



UMTS_Huawei_UTRAN_V900R011 Product Requirements

Table of Contents

1 Change History.....	5
2 Outstanding Issues.....	6
3 Vendor Measurement Scope.....	7
4 Tech Pack Prerequisites.....	23
5 Network Model.....	24
5.1 AAL2PATH details.....	24
5.2 ATM_Logic_Port details.....	25
5.3 ATM_Node details.....	26
5.4 ATM_Port details.....	27
5.5 Cell details.....	28
5.6 CNOOPERATOR details.....	36
5.7 E1T1_Link details.....	36
5.8 ETH details.....	37
5.9 FIBER_Link details.....	39
5.10 FlowControl details.....	39
5.11 FRAATM details.....	40
5.12 FRAIMALNK details.....	41
5.13 FRAME details.....	42
5.14 GPRS_Tunnel details.....	42
5.15 IMA_Group details.....	43
5.16 IMA_Link details.....	45
5.17 IPNODECONN details.....	45
5.18 IPNODETRM details.....	46
5.19 IPOA details.....	47
5.20 IPOAPVC details.....	48
5.21 IPPATH details.....	49
5.22 IPPATHPING details.....	51
5.23 lu details.....	51
5.24 lur details.....	53
5.25 Local_Cell details.....	55
5.26 Logic_Port details.....	56
5.27 M3UA_Dest details.....	57
5.28 M3UA_Link details.....	58
5.29 M3UA_LinkSet details.....	59
5.30 MLPPP details.....	60
5.31 MTP3_Link details.....	61
5.32 MTP3_LinkPoint details.....	62
5.33 MTP3_LinkSet details.....	63
5.34 MTP3B_Link details.....	64
5.35 MTP3B_LinkSet details.....	65
5.36 MTP3B_Point details.....	66
5.37 Neighbour details.....	67
5.38 Network details.....	69
5.39 NodeB details.....	69
5.40 OAM_Link details.....	71
5.41 PPP details.....	72

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

5.42	Processor details.....	73
5.43	QosQueue details.....	78
5.44	Region details.....	78
5.45	RNC details.....	79
5.46	SAAL_Link details.....	80
5.47	SCCP details.....	81
5.48	SCTPIP details.....	82
5.49	SCTPLNK details.....	82
5.50	Signalling_LinkSet details.....	83
5.51	Signalling_Link details.....	85
5.52	Signalling_Point details.....	87
5.53	UDSP details.....	87
5.54	UNILNK details.....	88
5.55	UOI_Board details.....	89
5.56	VC_ACROSS details.....	90
6	Busy Hours.....	91
7	Performance Indicators.....	93
7.1	AAL2PATH Performance Indicators.....	94
7.2	ATM_Logic_Port Performance Indicators.....	100
7.3	ATM_Node Performance Indicators.....	102
7.4	ATM_Port Performance Indicators.....	120
7.5	Cell Performance Indicators.....	121
7.6	E1T1_Link Performance Indicators.....	568
7.7	ETH Performance Indicators.....	572
7.8	FIBER_Link Performance Indicators.....	578
7.9	FlowControl Performance Indicators.....	582
7.10	FRAATM Performance Indicators.....	583
7.11	FRAIMALNK Performance Indicators.....	588
7.12	FRAME Performance Indicators.....	591
7.13	GPRS_Tunnel Performance Indicators.....	592
7.14	IMA_Group Performance Indicators.....	598
7.15	IMA_Link Performance Indicators.....	604
7.16	IPNODECONN Performance Indicators.....	607
7.17	IPNODETRM Performance Indicators.....	610
7.18	IPOA Performance Indicators.....	613
7.19	IPOAPVC Performance Indicators.....	617
7.20	IPPATH Performance Indicators.....	617
7.21	IPPATHPING Performance Indicators.....	629
7.22	Iu Performance Indicators.....	630
7.23	Iur Performance Indicators.....	683
7.24	Local_Cell Performance Indicators.....	722
7.25	Logic_Port Performance Indicators.....	741
7.26	M3UA_Dest Performance Indicators.....	744
7.27	M3UA_Link Performance Indicators.....	744
7.28	M3UA_LinkSet Performance Indicators.....	745
7.29	MLPPP Performance Indicators.....	746
7.30	MTP3_Link Performance Indicators.....	752
7.31	MTP3_LinkPoint Performance Indicators.....	757
7.32	MTP3_LinkSet Performance Indicators.....	758
7.33	MTP3B_Link Performance Indicators.....	758
7.34	MTP3B_LinkSet Performance Indicators.....	761
7.35	MTP3B_Point Performance Indicators.....	762
7.36	Neighbour Performance Indicators.....	763
7.37	NodeB Performance Indicators.....	769
7.38	OAM_Link Performance Indicators.....	799

7.39	PPP Performance Indicators.....	803
7.40	Processor Performance Indicators.....	808
7.41	QosQueue Performance Indicators.....	840
7.42	RNC Performance Indicators.....	841
7.43	SAAL_Link Performance Indicators.....	1055
7.44	SCCP Performance Indicators.....	1061
7.45	SCTPIP Performance Indicators.....	1072
7.46	SCTPLNK Performance Indicators.....	1073
7.47	Signalling_Link Performance Indicators.....	1077
7.48	Signalling_LinkSet Performance Indicators.....	1088
7.49	Signalling_Point Performance Indicators.....	1091
7.50	UDSP Performance Indicators.....	1092
7.51	UNILNK Performance Indicators.....	1094
7.52	UOI_Board Performance Indicators.....	1097
7.53	VC_ACROSS Performance Indicators.....	1097
8	Performance Alarms.....	1101
9	Reports.....	1102
9.1	AAL2PATH Reports.....	1102
9.2	ATM_Node Reports.....	1103
9.3	Cell Reports.....	1104
9.4	GPRS_Tunnel Reports.....	1126
9.5	Iu Reports.....	1127
9.6	Neighbour Reports.....	1128
9.7	NodeB Reports.....	1129
9.8	Processor Reports.....	1130
9.9	RNC Reports.....	1133
9.10	Signalling_Link Reports.....	1136

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

1 Change History

Issue	Date	Author	Comments
1.0	07 Mar 2011	IBM	Fixpack Released

2 Outstanding Issues

Number	Date	Description	Planned Resolution
N/A			

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

3 Vendor Measurement Scope

The table below lists the vendor OM groups that are in scope for this tech pack module, broken down by network element, together with their corresponding tech pack KPI group.

Vendor Measurement	Tech Pack KPI Group
AAL2PATH - Mapped with B67109466.RNC_Id & "/" & B67109466.AAL2PATH_Id or B67109477.RNC_Id & "/" & B67109477.AAL2PATH_Id or B67109486.RNC_Id & "/" & B67109486.AAL2PATH_Id	
B67109466	AAL2PATH.Huawei.UMTS.AAL2PATH_Connections
B67109466	AAL2PATH.Huawei.UMTS.AAL2PATH
B67109477	AAL2PATH.Huawei.UMTS.AAL2PATHPVC
B67109486	AAL2PATH.Huawei.UMTS.AAL2PATH_PVCPLAYER
B67109486	AAL2PATH.Huawei.UMTS.SCTP_IPLAYER
ATM_Logic_Port - Mapped with B67109564.RNC_Id & "/" & B67109564.Object_Id	
B67109564	ATM_Logic_Port.Huawei.UMTS.ATM_Logic_Port
ATM_Node - Mapped with B67109419.RNC_Id & "/" & B67109419.Object_Id or B67109479.RNC_Id & "/" & B67109479.Object_Id or B67109480.RNC_Id & "/" & B67109480.Object_Id or B67109518.RNC_Id & "/" & B67109518.Object_Id	
B67109419	ATM_Node.Huawei.UMTS.QAAL2_Allocations
B67109419	ATM_Node.Huawei.UMTS.QAAL2
B67109479	ATM_Node.Huawei.UMTS.IPPART_Connections
B67109479	ATM_Node.Huawei.UMTS.IPPATH_Resources
B67109480	ATM_Node.Huawei.UMTS.QAAL2_Allocations
B67109518	ATM_Node.Huawei.UMTS.QAAL2_Allocations
B67109518	ATM_Node.Huawei.UMTS.QAAL2_Connections
ATM_Port - Mapped with B67109464.RNC_Id & "/" & B67109464.ATM_Port_Id	

B67109464	ATM_Port.Huawei.UMTS.ATM_PORT_UTRAN
<p>Cell - Mapped with B67109365.RNC_Id & "/" & B67109365.Cell_Id or B67109367.RNC_Id & "/" & B67109367.Cell_Id or B67109368.RNC_Id & "/" & B67109368.Cell_Id or B67109369.RNC_Id & "/" & B67109369.Cell_Id or B67109372.RNC_Id & "/" & B67109372.Cell_Id or B67109373.RNC_Id & "/" & B67109373.Cell_Id or B67109376.RNC_Id & "/" & B67109376.Cell_Id or B67109378.RNC_Id & "/" & B67109378.Cell_Id or B67109379.RNC_Id & "/" & B67109379.Cell_Id or B67109380.RNC_Id & "/" & B67109380.Cell_Id or B67109381.RNC_Id & "/" & B67109381.Cell_Id or B67109382.RNC_Id & "/" & B67109382.Cell_Id or B67109384.RNC_Id & "/" & B67109384.Cell_Id or B67109387.RNC_Id & "/" & B67109387.Cell_Id or B67109390.RNC_Id & "/" & B67109390.Cell_Id or B67109391.RNC_Id & "/" & B67109391.Cell_Id or B67109392.RNC_Id & "/" & B67109392.Cell_Id or B67109471.RNC_Id & "/" & B67109471.Cell_Id or B67109474.RNC_Id & "/" & B67109474.Cell_Id or B67109508.RNC_Id & "/" & B67109508.Cell_Id or B67109523.RNC_Id & "/" & B67109523.Cell_Id</p>	
B67109365	Cell.Huawei.UMTS.CMB_Channels
B67109365	Cell.Huawei.UMTS.DSAC
B67109365	Cell.Huawei.UMTS.RRC_Connection_Global
B67109365	Cell.Huawei.UMTS.RRC_Connection_Request_per_cause
B67109365	Cell.Huawei.UMTS.RRC_Connection_Setup_per_cause
B67109365	Cell.Huawei.UMTS.RRC_Connection_Times
B67109366	Cell.Huawei.UMTS.RRC_Connection_Release
B67109367	Cell.Huawei.UMTS.RRC_Connection_Reject
B67109368	Cell.Huawei.UMTS.RAB_CSQueueTime_Cell
B67109368	Cell.Huawei.UMTS.RAB_Establishment_AMR_WB
B67109368	Cell.Huawei.UMTS.RAB_Establishment_AMR
B67109368	Cell.Huawei.UMTS.RAB_Establishment_CS_Conv
B67109368	Cell.Huawei.UMTS.RAB_Establishment_CS_Stream
B67109368	Cell.Huawei.UMTS.RAB_Establishment_CS
B67109368	Cell.Huawei.UMTS.RAB_Establishment_DCH
B67109369	Cell.Huawei.UMTS.RAB_Establish_Failure_CS
B67109370	Cell.Huawei.UMTS.RAB_Modify_CS

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

B67109371	Cell.Huawei.UMTS.RAB_Release_CS
B67109372	Cell.Huawei.UMTS.RAB_Establishment_PS_Bkg
B67109372	Cell.Huawei.UMTS.RAB_Establishment_PS_Conv
B67109372	Cell.Huawei.UMTS.RAB_Establishment_PS_DCH
B67109372	Cell.Huawei.UMTS.RAB_Establishment_PS_Global
B67109372	Cell.Huawei.UMTS.RAB_Establishment_PS_Inter
B67109372	Cell.Huawei.UMTS.RAB_Establishment_PS_Stream
B67109373	Cell.Huawei.UMTS.RAB_Blocking_PS
B67109373	Cell.Huawei.UMTS.RAB_Establish_Failure_PS
B67109374	Cell.Huawei.UMTS.RAB_Modify_PS
B67109375	Cell.Huawei.UMTS.RAB_Release_PS
B67109376	Cell.Huawei.UMTS.RAB_Abnorm_Release_CS
B67109376	Cell.Huawei.UMTS.RAB_Abnorm_Release_HSDPA
B67109376	Cell.Huawei.UMTS.RAB_Abnorm_Release_HSUPA
B67109376	Cell.Huawei.UMTS.RAB_Abnorm_Release_PS
B67109376	Cell.Huawei.UMTS.RAB_Abnorm_Release
B67109376	Cell.Huawei.UMTS.RAB_Release_CMB
B67109377	Cell.Huawei.UMTS.MultiRab
B67109378	Cell.Huawei.UMTS.RAB_DCH_to_EDCH_Switch
B67109378	Cell.Huawei.UMTS.Radio_Bearer_Usage_AMR_WB
B67109378	Cell.Huawei.UMTS.Radio_Bearer_Usage_AMR
B67109378	Cell.Huawei.UMTS.Radio_Bearer_Usage_CS
B67109378	Cell.Huawei.UMTS.Radio_Bearer_Usage_DRD_IFFreq
B67109378	Cell.Huawei.UMTS.Radio_Bearer_Usage_DRD
B67109378	Cell.Huawei.UMTS.Radio_Bearer_Usage_PS_Bkg
B67109378	Cell.Huawei.UMTS.Radio_Bearer_Usage_PS_Conv
B67109378	Cell.Huawei.UMTS.Radio_Bearer_Usage_PS_Inter
B67109378	Cell.Huawei.UMTS.Radio_Bearer_Usage_PS_Stream
B67109378	Cell.Huawei.UMTS.Radio_Bearer

B67109379	Cell.Huawei.UMTS.Soft_Handover
B67109379	Cell.Huawei.UMTS.Soft_Handover
B67109380	Cell.Huawei.UMTS.Hard_HO_Global
B67109380	Cell.Huawei.UMTS.Hard_HO_Inter_RNCCN
B67109380	Cell.Huawei.UMTS.Hard_HO_InterFreq
B67109380	Cell.Huawei.UMTS.Hard_HO_InterNB_IntraRNC
B67109380	Cell.Huawei.UMTS.Hard_HO_Intra_NodeB
B67109380	Cell.Huawei.UMTS.Hard_HO_IntraFreq
B67109380	Cell.Huawei.UMTS.Hard_HO_Iur
B67109380	Cell.Huawei.UMTS.Hard_HO_MultiBand
B67109381	Cell.Huawei.UMTS.InterRAT_HO_Incoming_CS
B67109381	Cell.Huawei.UMTS.InterRAT_HO_Incoming_PS
B67109381	Cell.Huawei.UMTS.InterRAT_HO_Outgoing_CS
B67109381	Cell.Huawei.UMTS.InterRAT_HO_Outgoing_PS
B67109381	Cell.Huawei.UMTS.InterRAT_HO_PS
B67109382	Cell.Huawei.UMTS.Cell_Update
B67109383	Cell.Huawei.UMTS.URA_Updating
B67109384	Cell.Huawei.UMTS.Measurement_Reports_UMTS
B67109385	Cell.Huawei.UMTS.Rx_and_Tx_Power
B67109386	Cell.Huawei.UMTS.NBAP_Statistics
B67109387	Cell.Huawei.UMTS.Traffic_CS
B67109387	Cell.Huawei.UMTS.Traffic_Global
B67109387	Cell.Huawei.UMTS.Traffic_PS
B67109388	Cell.Huawei.UMTS.Hardware_Resources_Usage
B67109389	Cell.Huawei.UMTS.Cell_Broadcast_Services
B67109390	Cell.Huawei.UMTS.HSDPA_Mobility

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

B67109390	Cell.Huawei.UMTS.HSDPA_UE_Ratio
B67109390	Cell.Huawei.UMTS.HSDPA
B67109391	Cell.Huawei.UMTS.CE_Resource_Adjustment
B67109391	Cell.Huawei.UMTS.CE_Resources
B67109391	Cell.Huawei.UMTS.Cell_Availability
B67109391	Cell.Huawei.UMTS.Cell_Breathing
B67109391	Cell.Huawei.UMTS.Cell_Load_Change
B67109391	Cell.Huawei.UMTS.Channel_Switching
B67109391	Cell.Huawei.UMTS.Credit_Usage
B67109391	Cell.Huawei.UMTS.Load_Congestion_Control_LDR
B67109391	Cell.Huawei.UMTS.Load_Congestion_Control_OLC
B67109391	Cell.Huawei.UMTS.Load_Congestion_Control
B67109391	Cell.Huawei.UMTS.MBMS_Cell
B67109391	Cell.Huawei.UMTS.RAC_Failures_due_to_Congestion
B67109391	Cell.Huawei.UMTS.RAC_Failures_NewCallRequest
B67109391	Cell.Huawei.UMTS.Radio_Admission_Control
B67109392	Cell.Huawei.UMTS.BLER_UL_CS
B67109392	Cell.Huawei.UMTS.BLER_UL_PS_NRT
B67109392	Cell.Huawei.UMTS.BLER_UL_PS_RT
B67109392	Cell.Huawei.UMTS.UL_Speech_Quality
B67109393	Cell.Huawei.UMTS.RLC_HSDPA
B67109393	Cell.Huawei.UMTS.RLC_R99
B67109393	Cell.Huawei.UMTS.RLC_Statistics
B67109413	Cell.Huawei.UMTS.Establishment
B67109413	Cell.Huawei.UMTS.HSDPA_Throughput
B67109413	Cell.Huawei.UMTS.HSUPA_Throughput
B67109471	Cell.Huawei.UMTS.HSUPA_Mobility
B67109471	Cell.Huawei.UMTS.HSUPA_Ratio
B67109471	Cell.Huawei.UMTS.HSUPA

B67109474	Cell.Huawei.UMTS.MBMS_Cell
B67109474	Cell.Huawei.UMTS.MBMS_Channel
B67109505	Cell.Huawei.UMTS.SIR_Target_CS
B67109505	Cell.Huawei.UMTS.SIR_Target_PS_NRT
B67109505	Cell.Huawei.UMTS.SIR_Target_PS_RT
B67109508	Cell.Huawei.UMTS.Throughput_AMR
B67109508	Cell.Huawei.UMTS.Throughput_CS_Conv
B67109508	Cell.Huawei.UMTS.Throughput_CS_Stream
B67109508	Cell.Huawei.UMTS.Throughput_MBMS
B67109508	Cell.Huawei.UMTS.Throughput_PS_Bkg_DL
B67109508	Cell.Huawei.UMTS.Throughput_PS_Bkg_UL
B67109508	Cell.Huawei.UMTS.Throughput_PS_Conv
B67109508	Cell.Huawei.UMTS.Throughput_PS_Inter_DL
B67109508	Cell.Huawei.UMTS.Throughput_PS_Inter_UL
B67109508	Cell.Huawei.UMTS.Throughput_PS_Stream
B67109508	Cell.Huawei.UMTS.Throughput_PS
B67109508	Cell.Huawei.UMTS.Throughput_SRB
B67109508	Cell.Huawei.UMTS.Throughput_VP
B67109509	Cell.Huawei.UMTS.Paging
B67109510	Cell.Huawei.UMTS.Location_Cell_Services
B67109523	Cell.Huawei.UMTS.Compressed_Mode_Activation
B67109545	Cell.Huawei.UMTS.RAB_Establishment_CCH
B67109549	Cell.Huawei.UMTS.MBMS_PTP_PTM
E1T1_Link - Mapped with B67109525.RNC_Id & "/" & B67109525.Object_Id or B67109487.RNC_Id & "/" & B67109487.Object_Id	
B67109487	E1T1_Link.Huawei.UMTS.ELECT

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

B67109525	E1T1_Link.Huawei.UMTS.E1T1_Link_Quality
ETH - Mapped with B67109514.RNC_Id & "/" & B67109514.ETH_Id or B67109544.RNC_Id & "/" & B67109544.ETH_Id or B67109488.RNC_Id & "/" & B67109488.ETH_Id	
B67109488	ETH.Huawei.UMTS.FEGE
B67109514	ETH.Huawei.UMTS.ETH
B67109544	ETH.Huawei.UMTS.FEGE_QUEUE
FIBER_Link - Mapped with B67109489.RNC_Id & "/" & B67109489.Object_Id or B67109496.RNC_Id & "/" & B67109496.Object_Id	
B67109489	FIBER_Link.Huawei.UMTS.FIBER_Traffic_ErrorCount
B67109496	FIBER_Link.Huawei.UMTS.SDH_Switch
B67109549_V900	FIBER_Link.Huawei.UMTS.UOI_V900
FlowControl - Mapped with B67109522.RNC_Id & "/" & B67109522.Object_Id	
B67109522	FlowControl.Huawei.UMTS.Flow_Control_Queue_Traffic
FRAATM - Mapped with B67109398.FRAATM_Id	
B67109398	FRAATM.Huawei.UMTS.FRAATM
FRAIMALNK - Mapped with B67109399.FRAIMALNK_Id	
B67109399	FRAIMALNK.Huawei.UMTS.FRAIMALNK
FRAME - Mapped with B67109520.RNC_Id & "/" & B67109520.Object_Id	
B67109520	FRAME.Huawei.UMTS.FRAME_FLUX
GPRS_Tunnel - Mapped with B67109400.RNC_Id & "/" & B67109400.Object_Id	
B67109400	GPRS_Tunnel.Huawei.UMTS.GTP_U_PktNum
B67109400	GPRS_Tunnel.Huawei.UMTS.GTP_U
IMA_Group - Mapped with B67109402.RNC_ID & "/" & B67109402.Object_Id	
B67109402	IMA_Group.Huawei.UMTS.IMA_Group_Measurement
B67109402	IMA_Group.Huawei.UMTS.IMAGroup_Traffic_others
IMA_Link - Mapped with B67109403.RNC_ID & "/" & B67109403.Object_Id	
B67109403	IMA_Link.Huawei.UMTS.IMA_Link_Measurement
B67109403	IMA_Link.Huawei.UMTS.IMALink_Traffic_others
IPNODECONN - Mapped with B67109475.RNC_Id & "/" & B67109475.IPNODECONN_Id or B67109481.RNC_Id & "/" & B67109481.IPNODECONN_Id	

B67109475	IPNODECONN.Huawei.UMTS.IPNODECONN
B67109481	IPNODECONN.Huawei.UMTS.IP_Connect_Network_Transport
IPNODETRM - Mapped with B67109476.RNC_Id & "/" & B67109476.IPNODETRM_Id or B67109500.RNC_Id & "/" & B67109500.IPNODETRM_Id	
B67109476	IPNODETRM.Huawei.UMTS.IPNODETRM
B67109500	IPNODETRM.Huawei.UMTS.IPNODE_Allocations
IPOA - Mapped with B67109457.RNC_Id & "/" & B67109457.IPOA_Id	
B67109457	IPOA.Huawei.UMTS.IPOA
IPOAPVC - Mapped with B67109465.RNC_Id & "/" & B67109465.IPOAPVC_Id	
B67109465	IPOAPVC.Huawei.UMTS.IPOAPVC
IPPATH - Mapped with B67109467.RNC_Id & "/" & B67109467.IPPATH_Id or B67109495.RNC_Id & "/" & B67109495.IPPATH_Id or B67109534.RNC_Id & "/" & B67109534.IPPATH_Id or B67109539.RNC_Id & "/" & B67109539.IPPATH_Id or B67109540.RNC_Id & "/" & B67109540.IPPATH_Id	
B67109467	IPPATH.Huawei.UMTS.IPPATH_Connections
B67109467	IPPATH.Huawei.UMTS.IPPATH_PING_V200
B67109467	IPPATH.Huawei.UMTS.IPPATH
B67109495	IPPATH.Huawei.UMTS.IPPATH_IPPLAYER_Traffic
B67109534	IPPATH.Huawei.UMTS.RTP_flux_Measurements
B67109539	IPPATH.Huawei.UMTS.IP_Performance_Monitor
B67109539	IPPATH.Huawei.UMTS.IPPATH_IPPM_Jitter
B67109540	IPPATH.Huawei.UMTS.IPPATH_IPPLAYER_QoS
IPPATHPING - Mapped with B67109470.RNC_Id & "/" & B67109470.IPPATHPING_Id	
B67109470	IPPATHPING.Huawei.UMTS.IPPATHPING
Iu - Mapped with (B67109405.RNC_Id & "/" & B67109405.Object_Id) or (B67109406.RNC_Id & "/" & B67109406.Object_Id) or (B67109407.RNC_Id & "/" & B67109407.Object_Id) or (B67109535.RNC_Id & "/" & B67109535.Object_Id) or (B67109526.RNC_Id & "/" & B67109526.Object_Id)	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

B67109405	Iu.Huawei.UMTS.CS_SIG_IU_FlowControl
B67109405	Iu.Huawei.UMTS.CS_SIG_IU
B67109405	Iu.Huawei.UMTS.Sig_CS_PS_Iu_LoadBalance
B67109406	Iu.Huawei.UMTS.PS_SIG_IU_FlowControl
B67109406	Iu.Huawei.UMTS.PS_SIG_IU
B67109406	Iu.Huawei.UMTS.Sig_CS_PS_Iu_LoadBalance
B67109407	Iu.Huawei.UMTS.IU_CS_Bytes
B67109407	Iu.Huawei.UMTS.IU_CS_KBPS_AMR_DL
B67109407	Iu.Huawei.UMTS.IU_CS_KBPS_AMR_UL
B67109407	Iu.Huawei.UMTS.IU_CS_KBPS_AMR_WB_DL
B67109407	Iu.Huawei.UMTS.IU_CS_KBPS_AMR_WB_UL
B67109407	Iu.Huawei.UMTS.IU_CS_KBPS_CONV_DL
B67109407	Iu.Huawei.UMTS.IU_CS_KBPS_CONV_UL
B67109407	Iu.Huawei.UMTS.IU_CS_KBPS_STR_DL
B67109407	Iu.Huawei.UMTS.IU_CS_KBPS_STR_UL
B67109408	Iu.Huawei.UMTS.IU_PS_Bytes
B67109478	Iu.Huawei.UMTS.MBMS_Iu
B67109526	Iu.Huawei.UMTS.Iu_MOCN
B67109535	Iu.Huawei.UMTS.SCCP_Connection_Iu
Iur - Mapped with (B67109410.RNC_Id & "/" & B67109410.Object_Id) or (B67109411.RNC_Id & "/" & B67109411.Object_Id) or (B67109412.RNC_Id & "/" & B67109412.Object_Id) or (B67109536.RNC_Id & "/" & B67109536.Object_Id)	
B67109410	Iur.Huawei.UMTS.Traffic
B67109411	Iur.Huawei.UMTS.DRNC
B67109411	Iur.Huawei.UMTS.SRNC_CallDrop_DiffServices
B67109411	Iur.Huawei.UMTS.SRNC
B67109412	Iur.Huawei.UMTS.DRNC_RLs
B67109412	Iur.Huawei.UMTS.DRNC
B67109536	Iur.Huawei.UMTS.SCCP_Connection_Iur

Local_Cell - Mapped with B50331648.NodeB_Id & "/" & B50331648.Local_Cell_Id or B50331650.NodeB_Id & "/" & B50331650.Local_Cell_Id or B50331651.NodeB_Id & "/" & B50331651.Local_Cell_Id	
B50331648	Local_Cell.Huawei.UMTS.HSDPA_Code_Utilization
B50331648	Local_Cell.Huawei.UMTS.HSDPA_CQI
B50331648	Local_Cell.Huawei.UMTS.HSDPA_Data_Measurement
B50331648	Local_Cell.Huawei.UMTS.HSDPA_Measurement
B50331648	Local_Cell.Huawei.UMTS.HSDPA_Power_Measurement
B50331648	Local_Cell.Huawei.UMTS.HSDPA_RAB
B50331650	Local_Cell.Huawei.UMTS.HSUPA_Measurement
B50331650	Local_Cell.Huawei.UMTS.Traffic_measurements_Locell
B50331651	Local_Cell.Huawei.UMTS.HSUPA_Data_Measurement
B50331651	Local_Cell.Huawei.UMTS.HSUPA_Load_Measurement
B50331651	Local_Cell.Huawei.UMTS.HSUPA_Measurement
B50331651	Local_Cell.Huawei.UMTS.HSUPA_Power_Measurement
B50331653	Local_Cell.Huawei.UMTS.CPC_Measurement
Logic_Port - Mapped with B67109524.RNC_Id & "/" & B67109524.Object_Id or B67109541.RNC_Id & "/" & B67109541.Object_Id	
B67109524	Logic_Port.Huawei.UMTS.LGCPORT_Traffic
B67109541	Logic_Port.Huawei.UMTS.LGCPORT_Queue_Traffic
M3UA_Dest - Mapped with B67109484.RNC_Id & "/" & B67109484.M3UA_Point_Id	
B67109484	M3UA_Dest.Huawei.UMTS.Destination_Entity
M3UA_Link - Mapped with B67109482.RNC_Id & "/" & B67109482.M3UA_Link_Id	
B67109482	M3UA_Link.Huawei.UMTS.M3UA_SignallingLink
M3UA_LinkSet - Mapped with B67109483.RNC_Id & "/" & B67109483.M3UA_LinkSet_Id	
B67109483	M3UA_LinkSet.Huawei.UMTS.M3UA_SignallingLinkSet
MLPPP - Mapped with B67109512.RNC_Id & "/" & B67109512.MLPPP_Id or B67109490.RNC_Id	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

& "/" & B67109490.MLPPP_Id or B67109542.RNC_Id & "/" & B67109542.MLPPP_Id	
B67109490	MLPPP.Huawei.UMTS.MLPPP
B67109512	MLPPP.Huawei.UMTS.MLPPP
B67109542	MLPPP.Huawei.UMTS.MLPPP_QUEUE
MTP3_Link - Mapped with B67109551.RNC_Id & "/" & B67109551.Object_Id	
B67109551	MTP3_Link.Huawei.UMTS.MTP3_Link_Measurement
MTP3_LinkPoint - Mapped with B67109550.RNC_Id & "/" & B67109550.Object_Id	
B67109550	MTP3_LinkPoint.Huawei.UMTS.MTP3_DSP_Measurement
MTP3_LinkSet - Mapped with B67109552.RNC_Id & "/" & B67109552.Object_Id	
B67109552	MTP3_LinkSet.Huawei.UMTS.MTP3_LinkSet_Measurement
MTP3B_Link - Mapped with B67109416.RNC_ID & "/" & B67109416.Object_Id	
B67109416	MTP3B_Link.Huawei.UMTS.MTP3B_Link_Measurement
MTP3B_LinkSet - Mapped with B67109417.RNC_ID & "/" & B67109417.Object_Id	
B67109417	MTP3B_LinkSet.Huawei.UMTS.MTP3B_LinkSet_Measurement
MTP3B_Point - Mapped with B67109415.RNC_ID & "/" & B67109415.Object_Id	
B67109415	MTP3B_Point.Huawei.UMTS.MTP3B_DSP_Measurement
Neighbour - Mapped with (B67109394.RNC_Id & "/" & Cell_Id & "/" & MCC_Id & "/" & MNC_Id) or (B67109395.RNC_Id & "/" & Cell_Id & "/" & Dest_RNC_Id & "/" & Dest_Cell_Id) or (B67109395_V900.RNC_Id & "/" & Cell_Id & "/" & Dest_RNC_Id & "/" & Dest_Cell_Id)	
B67109394	Neighbour.Huawei.UMTS.InterRAT_HO_per_Neighbour
B67109395	Neighbour.Huawei.UMTS.Handover_3G_3G_per_Neighbour
NodeB - Mapped with B67109473.RNC_Id & "/" & B67109473.NodeB_Id or B50331649.RNC_Id & "/" & B50331649.NodeB_Id or B67109391_GRP.RNC_Id & "/" & B67109391_GRP.NodeB_Id or B67109390_GRP.RNC_Id & "/" & B67109390_GRP.NodeB_Id or B67109387_GRP.RNC_Id & "/" & B67109387_GRP.NodeB_Id or B67109471_GRP.RNC_Id & "/" & B67109471_GRP.NodeB_Id	
B50331649	NodeB.Huawei.UMTS.IUB_Bandwidth
B50331649	NodeB.Huawei.UMTS.IUB_NodeB
B50331652	NodeB.Huawei.UMTS.Credit_Usage_LicenseGroup
B50331652	NodeB.Huawei.UMTS.Credit_Usage_Shared
B67109387_GRP	NodeB.Huawei.UMTS.Traffic_CS_aggregated_from_cell

B67109387_GRP	NodeB.Huawei.UMTS.Traffic_PS_aggregated_from_cell
B67109390_GRP	NodeB.Huawei.UMTS.HSDPA_aggregated_from_cell
B67109391_GRP	NodeB.Huawei.UMTS.Credit_Usage_aggregated_from_cell
B67109471_GRP	NodeB.Huawei.UMTS.HSUPA_aggregated_from_cell
B67109473	NodeB.Huawei.UMTS.Iub_Congestion
B67109473	NodeB.Huawei.UMTS.NodeB_Availability
OAM_Link - Mapped with B67109521.RNC_Id & "/" & B67109521.Object_Id or B67109538.RNC_Id & "/" & B67109538.Object_Id	
B67109521	OAM_Link.Huawei.UMTS.NODEBOAM_Channel_Measurement
B67109538	OAM_Link.Huawei.UMTS.OAM_FLOW
PPP - Mapped with B67109511.PPP_Id or B67109491.PPP_Id or B67109543.PPP_Id	
B67109491	PPP.Huawei.UMTS.PPP
B67109511	PPP.Huawei.UMTS.PPP
B67109543	PPP.Huawei.UMTS.PPP_QUEUE
Processor - Mapped with (B67109397.RNC_Id & "/" & B67109397.Object_Id) or (B67109401.RNC_Id & "/" & B67109401.Object_Id) or (B67109418.RNC_Id & "/" & B67109418.Object_Id) or (B67109453.RNC_Id & "/" & B67109453.Object_Id) or (B67109404.RNC_Id & "/" & B67109404.Object_Id) or (B67109461.RNC_Id & "/" & B67109461.Object_Id) or (B67109462.RNC_Id & "/" & B67109462.Object_Id) or (B67109463.RNC_Id & "/" & B67109463.Object_Id) or (B67109494.RNC_Id & "/" & B67109494.Object_Id) or (B67109516.RNC_Id & "/" & B67109516.Object_Id) or (B67109515.RNC_Id & "/" & B67109515.Object_Id) or (B67109493.RNC_Id & "/" & B67109493.Object_Id) or (B67109497.RNC_Id & "/" & B67109497.Object_Id) or (B67109537.RNC_Id & "/" & B67109537.Object_Id) or (B67109492.RNC_Id & "/" & B67109492.Object_Id) or (B67109453_V200.RNC_Id & "/" & B67109453_V200.Object_Id)	
B67109397	Processor.Huawei.UMTS.WFMR
B67109401	Processor.Huawei.UMTS.HPU
B67109404	Processor.Huawei.UMTS.XIE
B67109418	Processor.Huawei.UMTS.MUX
B67109453	Processor.Huawei.UMTS.SPU

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

B67109453_V200	Processor.Huawei.UMTS.SPU_V200
B67109453_V900	Processor.Huawei.UMTS.CPUS
B67109461	Processor.Huawei.UMTS.MPU
B67109462	Processor.Huawei.UMTS.LPU
B67109463	Processor.Huawei.UMTS.NET
B67109492	Processor.Huawei.UMTS.CSU
B67109493	Processor.Huawei.UMTS.GCU
B67109494	Processor.Huawei.UMTS.PIU
B67109497	Processor.Huawei.UMTS.INTERWORKING
B67109515	Processor.Huawei.UMTS.SCU
B67109516	Processor.Huawei.UMTS.DPU
B67109537	Processor.Huawei.UMTS.MPU
B82833917	Processor.Huawei.UMTS.XPU
B82833961	Processor.Huawei.UMTS.INT
QosQueue - Mapped with B67109513.QosQueue_Id	
B67109513	QosQueue.Huawei.UMTS.QosQueue
RNC - Mapped with B67109420.RNC_Id or B67109438.RNC_Id	
B67109390_RNC_GRP	RNC.Huawei.UMTS.HSDPA_aggregated_from_cell
B67109420	RNC.Huawei.UMTS.RRC_Connection_Setup_RNC
B67109421	RNC.Huawei.UMTS.RRC_Release_RNC
B67109422	RNC.Huawei.UMTS.RAB_Establish_CS_RNC
B67109423	RNC.Huawei.UMTS.RAB_Establish_Fail_CS_RNC
B67109424	RNC.Huawei.UMTS.RAB_Modify_CS_RNC
B67109425	RNC.Huawei.UMTS.RAB_Release_CS_RNC
B67109426	RNC.Huawei.UMTS.RAB_Establishment_PS_Attempts_RNC
B67109426	RNC.Huawei.UMTS.RAB_Establishment_PS_RNC
B67109427	RNC.Huawei.UMTS.RAB_Establish_Fail_PS_RNC
B67109428	RNC.Huawei.UMTS.RAB_Modify_PS_RNC
B67109429	RNC.Huawei.UMTS.RAB_AttRelPS_RNC

B67109429	RNC.Huawei.UMTS.RAB_Release_PS_RNC
B67109430	RNC.Huawei.UMTS.RAB_Abnorm_Release_CS_RNC
B67109430	RNC.Huawei.UMTS.RAB_Release_CMB_RNC
B67109431	RNC.Huawei.UMTS.MultiRab_RNC
B67109432	RNC.Huawei.UMTS.SRNS_Relocation_Drift_RNC
B67109432	RNC.Huawei.UMTS.SRNS_Relocation_Serving_RNC_Failures
B67109432	RNC.Huawei.UMTS.SRNS_Relocation_Serving_RNC
B67109433	RNC.Huawei.UMTS.SRNS_Relocation_Drift_RNC
B67109434	RNC.Huawei.UMTS.Location_Cell_Services_RNC
B67109435	RNC.Huawei.UMTS.AMR_RNC
B67109435	RNC.Huawei.UMTS.AMR_WB_RNC
B67109437	RNC.Huawei.UMTS.PDCP_Statistics
B67109437	RNC.Huawei.UMTS.PDCPGTPU_Measurement
B67109438	RNC.Huawei.UMTS.Paging_RNC
B67109440	RNC.Huawei.UMTS.DL_Inter_PS
B67109440	RNC.Huawei.UMTS.RB_Usage_CS_Conv_RNC
B67109440	RNC.Huawei.UMTS.RB_Usage_CS_Stream_RNC
B67109440	RNC.Huawei.UMTS.RB_Usage_DRD_RNC
B67109440	RNC.Huawei.UMTS.RB_Usage_PS_Bkg_RNC
B67109440	RNC.Huawei.UMTS.RB_Usage_PS_Conv_RNC
B67109440	RNC.Huawei.UMTS.RB_Usage_PS_Global_RNC
B67109440	RNC.Huawei.UMTS.RB_Usage_PS_Stream_RNC
B67109440	RNC.Huawei.UMTS.UL_Inter_PS
B67109443	RNC.Huawei.UMTS.InterRAT_HO_CS_RNC
B67109443	RNC.Huawei.UMTS.InterRAT_HO_SRNS_Relocation
B67109444	RNC.Huawei.UMTS.InterRAT_HO_PS_RNC

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

B67109445	RNC.Huawei.UMTS.Signalling_Messages
B67109446	RNC.Huawei.UMTS.Soft_Handover_RNC
B67109447	RNC.Huawei.UMTS.Hard_HO_RNC
B67109448	RNC.Huawei.UMTS.RLC_Statistics_RNC
B67109449	RNC.Huawei.UMTS.IMS_Statistics
B67109450	RNC.Huawei.UMTS.RRC_States
B67109460	RNC.Huawei.UMTS.Traffic_Load
B67109460	RNC.Huawei.UMTS.Traffic_R99_HSDPA_HSUPA_MBMS
B67109471_RNC_GRP	RNC.Huawei.UMTS.HSUPA_aggregated_from_cell
B67109519	RNC.Huawei.UMTS.Traffic_category_with_Operator
B67109553	RNC.Huawei.UMTS.RAB_Establish_AMR_RNC
B67109554	RNC.Huawei.UMTS.RAB_Loss_PLMN_RNC
SAAL_Link - Mapped with B67109451.RNC_Id & "/" & B67109451.Object_Id or B67109458.RNC_Id & "/" & B67109458.Object_Id or B67109517.RNC_Id & "/" & B67109517.Object_Id	
B67109451	SAAL_Link.Huawei.UMTS.SAAL_Link_Measurement_UTRAN
B67109458	SAAL_Link.Huawei.UMTS.SAALPVC
B67109517	SAAL_Link.Huawei.UMTS.SAALLNK_PVCLAYER
SCCP - Mapped with B67109452.RNC_Id & "/" & B67109452.Object_Id	
B67109452	SCCP.Huawei.UMTS.SCCP
SCTPIP - Mapped with B67109469.SCTPIP_Id	
B67109469	SCTPIP.Huawei.UMTS.SCTPIP
SCTPLNK - Mapped with B67109468.SCTPLNK_Id or B67109485.SCTPLNK_Id	
B67109468	SCTPLNK.Huawei.UMTS.SCTPLNK
B67109485	SCTPLNK.Huawei.UMTS.SCTP_IPLAYER
Signalling_Link - Mapped with (B67109403.RNC_Id & "/" & B67109403.Object_Id) or (B67109416.RNC_Id & "/" & B67109416.Object_Id) or (B67109451.RNC_Id & "/" & B67109451.Object_Id) or (B67109458.RNC_Id & "/" & B67109458.Object_Id)	
B67109403	Signalling_Link.Huawei.UMTS.IMA_Link
B67109416	Signalling_Link.Huawei.UMTS.MTP3BLNK

B67109451	Signalling_Link.Huawei.UMTS.SAALLNK
B67109458	Signalling_Link.Huawei.UMTS.SAALPVC
Signalling_LinkSet - Mapped with (B67109402.RNC_Id & "/" & B67109402.Object_Id) or (B67109417.RNC_Id & "/" & B67109417.Object_Id)	
B67109402	Signalling_LinkSet.Huawei.UMTS.IMA_Group
B67109417	Signalling_LinkSet.Huawei.UMTS.MTP3BLNKSET
Signalling_Point - Mapped with B67109415.RNC_Id & "/" & B67109415.Object_Id	
B67109415	Signalling_Point.Huawei.UMTS.MTP3BDSP
UDSP - Mapped with B67109546.RNC_Id & "/" & B67109546.Object_Id	
B67109546	UDSP.Huawei.UMTS.UDSP
UNILNK - Mapped with B67109456.UNILNK_Id	
B67109456	UNILNK.Huawei.UMTS.UNILNK
UOI_Board - Mapped with B67109549_V200.RNC_Id & "/" & Object_Id	
B67109549_V200	UOI_Board.Huawei.UMTS.UOI
VC_ACROSS - Mapped with B67109498.RNC_Id & "/" & B67109498.Object_Id	
B67109498	VC_ACROSS.Huawei.UMTS.VCCROSS_Traffic

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

4 Tech Pack Prerequisites

This section lists the Tech Pack modules that the current Tech Pack is dependent on, in alphabetical order.

- HUA GOMlet
- Neutral Core GOM
- Neutral GPRS/UMTS CN GOM
- Neutral GPRS BSS GOM
- Neutral GSM BSS/NSS GOM
- Neutral UMTS UTRAN Ext GOM
- Neutral UMTS UTRAN GOM
- VNL GOMlet

5 Network Model

This section describes any network objects that are defined in this technology pack module, in terms of their configuration attributes.

5.1 AAL2PATH details

In the network hierarchy, the immediate parent of the AAL2PATH object is Region.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
AAL2PATH_ Id	AAL2PATH identifier	Y		B67109466.RNC_Id & "/" & B67109466.AAL2PATH_Id or B67109477.RNC_Id & "/" & B67109477.AAL2PATH_Id or B67109486.RNC_Id & "/" & B67109486.AAL2PATH_Id	
Relationship Attributes					
Region_Id	Identifier of the region	Y	Y	B67109466.Region_Id or B67109477.Region_Id or B67109486.Region_Id	
Network_Id	Identifier of the network	Y	Y	B67109466.Network_Id or B67109477.Network_Id or B67109486.Network_Id	
Configuration Attributes					
AAL2PATH_	AAL2PATH name			B67109466.RNC_Id & "/" &	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Name	identifier			B67109466.AAL2PATH_Id or B67109477.RNC_Id & "/" & B67109477.AAL2PATH_Id or B67109486.RNC_Id & "/" & B67109486.AAL2PATH_Id	
Node_Id	Unique identifier for Node			B67109466.RNC_Id or B67109477.RNC_Id or B67109486.RNC_Id	
Node_Name	User friendly name for Node			B67109466.RNC_Id or B67109477.RNC_Id or B67109486.RNC_Id	
Node_Type	Type of the Node			B67109466."RNC" or B67109477."RNC" or B67109486."RNC"	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			B67109466."UMTS" or B67109477."UMTS" or B67109486."UMTS"	
Version	Hardware/Software version of the AAL2PATH			B67109466."V900R011" or B67109477."V900R011" or B67109486."V900R011"	

5.2 ATM_Logic_Port details

In the network hierarchy, the immediate parent of the ATM_Logic_Port object is Region.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
ATM_Logic_Port_Id	Unique identifier associated with ATM Logic Port	Y		B67109564.RNC_Id & "/" & B67109564.Object_Id	
Relationship Attributes					
Network_Id	Network associated with ATM Logic Port	Y	Y	B67109564.Network_Id	
Region_Id	Region associated with ATM Logic Port	Y	Y	B67109564.Region_Id	
Configuration Attributes					

ATM_Logic_Port_Name	User friendly name associated with ATM Logic Port			B67109564.RNC_Id & "/" & B67109564.Object_Id	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"UMTS"	
Version	Hardware/Software version of the ATM Logic Port			"V900R011"	

5.3 ATM_Node details

In the network hierarchy, the immediate parent of the ATM_Node object is RNC.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
ATM_Node_Id	ATM node identifier	Y		B67109419.RNC_Id & "/" & B67109419.Object_Id or B67109479.RNC_Id & "/" & B67109479.Object_Id or B67109480.RNC_Id & "/" & B67109480.Object_Id or B67109518.RNC_Id & "/" & B67109518.Object_Id	
Relationship Attributes					
RNC_Id	RNC associated with this ATM node	Y	Y	B67109419.RNC_Id or B67109479.RNC_Id or B67109480.RNC_Id or B67109518.RNC_Id	
Region_Id	Identifier of the region	Y	Y	B67109419.Region_Id or B67109479.Region_Id or B67109480.Region_Id or B67109518.Region_Id	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Network_Id	Identifier of the network	Y	Y	B67109419.Network_Id or B67109479.Network_Id or B67109480.Network_Id or B67109518.Network_Id	
Configuration Attributes					
ATM_Node_Name	ATM node name			B67109419.RNC_Id & "/" & B67109419.Object_Id or B67109479.RNC_Id & "/" & B67109479.Object_Id or B67109480.RNC_Id & "/" & B67109480.Object_Id or B67109518.RNC_Id & "/" & B67109518.Object_Id	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			B67109419."UMTS" or B67109479."UMTS" or B67109480."UMTS" or B67109518."UMTS"	
Version	Version.			B67109419."V900R011" or B67109479."V900R011" or B67109480."V900R011" or B67109518."V900R011"	

5.4 ATM_Port details

In the network hierarchy, the immediate parent of the ATM_Port object is Region.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
ATM_Port_Id	A unique identifier for the ATM Port.	Y		B67109464.RNC_Id & "/" & B67109464.ATM_Port_Id	
Relationship Attributes					
Network_Id	Network associated with the ATM Port.	Y	Y	B67109464.Network_Id	
Region_Id	Region associated with the ATM Port.	Y	Y	B67109464.Region_Id	
Configuration Attributes					

ATM_Port_Name	A user friendly name preferably unique for the ATM Port.			B67109464.RNC_Id & "/" & B67109464.ATM_Port_Id	
ATM_Port_Type	Type of ATM Port.			No mapping	
ATM_Port_Version	Hardware/Software version of the ATM Port.			"V900R011"	
Node_Id	A unique identifier for the Node.			B67109464.RNC_Id	
Node_Name	A user friendly name preferably unique for the Node.			B67109464.RNC_Id	
Node_Type	Type of the Node.			"RNC"	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"UMTS"	

5.5 Cell details

In the network hierarchy, the immediate parents of the Cell object are: BS, LAC, PCU, Registration_Area and Routing_Area.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggregator
Primary Identifier					
Cell_Id	A unique identifier for the Cell.	Y		B67109365.RNC_Id & "/" & B67109365.Cell_Id or B67109367.RNC_Id & "/" & B67109367.Cell_Id or B67109368.RNC_Id & "/" & B67109368.Cell_Id or B67109369.RNC_Id & "/" & B67109369.Cell_Id or	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

				B67109372.RNC_Id & "/" & B67109372.Cell_Id or B67109373.RNC_Id & "/" & B67109373.Cell_Id or B67109376.RNC_Id & "/" & B67109376.Cell_Id or B67109378.RNC_Id & "/" & B67109378.Cell_Id or B67109379.RNC_Id & "/" & B67109379.Cell_Id or B67109380.RNC_Id & "/" & B67109380.Cell_Id or B67109381.RNC_Id & "/" & B67109381.Cell_Id or B67109382.RNC_Id & "/" & B67109382.Cell_Id or B67109384.RNC_Id & "/" & B67109384.Cell_Id or B67109387.RNC_Id & "/" & B67109387.Cell_Id or B67109390.RNC_Id & "/" & B67109390.Cell_Id or B67109391.RNC_Id & "/" & B67109391.Cell_Id or B67109392.RNC_Id & "/" & B67109392.Cell_Id or B67109471.RNC_Id & "/" & B67109471.Cell_Id or B67109474.RNC_Id & "/" & B67109474.Cell_Id or B67109508.RNC_Id & "/" & B67109508.Cell_Id or B67109523.RNC_Id & "/" & B67109523.Cell_Id	
Relationship Attributes					
BSC_Id	A unique identifier for the BSC.	Y	Y	B67109365.RNC_Id or B67109367.RNC_Id or B67109368.RNC_Id or B67109369.RNC_Id or B67109372.RNC_Id or B67109373.RNC_Id or B67109376.RNC_Id or B67109378.RNC_Id or B67109379.RNC_Id or B67109380.RNC_Id or	

				B67109381.RNC_Id or B67109382.RNC_Id or B67109384.RNC_Id or B67109387.RNC_Id or B67109390.RNC_Id or B67109391.RNC_Id or B67109392.RNC_Id or B67109471.RNC_Id or B67109474.RNC_Id or B67109508.RNC_Id or B67109523.RNC_Id	
BS_Id	A unique identifier for the BS at which the Cell is located. The BS at which the cell is located.	Y	Y	B67109365.RNC_Id & "/" & B67109365.NodeB_Id or B67109367.RNC_Id & "/" & B67109367.NodeB_Id or B67109368.RNC_Id & "/" & B67109368.NodeB_Id or B67109369.RNC_Id & "/" & B67109369.NodeB_Id or B67109372.RNC_Id & "/" & B67109372.NodeB_Id or B67109373.RNC_Id & "/" & B67109373.NodeB_Id or B67109376.RNC_Id & "/" & B67109376.NodeB_Id or B67109378.RNC_Id & "/" & B67109378.NodeB_Id or B67109379.RNC_Id & "/" & B67109379.NodeB_Id or B67109380.RNC_Id & "/" & B67109380.NodeB_Id or B67109381.RNC_Id & "/" & B67109381.NodeB_Id or B67109382.RNC_Id & "/" & B67109382.NodeB_Id or B67109384.RNC_Id & "/" & B67109384.NodeB_Id or B67109387.RNC_Id & "/" & B67109387.NodeB_Id or B67109390.RNC_Id & "/" & B67109390.NodeB_Id or	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

				B67109391.RNC_Id & "/" & B67109391.NodeB_Id or B67109392.RNC_Id & "/" & B67109392.NodeB_Id or B67109471.RNC_Id & "/" & B67109471.NodeB_Id or B67109474.RNC_Id & "/" & B67109474.NodeB_Id or B67109508.RNC_Id & "/" & B67109508.NodeB_Id or B67109523.RNC_Id & "/" & B67109523.NodeB_Id	
GPRS_Cell_Id	A unique identifier for the Cell.	Y	Y	No mapping	
LAC_Id	The Location Area Code encompassing the Cell.	Y	Y	No mapping	
MSC_Id	A unique identifier for the MSC.	Y	Y	No mapping	
NSVC_Id	A unique identifier for the NSVC.	Y	Y	No mapping	
Network_Id	Network associated with the Cell.	Y	Y	B67109365.Network_Id or B67109367.Network_Id or B67109368.Network_Id or B67109369.Network_Id or B67109372.Network_Id or B67109373.Network_Id or B67109376.Network_Id or B67109378.Network_Id or B67109379.Network_Id or B67109380.Network_Id or B67109381.Network_Id or B67109382.Network_Id or B67109384.Network_Id or B67109387.Network_Id or B67109390.Network_Id or B67109391.Network_Id or B67109392.Network_Id or B67109471.Network_Id or B67109474.Network_Id or B67109508.Network_Id or B67109523.Network_Id	
PCU_Id	A unique identifier for	Y	Y	No mapping	

	the PCU.				
Region_Id	Region associated with the Cell.	Y	Y	B67109365.Region_Id or B67109367.Region_Id or B67109368.Region_Id or B67109369.Region_Id or B67109372.Region_Id or B67109373.Region_Id or B67109376.Region_Id or B67109378.Region_Id or B67109379.Region_Id or B67109380.Region_Id or B67109381.Region_Id or B67109382.Region_Id or B67109384.Region_Id or B67109387.Region_Id or B67109390.Region_Id or B67109391.Region_Id or B67109392.Region_Id or B67109471.Region_Id or B67109474.Region_Id or B67109508.Region_Id or B67109523.Region_Id	
Registration_Area_Id	A unique identifier for the Registration_Area.	Y	Y	No mapping	
Routing_Area_Id	A unique identifier for the Routing_Area.	Y	Y	No mapping	
SGSN_Id	A unique identifier for the SGSN.	Y	Y	No mapping	
UMTS_Cell_Id	A unique identifier for the Cell.	Y	Y	No mapping	
Configuration Attributes					
Cell_Name	A user friendly name preferably unique for the Cell.			B67109365.RNC_Id & "/" & B67109365.Cell_Label or B67109367.RNC_Id & "/" & B67109367.Cell_Label or B67109368.RNC_Id & "/" & B67109368.Cell_Label or	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

				B67109369.RNC_Id & "/" & B67109369.Cell_Label or B67109372.RNC_Id & "/" & B67109372.Cell_Label or B67109373.RNC_Id & "/" & B67109373.Cell_Label or B67109376.RNC_Id & "/" & B67109376.Cell_Label or B67109378.RNC_Id & "/" & B67109378.Cell_Label or B67109379.RNC_Id & "/" & B67109379.Cell_Label or B67109380.RNC_Id & "/" & B67109380.Cell_Label or B67109381.RNC_Id & "/" & B67109381.Cell_Label or B67109382.RNC_Id & "/" & B67109382.Cell_Label or B67109384.RNC_Id & "/" & B67109384.Cell_Label or B67109387.RNC_Id & "/" & B67109387.Cell_Label or B67109390.RNC_Id & "/" & B67109390.Cell_Label or B67109391.RNC_Id & "/" & B67109391.Cell_Label or B67109392.RNC_Id & "/" & B67109392.Cell_Label or B67109471.RNC_Id & "/" & B67109471.Cell_Label or B67109474.RNC_Id & "/" & B67109474.Cell_Label or B67109508.RNC_Id & "/" & B67109508.Cell_Label or B67109523.RNC_Id & "/" & B67109523.Cell_Label	
BCH_Power	Broadcast channel power.			No mapping	
BVC_Id	A unique identifier for the BVC.			No mapping	
Cell_Description	Description of Cell.			No mapping	
Cell_Type	Is the cell			B67109365."UMTS Cell" or	

	omni_directional, or a sector, or micro/pico/macro/umbrella cell, etc.		B67109367."UMTS Cell" or B67109368."UMTS Cell" or B67109369."UMTS Cell" or B67109372."UMTS Cell" or B67109373."UMTS Cell" or B67109376."UMTS Cell" or B67109378."UMTS Cell" or B67109379."UMTS Cell" or B67109380."UMTS Cell" or B67109381."UMTS Cell" or B67109382."UMTS Cell" or B67109384."UMTS Cell" or B67109387."UMTS Cell" or B67109390."UMTS Cell" or B67109391."UMTS Cell" or B67109392."UMTS Cell" or B67109471."UMTS Cell" or B67109474."UMTS Cell" or B67109508."UMTS Cell" or B67109523."UMTS Cell"	
Cell_Version	Hardware/Software version of the Cell.		B67109365."V900R011" or B67109367."V900R011" or B67109368."V900R011" or B67109369."V900R011" or B67109372."V900R011" or B67109373."V900R011" or B67109376."V900R011" or B67109378."V900R011" or B67109379."V900R011" or B67109380."V900R011" or B67109381."V900R011" or B67109382."V900R011" or B67109384."V900R011" or B67109387."V900R011" or B67109390."V900R011" or B67109391."V900R011" or B67109392."V900R011" or B67109471."V900R011" or B67109474."V900R011" or B67109508."V900R011" or B67109523."V900R011"	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Dedicated_PD CH	Dedicated Packet Data Channel.			No mapping	
Defined_CCH	Number of defined CCH channels for the Cell.			No mapping	
Defined_PDC H	Designated Packet Data Channel.			No mapping	
Defined_TCH	Number of defined TCH channels of the Cell.			No mapping	
Defined_TRX	Number of defined TRX belonging to the cell.			No mapping	
Max_Power	The bs_tx_pwr_max configuration attribute.			No mapping	
NSVC_CN_Id	A unique identifier for the NSVC CN.			No mapping	
Primary_Com mon_Pilot_Ch _Power	Primary CPICH channel power.			No mapping	
Primary_Scra mbling_Code	Primary DL scrambling code.			No mapping	
Primary_Sync _Ch_Power	Primary synchronisation channel power, DL.			No mapping	
Secondary_Sy nc_Ch_Power	Secondary synchronisation channel power, DL.			No mapping	
Segment_Id	A unique identifier for the Segment.			No mapping	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			B67109365."UMTS" or B67109367."UMTS" or B67109368."UMTS" or B67109369."UMTS" or B67109372."UMTS" or B67109373."UMTS" or B67109376."UMTS" or B67109378."UMTS" or B67109379."UMTS" or B67109380."UMTS" or B67109381."UMTS" or B67109382."UMTS" or	

				B67109384."UMTS" or B67109387."UMTS" or B67109390."UMTS" or B67109391."UMTS" or B67109392."UMTS" or B67109471."UMTS" or B67109474."UMTS" or B67109508."UMTS" or B67109523."UMTS"	
UTRAN_Absolute_Radio_Freq_DL	DL UTRAN absolute Radio Frequency Channel number.			No mapping	
UTRAN_Absolute_Radio_Freq_UL	UL UTRAN absolute Radio Frequency Channel number.			No mapping	

5.6 CNOOPERATOR details

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
CNOOPERATOR_Id	Unique ID of the license group.	Y		B50331652.Operator_Id or B67109519.CNNAME & "/" & B67109519.CNINDEX	
Configuration Attributes					
CNOOPERATOR_Name	User friendly name of the license group.			B50331652.Operator_Id or B67109519.CNNAME & "/" & B67109519.CNINDEX	

5.7 E1T1_Link details

In the network hierarchy, the immediate parent of the E1T1_Link object is RNC.

Attribute	Description	Read	Time-	Mapping	Aggrega
-----------	-------------	------	-------	---------	---------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Name		- Only ?	Track ed?		tor
Primary Identifier					
E1T1_Link_Id	Unique identifier for E1T1_Link	Y		B67109525.RNC_Id & "/" & B67109525.Object_Id or B67109487.RNC_Id & "/" & B67109487.Object_Id	
Relationship Attributes					
RNC_Id	The Node (RNC) that this E1T1_link is connected to (at this end).	Y	Y	B67109525.RNC_Id or B67109487.RNC_Id	
Region_Id	Identifier of the Region	Y	Y	B67109525.Region_Id or B67109487.Region_Id	
Network_Id	Network associated with E1T1_Link	Y	Y	B67109525.Network_Id or B67109487.Network_Id	
Configuration Attributes					
E1T1_Link_Name	User friendly name for E1T1_Link			B67109525.RNC_Id & "/" & B67109525.Object_Id or B67109487.RNC_Id & "/" & B67109487.Object_Id	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			B67109525."UMTS" or B67109487."UMTS"	
Version	Hardware/Software version of the E1T1_Link			B67109525."V900R011" or B67109487."V900R011"	

5.8 ETH details

In the network hierarchy, the immediate parent of the ETH object is Region.

Attribute Name	Description	Read - Only ?	Time- Track ed?	Mapping	Aggrega tor
Primary Identifier					

ETH_Id	Unique identifier for the ETH	Y		B67109514.RNC_Id & "/" & B67109514.ETH_Id or B67109544.RNC_Id & "/" & B67109544.ETH_Id or B67109488.RNC_Id & "/" & B67109488.ETH_Id	
Relationship Attributes					
Region_Id	Region associated with ETH	Y	Y	B67109514.Region_Id or B67109544.Region_Id or B67109488.Region_Id	
Network_Id	Network associated with ETH	Y	Y	B67109514.Network_Id or B67109544.Network_Id or B67109488.Network_Id	
Configuration Attributes					
ETH_Name	User friendly name for ETH			B67109514.RNC_Id & "/" & B67109514.ETH_Id or B67109544.RNC_Id & "/" & B67109544.ETH_Id or B67109488.RNC_Id & "/" & B67109488.ETH_Id	
Node_Id	Unique identifier for the Node			B67109514.RNC_Id or B67109544.RNC_Id or B67109488.RNC_Id	
Node_Name	User friendly name for the Node			B67109514.RNC_Id or B67109544.RNC_Id or B67109488.RNC_Id	
Node_Type	Type of the Node			B67109514."RNC" or B67109544."RNC" or B67109488."RNC"	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			B67109514."UMTS" or B67109544."UMTS" or B67109488."UMTS"	
Version	Hardware/Software version of the ETH.			B67109514."V900R011" or B67109544."V900R011" or B67109488."V900R011"	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

5.9 FIBER_Link details

In the network hierarchy, the immediate parent of the FIBER_Link object is Region.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
FIBER_Link_Id	Unique identifier for the Fiber Link	Y		B67109489.RNC_Id & "/" & B67109489.Object_Id or B67109496.RNC_Id & "/" & B67109496.Object_Id	
Relationship Attributes					
Region_Id	Identifier of the Region	Y	Y	B67109489.Region_Id or B67109496.Region_Id	
Network_Id	Network associated with FIBER_Link	Y	Y	B67109489.Network_Id or B67109496.Network_Id	
Configuration Attributes					
FIBER_Link_Name	User friendly name for FIBER_Link			B67109489.RNC_Id & "/" & B67109489.Object_Id or B67109496.RNC_Id & "/" & B67109496.Object_Id	
Node_Id	The Node (RNC) that this FIBER_Link is connected to (at this end).			B67109489.RNC_Id or B67109496.RNC_Id	
Node_Type	The type of the Node associated with the FIBER_Link			B67109489."RNC" or B67109496."RNC"	
Version	Hardware/Software version of the FIBER_Link			B67109489."V900R011" or B67109496."V900R011"	

5.10 FlowControl details

In the network hierarchy, the immediate parent of the FlowControl object is Region.

Attribute	Description	Read	Time-	Mapping	Aggrega
-----------	-------------	------	-------	---------	---------

Name		- Only ?	Track ed?		tor
Primary Identifier					
FlowControl_Id	Unique identifier for FlowControl	Y		B67109522.RNC_Id & "/" & B67109522.Object_Id	
Relationship Attributes					
Region_Id	Identifier of the Region	Y	Y	B67109522.Region_Id	
Network_Id	Network associated with FlowControl	Y	Y	B67109522.Network_Id	
Configuration Attributes					
FlowControl_Name	User friendly name for FlowControl			B67109522.RNC_Id & "/" & B67109522.Object_Id	
Node_Id	The Node (RNC) that this FlowControl belongs to (at this end).			B67109522.RNC_Id	
Node_Type	The type of the Node associated with the FlowControl			"RNC"	
Version	Hardware/Software Version of FlowControl			"V900R011"	

5.11 FRAATM details

In the network hierarchy, the immediate parent of the FRAATM object is Region.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
FRAATM_Id	FRAATM identifier	Y		B67109398.FRAATM_Id	
Relationship Attributes					

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Region_Id	Identifier of the region	Y	Y	B67109398.Region_Id	
Network_Id	Identifier of the network	Y	Y	B67109398.Network_Id	
Configuration Attributes					
FRAATM_Name	FRAATM name identifier			B67109398.FRAATM_Id	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"UMTS"	
Version	Hardware/Software version of the FRAATM.			"V900R011"	

5.12 FRAIMALNK details

In the network hierarchy, the immediate parent of the FRAIMALNK object is Region.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggregator
Primary Identifier					
FRAIMALNK_Id	FRAIMALNK identifier	Y		B67109399.FRAIMALNK_Id	
Relationship Attributes					
Region_Id	Identifier of the region	Y	Y	B67109399.Region_Id	
Network_Id	Identifier of the network	Y	Y	B67109399.Network_Id	
Configuration Attributes					
FRAIMALNK_Name	FRAIMALNK name identifier			B67109399.FRAIMALNK_Id	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"UMTS"	
Version	Hardware/Software version of the FRAIMALNK			"V900R011"	

5.13 FRAME details

In the network hierarchy, the immediate parent of the FRAME object is Region.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
FRAME_Id	Unique identifier for FRAME	Y		B67109520.RNC_Id & "/" & B67109520.Object_Id	
Relationship Attributes					
Region_Id	Identifier of the Region	Y	Y	B67109520.Region_Id	
Network_Id	Network associated with FRAME	Y	Y	B67109520.Network_Id	
Configuration Attributes					
FRAME_Na me	User friendly name for FRAME			B67109520.RNC_Id & "/" & B67109520.Object_Id	
Node_Id	The Node (RNC) that this FRAME belongs to			B67109520.RNC_Id	
Node_Type	The type of the Node associated with the FRAME			"RNC"	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"UMTS"	
Version	Hardware/Software Version of frame			"V900R011"	

5.14 GPRS_Tunnel details

In the network hierarchy, the immediate parent of the GPRS_Tunnel object is GGSN.

Attribute Name	Description	Read -	Time-Track	Mapping	Aggrega tor
----------------	-------------	--------	------------	---------	-------------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

		Only ?	ed?		
Primary Identifier					
GTP_Id	A unique identifier for the GPRS Tunnel.	Y		B67109400.RNC_Id & "/" & B67109400.Object_Id	
Relationship Attributes					
GGSN_Id	A unique identifier for the GGSN.	Y	Y	No mapping	
Network_Id	Network associated with the GPRS Tunnel.	Y	Y	B67109400.Network_Id	
Region_Id	Region associated with the GPRS Tunnel.	Y	Y	B67109400.Region_Id	
SGSN_Id	A unique identifier for the SGSN.	Y	Y	No mapping	
Configuration Attributes					
GTP_Name	A user friendly name preferably unique for the GPRS Tunnel.			B67109400.RNC_Id & "/" & B67109400.Object_Id	
GTP_PDP_Capacity	Number of PDP sessions supported by the GPRS Tunnel.			No mapping	
GTP_Role	GPRS Tunnel usage.			No mapping	
GTP_Version	Hardware/Software version of the GPRS Tunnel.			"V900R011"	
GTP_status	Status of the GPRS Tunnel.			No mapping	
Technology	Technology of the network/element (e.g. GPRS, UMTS).			"UMTS"	

5.15 IMA_Group details

In the network hierarchy, the immediate parents of the IMA_Group object are: NodeB and RNC.

Attribute	Description	Read	Time-	Mapping	Aggrega
-----------	-------------	------	-------	---------	---------

Name		- Only ?	Track ed?		tor
Primary Identifier					
IMA_Group_Id	Primary Identifier of the IMA_Group	Y		B67109402.RNC_ID & "/" & B67109402.Object_Id	
Relationship Attributes					
Region_Id	Region associated with IMA_Group	Y	Y	B67109402.Region_Id	
Network_Id	Network associated with IMA_Group	Y	Y	B67109402.Network_Id	
NodeB_Id	A unique identifier for the NodeB.	Y	Y	No mapping	
RNC_Id	A unique identifier for the RNC.	Y	Y	B67109402.RNC_Id	
Configuration Attributes					
IMA_Group_Name	User friendly name of IMA_Group			B67109402.RNC_ID & "/" & B67109402.Object_Id	
Node_Id	Node identifier associated with this IMA_Group			B67109402.RNC_Id	
Node_Type	The type of the Node associated with the IMA_Group			"RNC"	
IMA_Group_Type	Type or Information about the IMA Group.			No mapping	
Version	Version of the IMA Group or Node.			"V900R011"	
Technology	Technology of the IMA Group / Node (e.g. UMTS).			"UMTS"	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

5.16 IMA_Link details

In the network hierarchy, the immediate parents of the IMA_Link object are: RNC and IMA_Group.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
IMA_Link_Id	Primary identifier of the IMA link	Y		B67109403.RNC_ID & "/" & B67109403.Object_Id	
Relationship Attributes					
NodeB_Id	Identifier of the NodeB.	Y	Y	No mapping	
RNC_Id	Identifier of the BSC/RNC.	Y	Y	B67109403.RNC_Id	
Region_Id	Region associated with IMA Link	Y	Y	B67109403.Region_Id	
Network_Id	Network associated with IMA_Link	Y	Y	B67109403.Network_Id	
IMA_Group_Id	Identifier of the IMA Group.	Y	Y	No mapping	
Configuration Attributes					
IMA_Link_Name	User friendly name of IMA Link			B67109403.RNC_ID & "/" & B67109403.Object_Id	
Version	Hardware/Software version of the IMA_link or RNC.			"V900R011"	
Technology	Technology of the IMA Link (e.g. UMTS).			"UMTS"	

5.17 IPNODECONN details

In the network hierarchy, the immediate parent of the IPNODECONN object is Region.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
----------------	-------------	---------------	----------------	---------	-------------

Primary Identifier					
IPNODECONN_Id	IPNODECONN identifier	Y		B67109475.RNC_Id & "/" & B67109475.IPNODECONN_Id or B67109481.RNC_Id & "/" & B67109481.IPNODECONN_Id	
Relationship Attributes					
Region_Id	Identifier of the region	Y	Y	B67109475.Region_Id or B67109481.Region_Id	
Network_Id	Identifier of the network	Y	Y	B67109475.Network_Id or B67109481.Network_Id	
Configuration Attributes					
IPNODECONN_Name	IPNODECONN name identifier			B67109475.RNC_Id & "/" & B67109475.IPNODECONN_Id or B67109481.RNC_Id & "/" & B67109481.IPNODECONN_Id	
Node_Id	Unique identifier for the Node			B67109475.RNC_Id or B67109481.RNC_Id	
Node_Type	Type of the Node			B67109475."RNC" or B67109481."RNC"	
Node_Name	User friendly name for the Node			B67109475.RNC_Id or B67109481.RNC_Id	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			B67109475."UMTS" or B67109481."UMTS"	
Version	Hardware/Software version of the IPNODECONN			B67109475."V900R011" or B67109481."V900R011"	

5.18 IPNODETRM details

In the network hierarchy, the immediate parent of the IPNODETRM object is Region.

Attribute Name	Description	Read -	Time-Track	Mapping	Aggregator
----------------	-------------	--------	------------	---------	------------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

		Only ?	ed?		
Primary Identifier					
IPNODETRM_Id	IPNODETRM identifier	Y		B67109476.RNC_Id & "/" & B67109476.IPNODETRM_Id or B67109500.RNC_Id & "/" & B67109500.IPNODETRM_Id	
Relationship Attributes					
Region_Id	Identifier of the network	Y	Y	B67109476.Region_Id or B67109500.Region_Id	
Network_Id	Identifier of the network	Y	Y	B67109476.Network_Id or B67109500.Network_Id	
Configuration Attributes					
IPNODETRM_Name	IPNODETRM name identifier			B67109476.RNC_Id & "/" & B67109476.IPNODETRM_Id or B67109500.RNC_Id & "/" & B67109500.IPNODETRM_Id	
Node_Id	Unique identifier for the Node			B67109476.RNC_Id or B67109500.RNC_Id	
Node_Name	User friendly name for the Node			B67109476.RNC_Id or B67109500.RNC_Id	
Node_Type	Type of the Node			B67109476."RNC" or B67109500."RNC"	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			B67109476."UMTS" or B67109500."UMTS"	
Version	Hardware/Software version of the IPNODETRM			B67109476."V900R011" or B67109500."V900R011"	

5.19 IPOA details

In the network hierarchy, the immediate parent of the IPOA object is RNC.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
----------------	-------------	---------------	----------------	---------	-------------

Primary Identifier					
IPOA_Id	IPOA identifier	Y		B67109457.RNC_Id & "/" & B67109457.IPOA_Id	
Relationship Attributes					
RNC_Id	Identifier of the RNC	Y	Y	B67109457.RNC_Id	
Region_Id	Identifier of the region	Y	Y	B67109457.Region_Id	
Network_Id	Identifier of the network	Y	Y	B67109457.Network_Id	
Configuration Attributes					
IPOA_Name	IPOA name identifier			B67109457.RNC_Id & "/" & B67109457.IPOA_Id	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"UMTS"	
Version	Hardware/Software version of the IPOA			"V900R011"	

5.20 IPOAPVC details

In the network hierarchy, the immediate parent of the IPOAPVC object is Region.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
IPOAPVC_Id	IPOAPVC identifier	Y		B67109465.RNC_Id & "/" & B67109465.IPOAPVC_Id	
Relationship Attributes					
Region_Id	Identifier of the region	Y	Y	B67109465.Region_Id	
Network_Id	Identifier of the network	Y	Y	B67109465.Network_Id	
Configuration Attributes					

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

IPOAPVC_Name	IPOAPVC name identifier			B67109465.RNC_Id & "/" & B67109465.IPOAPVC_Id	
Node_Name	User friendly name for the Node			B67109465.RNC_Id	
Node_Type	Type of the Node			"RNC"	
Node_Id	Unique identifier for the Node			B67109465.RNC_Id	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"UMTS"	
Version	Hardware/Software version of the IPOAPVC			"V900R011"	

5.21 IPPATH details

In the network hierarchy, the immediate parent of the IPPATH object is Region.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggregator
Primary Identifier					
IPPATH_Id	IPPATH identifier	Y		B67109467.RNC_Id & "/" & B67109467.IPPATH_Id or B67109495.RNC_Id & "/" & B67109495.IPPATH_Id or B67109534.RNC_Id & "/" & B67109534.IPPATH_Id or B67109539.RNC_Id & "/" & B67109539.IPPATH_Id or B67109540.RNC_Id & "/" & B67109540.IPPATH_Id	
Relationship Attributes					
Region_Id	Identifier of the region	Y	Y	B67109467.Region_Id or B67109495.Region_Id or B67109534.Region_Id or B67109539.Region_Id or B67109540.Region_Id	
Network_Id	Identifier of the network	Y	Y	B67109467.Network_Id or	

				B67109495.Network_Id or B67109534.Network_Id or B67109539.Network_Id or B67109540.Network_Id	
Configuration Attributes					
IPPATH_Name	IPPATH name identifier			B67109467.RNC_Id & "/" & B67109467.IPPATH_Id or B67109495.RNC_Id & "/" & B67109495.IPPATH_Id or B67109534.RNC_Id & "/" & B67109534.IPPATH_Id or B67109539.RNC_Id & "/" & B67109539.IPPATH_Id or B67109540.RNC_Id & "/" & B67109540.IPPATH_Id	
Node_Id	Unique identifier of the Node			B67109467.RNC_Id or B67109495.RNC_Id or B67109534.RNC_Id or B67109539.RNC_Id or B67109540.RNC_Id	
Node_Name	User friendly name for Node			B67109467.RNC_Id or B67109495.RNC_Id or B67109534.RNC_Id or B67109539.RNC_Id or B67109540.RNC_Id	
Node_Type	Type of the Node			B67109467."RNC" or B67109495."RNC" or B67109534."RNC" or B67109539."RNC" or B67109540."RNC"	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			B67109467."UMTS" or B67109495."UMTS" or B67109534."UMTS" or B67109539."UMTS" or B67109540."UMTS"	
Version	Hardware/Software version of the IPPATH			B67109467."V900R011" or B67109495."V900R011" or	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

				B67109534."V900R011" or B67109539."V900R011" or B67109540."V900R011"	
--	--	--	--	--	--

5.22 IPPATHPING details

In the network hierarchy, the immediate parent of the IPPATHPING object is Region.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
IPPATHPING_Id	IPPATHPING identifier	Y		B67109470.RNC_Id & "/" & B67109470.IPPATHPING_Id	
Relationship Attributes					
Region_Id	Identifier of the region	Y	Y	B67109470.Region_Id	
Network_Id	Identifier of the network	Y	Y	B67109470.Network_Id	
Configuration Attributes					
IPPATHPING_Name	IPPATHPING name identifier			B67109470.RNC_Id & "/" & B67109470.IPPATHPING_Id	
Node_Id	Unique identifier for the Node			B67109470.RNC_Id	
Node_Name	User friendly name for the Node			B67109470.RNC_Id	
Node_Type	Type of the Node			"RNC"	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"UMTS"	
Version	Hardware/Software version of the IPPATHPING			"V900R011"	

5.23 Iu details

In the network hierarchy, the immediate parent of the Iu object is RNC.

Attribute	Description	Read	Time-	Mapping	Aggrega
-----------	-------------	------	-------	---------	---------

Name		- Only ?	Track ed?		tor
Primary Identifier					
Iu_Id	Identifier of the Iu interface	Y		(B67109405.RNC_Id & "/" & B67109405.Object_Id) or (B67109406.RNC_Id & "/" & B67109406.Object_Id) or (B67109407.RNC_Id & "/" & B67109407.Object_Id) or (B67109535.RNC_Id & "/" & B67109535.Object_Id) or (B67109526.RNC_Id & "/" & B67109526.Object_Id)	
Relationship Attributes					
RNC_Id	RNC identifier	Y	Y	B67109405.RNC_Id or B67109406.RNC_Id or B67109407.RNC_Id or B67109535.RNC_Id or B67109526.RNC_Id	
Region_Id	Identifier of the region	Y	Y	B67109405.Region_Id or B67109406.Region_Id or B67109407.Region_Id or B67109535.Region_Id or B67109526.Region_Id	
Network_Id	Identifier of the network	Y	Y	B67109405.Network_Id or B67109406.Network_Id or B67109407.Network_Id or B67109535.Network_Id or B67109526.Network_Id	
Configuration Attributes					
Iu_Name	Meaningful name of the Iu interface			(B67109405.RNC_Id & "/" & B67109405.Object_Id) or (B67109406.RNC_Id & "/" & B67109406.Object_Id) or (B67109407.RNC_Id & "/" &	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

				B67109407.Object_Id) or (B67109535.RNC_Id & "/" & B67109535.Object_Id) or (B67109526.RNC_Id & "/" & B67109526.Object_Id)	
NodeB_Id	Identifier of the Node B			No mapping	
Node_Id	Identifier of the Node			No mapping	
Node_Name	Meaningful name of the Node			No mapping	
Node_Type	Type of the Node			B67109405."RNC" or B67109406."RNC" or B67109407."RNC" or B67109535."RNC" or B67109526."RNC"	
Technology	Technology of the Network/Element			B67109405."UMTS" or B67109406."UMTS" or B67109407."UMTS" or B67109535."UMTS" or B67109526."UMTS"	
Version	Version.			B67109405."V900R011" or B67109406."V900R011" or B67109407."V900R011" or B67109535."V900R011" or B67109526."V900R011"	

5.24 Iur details

In the network hierarchy, the immediate parent of the Iur object is RNC.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
Iur_Id	Identifier of the Iur interface	Y		(B67109410.RNC_Id & "/" & B67109410.Object_Id) or (B67109411.RNC_Id & "/" & B67109411.Object_Id) or (B67109412.RNC_Id & "/" & B67109412.Object_Id) or	

				(B67109536.RNC_Id & "/" & B67109536.Object_Id)	
Relationship Attributes					
RNC_Id	Identifier for the serving (near end) RNC	Y	Y	B67109410.RNC_Id or B67109411.RNC_Id or B67109412.RNC_Id or B67109536.RNC_Id	
Region_Id	Identifier of the region	Y	Y	B67109410.Region_Id or B67109411.Region_Id or B67109412.Region_Id or B67109536.Region_Id	
Network_Id	Identifier of the network	Y	Y	B67109410.Network_Id or B67109411.Network_Id or B67109412.Network_Id or B67109536.Network_Id	
Configuration Attributes					
Iur_Name	Meaningful name of the Iur interface			(B67109410.RNC_Id & "/" & B67109410.Object_Id) or (B67109411.RNC_Id & "/" & B67109411.Object_Id) or (B67109412.RNC_Id & "/" & B67109412.Object_Id) or (B67109536.RNC_Id & "/" & B67109536.Object_Id)	
RNC_Target_Id	Identifier of the target RNC			No mapping	
Technology	Technology of the network/element			B67109410."UMTS" or B67109411."UMTS" or B67109412."UMTS" or B67109536."UMTS"	
Version	Version identifier			B67109410."V900R011" or B67109411."V900R011" or B67109412."V900R011" or B67109536."V900R011"	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

5.25 Local_Cell details

In the network hierarchy, the immediate parent of the Local_Cell object is NodeB.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
Local_Cell_Id	Unique identifier for Local Cell	Y		B50331648.NodeB_Id & "/" & B50331648.Local_Cell_Id or B50331650.NodeB_Id & "/" & B50331650.Local_Cell_Id or B50331651.NodeB_Id & "/" & B50331651.Local_Cell_Id	
Relationship Attributes					
NodeB_Id	NodeB associated with the Local Cell	Y	Y	B50331648.RNC_Id & "/" & B50331648.NodeB_Id or B50331650.RNC_Id & "/" & B50331650.NodeB_Id or B50331651.RNC_Id & "/" & B50331651.NodeB_Id	
Network_Id	Network associated with the Local Cell	Y	Y	B50331648.Network_Id or B50331650.Network_Id or B50331651.Network_Id	
Region_Id	Region associated with the Local Cell	Y	Y	B50331648.Region_Id or B50331650.Region_Id or B50331651.Region_Id	
RNC_Id	RNC associated with the Local Cell	Y	Y	B50331648.RNC_Id or B50331650.RNC_Id or B50331651.RNC_Id	
Configuration Attributes					
Local_Cell_Name	User friendly name for Local Cell			B50331648.NodeB_Id & "/" & B50331648.Local_Cell_Id or B50331650.NodeB_Id & "/" & B50331650.Local_Cell_Id or B50331651.NodeB_Id & "/" & B50331651.Local_Cell_Id	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			B50331648."UMTS" or B50331650."UMTS" or B50331651."UMTS"	

Version	Hardware/Software version of the Local_Cell			B50331648."V900R011" or B50331650."V900R011" or B50331651."V900R011"	
---------	---	--	--	--	--

5.26 Logic_Port details

In the network hierarchy, the immediate parent of the Logic_Port object is Region.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
Logic_Port_I d	Primary identifier of the Logic_Port	Y		B67109524.RNC_Id & "/" & B67109524.Object_Id or B67109541.RNC_Id & "/" & B67109541.Object_Id	
Relationship Attributes					
Region_Id	Region associated with Logic_Port	Y	Y	B67109524.Region_Id or B67109541.Region_Id	
Network_Id	Network associated with the Logic_Port	Y	Y	B67109524.Network_Id or B67109541.Network_Id	
Configuration Attributes					
Logic_Port_N ame	User friendly name of Logic_Port			B67109524.RNC_Id & "/" & B67109524.Object_Id or B67109541.RNC_Id & "/" & B67109541.Object_Id	
Node_Id	Node identifier associated with Logic_Port			B67109524.RNC_Id or B67109541.RNC_Id	
Node_Type	The type of the Node associated with the Logic_Port			B67109524."RNC" or B67109541."RNC"	
Version	Hardware/Software version			B67109524."V900R011" or B67109541."V900R011"	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

5.27 M3UA_Dest details

In the network hierarchy, the immediate parents of the M3UA_Dest object are: BSC, MSC, MGW, RNC and SGSN.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
M3UA_Dest_Id	Primary identifier of the M3UA Destination Point Code (DPC)	Y		B67109484.RNC_Id & "/" & B67109484.M3UA_Point_Id	
Relationship Attributes					
BSC_Id	A unique identifier for the BSC.	Y	Y	No mapping	
MSC_Id	A unique identifier for the MSC.	Y	Y	No mapping	
MGW_Id	A unique identifier for the MGW.	Y	Y	No mapping	
RNC_Id	A unique identifier for the RNC.	Y	Y	B67109484.RNC_Id	
SGSN_Id	A unique identifier for the SGSN.	Y	Y	No mapping	
Region_Id	Identifier of the region	Y	Y	B67109484.Region_Id	
Network_Id	Identifier of the Network	Y	Y	B67109484.Network_Id	
Configuration Attributes					
M3UA_Dest_Name	Meaningful name of the M3UA DPC			B67109484.RNC_Id & "/" & B67109484.M3UA_Point_Id	
Node_Id	Identifier of the node (e.g. SGSN or MSC)			B67109484.RNC_Id	
Node_Type	Type of the node (e.g. SGSN or MSC)			"RNC"	

5.28 M3UA_Link details

In the network hierarchy, the immediate parent of the M3UA_Link object is M3UA_LinkSet.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
M3UA_Link_Id	Identifier of the M3UA link	Y		B67109482.RNC_Id & "/" & B67109482.M3UA_Link_Id	
Relationship Attributes					
Region_Id	Region associated with M3UA link	Y	Y	B67109482.Region_Id	
Network_Id	Network associated with M3UA link	Y	Y	B67109482.Network_Id	
M3UA_LinkSet_Id	Identifier of the M3UA LinkSet.	Y	Y	No mapping	
Configuration Attributes					
M3UA_Link_Name	User friendly name of M3UA link			B67109482.RNC_Id & "/" & B67109482.M3UA_Link_Id	
Node_Id	Node identifier associated with this M3UA link			B67109482.RNC_Id	
Node_Type	The type of the Node associated with the M3UA Link			"RNC"	
Node_Name	The name of the Node associated with the M3UA Link			B67109482.RNC_Id	
Link_Number	LNKN for M3UA link			No mapping	
Module_Number	Module identifier for M3UA link			No mapping	
Technology	Technology of the			"UMTS"	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

	network/element (e.g. GSM, GPRS, UMTS).				
M3UA_Dest_Id	Identifier of the M3UA Destination Point.			No mapping	

5.29 M3UA_LinkSet details

In the network hierarchy, the immediate parents of the M3UA_LinkSet object are: BSC, MSC, MGW, RNC and SGSN.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
M3UA_LinkSet_Id	Unique identifier for M3UA linkset	Y		B67109483.RNC_Id & "/" & B67109483.M3UA_LinkSet_Id	
Relationship Attributes					
BSC_Id	A unique identifier for the BSC.	Y	Y	No mapping	
MSC_Id	A unique identifier for the MSC.	Y	Y	No mapping	
MGW_Id	A unique identifier for the MGW.	Y	Y	No mapping	
RNC_Id	A unique identifier for the RNC.	Y	Y	B67109483.RNC_Id	
SGSN_Id	A unique identifier for the SGSN.	Y	Y	No mapping	
M3UA_Dest_Id	Identifier of the M3UA Destination Point	Y	Y	No mapping	
Region_Id	Identifier of the Region	Y	Y	B67109483.Region_Id	
Network_Id	Network associated with M3UA link	Y	Y	B67109483.Network_Id	
Configuration Attributes					
M3UA_LinkSet_Name	User friendly name for M3UA link			B67109483.RNC_Id & "/" & B67109483.M3UA_LinkSet_Id	

Node_Id	The Node (MSC, MGW) that this M3UA LinkSet is connected to (at this end).			B67109483.RNC_Id	
Node_Type	The type of the Node associated with the M3UA Linkset			"RNC"	
Node_Name	The Name of the Node associated with the M3UA Linkset			B67109483.RNC_Id	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"UMTS"	

5.30 MLPPP details

In the network hierarchy, the immediate parent of the MLPPP object is Region.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
MLPPP_Id	Unique identifier for MLPPP	Y		B67109512.RNC_Id & "/" & B67109512.MLPPP_Id or B67109490.RNC_Id & "/" & B67109490.MLPPP_Id or B67109542.RNC_Id & "/" & B67109542.MLPPP_Id	
Relationship Attributes					
Network_Id	Network associated with MLPPP	Y	Y	B67109512.Network_Id or B67109490.Network_Id or B67109542.Network_Id	
Region_Id	Region associated with MLPPP	Y	Y	B67109512.Region_Id or B67109490.Region_Id or B67109542.Region_Id	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Configuration Attributes					
MLPPP_Name	User friendly name for MLPPP			B67109512.RNC_Id & "/" & B67109512.MLPPP_Id or B67109490.RNC_Id & "/" & B67109490.MLPPP_Id or B67109542.RNC_Id & "/" & B67109542.MLPPP_Id	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			B67109512."UMTS" or B67109490."UMTS" or B67109542."UMTS"	
Version	Hardware/Software version of the MLPPP			B67109512."V900R011" or B67109490."V900R011" or B67109542."V900R011"	

5.31 MTP3_Link details

In the network hierarchy, the immediate parent of the MTP3_Link object is MTP3_LinkSet.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggregator
Primary Identifier					
MTP3_Link_Id	Primary Identifier of the MTP3 link.	Y		B67109551.RNC_Id & "/" & B67109551.Object_Id	
Relationship Attributes					
MTP3_LinkPoint_Id	Identifier of the MTP3 DPC.	Y	Y	No mapping	
Region_Id	Identifier of the region	Y	Y	B67109551.Region_Id	
Network_Id	Identifier of the Network	Y	Y	B67109551.Network_Id	
MTP3_LinkSet_Id	Identifier of the MTP3 LinkSet.	Y	Y	B67109551.RNC_Id & "/" & B67109551.MTP3LinkSet_Id	
Configuration Attributes					
MTP3_Link_Name	Meaningful name for the MTP3 Link			B67109551.RNC_Id & "/" & B67109551.Object_Id	
Node_Id	Identifier of the Node (e.g. SGSN or MSC)			B67109551.RNC_Id	

Node_Type	Type of the Node (e.g. SGSN or MSC)			"RNC"	
Node_Name	The name of the Node associated with the MTP3 Link			B67109551.RNC_Id	
Link_Number	LNKN for MTP3 link			No mapping	
Module_Number	Module identifier for MTP3 link			No mapping	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"UMTS"	

5.32 MTP3_LinkPoint details

In the network hierarchy, the immediate parents of the MTP3_LinkPoint object are: BSC, MGW, RNC, SGSN and MSC.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
MTP3_LinkPoint_Id	Primary identifier of the MTP3 DPC.	Y		B67109550.RNC_Id & "/" & B67109550.Object_Id	
Relationship Attributes					
BSC_Id	A unique identifier for the BSC.	Y	Y	No mapping	
MGW_Id	A unique identifier for the MGW.	Y	Y	No mapping	
RNC_Id	A unique identifier for the RNC.	Y	Y	B67109550.RNC_Id	
SGSN_Id	A unique identifier for the SGSN.	Y	Y	No mapping	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

MSC_Id	A unique identifier for the MSC.	Y	Y	No mapping	
Region_Id	Identifier of the Region	Y	Y	B67109550.Region_Id	
Network_Id	Identifier of the network	Y	Y	B67109550.Network_Id	
Configuration Attributes					
MTP3_LinkPoint_Name	Meaningful name of the MTP3 DPC			B67109550.RNC_Id & "/" & B67109550.Object_Id	
Node_Id	Identifier of the Node (e.g. SGSN or MSC)			B67109550.RNC_Id	
Node_Type	Type of the Node			"RNC"	

5.33 MTP3_LinkSet details

In the network hierarchy, the immediate parents of the MTP3_LinkSet object are: BSC, MGW, RNC, SGSN and MSC.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggregator
Primary Identifier					
MTP3_LinkSet_Id	Primary identifier of the MTP3 LinkSet.	Y		B67109552.RNC_Id & "/" & B67109552.Object_Id	
Relationship Attributes					
BSC_Id	A unique identifier for the BSC.	Y	Y	No mapping	
MGW_Id	A unique identifier for the MGW.	Y	Y	No mapping	
RNC_Id	A unique identifier for the RNC.	Y	Y	B67109552.RNC_Id	
SGSN_Id	A unique identifier for the SGSN.	Y	Y	No mapping	
MSC_Id	A unique identifier for the MSC.	Y	Y	No mapping	
MTP3_LinkP	Identifier of the MTP3	Y	Y	No Mapping	

oint_Id	DPC.				
Region_Id	Identifier of the Region	Y	Y	B67109552.Region_Id	
Network_Id	Identifier of the Network	Y	Y	B67109552.Network_Id	
Configuration Attributes					
MTP3_LinkSet_Name	Meaningful name of the MTP3 LinkSet.			B67109552.RNC_Id & "/" & B67109552.Object_Id	
Node_Id	Identifier of the Node (e.g. SGSN or MSC)			B67109552.RNC_Id	
Node_Type	Type of the Node			"RNC"	
Node_Name	The Name of the Node associated with the MTP3 Linkset			B67109552.RNC_Id	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"UMTS"	

5.34 MTP3B_Link details

In the network hierarchy, the immediate parent of the MTP3B_Link object is MTP3B_LinkSet.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
MTP3B_Link_Id	Primary identifier of the MTP3B link.	Y		B67109416.RNC_ID & "/" & B67109416.Object_Id	
Relationship Attributes					
MTP3B_Link Point	Identifier of the MTP3B Link Point.	Y	Y	B67109416.SS7_Point_Id	
Region_Id	Identifier of the region	Y	Y	B67109416.Region_Id	
Network_Id	Identifier of the Network	Y	Y	B67109416.Network_Id	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

MTP3B_LinkSet_Id	Identifier of the MTP3B LinkSet.	Y	Y	B67109416.SS7_LinkSet_Id	
Configuration Attributes					
MTP3B_Link_Name	Meaningful name of the MTP3B link			B67109416.RNC_ID & "/" & B67109416.Object_Id	
Node_Id	Identifier of the Node (e.g. SGSN or MSC)			B67109416.RNC_Id	
Node_Type	Type of the Node (e.g. SGSN or MSC)			"RNC"	
Node_Name	The name of the Node associated with the MTP3B Link			B67109416.RNC_Id	
Link_Number	LNKN for MTP3B link			No mapping	
Module_Number	Module identifier for MTP3B link			No mapping	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"UMTS"	

5.35 MTP3B_LinkSet details

In the network hierarchy, the immediate parents of the MTP3B_LinkSet object are: MGW, RNC, SGSN and MSC.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
MTP3B_LinkSet_Id	Primary identifier of the MTP3B Link Set.	Y		B67109417.RNC_ID & "/" & B67109417.Object_Id	
Relationship Attributes					
MGW_Id	A unique identifier for the MGW.	Y	Y	No mapping	
RNC_Id	A unique identifier for the RNC.	Y	Y	B67109417.RNC_Id	

SGSN_Id	A unique identifier for the SGSN.	Y	Y	No mapping	
MSC_Id	A unique identifier for the MSC.	Y	Y	No mapping	
MTP3B_Link Point_Id	Identifier of the MTP3B DPC.	Y	Y	B67109417.SS7_Point_Id	
Region_Id	Identifier of the region	Y	Y	B67109417.Region_Id	
Network_Id	Identifier of the Network	Y	Y	B67109417.Network_Id	
Configuration Attributes					
MTP3B_Link Set_Name	Meaningful name for the MTP3B LinkSet			B67109417.RNC_ID & "/" & B67109417.Object_Id	
Node_Id	Identifier of the Node (e.g. SGSN or MSC)			B67109417.RNC_Id	
Node_Type	Type of the Node			"RNC"	
Node_Name	The Name of the Node associated with the MTP3B Linkset			B67109417.RNC_Id	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"UMTS"	

5.36 MTP3B_Point details

In the network hierarchy, the immediate parents of the MTP3B_Point object are: MGW, RNC, SGSN and MSC.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
MTP3B_Poin t_Id	Primary Identifier of the MTP3B Point.	Y		B67109415.RNC_ID & "/" & B67109415.Object_Id	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Relationship Attributes					
MGW_Id	A unique identifier for the MGW.	Y	Y	No mapping	
RNC_Id	A unique identifier for the RNC.	Y	Y	B67109415.RNC_Id	
SGSN_Id	A unique identifier for the SGSN.	Y	Y	No mapping	
MSC_Id	A unique identifier for the MSC.	Y	Y	No mapping	
Region_Id	Identifier of the Region	Y	Y	B67109415.Region_Id	
Network_Id	Identifier of the Network	Y	Y	B67109415.Network_Id	
Configuration Attributes					
MTP3B_Point_Name	Meaningful name for the MTP3B Point			B67109415.RNC_ID & "/" & B67109415.Object_Id	
Node_Id	Identifier of the Node (e.g. SGSN or MSC)			B67109415.RNC_Id	
Node_Type	Type of the Node (e.g. SGSN or MSC)			"RNC"	

5.37 Neighbour details

In the network hierarchy, the immediate parent of the Neighbour object is Cell.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggregator
Primary Identifier					
Neighbour_Id	A unique identifier for the Neighbour.	Y		(B67109394.RNC_Id & "/" & Cell_Id & "/" & MCC_Id & "/" & MNC_Id) or (B67109395.RNC_Id & "/" & Cell_Id & "/" & Dest_RNC_Id & "/" & Dest_Cell_Id) or (B67109395_V900.RNC_Id & "/" & Cell_Id & "/" & Dest_RNC_Id & "/" & Dest_Cell_Id)	

Relationship Attributes					
Source_Cell_Id	A unique identifier for the Cell_Id of the Cell that is handling calls.	Y	Y	B67109394.RNC_Id & "/" & B67109394.Cell_Id or B67109395.RNC_Id & "/" & B67109395.Cell_Id or B67109395_V900.RNC_Id & "/" & B67109395_V900.Cell_Id	
Configuration Attributes					
Neighbour_Name	A user friendly name preferably unique for the Neighbour.			(B67109394.RNC_Id & "/" & Cell_Id & "/" & MCC_Id & "/" & MNC_Id) or (B67109395.RNC_Id & "/" & Cell_Id & "/" & Dest_RNC_Id & "/" & Dest_Cell_Id) or (B67109395_V900.RNC_Id & "/" & Cell_Id & "/" & Dest_RNC_Id & "/" & Dest_Cell_Id)	
Source_Cell_Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			B67109395."UMTS" or B67109395_V900."UMTS" or B67109394."UMTS"	
Source_Cell_Type	Type of Source Cell.			No mapping	
Source_Cell_Vendor	Manufacturer of the Source Cell.			B67109395."Huawei" or B67109395_V900."Huawei" or B67109394."Huawei"	
Source_Cell_Version	Hardware/Software version of the Source Cell.			B67109395."V900R011" or B67109395_V900."V900R011" or B67109394."V900R011"	
Target_Cell_Id	A unique identifier for the Cell_Id of the Cell that is receiving handed-over calls.			B67109395.Dest_RNC_Id & "/" & Dest_Cell_Id or B67109395_V900.Dest_RNC_Id & "/" & Dest_Cell_Id or B67109394."No mapping"	
Target_Cell_Position	Position of Target Cell.			No mapping	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Target_Cell_Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			No mapping	
Target_Cell_Type	Type of Target Cell.			No mapping	
Target_Cell_Vendor	Manufacturer of the Target Cell.			No mapping	
Target_Cell_Version	Hardware/Software version of the Target Cell.			"V900R011"	

5.38 Network details

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
Network_Id	A unique identifier for the Network.	Y		B67109420.Network_Id	
Configuration Attributes					
Network_Name	A user friendly name preferably unique for the Network.			B67109420.Network_Id	
Default_Link_Speed	The default speed of SS7 Signalling Links in this network.			No mapping	
Network_Type	Type of Network (e.g. GSM-900, GSM-1800 or GSM-1900).			"UMTS"	

5.39 NodeB details

In the network hierarchy, the immediate parent of the NodeB object is RNC.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
----------------	-------------	---------------	----------------	---------	-------------

Primary Identifier					
NodeB_Id	A unique identifier for the NodeB.	Y		B67109473.RNC_Id & "/" & B67109473.NodeB_Id or B50331649.RNC_Id & "/" & B50331649.NodeB_Id or B67109391_GRP.RNC_Id & "/" & B67109391_GRP.NodeB_Id or B67109390_GRP.RNC_Id & "/" & B67109390_GRP.NodeB_Id or B67109387_GRP.RNC_Id & "/" & B67109387_GRP.NodeB_Id or B67109471_GRP.RNC_Id & "/" & B67109471_GRP.NodeB_Id	
Relationship Attributes					
MSC_Id	A unique identifier for the MSC.	Y	Y	No mapping	
Network_Id	Network associated with the NodeB.	Y	Y	B67109473.Network_Id or B50331649.Network_Id or B67109391_GRP.Network_Id or B67109390_GRP.Network_Id or B67109387_GRP.Network_Id or B67109471_GRP.Network_Id	
RNC_Id	The RNC that controls this NodeB.	Y	Y	B67109473.RNC_Id or B50331649.RNC_Id or B67109391_GRP.RNC_Id or B67109390_GRP.RNC_Id or B67109387_GRP.RNC_Id or B67109471_GRP.RNC_Id	
Region_Id	Region associated with the NodeB.	Y	Y	B67109473.Region_Id or B50331649.Region_Id or B67109391_GRP.Region_Id or B67109390_GRP.Region_Id or B67109387_GRP.Region_Id or	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

				B67109471_GRP.Region_Id	
SGSN_Id	A unique identifier for the SGSN.	Y	Y	No mapping	
Configuration Attributes					
NodeB_Name	A user friendly name preferably unique for the NodeB (site).			B67109473.RNC_Id & "/" & B67109473.NodeB_Id or B50331649.RNC_Id & "/" & B50331649.NodeB_Id or B67109391_GRP.RNC_Id & "/" & B67109391_GRP.NodeB_Id or B67109390_GRP.RNC_Id & "/" & B67109390_GRP.NodeB_Id or B67109387_GRP.RNC_Id & "/" & B67109387_GRP.NodeB_Id or B67109471_GRP.RNC_Id & "/" & B67109471_GRP.NodeB_Id	
NodeB_Version	Hardware/Software version of the NodeB.			B67109473."V900R011" or B50331649."V900R011" or B67109391_GRP."V900R011" or B67109390_GRP."V900R011" or B67109387_GRP."V900R011" or B67109471_GRP."V900R011"	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			B67109473."UMTS" or B50331649."UMTS" or B67109391_GRP."UMTS" or B67109390_GRP."UMTS" or B67109387_GRP."UMTS" or B67109471_GRP."UMTS"	

5.40 OAM_Link details

In the network hierarchy, the immediate parent of the OAM_Link object is Region.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
----------------	-------------	---------------	----------------	---------	-------------

Primary Identifier					
OAM_Link_Id	Identifier of the OMA_Link	Y		B67109521.RNC_Id & "/" & B67109521.Object_Id or B67109538.RNC_Id & "/" & B67109538.Object_Id	
Relationship Attributes					
Region_Id	Region associated with OAM_Link	Y	Y	B67109521.Region_Id or B67109538.Region_Id	
Network_Id	Network associated with OMA_Link	Y	Y	B67109521.Network_Id or B67109538.Network_Id	
Configuration Attributes					
OAM_Link_Name	User friendly name of OAM_Link			B67109521.RNC_Id & "/" & B67109521.Object_Id or B67109538.RNC_Id & "/" & B67109538.Object_Id	
Node_Id	Node identifier associated with this OAM_Link			B67109521.RNC_Id or B67109538.RNC_Id	
Node_Type	The type of the Node associated with the OAM_Link			B67109521."RNC" or B67109538."RNC"	

5.41 PPP details

In the network hierarchy, the immediate parent of the PPP object is Region.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
PPP_Id	Unique identifier associated with PPP	Y		B67109511.PPP_Id or B67109491.PPP_Id or B67109543.PPP_Id	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Relationship Attributes					
Network_Id	Network associated with PPP	Y	Y	B67109511.Network_Id or B67109491.Network_Id or B67109543.Network_Id	
Region_Id	Region associated with PPP	Y	Y	B67109511.Region_Id or B67109491.Region_Id or B67109543.Region_Id	
Configuration Attributes					
PPP_Name	User friendly name associated with PPP			B67109511.PPP_Name or B67109491.PPP_Name or B67109543.PPP_Name	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			B67109511."UMTS" or B67109491."UMTS" or B67109543."UMTS"	
Version	Hardware/Software version of the PPP			B67109511."V900R011" or B67109491."V900R011" or B67109543."V900R011"	

5.42 Processor details

In the network hierarchy, the immediate parent of the Processor object is Region.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
Processor_Id	A unique identifier for the Processor.	Y		(B67109397.RNC_Id & "/" & B67109397.Object_Id) or (B67109401.RNC_Id & "/" & B67109401.Object_Id) or (B67109418.RNC_Id & "/" & B67109418.Object_Id) or (B67109453.RNC_Id & "/" & B67109453.Object_Id) or (B67109404.RNC_Id & "/" & B67109404.Object_Id) or (B67109461.RNC_Id & "/" & B67109461.Object_Id) or (B67109462.RNC_Id & "/" &	

				B67109462.Object_Id) or (B67109463.RNC_Id & "/" & B67109463.Object_Id) or (B67109494.RNC_Id & "/" & B67109494.Object_Id) or (B67109516.RNC_Id & "/" & B67109516.Object_Id) or (B67109515.RNC_Id & "/" & B67109515.Object_Id) or (B67109493.RNC_Id & "/" & B67109493.Object_Id) or (B67109497.RNC_Id & "/" & B67109497.Object_Id) or (B67109537.RNC_Id & "/" & B67109537.Object_Id) or (B67109492.RNC_Id & "/" & B67109492.Object_Id) or (B67109453_V200.RNC_Id & "/" & B67109453_V200.Object_Id)	
Relationship Attributes					
Network_Id	Network associated with the Processor.	Y	Y	B67109397.Network_Id or B67109401.Network_Id or B67109418.Network_Id or B67109453.Network_Id or B67109404.Network_Id or B67109461.Network_Id or B67109462.Network_Id or B67109463.Network_Id or B67109494.Network_Id or B67109516.Network_Id or B67109515.Network_Id or B67109493.Network_Id or B67109497.Network_Id or B67109537.Network_Id or B67109492.Network_Id or B67109453_V200.Network_Id	
Region_Id	Region associated with the Processor.	Y	Y	B67109397.Region_Id or B67109401.Region_Id or B67109418.Region_Id or	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

				B67109453.Region_Id or B67109404.Region_Id or B67109461.Region_Id or B67109462.Region_Id or B67109463.Region_Id or B67109494.Region_Id or B67109516.Region_Id or B67109515.Region_Id or B67109493.Region_Id or B67109497.Region_Id or B67109537.Region_Id or B67109492.Region_Id or B67109453_V200.Region_Id	
Configuration Attributes					
Processor_Name	A user friendly name preferably unique for the Processor.			(B67109397.RNC_Id & "/" & B67109397.Object_Id) or (B67109401.RNC_Id & "/" & B67109401.Object_Id) or (B67109418.RNC_Id & "/" & B67109418.Object_Id) or (B67109453.RNC_Id & "/" & B67109453.Object_Id) or (B67109404.RNC_Id & "/" & B67109404.Object_Id) or (B67109461.RNC_Id & "/" & B67109461.Object_Id) or (B67109462.RNC_Id & "/" & B67109462.Object_Id) or (B67109463.RNC_Id & "/" & B67109463.Object_Id) or (B67109494.RNC_Id & "/" & B67109494.Object_Id) or (B67109516.RNC_Id & "/" & B67109516.Object_Id) or (B67109515.RNC_Id & "/" & B67109515.Object_Id) or (B67109493.RNC_Id & "/" & B67109493.Object_Id) or (B67109497.RNC_Id & "/" & B67109497.Object_Id) or (B67109537.RNC_Id & "/" & B67109537.Object_Id) or (B67109492.RNC_Id & "/" & B67109492.Object_Id) or (B67109453_V200.RNC_Id &	

				"/" & B67109453_V200.Object_Id)	
Node_Id	This is the identifier for the network element containing the Processor.			B67109397.RNC_Id or B67109401.RNC_Id or B67109418.RNC_Id or B67109453.RNC_Id or B67109404.RNC_Id or B67109461.RNC_Id or B67109462.RNC_Id or B67109463.RNC_Id or B67109494.RNC_Id or B67109516.RNC_Id or B67109515.RNC_Id or B67109493.RNC_Id or B67109497.RNC_Id or B67109537.RNC_Id or B67109492.RNC_Id or B67109453_V200.RNC_Id	
Node_Name	A user friendly name preferably unique for the Node.			B67109397.RNC_Id or B67109401.RNC_Id or B67109418.RNC_Id or B67109453.RNC_Id or B67109404.RNC_Id or B67109461.RNC_Id or B67109462.RNC_Id or B67109463.RNC_Id or B67109494.RNC_Id or B67109516.RNC_Id or B67109515.RNC_Id or B67109493.RNC_Id or B67109497.RNC_Id or B67109537.RNC_Id or B67109492.RNC_Id or B67109453_V200.RNC_Id	
Node_Type	The type of the network element containing the Processor.			B67109397."RNC" or B67109401."RNC" or B67109418."RNC" or B67109453."RNC" or B67109404."RNC" or B67109461."RNC" or	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

				B67109462."RNC" or B67109463."RNC" or B67109494."RNC" or B67109516."RNC" or B67109515."RNC" or B67109493."RNC" or B67109497."RNC" or B67109537."RNC" or B67109492."RNC" or B67109453_V200."RNC"	
Processor_Type	Type of Processor.			No mapping	
Processor_Version	Hardware/Software version of the Processor.			B67109397."V900R011" or B67109401."V900R011" or B67109418."V900R011" or B67109453."V900R011" or B67109404."V900R011" or B67109461."V900R011" or B67109462."V900R011" or B67109463."V900R011" or B67109494."V900R011" or B67109516."V900R011" or B67109515."V900R011" or B67109493."V900R011" or B67109497."V900R011" or B67109537."V900R011" or B67109492."V900R011" or B67109453_V200."V900R011"	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			B67109397."UMTS" or B67109401."UMTS" or B67109418."UMTS" or B67109453."UMTS" or B67109404."UMTS" or B67109461."UMTS" or B67109462."UMTS" or B67109463."UMTS" or B67109494."UMTS" or B67109516."UMTS" or B67109515."UMTS" or B67109493."UMTS" or B67109497."UMTS" or B67109537."UMTS" or B67109492."UMTS" or B67109453_V200."UMTS"	

5.43 QosQueue details

In the network hierarchy, the immediate parent of the QosQueue object is Region.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
QosQueue_Id	Unique identifier for QoSQueue	Y		B67109513.QosQueue_Id	
Relationship Attributes					
Region_Id	Region associated with the QosQueue	Y	Y	B67109513.Region_Id	
Network_Id	Network associated with QosQueue	Y	Y	B67109513.Network_Id	
Configuration Attributes					
QosQueue_Na me	User friendly name for QosQueue			B67109513.QosQueue_Name	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"UMTS"	
Version	Hardware/Software version of the QosQueue			"V900R011"	

5.44 Region details

In the network hierarchy, the immediate parent of the Region object is Network.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Region_Id	Region associated with the network object.	Y		B67109420.Region_Id	
Relationship Attributes					
Network_Id	Network associated with the Region.	Y	Y	B67109420.Network_Id	
Configuration Attributes					
Region_Name	A user friendly name preferably unique for the Region.			B67109420.Region_Id	

5.45 RNC details

In the network hierarchy, the immediate parent of the RNC object is SGSN.

This object is used for Data Availability tracking

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
RNC_Id	A unique identifier for the RNC.	Y		B67109420.RNC_Id or B67109438.RNC_Id	
Relationship Attributes					
MSC_Id	The MSC to which this RNC is connected.	Y	Y	No mapping	
Network_Id	Network associated with the RNC.	Y	Y	B67109420.Network_Id or B67109438.Network_Id	
Region_Id	Region associated with the RNC.	Y	Y	B67109420.Region_Id or B67109438.Region_Id	
SGSN_Id	A unique identifier for the SGSN.	Y	Y	No mapping	
Configuration Attributes					
RNC_Name	A user friendly name preferably unique for the RNC.			B67109420.RNC_Id or B67109438.RNC_Id	
RNC_Version	Hardware/Software			B67109420."V900R011" or	

	version of the RNC.			B67109438."V900R011"	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			B67109420."UMTS" or B67109438."UMTS"	

5.46 SAAL_Link details

In the network hierarchy, the immediate parent of the SAAL_Link object is Region.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
SAAL_Link_Id	Primary Identifier of the SAAL Link	Y		B67109451.RNC_ID & "/" & B67109451.Object_Id or B67109458.RNC_ID & "/" & B67109458.Object_Id or B67109517.RNC_ID & "/" & B67109517.Object_Id	
Relationship Attributes					
Region_Id	Identifier of the region	Y	Y	B67109451.Region_Id or B67109458.Region_Id or B67109517.Region_Id	
Network_Id	Network associated with the SAAL Link.	Y	Y	B67109451.Network_Id or B67109458.Network_Id or B67109517.Network_Id	
Configuration Attributes					
SAAL_Link_Name	User friendly name of the SAAL Link			B67109451.RNC_ID & "/" & B67109451.Object_Id or B67109458.RNC_ID & "/" & B67109458.Object_Id or B67109517.RNC_ID & "/" & B67109517.Object_Id	
Node_Id	Identifier of the Node			B67109451.RNC_Id or	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

	(e.g. SGSN or MSC)			B67109458.RNC_Id or B67109517.RNC_Id	
Node_Type	Type of the Node (e.g. SGSN or MSC)			B67109451."RNC" or B67109458."RNC" or B67109517."RNC"	
Node_Name	The name of the Node associated with the MTP3 Link			B67109451.RNC_Id or B67109458.RNC_Id or B67109517.RNC_Id	
Link_Number	LNKN for SAAL_Link			No mapping	
Module_Number	Module identifier for SAAL link			No mapping	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			B67109451."UMTS" or B67109458."UMTS" or B67109517."UMTS"	
MSC_Id	The node id associated with this element			No mapping	

5.47 SCCP details

In the network hierarchy, the immediate parent of the SCCP object is RNC.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggregator
Primary Identifier					
SCCP_Id	SCCP Identifier	Y		B67109452.RNC_Id & "/" & B67109452.Object_Id	
Relationship Attributes					
RNC_Id	Identifier of the associated RNC	Y	Y	B67109452.RNC_Id	
Region_Id	Identifier of the region	Y	Y	B67109452.Region_Id	
Network_Id	Identifier of the network	Y	Y	B67109452.Network_Id	
Configuration Attributes					
SCCP_Name	SCCP name			B67109452.RNC_Id & "/" & B67109452.Object_Id	

Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"UMTS"	
Version	Hardware/Software version of SCCP			"V900R011"	

5.48 SCTPIP details

In the network hierarchy, the immediate parent of the SCTPIP object is Region.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggregator
Primary Identifier					
SCTPIP_Id	SCTPIP identifier	Y		B67109469.SCTPIP_Id	
Relationship Attributes					
Region_Id	Identifier of the region	Y	Y	B67109469.Region_Id	
Network_Id	Identifier of the network	Y	Y	B67109469.Network_Id	
Configuration Attributes					
SCTPIP_Name	SCTPIP name identifier			B67109469.SCTPIP_Id	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"UMTS"	
SCTPIP_Version	Hardware/Software version of the SCTPIP			"V900R011"	

5.49 SCTPLNK details

In the network hierarchy, the immediate parent of the SCTPLNK object is Region.

Attribute Name	Description	Read -	Time-Track	Mapping	Aggregator
----------------	-------------	--------	------------	---------	------------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

		Only ?	ed?		
Primary Identifier					
SCTPLNK_Id	SCTPLNK identifier	Y		B67109468.SCTPLNK_Id or B67109485.SCTPLNK_Id	
Relationship Attributes					
Region_Id	Identifier of the region	Y	Y	B67109468.Region_Id or B67109485.Region_Id	
Network_Id	Identifier of the network	Y	Y	B67109468.Network_Id or B67109485.Network_Id	
Configuration Attributes					
SCTPLNK_Name	SCTPLNK name identifier			B67109468.SCTPLNK_Id or B67109485.SCTPLNK_Id	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			B67109468."UMTS" or B67109485."UMTS"	
Version	Hardware/Software version of the SCTPLNK			B67109468."V900R011" or B67109485."V900R011"	

5.50 Signalling_LinkSet details

In the network hierarchy, the immediate parent of the Signalling_LinkSet object is Signalling_Point.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggregator
Primary Identifier					
SS7_LinkSet_Id	A unique identifier for the SS7 LinkSet.	Y		(B67109402.RNC_Id & "/" & B67109402.Object_Id) or (B67109417.RNC_Id & "/" & B67109417.Object_Id)	
Relationship Attributes					
Network_Id	Network associated with the SS7 LinkSet.	Y	Y	B67109402.Network_Id or B67109417.Network_Id	
Region_Id	Region associated with the SS7 LinkSet.	Y	Y	(B67109402.Region_Id) or (B67109417.Region_Id)	

SS7_Point_Id	The SS7 Point to which this SS7 LinkSet is connected to (at this end).	Y	Y	No mapping	
Configuration Attributes					
SS7_LinkSet_Name	A user friendly name preferably unique for the SS7 LinkSet.			(B67109402.RNC_Id & "/" & B67109402.Object_Id) or (B67109417.RNC_Id & "/" & B67109417.Object_Id)	
Adjacent_Node_Id	The Adjacent Node that this SS7 LinkSet is connected from (at the other end).			No mapping	
Data_Rate	The total of all the individual SS7 Link speeds (aggregated over all SS7 Links in the SS7 LinkSet) in bits per second (bit/s).			No mapping	
Designed_Link_Failures	The number of SS7 Link failures permitted on the SS7 LinkSet while still keeping the SS7 LinkSet up to its designed capacity.			No mapping	
Node_Id	The Node (MSC or HLR) that this SS7 LinkSet is connected to (at this end).			B67109402.RNC_Id or B67109417.RNC_Id	
Node_Name	Name of the node that this SS7 LinkSet is connected to (at this end).			B67109402.RNC_Id or B67109417.RNC_Id	
Node_Type	The type of the network element that the SS7 LinkSet is connected to			B67109402."RNC" or B67109417."RNC"	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

	(at this end).				
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			B67109402."UMTS" or B67109417."UMTS"	

5.51 Signalling_Link details

In the network hierarchy, the immediate parent of the Signalling_Link object is Signalling_LinkSet.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
SS7_Link_Id	A unique identifier for the SS7 Link.	Y		(B67109403.RNC_Id & "/" & B67109403.Object_Id) or (B67109416.RNC_Id & "/" & B67109416.Object_Id) or (B67109451.RNC_Id & "/" & B67109451.Object_Id) or (B67109458.RNC_Id & "/" & B67109458.Object_Id)	
Relationship Attributes					
Network_Id	Network associated with the SS7 Link.	Y	Y	(B67109403.Network_Id) or (B67109416.Network_Id) or (B67109451.Network_Id) or (B67109458.Network_Id)	
Region_Id	Region associated with the SS7 Link.	Y	Y	(B67109403.Region_Id) or (B67109416.Region_Id) or (B67109451.Region_Id) or (B67109458.Region_Id)	
SS7_LinkSet_Id	The Node (MSC or HLR) that this SS7 Link is connected to (at this end).	Y	Y	(B67109403.RNC_Id & "/" & SS7_Point_Id & "/" & B67109403.SS7_LinkSet_Id) or (B67109416.RNC_Id & "/" & SS7_Point_Id & "/" & B67109416.SS7_LinkSet_Id) or (B67109451.RNC_Id & "/" & SS7_Point_Id & "/" & B67109451.SS7_LinkSet_Id) or (B67109458.RNC_Id & "/" &	

				SS7_Point_Id & "/" & B67109458.SS7_LinkSet_Id)	
SS7_Point_Id	A unique identifier for the SS7 Point.	Y	Y	No mapping	
Configuration Attributes					
SS7_Link_Name	A user friendly name preferably unique for the SS7 Link.			(B67109403.RNC_Id & "/" & B67109403.Object_Id) or (B67109416.RNC_Id & "/" & B67109416.Object_Id) or (B67109451.RNC_Id & "/" & B67109451.Object_Id) or (B67109458.RNC_Id & "/" & B67109458.Object_Id)	
Adjacent_Node_Id	The Adjacent Node that this SS7 Link is connected from (at the other end).			No mapping	
Data_Rate	The SS7 Link speed in bits per second (bit/s).			No mapping	
Node_Id	The Node (MSC or HLR) that this SS7 Link is connected to (at this end).			B67109403.RNC_Id or B67109416.RNC_Id or B67109451.RNC_Id or B67109458.RNC_Id	
Node_Name	The name for the network element that the SS7 Link is connected to (at this end).			B67109403.RNC_Id or B67109416.RNC_Id or B67109451.RNC_Id or B67109458.RNC_Id	
Node_Type	The type of the network element that the SS7 Link is connected to at this end.			B67109403."RNC" or B67109416."RNC" or B67109451."RNC" or B67109458."RNC"	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			B67109403."UMTS" or B67109416."UMTS" or B67109451."UMTS" or B67109458."UMTS"	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

5.52 Signalling_Point details

In the network hierarchy, the immediate parent of the Signalling_Point object is Region.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
SS7_Point_Id	A unique identifier for the SS7 Point.	Y		B67109415.RNC_Id & "/" & B67109415.Object_Id	
Relationship Attributes					
Network_Id	Network associated with the SS7 Point.	Y	Y	B67109415.Network_Id	
Region_Id	Region associated with the SS7 Point. SS7_Point - the default value is derived via the Node.	Y	Y	B67109415.Region_Id	
Configuration Attributes					
SS7_Point_Name	A user friendly name preferably unique for the SS7 Point.			B67109415.RNC_Id & "/" & B67109415.Object_Id	
Adjacent_Node_Id	A unique identifier for the Adjacent Node.			No mapping	
Node_Id	A unique identifier for the Node.			B67109415.RNC_Id	
Node_Name	A user friendly name preferably unique for the Node.			B67109415.RNC_Id	
Node_Type	Type of Node.			"RNC"	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"UMTS"	

5.53 UDSP details

In the network hierarchy, the immediate parent of the UDSP object is Region.

Attribute	Description	Read	Time-	Mapping	Aggrega
-----------	-------------	------	-------	---------	---------

Name		- Only ?	Track ed?		tor
Primary Identifier					
UDSP_Id	Unique identifier associated with UDSP	Y		B67109546.RNC_Id & "/" & B67109546.Object_Id	
Relationship Attributes					
Network_Id	Network associated with UDSP	Y	Y	B67109546.Network_Id	
Region_Id	Region associated with UDSP	Y	Y	B67109546.Region_Id	
Configuration Attributes					
UDSP_Name	User friendly name associated with UDSP			B67109546.RNC_Id & "/" & B67109546.Object_Id	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"UMTS"	
Version	Hardware/Software version of the UDSP			"V900R011"	

5.54 UNILNK details

In the network hierarchy, the immediate parent of the UNILNK object is Region.

Attribute Name	Description	Read - Only ?	Time- Track ed?	Mapping	Aggrega tor
Primary Identifier					
UNILNK_Id	UNILNK identifier	Y		B67109456.UNILNK_Id	
Relationship Attributes					
Region_Id	Identifier of the region	Y	Y	B67109456.Region_Id	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Network_Id	Identifier of the network	Y	Y	B67109456.Network_Id	
Configuration Attributes					
UNILNK_Name	UNILNK name identifier			B67109456.UNILNK_Name	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"UMTS"	
Version	Hardware/Software version of the UNILNK			"V900R011"	

5.55 UOI_Board details

In the network hierarchy, the immediate parent of the UOI_Board object is RNC.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
UOI_Board_Id	Unique identifier for UOI board	Y		B67109549_V200.RNC_Id & "/" & Object_Id	
Relationship Attributes					
RNC_Id	RNC associated with the UOI board	Y	Y	B67109549_V200.RNC_Id	
Region_Id	Region associated with UOI board	Y	Y	B67109549_V200.Region_Id	
Network_Id	Network associated with UOI board	Y	Y	B67109549_V200.Network_Id	
Configuration Attributes					
UOI_Board_Name	User friendly name for the UOI Board			B67109549_V200.RNC_Id & "/" & Object_Id	
Version	Hardware/software version for the UOI board			"V900R011"	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"UMTS"	

5.56 VC_ACROSS details

In the network hierarchy, the immediate parent of the VC_ACROSS object is Region.

Attribute Name	Description	Read - Only ?	Time-Track ed?	Mapping	Aggrega tor
Primary Identifier					
VC_CROSS_Id	Primary identifier of the VC_CROSS	Y		B67109498.RNC_Id & "/" & B67109498.Object_Id	
Relationship Attributes					
Region_Id	Identifier of the region	Y	Y	B67109498.Region_Id	
Network_Id	Identifier of the Network	Y	Y	B67109498.Network_Id	
Configuration Attributes					
VC_CROSS_Name	Meaningful name of the VC_CROSS			B67109498.RNC_Id & "/" & B67109498.Object_Id	
Node_Id	Identifier of the node (e.g. RNC)			B67109498.RNC_Id	
Node_Type	Type of the node			"RNC"	
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"UMTS"	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

6 Busy Hours

This section lists the busy hours which are defined for the technology pack module.

Each of the busy hours listed can be referenced within this document by way of a busy hour acronym, which is included in the table below.

Object	Busy Hour	Defining KPI	Acronym
Cell	Huawei_Cell_Traffic_Busy_Hour	Cell.Huawei.Traffic_PS.Cell_Traffic_busy_hour	huctbh
Cell	Huawei_Cell_ASE_Busy_Hour	Cell.Huawei.Throughput_PS_Inter_DL.Cell_ASE_busy_hour	hucasebh
GPRS_Tunnel	Huawei_GPRS_Tunnel_Total_Packet_Busy_Hour	GPRS_Tunnel.Huawei.GTP_U.Total_VS_GTPU_Pkt	hugttpbh
Local_Cell	Huawei_Local_Cell_Max_Data_Output_Busy_Hour	Local_Cell.Huawei.HSDPA_Data_Measurement.VS_DataOutput_Max	hulcmdbh
NodeB	Huawei_NodeB_Max_UL_Credit_Used_Busy_Hour	NodeB.Huawei.Credit_Usage_aggregated_from_cell.VS_LC_ULCreditUsed_CELL_Max	hunulcbh
NodeB	Huawei_NodeB_Max_DL_Credit_Used_Busy_Hour	NodeB.Huawei.Credit_Usage_aggregated_from_cell.VS_LC_DLCreditUsed_CELL_Max	hundlcbh
NodeB	Huawei_NodeB_Traffic_Busy_Hour	NodeB.Huawei.Traffic_PS_aggregated_from_cell.Traffic_busy_hour	hunbtbh
RNC	Huawei_RNC_CS_Load_Busy_Hour	RNC.Huawei.Traffic_Load.VS_CSLoad_Erlang_Equiv_RNC	hubcslbh
RNC	Huawei_RNC_PS_Load_Busy_Hour	RNC.Huawei.Traffic_Load.PSLoad_Thruput_RNC_busy_hour	hubpslbh
RNC	Huawei_RNC_HSDPA_Busy_Hour	RNC.Huawei.HSDPA_aggregated_from_cell.VS_HSDPA_MeanChThroughput_TotalBytes	hubhsdpabh

RNC	Huawei_RNC_R9 9PS_Load_Busy_ Hour	RNC.Huawei.Traffic_R99_HSDPA_HSUPA _MBMS.R99PSLoad_Thruput_RNC	hub99pslbh
-----	---	---	------------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

7 Performance Indicators

This section describes the performance indicators (both one-to-one counter mappings, and complex KPIs) that are defined in this technology pack module, grouped by the network object to which they relate, as follows:

- [AAL2PATH performance indicators.](#)
- [ATM_Logical_Port performance indicators.](#)
- [ATM_Node performance indicators.](#)
- [ATM_Port performance indicators.](#)
- [Cell performance indicators.](#)
- [E1T1_Link performance indicators.](#)
- [ETH performance indicators.](#)
- [FIBER_Link performance indicators.](#)
- [FlowControl performance indicators.](#)
- [FRAATM performance indicators.](#)
- [FRAIMALK performance indicators.](#)
- [FRAME performance indicators.](#)
- [GPRS_Tunnel performance indicators.](#)
- [IMA_Group performance indicators.](#)
- [IMA_Link performance indicators.](#)
- [IPNODECONN performance indicators.](#)
- [IPNODETRM performance indicators.](#)
- [IPOA performance indicators.](#)
- [IPOAPVC performance indicators.](#)
- [IPPATH performance indicators.](#)
- [IPPATHPING performance indicators.](#)
- [Iu performance indicators.](#)
- [Iur performance indicators.](#)
- [Local_Cell performance indicators.](#)
- [Logical_Port performance indicators.](#)
- [M3UA_Dest performance indicators.](#)
- [M3UA_Link performance indicators.](#)
- [M3UA_LinkSet performance indicators.](#)
- [MLPPP performance indicators.](#)
- [MTP3_Link performance indicators.](#)
- [MTP3_LinkPoint performance indicators.](#)
- [MTP3_LinkSet performance indicators.](#)
- [MTP3B_Link performance indicators.](#)

- [MTP3B_LinkSet performance indicators.](#)
- [MTP3B_Point performance indicators.](#)
- [Neighbour performance indicators.](#)
- [NodeB performance indicators.](#)
- [OAM_Link performance indicators.](#)
- [PPP performance indicators.](#)
- [Processor performance indicators.](#)
- [QosQueue performance indicators.](#)
- [RNC performance indicators.](#)
- [SAAL_Link performance indicators.](#)
- [SCCP performance indicators.](#)
- [SCTPIP performance indicators.](#)
- [SCTPLNK performance indicators.](#)
- [Signalling_Link performance indicators.](#)
- [Signalling_LinkSet performance indicators.](#)
- [Signalling_Point performance indicators.](#)
- [UDSP performance indicators.](#)
- [UNILNK performance indicators.](#)
- [UOI_Board performance indicators.](#)
- [VC_ACROSS performance indicators.](#)

7.1 AAL2PATH Performance Indicators

This section shows the key performance indicators and other counters for the AAL2PATH object, divided into the following sub-sections:

- [AAL2PATH.Huawei.UMTS.AAL2PATH_Connections](#)
- [AAL2PATH.Huawei.UMTS.AAL2PATH_PVCPLAYER](#)
- [AAL2PATH.Huawei.UMTS.AAL2PATH](#)
- [AAL2PATH.Huawei.UMTS.AAL2PATHPVC](#)
- [AAL2PATH.Huawei.UMTS.SCTP_IPLAYER](#)

7.1.1 AAL2PATH.Huawei.UMTS.AAL2PATH_Connections

AAL2PATH Connections

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_AAL2PATH_Act_Con	INTENSITY	FLOAT	Number of AAL2 path	B67109466.C67204206	Average	Sum, Minimum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			active connections to an adjacent node			m, Maximum
--	--	--	--	--	--	------------

7.1.2 AAL2PATH.Huawei.UMTS.AAL2PATH_PVCPLAYER

AAL2PATH PVC Player KPIs.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_AAL2PATH_PVCPLAYER_DROPFORHEADCELLS	ACCUMULATION	INTEGER	Number of cells discarded by AAL2PATH.PVC LAYER due to error headers	B67109486.C67194105	Sum	
VS_AAL2PATH_PVCPLAYER_DROPFORRXOVERFLOWCELLS	ACCUMULATION	INTEGER	Number of cells discarded by AAL2PATH.PVC LAYER due to overflow of receive buffer	B67109486.C67194106	Sum	
VS_AAL2PATH_PVCPLAYER_DROPFORTXOVERFLOWCELLS	ACCUMULATION	INTEGER	Number of cells discarded by AAL2PATH.PVC LAYER due to overflow of transmit buffer	B67109486.C67194107	Sum	
VS_AAL2PATH_PVCPLAYER_PEAK_RXBYTES	INTENSITY	INTEGER	Peak Number of the bytes received by the AAL2PATH.PVC LAYER every five seconds in the specified measurement period.	B67109486.C67194099	Average	Sum, Minimum, Maximum
VS_AAL2PATH_PVCPLAYER_PEAK_TXBYTES	INTENSITY	INTEGER	Peak Number of the bytes sent by the AAL2PATH.PVC LAYER every five	B67109486.C67194102	Average	Sum, Minimum, Maximum

			seconds in the specified measurement period.			
VS_AAL2PATH_PVCLAYER_RXBYTES	ACCUMULATION	INTEGER	Number of cells received by an AAL2path PVC link in a measurement period.	B67109486.C67194098	Sum	
VS_AAL2PATH_PVCLAYER_RXBYTESOF AAL2CPSPKTS	ACCUMULATION	INTEGER	Number of bytes of correct AAL2 CPS packets received by AAL2PATH.PVC LAYER	B67109486.C67194103	Sum	
VS_AAL2PATH_PVCLAYER_TXBYTES	ACCUMULATION	INTEGER	Number of cells sent by an AAL2path PVC link in a measurement period.	B67109486.C67194101	Sum	
VS_AAL2PATH_PVCLAYER_TXBYTESOF AAL2CPSPKTS	ACCUMULATION	INTEGER	Number of bytes of correct AAL2 CPS packets transmitted by AAL2PATH.PVC LAYER	B67109486.C67194104	Sum	
VS_AAL2PATH_PVCLAYER_TXCORRECTCELLS	ACCUMULATION	INTEGER	Number of correct cells transmitted by AAL2PATH.PVC LAYER	B67109486.C67194100	Sum	

7.1.3 AAL2PATH.Huawei.UMTS.AAL2PATH

AAL2 PATH data

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_AAL2PATH_Act_Con	INTENSITY	FLOAT	This measurement counter provides the number of active AAL2 connections between the AAL2 path and an adjacent node in the specified measurement period.	B67109466.C67204206	Average	Average, Maximum, Minimum, Sum
VS_AAL2PATH_Bwd_Cong_Dur	ACCUMULATION	INTEGER	Duration of backward congestion on the AAL2 path	B67109466.C67195598	Sum	Sum
VS_AAL2PATH_Bwd_Cong	ACCUMULATION	INTEGER	Number of backward congestions on the AAL2 path	B67109466.C67195597	Sum	Sum
VS_AAL2PATH_Fwd_Cong_Dur	ACCUMULATION	INTEGER	Duration of forward congestion on the AAL2 path	B67109466.C67195596	Sum	Sum
VS_AAL2PATH_Fwd_Cong	ACCUMULATION	INTEGER	Number of forward congestions on the AAL2 path	B67109466.C67195595	Sum	Sum
VS_AAL2PATH_MeasKbps_Rx	INTENSITY	FLOAT	Obsolete from UTRAN/V200 R010:Average Receive Traffic of AAL2PATH.	B67109466.C67202947	Average	Sum, Minimum, Maximum
VS_AAL2PATH_MeasKbps_Tx	INTENSITY	FLOAT	Obsolete from UTRAN/V200 R010:Average	B67109466.C67202948	Average	Sum, Minimum,

			Transmit Traffic of AAL2PATH.			Maximum
--	--	--	-------------------------------------	--	--	---------

7.1.4 AAL2PATH.Huawei.UMTS.AAL2PATHPVC

AAL2PATH PVC data.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_AAL2PATH PVC_Peak_RxC ells	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:Peak Number of Cells received by an AAL2PATH PVC link in a measurement period (5s).	B67109477.C67 192156	Constant	Sum, Minimum, Maximum
VS_AAL2PATH PVC_Peak_TxC ells	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:Peak Number of Cells sent by an AAL2PATH PVC link in a measurement period (5s).	B67109477.C67 192157	Constant	Sum, Minimum, Maximum
VS_AAL2PATH PVC_Rx_Cells	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011:Number of Cells received by an AAL2PATH PVC link in a measurement period.	B67109477.C67 192154	Sum	
VS_AAL2PATH	INTENSITY	FLOAT	Obsolete from	B67109477.C67	Average	Sum,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

PVC_Rx_Mean Kbps		T	UTRAN/V200R010:Mean Rx rate of a single AAL2PATHPVC link in a given measurement period. Unit: kbps.	203858		Minimum, Maximum
VS_AAL2PATH PVC_Tx_Cells	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011:Number of Cells sent by an AAL2PATH PVC link in a measurement period.	B67109477.C67192155	Sum	
VS_AAL2PATH PVC_Tx_MeanKbps	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Mean Tx rate of a single AAL2PATHPVC link in a given measurement period. Unit: kbps.	B67109477.C67203859	Average	Sum, Minimum, Maximum

7.1.5 AAL2PATH.Huawei.UMTS.SCTP_IPLAYER

SCTP I PLAYER KPIs.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_AAL2PATH_PVCLAYER_RXCORRECTCELLS	ACCUMULATION	INTEGER	Number of correct cells received by AAL2PATH.PVCLAYER	B67109486.C67194097	Sum	

7.2 ATM_Logic_Port Performance Indicators

This section shows the key performance indicators and other counters for the ATM_Logic_Port object, divided into the following sub-sections:

- [ATM_Logic_Port.Huawei.UMTS.ATM_Logic_Port](#)

7.2.1 ATM_Logical_Port.Huawei.UMTS.ATM_Logical_Port

Measurement of ATM Logical Port Performance

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_ATMLGCPRT_Allocated_Ave_Bwd	INTENSITY	INT8	Backward Bandwidth assigned to the ATM Logical Port	B67109564.C67204858	Average	Sum, Minimum, Maximum
VS_ATMLGCPRT_Allocated_Ave_Fwd	INTENSITY	INT8	Forward Bandwidth assigned to the ATM Logical Port	B67109564.C67204859	Average	Sum, Minimum, Maximum
VS_ATMLGCPRT_Allocated_Max_Bwd	INTENSITY	INT8	Maximum Backward Bandwidth assigned to the ATM Logical Port	B67109564.C67196320	Average	Sum, Minimum, Maximum
VS_ATMLGCPRT_Allocated_Max_Fwd	INTENSITY	INT8	Maximum Forward Bandwidth assigned to the ATM Logical Port	B67109564.C67196319	Average	Sum, Minimum, Maximum
VS_ATMLGCPRT_Bwd_Cong_Dur	ACCUMULATION	INT8	Duration of Backward Congestions on the ATM Logical Port	B67109564.C67196324	Sum	
VS_ATMLGCPRT_Bwd_Cong	ACCUMULATION	INT8	Number of Backward Congestions on	B67109564.C67196323	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			the ATM Logical Port			
VS_ATMLGCP RT_Fwd_Cong_ Dur	ACCUMULA TION	INT8	Duration of Forward Congestions on the ATM Logical Port	B67109564.C6719 6322	Sum	
VS_ATMLGCP RT_Fwd_Cong	ACCUMULA TION	INT8	Number of Forward Congestions on the ATM Logical Port	B67109564.C6719 6321	Sum	

7.3 ATM_Node Performance Indicators

This section shows the key performance indicators and other counters for the ATM_Node object, divided into the following sub-sections:

- [ATM_Node.Huawei.UMTS.IPPART_Connections](#)
- [ATM_Node.Huawei.UMTS.IPPATH_Resources](#)
- [ATM_Node.Huawei.UMTS.QAAL2_Allocations](#)
- [ATM_Node.Huawei.UMTS.QAAL2_Connections](#)
- [ATM_Node.Huawei.UMTS.QAAL2](#)

7.3.1 ATM_Node.Huawei.UMTS.IPPART_Connections

IP Part Connections

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IPPART_ Node_Act_Con n	INTENSITY	INT8	Number of active IP connections on dual stack adjacent node	B67109479.C6720 4200	Average	Sum, Minimum, Maximum
VS_IPPART_ Node_Conn_E stab_Att	ACCUMULA TION	INTEGER	Number of IP connection setup requests received on dual stack adjacent node	B67109479.C6719 4658	Sum	

VS_IPPART_ Node_Conn_E stab_Succ	ACCUMULA TION	INTEG ER	Number of successful IP connection setups on dual stack adjacent node	B67109479.C6719 4659	Sum	
VS_IPPART_ Node_Conn_M odify_Att	ACCUMULA TION	INTEG ER	Number of IP connection modifications on dual stack adjacent node	B67109479.C6719 4660	Sum	
VS_IPPART_ Node_Conn_M odify_Succ	ACCUMULA TION	INTEG ER	Number of successful IP connection modifications on dual stack adjacent node	B67109479.C6719 2414	Sum	
VS_IPPART_ Node_Conn_R el	ACCUMULA TION	INTEG ER	Number of IP connection releases on dual stack adjacent node	B67109479.C6719 2415	Sum	

7.3.2 ATM_Node.Huawei.UMTS.IPPATH_Resources

IP Path Resources

KPI	Type	Data Type	Description	Derivation	Default Aggregat or	Other Aggrega tors
VS_IPPART_All ocedBwd	INTENSI TY	FLOA T	IP path backward bandwidth allocated to dual stack adjacent node	B67109479.C67204 202	Average	Sum, Minimu m, Maximu m
VS_IPPART_All ocedFwd	INTENSI TY	FLOA T	IP path forward bandwidth allocated to dual	B67109479.C67204 201	Average	Sum, Minimu m,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			stack adjacent node			Maximum
--	--	--	---------------------	--	--	---------

7.3.3 ATM_Node.Huawei.UMTS.QAAL2_Allocations

QAAL2 Allocations

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_QAAL2_AllocatedBwd_AAL2BitRate	INTENSITY	FLOAT	Average value of allocated average AAL2 bit rate in backward direction	B67109419.C67190558	Average	Sum, Minimum, Maximum
VS_QAAL2_AllocatedFwd_AAL2BitRate	INTENSITY	FLOAT	Average value of allocated Average AAL2 bit rate in forward direction	B67109419.C67190555	Average	Sum, Minimum, Maximum
VS_QAAL2IP_AttResAlloc	ACCUMULATION	INTEGER	Number of requests for resource allocations on dual stack adjacent node	B67109480.C67192422	Sum	
VS_QAAL2IP_FailResAllocForBwLimit	ACCUMULATION	INTEGER	Number of Fail Resource Allocations for Reason of Bandwidth Limit on Dual Stack Adjacent Node	B67109480.C67196160	Sum	
VS_QAAL2IP_SuccessResAlloc	ACCUMULATION	INTEGER	Number of successful resource allocations on dual stack	B67109480.C67192423	Sum	

			adjacent node			
VS_QAAL2PART_AllocatedBwd_AA L2BitRate	INTENSITY	FLOAT	Average Q.AAL2 backward bandwidth allocated to iub adjacent node on dual stack adjacent node	B67109518.C67204205	Average	Sum, Minimum, Maximum
VS_QAAL2PART_AllocatedFwd_AAL 2BitRate	INTENSITY	FLOAT	Average Q.AAL2 forward bandwidth allocated to iub adjacent node on dual stack adjacent node	B67109518.C67204204	Average	Sum, Minimum, Maximum

7.3.4 ATM_Node.Huawei.UMTS.QAAL2_Connections

QAAL2 Connections

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_QAAL2PART_Act_Con	INTENSITY	FLOAT	Average Number of Q.AAL2 connections on dual stack adjacent node	B67109518.C67204203	Average	Sum, Minimum, Maximum
VS_QAAL2PART_ERQ_Rx	ACCUMULATION	INTEGER	Number of connection setup requests received by Q.AAL2 on dual stack	B67109518.C67194629	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			adjacent node			
VS_QAAL2PART_ERQ_Tx	ACCUMULATION	INTEGER	Number of connection setup requests sent by Q.AAL2 on dual stack adjacent node	B67109518.C67194628	Sum	
VS_QAAL2PART_Est_ECF_Rx	ACCUMULATION	INTEGER	Number of connection setup confirmations received by Q.AAL2 on dual stack adjacent node	B67109518.C67194631	Sum	
VS_QAAL2PART_Est_ECF_Tx	ACCUMULATION	INTEGER	Number of connection setup confirmations sent by Q.AAL2 on dual stack adjacent node	B67109518.C67194620	Sum	
VS_QAAL2PART_Est_RLC_Cong_Rx	ACCUMULATION	INTEGER	Number of connection release confirmations received by Q.AAL2 on dual stack adjacent node due to remote congestion	B67109518.C67194661	Sum	
VS_QAAL2PART_Est_RLC_Cong_Tx	ACCUMULATION	INTEGER	Number of connection release confirmations sent by Q.AAL2 on dual stack adjacent node due to switch	B67109518.C67194626	Sum	

			equipment congestion			
VS_QAAL2PART_Est_RLC_Fail_Rx	ACCUMULATION	INTEGER	Number of connection release confirmations received by Q.AAL2 on dual stack adjacent node due to other causes (network failure, temporary failure or normal release of the far end)	B67109518.C67194612	Sum	
VS_QAAL2PART_Est_RLC_Fail_Tx	ACCUMULATION	INTEGER	Number of connection release confirmations sent by Q.AAL2 on dual stack adjacent node due to other causes (network failure, temporary failure or normal release of the far end)	B67109518.C67194666	Sum	
VS_QAAL2PART_Est_RLC_NoBitRate_Tx	ACCUMULATION	INTEGER	This measurement item provides the number of AAL2 connection release confirmations	B67109518.C67196185	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			sent by the Q.AAL2 because of No BitRate.			
VS_QAAL2PART_Est_RLC_NoCID_Rx	ACCUMULATION	INTEGER	Number of connection release confirmations received by Q.AAL2 on dual stack adjacent node due to no cid available	B67109518.C67194611	Sum	
VS_QAAL2PART_Est_RLC_NoCID_Tx	ACCUMULATION	INTEGER	Number of connection release confirmations sent by Q.AAL2 on dual stack adjacent node due to no cid available	B67109518.C67194665	Sum	
VS_QAAL2PART_Est_RLC_NoPath_Rx	ACCUMULATION	INTEGER	Number of connection release confirmations received by Q.AAL2 on dual stack adjacent node due to no path configured	B67109518.C67192425	Sum	
VS_QAAL2PART_Est_RLC_NoPath_Tx	ACCUMULATION	INTEGER	Number of connection release confirmations sent by Q.AAL2 on dual stack adjacent node due to no path	B67109518.C67194664	Sum	

			configured			
VS_QAAL2PART_Est_RLC_NoRoute_Rx	ACCUMULATION	INTEGER	Number of connection release confirmations received by Q.AAL2 on dual stack adjacent node due to no route	B67109518.C67192424	Sum	
VS_QAAL2PART_Est_RLC_NoRoute_Tx	ACCUMULATION	INTEGER	Number of connection release confirmations sent by Q.AAL2 on dual stack adjacent node due to no route	B67109518.C67194663	Sum	
VS_QAAL2PART_Est_RLC_RecovOut_Rx	ACCUMULATION	INTEGER	Number of connection release confirmations received by Q.AAL2 on dual stack adjacent node due to timeout	B67109518.C67194662	Sum	
VS_QAAL2PART_Est_RLC_RecovOut_Tx	ACCUMULATION	INTEGER	Number of connection release confirmations sent by Q.AAL2 on dual stack adjacent node due to timeout	B67109518.C67194627	Sum	
VS_QAAL2PA	ACCUMULATION	INTEGER	Number of	B67109518.C671	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

RT_Est_RLC_Rx	TION	ER	connection setup rejections received by Q.AAL2 on dual stack adjacent node	94630		
VS_QAAL2PA RT_Est_RLC_Tx	ACCUMULATION	INTEGER	Number of connection setup rejections sent by Q.AAL2 on dual stack adjacent node	B67109518.C67194621	Sum	
VS_QAAL2PA RT_Rel_RLC_Rx	ACCUMULATION	INTEGER	Number of connection release confirmations received by Q.AAL2 on dual stack adjacent node	B67109518.C67194632	Sum	
VS_QAAL2PA RT_Rel_RLC_Tx	ACCUMULATION	INTEGER	Number of connection release confirmations sent by Q.AAL2 on dual stack adjacent node	B67109518.C67194633	Sum	
VS_QAAL2PA RT_Rel_Rx	ACCUMULATION	INTEGER	Number of connection releases received by Q.AAL2 on dual stack adjacent node	B67109518.C67194623	Sum	
VS_QAAL2PA RT_Rel_Tx	ACCUMULATION	INTEGER	Number of connection releases sent by Q.AAL2 on dual stack adjacent node	B67109518.C67194622	Sum	

VS_QAAL2PART_RxMod	ACCUMULATION	INTEGER	Number of connection modification requests received by Q.AAL2 on dual stack adjacent node	B67109518.C67192449	Sum	
VS_QAAL2PART_RxModRej	ACCUMULATION	INTEGER	Number of connection modification rejections received by Q.AAL2 on dual stack adjacent node	B67109518.C67192446	Sum	
VS_QAAL2PART_TxMod	ACCUMULATION	INTEGER	Number of connection modification requests sent by Q.AAL2 on dual stack adjacent node	B67109518.C67192448	Sum	
VS_QAAL2PART_TxModRej	ACCUMULATION	INTEGER	Number of connection modification rejections sent by Q.AAL2 on dual stack adjacent node	B67109518.C67192447	Sum	

7.3.5 ATM_Node.Huawei.UMTS.QAAL2

Q.AAL2 ATM Adaption Layer 2 data.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_AAL2_CAC	ACCUMULATION	INTEGER	Number of	B67109419.C671	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

_Att	TION	ER	PATH and CID allocation requests by Q.AAL2 upon reception of AAL2 connection setup requests from the upper layer	90053		
VS_AAL2_CAC_Succ	ACCUMULATION	INTEGER	Number of successful PATH and CID allocations by Q.AAL2 upon reception of AAL2 connection setup requests from the upper layer.	B67109419.C67190054	Sum	
VS_QAAL2_Act_Con	INTENSITY	FLOAT	Average number of active AAL2 connections to a Q.AAL2 adjacent node at all sampling points in a measurement period.	B67109419.C67199677	Average	Sum, Minimum, Maximum
VS_QAAL2_AllocatedAveBwd_AAL2BitRate	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Average value of allocated average AAL2 bit rate in backward direction to a Iub Interface Q.AAL2 adjacent node at all sampling	B67109419.C67203405	Average	Sum, Minimum, Maximum

			points in a measurement period.			
VS_QAAL2_All ocedAveFwd_A AL2BitRate	INTENSITY	FLOA T	Obsolete from UTRAN/V900 R011:Average value of allocated average AAL2 bit rate in forward direction to a Iub Interface Q.AAL2 adjacent node at all sampling points in a measurement period.	B67109419.C672 03404	Average	Sum, Minimu m, Maximu m
VS_QAAL2_All ocedBwd_AAL2 BitRate	INTENSITY	FLOA T	Average value of allocated average AAL2 bit rate in backward direction to a Iub Interface Q.AAL2 adjacent node at all sampling points in a measurement period.	B67109419.C671 90558	Average	Sum, Minimu m, Maximu m
VS_QAAL2_All ocedFwd_AAL2 BitRate	INTENSITY	FLOA T	Average value of allocated average AAL2 bit rate in forward direction to a Iub Interface Q.AAL2	B67109419.C671 90555	Average	Sum, Minimu m, Maximu m

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			adjacent node at all sampling points in a measurement period.			
VS_QAAL2_AllocMaxBwd_AAL2BR_v	INTENSITY	FLOAT	Maximum Value of AAL2 Path Backward Bandwidth Allocated to an Adjacent Node	B67109419.C67190565	Constant	Sum, Minimum, Maximum
VS_QAAL2_AllocMaxFwd_AAL2BR_v	INTENSITY	FLOAT	Maximum Value of AAL2 Path Forward Bandwidth Allocated to an Adjacent Node	B67109419.C67190562	Constant	Sum, Minimum, Maximum
VS_QAAL2_ERQ_Rx	ACCUMULATION	INTEGER	Number of AAL2 connection establishment requests received by the Q.AAL2 from an adjacent node.	B67109419.C67183362	Sum	
VS_QAAL2_ERQTx	ACCUMULATION	INTEGER	Number of AAL2 connection establishment requests sent to an adjacent node by QAAL2.	B67109419.C67183361	Sum	
VS_QAAL2_Est_ECF_Rx	ACCUMULATION	INTEGER	Number of AAL2 connection establishment confirmations received by Q.AAL2 from an adjacent node.	B67109419.C67183364	Sum	

VS_QAAL2_Est_ECF_Tx	ACCUMULATION	INTEGER	Number of AAL2 connection establishment confirmations sent by Q.AAL2 to an adjacent node.	B67109419.C67183365	Sum	
VS_QAAL2_Est_RLC_Cong_Rx	ACCUMULATION	INTEGER	Number of AAL2 connection release confirms received by Q.AAL2 due to remote switch equipment congestion.	B67109419.C67190059	Sum	
VS_QAAL2_Est_RLC_Cong_Tx	ACCUMULATION	INTEGER	Number of AAL2 connection release confirms sent by Q.AAL2 due to switch equipment congestion.	B67109419.C67190065	Sum	
VS_QAAL2_Est_RLC_Fail_Rx	ACCUMULATION	INTEGER	Number of AAL2 connection release confirms received by Q.AAL2 due to remote network fault, temporary failure, or normal release.	B67109419.C67190058	Sum	
VS_QAAL2_Est	ACCUMULATION	INTEGER	Number of	B67109419.C671	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

_RLC_Fail_Tx	TION	ER	AAL2 connection release confirms sent by Q.AAL2 due to network fault, unknown case, or temporary failure	90064		
VS_QAAL2_Est_RLC_NoBitRate_Tx	ACCUMULATION	INTEGER	This measurement item provides the number of AAL2 connection release confirmations sent by the Q.AAL2 because of No BitRate.	B67109419.C67196149	Sum	
VS_QAAL2_Est_RLC_NoCID_Rx	ACCUMULATION	INTEGER	Number of AAL2 connection release confirms received by Q.AAL2 due to no resource, circuit, or channel available at remote ends.	B67109419.C67190057	Sum	
VS_QAAL2_Est_RLC_NoCID_Tx	ACCUMULATION	INTEGER	Number of AAL2 connection release confirms sent by Q.AAL2 due to no CID or resource available.	B67109419.C67190063	Sum	

VS_QAAL2_Est _RLC_NoPath_ Rx	ACCUMULA TION	INTEG ER	Number of AAL2 connection release confirms received by Q.AAL2 due to no PATH configured.	B67109419.C671 90056	Sum	
VS_QAAL2_Est _RLC_NoPath_ Tx	ACCUMULA TION	INTEG ER	Number of AAL2 connection release confirms sent by Q.AAL2 due to no PATH configured at the local end.	B67109419.C671 90062	Sum	
VS_QAAL2_Est _RLC_NoRoute_ Rx	ACCUMULA TION	INTEG ER	Number of AAL2 connection release confirms received by Q.AAL2 due to no route to DSP.	B67109419.C671 90055	Sum	
VS_QAAL2_Est _RLC_NoRoute_ Tx	ACCUMULA TION	INTEG ER	Number of AAL2 connection release confirms sent by Q.AAL2 due to no route to adjacent node	B67109419.C671 90061	Sum	
VS_QAAL2_Est _RLC_RecovOut	ACCUMULA TION	INTEG ER	Number of AAL2	B67109419.C671 90060	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

_Rx			connection release confirms received by Q.AAL2 due to timeout.			
VS_QAAL2_Est_RLC_RecovOut_Tx	ACCUMULATION	INTEGER	Number of AAL2 connection release confirms sent by Q.AAL2 due to timeout.	B67109419.C67190066	Sum	
VS_QAAL2_Est_RLC_Rx	ACCUMULATION	INTEGER	Number of AAL2 connection establishment rejects received by Q.AAL2 from an adjacent node.	B67109419.C67183363	Sum	
VS_QAAL2_Est_RLC_Tx	ACCUMULATION	INTEGER	Number of AAL2 connection establishment rejects sent by Q.AAL2.	B67109419.C67183366	Sum	
VS_QAAL2_Rel_RLC_Rx	ACCUMULATION	INTEGER	Number of AAL2 connection release confirmations received by Q.AAL2 from an adjacent node after Q.AAL2 initiates these releases.	B67109419.C67183369	Sum	
VS_QAAL2_Rel_RLC_Tx	ACCUMULATION	INTEGER	Number of AAL2 connection release	B67109419.C67183370	Sum	

			confirmations responded by Q.AAL2 to an adjacent node initiating the AAL2 connection release.			
VS_QAAL2_Rel_Rx	ACCUMULATION	INTEGER	Number of AAL2 connection releases initiated by an adjacent node.	B67109419.C67183368	Sum	
VS_QAAL2_Rel_Tx	ACCUMULATION	INTEGER	Number of AAL2 connection releases sent by Q.AAL2 to an adjacent node.	B67109419.C67183367	Sum	
VS_QAAL2_Rx_Mod	ACCUMULATION	INTEGER	Number of AAL2 connection modification request received by Q.AAL2 from adjacent nodes.	B67109419.C67190554	Sum	
VS_QAAL2_Rx_ModRej	ACCUMULATION	INTEGER	Number of AAL2 connection modification rejects received by Q.AAL2 from adjacent nodes.	B67109419.C67190067	Sum	
VS_QAAL2_Tx_Mod	ACCUMULATION	INTEGER	Number of AAL2	B67109419.C67190553	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			connection modification request Sent to adjacent nodes by Q.AAL2.			
VS_QAAL2_TxModRej	ACCUMULATION	INTEGER	Number of AAL2 connection modification rejects sent by Q.AAL2 to adjacent nodes.	B67109419.C67190068	Sum	

7.4 ATM_Port Performance Indicators

This section shows the key performance indicators and other counters for the ATM_Port object, divided into the following sub-sections:

- [ATM_Port.Huawei.UMTS.ATM_PORT_UTRAN](#)

7.4.1 ATM_Port.Huawei.UMTS.ATM_PORT_UTRAN

ATM Port data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_ATMPORT_MaxKbps_Rx	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Maximum receive Traffic of ATMPORT.	B67109464.C67190773	Constant	Sum, Minimum, Maximum
VS_ATMPORT_MaxKbps_Tx	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Maximum transmit traffic of ATMPORT.	B67109464.C67190775	Constant	Sum, Minimum, Maximum
VS_ATMPORT_MeanKbps_Rx	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Average receive traffic of ATMPORT.	B67109464.C67190774	Average	Sum, Minimum, Maximum

VS_ATMPORT_MeanKbps_Tx	INTENSITY	FLOAT	Obsolete from UTRAN/V200R 010: Average transmit traffic of ATMPORT.	B67109464.C67190776	Average	Sum, Minimum, Maximum
------------------------	-----------	-------	---	---------------------	---------	-----------------------

7.5 Cell Performance Indicators

This section shows the key performance indicators and other counters for the Cell object, divided into the following sub-sections:

- [Cell.Huawei.UMTS.BLER_UL_CS](#)
- [Cell.Huawei.UMTS.BLER_UL_PS_NRT](#)
- [Cell.Huawei.UMTS.BLER_UL_PS_RT](#)
- [Cell.Huawei.UMTS.CE_Resource_Adjustment](#)
- [Cell.Huawei.UMTS.CE_Resources](#)
- [Cell.Huawei.UMTS.Cell_Availability](#)
- [Cell.Huawei.UMTS.Cell_Breathing](#)
- [Cell.Huawei.UMTS.Cell_Broadcast_Services](#)
- [Cell.Huawei.UMTS.Cell_Load_Change](#)
- [Cell.Huawei.UMTS.Cell_Update](#)
- [Cell.Huawei.UMTS.Channel_Switching](#)
- [Cell.Huawei.UMTS.CMB_Channels](#)
- [Cell.Huawei.UMTS.Compressed_Mode_Activation](#)
- [Cell.Huawei.UMTS.Credit_Usage](#)
- [Cell.Huawei.UMTS.DSAC](#)
- [Cell.Huawei.UMTS.Establishment](#)
- [Cell.Huawei.UMTS.Hard_HO_Global](#)
- [Cell.Huawei.UMTS.Hard_HO_Inter_RNCCN](#)
- [Cell.Huawei.UMTS.Hard_HO_InterFreq](#)
- [Cell.Huawei.UMTS.Hard_HO_InterNB_IntraRNC](#)
- [Cell.Huawei.UMTS.Hard_HO_Intra_NodeB](#)
- [Cell.Huawei.UMTS.Hard_HO_IntraFreq](#)
- [Cell.Huawei.UMTS.Hard_HO_Iur](#)
- [Cell.Huawei.UMTS.Hard_HO_MultiBand](#)
- [Cell.Huawei.UMTS.Hardware_Resources_Usage](#)
- [Cell.Huawei.UMTS.HSDPA_Mobility](#)
- [Cell.Huawei.UMTS.HSDPA_Throughput](#)
- [Cell.Huawei.UMTS.HSDPA_UE_Ratio](#)
- [Cell.Huawei.UMTS.HSDPA](#)
- [Cell.Huawei.UMTS.HSUPA_Mobility](#)
- [Cell.Huawei.UMTS.HSUPA_Ratio](#)

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

- [Cell.Huawei.UMTS.HSUPA_Throughput](#)
- [Cell.Huawei.UMTS.HSUPA](#)
- [Cell.Huawei.UMTS.InterRAT_HO_Incoming_CS](#)
- [Cell.Huawei.UMTS.InterRAT_HO_Incoming_PS](#)
- [Cell.Huawei.UMTS.InterRAT_HO_Outgoing_CS](#)
- [Cell.Huawei.UMTS.InterRAT_HO_Outgoing_PS](#)
- [Cell.Huawei.UMTS.InterRAT_HO_PS](#)
- [Cell.Huawei.UMTS.Load_Congestion_Control_LDR](#)
- [Cell.Huawei.UMTS.Load_Congestion_Control_OLC](#)
- [Cell.Huawei.UMTS.Load_Congestion_Control](#)
- [Cell.Huawei.UMTS.Location_Cell_Services](#)
- [Cell.Huawei.UMTS.MBMS_Cell](#)
- [Cell.Huawei.UMTS.MBMS_Channel](#)
- [Cell.Huawei.UMTS.MBMS_PTP_PTM](#)
- [Cell.Huawei.UMTS.Measurement_Reports_UMTS](#)
- [Cell.Huawei.UMTS.MultiRab](#)
- [Cell.Huawei.UMTS.NBAP_Statistics](#)
- [Cell.Huawei.UMTS.Paging](#)
- [Cell.Huawei.UMTS.RAB_Abnorm_Release_CS](#)
- [Cell.Huawei.UMTS.RAB_Abnorm_Release_HSDPA](#)
- [Cell.Huawei.UMTS.RAB_Abnorm_Release_HSUPA](#)
- [Cell.Huawei.UMTS.RAB_Abnorm_Release_PS](#)
- [Cell.Huawei.UMTS.RAB_Abnorm_Release](#)
- [Cell.Huawei.UMTS.RAB_Blocking_PS](#)
- [Cell.Huawei.UMTS.RAB_CSQueueTime_Cell](#)
- [Cell.Huawei.UMTS.RAB_DCH_to_EDCH_Switch](#)
- [Cell.Huawei.UMTS.RAB_Establish_Failure_CS](#)
- [Cell.Huawei.UMTS.RAB_Establish_Failure_PS](#)
- [Cell.Huawei.UMTS.RAB_Establishment_AMR_WB](#)
- [Cell.Huawei.UMTS.RAB_Establishment_AMR](#)
- [Cell.Huawei.UMTS.RAB_Establishment_CCH](#)
- [Cell.Huawei.UMTS.RAB_Establishment_CS_Conv](#)
- [Cell.Huawei.UMTS.RAB_Establishment_CS_Stream](#)
- [Cell.Huawei.UMTS.RAB_Establishment_CS](#)
- [Cell.Huawei.UMTS.RAB_Establishment_DCH](#)
- [Cell.Huawei.UMTS.RAB_Establishment_PS_Bkg](#)
- [Cell.Huawei.UMTS.RAB_Establishment_PS_Conv](#)
- [Cell.Huawei.UMTS.RAB_Establishment_PS_DCH](#)
- [Cell.Huawei.UMTS.RAB_Establishment_PS_Global](#)
- [Cell.Huawei.UMTS.RAB_Establishment_PS_Inter](#)
- [Cell.Huawei.UMTS.RAB_Establishment_PS_Stream](#)
- [Cell.Huawei.UMTS.RAB_Modify_CS](#)
- [Cell.Huawei.UMTS.RAB_Modify_PS](#)
- [Cell.Huawei.UMTS.RAB_Release_CMB](#)
- [Cell.Huawei.UMTS.RAB_Release_CS](#)
- [Cell.Huawei.UMTS.RAB_Release_PS](#)

- [Cell.Huawei.UMTS.RAC_Failures_due_to_Congestion](#)
- [Cell.Huawei.UMTS.RAC_Failures_NewCallRequest](#)
- [Cell.Huawei.UMTS.Radio_Admission_Control](#)
- [Cell.Huawei.UMTS.Radio_Bearer_Usage_AMR_WB](#)
- [Cell.Huawei.UMTS.Radio_Bearer_Usage_AMR](#)
- [Cell.Huawei.UMTS.Radio_Bearer_Usage_CS](#)
- [Cell.Huawei.UMTS.Radio_Bearer_Usage_DRD_IFFreq](#)
- [Cell.Huawei.UMTS.Radio_Bearer_Usage_DRD](#)
- [Cell.Huawei.UMTS.Radio_Bearer_Usage_PS_Bkg](#)
- [Cell.Huawei.UMTS.Radio_Bearer_Usage_PS_Conv](#)
- [Cell.Huawei.UMTS.Radio_Bearer_Usage_PS_Inter](#)
- [Cell.Huawei.UMTS.Radio_Bearer_Usage_PS_Stream](#)
- [Cell.Huawei.UMTS.Radio_Bearer](#)
- [Cell.Huawei.UMTS.RLC_HSDPA](#)
- [Cell.Huawei.UMTS.RLC_R99](#)
- [Cell.Huawei.UMTS.RLC_Statistics](#)
- [Cell.Huawei.UMTS.RRC_Connection_Global](#)
- [Cell.Huawei.UMTS.RRC_Connection_Reject](#)
- [Cell.Huawei.UMTS.RRC_Connection_Release](#)
- [Cell.Huawei.UMTS.RRC_Connection_Request_per_cause](#)
- [Cell.Huawei.UMTS.RRC_Connection_Setup_per_cause](#)
- [Cell.Huawei.UMTS.RRC_Connection_Times](#)
- [Cell.Huawei.UMTS.Rx_and_Tx_Power](#)
- [Cell.Huawei.UMTS.SIR_Target_CS](#)
- [Cell.Huawei.UMTS.SIR_Target_PS_NRT](#)
- [Cell.Huawei.UMTS.SIR_Target_PS_RT](#)
- [Cell.Huawei.UMTS.Soft_Handover](#)
- [Cell.Huawei.UMTS.Soft_Handover](#)
- [Cell.Huawei.UMTS.Throughput_AMR](#)
- [Cell.Huawei.UMTS.Throughput_CS_Conv](#)
- [Cell.Huawei.UMTS.Throughput_CS_Stream](#)
- [Cell.Huawei.UMTS.Throughput_MBMS](#)
- [Cell.Huawei.UMTS.Throughput_PS_Bkg_DL](#)
- [Cell.Huawei.UMTS.Throughput_PS_Bkg_UL](#)
- [Cell.Huawei.UMTS.Throughput_PS_Conv](#)
- [Cell.Huawei.UMTS.Throughput_PS_Inter_DL](#)
- [Cell.Huawei.UMTS.Throughput_PS_Inter_UL](#)
- [Cell.Huawei.UMTS.Throughput_PS_Stream](#)
- [Cell.Huawei.UMTS.Throughput_PS](#)
- [Cell.Huawei.UMTS.Throughput_SRB](#)
- [Cell.Huawei.UMTS.Throughput_VP](#)
- [Cell.Huawei.UMTS.Traffic_CS](#)

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

- [Cell.Huawei.UMTS.Traffic_Global](#)
- [Cell.Huawei.UMTS.Traffic_PS](#)
- [Cell.Huawei.UMTS.UL_Speech_Quality](#)
- [Cell.Huawei.UMTS.URA_Updating](#)

7.5.1 Cell.Huawei.UMTS.BLER_UL_CS

Block Error Rate Uplink CS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
UL_BLER_Out_CSAMR_OutTime	ACCUMULATION	INTEGER	No description.	B67109392.C67189862	Sum	hucasebh , huctbh
UL_BLER_Out_CSAMR_TotalTime	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109392.C67189863	Sum	hucasebh , huctbh
ULBLER_CS_14_4_ERR_TB_NUM	ACCUMULATION	INTEGER	No description.	B67109392.C67184404	Sum	hucasebh , huctbh
ULBLER_CS_14_4_SAMPLE_TIMES	ACCUMULATION	INTEGER	No description.	B67109392.C67184405	Sum	hucasebh , huctbh
ULBLER_CS_28_8_ERR_TB_NUM	ACCUMULATION	INTEGER	No description.	B67109392.C67184406	Sum	hucasebh , huctbh
ULBLER_CS_28_8_SAMPLE_TIMES	ACCUMULATION	INTEGER	No description.	B67109392.C67184407	Sum	hucasebh , huctbh
ULBLER_CS_56_ERR_TB_NUM	ACCUMULATION	INTEGER	No description.	B67109392.C67190451	Sum	hucasebh , huctbh
ULBLER_CS_56_SAMPLE_TIMES	ACCUMULATION	INTEGER	No description.	B67109392.C67190452	Sum	hucasebh , huctbh
ULBLER_CS_57_6_ERR_TB_NUM	ACCUMULATION	INTEGER	No description.	B67109392.C67184408	Sum	hucasebh , huctbh

ULBLER_CS_57_6_SAMPLE_TIMES	ACCUMULATION	INTEGER	No description.	B67109392.C67184409	Sum	hucasebh , huctbh
ULBLER_CS_64_ERR_TB_NUM	ACCUMULATION	INTEGER	Number of TBs with UL CRCI Error Received by CS 64 kbit/s Services for Cell	B67109392.C67184410	Sum	hucasebh , huctbh
ULBLER_CS_64_SAMPLE_TIMES	ACCUMULATION	INTEGER	Number of BLER Samplings for CS 64 kbit/s Services for Cell	B67109392.C67184411	Sum	hucasebh , huctbh
ULBLER_CS_AMR_ERR_TB_NUM	ACCUMULATION	INTEGER	Number of TBs with UL CRCI Error Received by CS AMR Speech Services for Cell	B67109392.C67184402	Sum	hucasebh , huctbh
ULBLER_CS_AMR_SAMPLE_TIMES	ACCUMULATION	INTEGER	Number of BLER Samplings for CS AMR Speech Services for Cell	B67109392.C67184403	Sum	hucasebh , huctbh
ULBLER_PSNRT_128K_ERR_TB_NUM	ACCUMULATION	INTEGER	Number of TBs with UL CRCI Error Received by PS 128 kbit/s Non-Real-Time Services for Cell	B67109392.C67184428	Sum	hucasebh , huctbh
ULBLER_PSNRT_128K_SAM	ACCUMULATION	INTEGER	Number of BLER	B67109392.C67184429	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

PLE_TIMES			Samplings for PS 128 kbit/s Non-Real-Time Services for Cell			
ULBLER_PSN RT_144K_ERR _TB_NUM	ACCUMULA TION	INTEG ER	Number of TBs with UL CRCI Error Received by PS 144 kbit/s Non-Real-Time Services for Cell	B67109392.C6718 4430	Sum	hucasebh , huctbh
ULBLER_PSN RT_144K_SAM PLE_TIMES	ACCUMULA TION	INTEG ER	Number of BLER Samplings for PS 144 kbit/s Non-Real-Time Services for Cell	B67109392.C6718 4431	Sum	hucasebh , huctbh
ULBLER_PSN RT_16K_ERR_ TB_NUM	ACCUMULA TION	INTEG ER	Number of TBs with UL CRCI Error Received by PS 16 kbit/s Non-Real-Time Services for Cell	B67109392.C6718 4422	Sum	hucasebh , huctbh
ULBLER_PSN RT_16K_SAMP LE_TIMES	ACCUMULA TION	INTEG ER	Number of BLER Samplings for PS 16 kbit/s Non-Real-Time Services for Cell	B67109392.C6718 4423	Sum	hucasebh , huctbh
ULBLER_PSN RT_256K_ERR _TB_NUM	ACCUMULA TION	INTEG ER	Number of TBs with UL CRCI Error Received by PS 256 kbit/s Non-Real-Time Services for Cell	B67109392.C6718 4432	Sum	hucasebh , huctbh
ULBLER_PSN RT_256K_SAM	ACCUMULA TION	INTEG ER	Number of BLER	B67109392.C6718 4433	Sum	hucasebh , huctbh

PLE_TIMES			Samplings for PS 256 kbit/s Non-Real-Time Services for Cell			
ULBLER_PSN RT_32K_ERR_ TB_NUM	ACCUMULA TION	INTEG ER	Number of TBs with UL CRCI Error Received by PS 32 kbit/s Non-Real-Time Services for Cell	B67109392.C6718 4424	Sum	hucasebh , huctbh
ULBLER_PSN RT_32K_SAMP LE_TIMES	ACCUMULA TION	INTEG ER	Number of BLER Samplings for PS 32 kbit/s Non-Real-Time Services for Cell	B67109392.C6718 4425	Sum	hucasebh , huctbh
ULBLER_PSN RT_384K_ERR_ TB_NUM	ACCUMULA TION	INTEG ER	Number of TBs with UL CRCI Error Received by PS 384 kbit/s Non-Real-Time Services for Cell	B67109392.C6718 4434	Sum	hucasebh , huctbh
ULBLER_PSN RT_384K_SAM PLE_TIMES	ACCUMULA TION	INTEG ER	Number of BLER Samplings for PS 384 kbit/s Non-Real-Time Services for Cell	B67109392.C6718 4435	Sum	hucasebh , huctbh
ULBLER_PSN RT_64K_ERR_ TB_NUM	ACCUMULA TION	INTEG ER	Number of TBs with UL CRCI Error Received by PS 64 kbit/s Non-Real-Time	B67109392.C6718 4426	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Services for Cell			
ULBLER_PSN RT_64K_SAMPLE_TIMES	ACCUMULATION	INTEGER	Number of BLER Samplings for PS 64 kbit/s Non-Real-Time Services for Cell	B67109392.C67184427	Sum	hucasebh , huctbh
ULBLER_PSN RT_8K_ERR_TB_NUM	ACCUMULATION	INTEGER	Number of TBs with UL CRCI Error Received by PS 8 kbit/s Non-Real-Time Services for Cell	B67109392.C67184420	Sum	hucasebh , huctbh
ULBLER_PSN RT_8K_SAMPLE_TIMES	ACCUMULATION	INTEGER	Number of BLER Samplings for PS 8 kbit/s Non-Real-Time Services for Cell	B67109392.C67184421	Sum	hucasebh , huctbh
ULBLER_PSRT _16K_ERR_TB_NUM	ACCUMULATION	INTEGER	Number of TBs with UL CRCI Error Received by PS 16 kbit/s Real-Time Services for Cell	B67109392.C67184414	Sum	hucasebh , huctbh
ULBLER_PSRT _16K_SAMPLE_TIMES	ACCUMULATION	INTEGER	Number of BLER Samplings for PS 16 kbit/s Real-Time Services for Cell	B67109392.C67184415	Sum	hucasebh , huctbh
ULBLER_PSRT _32K_ERR_TB_NUM	ACCUMULATION	INTEGER	Number of TBs with UL CRCI Error Received by PS 32 kbit/s Real-Time	B67109392.C67184416	Sum	hucasebh , huctbh

			Services for Cell			
ULBLER_PSRT_32K_SAMPLE_TIMES	ACCUMULATION	INTEGER	Number of BLER Samplings for PS 32 kbit/s Real-Time Services for Cell	B67109392.C67184417	Sum	hucasebh , huctbh
ULBLER_PSRT_64K_ERR_TB_NUM	ACCUMULATION	INTEGER	Number of TBs with UL CRCI Error Received by PS 64 kbit/s Real-Time Services for Cell	B67109392.C67184418	Sum	hucasebh , huctbh
ULBLER_PSRT_64K_SAMPLE_TIMES	ACCUMULATION	INTEGER	Number of BLER Samplings for PS 64 kbit/s Real-Time Services for Cell	B67109392.C67184419	Sum	hucasebh , huctbh
ULBLER_PSRT_8K_ERR_TB_NUM	ACCUMULATION	INTEGER	Number of TBs with UL CRCI Error Received by PS 8 kbit/s Real-Time Services for Cell	B67109392.C67184412	Sum	hucasebh , huctbh
ULBLER_PSRT_8K_SAMPLE_TIMES	ACCUMULATION	INTEGER	Number of BLER Samplings for PS 8 kbit/s Real-Time Services for Cell	B67109392.C67184413	Sum	hucasebh , huctbh
VS_UL_BLe_r_	INTENSITY	FLOA	Time	B67109392.C6720	Constant	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Out_CSAMR		T	Occupancy of Max DCH UL BLER Carrying AMR Speech Service (Cell)	2429		, huctbh, Sum, Minimum, Maximum
VS_ULBler_Out_CSRT_14_4_OutTime	ACCUMULATION	INTEGER	No description.	B67109392.C67189864	Sum	hucasebh, huctbh
VS_ULBler_Out_CSRT_14_4_TotalTime	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109392.C67189865	Sum	hucasebh, huctbh
VS_ULBler_Out_CSRT_14_4	INTENSITY	FLOAT	This item provides the ratio of the time taken by CS 14.4K real-time service to reach the maximum DCH UL BLER to that by the whole power control in a cell	B67109392.C67202430	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULBler_Out_CSRT_28_8_OutTime	ACCUMULATION	INTEGER	No description.	B67109392.C67189866	Sum	hucasebh, huctbh
VS_ULBler_Out_CSRT_28_8_TotalTime	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109392.C67189867	Sum	hucasebh, huctbh
VS_ULBler_Out_CSRT_28_8	INTENSITY	FLOAT	This item provides the ratio of the time taken by CS 28.8K real-time service to reach the maximum DCH UL BLER to that by the whole	B67109392.C67202431	Average	hucasebh, huctbh, Sum, Minimum, Maximum

			power control in a cell.			
VS_ULBler_Out_CSRT_56_OutTime	ACCUMULATION	INTEGER	No description.	B67109392.C67189868	Sum	hucasebh , huctbh
VS_ULBler_Out_CSRT_56_TotalTime	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109392.C67189869	Sum	hucasebh , huctbh
VS_ULBler_Out_CSRT_56	INTENSITY	FLOAT	This item provides the ratio of the time taken by CS 56K real-time service to reach the maximum DCH ULBLER to that by the whole power control in a cell.	B67109392.C67202432	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_ULBler_Out_CSRT_57_6_OutTime	ACCUMULATION	INTEGER	No description.	B67109392.C67190448	Sum	hucasebh , huctbh
VS_ULBler_Out_CSRT_57_6_TotalTime	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109392.C67190449	Sum	hucasebh , huctbh
VS_ULBler_Out_CSRT_57_6	INTENSITY	FLOAT	This item provides the ratio of the time taken by CS 57.6K real-time service to reach the maximum DCH ULBLER to that by the whole	B67109392.C67202558	Average	hucasebh , huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			power control in a cell.			
VS_ULBler_Out_CSRT_64_OutTime	ACCUMULATION	INTEGER	No description.	B67109392.C67189870	Sum	hucasebh, huctbh
VS_ULBler_Out_CSRT_64_TotalTime	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109392.C67189871	Sum	hucasebh, huctbh
VS_ULBler_Out_CSRT_64	INTENSITY	FLOAT	This item provides the ratio of the time taken by CS 64K real-time service to reach the maximum DCH UL BLER to that by the whole power control in a cell.	B67109392.C67202433	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULBlerAMR	INTENSITY	FLOAT	UL BLER on the dedicated transport channel carrying AMR speech services in a cell.	B67109392.C67199797	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULBlerCSRT_14_4	INTENSITY	FLOAT	UL BLER on the dedicated transport channel when carrying the CS 14.4 K real-time service in a cell.	B67109392.C67199798	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULBlerCSRT_28_8	INTENSITY	FLOAT	UL BLER on the dedicated transport channel when carrying the CS 28.8 K real-	B67109392.C67199799	Average	hucasebh, huctbh, Sum, Minimum, Maximum

			time service in a cell.			m
VS_ULBlerCSRT_56	INTENSITY	FLOAT	UL BLER on the dedicated transport channel when carrying the CS 56 K real-time service in a cell.	B67109392.C67202559	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULBlerCSRT_57_6	INTENSITY	FLOAT	UL BLER on the dedicated transport channel when carrying the CS 57.6 K real-time service in a cell.	B67109392.C67199800	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULBlerCSRT_64	INTENSITY	FLOAT	UL BLER on the dedicated transport channel when carrying the CS 64 K real-time service in a cell.	B67109392.C67199801	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.2 Cell.Huawei.UMTS.BLER_UL_PS_NRT

Block Error Rate Uplink PS NRT data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_ULBler_Out_PSNrt_DCH_128_OutTime	ACCUMULATION	INTEGER	No description.	B67109392.C67189890	Sum	hucasebh, huctbh
VS_ULBler_Out_	ACCUMULATION	INTEGER	Obsolete from	B67109392.C671	Sum	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

PSNrt_DCH_128 _TotalTime	TION	ER	UTRAN/V900 R011:No description.	89891		, huctbh
VS_ULBler_Out_ PSNrt_DCH_128	INTENSITY	FLOA T	This item provides the ratio of the time taken by PS 128K non- real-time service to reach the maximum DCH UL BLER to that by the whole power control in a cell.	B67109392.C672 02443	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_ULBler_Out_ PSNrt_DCH_144 _OutTime	ACCUMULA TION	INTEG ER	No description.	B67109392.C671 89892	Sum	hucasebh , huctbh
VS_ULBler_Out_ PSNrt_DCH_144 _TotalTime	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011:No description.	B67109392.C671 89893	Sum	hucasebh , huctbh
VS_ULBler_Out_ PSNrt_DCH_144	INTENSITY	FLOA T	This item provides the ratio of the time taken by PS 144K non- real-time service to reach the maximum DCH UL BLER to that by the whole power control in a cell.	B67109392.C672 02444	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_ULBler_Out_ PSNrt_DCH_16_ OutTime	ACCUMULA TION	INTEG ER	No description.	B67109392.C671 89884	Sum	hucasebh , huctbh
VS_ULBler_Out_	ACCUMULA	INTEG	Obsolete from	B67109392.C671	Sum	hucasebh

PSNrt_DCH_16_ TotalTime	TION	ER	UTRAN/V900 R011:No description.	89885		, huctbh
VS_ULBler_Out_ PSNrt_DCH_16	INTENSITY	FLOA T	This item provides the ratio of the time taken by PS 16K non- real-time service to reach the maximum DCH UL BLER to that by the whole power control in a cell.	B67109392.C672 02440	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_ULBler_Out_ PSNrt_DCH_256 _OutTime	ACCUMULA TION	INTEG ER	No description.	B67109392.C671 89894	Sum	hucasebh , huctbh
VS_ULBler_Out_ PSNrt_DCH_256 _TotalTime	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011:No description.	B67109392.C671 89895	Sum	hucasebh , huctbh
VS_ULBler_Out_ PSNrt_DCH_256	INTENSITY	FLOA T	This item provides the ratio of the time taken by PS 256K non- real-time service to reach the maximum DCH UL BLER to that by the whole power control in a cell.	B67109392.C672 02445	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_ULBler_Out_PSNrt_DCH_32_OutTime	ACCUMULATION	INTEGER	No description.	B67109392.C67189886	Sum	hucasebh, huctbh
VS_ULBler_Out_PSNrt_DCH_32_TotalTime	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109392.C67189887	Sum	hucasebh, huctbh
VS_ULBler_Out_PSNrt_DCH_32	INTENSITY	FLOAT	This item provides the ratio of the time taken by PS 32K non-real-time service to reach the maximum DCH ULBLER to that by the whole power control in a cell.	B67109392.C67202441	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULBler_Out_PSNrt_DCH_384_OutTime	ACCUMULATION	INTEGER	No description.	B67109392.C67189896	Sum	hucasebh, huctbh
VS_ULBler_Out_PSNrt_DCH_384_TotalTime	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109392.C67189897	Sum	hucasebh, huctbh
VS_ULBler_Out_PSNrt_DCH_384	INTENSITY	FLOAT	This item provides the ratio of the time taken by PS 384K non-real-time service to reach the maximum DCH ULBLER to that by the whole power control in a cell.	B67109392.C67202446	Average	hucasebh, huctbh, Sum, Minimum, Maximum

VS_ULBler_Out_PSNrt_DCH_64_OutTime	ACCUMULATION	INTEGER	No description.	B67109392.C67189888	Sum	hucasebh, huctbh
VS_ULBler_Out_PSNrt_DCH_64_TotalTime	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109392.C67189889	Sum	hucasebh, huctbh
VS_ULBler_Out_PSNrt_DCH_64	INTENSITY	FLOAT	This item provides the ratio of the time taken by PS 64K non-real-time service to reach the maximum DCH ULBLER to that by the whole power control in a cell	B67109392.C67202442	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULBler_Out_PSNrt_DCH_8_OutTime	ACCUMULATION	INTEGER	No description.	B67109392.C67189882	Sum	hucasebh, huctbh
VS_ULBler_Out_PSNrt_DCH_8_TotalTime	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109392.C67189883	Sum	hucasebh, huctbh
VS_ULBler_Out_PSNrt_DCH_8	INTENSITY	FLOAT	This item provides the ratio of the time taken by PS 8K non-real-time service to reach the maximum DCH UL	B67109392.C67202439	Average	hucasebh, huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			BLER to that by the whole power control in a cell.			
VS_ULBLER_PS NRT_RACH8_ER TB_NUM	ACCUMULATION	INTEGER	No description.	B67109392.C671 89898	Sum	hucasebh , huctbh
VS_ULBLER_PS NRT_RACH8_S AMPLE_TIMES	ACCUMULATION	INTEGER	No description.	B67109392.C671 89899	Sum	hucasebh , huctbh
VS_ULBler_PSN rt_Rach8	INTENSITY	FLOAT	This item provides the ratio of the time taken by PS 8K non-real-time service to reach the maximum RACH UL BLER to that by the whole power control in a cell.	B67109392.C672 02447	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_ULBlerPsNR TDch_128	INTENSITY	FLOAT	UL BLER on the dedicated transport channel when carrying the PS 128 K non-real-time service in a cell	B67109392.C671 99810	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_ULBlerPsNR TDch_144	INTENSITY	FLOAT	UL BLER on the dedicated transport channel when carrying the PS 144 K non-real-time service in a cell.	B67109392.C671 99811	Average	hucasebh , huctbh, Sum, Minimum, Maximum

VS_ULBlerPsNR TDch_16	INTENSITY	FLOAT	UL BLER on the dedicated transport channel when carrying the PS 16 K non-real-time service in a cell.	B67109392.C67199807	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULBlerPsNR TDch_256	INTENSITY	FLOAT	UL BLER on the dedicated transport channel when carrying the PS 256 K non-real-time service in a cell.	B67109392.C67199812	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULBlerPsNR TDch_32	INTENSITY	FLOAT	UL BLER on the dedicated transport channel when carrying the PS 32 K non-real-time service in a cell.	B67109392.C67199808	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULBlerPsNR TDch_384	INTENSITY	FLOAT	UL BLER on the dedicated transport channel when carrying the PS 384 K non-real-time service in a cell.	B67109392.C67199813	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULBlerPsNR TDch_64	INTENSITY	FLOAT	UL BLER on the dedicated transport channel when carrying the PS	B67109392.C67199809	Average	hucasebh, huctbh, Sum, Minimum,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			64 K non-real-time service in a cell.			Maximum
VS_ULBlerPsNR TDch_8	INTENSITY	FLOAT	UL BLER on the dedicated transport channel when carrying the PS 8 K non-real-time service in a cell.	B67109392.C67199806	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.3 Cell.Huawei.UMTS.BLER_UL_PS_RT

Block Error Rate Uplink PS RT data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_ULBler_Out_PSRT_144_OutTime	ACCUMULATION	INTEGER	No description.	B67109392.C67189880	Sum	hucasebh, huctbh
VS_ULBler_Out_PSRT_144_TotTime	ACCUMULATION	INTEGER	No description.	B67109392.C67189881	Sum	hucasebh, huctbh
VS_ULBler_Out_PSRT_144	INTENSITY	FLOAT	This item provides the ratio of the time taken by PS 144K real-time service to reach the maximum DCH UL BLER to that by the whole power control in a cell.	B67109392.C67202438	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULBler_Out_PSRT_16_OutTime	ACCUMULATION	INTEGER	No description.	B67109392.C67189874	Sum	hucasebh, huctbh
VS_ULBler_Out_PSRT_16_Tot	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900	B67109392.C67189875	Sum	hucasebh, huctbh

alTime			R011:No description.			
VS_ULBler_Out_PSRT_16	INTENSITY	FLOAT	This item provides the ratio of the time taken by PS 16K real-time service to reach the maximum DCH UL BLER to that by the whole power control in a cell.	B67109392.C6720 2435	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULBler_Out_PSRT_32_OutTime	ACCUMULATION	INTEGER	No description.	B67109392.C6718 9876	Sum	hucasebh, huctbh
VS_ULBler_Out_PSRT_32_Tot alTime	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109392.C6718 9877	Sum	hucasebh, huctbh
VS_ULBler_Out_PSRT_32	INTENSITY	FLOAT	This item provides the ratio of the time taken by PS 32K real-time service to reach the maximum DCH UL BLER to that by the whole power control in a cell.	B67109392.C6720 2436	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULBler_Out_PSRT_64_OutTime	ACCUMULATION	INTEGER	No description.	B67109392.C6718 9878	Sum	hucasebh, huctbh
VS_ULBler_Out_PSRT_64_Tot	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900	B67109392.C6718 9879	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

alTime			R011:No description.			
VS_ULBler_Out_PSRT_64	INTENSITY	FLOAT	This item provides the ratio of the time taken by PS 64K real-time service to reach the maximum DCH UL BLER to that by the whole power control in a cell.	B67109392.C67202437	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULBler_Out_PSRT_8_OutTime	ACCUMULATION	INTEGER	No description.	B67109392.C67189872	Sum	hucasebh, huctbh
VS_ULBler_Out_PSRT_8_TotalTime	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109392.C67189873	Sum	hucasebh, huctbh
VS_ULBler_Out_PSRT_8	INTENSITY	FLOAT	This item provides the ratio of the time taken by PS 8K real-time service to reach the maximum DCH UL BLER to that by the whole power control in a cell.	B67109392.C67202434	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULBlerPSRT_16	INTENSITY	FLOAT	UL BLER on the dedicated transport channel when carrying the PS 16 K real-time service in a cell	B67109392.C67199803	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULBlerPSRT_32	INTENSITY	FLOAT	UL BLER on the dedicated	B67109392.C67199804	Average	hucasebh, huctbh,

			transport channel when carrying the PS 32 K real-time service in a cell.			Sum, Minimum, Maximum
VS_ULBlerPSRT_64	INTENSITY	FLOAT	UL BLER on the dedicated transport channel when carrying the PS 64 K real-time service in a cell.	B67109392.C67199805	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULBlerPSRT_8	INTENSITY	FLOAT	UL BLER on the dedicated transport channel when carrying the PS 8 K real-time service in a cell.	B67109392.C67199802	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.4 Cell.Huawei.UMTS.CE_Resource_Adjustment

CE Resource Adjustment

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_DCCC_DL_CongDownsizing_Att	ACCUMULATION	INTEGER	Number of congestion-based rate downsizing attempts for DCCC on DCH in DL	B67109391.C67192591	Sum	hucasebh, huctbh
VS_DCCC_DL_CongDownsizing	ACCUMULATION	INTEGER	Number of successful	B67109391.C67192592	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

_Succ			operations of congestion-based rate downsizing for DCCC on DCH in DL			
VS_DCCC_DL_CovDownsizing_Att	ACCUMULATION	INTEGER	Number of coverage-based rate downsizing attempts for DCCC on DCH in DL	B67109391.C67192589	Sum	hucasebh , huctbh
VS_DCCC_DL_CovDownsizing_Succ	ACCUMULATION	INTEGER	Number of successful operations of coverage-based rate downsizing for DCCC on DCH in DL	B67109391.C67192590	Sum	hucasebh , huctbh
VS_DCCC_DL_ThrDownsizing_Att	ACCUMULATION	INTEGER	Number of traffic-volume-based rate downsizing attempts for DCCC on DCH in DL	B67109391.C67192587	Sum	hucasebh , huctbh
VS_DCCC_DL_ThrDownsizing_Succ	ACCUMULATION	INTEGER	Number of successful operations of traffic-volume-based rate downsizing for DCCC on DCH in DL	B67109391.C67192588	Sum	hucasebh , huctbh
VS_DCCC_DL_Upsizing_Att	ACCUMULATION	INTEGER	Number of rate upsizing attempts for DCCC on DCH in DL	B67109391.C67192585	Sum	hucasebh , huctbh
VS_DCCC_DL_	ACCUMULATION	INTEGER	Number of	B67109391.C671	Sum	hucasebh

Upsizing_Succ	TION	ER	successful operations of rate upsizing for DCCC on DCH in DL	92586		, huctbh
VS_DCCC_E2E_ReqRateDown_UE	ACCUMULATION	INTEGER	Number of attempts to downsize the rate for EDCH to EDCH DCCC based on traffic volume (RLC BO) or throughput in the uplink.	B67109391.C67196026	Sum	hucasebh, huctbh
VS_DCCC_E2E_ReqRateUp_UE	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of attempts to upsize the rate for EDCH to EDCH DCCC based on traffic volume (RLC BO) or throughput in the uplink.	B67109391.C67196025	Sum	hucasebh, huctbh
VS_DCCC_E2E_SuccRateDown_UE	ACCUMULATION	INTEGER	Number of successful operations to downsize the rate for EDCH to EDCH DCCC based on traffic volume (RLC BO) or throughput in the uplink.	B67109391.C67196028	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_DCCC_E2E_SuccRateUp_U_E	ACCUMULATION	INTEGER	Number of successful operations to upsize the rate for EDCH to EDCH DCCC based on traffic volume (RLC BO) or throughput in the uplink.	B67109391.C67196027	Sum	hucasebh , huctbh
VS_DCCC_UL_CongDownsizing_Att	ACCUMULATION	INTEGER	Number of attempts to downsize the rate for DCCC based on Congestion on DCH in the uplink in the best cell.	B67109391.C67196034	Sum	hucasebh , huctbh
VS_DCCC_UL_CongDownsizing_Succ	ACCUMULATION	INTEGER	Number of Successful Operations to downsize the rate for DCCC based on Congestion on DCH in the uplink in the best cell.	B67109391.C67196035	Sum	hucasebh , huctbh
VS_DCCC_UL_CovDownsizing_Att	ACCUMULATION	INTEGER	Number of attempts to downsize the rate for DCCC based on Coverage on DCH in the uplink in the best cell.	B67109391.C67196032	Sum	hucasebh , huctbh
VS_DCCC_UL_CovDownsizing_Succ	ACCUMULATION	INTEGER	Number of Successful Operations to downsize the	B67109391.C67196033	Sum	hucasebh , huctbh

			rate for DCCC based on Coverage on DCH in the uplink in the best cell.			
VS_DCCC_UL_Down sizing_Att	ACCUMULATION	INTEGER	Number of rate downsizing attempts for DCCC on DCH in UL	B67109391.C67192595	Sum	hucasebh , huctbh
VS_DCCC_UL_Down sizing_Suc c	ACCUMULATION	INTEGER	Number of successful operations of rate downsizing for DCCC on DCH in UL	B67109391.C67192596	Sum	hucasebh , huctbh
VS_DCCC_UL_Upsizing_Att	ACCUMULATION	INTEGER	Number of rate upsizing attempts for DCCC on DCH in UL	B67109391.C67192593	Sum	hucasebh , huctbh
VS_DCCC_UL_Upsizing_Succ	ACCUMULATION	INTEGER	Number of successful operations of rate upsizing for DCCC on DCH in UL	B67109391.C67192594	Sum	hucasebh , huctbh

7.5.5 Cell.Huawei.UMTS.CE_Resources

CE resources data.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RAC_DC	ACCUMULATION	INTEGER	Number of	B67109391.C6719	Sum	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

CC_Fail_DLC E_Cong	TION	ER	failures in each cell to request DL CE resources in the DCCC procedure	1840		, huctbh
VS_RAC_DC CC_Fail_ULC E_Cong	ACCUMULA TION	INTEG ER	Number of failures in each cell to request UL CE resources in the DCCC procedure	B67109391.C6719 1839	Sum	hucasebh , huctbh
VS_RAC_HH O_Fail_DLCE _Cong	ACCUMULA TION	INTEG ER	Number of unsuccessfully applying for DL CE resources in each failed cell in HHO Procedure.	B67109391.C6719 2493	Sum	hucasebh , huctbh
VS_RAC_HH O_Fail_ULCE _Cong	ACCUMULA TION	INTEG ER	Number of unsuccessfully applying for UL CE resources in each failed cell in HHO Procedure.	B67109391.C6719 2492	Sum	hucasebh , huctbh
VS_RAC_New Req_Fail_DLC E_Cong	ACCUMULA TION	INTEG ER	Number of failures in each cell to request DL CE resources in the RRC/RAB SETUP procedure	B67109391.C6719 1844	Sum	hucasebh , huctbh
VS_RAC_New Req_Fail_ULC E_Cong	ACCUMULA TION	INTEG ER	Number of failures in each cell to request UL CE resources in the RRC/RAB SETUP procedure	B67109391.C6719 1843	Sum	hucasebh , huctbh

VS_RAC_SHO_Fail_DLCE_Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request DL CE resources in the SHO procedure	B67109391.C67191842	Sum	hucasebh, huctbh
VS_RAC_SHO_Fail_ULCE_Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request UL CE resources in the SHO procedure	B67109391.C67191841	Sum	hucasebh, huctbh

7.5.6 Cell.Huawei.UMTS.Cell_Availability

Cell Availability data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_Cell_Ratio_UnavailTime_OM	INTENSITY	FLOAT	This measurement item takes statistics of the unavailability ratio of a cell in the RNC, that is, the out-of-service ratio of a cell.	B67109391.C67203851	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_Cell_UnavailTime_OM	ACCUMULATION	INTEGER	Unavailability duration (in seconds) of a cell in the RNC.	B67109391.C67199736	Sum	hucasebh, huctbh
VS_Cell_UnavailTime_Sys	ACCUMULATION	INTEGER	This measurement item provides the unavailability	B67109391.C67204837	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			duration of a cell caused by system fault in the RNC.			
VS_Eul_UnavailTime	ACCUMULATION	INTEGER	This measurement item provides the Hsupa service unavailability duration of a cell caused by system fault in the RNC.	B67109391.C67204839	Sum	hucasebh , huctbh
VS_Hsdpa_UnavailTime	ACCUMULATION	INTEGER	This measurement item provides the Hsdpa service unavailability duration of a cell caused by system fault in the RNC.	B67109391.C67204838	Sum	hucasebh , huctbh

7.5.7 Cell.Huawei.UMTS.Cell_Breathing

Cell Breathing data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_CellBreath_CPICHDown	ACCUMULATION	INTEGER	Number of CPICH power decreases due to cell breathing in a cell	B67109391.C67190847	Sum	hucasebh , huctbh
VS_CellBreath_CPICHMax_Time	ACCUMULATION	INTEGER	Duration of the maximum value of CPICH power due to cell	B67109391.C67202918	Sum	hucasebh , huctbh

			breathing in a cell			
VS_CellBreath_CPICHMin_Time	ACCUMULATION	INTEGER	Duration of the minimum value of CPICH power due to cell breathing in a cell	B67109391.C67202917	Sum	hucasebh, huctbh
VS_CellBreath_CPICHUp	ACCUMULATION	INTEGER	Number of CPICH power increases due to cell breathing in a cell	B67109391.C67190846	Sum	hucasebh, huctbh
VS_CellBreath_TCPOver_Time	ACCUMULATION	INTEGER	Duration for which TCP is greater than the higher threshold configured for cell breathing in a cell	B67109391.C67202920	Sum	hucasebh, huctbh
VS_CellBreath_TCPUnder_Time	ACCUMULATION	INTEGER	Duration for which TCP is smaller than the lower threshold configured for cell breathing in a cell	B67109391.C67202919	Sum	hucasebh, huctbh
VS_DLTxPwrAMR_WB	INTENSITY	FLOAT	This measurement item takes statistics of the average downlink code transmit power for AMR WB connection in the best cell.	B67109391.C67203865	Average	hucasebh, huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_DLTxPwrAMR	INTENSITY	FLOAT	Average downlink transmit power for AMR connection in the best cell. Unit: dBm	B67109391.C67199792	Average	hucasebh, huctbh, Sum, Minimum, Maximum
---------------	-----------	-------	---	---------------------	---------	---

7.5.8 Cell.Huawei.UMTS.Cell_Broadcast_Services

Cell Broadcast Services data.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_CBS_MaxNumStored	INTENSITY	INTEGER	The RNC periodically samples the number of CBS messages stored by the BMC and saves the maximum number.	B67109389.C67180994	Constant	hucasebh, huctbh, Sum, Minimum, Maximum
VS_CBS_MeanNumStored_Deno	INTENSITY	FLOAT	Average number of CBS messages stored by the BMC in a cell in a measurement period. Number of samples	B67109389.C67180997	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_CBS_MeanNumStored	INTENSITY	FLOAT	Average number of CBS messages stored by the BMC in a cell in a measurement period	B67109389.C67199706	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_CBS_MinNumStored	ACCUMULATION	INTEGER	The RNC periodically samples the number of CBS	B67109389.C67180995	Sum	hucasebh, huctbh

			messages stored by the BMC and saves the minimum number.			
VS_CBS_NumB MCCongIND	ACCUMULA TION	INTEG ER	Number of CONGESTION INDICATION messages sent by BMC in a cell.	B67109389.C671 80998	Sum	hucasebh , huctbh
VS_CBS_NumR X	ACCUMULA TION	INTEG ER	Number of CBS messages received by the BMC in a cell.	B67109389.C671 80993	Sum	hucasebh , huctbh
VS_CBS_NumSt ored_Num	ACCUMULA TION	INTEG ER	No description.	B67109389.C671 80996	Sum	hucasebh , huctbh
VS_CBS_NumT XUE	ACCUMULA TION	INTEG ER	Number of CBS messages (excluding the CBS scheduling message) sent to a UE from the BMC.	B67109389.C671 80999	Sum	hucasebh , huctbh

7.5.9 Cell.Huawei.UMTS.Cell_Load_Change

Cell Load Change data

KPI	Type	Data Type	Description	Derivation	Default Aggregat or	Other Aggrega tors
VS_PUC_Hig h_IntSrch_Upd t	ACCUMULA TION	INTEG ER	Number of Sintersearch Updates due to Cell Load Change (Cell). The load of cell	B67109391.C6719 0444	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			becomes heavy.			
VS_PUC_High_Offset_Updt	ACCUMULATION	INTEGER	Numbers of Qoffset updates when the load of the serving cell becomes heavy.	B67109391.C67189856	Sum	hucasebh , huctbh
VS_PUC_Light_IntSrch_Updt	ACCUMULATION	INTEGER	Number of Sintersearch Updates due to Cell Load Change (Cell). The load of cell becomes light.	B67109391.C67190442	Sum	hucasebh , huctbh
VS_PUC_Light_Offset_Updt	ACCUMULATION	INTEGER	Numbers of Qoffset updates when the load of the serving cell becomes light.	B67109391.C67189857	Sum	hucasebh , huctbh
VS_PUC_Normal_IntSrch_Updt	ACCUMULATION	INTEGER	Number of Sintersearch Updates due to Cell Load Change (Cell). The load of cell becomes normal.	B67109391.C67190443	Sum	hucasebh , huctbh
VS_PUC_Normal_Offset_Updt	ACCUMULATION	INTEGER	Numbers of Qoffset updates when the load of the serving cell becomes normal.	B67109391.C67189858	Sum	hucasebh , huctbh

7.5.10 Cell.Huawei.UMTS.Cell_Update

Cell update data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
-----	------	-----------	-------------	------------	--------------------	-------------------

RRC_AttConnRe Estab_RFLoss	ACCUMULA TION	INTEG ER	Numbers of CELL UPDATE messages received by the RNC in a cell,radio link failure	B67109382.C6 7180378	Sum	hucasebh , huctbh
RRC_FailConnR eEstab_NoReply	ACCUMULA TION	INTEG ER	Number of no receipt of PHYSICAL CHANNEL RECONFIGURA TION COMPLETE messages in a certain period upon sending CELL UPDATE CONFIRM messages. Where, the reason of cell update is RL failure.	B67109382.C6 7189768	Sum	hucasebh , huctbh
RRC_SuccConn ReEstab	ACCUMULA TION	INTEG ER	Numbers of successful cell updates due to different causes, Radio link failure	B67109382.C6 7189767	Sum	hucasebh , huctbh
VS_CellUpdt_At tConf	ACCUMULA TION	INTEG ER	Number of CELL UPDATE CONFIRM messages sent from the SRNC to a UE in a cell on receipt of a CELL UPDATE message	B67109382.C6 7180370	Sum	hucasebh , huctbh
VS_CellUpdt_At tErrRLC	ACCUMULA TION	INTEG ER	Obsolete in release Vn00R010.	B67109382.C6 7180377	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Numbers of CELL UPDATE messages received by the RNC in a cell,RLC unrecoverable error			
VS_CellUpdt_At tErrSRLC	ACCUMULA TION	INTEG ER	Number of cell update attempts in a cell with the cell update cause of "SRB RLC unrecoverable error"	B67109382.C6 7192570	Sum	hucasebh , huctbh
VS_CellUpdt_At tErrTRLC	ACCUMULA TION	INTEG ER	Number of cell update attempts in a cell with the cell update cause of "TRB RLC unrecoverable error"	B67109382.C6 7192571	Sum	hucasebh , huctbh
VS_CellUpdt_At tMbmsRecv	ACCUMULA TION	INTEG ER	Number of cell update attempts in a cell with the cell update cause of "MBMS reception"	B67109382.C6 7192573	Sum	hucasebh , huctbh
VS_CellUpdt_At tPage	ACCUMULA TION	INTEG ER	Numbers of CELL UPDATE messages received by the RNC in a cell,Paging Response	B67109382.C6 7180375	Sum	hucasebh , huctbh
VS_CellUpdt_At tPrd	ACCUMULA TION	INTEG ER	Numbers of CELL UPDATE messages received by the RNC in a cell,Periodic Cell update	B67109382.C6 7180372	Sum	hucasebh , huctbh
VS_CellUpdt_At tPtpRbReq	ACCUMULA TION	INTEG ER	Number of cell update attempts in a cell with the cell	B67109382.C6 7192575	Sum	hucasebh , huctbh

			update cause of "MBMS PTP RB request"			
VS_CellUpdt_At tResel_CMB	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V100V2 00R011: Number of Cell Updates for Different Causes (Cell). Cause Cell reselection due to CMB.	B67109382.C6 7190836	Sum	hucasebh , huctbh
VS_CellUpdt_At tResel	ACCUMULA TION	INTEG ER	Numbers of CELL UPDATE messages received by the RNC in a cell, Cell Reselection	B67109382.C6 7180373	Sum	hucasebh , huctbh
VS_CellUpdt_At tRsa	ACCUMULA TION	INTEG ER	Numbers of CELL UPDATE messages received by the RNC in a cell, Reentering Service Area	B67109382.C6 7180374	Sum	hucasebh , huctbh
VS_CellUpdt_At tULDatTrsf	ACCUMULA TION	INTEG ER	Numbers of CELL UPDATE messages received by the RNC in a cell, Uplink Data Transfer	B67109382.C6 7180376	Sum	hucasebh , huctbh
VS_CellUpdt_At tUpd_Msg	ACCUMULA TION	INTEG ER	Number of cell update attempts in a cell with the cell update cause of "periodic cell update"	B67109382.C6 7192569	Sum	hucasebh , huctbh
VS_CellUpdt_R LFAIL_Max_Ti	ACCUMULA TION	INTEG ER	Maximum Signalling Delay	B67109382.C6 7189764	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

me			of Cell Updates due to RL Failure (Cell)			
VS_CellUpdt_RLFail_Mean_Time	INTENSITY	FLOAT	Mean Signalling Delay of Cell Updates due to RL Failure (Cell)	B67109382.C67202419	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_CellUpdt_RLFail_TCum	ACCUMULATION	INTEGER	No description.	B67109382.C67189765	Sum	hucasebh, huctbh
VS_CellUpdt_RLFail_TSample	ACCUMULATION	INTEGER	No description.	B67109382.C67189766	Sum	hucasebh, huctbh
VS_CellUpdt_SuccessErrRLC	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of successful cell updates due to different causes, RLC Error	B67109382.C67180384	Sum	hucasebh, huctbh
VS_CellUpdt_SuccessErrTRLC	ACCUMULATION	INTEGER	Number of successful cell updates in a cell with the cell update cause of "TRB RLC unrecoverable error"	B67109382.C67192572	Sum	hucasebh, huctbh
VS_CellUpdt_SuccessMbmsPtpRbReq	ACCUMULATION	INTEGER	Number of successful cell updates in a cell with the cell update cause of "MBMS PTP RB request"	B67109382.C67192576	Sum	hucasebh, huctbh
VS_CellUpdt_SuccessMbmsRecv	ACCUMULATION	INTEGER	Number of successful cell updates in a cell with the cell	B67109382.C67192574	Sum	hucasebh, huctbh

			update cause of "MBMS reception"			
VS_CellUpdt_SuccPage	ACCUMULATION	INTEGER	Numbers of successful cell updates due to different causes,Paging Response	B67109382.C67180382	Sum	hucasebh , huctbh
VS_CellUpdt_SuccPrd	ACCUMULATION	INTEGER	Numbers of successful cell updates due to different causes,Periodic Cell update	B67109382.C67180379	Sum	hucasebh , huctbh
VS_CellUpdt_SuccResel_CMB	ACCUMULATION	INTEGER	Obsolete from UTRAN/V100V2 00R011: Number of Successful Cell Updates for Different Causes (Cell). Cause Cell reselection due to CMB	B67109382.C67190837	Sum	hucasebh , huctbh
VS_CellUpdt_SuccResel	ACCUMULATION	INTEGER	Numbers of successful cell updates due to different causes,Cell Reselection	B67109382.C67180380	Sum	hucasebh , huctbh
VS_CellUpdt_SuccRRRel	ACCUMULATION	INTEGER	Number of RRC connection releases due to cell update failure in the SRNC. If the CELL UPDATE message indicates that there is an	B67109382.C67180386	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			unrecoverable AM RLC error over the RB2, RB3, or RB4, the SRNC sends an RRC CONNECTION RELEASE message to the UE			
VS_CellUpdt_SuccRsa	ACCUMULATION	INTEGER	Numbers of successful cell updates due to different causes, Reentering Service Area	B67109382.C67180381	Sum	hucasebh, huctbh
VS_CellUpdt_SuccULDatTrsf	ACCUMULATION	INTEGER	Numbers of successful cell updates due to different causes, Uplink Data Transfer	B67109382.C67180383	Sum	hucasebh, huctbh
VS_CellUpdt_SuccUpd	ACCUMULATION	INTEGER	Numbers of successful cell updates due to different causes, Successful update	B67109382.C67180371	Sum	hucasebh, huctbh

7.5.11 Cell.Huawei.UMTS.Channel_Switching

Channel Switching data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_AMR_DLRateReconfDown	ACCUMULATION	INTEGER	Number of decrease of the DL bit rate for the AMR speech service in a cell.	B67109391.C67190519	Sum	hucasebh, huctbh
VS_AMR_DLRateReconfUp	ACCUMULATION	INTEGER	Number of rises of the DL	B67109391.C67180678	Sum	hucasebh, huctbh

			bit rate for the AMR speech service in a cell.			
VS_AMR_ULRateReconfDown	ACCUMULATION	INTEGER	Number of decreases of the DL bit rate for the AMR speech service in a cell.	B67109391.C67180677	Sum	hucasebh , huctbh
VS_AMR_ULRateReconfUp	ACCUMULATION	INTEGER	Number of increase of the UL bit rate for the AMR speech service in a cell.	B67109391.C67190520	Sum	hucasebh , huctbh
VS_AMR_WB_DLRateReconfDown	ACCUMULATION	INTEGER	Number of decreases of the DL bit rate for the AMR WB speech service in a cell.	B67109391.C67192002	Sum	hucasebh , huctbh
VS_AMR_WB_DLRateReconfUp	ACCUMULATION	INTEGER	Number of increases of the DL bit rate for the AMR WB speech service in a cell.	B67109391.C67192001	Sum	hucasebh , huctbh
VS_AMR_WB_ULRateReconfDown	ACCUMULATION	INTEGER	Number of decreases of the DL bit rate for the AMR WB speech service in a cell.	B67109391.C67192004	Sum	hucasebh , huctbh
VS_AMR_WB_ULRateReconfUp	ACCUMULATION	INTEGER	Number of increases of the	B67109391.C67192003	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			UL bit rate for the AMR WB speech service in a cell.			
VS_Cell_DynamicShutDownTime_OM	ACCUMULATION	FLOAT	Duration of dynamic shutdown of cell	B67109391.C67204134	Sum	hucasebh, huctbh
VS_DCCC_C2D_Att	ACCUMULATION	INTEGER	Number of handover attempts from FACH to DCH in a cell	B67109391.C67190707	Sum	hucasebh, huctbh
VS_DCCC_C2D_Succ	ACCUMULATION	INTEGER	Number of dynamic channel configurations for CCH to DCH handover in a cell	B67109391.C67180675	Sum	hucasebh, huctbh
VS_DCCC_D2C_Att	ACCUMULATION	INTEGER	Number of handover attempts from DCH to FACH in a cell	B67109391.C67190706	Sum	hucasebh, huctbh
VS_DCCC_D2C_Succ	ACCUMULATION	INTEGER	Number of successful dynamic configurations for DCH to CCH handover in a cell.	B67109391.C67180676	Sum	hucasebh, huctbh
VS_DCCC_D2D_SuccRateDown_UE	ACCUMULATION	INTEGER	Number of successful dynamic configurations to lower the DL bit rate of the PS BE service. The channel handover here	B67109391.C67180674	Sum	hucasebh, huctbh

			refers to a handover between DCHs. An RNC can initiate a dynamic channel configuration procedure through an RB reconfiguration procedure or transport channel reconfiguration procedure.			
VS_DCCC_D2D_SuccRateUp_UE	ACCUMULATION	INTEGER	Number of successful dynamic configurations to raise the DL bit rate of the PS BE service. The channel handover here refers to the handover between DCHs. An RNC can initiate a dynamic channel configuration procedure through an RB reconfiguration procedure or transport channel	B67109391.C67180673	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			reconfiguration procedure.			
VS_DCCC_FtoP_Att	ACCUMULATION	INTEGER	Number of attempts to switch from FACH to PCH	B67109391.C67192583	Sum	hucasebh, huctbh
VS_DCCC_FtoP_Succ	ACCUMULATION	INTEGER	Number of successful operations of switching from FACH to PCH	B67109391.C67192584	Sum	hucasebh, huctbh

7.5.12 Cell.Huawei.UMTS.CMB_Channels

CMB Channel data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_RRC_SuccConnEstab_CMB_Cell	PERCENTAGE	FLOAT	Obsolete from UTRAN/V200 R010:Percentage CMB RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell through.	$100 * \frac{\{VS_RRC_SuccConnEstab_CMB_Cell\}}{\{VS_RRC_AttConnEstab_CMB_Cell\}}$	Average	hucasebh, huctbh
VS_CellCmbCh1UEs	INTENSITY	FLOAT	Obsolete from UTRAN/V200 R010:Mean numbers of UEs receiving specified CMBCHs in a cell, Mean number of UEs receiving CMBCH 1	B67109365.C67202968	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_CellCmbCh1	INTENSITY	FLOAT	Obsolete from	B67109365.C672	Average	hucasebh

UsedTime		T	UTRAN/V200 R010:Mean time to watch each CMB channel in a cell, Mean time to watch CMB channel 1	02962		, huctbh, Sum, Minimu m, Maximu m
VS_CellCmbCh2 UEs	INTENSITY	FLOA T	Obsolete from UTRAN/V200 R010:Mean numbers of UEs receiving specified CMBCHs in a cell, Mean number of UEs receiving CMBCH 2	B67109365.C672 02957	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_CellCmbCh2 UsedTime	INTENSITY	FLOA T	Obsolete from UTRAN/V200 R010:Mean time to watch each CMB channel in a cell, Mean time to watch CMB channel 2	B67109365.C672 02963	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_CellCmbCh3 UEs	INTENSITY	FLOA T	Obsolete from UTRAN/V200 R010:Mean numbers of UEs receiving specified CMBCHs in a cell, Mean number of UEs receiving CMBCH 3	B67109365.C672 02958	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_CellCmbCh3 UsedTime	INTENSITY	FLOAT	Obsolete from UTRAN/V200 R010:Mean time to watch each CMB channel in a cell, Mean time to watch CMB channel 3	B67109365.C672 02964	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_CellCmbCh4 UEs	INTENSITY	FLOAT	Obsolete from UTRAN/V200 R010:Mean numbers of UEs receiving specified CMBCHs in a cell, Mean number of UEs receiving CMBCH 4	B67109365.C672 02959	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_CellCmbCh4 UsedTime	INTENSITY	FLOAT	Obsolete from UTRAN/V200 R010:Mean time to watch each CMB channel in a cell, Mean time to watch CMB channel 4	B67109365.C672 02965	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_CellCmbCh5 UEs	INTENSITY	FLOAT	Obsolete from UTRAN/V200 R010:Mean numbers of UEs receiving specified CMBCHs in a cell, Mean number of UEs receiving CMBCH 5	B67109365.C672 02960	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_CellCmbCh5 UsedTime	INTENSITY	FLOAT	Obsolete from UTRAN/V200 R010:Mean	B67109365.C672 02966	Average	hucasebh , huctbh, Sum,

			time to watch each CMB channel in a cell, Mean time to watch CMB channel 5			Minimum, Maximum
VS_CellCmbCh6 UEs	INTENSITY	FLOAT	Obsolete from UTRAN/V200 R010:Mean numbers of UEs receiving specified CMBCHs in a cell, Mean number of UEs receiving CMBCH 6	B67109365.C672 02961	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_CellCmbCh6 UsedTime	INTENSITY	FLOAT	Obsolete from UTRAN/V200 R010:Mean time to watch each CMB channel in a cell, Mean time to watch CMB channel 6	B67109365.C672 02967	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_CellCmbUsed Time	INTENSITY	FLOAT	Obsolete from UTRAN/V200 R010:Mean time to watch at least one CMB channel in a cell	B67109365.C672 02956	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RRC_AttCon nEstab_CMB_Cel l	ACCUMULATION	INTEGER	Obsolete from UTRAN/V100 V200R011:Num ber of CMB RRC CONNECTIO	B67109365.C671 90594	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			N REQUEST messages from UEs to the RNC in a cell through.			
VS_RRC_SuccConnEstab_CMB_Cell	ACCUMULATION	INTEGER	Obsolete from UTRAN/V100 V200R011: Number of CMB RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell through.	B67109365.C67190595	Sum	hucasebh , huctbh

7.5.13 Cell.Huawei.UMTS.Compressed_Mode_Activation

Compressed Mode Activations

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_CM_DLHLS_Act_Att	ACCUMULATION	INTEGER	Number of down link HLS compressed mode activation attempts	B67109523.C67194886	Sum	hucasebh , huctbh
VS_CM_DLHLS_Act_Fail	ACCUMULATION	INTEGER	Number of down link HLS compressed mode activation fails	B67109523.C67194888	Sum	hucasebh , huctbh
VS_CM_DLSF2_Act_Att	ACCUMULATION	INTEGER	Number of down link SF-2 compressed mode activation attempts	B67109523.C67194885	Sum	hucasebh , huctbh
VS_CM_DLSF2_Act_Fail	ACCUMULATION	INTEGER	Number of down link SF-2	B67109523.C67194887	Sum	hucasebh , huctbh

			compressed mode activation fails			
VS_CM_ULHLS_Act_Att	ACCUMULATION	INTEGER	Number of up link HLS compressed mode activation attempts	B67109523.C67194882	Sum	hucasebh, huctbh
VS_CM_ULHLS_Act_Fail	ACCUMULATION	INTEGER	Number of up link HLS compressed mode activation fails	B67109523.C67194884	Sum	hucasebh, huctbh
VS_CM_ULSF2_Act_Att	ACCUMULATION	INTEGER	Number of up link SF-2 compressed mode activation attempts	B67109523.C67194881	Sum	hucasebh, huctbh
VS_CM_ULSF2_Act_Fail	ACCUMULATION	INTEGER	Number of up link SF-2 compressed mode activation fails	B67109523.C67194883	Sum	hucasebh, huctbh

7.5.14 Cell.Huawei.UMTS.Credit_Usage

Credit Usage data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_LC_DLCreditUsed_CELL_Max	INTENSITY	INTEGER	Max DL Credit Usage (Cell)	B67109391.C67191167	Constant	hucasebh, huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_LC_DLCreditUsed_CELL_Min	INTENSITY	INTEGER	Min DL Credit Usage (Cell)	B67109391.C67191168	Minimum	hucasebh, huctbh, Sum, Minimum, Maximum
VS_LC_DLCreditUsed_CELL	INTENSITY	FLOAT	Average DL Credit Usage (Cell)	B67109391.C67202570	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_LC_ULCreditUsed_CELL_Max	INTENSITY	INTEGER	Max UL Credit Usage (Cell)	B67109391.C67191165	Constant	hucasebh, huctbh, Sum, Minimum, Maximum
VS_LC_ULCreditUsed_CELL_Min	INTENSITY	INTEGER	Min UL Credit Usage (Cell)	B67109391.C67191166	Minimum	hucasebh, huctbh, Sum, Minimum, Maximum
VS_LC_ULCreditUsed_CELL	INTENSITY	FLOAT	Average UL Credit Usage (Cell)	B67109391.C67202567	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.15 Cell.Huawei.UMTS.DSAC

DSAC data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
-----	------	-----------	-------------	------------	--------------------	-------------------

VS_RRC_AutoDsac_Num	ACCUMULATION	INTEGER	The measurement counter provides the times the automatic domain-based access function is triggered in a cell.	B67109365.C67195590	Sum	hucasebh, huctbh
VS_RRC_AutoDsac_Time	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:VS RRC AutoDsac Time	B67109365.C67204776	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RRC_ManualDsac_Num	ACCUMULATION	INTEGER	The measurement counter provides the times the manual domain-based access function is activated in a cell.	B67109365.C67195587	Sum	hucasebh, huctbh
VS_RRC_ManualDsac_Time	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:VS RRC ManualDsac Time	B67109365.C67204171	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.16 Cell.Huawei.UMTS.Establishment

Cell HSPA, AMR and R99 establishment measurement.

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
AMR_Estab_Cum	ACCUMULATION	INTEGER	VS AMR Estab Cum	B67109413.C67195974	Sum	hucasebh, huctbh
AMR_Estab_MaxTime	INTENSITY	FLOAT	Maximum delay of successful AMR service establishment in the best cell.	B67109413.C67195972	Average	hucasebh, huctbh, Sum, Minimum, Maximum
AMR_Estab_MinTime	INTENSITY	FLOAT	Minimum delay of successful AMR service establishment in the best cell.	B67109413.C67195973	Average	hucasebh, huctbh, Sum, Minimum, Maximum
AMR_Estab_Sample	ACCUMULATION	INTEGER	VS AMR Estab Sample	B67109413.C67195975	Sum	hucasebh, huctbh
CS64_Estab_Cum	ACCUMULATION	INTEGER	VS CS64 Estab Cum	B67109413.C67195978	Sum	hucasebh, huctbh
CS64_Estab_MaxTime	INTENSITY	FLOAT	Maximum delay of successful 64 Kbit/s CS service establishment in the best cell.	B67109413.C67195976	Average	hucasebh, huctbh, Sum, Minimum, Maximum
CS64_Estab_MinTime	INTENSITY	FLOAT	Minimum delay of successful 64 Kbit/s CS service establishment in the best cell.	B67109413.C67195977	Average	hucasebh, huctbh, Sum, Minimum, Maximum
CS64_Estab_Sample	ACCUMULATION	INTEGER	VS CS64 Estab Sample	B67109413.C67195979	Sum	hucasebh, huctbh
HSDPA_Estab	ACCUMULATION	INTEGER	VS HSDPA	B67109413.C6719	Sum	hucasebh

_Cum	TION	ER	Estab Cum	5986		, huctbh
HSDPA_Estab_MaxTime	INTENSITY	FLOAT	Maximum delay of successful HSDPA service establishment in the best cell.	B67109413.C67195984	Average	hucasebh, huctbh, Sum, Minimum, Maximum
HSDPA_Estab_MinTime	INTENSITY	FLOAT	Minimum delay of successful HSDPA service establishment in the best cell.	B67109413.C67195985	Average	hucasebh, huctbh, Sum, Minimum, Maximum
HSDPA_Estab_Sample	ACCUMULATION	INTEGER	VS HSDPA Estab Sample	B67109413.C67195987	Sum	hucasebh, huctbh
HSUPA_Estab_Cum	ACCUMULATION	INTEGER	VS HSUPA Estab Cum	B67109413.C67195990	Sum	hucasebh, huctbh
HSUPA_Estab_MaxTime	INTENSITY	FLOAT	Maximum delay of successful HSUPA service establishment in the best cell.	B67109413.C67195988	Average	hucasebh, huctbh, Sum, Minimum, Maximum
HSUPA_Estab_MinTime	INTENSITY	FLOAT	Minimum delay of successful HSUPA service establishment in the best cell.	B67109413.C67195989	Average	hucasebh, huctbh, Sum, Minimum, Maximum
HSUPA_Estab_Sample	ACCUMULATION	INTEGER	VS HSUPA Estab Sample	B67109413.C67195991	Sum	hucasebh, huctbh
PSR99_Estab_	ACCUMULATION	INTEGER	VS PSR99	B67109413.C6719	Sum	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Cum	TION	ER	Estab Cum	5982		, huctbh
PSR99_Estab_MaxTime	INTENSITY	FLOAT	Maximum delay of successful PS R99 service establishment in the best cell.	B67109413.C67195980	Average	hucasebh, huctbh, Sum, Minimum, Maximum
PSR99_Estab_MinTime	INTENSITY	FLOAT	Minimum delay of successful PS R99 service establishment in the best cell.	B67109413.C67195981	Average	hucasebh, huctbh, Sum, Minimum, Maximum
PSR99_Estab_Sample	ACCUMULATION	INTEGER	VS PSR99 Estab Sample	B67109413.C67195983	Sum	hucasebh, huctbh
VS_AMR_Estab_MeanTime	INTENSITY	FLOAT	Mean delay of successful AMR service establishment in the best cell.	B67109413.C67204785	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_CS64_Estab_MeanTime	INTENSITY	FLOAT	Mean delay of successful 64 Kbit/s CS service establishment in the best cell.	B67109413.C67204786	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_HSDPA_Estab_MeanTime	INTENSITY	FLOAT	Mean delay of successful HSDPA service establishment in the best cell.	B67109413.C67204788	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_HSUPA_Estab_MeanTime	INTENSITY	FLOAT	Mean delay of successful HSUPA service	B67109413.C67204789	Average	hucasebh, huctbh, Sum,

			establishment in the best cell.			Minimum, Maximum
VS_PSR99_Estab_MeanTime	INTENSITY	FLOAT	Mean delay of successful PS R99 service establishment in the best cell.	B67109413.C67204787	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.17 Cell.Huawei.UMTS.Hard_HO_Global

Global Hard Handover data.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_HHO_Succ_In	PERCENTAGE	FLOAT	Percentage incoming successful hard handover decisions for a cell.	$100 * \frac{\{VS_HHO_Succ_In\}}{\{VS_HHO_Att_In\}}$	Average	hucasebh, huctbh
%_VS_HHO_SuccInterCell_LB	PERCENTAGE	FLOAT	Percentage of successful outgoing inter-frequency hard handovers initiated by RNC due to load balance	$100 * \frac{\{VS_HHO_SuccInterCell_LB\}}{\{VS_HHO_AttInterCell_LB\}}$	Average	hucasebh, huctbh
VS_HHO_Att_In	ACCUMULATION	INTEGER	Number of incoming hard handover decisions for a cell.	B67109380.C67180565	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_HHO_AttribIndHO	ACCUMULATION	INTEGER	Number of Blind Handover Attempts (Cell)	B67109380.C67191694	Sum	hucasebh , huctbh
VS_HHO_AttribIFrqCM_DLQoS_In	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of decisions of incoming inter-frequency hard handovers due to DL QoS in compressed mode.	B67109380.C67189686	Sum	hucasebh , huctbh
VS_HHO_AttribIFrqCM_DLQoS_Out	ACCUMULATION	INTEGER	Number of decisions of outgoing inter-frequency hard handovers due to DL QoS in compressed mode.	B67109380.C67189688	Sum	hucasebh , huctbh
VS_HHO_AttribInterCell_LB	ACCUMULATION	INTEGER	Number of outgoing inter-frequency hard handover requests initiated by RNC due to load balance	B67109380.C67180549	Sum	hucasebh , huctbh
VS_HHO_EvalIFrq_In_CM	ACCUMULATION	INTEGER	Number of incoming inter-frequency hard handover decisions triggered by inter-frequency measurement in compressed mode.	B67109380.C67180570	Sum	hucasebh , huctbh
VS_HHO_EvalIFrq_Out_CM	ACCUMULATION	INTEGER	Number of outgoing inter-frequency hard	B67109380.C67180551	Sum	hucasebh , huctbh

			handover decisions triggered by inter-frequency measurement in compressed mode.			
VS_HHO_EvalIn	ACCUMULATION	INTEGER	Number of incoming hard handover decisions for a cell.	B67109380.C67189723	Sum	hucasebh, huctbh
VS_HHO_EvalOut	ACCUMULATION	INTEGER	Number of outgoing hard handover decisions for a cell.	B67109380.C67189722	Sum	hucasebh, huctbh
VS_HHO_Fail_CellUpd_In	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful incoming hard handovers due to different causes, cell update occurred	B67109380.C67180577	Sum	hucasebh, huctbh
VS_HHO_Fail_CfgUnsup_In	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful incoming hard handovers due to different causes, Configuration unsupported	B67109380.C67180573	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_HHO_Fail_InvCfg_In	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful incoming hard handovers due to different causes,invalid configuration	B67109380.C67180578	Sum	hucasebh , huctbh
VS_HHO_Fail_Isr_In	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful incoming hard handovers due to different causes,incompatible simultaneous reconfiguration	B67109380.C67180575	Sum	hucasebh , huctbh
VS_HHO_Fail_PhyChFail_In	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful incoming hard handovers due to different causes,physical channel failure	B67109380.C67180574	Sum	hucasebh , huctbh
VS_HHO_Fail_RACDenyDL_Out	ACCUMULATION	INTEGER	Numbers of unsuccessful outgoing hard handovers in a cell,DL admission reject	B67109380.C67180563	Sum	hucasebh , huctbh
VS_HHO_Fail_RACDenyUL_Out	ACCUMULATION	INTEGER	Numbers of unsuccessful outgoing hard handovers in a cell, UL	B67109380.C67180562	Sum	hucasebh , huctbh

			admission reject			
VS_HHO_Fail_RLAddFail_In	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of incoming hard handover failures due to RL addition failure in a cell.	B67109380.C67180583	Sum	hucasebh , huctbh
VS_HHO_Fail_RLAddFail_Out	ACCUMULATION	INTEGER	Numbers of unsuccessful outgoing hard handovers in a cell,RL addition failure	B67109380.C67180584	Sum	hucasebh , huctbh
VS_HHO_FailInterCell_NRly_LB	ACCUMULATION	INTEGER	Number of unsuccessful outgoing inter-frequency hard handovers due to load balance with the failure cause of no response.	B67109380.C67190402	Sum	hucasebh , huctbh
VS_HHO_PreIn_RLSetupFail	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of hard handover preparation failures due to different causes upon initiation of the RNC.	B67109380.C67183928	Sum	hucasebh , huctbh
VS_HHO_ReqRelocPrep_RF	ACCUMULATION	INTEGER	Number of preparations for outgoing hard	B67109380.C67189685	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			handovers due to RL signal quality in a cell.			
VS_HHO_Succ_In	ACCUMULATION	INTEGER	Number of incoming successful hard handover decisions for a cell.	B67109380.C67180566	Sum	hucasebh , huctbh
VS_HHO_SuccBlindHO	ACCUMULATION	INTEGER	Number of Successful Blind Inter-Frequency Hard Handovers (Cell)	B67109380.C67191695	Sum	hucasebh , huctbh
VS_HHO_SuccIFrqCM_DLQoS_In	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of successful incoming inter-frequency hard handovers due to DL QoS in compressed mode.	B67109380.C67189687	Sum	hucasebh , huctbh
VS_HHO_SuccIFrqCM_DLQoS_Out	ACCUMULATION	INTEGER	Number of decisions of successful outgoing inter-frequency hard handovers due to DL QoS in compressed mode.	B67109380.C67189689	Sum	hucasebh , huctbh
VS_HHO_SuccInterCell_LB	ACCUMULATION	INTEGER	Number of successful outgoing inter-frequency hard handovers initiated by RNC due to load balance	B67109380.C67180550	Sum	hucasebh , huctbh

7.5.18 Cell.Huawei.UMTS.Hard_HO_Inter_RNCCN

Inter RNCCN Hard Handover data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_HHO_SuccAttRelocPrepOutInterRNCCN	PERCENTAGE	FLOAT	Obsolete in release Vn00R010. Percentage successful preparations for relocations with outgoing hard handovers in a cell.	$100 * \frac{\{HHO_SuccAttRelocPrepOutInterRNCCN\}}{\{HHO_AttRelocPrepOutInterRNCCN\}}$	Average	hucasebh, huctbh
HHO_AttRelocPrepOutInterRNCCN	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of requests for relocation preparations with outgoing hard handovers in a cell. Where,	B67109380.C67189706	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			the source cell and the target cell belong to different CNs.			
HHO_FailRelocPrepOutInterRNCCN_NoResAvail	ACCUMULATION	INTEGER	Numbers of unsuccessful preparations for relocations with outgoing hard handovers in a cell, No radio resources available in target cell	B67109380.C67189708	Sum	hucasebh, huctbh
HHO_FailRelocPrepOutInterRNCCN_OM	ACCUMULATION	INTEGER	Numbers of unsuccessful preparations for relocations with outgoing hard handovers in a cell, OM Intervention	B67109380.C67189713	Sum	hucasebh, huctbh
HHO_FailRelocPrepOutInterRNCCN_RelocTgtNotAllo	ACCUMULATION	INTEGER	Numbers of unsuccessful	B67109380.C67189712	Sum	hucasebh, huctbh

			preparations for relocations with outgoing hard handovers in a cell,Relocation Target not allowed			
HHO_FailRelocPrepOutputInterRNCCN_ResUnavail	ACCUMULATION	INTEGER	Numbers of unsuccessful preparations for relocations with outgoing hard handovers in a cell,No Resource Available	B67109380.C67189714	Sum	hucasebh, huctbh
HHO_FailRelocPrepOutputInterRNCCN_RNSp	ACCUMULATION	INTEGER	Numbers of unsuccessful preparations for relocations with outgoing hard handovers in a	B67109380.C67189711	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			cell,Relocation not supported in Target RNC or Target system			
HHO_FailRelocPrepOutInterRNCCN_TExp	ACCUMULATION	INTEGER	Numbers of unsuccessful preparations for relocations with outgoing hard handovers in a cell,TRELOCalloc Expiry	B67109380.C67189709	Sum	hucasebh, huctbh
HHO_FailRelocPrepOutInterRNCCN_TgtF	ACCUMULATION	INTEGER	Numbers of unsuccessful preparations for relocations with outgoing hard handovers in a cell,Relocation Failure in Target CN/RNC or Target System	B67109380.C67189710	Sum	hucasebh, huctbh
HHO_FailRelocPrepOutInterRNCCN_UnspFail	ACCUMULATION	INTEGER	Numbers of unsuccessful	B67109380.C67189715	Sum	hucasebh, huctbh

			ful preparatio ns for relocation s with outgoing hard handover s in a cell, Unspecifi ed Failure			
HHO_SuccAttRelocPrepOutInterRNCCN	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of successfu l preparatio ns for relocation s with outgoing hard handover s in a cell.	B67109380.C67189707	Sum	hucaseb h, huctbh
VS_HHO_FailOutInterRNCCN_CfgUnsup	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of Unsucces sful Relocatio ns with Outgoing Hard Handover	B67109380.C67192173	Sum	hucaseb h, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			s for Different Causes (Cell). Cause Configura tion unsupport ed.			
VS_HHO_FailOutInte rRNCCN_IncompCfg	ACCUMUL ATION	INTE GER	Obsolete in release Vn00R01 0. Number of Unsucces sful Relocatio ns with Outgoing Hard Handover s for Different Causes (Cell). Cause Configura tion Incomplet e.	B67109380.C67192177	Sum	hucaseb h, huctbh
VS_HHO_FailOutInte rRNCCN_InvCfg	ACCUMUL ATION	INTE GER	Obsolete in release Vn00R01 0. Number of Unsucces sful Relocatio ns with Outgoing Hard Handover s for	B67109380.C67192176	Sum	hucaseb h, huctbh

			Different Causes (Cell). Cause Invalid Configuration.			
VS_HHO_FailOutInterRNCN_ISR	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of Unsuccessful Relocations with Outgoing Hard Handovers for Different Causes (Cell). Cause Incompatible simultaneous reconfiguration.	B67109380.C67192175	Sum	hucasebh, huctbh
VS_HHO_FailOutInterRNCN_PhyChFail	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of Unsuccessful Relocatio	B67109380.C67192174	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			ns with Outgoing Hard Handover s for Different Causes (Cell). Cause Physical channel failure.			
--	--	--	--	--	--	--

7.5.19 Cell.Huawei.UMTS.Hard_HO_InterFreq

Inter Frequency Hard Handover data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
$\overline{\%_VS_HHO_InterFreq_SuccessOut}$	PERCENTAGE	FLOAT	Percentage successful outgoing inter-frequency hard handovers initiated by RNC.	$100 * \frac{\{VS_HHO_InterFreq_SuccessOut\}}{\{VS_HHO_InterFreq_AttOut\}}$	Average	hucasebh, huctbh
$\overline{\%_VS_HHO_InterFreqIn_Success}$	PERCENTAGE	FLOAT	Percentage successful incoming inter-frequency hard handovers initiated by RNC.	$100 * \frac{\{VS_HHO_InterFreqIn_Success\}}{\{VS_HHO_InterFreqIn_Att\}}$	Average	hucasebh, huctbh
HHO_InterFreq_CS_Out_TrigEcIo	ACCUMULATION	INTEGER	The number of hard handover triggered by EcN0 in the CS domain.	B67109380.C67193402	Sum	hucasebh, huctbh

HHO_InterFreq_CS_Out_TrigRscp	ACCUMULATION	INTEGER	The number of hard handover triggered by RSCP in the CS domain.	B671093 80.C6719 3401	Sum	hucasebh , huctbh
HHO_InterFreq_PS_Out_TrigEcIo	ACCUMULATION	INTEGER	The number of hard handover triggered by EcN0 in the PS domain.	B671093 80.C6719 3404	Sum	hucasebh , huctbh
HHO_InterFreq_PS_Out_TrigRscp	ACCUMULATION	INTEGER	The number of hard handover triggered by RSCP in the PS domain.	B671093 80.C6719 3403	Sum	hucasebh , huctbh
HHO_InterFreqOutCS_MeasTimeOut	ACCUMULATION	INTEGER	The number of inter-frequency measurement expiry in the CS domain.	B671093 80.C6719 3397	Sum	hucasebh , huctbh
HHO_InterFreqOutPS_MeasTimeOut	ACCUMULATION	INTEGER	The number of inter-frequency measurement expiry in the PS domain.	B671093 80.C6719 3398	Sum	hucasebh , huctbh
Total_HHO_InterFreq_Drops	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Total call drops due to unsuccessful incoming and outgoing inter-frequency hard handovers.	{VS_HHO_InterFreq_In_Drop} + {VS_HHO_InterFreq_Out_Drop}	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_HHO_AttInterCell_LB_MultiRL	ACCUMULATION	INTEGER	Number of outgoing inter-frequency hard handover requests due to load balance; there are more than one cell before handover.	B671093 80.C6719 3709	Sum	hucasebh , huctbh
VS_HHO_AttOutInterNodeBIntraRNCInterFreq	ACCUMULATION	INTEGER	Number of requests for outgoing Inter-Freq hard handovers between different NodeBs of the same RNC in a cell. Where, the source cell and the target cell belong to the same RNC but different NodeB	B671093 80.C6719 0884	Sum	hucasebh , huctbh
VS_HHO_AttOutInterRNCInterFreqCN	ACCUMULATION	INTEGER	Number of reconfigurations for relocations with outgoing Inter-Freq hard handovers in a cell	B671093 80.C6719 0898	Sum	hucasebh , huctbh
VS_HHO_AttOutInterRNCInterFreqIur	ACCUMULATION	INTEGER	Number of requests for outgoing Inter-Freq hard handovers between RNCs in a	B671093 80.C6719 0891	Sum	hucasebh , huctbh

			cell. Where, the source cell and the target cell belong to different RNCs, and the Inter-Freq hard handover is performed through the Iur interface.			
VS_HHO_AttOutIntraNodeBInterFreq	ACCUMULATION	INTEGER	Number of requests for outgoing Inter-Freq hard handovers in NodeB in a cell. Outgoing Intra-Freq hard handovers in NodeB refers to such an Inter-Freq hard handover where the source cell and the target cell belong to the same NodeB.	B671093 80.C6719 0877	Sum	hucasebh , huctbh
VS_HHO_FailOutInterRNCInterFreqCN_CfgUnsup	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful SRNC relocations with Inter-	B671093 80.C6719 0900	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Freq hard handover during SRNC reconfigurations due to Configuration Unsupported			
VS_HHO_FailOutInterRNCInterFreqCN_IncompCfg	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful SRNC relocations with Inter-Freq hard handover during SRNC reconfigurations due to Configuration Incomplete	B671093 80.C6719 0904	Sum	hucasebh , huctbh
VS_HHO_FailOutInterRNCInterFreqCN_InvCfg	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful SRNC relocations with Inter-Freq hard handover during SRNC reconfigurations due to Invalid Configuration	B671093 80.C6719 0903	Sum	hucasebh , huctbh
VS_HHO_FailOutInterRNCInterFreqCN_ISR	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful SRNC relocations	B671093 80.C6719 0902	Sum	hucasebh , huctbh

			with Inter-Freq hard handover during SRNC reconfigurations due to Incompatible simultaneous reconfiguration			
VS_HHO_FailOutInterRNCInterFreqCN_PhyChFail	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful SRNC relocations with Inter-Freq hard handover during SRNC reconfigurations due to Physical Channel Failure	B671093 80.C6719 0901	Sum	hucasebh , huctbh
VS_HHO_InterFreq_AttOut	ACCUMULATION	INTEGER	Number of requested outgoing inter-frequency hard handovers initiated by RNC	B671093 80.C6718 3900	Sum	hucasebh , huctbh
VS_HHO_InterFreq_In_Drop	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of call drops due to	B671093 80.C6718 3925	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			unsuccessful incoming inter-frequency hard handovers.			
VS_HHO_InterFreq_Out_Drop	ACCUMULATION	INTEGER	Number of call drops due to unsuccessful outgoing inter-frequency hard handovers.	B671093 80.C6718 3924	Sum	hucasebh , huctbh
VS_HHO_InterFreq_SuccOut	ACCUMULATION	INTEGER	Number of successful outgoing inter-frequency hard handovers initiated by RNC.	B671093 80.C6718 3901	Sum	hucasebh , huctbh
VS_HHO_InterFreqIn_Att	ACCUMULATION	INTEGER	Number of requested incoming inter-frequency hard handovers initiated by RNC.	B671093 80.C6718 3912	Sum	hucasebh , huctbh
VS_HHO_InterFreqIn_CellUpdt	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful incoming inter-frequency hard handovers due to different causes	B671093 80.C6718 3918	Sum	hucasebh , huctbh

VS_HHO_InterFreqIn_CfgInvalid	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful incoming inter-frequency hard handovers due to different causes	B671093 80.C6718 3919	Sum	hucasebh , huctbh
VS_HHO_InterFreqIn_CfgUnsupp	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful incoming inter-frequency hard handovers due to different causes	B671093 80.C6718 3914	Sum	hucasebh , huctbh
VS_HHO_InterFreqIn_DLAdmsnDeny	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful incoming hard handovers initiated by the RNC due to resource congestion.	B671093 80.C6718 3923	Sum	hucasebh , huctbh
VS_HHO_InterFreqIn_DLCodeRej	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful	B671093 80.C6718 3921	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			incoming hard handovers initiated by the RNC due to resource congestion.			
VS_HHO_InterFreqIn_Fail USR	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful incoming inter-frequency hard handovers due to different causes	B671093 80.C6718 3916	Sum	hucasebh , huctbh
VS_HHO_InterFreqIn_NoR epl	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of unsuccessful incoming inter-frequency hard handovers due to no response from the UE upon initiation of hard handover by the RNC in a cell.	B671093 80.C6718 3920	Sum	hucasebh , huctbh
VS_HHO_InterFreqIn_Pyh ChFail	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful incoming inter-frequency hard	B671093 80.C6718 3915	Sum	hucasebh , huctbh

			handovers due to different causes			
VS_HHO_InterFreqIn_Success	ACCUMULATION	INTEGER	Number of successful incoming inter-frequency hard handovers initiated by RNC.	B671093 80.C6718 3913	Sum	hucasebh , huctbh
VS_HHO_InterFreqIn_ULAdmsnDeny	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful incoming hard handovers initiated by the RNC due to resource congestion.	B671093 80.C6718 3922	Sum	hucasebh , huctbh
VS_HHO_InterFreqOut_CellUdpd	ACCUMULATION	INTEGER	Numbers of unsuccessful outgoing inter-frequency hard handovers due to different causes.	B671093 80.C6718 3906	Sum	hucasebh , huctbh
VS_HHO_InterFreqOut_CfgInvalid	ACCUMULATION	INTEGER	Numbers of unsuccessful outgoing inter-frequency hard handovers due to different causes.	B671093 80.C6718 3907	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_HHO_InterFreqOut_CfgUnsupp	ACCUMULATION	INTEGER	Numbers of unsuccessful outgoing inter-frequency hard handovers due to different causes.	B671093 80.C6718 3902	Sum	hucasebh , huctbh
VS_HHO_InterFreqOut_DLAmsnDeny	ACCUMULATION	INTEGER	Numbers of unsuccessful outgoing hard handovers initiated by the RNC due to resource congestion.	B671093 80.C6718 3911	Sum	hucasebh , huctbh
VS_HHO_InterFreqOut_DLCodeRej	ACCUMULATION	INTEGER	Numbers of unsuccessful outgoing hard handovers initiated by the RNC due to resource congestion.	B671093 80.C6718 3909	Sum	hucasebh , huctbh
VS_HHO_InterFreqOut_FailPrep	ACCUMULATION	INTEGER	Number of failures to prepare for outgoing inter-frequency hard handovers	B671093 80.C6719 2555	Sum	hucasebh , huctbh
VS_HHO_InterFreqOut_FailUSR	ACCUMULATION	INTEGER	Numbers of unsuccessful outgoing inter-frequency hard handovers due to different causes. Incompatible simultaneous reconfiguration	B671093 80.C6718 3904	Sum	hucasebh , huctbh

VS_HHO_InterFreqOut_NoReply	ACCUMULATION	INTEGER	Number of unsuccessful outgoing hard handovers due to no response from the UE upon initiation of hard handover by the RNC in a cell.	B671093 80.C6718 3908	Sum	hucasebh , huctbh
VS_HHO_InterFreqOut_PyhChFail	ACCUMULATION	INTEGER	Numbers of unsuccessful outgoing inter-frequency hard handovers due to different causes.physical channel failure	B671093 80.C6718 3903	Sum	hucasebh , huctbh
VS_HHO_InterFreqOut_RLAddFail	ACCUMULATION	INTEGER	Number of failures to prepare for outgoing inter-frequency hard handovers due to RL addition failure	B671093 80.C6719 2557	Sum	hucasebh , huctbh
VS_HHO_InterFreqOut_ULAdmsnDeny	ACCUMULATION	INTEGER	Numbers of unsuccessful outgoing hard handovers initiated by the RNC due to resource congestion.UL admission rejected	B671093 80.C6718 3910	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_HHO_InterFreqRelocPrep_Att	ACCUMULATION	INTEGER	Number of requests for relocation preparations with outgoing inter-frequency hard handovers	B671093 80.C6719 2551	Sum	hucasebh , huctbh
VS_HHO_InterFreqRelocPrep_Succ	ACCUMULATION	INTEGER	Number of successful relocation preparations with outgoing inter-frequency hard handovers	B671093 80.C6719 2552	Sum	hucasebh , huctbh
VS_HHO_IntraFreqOut_CellUpdt	ACCUMULATION	INTEGER	Number of failures to perform outgoing intra-frequency hard handovers in a cell with the failure cause of "cell update occurred"	B671093 80.C6719 2561	Sum	hucasebh , huctbh
VS_HHO_IntraFreqOut_PyChChFail	ACCUMULATION	INTEGER	Number of failures to perform outgoing intra-frequency hard handovers in a cell with the failure cause of "physical channel failure"	B671093 80.C6719 2559	Sum	hucasebh , huctbh
VS_HHO_SuccInterCell_LB_MultiRL	ACCUMULATION	INTEGER	Number of successful	B671093 80.C6719	Sum	hucasebh , huctbh

			outgoing inter-frequency hard handovers due to load balance	3710		
VS_HHO_SuccOutInterNodeBIntraRNCInterFreq	ACCUMULATION	INTEGER	Number of successful outgoing Inter-Freq hard handovers between different NodeBs of the same RNC in a cell.	B671093 80.C6719 0885	Sum	hucasebh , huctbh
VS_HHO_SuccOutInterRNCInterFreqCN	ACCUMULATION	INTEGER	Number of successful relocations with outgoing Inter-Freq hard handovers in a cell.	B671093 80.C6719 0899	Sum	hucasebh , huctbh
VS_HHO_SuccOutInterRNCInterFreqIur	ACCUMULATION	INTEGER	Number of successful outgoing Inter-Freq hard handovers between RNCs in a cell.	B671093 80.C6719 0892	Sum	hucasebh , huctbh
VS_HHO_SuccOutIntraNodeBInterFreq	ACCUMULATION	INTEGER	Number of successful outgoing Inter-Freq hard	B671093 80.C6719 0878	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			handovers in NodeB in a cell.			
--	--	--	-------------------------------	--	--	--

7.5.20 Cell.Huawei.UMTS.Hard_HO_InterNB_IntraRNC

Hard handover inter NodeB Intra RNC measurement.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
HHO_FailOInteNBIntrRN_CfgUnsup	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of Unsuccessful Outgoing Hard Handovers Between Different NodeBs of RNC for Different Causes (Cell). Cause Configuration unsupported.	B67109380.C67192163	Sum	hucasebh, huctbh
HHO_FailOInteNBIntrRN_IncoCfg	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of Unsuccessful Outgoing Hard Handovers Between Different NodeBs of RNC for Different Causes (Cell). Cause Configuration Incomplete.	B67109380.C67192167	Sum	hucasebh, huctbh
HHO_FailOInteNB	ACCUMULATION	INTEGER	Obsolete in	B67109380.C67	Sum	hucasebh

BIntrRN_InvCfg	TION	ER	release Vn00R010. Number of Unsuccessful Outgoing Hard Handovers Between Different NodeBs of RNC for Different Causes (Cell). Cause Invalid Configuration.	192166		, huctbh
HHO_FailOInteN BIntrRN_ISR	ACCUMULA TION	INTEG ER	Obsolete in release Vn00R010. Number of Unsuccessful Outgoing Hard Handovers Between Different NodeBs of RNC for Different Causes (Cell). Cause Incompatible simultaneous reconfiguration.	B67109380.C67 192165	Sum	hucasebh , huctbh
HHO_FailOInteN BIntrRN_PhChFa il	ACCUMULA TION	INTEG ER	Obsolete in release Vn00R010. Number of Unsuccessful Outgoing Hard Handovers Between Different	B67109380.C67 192164	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			NodeBs of RNC for Different Causes (Cell). Cause Physical channel failure.			
--	--	--	--	--	--	--

7.5.21 Cell.Huawei.UMTS.Hard_HO_Intra_NodeB

Hard handover intra NodeB

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_HHO_FailOutIntraNB_CfgUnsup	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of Unsuccessful Outgoing Hard Handovers in NodeB for Different Causes (Cell). Cause Configuration unsupported.	B67109380.C67192158	Sum	hucasebh , huctbh
VS_HHO_FailOutIntraNB_IncoCfg	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of Unsuccessful Outgoing Hard Handovers in NodeB for Different Causes (Cell). Cause Configuration Incomplete.	B67109380.C67192162	Sum	hucasebh , huctbh
VS_HHO_FailOutIntraNB_InvCfg	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of	B67109380.C67192161	Sum	hucasebh , huctbh

			Unsuccessful Outgoing Hard Handovers in NodeB for Different Causes (Cell). Cause Invalid Configuration.			
VS_HHO_FailOutIntraNB_ISR	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of Unsuccessful Outgoing Hard Handovers in NodeB for Different Causes (Cell). Cause Incompatible simultaneous reconfiguration.	B67109380.C671 92160	Sum	hucasebh , huctbh
VS_HHO_FailOutIntraNB_PhChFail	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of Unsuccessful Outgoing Hard Handovers in NodeB for Different Causes (Cell). Cause Physical channel failure.	B67109380.C671 92159	Sum	hucasebh , huctbh

7.5.22 Cell.Huawei.UMTS.Hard_HO_IntraFreq

Intra Frequency Hard Handover data

KPI	Type	Data	Description	Derivation	Defau	Other
-----	------	------	-------------	------------	-------	-------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

		Type			It Aggregator	Aggregators
$\bar{\%_VS_HHO_SuccOutInterNodeBIntraRNCIntraFreq}$	PERCENT AGE	FLOAT	Percentage successful outgoing Intra-Freq hard handovers between different NodeBs of the same RNC in a cell	$100 * \frac{\{VS_HHO_SuccOutInterNodeBIntraRNCIntraFreq\}}{\{VS_HHO_AttOutInterNodeBIntraRNCIntraFreq\}}$	Average	hucasebh, huctbh
$\bar{\%_VS_HHO_SuccOutInterRNCIntraFreqCN}$	PERCENT AGE	FLOAT	Percentage successful relocations with outgoing Intra-Freq hard handovers in a cell.	$100 * \frac{\{VS_HHO_SuccOutInterRNCIntraFreqCN\}}{\{VS_HHO_AttOutInterRNCIntraFreqCN\}}$	Average	hucasebh, huctbh
$\bar{\%_VS_HHO_SuccOutIntraNodeBIntraFreq}$	PERCENT AGE	FLOAT	Percentage successful outgoing Intra-Freq hard handovers in NodeB in a cell.	$100 * \frac{\{VS_HHO_SuccOutIntraNodeBIntraFreq\}}{\{VS_HHO_AttOutIntraNodeBIntraFreq\}}$	Average	hucasebh, huctbh
FailOutInterNodeBIntraRNCIntraFreq_IncompCfg	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful outgoing Intra-Freq hard handovers between different NodeBs of	B67109380.C67189700	Sum	hucasebh, huctbh

			the same RNC in a cell due to Configuration Incomplete			
FailOutInterNodeBIntraRNCIntraFreq_PhyCh Fail	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful outgoing Intra-Freq hard handovers between different NodeBs of the same RNC in a cell due to Physical channel failure	B67109380.C67189697	Sum	hucase bh, huctbh
VS_HHO_AttOutInterNodeBIntraRNCIntraFreq	ACCUMULATION	INTEGER	Number of requests for outgoing Intra-Freq hard handovers between different NodeBs of the same RNC in a cell. Where, the source cell and the target cell belong to the same RNC	B67109380.C67180587	Sum	hucase bh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			but different NodeB.			
VS_HHO_AttOutInter RNCIntraFreqCN	ACCUMU LATION	INTE GER	Number of reconfigurations for relocations with outgoing Intra-Freq hard handovers in a cell. After successful preparation for relocation with Intra-Freq hard handover, the SRNC originates a reconfiguration procedure to UE. The reconfiguration procedure involves the following messages: RADIO BEARER SETUP RADIO BEARER RECONFIGURATION RADIO BEARER RELEASE TRANSPORT CHANNEL RECONFIGURATION PHYSICAL CHANNEL	B67109380.C67189716	Sum	hucase bh, huctbh

			RECONFIGURATION Where, the source cell and the target cell belong to different CNs.			
VS_HHO_AttOutIntraNodeBIntraFreq	ACCUMULATION	INTEGER	Number of requests for outgoing Intra-Freq hard handovers in NodeB in a cell. Outgoing Intra-Freq hard handovers in NodeB refers to such an Intra-Freq hard handover where the source cell and the target cell belong to the same NodeB	B67109380.C67180585	Sum	hucasebh, huctbh
VS_HHO_FailOutInterNodeBIntraRNCIntraFreq_CfgUnsup	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful outgoing Intra-Freq hard handovers	B67109380.C67189696	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			between different NodeBs of the same RNC in a cell due to Configuration unsupported			
VS_HHO_FailOutInterNodeBIntraRNCIntraFreq_InvCfg	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful outgoing Intra-Freq hard handovers between different NodeBs of the same RNC in a cell due to Invalid Configuration	B67109380.C67189699	Sum	hucasebh, huctbh
VS_HHO_FailOutInterNodeBIntraRNCIntraFreq_ISR	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful outgoing Intra-Freq hard handovers between different NodeBs of the same RNC in a cell due to Incompatible simultaneous reconfiguration	B67109380.C67189698	Sum	hucasebh, huctbh

VS_HHO_FailOutInterRNCIntraFreqCN_CfgUnsup	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful SRNC relocations with Intra-Freq hard handover during SRNC reconfigurations due to different causes in a cell, Configuration Unsupported	B67109380.C67189718	Sum	hucasebh, huctbh
VS_HHO_FailOutInterRNCIntraFreqCN_IncompCfg	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful SRNC relocations with Intra-Freq hard handover during SRNC reconfigurations due to different causes in a cell, Configuration Incomplete	B67109380.C67189725	Sum	hucasebh, huctbh
VS_HHO_FailOutInterRNCIntraFreqCN_InvCfg	ACCUMULATION	INTEGER	Obsolete in release Vn00R010.	B67109380.C67189724	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Numbers of unsuccessful SRNC relocations with Intra-Freq hard handover during SRNC reconfigurations due to different causes in a cell, Invalid Configuration			
VS_HHO_FailOutInterRNCIntraFreqCN_ISR	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful SRNC relocations with Intra-Freq hard handover during SRNC reconfigurations due to different causes in a cell, Incompatible simultaneous reconfiguration	B67109380.C67189720	Sum	hucase bh, huctbh
VS_HHO_FailOutInterRNCIntraFreqCN_PhychFail	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful SRNC relocations with Intra-Freq hard handover	B67109380.C67189719	Sum	hucase bh, huctbh

			during SRNC reconfigurations due to different causes in a cell, Physical Channel Failure			
VS_HHO_FailOutIntraNodeBIntraFreq_CfgUnsup	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful outgoing Intra-Freq hard handovers in NodeB in a cell due to different causes, configuration unsupported	B67109380.C67189691	Sum	hucasebh, huctbh
VS_HHO_FailOutIntraNodeBIntraFreq_IncompCfg	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of unsuccessful outgoing Intra-Freq hard handovers in NodeB in a cell due to different causes, Configuration Incomplete	B67109380.C67189695	Sum	hucasebh, huctbh
VS_HHO_FailOutIntraNodeBIntraFreq_InvCf	ACCUMULATION	INTEGER	Obsolete in release	B67109380.C67189694	Sum	hucasebh,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

g			Vn00R010. Numbers of unsuccessful outgoing Intra-Freq hard handovers in NodeB in a cell due to different causes, Invalid Configuratio n			huctbh
VS_HHO_FailOutIntra NodeBIntraFreq_ISR	ACCUMU LATION	INTE GER	Obsolete in release Vn00R010. Numbers of unsuccessful outgoing Intra-Freq hard handovers in NodeB in a cell due to different causes, Incompatible simultaneous reconfigurati on	B67109380.C67189693	Sum	hucase bh, huctbh
VS_HHO_FailOutIntra NodeBIntraFreq_PhyC hFail	ACCUMU LATION	INTE GER	Obsolete in release Vn00R010. Numbers of unsuccessful outgoing Intra-Freq hard handovers in NodeB in a cell due to different causes, physical	B67109380.C67189692	Sum	hucase bh, huctbh

			channel failure			
VS_HHO_IntraFreq_In_Drop	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011: Number of call drops due to unsuccessful intra-frequency hard handovers to the target	B67109380.C67183927	Sum	hucasebh, huctbh
VS_HHO_IntraFreq_Out_Drop	ACCUMULATION	INTEGER	Number of call drops due to unsuccessful intra-frequency hard handovers from a cell	B67109380.C67183926	Sum	hucasebh, huctbh
VS_HHO_IntraFreqOut_CfgInvalid	ACCUMULATION	INTEGER	Number of failures to perform outgoing intra-frequency hard handovers in a cell with the failure cause of "invalid configuration"	B67109380.C67192614	Sum	hucasebh, huctbh
VS_HHO_IntraFreqOut_CfgUnsupp	ACCUMULATION	INTEGER	Number of failures to	B67109380.C67192558	Sum	hucasebh,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			perform outgoing intra-frequency hard handovers in a cell with the failure cause of "configuration unsupported"			huctbh
VS_HHO_IntraFreqOut_FailPrep	ACCUMULATION	INTEGER	Number of failures to prepare for outgoing intra-frequency hard handovers	B67109380.C67192554	Sum	hucasebh, huctbh
VS_HHO_IntraFreqOut_FailUSR	ACCUMULATION	INTEGER	Number of failures to perform outgoing intra-frequency hard handovers in a cell with the failure cause of "incompatible simultaneous reconfiguration"	B67109380.C67192560	Sum	hucasebh, huctbh
VS_HHO_IntraFreqOut_NoReply	ACCUMULATION	INTEGER	Number of outgoing intra-frequency hard handover failures due to no	B67109380.C67192553	Sum	hucasebh, huctbh

			response			
VS_HHO_IntraFreqOut_RLAddFail	ACCUMULATION	INTEGER	Number of failures to prepare for outgoing intra-frequency hard handovers due to RL addition failure	B67109380.C67192556	Sum	hucase bh, huctbh
VS_HHO_IntraFreqRelocPrep_Att	ACCUMULATION	INTEGER	Number of requests for relocation preparations with outgoing intra-frequency hard handovers	B67109380.C67193708	Sum	hucase bh, huctbh
VS_HHO_IntraFreqRelocPrep_Succ	ACCUMULATION	INTEGER	Number of successful relocation preparations with outgoing intra-frequency hard handovers	B67109380.C67192770	Sum	hucase bh, huctbh
VS_HHO_SuccOutInterNodeBIntraRNCIntraFreq	ACCUMULATION	INTEGER	Number of successful outgoing Intra-Freq hard handovers between	B67109380.C67180588	Sum	hucase bh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			different NodeBs of the same RNC in a cell			
VS_HHO_SuccOutInterRNCIntraFreqCN	ACCUMULATION	INTEGER	Number of successful relocations with outgoing Intra-Freq hard handovers in a cell.	B67109380.C67189717	Sum	hucasebh, huctbh
VS_HHO_SuccOutIntraNodeBIntraFreq	ACCUMULATION	INTEGER	Number of successful outgoing Intra-Freq hard handovers in NodeB in a cell.	B67109380.C67180586	Sum	hucasebh, huctbh

7.5.23 Cell.Huawei.UMTS.Hard_HO_Iur

Iur Hard Handover data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_HHO_SuccOutInterRNCIntraFreqIur	PERCENTAGE	FLOAT	Percentage successful outgoing Intra-Freq hard handovers between RNCs in a cell.	$100 * \frac{\{VS_HHO_SuccOutInterRNCIntraFreqIur\}}{\{VS_HHO_AttOutInterRNCIntraFreqIur\}}$	Average	hucasebh, huctbh
VS_HHO_AttOutInterRNCIntraFreqIur	ACCUMULATION	INTEGER	Number of requests for outgoing Intra-Freq	B67109380.C67180589	Sum	hucasebh, huctbh

			hard handovers between RNCs in a cell. Where, the source cell and the target cell belong to different RNCs, and the Intra-Freq hard handover is performed through the Iur interface			
VS_HHO_FailOInte RNlur_CfgUnsup	ACCUMUL ATION	INTE GER	Number of Unsuccess ful Outgoing Hard Handovers Between RNCs (Cell). Cause Configurat ion unsupport ed.	B67109380.C671921 68	Sum	hucasebh , huctbh
VS_HHO_FailOInte RNlur_IncoCfg	ACCUMUL ATION	INTE GER	Number of Unsuccess ful Outgoing Hard Handovers	B67109380.C671921 72	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Between RNCs (Cell). Cause Configuration Incomplete.			
VS_HHO_FailOInteRNlur_InvCfg	ACCUMULATION	INTEGER	Number of Unsuccessful Outgoing Hard Handovers Between RNCs (Cell). Cause Invalid Configuration.	B67109380.C67192171	Sum	hucasebh , huctbh
VS_HHO_FailOInteRNlur_ISR	ACCUMULATION	INTEGER	Number of Unsuccessful Outgoing Hard Handovers Between RNCs (Cell). Cause Incompatible simultaneous reconfiguration.	B67109380.C67192170	Sum	hucasebh , huctbh
VS_HHO_FailOInteRNlur_PhChFail	ACCUMULATION	INTEGER	Number of Unsuccessful Outgoing Hard Handovers Between	B67109380.C67192169	Sum	hucasebh , huctbh

			RNCs (Cell). Cause Physical channel failure.			
VS_HHO_FailOutInterRNCIntraFreqIur_CfgUnsup	ACCUMULATION	INTEGER	Numbers of unsuccessful outgoing Intra-Freq hard handovers between RNCs in a cell due to different causes, Configuration unsupported	B67109380.C67189701	Sum	hucasebh, huctbh
VS_HHO_FailOutInterRNCIntraFreqIur_IncompCfg	ACCUMULATION	INTEGER	Numbers of unsuccessful outgoing Intra-Freq hard handovers between RNCs in a cell due to different causes, Configuration Incomplete	B67109380.C67189705	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_HHO_FailOutInterRNCIntraFreqIur_InvCfg	ACCUMULATION	INTEGER	Numbers of unsuccessful outgoing Intra-Freq hard handovers between RNCs in a cell due to different causes, Invalid Configuration	B67109380.C67189704	Sum	hucasebh , huctbh
VS_HHO_FailOutInterRNCIntraFreqIur_ISR	ACCUMULATION	INTEGER	Numbers of unsuccessful outgoing Intra-Freq hard handovers between RNCs in a cell due to different causes, Incompatible simultaneous reconfiguration	B67109380.C67189703	Sum	hucasebh , huctbh
VS_HHO_FailOutInterRNCIntraFreqIur_PhyChFail	ACCUMULATION	INTEGER	Numbers of unsuccessful outgoing Intra-Freq hard handovers between RNCs in a	B67109380.C67189702	Sum	hucasebh , huctbh

			cell due to different causes, Physical channel failure			
VS_HHO_SuccOutI nterRNCIntraFreqIur	ACCUMUL ATION	INTE GER	Number of successful outgoing Intra-Freq hard handovers between RNCs in a cell.	B67109380.C671805 90	Sum	hucasebh , huctbh

7.5.24 Cell.Huawei.UMTS.Hard_HO_MultiBand

Hard inter-band handovers

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_MBand_H O_AttOutCS	ACCUMULA TION	INTEG ER	Number of requests for outgoing inter-band hard handovers of CS services	B67109380.C6719 3565	Sum	hucasebh , huctbh
VS_MBand_H O_AttOutPS	ACCUMULA TION	INTEG ER	Number of requests for outgoing inter-band hard handovers of PS services	B67109380.C6719 2567	Sum	hucasebh , huctbh
VS_MBand_H O_SuccOutCS	ACCUMULA TION	INTEG ER	Number of successful outgoing inter-band hard	B67109380.C6719 3566	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			handovers for CS services			
VS_MBand_HO_SuccOutPS	ACCUMULATION	INTEGER	Number of successful outgoing inter-band hard handovers for PS services	B67109380.C67192568	Sum	hucasebh, huctbh

7.5.25 Cell.Huawei.UMTS.Hardware_Resources_Usage

Hardware Resource Usage data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RRIUB_No nEmerCall_DL_Rej	ACCUMULATION	INTEGER	Number of rejections of downlink Iub resource requests for non-emergency calls in a cell.	B67109388.C67191743	Sum	hucasebh, huctbh
VS_RRIUB_No nEmerCall_Rej	ACCUMULATION	INTEGER	Number of rejects of Iub Resource requests for non-emergency calls in a cell.	B67109388.C67189787	Sum	hucasebh, huctbh
VS_RRIUB_No nEmerCall_Req	ACCUMULATION	INTEGER	Number of Iub transmission requests for non-emergency calls in a cell.	B67109388.C67189779	Sum	hucasebh, huctbh
VS_RRIUB_No nEmerCall_UL_Rej	ACCUMULATION	INTEGER	Number of rejections of uplink Iub resource requests for non-emergency calls in a cell.	B67109388.C67191742	Sum	hucasebh, huctbh
VS_RRNBCred	ACCUMULATION	INTEGER	Number of	B67109388.C6719	Sum	hucasebh

NonEmerCall DL_Rej	TION	ER	rejections of downlink CE resource requests for non-emergency calls in a cell	1747		, huctbh
VS_RRNBCred _NonEmerCall_ Rej	ACCUMULA TION	INTEG ER	Number of rejects of CE resource requests for non-emergency calls.	B67109388.C6718 9781	Sum	hucasebh , huctbh
VS_RRNBCred _NonEmerCall_ Req	ACCUMULA TION	INTEG ER	Number of CE resource requests for UEs upon common call initiation.	B67109388.C6718 9789	Sum	hucasebh , huctbh
VS_RRNBCred _NonEmerCall_ UL_Rej	ACCUMULA TION	INTEG ER	Number of rejections of uplink CE resource requests for non-emergency calls in a cell	B67109388.C6719 1746	Sum	hucasebh , huctbh

7.5.26 Cell.Huawei.UMTS.HSDPA_Mobility

High Speed Data Packet Access Mobility data

KPI	Type	Data Type	Description	Derivation	Default Aggrega tor	Other Aggrega tors
_VS_HSDPA_ ChR_DCHtoHS DSCH_MultRLs _Succ	PERCENTA GE	FLOA T	Obsolete in release Vn00R010. Percentage successful handovers	100 * {VS_HSDPA_Ch R_DCHtoHSDSC H_MultRLs_Succ} / {VS_HSDPA_Ch	Average	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			from DCH to HS-DSCH in the case of multiple RLs in a cell	$R_DCHtoHSDSCH_MultRLs_Att\}$		
$\%_VS_HSDPA_ChR_DCHtoHSDSCH$	PERCENTAGE	FLOAT	Percentage successful handovers from DCH to HSDSCH in a cell, the procedure triggered by RAB ASSIGNMENT procedure is not included.	$100 * \frac{\{VS_HSDPA_ChR_DCHtoHSDSCH\}}{\{VS_HSDPA_ChR_DCHtoHSDSCH_Att\}}$	Average	hucasebh , huctbh
$\%_VS_HSDPA_ChR_FACHtoHSDSCH$	PERCENTAGE	FLOAT	Percentage successful handovers from FACH to HSDSCH in a cell, the procedure triggered by RAB ASSIGNMENT procedure is not included.	$100 * \frac{\{VS_HSDPA_ChR_FACHtoHSDSCH\}}{\{VS_HSDPA_ChR_FACHtoHSDSCH_Att\}}$	Average	hucasebh , huctbh
$\%_VS_HSDPA_ChR_HSDSCHtoDCH_MultRLs_Succ$	PERCENTAGE	FLOAT	Obsolete in release Vn00R010. Percentage successful handovers from HS-DSCH to DCH in the case of multiple RLs in a cell	$100 * \frac{\{VS_HSDPA_ChR_HSDSCHtoDCH_MultRLs_Succ\}}{\{VS_HSDPA_ChR_HSDSCHtoDCH_MultRLs_Att\}}$	Average	hucasebh , huctbh
$\%_VS_HSDPA_ChR_HSDSCHtoDC$	PERCENTAGE	FLOAT	Percentage successful handovers	$100 * \{VS_HSDPA_ChR_HSDSCHtoDC$	Average	hucasebh , huctbh

oDCH			from HSDSCH to DCH in a cell, the procedure triggered by RAB ASSIGNMENT procedure is not included	$\frac{H}{\{VS_HSDPA_ChR_HSDSCHtoDCH_Att\}}$		
$\frac{\%_VS_HSDPA_ChR_HSDSCHtoFACH}{oFACH}$	PERCENTAGE	FLOAT	Percentage successful handovers from HSDSCH to FACH in a cell, the procedure triggered by RAB ASSIGNMENT procedure is not included.	$100 * \frac{\{VS_HSDPA_ChR_HSDSCHtoFACH\}}{\{VS_HSDPA_ChR_HSDSCHtoFACH_Att\}}$	Average	hucasebh , huctbh
$\frac{\%_VS_HSDPA_HHO_H2D_SuccessOutInterFreq}{cOutInterFreq}$	PERCENTAGE	FLOAT	Percentage successful inter-frequency hard handovers from HSDSCH to DCH in a cell.	$100 * \frac{\{VS_HSDPA_HHO_H2D_SuccessOutInterFreq\}}{\{VS_HSDPA_HHO_H2D_AttOutInterFreq\}}$	Average	hucasebh , huctbh
$\frac{\%_VS_HSDPA_HHO_H2D_SuccessOutIntraFreq}{cOutIntraFreq}$	PERCENTAGE	FLOAT	Percentage successful intra-frequency hard handovers from HSDSCH to DCH in a cell.	$100 * \frac{\{VS_HSDPA_HHO_H2D_SuccessOutIntraFreq\}}{\{VS_HSDPA_HHO_H2D_AttOutIntraFreq\}}$	Average	hucasebh , huctbh
$\frac{\%_VS_HSDPA_HHO_SuccOutInterFreq}{terFreq}$	PERCENTAGE	FLOAT	Percentage successful inter-frequency hard handovers	$100 * \frac{\{VS_HSDPA_HHO_SuccOutInterFreq\}}{eq\}}$	Average	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			from HS-DSCH to HS-DSCH in a cell.	{VS_HSDPA_HHO_AttOutInterFreq}		
%_VS_HSDPA_HHO_SuccOutIntraFreq	PERCENTAGE	FLOAT	Percentage successful intra-frequency hard handovers from HS-DSCH to HS-DSCH in a cell.	$100 * \frac{\{VS_HSDPA_HHO_SuccOutIntraFreq\}}{\{VS_HSDPA_HHO_AttOutIntraFreq\}}$	Average	hucasebh, huctbh
VS_HSDPA_CellChg_AttOutIntraFreq	ACCUMULATION	INTEGER	Number of inter-RNC HS-DSCH serving cell change attempts	B67109390.C67195481	Sum	hucasebh, huctbh
VS_HSDPA_CellChg_SuccOutIntraFreq	ACCUMULATION	INTEGER	Number of successful inter-RNC HS-DSCH serving cell changes	B67109390.C67195482	Sum	hucasebh, huctbh
VS_HSDPA_ChR_DCHtoHSDSCH_Att	ACCUMULATION	INTEGER	Number of handover attempts from DCH to HS-DSCH in a cell	B67109390.C67190693	Sum	hucasebh, huctbh
VS_HSDPA_ChR_DCHtoHSDSCH_MultRLs_Att	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of handover attempts from DCH to HS-DSCH in the case of multiple RLs in a cell	B67109390.C67190694	Sum	hucasebh, huctbh
VS_HSDPA_ChR_DCHtoHSDSCH_MultRLs_Succ	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of	B67109390.C67190695	Sum	hucasebh, huctbh

			successful handovers from DCH to HS-DSCH in the case of multiple RLs in a cell			
VS_HSDPA_ChR_DCHtoHSDSCH	ACCUMULATION	INTEGER	Number of successful handovers from DCH to HSDSCH in a cell, the procedure triggered by RAB ASSIGNMENT procedure is not included.	B67109390.C67189830	Sum	hucasebh, huctbh
VS_HSDPA_ChR_FACHtoHSDSCH_Att	ACCUMULATION	INTEGER	Number of handover attempts from FACH to HS-DSCH in a cell	B67109390.C67190696	Sum	hucasebh, huctbh
VS_HSDPA_ChR_FACHtoHSDSCH	ACCUMULATION	INTEGER	Number of successful handovers from FACH to HSDSCH in a cell, the procedure triggered by RAB ASSIGNMENT procedure is not included.	B67109390.C67189831	Sum	hucasebh, huctbh
VS_HSDPA_ChR_HSDSCHtoDCH_Att	ACCUMULATION	INTEGER	Number of handover attempts from	B67109390.C67190690	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			HS-DSCH to DCH in a cell			
VS_HSDPA_ChR_HSDSCHtoDCH_MultRLs_Att	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of handover attempts from HS-DSCH to DCH in the case of multiple RLs in a cell	B67109390.C67190691	Sum	hucasebh, huctbh
VS_HSDPA_ChR_HSDSCHtoDCH_MultRLs_Succ	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of successful handovers from HS-DSCH to DCH in the case of multiple RLs in a cell	B67109390.C67190692	Sum	hucasebh, huctbh
VS_HSDPA_ChR_HSDSCHtoDCH	ACCUMULATION	INTEGER	Number of successful handovers from HSDSCH to DCH in a cell, the procedure triggered by RAB ASSIGNMENT procedure is not included	B67109390.C67189832	Sum	hucasebh, huctbh
VS_HSDPA_ChR_HSDSCHtoFACH_Att	ACCUMULATION	INTEGER	Number of handover attempts from HS-DSCH to FACH in a cell	B67109390.C67190697	Sum	hucasebh, huctbh
VS_HSDPA_ChR_HSDSCHtoF	ACCUMULATION	INTEGER	Number of successful	B67109390.C67189833	Sum	hucasebh, huctbh

ACH			handovers from HSDSCH to FACH in a cell, the procedure triggered by RAB ASSIGNMENT procedure is not included.			
VS_HSDPA_HO_AttOutInterFreq	ACCUMULATION	INTEGER	Number of requests for inter-frequency hard handovers from HS-DSCH to HS-DSCH in a cell.	B67109390.C67190702	Sum	hucasebh , huctbh
VS_HSDPA_HO_AttOutIntraFreq	ACCUMULATION	INTEGER	Number of requests for intra-frequency hard handovers from HS-DSCH to HS-DSCH in a cell.	B67109390.C67190700	Sum	hucasebh , huctbh
VS_HSDPA_HO_AttOutIntra	ACCUMULATION	INTEGER	Number of inter-RNC HS-DSCH service HHO requests without channel change	B67109390.C67195483	Sum	hucasebh , huctbh
VS_HSDPA_HO_H2D_AttOutInterFreq	ACCUMULATION	INTEGER	Number of requests for inter-frequency hard handovers from HS-DSCH to DCH in a cell.	B67109390.C67191159	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_HSDPA_H HO_H2D_AttOutIntraFreq	ACCUMULATION	INTEGER	Number of requests for intra-frequency hard handovers from HS-DSCH to DCH in a cell.	B67109390.C67191157	Sum	hucasebh , huctbh
VS_HSDPA_H HO_H2D_SuccOutInterFreq	ACCUMULATION	INTEGER	Number of successful inter-frequency hard handovers from HS-DSCH to DCH in a cell.	B67109390.C67191160	Sum	hucasebh , huctbh
VS_HSDPA_H HO_H2D_SuccOutIntraFreq	ACCUMULATION	INTEGER	Number of successful intra-frequency hard handovers from HS-DSCH to DCH in a cell.	B67109390.C67191158	Sum	hucasebh , huctbh
VS_HSDPA_H HO_SuccOutInterFreq	ACCUMULATION	INTEGER	Number of successful inter-frequency hard handovers from HS-DSCH to HS-DSCH in a cell.	B67109390.C67190703	Sum	hucasebh , huctbh
VS_HSDPA_H HO_SuccOutIntraFreq	ACCUMULATION	INTEGER	Number of successful intra-frequency hard handovers from HS-DSCH to HS-DSCH in a cell.	B67109390.C67190701	Sum	hucasebh , huctbh
VS_HSDPA_H HO_SuccOutIur	ACCUMULATION	INTEGER	Number of successful inter-RNC HS-DSCH service HHOs without channel change	B67109390.C67195484	Sum	hucasebh , huctbh

VS_HSDPA_SHO_CellChg_AtOut	ACCUMULATION	INTEGER	Number of Intra-RNC HSDPA Serving Cell Change Attempts for Cell	B67109390.C67190698	Sum	hucasebh, huctbh
VS_HSDPA_SHO_CellChg_SuccessOut	ACCUMULATION	INTEGER	Number of Intra-RNC HSDPA Serving Cell Change Success in RNC for Cell	B67109390.C67190699	Sum	hucasebh, huctbh

7.5.27 Cell.Huawei.UMTS.HSDPA_Throughput

HSDPA Throughput

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
HSDPA_CopperBeChThroughput_0	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is between 0kbps to 32kbps.	B67109413.C67196078	Sum	hucasebh, huctbh
HSDPA_CopperBeChThroughput_10	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of	B67109413.C67196088	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			MAC-d Flow of copper BE traffic in 20 seconds is between 4096kbps to 6144kbps.			
HSDPA_CopperBeChThroughput_11	ACCUMULATION	INTEGER	VThe number of times that the downlink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is between 6144kbps to 8192kbps.	B67109413.C67196089	Sum	hucasebh , huctbh
HSDPA_CopperBeChThroughput_12	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is between 8192kbps to 12288kbps.	B67109413.C67196090	Sum	hucasebh , huctbh
HSDPA_CopperBeChThroughput_13	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is more than 12288kbps.	B67109413.C67196091	Sum	hucasebh , huctbh
HSDPA_CopperBe	ACCUMULATION	INTEGER	The number	B67109413.C67	Sum	hucasebh

ChThroughput_1	TION	ER	of times that the downlink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is between 32kbps to 64kbps.	196079		, huctbh
HSDPA_CopperBeChThroughput_2	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is between 64kbps to 256kbps.	B67109413.C67196080	Sum	hucasebh, huctbh
HSDPA_CopperBeChThroughput_3	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is between 256kbps to 512kbps.	B67109413.C67196081	Sum	hucasebh, huctbh
HSDPA_CopperBeChThroughput_4	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of	B67109413.C67196082	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			MAC-d Flow of copper BE traffic in 20 seconds is between 512kbps to 768kbps.			
HSDPA_CopperBeChThroughput_5	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is between 768kbps to 1024kbps	B67109413.C67196083	Sum	hucasebh , huctbh
HSDPA_CopperBeChThroughput_6	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is between 1024kbps to 1536kbps.	B67109413.C67196084	Sum	hucasebh , huctbh
HSDPA_CopperBeChThroughput_7	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is between 1536kbps to 2048kbps.	B67109413.C67196085	Sum	hucasebh , huctbh

HSDPA_CopperBeChThroughput_8	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is between 2048kbps to 3072kbps.	B67109413.C67196086	Sum	hucasebh, huctbh
HSDPA_CopperBeChThroughput_9	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is between 3072kbps to 4096kbps.	B67109413.C67196087	Sum	hucasebh, huctbh
HSDPA_GoldenBeChThroughput_0	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 0kbps to 32kbps.	B67109413.C67196050	Sum	hucasebh, huctbh
HSDPA_GoldenBeChThroughput_10	ACCUMULATION	INTEGER	The number of times that the downlink mean	B67109413.C67196060	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 4096kbps to 6144kbps.			
HSDPA_GoldenBeChThroughput_11	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 6144kbps to 8192kbps.	B67109413.C67196061	Sum	hucasebh , huctbh
HSDPA_GoldenBeChThroughput_12	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 8192kbps to 12288kbps.	B67109413.C67196062	Sum	hucasebh , huctbh
HSDPA_GoldenBeChThroughput_13	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is more than 12288kbps.	B67109413.C67196063	Sum	hucasebh , huctbh

HSDPA_GoldenBeChThroughput_1	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 32kbps to 64kbps.	B67109413.C67196051	Sum	hucasebh, huctbh
HSDPA_GoldenBeChThroughput_2	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 64kbps to 256kbps.	B67109413.C67196052	Sum	hucasebh, huctbh
HSDPA_GoldenBeChThroughput_3	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 256kbps to 512kbps.	B67109413.C67196053	Sum	hucasebh, huctbh
HSDPA_GoldenBeChThroughput_4	ACCUMULATION	INTEGER	The number of times that the downlink mean	B67109413.C67196054	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 512kbps to 768kbps.			
HSDPA_GoldenBeChThroughput_5	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 768kbps to 1024kbps	B67109413.C67196055	Sum	hucasebh , huctbh
HSDPA_GoldenBeChThroughput_6	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 1024kbps to 1536kbps.	B67109413.C67196056	Sum	hucasebh , huctbh
HSDPA_GoldenBeChThroughput_7	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 1536kbps to 2048kbps.	B67109413.C67196057	Sum	hucasebh , huctbh

HSDPA_GoldenBeChThroughput_8	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 2048kbps to 3072kbps.	B67109413.C67196058	Sum	hucasebh, huctbh
HSDPA_GoldenBeChThroughput_9	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 3072kbps to 4096kbps.	B67109413.C67196059	Sum	hucasebh, huctbh
HSDPA_SilverBeChThroughput_0	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 0kbps to 32kbps.	B67109413.C67196064	Sum	hucasebh, huctbh
HSDPA_SilverBeChThroughput_10	ACCUMULATION	INTEGER	The number of times that the downlink mean	B67109413.C67196074	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 4096kbps to 6144kbps.			
HSDPA_SilverBeChThroughput_11	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 6144kbps to 8192kbps.	B67109413.C67196075	Sum	hucasebh , huctbh
HSDPA_SilverBeChThroughput_12	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 8192kbps to 12288kbps.	B67109413.C67196076	Sum	hucasebh , huctbh
HSDPA_SilverBeChThroughput_13	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of silver BE traffic in 20 seconds is more than 12288kbps.	B67109413.C67196077	Sum	hucasebh , huctbh

HSDPA_SilverBeC hThroughput_1	ACCUMULA TION	INTEG ER	The number of times that the downlink mean throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 32kbps to 64kbps.	B67109413.C67 196065	Sum	hucasebh , huctbh
HSDPA_SilverBeC hThroughput_2	ACCUMULA TION	INTEG ER	The number of times that the downlink mean throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 64kbps to256kbps.	B67109413.C67 196066	Sum	hucasebh , huctbh
HSDPA_SilverBeC hThroughput_3	ACCUMULA TION	INTEG ER	The number of times that the downlink mean throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 256kbps to 512kbps.	B67109413.C67 196067	Sum	hucasebh , huctbh
HSDPA_SilverBeC hThroughput_4	ACCUMULA TION	INTEG ER	The number of times that the downlink mean	B67109413.C67 196068	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 512kbps to 768kbps.			
HSDPA_SilverBeChThroughput_5	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 768kbps to 1024kbps	B67109413.C67196069	Sum	hucasebh , huctbh
HSDPA_SilverBeChThroughput_6	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 1024kbps to 1536kbps.	B67109413.C67196070	Sum	hucasebh , huctbh
HSDPA_SilverBeChThroughput_7	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 1536kbps to 2048kbps.	B67109413.C67196071	Sum	hucasebh , huctbh

HSDPA_SilverBeChThroughput_8	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 2048kbps to 3072kbps.	B67109413.C67196072	Sum	hucasebh, huctbh
HSDPA_SilverBeChThroughput_9	ACCUMULATION	INTEGER	The number of times that the downlink mean throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 3072kbps to 4096kbps.	B67109413.C67196073	Sum	hucasebh, huctbh

7.5.28 Cell.Huawei.UMTS.HSDPA_UE_Ratio

HSDPA UE Ratio

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_HSDPA_UE_Ratio_Max_CAT1_6	INTENSITY	FLOAT	The maximum ratio of HSDPA UE with CAT 1-6 in a cell within one report period.	B67109390.C67196127	Average	hucasebh, huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_HSDPA_UE_Ratio_Max_CAT11_12	INTENSITY	FLOAT	The maximum ratio of HSDPA UE with CAT 11-12 in a cell within one report period.	B67109390.C67196133	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_HSDPA_UE_Ratio_Max_CAT13_14	INTENSITY	FLOAT	The maximum ratio of HSDPA UE with CAT 13-14 in a cell within one report period.	B67109390.C67196136	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_HSDPA_UE_Ratio_Max_CAT15_16	INTENSITY	FLOAT	The maximum ratio of HSDPA UE with CAT 15-16 in a cell within one report period.	B67109390.C67196139	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_HSDPA_UE_Ratio_Max_CAT17_20	INTENSITY	FLOAT	The maximum ratio of HSDPA UE with CAT 17-20 in a cell within one report period.	B67109390.C67196142	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_HSDPA_UE_Ratio_Max_CAT7_10	INTENSITY	FLOAT	The maximum ratio of HSDPA UE with CAT 7-10 in a cell within one report period.	B67109390.C67196130	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_HSDPA_UE_Ratio_Mean_CAT1_6	INTENSITY	FLOAT	The average ratio of HSDPA UE with CAT 1-6 in a cell within one report period.	B67109390.C67204813	Average	hucasebh, huctbh, Sum, Minimum, Maximum

VS_HSDPA_U E_Ratio_Mean_ CAT11_12	INTENSI TY	FLOA T	The average ratio of HSDPA UE with CAT 11-12 in a cell within one report period.	B67109390.C672048 15	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_HSDPA_U E_Ratio_Mean_ CAT13_14	INTENSI TY	FLOA T	The average ratio of HSDPA UE with CAT 13-14 in a cell within one report period.	B67109390.C672048 16	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_HSDPA_U E_Ratio_Mean_ CAT15_16	INTENSI TY	FLOA T	The average ratio of HSDPA UE with CAT 15-16 in a cell within one report period.	B67109390.C672048 17	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_HSDPA_U E_Ratio_Mean_ CAT17_20	INTENSI TY	FLOA T	The average ratio of HSDPA UE with CAT 17-20 in a cell within one report period.	B67109390.C672048 18	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_HSDPA_U E_Ratio_Mean_ CAT7_10	INTENSI TY	FLOA T	The average ratio of HSDPA UE with CAT 7-10 in a cell within one report period.	B67109390.C672048 14	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m

7.5.29 Cell.Huawei.UMTS.HSDPA

High Speed Data Packet Access data

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_HSDPA_RAB_SuccEstab	PERCENTAGE	FLOAT	Percentage successful setups of the HSDPA service in each cell.	$100 * \frac{\{VS_HSDPA_RAB_SuccEstab\}}{\{VS_HSDPA_RAB_AttEstab\}}$	Average	hucasebh, huctbh
VS_HSDPA_MACD_Mean_Cell	INTENSITY	FLOAT	Mean number of MAC-D flows in a cell.	B67109390.C67202941	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_HSDPA_MACD_Rel	ACCUMULATION	INTEGER	Number of MAC-D flows released in a cell.	B67109390.C67190688	Sum	hucasebh, huctbh
VS_HSDPA_MACD_FailDelPerCell	ACCUMULATION	INTEGER	Number of unsuccessful HSDPA service deletions in a cell.	B67109390.C67189837	Sum	hucasebh, huctbh
VS_HSDPA_MACD_FailStpPerCell	ACCUMULATION	INTEGER	Number of unsuccessful HSDPA service setups in a cell.	B67109390.C67189836	Sum	hucasebh, huctbh
VS_HSDPA_MACD_SuccDelPerCell	ACCUMULATION	INTEGER	Number of successful HSDPA service deletions in a cell.	B67109390.C67189835	Sum	hucasebh, huctbh
VS_HSDPA_MACD_SuccStpPerCell	ACCUMULATION	INTEGER	Number of successful MAC-d Flow	B67109390.C67189834	Sum	hucasebh, huctbh

			setups in a cell.			
VS_HSDPA_MeanChThroughput_Times	ACCUMULATION	INTEGER	Mean throughput of MAC-D flows in a cell. Times	B67109390.C67190567	Sum	hucasebh, huctbh
VS_HSDPA_MeanChThroughput_TotalBytes	ACCUMULATION	INTEGER	Mean throughput of MAC-D flows in a cell.Total bytes	B67109390.C67189840	Sum	hucasebh, huctbh
VS_HSDPA_MeanChThroughput	INTENSITY	FLOAT	Mean throughput of MAC-D flows in a cell.	B67109390.C67202894	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_HSDPA_MeanCopperBeChThroughput_TotalBytes	ACCUMULATION	INTEGER	Number of bytes transmitted in MAC-d flow of copper BE traffic	B67109390.C67194871	Sum	hucasebh, huctbh
VS_HSDPA_MeanCopperBeChThroughput	INTENSITY	FLOAT	Average throughput of MAC-d flow of copper BE traffic	B67109390.C67204512	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_HSDPA_MeanCopperBeChThrp	ACCUMULATION	INTEGER	This measurement item provides the mean downlink throughput of	B67109390.C67194872	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			MAC-d flow of copper BE traffic in a cell.			
VS_HSDPA_MeanGoldenBeChThroughput_TotalBytes	ACCUMULATION	INTEGER	Number of bytes transmitted in MAC-d flow of golden BE traffic	B67109390.C67194867	Sum	hucasebh, huctbh
VS_HSDPA_MeanGoldenBeChThroughput	INTENSITY	FLOAT	Average throughput of MAC-d flow of golden BE traffic	B67109390.C67204510	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_HSDPA_MeanGoldenBeChThrp	ACCUMULATION	INTEGER	This measurement item provides the mean downlink throughput of MAC-d flow of golden BE traffic in a cell.	B67109390.C67194868	Sum	hucasebh, huctbh
VS_HSDPA_MeanSilverBeChThroughput_TotalBytes	ACCUMULATION	INTEGER	Number of bytes transmitted in MAC-d flow of silver BE traffic	B67109390.C67194869	Sum	hucasebh, huctbh
VS_HSDPA_MeanSilverBeChThroughput	INTENSITY	FLOAT	Average throughput of MAC-d flow of silver BE traffic	B67109390.C67204511	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_HSDPA_MeanSilverBeChThrp	ACCUMULATION	INTEGER	This measurement	B67109390.C67194870	Sum	hucasebh, huctbh

			item provides the mean downlink throughput of MAC-d flow of silver BE traffic in a cell.			
VS_HSDPA_RAB_AttemptEstab_BE_Copper	ACCUMULATION	INTEGER	Number of HSDPA RAB establishment attempts of be service for copper-level users	B67109390.C67195509	Sum	hucasebh , huctbh
VS_HSDPA_RAB_AttemptEstab_BE_Golden	ACCUMULATION	INTEGER	Number of HSDPA RAB Establishment Attempts of BE Service for Golden-Level Users	B67109390.C67195507	Sum	hucasebh , huctbh
VS_HSDPA_RAB_AttemptEstab_BE_Silver	ACCUMULATION	INTEGER	Number of HSDPA RAB establishment attempts of be service for silver-level users	B67109390.C67195508	Sum	hucasebh , huctbh
VS_HSDPA_RAB_AttemptEstab	ACCUMULATION	INTEGER	Number of requests to set up the HSDPA service in a cell.	B67109390.C67190704	Sum	hucasebh , huctbh
VS_HSDPA_RAB_Loss_Abnorm_NonRF	ACCUMULATION	INTEGER	Number of HSDPA Service	B67109390.C67191162	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Abnormal Released due to Different Cause in a cell.			
VS_HSDPA_RAB_Loss_InActivity	ACCUMULATION	INTEGER	Number of HSDPA Service Released due to User Inactivity in a cell.	B67109390.C67191161	Sum	hucasebh , huctbh
VS_HSDPA_RAB_Loss_Norm	ACCUMULATION	INTEGER	Number of HSDPA Service Normal Released in a cell.	B67109390.C67191164	Sum	hucasebh , huctbh
VS_HSDPA_RAB_Loss_RF	ACCUMULATION	INTEGER	Number of HSDPA Service Abnormal Released due to Iu/RAB cause : - Radio Connection With UE Lost - Failure in the Radio Interface Procedure.	B67109390.C67191163	Sum	hucasebh , huctbh
VS_HSDPA_RAB_SuccessEstab_BE_Copper	ACCUMULATION	INTEGER	Number of successful HSDPA RAB establishments of be service for copper-level users	B67109390.C67195512	Sum	hucasebh , huctbh
VS_HSDPA_RAB_SuccessEstab_BE_Golden	ACCUMULATION	INTEGER	Number of Successful HSDPA RAB Establishment	B67109390.C67195510	Sum	hucasebh , huctbh

			s of BE Service for Golden-Level Users			
VS_HSDPA_RAB_SuccEstab_BE_Silver	ACCUMULATION	INTEGER	Number of successful HSDPA RAB establishments of be service for silver-level users	B67109390.C67195511	Sum	hucasebh, huctbh
VS_HSDPA_RAB_SuccEstab	ACCUMULATION	INTEGER	Number of successful setups of the HSDPA service in each cell.	B67109390.C67190705	Sum	hucasebh, huctbh
VS_HSDPA_UE_Mean_Cell	INTENSITY	FLOAT	This item provides the average number of UEs in CELL_HSDPA state in a cell.	B67109390.C67202932	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.30 Cell.Huawei.UMTS.HSUPA_Mobility

High Speed Uplink Packet Access mobility measurement

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_EDCH_SHO_Succ	PERCENTAGE	FLOAT	Percentage successful attempts to add or delete the EDCH link in a cell	$100 * \frac{\{HSUPA_EDCH_SHO_Succ\}}{\{HSUPA_EDCH_SHO_Att\}}$	Average	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			due to the soft handover.			
$\overline{\%_EDCHtoFACH_Succ}$	PERCENTAGE	FLOAT	Percentage successful attempts to switch the channel type from EDCH to FACH in the same cell of the RNC.	$100 * \frac{\{HSUPA_EDCHtoFACH_Succ\}}{\{HSUPA_EDCHtoFACH_Att\}}$	Average	hucasebh , huctbh
$\overline{\%_FACHtoEDCH_Succ}$	PERCENTAGE	FLOAT	Percentage successful attempts to switch the channel type from FACH to EDCH in the same cell of the RNC.	$100 * \frac{\{HSUPA_FACHtoEDCH_Succ\}}{\{HSUPA_FACHtoEDCH_Att\}}$	Average	hucasebh , huctbh
$\overline{\%_HHO_InterFreq_NoChR_Succ}$	PERCENTAGE	FLOAT	Percentage successful attempts to change the serving cell because the RNC triggers the EDCH-to-EDCH inter-frequency hard handover.	$100 * \frac{\{HSUPA_HHO_InterFreq_NoChR_Succ\}}{\{HSUPA_HHO_InterFreq_NoChR_Att\}}$	Average	hucasebh , huctbh
$\overline{\%_HHO_IntraFreq_NoChR_Succ}$	PERCENTAGE	FLOAT	Percentage successful attempts to change the serving cell because the RNC triggers the EDCH-to-EDCH intra-frequency hard	$100 * \frac{\{HSUPA_HHO_IntraFreq_NoChR_Succ\}}{\{HSUPA_HHO_IntraFreq_NoChR_Att\}}$	Average	hucasebh , huctbh

			handover.			
%_InterFreq_EDCHtoDCH_Succ	PERCENTAGE	FLOAT	Percentage successful attempts to switch channel type from EDCH to DCH due to the inter-frequency hard handover in a cell.	$100 * \frac{\{HSUPA_InterFreq_EDCHtoDCH_Success\}}{\{HSUPA_InterFreq_EDCHtoDCH_Attempts\}}$	Average	hucasebh , huctbh
%_IntraCell_DC HtoEDCH_Succ	PERCENTAGE	FLOAT	Percentage successful attempts to switch the channel type from DCH to EDCH in the same cell of the RNC.	$100 * \frac{\{HSUPA_IntraCell_DCHtoEDCH_Success\}}{\{HSUPA_IntraCell_DCHtoEDCH_Attempts\}}$	Average	hucasebh , huctbh
%_IntraCell_EDCHtoDCH_Succ	PERCENTAGE	FLOAT	Percentage successful attempts to switch the channel type from EDCH to DCH in the same cell of the RNC.	$100 * \frac{\{HSUPA_IntraCell_EDCHtoDCH_Success\}}{\{HSUPA_IntraCell_EDCHtoDCH_Attempts\}}$	Average	hucasebh , huctbh
%_IntraFreq_EDCHtoDCH_Succ	PERCENTAGE	FLOAT	Percentage successful attempts to switch the channel type from EDCH to DCH due to intra-frequency	$100 * \frac{\{HSUPA_IntraFreq_EDCHtoDCH_Success\}}{\{HSUPA_IntraFreq_EDCHtoDCH_Attempts\}}$	Average	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			hard handover in a cell.			
HSUPA_EDCH_ SHO_Att	ACCUMULA TION	INTEG ER	Number of the attempts to add or delete the EDCH links in the cell due to the soft handover.	B67109471.C6719 2367	Sum	hucasebh , huctbh
HSUPA_EDCH_ SHO_Succ	ACCUMULA TION	INTEG ER	Number of the successful attempts to add or delete the EDCH link in a cell due to the soft handover.	B67109471.C6719 2368	Sum	hucasebh , huctbh
HSUPA_EDCHto FACH_Att	ACCUMULA TION	INTEG ER	Number of attempts to switch the channel type from EDCH to FACH in the same cell of the RNC.	B67109471.C6719 2480	Sum	hucasebh , huctbh
HSUPA_EDCHto FACH_Succ	ACCUMULA TION	INTEG ER	Number of successful attempts to switch the channel type from EDCH to FACH in the same cell of the RNC.	B67109471.C6719 2481	Sum	hucasebh , huctbh
HSUPA_FACHto EDCH_Att	ACCUMULA TION	INTEG ER	Number of attempts to switch the channel type from FACH to EDCH in the same cell of the RNC.	B67109471.C6719 2482	Sum	hucasebh , huctbh

HSUPA_FACHto EDCH_Succ	ACCUMULA TION	INTEG ER	Number of successful attempts to switch the channel type from FACH to EDCH in the same cell of the RNC.	B67109471.C6719 2483	Sum	hucasebh , huctbh
HSUPA_HHO_In terFreq_NoChR_ Att	ACCUMULA TION	INTEG ER	Number of attempts to change the serving cell because the RNC triggers the EDCH-to- EDCH inter- frequency hard handover.	B67109471.C6719 2374	Sum	hucasebh , huctbh
HSUPA_HHO_In terFreq_NoChR_ Succ	ACCUMULA TION	INTEG ER	Number of successful attempts to change the serving cell because the RNC triggers the EDCH-to- EDCH inter- frequency hard handover.	B67109471.C6719 2373	Sum	hucasebh , huctbh
HSUPA_HHO_In traFreq_NoChR_ Att	ACCUMULA TION	INTEG ER	Number of attempts to change the serving cell because the RNC triggers the EDCH-to- EDCH intra-	B67109471.C6719 2372	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			frequency hard handover.			
HSUPA_HHO_IntraFreq_NoChR_Succ	ACCUMULATION	INTEGER	Number of successful attempts to change the serving cell because the RNC triggers the EDCH-to-EDCH intra-frequency hard handover.	B67109471.C67192371	Sum	hucasebh , huctbh
HSUPA_InterFreq_EDCH2DCH_Att	ACCUMULATION	INTEGER	Number of attempts to switch the channel type from EDCH to DCH due to the inter-frequency hard handover in a cell.	B67109471.C67192475	Sum	hucasebh , huctbh
HSUPA_InterFreq_EDCHtoDCH_Succ	ACCUMULATION	INTEGER	Number of successful attempts to switch channel type from EDCH to DCH due to the inter-frequency hard handover in a cell.	B67109471.C67192474	Sum	hucasebh , huctbh
HSUPA_IntraCell_DCHtoEDCH_Att	ACCUMULATION	INTEGER	Number of attempts to switch the channel type from DCH to EDCH in the same cell of	B67109471.C67192477	Sum	hucasebh , huctbh

			the RNC.			
HSUPA_IntraCell_DCHtoEDCH_Succ	ACCUMULATION	INTEGER	Number of successful attempts to switch the channel type from DCH to EDCH in the same cell of the RNC.	B67109471.C67192476	Sum	hucasebh, huctbh
HSUPA_IntraCell_EDCHtoDCH_Att	ACCUMULATION	INTEGER	Number of attempts to switch the channel type from EDCH to DCH in the same cell of the RNC.	B67109471.C67192471	Sum	hucasebh, huctbh
HSUPA_IntraCell_EDCHtoDCH_Succ	ACCUMULATION	INTEGER	Number of successful attempts to switch the channel type from EDCH to DCH in the same cell of the RNC.	B67109471.C67192470	Sum	hucasebh, huctbh
HSUPA_IntraFreq_EDCHtoDCH_Att	ACCUMULATION	INTEGER	Number of attempts to switch the channel type from EDCH to DCH due to the intra-frequency hard handover in a cell.	B67109471.C67192473	Sum	hucasebh, huctbh
HSUPA_IntraFreq	ACCUMULATION	INTEGER	Number of	B67109471.C6719	Sum	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

q_EDCHtoDCH_Succ	TION	ER	successful attempts to switch the channel type from EDCH to DCH due to intra-frequency hard handover in a cell.	2472		, huctbh
VS_HSUPA_HHO_NoChR_AttIur	ACCUMULATION	INTEGER	Number of sent message between RNCs that indicates serving HSUPA cell change in HHO	B67109471.C67195488	Sum	hucasebh, huctbh
VS_HSUPA_HHO_NoChR_SuccIur	ACCUMULATION	INTEGER	Number of received message between RNCs that indicates serving HSUPA cell changed in SHO	B67109471.C67195487	Sum	hucasebh, huctbh
VS_HSUPA_SHO_ServCellChg_AttIur	ACCUMULATION	INTEGER	Number of sent message between RNCs that indicates serving HSUPA cell change in SHO	B67109471.C67195485	Sum	hucasebh, huctbh
VS_HSUPA_SHO_ServCellChg_SuccIur	ACCUMULATION	INTEGER	Number of received message between RNCs that	B67109471.C67195486	Sum	hucasebh, huctbh

			indicates serving HSUPA cell changed in SHO			
--	--	--	---	--	--	--

7.5.31 Cell.Huawei.UMTS.HSUPA_Ratio

HSUPA Ratio

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_HSUPA_UE_Ratio_Max_CAT1_5	INTENSITY	FLOAT	The maximum ratio of HSUPA UE with CAT 1~5 in a cell within one report period.	B67109471.C67196145	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_HSUPA_UE_Ratio_Max_CAT6	INTENSITY	FLOAT	The maximum ratio of HSUPA UE with CAT 6 in a cell within one report period.	B67109471.C67196148	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_HSUPA_UE_Ratio_Mean_CAT1_5	INTENSITY	FLOAT	The average ratio of HSUPA UE with CAT 1~5 in a cell within one report period.	B67109471.C67204819	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_HSUPA_UE_Ratio_Mean_CAT6	INTENSITY	FLOAT	The average ratio of HSUPA UE with CAT 6 in a cell within one report period.	B67109471.C67204820	Average	hucasebh, huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						Maximum
--	--	--	--	--	--	---------

7.5.32 Cell.Huawei.UMTS.HSUPA_Throughput

HSUPA Throughput

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
HSUPA_CopperBeChThroughput_0	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is between 0kbps to 32kbps.	B67109413.C67196114	Sum	hucasebh , huctbh
HSUPA_CopperBeChThroughput_10	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is between 4096kbps to 6144kbps.	B67109413.C67196124	Sum	hucasebh , huctbh
HSUPA_CopperBeChThroughput_1	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is between	B67109413.C67196115	Sum	hucasebh , huctbh

			32kbps to 64kbps.			
HSUPA_CopperBeChThroughput_2	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is between 64kbps to 256kbps.	B67109413.C67196116	Sum	hucasebh, huctbh
HSUPA_CopperBeChThroughput_3	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is between 256kbps to 512kbps.	B67109413.C67196117	Sum	hucasebh, huctbh
HSUPA_CopperBeChThroughput_4	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is between 512kbps to 768kbps.	B67109413.C67196118	Sum	hucasebh, huctbh
HSUPA_CopperBe	ACCUMULATION	INTEGER	The number	B67109413.C67	Sum	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

ChThroughput_5	TION	ER	of times that the uplink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is between 768kbps to 1024kbps	196119		, huctbh
HSUPA_CopperBeChThroughput_6	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is between 1024kbps to 1536kbps.	B67109413.C67196120	Sum	hucasebh, huctbh
HSUPA_CopperBeChThroughput_7	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is between 1536kbps to 2048kbps.	B67109413.C67196121	Sum	hucasebh, huctbh
HSUPA_CopperBeChThroughput_8	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is	B67109413.C67196122	Sum	hucasebh, huctbh

			between 2048kbps to 3072kbps.			
HSUPA_CopperBeChThroughput_9	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of copper BE traffic in 20 seconds is between 3072kbps to 4096kbps.	B67109413.C67196123	Sum	hucasebh , huctbh
HSUPA_GoldenBeChThroughput_0	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 0kbps to 32kbps.	B67109413.C67196092	Sum	hucasebh , huctbh
HSUPA_GoldenBeChThroughput_10	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 4096kbps to 6144kbps.	B67109413.C67196102	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

HSUPA_GoldenBeChThroughput_1	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 32kbps to 64kbps.	B67109413.C67196093	Sum	hucasebh , huctbh
HSUPA_GoldenBeChThroughput_2	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 64kbps to 256kbps.	B67109413.C67196094	Sum	hucasebh , huctbh
HSUPA_GoldenBeChThroughput_3	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 256kbps to 512kbps.	B67109413.C67196095	Sum	hucasebh , huctbh
HSUPA_GoldenBeChThroughput_4	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of golden BE traffic in 20	B67109413.C67196096	Sum	hucasebh , huctbh

			seconds is between 512kbps to 768kbps.			
HSUPA_GoldenBeChThroughput_5	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 768kbps to 1024kbps	B67109413.C67196097	Sum	hucasebh , huctbh
HSUPA_GoldenBeChThroughput_6	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 1024kbps to 1536kbps.	B67109413.C67196098	Sum	hucasebh , huctbh
HSUPA_GoldenBeChThroughput_7	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 1536kbps to 2048kbps.	B67109413.C67196099	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

HSUPA_GoldenBeChThroughput_8	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 2048kbps to 3072kbps.	B67109413.C67196100	Sum	hucasebh , huctbh
HSUPA_GoldenBeChThroughput_9	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of golden BE traffic in 20 seconds is between 3072kbps to 4096kbps.	B67109413.C67196101	Sum	hucasebh , huctbh
HSUPA_SilverBeChThroughput_0	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 0kbps to 32kbps.	B67109413.C67196103	Sum	hucasebh , huctbh
HSUPA_SilverBeChThroughput_10	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of silver BE traffic in 20	B67109413.C67196113	Sum	hucasebh , huctbh

			seconds is between 4096kbps to 6144kbps.			
HSUPA_SilverBeChThroughput_1	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 32kbps to 64kbps.	B67109413.C67196104	Sum	hucasebh , huctbh
HSUPA_SilverBeChThroughput_2	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 64kbps to 256kbps.	B67109413.C67196105	Sum	hucasebh , huctbh
HSUPA_SilverBeChThroughput_3	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 256kbps to 512kbps.	B67109413.C67196106	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

HSUPA_SilverBeChThroughput_4	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 512kbps to 768kbps.	B67109413.C67196107	Sum	hucasebh , huctbh
HSUPA_SilverBeChThroughput_5	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 768kbps to 1024kbps	B67109413.C67196108	Sum	hucasebh , huctbh
HSUPA_SilverBeChThroughput_6	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 1024kbps to 1536kbps.	B67109413.C67196109	Sum	hucasebh , huctbh
HSUPA_SilverBeChThroughput_7	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of silver BE traffic in 20	B67109413.C67196110	Sum	hucasebh , huctbh

			seconds is between 1536kbps to 2048kbps.			
HSUPA_SilverBeChThroughput_8	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 2048kbps to 3072kbps.	B67109413.C67196111	Sum	hucasebh , huctbh
HSUPA_SilverBeChThroughput_9	ACCUMULATION	INTEGER	The number of times that the uplink mean throughput of MAC-d Flow of silver BE traffic in 20 seconds is between 3072kbps to 4096kbps.	B67109413.C67196112	Sum	hucasebh , huctbh

7.5.33 Cell.Huawei.UMTS.HSUPA

High Speed Uplink Packet Access data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_HSUPA_RAB_SuccEstab	PERCENTAGE	FLOAT	Percentage successful attempts to set up the HSUPA	100 * {HSUPA_RAB_S	Average	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			RABs in a cell.	uccEstab }/ {HSUPA _RAB_A ttEstab}		
%_HSUPA_SHO_ServCellChg_Succ	PERCENTAGE	FLOAT	Percentage successful attempts to change the EDCH serving cells because the soft handover is performed or multiple links exist.	100 * {HSUPA _SHO_ServCellChg_Succ} / {HSUPA _SHO_ServCellChg_Att}	Average	hucasebh , huctbh
HSUPA_MACDFailDelPerCell	ACCUMULATION	INTEGER	Number of failures to delete EDCH MACD FLOW in a cell.	B671094 71.C6719 2113	Sum	hucasebh , huctbh
HSUPA_MACDFailStpPerCell	ACCUMULATION	INTEGER	Number of failures of the RNC to set up EDCH MACD FLOW in a cell.	B671094 71.C6719 2111	Sum	hucasebh , huctbh
HSUPA_MACDSuccDelPerCell	ACCUMULATION	INTEGER	Number of successful attempts to delete EDCH MACD FLOW from a UE in a cell.	B671094 71.C6719 2112	Sum	hucasebh , huctbh
HSUPA_MACDSuccStpPerCell	ACCUMULATION	INTEGER	Number of successful attempts of the RNC to set up the EDCH MACD FLOW in a cell.	B671094 71.C6719 2110	Sum	hucasebh , huctbh
HSUPA_MeanChThroughput_Times	ACCUMULATION	INTEGER	No description.	B671094 71.C6719 2487	Sum	hucasebh , huctbh
HSUPA_MeanChThroughput_TotByte	ACCUMULATION	INTEGER	Number of bytes received by the MAC-d flow in a cell.	B671094 71.C6719 2486	Sum	hucasebh , huctbh
HSUPA_MeanChThroughput	INTENSITY	FLOAT	Average UL throughput of MAC-	B671094 71.C6720	Average	hucasebh , huctbh,

			d flow in a cell.	3932		Sum, Minimum, Maximum
HSUPA_RAB_AttEstab	ACCUMULATION	INTEGER	Number of attempts to set up HSUPA RABs in a cell.	B671094 71.C6719 2114	Sum	hucasebh , huctbh
HSUPA_RAB_Loss_Abnorm	ACCUMULATION	INTEGER	Number of HSUPA RABs abnormally released by the RNC in a cell.	B671094 71.C6719 2364	Sum	hucasebh , huctbh
HSUPA_RAB_Loss_Norm	ACCUMULATION	INTEGER	Number of HSUPA RABs normally released by the RNC in a cell.	B671094 71.C6719 2365	Sum	hucasebh , huctbh
HSUPA_RAB_Loss_UEGen	ACCUMULATION	INTEGER	Number of HSUPA RABs released by the RNC for the release of the UE signaling connection.	B671094 71.C6719 2366	Sum	hucasebh , huctbh
HSUPA_RAB_SuccEstab	ACCUMULATION	INTEGER	Number of successful attempts to set up the HSUPA RABs in a cell.	B671094 71.C6719 2115	Sum	hucasebh , huctbh
HSUPA_SHO_ServCellChg_Att	ACCUMULATION	INTEGER	Number of attempts to change the EDCH serving cells because the soft handover is performed or multiple links exist.	B671094 71.C6719 2370	Sum	hucasebh , huctbh
HSUPA_SHO_ServCellChg_Succ	ACCUMULATION	INTEGER	Number of successful attempts to change the EDCH serving cells because the soft handover is performed or	B671094 71.C6719 2369	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			multiple links exist.			
VS_HSUPA_CopperBeMeanChThroughput_TotalBytes	ACCUMULATION	INTEGER	Number of bytes receive in MAC-d flow of copper BE traffic	B67109471.C67194889	Sum	hucasebh, huctbh
VS_HSUPA_CopperBeMeanChThroughput	INTENSITY	FLOAT	Mean uplink throughput of MAC-d flows of copper BE traffic	B67109471.C67204515	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_HSUPA_CopperBeMeanChThrpt	ACCUMULATION	INTEGER	VS HSUPA CopperBeMeanChThroughput Times	B67109471.C67194890	Sum	hucasebh, huctbh
VS_HSUPA_GoldenBeMeanChThroughput_TotalBytes	ACCUMULATION	INTEGER	Number of bytes receive in MAC-d flow of golden BE traffic	B67109471.C67194873	Sum	hucasebh, huctbh
VS_HSUPA_GoldenBeMeanChThroughput	INTENSITY	FLOAT	Mean uplink throughput of MAC-d flows of golden BE traffic	B67109471.C67204513	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_HSUPA_GoldenBeMeanChThrpt	ACCUMULATION	INTEGER	VS HSUPA GoldenBeMeanChThroughput Times	B67109471.C67194874	Sum	hucasebh, huctbh
VS_HSUPA_RAB_AttemptEstab_BE_Copper	ACCUMULATION	INTEGER	Number of HSUPA RAB establishment attempts of be service for copper-level users	B67109471.C67192971	Sum	hucasebh, huctbh
VS_HSUPA_RAB_AttemptEstab_BE_Golden	ACCUMULATION	INTEGER	Number of HSUPA RAB establishment attempts of be service for golden-level users	B67109471.C67192969	Sum	hucasebh, huctbh
VS_HSUPA_RAB_A	ACCUMULATION	INTEGER	Number of HSUPA	B671094	Sum	hucasebh

ttEstab_BE_Silver	TION	GER	RAB establishment attempts of be service for silver-level users	71.C6719 2970		, huctbh
VS_HSUPA_RAB_SuccEstab_BE_Copper	ACCUMULATION	INTEGER	Number of successful HSUPA RAB establishments of be service for copper-level users	B671094 71.C6719 2974	Sum	hucasebh , huctbh
VS_HSUPA_RAB_SuccEstab_BE_Golden	ACCUMULATION	INTEGER	Number of successful HSUPA RAB establishments of be service for golden-level users	B671094 71.C6719 2972	Sum	hucasebh , huctbh
VS_HSUPA_RAB_SuccEstab_BE_Silver	ACCUMULATION	INTEGER	Number of successful HSUPA RAB establishments of be service for silver-level users	B671094 71.C6719 2973	Sum	hucasebh , huctbh
VS_HSUPA_SilverBeMeanChThroughput_TotalBytes	ACCUMULATION	INTEGER	Number of bytes receive in MAC-d flow of silver BE traffic	B671094 71.C6719 4875	Sum	hucasebh , huctbh
VS_HSUPA_SilverBeMeanChThroughput	INTENSITY	FLOAT	Mean uplink throughput of MAC-d flows of silver BE traffic	B671094 71.C6720 4514	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_HSUPA_SilverBeMeanChThrpt	ACCUMULATION	INTEGER	VS HSUPA SilverBeMeanChThroughput Times	B671094 71.C6719 4876	Sum	hucasebh , huctbh
VS_HSUPA_UE_Mean_Cell	INTENSITY	FLOAT	Average number of UEs in CELL_HSUPA state in a cell.	B671094 71.C6720 3850	Average	hucasebh , huctbh, Sum, Minimum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						m, Maximum
--	--	--	--	--	--	---------------

7.5.34 Cell.Huawei.UMTS.InterRAT_HO_Incoming_CS

InterRAT Incoming Handover CS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_IRATHO_SuccIncCS	PERCENTAGE	FLOAT	Percentage successful CS domain incoming inter-RAT handovers.	$100 * \frac{\{IRATHO_SuccIncCS\}}{\{IRATHO_AttIncCS\}}$	Average	hucasebh, huctbh
IRATHO_AttIncCS	ACCUMULATION	INTEGER	Number of preparations for CS domain incoming inter-RAT handovers.	B67109381.C67189758	Sum	hucasebh, huctbh
IRATHO_AttOutCS	ACCUMULATION	INTEGER	Number of attempts at CS domain outgoing inter-RAT handovers.	B67109381.C67189754	Sum	hucasebh, huctbh
IRATHO_FailIncCS_HiTrafLod	ACCUMULATION	INTEGER	Number of Unsuccessful Preparations for CS Domain Incoming Inter-RAT Handovers for Different Causes (Cell)	B67109381.C67192187	Sum	hucasebh, huctbh
IRATHO_FailIncCS_ResUnavail	ACCUMULATION	INTEGER	Numbers of unsuccessful preparations	B67109381.C67189762	Sum	hucasebh, huctbh

			for CS domain incoming inter-RAT handovers due to different causes, No resource available			
IRATHO_FailIncCS_TRNCSysFailReloc	ACCUMULATION	INTEGER	Numbers of unsuccessful preparations for CS domain incoming inter-RAT handovers due to different causes, Relocation failure in target CN/RNC or target system	B67109381.C67189760	Sum	hucasebh, huctbh
IRATHO_FailIncCS_TRNCSysRelocUnsupp	ACCUMULATION	INTEGER	Numbers of unsuccessful preparations for CS domain incoming inter-RAT handovers due to different causes, Relocation not supported in target RNC or target system	B67109381.C67189761	Sum	hucasebh, huctbh
IRATHO_SuccIncCS	ACCUMULATION	INTEGER	Number of successful CS domain incoming inter-RAT handovers.	B67109381.C67189759	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_IRATHO_Fail IncCS_NRply	ACCUMULA TION	INTEG ER	Number of unsuccessful CS domain incoming inter-RAT handovers due to No response.	B67109381.C671 90410	Sum	hucasebh , huctbh
VS_IRATHO_Pre pSuccCSIn	ACCUMULA TION	INTEG ER	Number of successful preparations for CS domain incoming inter-RAT handovers.	B67109381.C671 90414	Sum	hucasebh , huctbh
VS_IRATHO_Ser vice_SuccOutCS	ACCUMULA TION	INTEG ER	No description	B67109381.C671 90857	Sum	hucasebh , huctbh

7.5.35 Cell.Huawei.UMTS.InterRAT_HO_Incoming_PS

Incoming InterRAT Handover packet switched

KPI	Type	Data Type	Description	Derivation	Default Aggregat or	Other Aggrega tors
VS_IRATHO_R eloc_AttPrepInP S	ACCUMULA TION	INTEG ER	Number of attempts to prepare for incoming enhanced Inter- RAT PS handovers	B67109381.C6719 2675	Sum	hucasebh , huctbh
VS_IRATHO_R eloc_FailInPS_ NRply	ACCUMULA TION	INTEG ER	Number of unsuccessful incoming enhanced Inter- RAT PS handovers due to no response from the UE	B67109381.C6719 2682	Sum	hucasebh , huctbh
VS_IRATHO_R eloc_FailPrepIn	ACCUMULA TION	INTEG ER	Number of unsuccessful	B67109381.C6719 2679	Sum	hucasebh , huctbh

PS_ReloNoSup			preparations for incoming enhanced Inter-RAT PS handovers for different causes (relocation not supported in target RNC or target system)			
VS_IRATHO_R eloc_FailPrepIn PS_ResUnavail	ACCUMULA TION	INTEG ER	Number of unsuccessful preparations for incoming enhanced Inter-RAT PS handovers for different causes (no resource available)	B67109381.C6719 2680	Sum	hucasebh , huctbh
VS_IRATHO_R eloc_FailPrepIn PS_TgtFail	ACCUMULA TION	INTEG ER	Number of unsuccessful preparations for incoming enhanced Inter-RAT PS handovers for different causes (relocation failure in target CN/RNC or target system)	B67109381.C6719 2678	Sum	hucasebh , huctbh
VS_IRATHO_R eloc_FailPrepIn PS_TLoadHighe r	ACCUMULA TION	INTEG ER	Number of unsuccessful preparations for incoming enhanced Inter-RAT PS handovers for different causes	B67109381.C6719 2681	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			(traffic load in the target cell higher than in the source cell)			
VS_IRATHO_Reloc_SuccInPS	ACCUMULATION	INTEGER	Number of successful incoming enhanced Inter-RAT PS handovers	B67109381.C67192677	Sum	hucasebh , huctbh
VS_IRATHO_Reloc_SuccPreInPS	ACCUMULATION	INTEGER	Number of successful preparations for incoming enhanced Inter-RAT PS handovers	B67109381.C67192676	Sum	hucasebh , huctbh

7.5.36 Cell.Huawei.UMTS.InterRAT_HO_Outgoing_CS

InterRAT Outgoing Handover CS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
IRATHO_AttRelocPrepOutCS	ACCUMULATION	INTEGER	Number of preparations for CS domain outgoing inter-RAT handovers.	B67109381.C67189749	Sum	hucasebh , huctbh
IRATHO_FailOutCS_CfgUnsupp	ACCUMULATION	INTEGER	Numbers of unsuccessful CS domain outgoing inter-RAT handovers due to different causes, Configuration Unsupported	B67109381.C67189756	Sum	hucasebh , huctbh
IRATHO_FailOut	ACCUMULATION	INTEGER	Numbers of	B67109381.C67	Sum	hucasebh

CS_PhyChFail	TION	ER	unsuccessful CS domain outgoing inter- RAT handovers due to different causes,Physical Channel Failure	189757		, huctbh
IRATHO_FailRel ocPrepOutCS_No ResAvail	ACCUMULA TION	INTEG ER	Number of unsuccessful preparations for CS domain Inter-RAT outgoing handovers for different causes (no resource available)	B67109381.C67 192658	Sum	hucasebh , huctbh
IRATHO_FailRel ocPrepOutCS_Rel oNoSup	ACCUMULA TION	INTEG ER	Numbers of unsuccessful preparations for CS domain outgoing inter- RAT handovers due to different causes,Relocati on not supported in Target RNC or Target system	B67109381.C67 189753	Sum	hucasebh , huctbh
IRATHO_FailRel ocPrepOutCS_TA lExp	ACCUMULA TION	INTEG ER	Numbers of unsuccessful preparations for CS domain outgoing inter- RAT handovers due to different	B67109381.C67 189751	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			causes,TRELO Calloc expiry			
IRATHO_FailRel ocPrepOutCS_Tgt Fail	ACCUMULA TION	INTEG ER	Numbers of unsuccessful preparations for CS domain outgoing inter- RAT handovers due to different causes,Relocati on Failure in Target CN/RNC or Target System	B67109381.C67 189752	Sum	hucasebh , huctbh
IRATHO_FailRel ocPrepOutCS_UK nowRNC	ACCUMULA TION	INTEG ER	Number of unsuccessful preparations for CS domain Inter-RAT outgoing handovers for different causes (unknown target RNC)	B67109381.C67 192659	Sum	hucasebh , huctbh
IRATHO_FailRel PrOCS_HiTrafLo d	ACCUMULA TION	INTEG ER	Number of Unsuccessful Preparations for CS Domain Inter-RAT Outgoing Handovers for Different Causes (Cell)	B67109381.C67 192186	Sum	hucasebh , huctbh
IRATHO_SuccOu tCS	ACCUMULA TION	INTEG ER	Number of successful CS domain outgoing inter- RAT handovers.	B67109381.C67 189755	Sum	hucasebh , huctbh
IRATHO_SuccRe locPrepOutCS	ACCUMULA TION	INTEG ER	Number of successful preparations	B67109381.C67 189750	Sum	hucasebh , huctbh

			for CS domain outgoing inter-RAT handovers.			
VS_IRATHO_CS_MBDR_RelocAttOut	ACCUMULATION	INTEGER	The measurement items take statistics of the number of CS VOICE Domain Inter-RAT Outgoing Handover From UTRAN Attempt due to Inter-RAT Measurement.	B67109381.C67196299	Sum	hucasebh, huctbh
VS_IRATHO_CS_MBDR_RelocSuccessOut	ACCUMULATION	INTEGER	The measurement items take statistics of the number of CS VOICE Domain Inter-RAT Outgoing Handover From UTRAN Success due to Inter-RAT Measurement.	B67109381.C67196300	Sum	hucasebh, huctbh
VS_IRATHO_CS_Out_TrigEcIo	ACCUMULATION	INTEGER	The number of handover triggered by EcN0 in the CS domain.	B67109381.C67193406	Sum	hucasebh, huctbh
VS_IRATHO_CS_Out_TrigRscp	ACCUMULATION	INTEGER	The number of handover triggered by RSCP in the	B67109381.C67193405	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			CS domain.			
VS_IRATHO_CS AMR_ReqRelocOut	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of preparations for CS domain outgoing inter-RAT handovers for AMR service.	B67109381.C67 184200	Sum	hucasebh , huctbh
VS_IRATHO_CS AMR_SuccRelocOut	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of successful CS domain outgoing inter-RAT handovers for AMR service.	B67109381.C67 184201	Sum	hucasebh , huctbh
VS_IRATHO_Fai lOutCS_Nrply	ACCUMULATION	INTEGER	Number of timeouts of waiting for Iu RELEASE COMMAND messages during outgoing Inter-RAT CS handovers	B67109381.C67 192660	Sum	hucasebh , huctbh
VS_IRATHO_Load_AttRelocPrepOutCS	ACCUMULATION	INTEGER	Number of preparations for CS domain outgoing inter-RAT handovers for AMR service.	B67109381.C67 189739	Sum	hucasebh , huctbh
VS_IRATHO_Load_SuccOutCS	ACCUMULATION	INTEGER	Numbers of successful CS domain outgoing inter-RAT	B67109381.C67 189741	Sum	hucasebh , huctbh

			handovers due to different causes,Relocation desirable for radio reasons			
VS_IRATHO_Load_SuccRelocPrepOutCS	ACCUMULATION	INTEGER	Numbers of successful preparations for CS domain outgoing inter-RAT handovers due to different causes,Resource optimization relocation or Reduce load in serving cell	B67109381.C67189740	Sum	hucasebh , huctbh
VS_IRATHO_Out_RelocPrep_SigOnly_Att	ACCUMULATION	INTEGER	Number of attempts to prepare for outgoing Inter-RAT CS handovers with signalling only	B67109381.C67192654	Sum	hucasebh , huctbh
VS_IRATHO_Out_RelocPrep_SigOnly_Succ	ACCUMULATION	INTEGER	Number of successful preparations for outgoing Inter-RAT CS handovers with signalling only	B67109381.C67192655	Sum	hucasebh , huctbh
VS_IRATHO_Out_SigOnly_Att	ACCUMULATION	INTEGER	Number of attempts to perform outgoing Inter-RAT CS handovers with signalling only	B67109381.C67192656	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_IRATHO_Out_SigOnly_Succ	ACCUMULATION	INTEGER	Number of successful outgoing Inter-RAT CS handovers with signalling only	B67109381.C67 192657	Sum	hucasebh , huctbh
VS_IRATHO_Out_CS_MeasTimeOut	ACCUMULATION	INTEGER	The number of inter-RAT measurement expiry in the CS domain.	B67109381.C67 193399	Sum	hucasebh , huctbh
VS_IRATHO_Out_PS_MeasTimeOut	ACCUMULATION	INTEGER	The number of inter-RAT measurement expiry in the PS domain.	B67109381.C67 193400	Sum	hucasebh , huctbh
VS_IRATHO_PS_Out_TrigEcIo	ACCUMULATION	INTEGER	The number of handover triggered by EcN0 in the PS domain.	B67109381.C67 193408	Sum	hucasebh , huctbh
VS_IRATHO_PS_Out_TrigRscp	ACCUMULATION	INTEGER	The number of handover triggered by RSCP in the PS domain.	B67109381.C67 193407	Sum	hucasebh , huctbh
VS_IRATHO_Re_qRelocOutCS_DR	ACCUMULATION	INTEGER	Number of preparations for CS domain outgoing inter-RAT handovers for AMR service.	B67109381.C67 189730	Sum	hucasebh , huctbh
VS_IRATHO_RF_AttRelocPrepOut_CS	ACCUMULATION	INTEGER	Numbers of preparations for CS domain outgoing inter-RAT handovers due to different causes,	B67109381.C67 189744	Sum	hucasebh , huctbh

VS_IRATHO_RF_SuccOutCS	ACCUMULATION	INTEGER	Numbers of successful CS domain outgoing inter-RAT handovers due to different causes,Relocation desirable for radio reasons	B67109381.C67189746	Sum	hucasebh , huctbh
VS_IRATHO_RF_SuccRelocPreOutCS	ACCUMULATION	INTEGER	Numbers of successful preparations for CS domain outgoing inter-RAT handovers due to different causes,Relocation desirable for radio reasons	B67109381.C67189745	Sum	hucasebh , huctbh
VS_IRATHO_Service_AttRelocPrepOutCS	ACCUMULATION	INTEGER	Number of CS Inter-RAT Outgoing Handover Attempts Based on Services in Serving Cell for Cell	B67109381.C67190593	Sum	hucasebh , huctbh
VS_IRATHO_Service_SuccRelocPrepOutCS	ACCUMULATION	INTEGER	No description available.	B67109381.C67190856	Sum	hucasebh , huctbh
VS_IRATHO_SuccOutCs_DR	ACCUMULATION	INTEGER	Numbers of successful CS domain outgoing inter-RAT handovers due	B67109381.C67189729	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			to different causes,			
VS_IRATHO_SucRelocOutCS_DR	ACCUMULATION	INTEGER	Numbers of successful preparations for CS domain outgoing inter-RAT handovers due to different causes,Directed retry	B67109381.C67189732	Sum	hucasebh , huctbh

7.5.37 Cell.Huawei.UMTS.InterRAT_HO_Outgoing_PS

Outgoing InterRAT Handover Packet switched

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IRATHO_CO_FailOutPSUTRAN_Nrply	ACCUMULATION	INTEGER	Number of timeouts of waiting for Iu RELEASE COMMAND messages during outgoing Inter-RAT PS handovers initiated by the RNC	B67109381.C67192661	Sum	hucasebh , huctbh
VS_IRATHO_Reloc_AttOutPSUTRAN	ACCUMULATION	INTEGER	Number of attempts to implement outgoing enhanced Inter-RAT PS handovers initiated by the RNC	B67109381.C67192664	Sum	hucasebh , huctbh
VS_IRATHO_Reloc_AttPrepOutPS	ACCUMULATION	INTEGER	Number of attempts to prepare for	B67109381.C67192662	Sum	hucasebh , huctbh

			outgoing enhanced Inter-RAT PS handovers initiated by the RNC			
VS_IRATHO_Reloc_FailOutPSUTRAN_CfgUnsupp	ACCUMULATION	INTEGER	Number of unsuccessful outgoing enhanced Inter-RAT PS handovers for different causes (configuration unsupported)	B67109381.C67192672	Sum	hucasebh, huctbh
VS_IRATHO_Reloc_FailOutPSUTRAN_NRply	ACCUMULATION	INTEGER	Number of timeouts of waiting for Iu RELEASE COMMAND messages during outgoing enhanced Inter-RAT PS handovers	B67109381.C67192674	Sum	hucasebh, huctbh
VS_IRATHO_Reloc_FailOutPSUTRAN_PhyChFail	ACCUMULATION	INTEGER	Number of unsuccessful outgoing enhanced Inter-RAT PS handovers for different causes (physical channel failure)	B67109381.C67192673	Sum	hucasebh, huctbh
VS_IRATHO_Reloc_FailPrepOutPS_NoResAvail	ACCUMULATION	INTEGER	Number of unsuccessful preparations for outgoing enhanced Inter-	B67109381.C67192670	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			RAT PS handovers for different causes (no resource available)			
VS_IRATHO_Reloc_FailPrepOutPS_RelNoSup	ACCUMULATION	INTEGER	Number of unsuccessful preparations for outgoing enhanced Inter-RAT PS handovers for different causes (relocation not supported in target RNC or target system)	B67109381.C67192668	Sum	hucasebh , huctbh
VS_IRATHO_Reloc_FailPrepOutPS_TAExp	ACCUMULATION	INTEGER	Number of unsuccessful preparations for outgoing enhanced Inter-RAT PS handovers for different causes (TRELOCalloc expiry)	B67109381.C67192666	Sum	hucasebh , huctbh
VS_IRATHO_Reloc_FailPrepOutPS_TgtFail	ACCUMULATION	INTEGER	Number of unsuccessful preparations for outgoing enhanced Inter-RAT PS handovers for different causes (relocation failure in target CN/RNC or target system)	B67109381.C67192667	Sum	hucasebh , huctbh
VS_IRATHO_Reloc_FailPrepOutPS_TLoadHigher	ACCUMULATION	INTEGER	Number of unsuccessful preparations for outgoing	B67109381.C67192669	Sum	hucasebh , huctbh

			enhanced Inter-RAT PS handovers for different causes (traffic load in the target cell higher than in the source cell)			
VS_IRATHO_Reloc_FailPrepOutPS_UKknowRNC	ACCUMULATION	INTEGER	Number of unsuccessful preparations for outgoing enhanced Inter-RAT PS handovers for different causes (unknown target RNC)	B67109381.C67192671	Sum	hucasebh , huctbh
VS_IRATHO_Reloc_SuccOutPSUTRAN	ACCUMULATION	INTEGER	Number of successful outgoing enhanced Inter-RAT PS handovers initiated by the RNC	B67109381.C67192665	Sum	hucasebh , huctbh
VS_IRATHO_Reloc_SuccPrepOutPS	ACCUMULATION	INTEGER	Number of successful preparations for outgoing enhanced Inter-RAT PS handovers initiated by the RNC	B67109381.C67192663	Sum	hucasebh , huctbh

7.5.38 Cell.Huawei.UMTS.InterRAT_HO_PS

InterRAT Handover PS data

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
-----	------	-----------	-------------	------------	--------------------	-------------------

$\bar{\%_HSUPA_IRATHO_SuccOutPSUTRAN}$	PERCENTAGE	FLOAT	Percentage successful RNC-Originated PS Domain Outgoing Inter-RAT Handovers for HSUPA services(Cell)	$100 * \frac{\{HSUPA_IRATHO_SuccOutPSUTRAN\}}{\{HSUPA_IRATHO_AttOutPSUTRAN\}}$	Average	hucasebh , huctbh
$\bar{\%_IRATHO_HSDPA_SuccOutPSUTRAN}$	PERCENTAGE	FLOAT	Percentage successful RNC-Originated PS Domain Outgoing Inter-RAT Handovers for HSDPA services(Cell)	$100 * \frac{\{VS_IRATHO_HSDPA_SuccOutPSUTRAN\}}{\{VS_IRATHO_HSDPA_AttOutPSUTRAN\}}$	Average	hucasebh , huctbh
$\bar{\%_IRATHO_Service_SuccOutPSUTRAN}$	PERCENTAGE	FLOAT	Percentage of successful preparations for PS domain outgoing inter-RAT handovers due to service (cell)	$100 * \frac{\{VS_IRATHO_Service_SuccOutPSUTRAN\}}{\{VS_IRATHO_Service_AttOutPSUTRAN\}}$	Average	hucasebh , huctbh
$\bar{\%_IRATHO_SuccessfulUE_SuccOutPSUE}$	PERCENTAGE	FLOAT	Percentage successful UE-originated PS domain incoming inter-RAT handovers.	$100 * \frac{\{IRATHO_SuccessfulUE_SuccOutPSUE\}}{\{VS_IRATHO_SuccessfulUE_AttOutPSUE\}}$	Average	hucasebh , huctbh
$\bar{\%_IRATHO_SuccessfulPSUTRAN}$	PERCENTAGE	FLOAT	Percentage successful PS domain	$100 * \frac{\{IRATHO_SuccessfulPSUTRAN\}}{\{VS_IRATHO_SuccessfulPSUTRAN\}}$	Average	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			outgoing inter-RAT handovers originated by RNC	{IRATHO_AttOutPSUTRAN}		
%_VS_IRATHO_Load_SuccOutPSUTRAN	PERCENTAGE	FLOAT	Percentage successful PS domain outgoing inter-RAT handovers due to different causes, Number of Successful PS Domain Outgoing Inter-RAT Handovers due to Load (Cell)	$100 * \frac{\{VS_IRATHO_Load_SuccOutPSUTRAN\}}{\{VS_IRATHO_Load_AttOutPSUTRAN\}}$	Average	hucasebh, huctbh
%_VS_IRATHO_RF_SuccOutPSUTRAN	PERCENTAGE	FLOAT	Percentage successful PS domain outgoing inter-RAT handovers due to different causes, Number of Successful PS Domain Outgoing Inter-RAT Handovers due to RF (Cell)	$100 * \frac{\{VS_IRATHO_RF_SuccOutPSUTRAN\}}{\{VS_IRATHO_RF_AttOutPSUTRAN\}}$	Average	hucasebh, huctbh
HSUPA_IRATHO_AttOutPSUTRAN	ACCUMULATION	INTEGER	Number of attempts at PS domain outgoing inter-RAT handovers for HSUPA	B67109381.C67192507	Sum	hucasebh, huctbh

			services.			
HSUPA_IRATH O_SuccOutPSU TRAN	ACCUMULA TION	INTEG ER	Number of successful RNC- Originated PS Domain Outgoing Inter-RAT Handovers for HSUPA services(Cell)	B67109381.C67192 506	Sum	hucasebh , huctbh
IRATHO_AttOu tPSUTRAN	ACCUMULA TION	INTEG ER	Number of attempts at PS domain outgoing inter-RAT handovers.	B67109381.C67190 411	Sum	hucasebh , huctbh
IRATHO_FailO utPSUTRAN_Cf gUnsupp	ACCUMULA TION	INTEG ER	Numbers of unsuccessful PS domain outgoing inter-RAT handovers due to different causes,Config uration unacceptable	B67109381.C67190 476	Sum	hucasebh , huctbh
IRATHO_FailO utPSUTRAN_Ph yChFail	ACCUMULA TION	INTEG ER	Numbers of unsuccessful PS domain outgoing inter-RAT handovers due to different causes,Physic al Channel Failure	B67109381.C67190 477	Sum	hucasebh , huctbh
IRATHO_SuccO	ACCUMULA	INTEG	Number of	B67109381.C67189	Sum	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

utPSUE	TION	ER	successful UE-originated PS domain incoming inter-RAT handovers.	763		, huctbh
IRATHO_SuccO utPSUTRAN	ACCUMULA TION	INTEG ER	Number of successful PS domain outgoing inter-RAT handovers originated by RNC	B67109381.C67190 412	Sum	hucasebh , huctbh
VS_IRATHO_A ttOutPSUE	ACCUMULA TION	INTEG ER	Number of UE-originated PS domain outgoing inter-RAT handover requests. If the UE is in CELL_FACH , CELL_PCH, or URA_PCH state after setting up PS service in the WCDMA system, it can reselect a GPRS network according to cell reselection rule. After reselection, the UE need to re-establish the PS service. During this procedure, the 2.5G SGSN	B67109381.C67190 413	Sum	hucasebh , huctbh

			queries the context of PS RAB that is set up by the UE in the WCDMA system, by an SRNS CONTEXT REQUEST procedure.			
VS_IRATHO_HSDPA_AttOutPSUTRAN	ACCUMULATION	INTEGER	No description available.	B67109381.C67191155	Sum	hucasebh, huctbh
VS_IRATHO_HSDPA_SuccOutPSUTRAN	ACCUMULATION	INTEGER	No description available.	B67109381.C67191156	Sum	hucasebh, huctbh
VS_IRATHO_Load_AttOutPSUTRAN	ACCUMULATION	INTEGER	Numbers of preparations for PS domain outgoing inter-RAT handovers due to different causes, Number of Preparations for PS Domain Outgoing Inter-RAT Handovers due to Load (Cell)	B67109381.C67189742	Sum	hucasebh, huctbh
VS_IRATHO_Load_SuccOutPSUTRAN	ACCUMULATION	INTEGER	Numbers of successful PS domain outgoing inter-RAT	B67109381.C67189743	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			handovers due to different causes, Number of Successful PS Domain Outgoing Inter-RAT Handovers due to Load (Cell)			
VS_IRATHO_RF_AttOutPSUTRAN	ACCUMULATION	INTEGER	Numbers of preparations for PS domain outgoing inter-RAT handovers due to different causes, Number of Preparations for PS Domain Outgoing Inter-RAT Handovers due to RF (Cell)	B67109381.C67189747	Sum	hucasebh, huctbh
VS_IRATHO_RF_SuccOutPSUTRAN	ACCUMULATION	INTEGER	Numbers of successful PS domain outgoing inter-RAT handovers due to different causes, Number of Successful PS Domain Outgoing Inter-RAT Handovers due to RF (Cell)	B67109381.C67189748	Sum	hucasebh, huctbh

VS_IRATHO_Service_AttOutPSUTRAN	ACCUMULATION	INTEGER	No description available.	B67109381.C67190858	Sum	hucasebh , huctbh
VS_IRATHO_Service_SuccOutPSUTRAN	ACCUMULATION	INTEGER	No description available.	B67109381.C67190859	Sum	hucasebh , huctbh

7.5.39 Cell.Huawei.UMTS.Load_Congestion_Control_LDR

Load Congestion Control during LDR state

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_LCC_LDR_HSUPA_InterFreq	ACCUMULATION	INTEGER	Number of HSUPA users during inter-frequency load handover in LDR state	B67109391.C67192644	Sum	hucasebh , huctbh
VS_LCC_LDR_HSUPA_InterRATPS	ACCUMULATION	INTEGER	Number of HSUPA users during Inter-RAT handover in LDR state	B67109391.C67192645	Sum	hucasebh , huctbh
VS_LCC_LDR_Num_DLCE	ACCUMULATION	INTEGER	Number of times LDR state due to DL channel element resource congestion	B67109391.C67192641	Sum	hucasebh , huctbh
VS_LCC_LDR_Num_DLCode	ACCUMULATION	INTEGER	Number of times LDR state due to downlink code resource congestion	B67109391.C67192639	Sum	hucasebh , huctbh
VS_LCC_LDR	ACCUMULATION	INTEGER	Number of	B67109391.C6719	Sum	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

_Num_DL lub	TION	ER	times LDR state due to DL lub transmission resource congestion	2643		, huctbh
VS_LCC_LDR _Num_DLPower	ACCUMULATION	INTEGER	Number of times a cell is in LDR state due to DL power (equivalent Number of users) congestion	B67109391.C67192638	Sum	hucasebh , huctbh
VS_LCC_LDR _Num_ULCE	ACCUMULATION	INTEGER	Number of times LDR state due to UL channel element resource congestion	B67109391.C67192640	Sum	hucasebh , huctbh
VS_LCC_LDR _Num_UL lub	ACCUMULATION	INTEGER	Number of times LDR state due to UL lub transmission resource congestion	B67109391.C67192642	Sum	hucasebh , huctbh
VS_LCC_LDR _Num_ULPower	ACCUMULATION	INTEGER	Number of times a cell is in LDR state due to UL power (equivalent Number of users) congestion	B67109391.C67192637	Sum	hucasebh , huctbh
VS_LCC_LDR _Time_DLCE	ACCUMULATION	FLOAT	Duration in LDR state due to DL channel element resource congestion	B67109391.C67203995	Sum	hucasebh , huctbh
VS_LCC_LDR _Time_DLCode	ACCUMULATION	FLOAT	Duration in LDR state due to downlink	B67109391.C67203993	Sum	hucasebh , huctbh

			code resource congestion			
VS_LCC_LDR_Time_DLub	ACCUMULATION	FLOAT	Duration in LDR state due to DL Iub transmission resource congestion	B67109391.C67203997	Sum	hucasebh , huctbh
VS_LCC_LDR_Time_DLPower	ACCUMULATION	FLOAT	Duration in LDR state due to DL power (equivalent Number of users) congestion	B67109391.C67203992	Sum	hucasebh , huctbh
VS_LCC_LDR_Time_ULCE	ACCUMULATION	FLOAT	Duration in LDR state due to UL channel element resource congestion	B67109391.C67203994	Sum	hucasebh , huctbh
VS_LCC_LDR_Time_ULIub	ACCUMULATION	FLOAT	Duration in LDR state due to UL Iub transmission resource congestion	B67109391.C67203996	Sum	hucasebh , huctbh
VS_LCC_LDR_Time_ULPower	ACCUMULATION	FLOAT	Duration in LDR state due to UL power (equivalent Number of users) congestion	B67109391.C67203991	Sum	hucasebh , huctbh

7.5.40 Cell.Huawei.UMTS.Load_Congestion_Control_OLC

Load Congestion Control during OLC

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
-----	------	-----------	-------------	------------	--------------------	-------------------

VS_LCC_OLC_DL_FastBE	ACCUMULATION	INTEGER	Number of UEs for be service TF control in overload congestion	B67109391.C67192649	Sum	hucasebh , huctbh
VS_LCC_OLC_DL_UserRel	ACCUMULATION	INTEGER	Number of UEs released due to overload congestion	B67109391.C67192650	Sum	hucasebh , huctbh
VS_LCC_OLC_HSUPA_UserRel	ACCUMULATION	INTEGER	Number of UEs released due to overload congestion	B67109391.C67192648	Sum	hucasebh , huctbh
VS_LCC_OLC_TCC	ACCUMULATION	INTEGER	Number of UEs for be service transfer common channel in overload congestion	B67109391.C67192549	Sum	hucasebh , huctbh
VS_LCC_OLC_UL_FastBE	ACCUMULATION	INTEGER	Number of UEs for be service TF control in overload congestion	B67109391.C67192646	Sum	hucasebh , huctbh
VS_LCC_OLC_UL_UserRel	ACCUMULATION	INTEGER	Number of UEs released due to overload congestion	B67109391.C67192647	Sum	hucasebh , huctbh

7.5.41 Cell.Huawei.UMTS.Load_Congestion_Control

Load Congestion Control data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
-----	------	-----------	-------------	------------	--------------------	-------------------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_HSDPA_L DR_InterFreq	ACCUMULA TION	INTEG ER	When a cell is in basic congestion, the RNC shall select some Hsdpa UEs for inter-frequency handover. This item describes statistic number of the Hsdpa UEs performing such handover.	B67109391.C6 7191151	Sum	hucasebh , huctbh
VS_HSDPA_L DR_InterRATP S	ACCUMULA TION	INTEG ER	When a cell is in basic congestion, the RNC shall select some Hsdpa UEs for PS domain inter-RAT handover. This item describes statistic number of the Hsdpa UEs performing such handover.	B67109391.C6 7191152	Sum	hucasebh , huctbh
VS_HSDPA_O LC_UserRel	ACCUMULA TION	INTEG ER	When a cell is in overload congestion, the RNC shall select some Hsdpa UEs to release if failing to release the cell from overload congestion by BE service TF control. This item describes statistic number of the Hsdpa UEs released due to overload congestion.	B67109391.C6 7191150	Sum	hucasebh , huctbh
VS_LCC_Basic CongNumDL	ACCUMULA TION	INTEG ER	Obsolete in release Vn00R010. The measurement is	B67109391.C6 7189844	Sum	hucasebh , huctbh

			triggered when the RNC receives a COMMON MEASUREMENT REPORT from the NodeB and detects there is DL basic congestion in the cell.			
VS_LCC_Basic CongNumUL	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. The measurement is triggered when the RNC receives a COMMON MEASUREMENT REPORT from the NodeB and detects there is UL basic congestion in the cell.	B67109391.C6 7189845	Sum	hucasebh , huctbh
VS_LCC_Basic CongTimDL	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. After the cell is set up, the RNC sums the durations of DL basic congestions in the measurement period.	B67109391.C6 7203400	Sum	hucasebh , huctbh
VS_LCC_Basic CongTimUL	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. After the cell is set up, the RNC sums the durations of UL basic congestions in the measurement period.	B67109391.C6 7203401	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_LCC_HSDPA_CodeAdj_Succ	ACCUMULATION	INTEGER	In order to get more available HSDPA code, the RNC shall select some UEs for code adjustment. This measurement item provides the number of UEs that Successful perform the adjustment.	B67109391.C67193410	Sum	hucasebh , huctbh
VS_LCC_HSDPA_CodeAdj	ACCUMULATION	INTEGER	In order to get more available HSDPA code, the RNC shall select some UEs for code adjustment. This measurement item provides the number of UEs that perform the adjustment.	B67109391.C67195992	Sum	hucasebh , huctbh
VS_LCC_LDR_AmrDL	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011:When a cell is in basic congestion, the RNC shall select some UEs for Amr Rate Reduction. Number of the UEs performing such reduction.	B67109391.C67191640	Sum	hucasebh , huctbh
VS_LCC_LDR_AMRRateDL	ACCUMULATION	INTEGER	Number of UEs Performing AMR Rate Decreasing in DL Basic Congestion for Cell	B67109391.C67192427	Sum	hucasebh , huctbh
VS_LCC_LDR_AMRRateUL	ACCUMULATION	INTEGER	Number of UEs Performing AMR Rate Decreasing in	B67109391.C67192426	Sum	hucasebh , huctbh

			UL Basic Congestion for Cell			
VS_LCC_LDR_AmrUL	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R01 1: When a cell is in basic congestion, the RNC shall select some UEs for Amr Rate Reduction. Number of the UEs performing such reduction.	B67109391.C67191639	Sum	hucasebh, huctbh
VS_LCC_LDR_BERateDL	ACCUMULATION	INTEGER	When the cell is in basic congestion, the RNC shall select some UEs for BE service downsizing by RADIO BEARER RECONFIGURATION. Numbers of the UEs performing such BE service downsizing in DL direction.	B67109391.C67190437	Sum	hucasebh, huctbh
VS_LCC_LDR_BERateUL	ACCUMULATION	INTEGER	When the cell is in basic congestion, the RNC shall select some UEs for BE service downsizing by RADIO BEARER RECONFIGURATION. Numbers of the UEs performing such BE service	B67109391.C67190436	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			downsizing in UL direction.			
VS_LCC_LDR_CodeAdj_Succ	ACCUMULATION	INTEGER	When a cell is in basic congestion, the RNC shall select some UEs for code adjustment. This measurement item provides the number of UEs that Successfully perform the adjustment.	B67109391.C67193409	Sum	hucasebh , huctbh
VS_LCC_LDR_CodeAdj	ACCUMULATION	INTEGER	When a cell is in basic congestion, the RNC shall select some UEs for code adjustment. This measurement item takes statistics of the number of UEs that perform the adjustment.	B67109391.C67192397	Sum	hucasebh , huctbh
VS_LCC_LDR_HSDPA_InterRATCS	ACCUMULATION	INTEGER	When a cell is in LDR state, this measurement item provides the number of HSDPA users perform the CS domain inter-RAT handover.	B67109391.C67196030	Sum	hucasebh , huctbh
VS_LCC_LDR_HSUPA_InterRATCS	ACCUMULATION	INTEGER	When a cell is in LDR state, this measurement item provides the number of HSUPA users perform the CS domain inter-RAT handover.	B67109391.C67196029	Sum	hucasebh , huctbh
VS_LCC_LDR_InterFreq	ACCUMULATION	INTEGER	When a cell is in basic congestion,	B67109391.C67190435	Sum	hucasebh , huctbh

			the RNC shall select some UEs for inter-frequency handover. Number of the UEs performing such handover.			
VS_LCC_LDR_InterRATCS	ACCUMULATION	INTEGER	When a cell is in basic congestion, the RNC shall select some UEs for CS domain inter-RAT handover. Number of the UEs performing such handover.	B67109391.C67190440	Sum	hucasebh , huctbh
VS_LCC_LDR_InterRATPS	ACCUMULATION	INTEGER	When a cell is in basic congestion, the RNC shall select some UEs for PS domain inter-RAT handover. Number of the UEs performing such handover.	B67109391.C67190441	Sum	hucasebh , huctbh
VS_LCC_LDR_MbmsPowerDec	ACCUMULATION	INTEGER	When a cell is in basic congestion, the RNC shall select some MBMSs for power decrease. This measurement item takes statistics of the number of MBMSs that decrease the power.	B67109391.C67192398	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_LCC_LDR_RABRateDL	ACCUMULATION	INTEGER	When the cell is in basic congestion, the RNC shall select some UEs for uncontrollable realtime service QoS renegotiation by RAB MODIFY REQUEST. Numbers of the UEs performing such renegotiation in both UL and DL directions respectively.	B67109391.C67190439	Sum	hucasebh , huctbh
VS_LCC_LDR_RABRateUL	ACCUMULATION	INTEGER	When the cell is in basic congestion, the RNC shall select some UEs for BE service downsizing by RADIO BEARER RECONFIGURATION. Numbers of the UEs performing such BE service downsizing	B67109391.C67190438	Sum	hucasebh , huctbh
VS_LCC_OLC_FastBE	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. When a cell is in overload congestion, the RNC shall select some UEs for BE service TF control. By controlling the MAC TFC selection procedure, the RNC can reduce the data throughput of interactive traffic and background	B67109391.C67190434	Sum	hucasebh , huctbh

			traffic. Number of the UEs performing such TF control.			
VS_LCC_OLC_UserRel	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. When a cell is in overload congestion, the RNC shall select some UEs to release if failing to release the cell from overload congestion by BE service TF control. Number of the UEs released due to overload congestion.	B67109391.C67190433	Sum	hucasebh, huctbh
VS_LCC_OverCongNumDL	ACCUMULATION	INTEGER	The measurement is triggered when the RNC receives a COMMON MEASUREMENT REPORT from the NodeB and detects there is DL overload congestion in the cell.	B67109391.C67189853	Sum	hucasebh, huctbh
VS_LCC_OverCongNumUL	ACCUMULATION	INTEGER	The measurement is triggered when the RNC receives a COMMON MEASUREMENT REPORT from the NodeB and detects there is UL overload	B67109391.C67189852	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			congestion in the cell.			
VS_LCC_OverCongTimDL	ACCUMULATION	INTEGER	The above items provide the durations of DL overload congestions in a cell. Unit: s.	B67109391.C67203403	Sum	hucasebh , huctbh
VS_LCC_OverCongTimUL	ACCUMULATION	INTEGER	The above items provide the durations of UL overload congestions in a cell. Unit: s.	B67109391.C67203402	Sum	hucasebh , huctbh

7.5.42 Cell.Huawei.UMTS.Location_Cell_Services

Location Cell Services data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_LCS_OutCellCover_AgpsAss	ACCUMULATION	INTEGER	Number of the positioning results out of the reference cell coverage in case of UE ASSISTED AGPS method in a cell.	B67109510.C67190670	Sum	hucasebh , huctbh
VS_LCS_OutCellCover_AgpsBas	ACCUMULATION	INTEGER	Number of the positioning results out of the reference cell coverage in case of UE BASED AGPS method in a cell.	B67109510.C67190671	Sum	hucasebh , huctbh
VS_LCS_OutCellCover_CellIdR	ACCUMULATION	INTEGER	Number of the positioning	B67109510.C67190673	Sum	hucasebh , huctbh

tt			results out of the reference cell coverage in case of CELLID + RTT method in a cell.			
VS_LCS_OutCellCover_Otdoa	ACCUMULATION	INTEGER	Number of the positioning results out of the reference cell coverage in case of OTDOA method in a cell.	B67109510.C67190672	Sum	hucasebh, huctbh

7.5.43 Cell.Huawei.UMTS.MBMS_Cell

Number of setups and releases of the MBMS traffic

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_LCC_LDR_MBMS_PowerDec	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of operations of decreasing power for MBMS PTM service in LDR state	B67109391.C67194969	Sum	hucasebh, huctbh
VS_LCC_OLC_MBMS_PTM_RBRel	ACCUMULATION	INTEGER	Number of release PTM MBMS service in OLC state	B67109391.C67194970	Sum	hucasebh, huctbh
VS_LCC_OLC_MBMS_PTP_RB	ACCUMULATION	INTEGER	Number of release PTP	B67109391.C67194971	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Rel			MBMS service in OLC state			
VS_MBMS_InterCell_PTPtoPTM_Att	ACCUMULATION	INTEGER	Number of releases of PTP MBMS services because the new best cell is on PTM mode	B67109474.C67194980	Sum	hucasebh , huctbh
VS_MBMS_MTCHSetupFail_Cell	ACCUMULATION	INTEGER	Number of unsuccessful setups of the MBMS traffic channel in a cell.	B67109474.C67192131	Sum	hucasebh , huctbh
VS_MBMS_MTCHSetupSucc_Cell	ACCUMULATION	INTEGER	Number of successful attempts to set up the MBMS traffic channel in a cell.	B67109474.C67192130	Sum	hucasebh , huctbh
VS_MBMS_PTM_RB_Max_Cell	INTENSITY	INTEGER	Maximum Number of RBs in PTM MBMS service	B67109474.C67192620	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_MBMS_PTM_RB_Mean_Cell	INTENSITY	FLOAT	Average number of RBs in PTM MBMS service	B67109474.C67204014	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_MBMS_PTMtoPTP_Succ	ACCUMULATION	INTEGER	Number of successful transition from PTM MBMS service to PTP MBMS service	B67109474.C67192615	Sum	hucasebh , huctbh

VS_MBMS_PTP_UE_Max_Cell	INTENSITY	INTEGER	Obsolete from UTRAN/V900 R011:Maximum Number of UEs in PTP MBMS service	B67109474.C67192619	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_MBMS_PTP_UE_Mean_Cell	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Average number of UEs in PTP MBMS service	B67109474.C67192618	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_MBMS_PTP_toPTM_Att	ACCUMULATION	INTEGER	Number of transition from PTP MBMS service to PTM MBMS service	B67109474.C67192617	Sum	hucasebh, huctbh
VS_MBMS_PTP_toPTM_Succ	ACCUMULATION	INTEGER	Number of successful transition from PTP MBMS service to PTM MBMS service	B67109474.C67192616	Sum	hucasebh, huctbh
VS_MBMS_RB_PTM_AttEstab	ACCUMULATION	INTEGER	Number of setups of PTM MBMS service	B67109474.C67192621	Sum	hucasebh, huctbh
VS_MBMS_RB_PTM_SuccEstab	ACCUMULATION	INTEGER	Number of successful setups of PTM MBMS service	B67109474.C67192622	Sum	hucasebh, huctbh
VS_MBMS_RB_PTP_AttEstab	ACCUMULATION	INTEGER	Number of requests for PTP MBMS setup	B67109474.C67194981	Sum	hucasebh, huctbh
VS_MBMS_RB_	ACCUMULATION	INTEGER	Number of	B67109474.C671	Sum	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

PTP_Loss_Abnormal	TION	ER	abnormal releases of PTP MBMS services for different causes	94983		, huctbh
VS_MBMS_RB_PTP_Loss_Norm	ACCUMULATION	INTEGER	Number of normal releases of PTP MBMS services	B67109474.C67194984	Sum	hucasebh, huctbh
VS_MBMS_RB_PTP_SuccEstab	ACCUMULATION	INTEGER	Number of successful PTP MBMS setups	B67109474.C67194982	Sum	hucasebh, huctbh

7.5.44 Cell.Huawei.UMTS.MBMS_Channel

MBMS Channel

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
MBMS_PTM_Channel0_Dur_Cell	ACCUMULATION	INTEGER	Duration in Which MBMS Channel 0 is in PTM Mode	B67109474.C67204235	Sum	hucasebh, huctbh
MBMS_PTM_Channel1_Dur_Cell	ACCUMULATION	INTEGER	Duration in Which MBMS Channel 1 is in PTM Mode	B67109474.C67204237	Sum	hucasebh, huctbh
MBMS_PTM_Channel2_Dur_Cell	ACCUMULATION	INTEGER	Duration in Which MBMS Channel 2 is in PTM Mode	B67109474.C67204239	Sum	hucasebh, huctbh
MBMS_PTM_Channel3_Dur_Cell	ACCUMULATION	INTEGER	Duration in Which MBMS Channel 3 is in PTM Mode	B67109474.C67204241	Sum	hucasebh, huctbh
MBMS_PTM_Channel4_Dur_Cell	ACCUMULATION	INTEGER	Duration in Which MBMS Channel 4 is in PTM Mode	B67109474.C67204243	Sum	hucasebh, huctbh

MBMS_PTM_UE_Channel0_Mean_Cell	INTENSITY	FLOAT	Mean Number of UEs That Subscribe to MBMS Channel 0 in PTM Mode in a Cell	B67109474.C67204226	Average	hucasebh, huctbh, Sum, Minimum, Maximum
MBMS_PTM_UE_Channel1_Mean_Cell	INTENSITY	FLOAT	Mean Number of UEs That Subscribe to MBMS Channel 1 in PTM Mode in a Cell	B67109474.C67204228	Average	hucasebh, huctbh, Sum, Minimum, Maximum
MBMS_PTM_UE_Channel2_Mean_Cell	INTENSITY	FLOAT	Mean Number of UEs That Subscribe to MBMS Channel 2 in PTM Mode in a Cell	B67109474.C67204230	Average	hucasebh, huctbh, Sum, Minimum, Maximum
MBMS_PTM_UE_Channel3_Mean_Cell	INTENSITY	FLOAT	Mean Number of UEs That Subscribe to MBMS Channel 3 in PTM Mode in a Cell	B67109474.C67204232	Average	hucasebh, huctbh, Sum, Minimum, Maximum
MBMS_PTM_UE_Channel4_Mean_Cell	INTENSITY	FLOAT	Mean Number of UEs That Subscribe to MBMS Channel 4 in PTM Mode in a Cell	B67109474.C67204234	Average	hucasebh, huctbh, Sum, Minimum, Maximum
MBMS_PTP_Channel0_Duration_Cell	ACCUMULATION	INTEGER	Duration in Which MBMS Channel 0 is in	B67109474.C67204236	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			PTP Mode			
MBMS_PTP_Channel1_Dur_Cell	ACCUMULATION	INTEGER	Duration in Which MBMS Channel 1 is in PTP Mode	B67109474.C67204238	Sum	hucasebh, huctbh
MBMS_PTP_Channel2_Dur_Cell	ACCUMULATION	INTEGER	Duration in Which MBMS Channel 2 is in PTP Mode	B67109474.C67204240	Sum	hucasebh, huctbh
MBMS_PTP_Channel3_Dur_Cell	ACCUMULATION	INTEGER	Duration in Which MBMS Channel 3 is in PTP Mode	B67109474.C67204242	Sum	hucasebh, huctbh
MBMS_PTP_Channel4_Dur_Cell	ACCUMULATION	INTEGER	Duration in Which MBMS Channel 4 is in PTP Mode	B67109474.C67204244	Sum	hucasebh, huctbh
MBMS_PTP_UE_Channel0_Mean_Cell	INTENSITY	FLOAT	Mean Number of UEs That Subscribe to MBMS Channel 0 in PTP Mode in a Cell	B67109474.C67204225	Average	hucasebh, huctbh, Sum, Minimum, Maximum
MBMS_PTP_UE_Channel1_Mean_Cell	INTENSITY	FLOAT	Mean Number of UEs That Subscribe to MBMS Channel 1 in PTP Mode in a Cell	B67109474.C67204227	Average	hucasebh, huctbh, Sum, Minimum, Maximum
MBMS_PTP_UE_Channel2_Mean_Cell	INTENSITY	FLOAT	Mean Number of UEs That Subscribe to MBMS Channel 2 in PTP Mode in a Cell	B67109474.C67204229	Average	hucasebh, huctbh, Sum, Minimum, Maximum
MBMS_PTP_UE_Channel3_Mean_Cell	INTENSITY	FLOAT	Mean Number of UEs That Subscribe to	B67109474.C67204231	Average	hucasebh, huctbh, Sum,

			MBMS Channel 3 in PTP Mode in a Cell			Minimum, Maximum
MBMS_PTP_UE_Channel4_Mean_Cell	INTENSITY	FLOAT	Mean Number of UEs That Subscribe to MBMS Channel 4 in PTP Mode in a Cell	B67109474.C67204233	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.45 Cell.Huawei.UMTS.MBMS_PTP_PTM

MBMS PTP PTM

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_MBMS_PTM_Channel_Dur_Cell	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011:VS MBMS PTM Channel Dur Cell	B67109549.C67193075	Sum	hucasebh, huctbh
VS_MBMS_PTM_UE_Mean_Cell	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:VS MBMS PTM UE Mean Cell	B67109549.C67204157	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_MBMS_PTP_Channel_Dur_Cell	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011:VS MBMS PTP Channel Dur Cell	B67109549.C67193076	Sum	hucasebh, huctbh
VS_MBMS_PTP_UE_Mean_Cell	INTENSITY	FLOAT	Obsolete from UTRAN/V900R	B67109549.C67192618	Average	hucasebh, huctbh,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Cell			011:VS MBMS PTP UE Mean Cell			Sum, Minimum, Maximum
------	--	--	------------------------------------	--	--	-----------------------------

7.5.46 Cell.Huawei.UMTS.Measurement_Reports_UMTS

Measurement Report data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RRC_MrRpt_1A_Detect	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of event 1A measurement reports about monitoring sets.	B67109384.C67189913	Sum	hucasebh , huctbh
VS_RRC_MrRpt_1A	ACCUMULATION	INTEGER	Number of event 1A measurement reports about neighboring cells of a cell from UEs to the RNC.	B67109384.C67180609	Sum	hucasebh , huctbh
VS_RRC_MrRpt_1B	ACCUMULATION	INTEGER	Number of event 1B measurement reports about neighboring cells of a cell from UEs to the RNC.	B67109384.C67180610	Sum	hucasebh , huctbh
VS_RRC_MrRpt_1C	ACCUMULATION	INTEGER	Number of event 1C measurement reports about neighboring cells of a cell	B67109384.C67180611	Sum	hucasebh , huctbh

			from UEs to the RNC.			
VS_RRC_MrRpt_1D	ACCUMULATION	INTEGER	Number of event 1D measurement reports about neighboring cells of a cell from UEs to the RNC.	B67109384.C67180612	Sum	hucasebh , huctbh
VS_RRC_MrRpt_1F	ACCUMULATION	INTEGER	Number of Event 1F Measurement Reports (Cell)	B67109384.C67191692	Sum	hucasebh , huctbh
VS_RRC_MrRpt_2D	ACCUMULATION	INTEGER	Number of event 2D measurement reports about the cells in active sets from UEs to the RNC.	B67109384.C67180613	Sum	hucasebh , huctbh
VS_RRC_MrRpt_2F	ACCUMULATION	INTEGER	Number of event 2F measurement reports about the cells in active sets from UEs to the RNC	B67109384.C67180614	Sum	hucasebh , huctbh
VS_RRC_MrRpt_3A	ACCUMULATION	INTEGER	Number of Event 3A Measurement Reports (Cell)	B67109384.C67191693	Sum	hucasebh , huctbh
VS_UE_mrRPT_4A	ACCUMULATION	INTEGER	Number of event 4A measurement reports about the cells in active sets from UEs to	B67109384.C67180615	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			the RNC.			
VS_UE_mrRPT_4B	ACCUMULATION	INTEGER	Number of event 4B measurement reports about the cells in active sets from UEs to the RNC.	B67109384.C67180616	Sum	hucasebh , huctbh
VS_Utran_mrRPT_4A	ACCUMULATION	INTEGER	Number of downlink event 4A measurement reports	B67109384.C67192652	Sum	hucasebh , huctbh
VS_Utran_mrRPT_4B	ACCUMULATION	INTEGER	Number of downlink event 4B measurement reports	B67109384.C67192653	Sum	hucasebh , huctbh

7.5.47 Cell.Huawei.UMTS.MultiRab

MultiRab data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_MultRAB_SF128	INTENSITY	FLOAT	Average numbers of multi-RAB UEs allocated different spreading factors (SFs) of 4/8/16/32/64/128/256 in a cell.	B67109377.C67202943	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_MultRAB_SF16	INTENSITY	FLOAT	Average numbers of multi-RAB UEs allocated different spreading factors (SFs) of 4/8/16/32/64/128	B67109377.C67199692	Average	hucasebh , huctbh, Sum, Minimum, Maximum

			/256 in a cell.			
VS_MultRAB_SF256	INTENSITY	FLOAT	Average numbers of multi-RAB UEs allocated different spreading factors (SFs) of 4/8/16/32/64/128/256 in a cell.	B67109377.C67202944	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_MultRAB_SF32	INTENSITY	FLOAT	Average numbers of multi-RAB UEs allocated different spreading factors (SFs) of 4/8/16/32/64/128/256 in a cell.	B67109377.C67199693	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_MultRAB_SF4	INTENSITY	FLOAT	Average numbers of multi-RAB UEs allocated different spreading factors (SFs) of 4/8/16/32/64/128/256 in a cell.	B67109377.C67202942	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_MultRAB_SF64	INTENSITY	FLOAT	Average numbers of multi-RAB UEs allocated different spreading factors (SFs) of 4/8/16/32/64/128/256 in a cell.	B67109377.C67199694	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_MultRAB_SF	INTENSITY	FLOAT	Average	B67109377.C67199	Average	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

F8	TY	T	numbers of multi-RAB UEs allocated different spreading factors (SFs) of 4/8/16/32/64/128/256 in a cell.	691		, huctbh, Sum, Minimum, Maximum
VS_RAB_SFOC CUPY_MAX	INTENSITY	INTEGER	Max. numbers of spreading factor(SF) in a cell, Let the SF which has been occupied a unitary SF of 256 for count.	B67109377.C67191 657	Constant	hucasebh , huctbh, Sum, Minimum, Maximum
VS_RAB_SFOC CUPY	INTENSITY	FLOAT	Average numbers of spreading factor(SF) in a cell, Let the SF which has been occupied a unitary SF of 256 for count	B67109377.C67203 416	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_SingleRAB_ SF128	INTENSITY	FLOAT	Average numbers of single-RAB UEs allocated different spreading factors (SFs) 4/8/16/32/64/128/256 in a cell.	B67109377.C67199 703	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_SingleRAB_ SF16	INTENSITY	FLOAT	Average numbers of single-RAB UEs allocated different spreading factors (SFs) 4/8/16/32/64/128/256 in a cell.	B67109377.C67199 700	Average	hucasebh , huctbh, Sum, Minimum, Maximum

VS_SingleRAB_SF256	INTENSITY	FLOAT	Average numbers of single-RAB UEs allocated different spreading factors (SFs) 4/8/16/32/64/128/256 in a cell.	B67109377.C67199704	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_SingleRAB_SF32	INTENSITY	FLOAT	Average numbers of single-RAB UEs allocated different spreading factors (SFs) 4/8/16/32/64/128/256 in a cell.	B67109377.C67199701	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_SingleRAB_SF4	INTENSITY	FLOAT	Average numbers of single-RAB UEs allocated different spreading factors (SFs) 4/8/16/32/64/128/256 in a cell.	B67109377.C67199698	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_SingleRAB_SF64	INTENSITY	FLOAT	Average numbers of single-RAB UEs allocated different spreading factors (SFs) 4/8/16/32/64/128/256 in a cell.	B67109377.C67199702	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_SingleRAB_SF8	INTENSITY	FLOAT	Average numbers of single-RAB UEs	B67109377.C67199699	Average	hucasebh, huctbh, Sum,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			allocated different spreading factors (SFs) 4/8/16/32/64/128 /256 in a cell.			Minimum, Maximum
--	--	--	---	--	--	---------------------

7.5.48 Cell.Huawei.UMTS.NBAP_Statistics

NBAP data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
RLM_AttRLDeIub	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011:No description.	B67109386.C67180815	Sum	hucasebh , huctbh
RLM_SuccRLDeIub	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011:No description.	B67109386.C67180816	Sum	hucasebh , huctbh
VS_IUB_AttRLRecfg	ACCUMULATION	INTEGER	Number of RLs requested for synchronized reconfiguration on the Iub interface in a cell.	B67109386.C67189775	Sum	hucasebh , huctbh
VS_IUB_AttRLSetup	ACCUMULATION	INTEGER	Number of RLs requested to establish on the Iub interface in a cell.	B67109386.C67180801	Sum	hucasebh , huctbh
VS_IUB_CancelRLRecfg	ACCUMULATION	INTEGER	Number of RLs whose synchronized reconfiguration is cancelled on the Iub interface in a cell.	B67109386.C67180826	Sum	hucasebh , huctbh
VS_IUB_FailRL	ACCUMULATION	INTEGER	Numbers of	B67109386.C671	Sum	hucasebh

Add_OM	TION	ER	RLs unsuccessfully added on the Iub interface due to different causes in a cell.	80810		, huctbh
VS_IUB_FailRL Recfg_CfgUnsup	ACCUMULA TION	INTEG ER	Numbers of RLs unsuccessfully reconfigured on the Iub interface in a cell.	B67109386.C671 80823	Sum	hucasebh , huctbh
VS_IUB_FailRL Recfg_Cong	ACCUMULA TION	INTEG ER	Numbers of RLs unsuccessfully reconfigured on the Iub interface in a cell.	B67109386.C671 80822	Sum	hucasebh , huctbh
VS_IUB_FailRL Recfg_HW	ACCUMULA TION	INTEG ER	Numbers of RLs unsuccessfully reconfigured on the Iub interface in a cell.	B67109386.C671 80821	Sum	hucasebh , huctbh
VS_IUB_FailRL Recfg_NoReply	ACCUMULA TION	INTEG ER	Number of RLs unsuccessfully reconfigured on the Iub interface due to no response from the NodeB	B67109386.C671 80824	Sum	hucasebh , huctbh
VS_IUB_FailRL Recfg_OM	ACCUMULA TION	INTEG ER	Numbers of RLs unsuccessfully reconfigured on the Iub interface in a cell.	B67109386.C671 80820	Sum	hucasebh , huctbh
VS_IUB_FailRL	ACCUMULA	INTEG	Numbers of	B67109386.C671	Sum	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Setup_CfgUnsup	TION	ER	RLs unsuccessfully established on the Iub interface in a cell.	80806		, huctbh
VS_IUB_FailRL Setup_Cong	ACCUMULA TION	INTEG ER	Numbers of RLs unsuccessfully established on the Iub interface in a cell.	B67109386.C671 80805	Sum	hucasebh , huctbh
VS_IUB_FailRL Setup_HW	ACCUMULA TION	INTEG ER	Numbers of RLs unsuccessfully established on the Iub interface in a cell.	B67109386.C671 80804	Sum	hucasebh , huctbh
VS_IUB_FailRL Setup_OM	ACCUMULA TION	INTEG ER	Numbers of RLs unsuccessfully established on the Iub interface in a cell.	B67109386.C671 80803	Sum	hucasebh , huctbh
VS_IUB_RLFail _CfgUnsup	ACCUMULA TION	INTEG ER	Numbers of RLs not available on the Iub interface in a cell.	B67109386.C671 80831	Sum	hucasebh , huctbh
VS_IUB_RLFail _HW	ACCUMULA TION	INTEG ER	Numbers of RLs not available on the Iub interface in a cell.	B67109386.C671 80829	Sum	hucasebh , huctbh
VS_IUB_RLFail _OM	ACCUMULA TION	INTEG ER	Numbers of RLs not available on the Iub interface in a cell.	B67109386.C671 80828	Sum	hucasebh , huctbh
VS_IUB_RLFail _SyncFail	ACCUMULA TION	INTEG ER	Numbers of RLs not available on the	B67109386.C671 89772	Sum	hucasebh , huctbh

			Iub interface in a cell.			
VS_IUB_RLFailNoRestore	ACCUMULATION	INTEGER	Number of RLs unsuccessfully restored on the Iub interface due to no response from the NodeB.	B67109386.C67180830	Sum	hucasebh , huctbh
VS_IUB_RLFail	ACCUMULATION	INTEGER	Number of RLs that are unavailable on the Iub interface in a cell.	B67109386.C67180827	Sum	hucasebh , huctbh
VS_Iub_RLFailSetup_NoReply	ACCUMULATION	INTEGER	Number of RLs unsuccessfully established on the Iub interface due to no response from the NodeB	B67109386.C67180838	Sum	hucasebh , huctbh
VS_IUB_RLRestore	ACCUMULATION	INTEGER	Number of RLs restored on the Iub interface in a cell.	B67109386.C67180832	Sum	hucasebh , huctbh
VS_IUB_SuccRLRecfg	ACCUMULATION	INTEGER	Number of RLs successfully reconfigured on the Iub interface in a cell.	B67109386.C67180819	Sum	hucasebh , huctbh
VS_IUB_SuccRLSetup	ACCUMULATION	INTEGER	Number of RLs successfully established on Iub interface in a cell.	B67109386.C67180802	Sum	hucasebh , huctbh
VS_RLsOfUE_InOtherCell	INTENSITY	FLOAT	Number of RLs provided by	B67109386.C67202561	Average	hucasebh , huctbh,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			other cells in the RNC for this cell.			Sum, Minimum, Maximum
VS_SHO_AttRLAddIub	ACCUMULATION	INTEGER	Number of RLs requested to add on the Iub interface in a cell.	B67109386.C67180808	Sum	hucasebh, huctbh
VS_SHO_FailRLAddIub_CfgUnsup	ACCUMULATION	INTEGER	Numbers of RLs unsuccessfully added on the Iub interface due to different causes in a cell.	B67109386.C67180813	Sum	hucasebh, huctbh
VS_SHO_FailRLAddIub_Cong	ACCUMULATION	INTEGER	Numbers of RLs unsuccessfully added on the Iub interface due to different causes in a cell.	B67109386.C67180812	Sum	hucasebh, huctbh
VS_SHO_FailRLAddIub_HW	ACCUMULATION	INTEGER	Numbers of RLs unsuccessfully added on the Iub interface due to different causes in a cell.	B67109386.C67180811	Sum	hucasebh, huctbh
VS_SHO_SuccRLAddIub	ACCUMULATION	INTEGER	Number of RLs successfully added on the Iub interface in a cell.	B67109386.C67180809	Sum	hucasebh, huctbh

7.5.49 Cell.Huawei.UMTS.Paging

Paging data

KPI	Type	Data	Description	Derivation	Default	Other
-----	------	------	-------------	------------	---------	-------

		Type			Aggregat or	Aggrega tors
VS_RRC_Paging1_Att_Cell	ACCUMULATION	INTEGER	Number of pages of PAGING TYPE 1 sent by the RNC in a cell.	B67109509.C67190473	Sum	hucasebh , huctbh
VS_RRC_Paging1_Loss_PCH_Cong_Cell	ACCUMULATION	INTEGER	Number of losses of PAGING TYPE 1 message due to PCH congestion in a cell.	B67109509.C67190472	Sum	hucasebh , huctbh

7.5.50 Cell.Huawei.UMTS.RAB_Abnorm_Release_CS

RAB Abnormal Release CS data

KPI	Type	Data Type	Description	Derivation	Default Aggrega tor	Other Aggrega tors
VS_Abnorm_Rel_CS_Str	ACCUMULATION	INTEGER	Number of RABs that are specific for CS streaming services and are released for abnormal causes in the best cell which is under the SRNC	B67109376.C67192597	Sum	hucasebh , huctbh
VS_Norm_Rel_CS_Str_UISigRel	ACCUMULATION	INTEGER	Number of released CS streaming service RABs with the cause of uplink signalling connection	B67109376.C67192603	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			release in the best cell that belongs to the SRNC			
VS_Norm_Rel_CS_Str	ACCUMULATION	INTEGER	Number of RABs that are specific for CS streaming services and are normally released in the best cell which is under the SRNC	B67109376.C67192600	Sum	hucasebh , huctbh
VS_NorRel_CS_AMR_ULRel	ACCUMULATION	INTEGER	Number of released CS AMR RABs with the cause of uplink signaling connection release in the best cell that belongs to the SRNC	B67109376.C67191792	Sum	hucasebh , huctbh
VS_NorRel_CS_Conv_64_ULRel	ACCUMULATION	INTEGER	Number of released CS conversational service RABs with the cause of uplink signaling connection release in the best cell that belongs to the SRNC (Max DL bit rate = 64 kbit/s)	B67109376.C67191793	Sum	hucasebh , huctbh
VS_NorRel_CS_Conv_64	ACCUMULATION	INTEGER	Number of CS conversational service RABs normally released in the best cell that	B67109376.C67191786	Sum	hucasebh , huctbh

			belongs to the SRNC (Max DL bit rate = 64 kbit/s)			
VS_RAB_Loss_CS_Aal2Loss	ACCUMULATION	INTEGER	Number of released CS RABs triggered by the RNC due to Iu interface AAL2 link failure in a cell	B67109376.C67180080	Sum	hucasebh, huctbh
VS_RAB_Loss_CS_Ab_AcCell1	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of abnormally released CS RABs triggered by the RNC (Cell of Active Set).	B67109376.C67191829	Sum	hucasebh, huctbh
VS_RAB_Loss_CS_Ab_AMR_AcCell	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of abnormally released CS RABs triggered by the RNC (AMR Cell of Active Set).	B67109376.C67191830	Sum	hucasebh, huctbh
VS_RAB_Loss_CS_Abnorm_AMR	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of released RABs triggered by RNC due to abnormal cause	B67109376.C67190517	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			according to different domains in a cell, Numbers of Released RABs Triggered by RNC due to CS Abnormal Cause in a cell (AMR)			
VS_RAB_Loss_CS_Abnorm	ACCUMULATION	INTEGER	Numbers of released RABs triggered by RNC due to abnormal cause according to different domains in a cell, Numbers of Released RABs Triggered by RNC due to CS Abnormal Cause in a cell	B67109376.C67179778	Sum	hucasebh , huctbh
VS_RAB_Loss_CS_AMR_12_2	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC according to different maximum downlink bit rates in a cell.	B67109376.C67190467	Sum	hucasebh , huctbh
VS_RAB_Loss_CS_AMR_4_7_5	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC according to different maximum downlink bit rates in a cell.	B67109376.C67190470	Sum	hucasebh , huctbh
VS_RAB_Loss_CS_AMR_5_9	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC according	B67109376.C67190469	Sum	hucasebh , huctbh

			to different maximum downlink bit rates in a cell.			
VS_RAB_Loss_CS_AMR_7_9_5	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC according to different maximum downlink bit rates in a cell.	B67109376.C67190468	Sum	hucasebh, huctbh
VS_RAB_Loss_CS_AMR	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC according to different maximum downlink bit rates in a cell.	B67109376.C67180082	Sum	hucasebh, huctbh
VS_RAB_Loss_CS_AMRWB_12_65	ACCUMULATION	INTEGER	Number of abnormally released RABs triggered by the RNC in the best cell due to failures in the CS domain (DL 12.65 kbit/s)	B67109376.C67192207	Sum	hucasebh, huctbh
VS_RAB_Loss_CS_AMRWB_14_25	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011: Number of abnormally released RABs triggered by the RNC in the best cell due to failures in the CS domain (DL	B67109376.C67192206	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			14.25 kbit/s)			
VS_RAB_Loss _CS_AMRWB _15_85	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900R 011: Number of abnormally released RABs triggered by the RNC in the best cell due to failures in the CS domain (DL 15.85 kbit/s)	B67109376.C671 92205	Sum	hucasebh , huctbh
VS_RAB_Loss _CS_AMRWB _18_25	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900R 011: Number of abnormally released RABs triggered by the RNC in the best cell due to failures in the CS domain (DL 18.25 kbit/s)	B67109376.C671 92204	Sum	hucasebh , huctbh
VS_RAB_Loss _CS_AMRWB _19_85	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900R 011: Number of abnormally released RABs triggered by the RNC in the best cell due to failures in the CS domain (DL 19.85 kbit/s)	B67109376.C671 92203	Sum	hucasebh , huctbh
VS_RAB_Loss _CS_AMRWB _2_0	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900R 011: Number of abnormally released RABs triggered by the RNC in the best cell due to failures in the	B67109376.C671 92210	Sum	hucasebh , huctbh

			CS domain (DL 2.0 kbit/s)			
VS_RAB_Loss _CS_AMRWB _23_05	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900R 011: Number of abnormally released RABs triggered by the RNC in the best cell due to failures in the CS domain (DL 23.05 kbit/s)	B67109376.C671 92202	Sum	hucasebh , huctbh
VS_RAB_Loss _CS_AMRWB _23_85	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900R 011: Number of abnormally released RABs triggered by the RNC in the best cell due to failures in the CS domain (DL 23.85 kbit/s)	B67109376.C671 92201	Sum	hucasebh , huctbh
VS_RAB_Loss _CS_AMRWB _6_6	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900R 011: Number of abnormally released RABs triggered by the RNC in the best cell due to failures in the CS domain (DL 6.60 kbit/s)	B67109376.C671 92209	Sum	hucasebh , huctbh
VS_RAB_Loss _CS_AMRWB _8_85	ACCUMULA TION	INTEG ER	Number of abnormally released RABs triggered by the	B67109376.C671 92208	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			RNC in the best cell due to failures in the CS domain (DL 8.85 kbit/s)			
VS_RAB_Loss_CS_Congstion_CELL	ACCUMULATION	INTEGER	Number of released PS RABs triggered by the RNC due to CELL congestion in a cell	B67109376.C67190841	Sum	hucasebh , huctbh
VS_RAB_Loss_CS_Conv64K	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC according to different maximum downlink bit rates in a cell.	B67109376.C67180083	Sum	hucasebh , huctbh
VS_RAB_Loss_CS_Norm_AcCell	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of normally released CS RABs triggered by the RNC (Cell of Active Set).	B67109376.C67191832	Sum	hucasebh , huctbh
VS_RAB_Loss_CS_Norm_AMR_AcCell	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of normally released CS RABs triggered by the RNC (AMR Cell of Active Set).	B67109376.C67191833	Sum	hucasebh , huctbh
VS_RAB_Loss_CS_Norm_AMR	ACCUMULATION	INTEGER	Numbers of released RABs triggered by	B67109376.C67190518	Sum	hucasebh , huctbh

			RNC due to normal cause according to different domains in a cell, Numbers of Released RABs Triggered by RNC due to CS Normal Cause in a cell (AMR)			
VS_RAB_Loss_CS_Norm	ACCUMULATION	INTEGER	Numbers of released RABs triggered by RNC due to normal cause according to different domains in a cell, Numbers of Released RABs Triggered by RNC due to CS Normal Cause in a cell	B67109376.C67179779	Sum	hucasebh , huctbh
VS_RAB_Loss_CS_RF_AcCell	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of CS domain RAB releases triggered by the RNC due to RF failures (Cell of Active Set).	B67109376.C67191826	Sum	hucasebh , huctbh
VS_RAB_Loss_CS_RF_AMR_AcCell	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of CS domain RAB	B67109376.C67191828	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			releases triggered by the RNC due to RF failures (AMR Cell of Active Set).			
VS_RAB_Loss_CS_RF_AMR	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of released RABs triggered by the RNC due to RF by Traffic Classes, Count of CS domain RAB Release Triggered by RNC due to RF Loss in a cell (AMR)	B67109376.C67190516	Sum	hucasebh , huctbh
VS_RAB_Loss_CS_RF_Oth	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC according to different RF reasons, Count of CS domain RAB Release Triggered by RNC due to RF Loss (Other cause) in a cell	B67109376.C67189565	Sum	hucasebh , huctbh
VS_RAB_Loss_CS_RF_RLC Rst	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC according to different RF reasons, Count of CS domain RAB Release Triggered by RNC due to RF Loss (Uplink	B67109376.C67189563	Sum	hucasebh , huctbh

			RLC Reset) in a cell			
VS_RAB_Loss_CS_RF_ULSync	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC according to different RF reasons, Count of CS domain RAB Release Triggered by RNC due to RF Loss (Uplink Synchronization Fail) in a cell	B67109376.C67189568	Sum	hucasebh, huctbh
VS_RAB_Loss_CS_RF_UuNoReply	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC according to different RF reasons, Count of CS domain RAB Release Triggered by RNC due to RF Loss (Failure in the Radio Interface Procedure) in a cell	B67109376.C67190505	Sum	hucasebh, huctbh
VS_RAB_Loss_CS_RF	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC according to different RF reasons, Count of CS domain RAB Release Triggered by RNC due to RF	B67109376.C67179777	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Loss in a cell			
VS_RAB_Loss_CS_SRBReset	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC due to signalling Radio Link Control (RLC) Reset according to different domains, Number of released CS RABs triggered by RNC due to signalling RLC reset in a cell	B67109376.C67180077	Sum	hucasebh , huctbh
VS_RAB_RelReqCS_OM	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC in a cell according to different release causes.	B67109376.C67180067	Sum	hucasebh , huctbh
VS_RAB_RelReqCS_RABPreempt	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC in a cell according to different release causes.	B67109376.C67180069	Sum	hucasebh , huctbh
VS_RAB_RelReqCS_UTRANgen	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC in a cell according to different release causes.	B67109376.C67180068	Sum	hucasebh , huctbh

7.5.51 Cell.Huawei.UMTS.RAB_Abnorm_Release_HSDPA

RAB Abnormal Release for HSDPA

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_HSPA_RAB_Loss_Abn_CS_Conv	ACCUMULATION	INTEGER	Number of abnormally released CS RAB which bears on HSPA in the best cell.	B67109376.C67196204	Sum	hucasebh, huctbh
VS_HSPA_RAB_Loss_Norm_CS_Conv	ACCUMULATION	INTEGER	Number of CS over HSPA RAB Release due to normal Loss in the best cell.	B67109376.C67196205	Sum	hucasebh, huctbh
VS_RAB_RelReqPS_BE_HSDPA_Cong_Copper	ACCUMULATION	INTEGER	Number of released copper user's PS BE RABs beared on HSDPA triggered by the RNC due to cell congestion	B67109376.C67192977	Sum	hucasebh, huctbh
VS_RAB_RelReqPS_BE_HSDPA_Cong_Golden	ACCUMULATION	INTEGER	Number of released golden user's PS BE RABs beared on HSDPA triggered by the RNC due to cell congestion	B67109376.C67192975	Sum	hucasebh, huctbh
VS_RAB_RelReqPS_BE_HSDPA_Cong_Silver	ACCUMULATION	INTEGER	Number of released silver user's PS BE RABs beared on HSDPA triggered by the RNC due to cell	B67109376.C67192976	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			congestion			
--	--	--	------------	--	--	--

7.5.52 Cell.Huawei.UMTS.RAB_Abnorm_Release_HSUPA

RAB Abnormal Release for HSUPA

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RAB_RelReqPS_BE_HSUPA_Cong_Copper	ACCUMULATION	INTEGER	Number of released copper user's PS BE RABs beared on HSUPA triggered by the RNC due to cell congestion	B67109376.C67192980	Sum	hucasebh , huctbh
VS_RAB_RelReqPS_BE_HSUPA_Cong_Golden	ACCUMULATION	INTEGER	Number of released golden user's PS BE RABs beared on HSUPA triggered by the RNC due to cell congestion	B67109376.C67192978	Sum	hucasebh , huctbh
VS_RAB_RelReqPS_BE_HSUPA_Cong_Silver	ACCUMULATION	INTEGER	Number of released silver user's PS BE RABs beared on HSUPA triggered by the RNC due to cell congestion	B67109376.C67192979	Sum	hucasebh , huctbh

7.5.53 Cell.Huawei.UMTS.RAB_Abnorm_Release_PS

RAB Abnormal Release PS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_Abnorm_Release_PS_Conv	ACCUMULATION	INTEGER	Number of RABs that are	B67109376.C67192598	Sum	hucasebh , huctbh

			specific for PS conversational services on the DCH (excluding the HS-DSCH) and are released for abnormal causes in the best cell which is under the SRNC			
VS_Abnorm_Rel_PS_Str	ACCUMULATION	INTEGER	Number of RABs that are specific for PS streaming services on the DCH (excluding the HS-DSCH) and are released for abnormal causes in the best cell which is under the SRNC	B67109376.C67192599	Sum	hucasebh , huctbh
VS_AbRel_PS_BE_RB_0_32	ACCUMULATION	INTEGER	Number of abnormally released PS BE service RABs in the best cell that belongs to the SRNC (Max DL bit rate in [0,32] kbit/s)	B67109376.C67191814	Sum	hucasebh , huctbh
VS_AbRel_PS_BE_RB_144_384	ACCUMULATION	INTEGER	Number of abnormally released PS BE service RABs in the best cell that belongs to the SRNC (Max DL	B67109376.C67191817	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			bit rate in [144,384] kbit/s)			
VS_AbRel_PS_BE_RB_32_64	ACCUMULATION	INTEGER	Number of abnormally released PS BE service RABs in the best cell that belongs to the SRNC (Max DL bit rate in [32,64] kbit/s)	B67109376.C67191815	Sum	hucasebh , huctbh
VS_AbRel_PS_BE_RB_64_144	ACCUMULATION	INTEGER	Number of abnormally released PS BE service RABs in the best cell that belongs to the SRNC (Max DL bit rate in [64,144] kbit/s)	B67109376.C67191816	Sum	hucasebh , huctbh
VS_AbRel_PS_CCH	ACCUMULATION	INTEGER	Number of abnormally released PS RABs in the best cell that belongs to the SRNC (the PS service is on the CCH)	B67109376.C67191818	Sum	hucasebh , huctbh
VS_Norm_Rel_PS_0kbps_Timeout	ACCUMULATION	INTEGER	This measurement item takes statistics of the time of released RAB of 0kbps for failed to rate up in the best cell.	B67109376.C67196302	Sum	hucasebh , huctbh
VS_Norm_Rel_PS_Conv_UISigRel	ACCUMULATION	INTEGER	Number of released PS conversational service RABs with the cause of uplink signalling	B67109376.C67192604	Sum	hucasebh , huctbh

			connection release in the best cell that belongs to the SRNC			
VS_Norm_Rel_PS_Conv	ACCUMULATION	INTEGER	Number of RABs that are specific for PS conversational services on the DCH (excluding the HS-DSCH) and are normally released in the best cell which is under the SRNC	B67109376.C67192601	Sum	hucasebh , huctbh
VS_Norm_Rel_PS_Str_UISigRel	ACCUMULATION	INTEGER	Number of released PS streaming service RABs with the cause of uplink signalling connection release in the best cell that belongs to the SRNC	B67109376.C67192605	Sum	hucasebh , huctbh
VS_Norm_Rel_PS_Str	ACCUMULATION	INTEGER	Number of RABs that are specific for PS streaming services on the DCH (excluding the HS-DSCH) and are normally released in the best cell which is under the SRNC	B67109376.C67192602	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_NorRel_PS _BE_0_32_ULRel	ACCUMULATION	INTEGER	Number of released PS BE service RABs with the cause of uplink signaling connection release in the best cell that belongs to the SRNC (Max DL bit rate in [0,32] kbit/s)	B67109376.C67191794	Sum	hucasebh , huctbh
VS_NorRel_PS _BE_0_32	ACCUMULATION	INTEGER	Number of PS BE service RABs normally released in the best cell that belongs to the SRNC (Max DL bit rate in [0,32] kbit/s)	B67109376.C67191787	Sum	hucasebh , huctbh
VS_NorRel_PS _BE_144_384_ULRel	ACCUMULATION	INTEGER	Number of released PS BE service RABs with the cause of uplink signaling connection release in the best cell that belongs to the SRNC (Max DL bit rate in [144,384] kbit/s)	B67109376.C67191797	Sum	hucasebh , huctbh
VS_NorRel_PS _BE_144_384	ACCUMULATION	INTEGER	Number of PS BE service RABs normally released in the best cell that belongs to the SRNC (Max DL bit rate in [144,384] kbit/s)	B67109376.C67191790	Sum	hucasebh , huctbh
VS_NorRel_PS	ACCUMULATION	INTEGER	Number of	B67109376.C671	Sum	hucasebh

_BE_32_64_UL Rel	TION	ER	released PS BE service RABs with the cause of uplink signaling connection release in the best cell that belongs to the SRNC (Max DL bit rate in [32,64] kbit/s)	91795		, huctbh
VS_NorRel_PS _BE_32_64	ACCUMULA TION	INTEG ER	Number of PS BE service RABs normally released in the best cell that belongs to the SRNC (Max DL bit rate in [32,64] kbit/s)	B67109376.C671 91788	Sum	hucasebh , huctbh
VS_NorRel_PS _BE_64_144_U LRel	ACCUMULA TION	INTEG ER	Number of released PS BE service RABs with the cause of uplink signaling connection release in the best cell that belongs to the SRNC (Max DL bit rate in [64,144] kbit/s)	B67109376.C671 91796	Sum	hucasebh , huctbh
VS_NorRel_PS _BE_64_144	ACCUMULA TION	INTEG ER	Number of the PS BE service RABs normally released in the best cell that belongs to the SRNC (Max DL bit rate in	B67109376.C671 91789	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			[64,144] kbit/s)			
VS_NorRel_PS_CCH_USRel	ACCUMULATION	INTEGER	Number of released PS RABs with the cause of uplink signaling connection release in the best cell that belongs to the SRNC (the PS service is on the CCH)	B67109376.C67191798	Sum	hucasebh , huctbh
VS_NorRel_PS_CCH	ACCUMULATION	INTEGER	Number of the PS BE service RABs normally released in the best cell that belongs to the SRNC (Max DL bit rate in [64,144] kbit/s)	B67109376.C67191791	Sum	hucasebh , huctbh
VS_NorRel_PS_HS_USRel	ACCUMULATION	INTEGER	Number of RABs released for uplink signaling connection release in the best cell that belongs to the SRNC.	B67109376.C67191799	Sum	hucasebh , huctbh
VS_RAB_Loss_PS_128K	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of released RABs triggered by the RNC according to different maximum downlink bit rates in a cell.	B67109376.C67180085	Sum	hucasebh , huctbh
VS_RAB_Loss_	ACCUMULATION	INTEGER	Obsolete in	B67109376.C671	Sum	hucasebh

PS_384K	TION	ER	release Vn00R010. Numbers of released RABs triggered by the RNC according to different maximum downlink bit rates in a cell.	80084		, huctbh
VS_RAB_Loss_PS_64K	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of released RABs triggered by the RNC according to different maximum downlink bit rates in a cell.	B67109376.C67180086	Sum	hucasebh, huctbh
VS_RAB_Loss_PS_Abnorm_AcCell	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of abnormally released PS RABs triggered by the RNC (Cell of Active Set).	B67109376.C67191831	Sum	hucasebh, huctbh
VS_RAB_Loss_PS_Abnorm_DL128	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of released RABs triggered by RNC due to abnormal cause according to	B67109376.C67190511	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			different domains in a cell, Numbers of Released RABs Triggered by RNC due to PS Abnormal Cause in a cell (DL 128 kbps/s)			
VS_RAB_Loss_PS_Abnorm_DL 384	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of released RABs triggered by RNC due to abnormal cause according to different domains in a cell, Numbers of Released RABs Triggered by RNC due to PS Abnormal Cause in a cell (DL 384 kbps/s)	B67109376.C67190512	Sum	hucasebh , huctbh
VS_RAB_Loss_PS_Abnorm_DL 64	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of released RABs triggered by RNC due to abnormal cause according to different domains in a cell, Numbers of Released RABs Triggered by RNC due to PS Abnormal Cause in a cell (DL 64 kbps/s)	B67109376.C67190510	Sum	hucasebh , huctbh

VS_RAB_Loss_PS_Abnorm	ACCUMULATION	INTEGER	Numbers of released RABs triggered by RNC due to abnormal cause according to different domains in a cell, Numbers of Released RABs Triggered by RNC due to CS Abnormal Cause in a cell	B67109376.C67179781	Sum	hucasebh , huctbh
VS_RAB_Loss_PS_Congstion_CELL	ACCUMULATION	INTEGER	Number of released PS RABs triggered by the RNC due to CELL congestion in a cell	B67109376.C67190840	Sum	hucasebh , huctbh
VS_RAB_Loss_PS_GTPULoss	ACCUMULATION	INTEGER	Number of released PS RABs triggered by the RNC due to GTPU failure in a cell	B67109376.C67180081	Sum	hucasebh , huctbh
VS_RAB_Loss_PS_Norm_AcCell	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of normally released PS RABs triggered by the RNC (Cell of Active Set).	B67109376.C67191834	Sum	hucasebh , huctbh
VS_RAB_Loss_PS_Norm_DL12	ACCUMULATION	INTEGER	Obsolete in release	B67109376.C67190514	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

8			Vn00R010. Numbers of released RABs triggered by RNC due to normal cause according to different domains in a cell, Numbers of Released RABs Triggered by RNC due to PS Normal Cause in a cell (DL 128 kbps/s			
VS_RAB_Loss_ PS_Norm_DL38 4	ACCUMULA TION	INTEG ER	Obsolete in release Vn00R010. Numbers of released RABs triggered by RNC due to normal cause according to different domains in a cell, Numbers of Released RABs Triggered by RNC due to PS Normal Cause in a cell (DL 384 kbps/s)	B67109376.C671 90515	Sum	hucasebh , huctbh
VS_RAB_Loss_ PS_Norm_DL64	ACCUMULA TION	INTEG ER	Obsolete in release Vn00R010. Numbers of released RABs triggered by RNC due to normal cause according to different domains in a	B67109376.C671 90513	Sum	hucasebh , huctbh

			cell, Numbers of Released RABs Triggered by RNC due to PS Normal Cause in a cell (DL 64 kbps/s)			
VS_RAB_Loss_PS_Norm	ACCUMULATION	INTEGER	Numbers of released RABs triggered by RNC due to normal cause according to different domains in a cell, Numbers of Released RABs Triggered by RNC due to PS Normal Cause in a cell	B67109376.C67179782	Sum	hucasebh, huctbh
VS_RAB_Loss_PS_RF_AcCell	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of PS domain RAB releases triggered by the RNC due to RF failures (Cell of Active Set).	B67109376.C67191827	Sum	hucasebh, huctbh
VS_RAB_Loss_PS_RF_DL128	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of released RABs triggered by the RNC due to RF by Traffic Classes, Count	B67109376.C67190508	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			of PS domain RAB Release Triggered by RNC due to RF Loss in a cell (DL 128 kbps/s)			
VS_RAB_Loss_ PS_RF_DL384	ACCUMULA TION	INTEG ER	Obsolete in release Vn00R010. Numbers of released RABs triggered by the RNC due to RF by Traffic Classes, Count of CS domain RAB Release Triggered by RNC due to RF Loss in a cell (DL 384 kbps/s)	B67109376.C671 90509	Sum	hucasebh , huctbh
VS_RAB_Loss_ PS_RF_DL64	ACCUMULA TION	INTEG ER	Obsolete in release Vn00R010. Numbers of released RABs triggered by the RNC due to RF by Traffic Classes, Count of CS domain RAB Release Triggered by RNC due to RF Loss in a cell (DL 64 kbps/s)	B67109376.C671 90507	Sum	hucasebh , huctbh
VS_RAB_Loss_ PS_RF_Oth	ACCUMULA TION	INTEG ER	Numbers of released RABs triggered by the RNC according to different RF reasons, Count of PS domain RAB Release	B67109376.C671 89571	Sum	hucasebh , huctbh

			Triggered by RNC due to RF Loss(Other cause) in a cell			
VS_RAB_Loss_PS_RF_RLCReset	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC according to different RF reasons, Count of PS domain RAB Release Triggered by RNC due to RF Loss(Uplink RLC Reset) in a cell	B67109376.C67189569	Sum	hucasebh , huctbh
VS_RAB_Loss_PS_RF_ULSync	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC according to different RF reasons, Count of PS domain RAB Release Triggered by RNC due to RF Loss(Uplink Synchronization Fail) in a cell	B67109376.C67189572	Sum	hucasebh , huctbh
VS_RAB_Loss_PS_RF_UuNoReply	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC according to different RF reasons, Count of PS domain RAB Release Triggered by RNC due to RF	B67109376.C67190506	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Loss(Failure in the Radio Interface Procedure) in a cell			
VS_RAB_Loss_PS_RF	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC according to different RF reasons, Count of PS domain RAB Release Triggered by RNC due to RF Loss in a cell	B67109376.C67179780	Sum	hucasebh , huctbh
VS_RAB_Loss_PS_SRBRReset	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC due to signalling Radio Link Control (RLC) Reset according to different domains, Number of released CS RABs triggered by RNC due to signalling RLC reset in a cell	B67109376.C67180078	Sum	hucasebh , huctbh
VS_RAB_Loss_PS_TRBRReset	ACCUMULATION	INTEGER	Number of released PS RABs triggered by RNC due to traffic RLC reset in a cell.	B67109376.C67180079	Sum	hucasebh , huctbh
VS_RAB_Loss_PS_UEGen_128K	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of released PS	B67109376.C67191837	Sum	hucasebh , huctbh

			RABs triggered by the RNC due to uplink signaling connection release in the best cell that belongs to the SRNC (Max DL bit rate = 128 kbit/s)			
VS_RAB_Loss_PS_UEGen_384K	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of released PS RABs triggered by the RNC due to uplink signaling connection release in the best cell that belongs to the SRNC (Max DL bit rate = 384 kbit/s)	B67109376.C67191836	Sum	hucasebh , huctbh
VS_RAB_Loss_PS_UEGen_64K	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of released PS RABs triggered by the RNC due to uplink signaling connection release in the best cell that belongs to the	B67109376.C67191838	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			SRNC (Max DL bit rate = 64 kbit/s)			
VS_RAB_Loss_PS_UEGen	ACCUMULATION	INTEGER	Number of released PS RABs triggered by the RNC due to uplink signaling connection release in the best cell that belongs to the SRNC	B67109376.C67191835	Sum	hucasebh , huctbh
VS_RAB_RelAbnomaPS_CMB_Cell	ACCUMULATION	INTEGER	Obsolete from UTRAN/V100V 200R011:Numbers of CMB abnormal released RABs triggered by the RNC in a cell.	B67109376.C67190598	Sum	hucasebh , huctbh
VS_RAB_RelReqPS_OM	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC in a cell according to different release causes.	B67109376.C67180074	Sum	hucasebh , huctbh
VS_RAB_RelReqPS_RABPreempt	ACCUMULATION	INTEGER	Numbers of released RABs triggered by the RNC in a cell according to different release causes.	B67109376.C67180076	Sum	hucasebh , huctbh

7.5.54 Cell.Huawei.UMTS.RAB_Abnorm_Release

RAB abnormal release measurement.

KPI	Type	Data Type	Description	Derivation	Default Aggrega	Other Aggrega
-----	------	-----------	-------------	------------	-----------------	---------------

					tor	tors
VS_CallDrop_AMR_BestCell	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109376.C67192286	Sum	hucasebh , huctbh
VS_CallDrop_PS_BestCell	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109376.C67192290	Sum	hucasebh , huctbh
VS_CallDrop_VP_BestCell	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109376.C67192288	Sum	hucasebh , huctbh
VS_CallNormalRel_AMR_BestCell	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109376.C67192287	Sum	hucasebh , huctbh
VS_CallNormalRel_PS_BestCell	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109376.C67192291	Sum	hucasebh , huctbh
VS_CallNormalRel_VP_BestCell	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109376.C67192289	Sum	hucasebh , huctbh
VS_RAB_Loss_VP_LIMIT	ACCUMULATION	INTEGER	Number of normally released CS VP RABs triggered by RNC because VP is forbidden in target cell of SHO/HHO/Cell Update.	B67109376.C67196233	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

7.5.55 Cell.Huawei.UMTS.RAB_Blocking_PS

RAB Blocking PS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RAB_Block_PS_Bkg_0_32	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully established due to congestion, according to different traffic classes and different maximum DL bit rates, Background service 0 not more than Max DL bit rate not more than 32 kbps	B67109373.C67189543	Sum	hucasebh, huctbh
VS_RAB_Block_PS_Bkg_144_384	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully established due to congestion, according to different traffic classes and different maximum DL bit rates, Background service 144 less than Max DL bit rate not more than 384 kbps	B67109373.C67189544	Sum	hucasebh, huctbh
VS_RAB_Block_PS_Bkg_32_64	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully established due to congestion,	B67109373.C67189545	Sum	hucasebh, huctbh

			according to different traffic classes and different maximum DL bit rates, Background service 32 less than Max DL bit rate not more than 64 kbps			
VS_RAB_Block_PS_Bkg_64_144	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully established due to congestion, according to different traffic classes and different maximum DL bit rates, Background service 64 less than Max DL bit rate not more than 144 kbps	B67109373.C67189546	Sum	hucasebh, huctbh
VS_RAB_Block_PS_Conv_0_32	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully established due to congestion, according to different traffic classes and different maximum DL bit rates, Conversational service 0 (Max	B67109373.C67189547	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			DL bit rate (32 kbps))			
VS_RAB_Block_PS_Int_0_32	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully established due to congestion, according to different traffic classes and different maximum DL bit rates, Interactive service 0 not more than Max DL bit rate not more than 32 kbps	B67109373.C67189548	Sum	hucasebh , huctbh
VS_RAB_Block_PS_Int_144_384	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully established due to congestion, according to different traffic classes and different maximum DL bit rates, Interactive service 0 not more than Max DL bit rate not more than 32 kbps	B67109373.C67189549	Sum	hucasebh , huctbh
VS_RAB_Block_PS_Int_32_64	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully established due to congestion, according to different traffic classes and	B67109373.C67189550	Sum	hucasebh , huctbh

			different maximum DL bit rates, Interactive service 32 less than Max DL bit rate not more than 64 kbps			
VS_RAB_Block_PS_Int_64_144	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully established due to congestion, according to different traffic classes and different maximum DL bit rates, Interactive service 64 less than Max DL bit rate not more than 144 kbps	B67109373.C67189551	Sum	hucasebh, huctbh
VS_RAB_Block_PS_Str_144_384	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully established due to congestion, according to different traffic classes and different maximum DL bit rates, Streaming service 144 less than Max DL bit rate not more than 384 kbps	B67109373.C67189553	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RAB_Block_PS_Str_64_144	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully established due to congestion, according to different traffic classes and different maximum DL bit rates, Streaming service 64 less than Max DL bit rate not more than 144 kbps	B67109373.C67189555	Sum	hucasebh , huctbh
VS_RAB_Block_PS_BkgMor384	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully established due to congestion, according to different traffic classes and different maximum DL bit rates, Background service 384 kbps less than Max DL bit rate	B67109373.C67190417	Sum	hucasebh , huctbh
VS_RAB_Block_PS_ConvMor32	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully established due to congestion, according to different traffic classes and different maximum DL bit rates, Conversational service 32 kbps less than Max	B67109373.C67190418	Sum	hucasebh , huctbh

			DL bit rate			
VS_RAB_Bloc kPS_IntMor384	ACCUMULA TION	INTEG ER	Numbers of PS RABs unsuccessfully established due to congestion, according to different traffic classes and different maximum DL bit rates, Interactive service 384 kbps less than Max DL bit rate	B67109373.C6719 0447	Sum	hucasebh , huctbh
VS_RAB_Bloc kPS_StrMor38 4	ACCUMULA TION	INTEG ER	Numbers of PS RABs unsuccessfully established due to congestion, according to different traffic classes and different maximum DL bit rates, Streaming service 384 kbps less than Max DL bit rate	B67109373.C6719 0419	Sum	hucasebh , huctbh

7.5.56 Cell.Huawei.UMTS.RAB_CSQueueTime_Cell

RAB CS Queue Time data

KPI	Type	Data Type	Description	Derivation	Default Aggrega tor	Other Aggrega tors
-----	------	--------------	-------------	------------	---------------------------	--------------------------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RAB_CSQueueTime_Con_Cell_CUM	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109368.C67190421	Sum	hucasebh, huctbh
VS_RAB_CSQueueTime_Con_Cell_SAMPLE	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109368.C67190422	Sum	hucasebh, huctbh
VS_RAB_CSQueueTime_Str_Cell_CUM	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109368.C67190423	Sum	hucasebh, huctbh
VS_RAB_CSQueueTime_Str_Cell_SAMPLE	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109368.C67190424	Sum	hucasebh, huctbh
VS_RAB_Estab_CS_DCH_MaxTime	INTENSITY	INTEGER	Maximum delay of RAB setup on DCH in the CS domain	B67109368.C67192716	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RAB_Estab_CS_DCH_MeanTime	INTENSITY	FLOAT	Mean delay of RAB setup on DCH in the CS domain	B67109368.C67192715	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.57 Cell.Huawei.UMTS.RAB_DCH_to_EDCH_Switch

RAB DCH to RAB EDCH switches

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_DRD_RB_D2E_AtIn	ACCUMULATION	INTEGER	Number of DCH to HSUPA DRDs into a cell. Number of	B67109378.C67195505	Sum	hucasebh, huctbh

			radio bearer setup/radio bearer reconfiguration messages sent to the UE, which indicates that the UE attempts to redirect to a target cell with the channel transformation type of "DCH to HSUPA".			
VS_DRD_RB_D2E_AttOut	ACCUMULATION	INTEGER	Number of DCH to HSUPA DRDs out of a cell. Number of radio bearer setup/radio bearer reconfiguration messages sent to the UE, which indicates that the UE attempts to redirect to a target cell with the channel transformation type of "DCH to HSUPA".	B67109378.C67195503	Sum	hucasebh, huctbh
VS_DRD_RB_D2E_SuccIn	ACCUMULATION	INTEGER	Number of successful DCH to HSUPA DRDs into a cell	B67109378.C67195506	Sum	hucasebh, huctbh
VS_DRD_RB_D2E_SuccOut	ACCUMULATION	INTEGER	Number of successful DCH to HSUPA DRDs out of a	B67109378.C67195504	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			cell			
--	--	--	------	--	--	--

7.5.58 Cell.Huawei.UMTS.RAB_Establish_Failure_CS

RAB Establish Failure CS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RAB_Block_CS_Conv_32_64	ACCUMULATION	INTEGER	Obsolete in Vn00R010 release. Numbers of unsuccessful CS RAB setups due to congestion in each cell, Conversational service 32 less than Max DL bit rate (64 kbps)	B67109369.C67189491	Sum	hucasebh, huctbh
VS_RAB_FailEstab_CS_DLIUBBand_Cong	ACCUMULATION	INTEGER	Number of RABs that fail to be set up in the CS domain with the failure cause of rejection by admission control due to downlink Iub bandwidth congestion	B67109369.C67192610	Sum	hucasebh, huctbh
VS_RAB_FailEstab_CS_ULIUBBand_Cong	ACCUMULATION	INTEGER	Number of RABs that fail to be set up in the CS domain with the failure cause of rejection by admission control due to uplink Iub bandwidth congestion	B67109369.C67192611	Sum	hucasebh, huctbh
VS_RAB_FailEstabCS_Cong	ACCUMULATION	INTEGER	Number of unsuccessful CS RAB setups due to congestion in each cell. This item includes VS.RAB.FailEstCs.Power.Cong, VS.RAB.FailEstCs.ULCE.Cong, VS.RAB.FailEstCs.DL	B67109369.C67189494	Sum	hucasebh, huctbh

			CE.Cong, VS.RAB.FailEstCs.Co de.Cong and VS.RAB.FailEstCs.IU B.Band			
VS_RAB_Fai lEstabCS_RN L	ACCUMULA TION	INTEG ER	Number of unsuccessful CS RAB setups due to radio network layer cause in each cell. This item includes VS.RAB.FailEstCS.Re lo, VS.RAB.FailEstCS.RI PFail and VS.RAB.FailEstCS.Un sp	B67109369.C 67189495	Sum	hucasebh , huctbh
VS_RAB_Fai lEstabCS_TN L	ACCUMULA TION	INTEG ER	Number of unsuccessful CS RAB setups due to transport network layer cause in each cell.	B67109369.C 67189496	Sum	hucasebh , huctbh
VS_RAB_Fai lEstCs_Code _Cong	ACCUMULA TION	INTEG ER	Numbers of CS RABs unsuccessfully established in a cell due to resource congestion causes.	B67109369.C 67179864	Sum	hucasebh , huctbh
VS_RAB_Fai lEstCs_DLC E_Cong	ACCUMULA TION	INTEG ER	Numbers of CS RABs unsuccessfully established in a cell due to resource congestion causes.	B67109369.C 67190407	Sum	hucasebh , huctbh
VS_RAB_Fai lEstCs_IUB_ Band	ACCUMULA TION	INTEG ER	Obsolete in Vn00R010 release. Numbers of CS RABs unsuccessfully established in a cell due to resource	B67109369.C 67181407	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			congestion causes			
VS_RAB_FailEstCs_Power_Cong	ACCUMULATION	INTEGER	Numbers of CS RABs unsuccessfully established in a cell due to resource congestion causes	B67109369.C67179862	Sum	hucasebh , huctbh
VS_RAB_FailEstCS_Relo	ACCUMULATION	INTEGER	Number of CS RABs unsuccessfully established due to relocation triggered in a cell	B67109369.C67179831	Sum	hucasebh , huctbh
VS_RAB_FailEstCS_RIPF ail	ACCUMULATION	INTEGER	Number of unsuccessful CS RAB setups due to air interface cause in each cell	B67109369.C67179865	Sum	hucasebh , huctbh
VS_RAB_FailEstCs_ULCE_Cong	ACCUMULATION	INTEGER	Numbers of CS RABs unsuccessfully established in a cell due to resource congestion causes	B67109369.C67190406	Sum	hucasebh , huctbh
VS_RAB_FailEstCS_Unsp	ACCUMULATION	INTEGER	Number of unsuccessful CS RAB setups due to capability cause in each cell	B67109369.C67179830	Sum	hucasebh , huctbh

7.5.59 Cell.Huawei.UMTS.RAB_Establish_Failure_PS

RAB Establish Failure PS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RAB_FailEstab_PS_DLIU BBand_Cong	ACCUMULATION	INTEGER	Number of RABs that fail to be set up in the PS domain with the failure cause of rejection by admission control due to	B67109373.C67192612	Sum	hucasebh , huctbh

			downlink Iub bandwidth congestion			
VS_RAB_FailE stab_PS_ULIU BBand_Cong	ACCUMULA TION	INTEG ER	Number of RABs that fail to be set up in the PS domain with the failure cause of rejection by admission control due to uplink Iub bandwidth congestion	B67109373.C6719 2613	Sum	hucasebh , huctbh
VS_RAB_FailE stPs_Code_Con g	ACCUMULA TION	INTEG ER	Numbers of PS RABs unsuccessfully established in a cell due to different Radio Resource Congestion causes.	B67109373.C6717 9967	Sum	hucasebh , huctbh
VS_RAB_FailE stPs_DLCE_Co ng	ACCUMULA TION	INTEG ER	Numbers of PS RABs unsuccessfully established in a cell due to different Radio Resource Congestion causes.	B67109373.C6719 0409	Sum	hucasebh , huctbh
VS_RAB_FailE stPs_IUB_Band	ACCUMULA TION	INTEG ER	Obsolete in release Vn00R010. Numbers of PS RABs unsuccessfully	B67109373.C6718 1408	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			established in a cell due to different Radio Resource Congestion causes.			
VS_RAB_FailurePS_NResourcesAvailable	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully established in a cell due to different causes, Numbers of PS Domain RABs unsuccessfully established due to No Resource Available	B67109373.C67179932	Sum	hucasebh , huctbh
VS_RAB_FailurePS_Par	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully established in a cell due to different causes,	B67109373.C67179929	Sum	hucasebh , huctbh
VS_RAB_FailurePS_Power_Con	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully established due to No Resource Available because of power	B67109373.C67179965	Sum	hucasebh , huctbh
VS_RAB_FailurePS_Relo	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully established in a cell due to different causes, Numbers of PS RABs unsuccessfully established due to Relocation	B67109373.C67179931	Sum	hucasebh , huctbh

			Triggered			
VS_RAB_FailE stPS_RIPFail	ACCUMULA TION	INTEG ER	Numbers of PS RABs unsuccessfully established in a cell due to different causes, Numbers of PS RABs unsuccessfully established due to Radio Interface, including the cause values below: Failure in the Radio Interface Procedure	B67109373.C6717 9974	Sum	hucasebh , huctbh
VS_RAB_FailE stPS_RNL	ACCUMULA TION	INTEG ER	Numbers of PS RABs unsuccessfully established in a cell due to different causes, Numbers of PS Domain RABs unsuccessfully established due to Radio Network Layer	B67109373.C6718 9556	Sum	hucasebh , huctbh
VS_RAB_FailE stPS_TNL	ACCUMULA TION	INTEG ER	Numbers of PS RABs unsuccessfully established in a cell due to different causes, Numbers of PS Domain RABs unsuccessfully	B67109373.C6718 9557	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			established due to Transmission Network Layer			
VS_RAB_Failure stPs_ULCE_Cong	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully established due to No Resource Available because of uplink cell	B67109373.C67190408	Sum	hucasebh , huctbh
VS_RAB_Failure stPS_Unsp	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully established in a cell due to different causes, Numbers of PS RABs unsuccessfully established due to UTRAN capability not supported, including the cause values below: Requested Traffic Class not Available, Requested Maximum Bit Rate not Available, Requested Maximum Bit Rate for DL not Available, Requested Maximum Bit Rate for UL not Available, Requested Guaranteed Bit Rate not	B67109373.C67179930	Sum	hucasebh , huctbh

			Available, Requested Guaranteed Bit Rate for DL not Available, Requested Guaranteed Bit Rate for UL not Available, Requested Transfer Delay not Achievable			
--	--	--	---	--	--	--

7.5.60 Cell.Huawei.UMTS.RAB_Establishment_AMR_WB

RAB establishment AMR WB data.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_RAB_SuccEstab_AMRWB	PERCENTAGE	FLOAT	Percentage of AMRWB RABs successfully established in a cell.	$100 * \frac{\{VS_RAB_SuccEstab_AMRWB\}}{\{VS_RAB_AttEstabCS_AMRWB\}}$	Average	hucasebh, huctbh
VS_RAB_AttEstabCS_AMRWB	ACCUMULATION	INTEGER	Number of AMRWB RABs requested to establish in a cell.	B67109368.C67192120	Sum	hucasebh, huctbh
VS_RAB_SuccEstab_AMRWB	ACCUMULATION	INTEGER	Number of AMRWB RABs successfully established in a cell.	B67109368.C67192121	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

7.5.61 Cell.Huawei.UMTS.RAB_Establishment_AMR

RAB Establishment AMR data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_RAB_SuccEstab_AMR	PERCENTAGE	FLOAT	Percentage CS RABs of different traffic classes successfully established in a cell.	$100 * \frac{\{VS_RAB_SuccEstab_AMR\}}{\{VS_RAB_AttEstab_AMR\}}$	Average	hucasebh, huctbh
VS_RAB_AttEstab_AMR	ACCUMULATION	INTEGER	Numbers of CS RABs of different traffic classes requested to establish in a cell.	B67109368.C67179858	Sum	hucasebh, huctbh
VS_RAB_AttEstabCS_AMR_12_2	ACCUMULATION	INTEGER	Numbers of CS RABs of different traffic classes requested to establish in a best cell.	B67109368.C67190457	Sum	hucasebh, huctbh
VS_RAB_AttEstCS_AMR_4_75	ACCUMULATION	INTEGER	Numbers of CS RABs of different traffic classes requested to establish in a best cell.	B67109368.C67190460	Sum	hucasebh, huctbh
VS_RAB_AttEstCS_AMR_5_9	ACCUMULATION	INTEGER	Numbers of CS RABs of different traffic classes requested to establish in a best cell.	B67109368.C67190459	Sum	hucasebh, huctbh
VS_RAB_AttEst	ACCUMULATION	INTEGER	Numbers of CS	B67109368.C6719	Sum	hucasebh

tCS_AMR_7_95	TION	ER	RABs of different traffic classes requested to establish in a best cell.	0458		, huctbh
VS_RAB_Succ Estab_AMR	ACCUMULA TION	INTEG ER	Numbers of the CS RABs of different traffic classes successfully established in a cell.	B67109368.C6717 9860	Sum	hucasebh , huctbh
VS_RAB_Succ EstabCS_AMR_12_2	ACCUMULA TION	INTEG ER	Numbers of the CS RABs of different traffic classes successfully established in a best cell.	B67109368.C6719 0461	Sum	hucasebh , huctbh
VS_RAB_Succ EstCS_AMR_4_75	ACCUMULA TION	INTEG ER	Numbers of the CS RABs of different traffic classes successfully established in a best cell.	B67109368.C6719 0464	Sum	hucasebh , huctbh
VS_RAB_Succ EstCS_AMR_5_9	ACCUMULA TION	INTEG ER	Numbers of the CS RABs of different traffic classes successfully established in a best cell.	B67109368.C6719 0463	Sum	hucasebh , huctbh
VS_RAB_Succ EstCS_AMR_7_95	ACCUMULA TION	INTEG ER	Numbers of the CS RABs of different traffic classes	B67109368.C6719 0462	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			successfully established in a best cell.			
--	--	--	--	--	--	--

7.5.62 Cell.Huawei.UMTS.RAB_Establishment_CCH

RAB Establishment CCH data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
RRC_AttConnEstab_EFACH	ACCUMULATION	INTEGER	This measurement item provides the number of requests for the RRC connection that the RNC decides to set up on the EFACH in a cell after the RNC receives an RRC CONNECTION REQUEST message from the UE.	B67109545.C67193111	Sum	hucasebh , huctbh
RRC_ConnEstabTime_CCH_FACH_Cum	ACCUMULATION	INTEGER	VS RRC ConnEstabTime CCH FACH Cum	B67109545.C67193115	Sum	hucasebh , huctbh
RRC_ConnEstabTime_CCH_FACH_Sample	ACCUMULATION	INTEGER	VS RRC ConnEstabTime CCH FACH Sample	B67109545.C67193116	Sum	hucasebh , huctbh
RRC_ConnEstabTime_CCH_HSDSCH_Cum	ACCUMULATION	INTEGER	VS RRC ConnEstabTime CCH HSDSCH Cum	B67109545.C67193117	Sum	hucasebh , huctbh
RRC_ConnEstabTi	ACCUMULATION	INTEG	VS RRC	B67109545.C67	Sum	hucasebh

me_CCH_HSDSCH H_Sample	TION	ER	ConnEstabTime CCH HSDSCH Sample	193118		, huctbh
RRC_ConnEstabTimeMax_CCH_FACH	ACCUMULATION	INTEGER	Maximum delay of the RRC signaling on the FACH in a cell	B67109545.C67193113	Sum	hucasebh, huctbh
RRC_ConnEstabTimeMax_CCH_HSDSCH	ACCUMULATION	INTEGER	Maximum delay of the RRC signaling on the EFACH in a cell	B67109545.C67193114	Sum	hucasebh, huctbh
RRC_SuccConEstEFACH	ACCUMULATION	INTEGER	This measurement item provides the number of successful RRC connection setups on the EFACH.	B67109545.C67193112	Sum	hucasebh, huctbh
VS_MAC_CRNCIubBytesEFACH_Tx	ACCUMULATION	INT8	This measurement counter provides the number of downlink MAC PDU bytes sent by the CRNC on the EFACH over the Iub interface in a cell.	B67109545.C67204778	Sum	hucasebh, huctbh
VS_RAB_AbnormRel_PS_EFACH	ACCUMULATION	INTEGER	This measurement item provides the number of	B67109545.C67193127	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			abnormally released PS RABs on the EFACH in the best cell.			
VS_RAB_AttEstP S_EFACH	ACCUMULA TION	INTEG ER	This measurement item provides the number of attempts of PS RAB setup on the EFACH when the best cell is under the SRNC.	B67109545.C67 193119	Sum	hucasebh , huctbh
VS_RAB_Estab_P S_CCH_FACH_Cu m	ACCUMULA TION	INTEG ER	VS RAB Estab PS CCH FACH Cum	B67109545.C67 193123	Sum	hucasebh , huctbh
VS_RAB_Estab_P S_CCH_FACH_M axTime	ACCUMULA TION	INTEG ER	Maximum delay of the PS RAB setup on the FACH in a cell	B67109545.C67 193121	Sum	hucasebh , huctbh
VS_RAB_Estab_P S_CCH_FACH_M eanTime	INTENSITY	FLOA T	Mean delay of the PS RAB setup on the FACH in a cell	B67109545.C67 204169	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_RAB_Estab_P S_CCH_FACH_Sa mple	ACCUMULA TION	INTEG ER	VS RAB Estab PS CCH FACH Sample	B67109545.C67 193124	Sum	hucasebh , huctbh
VS_RAB_Estab_P S_CCH_HSDSCH _Cum	ACCUMULA TION	INTEG ER	VS RAB Estab PS CCH HSDSCH Cum	B67109545.C67 193125	Sum	hucasebh , huctbh
VS_RAB_Estab_P S_CCH_HSDSCH _MaxTime	ACCUMULA TION	INTEG ER	Maximum delay of the PS RAB setup on the EFACH in a cell	B67109545.C67 193122	Sum	hucasebh , huctbh

VS_RAB_Estab_PS_CCH_HSDSCH_MeanTime	INTENSITY	FLOAT	Mean delay of the PS RAB setup on the EFACH in a cell	B67109545.C67204170	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RAB_Estab_PS_CCH_HSDSCH_Sample	ACCUMULATION	INTEGER	VS RAB Estab PS CCH HSDSCH Sample	B67109545.C67193126	Sum	hucasebh, huctbh
VS_RAB_Norm_Rel_PS_EFACH	ACCUMULATION	INTEGER	This measurement item provides the number of normally released PS RABs on the EFACH in the best cell.	B67109545.C67193128	Sum	hucasebh, huctbh
VS_RAB_SuccEst_PS_EFACH	ACCUMULATION	INTEGER	This measurement item provides the number of successful PS RAB setups on the EFACH when the best cell is under the SRNC.	B67109545.C67193120	Sum	hucasebh, huctbh
VS_RRC_ConnEstabTimeMean_CCH_FACH	INTENSITY	FLOAT	Mean delay of the RRC signaling on the FACH in a cell	B67109545.C67204167	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RRC_ConnEst	INTENSITY	FLOAT	Mean delay of	B67109545.C67	Average	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

abTimeMean_CCH_HSDSCH		T	the RRC signaling on the EFACH in a cell	204168		, huctbh, Sum, Minimum, Maximum
-----------------------	--	---	--	--------	--	---------------------------------

7.5.63 Cell.Huawei.UMTS.RAB_Establishment_CS_Conv

RAB Establishment CS Conversational data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_RAB_SuccEstabCS_Conv	PERCENTAGE	FLOAT	Percentage CS RABs of different traffic classes successfully established in a cell.	$100 * \frac{\{VS_RAB_SuccEstabCS_Conv\}}{\{VS_RAB_AttEstabCS_Conv\}}$	Average	hucasebh, huctbh
HSPA_UE_Mean_CS_Conv_Cell_V100	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011: This is applicable for V100R011. The measurement counter provides the average number of CS Over HSPA in a cell.	B67109368.C67204245	Average	hucasebh, huctbh, Sum, Minimum, Maximum
HSPA_UE_Mean_CS_Conv_Cell_V200	INTENSITY	FLOAT	This is applicable for V200R011. The measurement counter provides the average number of CS Over HSPA in a cell.	B67109368.C67204853	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_HSPA_RAB_AttEstab_CS	ACCUMULATION	INTEGER	Number of CS over HSPA	B67109368.C67196202	Sum	hucasebh, huctbh

_Conv			RAB Assignment RAB Setup in the best cell.			
VS_HSPA_RAB_SuccEstab_CS_Conv	ACCUMULATION	INTEGER	Number of CS over HSPA RAB Assignment RAB Successfully Setup in the best cell.	B67109368.C67196203	Sum	hucasebh , huctbh
VS_RAB_AttEsCSQueue_Con_Cell	ACCUMULATION	INTEGER	Numbers of CS RAB setup queuing requests during RAB assignment, Number of CS RAB Setup Queuing Requests for Conversational Service (Cell)	B67109368.C67189479	Sum	hucasebh , huctbh
VS_RAB_AttEstabCS_Conv	ACCUMULATION	INTEGER	Numbers of CS RABs of different traffic classes requested to establish in a cell.	B67109368.C67179825	Sum	hucasebh , huctbh
VS_RAB_AttEstCS_Conv_64	ACCUMULATION	INTEGER	Numbers of CS RABs of different traffic classes requested to establish in a cell.	B67109368.C67179859	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RAB_Succ EstabCS_Conv_32	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:Numbers of CS RABs successfully established, Conversational Service Max DL bit rate is 32 kbps	B67109368.C67189486	Sum	hucasebh , huctbh
VS_RAB_Succ EstabCS_Conv	ACCUMULATION	INTEGER	Numbers of the CS RABs of different traffic classes successfully established in a cell.	B67109368.C67179827	Sum	hucasebh , huctbh
VS_RAB_Succ EstCS_Conv_64	ACCUMULATION	INTEGER	Numbers of the CS RABs of different traffic classes successfully established in a cell.	B67109368.C67179861	Sum	hucasebh , huctbh

7.5.64 Cell.Huawei.UMTS.RAB_Establishment_CS_Stream

RAB Establishment CS Streaming data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_RAB_SuccEstabCS_Str	PERCENTAGE	FLOAT	Percentage successful CS RABs of different traffic classes successfully established in a cell.	$100 * \frac{\{VS_RAB_SuccEstabCS_Str\}}{\{VS_RAB_AttEstabCS_Str\}}$	Average	hucasebh , huctbh
VS_RAB_AttEstabCS_Str	ACCUMULATION	INTEGER	Numbers of CS RABs of different traffic	B67109368.C67179826	Sum	hucasebh , huctbh

			classes requested to establish in a cell.			
VS_RAB_Succ EstabCS_Str	ACCUMULATION	INTEGER	Numbers of the CS RABs of different traffic classes successfully established in a cell.	B67109368.C6717 9828	Sum	hucasebh , huctbh

7.5.65 Cell.Huawei.UMTS.RAB_Establishment_CS

RAB Establishment CS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RAB_AttestabCS_VP_LIMIT	ACCUMULATION	INTEGER	This measurement item takes statistics of the time of released RAB of 0kbps for failed to rate up in the best cell.	B67109368.C6719 6232	Sum	hucasebh , huctbh

7.5.66 Cell.Huawei.UMTS.RAB_Establishment_DCH

RAB Establishment DCH data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RAB_EstabCS_DCH_Cum	ACCUMULATION	INTEGER	VS RAB Estab CS DCH Cum	B67109368.C6719 2721	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RAB_Establishment_CS_DCH_Sample	ACCUMULATION	INTEGER	VS RAB Establishment CS DCH Sample	B67109368.C67192722	Sum	hucasebh, huctbh
------------------------------------	--------------	---------	------------------------------------	---------------------	-----	------------------

7.5.67 Cell.Huawei.UMTS.RAB_Establishment_PS_Bkg

RAB Establishment PS Background data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_RAB_SuccessEstabPS_Bkg	PERCENTAGE	FLOAT	Numbers of PS RABs of different traffic classes successfully established in a cell.	$100 * \frac{\{VS_RAB_SuccessEstabPS_Bkg\}}{\{VS_RAB_AttemptEstabPS_Bkg\}}$	Average	hucasebh, huctbh
VS_RAB_AttemptPS_Bkg_0_32	ACCUMULATION	INTEGER	Numbers of PS RABs requested to establish in the Cell, Number of PS RABs requested to establish for background services (0 (Max DL bit rate (32 kbps)))	B67109372.C67189501	Sum	hucasebh, huctbh
VS_RAB_AttemptPS_Bkg_144_384	ACCUMULATION	INTEGER	Numbers of PS RABs requested to establish in the Cell, Number of PS RABs requested to establish for background services (144 kbps less than Max DL bit rate (384 kbps))	B67109372.C67189502	Sum	hucasebh, huctbh

VS_RAB_Att_Est_PS_Bkg_32_64	ACCUMULATION	INTEGER	Numbers of PS RABs requested to establish in the Cell, Number of PS RABs requested to establish for background services (32 kbps less than Max DL bit rate (64 kbps))	B67109372.C67189503	Sum	hucasebh, huctbh
VS_RAB_Att_Est_PS_Bkg_64_144	ACCUMULATION	INTEGER	Numbers of PS RABs requested to establish in the Cell, Number of PS RABs requested to establish for background services (64 kbps less than Max DL bit rate (144 kbps))	B67109372.C67189504	Sum	hucasebh, huctbh
VS_RAB_Att_Est_PS_Bkg_Mor384	ACCUMULATION	INTEGER	Numbers of PS RABs requested to establish in the Cell, Number of PS RABs requested to establish for background services (384 kbps less than Max DL bit rate)	B67109372.C67189505	Sum	hucasebh, huctbh
VS_RAB_AttEs	ACCUMULATION	INTEGER	Numbers of PS	B67109372.C6718	Sum	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

PSQueue_Bkg_Cell	TION	ER	RAB setup queuing requests during RAB assignment, Number of PS RAB Setup Queuing Requests for Background Service (Cell)	9518		, huctbh
VS_RAB_AttEstabPS_Bkg	ACCUMULATION	INTEGER	Numbers of PS RABs of different traffic classes requested to establish in a cell.	B67109372.C67179924	Sum	hucasebh, huctbh
VS_RAB_PSQueueTime_Bkg_Cell	INTENSITY	FLOAT	Average queuing duration of PS RABs, Average queuing duration of PS RABs for background service (Cell)	B67109372.C67189523	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RAB_SucEst_PS_Bkg_0_32	ACCUMULATION	INTEGER	Numbers of PS RABs successfully established in the Cell, Number of PS RABs successfully established for background services (0 less than Max DL bit rate (32 kbps))	B67109372.C67189527	Sum	hucasebh, huctbh
VS_RAB_SucEst_PS_Bkg_14	ACCUMULATION	INTEGER	Numbers of PS RABs	B67109372.C67189528	Sum	hucasebh, huctbh

4384			successfully established in the Cell, Number of PS RABs successfully established for background services (144 kbps less than Max DL bit rate (384 kbps))			
VS_RAB_Suc_Est_PS_Bkg_32_64	ACCUMULATION	INTEGER	Numbers of PS RABs successfully established in the Cell, Number of PS RABs successfully established for background services (32 kbps less than Max DL bit rate (64 kbps))	B67109372.C67189529	Sum	hucasebh , huctbh
VS_RAB_Suc_Est_PS_Bkg_64_144	ACCUMULATION	INTEGER	Numbers of PS RABs successfully established in the Cell, Number of PS RABs successfully established for background services (64 kbps less than Max DL bit rate (144 kbps))	B67109372.C67189530	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RAB_Succ EstabPS_Bkg_Rate	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:VS RAB SuccEstabPS Bkg Rate	B67109372.C67204825	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RAB_Succ EstabPS_Bkg	ACCUMULATION	INTEGER	Numbers of PS RABs of different traffic classes successfully established in a cell.	B67109372.C67179928	Sum	hucasebh, huctbh
VS_RAB_Succ EstPS_BkgMor384	ACCUMULATION	INTEGER	Numbers of PS RABs successfully established in the Cell, Number of PS RABs successfully established for background services (384 kbps less than Max DL bit rate)	B67109372.C67191600	Sum	hucasebh, huctbh

7.5.68 Cell.Huawei.UMTS.RAB_Establishment_PS_Conv

RAB Establishment PS Conversational data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_RAB_SuccEstabPS_Conv	PERCENTAGE	FLOAT	Percentage PS RABs of different traffic classes successfully established in a cell.	100 * {VS_RAB_SuccEstabPS_Conv}/ {VS_RAB_AttEstabPS_Conv}	Average	hucasebh, huctbh

VS_RAB_AttEs PSQueue_Con_ Cell	ACCUMULA TION	INTEG ER	Numbers of PS RAB setup queuing requests during RAB assignment, Number of PS RAB Setup Queuing Requests for Conversational Service (Cell)	B67109372.C6718 9519	Sum	hucasebh , huctbh
VS_RAB_AttEs tabPS_Conv	ACCUMULA TION	INTEG ER	Numbers of PS RABs of different traffic classes requested to establish in a cell.	B67109372.C6717 9921	Sum	hucasebh , huctbh
VS_RAB_PSQu eueTime_Bkg_ Cell_CUM	INTENSITY	FLOA T	Obsolete from UTRAN/V900 R011:Average queuing duration of PS RABs, Average queuing duration of PS RABs for background service (Cell). Cumulative value.	B67109372.C6719 0425	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_RAB_PSQu eueTime_Bkg_ Cell_SAMPLE	INTENSITY	FLOA T	Obsolete from UTRAN/V900 R011:Average queuing duration of PS RABs, Average queuing duration of PS	B67109372.C6719 0426	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			RABs for background service (Cell). Sample value			
VS_RAB_PSQueueTime_Con_Cell_CUM	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Average queuing duration of PS RABs, Average queuing duration of PS RABs for conversational service (Cell). Cumulative value	B67109372.C67190427	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RAB_PSQueueTime_Con_Cell_SAMPLE	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Average queuing duration of PS RABs, Average queuing duration of PS RABs for conversational service (Cell). Sample value	B67109372.C67190428	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RAB_PSQueueTime_Con_Cell	INTENSITY	FLOAT	Average queuing duration of PS RABs, Average queuing duration of PS RABs for conversational service (Cell)	B67109372.C67189524	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RAB_PSQueueTime_Int_Cell_CUM	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Average queuing duration of PS	B67109372.C67190429	Average	hucasebh, huctbh, Sum, Minimum,

			RABs, Average queuing duration of PS RABs for interactive service (Cell). Cumulative value.			Maximum
VS_RAB_PSQueueTime_Int_Cell_SAMPLE	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Average queuing duration of PS RABs, Average queuing duration of PS RABs for interactive service (Cell). Sample value	B67109372.C67190430	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RAB_PSQueueTime_Str_Cell_CUM	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Average queuing duration of PS RABs, Average queuing duration of PS RABs for streaming service (Cell). Cumulative value	B67109372.C67190431	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RAB_PSQueueTime_Str_Cell_SAMPLE	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Average queuing duration of PS RABs, Average queuing	B67109372.C67190432	Average	hucasebh, huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			duration of PS RABs for streaming service (Cell). Sample value			
VS_RAB_SuccEstabPS_Conv_Rate	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:VS RAB SuccEstabPS Conv Rate	B67109372.C67204822	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RAB_SuccEstabPS_Conv	ACCUMULATION	INTEGER	Numbers of PS RABs of different traffic classes successfully established in a cell.	B67109372.C67179925	Sum	hucasebh, huctbh

7.5.69 Cell.Huawei.UMTS.RAB_Establishment_PS_DCH

RAB Establishment PS DCH data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RAB_Estab_PS_DCH_Cum	ACCUMULATION	INTEGER	VS RAB Estab PS DCH Cum	B67109372.C67192723	Sum	hucasebh, huctbh
VS_RAB_Estab_PS_DCH_Sample	ACCUMULATION	INTEGER	VS RAB Estab PS DCH Sample	B67109372.C67192724	Sum	hucasebh, huctbh

7.5.70 Cell.Huawei.UMTS.RAB_Establishment_PS_Global

RAB Establishment PS Global data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
_	PERCENTA	FLOAT	Obsolete from	100 *	Average	hucasebh

%_VS_RAB_SuccEstabPS_CMB_Cell	GE	T	UTRAN/V100V 200R011:Percentage CMB RABs successfully established in a cell.	{VS_RAB_SuccEstabPS_CMB_Cell}/ {VS_RAB_AttEstabPS_CMB_Cell}		, huctbh
VS_RAB_AttEstabPS_CMB_Cell	ACCUMULATION	INTEGER	Obsolete from UTRAN/V100V 200R011: Number of CMB RABs requested to establish.	B67109372.C67190596	Sum	hucasebh , huctbh
VS_RAB_AttEstPS_128	ACCUMULATION	INTEGER	Obsolete in Vn00R010 release. Numbers of PS RABs requested to establish in the Cell, Number of PS RABs requested to establish (Max DL bit rate = 128 kbps)	B67109372.C67179969	Sum	hucasebh , huctbh
VS_RAB_AttEstPS_384	ACCUMULATION	INTEGER	Obsolete in Vn00R010 release. Numbers of PS RABs requested to establish in the Cell, Number of PS RABs requested to establish (Max DL bit rate = 384 kbps)	B67109372.C67179968	Sum	hucasebh , huctbh
VS_RAB_AttEstPS_64	ACCUMULATION	INTEGER	Obsolete in Vn00R010 release.	B67109372.C67179970	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Numbers of PS RABs requested to establish in the Cell, Number of PS RABs requested to establish (Max DL bit rate = 64 kbps)			
VS_RAB_CCH_Max	INTENSITY	INTEGER	Obsolete in Vn00R010 release. Maximum numbers of RABs established on CCH in a cell.	B67109372.C67179787	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RAB_CCH_Mean	INTENSITY	FLOAT	Obsolete in Vn00R010 release. Mean numbers of RABs established on CCH in a cell.	B67109372.C67199523	Constant	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RAB_CCH_Min	INTENSITY	INTEGER	Obsolete in Vn00R010 release. Minimum numbers of RABs established on CCH in a cell.	B67109372.C67179788	Minimum	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RAB_DCH_Max	INTENSITY	INTEGER	Obsolete in Vn00R010 release. Maximum numbers of RABs established on DCH in a cell in a measurement period.	B67109372.C67179783	Constant	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RAB_Dch_	INTENSITY	FLOAT	Obsolete in	B67109372.C6719	Average	hucasebh

Mean		T	Vn00R010 release. Mean numbers of RABs established on DCH in a cell in a measurement period.	9522		, huctbh, Sum, Minimum, Maximum
VS_RAB_DCH_Min	INTENSITY	INTEGER	Obsolete in Vn00R010 release. Minimum numbers of RABs established on DCH in a cell in a measurement period.	B67109372.C67179784	Minimum	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RAB_Establish_PS_CCH_MaxTime	INTENSITY	INTEGER	Obsolete from UTRAN/V100V 200R011:Maximum delay of RAB setup on CCH in the PS domain	B67109372.C67192720	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RAB_Establish_PS_CCH_MeanTime	INTENSITY	FLOAT	Obsolete from UTRAN/V100V 200R011:Mean delay of RAB setup on CCH in the PS domain	B67109372.C67192718	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RAB_Establish_PS_DCH_MaxTime	INTENSITY	INTEGER	Maximum delay of RAB setup on DCH in the PS domain	B67109372.C67192719	Average	hucasebh, huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RAB_EstablishPS_DCH_MeanTime	INTENSITY	FLOAT	Mean delay of RAB setup on DCH in the PS domain	B67109372.C67192717	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RAB_SucEstPS_0kbps	ACCUMULATION	INTEGER	UE establishes with 0kbps even when resource is limited. This measurement item takes statistics of the time of RAB established successfully with 0kbps in the best cell.	B67109372.C67196301	Sum	hucasebh, huctbh
VS_RAB_SuccEstabPS_CMB_Cell	ACCUMULATION	INTEGER	Obsolete from UTRAN/V100V 200R011: Number of successfully established CMB RABs.	B67109372.C67190597	Sum	hucasebh, huctbh
VS_RAB_SuccEstPS_128	ACCUMULATION	INTEGER	Obsolete in Vn00R010 release. Numbers of PS RABs successfully established in the Cell. Number of PS RABs successfully established (Max DL bit rate = 128 kbps)	B67109372.C67179972	Sum	hucasebh, huctbh
VS_RAB_SuccEstPS_384	ACCUMULATION	INTEGER	Obsolete in Vn00R010 release.	B67109372.C67179971	Sum	hucasebh, huctbh

			Numbers of PS RABs successfully established in the Cell. Number of PS RABs successfully established (Max DL bit rate = 384 kbps)			
VS_RAB_SuccEstPS_64	ACCUMULATION	INTEGER	Obsolete in Vn00R010 release. Numbers of PS RABs successfully established in the Cell. Number of PS RABs successfully established (Max DL bit rate = 64 kbps)	B67109372.C67179973	Sum	hucasebh, huctbh

7.5.71 Cell.Huawei.UMTS.RAB_Establishment_PS_Inter

RAB Establishment PS Interactive data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_RAB_SuccEstabPS_Inter	PERCENTAGE	FLOAT	Percentage PS RABs of different traffic classes successfully established in a cell.	100 * {VS_RAB_SuccEstabPS_Inter}/ {VS_RAB_AttEstabPS_Inter}	Average	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RAB_Att_E st_PS_Int_0_32	ACCUMULA TION	INTEG ER	Numbers of PS RABs requested to establish in the Cell, Number of PS RABs requested to establish for interactive services (0 (Max DL bit rate (32 kbps)))	B67109372.C6718 9508	Sum	hucasebh , huctbh
VS_RAB_Att_E st_PS_Int_1443 84	ACCUMULA TION	INTEG ER	Numbers of PS RABs requested to establish in the Cell, Number of PS RABs requested to establish for interactive services (144 kbps less than Max DL bit rate (384 kbps))	B67109372.C6718 9509	Sum	hucasebh , huctbh
VS_RAB_Att_E st_PS_Int_32_6 4	ACCUMULA TION	INTEG ER	Numbers of PS RABs requested to establish in the Cell, Number of PS RABs requested to establish for interactive services (32 kbps less than Max DL bit rate (64 kbps))	B67109372.C6718 9510	Sum	hucasebh , huctbh
VS_RAB_Att_E st_PS_Int_64_1 44	ACCUMULA TION	INTEG ER	Numbers of PS RABs requested to establish in the Cell, Number of PS RABs	B67109372.C6718 9511	Sum	hucasebh , huctbh

			requested to establish for interactive services (64 kbps less than Max DL bit rate (144 kbps))			
VS_RAB_Att_Est_PS_Int_Mor384	ACCUMULATION	INTEGER	Numbers of PS RABs requested to establish in the Cell, Number of PS RABs requested to establish for interactive services (384 kbps less than Max DL bit rate)	B67109372.C67189512	Sum	hucasebh , huctbh
VS_RAB_AttEsPSQueue_Int_Cell	ACCUMULATION	INTEGER	Numbers of PS RAB setup queuing requests during RAB assignment, Number of PS RAB Setup Queuing Requests for Interactive Service (Cell)	B67109372.C67189520	Sum	hucasebh , huctbh
VS_RAB_AttEstabPS_Inter	ACCUMULATION	INTEGER	Numbers of PS RABs of different traffic classes requested to establish in a cell.	B67109372.C67179923	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RAB_PSQueueTime_Int_Cell	INTENSITY	FLOAT	Average queuing duration of PS RABs, Average queuing duration of PS RABs for interactive service (Cell)	B67109372.C67189525	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RAB_SucEst_PS_Int_0_32	ACCUMULATION	INTEGER	Numbers of PS RABs successfully established in the Cell, Number of PS RABs successfully established for interactive services (0 (Max DL bit rate (32 kbps)))	B67109372.C67189532	Sum	hucasebh, huctbh
VS_RAB_SucEst_PS_Int_144384	ACCUMULATION	INTEGER	Numbers of PS RABs successfully established in the Cell, Number of PS RABs successfully established for interactive services (144 kbps less than Max DL bit rate (384 kbps))	B67109372.C67189533	Sum	hucasebh, huctbh
VS_RAB_SucEst_PS_Int_32_64	ACCUMULATION	INTEGER	Numbers of PS RABs successfully established in the Cell, Number of PS RABs successfully	B67109372.C67189534	Sum	hucasebh, huctbh

			established for interactive services (32 kbps less than Max DL bit rate (64 kbps))			
VS_RAB_SucEst_PS_Int_64_144	ACCUMULATION	INTEGER	Numbers of PS RABs successfully established in the Cell, Number of PS RABs successfully established for interactive services (64 kbps less than Max DL bit rate (144 kbps))	B67109372.C67189535	Sum	hucasebh , huctbh
VS_RAB_SuccEstabPS_Inter_Rate	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:VS RAB SuccEstabPS Inter Rate	B67109372.C67204824	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_RAB_SuccEstabPS_Inter	ACCUMULATION	INTEGER	Numbers of PS RABs of different traffic classes successfully established in a cell.	B67109372.C67179927	Sum	hucasebh , huctbh
VS_RAB_SucEstPS_IntMor384	ACCUMULATION	INTEGER	Numbers of PS RABs successfully established in the Cell,	B67109372.C67190416	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Number of PS RABs successfully established for interactive services (384 kbps less than Max DL bit rate)			
--	--	--	--	--	--	--

7.5.72 Cell.Huawei.UMTS.RAB_Establishment_PS_Stream

RAB Establishment PS Streaming data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_RAB_SuccEstabPS_Str	PERCENTAGE	FLOAT	Percentage PS RABs of different traffic classes successfully established in a cell	$100 * \frac{\{VS_RAB_SuccEstabPS_Str\}}{\{VS_RAB_AttEstabPS_Str\}}$	Average	hucasebh, huctbh
VS_RAB_Att_Est_PS_Str_0_32	ACCUMULATION	INTEGER	Numbers of PS RABs requested to establish in the Cell, Number of PS RABs requested to establish for streaming services (0 (Max DL bit rate (32 kbps)))	B67109372.C67189513	Sum	hucasebh, huctbh
VS_RAB_Att_Est_PS_Str_144384	ACCUMULATION	INTEGER	Numbers of PS RABs requested to establish in the Cell, Number of PS RABs requested to establish for	B67109372.C67189514	Sum	hucasebh, huctbh

			streaming services (144 kbps less than Max DL bit rate (384 kbps))			
VS_RAB_Att_Est_PS_Str_32_64	ACCUMULATION	INTEGER	Numbers of PS RABs requested to establish in the Cell, Number of PS RABs requested to establish for streaming services (32 (Max DL bit rate (64 kbps)))	B67109372.C67189515	Sum	hucasebh, huctbh
VS_RAB_Att_Est_PS_Str_64_144	ACCUMULATION	INTEGER	Numbers of PS RABs requested to establish in the Cell, Number of PS RABs requested to establish for streaming services (64 kbps less than Max DL bit rate (144 kbps))	B67109372.C67189516	Sum	hucasebh, huctbh
VS_RAB_Att_Est_PS_Str_Mor384	ACCUMULATION	INTEGER	Numbers of PS RABs requested to establish in the Cell, Number of PS RABs requested to establish for streaming services (384	B67109372.C67189517	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			kbps less than Max DL bit rate)			
VS_RAB_AttEs PSQueue_Stm_ Cell	ACCUMULA TION	INTEG ER	Numbers of PS RAB setup queuing requests during RAB assignment, Number of PS RAB Setup Queuing Requests for Streaming Service (Cell)	B67109372.C6718 9521	Sum	hucasebh , huctbh
VS_RAB_AttEs tabPS_Str	ACCUMULA TION	INTEG ER	Numbers of PS RABs of different traffic classes requested to establish in a cell	B67109372.C6717 9922	Sum	hucasebh , huctbh
VS_RAB_PSQu eueTime_Str_Ce ll	INTENSITY	FLOA T	Average queuing duration of PS RABs, Average queuing duration of PS RABs for streaming service (Cell)	B67109372.C6718 9526	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_RAB_Suc_ Est_PS_Str_0_3 2	ACCUMULA TION	INTEG ER	Numbers of PS RABs successfully established in the Cell, Number of PS RABs successfully established for streaming services (0 (Max DL bit	B67109372.C6718 9536	Sum	hucasebh , huctbh

			rate (32 kbps)))			
VS_RAB_Suc_ Est_PS_Str_32_ 64	ACCUMULA TION	INTEG ER	Numbers of PS RABs successfully established in the Cell, Number of PS RABs successfully established for streaming services (32 less than Max DL bit rate (64 kbps))	B67109372.C6718 9537	Sum	hucasebh , huctbh
VS_RAB_Suc_ Est_PS_Str_64_ 144	ACCUMULA TION	INTEG ER	Numbers of PS RABs successfully established in the Cell, Number of PS RABs successfully established for streaming services (64 kbps less than Max DL bit rate (144 kbps))	B67109372.C6718 9538	Sum	hucasebh , huctbh
VS_RAB_Suc_ Est_PS_Str1443 84	ACCUMULA TION	INTEG ER	Numbers of PS RABs successfully established in the Cell, Number of PS RABs successfully established for streaming services (144	B67109372.C6718 9539	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			kbps less than Max DL bit rate (384 kbps))			
VS_RAB_SuccEstabPS_Str_Rate	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:VS RAB SuccEstabPS Str Rate	B67109372.C67204823	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RAB_SuccEstabPS_Str	ACCUMULATION	INTEGER	Numbers of PS RABs of different traffic classes successfully established in a cell	B67109372.C67179926	Sum	hucasebh, huctbh
VS_RAB_SuccEstabPS_StrMor384	ACCUMULATION	INTEGER	Numbers of PS RABs successfully established in the Cell, Number of PS RABs successfully established for streaming services (384 kbps less than Max DL bit rate)	B67109372.C67190445	Sum	hucasebh, huctbh

7.5.73 Cell.Huawei.UMTS.RAB_Modify_CS

RAB Modify CS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_RAB_SuccModCS_Conv	PERCENTAGE	FLOAT	Percentage CS Conversational RABs successfully	100 * {VS_RAB_SuccModCS_Conv}/{VS_RAB_AttEst	Average	hucasebh, huctbh

			modified in a cell.	ModCS_Conv}		
%_VS_RAB_SuccModCS_Str	PERCENTAGE	FLOAT	Percentage CS Streaming RABs successfully modified in a cell.	$100 * \frac{\{VS_RAB_SuccModCS_Str\}}{\{VS_RAB_AttEstModCS_Str\}}$	Average	hucasebh, huctbh
VS_FBack_RABModReqCs_Conv_Cell	ACCUMULATION	INTEGER	Number of RNC-originated service changes and UDI fallbacks in the cells of the active set.	B67109370.C67203801	Sum	hucasebh, huctbh
VS_RAB_AttEstModCS_Conv	ACCUMULATION	INTEGER	Numbers of CS RABs requested to modify for traffic classes of the UE in a cell. If the QoS parameters of the current service changes after the RAB setup, the CN initiates a RAB reconfiguration procedure by transmission of a RAB ASSIGNMENT REQUEST message. If the RNC detects that the RABs requested to establish already exist on receipt of the	B67109370.C67179835	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			RAB ASSIGNMENT REQUEST message from the CN, it regards the request to establish RABs as a request to modify the RABs.			
VS_RAB_AttEs tModCS_Str	ACCUMULA TION	INTEG ER	Numbers of CS RABs requested to modify for traffic classes of the UE in a cell. If the QoS parameters of the current service changes after the RAB setup, the CN initiates a RAB reconfiguration procedure by transmission of a RAB ASSIGNMENT REQUEST message. If the RNC detects that that the RABs requested to establish already exist on receipt of the RAB ASSIGNMENT REQUEST message from the CN, it regards the request to establish RABs as a request to	B67109370.C671 79836	Sum	hucasebh , huctbh

			modify the RABs.			
VS_RAB_FailModCS_Cong	ACCUMULATION	INTEGER	Numbers of CS RABs unsuccessfully modified due to different causes	B67109370.C67179841	Sum	hucasebh , huctbh
VS_RAB_FailModCS_Param	ACCUMULATION	INTEGER	Numbers of CS RABs unsuccessfully modified due to different causes	B67109370.C67189497	Sum	hucasebh , huctbh
VS_RAB_FailModCS_Reloc	ACCUMULATION	INTEGER	Numbers of CS RABs unsuccessfully modified due to different causes	B67109370.C67189498	Sum	hucasebh , huctbh
VS_RAB_FailModCS_TNL	ACCUMULATION	INTEGER	Numbers of CS RABs unsuccessfully modified due to different causes	B67109370.C67179840	Sum	hucasebh , huctbh
VS_RAB_FailModCS_Unsup	ACCUMULATION	INTEGER	Numbers of CS RABs unsuccessfully modified due to different causes	B67109370.C67189499	Sum	hucasebh , huctbh
VS_RAB_SuccModCS_Conv	ACCUMULATION	INTEGER	Numbers of CS Conversational RABs successfully modified in a cell.	B67109370.C67179837	Sum	hucasebh , huctbh
VS_RAB_SuccModCS_Str	ACCUMULATION	INTEGER	Numbers of CS Streaming RABs successfully	B67109370.C67179838	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			modified in a cell.			
--	--	--	---------------------	--	--	--

7.5.74 Cell.Huawei.UMTS.RAB_Modify_PS

RAB Modify PS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
$\bar{\%_VS_RAB_SuccModPS_Bkg}$	PERCENTAGE	FLOAT	Percentage PS RABs of different traffic classes successfully modified in a cell. Background.	$100 * \frac{\{VS_RAB_SuccModPS_Bkg\}}{\{VS_RAB_AttEstModPS_Bkg\}}$	Average	hucasebh, huctbh
$\bar{\%_VS_RAB_SuccModPS_Conv}$	PERCENTAGE	FLOAT	Percentage PS RABs of different traffic classes successfully modified in a cell. Conversational	$100 * \frac{\{VS_RAB_SuccModPS_Conv\}}{\{VS_RAB_AttEstModPS_Conv\}}$	Average	hucasebh, huctbh
$\bar{\%_VS_RAB_SuccModPS_Inter}$	PERCENTAGE	FLOAT	Percentage PS RABs of different traffic classes successfully modified in a cell. Interactive	$100 * \frac{\{VS_RAB_SuccModPS_Inter\}}{\{VS_RAB_AttEstModPS_Inter\}}$	Average	hucasebh, huctbh
$\bar{\%_VS_RAB_SuccModPS_Str}$	PERCENTAGE	FLOAT	Percentage PS RABs of different traffic classes successfully modified in a cell. Streaming	$100 * \frac{\{VS_RAB_SuccModPS_Str\}}{\{VS_RAB_AttEstModPS_Str\}}$	Average	hucasebh, huctbh
VS_RAB_AttEstModPS_Bkg	ACCUMULATION	INTEGER	Numbers of PS RABs of	B67109374.C67179937	Sum	hucasebh, huctbh

			different traffic classes requested to modify in a cell. If there are some changes in the parameters such as QoS for the current service after the RAB setup, the SGSN initiates a RAB modification procedure by sending an RAB ASSIGNMENT REQUEST message. On receipt of this message, the RNC judges that these RABs need to be modified if it finds that the requested RABs have been set up.			
VS_RAB_AttestModPS_Conv	ACCUMULATION	INTEGER	Numbers of PS RABs of different traffic classes requested to modify in a cell. If there are some changes in the parameters such as QoS for the current service after the	B67109374.C67179934	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			RAB setup, the SGSN initiates a RAB modification procedure by sending an RAB ASSIGNMENT REQUEST message. On receipt of this message, the RNC judges that these RABs need to be modified if it finds that the requested RABs have been set up.			
VS_RAB_AttestModPS_Inter	ACCUMULATION	INTEGER	Numbers of PS RABs of different traffic classes requested to modify in a cell. If there are some changes in the parameters such as QoS for the current service after the RAB setup, the SGSN initiates a RAB modification procedure by sending an RAB ASSIGNMENT REQUEST message. On receipt of this message, the RNC judges that these RABs need to be	B67109374.C67179936	Sum	hucasebh, huctbh

			modified if it finds that the requested RABs have been set up.			
VS_RAB_AttestModPS_Str	ACCUMULATION	INTEGER	Numbers of PS RABs of different traffic classes requested to modify in a cell. If there are some changes in the parameters such as QoS for the current service after the RAB setup, the SGSN initiates a RAB modification procedure by sending an RAB ASSIGNMENT REQUEST message. On receipt of this message, the RNC judges that these RABs need to be modified if it finds that the requested RABs have been set up.	B67109374.C67179935	Sum	hucasebh, huctbh
VS_RAB_FailModPS_Cong	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully modified in a	B67109374.C67179944	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			cell due to different causes.			
VS_RAB_Fail ModPS_Param	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully modified in a cell due to different causes.	B67109374.C67189558	Sum	hucasebh , huctbh
VS_RAB_Fail ModPS_Reloc	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully modified in a cell due to different causes.	B67109374.C67189559	Sum	hucasebh , huctbh
VS_RAB_Fail ModPS_TNL	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully modified in a cell due to different causes.	B67109374.C67179943	Sum	hucasebh , huctbh
VS_RAB_Fail ModPS_Unsup	ACCUMULATION	INTEGER	Numbers of PS RABs unsuccessfully modified in a cell due to different causes.	B67109374.C67189560	Sum	hucasebh , huctbh
VS_RAB_Succ ModPS_Bkg	ACCUMULATION	INTEGER	Numbers of PS RABs of different traffic classes successfully modified in a cell.	B67109374.C67179941	Sum	hucasebh , huctbh
VS_RAB_Succ ModPS_Conv	ACCUMULATION	INTEGER	Numbers of PS RABs of different traffic classes successfully modified in a cell.	B67109374.C67179938	Sum	hucasebh , huctbh
VS_RAB_Succ	ACCUMULATION	INTEGER	Numbers of PS	B67109374.C6717	Sum	hucasebh

ModPS_Inter	TION	ER	RABs of different traffic classes successfully modified in a cell.	9940		, huctbh
VS_RAB_Succ ModPS_Str	ACCUMULATION	INTEGER	Numbers of PS RABs of different traffic classes successfully modified in a cell.	B67109374.C6717 9939	Sum	hucasebh , huctbh

7.5.75 Cell.Huawei.UMTS.RAB_Release_CMB

RAB CMB RRC signalling release measurement

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RAB_UISigRel_CMB_CELL	ACCUMULATION	INTEGER	Obsolete from UTRAN/V100V 200R011: Number of CMB RRC Signaling Releases Triggered by UE (Cell)	B67109376.C6719 1696	Sum	hucasebh , huctbh

7.5.76 Cell.Huawei.UMTS.RAB_Release_CS

RAB Release CS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_CN_RAB_Loss_CS	ACCUMULATION	INTEGER	Numbers of CS RABs Release	B67109371.C6719 0745	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Triggered by CN in a cell.			
VS_RAB_AttRelCS_Conv	ACCUMULATION	INTEGER	Numbers of CS RABs requested to release in a cell.	B67109371.C67179843	Sum	hucasebh , huctbh
VS_RAB_AttRelCS_NetOpt	ACCUMULATION	INTEGER	Numbers of CS RABs requested to release in a cell due to different causes.	B67109371.C67179850	Sum	hucasebh , huctbh
VS_RAB_AttRelCS_NormRel	ACCUMULATION	INTEGER	Numbers of CS RABs requested to release in a cell due to different causes.	B67109371.C67179845	Sum	hucasebh , huctbh
VS_RAB_AttRelCS_OM	ACCUMULATION	INTEGER	Numbers of CS RABs requested to release in a cell due to different causes.	B67109371.C67179849	Sum	hucasebh , huctbh
VS_RAB_AttRelCS_Preempt	ACCUMULATION	INTEGER	Numbers of CS RABs requested to release in a cell due to different causes.	B67109371.C67179848	Sum	hucasebh , huctbh
VS_RAB_AttRelCS_Str	ACCUMULATION	INTEGER	Numbers of CS RABs requested to release in a cell.	B67109371.C67179844	Sum	hucasebh , huctbh
VS_RAB_AttRelCS_UEInact	ACCUMULATION	INTEGER	Numbers of CS RABs requested to release in a cell due to different causes.	B67109371.C67179847	Sum	hucasebh , huctbh
VS_RAB_AttRel	ACCUMULATION	INTEGER	Numbers of CS	B67109371.C6718	Sum	hucasebh

eICS_UTRAN Gen	TION	ER	RABs requested to release in a cell due to different causes.	9500		, huctbh
-------------------	------	----	--	------	--	----------

7.5.77 Cell.Huawei.UMTS.RAB_Release_PS

RAB Release PS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_CN_RAB_Loss_PS	ACCUMULATION	INTEGER	Numbers of CS RABs Release Triggered by CN in each serving cell.	B67109375.C67190755	Sum	hucasebh , huctbh
VS_RAB_AttRelPS_Bkg	ACCUMULATION	INTEGER	Numbers of PS RABs of different traffic classes requested to release in a cell.	B67109375.C67179949	Sum	hucasebh , huctbh
VS_RAB_AttRelPS_Conv	ACCUMULATION	INTEGER	Numbers of PS RABs of different traffic classes requested to release in a cell.	B67109375.C67179946	Sum	hucasebh , huctbh
VS_RAB_AttRelPS_Inter	ACCUMULATION	INTEGER	Numbers of PS RABs of different traffic classes requested to release in a cell.	B67109375.C67179948	Sum	hucasebh , huctbh
VS_RAB_AttRelPS_NetOptm	ACCUMULATION	INTEGER	Numbers of PS RABs	B67109375.C67179955	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			requested to release in a cell due to different causes.			
VS_RAB_AttRelPS_NormRel	ACCUMULATION	INTEGER	Numbers of PS RABs requested to release in a cell due to different causes.	B67109375.C67179950	Sum	hucasebh , huctbh
VS_RAB_AttRelPS_OM	ACCUMULATION	INTEGER	Numbers of PS RABs requested to release in a cell due to different causes.	B67109375.C67179954	Sum	hucasebh , huctbh
VS_RAB_AttRelPS_RABPreempt	ACCUMULATION	INTEGER	Numbers of PS RABs requested to release in a cell due to different causes.	B67109375.C67179953	Sum	hucasebh , huctbh
VS_RAB_AttRelPS_Str	ACCUMULATION	INTEGER	Numbers of PS RABs of different traffic classes requested to release in a cell.	B67109375.C67179947	Sum	hucasebh , huctbh
VS_RAB_AttRelPS_UelInact	ACCUMULATION	INTEGER	Numbers of PS RABs requested to release in a cell due to different causes.	B67109375.C67179952	Sum	hucasebh , huctbh
VS_RAB_AttRelPS_Unsp	ACCUMULATION	INTEGER	Numbers of PS RABs requested to release in a cell due to different causes.	B67109375.C67189561	Sum	hucasebh , huctbh
VS_RAB_AttRel	ACCUMULATION	INTEGER	Numbers of PS	B67109375.C6717	Sum	hucasebh

elPS_UtranGen	TION	ER	RABs requested to release in a cell due to different causes.	9951		, huctbh
---------------	------	----	--	------	--	----------

7.5.78 Cell.Huawei.UMTS.RAC_Failures_due_to_Congestion

RAB/RAC failures due to Congestion

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RAC_DCC C_Fail_DLLD_ Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request DL power resources in the DCCC procedure	B67109391.C6719 2944	Sum	hucasebh , huctbh
VS_RAC_DCC C_Fail_OVSF_ Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request DL CODE resources in the DCCC procedure	B67109391.C6719 2922	Sum	hucasebh , huctbh
VS_RAC_DCC C_Fail_ULLD_ Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request UL power resources in the DCCC procedure	B67109391.C6719 2943	Sum	hucasebh , huctbh
VS_RAC_HHO _Fail_DLlub_C ong	ACCUMULATION	INTEGER	Number of failures in each cell to request DL lub resources in the	B67109391.C6719 2931	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			HHO procedure			
VS_RAC_HHO_Fail_DLLD_Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request DL power resources in the HHO procedure	B67109391.C67192942	Sum	hucasebh , huctbh
VS_RAC_HHO_Fail_HSDPANum_Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request HSDPA user number resources in the HHO procedure	B67109391.C67192932	Sum	hucasebh , huctbh
VS_RAC_HHO_Fail_HSUPANum_Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request HSUPA user number resources in the HHO procedure	B67109391.C67192933	Sum	hucasebh , huctbh
VS_RAC_HHO_Fail_ULIub_Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request UL Iub resources in the HHO procedure	B67109391.C67192930	Sum	hucasebh , huctbh
VS_RAC_HHO_Fail_ULLD_Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request UL power resources in the HHO procedure	B67109391.C67192941	Sum	hucasebh , huctbh
VS_RAC_HHO_Preempt_Cong	ACCUMULATION	INTEGER	Number of preempt after fail to request resources in the HHO procedure	B67109391.C67192938	Sum	hucasebh , huctbh
VS_RAC_HSDPA_Power_Confg	ACCUMULATION	INTEGER	Number of failures in each cell to request	B67109391.C67192935	Sum	hucasebh , huctbh

			HSDPA power resources			
VS_RAC_HSUPA_Power_Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request HSUPA power resources	B67109391.C67192651	Sum	hucasebh, huctbh
VS_RAC_R99_Power_Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request R99 power resources	B67109391.C67192934	Sum	hucasebh, huctbh
VS_RAC_SHO_Fail_DLsub_Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request DL sub resources in the TrChSwitch procedure	B67109391.C67192920	Sum	hucasebh, huctbh
VS_RAC_SHO_Fail_DLLD_Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request DL power resources in the SHO procedure	B67109391.C67192940	Sum	hucasebh, huctbh
VS_RAC_SHO_Fail_HSUPANum_Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request HSUPA user number resources in the SHO procedure	B67109391.C67192921	Sum	hucasebh, huctbh
VS_RAC_SHO_Fail_OVSF_Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request DL CODE resources in the SHO procedure	B67109391.C67192918	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RAC_SHO_Fail_ULIub_Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request UL Iub resources in the SHO procedure	B67109391.C67192919	Sum	hucasebh , huctbh
VS_RAC_SHO_Fail_ULLD_Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request UL power resources in the SHO procedure	B67109391.C67192939	Sum	hucasebh , huctbh
VS_RAC_Total_Power_Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request total power resources	B67109391.C67192936	Sum	hucasebh , huctbh
VS_RAC_TrChSwitch_Fail_DLCE_Cong	ACCUMULATION	INTEGER	Number of unsuccessfully applying for DL CE resources in each failed cell in TrChSwitch procedure	B67109391.C67192924	Sum	hucasebh , huctbh
VS_RAC_TrChSwitch_Fail_DLIub_Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request DL Iub resources in the TrChSwitch procedure	B67109391.C67192927	Sum	hucasebh , huctbh
VS_RAC_TrChSwitch_Fail_DLLD_Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request DL power resources in the TrChSwitch procedure	B67109391.C67192946	Sum	hucasebh , huctbh
VS_RAC_TrChSwitch_Fail_HSDPANum_Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request HSDPA user	B67109391.C67192928	Sum	hucasebh , huctbh

			number resources in the TrChSwitch procedure			
VS_RAC_TrCh Switch_Fail_HS UPANum_Cong	ACCUMULA TION	INTEG ER	Number of failures in each cell to request HSUPA user number resources in the TrChSwitch procedure	B67109391.C6719 2929	Sum	hucasebh , huctbh
VS_RAC_TrCh Switch_Fail_O VSF_Cong	ACCUMULA TION	INTEG ER	Number of failures in each cell to request DL CODE resources in the TrChSwitch procedure	B67109391.C6719 2925	Sum	hucasebh , huctbh
VS_RAC_TrCh Switch_Fail_U LCE_Cong	ACCUMULA TION	INTEG ER	Number of unsuccessfully applying for UL CE resources in each failed cell in TrChSwitch procedure	B67109391.C6719 2923	Sum	hucasebh , huctbh
VS_RAC_TrCh Switch_Fail_U LIub_Cong	ACCUMULA TION	INTEG ER	Number of failures in each cell to request UL Iub resources in the TrChSwitch procedure	B67109391.C6719 2926	Sum	hucasebh , huctbh
VS_RAC_TrCh Switch_Fail_U LLD_Cong	ACCUMULA TION	INTEG ER	Number of failures in each cell to request UL power resources in the	B67109391.C6719 2945	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			TrChSwitch procedure			
--	--	--	-------------------------	--	--	--

7.5.79 Cell.Huawei.UMTS.RAC_Failures_NewCallRequest

RCC/RAB setup failures

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RAC_NewCallRequest_Fail_HSDPANum_Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request HSDPA user number resources in the RRC/RAB setup procedure	B67109391.C67192916	Sum	hucasebh, huctbh
VS_RAC_NewCallRequest_Fail_HSUPANum_Cong	ACCUMULATION	INTEGER	Number of failures in each cell to request HSUPA user number resources in the RRC/RAB setup procedure	B67109391.C67192917	Sum	hucasebh, huctbh
VS_RAC_NewCallRequest_Preempt_Cong	ACCUMULATION	INTEGER	Number of preempt after fail to request resources in the RRC/RAB setup procedure	B67109391.C67192937	Sum	hucasebh, huctbh

7.5.80 Cell.Huawei.UMTS.Radio_Admission_Control

Radio Admission Control data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
-----	------	-----------	-------------	------------	--------------------	-------------------

$\bar{\%_VS_RAC_NewCallAcc}$	PERCENTAGE	FLOAT	Percentage successful cell resource requests for new call setup.	$100 * \frac{\{VS_RAC_NewCallAcc\}}{\{VS_RAC_NewCallReq\}}$	Average	hucasebh , huctbh
$\bar{\%_VS_RAC_ReconfigCallAcc}$	PERCENTAGE	FLOAT	Percentage successful cell resource requests due to UE service reconfiguration.	$100 * \frac{\{VS_RAC_ReconfigCallAcc\}}{\{VS_RAC_ReconfigCallReq\}}$	Average	hucasebh , huctbh
$\bar{\%_VS_RAC_SHOCallAcc}$	PERCENTAGE	FLOAT	Percentage successful cell resource requests for soft handover.	$100 * \frac{\{VS_RAC_SHOCallAcc\}}{\{VS_RAC_SHOCallReq\}}$	Average	hucasebh , huctbh
$\bar{\%_VS_RAC_TrChSwitchCallAcc}$	PERCENTAGE	FLOAT	Percentage When a UE transits from CELL_FACH to CELL_DCH state or from CELL_DCH to CELL_FACH state, the RNC shall request cell resource for this UE. Number of successful cell resource requests due to UE RRC state transition	$100 * \frac{\{VS_RAC_TrChSwitchCallAcc\}}{\{VS_RAC_TrChSwitchCallReq\}}$	Average	hucasebh , huctbh
VS_DCCC_E2E_ReqRateUp_UE	ACCUMULATION	INT8	Number of Attempts of	B67109391.C67184359	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			EDCH Rate DCCC Upsizing for Cell			
VS_RAC_Code RejDL	ACCUMULA TION	INTEG ER	Obsolete in release Vn00R010. Number of unsuccessful channelization code requests.	B67109391.C6718 1064	Sum	hucasebh , huctbh
VS_RAC_DL_T otalTrfFactor	INTENSITY	FLOA T	This item provides the average number of DL equivalent voice UEs in CELL_DCH state in a cell.	B67109391.C6719 9664	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_RAC_HHO_ CodeAssignRej_ DL	ACCUMULA TION	INTEG ER	Number of rejected target cell in the RNC due to DL codeassign failures.	B67109391.C6718 9859	Sum	hucasebh , huctbh
VS_RAC_HHO AdmissionRej_D L	ACCUMULA TION	INTEG ER	Obsolete in release Vn00R010. Number of rejected target cell in the RNC due to DL admission failures.	B67109391.C6718 9860	Sum	hucasebh , huctbh
VS_RAC_HHO AdmissionRej_U L	ACCUMULA TION	INTEG ER	Obsolete in release Vn00R010. Number of rejected target cell in the RNC due to UL admission failures.	B67109391.C6718 9861	Sum	hucasebh , huctbh

VS_RAC_HHO CallAcc	ACCUMULA TION	INTEG ER	After the RNC receives an inter-frequency measurement report from a UE, it shall request cell resource for successful hard handover to a new cell. Number of successful cell resource requests for hard handover.	B67109391.C6718 1079	Sum	hucasebh , huctbh
VS_RAC_HHO CallReq	ACCUMULA TION	INTEG ER	After the RNC receives an inter-frequency measurement report from a UE, it shall request cell resource for hard handover to a new cell. Number of cell resource requests for hard handover.	B67109391.C6718 1074	Sum	hucasebh , huctbh
VS_RAC_NewC allAcc	ACCUMULA TION	INTEG ER	Number of successful cell resource requests for new call setup.	B67109391.C6718 1076	Sum	hucasebh , huctbh
VS_RAC_NewC allReq	ACCUMULA TION	INTEG ER	Number of cell resource requests for	B67109391.C6718 1071	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			new call setup.			
VS_RAC_NewCallRequest_DownSZ_Cong	ACCUMULATION	INTEGER	No description available	B67109391.C67194937	Sum	hucasebh , huctbh
VS_RAC_NoAdmDL	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of DL admission failures upon decision according to current cell load.	B67109391.C67181066	Sum	hucasebh , huctbh
VS_RAC_NoAdmUL	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of UL admission failures upon decision according to current cell load.	B67109391.C67181065	Sum	hucasebh , huctbh
VS_RAC_ReconfigCallAcc	ACCUMULATION	INTEGER	Number of successful cell resource requests due to UE service reconfiguration.	B67109391.C67181078	Sum	hucasebh , huctbh
VS_RAC_ReconfigCallReq	ACCUMULATION	INTEGER	Number of cell resource requests due to UE service reconfiguration.	B67109391.C67181073	Sum	hucasebh , huctbh
VS_RAC_SHOCallAcc	ACCUMULATION	INTEGER	After the RNC receives an intra-frequency measurement	B67109391.C67181077	Sum	hucasebh , huctbh

			report from a UE, it shall request cell resource for successful soft handover to a new cell. Number of successful cell resource requests for soft handover.			
VS_RAC_SHOC allReq	ACCUMULATION	INTEGER	After the RNC receives an intra-frequency measurement report from a UE, it shall request cell resource for soft handover to a new cell. Number of cell resource requests for soft handover.	B67109391.C6718 1072	Sum	hucasebh , huctbh
VS_RAC_TrChS witchCallAcc	ACCUMULATION	INTEGER	When a UE transits from CELL_FACH to CELL_DCH state or from CELL_DCH to CELL_FACH state, the RNC shall request cell resource for this UE.	B67109391.C6718 1080	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Number of successful cell resource requests due to UE RRC state transition			
VS_RAC_TrChSwitchCallReq	ACCUMULATION	INTEGER	When a UE transits from CELL_FACH to CELL_DCH state or from CELL_DCH to CELL_FACH state, the RNC shall request cell resource for this UE. Number of cell resource requests due to UE RRC state transition.	B67109391.C67181075	Sum	hucasebh, huctbh
VS_RAC_UL_TotalTrfFactor	INTENSITY	FLOAT	This item provides the average number of UL equivalent voice UEs in CELL_DCH state in a cell.	B67109391.C67199663	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.81 Cell.Huawei.UMTS.Radio_Bearer_Usage_AMR_WB

Radio bearer usage AMR WB data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_AMR_WB_Ctrl_DL12_65	INTENSITY	FLOAT	Average number of UEs that use the AMR WB speech service at	B67109378.C67203809	Average	hucasebh, huctbh, Sum, Minimum

			the DL bit rate of 12.65 kbit/s.			m, Maximum
VS_AMR_WB_Ctrl_DL14_25	INTENSITY	FLOAT	Average number of UEs that use the AMR WB speech service at the DL bit rate of 14.25 kbit/s.	B67109378.C67203808	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_WB_Ctrl_DL15_85	INTENSITY	FLOAT	Average number of UEs that use the AMR WB speech service at the DL bit rate of 15.85 kbit/s.	B67109378.C67203807	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_WB_Ctrl_DL18_25	INTENSITY	FLOAT	Average number of UEs that use the AMR WB speech service at the DL bit rate of 18.25 kbit/s.	B67109378.C67203806	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_WB_Ctrl_DL19_85	INTENSITY	FLOAT	Average number of UEs that use the AMR WB speech service at the DL bit rate of 19.85 kbit/s.	B67109378.C67203805	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_WB_Ctrl_DL23_05	INTENSITY	FLOAT	Average number of UEs that use the AMR WB speech service at the DL bit rate of 23.05 kbit/s.	B67109378.C67203804	Average	hucasebh, huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_AMR_WB_Ctrl_DL23_85	INTENSITY	FLOAT	Average number of UEs that use the AMR WB speech service at the DL bit rate of 23.85 kbit/s.	B67109378.C67203803	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_WB_Ctrl_DL6_60	INTENSITY	FLOAT	Average number of UEs that use the AMR WB speech service at the DL bit rate of 6.60 kbit/s.	B67109378.C67203811	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_WB_Ctrl_DL8_85	INTENSITY	FLOAT	Average number of UEs that use the AMR WB speech service at the UL bit rate of 8.85 kbit/s.	B67109378.C67203810	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_WB_Ctrl_UL12_65	INTENSITY	FLOAT	Average number of UEs that use the AMR WB speech service at the UL bit rate of 12.65 kbit/s.	B67109378.C67203818	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_WB_Ctrl_UL14_25	INTENSITY	FLOAT	Average number of UEs that use the AMR WB speech service at the UL bit rate of 14.25 kbit/s.	B67109378.C67203817	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_WB_Ctrl_UL15_85	INTENSITY	FLOAT	Average number of UEs that use the AMR WB speech service at the UL bit rate of 15.85 kbit/s.	B67109378.C67203816	Average	hucasebh, huctbh, Sum, Minimum, Maximum

VS_AMR_WB_Ctrl_UL18_25	INTENSITY	FLOAT	Average number of UEs that use the AMR WB speech service at the UL bit rate of 18.25 kbit/s.	B67109378.C67203815	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_WB_Ctrl_UL19_85	INTENSITY	FLOAT	Average number of UEs that use the AMR WB speech service at the UL bit rate of 19.85 kbit/s.	B67109378.C67203814	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_WB_Ctrl_UL23_05	INTENSITY	FLOAT	Average number of UEs that use the AMR WB speech service at the UL bit rate of 23.05 kbit/s.	B67109378.C67203813	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_WB_Ctrl_UL23_85	INTENSITY	FLOAT	Average number of UEs that use the AMR WB speech service at the UL bit rate of 23.85 kbit/s.	B67109378.C67203812	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_WB_Ctrl_UL6_60	INTENSITY	FLOAT	Average number of UEs that use the AMR WB speech service at the UL bit rate of 6.60 kbit/s.	B67109378.C67203820	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_WB_Ctrl_UL8_85	INTENSITY	FLOAT	Average number of UEs that use the AMR WB	B67109378.C67203819	Average	hucasebh, huctbh, Sum,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			speech service at the UL bit rate of 8.85 kbit/s.			Minimum, Maximum
--	--	--	---	--	--	------------------

7.5.82 Cell.Huawei.UMTS.Radio_Bearer_Usage_AMR

Radio Bearer Usage AMR data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_AMR_Ctrl_DL10_2	INTENSITY	FLOAT	Mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions.	B67109378.C67199619	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_Ctrl_DL12_2	INTENSITY	FLOAT	Mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions.	B67109378.C67199620	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_Ctrl_DL4_75	INTENSITY	FLOAT	Mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions.	B67109378.C67199625	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_Ctrl_DL5_15	INTENSITY	FLOAT	Mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions.	B67109378.C67199624	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_Ctrl_DL5_9	INTENSITY	FLOAT	Mean numbers of UEs using the	B67109378.C67199623	Average	hucasebh, huctbh,

			variable-rate AMR speech service in a RNC in the UL and DL directions.			Sum, Minimum, Maximum
VS_AMR_Ctrl_DL6_7	INTENSITY	FLOAT	Mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions.	B67109378.C67199780	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_Ctrl_DL7_4	INTENSITY	FLOAT	Mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions.	B67109378.C67199622	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_Ctrl_DL7_95	INTENSITY	FLOAT	Mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions.	B67109378.C67199621	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_Ctrl_UL10_2	INTENSITY	FLOAT	Mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions.	B67109378.C67199626	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_Ctrl_UL12_2	INTENSITY	FLOAT	Mean numbers of UEs using the variable-rate AMR speech service in a RNC	B67109378.C67199627	Average	hucasebh, huctbh, Sum, Minimum,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			in the UL and DL directions.			Maximum
VS_AMR_Ctrl_UL4_75	INTENSITY	FLOAT	Mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions.	B67109378.C67199632	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_Ctrl_UL5_15	INTENSITY	FLOAT	Mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions.	B67109378.C67199631	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_Ctrl_UL5_9	INTENSITY	FLOAT	Mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions.	B67109378.C67199630	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_Ctrl_UL6_7	INTENSITY	FLOAT	Mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions.	B67109378.C67199781	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_Ctrl_UL7_4	INTENSITY	FLOAT	Mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions.	B67109378.C67199629	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMR_Ctrl_UL7_95	INTENSITY	FLOAT	Mean numbers of UEs using the variable-rate AMR speech service in a RNC	B67109378.C67199628	Average	hucasebh, huctbh, Sum, Minimum,

			in the UL and DL directions.			Maximum
--	--	--	------------------------------	--	--	---------

7.5.83 Cell.Huawei.UMTS.Radio_Bearer_Usage_CS

Radio Bearer Usage CS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RB_DLConvCS_64	INTENSITY	FLOAT	Average numbers of CS conversational service RBs (downlink) with different bit rates in a cell, that is, average number of the downlink RBs obtained at the sampling points in the cell in a measurement period, Average number of established CS conversational service RBs with DL rate of 64 kbps	B67109378.C67199556	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_DLStrCS_57_6	INTENSITY	FLOAT	Average numbers of CS streaming service RBs with bit rates of 14.4 K, 28.8 K, 32 K, 57.6 K, and 64 K in a cell, that is, average number of the RBs obtained at the	B67109378.C67199560	Average	hucasebh, huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			sampling points in the cell in a measurement period, Average number of established CS streaming service RBs with DL rate of 57.6 kbps			
--	--	--	---	--	--	--

7.5.84 Cell.Huawei.UMTS.Radio_Bearer_Usage_DRD_IFFreq

Radio Bearer Usage DRD IFFreq data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
IFREQ_CS_M BDR_RBSet_ AttOut	ACCUMULATION	INTEGER	The measurement items take statistics of the number of CS Traffic RB Setup DRD out of a cell based on InterFreq measurement.	B67109378.C67196293	Sum	hucasebh , huctbh
IFREQ_CS_M BDR_RBSet_ SucOut	ACCUMULATION	INTEGER	The measurement items take statistics of the number of CS Traffic RB Setup DRD successfully out of a cell based on InterFreq measurement.	B67109378.C67196294	Sum	hucasebh , huctbh
IFREQ_PS_M BDR_HResC_ RBSet_AttOut	ACCUMULATION	INTEGER	The measurement items take statistics of the number of HSDPA PS	B67109378.C67196297	Sum	hucasebh , huctbh

			Traffic RB Setup DRD out of a cell based on InterFreq measurement.			
IFREQ_PS_M BDR_HResC_ RBSet_SucOut	ACCUMULATION	INTEGER	The measurement items take statistics of the number of HSDPA PS Traffic RB Setup DRD successfully out of a cell based on InterFreq measurement.	B67109378.C67196298	Sum	hucasebh , huctbh
IFREQ_PS_M BDR_R99_RB Set_AttOut	ACCUMULATION	INTEGER	The measurement items take statistics of the number of R99 PS Traffic RB Setup DRD out of a cell based on InterFreq measurement.	B67109378.C67196295	Sum	hucasebh , huctbh
IFREQ_PS_M BDR_R99_RB Set_SucOut	ACCUMULATION	INTEGER	The measurement items take statistics of the number of R99 PS Traffic RB Setup DRD successfully out of a cell based on InterFreq measurement.	B67109378.C67196296	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

7.5.85 Cell.Huawei.UMTS.Radio_Bearer_Usage_DRD

Radio bearer usage DRD.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
$\%_VS_DRD_RB_D2H_SuccIn$	PERCENTAGE	FLOAT	Percentage successful RADIO BEARER RECONFIGURATION COMPLETE messages received from the UE, which indicates that the UE successfully redirects to the target inter-frequency cell.	$100 * \frac{\{VS_DRD_RB_D2H_SuccIn\}}{\{VS_DRD_RB_D2H_AttIn\}}$	Average	hucasebh, huctbh
$\%_VS_DRD_RB_D2H_SuccOut$	PERCENTAGE	FLOAT	Percentage successful RADIO BEARER SETUP COMPLETE/RADIO BEARER RECONFIGURATION COMPLETE messages sent from the cell that the UE camps on, which indicates that the UE successfully redirects to the target cell with the channel transformation type of "DCH TO HSDPA".	$100 * \frac{\{VS_DRD_RB_D2H_SuccOut\}}{\{VS_DRD_RB_D2H_AttOut\}}$	Average	hucasebh, huctbh
$\%_VS_DRD_RBRecfg_SuccIn$	PERCENTAGE	FLOAT	Percentage successful RADIO BEARER RECONFIGURATION COMPLETE messages received from the UE,	$100 * \frac{\{VS_DRD_RBR_ecfg_SuccIn\}}{\{VS_DRD_RBR_ecfg_AttIn\}}$	Average	hucasebh, huctbh

			which indicates that the UE successfully redirects to the target inter-frequency cell.			
%_VS_DRD_RBRecfg_SuccOut	PERCENTAGE	FLOAT	Percentage successful RADIO BEARER RECONFIGURATION COMPLETE messages received from the cell that the UE camps on, which indicates that the UE successfully redirects to the other inter-frequency cell.	$100 * \frac{\{VS_DRD_RBRecfg_SuccOut\}}{\{VS_DRD_RBRecfg_AttOut\}}$	Average	hucasebh, huctbh
%_VS_DRD_RBSetup_SuccIn	PERCENTAGE	FLOAT	Percentage successful RADIO BEARER SETUP COMPLETE messages received from the UE, which indicates that the UE successfully redirects to a target inter-frequency cell.	$100 * \frac{\{VS_DRD_RBSetup_SuccIn\}}{\{VS_DRD_RBSetup_AttIn\}}$	Average	hucasebh, huctbh
%_VS_DRD_RBSetup_SuccOut	PERCENTAGE	FLOAT	Percentage successful RADIO BEARER SETUP COMPLETE messages received from the cell that UE camps on, which indicates	$100 * \frac{\{VS_DRD_RBSetup_SuccOut\}}{\{VS_DRD_RBSetup_AttOut\}}$	Average	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			that the UE successfully redirects to an inter-frequency cell.			
VS_DRD_RB_D2H_AttIn	ACCUMULATION	INTEGER	Number of RADIO BEARER SETUP/ RADIO BEARER RECONFIGURATION messages sent to the UE, which indicates that the UE attempts to redirect to a target cell with the channel transformation type of "DCH TO HSDPA".	B67109378.C67192442	Sum	hucasebh , huctbh
VS_DRD_RB_D2H_AttOut	ACCUMULATION	INTEGER	Number of RADIO BEARER SETUP/ RADIO BEARER RECONFIGURATION messages sent from the cell that the UE camps on, which indicates that the UE attempts to redirect to a target cell with the channel transformation type of "DCH TO HSDPA".	B67109378.C67192440	Sum	hucasebh , huctbh
VS_DRD_RB_D2H_SuccIn	ACCUMULATION	INTEGER	Number of RADIO BEARER RECONFIGURATION COMPLETE messages received from the UE, which indicates that the UE successfully redirects to the	B67109378.C67192443	Sum	hucasebh , huctbh

			target inter-frequency cell.			
VS_DRD_RB_D2H_SuccOut	ACCUMULATION	INTEGER	Number of RADIO BEARER SETUP COMPLETE/RADIO BEARER RECONFIGURATION COMPLETE messages sent from the cell that the UE camps on, which indicates that the UE successfully redirects to the target cell with the channel transformation type of "DCH TO HSDPA".	B67109378.C67192441	Sum	hucasebh, huctbh
VS_DRD_RB_Recfg_AttIn	ACCUMULATION	INTEGER	Number of RADIO BEARER RECONFIGURATION messages sent to the UE, which indicates that the UE redirects to a target inter-frequency cell.	B67109378.C67192395	Sum	hucasebh, huctbh
VS_DRD_RB_Recfg_AttOut	ACCUMULATION	INTEGER	Number of RADIO BEARER RECONFIGURATION messages sent from the cell that the UE camps on, which indicates that the UE attempts to redirect to the other cell.	B67109378.C67192393	Sum	hucasebh, huctbh
VS_DRD_RB	ACCUMULATION	INTEGER	Number of RADIO	B67109378.C671	Sum	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Recfg_SuccIn	TION	ER	BEARER RECONFIGURATION COMPLETE messages received from the UE, which indicates that the UE successfully redirects to the target inter-frequency cell.	92396		, huctbh
VS_DRD_RB Recfg_SuccOut	ACCUMULATION	INTEGER	Number of RADIO BEARER RECONFIGURATION COMPLETE messages received from the cell that the UE camps on, which indicates that the UE successfully redirects to the other inter-frequency cell.	B67109378.C67192394	Sum	hucasebh , huctbh
VS_DRD_RB Setup_AttIn	ACCUMULATION	INTEGER	Number of RADIO BEARER SETUP messages sent to the UE, which indicates that the UE attempts to redirect to a target inter-frequency cell.	B67109378.C67192391	Sum	hucasebh , huctbh
VS_DRD_RB Setup_AttOut	ACCUMULATION	INTEGER	Total number of RADIO BEARER SETUP messages sent from the cell that the UE camps on, which indicates that the UE attempts to redirect to an inter-frequency cell.	B67109378.C67192389	Sum	hucasebh , huctbh

VS_DRD_RB Setup_SuccIn	ACCUMULATION	INTEGER	Number of RADIO BEARER SETUP COMPLETE messages received from the UE, which indicates that the UE successfully redirects to a target inter-frequency cell.	B67109378.C67192392	Sum	hucasebh , huctbh
VS_DRD_RB Setup_SuccOut	ACCUMULATION	INTEGER	Number of RADIO BEARER SETUP COMPLETE messages received from the cell that UE camps on, which indicates that the UE successfully redirects to an inter-frequency cell.	B67109378.C67192390	Sum	hucasebh , huctbh

7.5.86 Cell.Huawei.UMTS.Radio_Bearer_Usage_PS_Bkg

Radio Bearer Usage PS Backgroup data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RB_DLBkg PS_128	INTENSITY	FLOAT	Average numbers of PS background service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is,	B67109378.C67199594	Average	hucasebh , huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS background service RBs with DL rate of 128 kbps			
VS_RB_DLBkg PS_144	INTENSITY	FLOAT	Average numbers of PS background service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS background service RBs with DL rate of 144 kbps	B67109378.C67199595	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_DLBkg PS_16	INTENSITY	FLOAT	Average numbers of PS background service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the	B67109378.C67199591	Average	hucasebh, huctbh, Sum, Minimum, Maximum

			sampling points in the cell in a measurement period, Average number of PS background service RBs with DL rate of 16 kbps			
VS_RB_DLBkg PS_256	INTENSITY	FLOAT	Average numbers of PS background service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS background service RBs with DL rate of 256 kbps	B67109378.C67199596	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_DLBkg PS_32	INTENSITY	FLOAT	Average numbers of PS background service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number	B67109378.C67199592	Average	hucasebh, huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS background service RBs with DL rate of 32 kbps			
VS_RB_DLBkg PS_384	INTENSITY	FLOAT	Average numbers of PS background service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS background service RBs with DL rate of 384 kbps	B67109378.C67199597	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_DLBkg PS_64	INTENSITY	FLOAT	Average numbers of PS background service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points	B67109378.C67199593	Average	hucasebh, huctbh, Sum, Minimum, Maximum

			in the cell in a measurement period, Average number of PS background service RBs with DL rate of 64 kbps			
VS_RB_DLBkg PS_8	INTENSITY	FLOAT	Average numbers of PS background service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS background service RBs with DL rate of 8 kbps	B67109378.C67199590	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_ULBkg PS_128	INTENSITY	FLOAT	Average numbers of PS background service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the	B67109378.C67199602	Average	hucasebh, huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			sampling points in the cell in a measurement period, Average number of PS background service RBs with UL rate of 128 kbps			
VS_RB_ULBkg PS_144	INTENSITY	FLOAT	Average numbers of PS background service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS background service RBs with UL rate of 144 kbps	B67109378.C67199603	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_ULBkg PS_16	INTENSITY	FLOAT	Average numbers of PS background service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement	B67109378.C67199599	Average	hucasebh, huctbh, Sum, Minimum, Maximum

			period, Average number of PS background service RBs with UL rate of 16 kbps			
VS_RB_ULBkg PS_256	INTENSITY	FLOAT	Average numbers of PS background service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS background service RBs with UL rate of 256 kbps	B67109378.C67199604	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_ULBkg PS_32	INTENSITY	FLOAT	Average numbers of PS background service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points	B67109378.C67199600	Average	hucasebh, huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			in the cell in a measurement period, age number of PS background service RBs with UL rate of 32 kbps			
VS_RB_ULBkg PS_384	INTENSITY	FLOAT	Average numbers of PS background service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS background service RBs with UL rate of 384 kbps	B67109378.C67199 605	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_RB_ULBkg PS_64	INTENSITY	FLOAT	Average numbers of PS background service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average	B67109378.C67199 601	Average	hucasebh , huctbh, Sum, Minimum, Maximum

			number of PS background service RBs with UL rate of 64 kbps			
VS_RB_ULBkg PS_8	INTENSITY	FLOAT	Average numbers of PS background service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS background service RBs with UL rate of 8 kbps	B67109378.C67199598	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.87 Cell.Huawei.UMTS.Radio_Bearer_Usage_PS_Conv

Radio Bearer Usage PS Conversational data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RB_ConvPS_16	INTENSITY	FLOAT	Obsolete from UTRAN/V900R011:No description.	B67109378.C67203847	Average	hucasebh, huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RB_ConvPS_32	INTENSITY	FLOAT	Obsolete from UTRAN/V900R011:No description.	B67109378.C67203848	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_ConvPS_64	INTENSITY	FLOAT	Obsolete from UTRAN/V900R011:No description.	B67109378.C67203849	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_DLConvPS_16	INTENSITY	FLOAT	Obsolete from UTRAN/V900R011:Average number of PS conversational service RBs with DL rate of 16 kbps	B67109378.C67203428	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_DLConvPS_32	INTENSITY	FLOAT	Obsolete from UTRAN/V900R011:Average number of PS conversational service RBs with DL rate of 32 kbps	B67109378.C67203429	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_DLConvPS_38_8	INTENSITY	FLOAT	Mean number of PS conversational service R99 RBs at the DL bit rate of 38.8 kbit/s.	B67109378.C67204790	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_DLConvPS_39_2	INTENSITY	FLOAT	Mean number of PS conversational service R99 RBs at the DL bit rate of 39.2 kbit/s.	B67109378.C67204791	Average	hucasebh, huctbh, Sum, Minimum, Maximum

						m
VS_RB_DLCon vPS_40	INTENSI TY	FLOA T	Mean number of PS conversational service R99 RBs at the DL bit rate of 40 kbit/s.	B67109378.C67204 792	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_RB_DLCon vPS_42_8	INTENSI TY	FLOA T	Mean number of PS conversational service R99 RBs at the DL bit rate of 42.8 kbit/s.	B67109378.C67204 793	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_RB_DLCon vPS_64	INTENSI TY	FLOA T	Average number of PS conversational service RBs with DL rate of 64 kbps	B67109378.C67203 430	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_RB_DLCon vPS_8	INTENSI TY	FLOA T	Obsolete from UTRAN/V900R0 11: Average number of PS conversational service RBs with DL rate of 8 kbps	B67109378.C67203 427	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_RB_ULCon vCS_64	INTENSI TY	FLOA T	Average number of CS conversational service RBs with DL rate of 64 kbps	B67109378.C67203 438	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_RB_ULCon vPS_16	INTENSI TY	FLOA T	Obsolete from UTRAN/V900R0	B67109378.C67203 432	Average	hucasebh , huctbh,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			11:Average number of PS conversational service RBs with UL rate of 16 kbps			Sum, Minimum, Maximum
VS_RB_ULCon vPS_32	INTENSITY	FLOAT	Obsolete from UTRAN/V900R0 11:Average number of PS conversational service RBs with UL rate of 32 kbps	B67109378.C67203433	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_ULCon vPS_38_8	INTENSITY	FLOAT	Mean number of PS conversational service R99 RBs at the UL bit rate of 38.8 kbit/s.	B67109378.C67204794	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_ULCon vPS_39_2	INTENSITY	FLOAT	Mean number of PS conversational service R99 RBs at the UL bit rate of 39.2 kbit/s.	B67109378.C67204795	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_ULCon vPS_40	INTENSITY	FLOAT	Mean number of PS conversational service R99 RBs at the UL bit rate of 40 kbit/s.	B67109378.C67204796	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_ULCon vPS_42_8	INTENSITY	FLOAT	Mean number of PS conversational service R99 RBs at the UL bit rate of 42.8 kbit/s.	B67109378.C67204797	Average	hucasebh, huctbh, Sum, Minimum, Maximum

VS_RB_ULCon vPS_64	INTENSITY	FLOAT	Average number of PS conversational service RBs with UL rate of 64 kbps	B67109378.C67203434	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_ULCon vPS_8	INTENSITY	FLOAT	Obsolete from UTRAN/V900R011: Average number of PS conversational service RBs with UL rate of 8 kbps	B67109378.C67203431	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.88 Cell.Huawei.UMTS.Radio_Bearer_Usage_PS_Inter

Radio Bearer Usage PS Interactive data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RB_DLInter PS_128	INTENSITY	FLOAT	Average numbers of PS interactive service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS interactive service RBs with	B67109378.C67199578	Average	hucasebh, huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			DL rate of 128 kbps			
VS_RB_DLInter PS_144	INTENSITY	FLOAT	Average numbers of PS interactive service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS interactive service RBs with DL rate of 144 kbps	B67109378.C67199 579	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_RB_DLInter PS_16	INTENSITY	FLOAT	Average numbers of PS interactive service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS interactive service RBs with DL rate of 16 kbps	B67109378.C67199 575	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_RB_DLInter PS_256	INTENSITY	FLOAT	Average numbers of PS interactive	B67109378.C67199 580	Average	hucasebh , huctbh,

			service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS interactive service RBs with DL rate of 256 kbps			Sum, Minimum, Maximum
VS_RB_DLInter PS_32	INTENSITY	FLOAT	Average numbers of PS interactive service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS interactive service RBs with DL rate of 32 kbps	B67109378.C67199576	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_DLInter PS_384	INTENSITY	FLOAT	Average numbers of PS interactive	B67109378.C67199581	Average	hucasebh, huctbh,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS interactive service RBs with DL rate of 384 kbps			Sum, Minimum, Maximum
VS_RB_DLInter PS_64	INTENSITY	FLOAT	Average numbers of PS interactive service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS interactive service RBs with DL rate of 64 kbps	B67109378.C67199577	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_DLInter PS_8	INTENSITY	FLOAT	Average numbers of PS interactive service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K	B67109378.C67199574	Average	hucasebh, huctbh, Sum, Minimum, Maximum

			in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS interactive service RBs with DL rate of 8 kbps			
VS_RB_ULInter PS_128	INTENSI TY	FLOA T	Average numbers of PS interactive service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS interactive service RBs with UL rate of 128 kbps	B67109378.C67199 586	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_RB_ULInter PS_144	INTENSI TY	FLOA T	Average numbers of PS interactive service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is,	B67109378.C67199 587	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS interactive service RBs with UL rate of 144 kbps			
VS_RB_ULInterPS_16	INTENSITY	FLOAT	Average numbers of PS interactive service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS interactive service RBs with UL rate of 16 kbps	B67109378.C67199583	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_ULInterPS_256	INTENSITY	FLOAT	Average numbers of PS interactive service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a	B67109378.C67199588	Average	hucasebh, huctbh, Sum, Minimum, Maximum

			measurement period, Average number of PS interactive service RBs with UL rate of 256 kbps			
VS_RB_ULInter PS_32	INTENSITY	FLOAT	Average numbers of PS interactive service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS interactive service RBs with UL rate of 32 kbps	B67109378.C67199584	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_ULInter PS_384	INTENSITY	FLOAT	Average numbers of PS interactive service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a	B67109378.C67199589	Average	hucasebh, huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			measurement period, Average number of PS interactive service RBs with UL rate of 384 kbps			
VS_RB_ULInterPS_64	INTENSITY	FLOAT	Average numbers of PS interactive service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS interactive service RBs with UL rate of 64 kbps	B67109378.C67199585	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_ULInterPS_8	INTENSITY	FLOAT	Average numbers of PS interactive service RBs with bit rates of 8 K, 16 K, 32 K, 64 K, 128 K, 144 K, 256 K and 384 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS interactive service RBs with	B67109378.C67199582	Average	hucasebh, huctbh, Sum, Minimum, Maximum

			UL rate of 8 kbps		
--	--	--	-------------------	--	--

7.5.89 Cell.Huawei.UMTS.Radio_Bearer_Usage_PS_Stream

Radio Bearer Usage PS streaming data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RB_DLStrPS_128	INTENSITY	FLOAT	Average numbers of PS streaming service RBs with bit rates of 16 K, 32 K, 64 K, 128 K and 144 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS streaming service RBs with DL rate of 128 kbps	B67109378.C67199569	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_DLStrPS_144	INTENSITY	FLOAT	Average numbers of PS streaming service RBs with bit rates of 16 K, 32 K, 64 K, 128 K and 144 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement	B67109378.C67199570	Average	hucasebh, huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			period, Average number of PS streaming service RBs with DL rate of 144 kbps			
VS_RB_DLStrP S_16	INTENSITY	FLOAT	Average number of PS streaming service RBs with DL rate of 16 kbps	B67109378.C672034 40	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_RB_DLStrP S_256	INTENSITY	FLOAT	Average number of PS streaming service RBs with DL rate of 256 kbps	B67109378.C672034 41	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_RB_DLStrP S_32	INTENSITY	FLOAT	Average numbers of PS streaming service RBs with bit rates of 16 K, 32 K, 64 K, 128 K and 144 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS streaming service RBs with DL rate of 32 kbps	B67109378.C671995 67	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_RB_DLStrP S_64	INTENSITY	FLOAT	Average numbers of PS streaming service RBs with bit rates of 16 K, 32 K, 64 K, 128 K and 144 K in a	B67109378.C671995 68	Average	hucasebh , huctbh, Sum, Minimum, Maximum

			cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS streaming service RBs with DL rate of 64 kbps			m
VS_RB_DLStrP S_8	INTENSITY	FLOAT	Average number of PS streaming service RBs with DL rate of 8 kbps	B67109378.C672034 39	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_RB_ULStrC S_57_6	INTENSITY	FLOAT	Average number of established CS streaming service RBs with UL rate of 57.6 kbps	B67109378.C672034 42	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_RB_ULStrP S_128	INTENSITY	FLOAT	Average number of PS streaming service RBs with UL rate of 128 kbps	B67109378.C672034 46	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_RB_ULStrP S_144	INTENSITY	FLOAT	Average number of PS streaming service RBs with UL rate of 144 kbps	B67109378.C672034 47	Average	hucasebh , huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						m
VS_RB_ULStrP S_16	INTENSI TY	FLOA T	Average numbers of PS streaming service RBs with bit rates of 16 K, 32 K, 64 K, 128 K and 144 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS streaming service RBs with UL rate of 16 kbps	B67109378.C671995 71	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_RB_ULStrP S_256	INTENSI TY	FLOA T	Average number of PS streaming service RBs with UL rate of 256 kbps	B67109378.C672034 48	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_RB_ULStrP S_32	INTENSI TY	FLOA T	Average numbers of PS streaming service RBs with bit rates of 16 K, 32 K, 64 K, 128 K and 144 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS streaming service RBs with UL rate of 32 kbps	B67109378.C671995 72	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m

VS_RB_ULStrPS_64	INTENSITY	FLOAT	Average numbers of PS streaming service RBs with bit rates of 16 K, 32 K, 64 K, 128 K and 144 K in a cell, that is, average number of the RBs obtained at the sampling points in the cell in a measurement period, Average number of PS streaming service RBs with UL rate of 64 kbps	B67109378.C67199573	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RB_ULStrPS_8	INTENSITY	FLOAT	Average number of PS streaming service RBs with UL rate of 8 kbps	B67109378.C67203445	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.90 Cell.Huawei.UMTS.Radio_Bearer

Radio Bearer data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_SuccRBRecfg	PERCENTAGE	FLOAT	Percentage RADIO BEARER RECONFIGURATION COMPLETE messages from UEs in a cell to the	$100 * \frac{\{VS_SuccRBRecfg\}}{\{VS_AttRBRecfg\}}$	Average	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			RNC.			
%_VS_SuccRBSetup	PERCENTAGE	FLOAT	Percentage RADIO BEARER SETUP COMPLETE messages from UEs in a cell to the RNC	$100 * \frac{\{VS_SuccRBSetup\}}{\{VS_AttRBSetup\}}$	Average	hucasebh , huctbh
VS_AttRBReCfg	ACCUMULATION	INTEGER	Number of RADIO BEARER RECONFIGURATION messages from the RNC to UEs in a cell.	B67109378.C67180122	Sum	hucasebh , huctbh
VS_AttRBSetup	ACCUMULATION	INTEGER	Number of RADIO BEARER SETUP messages from the RNC to a UE in a cell	B67109378.C67180113	Sum	hucasebh , huctbh
VS_FailRBReCfg_CellUpd	ACCUMULATION	INTEGER	Numbers of RB reconfigurations failures due to different causes in a cell.	B67109378.C67180128	Sum	hucasebh , huctbh
VS_FailRBReCfg_CfgUnsup	ACCUMULATION	INTEGER	Numbers of RB reconfigurations failures due to different causes in a cell.	B67109378.C67180124	Sum	hucasebh , huctbh
VS_FailRBReCfg_IncCfg	ACCUMULATION	INTEGER	Numbers of RB reconfigurations failures due to different causes in a cell.	B67109378.C67180129	Sum	hucasebh , huctbh
VS_FailRBReCfg_NoReply	ACCUMULATION	INTEGER	Numbers of RB reconfigurations failures due to different causes in a cell.	B67109378.C67180130	Sum	hucasebh , huctbh
VS_FailRBReCfg_PhyChFail	ACCUMULATION	INTEGER	Numbers of RB reconfigurations	B67109378.C67180125	Sum	hucasebh , huctbh

			failures due to different causes in a cell.			
VS_FailRBRel_CellUpd	ACCUMULATION	INTEGER	Numbers of RB release failures due to different causes in a cell.	B67109378.C67180146	Sum	hucasebh , huctbh
VS_FailRBRel_InvCfg	ACCUMULATION	INTEGER	Numbers of RB release failures due to different causes in a cell.	B67109378.C67180147	Sum	hucasebh , huctbh
VS_FailRBRel_NoReply	ACCUMULATION	INTEGER	Numbers of RB release failures due to different causes in a cell.	B67109378.C67180148	Sum	hucasebh , huctbh
VS_FailRBSet_up_CellUpd	ACCUMULATION	INTEGER	Numbers of RB setup failures due to different causes in a cell.	B67109378.C67180119	Sum	hucasebh , huctbh
VS_FailRBSet_up_CfgUnsup	ACCUMULATION	INTEGER	Numbers of RB setup failures due to different causes in a cell.	B67109378.C67180115	Sum	hucasebh , huctbh
VS_FailRBSet_up_IncCfg	ACCUMULATION	INTEGER	Numbers of RB setup failures due to different causes in a cell.	B67109378.C67180120	Sum	hucasebh , huctbh
VS_FailRBSet_up_NoReply	ACCUMULATION	INTEGER	Numbers of RB setup failures due to different causes in a cell.	B67109378.C67180121	Sum	hucasebh , huctbh
VS_FailRBSet_up_PhyChFail	ACCUMULATION	INTEGER	Numbers of RB setup failures due to different causes in a cell.	B67109378.C67180116	Sum	hucasebh , huctbh
VS_RB_AttRe	ACCUMULATION	INTEGER	Obsolete from	B67109378.C671	Sum	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

cfgPS_CMB_Cell	TION	ER	UTRAN/V100V20 0R011: Number of RADIO BEARER RECONFIGURA TION messages from the RNC to UEs in a cell.	90599		, huctbh
VS_RB_RateDown_To_0kbps	ACCUMULATION	INTEGER	This measurement item takes statistics of the time of RAB rated down to 0kbps for low activity or other reasons in the best cell.	B67109378.C671 96303	Sum	hucasebh , huctbh
VS_RB_SuccRecfgPS_CMB_Cell	ACCUMULATION	INTEGER	Obsolete from UTRAN/V100V20 0R011: Number of RADIO BEARER RECONFIGURA TION COMPLETE messages from UEs in a cell to the RNC.	B67109378.C671 90600	Sum	hucasebh , huctbh
VS_SuccRBRecfg	ACCUMULATION	INTEGER	Number of RADIO BEARER RECONFIGURA TION COMPLETE messages from UEs in a cell to the RNC.	B67109378.C671 80123	Sum	hucasebh , huctbh
VS_SuccRBSetup	ACCUMULATION	INTEGER	Number of RADIO BEARER SETUP COMPLETE messages from UEs in a cell to the RNC	B67109378.C671 80114	Sum	hucasebh , huctbh

7.5.91 Cell.Huawei.UMTS.RLC_HSDPA

RLC HSDPA data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_AM_RLC_Rtx_HsdpaTrf_PDU	ACCUMULATION	INTEGER	This measurement item provides the number of traffic PDUs retransmitted by the RLC on HSDPA in acknowledged mode.	B67109393.C67204808	Sum	hucasebh, huctbh

7.5.92 Cell.Huawei.UMTS.RLC_R99

RLC R99 data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_AM_RLC_Rtx_R99Sig_PDU	ACCUMULATION	INTEGER	This measurement item provides the number of signaling PDUs retransmitted by the RLC on R99 in acknowledged mode.	B67109393.C67204812	Sum	hucasebh, huctbh
VS_AM_RLC_Rtx_R99Trf_PDU	ACCUMULATION	INTEGER	This measurement item provides the number of traffic PDUs retransmitted by	B67109393.C67204809	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			the RLC on R99 in acknowledged mode.			
VS_AM_RLC_Tx_R99Sig_PDU	ACCUMULATION	INTEGER	This measurement item provides the number of signaling PDUs delivered by the RLC on R99 in acknowledged mode. It does not include the PDUs retransmitted.	B67109393.C67204807	Sum	hucasebh , huctbh
VS_RLC_AM_Disc_R99Sig_PDU	ACCUMULATION	INTEGER	This measurement item provides the number of signaling PDUs on R99 discarded in the downlink by the RLC in acknowledged mode during the transmission.	B67109393.C67204811	Sum	hucasebh , huctbh
VS_RLC_AM_Disc_R99TrfPDU	ACCUMULATION	INTEGER	This measurement item provides the number of traffic PDUs on R99 discarded in the downlink by the RLC in acknowledged mode.	B67109393.C67204810	Sum	hucasebh , huctbh
VS_RLC_AM_Tx_R99Trf_PDU	ACCUMULATION	INTEGER	his measurement item provides the number of traffic PDUs	B67109393.C67204806	Sum	hucasebh , huctbh

			delivered by the RLC on R99 in acknowledged mode. It does not include the PDUs retransmitted.			
--	--	--	---	--	--	--

7.5.93 Cell.Huawei.UMTS.RLC_Statistics

Radio Link Control data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_AM_RLC_Rtx_HsdpaSig_PDU	ACCUMULATION	INT8	Obsolete from UTRAN/V900 R011:No description	B67109393.C67199883	Sum	hucasebh , huctbh
VS_AM_RLC_Rtx_Sig_PDU	ACCUMULATION	INTEGER	Number of HSDPA Signaling PDUs Retransmitted by AM RLC for Cell	B67109393.C67204862	Sum	hucasebh , huctbh
VS_AM_RLC_Tx_HsdpaSig_PDU	ACCUMULATION	INT8	Obsolete from UTRAN/V900 R011:No description	B67109393.C67199881	Sum	hucasebh , huctbh
VS_AM_RLC_Tx_Sig_PDU	ACCUMULATION	INTEGER	Number of HSDPA Signaling PDUs Sent by AM RLC for Cell	B67109393.C67204861	Sum	hucasebh , huctbh
VS_RLC_AM_Disc_HsdpaSig_PDU	ACCUMULATION	INT8	Obsolete from UTRAN/V900 R011:No description	B67109393.C67199885	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RLC_AM_Disc_HsdpaTrf_PDU	ACCUMULATION	INT8	Obsolete from UTRAN/V900 R011:No description	B67109393.C67199886	Sum	hucasebh , huctbh
VS_RLC_AM_Disc_PDU	ACCUMULATION	INTEGER	Number of Service HSDPA PDUs Discarded by AM RLC for Cell	B67109393.C67204863	Sum	hucasebh , huctbh
VS_RLC_AM_Disc_Sig_PDU	ACCUMULATION	INTEGER	Number of Downlink HSDPA Signaling PDUs Discarded by AM RLC for Cell	B67109393.C67204864	Sum	hucasebh , huctbh
VS_RLC_AM_Rtx_Trfr_PDU_1	ACCUMULATION	INTEGER	Number of retransmitted service PDUs that are smaller than 34% of the maximum RLC PDU size.	B67109393.C67204177	Sum	hucasebh , huctbh
VS_RLC_AM_Rtx_Trfr_PDU_2	ACCUMULATION	INTEGER	Number of retransmitted service PDUs that are equal to or greater than 34% of the maximum RLC PDU size and equal to or smaller than 67% of the maximum RLC PDU size.	B67109393.C67204178	Sum	hucasebh , huctbh
VS_RLC_AM_Rtx_Trfr_PDU_3	ACCUMULATION	INTEGER	Number of retransmitted service PDUs that are greater than 67% of the maximum RLC	B67109393.C67204179	Sum	hucasebh , huctbh

			PDU size.			
VS_RLC_AM_Rtx_Trfr_PDU	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109393.C67199884	Sum	hucasebh , huctbh
VS_RLC_AM_Tx_HsdpaTrfr_PDU	ACCUMULATION	INT8	Obsolete from UTRAN/V900 R011:No description	B67109393.C67199882	Sum	hucasebh , huctbh
VS_RLC_AM_Tx_Trfr_PDU	ACCUMULATION	INTEGER	Number of HSDPA Service PDUs Sent by AM RLC for Cell	B67109393.C67204860	Sum	hucasebh , huctbh

7.5.94 Cell.Huawei.UMTS.RRC_Connection_Global

RRC Connection Global data.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_DRD_RRC_Out_Succ	PERCENTAGE	FLOAT	Percentage successful RRC DRDs in a cell.	$100 * \frac{\{VS_DRD_RRC_Out_Succ\}}{\{VS_DRD_RRC_Out_Att\}}$	Average	hucasebh , huctbh
%_VS_RRC_SuccConEst_CCH	PERCENTAGE	FLOAT	Percentage RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell through which messages the RNC judges that the RRC connections are set up on CCH.	$100 * \frac{\{VS_RRC_SuccConEst_CCH\}}{\{VS_RRC_AttConEst_CCH\}}$	Average	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

%_VS_RRC_SuccConEst_DCH	PERCENTAGE	FLOAT	Percentage RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell through which messages the RNC judges that the RRC connections are set up on DCH.	$100 * \frac{\{VS_RRC_SuccessfulConEst_DCH\}}{\{VS_RRC_AttemptedConEst_DCH\}}$	Average	hucasebh, huctbh
HSPA_UE_Mean_CS_Conv_Cell_V100	INTENSITY	FLOAT	Obsolete from UTRAN/V900R011 :This is applicable for V100R011. The measurement counter provides the average number of CS Over HSPA in a cell.	B67109365.C67204245	Average	hucasebh, huctbh, Sum, Minimum, Maximum
HSPA_UE_Mean_CS_Conv_Cell_V200	INTENSITY	FLOAT	This is applicable for V200R011. The measurement counter provides the average number of CS Over HSPA in a cell.	B67109365.C67204853	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_CellIDCHUs	INTENSITY	FLOAT	This item provides the average number of UEs in CELL DCH state in a cell.	B67109365.C67199662	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_CellIEFACHUEs	INTENSITY	FLOAT	The preceding measurement counters provide the average number of UEs in a cell in different RRC connection states. The RRC connection state is	B67109365.C67204156	Average	hucasebh, huctbh, Sum, Minimum, Maximum

			CELL_FACH and is carried on the EFACH.			
VS_CellFACH UEs	INTENSITY	FLOAT	This item provides the average number of UEs in CELL FACH state in a cell.	B67109365.C67199661	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_CellPCH UEs	INTENSITY	FLOAT	This item provides the average number of UEs in CELL PCH state in a cell.	B67109365.C67199660	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_DRD_RRC_Out_Att	ACCUMULATION	INTEGER	Number of RRC connection setup redirections after failure in initial RRC connection setups. The RNC takes statistics by the cells to which the initial RRC connection is requested to set up	B67109365.C67189400	Sum	hucasebh, huctbh
VS_DRD_RRC_Out_Succ	ACCUMULATION	INTEGER	Number of successful RRC DRDs in a cell.	B67109365.C67189401	Sum	hucasebh, huctbh
VS_RRC_AttConEst_CCH	ACCUMULATION	INTEGER	Number of RRC CONNECTION REQUEST messages from UEs to the RNC in a cell through which messages the RNC	B67109365.C67179649	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			judges that the required RRC connections are to be set up on CCH.			
VS_RRC_AttConEst_DCH	ACCUMULATION	INTEGER	Number of RRC CONNECTION REQUEST messages from UEs to the RNC in a cell through which messages the RNC judges that the required RRC connections are to be set up on DCH.	B67109365.C67179633	Sum	hucasebh, huctbh
VS_RRC_AttConnEst_TCum_CCCH	ACCUMULATION	INTEGER	Obsolete from UTRAN/V100V200 R011: Number of RRC CONNECTION REQUEST messages from UEs to the RNC in a cell through which messages the RNC judges that the required RRC connections are to be set up on CCH. Cumulative value.	B67109365.C67179306	Sum	hucasebh, huctbh
VS_RRC_AttConnEst_TCum_DCCH	ACCUMULATION	INTEGER	Number of RRC CONNECTION REQUEST messages from UEs to the RNC in a cell through which messages the RNC judges that the required RRC connections are to be set up on DCH. Cumulative value.	B67109365.C67179303	Sum	hucasebh, huctbh
VS_RRC_AttC	ACCUMULATION	INTEGER	Obsolete from	B67109365.C6	Sum	hucasebh

onnEst_TSamp le_CCCH	TION	ER	UTRAN/V100V200 R011: Number of RRC CONNECTION REQUEST messages from UEs to the RNC in a cell through which messages the RNC judges that the required RRC connections are to be set up on CCH. Cumulative value. Sample value	7179307		, huctbh
VS_RRC_AttC onnEst_TSamp le_DCCH	ACCUMULA TION	INTEG ER	Number of RRC CONNECTION REQUEST messages from UEs to the RNC in a cell through which messages the RNC judges that the required RRC connections are to be set up on DCH. Cumulative value. Sample value.	B67109365.C6 7179304	Sum	hucasebh , huctbh
VS_RRC_AttC onnEstab_Cell	ACCUMULA TION	INTEG ER	Number of RRC CONNECTION REQUEST messages actually processed by the RNC in a cell. This item includes VS.RRC.AttConEst. DCH and VS.RRC.AttConEst. CCH.	B67109365.C6 7190586	Sum	hucasebh , huctbh
VS_RRC_AttC	ACCUMULA	INTEG	Number of UL over	B67109365.C6	Sum	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

onnEstab_EDCH	TION	ER	E-DCH Connection Requests.	7196198		, huctbh
VS_RRC_AttConnEstab_HSDSCH	ACCUMULATION	INTEGER	Number of DL over HS-DSCH Connection Requests.	B67109365.C67196199	Sum	hucasebh, huctbh
VS_RRC_SetupConnEstab_Cell	ACCUMULATION	INTEGER	Number of RRC CONNECTION SETUP messages from the RNC to UEs in a cell upon reception of RRC CONNECTION REQUEST messages from the UEs.	B67109365.C67179298	Sum	hucasebh, huctbh
VS_RRC_SuccConEst_CCH	ACCUMULATION	INTEGER	Number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell through which messages the RNC judges that the RRC connections are set up on CCH.	B67109365.C67179650	Sum	hucasebh, huctbh
VS_RRC_SuccConEst_DCH	ACCUMULATION	INTEGER	Number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell through which messages the RNC judges that the RRC connections are set up on DCH.	B67109365.C67179634	Sum	hucasebh, huctbh
VS_RRC_SuccConnEstab_Cell	ACCUMULATION	INTEGER	Number of RRC CONNECTION SETUP COMPLETE messages from UEs	B67109365.C67179299	Sum	hucasebh, huctbh

			to the RNC in a cell. This item includes VS.RRC.SuccConE st.DCH and VS.RRC.SuccConE st.CCH.			
VS_RRC_Succ ConnEstab_ED CH	ACCUMULA TION	INTEG ER	Number of UL over E-DCH Connection Setup Successes.	B67109365.C6 7196200	Sum	hucasebh , huctbh
VS_RRC_Succ ConnEstab_Fir st	ACCUMULA TION	INTEG ER	Number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell and the RNC judges that the RRC connections are set up on first RRC CONNECTION REQUEST message.	B67109365.C6 7190587	Sum	hucasebh , huctbh
VS_RRC_Succ ConnEstab_HS DSCH	ACCUMULA TION	INTEG ER	Number of DL over HS-DSCH Connection Setup Successes.	B67109365.C6 7196201	Sum	hucasebh , huctbh
VS_RRC_Succ ConnEstab_Sec ond	ACCUMULA TION	INTEG ER	Number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell and the RNC judges that the RRC connections are set up on second RRC CONNECTION REQUEST message.	B67109365.C6 7190588	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RRC_Succ ConnEstab_Third	ACCUMULATION	INTEGER	Number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell and the RNC judges that the RRC connections are set up on third RRC CONNECTION REQUEST message.	B67109365.C6 7190589	Sum	hucasebh , huctbh
--------------------------------	--------------	---------	--	-------------------------	-----	----------------------

7.5.95 Cell.Huawei.UMTS.RRC_Connection_Reject

RRC Connection Reject data.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
RRC_FailConn Estab_Cong	ACCUMULATION	INTEGER	Number of RRC CONNECTION REJECT messages from the RNC to UEs in a cell due to network congestion after receiving RRC CONNECTION REQUEST messages from the UEs. This item includes VS.RRC.Rej.Power.Cong, VS.RRC.Rej.UL.CE.Cong, VS.RRC.Rej.DL.CE.Cong and VS.RRC.Rej.Code.Cong.	B67109367.C6 7179521	Sum	hucasebh , huctbh
RRC_FailConn Estab_NoReply	ACCUMULATION	INTEGER	Number of RRC connections failures due to no	B67109367.C6 7190401	Sum	hucasebh , huctbh

			responses.			
VS_RRC_FailConnEstab	ACCUMULATION	INTEGER	This item provides the number of RRC Connection fail in a cell	B67109367.C67179300	Sum	hucasebh, huctbh
VS_RRC_Rej_AAL2_Fail	ACCUMULATION	INTEGER	The number of RRC CONNECTION REJECT messages from the RNC to UEs in a cell due to an RRC connection reject cause upon reception of RRC CONNECTION REQUEST messages from the UE. AAL2 setup failure.	B67109367.C67179527	Sum	hucasebh, huctbh
VS_RRC_Rej_Code_Cong	ACCUMULATION	INTEGER	The number of RRC CONNECTION REJECT messages from the RNC to UEs in a cell due to radio resource congestion after receiving RRC CONNECTION REQUEST messages from the UEs, Code resource request failure	B67109367.C67179524	Sum	hucasebh, huctbh
VS_RRC_Rej_DL_CE_Cong	ACCUMULATION	INTEGER	The number of RRC CONNECTION REJECT messages from the RNC to UEs in a cell due to	B67109367.C67190405	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			radio resource congestion after receiving RRC CONNECTION REQUEST messages from the UEs, Cell DL resource request failure.			
VS_RRC_Rej_DLIUBBandCong	ACCUMULATION	INTEGER	Number of RRC CONNECTION REJECT due to DL bandwidth congestion over Iub	B67109367.C67192609	Sum	hucasebh , huctbh
VS_RRC_Rej_Power_Cong	ACCUMULATION	INTEGER	The number of RRC CONNECTION REJECT messages from the RNC to UEs in a cell due to radio resource congestion after receiving RRC CONNECTION REQUEST messages from the UEs, Power resource request failure.	B67109367.C67179522	Sum	hucasebh , huctbh
VS_RRC_Rej_Redir_Inter_Att	ACCUMULATION	INTEGER	Numbers of RRC CONNECTION REJECT messages due to redirection failure after receiving RRC CONNECTION REQUEST messages. interfrequency cell	B67109367.C67189473	Sum	hucasebh , huctbh
VS_RRC_Rej_RL_Fail	ACCUMULATION	INTEGER	The number of RRC CONNECTION REJECT messages	B67109367.C67179525	Sum	hucasebh , huctbh

			from the RNC to UEs in a cell due to an RRC connection reject cause upon reception of RRC CONNECTION REQUEST messages from the UEs, RL setup failure.			
VS_RRC_Rej_UL_CE_Cong	ACCUMULATION	INTEGER	The number of RRC CONNECTION REJECT messages from the RNC to UEs in a cell due to radio resource congestion after receiving RRC CONNECTION REQUEST messages from the UEs, Cell UL resource request failure.	B67109367.C67190404	Sum	hucasebh, huctbh
VS_RRC_Rej_ULIUBBandCong	ACCUMULATION	INTEGER	Number of RRC CONNECTION REJECT due to UL bandwidth congestion over Iub	B67109367.C67192608	Sum	hucasebh, huctbh
VS_RRC_Reject_Redir_Intrat	ACCUMULATION	INTEGER	Numbers of RRC CONNECTION REJECT messages due to redirection failure after receiving RRC CONNECTION REQUEST messages. Intrat cell info.	B67109367.C67189474	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RRC_Reject_Redir_Service	ACCUMULATION	INTEGER	Number of RRC Connection Reject due to Service Based Redirection.	B67109367.C67196031	Sum	hucasebh , huctbh
-----------------------------	--------------	---------	---	---------------------	-----	-------------------

7.5.96 Cell.Huawei.UMTS.RRC_Connection_Release

RRC Connection Release data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
RRC_AttConnRelCCCH_Congestion	ACCUMULATION	INTEGER	Numbers of RRC connection releases on CCCHs in each cell due to Congestion.	B67109366.C67189465	Sum	hucasebh , huctbh
RRC_AttConnRelCCCH_NormRel	ACCUMULATION	INTEGER	Numbers of RRC connection releases on CCCHs in each cell due to Normal event.	B67109366.C67189470	Sum	hucasebh , huctbh
RRC_AttConnRelCCCH_Prempt	ACCUMULATION	INTEGER	Numbers of RRC connection releases on CCCHs in each cell due to Pre-emptive release.	B67109366.C67189466	Sum	hucasebh , huctbh
RRC_AttConnRelCCCH_ReEstRej	ACCUMULATION	INTEGER	Numbers of RRC connection releases on CCCHs in each cell due to Re-establishment reject.	B67109366.C67189467	Sum	hucasebh , huctbh
RRC_AttConnRelCCCH_SigConReEst	ACCUMULATION	INTEGER	Numbers of RRC connection releases on CCCHs in each cell due to Directed signalling connection re-establishment.	B67109366.C67189468	Sum	hucasebh , huctbh
RRC_AttConnRelCCCH_Unspec	ACCUMULATION	INTEGER	Numbers of RRC connection releases on CCCHs in each cell due to Unspecified.	B67109366.C67189472	Sum	hucasebh , huctbh
RRC_AttConnRelCCCH_Usr	ACCUMULATION	INTEGER	Numbers of RRC connection releases on	B67109366.C671894	Sum	hucasebh , huctbh

Inact			CCCHs in each cell due to User inactivity.	71		
RRC_AttConnRelDCCH_Congestion	ACCUMULATION	INTEGER	Numbers of RRC connection releases on DCCHs in each cell due to Congestion	B67109366.C67189459	Sum	hucasebh, huctbh
RRC_AttConnRelDCCH_NormRel	ACCUMULATION	INTEGER	Numbers of RRC connection releases on DCCHs in each cell due to Normal event	B67109366.C67189469	Sum	hucasebh, huctbh
RRC_AttConnRelDCCH_Preempt	ACCUMULATION	INTEGER	Numbers of RRC connection releases on DCCHs in each cell due to Pre-emptive release	B67109366.C67189460	Sum	hucasebh, huctbh
RRC_AttConnRelDCCH_ReEstRej	ACCUMULATION	INTEGER	Numbers of RRC connection releases on DCCHs in each cell due to Re-establishment reject	B67109366.C67189461	Sum	hucasebh, huctbh
RRC_AttConnRelDCCH_SigConReEst	ACCUMULATION	INTEGER	Numbers of RRC connection releases on DCCHs in each cell due to Directed signalling connection re-establishment	B67109366.C67189462	Sum	hucasebh, huctbh
RRC_AttConnRelDCCH_Unspec	ACCUMULATION	INTEGER	Numbers of RRC connection releases on DCCHs in each cell due to Unspecified	B67109366.C67189464	Sum	hucasebh, huctbh
RRC_AttConnRelDCCH_UsrInact	ACCUMULATION	INTEGER	Numbers of RRC connection releases on DCCHs in each cell due to User inactivity	B67109366.C67189463	Sum	hucasebh, huctbh
RRC_FailConnReEstab_Cong	ACCUMULATION	INTEGER	Number of RRC connection releases in each cell due to congestion. This item	B67109366.C67179571	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			includes RRC.AttConnRelCCCH. Congestion and RRC.AttConnRelDCCH. Congestion			
VS_RRC_Con nRel_CellUpd	ACCUMULA TION	INTEG ER	Number of RRC connection releases due to cell update failure with the cause of radio link failure.	B6710936 6.C671803 87	Sum	hucasebh , huctbh

7.5.97 Cell.Huawei.UMTS.RRC_Connection_Request_per_cause

RRC Connection Request per Cause

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
RRC_AttConnEstab_CallReEst	ACCUMULATION	INTEGER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC in a cell due to an RRC connection request cause. Call re-establishment	B67109365.C67179345	Sum	hucasebh , huctbh
RRC_AttConnEstab_Detach	ACCUMULATION	INTEGER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC in a cell due to an RRC connection request cause. Detach. RRC.AttConnEstab.IMSIDetach	B67109365.C67179342	Sum	hucasebh , huctbh
RRC_AttConnEstab_EmgCall	ACCUMULATION	INTEGER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC in a cell due to an RRC connection request cause. Emergency Call	B67109365.C67179338	Sum	hucasebh , huctbh

RRC_AttCon nEstab_IRAT CCO	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC in a cell due to an RRC connection request cause. Inter- RAT cell change order	B67109365.C6 7179340	Sum	hucasebh , huctbh
RRC_AttCon nEstab_IRAT CelRes	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC in a cell due to an RRC connection request cause. Inter- RAT cell re-selection	B67109365.C6 7179339	Sum	hucasebh , huctbh
RRC_AttCon nEstab_MB MSPtp	ACCUMULA TION	INTEG ER	These measurement items take statistics of the number of RRC CONNECTION REQUEST messages that the RNC receives from the UEs and then actually processes for different RRC connection request causes, excluding cases that such request is rejected because of redirection based on specific services - MBMS PTP RB Request.	B67109365.C6 7195965	Sum	hucasebh , huctbh
RRC_AttCon nEstab_MB MSRep	ACCUMULA TION	INTEG ER	These measurement items take statistics of the number of RRC CONNECTION REQUEST messages that the RNC receives from the UEs and then	B67109365.C6 7195964	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			actually processes for different RRC connection request causes, excluding cases that such request is rejected because of redirection based on specific services - MBMS Reception			
RRC_AttCon nEstab_OgH hPrSig	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC in a cell due to an RRC connection request cause. Originating High Priority Signalling	B67109365.C6 7179343	Sum	hucasebh , huctbh
RRC_AttCon nEstab_OgL wPrSig	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC in a cell due to an RRC connection request cause. Originating Low Priority Signalling	B67109365.C6 7179344	Sum	hucasebh , huctbh
RRC_AttCon nEstab_OgSu bCall	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC in a cell due to an RRC connection request cause. Originating Subscribed traffic Call	B67109365.C6 7179333	Sum	hucasebh , huctbh
RRC_AttCon nEstab_OrgB kgCall	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC in a cell due to an RRC connection request cause.	B67109365.C6 7179332	Sum	hucasebh , huctbh

			Originating Background Call			
RRC_AttCon nEstab_OrgC onvCall	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC in a cell due to an RRC connection request cause. Originating Conversational Call	B67109365.C6 7179329	Sum	hucasebh , huctbh
RRC_AttCon nEstab_OrgI nterCall	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC in a cell due to an RRC connection request cause. Originating Interactive Call	B67109365.C6 7179331	Sum	hucasebh , huctbh
RRC_AttCon nEstab_OrgS trCall	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC in a cell due to an RRC connection request cause. Originating Streaming Call	B67109365.C6 7179330	Sum	hucasebh , huctbh
RRC_AttCon nEstab_Reg	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC in a cell due to an RRC connection request cause. Registration	B67109365.C6 7179341	Sum	hucasebh , huctbh
RRC_AttCon	ACCUMULA	INTEG	The number of RRC	B67109365.C6	Sum	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

nEstab_TmBkgCall	TION	ER	CONNECTION REQUEST messages actually processed by the RNC in a cell due to an RRC connection request cause. Terminating Background Call	7179337		, huctbh
RRC_AttCon nEstab_TmConvCall	ACCUMULATION	INTEGER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC in a cell due to an RRC connection request cause. Terminating Conversational Call	B67109365.C6 7179334	Sum	hucasebh , huctbh
RRC_AttCon nEstab_TmHhPrSig	ACCUMULATION	INTEGER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC in a cell due to an RRC connection request cause. Terminating High Priority Signalling	B67109365.C6 7179346	Sum	hucasebh , huctbh
RRC_AttCon nEstab_TmInterCall	ACCUMULATION	INTEGER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC in a cell due to an RRC connection request cause. Terminating Interactive Call	B67109365.C6 7179336	Sum	hucasebh , huctbh
RRC_AttCon nEstab_TmLowPrSig	ACCUMULATION	INTEGER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC in a cell due to an RRC connection request cause. Terminating Low	B67109365.C6 7179347	Sum	hucasebh , huctbh

			Priority Signalling			
RRC_AttConnEstab_TmStrCall	ACCUMULATION	INTEGER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC in a cell due to an RRC connection request cause. Terminating Streaming Call	B67109365.C67179335	Sum	hucasebh, huctbh
RRC_AttConnEstab_Unknown	ACCUMULATION	INTEGER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC in a cell due to an RRC connection request cause. Terminating - cause unknown	B67109365.C67179348	Sum	hucasebh, huctbh
Total_RRC_AttConnEstab	ACCUMULATION	INTEGER	Total number of RRC CONNECTION REQUEST messages actually processed by the RNC - all causes	{RRC_AttConnEstab_CallReq} + {RRC_AttConnEstab_Detach} + {RRC_AttConnEstab_EmgCall} + {RRC_AttConnEstab_IRATCCO} + {RRC_AttConnEstab_IRATCelRes} + {RRC_AttConnEstab_OgHhPrSig} + {RRC_AttConnEstab_OgLwPrSig} +	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

				{RRC_AttConnEstab_OgSubCall} + {RRC_AttConnEstab_OrgBkgCall}		
--	--	--	--	---	--	--

7.5.98 Cell.Huawei.UMTS.RRC_Connection_Setup_per_cause

RRC Connection Setup per cause

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
RRC_ConnEstab_Succ_Rate	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:RRC ConnEstab Succ Rate	B67109365.C67204821	Average	hucasebh, huctbh, Sum, Minimum, Maximum
RRC_SuccConnEstab_CallReEst	ACCUMULATION	INTEGER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell due to an RRC connection request cause. Call re-establishment	B67109365.C67179473	Sum	hucasebh, huctbh
RRC_SuccConnEstab_Detach	ACCUMULATION	INTEGER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell due to an RRC connection	B67109365.C67179470	Sum	hucasebh, huctbh

			request cause. Detach			
RRC_SuccConn Estab_EmgCall	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell due to an RRC connection request cause. Emergency Call	B67109365.C671 79466	Sum	hucasebh , huctbh
RRC_SuccConn Estab_IRATCC O	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell due to an RRC connection request cause. Inter-RAT cell change order	B67109365.C671 79468	Sum	hucasebh , huctbh
RRC_SuccConn Estab_IRATCel Res	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell due to an RRC connection request cause. Inter-RAT cell re-selection	B67109365.C671 79467	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

RRC_SuccConn Etab_MBMSPTp	ACCUMULATION	INTEGER	The preceding measurement counters provide the number of RRC CONNECTION SETUP COMPLETE messages for different causes received by the RNC from UEs in a cell - MBMS PTP RB Request.	B67109365.C67195967	Sum	hucasebh , huctbh
RRC_SuccConn Etab_MBMSRe p	ACCUMULATION	INTEGER	The preceding measurement counters provide the number of RRC CONNECTION SETUP COMPLETE messages for different causes received by the RNC from UEs in a cell - MBMS Reception.	B67109365.C67195966	Sum	hucasebh , huctbh
RRC_SuccConn Etab_OgConvC all	ACCUMULATION	INTEGER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell due to an RRC connection request cause. Originating Conversational Call	B67109365.C67179457	Sum	hucasebh , huctbh

RRC_SuccConn Estab_OgHhPrSig	ACCUMULATION	INTEGER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell due to an RRC connection request cause. Originating High Priority Signalling	B67109365.C67179471	Sum	hucasebh , huctbh
RRC_SuccConn Estab_OgLwPrSig	ACCUMULATION	INTEGER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell due to an RRC connection request cause. Originating Low Priority Signalling	B67109365.C67179472	Sum	hucasebh , huctbh
RRC_SuccConn Estab_OrgBkgCall	ACCUMULATION	INTEGER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell due to an RRC connection request cause. Originating	B67109365.C67179460	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Background Call			
RRC_SuccConn Etab_OrgItrCall	ACCUMULATION	INTEGER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell due to an RRC connection request cause. Originating Interactive Call	B67109365.C67179459	Sum	hucasebh , huctbh
RRC_SuccConn Etab_OrgStrCall	ACCUMULATION	INTEGER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell due to an RRC connection request cause. Originating Streaming Call	B67109365.C67179458	Sum	hucasebh , huctbh
RRC_SuccConn Etab_OrgSubCall	ACCUMULATION	INTEGER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell due to an RRC connection request cause. Originating Subscribed traffic Call	B67109365.C67179461	Sum	hucasebh , huctbh
RRC_SuccConn	ACCUMULATION	INTEGER	The number of	B67109365.C671	Sum	hucasebh

Estab_Reg	TION	ER	RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell due to an RRC connection request cause. Registration	79469		, huctbh
RRC_SuccConn Estab_TmBkgC all	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell due to an RRC connection request cause. Terminating Background Call	B67109365.C671 79465	Sum	hucasebh , huctbh
RRC_SuccConn Estab_TmConv Call	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell due to an RRC connection request cause. Terminating Conversational Call	B67109365.C671 79462	Sum	hucasebh , huctbh
RRC_SuccConn	ACCUMULA	INTEG	The number of	B67109365.C671	Sum	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Estab_TmHhPrSig	TION	ER	RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell due to an RRC connection request cause. Terminating High Priority Signalling	79474		, huctbh
RRC_SuccConn Estab_TmItrCall	ACCUMULATION	INTEGER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell due to an RRC connection request cause. Terminating Interactive Call	B67109365.C671 79464	Sum	hucasebh , huctbh
RRC_SuccConn Estab_TmLwPr Sig	ACCUMULATION	INTEGER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell due to an RRC connection request cause. Terminating Low Priority Signalling	B67109365.C671 79475	Sum	hucasebh , huctbh
RRC_SuccConn Estab_TmStrCal l	ACCUMULATION	INTEGER	The number of RRC CONNECTION SETUP	B67109365.C671 79463	Sum	hucasebh , huctbh

			COMPLETE messages from UEs to the RNC in a cell due to an RRC connection request cause. Terminating Streaming Call			
RRC_SuccConn Estab_Unkown	ACCUMULATION	INTEGER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC in a cell due to an RRC connection request cause. Terminating - cause unknown	B67109365.C671 79476	Sum	hucasebh , huctbh

7.5.99 Cell.Huawei.UMTS.RRC_Connection_Times

RRC Connection Times data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RRC_ConnEstabTimeMax_CCH	INTENSITY	INTEGER	Obsolete from UTRAN/V100 V200R011:Maximum signalling delay of RRC connection setup on CCH in a cell Unit: ms	B67109365.C67179305	Constant	hucasebh , huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RRC_ConnEstabTimeMax_DCH	INTENSITY	INTEGER	Maximum signalling delay of RRC connection setup on DCH in a cell Unit: ms	B67109365.C67179302	Constant	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RRC_ConnEstabTimeMean_CCH	INTENSITY	FLOAT	Obsolete from UTRAN/V100 V200R011:Mean signalling delay of RRC connection setup on CCH in a cell Unit: ms	B67109365.C67199511	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RRC_ConnEstabTimeMean_DCH	INTENSITY	FLOAT	Mean signalling delay of RRC connection setup on DCH in a cell Unit: ms	B67109365.C67199510	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_RRC_EstabDRDIn	ACCUMULATION	INTEGER	Number of RRC CONNECTION request messages sent by the RNC for incoming direct retry decision (DRD) in the target cell that is under the SRNC.	B67109365.C67192607	Sum	hucasebh, huctbh

7.5.100Cell.Huawei.UMTS.Rx_and_Tx_Power

Received and Transmitted Power data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
-----	------	-----------	-------------	------------	--------------------	-------------------

VS_HSDPA_MaxRequiredPwr	INTENSITY	FLOAT	No description available.	B67109385.C67202982	Constant	hucasebh, huctbh, Sum, Minimum, Maximum
VS_HSDPA_MeanRequiredPwr	INTENSITY	FLOAT	No description available.	B67109385.C67202984	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_HSDPA_MinRequiredPwr	INTENSITY	FLOAT	No description available.	B67109385.C67202983	Minimum	hucasebh, huctbh, Sum, Minimum, Maximum
VS_HSDPA_RequiredPwr_CUM_NoLog	ACCUMULATION	FLOAT	Obsolete from UTRAN/V900 R011:VS HSDPA RequiredPwr CUM NoLog	B67109385.C67204828	Sum	hucasebh, huctbh
VS_HSDPA_RequiredPwr_CUM	ACCUMULATION	FLOAT	Obsolete from UTRAN/V900 R011:No description available.	B67109385.C67202985	Sum	hucasebh, huctbh
VS_HSDPA_RequiredPwr_SAMPLE_Log	ACCUMULATION	FLOAT	Obsolete from UTRAN/V900 R011:No description available.	B67109385.C67202986	Sum	hucasebh, huctbh
VS_HSDPA_Req	ACCUMULATION	INTEGER	Obsolete from	B67109385.C671	Sum	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

RequiredPwr_SAMPLE	INTENSITY	INTEGER	UTRAN/V900 R011:VS HSDPA RequiredPwr SAMPLE	91149		hucasebh, huctbh
VS_MaxRTWP	INTENSITY	FLOAT	Maximum RTWP of a cell, that is, maximum value among all the RTWP values reported in a certain period Unit: dBm	B67109385.C67199680	Constant	hucasebh, huctbh, Sum, Minimum, Maximum
VS_MaxTCP_NoHSD	INTENSITY	FLOAT	Maximum TCP of a Non-HSDPA cell, that is, maximum value among all the TCP values reported in a certain period Unit: dBm	B67109385.C67202900	Constant	hucasebh, huctbh, Sum, Minimum, Maximum
VS_MaxTCP	INTENSITY	FLOAT	Maximum TCP of a cell, that is, maximum value among all the TCP values reported in a certain period Unit: dBm	B67109385.C67199682	Constant	hucasebh, huctbh, Sum, Minimum, Maximum
VS_MeanRTWP	INTENSITY	FLOAT	Mean RTWP of a cell, that is, mean number of the sum of the RTWP values reported in a certain period	B67109385.C67199617	Average	hucasebh, huctbh, Sum, Minimum, Maximum

			Unit: dBm			
VS_MeanTCP_NonHS	INTENSITY	FLOAT	Mean TCP of a Non-HSDPA cell, that is, mean number of the sum of the TCP values reported in a certain period Unit: dBm	B67109385.C67202902	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_MeanTCP	INTENSITY	FLOAT	Mean TCP of a cell, that is, mean number of the sum of the TCP values reported in a certain period Unit: dBm	B67109385.C67199618	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_MinRTWP	INTENSITY	FLOAT	Minimum RTWP of a cell, that is, minimum value among all the RTWP values reported in a certain period Unit: dBm	B67109385.C67199681	Minimum	hucasebh, huctbh, Sum, Minimum, Maximum
VS_MinTCP_NonHS	INTENSITY	FLOAT	Minimum TCP of a Non-HSDPA cell, that is, minimum value among all the TCP values reported in a certain period Unit: dBm	B67109385.C67202901	Minimum	hucasebh, huctbh, Sum, Minimum, Maximum
VS_MinTCP	INTENSITY	FLOAT	Minimum TCP	B67109385.C671	Minimum	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

		T	of a cell, that is, minimum value among all the TCP values reported in a certain period Unit: dBm	99683	m	, huctbh, Sum, Minimum, Maximum
VS_RTWP_CUM	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109385.C67180641	Sum	hucasebh, huctbh
VS_RTWP_SAMPLE	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description.	B67109385.C67180642	Sum	hucasebh, huctbh
VS_TCP_CUM_NoLog	ACCUMULATION	FLOAT	Obsolete from UTRAN/V900 R011:VS TCP CUM NoLog	B67109385.C67204826	Sum	hucasebh, huctbh
VS_TCP_CUM	ACCUMULATION	FLOAT	Obsolete from UTRAN/V900 R011:No description.	B67109385.C67199779	Sum	hucasebh, huctbh
VS_TCP_NonHS_CUM_NoLog	ACCUMULATION	FLOAT	Obsolete from UTRAN/V900 R011:VS TCP NonHS CUM NoLog	B67109385.C67204827	Sum	hucasebh, huctbh
VS_TCP_NonHS_CUM	ACCUMULATION	FLOAT	Obsolete from UTRAN/V900 R011:No description.	B67109385.C67202903	Sum	hucasebh, huctbh
VS_TCP_NonHS_SAMPLE_Log	ACCUMULATION	FLOAT	Obsolete from UTRAN/V900 R011:No description.	B67109385.C67202904	Sum	hucasebh, huctbh
VS_TCP_NonHS_SAMPLE	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:VS TCP NonHS	B67109385.C67190621	Sum	hucasebh, huctbh

			SAMPLE			
VS_TCP_SAMP LE_Log	ACCUMULA TION	FLOA T	Obsolete from UTRAN/V900 R011:No description.	B67109385.C672 02560	Sum	hucasebh , huctbh
VS_TCP_SAMP LE	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011:VS TCP SAMPLE	B67109385.C671 80648	Sum	hucasebh , huctbh

7.5.101Cell.Huawei.UMTS.SIR_Target_CS

Signal to Interference Ratio Target CS data

KPI	Type	Data Type	Description	Derivation	Default Aggregat or	Other Aggrega tors
UISirTarget_Ou t_AMR_Out	ACCUMULA TION	INTEG ER	No description.	B67109505.C6718 4436	Sum	hucasebh , huctbh
UISirTarget_Ou t_AMR_Total	ACCUMULA TION	INTEG ER	No description.	B67109505.C6718 4489	Sum	hucasebh , huctbh
UISirTarget_Ou t_CSRT_14_4_ Out	ACCUMULA TION	INTEG ER	No description.	B67109505.C6718 4437	Sum	hucasebh , huctbh
UISirTarget_Ou t_CSRT_14_4_ Total	ACCUMULA TION	INTEG ER	No description.	B67109505.C6718 4490	Sum	hucasebh , huctbh
UISirTarget_Ou t_CSRT_28_8_ Out	ACCUMULA TION	INTEG ER	No description.	B67109505.C6718 4438	Sum	hucasebh , huctbh
UISirTarget_Ou t_CSRT_28_8_ Total	ACCUMULA TION	INTEG ER	No description.	B67109505.C6718 4491	Sum	hucasebh , huctbh
UISirTarget_Ou t_CSRT_57_6_ Out	ACCUMULA TION	INTEG ER	No description.	B67109505.C6718 4439	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP
Schedule Contract with IBM Corp.

UISirTarget_Out_CSRT_57_6_Total	ACCUMULATION	INTEGER	No description.	B67109505.C67184492	Sum	hucasebh, huctbh
UISirTarget_Out_CSRT_64_Out	ACCUMULATION	INTEGER	No description.	B67109505.C67184440	Sum	hucasebh, huctbh
UISirTarget_Out_CSRT_64_Total	ACCUMULATION	INTEGER	No description.	B67109505.C67184493	Sum	hucasebh, huctbh
VS_ULSirTarget_Out_AMR	INTENSITY	FLOAT	Ratio of the time that the target SIR of the AMR service used by all the UEs in a cell remains at the maximum value in the outer loop power control in the uplink to the time of the entire outer loop power control in a measurement period.	B67109505.C67199814	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULSirTarget_Out_CSRT_64	INTENSITY	FLOAT	Ratio of the time that the target SIR of the CSRT 64 K service used by all the UEs in a cell remains at the maximum value in the outer loop power control in the uplink to the time of the entire outer loop power control in a	B67109505.C67199818	Average	hucasebh, huctbh, Sum, Minimum, Maximum

			measurement period			
VS_ULSirTarget_Out_CSRT14_4	INTENSITY	FLOAT	Ratio of the time that the target SIR of the CSRT 14.4 K service used by all the UEs in a cell remains at the maximum value in the outer loop power control in the uplink to the time of the entire outer loop power control in a measurement period.	B67109505.C67199815	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULSirTarget_Out_CSRT28_8	INTENSITY	FLOAT	Ratio of the time that the target SIR of the CSRT 28.8 K service used by all the UEs in a cell remains at the maximum value in the outer loop power control in the uplink to the time of the entire outer loop power control in a measurement period.	B67109505.C67199816	Average	hucasebh, huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_ULSirTarget_Out_CSRT57_6	INTENSITY	FLOAT	Ratio of the time that the target SIR of the CSRT 57.6 K service used by all the UEs in a cell remains at the maximum value in the outer loop power control in the uplink to the time of the entire outer loop power control in a measurement period.	B67109505.C67199817	Average	hucasebh, huctbh, Sum, Minimum, Maximum
-----------------------------	-----------	-------	---	---------------------	---------	---

7.5.102Cell.Huawei.UMTS.SIR_Target_PS_NRT

Signal to Interference Ratio Target PS NRT data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
UISirTarget_Out_PSNRT_128_Out	ACCUMULATION	INTEGER	No description.	B67109505.C67184449	Sum	hucasebh, huctbh
UISirTarget_Out_PSNRT_128_Total	ACCUMULATION	INTEGER	No description.	B67109505.C67184502	Sum	hucasebh, huctbh
UISirTarget_Out_PSNRT_144_Out	ACCUMULATION	INTEGER	No description.	B67109505.C67184450	Sum	hucasebh, huctbh
UISirTarget_Out_PSNRT_144_Total	ACCUMULATION	INTEGER	No description.	B67109505.C67184503	Sum	hucasebh, huctbh
UISirTarget_Out_PSNRT_16_Out	ACCUMULATION	INTEGER	No description.	B67109505.C67184446	Sum	hucasebh, huctbh

UISirTarget_Out_PSNRT_16_Total	ACCUMULATION	INTEGER	No description.	B67109505.C67184499	Sum	hucasebh, huctbh
UISirTarget_Out_PSNRT_256_Out	ACCUMULATION	INTEGER	No description.	B67109505.C67184451	Sum	hucasebh, huctbh
UISirTarget_Out_PSNRT_256_Total	ACCUMULATION	INTEGER	No description.	B67109505.C67184504	Sum	hucasebh, huctbh
UISirTarget_Out_PSNRT_32_Out	ACCUMULATION	INTEGER	No description.	B67109505.C67184447	Sum	hucasebh, huctbh
UISirTarget_Out_PSNRT_32_Total	ACCUMULATION	INTEGER	No description.	B67109505.C67184500	Sum	hucasebh, huctbh
UISirTarget_Out_PSNRT_384_Out	ACCUMULATION	INTEGER	No description.	B67109505.C67184452	Sum	hucasebh, huctbh
UISirTarget_Out_PSNRT_384_Total	ACCUMULATION	INTEGER	No description.	B67109505.C67184505	Sum	hucasebh, huctbh
UISirTarget_Out_PSNRT_64_Out	ACCUMULATION	INTEGER	No description.	B67109505.C67184448	Sum	hucasebh, huctbh
UISirTarget_Out_PSNRT_64_Total	ACCUMULATION	INTEGER	No description.	B67109505.C67184501	Sum	hucasebh, huctbh
UISirTarget_Out_PSNRT_8_Out	ACCUMULATION	INTEGER	No description.	B67109505.C67184445	Sum	hucasebh, huctbh
UISirTarget_Out_PSNRT_8_Total	ACCUMULATION	INTEGER	No description.	B67109505.C67184498	Sum	hucasebh, huctbh
VS_ULSirTarget_Out_PSNRT1	INTENSITY	FLOAT	Ratio of the time that the	B67109505.C67199827	Average	hucasebh, huctbh,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

28			target SIR of the PSNRT 128 K service used by all the UEs in a cell remains at the maximum value in the outer loop power control in the uplink to the time of the entire outer loop power control in a measurement period			Sum, Minimum, Maximum
VS_ULSirTarget_Out_PSNRT144	INTENSITY	FLOAT	Ratio of the time that the target SIR of the PSNRT 144 K service used by all the UEs in a cell remains at the maximum value in the outer loop power control in the uplink to the time of the entire outer loop power control in a measurement period.	B67109505.C67199828	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULSirTarget_Out_PSNRT16	INTENSITY	FLOAT	Ratio of the time that the target SIR of the PSNRT 16 K service used by all the UEs in a cell remains at the maximum value	B67109505.C67199824	Average	hucasebh, huctbh, Sum, Minimum, Maximum

			in the outer loop power control in the uplink to the time of the entire outer loop power control in a measurement period.			
VS_ULSirTarget_Out_PSNRT256	INTENSITY	FLOAT	Ratio of the time that the target SIR of the PSNRT 256 K service used by all the UEs in a cell remains at the maximum value in the outer loop power control in the uplink to the time of the entire outer loop power control in a measurement period.	B67109505.C67199829	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULSirTarget_Out_PSNRT32	INTENSITY	FLOAT	Ratio of the time that the target SIR of the PSNRT 32 K service used by all the UEs in a cell remains at the maximum value in the outer loop power	B67109505.C67199825	Average	hucasebh, huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			control in the uplink to the time of the entire outer loop power control in a measurement period.			
VS_ULSirTarget_Out_PSNRT384	INTENSITY	FLOAT	Ratio of the time that the target SIR of the PSNRT 384 K service used by all the UEs in a cell remains at the maximum value in the outer loop power control in the uplink to the time of the entire outer loop power control in a measurement period.	B67109505.C67199830	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULSirTarget_Out_PSNRT64	INTENSITY	FLOAT	Ratio of the time that the target SIR of the PSNRT 64 K service used by all the UEs in a cell remains at the maximum value in the outer loop power control in the uplink to the time of the entire outer loop power control in a measurement	B67109505.C67199826	Average	hucasebh, huctbh, Sum, Minimum, Maximum

			period.			
--	--	--	---------	--	--	--

7.5.103Cell.Huawei.UMTS.SIR_Target_PS_RT

Signal to Interference Ratio Target PS RT data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
UISirTarget_Out_PSRT_16_Out	ACCUMULATION	INTEGER	No description.	B67109505.C67184442	Sum	hucasebh, huctbh
UISirTarget_Out_PSRT_16_Total	ACCUMULATION	INTEGER	No description.	B67109505.C67184495	Sum	hucasebh, huctbh
UISirTarget_Out_PSRT_32_Out	ACCUMULATION	INTEGER	No description.	B67109505.C67184443	Sum	hucasebh, huctbh
UISirTarget_Out_PSRT_32_Total	ACCUMULATION	INTEGER	No description.	B67109505.C67184496	Sum	hucasebh, huctbh
UISirTarget_Out_PSRT_64_Out	ACCUMULATION	INTEGER	No description.	B67109505.C67184444	Sum	hucasebh, huctbh
UISirTarget_Out_PSRT_64_Total	ACCUMULATION	INTEGER	No description.	B67109505.C67184497	Sum	hucasebh, huctbh
UISirTarget_Out_PSRT_8_Out	ACCUMULATION	INTEGER	No description.	B67109505.C67184441	Sum	hucasebh, huctbh
UISirTarget_Out_PSRT_8_Total	ACCUMULATION	INTEGER	No description.	B67109505.C67184494	Sum	hucasebh, huctbh
VS_ULSirTarget_Out_PSNRT8	INTENSITY	FLOAT	Ratio of the time that the target SIR of the PSNRT 8 K service used by all the UEs in a cell remains at	B67109505.C67199823	Average	hucasebh, huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			the maximum value in the outer loop power control in the uplink to the time of the entire outer loop power control in a measurement period			
VS_ULSirTarget_Out_PSRT_16	INTENSITY	FLOAT	Ratio of the time that the target SIR of the PSRT 16 K service used by all the UEs in a cell remains at the maximum value in the outer loop power control in the uplink to the time of the entire outer loop power control in a	B67109505.C67199820	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULSirTarget_Out_PSRT_32	INTENSITY	FLOAT	Ratio of the time that the target SIR of the PSRT 32 K service used by all the UEs in a cell remains at the maximum value in the outer loop power control in the uplink to the time of the entire outer loop power control in a	B67109505.C67199821	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_ULSirTarget	INTENSITY	FLOAT	Ratio of the	B67109505.C6719	Average	hucasebh

t_Out_PSRT_64		T	time that the target SIR of the PSRT 64 K service used by all the UEs in a cell remains at the maximum value in the outer loop power control in the uplink to the time of the entire outer loop power control in a	9822		, huctbh, Sum, Minimum, Maximum
VS_ULSirTarget_Out_PSRT_8	INTENSITY	FLOAT	Ratio of the time that the target SIR of the PSRT 8 K service used by all the UEs in a cell remains at the maximum value in the outer loop power control in the uplink to the time of the entire outer loop power control in a	B67109505.C67199819	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.104Cell.Huawei.UMTS.Soft_Handover

Soft Handover data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
—	PERCENTA	FLOA	Percentage	100 *	Average	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

%_VS_SHO_AMR_SuccOut	GE	T	successful soft handovers of different traffic classes initiated by the RNC in a cell	{VS_SHO_AMR_SuccOut}/ {VS_SHO_AMR_AttOut}		, huctbh
SHO_AttrLAddUESide	ACCUMULATION	INTEGER	Number of RL additions to a cell in RNC-initiated soft handover.	B67109379.C67180498	Sum	hucasebh , huctbh
SHO_AttrLDeIUESide	ACCUMULATION	INTEGER	Number of attempted RL deletions upon initiation of soft handover by the RNC in a cell.	B67109379.C67180508	Sum	hucasebh , huctbh
SHO_FailRLAddUESide_CfgUnsup	ACCUMULATION	INTEGER	Number of RL addition failures in a cell after the RNC initiates the soft handover.	B67109379.C67180500	Sum	hucasebh , huctbh
SHO_FailRLAddUESide_InvCfg	ACCUMULATION	INTEGER	Number of RL addition failures in a cell after the RNC initiates the soft handover.	B67109379.C67180503	Sum	hucasebh , huctbh
SHO_FailRLAddUESide_Isr	ACCUMULATION	INTEGER	Number of RL addition failures in a cell after the RNC initiates the soft handover.	B67109379.C67180501	Sum	hucasebh , huctbh
SHO_FailRLAddUESide_NoReply	ACCUMULATION	INTEGER	Number of RL addition failures due to	B67109379.C67180504	Sum	hucasebh , huctbh

			no response from a UE after the RNC initiates a soft handover in a cell.			
SHO_SuccRLAddUESide	ACCUMULATION	INTEGER	Number of successful RL additions in a cell after the RNC has initiated soft handover.	B67109379.C67180499	Sum	hucasebh, huctbh
SHO_SuccRLDelUESide	ACCUMULATION	INTEGER	Number of successful RL deletions upon initiation of soft handover by the RNC in a cell.	B67109379.C67180509	Sum	hucasebh, huctbh
VS_SHO_AddTimeMean	INTENSITY	FLOAT	Mean delay upon the sho algorithm decides to add a RL till the RRC ACTIVE SETUP UPDATE COMPLETE message is received from the UE, on a per cell basis. Unit: ms.	B67109379.C67199676	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_SHO_AMR_AttOut	ACCUMULATION	INTEGER	Numbers of soft handovers decided to initiate by the RNC for	B67109379.C67180519	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			different traffic classes in a cell.			
VS_SHO_AMR_SuccOut	ACCUMULATION	INTEGER	Numbers of successful soft handovers of different traffic classes initiated by the RNC in a cell	B67109379.C67180520	Sum	hucasebh, huctbh
VS_SHO_AS_1RL	INTENSITY	FLOAT	Average number of UEs with only one RL in a cell, and the cell belongs to active set.	B67109379.C67203936	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_SHO_AS_2RL	INTENSITY	FLOAT	Average number of UEs with two RLs in a cell, and the cell belongs to active set.	B67109379.C67203937	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_SHO_AS_3RL	INTENSITY	FLOAT	Average number of UEs with three RLs in a cell, and the cell belongs to active set.	B67109379.C67203938	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_SHO_AS_4RL	INTENSITY	FLOAT	Average number of UEs with four RLs in a cell, and the cell belongs to active set.	B67109379.C67203939	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_SHO_AS_5RL	INTENSITY	FLOAT	Average number of UEs with five RLs in a cell, and	B67109379.C67203940	Average	hucasebh, huctbh, Sum, Minimum

			the cell belongs to active set.			m, Maximum
VS_SHO_AS_6RL	INTENSITY	FLOAT	Average number of UEs with six RLs in a cell, and the cell belongs to active set.	B67109379.C67203941	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_SHO_AttRLAdd_Prep	ACCUMULATION	INTEGER	Number of decisions to trigger soft handovers with radio link addition	B67109379.C67193564	Sum	hucasebh, huctbh
VS_SHO_CS64_AttOut	ACCUMULATION	INTEGER	Numbers of soft handovers decided to initiate by the RNC for different traffic classes in a cell	B67109379.C67180521	Sum	hucasebh, huctbh
VS_SHO_CS64_SuccOut	ACCUMULATION	INTEGER	Numbers of successful soft handovers of different traffic classes initiated by the RNC in a cell.	B67109379.C67180522	Sum	hucasebh, huctbh
VS_SHO_FailRLAdd_MinQualThd	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. No description.	B67109379.C67191673	Sum	hucasebh, huctbh
VS_SHO_FailRLAdd_PreCac	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. No description.	B67109379.C67191672	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_SHO_Prep_RLSetupFail	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Numbers of soft handover preparation failures due to different causes upon initiation of soft handover decision by the RNC in a cell	B67109379.C67180516	Sum	hucasebh , huctbh
VS_SHO_PS128_AttOut	ACCUMULATION	INTEGER	Numbers of soft handovers decided to initiate by the RNC for different traffic classes in a cell.	B67109379.C67180525	Sum	hucasebh , huctbh
VS_SHO_PS128_SuccOut	ACCUMULATION	INTEGER	Numbers of successful soft handovers of different traffic classes initiated by the RNC in a cell.	B67109379.C67180526	Sum	hucasebh , huctbh
VS_SHO_PS144_AttOut	ACCUMULATION	INTEGER	Number of soft handover requests in PS domain (Max DL bit rate = 144 kbps)	B67109379.C67190758	Sum	hucasebh , huctbh
VS_SHO_PS144_SuccOut	ACCUMULATION	INTEGER	Number of successful soft handovers in PS domain (Max DL bit rate = 144 kbps)	B67109379.C67190759	Sum	hucasebh , huctbh
VS_SHO_PS384_AttOut	ACCUMULATION	INTEGER	Numbers of soft handovers	B67109379.C67180527	Sum	hucasebh , huctbh

			decided to initiate by the RNC for different traffic classes in a cell.			
VS_SHO_PS384_SuccOut	ACCUMULATION	INTEGER	Numbers of successful soft handovers of different traffic classes initiated by the RNC in a cell.	B67109379.C67180528	Sum	hucasebh , huctbh
VS_SHO_PS64_AttOut	ACCUMULATION	INTEGER	Numbers of soft handovers decided to initiate by the RNC for different traffic classes in a cell	B67109379.C67180523	Sum	hucasebh , huctbh
VS_SHO_PS64_SuccOut	ACCUMULATION	INTEGER	Numbers of successful soft handovers of different traffic classes initiated by the RNC in a cell.	B67109379.C67180524	Sum	hucasebh , huctbh
VS_SHO_SigOnly_AttOut	ACCUMULATION	INTEGER	Number of attempts in a cell to perform soft handovers when only signalling exists	B67109379.C67192562	Sum	hucasebh , huctbh
VS_SHO_SigOnly_SuccOut	ACCUMULATION	INTEGER	Number of successful soft handovers in a cell performed	B67109379.C67193563	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			when only signalling exists			
--	--	--	-----------------------------	--	--	--

7.5.105Cell.Huawei.UMTS.Softter_Handover

Softter Handover data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_SoHO_AS U_AttRLAdd	ACCUMULATION	INTEGER	Number of RL additions in the softer handover initiated by RNC in a cell.	B67109379.C67180483	Sum	hucasebh , huctbh
VS_SoHO_AS U_AttRlDel	ACCUMULATION	INTEGER	Number of attempted RL deletions in the RNC-initiated softer handover in a cell.	B67109379.C67180490	Sum	hucasebh , huctbh
VS_SoHO_AS U_FailRLAdd_ CfgUns	ACCUMULATION	INTEGER	Numbers of RL addition failures in the RNC-initiated softer handover due to different causes	B67109379.C67180485	Sum	hucasebh , huctbh
VS_SoHO_AS U_FailRLAdd_ InvCfg	ACCUMULATION	INTEGER	Numbers of RL addition failures in the RNC-initiated softer handover due to different causes	B67109379.C67180488	Sum	hucasebh , huctbh
VS_SoHO_AS U_FailRLAdd_ Isr	ACCUMULATION	INTEGER	Numbers of RL addition failures in the RNC-initiated softer handover due to different	B67109379.C67180486	Sum	hucasebh , huctbh

			causes			
VS_SoHO_AS U_FailRLAdd_ NoRepl	ACCUMULA TION	INTEG ER	Number of RL addition failures due to no response from the UE in the RNC- initiated softer handover.	B67109379.C6718 0489	Sum	hucasebh , huctbh
VS_SoHO_AS U_SuccRLAdd	ACCUMULA TION	INTEG ER	Number of successful RL additions in the softer handover initiated by RNC in a cell.	B67109379.C6718 0484	Sum	hucasebh , huctbh
VS_SoHO_AS U_SuccRlDel	ACCUMULA TION	INTEG ER	Number of successful RL deletions from a cell in the RNC-initiated softer handover	B67109379.C6718 0491	Sum	hucasebh , huctbh

7.5.106Cell.Huawei.UMTS.Throughput_AMR

Throughput AMR data

KPI	Type	Data Type	Description	Derivation	Default Aggregat or	Other Aggrega tors
VS_AMR_Erla ng_BestCell	INTENSITY	FLOA T	Number of erlang of AMR service based on the best cell	B67109508.C6719 2689	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_AMRLoad _kbits_DL_Hi	ACCUMULA TION	INTEG ER	No description.	B67109508.C6719 1765	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_AMRLoad_kbits_DL_Lo	ACCUMULATION	INTEGER	No description.	B67109508.C67191764	Sum	hucasebh, huctbh
VS_AMRLoad_kbits_DL	INTENSITY	FLOAT	This measurement item takes statistics of the DL volume of CS AMR service in the best cell.	B67109508.C67203450	Constant	hucasebh, huctbh, Sum, Minimum, Maximum
VS_AMRLoad_kbits_UL_Hi	ACCUMULATION	INTEGER	No description.	B67109508.C67191763	Sum	hucasebh, huctbh
VS_AMRLoad_kbits_UL_Lo	ACCUMULATION	INTEGER	No description.	B67109508.C67191762	Sum	hucasebh, huctbh
VS_AMRLoad_kbits_UL	INTENSITY	FLOAT	This measurement item takes statistics of the UL volume of CS AMR service in the best cell.	B67109508.C67203449	Constant	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.107Cell.Huawei.UMTS.Throughput_CS_Conv

Throughput CS Conversational data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
CS_CONV_KBPS_DL_64_Thruput	ACCUMULATION	INT8	No description available.	B67109508.C67183986	Sum	hucasebh, huctbh
CS_CONV_KBPS_DL_64_Times	ACCUMULATION	INTEGER	No description available.	B67109508.C67184036	Sum	hucasebh, huctbh
VS_CS_Conv_Kbps_DL64	INTENSITY	FLOAT	This item provides the average DL bit rate of CS 64K conversational	B67109508.C67202812	Average	hucasebh, huctbh, Sum, Minimum,

			traffic in a cell.			Maximum
--	--	--	--------------------	--	--	---------

7.5.108Cell.Huawei.UMTS.Throughput_CS_Stream

Throughput CS Streaming data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
CS_STR_KBPS_DL_57_6_Throughput	INTENSITY	INT8	No description available.	B67109508.C67183990	Average	hucasebh, huctbh, Sum, Minimum, Maximum
CS_STR_KBPS_DL_57_6_Times	ACCUMULATION	INTEGER	No description available.	B67109508.C67184040	Sum	hucasebh, huctbh
CS_STR_KBPS_DL_64_Throughput	INTENSITY	INT8	No description available.	B67109508.C67183992	Average	hucasebh, huctbh, Sum, Minimum, Maximum
CS_STR_KBPS_DL_64_Times	ACCUMULATION	INTEGER	No description available.	B67109508.C67184042	Sum	hucasebh, huctbh
CS_STR_KBPS_UL_64_Throughput	INTENSITY	INT8	No description available.	B67109508.C67184013	Average	hucasebh, huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

CS_STR_KBPS_UL_64_Times	ACCUMULATION	INTEGER	No description available.	B67109508.C67184063	Sum	hucasebh, huctbh
VS_CS_Str_Kbps_DL57_6	INTENSITY	FLOAT	This item provides the average DL bit rate of CS 57.6K streaming traffic in a cell.	B67109508.C67202816	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_CS_Str_Kbps_DL64	INTENSITY	FLOAT	This item provides the average DL bit rate of CS 64K streaming traffic in a cell.	B67109508.C67202818	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_CS_Str_Kbps_UL64	INTENSITY	FLOAT	No description available.	B67109508.C67202839	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.109Cell.Huawei.UMTS.Throughput_MBMS

Throughput for MBMS

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_MBMS_PTM_MeanThroughput_Cell	ACCUMULATION	FLOAT	No description available	B67109508.C67204482	Sum	hucasebh, huctbh
VS_MBMS_PTP_MeanThroughput_Cell	ACCUMULATION	FLOAT	No description available	B67109508.C67204483	Sum	hucasebh, huctbh

7.5.110Cell.Huawei.UMTS.Throughput_PS_Bkg_DL

Throughput PS Background Downlink data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
-----	------	-----------	-------------	------------	--------------------	-------------------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

PS_BKG_KBP S_DL_128_Th ruput	INTENSITY	FLOA T	This item provides the average DL bit rate of PS 128K background traffic in a cell.	B67109508.C6718 3997	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
PS_BKG_KBP S_DL_128_Ti mes	ACCUMULA TION	INTEG ER	No description.	B67109508.C6718 4047	Sum	hucasebh , huctbh
PS_BKG_KBP S_DL_144_Th ruput	INTENSITY	FLOA T	No description available.	B67109508.C6718 3998	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
PS_BKG_KBP S_DL_144_Ti mes	ACCUMULA TION	INTEG ER	No description available.	B67109508.C6718 4048	Sum	hucasebh , huctbh
PS_BKG_KBP S_DL_16_Thr uput	INTENSITY	FLOA T	No description available.	B67109508.C6718 3994	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
PS_BKG_KBP S_DL_16_Tim es	ACCUMULA TION	INTEG ER	No description available.	B67109508.C6718 4044	Sum	hucasebh , huctbh
PS_BKG_KBP S_DL_256_Th ruput	INTENSITY	FLOA T	No description available.	B67109508.C6718 3999	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
PS_BKG_KBP S_DL_256_Ti mes	ACCUMULA TION	INTEG ER	No description available.	B67109508.C6718 4049	Sum	hucasebh , huctbh
PS_BKG_KBP	INTENSITY	FLOA	No description	B67109508.C6718	Average	hucasebh

S_DL_32_Thruput		T	available.	3995		, huctbh, Sum, Minimum, Maximum
PS_BKG_KBP S_DL_32_Times	ACCUMULATION	INTEGER	No description available.	B67109508.C67184045	Sum	hucasebh, huctbh
PS_BKG_KBP S_DL_384_Thruput	INTENSITY	FLOAT	No description available.	B67109508.C67184000	Average	hucasebh, huctbh, Sum, Minimum, Maximum
PS_BKG_KBP S_DL_384_Times	ACCUMULATION	INTEGER	No description available.	B67109508.C67184050	Sum	hucasebh, huctbh
PS_BKG_KBP S_DL_64_Thruput	INTENSITY	FLOAT	No description available.	B67109508.C67183996	Average	hucasebh, huctbh, Sum, Minimum, Maximum
PS_BKG_KBP S_DL_64_Times	ACCUMULATION	INTEGER	No description available.	B67109508.C67184046	Sum	hucasebh, huctbh
PS_BKG_KBP S_DL_8_Thruput	INTENSITY	FLOAT	No description available.	B67109508.C67183993	Average	hucasebh, huctbh, Sum, Minimum, Maximum
PS_BKG_KBP	ACCUMULATION	INTEGER	No description	B67109508.C6718	Sum	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

S_DL_8_Times	INTENSITY	REAL	available.	4043		, huctbh
VS_PS_Bkg_Kbps_DL128	INTENSITY	FLOAT	This item provides the average DL bit rate of PS 128K background traffic in a cell.	B67109508.C67202823	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Bkg_Kbps_DL144	INTENSITY	FLOAT	This item provides the average DL bit rate of PS 144K background traffic in a cell.	B67109508.C67202824	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Bkg_Kbps_DL16	INTENSITY	FLOAT	This item provides the average DL bit rate of PS 16K background traffic in a cell.	B67109508.C67202820	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Bkg_Kbps_DL256	INTENSITY	FLOAT	This item provides the average DL bit rate of PS 256K background traffic in a cell.	B67109508.C67202825	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Bkg_Kbps_DL32	INTENSITY	FLOAT	This item provides the average DL bit rate of PS 32K background traffic in a cell.	B67109508.C67202821	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Bkg_Kbps_DL384	INTENSITY	FLOAT	This item provides the average DL bit rate of PS 384K background	B67109508.C67202826	Average	hucasebh, huctbh, Sum, Minimum,

			traffic in a cell.			Maximum
VS_PS_Bkg_Kbps_DL64	INTENSITY	FLOAT	This item provides the average DL bit rate of PS 64K background traffic in a cell.	B67109508.C67202822	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Bkg_Kbps_DL8	INTENSITY	FLOAT	This item provides the average DL bit rate of PS 8K background traffic in a cell.	B67109508.C67202819	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.111Cell.Huawei.UMTS.Throughput_PS_Bkg_UL

Throughput PS Background Uplink data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
PS_BKG_KBPS_UL_128_Throughput	ACCUMULATION	INT8	Throughput of PS Uplink 128 kbit/s Background Service for Cell	B67109508.C67184018	Sum	hucasebh, huctbh
PS_BKG_KBPS_UL_128_Times	ACCUMULATION	INTEGER	No description.	B67109508.C67184068	Sum	hucasebh, huctbh
PS_BKG_KBPS_UL_144_Throughput	ACCUMULATION	INT8	Throughput of PS Uplink 144 kbit/s Background Service for Cell	B67109508.C67184019	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

PS_BKG_KBP S_UL_144_Ti mes	ACCUMULA TION	INTEG ER	No description.	B67109508.C6718 4069	Sum	hucasebh , huctbh
PS_BKG_KBP S_UL_16_Thr uput	ACCUMULA TION	INT8	Throughput of PS Uplink 16 kbit/s Background Service for Cell	B67109508.C6718 4015	Sum	hucasebh , huctbh
PS_BKG_KBP S_UL_16_Tim es	ACCUMULA TION	INTEG ER	No description.	B67109508.C6718 4065	Sum	hucasebh , huctbh
PS_BKG_KBP S_UL_256_Th ruput	ACCUMULA TION	INT8	Throughput of PS Uplink 256 kbit/s Background Service for Cell	B67109508.C6718 4020	Sum	hucasebh , huctbh
PS_BKG_KBP S_UL_256_Ti mes	ACCUMULA TION	INTEG ER	No description.	B67109508.C6718 4070	Sum	hucasebh , huctbh
PS_BKG_KBP S_UL_32_Thr uput	ACCUMULA TION	INT8	Throughput of PS Uplink 32 kbit/s Background Service for Cell	B67109508.C6718 4016	Sum	hucasebh , huctbh
PS_BKG_KBP S_UL_32_Tim es	ACCUMULA TION	INTEG ER	No description.	B67109508.C6718 4066	Sum	hucasebh , huctbh
PS_BKG_KBP S_UL_384_Th ruput	ACCUMULA TION	INT8	Throughput of PS Uplink 384 kbit/s Background Service for Cell	B67109508.C6718 4021	Sum	hucasebh , huctbh
PS_BKG_KBP S_UL_384_Ti mes	ACCUMULA TION	INTEG ER	No description.	B67109508.C6718 4071	Sum	hucasebh , huctbh
PS_BKG_KBP S_UL_64_Thr uput	ACCUMULA TION	INT8	Throughput of PS Uplink 64 kbit/s Background Service for Cell	B67109508.C6718 4017	Sum	hucasebh , huctbh

PS_BKG_KBP S_UL_64_Times	ACCUMULATION	INTEGER	No description.	B67109508.C6718 4067	Sum	hucasebh , huctbh
PS_BKG_KBP S_UL_8_Throughput	ACCUMULATION	INT8	Throughput of PS Uplink 8 kbit/s Background Service for Cell	B67109508.C6718 4014	Sum	hucasebh , huctbh
PS_BKG_KBP S_UL_8_Times	ACCUMULATION	INTEGER	No description.	B67109508.C6718 4064	Sum	hucasebh , huctbh
VS_PS_Bkg_Kbps_UL128	INTENSITY	FLOAT	This item provides the average UL bit rate of PS 128K background traffic in a cell.	B67109508.C6720 2844	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_PS_Bkg_Kbps_UL144	INTENSITY	FLOAT	This item provides the average UL bit rate of PS 144K background traffic in a cell.	B67109508.C6720 2845	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_PS_Bkg_Kbps_UL16	INTENSITY	FLOAT	This item provides the average UL bit rate of PS 16K background traffic in a cell.	B67109508.C6720 2841	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_PS_Bkg_Kbps_UL256	INTENSITY	FLOAT	This item provides the average UL bit rate of PS 256K background traffic in a cell.	B67109508.C6720 2846	Average	hucasebh , huctbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						m
VS_PS_Bkg_Kbps_UL32	INTENSITY	FLOAT	This item provides the average UL bit rate of PS 32K background traffic in a cell	B67109508.C67202842	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Bkg_Kbps_UL384	INTENSITY	FLOAT	This item provides the average UL bit rate of PS 384K background traffic in a cell.	B67109508.C67202847	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Bkg_Kbps_UL64	INTENSITY	FLOAT	This item provides the average UL bit rate of PS 64K background traffic in a cell.	B67109508.C67202843	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Bkg_Kbps_UL8	INTENSITY	FLOAT	This item provides the average UL bit rate of PS 8K background traffic in a cell.	B67109508.C67202840	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.112Cell.Huawei.UMTS.Throughput_PS_Conv

Throughput PS Conversational data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
PS_CONV_KBPS_DL_8_Thruput	INTENSITY	INT8	No description.	B67109508.C67183987	Average	hucasebh, huctbh, Sum, Minimum,

						Maximum
PS_CONV_KBPS_DL_8_Times	ACCUMULATION	INTEGER	No description.	B67109508.C67184037	Sum	hucasebh, huctbh
VS_PS_Conv_Kbps_DL8	INTENSITY	FLOAT	This item provides the average DL bit rate of PS 8K conversational traffic in a cell.	B67109508.C67202813	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.113Cell.Huawei.UMTS.Throughput_PS_Inter_DL

Throughput PS Interactive Downlink data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
Cell_ASE_busy_hour	INTENSITY	FLOAT	Cell ASE busy hour measurement.	(B67109508.C67202830 * 2) + (B67109508.C67202831 * 4) + (B67109508.C67202834 * 8) + B67109508.C67199620 + (B67109508.C67199556 * 2)	Average	hucasebh, huctbh, Sum, Minimum, Maximum
PS_INTER_KBPS_DL_128_Thruput	ACCUMULATION	INT8	Throughput of PS Downlink 128 kbit/s Interactive Service for Cell	B67109508.C67184005	Sum	hucasebh, huctbh
PS_INTER_KBPS_DL_128_Times	ACCUMULATION	INTEGER	No description.	B67109508.C67184055	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

PS_INTER_K BPS_DL_144 _Thruput	ACCUMULA TION	INT8	Throughput of PS Downlink 144 kbit/s Interactive Service for Cell	B67109508.C67184 006	Sum	hucasebh , huctbh
PS_INTER_K BPS_DL_144 _Times	ACCUMULA TION	INTEG ER	No description.	B67109508.C67184 056	Sum	hucasebh , huctbh
PS_INTER_K BPS_DL_16_ Thruput	ACCUMULA TION	INT8	Throughput of PS Downlink 16 kbit/s Interactive Service for Cell	B67109508.C67184 002	Sum	hucasebh , huctbh
PS_INTER_K BPS_DL_16_ Times	ACCUMULA TION	INTEG ER	No description.	B67109508.C67184 052	Sum	hucasebh , huctbh
PS_INTER_K BPS_DL_256 _Thruput	ACCUMULA TION	INT8	Throughput of PS Downlink 256 kbit/s Interactive Service for Cell	B67109508.C67184 007	Sum	hucasebh , huctbh
PS_INTER_K BPS_DL_256 _Times	ACCUMULA TION	INTEG ER	No description.	B67109508.C67184 057	Sum	hucasebh , huctbh
PS_INTER_K BPS_DL_32_ Thruput	ACCUMULA TION	INT8	Throughput of PS Downlink 32 kbit/s Interactive Service for Cell	B67109508.C67184 003	Sum	hucasebh , huctbh
PS_INTER_K BPS_DL_32_ Times	ACCUMULA TION	INTEG ER	No description.	B67109508.C67184 053	Sum	hucasebh , huctbh
PS_INTER_K BPS_DL_384 _Thruput	ACCUMULA TION	INT8	Throughput of PS Downlink 384 kbit/s Interactive Service for Cell	B67109508.C67184 008	Sum	hucasebh , huctbh
PS_INTER_K BPS_DL_384 _Times	ACCUMULA TION	INTEG ER	No description.	B67109508.C67184 058	Sum	hucasebh , huctbh

PS_INTER_K BPS_DL_64_ Thruput	ACCUMULA TION	INT8	Throughput of PS Downlink 64 kbit/s Interactive Service for Cell	B67109508.C67184 004	Sum	hucasebh , huctbh
PS_INTER_K BPS_DL_64_ Times	ACCUMULA TION	INTEG ER	No description.	B67109508.C67184 054	Sum	hucasebh , huctbh
PS_INTER_K BPS_DL_8_T hruput	ACCUMULA TION	INT8	Throughput of PS Downlink 8 kbit/s Interactive Service for Cell	B67109508.C67184 001	Sum	hucasebh , huctbh
PS_INTER_K BPS_DL_8_Ti mes	ACCUMULA TION	INTEG ER	No description.	B67109508.C67184 051	Sum	hucasebh , huctbh
VS_PS_Int_K bps_DL128	INTENSITY	FLOA T	This item provides the average DL bit rate of PS 128K interactive traffic in a cell.	B67109508.C67202 831	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_PS_Int_K bps_DL144	INTENSITY	FLOA T	This item provides the average DL bit rate of PS 144K interactive traffic in a cell.	B67109508.C67202 832	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_PS_Int_K bps_DL16	INTENSITY	FLOA T	This item provides the average DL bit rate of PS 16K interactive traffic in a cell.	B67109508.C67202 828	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_PS_Int_Kbps_DL256	INTENSITY	FLOAT	This item provides the average DL bit rate of PS 256K interactive traffic in a cell.	B67109508.C67202833	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Int_Kbps_DL32	INTENSITY	FLOAT	This item provides the average DL bit rate of PS 32K interactive traffic in a cell.	B67109508.C67202829	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Int_Kbps_DL384	INTENSITY	FLOAT	This item provides the average DL bit rate of PS 384K interactive traffic in a cell.	B67109508.C67202834	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Int_Kbps_DL64	INTENSITY	FLOAT	This item provides the average DL bit rate of PS 64K interactive traffic in a cell.	B67109508.C67202830	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Int_Kbps_DL8	INTENSITY	FLOAT	This item provides the average DL bit rate of PS 8K interactive traffic in a cell.	B67109508.C67202827	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.114Cell.Huawei.UMTS.Throughput_PS_Inter_UL

Throughput PS Interactive Uplink data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
-----	------	-----------	-------------	------------	--------------------	-------------------

PS_INTER_K BPS_UL_128_ Thruput	ACCUMULA TION	INT8	Throughput of PS Uplink 128 kbit/s Interactive Service for Cell	B67109508.C6718 4026	Sum	hucasebh , huctbh
PS_INTER_K BPS_UL_128_ Times	ACCUMULA TION	INTEG ER	No description.	B67109508.C6718 4076	Sum	hucasebh , huctbh
PS_INTER_K BPS_UL_144_ Thruput	ACCUMULA TION	INT8	Throughput of PS Uplink 144 kbit/s Interactive Service for Cell	B67109508.C6718 4027	Sum	hucasebh , huctbh
PS_INTER_K BPS_UL_144_ Times	ACCUMULA TION	INTEG ER	No description.	B67109508.C6718 4077	Sum	hucasebh , huctbh
PS_INTER_K BPS_UL_16_ Thruput	ACCUMULA TION	INT8	Throughput of PS Uplink 16 kbit/s Interactive Service for Cell	B67109508.C6718 4023	Sum	hucasebh , huctbh
PS_INTER_K BPS_UL_16_ Times	ACCUMULA TION	INTEG ER	No description.	B67109508.C6718 4073	Sum	hucasebh , huctbh
PS_INTER_K BPS_UL_256_ Thruput	ACCUMULA TION	INT8	Throughput of PS Uplink 256 kbit/s Interactive Service for Cell	B67109508.C6718 4028	Sum	hucasebh , huctbh
PS_INTER_K BPS_UL_256_ Times	ACCUMULA TION	INTEG ER	No description.	B67109508.C6718 4078	Sum	hucasebh , huctbh
PS_INTER_K BPS_UL_32_ Thruput	ACCUMULA TION	INT8	Throughput of PS Uplink 32 kbit/s Interactive	B67109508.C6718 4024	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Service for Cell			
PS_INTER_K BPS_UL_32_ Times	ACCUMULA TION	INTEG ER	No description.	B67109508.C6718 4074	Sum	hucasebh , huctbh
PS_INTER_K BPS_UL_384_ Thruput	ACCUMULA TION	INT8	Throughput of PS Uplink 384 kbit/s Interactive Service for Cell	B67109508.C6718 4029	Sum	hucasebh , huctbh
PS_INTER_K BPS_UL_384_ Times	ACCUMULA TION	INTEG ER	No description.	B67109508.C6718 4079	Sum	hucasebh , huctbh
PS_INTER_K BPS_UL_64_ Thruput	ACCUMULA TION	INT8	Throughput of PS Uplink 64 kbit/s Interactive Service for Cell	B67109508.C6718 4025	Sum	hucasebh , huctbh
PS_INTER_K BPS_UL_64_ Times	ACCUMULA TION	INTEG ER	No description.	B67109508.C6718 4075	Sum	hucasebh , huctbh
PS_INTER_K BPS_UL_8_T hruput	ACCUMULA TION	INT8	Throughput of PS Uplink 8 kbit/s Interactive Service for Cell	B67109508.C6718 4022	Sum	hucasebh , huctbh
PS_INTER_K BPS_UL_8_Ti mes	ACCUMULA TION	INTEG ER	No description.	B67109508.C6718 4072	Sum	hucasebh , huctbh
VS_PS_Int_K bps_UL128	INTENSITY	FLOA T	This item provides the average UL bit rate of PS 128K interactive traffic in a cell	B67109508.C6720 2852	Average	hucasebh , huctbh, Sum, Minimu m, Maximu m
VS_PS_Int_K bps_UL144	INTENSITY	FLOA T	This item provides the average UL bit rate of PS 144K interactive	B67109508.C6720 2853	Average	hucasebh , huctbh, Sum, Minimu m,

			traffic in a cell.			Maximum
VS_PS_Int_K bps_UL16	INTENSITY	FLOAT	This item provides the average UL bit rate of PS 16K interactive traffic in a cell.	B67109508.C6720 2849	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Int_K bps_UL256	INTENSITY	FLOAT	This item provides the average UL bit rate of PS 256K interactive traffic in a cell.	B67109508.C6720 2854	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Int_K bps_UL32	INTENSITY	FLOAT	This item provides the average UL bit rate of PS 32K interactive traffic in a cell.	B67109508.C6720 2850	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Int_K bps_UL384	INTENSITY	FLOAT	This item provides the average UL bit rate of PS 384K interactive traffic in a cell.	B67109508.C6720 2855	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Int_K bps_UL64	INTENSITY	FLOAT	This item provides the average UL bit rate of PS 64K interactive traffic in a cell.	B67109508.C6720 2851	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Int_K	INTENSITY	FLOAT	This item	B67109508.C6720	Average	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

bps_UL8		T	provides the average UL bit rate of PS 8K interactive traffic in a cell.	2848		, huctbh, Sum, Minimum, Maximum
---------	--	---	--	------	--	---------------------------------

7.5.115Cell.Huawei.UMTS.Throughput_PS_Stream

Throughput PS Streaming data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
PS_STR_KBPS_DL_128_Throughput	ACCUMULATION	INT8	Throughput of PS Downlink 128 kbit/s Streaming Service for Cell	B67109508.C67184011	Sum	hucasebh, huctbh
PS_STR_KBPS_DL_128_Times	ACCUMULATION	INTEGER	No description.	B67109508.C67184061	Sum	hucasebh, huctbh
PS_STR_KBPS_DL_144_Throughput	ACCUMULATION	INT8	Throughput of PS Downlink 144 kbit/s Streaming Service for Cell	B67109508.C67184012	Sum	hucasebh, huctbh
PS_STR_KBPS_DL_144_Times	ACCUMULATION	INTEGER	No description.	B67109508.C67184062	Sum	hucasebh, huctbh
PS_STR_KBPS_DL_32_Throughput	ACCUMULATION	INT8	Throughput of PS Downlink 32 kbit/s Streaming Service for Cell	B67109508.C67184009	Sum	hucasebh, huctbh
PS_STR_KBPS_DL_32_Times	ACCUMULATION	INTEGER	No description.	B67109508.C67184059	Sum	hucasebh, huctbh
PS_STR_KBPS_DL_64_Throughput	ACCUMULATION	INT8	Throughput of PS Downlink 64 kbit/s Streaming for Cell	B67109508.C67184010	Sum	hucasebh, huctbh

PS_STR_KBP S_DL_64_Times	ACCUMULATION	INTEGER	No description.	B67109508.C6718 4060	Sum	hucasebh , huctbh
PS_STR_KBP S_UL_16_Throughput	ACCUMULATION	INT8	Throughput of PS Uplink 16 kbit/s Streaming Service for Cell	B67109508.C6718 4030	Sum	hucasebh , huctbh
PS_STR_KBP S_UL_16_Times	ACCUMULATION	INTEGER	No description.	B67109508.C6718 4080	Sum	hucasebh , huctbh
PS_STR_KBP S_UL_32_Throughput	ACCUMULATION	INT8	Throughput of PS Uplink 32 kbit/s Streaming Service for Cell	B67109508.C6718 4031	Sum	hucasebh , huctbh
PS_STR_KBP S_UL_32_Times	ACCUMULATION	INTEGER	No description.	B67109508.C6718 4081	Sum	hucasebh , huctbh
PS_STR_KBP S_UL_64_Throughput	ACCUMULATION	INT8	Throughput of PS Uplink 64 kbit/s Streaming Service for Cell	B67109508.C6718 4032	Sum	hucasebh , huctbh
PS_STR_KBP S_UL_64_Times	ACCUMULATION	INTEGER	No description.	B67109508.C6718 4082	Sum	hucasebh , huctbh
VS_PS_Str_Kbps_DL128	INTENSITY	FLOAT	This item provides the average DL bit rate of PS 128K streaming traffic in a cell.	B67109508.C6720 2837	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_PS_Str_Kbps_DL144	INTENSITY	FLOAT	This item provides the average DL bit rate of PS 144K streaming traffic	B67109508.C6720 2838	Average	hucasebh , huctbh, Sum, Minimum,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			in a cell.			Maximum
VS_PS_Str_Kbps_DL32	INTENSITY	FLOAT	This item provides the average DL bit rate of PS 32K streaming traffic in a cell.	B67109508.C67202835	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Str_Kbps_DL64	INTENSITY	FLOAT	This item provides the average DL bit rate of PS 64K streaming traffic in a cell.	B67109508.C67202836	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Str_Kbps_UL16	INTENSITY	FLOAT	This item provides the average UL bit rate of PS 16K streaming traffic in a cell.	B67109508.C67202856	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Str_Kbps_UL32	INTENSITY	FLOAT	This item provides the average UL bit rate of PS 32K streaming traffic in a cell.	B67109508.C67202857	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PS_Str_Kbps_UL64	INTENSITY	FLOAT	This item provides the average UL bit rate of PS 64K streaming traffic in a cell.	B67109508.C67202858	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.116Cell.Huawei.UMTS.Throughput_PS

Packet Switch throughput.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_PSLoad_kbits_DL_0_32_Hi	ACCUMULATION	INTEGER	No description.	B67109508.C67191773	Sum	hucasebh, huctbh
VS_PSLoad_kbits_DL_0_32_Lo	ACCUMULATION	INTEGER	No description.	B67109508.C67191772	Sum	hucasebh, huctbh
VS_PSLoad_kbits_DL_0_32	INTENSITY	FLOAT	DL Throughput of PS 0 to 32 kbit/s BE service in the best cell.	B67109508.C67203454	Constant	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PSLoad_kbits_DL_144_384_Hi	ACCUMULATION	INTEGER	No description.	B67109508.C67191785	Sum	hucasebh, huctbh
VS_PSLoad_kbits_DL_144_384_Lo	ACCUMULATION	INTEGER	No description.	B67109508.C67191784	Sum	hucasebh, huctbh
VS_PSLoad_kbits_DL_144_384	INTENSITY	FLOAT	DL Throughput of PS 144 to 384 kbit/s BE service in the best cell.	B67109508.C67203460	Constant	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PSLoad_kbits_DL_32_64_Hi	ACCUMULATION	INTEGER	No description.	B67109508.C67191777	Sum	hucasebh, huctbh
VS_PSLoad_kbits_DL_32_64_Lo	ACCUMULATION	INTEGER	No description.	B67109508.C67191776	Sum	hucasebh, huctbh
VS_PSLoad_k	INTENSITY	FLOAT	DL Throughput	B67109508.C6720	Constant	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

bits_DL_32_64		T	of PS 32 to 64 kbit/s BE service in the best cell.	3456		, huctbh, Sum, Minimum, Maximum
VS_PSLoad_kbits_DL_64_144_Hi	ACCUMULATION	INTEGER	No description.	B67109508.C67191781	Sum	hucasebh, huctbh
VS_PSLoad_kbits_DL_64_144_Lo	ACCUMULATION	INTEGER	No description.	B67109508.C67191780	Sum	hucasebh, huctbh
VS_PSLoad_kbits_DL_64_144	INTENSITY	FLOAT	DL Throughput of PS 64 to 144 kbit/s BE service in the best cell.	B67109508.C67203458	Constant	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PSLoad_kbits_UL_0_32_Hi	ACCUMULATION	INTEGER	No description.	B67109508.C67191771	Sum	hucasebh, huctbh
VS_PSLoad_kbits_UL_0_32_Lo	ACCUMULATION	INTEGER	No description.	B67109508.C67191770	Sum	hucasebh, huctbh
VS_PSLoad_kbits_UL_0_32	INTENSITY	FLOAT	UL Throughput of PS 0 to 32 kbit/s BE service in the best cell.	B67109508.C67203453	Constant	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PSLoad_kbits_UL_144_384_Hi	ACCUMULATION	INTEGER	No description.	B67109508.C67191783	Sum	hucasebh, huctbh
VS_PSLoad_kbits_UL_144_384_Lo	ACCUMULATION	INTEGER	No description.	B67109508.C67191782	Sum	hucasebh, huctbh
VS_PSLoad_kbits_UL_144_3	INTENSITY	FLOAT	UL Throughput of PS 144 to	B67109508.C67203459	Constant	hucasebh, huctbh,

84			384 kbit/s BE service in the best cell.			Sum, Minimum, Maximum
VS_PSLoad_kbits_UL_32_64_Hi	ACCUMULATION	INTEGER	No description.	B67109508.C67191775	Sum	hucasebh, huctbh
VS_PSLoad_kbits_UL_32_64_Lo	ACCUMULATION	INTEGER	No description.	B67109508.C67191774	Sum	hucasebh, huctbh
VS_PSLoad_kbits_UL_32_64	INTENSITY	FLOAT	UL Throughput of PS 32 to 64 kbit/s BE service in the best cell.	B67109508.C67203455	Constant	hucasebh, huctbh, Sum, Minimum, Maximum
VS_PSLoad_kbits_UL_64_144_Hi	ACCUMULATION	INTEGER	No description.	B67109508.C67191779	Sum	hucasebh, huctbh
VS_PSLoad_kbits_UL_64_144_Lo	ACCUMULATION	INTEGER	No description.	B67109508.C67191778	Sum	hucasebh, huctbh
VS_PSLoad_kbits_UL_64_144	INTENSITY	FLOAT	UL Throughput of PS 64 to 144 kbit/s BE service in the best cell.	B67109508.C67203457	Constant	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.117Cell.Huawei.UMTS.Throughput_SRB

Throughput Signalling Radio Bearer data

KPI	Type	Data	Description	Derivation	Default	Other
-----	------	------	-------------	------------	---------	-------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

		Type			Aggregator	Aggregators
VS_DcchSrbKbps_Dl_Thruput	ACCUMULATION	INT8	Throughput DL bit rate of signalling on DCCH in a cell.	B67109508.C67189905	Sum	hucasebh, huctbh
VS_DcchSrbKbps_Dl_Times	ACCUMULATION	INTEGER	Times DL bit rate of signalling on DCCH in a cell.	B67109508.C67189906	Sum	hucasebh, huctbh
VS_DcchSrbKbps_Dl	INTENSITY	FLOAT	This item provides the average DL bit rate of signalling on DCCH in a cell.	B67109508.C67202860	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_DcchSrbKbps_Ul_Thruput	ACCUMULATION	INT8	Throughput UL bit rate of signalling on DCCH in a cell.	B67109508.C67189903	Sum	hucasebh, huctbh
VS_DcchSrbKbps_Ul_Times	ACCUMULATION	INTEGER	Times UL bit rate of signalling on DCCH in a cell.	B67109508.C67189904	Sum	hucasebh, huctbh
VS_DcchSrbKbps_Ul	INTENSITY	FLOAT	This item provides the average UL bit rate of signalling on DCCH in a cell.	B67109508.C67202859	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.118Cell.Huawei.UMTS.Throughput_VP

VP throughput measurement.

KPI	Type	Data	Description	Derivation	Default	Other
-----	------	------	-------------	------------	---------	-------

		Type			Aggregat or	Aggrega tors
VS_VP_Erlang_BestCell	INTENSITY	FLOAT	Number of erlang of VP service based on the best cell	B67109508.C67192690	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_VPLoad_kbits_DL_HIGH	ACCUMULATION	INTEGER	No description.	B67109508.C67191769	Sum	hucasebh, huctbh
VS_VPLoad_kbits_DL_LOW	ACCUMULATION	INTEGER	No description.	B67109508.C67191768	Sum	hucasebh, huctbh
VS_VPLoad_kbits_DL	INTENSITY	FLOAT	DL volume of CS VP service in the best cell.	B67109508.C67203452	Constant	hucasebh, huctbh, Sum, Minimum, Maximum
VS_VPLoad_kbits_UL_HIGH	ACCUMULATION	INTEGER	No description.	B67109508.C67191767	Sum	hucasebh, huctbh
VS_VPLoad_kbits_UL_LOW	ACCUMULATION	INTEGER	No description.	B67109508.C67191766	Sum	hucasebh, huctbh
VS_VPLoad_kbits_UL	INTENSITY	FLOAT	UL volume of CS VP service in the best cell.	B67109508.C67203451	Constant	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.119Cell.Huawei.UMTS.Traffic_CS

CS Traffic data

KPI	Type	Data	Description	Derivation	Default	Other
-----	------	------	-------------	------------	---------	-------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

		Type			Aggregator	Aggregators
Total_VS_MAC_SRNCIubBytesCS_RX	ACCUMULATION	INT 8	Total number of UL MAC PDU bytes on the CS conversational and streaming services bearer over the Iub interface in a cell.	$\{VS_MAC_SRNCIubBytesCSConv_Rx\}$ + $\{VS_MAC_SRNCIubBytesCSStr_Rx\}$	Sum	hucasebh , huctbh
Total_VS_MAC_SRNCIubBytesCS_TX	ACCUMULATION	INT 8	Total number of DL MAC PDU bytes on the CS conversational and streaming services bearer over the Iub interface in a cell.	$\{VS_MAC_SRNCIubBytesCSConv_Tx\}$ + $\{VS_MAC_SRNCIubBytesCSStr_Tx\}$	Sum	hucasebh , huctbh
Total_VS_MAC_SRNCIubBytesCSConv	ACCUMULATION	INT 8	Total number of UL and DL MAC PDU bytes on the CS conversational service bearer over the Iub interface in a cell.	$\{VS_MAC_SRNCIubBytesCSConv_Rx\}$ + $\{VS_MAC_SRNCIubBytesCSConv_Tx\}$	Sum	hucasebh , huctbh
Total_VS_MAC_SRNCIubBytesCSStr	ACCUMULATION	INT 8	Total number of UL and DL MAC PDU bytes on the CS streaming service bearer	$\{VS_MAC_SRNCIubBytesCSStr_Rx\}$ + $\{VS_MAC_SRNCIubBytesCSStr_Tx\}$	Sum	hucasebh , huctbh

			over the Iub interface in a cell.			
VS_MAC_SRNCI ubBytesCSConv_ Rx	ACCUMULA TION	INT 8	Number of UL MAC PDU bytes sent by the SRNC to the MAC-d on the CS conversational service bearer (DCH FP) over the Iub interface in a cell.	B67109387.C67199 642	Sum	hucasebh , huctbh
VS_MAC_SRNCI ubBytesCSConv_T x	ACCUMULA TION	INT 8	Number of bytes of the DL MAC PDU sent by the SRNC on the CS conversational service bearer DCH FP over the Iub interface in a cell.	B67109387.C67199 646	Sum	hucasebh , huctbh
VS_MAC_SRNCI ubBytesCSStr_Rx	ACCUMULA TION	INT 8	Number of UL MAC PDU bytes sent by the SRNC to the MAC-d on the CS streaming service bearer (DCH FP) over the Iub interface in a	B67109387.C67199 643	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			cell.			
VS_MAC_SRNCIubBytesCSStr_Tx	ACCUMULATION	INTEGER	Number of bytes of the DL MAC PDU sent by the SRNC on the CS streaming service bearer DCH FP over the Iub interface in a cell.	B67109387.C67199647	Sum	hucasebh, huctbh

7.5.120Cell.Huawei.UMTS.Traffic_Global

Global Traffic data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
BCCH_SRB_KBPS_DL_Times	ACCUMULATION	INTEGER	No description.	B67109387.C67190392	Sum	hucasebh, huctbh
BCCH_SRB_KBPS_DL_Volume	ACCUMULATION	INTEGER	No description.	B67109387.C67190391	Sum	hucasebh, huctbh
VS_BcchSrbKbps_DI	INTENSITY	FLOAT	This item provides the bit rate at which the CRNC transmits DL data on Iub BCCH logical channel.	B67109387.C67189782	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_CcchSrbKbps_DI_Times	ACCUMULATION	INTEGER	No description.	B67109387.C67189784	Sum	hucasebh, huctbh
VS_CcchSrbKbps_DI_Volume	ACCUMULATION	INTEGER	No description.	B67109387.C67189783	Sum	hucasebh, huctbh
VS_CcchSrbKbps_DI	INTENSITY	FLOAT	This item provides the bit rate at which the CRNC	B67109387.C67202807	Average	hucasebh, huctbh, Sum, Minimum

			transmits DL data on Iub CCCH logical channel.			m, Maximum
VS_CcchSrbKbps_UI_Times	ACCUMULATION	INTEGER	No description.	B67109387.C67189786	Sum	hucasebh, huctbh
VS_CcchSrbKbps_UI_Volume	ACCUMULATION	INTEGER	No description.	B67109387.C67189785	Sum	hucasebh, huctbh
VS_CcchSrbKbps_UI	INTENSITY	FLOAT	This item provides the bit rate at which the CRNC receives UL data on Iub CCCH logical channel.	B67109387.C67202808	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_CRNC_IUB_FACH_Bandwidth	INTENSITY	FLOAT	Common channel bandwidth on Iub interface in a cell, CRNC_FACH Channel Bandwidth (Cell)	B67109387.C67199740	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_CRNC_IUB_PCH_Bandwidth	INTENSITY	FLOAT	Common channel bandwidth on Iub interface in a cell, CRNC_PCH Channel Bandwidth (Cell)	B67109387.C67199741	Average	hucasebh, huctbh, Sum, Minimum, Maximum
VS_CRNC_IUB_RACH_Bandwidth	INTENSITY	FLOAT	Common channel bandwidth on Iub interface in	B67109387.C67199739	Average	hucasebh, huctbh, Sum, Minimum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			a cell,CRNC_RACH Channel Bandwidth (Cell)			m, Maximum
VS_IUB_FP_Unsync	ACCUMULATION	INTEGER	Number of UL time synchronization frames received by CRNC on Iub interface in a cell.	B67109387.C67190403	Sum	hucasebh , huctbh
VS_MAC_CRNCIubBytesFACH_Tx	ACCUMULATION	INTEGER	Number of DL MAC PDU bytes sent by the CRNC on the FACH FP over the Iub interface in a cell.	B67109387.C67199638	Sum	hucasebh , huctbh
VS_MAC_CRNCIubBytesPCH_Tx	ACCUMULATION	INTEGER	Number of DL MAC PDU bytes received by the Controlling RNC (CRNC) on the PCH FP over the Iub interface. These bytes include paging data transport blocks and paging indication (PI) data	B67109387.C67199637	Sum	hucasebh , huctbh
VS_MAC_CRNCIubBytesRACH_Rx	ACCUMULATION	INTEGER	Number of bytes of the MAC PDUs received by the DRNC from the SRNC on the RACH FP	B67109387.C67199639	Sum	hucasebh , huctbh

			over the Iub interface in a cell.			
VS_MAC_DRNCI ubBytesDCH_Rx	ACCUMULATION	INTEGER	Number of bytes of the MAC PDUs received by the DRNC from the SRNC on the DCH FP over the Iub interface in a cell.	B67109387.C67 202422	Sum	hucasebh , huctbh
VS_MAC_DRNCI ubBytesDCH_Tx	ACCUMULATION	INTEGER	Number of bytes of the MAC PDUs sent by the DRNC to the SRNC on the Iub interface in a cell.	B67109387.C67 202423	Sum	hucasebh , huctbh
VS_MAC_SRNCI ubBytesDCH_Rx	ACCUMULATION	INTEGER	Number of DL MAC PDU bytes sent by the SRNC to the MAC-d on the signalling bearer DCH FP over the Iub interface in a cell.	B67109387.C67 199640	Sum	hucasebh , huctbh
VS_MAC_SRNCI ubBytesDCH_Tx	ACCUMULATION	INTEGER	Number of DL MAC PDU bytes sent by the SRNC on the signalling bearer DCH FP over the Iub interface in a	B67109387.C67 199641	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			cell.			
VS_MBMS_IUB_BANDWIDTH	INTENSITY	FLOAT	This measurement item provides the mean IUB bandwidth of MBMS service channel in a cell.	B67109387.C67204155	Average	hucasebh, huctbh, Sum, Minimum, Maximum

7.5.121Cell.Huawei.UMTS.Traffic_PS

PS Traffic data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
Cell_Traffic_busy_hour	ACCUMULATION	INT 8	Cell traffic busy hour measurement.	B67109387.C67189840 + B67109387.C67199656 + B67109387.C67199652 + B67109387.C67199657 + B67109387.C67199653 + B67109387.C67199642 + B67109387.C67199646	Sum	hucasebh, huctbh
Total_VS_MAC_SRNCIubBytesPS_Rx	ACCUMULATION	INT 8	Number of bytes of the UL MAC PDUs sent by the SRNC to the MAC-d on the PS background and conversational and interactive and streaming	{VS_MAC_SRNCIubBytesPSBkg_Rx} + {VS_MAC_SRNCIubBytesPSInt_Rx} + {VS_MAC_SRNCIubBytesPSStr_Rx}	Sum	hucasebh, huctbh

			service bearer (DCH FP) over the Iub interface in a cell.			
Total_VS_MAC_SRNCIubBytesPS_Tx	ACCUMULATION	INT 8	Number of bytes of the UL MAC PDUs sent by the SRNC to the MAC-d on the PS background and conversational and interactive and streaming service bearer (DCH FP) over the Iub interface in a cell.	{VS_MAC_SRNCIubBytesPSBkg_Tx} + {VS_MAC_SRNCIubBytesPSInt_Tx} + {VS_MAC_SRNCIubBytesPSStr_Tx}	Sum	hucasebh , huctbh
Total_VS_MAC_SRNCIubBytesPSBkg	ACCUMULATION	INT 8	Number of bytes of the UL and DL MAC PDUs sent by the SRNC to the MAC-d on the PS background service bearer (DCH FP) over the Iub interface in a cell.	{VS_MAC_SRNCIubBytesPSBkg_Rx} + {VS_MAC_SRNCIubBytesPSBkg_Tx}	Sum	hucasebh , huctbh
Total_VS_MAC_SRNCIubBytesPSInt	ACCUMULATION	INT 8	Number of bytes of the UL and DL	{VS_MAC_SRNCIubBytesPSInt_Rx} +	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			MAC PDUs sent by the SRNC to the MAC-d on the PS interactive service bearer (DCH FP) over the Iub interface in a cell.	{VS_MAC_SRNCIubBytesPSInt_Tx}		
Total_VS_MAC_SRNCIubBytesPSStr	ACCUMULATION	INT 8	Number of bytes of the UL and DL MAC PDUs sent by the SRNC to the MAC-d on the PS streaming service bearer (DCH FP) over the Iub interface in a cell.	{VS_MAC_SRNCIubBytesPSStr_Rx} + {VS_MAC_SRNCIubBytesPSStr_Tx}	Sum	hucasebh , huctbh
VS_MAC_CRNCIubBytes_PS_CCH_RX	ACCUMULATION	INT 8	Number of bytes in UL MAC PDU sent by the CRNC on the RACH PS over the Iub interface in a cell.	B67109387.C67204753	Sum	hucasebh , huctbh
VS_MAC_CRNCIubBytes_PS_CCH_TX	ACCUMULATION	INT 8	Number of bytes in DL MAC PDU sent by the CRNC on the FACH PS over the Iub interface in a cell.	B67109387.C67204754	Sum	hucasebh , huctbh
VS_MAC_SRNCIubBytesPSBkg_Rx	ACCUMULATION	INT 8	Number of bytes of the	B67109387.C67199653	Sum	hucasebh , huctbh

			UL MAC PDUs sent by the SRNC to the MAC-d on the PS background service bearer (DCH FP) over the Iub interface in a cell.			
VS_MAC_SRNCIubBytesPSBkg_Tx	ACCUMULATION	INT 8	Number of bytes of the DL MAC PDU sent by the SRNC on the PS background service bearer DCH FP over the Iub interface in a cell.	B67109387.C67199657	Sum	hucasebh, huctbh
VS_MAC_SRNCIubBytesPSConv_Rx	ACCUMULATION	INT 8	Number of bytes of the UL MAC PDUs sent by the SRNC to the MAC-d on the PS conversational service bearer (DCH FP) over the Iub interface in a cell.	B67109387.C67199650	Sum	hucasebh, huctbh
VS_MAC_SRNCIubBytesPSConv_Tx	ACCUMULATION	INT 8	Number of bytes of the DL MAC PDU sent by	B67109387.C67199654	Sum	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			the SRNC on the PS conversational service bearer DCH FP over the Iub interface in a cell.			
VS_MAC_SRNCIubBytesPSInt_Rx	ACCUMULATION	INT 8	Number of bytes of the UL MAC PDUs sent by the SRNC to the MAC-d on the PS interactive service bearer (DCH FP) over the Iub interface in a cell.	B67109387.C67199652	Sum	hucasebh , huctbh
VS_MAC_SRNCIubBytesPSInt_Tx	ACCUMULATION	INT 8	Number of DL MAC PDU bytes sent by the SRNC on the PS interactive service bearer DCH FP over the Iub interface in a cell.	B67109387.C67199656	Sum	hucasebh , huctbh
VS_MAC_SRNCIubBytesPSStr_Rx	ACCUMULATION	INT 8	Number of bytes of the UL MAC PDUs sent by the SRNC to the MAC-d on the PS streaming service bearer (DCH FP) over the Iub interface in a	B67109387.C67199651	Sum	hucasebh , huctbh

			cell.			
VS_MAC_SRNCI ubBytesPSStr_Tx	ACCUMULATION	INT 8	Number of bytes of the DL MAC PDU sent by the SRNC on the PS streaming service bearer DCH FP over the Iub interface in a cell.	B67109387.C67199655	Sum	hucasebh , huctbh

7.5.122Cell.Huawei.UMTS.UL_Speech_Quality

Speech quality of Up Link

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_Speech_SQI_Accept	INTENSITY	FLOAT	Ratio of acceptable UL speech quality duration to conversation duration	B67109392.C67204480	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_Speech_SQI_Bad	INTENSITY	FLOAT	Ratio of bad UL speech quality duration to conversation duration	B67109392.C67204481	Average	hucasebh , huctbh, Sum, Minimum, Maximum
VS_Speech_SQI_Good	INTENSITY	FLOAT	Ratio of good UL speech quality duration to conversation	B67109392.C67204479	Average	hucasebh , huctbh, Sum, Minimum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			duration			m, Maximum
--	--	--	----------	--	--	---------------

7.5.123Cell.Huawei.UMTS.URA_Updating

UTRAN Registration Area Update data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_URAUdpd_Succ_CHG	ACCUMULATION	INTEGER	Number of URA UPDATE CONFIRM messages responded to the UE from the RNC on receipt of the URA UPDATE message with cause change of URA.	B67109383.C67180453	Sum	hucasebh, huctbh
VS_URAUdpd_Succ_Prd	ACCUMULATION	INTEGER	Number of URA UPDATE CONFIRM messages responded to the UE from the RNC on receipt of the URA UPDATE message with cause periodic URA update.	B67109383.C67180454	Sum	hucasebh, huctbh

7.6 E1T1_Link Performance Indicators

This section shows the key performance indicators and other counters for the E1T1_Link object, divided into the following sub-sections:

- [E1T1_Link.Huawei.UMTS.E1T1_Link_Quality](#)
- [E1T1_Link.Huawei.UMTS.ELECT](#)

7.6.1 E1T1_Link.Huawei.UMTS.E1T1_Link_Quality

Link Quality of the E1T1

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_ATMLGCPR T_Allocated_Ave_ Bwd	INTENSITY	FLOAT	Mean forward bandwidth assigned to the ATM logic port	B67109525.C67204858 or B67109564.C67204858	Average	Sum, Minimum, Maximum
VS_ATMLGCPR T_Allocated_Ave_ Fwd	INTENSITY	FLOAT	Mean backward bandwidth assigned to the ATM logic port	B67109525.C67204859 or B67109564.C67204859	Average	Sum, Minimum, Maximum
VS_ATMLGCPR T_Allocated_Max_ Bwd	INTENSITY	FLOAT	Maximum backward bandwidth assigned to the ATM logic port	B67109525.C67196320 or B67109564.C67196320	Average	Sum, Minimum, Maximum
VS_ATMLGCPR T_Allocated_Max_ Fwd	INTENSITY	FLOAT	Maximum forward bandwidth assigned to the ATM logic port	B67109525.C67196319 or B67109564.C67196319	Average	Sum, Minimum, Maximum
VS_ATMLGCPR T_Bwd_Cong_Dur	ACCUMULATION	INTEGER	Duration of backward congestion on the ATM logic port	B67109525.C67196324 or B67109564.C67196324	Sum	
VS_ATMLGCPR T_Bwd_Cong	ACCUMULATION	INTEGER	Number of backward congestions on the ATM logic port	B67109525.C67196323 or B67109564.C67196323	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			port			
VS_ATMLGCPR T_Fwd_Cong_Dur	ACCUMULATION	INTEGER	Duration of forward congestion on the ATM logic port	B67109525.C67196322 or B67109564.C67196322	Sum	
VS_ATMLGCPR T_Fwd_Cong	ACCUMULATION	INTEGER	Number of forward congestions on the ATM logic port	B67109525.C67196321 or B67109564.C67196321	Sum	
VS_EIERRRAT E_CODEVIOLATION	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Error rate of COCD violation error (specific to V100R010)	B67109525.C67204010	Average	Sum, Minimum, Maximum
VS_EIERRRAT E_CRC4	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Error rate of CRC4 error (specific to V100R010)	B67109525.C67204012	Average	Sum, Minimum, Maximum
VS_EIERRRAT E_EBIT	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Error rate of EBIT error (specific to V100R010)	B67109525.C67204013	Average	Sum, Minimum, Maximum
VS_EIERRRAT E_FRAME	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Error rate of frame error (specific to V100R010)	B67109525.C67204011	Average	Sum, Minimum, Maximum

7.6.2 E1T1_Link.Huawei.UMTS.ELECT

ELECT errors

KPI	Type	Data	Description	Derivation	Default	Other
-----	------	------	-------------	------------	---------	-------

		Type			Aggrega tor	Aggrega tors
VS_ELECT_CODE VIOLATE_Rate_Mean	INTENSITY	FLOAT	Error rate of cells with error codes in ELECT	B67109487.C67 204488	Average	Sum, Minimum, Maximum
VS_ELECT_CODE VIOLATE	ACCUMULATION	INTEGER	Number of cells with error codes in ELECT	B67109487.C67 194334	Sum	
VS_ELECT_CRCE RROR_Rate_Mean	INTENSITY	FLOAT	error rate of cells with CRC errors in ELECT	B67109487.C67 204490	Average	Sum, Minimum, Maximum
VS_ELECT_CRCE RROR	ACCUMULATION	INTEGER	Number of cells with CRC errors in ELECT	B67109487.C67 194336	Sum	
VS_ELECT_EBITE RROR_Rate_Mean	INTENSITY	FLOAT	error rate of cells with ebit errors in ELECT	B67109487.C67 204491	Average	Sum, Minimum, Maximum
VS_ELECT_EBITE RROR	ACCUMULATION	INTEGER	Number of cells with ebit errors in ELECT	B67109487.C67 194337	Sum	
VS_ELECT_FAUL TCLEAR	ACCUMULATION	INTEGER	Obsolete from UTRAN/V90 OR011: Number of times faults are cleared in ELECT	B67109487.C67 194340	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_ELECT_FAULTMIT	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011: Number of times fault occur in ELECT	B67109487.C67194339	Sum	
VS_ELECT_FAULTTIME	ACCUMULATION	INTEGER	Duration of fault of ELECT	B67109487.C67194341	Sum	
VS_ELECT_FRAMEALIGNCHANGED	ACCUMULATION	INTEGER	Number of frame alignment changes of ELECT	B67109487.C67194347	Sum	
VS_ELECT_FRAMEINGERROR_Rate_Mean	INTENSITY	FLOAT	Error rate of cells with frame delimitation in ELECT	B67109487.C67204489	Average	Sum, Minimum, Maximum
VS_ELECT_FRAMEINGERROR	ACCUMULATION	INTEGER	Number of cells with error frame delimitation in ELECT	B67109487.C67194335	Sum	
VS_ELECT_MULTIFRAME	ACCUMULATION	INTEGER	Number of ELECT multiframes	B67109487.C67194342	Sum	
VS_ELECT_RXFLOWCAPACITY	ACCUMULATION	INTEGER	Received traffic by ELECT	B67109487.C67194343	Sum	
VS_ELECT_SA6ERROR	ACCUMULATION	INTEGER	Number of cells with sa6 errors in ELECT	B67109487.C67194338	Sum	
VS_ELECT_TXFLOWCAPACITY	ACCUMULATION	INTEGER	Transmitted traffic by ELECT	B67109487.C67194344	Sum	

7.7 ETH Performance Indicators

This section shows the key performance indicators and other counters for the ETH object, divided into the following sub-sections:

- [ETH.Huawei.UMTS.ETH](#)
- [ETH.Huawei.UMTS.FEGE_QUEUE](#)
- [ETH.Huawei.UMTS.FEGE](#)

7.7.1 ETH.Huawei.UMTS.ETH

ETH measurement

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
Total_VS_IP_Bytes_ETH	ACCUMULATION	INT8	Number of bytes sent and received by an ETH port in a measurement period.	({VS_IP_Rx_Bytes_ETH} + {VS_IP_Tx_Bytes_ETH})	Sum	
VS_IP_MeanThroughputKbpsRx_ETH	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Mean Rx rate of an ETH port in a given measurement period.	B67109514.C67203910	Average	Sum, Minimum, Maximum
VS_IP_MeanThroughputKbpsTx_ETH	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Mean Tx rate of an ETH port in a given measurement period.	B67109514.C67203911	Average	Sum, Minimum, Maximum
VS_IP_PktErrorRx_ETH_Port	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900	B67109514.C67192409	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			R011:Lost Number of package received by an ETH in a measurement period (5s).			
VS_IP_PktUnexpectedRx_ETH	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200 R010:Lost Number of package sent by an ETH in a measurement period (5s).	B67109514.C67 192410	Sum	
VS_IP_Rx_Bytes_ETH	ACCUMULATION	INT8	Obsolete from UTRAN/V900 R011:Number of bytes received by an ETH port in a measurement period.	B67109514.C67 192407	Sum	
VS_IP_Tx_Bytes_ETH	ACCUMULATION	INT8	Obsolete from UTRAN/V900 R011:Number of bytes sent by an ETH port in a measurement period.	B67109514.C67 192408	Sum	
VS_MAC_PktErrorRx_ETH	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200 R010:Number of package received by MAC in a measurement period (5s).	B67109514.C67 192432	Sum	
VS_MAC_PktErrorTx_ETH	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200 R010:Number	B67109514.C67 192433	Sum	

			of package sent by MAC in a measurement period (5s).			
--	--	--	--	--	--	--

7.7.2 ETH.Huawei.UMTS.FEGE_QUEUE

FEGE Queue

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_FEGE_QUEUE_MEAN_TX	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Mean transmission rate of FEGE_QUEUE	B67109544.C67204536	Average	Sum, Minimum, Maximum
VS_FEGE_QUEUE_PEAK_TXRATE	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Peak transmission rate of FEGE_QUEUE	B67109544.C67204534	Average	Sum, Minimum, Maximum
VS_FEGE_QUEUE_TXBYTES	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:Number of bytes transmitted from the FEGE_QUEUE	B67109544.C67195073	Sum	
VS_FEGE_QUEUE_TXDROPBYTES	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:Number of outgoing	B67109544.C67195075	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			bytes discarded in the FEGE_QUEUE			
VS_FEGE_QUEUE_TXDROPPACKETS	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of outgoing packets discarded in the FEGE_QUEUE	B67109544.C67195074	Sum	
VS_FEGE_QUEUE_TXPKTS	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of packets transmitted from the FEGE_QUEUE	B67109544.C67195072	Sum	

7.7.3 ETH.Huawei.UMTS.FEGE

FEGE measurement

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_FEGE_FAULTCLEAR	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of times faults are cleared in FEGE	B67109488.C67194367	Sum	
VS_FEGE_FAULTMIT	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of times faults occur in FEGE	B67109488.C67194366	Sum	
VS_FEGE_FAULT	ACCUMULATION	INTEGER	Duration of	B67109488.C671	Sum	

TTIME	TION	ER	fault of FEGE	94368		
VS_FEGE_RXBYTES	ACCUMULATION	INT8	Number of bytes received by an FEGE port in a measurement period.	B67109488.C67204393	Sum	
VS_FEGE_RXERRORPKTS	ACCUMULATION	INT8	Lost Number of package received by an FEGE in a measurement period (5s).	B67109488.C67194364	Sum	
VS_FEGE_RXMAXSPEED	INTENSITY	FLOAT	Maximum receive rate of FEGE	B67109488.C67194369	Average	Sum, Minimum, Maximum
VS_FEGE_RXMEANSPEED	INTENSITY	FLOAT	Average receive rate of the FEGE port in the specified measurement period	B67109488.C67194371	Average	Sum, Minimum, Maximum
VS_FEGE_RXMINSPEED	INTENSITY	FLOAT	Minimum receive rate of FEGE	B67109488.C67194370	Average	Sum, Minimum, Maximum
VS_FEGE_RXPACKETS	ACCUMULATION	INT8	Number of packets received by FEGE	B67109488.C67204395	Sum	
VS_FEGE_RXUNKNOWNPKTS	ACCUMULATION	INTEGER	Number of discarded packets transmitted by	B67109488.C67194365	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			FEGE			
VS_FEGE_TXBYTES	ACCUMULATION	INT8	Number of bytes sent by an FEGE port in a measurement period.	B67109488.C67204394	Sum	
VS_FEGE_TXDROPPEDPKTS	ACCUMULATION	INTEGER	Number of unknown packets received by FEGE	B67109488.C67194363	Sum	
VS_FEGE_TXMAXSPEED	INTENSITY	FLOAT	Maximum transmit rate of FEGE	B67109488.C67194372	Average	Sum, Minimum, Maximum
VS_FEGE_TXMEANSPEED	INTENSITY	FLOAT	Average transmit rate of the FEGE port in the specified measurement period	B67109488.C67194374	Average	Sum, Minimum, Maximum
VS_FEGE_TXMINSPEED	INTENSITY	FLOAT	Minimum transmit rate of FEGE	B67109488.C67194373	Average	Sum, Minimum, Maximum
VS_FEGE_TXPACKETS	ACCUMULATION	INT8	Number of packets transmitted by FEGE	B67109488.C67204396	Sum	

7.8 FIBER_Link Performance Indicators

This section shows the key performance indicators and other counters for the FIBER_Link object, divided into the following sub-sections:

- [FIBER_Link.Huawei.UMTS.FIBER_Traffic_ErrorCount](#)
- [FIBER_Link.Huawei.UMTS.SDH_Switch](#)
- [FIBER_Link.Huawei.UMTS.UOI_V900](#)

7.8.1 FIBER_Link.Huawei.UMTS.FIBER_Traffic_ErrorCount

Error counts on Fiber traffic

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_FIBER_B1	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of regenerator section errors of FIBER	B67109489.C67194380	Sum	
VS_FIBER_B2	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of multiplex section errors of FIBER	B67109489.C67194381	Sum	
VS_FIBER_B3	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of high order path errors of FIBER	B67109489.C67194382	Sum	
VS_FIBER_Bit2 ErrCount	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of low order path errors of FIBER	B67109489.C67194385	Sum	
VS_FIBER_FAULTCLEAR	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of times faults are cleared in FIBER	B67109489.C67194392	Sum	
VS_FIBER_FAULTEMIT	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900	B67109489.C67194391	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			R011: Number of times faults occur in FIBER			
VS_FIBER_FAULTTIME	ACCUMULATION	INTEGER	Duration of fault of FIBER	B67109489.C67194393	Sum	
VS_FIBER_FEBEErrCount	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of low order path remote errors of FIBER	B67109489.C67194386	Sum	
VS_FIBER_G1	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of high order path remote errors of FIBER	B67109489.C67194384	Sum	
VS_FIBER_M1	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of multiplex section remote errors of FIBER	B67109489.C67194383	Sum	
VS_FIBER_RXCELLS	ACCUMULATION	INT8	Received cells by FIBER	B67109489.C67204399	Sum	
VS_FIBER_RXFLUX	ACCUMULATION	FLOAT	Obsolete from UTRAN/V900 R011: Received traffic by FIBER	B67109489.C67204397	Sum	
VS_FIBER_RXMAXSPEED	INTENSITY	FLOAT	Maximum receive rate of FIBER	B67109489.C67194397	Average	Sum, Minimum, Maximum
VS_FIBER_RXMEANSPEED	INTENSITY	FLOAT	Average receive rate of	B67109489.C67194399	Average	Sum, Minimum

			FIBER			m, Maximum
VS_FIBER_RX MINSPEED	INTENSITY	FLOAT	Minimum receive rate of FIBER	B67109489.C671 94398	Average	Sum, Minimum, Maximum
VS_FIBER_TXC ELLS	ACCUMULATION	INT8	Transmitted cells by FIBER	B67109489.C672 04400	Sum	
VS_FIBER_TXF LUX	ACCUMULATION	FLOAT	Obsolete from UTRAN/V900 R011:Transmitted traffic by FIBER	B67109489.C672 04398	Sum	
VS_FIBER_TX MAXSPEED	INTENSITY	FLOAT	Maximum transmit rate of FIBER	B67109489.C671 94394	Average	Sum, Minimum, Maximum
VS_FIBER_TX MEANSPEED	INTENSITY	FLOAT	Average transmit rate of FIBER	B67109489.C671 94396	Average	Sum, Minimum, Maximum
VS_FIBER_TX MINSPEED	INTENSITY	FLOAT	Minimum transmit rate of FIBER	B67109489.C671 94395	Average	Sum, Minimum, Maximum

7.8.2 FIBER_Link.Huawei.UMTS.SDH_Switch

SDH Utilisation KPIs

KPI	Type	Data Type	Description	Derivation	Default Aggregat	Other Aggrega
-----	------	--------------	-------------	------------	---------------------	------------------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

					or	tors
VS_SDH_FAULT_CHANNEL_PROTECT_COUNTS	ACCUMULATION	INTEGER	Number of times faults occur in SDH protection channels	B67109496.C67194472	Sum	
VS_SDH_FAULT_CHANNEL_WORK_COUNTS	ACCUMULATION	INTEGER	Number of times faults occur in SDH work channels	B67109496.C67194473	Sum	
VS_SDH_SWAP_REASON_EXTERNAL_COUNTS	ACCUMULATION	INTEGER	Number of external requests for SDH switch	B67109496.C67194471	Sum	
VS_SDH_SWAP_REASON_KBYTE_COUNTS	ACCUMULATION	INTEGER	Number of k-byte requests for SDH switch	B67109496.C67194470	Sum	
VS_SDH_SWAP_REASON_REQUEST_COUNTS	ACCUMULATION	INTEGER	Number of condition requests for SDH switch	B67109496.C67194469	Sum	

7.8.3 FIBER_Link.Huawei.UMTS.UOI_V900

UOI Board data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_UOI_RXMAXSPEED	INTENSITY	FLOAT	The max receiving speed of fiber board	B67109549_V900.C67204851	Average	Sum, Minimum, Maximum
VS_UOI_TXMAXSPEED	INTENSITY	FLOAT	The max transmitting speed of fiber board	B67109549_V900.C67204852	Average	Sum, Minimum, Maximum

7.9 FlowControl Performance Indicators

This section shows the key performance indicators and other counters for the FlowControl object, divided into the following sub-sections:

- [FlowControl.Huawei.UMTS.Flow_Control_Queue_Traffic](#)

7.9.1 FlowControl.Huawei.UMTS.Flow_Control_Queue_Traffic

Flow Control Queue traffic

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_FLOWCTRL_QUE_TX_BYTES	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of bytes transmitted to indicate the flow control queue traffic.	B67109522.C67192550	Sum	

7.10 FRAATM Performance Indicators

This section shows the key performance indicators and other counters for the FRAATM object, divided into the following sub-sections:

- [FRAATM.Huawei.UMTS.FRAATM](#)

7.10.1 FRAATM.Huawei.UMTS.FRAATM

FRA ATM data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_FRAATM_PEAKE_RXCELLS	INTENSITY	FLOAT	Obsolete from UTRAN/V200 R010: Maximum Number of	B67109398.C67190737	Constant	Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Cells Received by FRA ATM Link.			m
VS_FRAATM_PEA K_RXRATE	INTENSITY	FLOA T	Obsolete from UTRAN/V900 R011:Peak rate of cells received by a FRA ATM link in a measurement period.	B67109398.C672 02974	Constant	Sum, Minimu m, Maximu m
VS_FRAATM_PEA K_TXCELLS	INTENSITY	FLOA T	Obsolete from UTRAN/V200 R010:Maximum Number of Cells Transmitted by FRA ATM Link.	B67109398.C671 90738	Constant	Sum, Minimu m, Maximu m
VS_FRAATM_PEA K_TXRATE	INTENSITY	FLOA T	Obsolete from UTRAN/V900 R011:Peak rate of cells sent by a FRA ATM link in a measurement period.	B67109398.C672 02975	Constant	Sum, Minimu m, Maximu m
VS_FRAATM_RX CELLS	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011:Number of cells received by a FRA ATM link in a measurement period.	B67109398.C671 90488	Sum	
VS_FRAATM_TX CELLS	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011:Number of cells sent by a FRA ATM link in a	B67109398.C671 90489	Sum	

			measurement period.			
VS_FraATMUNI_Lnk_MeanKbps_Rx	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Mean Rx rate of a FRA ATM link in a given measurement period. Unit: kbps.	B67109398.C67202913	Average	Sum, Minimum, Maximum
VS_FraATMUNI_Lnk_MeanKbps_Tx	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Mean Tx rate of a FRA ATM link in a given measurement period. Unit: kbps.	B67109398.C67202914	Average	Sum, Minimum, Maximum
VS_FRACATMLNK_Allocated_Ave_Bwd	INTENSITY	INTEGER	Mean backward bandwidth assigned to an FRA ATM link	B67109398.C67204780	Average	Sum, Minimum, Maximum
VS_FRACATMLNK_Allocated_Ave_Fwd	INTENSITY	INTEGER	Mean forward bandwidth assigned to an FRA ATM link	B67109398.C67204779	Average	Sum, Minimum, Maximum
VS_FRACATMLNK_Allocated_Max_Bwd	INTENSITY	INTEGER	Peak backward bandwidth assigned to an FRA ATM link	B67109398.C67195939	Average	Sum, Minimum, Maximum
VS_FRACATMLNK_Allocated_Max_Fwd	INTENSITY	INTEGER	Peak forward bandwidth assigned to an FRA ATM link	B67109398.C67195938	Average	Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

_Fwd			assigned to an FRA ATM link			m, Maximum
VS_FRACATMLNK_Bwd_Cong_Dur	ACCUMULATION	INTEGER	Duration of backward congestion on an FRA ATM link	B67109398.C67195943	Sum	
VS_FRACATMLNK_Bwd_Cong	ACCUMULATION	INTEGER	Number of backward congestions on an FRA ATM link	B67109398.C67195942	Sum	
VS_FRACATMLNK_Fwd_Cong_Dur	ACCUMULATION	INTEGER	Duration of forward congestion on an FRA ATM link	B67109398.C67195941	Sum	
VS_FRACATMLNK_Fwd_Cong	ACCUMULATION	INTEGER	Number of forward congestions on an FRA ATM link	B67109398.C67195940	Sum	
VS_FRACATMLNK_PEAK_RXCELLS	INTENSITY	INTEGER	Obsolete in Vn00R010; Maximum number of bytes sent	B67109398.C67193992	Average	Sum, Minimum, Maximum
VS_FRACATMLNK_PEAK_RXRATE	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Peak rate of cells received by a FRA ATM link in a measurement period.	B67109398.C67204454	Average	Sum, Minimum, Maximum
VS_FRACATMLNK_PEAK_TXCELLS	INTENSITY	INTEGER	Obsolete in Vn00R010; Maximum number of	B67109398.C67193990	Average	Sum, Minimum, Maximum

			bytes received			m
VS_FRACATML NK_PEAK_TXR ATE	INTENSITY	FLOA T	Obsolete from UTRAN/V900 R011:Peak rate of cells sent by a FRA ATM link in a measurement period.	B67109398.C672 04453	Average	Sum, Minimu m, Maximu m
VS_FRACATML NK_RXCELLS	ACCUMULA TION	INT8	Number of cells received by a FRA ATM link in a measurement period.	B67109398.C671 93991	Sum	
VS_FRACATML NK_RXDROPE DCELLS	ACCUMULA TION	INTEG ER	Number of discarded cells received by FRA ATM	B67109398.C671 93994	Sum	
VS_FRACATML NK_RXHCSERR CELLS	ACCUMULA TION	INTEG ER	Number of HCS error cells received by FRA ATM	B67109398.C671 93993	Sum	
VS_FRACATML NK_RXMAXSPE ED	INTENSITY	FLOA T	Maximum receive rate of FRA ATM	B67109398.C671 93998	Average	Sum, Minimu m, Maximu m
VS_FRACATML NK_RXMEANSPE ED	INTENSITY	FLOA T	Mean Rx rate of a FRA ATM link in a given measurement period. Unit: kbps.	B67109398.C671 94000	Average	Sum, Minimu m, Maximu m
VS_FRACATML NK_RXMINSPEE D	INTENSITY	FLOA T	Minimum receive rate of FRA ATM	B67109398.C671 93999	Average	Sum, Minimu m,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						Maximum
VS_FRACATMLNK_TXCELLS	ACCUMULATION	INT8	Number of cells sent by a FRA ATM link in a measurement period.	B67109398.C67193989	Sum	
VS_FRACATMLNK_TXMAXSPEED	INTENSITY	FLOAT	Maximum transmit rate of FRA ATM	B67109398.C67193995	Average	Sum, Minimum, Maximum
VS_FRACATMLNK_TXMEANSPEED	INTENSITY	FLOAT	Mean Tx rate of a FRA ATM link in a given measurement period. Unit: kbps.	B67109398.C67193997	Average	Sum, Minimum, Maximum
VS_FRACATMLNK_TXMINSPEED	INTENSITY	FLOAT	Minimum transmit rate of FRA ATM	B67109398.C67193996	Average	Sum, Minimum, Maximum

7.11 FRAIMALNK Performance Indicators

This section shows the key performance indicators and other counters for the FRAIMALNK object, divided into the following sub-sections:

- [FRAIMALNK.Huawei.UMTS.FRAIMALNK](#)

7.11.1 FRAIMALNK.Huawei.UMTS.FRAIMALNK

FRA IMA LNK data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_FraATMI MA_Lnk_MeanKbps_Rx	INTENSITY	FLOAT	Obsolete from UTRAN/V900R011:Mean Rx rate of a FRA IMA link	B67109399.C67202911	Average	Sum, Minimum,

			in a given measurement period. Unit: kbps.			Maximum
VS_FraATMI MA_Lnk_MeanKbps_Tx	INTENSITY	FLOAT	Obsolete from UTRAN/V900R011:Mean Tx rate of a FRA IMA link in a given measurement period. Unit: kbps.	B67109 399.C67 202912	Average	Sum, Minimum, Maximum
VS_FRACIMA LNK_PEAK_RXCELLS	INTENSITY	INTEGER	Obsolete in Vn00R010; Maximum number of bytes sent	B67109 399.C67 194007	Average	Sum, Minimum, Maximum
VS_FRACIMA LNK_PEAK_RXRATE	INTENSITY	FLOAT	Obsolete from UTRAN/V900R011:Peak rate of cells received by a FRA IMA link in a measurement period.	B67109 399.C67 204456	Average	Sum, Minimum, Maximum
VS_FRACIMA LNK_PEAK_TXCELLS	INTENSITY	INTEGER	Obsolete in Vn00R010; Maximum number of bytes received	B67109 399.C67 194004	Average	Sum, Minimum, Maximum
VS_FRACIMA LNK_PEAK_TXRATE	INTENSITY	FLOAT	Obsolete from UTRAN/V900R011:Peak rate of cells sent by a FRA IMA link in a measurement period.	B67109 399.C67 204455	Average	Sum, Minimum, Maximum
VS_FRACIMA LNK_RXDROPEDCELLS	ACCUMULATION	FLOAT	Number of cells discarded by FRA IMAlink	B67109 399.C67 194008	Sum	
VS_FRACIMA LNK_RXHCSERRCELLS	ACCUMULATION	INTEGER	Number of error cells of FRA IMAlink	B67109 399.C67 194009	Sum	
VS_FRACIMA LNK_RXMAXSPEED	INTENSITY	FLOAT	Maximum receive rate of FRA IMAlink	B67109 399.C67 194013	Average	Sum, Minimum,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						Maximum
VS_FRACIMALNK_RXMEANSPEED	INTENSITY	FLOAT	Mean Rx rate of a FRA IMA link in a given measurement period. Unit: kbps.	B67109399.C67194015	Average	Sum, Minimum, Maximum
VS_FRACIMALNK_RXMIN SPEED	INTENSITY	FLOAT	Minimum receive rate of FRA IMA link	B67109399.C67194014	Average	Sum, Minimum, Maximum
VS_FRACIMALNK_RXSTUFFCELLS	ACCUMULATION	INTEGER	Number of padding cells received by FRA IMA LNK	B67109399.C67194006	Sum	
VS_FRACIMALNK_RXUSE RCELLS	ACCUMULATION	INT8	Number of cells received by a FRA IMA link in a measurement period.	B67109399.C67194005	Sum	
VS_FRACIMALNK_TXMAX SPEED	INTENSITY	FLOAT	Maximum send rate of FRA IMA link	B67109399.C67194010	Average	Sum, Minimum, Maximum
VS_FRACIMALNK_TXMEANSPEED	INTENSITY	FLOAT	Mean Tx rate of a FRA IMA link in a given measurement period. Unit: kbps.	B67109399.C67194012	Average	Sum, Minimum, Maximum
VS_FRACIMALNK_TXMIN SPEED	INTENSITY	FLOAT	Minimum send rate of FRA IMA link	B67109399.C67194011	Average	Sum, Minimum, Maximum
VS_FRACIMALNK_TXSTUFFCELLS	ACCUMULATION	INTEGER	Number of padding cells transmitted by FRA IMA link	B67109399.C67194003	Sum	
VS_FRACIMALNK_TXUSE RCELLS	ACCUMULATION	INT8	Number of cells sent by a FRA IMA link in a measurement period.	B67109399.C67194002	Sum	
VS_FRAIMAL	INTENSITY	FLOAT	Obsolete from	B67109	Constant	Sum,

NK_PEAK_RXCELLS		T	UTRAN/V200R010: Number of the peak number of the user cells received by the FRA ATM every five seconds in the specified measurement period. The counter is used to indicate the maximum number of the user cells received by a single FRA ATM. VS.FRACATMLNK.PEAK.RXCELLS: peak number of the user cells received by the FRA ATM in the measurement period.	399.C67190735	t	Minimum, Maximum
VS_FRAIMALNK_PEAK_TXCELLS	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010: Number of the user cells transmitted by the FRA ATM in the specified measurement period. The counter is used to indicate the status of the traffic transmitted by a single FRA ATM. VS.FRACATMLNK.TXCELLS: number of the user cells transmitted by the FRA ATM in the measurement period.	B67109399.C67190736	Constant	Sum, Minimum, Maximum
VS_FRAIMALNK_RXCELLS	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011: Number of cells received by a FRA IMA link in a measurement period.	B67109399.C67190486	Sum	
VS_FRAIMALNK_TXCELLS	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011: Number of cells sent by a FRA IMA link in a measurement period.	B67109399.C67190487	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

7.12 FRAME Performance Indicators

This section shows the key performance indicators and other counters for the FRAME object, divided into the following sub-sections:

- [FRAME.Huawei.UMTS.FRAME_FLUX](#)

7.12.1 FRAME.Huawei.UMTS.FRAME_FLUX

Frame utilisation

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_Frame_Flux_MeasRate_Rx	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:Mean rate received by a frame	B67109520.C6720 4496	Average	Sum, Minimum, Maximum
VS_Frame_Flux_MeasRate_Tx	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:Mean rate transmitted by a frame	B67109520.C6720 4497	Average	Sum, Minimum, Maximum
VS_Frame_Flux_Peak_RxRate	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:Peak rate received by a frame	B67109520.C6720 4494	Average	Sum, Minimum, Maximum
VS_Frame_Flux_Peak_TxRate	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:Peak rate transmitted by a frame	B67109520.C6720 4495	Average	Sum, Minimum, Maximum
VS_Frame_Flux_RxBytes	ACCUMULATION	INT8	Obsolete from UTRAN/V900R 011:Received bytes by a frame	B67109520.C6720 4492	Sum	
VS_Frame_Flux_TxBytes	ACCUMULATION	INT8	Obsolete from UTRAN/V900R 011:Transmitted	B67109520.C6720 4493	Sum	

			bytes by a frame			
--	--	--	------------------	--	--	--

7.13 GPRS_Tunnel Performance Indicators

This section shows the key performance indicators and other counters for the GPRS_Tunnel object, divided into the following sub-sections:

- [GPRS_Tunnel.Huawei.UMTS.GTP_U_PktNum](#)
- [GPRS_Tunnel.Huawei.UMTS.GTP_U](#)

7.13.1 GPRS_Tunnel.Huawei.UMTS.GTP_U_PktNum

GTPU Packet Number data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_GTPU_PktNumBkg_Rx	ACCUMULATION	INTEGER	Number of Received Traffic PDUs of background service.	B67109400.C67204165	Sum	hugttpbh
VS_GTPU_PktNumBkg_Tx	ACCUMULATION	INTEGER	Number of Sent traffic PDUs of Background service.	B67109400.C67204164	Sum	hugttpbh
VS_GTPU_PktNumConv_Rx	ACCUMULATION	INTEGER	Number of Received Traffic PDUs of conversational service.	B67109400.C67204159	Sum	hugttpbh
VS_GTPU_PktNumConv_Tx	ACCUMULATION	INTEGER	Number of Sent traffic PDUs of Conversational service.	B67109400.C67204158	Sum	hugttpbh
VS_GTPU_PktNumInt_Rx	ACCUMULATION	INTEGER	Number of Received Traffic PDUs of	B67109400.C67204163	Sum	hugttpbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			interactive service.			
VS_GTPU_PktNumInt_Tx	ACCUMULATION	INTEGER	Number of Sent traffic PDUs of Interactive service.	B67109400.C67204162	Sum	hugttpbh
VS_GTPU_PktNumStr_Rx	ACCUMULATION	INTEGER	Number of Received Traffic PDUs of streaming service.	B67109400.C67204161	Sum	hugttpbh
VS_GTPU_PktNumStr_Tx	ACCUMULATION	INTEGER	Number of Sent traffic PDUs of Streaming service.	B67109400.C67204160	Sum	hugttpbh

7.13.2 GPRS_Tunnel.Huawei.UMTS.GTP_U

GTP_U data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
Total_VS_GTPU_BytesPayldBkg	ACCUMULATION	INT8	Number of GTPU PDU bytes of PS background services sent and received by the RNC.	{VS_GTPU_BytesPayldBkg_Rx} + {VS_GTPU_BytesPayldBkg_Tx}	Sum	hugttpbh
Total_VS_GTPU_BytesPayldConv	ACCUMULATION	INT8	Number of GTPU PDU bytes of PS conversational services sent and received by the RNC.	{VS_GTPU_BytesPayldConv_Rx} + {VS_GTPU_BytesPayldConv_Tx}	Sum	hugttpbh
Total_VS_GTPU_BytesPayldInt	ACCUMULATION	INT8	Number of GTPU PDU bytes of PS interactive services sent	{VS_GTPU_BytesPayldInt_Rx} + {VS_GTPU_BytesPayldInt_Tx}	Sum	hugttpbh

			and received by the RNC.			
Total_VS_GTPU_BytesPayldStr	ACCUMULATION	INT8	Number of GTPU PDU bytes of PS streaming services sent and received by the RNC.	{VS_GTPU_BytesPayldStr_Rx} + {VS_GTPU_BytesPayldStrTx}	Sum	hugttpbh
Total_VS_GTPU_BytesPkt	ACCUMULATION	INT8	Number of the GTPU PDU bytes sent and received by the RNC.	{VS_GTPU_BytesPkt_Rx} + {VS_GTPU_BytesPkt_Tx}	Sum	hugttpbh
Total_VS_GTPU_PktLossBuffOverld	ACCUMULATION	INT8	After the setup of the GTPU tunnel, the local GTPU and the peer GTPU exchange packets. This measurement item calculates the number of sent and received packets discarded by GTPU	{VS_GTPU_PktLossBuffOverld_Rx} + {VS_GTPU_PktLossBuffOverld_Tx}	Sum	hugttpbh
Total_VS_GTPU_Pkt	ACCUMULATION	INT8	Number of packets sent and received by GTPU.	{VS_GTPU_Pkt_Tx} + {VS_GTPU_Pkt_Rx}	Sum	hugttpbh
VS_GTPU_BytesMbms_Rx	ACCUMULATION	INTEGER	Number of GTPU PDU bytes of MBMS	B67109400.C67192326	Sum	hugttpbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			services received by the RNC.			
VS_GTPU_Byte sPayldBkg_Rx	ACCUMULATION	INT8	Number of GTPU PDU bytes of PS background services received by the RNC.	B67109400.C6719 9482	Sum	hugttpbh
VS_GTPU_Byte sPayldBkg_Tx	ACCUMULATION	INT8	Number of GTPU PDU bytes of PS background services sent by the RNC.	B67109400.C6719 9486	Sum	hugttpbh
VS_GTPU_Byte sPayldConv_Rx	ACCUMULATION	INT8	Number of GTPU PDU bytes of PS conversational services received by the RNC.	B67109400.C6719 9483	Sum	hugttpbh
VS_GTPU_Byte sPayldConv_Tx	ACCUMULATION	INT8	Number of GTPU PDU bytes of PS conversational services sent by the RNC.	B67109400.C6719 9479	Sum	hugttpbh
VS_GTPU_Byte sPayldInt_Rx	ACCUMULATION	INT8	Number of GTPU PDU bytes of PS interactive services received by the RNC.	B67109400.C6719 9485	Sum	hugttpbh
VS_GTPU_Byte sPayldInt_Tx	ACCUMULATION	INT8	Number of GTPU PDU bytes of PS interactive services sent by the RNC.	B67109400.C6719 9481	Sum	hugttpbh

VS_GTPU_Byte sPayldStr_Rx	ACCUMULA TION	INT8	Number of GTPU PDU bytes of PS streaming services received by the RNC	B67109400.C6719 9484	Sum	hugttpbh
VS_GTPU_Byte sPayldStrTx	ACCUMULA TION	INT8	Number of GTPU PDU bytes of PS streaming services sent by the RNC.	B67109400.C6719 9480	Sum	hugttpbh
VS_GTPU_Byte sPkt_Rx	ACCUMULA TION	INT8	Number of the GTPU PDU bytes received by the RNC.	B67109400.C6719 9478	Sum	hugttpbh
VS_GTPU_Byte sPkt_Tx	ACCUMULA TION	INT8	Number of GTPU PDU bytes sent by the RNC.	B67109400.C6719 9477	Sum	hugttpbh
VS_GTPU_Pkt_ Rx	ACCUMULA TION	INT8	After the setup of the GTPU tunnel, the local GTPU and the peer GTPU exchange packets. This measurement item calculates the number of packets received by GTPU.	B67109400.C6717 8512	Sum	hugttpbh
VS_GTPU_Pkt_ Tx	ACCUMULA TION	INT8	Number of packets sent by GTPU.	B67109400.C6717 8509	Sum	hugttpbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_GTPU_PktLossBuffOverflow_x	ACCUMULATION	INT8	After the setup of the GTPU tunnel, the local GTPU and the peer GTPU exchange packets. This measurement item calculates the number of received packets discarded by GTPU	B67109400.C67178516	Sum	hugttpbh
VS_GTPU_PktLossBuffOverflow_Tx	ACCUMULATION	INT8	Number of to-be-sent packets discarded by GTPU. After the setup of the GTPU tunnel, the local GTPU and the peer GTPU exchange packets	B67109400.C67178515	Sum	hugttpbh

7.14 IMA_Group Performance Indicators

This section shows the key performance indicators and other counters for the IMA_Group object, divided into the following sub-sections:

- [IMA_Group.Huawei.UMTS.IMA_Group_Measurement](#)
- [IMA_Group.Huawei.UMTS.IMAGroup_Traffic_others](#)

7.14.1 IMA_Group.Huawei.UMTS.IMA_Group_Measurement

IMA Group utilisation

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
-----	------	-----------	-------------	------------	--------------------	-------------------

Total_VS_IMA_GRP_CELLS	ACCUMULATION	INTEGER	Total number of cells sent and received by an IMA group	{VS_IMAGRP_TXCELLS} + {VS_IMAGRP_RXCELLS}	Sum	hubcslbh, hubhsdpabh
VS_IMA_Grp_MeanKbps_Rx	INTENSITY	INT8	Mean Rx rate of an IMA group in a given measurement period. Unit: kbps	B67109402.C67202907	Average	hubcslbh, hubhsdpabh, Sum, Minimum, Maximum
VS_IMA_Grp_MeanKbps_Tx	INTENSITY	INT8	Mean Tx rate of an IMA group in a given measurement period. Unit: kbps	B67109402.C67202908	Average	hubcslbh, hubhsdpabh, Sum, Minimum, Maximum
VS_IMAGRP_Allocated_Ave_Bwd	INTENSITY	INTEGER	Mean backward bandwidth assigned to an IMA group link	B67109402.C67204193	Average	hubcslbh, hubhsdpabh, Sum, Minimum, Maximum
VS_IMAGRP_Allocated_Ave_Fwd	INTENSITY	INTEGER	Mean forward bandwidth assigned to an IMA group link	B67109402.C67204192	Average	hubcslbh, hubhsdpabh, Sum, Minimum, Maximum
VS_IMAGRP_Allocated_Max_	INTENSITY	INTEGER	Peak backward bandwidth	B67109402.C67193216	Average	hubcslbh,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Bwd			assigned to an IMA group link			hubhspdpa bh, Sum, Minimum, Maximum
VS_IMAGRP_ Alloced_Max_ Fwd	INTENSITY	INTEGER	Peak forward bandwidth assigned to an IMA group link	B67109402.C6719 3215	Average	hubcslbh , hubhspdpa bh, Sum, Minimum, Maximum
VS_IMAGRP_ Bwd_Cong_Du r	ACCUMULA TION	INTEGER	Duration of backward congestion on an IMA group link	B67109402.C6719 3220	Sum	hubcslbh , hubhspdpa bh
VS_IMAGRP_ Bwd_Cong	ACCUMULA TION	INTEGER	Number of backward congestions on an IMA group link	B67109402.C6719 3219	Sum	hubcslbh , hubhspdpa bh
VS_IMAGRP_ Fwd_Cong_Dur	ACCUMULA TION	INTEGER	Duration of forward congestion on an IMA group link	B67109402.C6719 3218	Sum	hubcslbh , hubhspdpa bh
VS_IMAGRP_ Fwd_Cong	ACCUMULA TION	INTEGER	Number of forward congestions on an IMA group link	B67109402.C6719 3217	Sum	hubcslbh , hubhspdpa bh
VS_IMAGRP_ PEAK_RXCEL LS	INTENSITY	INTEGER	Obsolete from UTRAN/V900 R011:Peak number of cells received by an IMA group in a measurement period	B67109402.C6719 0731	Average	hubcslbh , hubhspdpa bh, Sum, Minimum, Maximum

VS_IMAGRP_ PEAK_RXRAT E	INTENSITY	INT8	Obsolete from UTRAN/V900 R011:Peak Rate Received by IMA GROUP	B67109402.C6720 3411	Average	hubcslbh , hubhsdpa bh, Sum, Minimu m, Maximu m
VS_IMAGRP_ PEAK_TXCEL LS	INTENSITY	INTEG ER	Obsolete from UTRAN/V900 R011:Peak number of cells transmitted by an IMA group in a measurement period	B67109402.C6719 0732	Average	hubcslbh , hubhsdpa bh, Sum, Minimu m, Maximu m
VS_IMAGRP_ PEAK_TXRAT E	INTENSITY	INT8	Obsolete from UTRAN/V900 R011:Peak Rate Sent by IMA GROUP	B67109402.C6720 3412	Average	hubcslbh , hubhsdpa bh, Sum, Minimu m, Maximu m
VS_IMAGRP_ RXCELLS	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011:Number of cells received by an IMA group in a measurement period.	B67109402.C6719 0482	Sum	hubcslbh , hubhsdpa bh
VS_IMAGRP_ TXCELLS	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011:Number of cells sent by an IMA group in a	B67109402.C6719 0483	Sum	hubcslbh , hubhsdpa bh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			measurement period.			
--	--	--	---------------------	--	--	--

7.14.2 IMA_Group.Huawei.UMTS.IMAGroup_Traffic_others

IMA Group errors and misc traffic KPs.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
Total_VS_IMAGROUP_CELLS	ACCUMULATION	INT8	Total Number of cells sent and received by an IMA group	{VS_IMAGROUP_RXUSERCELLS} + {VS_IMAGROUP_TXUSERCELLS}	Sum	hubcslbh, hubhsdpabh
VS_IMAGROUP_PEAK_RXCELLS	INTENSITY	INTEGER	Obsolete in Vn00R010; Maximum number of bytes received	B67109402.C67194019	Average	hubcslbh, hubhsdpabh, Sum, Minimum, Maximum
VS_IMAGROUP_PEAK_RXRATE	INTENSITY	FLOAT	Peak rate received by IMA group	B67109402.C67204457	Average	hubcslbh, hubhsdpabh, Sum, Minimum, Maximum
VS_IMAGROUP_PEAK_TXCELLS	INTENSITY	INTEGER	Obsolete in Vn00R010; Maximum number of bytes sent	B67109402.C67194023	Average	hubcslbh, hubhsdpabh, Sum, Minimum, Maximum
VS_IMAGROUP_PEAK_TXRATE	INTENSITY	FLOAT	Peak rate sent by IMA group	B67109402.C67204458	Average	hubcslbh, hubhsdpabh

						bh, Sum, Minimum, Maximum
VS_IMAGROUP_RXDROP	ACCUMULATION	INTEGER	Number of Rx cells discarded by IMA group	B67109402.C67194026	Sum	hubcslbh , hubhsdpabh
VS_IMAGROUP_RXERRORCELLS	ACCUMULATION	INTEGER	Number of error packets received by IMA group	B67109402.C67194028	Sum	hubcslbh , hubhsdpabh
VS_IMAGROUP_RXFILLERCELLS	ACCUMULATION	FLOAT	Number of decoupling cells received by IMA group	B67109402.C67194020	Sum	hubcslbh , hubhsdpabh
VS_IMAGROUP_RXSTUFFCELLS	ACCUMULATION	INTEGER	Number of padding cells received by IMA group	B67109402.C67194018	Sum	hubcslbh , hubhsdpabh
VS_IMAGROUP_RXUSERCELLS	ACCUMULATION	INTEGER	Number of cells received by an IMA group in a measurement period.	B67109402.C67194017	Sum	hubcslbh , hubhsdpabh
VS_IMAGROUP_TXDISCARD	ACCUMULATION	FLOAT	Number of Tx cells discarded by IMA group	B67109402.C67194025	Sum	hubcslbh , hubhsdpabh
VS_IMAGROUP_TXERRORCELLS	ACCUMULATION	INTEGER	Number of error packets transmitted by IMA group	B67109402.C67194027	Sum	hubcslbh , hubhsdpabh
VS_IMAGROUP	ACCUMULATION	FLOAT	Number of	B67109402.C6719	Sum	hubcslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

P_TXFILLERCELLS	TION	T	decoupling cells transmitted by IMA group	4024		, hubhsdpabh
VS_IMAGROUP_TXSTUFFCELLS	ACCUMULATION	INTEGER	Number of padding cells transmitted by IMA group	B67109402.C67194022	Sum	hubcslbh, hubhsdpabh
VS_IMAGROUP_TXUSERCELLS	ACCUMULATION	INTEGER	Number of cells sent by an IMA group in a measurement period.	B67109402.C67194021	Sum	hubcslbh, hubhsdpabh

7.15 IMA_Link Performance Indicators

This section shows the key performance indicators and other counters for the IMA_Link object, divided into the following sub-sections:

- [IMA_Link.Huawei.UMTS.IMA_Link_Measurement](#)
- [IMA_Link.Huawei.UMTS.IMALink_Traffic_others](#)

7.15.1 IMA_Link.Huawei.UMTS.IMA_Link_Measurement

IMA Link utilisation

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
Total_IMALNK_CELLS	ACCUMULATION	INTEGER	Total number of cells sent and received by an IMA link	{VS_IMALNK_TXCELLS} + {VS_IMALNK_RXCELLS}	Sum	hubcslbh, hubhsdpabh
VS_IMA_Lnk_MeanKbps_Rx	INTENSITY	FLOAT	Average receive rate of IMA link	B67109403.C67202909	Average	hubcslbh, hubhsdpabh, Sum, Minimum, Maximum

VS_IMA_Lnk_MeanKbps_Tx	INTENSITY	FLOAT	Average transmit rate of IMA link	B67109403.C67202910	Average	hubcslbh , hubhsdpabh, Sum, Minimum, Maximum
VS_IMALNK_PEAK_RXCELLS	INTENSITY	INTEGER	Obsolete from UTRAN/V900 R011:Peak number of cells received by an IMA link in a measurement period.	B67109403.C67190733	Average	hubcslbh , hubhsdpabh, Sum, Minimum, Maximum
VS_IMALNK_PEAK_RXRATE	INTENSITY	FLOAT	Peak rate of cells received by IMA link	B67109403.C67203408	Average	hubcslbh , hubhsdpabh, Sum, Minimum, Maximum
VS_IMALNK_PEAK_TXCELLS	INTENSITY	INTEGER	Obsolete from UTRAN/V900 R011:Peak number of cells transmitted by an IMA link in a measurement period.	B67109403.C67190734	Average	hubcslbh , hubhsdpabh, Sum, Minimum, Maximum
VS_IMALNK_PEAK_TXRATE	INTENSITY	FLOAT	Peak rate of cells transmitted by IMA link	B67109403.C67203409	Average	hubcslbh , hubhsdpabh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						m
VS_IMALNK_RXCELLS	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of cells received by IMA link (specific to V100R010)	B67109403.C67190484	Sum	hubcslbh , hubhsdpa bh
VS_IMALNK_TXCELLS	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of cells transmitted by IMA link (specific to V100R010)	B67109403.C67190485	Sum	hubcslbh , hubhsdpa bh

7.15.2 IMA_Link.Huawei.UMTS.IMALink_Traffic_others

IMA Link error and misc traffic

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IMALNK_FAULTCLEAR	ACCUMULATION	INTEGER	Number of fault clearances in IMALNK	B67109403.C67194043	Sum	hubcslbh , hubhsdpa bh
VS_IMALNK_FAULTEMIT	ACCUMULATION	INTEGER	Number of fault occurrences in IMALNK	B67109403.C67194042	Sum	hubcslbh , hubhsdpa bh
VS_IMALNK_FAULTTIME	ACCUMULATION	INTEGER	Duration of faults in IMALNK	B67109403.C67194044	Sum	hubcslbh , hubhsdpa bh
VS_IMALNK_RXANOMALY	ACCUMULATION	INTEGER	Number of abnormal frame synchronization s of IMALNK	B67109403.C67194037	Sum	hubcslbh , hubhsdpa bh
VS_IMALNK_R	ACCUMULATION	FLOA	Number of	B67109403.C67	Sum	hubcslbh

XFILLERCELLS	TION	T	decoupling cells received by IMALNK	194041		, hubhsdpa bh
VS_IMALNK_RXFILTERCELLS	ACCUMULATION	FLOAT	Number of decoupling cells received by IMALNK	B67109403.C67194036	Sum	hubcslbh, hubhsdpa bh
VS_IMALNK_RXHCSERROR	ACCUMULATION	INTEGER	Number of error HCS cells received by IMALNK	B67109403.C67194040	Sum	hubcslbh, hubhsdpa bh
VS_IMALNK_RXICPCCELLS	ACCUMULATION	INTEGER	Number of valid ICP cells received by IMALNK	B67109403.C67194039	Sum	hubcslbh, hubhsdpa bh
VS_IMALNK_RXICPVIOLATE	ACCUMULATION	INTEGER	Number of error ICP cells received by IMALNK	B67109403.C67194038	Sum	hubcslbh, hubhsdpa bh
VS_IMALNK_RXIDLECELLS	ACCUMULATION	INTEGER	Number of idle cells received by IMALNK	B67109403.C67194032	Sum	hubcslbh, hubhsdpa bh
VS_IMALNK_RXUSERCELLS	ACCUMULATION	INTEGER	Number of user cells received by IMA link	B67109403.C67194029	Sum	hubcslbh, hubhsdpa bh
VS_IMALNK_RXUSTUFFCELLS	ACCUMULATION	INTEGER	Number of padding cells received by IMALNK	B67109403.C67194030	Sum	hubcslbh, hubhsdpa bh
VS_IMALNK_TXUSERCELLS	ACCUMULATION	INTEGER	Number of user cells transmitted by IMALNK	B67109403.C67194033	Sum	hubcslbh, hubhsdpa bh
VS_IMALNK_TX	ACCUMULATION	FLOAT	Number of	B67109403.C67	Sum	hubcslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

XUSTUFFCELL S	TION	T	padding cells transmitted by IMA link	194034		hubhsdpa bh
------------------	------	---	---	--------	--	----------------

7.16 IPNODECONN Performance Indicators

This section shows the key performance indicators and other counters for the IPNODECONN object, divided into the following sub-sections:

- [IPNODECONN.Huawei.UMTS.IP_Connect_Network_Transport](#)
- [IPNODECONN.Huawei.UMTS.IPNODECONN](#)

7.16.1 IPNODECONN.Huawei.UMTS.IP_Connect_Network_Transport

IP Connect Network Transport traffic

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_ANI_IP_Act_Con	INTENSITY	INT8	Obsolete from UTRAN/V900R011: Average Number of IP connections when an IP transport adjacent node is in active state.	B67109481.C67204477	Average	Sum, Minimum, Maximum
VS_ANI_IP_Conn_Estab_Att	ACCUMULATION	INTEGER	Number of connection setup requests for IP transport from the transport layer to the radio network layer.	B67109481.C67194793	Sum	
VS_ANI_IP_Conn_Estab_Succ	ACCUMULATION	INTEGER	Number of successful IP connection setups initiated by the transport layer.	B67109481.C67194794	Sum	
VS_ANI_IP_C	ACCUMULATION	INTEGER	Number of IP	B67109481.C6719	Sum	

onn_Modify_Att	TION	ER	connection modification requests sent from the radio network layer to the transport layer.	4795		
VS_ANI_IP_Conn_Modify_Success	ACCUMULATION	INTEGER	Number of successful IP modifications initiated by the transport layer.	B67109481.C67194796	Sum	
VS_ANI_IP_Conn_Rel	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011: Number of IP connection release requests sent from the radio network layer to the transport layer.	B67109481.C67194797	Sum	

7.16.2 IPNODECONN.Huawei.UMTS.IPNODECONN

IP NODE CONN data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IP_Node_Act_Con	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011: No description available.	B67109475.C67203423	Sum	
VS_IP_Node_Conn_Estab_Att	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011: No description available.	B67109475.C67191674	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_IP_Node_Conn_Estab_Succ	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011:No description available.	B67109475.C67191675	Sum	
VS_IP_Node_Conn_Modify_Att	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011:No description available.	B67109475.C67191676	Sum	
VS_IP_Node_Conn_Modify_Succ	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011:No description available.	B67109475.C67191677	Sum	
VS_IP_Node_Conn_Rel	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011:No description available.	B67109475.C67191678	Sum	

7.17 IPNODETRM Performance Indicators

This section shows the key performance indicators and other counters for the IPNODETRM object, divided into the following sub-sections:

- [IPNODETRM.Huawei.UMTS.IPNODE_Allocations](#)
- [IPNODETRM.Huawei.UMTS.IPNODETRM](#)

7.17.1 IPNODETRM.Huawei.UMTS.IPNODE_Allocations

IP Node Allocations

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
OS_ANI_IP_AllocatedBwd	INTENSITY	FLOAT	IP path backward bandwidth allocated to an IP transport adjacent node	B67109500.C67204476	Average	Sum, Minimum, Maximum

OS_ANI_IP_AllocatedFwd	INTENSITY	FLOAT	IP path forward bandwidth allocated to an IP transport adjacent node	B67109500.C67204475	Average	Sum, Minimum, Maximum
VS_ANI_IP_AttResAlloc	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of requests for IPNODE resource allocation sent from the radio network layer to the transport layer.	B67109500.C67194787	Sum	
VS_ANI_IP_FailResAllocForBwLimit	ACCUMULATION	INTEGER	Number of Fail Resource Allocations for Reason of Bandwidth Limit by IP Transport Adjacent Node	B67109500.C67196162	Sum	
VS_ANI_IP_SuccResAlloc	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of successful requests of IPNODE resource allocation after the transport layer receives the resource requests from	B67109500.C67194788	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			the radio network layer.			
--	--	--	--------------------------	--	--	--

7.17.2 IPNODETRM.Huawei.UMTS.IPNODETRM

IP NODE TRM data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IP_AttResAlloc	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:This measurement item provides the number of requests for IPNODE resource allocation sent from the radio network layer to the transport layer.	B67109476.C67191681	Sum	
VS_IP_FailResAllocForBwLimit	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:This measurement item provides the number of fail requests of IPNODE resource allocation for reason of bandwidth limit after the transport layer receives the resource allocation requests from the radio	B67109476.C67193435	Sum	

			network layer.			
VS_IP_SuccResAll oc	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011:This measurement item provides the number of successful requests of IPNODE resource allocation after the transport layer receives the resource allocation requests from the radio network layer.	B67109476.C67 191682	Sum	

7.18 IPOA Performance Indicators

This section shows the key performance indicators and other counters for the IPOA object, divided into the following sub-sections:

- [IPOA.Huawei.UMTS.IPOA](#)

7.18.1 IPOA.Huawei.UMTS.IPOA

IPOA data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_AAL_5_IPOA_BYT ESRX	ACCUMULA TION	INT8	Obsolete from UTRAN/V9 00R011:Num ber of bytes	B67109457. C67190492	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			received by an IPoA PVC link in a measurement period.			
VS_AAL_5_IPOA_BYTESTX	ACCUMULATION	INT8	Obsolete from UTRAN/V900R011: Number of bytes sent by an IPoA PVC link in a measurement period.	B67109457. C67190493	Sum	
VS_AAL_5_IPOA_PEAK_BYTESTRX	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010: Maximum number of bytes received by an IPoA PVC link in a measurement period.	B67109457. C67190741	Constant	Sum, Minimum, Maximum
VS_AAL_5_IPOA_PEAK_BYTESTX	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010: Maximum number of bytes sent by an IPoA PVC link in a measurement period.	B67109457. C67190742	Constant	Sum, Minimum, Maximum
VS_AAL_5_IPOA_PEA	INTENSITY	INT8	Obsolete	B67109457.	Constant	Sum,

K_RXRATE			from UTRAN/V900R011:Peak rate of bytes received by an IPoA PVC link in a measurement period.	C67202978		Minimum, Maximum
VS_AAL_5_IPOA_PEAK_TXRATE	INTENSITY	INT8	Obsolete from UTRAN/V900R011:Peak rate of bytes sent by an IPoA PVC link in a measurement period.	B67109457. C67202979	Constant	Sum, Minimum, Maximum
VS_IPOALNK_DROPFORHEADCELLS	ACCUMULATION	INTEGER	Number of cells discarded by IPoA PVC due to error headers	B67109457. C67194079	Sum	
VS_IPOALNK_DROPFORRXOVERFLOWCELLS	ACCUMULATION	INTEGER	Number of cells discarded by IPoA PVC due to overflow of receive buffer	B67109457. C67194080	Sum	
VS_IPOALNK_DROPFORTXOVERFLOWCELLS	ACCUMULATION	INTEGER	Number of cells discarded by	B67109457. C67194081	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			IPoA PVC due to overflow of send buffer			
VS_IPOALNK_PEAK_BYTESRX	INTENSITY	INTEGER	Obsolete in Vn00R010; Maximum number of bytes received	B67109457. C67194075	Average	Sum, Minimum, Maximum
VS_IPOALNK_PEAK_BYTESTX	INTENSITY	INTEGER	Obsolete in Vn00R010; Maximum number of bytes sent	B67109457. C67194078	Average	Sum, Minimum, Maximum
VS_IPOALNK_PEAK_RXRATE	INTENSITY	FLOAT	Peak rate of bytes received by an IPoA PVC link in a measurement period.	B67109457. C67204471	Average	Sum, Minimum, Maximum
VS_IPOALNK_PEAK_TXRATE	INTENSITY	FLOAT	Peak rate of bytes sent by an IPoA PVC link in a measurement period.	B67109457. C67204472	Average	Sum, Minimum, Maximum
VS_IPOALNK_RXBYTES	ACCUMULATION	INT8	Number of bytes received by an IPoA PVC link in a measurement period.	B67109457. C67194074	Sum	
VS_IPOALNK_RXCORRECTCELLS	ACCUMULATION	INTEGER	Number of correct cells received by IPoA PVC	B67109457. C67194073	Sum	

VS_IPOALNK_TXBYTES	ACCUMULATION	INT8	Number of bytes sent by an IPoA PVC link in a measurement period.	B67109457.C67194077	Sum	
VS_IPOALNK_TXCORRECTCELLS	ACCUMULATION	INTEGER	Number of correct cells transmitted by IPoA PVC	B67109457.C67194076	Sum	

7.19 IPOAPVC Performance Indicators

This section shows the key performance indicators and other counters for the IPOAPVC object, divided into the following sub-sections:

- [IPOAPVC.Huawei.UMTS.IPOAPVC](#)

7.19.1 IPOAPVC.Huawei.UMTS.IPOAPVC

IPOA PVC data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IPOAPVC_MeasKbps_Rx	INTENSITY	INTEGER	Obsolete from UTRAN/V200R010:Average Receive Traffic of IPoA PVC.	B67109465.C67202945	Average	Sum, Minimum, Maximum
VS_IPOAPVC_MeasKbps_Tx	INTENSITY	INTEGER	Obsolete from UTRAN/V200R010:Average Transmit Traffic of IPoA PVC.	B67109465.C67202946	Average	Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

7.20 IPPATH Performance Indicators

This section shows the key performance indicators and other counters for the IPPATH object, divided into the following sub-sections:

- [IPPATH.Huawei.UMTS.IP_Performance_Monitor](#)
- [IPPATH.Huawei.UMTS.IPPATH_Connections](#)
- [IPPATH.Huawei.UMTS.IPPATH_IPPLAYER_QoS](#)
- [IPPATH.Huawei.UMTS.IPPATH_IPPLAYER_Traffic](#)
- [IPPATH.Huawei.UMTS.IPPATH_IPPM_Jitter](#)
- [IPPATH.Huawei.UMTS.IPPATH_PING_V200](#)
- [IPPATH.Huawei.UMTS.IPPATH](#)
- [IPPATH.Huawei.UMTS.RTP_flux_Measurements](#)

7.20.1 IPPATH.Huawei.UMTS.IP_Performance_Monitor

IP Performance Monitor

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IPPM_Bits_MeansTx	INTENSITY	FLOAT	Mean bit transmission rate (IPPATH IPPM)	B67109539.C67204117	Average	Sum, Minimum, Maximum
VS_IPPM_Forward_JitterStandardDeviation	INTENSITY	FLOAT	Standard deviation of IPPATH IPPM forward jitter	B67109539.C67204131	Average	Sum, Minimum, Maximum
VS_IPPM_Forward_DropMeans	INTENSITY	FLOAT	Mean loss rates of IPPATH IPPM forward	B67109539.C67204127	Average	Sum, Minimum, Maximum
VS_IPPM_Forward_Peak_DropRates	INTENSITY	INTEGER	Peak loss rates of IPPATH IPPM forward	B67109539.C67204128	Average	Sum, Minimum, Maximum
VS_IPPM_MaxRttDelay	INTENSITY	INTEGER	Peak delay of IPPATH IPPM RTT	B67109539.C67192968	Average	Sum, Minimum,

						Maximum
VS_IPPM_Peak_Bits_RateTx	INTENSITY	FLOAT	Peak bit transmission rate (IPPATH IPPM)	B67109539.C67204119	Average	Sum, Minimum, Maximum
VS_IPPM_Peak_Pkts_RateTx	INTENSITY	FLOAT	Peak packet transmission rate (IPPATH IPPM)	B67109539.C67204120	Average	Sum, Minimum, Maximum
VS_IPPM_Peer_Bits_MeansRx	INTENSITY	FLOAT	Mean bit receiving rate of IPPATH IPPM peer	B67109539.C67204121	Average	Sum, Minimum, Maximum
VS_IPPM_Peer_Peak_Bits_RateRx	INTENSITY	FLOAT	Peak bit receiving rate of IPPATH IPPM peer	B67109539.C67204123	Average	Sum, Minimum, Maximum
VS_IPPM_Peer_Peak_Pkts_RateRx	INTENSITY	FLOAT	Peak packet receiving rate of IPPATH IPPM peer	B67109539.C67204124	Average	Sum, Minimum, Maximum
VS_IPPM_Peer_Pkts_MeansRx	INTENSITY	FLOAT	Mean packet receiving rate of IPPATH IPPM peer	B67109539.C67204122	Average	Sum, Minimum, Maximum
VS_IPPM_Pkts_MeansTx	INTENSITY	FLOAT	Mean packet transmission rate (IPPATH IPPM)	B67109539.C67204118	Average	Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_IPPM_Rtt_Means	INTENSITY	FLOAT	Mean delay of IPPATH IPPM RTT	B67109539.C67204132	Average	Sum, Minimum, Maximum
-------------------	-----------	-------	-------------------------------	---------------------	---------	-----------------------

7.20.2 IPPATH.Huawei.UMTS.IPPATH_Connections

IPPATH Connections

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IPPATH_Act_Con	INTENSITY	FLOAT	Number of IP path active connections to an adjacent node	B67109467.C67204207	Average	Sum, Minimum, Maximum

7.20.3 IPPATH.Huawei.UMTS.IPPATH_IPLAYER_QoS

IP PATH IPLAYER QoS counters

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IPPATH_IPLAYER_QOS_MEAN_RX	INTENSITY	FLOAT	Mean receiving rate over the IPPATH IPLAYER QOS link	B67109540.C67204705	Average	Sum, Minimum, Maximum
VS_IPPATH_IPLAYER_QOS_MEAN_TX	INTENSITY	FLOAT	Mean transmission rate over the IPPATH IPLAYER QOS link	B67109540.C67204703	Average	Sum, Minimum, Maximum
VS_IPPATH_IPLAYER_QOS_PEAK_RXRATE	INTENSITY	FLOAT	Peak receiving rate over the IPPATH IPLAYER QOS link	B67109540.C67204704	Average	Sum, Minimum, Maximum

VS_IPPATH_IPL AYER_QOS_PEA K_TXRATE	INTENSITY	FLOA T	Peak transmission rate over the IPPATH IPLAYER QOS link	B67109540.C672 04702	Average	Sum, Minimu m, Maximu m
VS_IPPATH_IPL AYER_QOS_RX BYTES	ACCUMULA TION	INTEG ER	Number of incoming bytes over the IPPATH IPLAYER QOS link	B67109540.C671 95410	Sum	
VS_IPPATH_IPL AYER_QOS_RX DROPBYTES	ACCUMULA TION	INTEG ER	Number of discarded incoming bytes over the IPPATH IPLAYER QOS link	B67109540.C671 95412	Sum	
VS_IPPATH_IPL AYER_QOS_RX DROPPACKETS	ACCUMULA TION	INTEG ER	Number of discarded incoming packets over the IPPATH IPLAYER QOS link	B67109540.C671 95411	Sum	
VS_IPPATH_IPL AYER_QOS_RX PACKETS	ACCUMULA TION	INTEG ER	Number of incoming packets over the IPPATH IPLAYER QOS link	B67109540.C671 95409	Sum	
VS_IPPATH_IPL AYER_QOS_TX BYTES	ACCUMULA TION	INTEG ER	Number of transmitted bytes over the IPPATH IPLAYER QOS link	B67109540.C671 95406	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_IPPATH_IPL AYER_QOS_TX DROPBYTES	ACCUMULA TION	INTEG ER	Number of discarded bytes in transmission over the IPPATH IPLAYER QOS link	B67109540.C671 95408	Sum	
VS_IPPATH_IPL AYER_QOS_TX DROPPACKETS	ACCUMULA TION	INTEG ER	Number of discarded packets in transmission over the IPPATH IPLAYER QOS link	B67109540.C671 95407	Sum	
VS_IPPATH_IPL AYER_QOS_TX PACKETS	ACCUMULA TION	INTEG ER	Number of transmitted packets over the IPPATH IPLAYER QOS link	B67109540.C671 95405	Sum	

7.20.4 IPPATH.Huawei.UMTS.IPPATH_IPLAYER_Traffic

IP PATH IPLAYER traffic

KPI	Type	Data Type	Description	Derivation	Default Aggrega tor	Other Aggrega tors
VS_IPPATH_IPL AYER_MEAN_R X	INTENSITY	FLOA T	Mean receiving rate over the IPPATH IPLAYER link	B67109495.C672 04701	Average	Sum, Minimu m, Maximu m
VS_IPPATH_IPL AYER_MEAN_T X	INTENSITY	FLOA T	Mean transmission rate over the IPPATH IPLAYER link	B67109495.C672 04699	Average	Sum, Minimu m, Maximu m
VS_IPPATH_IPL AYER_PEAK_R	INTENSITY	FLOA T	Peak receiving rate over the	B67109495.C672 04700	Average	Sum, Minimu

XRATE			IPPATH IPLAYER link			m, Maximum
VS_IPPATH_IPL AYER_PEAK_T XRATE	INTENSITY	FLOA T	Peak transmission rate over the IPPATH IPLAYER link	B67109495.C672 04698	Average	Sum, Minimum, Maximum
VS_IPPATH_IPL AYER_RXBYTE S	ACCUMULA TION	INTEG ER	Number of incoming bytes over the IPPATH IPLAYER link	B67109495.C671 95400	Sum	
VS_IPPATH_IPL AYER_RXDROP BYTES	ACCUMULA TION	INTEG ER	Number of discarded incoming bytes over the IPPATH IPLAYER link	B67109495.C671 95402	Sum	
VS_IPPATH_IPL AYER_RXDROP PACKETS	ACCUMULA TION	INTEG ER	Number of discarded incoming packets over the IPPATH IPLAYER link	B67109495.C671 95401	Sum	
VS_IPPATH_IPL AYER_RXPACK ETS	ACCUMULA TION	INTEG ER	Number of incoming packets over the IPPATH IPLAYER link	B67109495.C671 95399	Sum	
VS_IPPATH_IPL AYER_TXBYTE S	ACCUMULA TION	INTEG ER	Number of transmitted bytes over the IPPATH IPLAYER link	B67109495.C671 95396	Sum	
VS_IPPATH_IPL AYER_TXDROP	ACCUMULA TION	INTEG ER	Number of discarded	B67109495.C671 95398	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

BYTES			bytes in transmission over the IPPATH IPLAYER link			
VS_IPPATH_IPLAYER_TXDROP_PACKETS	ACCUMULATION	INTEGER	Number of discarded packets in transmission over the IPPATH IPLAYER link	B67109495.C67195397	Sum	
VS_IPPATH_IPLAYER_TXPACKETS	ACCUMULATION	INTEGER	Number of packets transmitted over the IPPATH IPLAYER link	B67109495.C67195395	Sum	

7.20.5 IPPATH.Huawei.UMTS.IPPATH_IPPM_Jitter

Jitter on IPPATH IPPM

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IPPM_Back_JitterStandardDeviation	INTENSITY	FLOAT	IPPATH IPPM backward jitter standard deviation	B67109539.C67204731	Average	Sum, Minimum, Maximum

7.20.6 IPPATH.Huawei.UMTS.IPPATH_PING_V200

IP PATH PING counters

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IPPATH_PING_MaxDELAY	INTENSITY	INTEGER	Maximum IP PATH PING Time Delay	B67109467.C67194636	Average	Sum, Minimum, Maximum

						m
VS_IPPATH_PING_MaxJITTER	INTENSITY	INTEGER	Maximum IP PATH PING Jitter	B67109467.C67194639	Average	Sum, Minimum, Maximum
VS_IPPATH_PING_MaxLOST	INTENSITY	INTEGER	Maximum Packet Loss Rate of IP PATH PING	B67109467.C67194642	Average	Sum, Minimum, Maximum
VS_IPPATH_PING_MeanDELAY	INTENSITY	INTEGER	IP PATH PING Time Delay	B67109467.C67204390	Average	Sum, Minimum, Maximum
VS_IPPATH_PING_MeanJITTER	INTENSITY	INTEGER	Delay Jitter of IP PATH PING	B67109467.C67204391	Average	Sum, Minimum, Maximum
VS_IPPATH_PING_MeanLOST	INTENSITY	INTEGER	Packet Loss Rate of IP PATH PING	B67109467.C67204392	Average	Sum, Minimum, Maximum

7.20.7 IPPATH.Huawei.UMTS.IPPATH

IP PATH data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
Total_VS_IPPATH_BYTES	ACCUMULATION	INT8	Obsolete from UTRAN/V200 R010: Number	(({VS_IPPATH_TX_BYTES} + {VS_IPPATH_RX	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			of Bytes sent and received by an IPPATH in a measurement period.	_BYTES}))		
VS_IP_PktRx_Path	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200 R010:The received packets of IPPATH in a given measurement period.	B67109467.C67192412	Sum	
VS_IP_PktTx_Path	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200 R010:The packets sent by IPPATH in a given measurement period.	B67109467.C67192413	Sum	
VS_IPPATH_Bwd_Cong_Dur	ACCUMULATION	INTEGER	Backward congestion duration on the IP path	B67109467.C67195602	Sum	
VS_IPPATH_Bwd_Cong	ACCUMULATION	INTEGER	Number of backward congestions on the IP path	B67109467.C67195601	Sum	
VS_IPPATH_Fwd_Cong_Dur	ACCUMULATION	INTEGER	Forward congestion duration on the IP path	B67109467.C67195600	Sum	
VS_IPPATH_Fwd_Cong	ACCUMULATION	INTEGER	Number of forward congestions on the IP path	B67109467.C67195599	Sum	
VS_IPPATH_PEAK_RXBYTES	INTENSITY	INT8	Obsolete from UTRAN/V200 R010:Number	B67109467.C67192430	Constant	Sum, Minimum,

			of Bytes Received by IP PATH.			Maximum
VS_IPPATH_P EAK_TXBYTES	INTENSITY	INT8	Obsolete from UTRAN/V200 R010:Peak Number of Bytes Transmitted by IP PATH.	B67109467.C6719 2431	Constant	Sum, Minimum, Maximum
VS_IPPATH_R X_BYTES	ACCUMULATION	INT8	Obsolete from UTRAN/V200 R010:Number of Bytes Received by IP PATH.	B67109467.C6719 2428	Sum	
VS_IPPATH_R X_MEANKBPS	INTENSITY	FLOAT	Obsolete from UTRAN/V200 R010:Average Receive Rate of IPPATH.	B67109467.C6720 2953	Average	Sum, Minimum, Maximum
VS_IPPATH_T X_BYTES	ACCUMULATION	INT8	Obsolete from UTRAN/V200 R010:Number of Bytes Transmitted by IPPATH.	B67109467.C6719 2429	Sum	
VS_IPPATH_T X_MEANKBPS	INTENSITY	FLOAT	Obsolete from UTRAN/V200 R010:Average Transmit Rate of IP PATH.	B67109467.C6720 2954	Average	Sum, Minimum, Maximum

7.20.8 IPPATH.Huawei.UMTS.RTP_flux_Measurements

RTP flux Measurements

KPI	Type	Data	Description	Derivation	Default	Other
-----	------	------	-------------	------------	---------	-------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

		Type			Aggregator	Aggregators
VS_IPPATH_RTP_AverageJitter	INTENSITY	FLOAT	Average delay jitter of RTP packets received over a single IP path	B67109534.C67192709	Average	Sum, Minimum, Maximum
VS_IPPATH_RTP_AverageRtt	INTENSITY	FLOAT	Average RTT of packets received over a single IP path	B67109534.C67192710	Average	Sum, Minimum, Maximum
VS_IPPATH_RTP_BandWidth_Rx	ACCUMULATION	FLOAT	Received local bandwidth of a single IP path	B67109534.C67204006	Sum	
VS_IPPATH_RTP_BandWidth_Tx	ACCUMULATION	FLOAT	Transmitted local bandwidth of a single IP path	B67109534.C67204007	Sum	
VS_IPPATH_RTP_BytesLen_Rx	ACCUMULATION	FLOAT	Total amount of RTP data in kb received over a single IP path	B67109534.C67204004	Sum	
VS_IPPATH_RTP_BytesNum_Tx	ACCUMULATION	FLOAT	Total amount of RTP data in kb transmitted over a single IP path	B67109534.C67204003	Sum	
VS_IPPATH_RTP_JitterOverrun_TimeRatio	INTENSITY	FLOAT	Ratio of duration of RTP delay jitter exceeding threshold to total active duration	B67109534.C67204008	Average	Sum, Minimum, Maximum
VS_IPPATH_RTP_LossPktRatio_Rx	INTENSITY	FLOAT	Rate of RTP packets loss received over a single IP path	B67109534.C67204005	Average	Sum, Minimum, Maximum

VS_IPPATH_RTP_PktNum_Rx	ACCUMULATION	INTEGER	Total number of RTP packets received over a single IP path	B67109534.C67192708	Sum	
VS_IPPATH_RTP_PktNum_Tx	ACCUMULATION	INTEGER	Total number of RTP packets transmitted over a single IP path	B67109534.C67192702	Sum	
VS_IPPATH_RTP_RttOverrun_TimeRatio	INTENSITY	FLOAT	Ratio of duration of RTT exceeding threshold to total active duration	B67109534.C67204009	Average	Sum, Minimum, Maximum

7.21 IPPATHPING Performance Indicators

This section shows the key performance indicators and other counters for the IPPATHPING object, divided into the following sub-sections:

- [IPPATHPING.Huawei.UMTS.IPPATHPING](#)

7.21.1 IPPATHPING.Huawei.UMTS.IPPATHPING

IP PATH PING data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IPPATH_PING_MaxDELAY	INTENSITY	INTEGER	Obsolete from UTRAN/V900R 011:No description available.	B67109470.C67191685	Constant	Sum, Minimum, Maximum
VS_IPPATH_PING_MaxJITTER	INTENSITY	INTEGER	Obsolete from UTRAN/V900R 011:No description	B67109470.C67191688	Constant	Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			available.			m
VS_IPPATH_PING_MaxLOST	INTENSITY	INTEGER	Obsolete from UTRAN/V900R 011:No description available.	B67109470.C67191691	Constant	Sum, Minimum, Maximum
VS_IPPATH_PING_MeanDELAY	INTENSITY	INTEGER	Obsolete from UTRAN/V900R 011:No description available.	B67109470.C67203424	Average	Sum, Minimum, Maximum
VS_IPPATH_PING_MeanJITTER	INTENSITY	INTEGER	Obsolete from UTRAN/V900R 011:No description available.	B67109470.C67203425	Average	Sum, Minimum, Maximum
VS_IPPATH_PING_MeanLOST	INTENSITY	INTEGER	Obsolete from UTRAN/V900R 011:No description available.	B67109470.C67203426	Average	Sum, Minimum, Maximum

7.22 Iu Performance Indicators

This section shows the key performance indicators and other counters for the Iu object, divided into the following sub-sections:

- [Iu.Huawei.UMTS.CS_SIG_IU_FlowControl](#)
- [Iu.Huawei.UMTS.CS_SIG_IU](#)
- [Iu.Huawei.UMTS.IU_CS_Bytes](#)
- [Iu.Huawei.UMTS.IU_CS_KBPS_AMR_DL](#)
- [Iu.Huawei.UMTS.IU_CS_KBPS_AMR_UL](#)
- [Iu.Huawei.UMTS.IU_CS_KBPS_AMR_WB_DL](#)
- [Iu.Huawei.UMTS.IU_CS_KBPS_AMR_WB_UL](#)
- [Iu.Huawei.UMTS.IU_CS_KBPS_CONV_DL](#)
- [Iu.Huawei.UMTS.IU_CS_KBPS_CONV_UL](#)
- [Iu.Huawei.UMTS.IU_CS_KBPS_STR_DL](#)
- [Iu.Huawei.UMTS.IU_CS_KBPS_STR_UL](#)
- [Iu.Huawei.UMTS.Iu_MOCN](#)
- [Iu.Huawei.UMTS.IU_PS_Bytes](#)
- [Iu.Huawei.UMTS.MBMS_Iu](#)
- [Iu.Huawei.UMTS.PS_SIG_IU_FlowControl](#)
- [Iu.Huawei.UMTS.PS_SIG_IU](#)
- [Iu.Huawei.UMTS.SCCP_Connection_Iu](#)

- [Iu.Huawei.UMTS.Sig_CS_PS_Iu_LoadBalance](#)

7.22.1 Iu.Huawei.UMTS.CS_SIG_IU_FlowControl

CS SIG IU FlowControl data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
IU_SCCP_FlowCtrl_Disc_InitDTCS	ACCUMULATION	INTEGER	This measurement counter provides the number of initial UE messages discarded under the SCCP flow control when the Iu interface receives the CS initial UE messages.	B67109405.C67193095	Sum	

7.22.2 Iu.Huawei.UMTS.CS_SIG_IU

CS SIG IU data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
IU_AttConnRelCNC S_sum	ACCUMULATION	INTEGER	Number of IU RELEASE COMMAND messages sent from the CS domain to the RNC. The Iu release procedure of	B67109405.C67176552	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			the CS domain is to release the Iu connection and all the UTRAN resources related to the Iu connection.			
IU_AttConnRelReq UTRANCS_sum	ACCUMULATION	INTEGER	Number of IU RELEASE REQUEST messages sent by the RNC to request the release of the Iu connection to the CS domain. Due to UTRAN generated reasons, the UTRAN requests the CS domain to release the Iu signalling connection for a particular UE by sending the CN an IU RELEASE REQUEST message.	B67109405.C6 7176546	Sum	
IU_RelReqCS_NetworkOpt	ACCUMULATION	INTEGER	These measurement counters take statistics of the number of IU RELEASE REQUEST messages that the RNC sends to the CS domain for	B67109405.C6 7196234	Sum	

			different causes - Network Optimization.			
Total_VS_IU_ErrInd_CS	ACCUMULATION	INTEGER	Number of ERROR INDICATION messages sent and received from the CS domain to the RNC.	{VS_IU_ErrInd_CS_Tx} + {VS_IU_ErrInd_CS_Rx}	Sum	
Total_VS_IU_Reset_CS	ACCUMULATION	INTEGER	Number of RESET messages sent and received from the CS domain to the RNC.	{VS_IU_Reset_CS_Rx} + {VS_IU_Reset_CS_Tx}	Sum	
VS_IU_ErrInd_CS_Rx	ACCUMULATION	INTEGER	Number of ERROR INDICATION messages sent from the CS domain to the RNC.	B67109405.C6 7176531	Sum	
VS_IU_ErrInd_CS_Tx	ACCUMULATION	INTEGER	Number of ERROR INDICATION messages sent from the RNC to the CS domain.	B67109405.C6 7176529	Sum	
VS_IU_RelCmdCS_NoRAB	ACCUMULATION	INTEGER	Numbers of IU RELEASE COMMAND messages sent from the RNC	B67109405.C6 7176557	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			to the CS domain due to different Iu connection release causes. No Remaining RAB			
VS_IU_RelCmdCS_NormRel	ACCUMULATION	INTEGER	Numbers of IU RELEASE COMMAND messages sent from the RNC to the CS domain due to different Iu connection release causes. Normal Release	B67109405.C6 7176554	Sum	
VS_IU_RelCmdCS_RelocCan	ACCUMULATION	INTEGER	Numbers of IU RELEASE COMMAND messages sent from the RNC to the CS domain due to different Iu connection release causes. Relocation Canceled	B67109405.C6 7176556	Sum	
VS_IU_RelCmdCS_RelocSucc	ACCUMULATION	INTEGER	Numbers of IU RELEASE COMMAND messages sent from the RNC to the CS domain due to different Iu connection release causes. Relocation Success	B67109405.C6 7176553	Sum	

VS_IU_RelCmdCS_UTRANGen	ACCUMULATION	INTEGER	Numbers of IU RELEASE COMMAND messages sent from the RNC to the CS domain due to different Iu connection release causes. UTRAN Generated	B67109405.C67176555	Sum	
VS_IU_RelCSPreempt	ACCUMULATION	INTEGER	Numbers of IU RELEASE REQUEST messages sent from the RNC to request the release of the Iu connection to the CS domain due to different causes RAB preempted	B67109405.C67190182	Sum	
VS_IU_RelReqCS_IngChkFail	ACCUMULATION	INTEGER	Numbers of IU RELEASE REQUEST messages sent from the RNC to request the release of the Iu connection to the CS domain due to different causes Repeated Integrity Checking	B67109405.C67176549	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Failure			
VS_IU_RelReqCS_OM	ACCUMULATION	INTEGER	Numbers of IU RELEASE REQUEST messages sent from the RNC to request the release of the Iu connection to the CS domain due to different causes OM Intervention	B67109405.C67176547	Sum	
VS_IU_RelReqCS_RadConnUELost	ACCUMULATION	INTEGER	Numbers of IU RELEASE REQUEST messages sent from the RNC to request the release of the Iu connection to the CS domain due to different causes Radio Connection With UE Lost to the CS domain	B67109405.C67176551	Sum	
VS_Iu_RelReqCS_RIPFail	ACCUMULATION	INTEGER	Numbers of IU RELEASE REQUEST messages sent from the RNC to request the release of the Iu connection to the CS domain due to different causes Failure in the Radio Interface	B67109405.C67176573	Sum	

			Procedure			
VS_IU_RelReqCS_SigConnRel	ACCUMULATION	INTEGER	Numbers of IU RELEASE REQUEST messages sent from the RNC to request the release of the Iu connection to the CS domain due to different causes UE Signalling Connection Release	B67109405.C6 7176550	Sum	
VS_Iu_RelReqCS_SRBReset	ACCUMULATION	INTEGER	Numbers of IU RELEASE REQUEST messages sent from the RNC to request the release of the Iu connection to the CS domain due to different causes Signalling RLC Reset	B67109405.C6 7176571	Sum	
VS_IU_ResetCS_Rx	ACCUMULATION	INTEGER	Number of RESET messages sent from the CS domain to the RNC.	B67109405.C6 7176453	Sum	
VS_IU_ResetCS_Tx	ACCUMULATION	INTEGER	Number of RESET messages sent	B67109405.C6 7176449	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			from the RNC to the CS domain.			
VS_IU_SIG_AttCon nEstabCS	ACCUMULA TION	INTEG ER	This item provides the number of INITIAL UE MESSAGE messages from the RNC to the CS domain. When the RNC receives a NAS message from a UE, the RNC will send an INITIAL UE MESSAGE to set up an Iu signalling connection if inexistent. The RNC takes statistics by CN nodes.	B67109405.C6 7189920	Sum	

7.22.3 Iu.Huawei.UMTS.IU_CS_Bytes

IU CS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
Total_VS_IuCS_BytesPayld_Rx	ACCUMULATION	INTEGER	This item provides the number of UL payload bytes of CS streaming and Conversational service data frames on the	{VS_IuCS_BytesPayldStr_Rx} + {VS_IuCS_BytesPayldConv_Rx}	Sum	

			Iu interface.			
Total_VS_IuCS_BytesPayld_Tx	ACCUMULATION	INTEGER	This item provides the number of DL payload bytes of CS streaming and Conversational service data frames on the Iu interface.	{VS_IuCS_BytesPayldStr_Tx} + {VS_IuCS_BytesPayldConv_Tx}	Sum	
Total_VS_IuCS_BytesPayldConv	ACCUMULATION	INTEGER	This item provides the number of UL and DL payload bytes of CS conversational service data frames on the Iu interface	{VS_IuCS_BytesPayldConv_Rx} + {VS_IuCS_BytesPayldConv_Tx}	Sum	
Total_VS_IuCS_BytesPayldStr	ACCUMULATION	INTEGER	This item provides the number of UL and DL payload bytes of CS streaming service data frames on the Iu interface.	{VS_IuCS_BytesPayldStr_Rx} + {VS_IuCS_BytesPayldStr_Tx}	Sum	
VS_IuCS_BytesPayldConv_Rx	ACCUMULATION	INT8	This item provides the number of UL payload bytes of CS conversational service data frames on the	B67109407.C67199469	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Iu interface			
VS_IuCS_Bytes PayldConv_Tx	ACCUMULATION	INT8	This item provides the number of DL payload bytes of CS conversational service data frames on the Iu interface.	B67109407.C67199473	Sum	
VS_IuCS_Bytes PayldStr_Rx	ACCUMULATION	INTEGER	This item provides the number of UL payload bytes of CS streaming service data frames on the Iu interface.	B67109407.C67199470	Sum	
VS_IuCS_Bytes PayldStr_Tx	ACCUMULATION	INTEGER	This item provides the number of DL payload bytes of CS streaming service data frames on the Iu interface.	B67109407.C67199474	Sum	

7.22.4 Iu.Huawei.UMTS.IU_CS_KBPS_AMR_DL

IU CS AMR Downlink data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IU_CS_KBPS_AMR_DL_10_2_HIGH	ACCUMULATION	INTEGER	No description.	B67109407.C67189926	Sum	
VS_IU_CS_KBPS_AMR_DL_10_2_LOW	ACCUMULATION	INTEGER	No description.	B67109407.C67189925	Sum	

VS_IU_CS_K BPS_AMR_DL _10_2_SAMPL E_TIMES	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9927	Sum	
VS_IU_CS_K BPS_AMR_DL _10_2	INTENSITY	FLOA T	This item provides the actual DL rate of CS AMR 10.2K speech service on the Iu interface.	B67109407.C6720 2862	Average	Sum, Minimu m, Maximu m
VS_IU_CS_K BPS_AMR_DL _12_2_HIGH	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9923	Sum	
VS_IU_CS_K BPS_AMR_DL _12_2_LOW	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9922	Sum	
VS_IU_CS_K BPS_AMR_DL _12_2_SAMPL E_TIMES	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9924	Sum	
VS_IU_CS_K BPS_AMR_DL _12_2	INTENSITY	FLOA T	This item provides the actual DL rate of CS AMR 12.2K speech service on the Iu interface.	B67109407.C6720 2861	Average	Sum, Minimu m, Maximu m
VS_IU_CS_K BPS_AMR_DL _4_75_HIGH	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9944	Sum	
VS_IU_CS_K BPS_AMR_DL _4_75_LOW	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9943	Sum	
VS_IU_CS_K BPS_AMR_DL	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9945	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_IU_CS_K BPS_AMR_DL _4_75_SAMPL E_TIMES						
VS_IU_CS_K BPS_AMR_DL _4_75	INTENSITY	FLOA T	This item provides the actual DL rate of CS AMR 4.75K speech service on the Iu interface.	B67109407.C6720 2868	Average	Sum, Minimu m, Maximu m
VS_IU_CS_K BPS_AMR_DL _5_15_HIGH	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9941	Sum	
VS_IU_CS_K BPS_AMR_DL _5_15_LOW	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9940	Sum	
VS_IU_CS_K BPS_AMR_DL _5_15_SAMPL E_TIMES	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9942	Sum	
VS_IU_CS_K BPS_AMR_DL _5_15	INTENSITY	FLOA T	This item provides the actual DL rate of CS AMR 5.15K speech service on the Iu interface.	B67109407.C6720 2867	Average	Sum, Minimu m, Maximu m
VS_IU_CS_K BPS_AMR_DL _5_9_HIGH	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9938	Sum	
VS_IU_CS_K BPS_AMR_DL _5_9_LOW	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9937	Sum	
VS_IU_CS_K BPS_AMR_DL _5_9_SAMPL E_TIMES	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9939	Sum	
VS_IU_CS_K BPS_AMR_DL _5_9	INTENSITY	FLOA T	This item provides the actual DL rate of CS AMR	B67109407.C6720 2866	Average	Sum, Minimu m, Maximu

			5.9K speech service on the Iu interface.			m
VS_IU_CS_K BPS_AMR_DL _6_7_HIGH	ACCUMULATION	INTEGER	No description.	B67109407.C67189935	Sum	
VS_IU_CS_K BPS_AMR_DL _6_7_LOW	ACCUMULATION	INTEGER	No description.	B67109407.C67189934	Sum	
VS_IU_CS_K BPS_AMR_DL _6_7_SAMPL E_TIMES	ACCUMULATION	INTEGER	No description.	B67109407.C67189936	Sum	
VS_IU_CS_K BPS_AMR_DL _6_7	INTENSITY	FLOAT	This item provides the actual DL rate of CS AMR 6.7K speech service on the Iu interface.	B67109407.C67202865	Average	Sum, Minimum, Maximum
VS_IU_CS_K BPS_AMR_DL _7_4_HIGH	ACCUMULATION	INTEGER	No description.	B67109407.C67189932	Sum	
VS_IU_CS_K BPS_AMR_DL _7_4_LOW	ACCUMULATION	INTEGER	No description.	B67109407.C67189931	Sum	
VS_IU_CS_K BPS_AMR_DL _7_4_SAMPL E_TIMES	ACCUMULATION	INTEGER	No description.	B67109407.C67189933	Sum	
VS_IU_CS_K BPS_AMR_DL _7_4	INTENSITY	FLOAT	This item provides the actual DL rate of CS AMR 7.4K speech service on the	B67109407.C67202864	Average	Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Iu interface.			
VS_IU_CS_K BPS_AMR_DL _7_95_HIGH	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9929	Sum	
VS_IU_CS_K BPS_AMR_DL _7_95_LOW	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9928	Sum	
VS_IU_CS_K BPS_AMR_DL _7_95_SAMPL E_TIMES	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9930	Sum	
VS_IU_CS_K BPS_AMR_DL _7_95	INTENSITY	FLOA T	This item provides the actual DL rate of CS AMR 7.95K speech service on the Iu interface.	B67109407.C6720 2863	Average	Sum, Minimu m, Maximu m

7.22.5 Iu.Huawei.UMTS.IU_CS_KBPS_AMR_UL

IU CS AMR Uplink data

KPI	Type	Data Type	Description	Derivation	Default Aggregat or	Other Aggrega tors
VS_IU_CS_K BPS_AMR_UL _10_2_HIGH	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9950	Sum	
VS_IU_CS_K BPS_AMR_UL _10_2_LOW	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9949	Sum	
VS_IU_CS_K BPS_AMR_UL _10_2_SAMPL E_TIMES	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9951	Sum	
VS_IU_CS_K BPS_AMR_UL _10_2	INTENSITY	FLOA T	This item provides the actual UL rate of CS AMR 10.2K speech	B67109407.C6720 2870	Average	Sum, Minimu m, Maximu m

			service on the Iu interface.			
VS_IU_CS_K BPS_AMR_UL _12_2_HIGH	ACCUMULATION	INTEGER	No description.	B67109407.C67189947	Sum	
VS_IU_CS_K BPS_AMR_UL _12_2_LOW	ACCUMULATION	INTEGER	No description.	B67109407.C67189946	Sum	
VS_IU_CS_K BPS_AMR_UL _12_2_SAMPL E_TIMES	ACCUMULATION	INTEGER	No description.	B67109407.C67189948	Sum	
VS_IU_CS_K BPS_AMR_UL _12_2	INTENSITY	FLOAT	This item provides the actual UL rate of CS AMR 12.2K speech service on the Iu interface.	B67109407.C67202869	Average	Sum, Minimum, Maximum
VS_IU_CS_K BPS_AMR_UL _4_75_HIGH	ACCUMULATION	INTEGER	No description.	B67109407.C67189968	Sum	
VS_IU_CS_K BPS_AMR_UL _4_75_LOW	ACCUMULATION	INTEGER	No description.	B67109407.C67189967	Sum	
VS_IU_CS_K BPS_AMR_UL _4_75_SAMPL E_TIMES	ACCUMULATION	INTEGER	No description.	B67109407.C67189969	Sum	
VS_IU_CS_Kb ps_AMR_UL _4_75	INTENSITY	FLOAT	This item provides the actual UL rate of CS AMR 4.75K speech service on the Iu interface	B67109407.C67202876	Average	Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_IU_CS_K BPS_AMR_UL _5_15_HIGH	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9965	Sum	
VS_IU_CS_K BPS_AMR_UL _5_15_LOW	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9964	Sum	
VS_IU_CS_K BPS_AMR_UL _5_15_SAMPL E_TIMES	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9966	Sum	
VS_IU_CS_Kb ps_AMR_UL_ 5_15	INTENSITY	FLOA T	This item provides the actual UL rate of CS AMR 5.15K speech service on the Iu interface.	B67109407.C6720 2875	Average	Sum, Minimu m, Maximu m
VS_IU_CS_K BPS_AMR_UL _5_9_HIGH	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9962	Sum	
VS_IU_CS_K BPS_AMR_UL _5_9_LOW	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9961	Sum	
VS_IU_CS_K BPS_AMR_UL _5_9_SAMPL E_TIMES	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9963	Sum	
VS_IU_CS_Kb ps_AMR_UL_ 5_9	INTENSITY	FLOA T	This item provides the actual UL rate of CS AMR 5.9K speech service on the Iu interface.	B67109407.C6720 2874	Average	Sum, Minimu m, Maximu m
VS_IU_CS_K BPS_AMR_UL _6_7_HIGH	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9959	Sum	
VS_IU_CS_K BPS_AMR_UL _6_7_LOW	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9958	Sum	

VS_IU_CS_K BPS_AMR_UL _6_7_SAMPL E_TIMES	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9960	Sum	
VS_IU_CS_K BPS_AMR_UL _6_7	INTENSITY	FLOA T	This item provides the actual UL rate of CS AMR 6.7K speech service on the Iu interface.	B67109407.C6720 2873	Average	Sum, Minimu m, Maximu m
VS_IU_CS_K BPS_AMR_UL _7_4_HIGH	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9956	Sum	
VS_IU_CS_K BPS_AMR_UL _7_4_LOW	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9955	Sum	
VS_IU_CS_K BPS_AMR_UL _7_4_SAMPL E_TIMES	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9957	Sum	
VS_IU_CS_K BPS_AMR_UL _7_4	INTENSITY	FLOA T	This item provides the actual UL rate of CS AMR 7.4K speech service on the Iu interface.	B67109407.C6720 2872	Average	Sum, Minimu m, Maximu m
VS_IU_CS_K BPS_AMR_UL _7_95_HIGH	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9953	Sum	
VS_IU_CS_K BPS_AMR_UL _7_95_LOW	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9952	Sum	
VS_IU_CS_K BPS_AMR_UL	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9954	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

7_95_SAMPL E_TIMES						
VS_IU_CS_K BPS_AMR_UL _7_95	INTENSITY	FLOA T	This item provides the actual UL rate of CS AMR 7.95K speech service on the Iu interface.	B67109407.C6720 2871	Average	Sum, Minimu m, Maximu m

7.22.6 Iu.Huawei.UMTS.IU_CS_KBPS_AMR_WB_DL

Iu CS kbps AWR WB downlink data.

KPI	Type	Data Type	Description	Derivation	Default Aggregat or	Other Aggrega tors
VS_IuCS_Kbp s_AMRWB_D L_12_65_Hi	ACCUMULA TION	INTEG ER	No description.	B67109407.C6719 2218	Sum	
VS_IuCS_Kbp s_AMRWB_D L_12_65_Lo	ACCUMULA TION	INTEG ER	No description.	B67109407.C6719 2217	Sum	
VS_IuCS_Kbp s_AMRWB_D L_12_65_ST	ACCUMULA TION	INTEG ER	No description.	B67109407.C6719 2219	Sum	
VS_IuCS_Kbp s_AMRWB_D L_12_65	INTENSITY	FLOA T	The actual DL rate of CS AMRWB 12.65K speech service on the Iu interface.	B67109407.C6720 3868	Constant	Sum, Minimu m, Maximu m
VS_IuCS_Kbp s_AMRWB_D L_14_25_Hi	ACCUMULA TION	INTEG ER	No description.	B67109407.C6719 2221	Sum	
VS_IuCS_Kbp s_AMRWB_D L_14_25_Lo	ACCUMULA TION	INTEG ER	No description.	B67109407.C6719 2220	Sum	
VS_IuCS_Kbp s_AMRWB_D L_14_25_ST	ACCUMULA TION	INTEG ER	No description.	B67109407.C6719 2222	Sum	

VS_IuCS_Kbps_AMRWB_DL_14_25	INTENSITY	FLOAT	The actual DL rate of CS AMRWB 14.25K speech service on the Iu interface.	B67109407.C67203869	Constant	Sum, Minimum, Maximum
VS_IuCS_Kbps_AMRWB_DL_15_85_Hi	ACCUMULATION	INTEGER	No description.	B67109407.C67192224	Sum	
VS_IuCS_Kbps_AMRWB_DL_15_85_Lo	ACCUMULATION	INTEGER	No description.	B67109407.C67192223	Sum	
VS_IuCS_Kbps_AMRWB_DL_15_85_ST	ACCUMULATION	INTEGER	No description.	B67109407.C67192225	Sum	
VS_IuCS_Kbps_AMRWB_DL_15_85	INTENSITY	FLOAT	The actual DL rate of CS AMRWB 15.85K speech service on the Iu interface.	B67109407.C67203870	Constant	Sum, Minimum, Maximum
VS_IuCS_Kbps_AMRWB_DL_18_25_Hi	ACCUMULATION	INTEGER	No description.	B67109407.C67192227	Sum	
VS_IuCS_Kbps_AMRWB_DL_18_25_Lo	ACCUMULATION	INTEGER	No description.	B67109407.C67192226	Sum	
VS_IuCS_Kbps_AMRWB_DL_18_25_ST	ACCUMULATION	INTEGER	No description.	B67109407.C67192228	Sum	
VS_IuCS_Kbps_AMRWB_DL_18_25	INTENSITY	FLOAT	The actual DL rate of CS AMRWB 18.25K speech service on the Iu interface.	B67109407.C67203871	Constant	Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_IuCS_Kbps_AMRWB_DL_19_85_Hi	ACCUMULATION	INTEGER	No description.	B67109407.C67192230	Sum	
VS_IuCS_Kbps_AMRWB_DL_19_85_Lo	ACCUMULATION	INTEGER	No description.	B67109407.C67192229	Sum	
VS_IuCS_Kbps_AMRWB_DL_19_85_ST	ACCUMULATION	INTEGER	No description.	B67109407.C67192231	Sum	
VS_IuCS_Kbps_AMRWB_DL_19_85	INTENSITY	FLOAT	The actual DL rate of CS AMRWB 19.85K speech service on the Iu interface.	B67109407.C67203872	Constant	Sum, Minimum, Maximum
VS_IuCS_Kbps_AMRWB_DL_23_05_Hi	ACCUMULATION	INTEGER	No description.	B67109407.C67192233	Sum	
VS_IuCS_Kbps_AMRWB_DL_23_05_Lo	ACCUMULATION	INTEGER	No description.	B67109407.C67192232	Sum	
VS_IuCS_Kbps_AMRWB_DL_23_05_ST	ACCUMULATION	INTEGER	No description.	B67109407.C67192234	Sum	
VS_IuCS_Kbps_AMRWB_DL_23_05	INTENSITY	FLOAT	The actual DL rate of CS AMRWB 23.05K speech service on the Iu interface.	B67109407.C67203873	Constant	Sum, Minimum, Maximum
VS_IuCS_Kbps_AMRWB_DL_23_85_Hi	ACCUMULATION	INTEGER	No description.	B67109407.C67192236	Sum	
VS_IuCS_Kbps_AMRWB_DL_23_85_Lo	ACCUMULATION	INTEGER	No description.	B67109407.C67192235	Sum	
VS_IuCS_Kbps_AMRWB_DL_23_85_ST	ACCUMULATION	INTEGER	No description.	B67109407.C67192237	Sum	

VS_IuCS_Kbps_AMRWB_DL_23_85	INTENSITY	FLOAT	The actual DL rate of CS AMRWB 23.855K speech service on the Iu interface.	B67109407.C67203874	Constant	Sum, Minimum, Maximum
VS_IuCS_Kbps_AMRWB_DL_6_60_Hi	ACCUMULATION	INTEGER	No description.	B67109407.C67192212	Sum	
VS_IuCS_Kbps_AMRWB_DL_6_60_Lo	ACCUMULATION	INTEGER	No description.	B67109407.C67192211	Sum	
VS_IuCS_Kbps_AMRWB_DL_6_60_ST	ACCUMULATION	INTEGER	No description.	B67109407.C67192213	Sum	
VS_IuCS_Kbps_AMRWB_DL_6_60	INTENSITY	FLOAT	The actual DL rate of CS AMRWB 6.60K speech service on the Iu interface.	B67109407.C67203866	Constant	Sum, Minimum, Maximum
VS_IuCS_Kbps_AMRWB_DL_8_85_Hi	ACCUMULATION	INTEGER	No description.	B67109407.C67192215	Sum	
VS_IuCS_Kbps_AMRWB_DL_8_85_Lo	ACCUMULATION	INTEGER	No description.	B67109407.C67192214	Sum	
VS_IuCS_Kbps_AMRWB_DL_8_85_ST	ACCUMULATION	INTEGER	No description.	B67109407.C67192216	Sum	
VS_IuCS_Kbps_AMRWB_DL_8_85	INTENSITY	FLOAT	The actual DL rate of CS AMRWB 8.855K speech service on the Iu interface.	B67109407.C67203867	Constant	Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

7.22.7 Iu.Huawei.UMTS.IU_CS_KBPS_AMR_WB_UL

Iu CS kbps AWR WB uplink data.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IuCS_Kbps_AMRWB_UL_12_65_Hi	ACCUMULATION	INTEGER	No description.	B67109407.C67192245	Sum	
VS_IuCS_Kbps_AMRWB_UL_12_65_Lo	ACCUMULATION	INTEGER	No description.	B67109407.C67192244	Sum	
VS_IuCS_Kbps_AMRWB_UL_12_65_ST	ACCUMULATION	INTEGER	No description.	B67109407.C67192246	Sum	
VS_IuCS_Kbps_AMRWB_UL_12_65	INTENSITY	FLOAT	The actual UL rate of CS AMRWB 12.65K speech service on the Iu interface.	B67109407.C67203877	Constant	Sum, Minimum, Maximum
VS_IuCS_Kbps_AMRWB_UL_14_25_Hi	ACCUMULATION	INTEGER	No description.	B67109407.C67192248	Sum	
VS_IuCS_Kbps_AMRWB_UL_14_25_Lo	ACCUMULATION	INTEGER	No description.	B67109407.C67192247	Sum	
VS_IuCS_Kbps_AMRWB_UL_14_25_ST	ACCUMULATION	INTEGER	No description.	B67109407.C67192249	Sum	
VS_IuCS_Kbps_AMRWB_UL_14_25	INTENSITY	FLOAT	The actual UL rate of CS AMRWB 14.25K speech service on the Iu interface.	B67109407.C67203878	Constant	Sum, Minimum, Maximum
VS_IuCS_Kbps_AMRWB_UL_15_85_Hi	ACCUMULATION	INTEGER	No description.	B67109407.C67192251	Sum	

VS_IuCS_Kbps_AMRWB_UL_15_85_Lo	ACCUMULATION	INTEGER	No description.	B67109407.C67192250	Sum	
VS_IuCS_Kbps_AMRWB_UL_15_85_ST	ACCUMULATION	INTEGER	No description.	B67109407.C67192252	Sum	
VS_IuCS_Kbps_AMRWB_UL_15_85	INTENSITY	FLOAT	The actual UL rate of CS AMRWB 15.85K speech service on the Iu interface.	B67109407.C67203879	Constant	Sum, Minimum, Maximum
VS_IuCS_Kbps_AMRWB_UL_18_25_Hi	ACCUMULATION	INTEGER	No description.	B67109407.C67192254	Sum	
VS_IuCS_Kbps_AMRWB_UL_18_25_Lo	ACCUMULATION	INTEGER	No description.	B67109407.C67192253	Sum	
VS_IuCS_Kbps_AMRWB_UL_18_25_ST	ACCUMULATION	INTEGER	No description.	B67109407.C67192255	Sum	
VS_IuCS_Kbps_AMRWB_UL_18_25	INTENSITY	FLOAT	The actual UL rate of CS AMRWB 18.25K speech service on the Iu interface.	B67109407.C67203880	Constant	Sum, Minimum, Maximum
VS_IuCS_Kbps_AMRWB_UL_19_85_Hi	ACCUMULATION	INTEGER	No description.	B67109407.C67192257	Sum	
VS_IuCS_Kbps_AMRWB_UL_19_85_Lo	ACCUMULATION	INTEGER	No description.	B67109407.C67192256	Sum	
VS_IuCS_Kbps_AMRWB_UL_19_85_ST	ACCUMULATION	INTEGER	No description.	B67109407.C67192258	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_IuCS_Kbps_AMRWB_UL_19_85	INTENSITY	FLOAT	The actual UL rate of CS AMRWB 19.85K speech service on the Iu interface.	B67109407.C67203881	Constant	Sum, Minimum, Maximum
VS_IuCS_Kbps_AMRWB_UL_23_05_Hi	ACCUMULATION	INTEGER	No description.	B67109407.C67192260	Sum	
VS_IuCS_Kbps_AMRWB_UL_23_05_Lo	ACCUMULATION	INTEGER	No description.	B67109407.C67192259	Sum	
VS_IuCS_Kbps_AMRWB_UL_23_05_ST	ACCUMULATION	INTEGER	No description.	B67109407.C67192261	Sum	
VS_IuCS_Kbps_AMRWB_UL_23_05	INTENSITY	FLOAT	The actual UL rate of CS AMRWB 23.05K speech service on the Iu interface.	B67109407.C67203882	Constant	Sum, Minimum, Maximum
VS_IuCS_Kbps_AMRWB_UL_23_85_Hi	ACCUMULATION	INTEGER	No description.	B67109407.C67192263	Sum	
VS_IuCS_Kbps_AMRWB_UL_23_85_Lo	ACCUMULATION	INTEGER	No description.	B67109407.C67192262	Sum	
VS_IuCS_Kbps_AMRWB_UL_23_85_ST	ACCUMULATION	INTEGER	No description.	B67109407.C67192264	Sum	
VS_IuCS_Kbps_AMRWB_UL_23_85	INTENSITY	FLOAT	The actual UL rate of CS AMRWB 23.85K speech service on the Iu interface.	B67109407.C67203883	Constant	Sum, Minimum, Maximum
VS_IuCS_Kbps_AMRWB_UL_6_60_Hi	ACCUMULATION	INTEGER	No description.	B67109407.C67192239	Sum	
VS_IuCS_Kbps	ACCUMULATION	INTEGER	No description.	B67109407.C6719	Sum	

s_AMRWB_UL_6_60_Lo	TION	ER		2238		
VS_IuCS_Kbps_AMRWB_UL_6_60_ST	ACCUMULATION	INTEGER	No description.	B67109407.C67192240	Sum	
VS_IuCS_Kbps_AMRWB_UL_6_60	INTENSITY	FLOAT	The actual UL rate of CS AMRWB 6.60K speech service on the Iu interface.	B67109407.C67203875	Constant	Sum, Minimum, Maximum
VS_IuCS_Kbps_AMRWB_UL_8_85_Hi	ACCUMULATION	INTEGER	No description.	B67109407.C67192242	Sum	
VS_IuCS_Kbps_AMRWB_UL_8_85_Lo	ACCUMULATION	INTEGER	No description.	B67109407.C67192241	Sum	
VS_IuCS_Kbps_AMRWB_UL_8_85_ST	ACCUMULATION	INTEGER	No description.	B67109407.C67192243	Sum	
VS_IuCS_Kbps_AMRWB_UL_8_85	INTENSITY	FLOAT	The actual UL rate of CS AMRWB 8.85K speech service on the Iu interface.	B67109407.C67203876	Constant	Sum, Minimum, Maximum

7.22.8 Iu.Huawei.UMTS.IU_CS_KBPS_CONV_DL

IU CS Conversational Downlink data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IU_CS_KBPS_CONV_DL_28_8_HIGH	ACCUMULATION	INTEGER	No description.	B67109407.C67189989	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_IU_CS_K BPS_CONV_DL_28_8_LOW	ACCUMULATION	INTEGER	No description.	B67109407.C67189988	Sum	
VS_IU_CS_K BPS_CONV_DL_28_8_SAMPLE_TIMES	ACCUMULATION	INTEGER	No description.	B67109407.C67189990	Sum	
VS_IU_CS_Kbps_Conv_DL_28_8	INTENSITY	FLOAT	This item provides the actual DL rate of CS 28.8K conversational service on the Iu interface.	B67109407.C67202883	Average	Sum, Minimum, Maximum
VS_IU_CS_K BPS_CONV_DL_32_HIGH	ACCUMULATION	INTEGER	No description.	B67109407.C67189983	Sum	
VS_IU_CS_K BPS_CONV_DL_32_LOW	ACCUMULATION	INTEGER	No description.	B67109407.C67189982	Sum	
VS_IU_CS_K BPS_CONV_DL_32_SAMPLE_TIMES	ACCUMULATION	INTEGER	No description.	B67109407.C67189984	Sum	
VS_IU_CS_Kbps_Conv_DL_32	INTENSITY	FLOAT	This item provides the actual DL rate of CS 32K conversational service on the Iu interface.	B67109407.C67202881	Average	Sum, Minimum, Maximum
VS_IU_CS_K BPS_CONV_DL_56_HIGH	ACCUMULATION	INTEGER	No description.	B67109407.C67189977	Sum	
VS_IU_CS_K BPS_CONV_DL_56_LOW	ACCUMULATION	INTEGER	No description.	B67109407.C67189976	Sum	
VS_IU_CS_K BPS_CONV_DL_56_SAMPLE	ACCUMULATION	INTEGER	No description.	B67109407.C67189978	Sum	

E_TIMES						
VS_IU_CS_Kbps_Conv_DL_56	INTENSITY	FLOAT	This item provides the actual DL rate of CS 56K conversational service on the Iu interface.	B67109407.C67202879	Average	Sum, Minimum, Maximum
VS_IU_CS_KBPS_CONV_DL_64_HIGH	ACCUMULATION	INTEGER	No description.	B67109407.C67189971	Sum	
VS_IU_CS_KBPS_CONV_DL_64_LOW	ACCUMULATION	INTEGER	No description.	B67109407.C67189970	Sum	
VS_IU_CS_KBPS_CONV_DL_64_SAMPLE_TIMES	ACCUMULATION	INTEGER	No description.	B67109407.C67189972	Sum	
VS_IU_CS_Kbps_Conv_DL_64	INTENSITY	FLOAT	This item provides the actual DL rate of CS 64K conversational service on the Iu interface.	B67109407.C67202877	Average	Sum, Minimum, Maximum

7.22.9 Iu.Huawei.UMTS.IU_CS_KBPS_CONV_UL

IU CS Conversational Uplink data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IU_CS_KBPS_CONV_UL_28_8_HIGH	ACCUMULATION	INTEGER	No description.	B67109407.C67189992	Sum	
VS_IU_CS_K	ACCUMULATION	INTEGER	No description.	B67109407.C6718	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

BPS_CONV_UL_28_8_LOW	TION	ER		9991		
VS_IU_CS_K BPS_CONV_UL_28_8_SAMP LE_TIMES	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9993	Sum	
VS_IU_CS_Kb ps_Conv_UL_28_8	INTENSITY	FLOA T	This item provides the actual UL rate of CS 28.8K conversational service on the Iu interface.	B67109407.C6720 2884	Average	Sum, Minimu m, Maximu m
VS_IU_CS_K BPS_CONV_UL_32_HIGH	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9986	Sum	
VS_IU_CS_K BPS_CONV_UL_32_LOW	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9985	Sum	
VS_IU_CS_K BPS_CONV_UL_32_SAMPL E_TIMES	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9987	Sum	
VS_IU_CS_Kb ps_Conv_UL_32	INTENSITY	FLOA T	This item provides the actual UL rate of CS 32K conversational service on the Iu interface.	B67109407.C6720 2882	Average	Sum, Minimu m, Maximu m
VS_IU_CS_K BPS_CONV_UL_56_HIGH	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9980	Sum	
VS_IU_CS_K BPS_CONV_UL_56_LOW	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9979	Sum	
VS_IU_CS_K BPS_CONV_UL_56_SAMPL E_TIMES	ACCUMULA TION	INTEG ER	No description.	B67109407.C6718 9981	Sum	

VS_IU_CS_Kbps_Conv_UL_56	INTENSITY	FLOAT	This item provides the actual UL rate of CS 56K conversational service on the Iu interface.	B67109407.C67202880	Average	Sum, Minimum, Maximum
VS_IU_CS_KBPS_CONV_UL_64_HIGH	ACCUMULATION	INTEGER	No description.	B67109407.C67189974	Sum	
VS_IU_CS_KBPS_CONV_UL_64_LOW	ACCUMULATION	INTEGER	No description.	B67109407.C67189973	Sum	
VS_IU_CS_KBPS_CONV_UL_64_SAMPLE_TIMES	ACCUMULATION	INTEGER	No description.	B67109407.C67189975	Sum	
VS_IU_CS_Kbps_Conv_UL_64	INTENSITY	FLOAT	This item provides the actual UL rate of CS 64K conversational service on the Iu interface.	B67109407.C67202878	Average	Sum, Minimum, Maximum

7.22.10lu.Huawei.UMTS.IU_CS_KBPS_STR_DL

IU CS Streaming Downlink data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IU_CS_KBPS_STR_DL_14_4_HIGH	ACCUMULATION	INTEGER	No description.	B67109407.C67190012	Sum	
VS_IU_CS_KBPS_STR_DL	ACCUMULATION	INTEGER	No description.	B67109407.C67190013	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

_14_4_LOW						
VS_IU_CS_K BPS_STR_DL _14_4_SAMPL E_TIMES	ACCUMULA TION	INTEG ER	No description.	B67109407.C6719 0014	Sum	
VS_IU_CS_Kb ps_Str_DL_14_ 4	INTENSITY	FLOA T	This item provides the actual DL rate of CS 14.4K streaming service on the Iu interface	B67109407.C6720 2891	Average	Sum, Minimu m, Maximu m
VS_IU_CS_K BPS_STR_DL _28_8_HIGH	ACCUMULA TION	INTEG ER	No description.	B67109407.C6719 0010	Sum	
VS_IU_CS_K BPS_STR_DL _28_8_LOW	ACCUMULA TION	INTEG ER	No description.	B67109407.C6719 0009	Sum	
VS_IU_CS_K BPS_STR_DL _28_8_SAMPL E_TIMES	ACCUMULA TION	INTEG ER	No description.	B67109407.C6719 0011	Sum	
VS_IU_CS_Kb ps_Str_DL_28_ 8	INTENSITY	FLOA T	This item provides the actual UL rate of CS 28.8K streaming service on the Iu interface	B67109407.C6720 2890	Average	Sum, Minimu m, Maximu m
VS_IU_CS_K BPS_STR_DL _57_6_HIGH	ACCUMULA TION	INTEG ER	No description.	B67109407.C6719 0001	Sum	
VS_IU_CS_K BPS_STR_DL _57_6_LOW	ACCUMULA TION	INTEG ER	No description.	B67109407.C6719 0000	Sum	
VS_IU_CS_K BPS_STR_DL _57_6_SAMPL E_TIMES	ACCUMULA TION	INTEG ER	No description.	B67109407.C6719 0002	Sum	
VS_IU_CS_Kb	INTENSITY	FLOA	This item	B67109407.C6720	Average	Sum,

ps_Str_DL_57_6		T	provides the actual DL rate of CS 57.6K streaming service on the Iu interface.	2887		Minimum, Maximum
VS_IU_CS_KBPS_STR_DL_64_HIGH	ACCUMULATION	INTEGER	No description.	B67109407.C67189995	Sum	
VS_IU_CS_KBPS_STR_DL_64_LOW	ACCUMULATION	INTEGER	No description.	B67109407.C67189994	Sum	
VS_IU_CS_KBPS_STR_DL_64_SAMPLE_TIMES	ACCUMULATION	INTEGER	No description.	B67109407.C67189996	Sum	
VS_IU_CS_Kbps_Str_DL_64	INTENSITY	FLOAT	This item provides the actual DL rate of CS 64K streaming service on the Iu interface.	B67109407.C67202885	Average	Sum, Minimum, Maximum

7.22.11Iu.Huawei.UMTS.IU_CS_KBPS_STR_UL

IU CS Streaming Uplink data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IU_CS_KBPS_STR_UL_14_4_HIGH	ACCUMULATION	INTEGER	No description.	B67109407.C67190016	Sum	
VS_IU_CS_KBPS_STR_UL_14_4_LOW	ACCUMULATION	INTEGER	No description.	B67109407.C67190015	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_IU_CS_K BPS_STR_UL _14_4_SAMPL E_TIMES	ACCUMULA TION	INTEG ER	No description.	B67109407.C6719 0017	Sum	
VS_IU_CS_Kb ps_Str_UL_14_ 4	INTENSITY	FLOA T	This item provides the actual UL rate of CS 14.4K streaming service on the Iu interface	B67109407.C6720 2892	Average	Sum, Minimu m, Maximu m
VS_IU_CS_K BPS_STR_UL _28_8_HIGH	ACCUMULA TION	INTEG ER	No description.	B67109407.C6719 0007	Sum	
VS_IU_CS_K BPS_STR_UL _28_8_LOW	ACCUMULA TION	INTEG ER	No description.	B67109407.C6719 0006	Sum	
VS_IU_CS_K BPS_STR_UL _28_8_SAMPL E_TIMES	ACCUMULA TION	INTEG ER	No description.	B67109407.C6719 0008	Sum	
VS_IU_CS_Kb ps_Str_UL_28_ 8	INTENSITY	FLOA T	This item provides the actual DL rate of CS 28.8K streaming service on the Iu interface.	B67109407.C6720 2889	Average	Sum, Minimu m, Maximu m
VS_IU_CS_K BPS_STR_UL _57_6_HIGH	ACCUMULA TION	INTEG ER	No description.	B67109407.C6719 0004	Sum	
VS_IU_CS_K BPS_STR_UL _57_6_LOW	ACCUMULA TION	INTEG ER	No description.	B67109407.C6719 0003	Sum	
VS_IU_CS_K BPS_STR_UL _57_6_SAMPL E_TIMES	ACCUMULA TION	INTEG ER	No description.	B67109407.C6719 0005	Sum	
VS_IU_CS_Kb ps_Str_UL_57_ _	INTENSITY	FLOA T	This item provides the	B67109407.C6720 2888	Average	Sum, Minimu

6			actual UL rate of CS 57.6K streaming service on the Iu interface.			m, Maximum
VS_IU_CS_KBPS_STR_UL_64_HIGH	ACCUMULATION	INTEGER	No description.	B67109407.C67189998	Sum	
VS_IU_CS_KBPS_STR_UL_64_LOW	ACCUMULATION	INTEGER	No description.	B67109407.C67189997	Sum	
VS_IU_CS_KBPS_STR_UL_64_SAMPLE_TIMES	ACCUMULATION	INTEGER	No description.	B67109407.C67189999	Sum	
VS_IU_CS_Kbps_Str_UL_64	INTENSITY	FLOAT	This item provides the actual UL rate of CS 64K streaming service on the Iu interface.	B67109407.C67202886	Average	Sum, Minimum, Maximum

7.22.12 Iu.Huawei.UMTS.Iu_MOCN

Iu MOCN data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IU_MOCN_CsPsCoordination	ACCUMULATION	INTEGER	The measurement counters provide the number of Redirect in the scenario of the MOCN for	B67109526.C67193097	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			different causes - Redirect cause is CS/PS coordination required.			
VS_IU_MOCN_GprsServicesNotAllowed	ACCUMULATION	INTEGER	The measurement counters provide the number of Redirect in the scenario of the MOCN for different causes - Redirect cause is GPRS services not allowed in this PLMN.	B67109526.C67193102	Sum	
VS_IU_MOCN_LocationAreaNotAllowed	ACCUMULATION	INTEGER	The measurement counters provide the number of Redirect in the scenario of the MOCN for different causes - Redirect cause is location area not allowed.	B67109526.C67193098	Sum	
VS_IU_MOCN_NoSuitableCell	ACCUMULATION	INTEGER	The measurement counters provide the number of Redirect in the scenario of the MOCN for different	B67109526.C67193101	Sum	

			causes - Redirect cause is no suitable cell in location area.			
VS_IU_MOCN_Pl mnNotAllowed	ACCUMULA TION	INTEG ER	The measurement counters provide the number of Redirect in the scenario of the MOCN for different causes - Redirect cause is PLMN not allowed.	B67109526.C67 193099	Sum	
VS_IU_MOCN_Ro amNotAllowed	ACCUMULA TION	INTEG ER	The measurement counters provide the number of Redirect in the scenario of the MOCN for different causes - Redirect cause is roaming not allowed in this location area.	B67109526.C67 193100	Sum	

7.22.13lu.Huawei.UMTS.IU_PS_Bytes

Iu PS bytes measurement.

KPI	Type	Data Type	Description	Derivation	Default Aggrega tor	Other Aggrega tors
-----	------	--------------	-------------	------------	---------------------------	--------------------------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Total_VS_IuPS_BytesPayld_Rx	ACCUMULATION	INT8	This item provides the number of received payload bytes of PS streaming, conversational, interactive and background service data frames on the Iu interface.	(({VS_IuPS_BytesPayldBgrd_Rx} + {VS_IuPS_BytesPayldConv_Rx} + {VS_IuPS_BytesPayldIntact_Rx} + {VS_IuPS_BytesPayldStr_Rx}))	Sum	
Total_VS_IuPS_BytesPayld_Tx	ACCUMULATION	INT8	This item provides the number of transmitted payload bytes of PS streaming, conversational, interactive and background service data frames on the Iu interface.	(({VS_IuPS_BytesPayldBgrd_Tx} + {VS_IuPS_BytesPayldConv_Tx} + {VS_IuPS_BytesPayldIntact_Tx} + {VS_IuPS_BytesPayldStr_Tx}))	Sum	
Total_VS_IuPS_BytesPayldBgrd	ACCUMULATION	INT8	Total bytes of download and upload background service on IU interface PS domain.	(({VS_IuPS_BytesPayldBgrd_Rx} + {VS_IuPS_BytesPayldBgrd_Tx}))	Sum	
Total_VS_IuPS_BytesPayldConv	ACCUMULATION	INT8	Total bytes of download and upload conversational service on IU interface PS domain.	(({VS_IuPS_BytesPayldConv_Rx} + {VS_IuPS_BytesPayldConv_Tx}))	Sum	
Total_VS_IuPS_BytesPayldIntact	ACCUMULATION	INT8	Total bytes of download and upload streaming service on IU interface PS domain.	(({VS_IuPS_BytesPayldIntact_Rx} + {VS_IuPS_BytesPayldIntact_Tx}))	Sum	

Total_VS_IuPS_BytesPayldStr	ACCUMULATION	INT8	Total bytes of download and uploadstreaming service on IU interface PS domain.	({VS_IuPS_BytesPayldStr_Rx} + {VS_IuPS_BytesPayldStr_Tx})	Sum	
VS_IuPS_BytesPayldBgrd_Rx	ACCUMULATION	INT8	Total bytes of download background service on IU interface PS domain.	B67109408.C67203900	Sum	
VS_IuPS_BytesPayldBgrd_Tx	ACCUMULATION	INT8	Total bytes of upload background service on IU interface PS domain.	B67109408.C67203898	Sum	
VS_IuPS_BytesPayldConv_Rx	ACCUMULATION	INT8	Total bytes of download conversation service on IU interface PS domain.	B67109408.C67203895	Sum	
VS_IuPS_BytesPayldConv_Tx	ACCUMULATION	INT8	Total bytes of upload conversation service on IU interface PS domain.	B67109408.C67203893	Sum	
VS_IuPS_BytesPayldIntact_Rx	ACCUMULATION	INT8	Total bytes of download streaming service on IU interface PS domain.	B67109408.C67203899	Sum	
VS_IuPS_BytesPayldIntact_Tx	ACCUMULATION	INT8	Total bytes of upload interact service on IU	B67109408.C67203897	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			interface PS domain.			
VS_IuPS_Bytes PayldStr_Rx	ACCUMULATION	INT8	Total bytes of download streaming service on IU interface PS domain.	B67109408.C6720 3896	Sum	
VS_IuPS_Bytes PayldStr_Tx	ACCUMULATION	INT8	Total bytes of upload streaming service on IU interface PS domain.	B67109408.C6720 3894	Sum	
VS_IuPS_CopperBE_Bytes_Rx	ACCUMULATION	INT8	This measurement item provides the total number of uplink bytes of the PS domain CopperBE service on the Iu interface. The IuPS contains the GTPU header and application layer data.	B67109408.C6720 4834	Sum	
VS_IuPS_CopperBE_Bytes_Tx	ACCUMULATION	INT8	This measurement item provides the total number of uplink bytes of the PS domain CopperBE service on the Iu interface. The IuPS contains the GTPU header and application layer data.	B67109408.C6720 4831	Sum	
VS_IuPS_GoldenBE_Bytes_Rx	ACCUMULATION	INT8	This measurement item provides the total number of downlink bytes	B67109408.C6720 4832	Sum	

			of the PS domain GoldenBE service on the Iu interface. The IuPS contains the GTPU header and application layer data.			
VS_IuPS_GoldenBE_Bytes_Tx	ACCUMULATION	INT8	This measurement item provides the total number of uplink bytes of the PS domain GoldenBE service on the Iu interface. The IuPS contains the GTPU header and application layer data.	B67109408.C67204829	Sum	
VS_IuPS_SilverBE_Bytes_Rx	ACCUMULATION	INT8	This measurement item provides the total number of uplink bytes of the PS domain SilverBE service on the Iu interface. The IuPS contains the GTPU header and application layer data.	B67109408.C67204833	Sum	
VS_IuPS_SilverBE_Bytes_Tx	ACCUMULATION	INT8	This measurement item provides the total number of uplink bytes of the PS domain	B67109408.C67204830	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			SilverBE service on the Iu interface. The IuPS contains the GTPU header and application layer data.			
--	--	--	---	--	--	--

7.22.14lu.Huawei.UMTS.MBMS_Iu

MBMS Iu data.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IU_MBMS_Fail_IuSigFail	ACCUMULATION	INTEGER	Number of MBMS SESSION START FAILURE messages due to IU signalling fail send to CN.	B67109478.C67192083	Sum	
VS_IU_MBMS_Fail_IuUpFail	ACCUMULATION	INTEGER	Number of MBMS SESSION START FAILURE messages due to IU User Part fail send to CN.	B67109478.C67192082	Sum	
VS_IU_MBMS_Fail_NNSF	ACCUMULATION	INTEGER	The measurement is triggered when the RNC sends MBMS SESSION START FAILURE messages to CN due to NNSF.	B67109478.C67192081	Sum	
VS_IU_MBMS_Fail_NoRsrc	ACCUMULATION	INTEGER	Number of MBMS	B67109478.C67192080	Sum	

			SESSION START FAILURE messages due to no resource send to CN.			
VS_IU_MBM S_Fail	ACCUMULA TION	INTEG ER	Number of MBMS SESSION START FAILURE messages received from CN.	B67109478.C6719 2079	Sum	
VS_IU_MBM S_Start	ACCUMULA TION	INTEG ER	Number of MBMS SESSION START FAILURE messages due to no resource send to CN.	B67109478.C6719 2077	Sum	
VS_IU_MBM S_Succ	ACCUMULA TION	INTEG ER	Number of MBMS SESSION START RESPONSE messages send to CN.	B67109478.C6719 2078	Sum	

7.22.15lu.Huawei.UMTS.PS_SIG_IU_FlowControl

PS SIG IU FlowControl data

KPI	Type	Data Type	Description	Derivation	Default Aggregat or	Other Aggrega tors
IU_SCCP_Flo wCtrl_Disc_Ini	ACCUMULA TION	INTEG ER	This measurement	B67109406.C6719 3096	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

tDTPS			counter provides the number of initial UE messages discarded under the SCCP flow control when the Iu interface receives the PS initial UE messages.			
-------	--	--	---	--	--	--

7.22.16lu.Huawei.UMTS.PS_SIG_IU

PS SIG IU data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
IU_AttConnRelCNP S_sum	ACCUMULATION	INTEGER	Number of IU RELEASE COMMAND messages sent from the PS domain to the RNC. The Iu release procedure initiates the PS domain to release the Iu connection and all the UTRAN resources related to the Iu.	B67109406.C6 7176565	Sum	
IU_AttConnRelReq UTRANPS_sum	ACCUMULATION	INTEGER	Number of IU RELEASE REQUEST messages sent by the RNC to request the	B67109406.C6 7176559	Sum	

			release of the Iu connection to the PS domain. Due to UTRAN generated reasons, the UTRAN requests the PS domain to release the Iu signalling connection for a particular UE by sending the CN an IU RELEASE REQUEST message			
Total_VS_IU_ErrInd_PS	ACCUMULATION	INTEGER	Number of ERROR INDICATION messages sent and received from the PS domain to the RNC.	{VS_IU_ErrInd_PS_Rx} + {VS_IU_ErrInd_PS_Tx}	Sum	
Total_VS_IU_Reset_PS	ACCUMULATION	INTEGER	Number of RESET messages sent and received from the PS domain to the RNC.	{VS_IU_Reset_PS_Rx} + {VS_IU_Reset_PS_Tx}	Sum	
VS_IU_ErrInd_PS_Rx	ACCUMULATION	INTEGER	Number of ERROR INDICATION messages sent from the PS domain to the	B67109406.C6 7176532	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			RNC.			
VS_IU_ErrInd_PS_Tx	ACCUMULATION	INTEGER	Number of ERROR INDICATION messages sent from the RNC to the PS domain.	B67109406.C6 7176530	Sum	
VS_IU_RelCmdPS_NoRAB	ACCUMULATION	INTEGER	Numbers of IU RELEASE COMMAND messages sent from the RNC to the PS due to different Iu connection release causes No Remaining RAB	B67109406.C6 7176570	Sum	
VS_IU_RelCmdPS_NormRel	ACCUMULATION	INTEGER	Numbers of IU RELEASE COMMAND messages sent from the RNC to the PS due to different Iu connection release causes Normal Release	B67109406.C6 7176567	Sum	
VS_IU_RelCmdPS_RelocCan	ACCUMULATION	INTEGER	Numbers of IU RELEASE COMMAND messages sent from the RNC to the PS due to different Iu connection release causes Relocation Canceled	B67109406.C6 7176569	Sum	
VS_IU_RelCmdPS_RelocSucc	ACCUMULATION	INTEGER	Numbers of IU RELEASE	B67109406.C6 7176566	Sum	

			COMMAND messages sent from the RNC to the PS due to different Iu connection release causes Relocation Success			
VS_IU_RelCmdPS_UTRANGen	ACCUMULATION	INTEGER	Numbers of IU RELEASE COMMAND messages sent from the RNC to the PS due to different Iu connection release causes UTRAN Generated	B67109406.C67176568	Sum	
VS_IU_RelPSPreempt	ACCUMULATION	INTEGER	Numbers of IU RELEASE REQUEST messages sent from the RNC to request the release of the Iu connection to the CS domain due to different Iu release request causes	B67109406.C67190183	Sum	
VS_IU_RelReqPS_IgnChkFail	ACCUMULATION	INTEGER	Numbers of IU RELEASE REQUEST messages sent from the RNC to request the release of the	B67109406.C67176562	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Iu connection to the CS domain due to different Iu release request causes Repeated Integrity Checking Failure			
VS_IU_RelReqPS_OM	ACCUMULATION	INTEGER	Numbers of IU RELEASE REQUEST messages sent from the RNC to request the release of the Iu connection to the CS domain due to different Iu release request causes OM Intervention	B67109406.C6 7176560	Sum	
VS_Iu_RelReqPS_RIPFail	ACCUMULATION	INTEGER	Numbers of IU RELEASE REQUEST messages sent from the RNC to request the release of the Iu connection to the CS domain due to different Iu release request causes Failure in the Radio Interface Procedure	B67109406.C6 7176574	Sum	
VS_IU_RelReqPS_SigConnRel	ACCUMULATION	INTEGER	Numbers of IU RELEASE REQUEST messages sent	B67109406.C6 7176563	Sum	

			from the RNC to request the release of the Iu connection to the CS domain due to different Iu release request causes UE Signalling Connection Release			
VS_Iu_RelReqPS_SRBReset	ACCUMULATION	INTEGER	Numbers of IU RELEASE REQUEST messages sent from the RNC to request the release of the Iu connection to the CS domain due to different Iu release request causes Signalling RLC Reset	B67109406.C67176572	Sum	
VS_IU_RelReqPS_UELost	ACCUMULATION	INTEGER	Numbers of IU RELEASE REQUEST messages sent from the RNC to request the release of the Iu connection to the CS domain due to different Iu release request causes Radio	B67109406.C67176564	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Connection With UE Lost to the CS domain			
VS_IU_RelReqPS_UsrInact	ACCUMULATION	INTEGER	Numbers of IU RELEASE REQUEST messages sent from the RNC to request the release of the Iu connection to the CS domain due to different Iu release request causes User Inactivity	B67109406.C67176561	Sum	
VS_IU_ResetPS_Rx	ACCUMULATION	INTEGER	Number of RESET messages sent from the PS domain to the RNC.	B67109406.C67176485	Sum	
VS_IU_ResetPS_Tx	ACCUMULATION	INTEGER	Number of RESET messages sent from the RNC to the PS domain.	B67109406.C67176481	Sum	
VS_IU_SIG_AttCon nEstabPS	ACCUMULATION	INTEGER	This item provides the number of INITIAL UE MESSAGE messages from the RNC to the PS domain. When the RNC receives an NAS message from a UE, the	B67109406.C67189921	Sum	

			RNC will send an INITIAL UE MESSAGE to set up an Iu signalling connection if inexistent. The RNC takes statistics by CN nodes.			
--	--	--	--	--	--	--

7.22.17lu.Huawei.UMTS.SCCP_Connection_Iu

SCCP Connections over Iu

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IU_SCCP_Rx_Con_Req	ACCUMULATION	INTEGER	Total Number of SCCP connection request of Iu interface received from CN	B67109535.C67195051	Sum	
VS_IU_SCCP_Rx_Con_Success	ACCUMULATION	INTEGER	Total Number of SCCP connection successful establishments of Iu interface received from CN	B67109535.C67195052	Sum	
VS_IU_SCCP_Tx_Con_Req	ACCUMULATION	INTEGER	Total Number of SCCP connection request of Iu interface sent by	B67109535.C67195049	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			RNC			
VS_IU_SCCP_Tx_Con_Success	ACCUMULATION	INTEGER	Total Number of SCCP connection successful establishments of Iu interface sent by RNC	B67109535.C67195050	Sum	

7.22.18lu.Huawei.UMTS.Sig_CS_PS_Iu_LoadBalance

load balanced CS and PS INITIAL UE messages over Iu

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IU_LdBalRtCS_IMEI	ACCUMULATION	INTEGER	Number of INITIAL UE MESSAGE messages that RNC sends to the CS domain by load balancing in the case of IuFLEX. RNC measures this item according to IMEI carried by UE.	B67109405.C67192540	Sum	
VS_IU_LdBalRtCS_IMSI	ACCUMULATION	INTEGER	Number of INITIAL UE MESSAGE messages that RNC sends to the CS domain by load balancing in the case of IuFLEX. RNC measures this item according to IMSI carried by UE.	B67109405.C67192538	Sum	

VS_IU_LdBalR tCS_InValidNR I	ACCUMULA TION	INTEG ER	Number of INITIAL UE MESSAGE messages that RNC sends to the CS domain by load balancing in the case of IuFLEX. RNC measures this item according to NRI carried by UE.	B67109405.C6719 2539	Sum	
VS_IU_LdBalR tPS_IMEI	ACCUMULA TION	INTEG ER	Number of INITIAL UE MESSAGE messages that RNC sends to the PS domain by load balancing in the case of IuFLEX. RNC measures this item according to IMEI carried by UE.	B67109406.C6719 2543	Sum	
VS_IU_LdBalR tPS_IMSI	ACCUMULA TION	INTEG ER	Number of INITIAL UE MESSAGE messages that RNC sends to the PS domain by load balancing in the case of IuFLEX. RNC measures this item according	B67109406.C6719 2541	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			to IMSI carried by UE.			
VS_IU_LdBalRtPS_InValidNRI	ACCUMULATION	INTEGER	Number of INITIAL UE MESSAGE messages that RNC sends to the PS domain by load balancing in the case of IuFLEX. RNC measures this item according to NRI carried by UE.	B67109406.C67192542	Sum	

7.23 Iur Performance Indicators

This section shows the key performance indicators and other counters for the Iur object, divided into the following sub-sections:

- [Iur.Huawei.UMTS.DRNC_RLs](#)
- [Iur.Huawei.UMTS.DRNC](#)
- [Iur.Huawei.UMTS.SCCP_Connection_Iur](#)
- [Iur.Huawei.UMTS.SRNC_CallDrop_DiffServices](#)
- [Iur.Huawei.UMTS.SRNC](#)
- [Iur.Huawei.UMTS.Traffic](#)

7.23.1 Iur.Huawei.UMTS.DRNC_RLs

RLs reconfigured by DRNC.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_SHO_FailRLAddIur_TransCong_Tx	ACCUMULATION	INTEGER	Number of RLs unsuccessfully added by DRNC on Iur interface for different causes (transport resource	B67109412.C67192581	Sum	

			unavailable)			
VS_SHO_FailRLRecfgIur_TransCongRx	ACCUMULATION	INTEGER	Number of RLs unsuccessfully reconfigured by DRNC on Iur interface for different causes (transport resource unavailable)	B67109412.C67192579	Sum	
VS_SHO_FailRLSetupIur_TransCongTx	ACCUMULATION	INTEGER	Number of RLs unsuccessfully established by DRNC on Iur interface for different causes (transport resource unavailable)	B67109412.C67192580	Sum	

7.23.2 Iur.Huawei.UMTS.DRNC

Drift Radio Network Controller data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
Abnorm_Rel_HSPA_CS_Conv_Iurlink	ACCUMULATION	INTEGER	Number of CS over HSPA RABs abnormally released in the best cell which belongs to the DRNC on the SRNC Iur interface.	B67109411.C67196207	Sum	
Norm_Rel_HSPA_CS_Conv_Iurlink	ACCUMULATION	INTEGER	Number of CS over HSPA	B67109411.C67196206	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			RABs normally released in the best cell which belongs to the DRNC on the SRNC Iur interface.			
VS_AbRel_CS_AMR_IurL	ACCUMULATION	INTEGER	Number of released CS AMR RABs triggered by abnormal cause on Iur interface which belongs to the DRNC	B67109411.C67191859	Sum	
VS_AbRel_CS_Conv_RB_64_IurL	ACCUMULATION	INTEGER	Number of released CS conversational service RABs triggered by abnormal cause on Iur interface which belongs to the DRNC (Max DL bit rate = 64 kbps)	B67109411.C67191860	Sum	
VS_AbRel_PS_BE_RB_0_32_IurL	ACCUMULATION	INTEGER	Number of released PS BE service RABs triggered by abnormal cause on Iur interface which belongs to the DRNC (Max DL bit rate in [0,32]kbps)	B67109411.C67191861	Sum	
VS_AbRel_PS_BE_RB_144_384_IurL	ACCUMULATION	INTEGER	Number of released PS BE service RABs triggered by abnormal cause on Iur interface	B67109411.C67191864	Sum	

			which belongs to the DRNC (Max DL bit rate in (144,384]kbps)			
VS_AbRel_PS_BE_RB_32_64_IurL	ACCUMULATION	INTEGER	Number of released PS BE service RABs triggered by abnormal cause on Iur interface which belongs to the DRNC (Max DL bit rate in (32,64]kbps)	B67109411.C67191862	Sum	
VS_AbRel_PS_BE_RB_64_144_IurL	ACCUMULATION	INTEGER	Number of released PS BE service RABs triggered by abnormal cause on Iur interface which belongs to the DRNC (Max DL bit rate in (64,144]kbps)	B67109411.C67191863	Sum	
VS_AbRel_PS_CCH_IurL	ACCUMULATION	INTEGER	Number of released PS RABs triggered by abnormal cause on Iur interface which belongs to the DRNC (the PS service is on CCH)	B67109411.C67191865	Sum	
VS_IUR_AttComTraChResDRNC	ACCUMULATION	INTEGER	Number of COMMON	B67109412.C67179119	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			TRANSPORT CHANNEL RESOURCES REQUEST messages sent from DRNC on the Iur interface.			
VS_IUR_AttRelCo TrChResDRNC	ACCUMULA TION	INTEG ER	Number of COMMON TRANSPORT CHANNEL RELEASE REQUEST messages received by a DRNC on the Iur interface.	B67109412.C6 7179122	Sum	
VS_IUR_FailCTCR DRNC_NotSupp	ACCUMULA TION	INTEG ER	Number of COMMON TRANSPORT CHANNEL RESOURCES FAILURE messages with cause Transport Resource Unavailable sent from a DRNC to the SRNC on the Iur interface.	B67109412.C6 7179121	Sum	
VS_IUR_SuccCom TraChResDRNC	ACCUMULA TION	INTEG ER	Number of COMMON TRANSPORT CHANNEL RESOURCES RESPONSE messages sent from a DRNC on the Iur interface.	B67109412.C6 7179120	Sum	

VS_NorRel_CS_A MR_IurL	ACCUMULA TION	INTEG ER	Numbers of CS AMR service RABs Released due to Normal Causes in the best cell which belongs to the DRNC	B67109411.C6 7191858	Sum	
VS_NorRel_CS_A MR_UL_Iur	ACCUMULA TION	INTEG ER	Number of released CS AMR RABs triggered by ue signalling connection release indication on Iur interface cell which belongs to the DRNC	B67109411.C6 7191851	Sum	
VS_NorRel_CSCon v_64_Iur	ACCUMULA TION	INTEG ER	Numbers of CS conversational service RABs Released due to Normal Causes in the best cell which belongs to the DRNC (Max DL bit rate = 64 kbps)	B67109411.C6 7191845	Sum	
VS_NorRel_CSCon v_64_UL_Iur	ACCUMULA TION	INTEG ER	Number of released CS conversational service RABs triggered ue signalling connection release indication on	B67109411.C6 7191852	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Iur interface cell which belongs to the DRNC (Max DL bit rate = 64 kbps)			
VS_NorRel_PS_BE_0_32_Iur	ACCUMULATION	INTEGER	Numbers of PS BE service RABs Released due to Normal Causes in the best cell which belongs to the DRNC (Max DL bit rate in [0,32]kbps)	B67109411.C6 7191846	Sum	
VS_NorRel_PS_BE_0_32_UL_Iur	ACCUMULATION	INTEGER	Number of released PS BE service RABs triggered ue signalling connection release indication on Iur interface which belongs to the DRNC (Max DL bit rate in [0,32]kbps)	B67109411.C6 7191853	Sum	
VS_NorRel_PS_BE_144_384_Iur	ACCUMULATION	INTEGER	Numbers of PS BE service RABs Released due to Normal Causes in the best cell which belongs to the DRNC(Max DL bit rate in (144,384]kbps)	B67109411.C6 7191849	Sum	
VS_NorRel_PS_BE_144_384_UL_Iur	ACCUMULATION	INTEGER	Number of released PS BE service RABs	B67109411.C6 7191856	Sum	

			triggered ue signalling connection release indication on Iur interface which belongs to the DRNC (Max DL bit rate in (144,384]kbps)			
VS_NorRel_PS_BE_32_64_Iur	ACCUMULATION	INTEGER	Numbers of PS BE service RABs Released due to Normal Causes in the best cell which belongs to the DRNC (Max DL bit rate in (32,64]kbps)	B67109411.C6 7191847	Sum	
VS_NorRel_PS_BE_32_64_UL_Iur	ACCUMULATION	INTEGER	Number of released PS BE service RABs triggered ue signalling connection release indication on Iur interface which belongs to the DRNC (Max DL bit rate in (32,64]kbps)	B67109411.C6 7191854	Sum	
VS_NorRel_PS_BE_64_144_Iur	ACCUMULATION	INTEGER	Numbers of PS BE service RABs Released due to Normal Causes in the	B67109411.C6 7191848	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			best cell which belongs to the DRNC (Max DL bit rate in (64,144]kbps)			
VS_NorRel_PS_BE_64_144_UL_Iur	ACCUMULATION	INTEGER	Number of released PS BE service RABs triggered ue signalling connection release indication on Iur interface which belongs to the DRNC (Max DL bit rate in (64,144]kbps)	B67109411.C67191855	Sum	
VS_NorRel_PS_CCH_IurL	ACCUMULATION	INTEGER	Numbers of PS BE service RABs Released due to Normal Causes in the best cell which belongs to the DRNC (Max DL bit rate in (64,144]kbps)	B67109411.C67191850	Sum	
VS_NorRel_PS_CCH_USRel_IurL	ACCUMULATION	INTEGER	Number of released PS RABs triggered ue signalling connection release indication on Iur interface which belongs to the DRNC (the PS service is on CCH)	B67109411.C67191857	Sum	
VS_SHO_AttrLAdIur_Rx	ACCUMULATION	INTEGER	Number of RLs that DRNC is	B67109412.C67179098	Sum	

			requested to add on the Iur interface.			
VS_SHO_AttRLDeleteIur_Rx	ACCUMULATION	INTEGER	Number of RLs that a DRNC is requested to delete on the Iur interface.	B67109412.C67179096	Sum	
VS_SHO_AttRLReconfIur_Rx	ACCUMULATION	INTEGER	Number of RLs that a DRNC is requested to reconfigure on the Iur interface.	B67109412.C67179105	Sum	
VS_SHO_AttRLSetupIur_Rx	ACCUMULATION	INTEGER	Number of RLs that a DRNC is requested to set up on the Iur interface.	B67109412.C67179089	Sum	
VS_SHO_CancRLReconfIur_Rx	ACCUMULATION	INTEGER	Number of RLs whose synchronized reconfiguration is cancelled by a DRNC on the Iur interface.	B67109412.C67179112	Sum	
VS_SHO_ErrIndIur_Rx	ACCUMULATION	INTEGER	Number of ERROR INDICATION messages received on the Iur interface.	B67109412.C67179009	Sum	
VS_SHO_ErrIndIur_Tx	ACCUMULATION	INTEGER	Number of ERROR INDICATION messages transmitted on the Iur	B67109412.C67179010	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			interface.			
VS_SHO_FailRLA ddIur_CfgUnsTx	ACCUMULA TION	INTEG ER	The numbers of RLs unsuccessfully added by a DRNC on the Iur interface due to different causes. Combining not Supported, Requested Tx Diversity Mode not Supported, Power Level not Supported, Number of DL codes not Supported, Number of UL codes not Supported, CM not Supported	B67109412.C6 7179103	Sum	
VS_SHO_FailRLA ddIur_Cong_Tx	ACCUMULA TION	INTEG ER	The numbers of RLs unsuccessfully added by a DRNC on the Iur interface due to different causes. RL Already Activated, RL Already Allocated, DL Radio Resources not Available, UL Radio Resources not Available, Combining Resources not available, Cell not Available,	B67109412.C6 7179102	Sum	

			Transport Resource Unavailable, Control Processing Overload, Not enough User Plane Processing Resources			
VS_SHO_FailRLAddIur_HW_Tx	ACCUMULATION	INTEGER	The numbers of RLS unsuccessfully added by a DRNC on the Iur interface due to different causes. Hardware Failure	B67109412.C67179101	Sum	
VS_SHO_FailRLAddIur_OM_Tx	ACCUMULATION	INTEGER	The numbers of RLS unsuccessfully added by a DRNC on the Iur interface due to different causes. OM Intervention	B67109412.C67179100	Sum	
VS_SHO_FailRLReconfIur_CfgUTx	ACCUMULATION	INTEGER	The numbers of RLS unsuccessfully reconfigured by a DRNC on the Iur interface due to different causes Requested Configuration not Supported,	B67109412.C67179110	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Number of DL Codes not Supported, Number of UL Codes not Supported, Dedicated Transport Channel Type not Supported, DL Shared Channel Type not Supported, UL Spreading Factor not Supported, DL Spreading Factor not Supported, CM not Supported			
VS_SHO_FailRLR ecfgIur_CongTx	ACCUMULATION	INTEGER	The numbers of RLS unsuccessfully reconfigured by a DRNC on the Iur interface due to different causes DL Radio Resources not Available, UL Radio Resources not Available, Control Processing Overload, Not enough User Plane Processing Resources, UL Scrambling Code Already in Use	B67109412.C6 7179109	Sum	
VS_SHO_FailRLR	ACCUMULATION	INTEGER	The numbers	B67109412.C6	Sum	

ecfgIur_HW_Tx	TION	ER	of RLs unsuccessfully reconfigured by a DRNC on the Iur interface due to different causes Hardware Failure	7179108		
VS_SHO_FailRLR ecfgIur_OM_Tx	ACCUMULATION	INTEGER	The numbers of RLs unsuccessfully reconfigured by a DRNC on the Iur interface due to different causes OM Intervention	B67109412.C6 7179107	Sum	
VS_SHO_FailRLSe tupIur_CfgUTx	ACCUMULATION	INTEGER	The above items provide the numbers of RLs unsuccessfully established by a DRNC on the Iur interface due to different causes. Combining not Supported, Requested Configuration not Supported, Requested Tx Diversity Mode not Supported, Power Level not Supported, Number of DL	B67109412.C6 7179094	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			codes not Supported, Number of UL codes not Supported, Dedicated Transport Channel Type not Supported, DL Shared Channel Type not Supported, UL Spreading Factor not Supported, DL Spreading Factor not Supported, CM not Supported			
VS_SHO_FailRLSe tupIur_CongTx	ACCUMULA TION	INTEG ER	The above items provide the numbers of RLs unsuccessfully established by a DRNC on the Iur interface due to different causes.	B67109412.C6 7179093	Sum	
VS_SHO_FailRLSe tupIur_HW_Tx	ACCUMULA TION	INTEG ER	The above items provide the numbers of RLs unsuccessfully established by a DRNC on the Iur interface due to different causes. Hardware Failure	B67109412.C6 7179092	Sum	
VS_SHO_RLFail_ CfgUnsup_Tx	ACCUMULA TION	INTEG ER	The numbers of failed RLs for the DRNC	B67109412.C6 7179117	Sum	

			on the Iur interface due to different causes. Requested Configuration not Supported, Number of DL codes not Supported, Number of UL codes not Supported, Transport Channel Type not Supported, DL Shared Channel Type not Supported, UL Spreading Factor not Supported, DL Spreading Factor not Supported, CM not Supported			
VS_SHO_RLFail_HW_Tx	ACCUMULATION	INTEGER	The numbers of failed RLs for the DRNC on the Iur interface due to different causes. Hardware Failure	B67109412.C67179115	Sum	
VS_SHO_RLFail_OM_Tx	ACCUMULATION	INTEGER	The numbers of failed RLs for the DRNC on the Iur interface due to	B67109412.C67179114	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			different causes. OM Intervention			
VS_SHO_RLFail_Other_Tx	ACCUMULATION	INTEGER	The numbers of failed RLs for the DRNC on the Iur interface due to different causes. Other Cause	B67109412.C67190048	Sum	
VS_SHO_RLFail_SyncFail_Tx	ACCUMULATION	INTEGER	The numbers of failed RLs for the DRNC on the Iur interface due to different causes. Synchronization Failure	B67109412.C67179116	Sum	
VS_SHO_RLFail_Tx	ACCUMULATION	INTEGER	Number of failed RLs for a DRNC on the Iur interface.	B67109412.C67179113	Sum	
VS_SHO_RLRestore_Tx	ACCUMULATION	INTEGER	Number of RLs restored by a DRNC on the Iur interface.	B67109412.C67179118	Sum	
VS_SHO_SuccRLAddIur_Tx	ACCUMULATION	INTEGER	Number of RLs successfully added by a DRNC on the Iur interface.	B67109412.C67179099	Sum	
VS_SHO_SuccRLDelIur_Tx	ACCUMULATION	INTEGER	Number of RLs successfully deleted by a DRNC on the Iur interface.	B67109412.C67179097	Sum	
VS_SHO_SuccRLRecfgIur_Tx	ACCUMULATION	INTEGER	Number of RLs successfully reconfigured	B67109412.C67179106	Sum	

			by a DRNC on the Iur interface.			
VS_SHO_SuccRLSetupIur_Tx	ACCUMULATION	INTEGER	Number of RLS successfully established by a DRNC on the Iur interface	B67109412.C67179090	Sum	

7.23.3 Iur.Huawei.UMTS.SCCP_Connection_Iur

SCCP Connections over Iur.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IUR_SCCP_Rx_Con_Req	ACCUMULATION	INTEGER	Total Number of SCCP connection request of Iur interface received from remote RNC	B67109536.C67195055	Sum	
VS_IUR_SCCP_Rx_Con_Success	ACCUMULATION	INTEGER	Total Number of SCCP connection successful establishments of Iur interface received from remote RNC	B67109536.C67195056	Sum	
VS_IUR_SCCP_Tx_Con_Req	ACCUMULATION	INTEGER	Total Number of SCCP connection request of Iur interface sent by local RNC	B67109536.C67195053	Sum	
VS_IUR_SCC	ACCUMULATION	INTEGER	Total Number of	B67109536.C6719	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

P_Tx_Con_Succ	TION	ER	SCCP connection successful establishments of Iur interface sent by local RNC	5054		
---------------	------	----	--	------	--	--

7.23.4 Iur.Huawei.UMTS.SRNC_CallDrop_DiffServices

RAB releases over Iur

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_ABNORM_REL_CS_STR_IURLINK	ACCUMULATION	INTEGER	Number of RABs that are specific for CS streaming services and released for abnormal causes over Iur in the best cell which is under the DRNC	B67109411.C67194997	Sum	
VS_ABNORM_REL_PS_CONV_IURLINK	ACCUMULATION	INTEGER	Number of RABs that are specific for PS conversational services and released for abnormal causes over Iur in the best cell which is under the DRNC	B67109411.C67194998	Sum	
VS_ABNORM_REL_PS_EDCH_IURLINK	ACCUMULATION	INTEGER	Number of RABs that are specific for PS services carried on the e-DCH and are released for abnormal	B67109411.C67195001	Sum	

			causes over Iur in the best cell which is under the DRNC			
VS_ABNORM_REL_PS_HS_IURLINK	ACCUMULATION	INTEGER	Number of RABs that are specific for PS services carried on the HS-DSCH and are released for abnormal causes over Iur in the best cell which is under the DRNC	B67109411.C67195000	Sum	
VS_ABNORM_REL_PS_STR_IURLINK	ACCUMULATION	INTEGER	Number of RABs that are specific for PS streaming services and released for abnormal causes over Iur in the best cell which is under the DRNC	B67109411.C67194999	Sum	
VS_NORM_REL_CS_STR_IURLINK	ACCUMULATION	INTEGER	Number of RABs that are specific for CS streaming services and normally released over Iur in the best cell which is under the DRNC	B67109411.C67194987	Sum	
VS_NORM_REL_CS_STR_IURLINK	ACCUMULATION	INTEGER	Number of	B67109411.C6719	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

L_CS_STR_UL SIGREL_IURL INK	TION	ER	RABs that are specific for CS streaming services and released over Iur with the cause of "release-due-to-UE-generated-signalling-connection-release" in the best cell which is under the DRNC.	4992		
VS_NORM_RE L_PS_CONV_I URLINK	ACCUMULA TION	INTEG ER	Number of RABs that are specific for PS conversational services and normally released over Iur in the best cell which is under the DRNC	B67109411.C6719 4988	Sum	
VS_NORM_RE L_PS_CONV_ ULSIGREL_IU RLINK	ACCUMULA TION	INTEG ER	Number of RABs that are specific for PS conversational services and released over Iur with the cause of "release-due-to-UE-generated-signalling-connection-release" in the best cell which is under the DRNC	B67109411.C6719 4993	Sum	
VS_NORM_RE L_PS_EDCH_I	ACCUMULA TION	INTEG ER	Number of RABs that are	B67109411.C6719 4991	Sum	

URLINK			specific for PS services carried on the e-DCH and are normally released over Iur in the best cell which is under the DRNC			
VS_NORM_RELEASE_PSEDCH_ULSIGREL_IURLINK	ACCUMULATION	INTEGER	Number of RABs that are specific for PS services carried on the e-DCH and are released over Iur with the cause of "release-due-to-UE-generated-signalling-connection-release" in the best cell which is under the DRNC	B67109411.C67194996	Sum	
VS_NORM_RELEASE_PSHS_IURLINK	ACCUMULATION	INTEGER	Number of RABs that are specific for PS services carried on the HS-DSCH and are normally released over Iur in the best cell which is under the DRNC	B67109411.C67194990	Sum	
VS_NORM_RELEASE_PSHS_ULS	ACCUMULATION	INTEGER	Number of RABs that are	B67109411.C67194995	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

IGREL_IURLINK			specific for PS services carried on the HS-DSCH and are released over Iur with the cause of "release-due-to-UE-generated-signalling-connection-release" in the best cell which is under the DRNC			
VS_NORM_REL_PS_STR_IURLINK	ACCUMULATION	INTEGER	Number of RABs that are specific for PS streaming services and normally released over Iur in the best cell which is under the DRNC	B67109411.C67194989	Sum	
VS_NORM_REL_PS_STR_ULSIGREL_IURLINK	ACCUMULATION	INTEGER	Number of RABs that are specific for PS streaming services and released over Iur with the cause of "release-due-to-UE-generated-signalling-connection-release" in the best cell which is under the DRNC	B67109411.C67194994	Sum	

7.23.5 Iur.Huawei.UMTS.SRNC

Serving Radio Network Controller data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IUR_AttComTraChResSRNC	ACCUMULATION	INTEGER	Number of COMMON TRANSPORT CHANNEL RESOURCES REQUEST messages sent from SRNC on the Iur interface.	B67109411.C67179057	Sum	
VS_IUR_AttRelCoTrChResSRNC	ACCUMULATION	INTEGER	Number of COMMON TRANSPORT CHANNEL RESOURCES RELEASE REQUEST messages sent from SRNC on the Iur interface.	B67109411.C67179060	Sum	
VS_IUR_FailCTCRSRNC_NotSupp	ACCUMULATION	INTEGER	Number of COMMON TRANSPORT CHANNEL RESOURCES FAILURE messages with cause Transport Resource Unavailable received by SRNC on the	B67109411.C67179059	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Iur interface.			
VS_Iur_SHO_Att	ACCUMULATION	INTEGER	Number of soft handovers initiated from SRNC on Iur Interface.	B67109411.C67179061	Sum	
VS_Iur_SHO_Succ	ACCUMULATION	INTEGER	Number of successful soft handovers initiated from SRNC on Iur Interface.	B67109411.C67179062	Sum	
VS_IUR_SuccComTraChResSRNC	ACCUMULATION	INTEGER	Number of COMMON TRANSPORT CHANNEL RESOURCES RESPONSE messages received by SRNC on the Iur interface.	B67109411.C67179058	Sum	
VS_SHO_AttRLAddIur_Tx	ACCUMULATION	INTEGER	Number of RLs that the SRNC requests to add on the Iur interface.	B67109411.C67179035	Sum	
VS_SHO_AttRLReconfIur_Tx	ACCUMULATION	INTEGER	Number of RLs requested by SRNC to reconfigure on the Iur interface.	B67109411.C67179042	Sum	
VS_SHO_AttRLSetupIur_Tx	ACCUMULATION	INTEGER	Number of RLs that the SRNC requests to set up on the Iur interface.	B67109411.C67179025	Sum	
VS_SHO_CancelRLReconfIur_Tx	ACCUMULATION	INTEGER	Number of RLs whose synchronized	B67109411.C67179050	Sum	

			reconfiguration is cancelled by the SRNC on the Iur interface.			
VS_SHO_FaiRLA ddIur_CfgUnsRx	ACCUMULA TION	INTEG ER	The numbers of RLs unsuccessfully added by the SRNC on the Iur interface due to Combining not Supported, Requested Tx Diversity Mode not Supported, Power Level not Supported, Number of DL codes not Supported, Number of UL codes not Supported, CM not Supported	B67109411.C67 179040	Sum	
VS_SHO_FaiRLA ddIur_Cong_Rx	ACCUMULA TION	INTEG ER	The numbers of RLs unsuccessfully added by the SRNC on the Iur interface due to RL Already Activated, RL Already Allocated, DL Radio Resources not	B67109411.C67 179039	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Available, UL Radio Resources not Available, Combining Resources not available, Cell not Available, Transport Resource Unavailable, Control Processing Overload, Not enough User Plane Processing Resources			
VS_SHO_FailRLA ddIur_HW_Rx	ACCUMULA TION	INTEG ER	The numbers of RLs unsuccessfully added by the SRNC on the Iur interface due to Hardware Failure	B67109411.C67 179038	Sum	
VS_SHO_FailRLA ddIur_OM_Rx	ACCUMULA TION	INTEG ER	The numbers of RLs unsuccessfully added by the SRNC on the Iur interface due to OM Intervention	B67109411.C67 179037	Sum	
VS_SHO_FailRLA ddIur_TransCong_ Rx	ACCUMULA TION	INTEG ER	Number of RLs unsuccessfully added by SRNC on Iur interface for different causes (transport	B67109411.C67 192578	Sum	

			resource unavailable)			
VS_SHO_FailRLR ecfgIur_CfgURx	ACCUMULA TION	INTEG ER	The numbers of RLS unsuccessfully reconfigured on the SRNC Iur interface due to Requested Configuration not Supported, Number of DL Codes not Supported, Number of UL Codes not Supported, Dedicated Transport Channel Type not Supported, DL Shared Channel Type not Supported, UL Spreading Factor not Supported, DL Spreading Factor Not Supported, CM not Supported	B67109411.C67 179047	Sum	
VS_SHO_FailRLR ecfgIur_CongRx	ACCUMULA TION	INTEG ER	The numbers of RLS unsuccessfully reconfigured on the SRNC Iur interface due to DL Radio	B67109411.C67 179046	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Resources not Available, UL Radio Resources not Available, Control Processing Overload, Not enough User Plane Processing Resources, UL Scrambling Code Already in Use			
VS_SHO_FailRLR ecfgIur_HW_Rx	ACCUMULATION	INTEGER	The numbers of RLS unsuccessfully reconfigured on the SRNC Iur interface due to DL Hardware Failure	B67109411.C67 179045	Sum	
VS_SHO_FailRLR ecfgIur_NRplyR	ACCUMULATION	INTEGER	Number of RLS unsuccessfully deleted by the SRNC on the Iur interface.	B67109411.C67 179048	Sum	
VS_SHO_FailRLR ecfgIur_OM_Rx	ACCUMULATION	INTEGER	The numbers of RLS unsuccessfully reconfigured on the SRNC Iur interface due to DL OM Intervention	B67109411.C67 179044	Sum	
VS_SHO_FailRLSe tupIur_CfgURx	ACCUMULATION	INTEGER	The numbers of RLS unsuccessfully established by the SRNC on	B67109411.C67 179030	Sum	

			the Iur interface due to Combining not Supported, Requested Configuration not Supported, Requested Tx Diversity Mode not Supported, Power Level not Supported, Number of DL codes not Supported, Number of UL codes not Supported, Dedicated Transport Channel Type not Supported, DL Shared Channel Type not Supported, UL Spreading Factor not Supported, DL Spreading Factor not Supported, CM not Supported			
VS_SHO_FailRLSetupIur_CongRx	ACCUMULATION	INTEGER	The numbers of RLs unsuccessfully established by the SRNC on the Iur interface due to RL Already	B67109411.C67179029	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Activated, RL Already Allocated, DL Radio Resources not Available, UL Radio Resources not Available, Combining Resources not available, Cell not Available, Transport Resource Unavailable, Control Processing Overload, Not enough User Plane Processing Resources, UL Scrambling Code Already in Use			
VS_SHO_FailRLSe tupIur_HW_Rx	ACCUMULA TION	INTEG ER	The numbers of RLs unsuccessfully established by the SRNC on the Iur interface due to Hardware Failure	B67109411.C67 179028	Sum	
VS_SHO_FailRLSe tupIur_OM_Rx	ACCUMULA TION	INTEG ER	The numbers of RLs unsuccessfully established by the SRNC on the Iur interface due to OM intervention	B67109411.C67 179027	Sum	

VS_SHO_FailRLSetupIur_TransCongRx	ACCUMULATION	INTEGER	Number of RLs unsuccessfully established by SRNC on Iur interface for different causes (transport resource unavailable)	B67109411.C67192577	Sum	
VS_SHO_RLFailIur_CfgUnsup_Rx	ACCUMULATION	INTEGER	The numbers of failed RLs for the SRNC on the Iur interface due to Requested Configuration not Supported, Number of DL codes not Supported, Number of UL codes not Supported, Transport Channel Type not Supported, DL Shared Channel Type not Supported, UL Spreading Factor not Supported, DL Spreading Factor not Supported, CM not Supported	B67109411.C67179055	Sum	
VS_SHO_RLFailIur_HW_Rx	ACCUMULATION	INTEGER	The numbers of failed RLs	B67109411.C67179053	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			for the SRNC on the Iur interface due to Hardware Resources			
VS_SHO_RLFallIur_OM_Rx	ACCUMULATION	INTEGER	The numbers of failed RLs for the SRNC on the Iur interface due to OM intervention	B67109411.C67179052	Sum	
VS_SHO_RLFallIur_Rx	ACCUMULATION	INTEGER	Number of failed RLs for the SRNC on the Iur interface.	B67109411.C67179051	Sum	
VS_SHO_RLFallIur_SyncFail_Rx	ACCUMULATION	INTEGER	The numbers of failed RLs for the SRNC on the Iur interface due to Requested Configuration not Supported, Number of DL codes not Supported, Number of UL codes not Supported, Transport Channel Type not Supported, DL Shared Channel Type not Supported, UL Spreading Factor not Supported, DL Spreading Factor not Supported, CM not Supported	B67109411.C67179054	Sum	

VS_SHO_RLRestoreIur_Rx	ACCUMULATION	INTEGER	Number of RLs restored by the SRNC on the Iur interface.	B67109411.C67179056	Sum	
VS_SHO_SuccRLAddIur_Rx	ACCUMULATION	INTEGER	Number of RLs successfully added by SRNC on the Iur interface.	B67109411.C67179036	Sum	
VS_SHO_SuccRLRecfgIur_Rx	ACCUMULATION	INTEGER	Number of RLs successfully reconfigured by the SRNC.	B67109411.C67179043	Sum	
VS_SHO_SuccRLSetupIur_Rx	ACCUMULATION	INTEGER	Number of RLs successfully established by SRNC on the Iur interface.	B67109411.C67179026	Sum	

7.23.6 Iur.Huawei.UMTS.Traffic

Traffic data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
Total_VS_MAC_DRNCIurBytesDCH	ACCUMULATION	INT8	Number of MAC PDUs sent and received by a DRNC from the SRNC on the DCH FP over the Iur interface.	{VS_MAC_DRNCIurBytesDCH_Rx} + {VS_MAC_DRNCIurBytesDCH_Tx}	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Total_VS_MAC_SRNCIurBytesCSCConv	ACCUMULATION	INT 8	Number of MAC PDUs sent and received from the SRNC to the MAC-d on the CS conversational service bearer DCH FP over the Iur interface.	{VS_MAC_SRNCIurBytesCSCConv_Rx} + {VS_MAC_SRNCIurBytesCSCConv_Tx}	Sum	
Total_VS_MAC_SRNCIurBytesCSStr	ACCUMULATION	INT 8	Number of MAC PDUs sent and received from the SRNC to the MAC-d on the CS streaming service bearer DCH FP over the Iur interface.	{VS_MAC_SRNCIurBytesCSStr_Rx} + {VS_MAC_SRNCIurBytesCSStr_Tx}	Sum	
Total_VS_MAC_SRNCIurBytesPSBkg	ACCUMULATION	INT 8	Number of DL MAC PDUs sent and received from the SRNC on the PS background service bearer DCH FP over the Iur interface.	{VS_MAC_SRNCIurBytesPSBkg_Tx} + {VS_MAC_SRNCIurBytesPSBkg_Rx}	Sum	
Total_VS_MAC_SRNCIurBytesPSCConv	ACCUMULATION	INT 8	Number of DL MAC PDUs sent and received from the SRNC on the PS conversational	{VS_MAC_SRNCIurBytesPSCConv_Tx} + {VS_MAC_SRNCIurBytesPSCConv_Rx}	Sum	

			l service bearer DCH FP over the Iur interface.			
Total_VS_MAC_SRNCIurBytesPSInt	ACCUMULATION	INT 8	Number of DL MAC PDUs sent and received from the SRNC on the PS interactive service bearer DCH FP over the Iur interface.	{VS_MAC_SRNCIurBytesPSInt_Tx} + {VS_MAC_SRNCIurBytesPSInt_Rx}	Sum	
Total_VS_MAC_SRNCIurBytesPSStr	ACCUMULATION	INT 8	Number of DL MAC PDUs sent and received from the SRNC on the PS streaming service bearer DCH FP over the Iur interface.	{VS_MAC_SRNCIurBytesPSStr_Tx} + {VS_MAC_SRNCIurBytesPSStr_Rx}	Sum	
Total_VS_MAC_SRNCIurBytesSig	ACCUMULATION	INT 8	Number of DL MAC PDUs sent and received from the SRNC on the signalling bearer DCH FP over the Iur interface.	{VS_MAC_SRNCIurBytesSig_Tx} + {VS_MAC_SRNCIurBytesSig_Rx}	Sum	
VS_MAC_DRNCIurBytesDCH_Rx	ACCUMULATION	INT 8	Number of MAC PDUs received by a	B67109410.C67199506	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			DRNC from the SRNC on the DCH FP over the Iur interface.			
VS_MAC_DRNCIurBytesDCH_Tx	ACCUMULATION	INT 8	Number of MAC PDUs sent from a DRNC to the SRNC on the DCH FP over the Iur interface.	B67109410.C67199505	Sum	
VS_MAC_SRNCIurBytesCSConv_Rx	ACCUMULATION	INT 8	Number of MAC PDUs sent from the SRNC to the MAC-d on the CS conversational service bearer DCH FP over the Iur interface.	B67109410.C67199489	Sum	
VS_MAC_SRNCIurBytesCSConv_Tx	ACCUMULATION	INT 8	Number of DL MAC PDUs sent from the SRNC on the CS conversational service bearer DCH FP over the Iur interface.	B67109410.C67199493	Sum	
VS_MAC_SRNCIurBytesCSStr_Rx	ACCUMULATION	INT 8	Number of MAC PDUs sent from the SRNC to the MAC-d on the CS streaming service bearer	B67109410.C67199490	Sum	

			DCH FP over the Iur interface.			
VS_MAC_SRNCIurBytesCSStr_Tx	ACCUMULATION	INT 8	Number of DL MAC PDUs sent from the SRNC on the CS streaming service bearer DCH FP over the Iur interface.	B67109410.C67199494	Sum	
VS_MAC_SRNCIurBytesPSBkg_Rx	ACCUMULATION	INT 8	Number of UL MAC PDUs sent from the SRNC to the MAC-d on the PS background service bearer DCH FP over the Iur interface.	B67109410.C67199500	Sum	
VS_MAC_SRNCIurBytesPSBkg_Tx	ACCUMULATION	INT 8	Number of DL MAC PDUs sent from the SRNC on the PS background service bearer DCH FP over the Iur interface.	B67109410.C67199504	Sum	
VS_MAC_SRNCIurBytesPSConv_Rx	ACCUMULATION	INT 8	Number of UL MAC PDUs sent	B67109410.C67199497	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			from the SRNC to the MAC-d on the PS conversational service bearer DCH FP over the Iur interface			
VS_MAC_SRNCIurBytesPSConv_Tx	ACCUMULATION	INT 8	Number of DL MAC PDUs sent from the SRNC on the PS conversational service bearer DCH FP over the Iur interface.	B67109410.C67199501	Sum	
VS_MAC_SRNCIurBytesPSInt_Rx	ACCUMULATION	INT 8	Number of UL MAC PDUs sent from the SRNC to the MAC-d on the PS interactive service bearer DCH FP over the Iur interface.	B67109410.C67199499	Sum	
VS_MAC_SRNCIurBytesPSInt_Tx	ACCUMULATION	INT 8	Number of DL MAC PDUs sent from the SRNC on the PS interactive service bearer DCH FP over the Iur interface.	B67109410.C67199503	Sum	
VS_MAC_SRNCI	ACCUMULATION	INT	Number of	B67109410.C67199	Sum	

urBytesPSStr_Rx	TION	8	UL MAC PDUs sent from the SRNC to the MAC-d on the PS streaming service bearer DCH FP over the Iur interface	498		
VS_MAC_SRNCI urBytesPSStr_Tx	ACCUMULA TION	INT 8	Number of DL MAC PDUs sent from the SRNC on the PS streaming service bearer DCH FP over the Iur interface.	B67109410.C67199 502	Sum	
VS_MAC_SRNCI urBytesSig_Rx	ACCUMULA TION	INT 8	Byte number of MAC PDUs sent to the MAC-d from the signalling bearer DCH FP over the Iur interface.	B67109410.C67199 487	Sum	
VS_MAC_SRNCI urBytesSig_Tx	ACCUMULA TION	INT 8	Number of DL MAC PDUs sent from the SRNC on the signalling bearer DCH FP over the Iur interface.	B67109410.C67199 488	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

7.24 Local_Cell Performance Indicators

This section shows the key performance indicators and other counters for the Local_Cell object, divided into the following sub-sections:

- [Local_Cell.Huawei.UMTS.CPC_Measurement](#)
- [Local_Cell.Huawei.UMTS.HSDPA_Code_Utilization](#)
- [Local_Cell.Huawei.UMTS.HSDPA_CQI](#)
- [Local_Cell.Huawei.UMTS.HSDPA_Data_Measurement](#)
- [Local_Cell.Huawei.UMTS.HSDPA_Measurement](#)
- [Local_Cell.Huawei.UMTS.HSDPA_Power_Measurement](#)
- [Local_Cell.Huawei.UMTS.HSDPA_RAB](#)
- [Local_Cell.Huawei.UMTS.HSUPA_Data_Measurement](#)
- [Local_Cell.Huawei.UMTS.HSUPA_Load_Measurement](#)
- [Local_Cell.Huawei.UMTS.HSUPA_Measurement](#)
- [Local_Cell.Huawei.UMTS.HSUPA_Power_Measurement](#)
- [Local_Cell.Huawei.UMTS.Traffic_measurements_Locell](#)

7.24.1 Local_Cell.Huawei.UMTS.CPC_Measurement

CPC measurement

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_CPC_DRXAct_UserNum	INTENSITY	INTEGER	VS CPC DRXAct UserNum	B50331653.C50331751	Average	hulcmdbh, Sum, Minimum, Maximum
VS_CPC_DRXCfg_UserNum	INTENSITY	INTEGER	VS CPC DRXCfg UserNum	B50331653.C50331750	Average	hulcmdbh, Sum, Minimum, Maximum
VS_CPC_DTXAct_UserNum	INTENSITY	INTEGER	VS CPC DTXAct UserNum	B50331653.C50331749	Average	hulcmdbh, Sum, Minimum, Maximum
VS_CPC_DTXCfg_UserNum	INTENSITY	INTEGER	VS CPC DTXCfg	B50331653.C50331748	Average	hulcmdbh, Sum,

			UserNum			Minimum, Maximum
VS_CPC_LesOpCfg_LesModeNum	ACCUMULATION	INTEGER	VS CPC LesOpCfg LesModeNum	B50331653.C50331753	Sum	hulcmdb h
VS_CPC_LesOpCfg_ScheduledNum	ACCUMULATION	INTEGER	VS CPC LesOpCfg ScheduledNum	B50331653.C50331752	Sum	hulcmdb h

7.24.2 Local_Cell.Huawei.UMTS.HSDPA_Code_Utilization

HSDPA code utilization measurement.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_PdschCodeAvail_Max	INTENSITY	FLOAT	VS PdschCodeAvail Max	B50331648.C50341691	Average	hulcmdb h, Sum, Minimum, Maximum
VS_PdschCodeAvail_Mean	INTENSITY	FLOAT	VS PdschCodeAvail Mean	B50331648.C50341690	Average	hulcmdb h, Sum, Minimum, Maximum
VS_PdschCodeUsed_Max	INTENSITY	FLOAT	VS PdschCodeUsed Max	B50331648.C50341689	Average	hulcmdb h, Sum, Minimum, Maximum
VS_PdschCodeU	INTENSITY	FLOAT	VS	B50331648.C5034	Average	hulcmdb

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

sed_Mean	TY	T	PdschCodeUsed Mean	1688		h, Sum, Minimum, Maximum
VS_PdschCodeUtil_Max	INTENSITY	INTEGER	No description.	B50331648.C5034 1652	Constant	hulemdb h, Sum, Minimum, Maximum
VS_PdschCodeUtil_Mean_Data	INTENSITY	INTEGER	No description.	B50331648.C5034 1657	Average	hulemdb h, Sum, Minimum, Maximum
VS_PdschCodeUtil_Mean_User	INTENSITY	INTEGER	No description.	B50331648.C5034 1656	Average	hulemdb h, Sum, Minimum, Maximum
VS_PdschCodeUtil_Mean	INTENSITY	INTEGER	No description.	B50331648.C5034 1651	Average	hulemdb h, Sum, Minimum, Maximum
VS_PdschCodeUtil_Min	INTENSITY	INTEGER	No description.	B50331648.C5034 1653	Minimum	hulemdb h, Sum, Minimum, Maximum
VS_ScchCodeUtil_Max	INTENSITY	INTEGER	No description.	B50331648.C5034 1649	Constant	hulemdb h, Sum, Minimum, Maximum

VS_ScchCodeUtil_Mean_Data	INTENSITY	INTEGER	No description.	B50331648.C50341655	Average	hulcmdb h, Sum, Minimum, Maximum
VS_ScchCodeUtil_Mean_User	INTENSITY	INTEGER	No description.	B50331648.C50341654	Average	hulcmdb h, Sum, Minimum, Maximum
VS_ScchCodeUtil_Mean	INTENSITY	INTEGER	No description.	B50331648.C50341648	Average	hulcmdb h, Sum, Minimum, Maximum
VS_ScchCodeUtil_Min	INTENSITY	INTEGER	No description.	B50331648.C50341650	Minimum	hulcmdb h, Sum, Minimum, Maximum

7.24.3 Local_Cell.Huawei.UMTS.HSDPA_CQI

HSDPA CQI measurement.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_CQI_0	ACCUMULATION	INTEGER	No description.	B50331648.C50331669	Sum	hulcmdb h
VS_CQI_10	ACCUMULATION	INTEGER	No description.	B50331648.C50331679	Sum	hulcmdb h
VS_CQI_11	ACCUMULATION	INTEGER	No description.	B50331648.C50331	Sum	hulcmdb

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

	TION	ER		680		h
VS_CQI_12	ACCUMULATION	INTEGER	No description.	B50331648.C50331681	Sum	hulemdbh
VS_CQI_13	ACCUMULATION	INTEGER	No description.	B50331648.C50331682	Sum	hulemdbh
VS_CQI_14	ACCUMULATION	INTEGER	No description.	B50331648.C50331683	Sum	hulemdbh
VS_CQI_15	ACCUMULATION	INTEGER	No description.	B50331648.C50331684	Sum	hulemdbh
VS_CQI_16	ACCUMULATION	INTEGER	No description.	B50331648.C50331685	Sum	hulemdbh
VS_CQI_17	ACCUMULATION	INTEGER	No description.	B50331648.C50331686	Sum	hulemdbh
VS_CQI_18	ACCUMULATION	INTEGER	No description.	B50331648.C50331687	Sum	hulemdbh
VS_CQI_19	ACCUMULATION	INTEGER	No description.	B50331648.C50331688	Sum	hulemdbh
VS_CQI_1	ACCUMULATION	INTEGER	No description.	B50331648.C50331670	Sum	hulemdbh
VS_CQI_20	ACCUMULATION	INTEGER	No description.	B50331648.C50331689	Sum	hulemdbh
VS_CQI_21	ACCUMULATION	INTEGER	No description.	B50331648.C50331690	Sum	hulemdbh
VS_CQI_22	ACCUMULATION	INTEGER	No description.	B50331648.C50331691	Sum	hulemdbh
VS_CQI_23	ACCUMULATION	INTEGER	No description.	B50331648.C50331692	Sum	hulemdbh
VS_CQI_24	ACCUMULATION	INTEGER	No description.	B50331648.C50331693	Sum	hulemdbh
VS_CQI_25	ACCUMULATION	INTEGER	No description.	B50331648.C50331694	Sum	hulemdbh
VS_CQI_26	ACCUMULATION	INTEGER	No description.	B50331648.C50331695	Sum	hulemdbh
VS_CQI_27	ACCUMULATION	INTEGER	No description.	B50331648.C50331696	Sum	hulemdbh

VS_CQI_28	ACCUMULATION	INTEGER	No description.	B50331648.C50331697	Sum	hulemdbh
VS_CQI_29	ACCUMULATION	INTEGER	No description.	B50331648.C50331698	Sum	hulemdbh
VS_CQI_2	ACCUMULATION	INTEGER	No description.	B50331648.C50331671	Sum	hulemdbh
VS_CQI_30	ACCUMULATION	INTEGER	No description.	B50331648.C50331699	Sum	hulemdbh
VS_CQI_3	ACCUMULATION	INTEGER	No description.	B50331648.C50331672	Sum	hulemdbh
VS_CQI_4	ACCUMULATION	INTEGER	No description.	B50331648.C50331673	Sum	hulemdbh
VS_CQI_5	ACCUMULATION	INTEGER	No description.	B50331648.C50331674	Sum	hulemdbh
VS_CQI_6	ACCUMULATION	INTEGER	No description.	B50331648.C50331675	Sum	hulemdbh
VS_CQI_7	ACCUMULATION	INTEGER	No description.	B50331648.C50331676	Sum	hulemdbh
VS_CQI_8	ACCUMULATION	INTEGER	No description.	B50331648.C50331677	Sum	hulemdbh
VS_CQI_9	ACCUMULATION	INTEGER	No description.	B50331648.C50331678	Sum	hulemdbh

7.24.4 Local_Cell.Huawei.UMTS.HSDPA_Data_Measurement

HSDPA data measurement.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_DataDiscardRatio_Max	INTENSITY	INTEGER	No description.	B50331648.C50341686	Constant	hulemdbh, Sum, Minimum,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						Maximum
VS_DataDiscardRatio_Mean	INTENSITY	INTEGER	No description.	B50331648.C50341685	Average	hulemdbh, Sum, Minimum, Maximum
VS_DataDiscardRatio_Min	INTENSITY	INTEGER	No description.	B50331648.C50341687	Minimum	hulemdbh, Sum, Minimum, Maximum
VS_DataOutput_Max	INTENSITY	INTEGER	No description.	B50331648.C50341669	Constant	hulemdbh, Sum, Minimum, Maximum
VS_DataOutput_Mean	INTENSITY	INTEGER	No description.	B50331648.C50341668	Average	hulemdbh, Sum, Minimum, Maximum
VS_DataOutput_Min	INTENSITY	INTEGER	No description.	B50331648.C50341670	Minimum	hulemdbh, Sum, Minimum, Maximum
VS_DataOutput_RabData	INTENSITY	INTEGER	No description.	B50331648.C50341674	Average	hulemdbh, Sum, Minimum, Maximum
VS_DataOutput_Rab	INTENSITY	INTEGER	No description.	B50331648.C50341673	Average	hulemdbh, Sum, Minimum

						m, Maximum
VS_DataOutput_UserData	INTENSITY	INTEGER	No description.	B50331648.C50341672	Average	hulcmdb h, Sum, Minimum, Maximum
VS_DataOutput_User	INTENSITY	INTEGER	No description.	B50331648.C50341671	Average	hulcmdb h, Sum, Minimum, Maximum

7.24.5 Local_Cell.Huawei.UMTS.HSDPA_Measurement

Local cell HSDPA measurement.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_64QAMCfg_ActedNum	ACCUMULATION	INTEGER	VS 64QAMCfg ActedNum	B50331648.C50331709	Sum	hulcmdb h
VS_64QAMCfg_ScheduledNum	ACCUMULATION	INTEGER	VS 64QAMCfg ScheduledNum	B50331648.C50331710	Sum	hulcmdb h
VS_AckFirst	ACCUMULATION	INTEGER	No description.	B50331648.C50331657	Sum	hulcmdb h
VS_AckRemain	ACCUMULATION	INTEGER	No description.	B50331648.C50331668	Sum	hulcmdb h
VS_AckRetrans_10	ACCUMULATION	INTEGER	No description.	B50331648.C50331667	Sum	hulcmdb h
VS_AckRetrans_1	ACCUMULATION	INTEGER	No description.	B50331648.C50331658	Sum	hulcmdb h
VS_AckRetrans	ACCUMULATION	INTEGER	No description.	B50331648.C503	Sum	hulcmdb

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

_2	TION	ER		31659		h
VS_AckRetrans_3	ACCUMULATION	INTEGER	No description.	B50331648.C50331660	Sum	hulemdbh
VS_AckRetrans_4	ACCUMULATION	INTEGER	No description.	B50331648.C50331661	Sum	hulemdbh
VS_AckRetrans_5	ACCUMULATION	INTEGER	No description.	B50331648.C50331662	Sum	hulemdbh
VS_AckRetrans_6	ACCUMULATION	INTEGER	No description.	B50331648.C50331663	Sum	hulemdbh
VS_AckRetrans_7	ACCUMULATION	INTEGER	No description.	B50331648.C50331664	Sum	hulemdbh
VS_AckRetrans_8	ACCUMULATION	INTEGER	No description.	B50331648.C50331665	Sum	hulemdbh
VS_AckRetrans_9	ACCUMULATION	INTEGER	No description.	B50331648.C50331666	Sum	hulemdbh
VS_AckTotal	ACCUMULATION	INTEGER	No description.	B50331648.C50331654	Sum	hulemdbh
VS_DataTtiRatio_Mean	INTENSITY	INTEGER	No description.	B50331648.C50341659	Average	hulemdbh, Sum, Minimum, Maximum
VS_DtxTotal	ACCUMULATION	INTEGER	No description.	B50331648.C50331656	Sum	hulemdbh
VS_MIMOCfg_ActedNum	ACCUMULATION	INTEGER	VS MIMOCfg ActedNum	B50331648.C50331711	Sum	hulemdbh
VS_MIMOCfg_ScheduledNum	ACCUMULATION	INTEGER	VS MIMOCfg ScheduledNum	B50331648.C50331712	Sum	hulemdbh
VS_NackTotal	ACCUMULATION	INTEGER	No description.	B50331648.C50331655	Sum	hulemdbh
VS_UserTtiRatio_Mean	INTENSITY	INTEGER	No description.	B50331648.C50341658	Average	hulemdbh, Sum, Minimum, Maximum

7.24.6 Local_Cell.Huawei.UMTS.HSDPA_Power_Measurement

HSDPA power measurement.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_PdschPwrRatio_Data	INTENSITY	INTEGER	No description.	B50331648.C50341684	Average	hulcmdbh, Sum, Minimum, Maximum
VS_PdschPwrRatio_Max	INTENSITY	INTEGER	No description.	B50331648.C50341679	Constant	hulcmdbh, Sum, Minimum, Maximum
VS_PdschPwrRatio_Mean	INTENSITY	INTEGER	No description.	B50331648.C50341678	Average	hulcmdbh, Sum, Minimum, Maximum
VS_PdschPwrRatio_Min	INTENSITY	INTEGER	No description.	B50331648.C50341680	Minimum	hulcmdbh, Sum, Minimum, Maximum
VS_PdschPwrRatio_User	INTENSITY	INTEGER	No description.	B50331648.C50341682	Average	hulcmdbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_ScchPwrRatio_Max	INTENSITY	INTEGER	No description.	B50331648.C50341676	Constant	hulcmdb h, Sum, Minimum, Maximum
VS_ScchPwrRatio_Mean	INTENSITY	INTEGER	No description.	B50331648.C50341675	Average	hulcmdb h, Sum, Minimum, Maximum
VS_ScchPwrRatio_Min	INTENSITY	INTEGER	No description.	B50331648.C50341677	Minimum	hulcmdb h, Sum, Minimum, Maximum
VS_ScchPwrRatio_UserData	INTENSITY	INTEGER	No description.	B50331648.C50341683	Average	hulcmdb h, Sum, Minimum, Maximum
VS_ScchPwrRatio_User	INTENSITY	INTEGER	No description.	B50331648.C50341681	Average	hulcmdb h, Sum, Minimum, Maximum

7.24.7 Local_Cell.Huawei.UMTS.HSDPA_RAB

HSDPA RAB data.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_DataRabNum_Max	INTENSITY	INTEGER	No description.	B50331648.C50341664	Constant	hulcmdb h, Sum, Minimum,

						Maximum
VS_DataRabNum_Mean	INTENSITY	INTEGER	No description.	B50331648.C50341663	Average	hulcmdb h, Sum, Minimum, Maximum
VS_DataRabNum_Min	INTENSITY	INTEGER	No description.	B50331648.C50341665	Minimum	hulcmdb h, Sum, Minimum, Maximum
VS_RabNum_Max	INTENSITY	INTEGER	No description.	B50331648.C50341661	Constant	hulcmdb h, Sum, Minimum, Maximum
VS_RabNum_Mean	INTENSITY	INTEGER	No description.	B50331648.C50341660	Average	hulcmdb h, Sum, Minimum, Maximum
VS_RabNum_Min	INTENSITY	INTEGER	No description.	B50331648.C50341662	Minimum	hulcmdb h, Sum, Minimum, Maximum
VS_RabNumAvg_UserData	INTENSITY	INTEGER	No description.	B50331648.C50341667	Average	hulcmdb h, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RabNumAve_User	INTENSITY	INTEGER	No description.	B50331648.C50341666	Average	hulcmdb h, Sum, Minimum, Maximum
-------------------	-----------	---------	-----------------	---------------------	---------	----------------------------------

7.24.8 Local_Cell.Huawei.UMTS.HSUPA_Data_Measurement

HSUPA data measurement.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_HSUPA_DataTtiNum	ACCUMULATION	INTEGER	No description.	B50331651.C50331879	Sum	hulcmdb h
VS_HSUPA_DataUserNum_Max	INTENSITY	INTEGER	No description.	B50331651.C50341851	Constant	hulcmdb h, Sum, Minimum, Maximum
VS_HSUPA_DataUserNum_Mean	INTENSITY	INTEGER	No description.	B50331651.C50341850	Average	hulcmdb h, Sum, Minimum, Maximum
VS_HSUPA_MeanBitRate_WithData	INTENSITY	INTEGER	Average Throughput of HSUPA MAC-E; (Number of received MAC-D PDU bits) / (Sampling times of data transmission x Sampling period)	B50331651.C50342553	Average	hulcmdb h, Sum, Minimum, Maximum
VS_HSUPA_MeanBitRate	INTENSITY	INTEGER	Average Throughput of HSUPA MAC-	B50331651.C50342552	Average	hulcmdb h, Sum, Minimum

			E; (Number of received MAC-D PDU bits) / (Sampling times x Sampling period)			m, Maximum
VS_HSUPA_Thruput	ACCUMULATION	INTEGER	Number of received MAC-D PDU bits	B50331651.C50332551	Sum	hulcmdbh

7.24.9 Local_Cell.Huawei.UMTS.HSUPA_Load_Measurement

HSUPA load measurement.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_HSUPA_LoadOutput_0	ACCUMULATION	INTEGER	No description.	B50331651.C50331850	Sum	hulcmdbh
VS_HSUPA_LoadOutput_10	ACCUMULATION	INTEGER	No description.	B50331651.C50331860	Sum	hulcmdbh
VS_HSUPA_LoadOutput_11	ACCUMULATION	INTEGER	No description.	B50331651.C50331861	Sum	hulcmdbh
VS_HSUPA_LoadOutput_12	ACCUMULATION	INTEGER	No description.	B50331651.C50331862	Sum	hulcmdbh
VS_HSUPA_LoadOutput_13	ACCUMULATION	INTEGER	No description.	B50331651.C50331863	Sum	hulcmdbh
VS_HSUPA_LoadOutput_14	ACCUMULATION	INTEGER	No description.	B50331651.C50331864	Sum	hulcmdbh
VS_HSUPA_LoadOutput_15	ACCUMULATION	INTEGER	No description.	B50331651.C50331865	Sum	hulcmdbh
VS_HSUPA_LoadOutput_16	ACCUMULATION	INTEGER	No description.	B50331651.C50331866	Sum	hulcmdbh
VS_HSUPA_Load	ACCUMULATION	INTEGER	No description.	B50331651.C5033	Sum	hulcmdbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

oadOutput_17	TION	ER		1867		h
VS_HSUPA_L oadOutput_18	ACCUMULA TION	INTEG ER	No description.	B50331651.C5033 1868	Sum	hulemdb h
VS_HSUPA_L oadOutput_19	ACCUMULA TION	INTEG ER	No description.	B50331651.C5033 1869	Sum	hulemdb h
VS_HSUPA_L oadOutput_1	ACCUMULA TION	INTEG ER	No description.	B50331651.C5033 1851	Sum	hulemdb h
VS_HSUPA_L oadOutput_20	ACCUMULA TION	INTEG ER	No description.	B50331651.C5033 1870	Sum	hulemdb h
VS_HSUPA_L oadOutput_21	ACCUMULA TION	INTEG ER	No description.	B50331651.C5033 1871	Sum	hulemdb h
VS_HSUPA_L oadOutput_22	ACCUMULA TION	INTEG ER	No description.	B50331651.C5033 1872	Sum	hulemdb h
VS_HSUPA_L oadOutput_23	ACCUMULA TION	INTEG ER	No description.	B50331651.C5033 1873	Sum	hulemdb h
VS_HSUPA_L oadOutput_24	ACCUMULA TION	INTEG ER	No description.	B50331651.C5033 1874	Sum	hulemdb h
VS_HSUPA_L oadOutput_25	ACCUMULA TION	INTEG ER	No description.	B50331651.C5033 1875	Sum	hulemdb h
VS_HSUPA_L oadOutput_2	ACCUMULA TION	INTEG ER	No description.	B50331651.C5033 1852	Sum	hulemdb h
VS_HSUPA_L oadOutput_3	ACCUMULA TION	INTEG ER	No description.	B50331651.C5033 1853	Sum	hulemdb h
VS_HSUPA_L oadOutput_4	ACCUMULA TION	INTEG ER	No description.	B50331651.C5033 1854	Sum	hulemdb h
VS_HSUPA_L oadOutput_5	ACCUMULA TION	INTEG ER	No description.	B50331651.C5033 1855	Sum	hulemdb h
VS_HSUPA_L oadOutput_6	ACCUMULA TION	INTEG ER	No description.	B50331651.C5033 1856	Sum	hulemdb h
VS_HSUPA_L oadOutput_7	ACCUMULA TION	INTEG ER	No description.	B50331651.C5033 1857	Sum	hulemdb h
VS_HSUPA_L oadOutput_8	ACCUMULA TION	INTEG ER	No description.	B50331651.C5033 1858	Sum	hulemdb h
VS_HSUPA_L oadOutput_9	ACCUMULA TION	INTEG ER	No description.	B50331651.C5033 1859	Sum	hulemdb h

7.24.10Local_Cell.Huawei.UMTS.HSUPA_Measurement

HSUPA local cell data.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_DLCE_Max	INTENSITY	INTEGER	Obsolete in Vn00R010. No description.	B50331650.C50342549	Constant	hulcmdb h, Sum, Minimum, Maximum
VS_DLCE_Mean	INTENSITY	INTEGER	Obsolete in Vn00R010. No description.	B50331650.C50332549	Average	hulcmdb h, Sum, Minimum, Maximum
VS_HSUPA_OverLoadNum	ACCUMULATION	INTEGER	No description.	B50331651.C50331876	Sum	hulcmdb h
VS_HSUPA_ScheduleUserNum_Max	INTENSITY	INTEGER	No description.	B50331651.C50341853	Constant	hulcmdb h, Sum, Minimum, Maximum
VS_HSUPA_ScheduleUserNum_Mean	INTENSITY	INTEGER	No description.	B50331651.C50341852	Average	hulcmdb h, Sum, Minimum, Maximum
VS_HSUPA_UnHappyUserNum	ACCUMULATION	INTEGER	No description.	B50331651.C50331877	Sum	hulcmdb h
VS_HSUPA_UnHappyUserNumRatio	INTENSITY	INTEGER	No description.	B50331651.C50341849	Average	hulcmdb h, Sum,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						Minimum, Maximum
VS_HSUPA_UserTtiNum	ACCUMULATION	INTEGER	No description.	B50331651.C50331878	Sum	hulcmdbh
VS_ULCE_Max	INTENSITY	INTEGER	Obsolete in Vn00R010. No description.	B50331650.C50342548	Constant	hulcmdbh, Sum, Minimum, Maximum
VS_ULCE_Mean	INTENSITY	INTEGER	Obsolete in Vn00R010. No description.	B50331650.C50332548	Average	hulcmdbh, Sum, Minimum, Maximum

7.24.11Local_Cell.Huawei.UMTS.HSUPA_Power_Measurement

HSUPA power measurement.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_HSUPA_LeftPwrLmtUserRatio	INTENSITY	INTEGER	No description.	B50331651.C50341855	Average	hulcmdbh, Sum, Minimum, Maximum
VS_HSUPA_MaxPwrLmtUserRatio	INTENSITY	INTEGER	No description.	B50331651.C50341854	Average	hulcmdbh, Sum, Minimum, Maximum

7.24.12Local_Cell.Huawei.UMTS.Traffic_measurements_Locell

Traffic measurements for Local Cell

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
-----	------	-----------	-------------	------------	--------------------	-------------------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_DLCE_Max_Dedicated	INTENSITY	INTEGER	Maximum usage of DL CEs when the RAN network is not shared	B50331650.C50342549	Average	hulcmdbh, Sum, Minimum, Maximum
VS_DLCE_Max_Shared	INTENSITY	INTEGER	Maximum usage of DL CEs when multiple operators share one RAN network	B50331650.C50342554	Average	hulcmdbh, Sum, Minimum, Maximum
VS_DLCE_Mean_Dedicated	INTENSITY	INTEGER	Average usage of DL CEs when the RAN network is not shared	B50331650.C50332549	Average	hulcmdbh, Sum, Minimum, Maximum
VS_DLCE_Mean_Shared	INTENSITY	INTEGER	Average usage of DL CEs when multiple operators share one RAN network	B50331650.C50332554	Average	hulcmdbh, Sum, Minimum, Maximum
VS_ULCE_Max_Dedicated	INTENSITY	INTEGER	Maximum usage of UL CEs when the RAN network is not shared	B50331650.C50342548	Average	hulcmdbh, Sum, Minimum, Maximum
VS_ULCE_Max_Shared	INTENSITY	INTEGER	Maximum usage of UL CEs when multiple operators share one RAN network	B50331650.C50342550	Average	hulcmdbh, Sum, Minimum, Maximum
VS_ULCE_Mean_Dedicated	INTENSITY	INTEGER	Average usage of UL CEs when the RAN network is not shared	B50331650.C50332548	Average	hulcmdbh, Sum, Minimum, Maximum

VS_ULCE_Mean_Shared	INTENSITY	INTEGER	Average usage of UL CEs when multiple operators share one RAN network	B50331650.C50332550	Average	hulcmdbh, Sum, Minimum, Maximum
---------------------	-----------	---------	---	---------------------	---------	---------------------------------

7.25 Logic_Port Performance Indicators

This section shows the key performance indicators and other counters for the Logic_Port object, divided into the following sub-sections:

- [Logic_Port.Huawei.UMTS.LGCPORT_Queue_Traffic](#)
- [Logic_Port.Huawei.UMTS.LGCPORT_Traffic](#)

7.25.1 Logic_Port.Huawei.UMTS.LGCPORT_Queue_Traffic

Queued traffic on the LOGIC_PORT

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_LGCPRT_QUEUE_MEAN_TX	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Mean transmission rate from the LOGIC_PORT_QUEUE	B67109541.C67204687	Average	Sum, Minimum, Maximum
VS_LGCPRT_QUEUE_PEAK_TXRATE	INTENSITY	FLOAT	Peak transmission rate from the LOGIC_PORT_QUEUE	B67109541.C67204686	Average	Sum, Minimum, Maximum
VS_LGCPRT_QUEUE_TXBYTES	ACCUMULATION	INTEGER	Number of transmitted bytes from the LOGIC_PORT_QUEUE	B67109541.C67195366	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_LGCPRT_QUEUE_TXDROP BYTES	ACCUMULATION	INTEGER	Number of discarded bytes in transmission from the LOGIC_PORT_QUEUE	B67109541.C67195368	Sum	
VS_LGCPRT_QUEUE_TXDROP PACKETS	ACCUMULATION	INTEGER	Number of discarded packets in transmission from the LOGIC_PORT_QUEUE	B67109541.C67195367	Sum	
VS_LGCPRT_QUEUE_TXPACKETS	ACCUMULATION	INTEGER	Number of transmitted packets from the LOGIC_PORT_QUEUE	B67109541.C67195365	Sum	

7.25.2 Logic_Port.Huawei.UMTS.LGCPORT_Traffic

Traffic on the LOGIC_PORT

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_LGCPRT_Alloced_Ave_Bwd	INTENSITY	FLOAT	Mean backward bandwidth assigned to the logic port	B67109524.C67204784	Average	Sum, Minimum, Maximum
VS_LGCPRT_Alloced_Ave_Fwd	INTENSITY	FLOAT	Mean forward bandwidth assigned to the logic port	B67109524.C67204783	Average	Sum, Minimum, Maximum
VS_LGCPRT_Alloced_Max_Bwd	INTENSITY	FLOAT	Maximum backward bandwidth assigned to the	B67109524.C67195959	Average	Sum, Minimum, Maximum

			logic port			m
VS_LGCPRT_All oced_Max_Fwd	INTENSITY	FLOA T	Maximum forward bandwidth assigned to the logic port	B67109524.C671 95958	Average	Sum, Minimu m, Maximu m
VS_LGCPRT_B wd_Cong_Dur	ACCUMULA TION	INTEG ER	Duration of backward congestion on the logic port	B67109524.C671 95963	Sum	
VS_LGCPRT_B wd_Cong	ACCUMULA TION	INTEG ER	Number of backward congestions on the logic port	B67109524.C671 95962	Sum	
VS_LGCPRT_Fw d_Cong_Dur	ACCUMULA TION	INTEG ER	Duration of forward congestion on the logic port	B67109524.C671 95961	Sum	
VS_LGCPRT_Fw d_Cong	ACCUMULA TION	INTEG ER	Number of forward congestions on the logic port	B67109524.C671 95960	Sum	
VS_LGCPRT_M EAN_TX	INTENSITY	FLOA T	Mean transmission rate of the LOGIC_PORT	B67109524.C672 04685	Average	Sum, Minimu m, Maximu m
VS_LGCPRT_PE AK_TXRATE	INTENSITY	FLOA T	Peak transmission rate of the LOGIC_PORT	B67109524.C672 04684	Average	Sum, Minimu m, Maximu m
VS_LGCPRT_TX BYTES	ACCUMULA TION	INTEG ER	Number of transmitted bytes from the LOGIC_PORT	B67109524.C671 95361	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_LGCPRT_TX DROPBYTES	ACCUMULATION	INTEGER	Number of discarded bytes in transmission from the LOGIC_PORT	B67109524.C67195363	Sum	
VS_LGCPRT_TX DROPPACKETS	ACCUMULATION	INTEGER	Number of discarded packets in transmission from the LOGIC_PORT	B67109524.C67195362	Sum	
VS_LGCPRT_TX PACKETS	ACCUMULATION	INTEGER	Number of transmitted packets from the LOGIC_PORT	B67109524.C67195360	Sum	

7.26 M3UA_Dest Performance Indicators

This section shows the key performance indicators and other counters for the M3UA_Dest object, divided into the following sub-sections:

- [M3UA_Dest.Huawei.UMTS.Destination_Entity](#)

7.26.1 M3UA_Dest.Huawei.UMTS.Destination_Entity

M3UA destination availability

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
OS_M3UA_DE_Unavail_Dur	INTENSITY	INTEGER	Duration of M3UA destination entity unavailability	B67109484.C67194648	Average	Sum, Minimum, Maximum
OS_M3UA_DE_Unavail	ACCUMULATION	INTEGER	Number of times M3UA destination entity is unavailable	B67109484.C67194647	Sum	

7.27 M3UA_Link Performance Indicators

This section shows the key performance indicators and other counters for the M3UA_Link object, divided into the following sub-sections:

- [M3UA_Link.Huawei.UMTS.M3UA_SignallingLink](#)

7.27.1 M3UA_Link.Huawei.UMTS.M3UA_SignallingLink

M3UA Link utilisation

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
OS_M3UA_Link_ASPM_Rx_Msg	ACCUMULATION	INTEGER	Number of ASPM messages received by M3UA link	B67109482.C67194657	Sum	
OS_M3UA_Link_ASPM_Tx_Msg	ACCUMULATION	INTEGER	Number of ASPM messages transmitted by M3UA link	B67109482.C67194656	Sum	
OS_M3UA_Link_Cong_Dur	INTENSITY	INTEGER	Duration of M3UA link congestion	B67109482.C67194653	Average	Sum, Minimum, Maximum
OS_M3UA_Link_Fail_Dur	INTENSITY	INTEGER	Duration of M3UA link unavailability	B67109482.C67194652	Average	Sum, Minimum, Maximum
OS_M3UA_Link_Fail	ACCUMULATION	INTEGER	Number of times M3UA link is unavailable	B67109482.C67194651	Sum	
OS_M3UA_Link_Rx_Msg	ACCUMULATION	INTEGER	Number of MSU messages received by	B67109482.C67194655	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			M3UA link			
OS_M3UA_Lnk_Tx_Msg	ACCUMULATION	INTEGER	Number of MSU messages transmitted by M3UA link	B67109482.C67194654	Sum	

7.28 M3UA_LinkSet Performance Indicators

This section shows the key performance indicators and other counters for the M3UA_LinkSet object, divided into the following sub-sections:

- [M3UA_LinkSet.Huawei.UMTS.M3UA_SignallingLinkSet](#)

7.28.1 M3UA_LinkSet.Huawei.UMTS.M3UA_SignallingLinkSet

M3UA Linkset availability

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
OS_M3UA_Lnkset_Unavail_Dur	INTENSITY	INTEGER	Duration of M3UA link set unavailability	B67109483.C67194650	Average	Sum, Minimum, Maximum
OS_M3UA_Lnkset_Unavail	ACCUMULATION	INTEGER	Number of times M3UA link set is unavailable	B67109483.C67194649	Sum	

7.29 MLPPP Performance Indicators

This section shows the key performance indicators and other counters for the MLPPP object, divided into the following sub-sections:

- [MLPPP.Huawei.UMTS.MLPPP_QUEUE](#)
- [MLPPP.Huawei.UMTS.MLPPP](#)

7.29.1 MLPPP.Huawei.UMTS.MLPPP_QUEUE

MLPPP queue

KPI	Type	Data	Description	Derivation	Default	Other
-----	------	------	-------------	------------	---------	-------

		Type			Aggrega tor	Aggrega tors
VS_MLPPP_QUEUE_MEAN_TX	INTENSITY	FLOAT	Mean transmission rate from the MLPP QUEUE	B67109542.C67204559	Average	Sum, Minimum, Maximum
VS_MLPPP_QUEUE_PEAK_TXRATE	INTENSITY	FLOAT	Maximum transmission rate from the MLPP QUEUE	B67109542.C67204558	Average	Sum, Minimum, Maximum
VS_MLPPP_QUEUE_TXBYTES	ACCUMULATION	INTEGER	Number of transmitted bytes from the MLPP QUEUE	B67109542.C67195133	Sum	
VS_MLPPP_QUEUE_TXDROPPBYTES	ACCUMULATION	INTEGER	Number of discarded bytes from the MLPP QUEUE	B67109542.C67195135	Sum	
VS_MLPPP_QUEUE_TXDROPPACKETS	ACCUMULATION	INTEGER	Number of discarded packets from the MLPP QUEUE	B67109542.C67195134	Sum	
VS_MLPPP_QUEUE_TXPACKETS	ACCUMULATION	INTEGER	Number of transmitted packets from the MLPP QUEUE	B67109542.C67195132	Sum	

7.29.2 MLPPP.Huawei.UMTS.MLPPP

MLPPP data.

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
Total_VS_MLPPP_BYTES	ACCUMULATION	INT8	Number of bytes sent and received by a MLPPP link in a measurement period.	((VS_MLPPP_BYTESRXTOTAL} + {VS_MLPPP_BYTESTXTOTAL}))	Sum	
VS_MLPPP_Allocated_Ave_Bwd	INTENSITY	FLOAT	Mean backward bandwidth assigned to an MLPPP link	B67109490.C67204782	Average	Sum, Minimum, Maximum
VS_MLPPP_Allocated_Ave_Fwd	INTENSITY	FLOAT	Mean forward bandwidth assigned to an MLPPP link	B67109490.C67204781	Average	Sum, Minimum, Maximum
VS_MLPPP_Allocated_Max_Bwd	INTENSITY	FLOAT	Peak backward bandwidth assigned to an MLPPP link	B67109490.C67195949	Average	Sum, Minimum, Maximum
VS_MLPPP_Allocated_Max_Fwd	INTENSITY	FLOAT	Peak forward bandwidth assigned to an MLPPP link	B67109490.C67195948	Average	Sum, Minimum, Maximum
VS_MLPPP_Bwd_Cong_Dur	ACCUMULATION	INTEGER	Duration of backward congestion on an MLPPP link	B67109490.C67195953	Sum	
VS_MLPPP_Bwd_Cong	ACCUMULATION	INTEGER	Number of backward congestions	B67109490.C67195952	Sum	

			on an MLPPP link			
VS_MLPPP_BYT ESRXTOTAL	ACCUMULA TION	INT8	Number of bytes received by a MLPPP link in a measurement period.	B67109490.C6719 4404	Sum	
VS_MLPPP_BYT ESTXTOTAL	ACCUMULA TION	INT8	Number of bytes sent by a MLPPP link in a measurement period.	B67109490.C6719 4403	Sum	
VS_MLPPP_FAU LTCLEAR	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V90 0R011:Numb er of times faults are cleared in MLPPP	B67109490.C6719 4408	Sum	
VS_MLPPP_FAU LTEMIT	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V90 0R011:Numb er of times faults occur in MLPPP	B67109490.C6719 4407	Sum	
VS_MLPPP_FAU LTTIME	ACCUMULA TION	INTEG ER	Duration of fault of MLPPP	B67109490.C6719 4409	Sum	
VS_MLPPP_Fwd _Cong_Dur	ACCUMULA TION	INTEG ER	Duration of forward congestion on an MLPPP link	B67109490.C6719 5951	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_MLPPP_Fwd_Cong	ACCUMULATION	INTEGER	Number of forward congestions on an MLPPP link	B67109490.C67195950	Sum	
VS_MLPPP_MeanThroughputKbps_Rx	INTENSITY	FLOAT	Obsolete from UTRAN/V900R011:Mean Rx rate of a MLPPP link in a given measurement period. Unit: kbps.	B67109512.C67203908	Average	Sum, Minimum, Maximum
VS_MLPPP_MeanThroughputKbps_Tx	INTENSITY	FLOAT	Obsolete from UTRAN/V900R011:Mean Rx rate of a MLPPP link in a given measurement period. Unit: kbps.	B67109512.C67203909	Average	Sum, Minimum, Maximum
VS_MLPPP_PktUnexpectedRx	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011:Tx lost Number of package received by a MLPPP link in a measurement period (5s).	B67109512.C67192404	Sum	
VS_MLPPP_RX_BYTES	ACCUMULATION	INT8	Obsolete from UTRAN/V900R011:Number of bytes received by a MLPPP link	B67109512.C67192402	Sum	

			in a measurement period.			
VS_MLPPP_RXE RRORPKTS	ACCUMULA TION	INTEG ER	Number of error Rx packets on MLPPP	B67109490.C6719 4406	Sum	
VS_MLPPP_RX MAXSPEED	INTENSITY	FLOA T	Maximum receive rate of MLPPP	B67109490.C6719 4413	Average	Sum, Minimu m, Maximu m
VS_MLPPP_RX MEANSPEED	INTENSITY	FLOA T	Mean Rx rate of a MLPPP link in a given measurement period. Unit: kbps.	B67109490.C6719 4415	Average	Sum, Minimu m, Maximu m
VS_MLPPP_RX MINSPEED	INTENSITY	FLOA T	Minimum receive rate of MLPPP	B67109490.C6719 4414	Average	Sum, Minimu m, Maximu m
VS_MLPPP_RXP ACKETS	ACCUMULA TION	INTEG ER	Number of packets received by MLPPP	B67109490.C6719 4402	Sum	
VS_MLPPP_TX_ BYTES	ACCUMULA TION	INT8	Obsolete from UTRAN/V900R011: Number of bytes sent by a MLPPP link in a measurement period.	B67109512.C6719 2403	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_MLPPP_TXDROPPEDPKTS	ACCUMULATION	INTEGER	Tx lost Number of package received by a MLPPP link in a measurement period (5s).	B67109490.C67194405	Sum	
VS_MLPPP_TXMAXSPEED	INTENSITY	FLOAT	Maximum transmit rate of MLPPP	B67109490.C67194410	Average	Sum, Minimum, Maximum
VS_MLPPP_TXMEANSPEED	INTENSITY	FLOAT	Mean Rx rate of a MLPPP link in a given measurement period. Unit: kbps.	B67109490.C67194412	Average	Sum, Minimum, Maximum
VS_MLPPP_TXMINSPEED	INTENSITY	FLOAT	Minimum transmit rate of MLPPP	B67109490.C67194411	Average	Sum, Minimum, Maximum
VS_MLPPP_TXPACKETS	ACCUMULATION	INTEGER	Number of packets transmitted by MLPPP	B67109490.C67194401	Sum	

7.30 MTP3_Link Performance Indicators

This section shows the key performance indicators and other counters for the MTP3_Link object, divided into the following sub-sections:

- [MTP3_Link.Huawei.UMTS.MTP3_Link_Measurement](#)

7.30.1 MTP3_Link.Huawei.UMTS.MTP3_Link_Measurement

MTP3 Link Measurement

KPI	Type	Data Type	Description	Derivation	Default Aggregat	Other Aggrega
-----	------	-----------	-------------	------------	------------------	---------------

					or	tors
OS_MTP3_Lnk_Choc	ACCUMULATION	INTEGER	This measurement item provides the number of changeovers from one MTP3 link to other MTP3 links for some reason.	B67109551.C67196173	Sum	
OS_MTP3_Lnk_Cong_Dur	ACCUMULATION	INTEGER	This measurement item provides the duration of MTP3 link congestion.	B67109551.C67196168	Sum	
OS_MTP3_Lnk_ConG	ACCUMULATION	INTEGER	This measurement item provides the number of MTP3 link congestions.	B67109551.C67196176	Sum	
OS_MTP3_Lnk_Discard_Msg_Cong	ACCUMULATION	INTEGER	This measurement item provides the number of messages discarded due to MTP3 link congestion.	B67109551.C67196179	Sum	
OS_MTP3_Lnk_Discard_Msg_RouteFail	ACCUMULATION	INTEGER	This measurement item provides the number of messages discarded on the MTP3 link due to route fail.	B67109551.C67196181	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

OS_MTP3_Lnk_Fail_Dur	ACCUMULATION	INTEGER	This measurement item provides the duration of the out-of-service MTP3 link.	B67109551.C67196167	Sum	
OS_MTP3_Lnk_Fail	ACCUMULATION	INTEGER	This measurement item provides the total number of MTP3 link failures for reasons such as MTP3 transition from available state to unavailable state and link test failure.	B67109551.C67196166	Sum	
OS_MTP3_Lnk_LocalInh_Dur	ACCUMULATION	INTEGER	This measurement item provides the duration when the MTP3 link stays locally inhibited after being inhibited at the local end.	B67109551.C67196170	Sum	
OS_MTP3_Lnk_LocalInhibit	ACCUMULATION	INTEGER	This measurement item provides the number of inhibitions on the MTP3 link at the local end.	B67109551.C67196169	Sum	
OS_MTP3_Lnk_RmtInhibit_Dur	ACCUMULATION	INTEGER	This measurement item provides the duration of the MTP3 link in inhibited	B67109551.C67196172	Sum	

			state after it is successfully inhibited by the remote signaling point.			
OS_MTP3_Lnk_RmtInhibit	ACCUMULATION	INTEGER	This measurement item provides the number of inhibitions on the MTP3 link at the remote signaling point.	B67109551.C67196171	Sum	
OS_MTP3_Lnk_Rpo_Dur	ACCUMULATION	INT8	Duration of MTP3 Link Remote Processor Fault	B67109551.C73403527	Sum	
OS_MTP3_Lnk_Rpos	ACCUMULATION	INT8	Number of MTP3 Link Remote Processor Failures	B67109551.C67184091	Sum	
OS_MTP3_Lnk_Rx_Msg	ACCUMULATION	INT8	Number of message signaling units (MSU) received on the MTP3 link.	B67109551.C67196175	Sum	
OS_MTP3_Lnk_Rx_TFC	ACCUMULATION	INTEGER	This measurement item provides the number of transfer-controlled signals received on the MTP3 link.	B67109551.C67196182	Sum	
OS_MTP3_Lnk	ACCUMULATION	INTEGER	This	B67109551.C6719	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

_Rx_TFP	TION	ER	measurement item provides the number of transfer-prohibited signals received on the MTP3 link.	6180		
OS_MTP3_Lnk_Service_Dur	ACCUMULATION	INTEGER	This measurement item provides the service duration of the MTP3 link.	B67109551.C67196165	Sum	
OS_MTP3_Lnk_SIO_SIF_Rx	ACCUMULATION	INT8	This measurement item provides the number of MSU bytes received by the MTP3 link. The bytes include signaling information field (SIF) and service information octet (SIO). SIF includes upper layer signaling content and routing label. SIO includes network indicator and service indicator.	B67109551.C67196178	Sum	
OS_MTP3_Lnk_SIO_SIF_Tx	ACCUMULATION	INT8	This measurement item provides the number of MSU bytes sent by the MTP3 link. The bytes	B67109551.C67196177	Sum	

			include signaling information field (SIF) and service information octet (SIO). The SIF includes upper layer signaling content and routing label. The SIO includes network indicator and service indicator.			
OS_MTP3_Lnk_Tx_Msg	ACCUMULATION	INT8	This measurement item provides the number of message signaling units (MSUs) sent by the MTP3 Link.	B67109551.C67196174	Sum	

7.31 MTP3_LinkPoint Performance Indicators

This section shows the key performance indicators and other counters for the MTP3_LinkPoint object, divided into the following sub-sections:

- [MTP3_LinkPoint.Huawei.UMTS.MTP3_DSP_Measurement](#)

7.31.1 MTP3_LinkPoint.Huawei.UMTS.MTP3_DSP_Measurement

MTP3 DSP Measurement

KPI	Type	Data Type	Description	Derivation	Default Aggregat	Other Aggrega
-----	------	-----------	-------------	------------	------------------	---------------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

					or	tors
OS_MTP3_DSP_Unavail_Dur	ACCUMULATION	INTEGER	Duration of MTP3 DSP in Inaccessible State	B67109550.C67196164	Sum	
OS_MTP3_DSP_Unavail	ACCUMULATION	INTEGER	Number of MTP3 DSP Changes to Inaccessible State	B67109550.C67196163	Sum	

7.32 MTP3_LinkSet Performance Indicators

This section shows the key performance indicators and other counters for the MTP3_LinkSet object, divided into the following sub-sections:

- [MTP3_LinkSet.Huawei.UMTS.MTP3_LinkSet_Measurement](#)

7.32.1 MTP3_LinkSet.Huawei.UMTS.MTP3_LinkSet_Measurement

MTP3 LinkSet Measurement

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
OS_MTP3_Linkset_Unavail_Dur	ACCUMULATION	INTEGER	Duration of MTP3 Link Set in Unavailable State	B67109552.C67196184	Sum	
OS_MTP3_Linkset_Unavail	ACCUMULATION	INTEGER	Number of MTP3 Link Set Failures	B67109552.C67196183	Sum	

7.33 MTP3B_Link Performance Indicators

This section shows the key performance indicators and other counters for the MTP3B_Link object, divided into the following sub-sections:

- [MTP3B_Link.Huawei.UMTS.MTP3B_Link_Measurement](#)

7.33.1 MTP3B_Link.Huawei.UMTS.MTP3B_Link_Measurement

MTP3B Link traffic

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
OS_MTP3B_Lnk_Cho	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011: Number of MTP3B link changeovers	B67109416.C67182856	Sum	
OS_MTP3B_Lnk_Cong_Dur	INTENSITY	INTEGER	Obsolete from UTRAN/V900R011: Duration of MTP3B link congestion	B67109416.C67182862	Average	Sum, Minimum, Maximum
OS_MTP3B_Lnk_ConG	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011: Number of MTP3B link congestions	B67109416.C67182861	Sum	
OS_MTP3B_Lnk_Disc_Msg_RouteFail	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011: This measurement item provides the number of messages discarded on the MTP3B link due to route fail.	B67109416.C67196156	Sum	
OS_MTP3B_Lnk_Discard_Msg_Cong	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011: This measurement item provides the number of messages discarded due to MTP3B link congestion.	B67109416.C67196154	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

OS_MTP3B_Lnk_Fail_Dur	INTENSITY	INTEGER	Obsolete from UTRAN/V900R 011:Duration of out-of-service MTP3B link	B67109416.C6718 2851	Average	Sum, Minimum, Maximum
OS_MTP3B_Lnk_Fail	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011:Number of MTP3B link failures	B67109416.C6718 2850	Sum	
OS_MTP3B_Lnk_LocalInh_Dur	INTENSITY	INTEGER	Obsolete from UTRAN/V900R 011:Duration of local inhibition on MTP3B link	B67109416.C6718 2853	Average	Sum, Minimum, Maximum
OS_MTP3B_Lnk_LocalInhibit	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011:Number of local inhibitions on MTP3B link	B67109416.C6718 2852	Sum	
OS_MTP3B_Lnk_RmtInhibit_Dur	INTENSITY	INTEGER	Obsolete from UTRAN/V900R 011:Duration of remote inhibition on MTP3B link	B67109416.C6718 2855	Average	Sum, Minimum, Maximum
OS_MTP3B_Lnk_RmtInhibit	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011:Number of remote inhibitions on MTP3B link	B67109416.C6718 2854	Sum	
OS_MTP3B_Lnk_Rx_Msg	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011:Number of MSUs received by MTP3B link	B67109416.C6718 2858	Sum	
OS_MTP3B_Lnk_Rx_TFC	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011:This measurement	B67109416.C6719 6157	Sum	

			item provides the number of transfer-controlled signals received on the MTP3B link.			
OS_MTP3B_Lnk_Rx_TFP	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011:This measurement item provides the number of transfer-prohibited signals received on the MTP3B link.	B67109416.C67196155	Sum	
OS_MTP3B_Lnk_Service_Dur	INTENSITY	INTEGER	Obsolete from UTRAN/V900R 011:Service Duration of MTP3B link	B67109416.C67182849	Average	Sum, Minimum, Maximum
OS_MTP3B_Lnk_SIO_SIF_Rx	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011:Number of MSU bytes received by MTP3B link	B67109416.C67182860	Sum	
OS_MTP3B_Lnk_SIO_SIF_Tx	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011:Number of MSU bytes sent by MTP3B link	B67109416.C67182859	Sum	
OS_MTP3B_Lnk_Tx_Msg	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011:Number of messages sent	B67109416.C67182857	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			by MTP3B link			
Total_OS_MTP3B_Lnk_SIO_SIF	ACCUMULATION	INTEGER	Total number of octets of messages sent and received	{OS_MTP3B_Lnk_SIO_SIF_Rx} + {OS_MTP3B_Lnk_SIO_SIF_Tx}	Sum	

7.34 MTP3B_LinkSet Performance Indicators

This section shows the key performance indicators and other counters for the MTP3B_LinkSet object, divided into the following sub-sections:

- [MTP3B_LinkSet.Huawei.UMTS.MTP3B_LinkSet_Measurement](#)

7.34.1 MTP3B_LinkSet.Huawei.UMTS.MTP3B_LinkSet_Measurement

MTP3B Linkset availability and failures

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
OS_MTP3B_Lnkset_Unavail_Dur	INTENSITY	INTEGER	Obsolete from UTRAN/V900R 011:Duration of MTP3B link set in unavailable state	B67109417.C6718 3106	Average	hubcslbh, hubhsdpabh, Sum, Minimum, Maximum
OS_MTP3B_Lnkset_Unavail	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011:Number of MTP3B link set failures. The MTP3B link set fails when it shifts from available state to the unavailable state	B67109417.C6718 3105	Sum	hubcslbh, hubhsdpabh

7.35 MTP3B_Point Performance Indicators

This section shows the key performance indicators and other counters for the MTP3B_Point object, divided into the following sub-sections:

- [MTP3B_Point.Huawei.UMTS.MTP3B_DSP_Measurement](#)

7.35.1 MTP3B_Point.Huawei.UMTS.MTP3B_DSP_Measurement

MTP3B accessible state

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
OS_MTP3B_DSP_Unavail_Dur	INTENSITY	INTEGER	Obsolete from UTRAN/V900R011:Duration of MTP3B DSP in inaccessible state	B67109415.C67183234	Average	hubcslbh, hubhsdpabh, Sum, Minimum, Maximum
OS_MTP3B_DSP_Unavail	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011:Number of MTP3B DSP changes to inaccessible state	B67109415.C67183233	Sum	hubcslbh, hubhsdpabh

7.36 Neighbour Performance Indicators

This section shows the key performance indicators and other counters for the Neighbour object, divided into the following sub-sections:

- [Neighbour.Huawei.UMTS.Handover_3G_3G_per_Neighbour](#)
- [Neighbour.Huawei.UMTS.InterRAT_HO_per_Neighbour](#)

7.36.1 Neighbour.Huawei.UMTS.Handover_3G_3G_per_Neighbour

3G to 3G Handover data per Neighbour

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
-----	------	-----------	-------------	------------	--------------------	-------------------

$\frac{\text{VS_HHO_SuccOutInterCell_N}}{\text{VS_HHO_AttOutInterCell_N}}$	PERCENTAGE	FLOAT	Percentage successful hard handovers between neighboring cells.	$100 * \frac{\text{VS_HHO_SuccOutInterCell_N}}{\text{VS_HHO_AttOutInterCell_N}}$	Average	hucasebh, huctbh
$\frac{\text{VS_HSDPA_HHO_NoChR_Succ_N}}{\text{VS_HSDPA_HHO_NoChR_Att_N}}$	PERCENTAGE	FLOAT	Percentage successful hard handovers from HS-DSCH to HS-DSCH between cells.	$100 * \frac{\text{VS_HSDPA_HHO_NoChR_Succ_N}}{\text{VS_HSDPA_HHO_NoChR_Att_N}}$	Average	hucasebh, huctbh
$\frac{\text{VS_HSDPA_ServingCellChg_Succ_N}}{\text{VS_HSDPA_ServingCellChg_Att_N}}$	PERCENTAGE	FLOAT	Percentage successful changes of HS-DSCH serving cells.	$100 * \frac{\text{VS_HSDPA_ServingCellChg_Succ_N}}{\text{VS_HSDPA_ServingCellChg_Att_N}}$	Average	hucasebh, huctbh
$\frac{\text{VS_SHO_AddRLSucc_NCell}}{\text{VS_SHO_AddRLAtt_NCell}}$	PERCENTAGE	FLOAT	Percentage successful RL additions in the soft handover between neighboring cells.	$100 * \frac{\text{VS_SHO_AddRLSucc_NCell}}{\text{VS_SHO_AddRLAtt_NCell}}$	Average	hucasebh, huctbh
$\frac{\text{VS_SHO_DelRLSucc_NCell}}{\text{VS_SHO_DelRLAtt_NCell}}$	PERCENTAGE	FLOAT	Percentage successful RL deletions in the soft handover between neighboring cells.	$100 * \frac{\text{VS_SHO_DelRLSucc_NCell}}{\text{VS_SHO_DelRLAtt_NCell}}$	Average	hucasebh, huctbh
—	PERCENTAGE	FLOAT	Percentage	100 *	Average	hucasebh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

%_VS_SHO_Repl aceRLSucc_NCell	GE	T	successful RL replacements in soft handover between neighboring cells.	{VS_SHO_Replac eRLSucc_NCell}/ {VS_SHO_Replac eRLAtt_NCell}		, huctbh
%_VS_SHO_Succ ASU_N	PERCENTA GE	FLOA T	Percentage successful soft handovers between neighboring cells	100 * {VS_SHO_SuccA SU_N}/ {VS_SHO_AttAS U_N}	Average	hucasebh , huctbh
VS_HHO_AttOutI nterCell_N	ACCUMULA TION	INTEG ER	Number of attempted hard handovers between neighboring cells.	B67109395.C6718 3489 or B67109395_V900 .C67183489	Sum	hucasebh , huctbh
VS_HHO_FailOut InterCellNRlyN	ACCUMULA TION	INTEG ER	This item provides the number of unsuccessful hard handovers between neighboring cells due to no response from UE.	B67109395.C6718 9912 or B67109395_V900 .C67189912	Sum	hucasebh , huctbh
VS_HHO_SuccOu tInterCell_N	ACCUMULA TION	INTEG ER	Number of successful hard handovers between neighboring cells.	B67109395.C6718 3490 or B67109395_V900 .C67183490	Sum	hucasebh , huctbh
VS_HSDPA_HH O_NoChR_Att_N	ACCUMULA TION	INTEG ER	Number of hard handover attempts from HS-DSCH to	B67109395.C6719 0708 or B67109395_V900 .C67190708	Sum	hucasebh , huctbh

			HS-DSCH between cells.			
VS_HSDPA_HH O_NoChR_Succ_ N	ACCUMULA TION	INTEG ER	Number of successful hard handovers from HS- DSCH to HS- DSCH between cells.	B67109395.C6719 0709 or B67109395_V900 .C67190709	Sum	hucasebh , huctbh
VS_HSDPA_Serv CellChg_Att_N	ACCUMULA TION	INTEG ER	Number of attempts to change HS- DSCH serving cells.	B67109395.C6719 0710 or B67109395_V900 .C67190710	Sum	hucasebh , huctbh
VS_HSDPA_Serv CellChg_Succ_N	ACCUMULA TION	INTEG ER	Number of successful changes of HS-DSCH serving cells.	B67109395.C6719 0711 or B67109395_V900 .C67190711	Sum	hucasebh , huctbh
VS_SHO_AddRL Att_NCell	ACCUMULA TION	INTEG ER	Number of attempted RL additions in the soft handover between neighboring cells.	B67109395.C6718 3491 or B67109395_V900 .C67183491	Sum	hucasebh , huctbh
VS_SHO_AddRL Succ_NCell	ACCUMULA TION	INTEG ER	Number of successful RL additions in the soft handover between neighboring cells.	B67109395.C6718 3492 or B67109395_V900 .C67183492	Sum	hucasebh , huctbh
VS_SHO_AttASU _N	ACCUMULA TION	INTEG ER	This item provides the	B67109395.C6718 9910 or	Sum	hucasebh , huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			number of soft handover attempts between neighboring cells.	B67109395_V900.C67189910		
VS_SHO_DeIRLAtt_NCell	ACCUMULATION	INTEGER	Number of attempted RL deletions in the soft handover between neighboring cells.	B67109395.C67183493 or B67109395_V900.C67183493	Sum	hucasebh, huctbh
VS_SHO_DeIRLSucc_NCell	ACCUMULATION	INTEGER	Number of successful RL deletions in the soft handover between neighboring cells.	B67109395.C67183494 or B67109395_V900.C67183494	Sum	hucasebh, huctbh
VS_SHO_FailASU_NRply_N	ACCUMULATION	INTEGER	This item provides the number of unsuccessful soft handovers between neighboring cells due to no response from UE.	B67109395.C67189911 or B67109395_V900.C67189911	Sum	hucasebh, huctbh
VS_SHO_ReplaceRLAtt_NCell	ACCUMULATION	INTEGER	Number of attempted RL replacements in soft handover between neighboring cells.	B67109395.C67183499 or B67109395_V900.C67183499	Sum	hucasebh, huctbh
VS_SHO_ReplaceRLSucc_NCell	ACCUMULATION	INTEGER	Number of successful RL	B67109395.C67183500 or	Sum	hucasebh, huctbh

			replacements in soft handover between neighboring cells.	B67109395_V900.C67183500		
VS_SHO_SuccASU_N	ACCUMULATION	INTEGER	This item provides the number of successful soft handovers between neighboring cells	B67109395.C67189909 or B67109395_V900.C67189909	Sum	hucasebh, huctbh

7.36.2 Neighbour.Huawei.UMTS.InterRAT_HO_per_Neighbour

InterRAT Handover data per Neighbour

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_IRATHO_SuccOutCS_N	PERCENTAGE	FLOAT	Percentage successful CS inter-RAT outgoing handovers between neighboring cells.	$100 * \frac{\{VS_IRATHO_SuccOutCS_N\}}{\{VS_IRATHO_AttOutCS_N\}}$	Average	hucasebh, huctbh
%_VS_IRATHO_SuccOutPSUTRAN_N	PERCENTAGE	FLOAT	Percentage successful PS inter-RAT outgoing handovers between neighboring cells.	$100 * \frac{\{VS_IRATHO_SuccOutPSUTRAN_N\}}{\{VS_IRATHO_AttOutPSUTRAN_N\}}$	Average	hucasebh, huctbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_IRATHO_At tOutCS_N	ACCUMULA TION	INTEG ER	Number of attempted CS inter-RAT outgoing (from UTRAN) handovers between neighboring cells.	B67109394.C67183 495	Sum	hucasebh , huctbh
VS_IRATHO_At tOutPSUTRAN_ N	ACCUMULA TION	INTEG ER	Number of attempted PS inter-RAT outgoing handovers between neighboring cells.	B67109394.C67183 497	Sum	hucasebh , huctbh
VS_IRATHO_Fa ilOutCS_UEF_N	ACCUMULA TION	INTEG ER	No description	B67109394.C67189 907	Sum	hucasebh , huctbh
VS_IRATHO_Fa iOutPSUTRAN_ UEFN	ACCUMULA TION	INTEG ER	No description	B67109394.C67189 908	Sum	hucasebh , huctbh
VS_IRATHO_Su ccOutCS_N	ACCUMULA TION	INTEG ER	Number of successful CS inter-RAT outgoing handovers between neighboring cells.	B67109394.C67183 496	Sum	hucasebh , huctbh
VS_IRATHO_Su ccOutPSUTRAN _N	ACCUMULA TION	INTEG ER	Number of successful PS inter-RAT outgoing handovers between neighboring cells.	B67109394.C67183 498	Sum	hucasebh , huctbh

7.37 NodeB Performance Indicators

This section shows the key performance indicators and other counters for the NodeB object, divided into the following sub-sections:

- [NodeB.Huawei.UMTS.Credit_Usage_aggregated_from_cell](#)
- [NodeB.Huawei.UMTS.Credit_Usage_LicenseGroup](#)
- [NodeB.Huawei.UMTS.Credit_Usage_Shared](#)
- [NodeB.Huawei.UMTS.HSDPA_aggregated_from_cell](#)
- [NodeB.Huawei.UMTS.HSUPA_aggregated_from_cell](#)
- [NodeB.Huawei.UMTS.IUB_Bandwidth](#)
- [NodeB.Huawei.UMTS.Iub_Congestion](#)
- [NodeB.Huawei.UMTS.IUB_NodeB](#)
- [NodeB.Huawei.UMTS.NodeB_Availability](#)
- [NodeB.Huawei.UMTS.Traffic_CS_aggregated_from_cell](#)
- [NodeB.Huawei.UMTS.Traffic_PS_aggregated_from_cell](#)

7.37.1 NodeB.Huawei.UMTS.Credit_Usage_aggregated_from_cell

Credit Usage data aggregated from cell level.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_LC_DLCreditUsed_CELL_Max	ACCUMULATION	INTEGER	Max DL Credit Usage (Cell)	B67109391_GRP.C67191167	Sum	hundlcbbh, hunulcbbh
VS_LC_DLCreditUsed_CELL_Min	ACCUMULATION	INTEGER	Min DL Credit Usage (Cell)	B67109391_GRP.C67191168	Sum	hundlcbbh, hunulcbbh
VS_LC_DLCreditUsed_CELL	INTENSITY	FLOAT	Average DL Credit Usage (Cell)	B67109391_GRP.C67202570	Average	hundlcbbh, hunulcbbh, Sum, Minimum, Maximum
VS_LC_ULCreditUsed_CELL	ACCUMULATION	INTEGER	Max UL Credit Usage (Cell)	B67109391_GRP.C67191165	Sum	hundlcbbh,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Max						hunulcbh
VS_LC_ULCreditUsed_CELL_Min	ACCUMULATION	INTEGER	Min UL Credit Usage (Cell)	B67109391_GRP.C67191166	Sum	hundlcbh , hunulcbh
VS_LC_ULCreditUsed_CELL	INTENSITY	FLOAT	Average UL Credit Usage (Cell)	B67109391_GRP.C67202567	Average	hundlcbh , hunulcbh , Sum, Minimum, Maximum

7.37.2 NodeB.Huawei.UMTS.Credit_Usage_LicenseGroup

Credit usage per license group. When the RAN is shared by multiple operators, each license group corresponds to one operator.

The performance data measurements for this KPI group are recorded against the combination of NodeB and CNOOPERATOR (cnoperator_id) .

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_LC_DLCreditAvailable_LicenseGroup_Dedicated	INTENSITY	FLOAT	Number of the DL CEs in each license group.	B50331652.C50332557	Average	Sum, Minimum, Maximum
VS_LC_DLMax_LicenseGroup	INTENSITY	FLOAT	Maximum usage of DL CEs of the license group.	B50331652.C50342556	Average	Sum, Minimum, Maximum
VS_LC_DLMean_LicenseGroup	INTENSITY	FLOAT	Average usage of DL CEs of the license group.	B50331652.C50332556	Average	Sum, Minimum, Maximum
VS_LC_ULCreditAvailable_LicenseGroup_Dedicated	INTENSITY	FLOAT	Number of the UL CEs in each license group.	B50331652.C50332558	Average	Sum, Minimum,

						Maximum
VS_LC_ULMax_LicenseGroup	INTENSITY	FLOAT	Maximum usage of UL CEs of the license group.	B50331652.C50342555	Average	Sum, Minimum, Maximum
VS_LC_ULMean_LicenseGroup	INTENSITY	FLOAT	Average usage of UL CEs of the license group.	B50331652.C50332555	Average	Sum, Minimum, Maximum

7.37.3 NodeB.Huawei.UMTS.Credit_Usage_Shared

Credit usage for the entire NodeB. When the RAN is not shared, the usage of UL CEs and DL CEs of the entire NodeB is reported,

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_LC_DLCredit Available_Shared	INTENSITY	FLOAT	Number of the DL CEs in the entire NodeB.	B50331652.C50332560	Average	hundlcbh, hunulcbh, Sum, Minimum, Maximum
VS_LC_DLMax_LicenseGroup_Shared	INTENSITY	FLOAT	Maximum usage of DL CEs of shared NodeB.	B50331652.C50342562	Average	hundlcbh, hunulcbh, Sum, Minimum, Maximum
VS_LC_DLMean_	INTENSITY	FLOAT	Average usage	B50331652.C50332	Average	hundlcbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

LicenseGroup_Shared	TY	T	of DL CEs of shared NodeB.	562		, hunulcbh, Sum, Minimum, Maximum
VS_LC_ULCreditAvailable_Shared	INTENSITY	FLOAT	Number of the UL CEs in the entire NodeB.	B50331652.C50332559	Average	hundlcbh, hunulcbh, Sum, Minimum, Maximum
VS_LC_ULMaxLicenseGroup_Shared	INTENSITY	FLOAT	Maximum usage of UL CEs of shared NodeB.	B50331652.C50342561	Average	hundlcbh, hunulcbh, Sum, Minimum, Maximum
VS_LC_ULMeanLicenseGroup_Shared	INTENSITY	FLOAT	Average usage of UL CEs of shared NodeB.	B50331652.C50332561	Average	hundlcbh, hunulcbh, Sum, Minimum, Maximum

7.37.4 NodeB.Huawei.UMTS.HSDPA_aggregated_from_cell

HSDPA data aggregated from cell level.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_HSDPA_MACD_AbnormRel	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011:Numb	B67109390_GRP.C67190689	Sum	hunbtbh

			er of MAC-D flows released abnormally in a cell.			
VS_HSDPA_MACD_Mean_Cell	INTENSITY	FLOAT	Mean number of MAC-D flows in a cell.	B67109390_GRP.C67202941	Average	hunbtbh, Sum, Minimum, Maximum
VS_HSDPA_MACD_Rel	ACCUMULATION	INTEGER	Number of MAC-D flows released in a cell.	B67109390_GRP.C67190688	Sum	hunbtbh
VS_HSDPA_MACD_FailDelPerCell	ACCUMULATION	INTEGER	Number of unsuccessful HSDPA service deletions in a cell.	B67109390_GRP.C67189837	Sum	hunbtbh
VS_HSDPA_MACD_FailStpPerCell	ACCUMULATION	INTEGER	Number of unsuccessful HSDPA service setups in a cell.	B67109390_GRP.C67189836	Sum	hunbtbh
VS_HSDPA_MACD_SuccDelPerCell	ACCUMULATION	INTEGER	Number of successful HSDPA service deletions in a cell.	B67109390_GRP.C67189835	Sum	hunbtbh
VS_HSDPA_MACD_SuccStpPerCell	ACCUMULATION	INTEGER	Number of successful MAC-d Flow setups in a	B67109390_GRP.C67189834	Sum	hunbtbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			cell.			
VS_HSDPA_MeanChThroughput_Times	ACCUMULATION	INTEGER	Mean throughput of MAC-D flows in a cell. Times	B67109390_GRP.C67190567	Sum	hunbtbh
VS_HSDPA_MeanChThroughput_TotalBytes	INTENSITY	FLOAT	Mean throughput of MAC-D flows in a cell.Total bytes	B67109390_GRP.C67189840	Average	hunbtbh, Sum, Minimum, Maximum
VS_HSDPA_MeanChThroughput	INTENSITY	FLOAT	Mean throughput of MAC-D flows in a cell.	B67109390_GRP.C67202894	Average	hunbtbh, Sum, Minimum, Maximum
VS_HSDPA_MeanCopperBeChThroughput_TotalBytes	ACCUMULATION	INTEGER	Number of bytes transmitted in MAC-d flow of copper BE traffic	B67109390_GRP.C67194871	Sum	hunbtbh
VS_HSDPA_MeanCopperBeChThroughput	INTENSITY	FLOAT	Average throughput of MAC-d flow of copper BE traffic	B67109390_GRP.C67204512	Average	hunbtbh, Sum, Minimum, Maximum
VS_HSDPA_MeanGoldenBeChThroughput_TotalBytes	ACCUMULATION	INT8	Number of bytes transmitted in MAC-d flow of golden BE traffic	B67109390_GRP.C67194867	Sum	hunbtbh
VS_HSDPA_MeanGoldenBeChThroughput	INTENSITY	FLOAT	Average throughput of MAC-d flow	B67109390_GRP.C67204510	Average	hunbtbh, Sum, Minimum

			of golden BE traffic			m, Maximum
VS_HSDPA_MeanSilverBeChThroughput_TotalBytes	ACCUMULATION	INT8	Number of bytes transmitted in MAC-d flow of silver BE traffic	B67109390_GRP.C67194869	Sum	hunbtbh
VS_HSDPA_MeanSilverBeChThroughput	INTENSITY	FLOAT	Average throughput of MAC-d flow of silver BE traffic	B67109390_GRP.C67204511	Average	hunbtbh, Sum, Minimum, Maximum
VS_HSDPA_RAB_AttEstab_BE_Copper	ACCUMULATION	INTEGER	Number of HSDPA RAB establishment attempts of be service for copper-level users	B67109390_GRP.C67195509	Sum	hunbtbh
VS_HSDPA_RAB_AttEstab_BE_Golden	ACCUMULATION	INTEGER	Number of HSDPA RAB Establishment Attempts of BE Service for Golden-Level Users	B67109390_GRP.C67195507	Sum	hunbtbh
VS_HSDPA_RAB_AttEstab_BE_Silver	ACCUMULATION	INTEGER	Number of HSDPA RAB establishment attempts of be service for silver-level	B67109390_GRP.C67195508	Sum	hunbtbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			users			
VS_HSDPA_RAB_AtEtab	ACCUMULATION	INTEGER	Number of requests to set up the HSDPA service in a cell.	B67109390_GRP.C67190704	Sum	hunbtbh
VS_HSDPA_RAB_Loss_Abnorm_NonRF	ACCUMULATION	INTEGER	Number of HSDPA Service Abnormal Released due to Different Cause in a cell.	B67109390_GRP.C67191162	Sum	hunbtbh
VS_HSDPA_RAB_Loss_InActivity	ACCUMULATION	INTEGER	Number of HSDPA Service Released due to User Inactivity in a cell.	B67109390_GRP.C67191161	Sum	hunbtbh
VS_HSDPA_RAB_Loss_Norm	ACCUMULATION	INTEGER	Number of HSDPA Service Normal Released in a cell.	B67109390_GRP.C67191164	Sum	hunbtbh
VS_HSDPA_RAB_Loss_RF	ACCUMULATION	INTEGER	Number of HSDPA Service Abnormal Released due to Iu/RAB cause : - Radio Connection With UE Lost - Failure in the Radio Interface Procedure.	B67109390_GRP.C67191163	Sum	hunbtbh

VS_HSDPA_RAB_SuccEstab_BE_Copper	ACCUMULATION	INTEGER	Number of successful HSDPA RAB establishments of be service for copper-level users	B67109390_GRP.C67195512	Sum	hunbtbh
VS_HSDPA_RAB_SuccEstab_BE_Golden	ACCUMULATION	INTEGER	Number of Successful HSDPA RAB Establishments of BE Service for Golden-Level Users	B67109390_GRP.C67195510	Sum	hunbtbh
VS_HSDPA_RAB_SuccEstab_BE_Silver	ACCUMULATION	INTEGER	Number of successful HSDPA RAB establishments of be service for silver-level users	B67109390_GRP.C67195511	Sum	hunbtbh
VS_HSDPA_RAB_SuccEstab	ACCUMULATION	INTEGER	Number of successful setups of the HSDPA service in each cell.	B67109390_GRP.C67190705	Sum	hunbtbh
VS_HSDPA_UE_Mean_Cell	INTENSITY	FLOAT	This item provides the average number of UEs in CELL_HSD	B67109390_GRP.C67202932	Average	hunbtbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			PA state in a cell.			
--	--	--	---------------------	--	--	--

7.37.5 NodeB.Huawei.UMTS.HSUPA_aggregated_from_cell

HSUPA data aggregated from cell

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
HSUPA_MACDFailDelPerCell	ACCUMULATION	INTEGER	Number of failures to delete EDCH MACD FLOW in a cell.	B67109471_GRP.C67192113	Sum	hunbtbh
HSUPA_MACDFailSetupPerCell	ACCUMULATION	INTEGER	Number of failures of the RNC to set up EDCH MACD FLOW in a cell.	B67109471_GRP.C67192111	Sum	hunbtbh
HSUPA_MACDSuccessDelPerCell	ACCUMULATION	INTEGER	Number of successful attempts to delete EDCH MACD FLOW from a UE in a cell.	B67109471_GRP.C67192112	Sum	hunbtbh
HSUPA_MACDSuccessSetupPerCell	ACCUMULATION	INTEGER	Number of successful attempts of the RNC to set up the EDCH MACD FLOW in a cell.	B67109471_GRP.C67192110	Sum	hunbtbh
HSUPA_MeanChThroughput_Times	ACCUMULATION	INTEGER	No description.	B67109471_GRP.C67192487	Sum	hunbtbh

HSUPA_MeanChThroughput_TotByte	ACCUMULATION	INTEGER	Number of bytes received by the MAC-d flow in a cell.	B67109471_GRP.C67192486	Sum	hunbtbh
HSUPA_MeanChThroughput	INTENSITY	FLOAT	Average UL throughput of MAC-d flow in a cell.	B67109471_GRP.C67203932	Average	hunbtbh, Sum, Minimum, Maximum
HSUPA_RAB_AttEstab	ACCUMULATION	INTEGER	Number of attempts to set up HSUPA RABs in a cell.	B67109471_GRP.C67192114	Sum	hunbtbh
HSUPA_RAB_Loss_Abnorm	ACCUMULATION	INTEGER	Number of HSUPA RABs abnormally released by the RNC in a cell.	B67109471_GRP.C67192364	Sum	hunbtbh
HSUPA_RAB_Loss_Norm	ACCUMULATION	INTEGER	Number of HSUPA RABs normally released by the RNC in a cell.	B67109471_GRP.C67192365	Sum	hunbtbh
HSUPA_RAB_Loss_UEGen	ACCUMULATION	INTEGER	Number of HSUPA RABs released by the RNC for the release of	B67109471_GRP.C67192366	Sum	hunbtbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			the UE signaling connection.			
HSUPA_RAB_SuccEstab	ACCUMULATION	INTEGER	Number of successful attempts to set up the HSUPA RABs in a cell.	B67109471_GRP.C67192115	Sum	hunbtbh
HSUPA_SHO_ServCellChg_Att	ACCUMULATION	INTEGER	Number of attempts to change the EDCH serving cells because the soft handover is performed or multiple links exist.	B67109471_GRP.C67192370	Sum	hunbtbh
HSUPA_SHO_ServCellChg_Succ	ACCUMULATION	INTEGER	Number of successful attempts to change the EDCH serving cells because the soft handover is performed or multiple links exist.	B67109471_GRP.C67192369	Sum	hunbtbh
VS_HSUPA_CopperBeMeanChThroughput_TotalBytes	ACCUMULATION	INTEGER	Number of bytes received in MAC-d flow of copper BE traffic	B67109471_GRP.C67194889	Sum	hunbtbh
VS_HSUPA_CopperBeMeanChThroughput	INTENSITY	FLOAT	Mean uplink throughput of MAC-d flows of	B67109471_GRP.C67204515	Average	hunbtbh, Sum, Minimum,

			copper BE traffic			Maximum
VS_HSUPA_GoldenBeMeanChThroughput_TotalBytes	ACCUMULATION	INTEGER	Number of bytes received in MAC-d flow of golden BE traffic	B67109471_GRP.C67194873	Sum	hunbtbh
VS_HSUPA_GoldenBeMeanChThroughput	INTENSITY	FLOAT	Mean uplink throughput of MAC-d flows of golden BE traffic	B67109471_GRP.C67204513	Average	hunbtbh, Sum, Minimum, Maximum
VS_HSUPA_RAB_AttEstab_BE_Copper	ACCUMULATION	INTEGER	Number of HSUPA RAB establishment attempts of be service for copper-level users	B67109471_GRP.C67192971	Sum	hunbtbh
VS_HSUPA_RAB_AttEstab_BE_Golden	ACCUMULATION	INTEGER	Number of HSUPA RAB establishment attempts of be service for golden-level users	B67109471_GRP.C67192969	Sum	hunbtbh
VS_HSUPA_RAB_AttEstab_BE_Silver	ACCUMULATION	INTEGER	Number of HSUPA RAB establishment attempts of be service for silver-level users	B67109471_GRP.C67192970	Sum	hunbtbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_HSUPA_RAB_SuccEstab_BE_Copper	ACCUMULATION	INTEGER	Number of successful HSUPA RAB establishments of be service for copper-level users	B67109471_GRP.C67192974	Sum	hunbtbh
VS_HSUPA_RAB_SuccEstab_BE_Golden	ACCUMULATION	INTEGER	Number of successful HSUPA RAB establishments of be service for golden-level users	B67109471_GRP.C67192972	Sum	hunbtbh
VS_HSUPA_RAB_SuccEstab_BE_Silver	ACCUMULATION	INTEGER	Number of successful HSUPA RAB establishments of be service for silver-level users	B67109471_GRP.C67192973	Sum	hunbtbh
VS_HSUPA_SilverBeMeanChThroughput_TotalBytes	ACCUMULATION	INTEGER	Number of bytes receive in MAC-d flow of silver BE traffic	B67109471_GRP.C67194875	Sum	hunbtbh
VS_HSUPA_SilverBeMeanChThroughput	INTENSITY	FLOAT	Mean uplink throughput of MAC-d flows of silver BE traffic	B67109471_GRP.C67204514	Average	hunbtbh, Sum, Minimum, Maximum
VS_HSUPA_UE_Mean_Cell	INTENSITY	FLOAT	Average number of UEs in CELL_HSUPA state in a	B67109471_GRP.C67203850	Average	hunbtbh, Sum, Minimum, Maximum

			cell.			m
--	--	--	-------	--	--	---

7.37.6 NodeB.Huawei.UMTS.IUB_Bandwidth

Measurement related to the iub configure bandwidth and used bandwidth.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_ATMDIAvgUsed_1	INTENSITY	FLOAT	Average used DL bandwidth on the ATM physical ports	B50331649.C50332678	Average	hunbtbh, Sum, Minimum, Maximum
VS_ATMDIAvgUsed_2	INTENSITY	FLOAT	Average used DL bandwidth on the ATM physical ports	B50331649.C50332690	Average	hunbtbh, Sum, Minimum, Maximum
VS_ATMDIAvgUsed_3	INTENSITY	FLOAT	Average used DL bandwidth on the ATM physical ports	B50331649.C50332702	Average	hunbtbh, Sum, Minimum, Maximum
VS_ATMDIAvgUsed_4	INTENSITY	FLOAT	Average used DL bandwidth on the ATM physical ports	B50331649.C50332714	Average	hunbtbh, Sum, Minimum, Maximum
VS_ATMDIMaxUsed_1	INTENSITY	FLOAT	Maximum used DL bandwidth on the ATM physical ports.	B50331649.C50332677	Average	hunbtbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						m
VS_ATMDIMaxUsed_2	INTENSITY	FLOAT	Maximum used DL bandwidth on the ATM physical ports.	B50331649.C50332689	Average	hunbtbh, Sum, Minimum, Maximum
VS_ATMDIMaxUsed_3	INTENSITY	FLOAT	Maximum used DL bandwidth on the ATM physical ports.	B50331649.C50332701	Average	hunbtbh, Sum, Minimum, Maximum
VS_ATMDIMaxUsed_4	INTENSITY	FLOAT	Maximum used DL bandwidth on the ATM physical ports.	B50331649.C50332713	Average	hunbtbh, Sum, Minimum, Maximum
VS_ATMDITotal_1	INTENSITY	FLOAT	Available DL Bandwidth on ATM Physical Ports.	B50331649.C50332676	Average	hunbtbh, Sum, Minimum, Maximum
VS_ATMDITotal_2	INTENSITY	FLOAT	Available DL Bandwidth on ATM Physical Ports.	B50331649.C50332688	Average	hunbtbh, Sum, Minimum, Maximum
VS_ATMDITotal_3	INTENSITY	FLOAT	Available DL Bandwidth on ATM Physical Ports.	B50331649.C50332700	Average	hunbtbh, Sum, Minimum, Maximum
VS_ATMDITotal_4	INTENSITY	FLOAT	Available DL Bandwidth on ATM Physical Ports.	B50331649.C50332712	Average	hunbtbh, Sum, Minimum,

						Maximum
VS_ATMUIAvgUsed_1	INTENSITY	FLOAT	Average used UL bandwidth on the ATM physical ports	B50331649.C50332675	Average	hunbtbh, Sum, Minimum, Maximum
VS_ATMUIAvgUsed_2	INTENSITY	FLOAT	Average used UL bandwidth on the ATM physical ports	B50331649.C50332687	Average	hunbtbh, Sum, Minimum, Maximum
VS_ATMUIAvgUsed_3	INTENSITY	FLOAT	Average used UL bandwidth on the ATM physical ports	B50331649.C50332699	Average	hunbtbh, Sum, Minimum, Maximum
VS_ATMUIAvgUsed_4	INTENSITY	FLOAT	Average used UL bandwidth on the ATM physical ports	B50331649.C50332711	Average	hunbtbh, Sum, Minimum, Maximum
VS_ATMUIMaxUsed_1	INTENSITY	FLOAT	Maximum used UL bandwidth on the ATM physical ports.	B50331649.C50332674	Average	hunbtbh, Sum, Minimum, Maximum
VS_ATMUIMaxUsed_2	INTENSITY	FLOAT	Maximum used UL bandwidth on the ATM physical ports.	B50331649.C50332686	Average	hunbtbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_ATMUIMaxUsed_3	INTENSITY	FLOAT	Maximum used UL bandwidth on the ATM physical ports.	B50331649.C50332698	Average	hunbtbh, Sum, Minimum, Maximum
VS_ATMUIMaxUsed_4	INTENSITY	FLOAT	Maximum used UL bandwidth on the ATM physical ports.	B50331649.C50332710	Average	hunbtbh, Sum, Minimum, Maximum
VS_ATMUITotal_1	INTENSITY	FLOAT	Available UL Bandwidth on ATM Physical Ports.	B50331649.C50332673	Average	hunbtbh, Sum, Minimum, Maximum
VS_ATMUITotal_2	INTENSITY	FLOAT	Available UL Bandwidth on ATM Physical Ports.	B50331649.C50332685	Average	hunbtbh, Sum, Minimum, Maximum
VS_ATMUITotal_3	INTENSITY	FLOAT	Available UL Bandwidth on ATM Physical Ports.	B50331649.C50332697	Average	hunbtbh, Sum, Minimum, Maximum
VS_ATMUITotal_4	INTENSITY	FLOAT	Available UL Bandwidth on ATM Physical Ports.	B50331649.C50332709	Average	hunbtbh, Sum, Minimum, Maximum
VS_IPDIAvgUsed_1	INTENSITY	FLOAT	Average used DL bandwidth on the IP physical ports	B50331649.C50332684	Average	hunbtbh, Sum, Minimum, Maximum

VS_IPDIAvgUsed_2	INTENSITY	FLOAT	Average used DL bandwidth on the IP physical ports	B50331649.C50332696	Average	hunbtbh, Sum, Minimum, Maximum
VS_IPDIAvgUsed_3	INTENSITY	FLOAT	Average used DL bandwidth on the IP physical ports	B50331649.C50332708	Average	hunbtbh, Sum, Minimum, Maximum
VS_IPDIAvgUsed_4	INTENSITY	FLOAT	Average used DL bandwidth on the IP physical ports	B50331649.C50332720	Average	hunbtbh, Sum, Minimum, Maximum
VS_IPDIMaxUsed_1	INTENSITY	FLOAT	Maximum used DL bandwidth on the IP physical ports.	B50331649.C50332683	Average	hunbtbh, Sum, Minimum, Maximum
VS_IPDIMaxUsed_2	INTENSITY	FLOAT	Maximum used DL bandwidth on the IP physical ports.	B50331649.C50332695	Average	hunbtbh, Sum, Minimum, Maximum
VS_IPDIMaxUsed_3	INTENSITY	FLOAT	Maximum used DL bandwidth on the IP physical ports.	B50331649.C50332707	Average	hunbtbh, Sum, Minimum, Maximum
VS_IPDIMaxUsed_4	INTENSITY	FLOAT	Maximum used DL bandwidth	B50331649.C50332719	Average	hunbtbh, Sum,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			on the IP physical ports.			Minimum, Maximum
VS_IPDITotal_1	INTENSITY	FLOAT	Available DL Bandwidth on IP Physical Ports.	B50331649.C50332682	Average	hunbtbh, Sum, Minimum, Maximum
VS_IPDITotal_2	INTENSITY	FLOAT	Available DL Bandwidth on IP Physical Ports.	B50331649.C50332694	Average	hunbtbh, Sum, Minimum, Maximum
VS_IPDITotal_3	INTENSITY	FLOAT	Available DL Bandwidth on IP Physical Ports.	B50331649.C50332706	Average	hunbtbh, Sum, Minimum, Maximum
VS_IPDITotal_4	INTENSITY	FLOAT	Available DL Bandwidth on IP Physical Ports.	B50331649.C50332718	Average	hunbtbh, Sum, Minimum, Maximum
VS_IPUIAvgUsed_1	INTENSITY	FLOAT	Average used UL bandwidth on the IP physical ports	B50331649.C50332681	Average	hunbtbh, Sum, Minimum, Maximum
VS_IPUIAvgUsed_2	INTENSITY	FLOAT	Average used UL bandwidth on the IP physical ports	B50331649.C50332693	Average	hunbtbh, Sum, Minimum, Maximum
VS_IPUIAvgUsed	INTENSITY	FLOAT	Average used	B50331649.C50332	Average	hunbtbh,

_3	TY	T	UL bandwidth on the IP physical ports	705		Sum, Minimum, Maximum
VS_IPUIAvgUsed_4	INTENSITY	FLOAT	Average used UL bandwidth on the IP physical ports	B50331649.C50332717	Average	hunbtbh, Sum, Minimum, Maximum
VS_IPUIMaxUsed_1	INTENSITY	FLOAT	Maximum used UL bandwidth on the IP physical ports.	B50331649.C50332680	Average	hunbtbh, Sum, Minimum, Maximum
VS_IPUIMaxUsed_2	INTENSITY	FLOAT	Maximum used UL bandwidth on the IP physical ports.	B50331649.C50332692	Average	hunbtbh, Sum, Minimum, Maximum
VS_IPUIMaxUsed_3	INTENSITY	FLOAT	Maximum used UL bandwidth on the IP physical ports.	B50331649.C50332704	Average	hunbtbh, Sum, Minimum, Maximum
VS_IPUIMaxUsed_4	INTENSITY	FLOAT	Maximum used UL bandwidth on the IP physical ports.	B50331649.C50332716	Average	hunbtbh, Sum, Minimum, Maximum
VS_IPUITotal_1	INTENSITY	FLOAT	Available UL Bandwidth on IP Physical Ports.	B50331649.C50332679	Average	hunbtbh, Sum, Minimum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						m, Maximum
VS_IPUITotal_2	INTENSITY	FLOAT	Available UL Bandwidth on IP Physical Ports.	B50331649.C50332691	Average	hunbtbh, Sum, Minimum, Maximum
VS_IPUITotal_3	INTENSITY	FLOAT	Available UL Bandwidth on IP Physical Ports.	B50331649.C50332703	Average	hunbtbh, Sum, Minimum, Maximum
VS_IPUITotal_4	INTENSITY	FLOAT	Available UL Bandwidth on IP Physical Ports.	B50331649.C50332715	Average	hunbtbh, Sum, Minimum, Maximum

7.37.7 NodeB.Huawei.UMTS.Iub_Congestion

Iub congestion data.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IUB_CongDL	ACCUMULATION	INTEGER	Number of DL Congestions on Iub Interface	B67109473.C67192135	Sum	hunbtbh
VS_IUB_CongUL	ACCUMULATION	INTEGER	Number of UL Congestions on Iub Interface	B67109473.C67192134	Sum	hunbtbh
VS_IUB_TimeCongDL	ACCUMULATION	INTEGER	Duration of DL Congestions on Iub Interface	B67109473.C67203855	Sum	hunbtbh
VS_IUB_TimeCongUL	ACCUMULATION	INTEGER	Duration of UL Congestions on Iub Interface	B67109473.C67203854	Sum	hunbtbh

7.37.8 NodeB.Huawei.UMTS.IUB_NodeB

IuB measurement

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_AAL2Total	INTENSITY	INTEGER	Obsolete in Vn00R010; No description.	B50331649.C50332648	Average	hunbtbh, Sum, Minimum, Maximum
VS_HSDPAAlloc	INTENSITY	INTEGER	Obsolete in Vn00R010; No description.	B50331649.C50332651	Average	hunbtbh, Sum, Minimum, Maximum
VS_HSDPAAllocRatio_100	ACCUMULATION	INTEGER	Obsolete in Vn00R010; No description.	B50331649.C50332672	Sum	hunbtbh
VS_HSDPAAllocRatio_10	ACCUMULATION	INTEGER	Obsolete in Vn00R010; No description.	B50331649.C50332654	Sum	hunbtbh
VS_HSDPAAllocRatio_15	ACCUMULATION	INTEGER	Obsolete in Vn00R010; No description.	B50331649.C50332655	Sum	hunbtbh
VS_HSDPAAllocRatio_20	ACCUMULATION	INTEGER	Obsolete in Vn00R010; No description.	B50331649.C50332656	Sum	hunbtbh
VS_HSDPAAllocRatio_25	ACCUMULATION	INTEGER	Obsolete in Vn00R010; No description.	B50331649.C50332657	Sum	hunbtbh
VS_HSDPAAllocRatio_30	ACCUMULATION	INTEGER	Obsolete in Vn00R010; No	B50331649.C50332658	Sum	hunbtbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			description.			
VS_HSDPAAlloc Ratio_35	ACCUMULA TION	INTEG ER	Obsolete in Vn00R010; No description.	B50331649.C503 32659	Sum	hunbtbh
VS_HSDPAAlloc Ratio_40	ACCUMULA TION	INTEG ER	Obsolete in Vn00R010; No description.	B50331649.C503 32660	Sum	hunbtbh
VS_HSDPAAlloc Ratio_45	ACCUMULA TION	INTEG ER	Obsolete in Vn00R010; No description.	B50331649.C503 32661	Sum	hunbtbh
VS_HSDPAAlloc Ratio_50	ACCUMULA TION	INTEG ER	Obsolete in Vn00R010; No description.	B50331649.C503 32662	Sum	hunbtbh
VS_HSDPAAlloc Ratio_55	ACCUMULA TION	INTEG ER	Obsolete in Vn00R010; No description.	B50331649.C503 32663	Sum	hunbtbh
VS_HSDPAAlloc Ratio_5	ACCUMULA TION	INTEG ER	Obsolete in Vn00R010; No description.	B50331649.C503 32653	Sum	hunbtbh
VS_HSDPAAlloc Ratio_60	ACCUMULA TION	INTEG ER	Obsolete in Vn00R010; No description.	B50331649.C503 32664	Sum	hunbtbh
VS_HSDPAAlloc Ratio_65	ACCUMULA TION	INTEG ER	Obsolete in Vn00R010; No description.	B50331649.C503 32665	Sum	hunbtbh
VS_HSDPAAlloc Ratio_70	ACCUMULA TION	INTEG ER	Obsolete in Vn00R010; No description.	B50331649.C503 32666	Sum	hunbtbh
VS_HSDPAAlloc Ratio_75	ACCUMULA TION	INTEG ER	Obsolete in Vn00R010; No description.	B50331649.C503 32667	Sum	hunbtbh
VS_HSDPAAlloc Ratio_80	ACCUMULA TION	INTEG ER	Obsolete in Vn00R010; No description.	B50331649.C503 32668	Sum	hunbtbh
VS_HSDPAAlloc Ratio_85	ACCUMULA TION	INTEG ER	Obsolete in Vn00R010; No description.	B50331649.C503 32669	Sum	hunbtbh
VS_HSDPAAlloc	ACCUMULA	INTEG	Obsolete in	B50331649.C503	Sum	hunbtbh

Ratio_90	TION	ER	Vn00R010; No description.	32670		
VS_HSDPAAllocRatio_95	ACCUMULATION	INTEGER	Obsolete in Vn00R010; No description.	B50331649.C50332671	Sum	hunbtbh
VS_HSDPARemain	INTENSITY	INTEGER	Obsolete in Vn00R010; No description.	B50331649.C50332650	Average	hunbtbh, Sum, Minimum, Maximum
VS_HSDPAUsed	INTENSITY	INTEGER	Obsolete in Vn00R010; No description.	B50331649.C50332652	Average	hunbtbh, Sum, Minimum, Maximum
VS_R99Alloc	INTENSITY	INTEGER	Obsolete in Vn00R010; No description.	B50331649.C50332649	Average	hunbtbh, Sum, Minimum, Maximum

7.37.9 NodeB.Huawei.UMTS.NodeB_Availability

NodeB availability measurement.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_NodeB_Ratio_UnavailTime_OM	INTENSITY	FLOAT	Unavailability ratio of a NodeB, that is, the out-of-service ratio of a NodeB.	B67109473.C67203852	Average	hunbtbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_NodeB_UnavailTime_OM	ACCUMULATION	INTEGER	Unavailability duration (in seconds) of a NodeB, that is, the out-of-service time of a NodeB.	B67109473.C67203853	Sum	hunbtbh
-------------------------	--------------	---------	---	---------------------	-----	---------

7.37.10NodeB.Huawei.UMTS.Traffic_CS_aggregated_from_cell

CS Traffic data aggregated from cell level.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_MAC_SRNCIubBytesCSConv_Rx	ACCUMULATION	INTEGER	Number of UL MAC PDU bytes sent by the SRNC to the MAC-d on the CS conversational service bearer (DCH FP) over the Iub interface in a cell.	B67109387_GRP.C67199642	Sum	hunbtbh
VS_MAC_SRNCIubBytesCSConv_Tx	ACCUMULATION	INTEGER	Number of bytes of the DL MAC PDU sent by the SRNC on the CS conversational service bearer DCH FP over the Iub interface in a cell.	B67109387_GRP.C67199646	Sum	hunbtbh
VS_MAC_SRNCIubBytesCSStr_Rx	ACCUMULATION	INTEGER	Number of UL MAC PDU bytes sent by the	B67109387_GRP.C67199643	Sum	hunbtbh

			SRNC to the MAC-d on the CS streaming service bearer (DCH FP) over the Iub interface in a cell.			
VS_MAC_SRNCIubBytesCSStr_Tx	ACCUMULATION	INTEGER	Number of bytes of the DL MAC PDU sent by the SRNC on the CS streaming service bearer DCH FP over the Iub interface in a cell.	B67109387_GRP.C67199647	Sum	hunbtbh

7.37.11NodeB.Huawei.UMTS.Traffic_PS_aggregated_from_cell

PS traffic data aggregated from cell level.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
Traffic_busy_hour	ACCUMULATION	FLOAT	Calculation for NodeB traffic busy hour.	B67109387_GRP.C67199656 + B67109387_GRP.C67199652 + B67109387_GRP.C67199657 + B67109387_GRP.C67199653 + B67109387_GRP.C67199642 + B67109387_GRP.C67199646	Sum	hunbtbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_MAC_CRNCI ubBytes_PS_CCH _RX	ACCUMULA TION	INT8	Number of bytes in UL MAC PDU sent by the CRNC on the RACH PS over the Iub interface in a cell.	B67109387_GRP .C67204753	Sum	hunbtbh
VS_MAC_CRNCI ubBytes_PS_CCH _TX	ACCUMULA TION	INT8	Number of bytes in DL MAC PDU sent by the CRNC on the FACH PS over the Iub interface in a cell.	B67109387_GRP .C67204754	Sum	hunbtbh
VS_MAC_SRNCI ubBytesPSBkg_Rx	ACCUMULA TION	INTEG ER	Number of bytes of the UL MAC PDUs sent by the SRNC to the MAC-d on the PS background service bearer (DCH FP) over the Iub interface in a cell.	B67109387_GRP .C67199653	Sum	hunbtbh
VS_MAC_SRNCI ubBytesPSBkg_Tx	ACCUMULA TION	INTEG ER	Number of bytes of the DL MAC PDU sent by the SRNC on the PS background service bearer DCH FP over the Iub interface in a cell.	B67109387_GRP .C67199657	Sum	hunbtbh

VS_MAC_SRNCI ubBytesPSConv_Rx	ACCUMULATION	INTEGER	Number of bytes of the UL MAC PDUs sent by the SRNC to the MAC-d on the PS conversational service bearer (DCH FP) over the Iub interface in a cell.	B67109387_GRP .C67199650	Sum	hunbtbh
VS_MAC_SRNCI ubBytesPSConv_Tx	ACCUMULATION	INTEGER	Number of bytes of the DL MAC PDU sent by the SRNC on the PS conversational service bearer DCH FP over the Iub interface in a cell.	B67109387_GRP .C67199654	Sum	hunbtbh
VS_MAC_SRNCI ubBytesPSInt_Rx	ACCUMULATION	INTEGER	Number of bytes of the UL MAC PDUs sent by the SRNC to the MAC-d on the PS interactive service bearer (DCH FP) over the Iub interface in a cell.	B67109387_GRP .C67199652	Sum	hunbtbh
VS_MAC_SRNCI ubBytesPSInt_Tx	ACCUMULATION	INTEGER	Number of DL MAC	B67109387_GRP .C67199656	Sum	hunbtbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			PDU bytes sent by the SRNC on the PS interactive service bearer DCH FP over the Iub interface in a cell.			
VS_MAC_SRNCIubBytesPSStr_Rx	ACCUMULATION	INTEGER	Number of bytes of the UL MAC PDUs sent by the SRNC to the MAC-d on the PS streaming service bearer (DCH FP) over the Iub interface in a cell.	B67109387_GRP.C67199651	Sum	hunbtbh
VS_MAC_SRNCIubBytesPSStr_Tx	ACCUMULATION	INTEGER	Number of bytes of the DL MAC PDU sent by the SRNC on the PS streaming service bearer DCH FP over the Iub interface in a cell.	B67109387_GRP.C67199655	Sum	hunbtbh

7.38 OAM_Link Performance Indicators

This section shows the key performance indicators and other counters for the OAM_Link object, divided into the following sub-sections:

- [OAM_Link.Huawei.UMTS.NODEBOAM_Channel_Measurement](#)
- [OAM_Link.Huawei.UMTS.OAM_FLOW](#)

7.38.1 OAM_Link.Huawei.UMTS.NODEBOAM_Channel_Measurement

NodeB OAM Measurements

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_NODEBOAM_PEAK_RXBYTES	INTENSITY	INTEGER	Obsolete from UTRAN/V900 R011:Peak number of bytes received by NODEB OAM (specific to V100R010)	B67109521.C67192546	Average	Sum, Minimum, Maximum
VS_NODEBOAM_PEAK_TXBYTES	INTENSITY	INTEGER	Obsolete from UTRAN/V900 R011:Peak number of bytes transmitted by NODEB OAM (specific to V100R010)	B67109521.C67192547	Average	Sum, Minimum, Maximum
VS_NODEBOAM_RX_BYTES	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:Number of bytes received by NODEB OAM (specific to V100R010)	B67109521.C67192544	Sum	
VS_NODEBOAM_RX_MEAN_KBPS	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Average receive rate of NODEB OAM (specific to V100R010)	B67109521.C67203956	Average	Sum, Minimum, Maximum
VS_NODEBOAM	ACCUMULATION	INTEGER	Obsolete from	B67109521.C6719	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

M_RX_PKTS	TION	ER	UTRAN/V900 R011: Number of packets received by NODEB OAM (specific to V100R010)	2548		
VS_NODEBOAM_TX_BYTES	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of bytes transmitted by NODEB OAM (specific to V100R010)	B67109521.C67192545	Sum	
VS_NODEBOAM_TX_MEAN_KBPS	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011: Average transmit rate of NODEB OAM (specific to V100R010)	B67109521.C67203957	Average	Sum, Minimum, Maximum
VS_NODEBOAM_TX_PKTS	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of packets transmitted by NODEB OAM (specific to V100R010)	B67109521.C67192508	Sum	

7.38.2 OAM_Link.Huawei.UMTS.OAM_FLOW

OAM FLOW measurements

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_OAM_FLOW_MEANS_RX	INTENSITY	FLOAT	Average rate received in OAM_FLOW	B67109538.C67204729	Average	Sum, Minimum, Maximum

VS_OAM_FLOW_MEANS_TX	INTENSITY	FLOAT	Average rate transmitted in OAM_FLOW	B67109538.C67204727	Average	Sum, Minimum, Maximum
VS_OAM_FLOW_PEAK_RXRAT_E	INTENSITY	FLOAT	Peak rate received in OAM_FLOW	B67109538.C67204728	Average	Sum, Minimum, Maximum
VS_OAM_FLOW_PEAK_TXRAT_E	INTENSITY	FLOAT	Peak rate transmitted in OAM_FLOW	B67109538.C67204726	Average	Sum, Minimum, Maximum
VS_OAM_FLOW_RXBYTES	ACCUMULATION	INTEGER	Number of bytes received in OAM_FLOW	B67109538.C67195470	Sum	
VS_OAM_FLOW_RXDROPBYTES	ACCUMULATION	INTEGER	Number of discarded bytes received in OAM_FLOW	B67109538.C67195472	Sum	
VS_OAM_FLOW_RXDROPPACKETS	ACCUMULATION	INTEGER	Number of discarded packets received in OAM_FLOW	B67109538.C67195471	Sum	
VS_OAM_FLOW_RXPACKETS	ACCUMULATION	INTEGER	Number of packets received in OAM_FLOW	B67109538.C67195469	Sum	
VS_OAM_FLOW_TXBYTES	ACCUMULATION	INTEGER	Number of bytes transmitted in OAM_FLOW	B67109538.C67195466	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_OAM_FLOW_TXDROPPACKETS	ACCUMULATION	INTEGER	Number of discarded bytes transmitted in OAM_FLOW	B67109538.C67195468	Sum	
VS_OAM_FLOW_TXDROPPACKETS	ACCUMULATION	INTEGER	Number of discarded packets transmitted	B67109538.C67195467	Sum	
VS_OAM_FLOW_TXPACKETS	ACCUMULATION	INTEGER	Number of packets transmitted in OAM_FLOW	B67109538.C67195465	Sum	

7.39 PPP Performance Indicators

This section shows the key performance indicators and other counters for the PPP object, divided into the following sub-sections:

- [PPP.Huawei.UMTS.PPP_QUEUE](#)
- [PPP.Huawei.UMTS.PPP](#)

7.39.1 PPP.Huawei.UMTS.PPP_QUEUE

PPP Queue measurements

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_PPP_QUEUE_MEAN_TX	INTENSITY	FLOAT	Mean transmission rate of the PPP LINK_queue	B67109543.C67204583	Average	Sum, Minimum, Maximum
VS_PPP_QUEUE_PEAK_TXRATE	INTENSITY	FLOAT	Peak transmission rate of the PPP LINK_queue	B67109543.C67204582	Average	Sum, Minimum, Maximum
VS_PPP_QUEUE_TXBYTES	ACCUMULATION	INTEGER	Number of transmitted bytes from the	B67109543.C67195193	Sum	

			PPP LINK_queue			
VS_PPP_QUEUE_TXDROPPBYTES	ACCUMULATION	INTEGER	Number of discarded bytes in transmission from the PPP LINK_queue	B67109543.C67195195	Sum	
VS_PPP_QUEUE_TXDROPPACKETS	ACCUMULATION	INTEGER	Number of discarded packets in transmission from the PPP LINK_queue	B67109543.C67195194	Sum	
VS_PPP_QUEUE_TXPACKETS	ACCUMULATION	INTEGER	Number of transmitted packets from the PPP LINK_queue	B67109543.C67195192	Sum	

7.39.2 PPP.Huawei.UMTS.PPP

PPP measurement.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
Total_VS_PPP_BYTES	ACCUMULATION	INT8	Number of bytes sent and received by a PPP link in a measurement period.	({VS_PPP_RXBYTES} + {VS_PPP_TXBYTES})	Sum	
VS_PPP_Allocated_Ave_Bwd	INTENSITY	FLOAT	Mean backward bandwidth assigned to a PPP link	B67109491.C67204199	Average	Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_PPP_Allocated_Ave_Fwd	INTENSITY	FLOAT	Mean forward bandwidth assigned to a PPP link	B67109491.C67 204198	Average	Sum, Minimum, Maximum
VS_PPP_Allocated_Max_Bwd	INTENSITY	FLOAT	Peak backward bandwidth assigned to a PPP link	B67109491.C67 193246	Average	Sum, Minimum, Maximum
VS_PPP_Allocated_Max_Fwd	INTENSITY	FLOAT	Peak forward bandwidth assigned to a PPP link	B67109491.C67 193245	Average	Sum, Minimum, Maximum
VS_PPP_Bwd_Cong_Dur	ACCUMULATION	INTEGER	Duration of backward congestion on a PPP link	B67109491.C67 193250	Sum	
VS_PPP_Bwd_Cong	ACCUMULATION	INTEGER	Number of backward congestions on a PPP link	B67109491.C67 193249	Sum	
VS_PPP_FAULTCLEAR	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of times faults are cleared in PPP LINK	B67109491.C67 194424	Sum	
VS_PPP_FAULTLIMIT	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of times faults occur in PPP LINK	B67109491.C67 194423	Sum	
VS_PPP_FAULTTIME	ACCUMULATION	INTEGER	Duration of PPP LINK faults	B67109491.C67 194425	Sum	
VS_PPP_Fwd_Cong_Dur	ACCUMULATION	INTEGER	Duration of forward congestion on	B67109491.C67 193248	Sum	

			a PPP link			
VS_PPP_Fwd_Cong	ACCUMULATION	INTEGER	Number of forward congestions on a PPP link	B67109491.C67193247	Sum	
VS_PPP_MeanThroughputKbps_Rx	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Mean Rx rate of a PPP link in a given measurement period. Unit: kbps.	B67109511.C67203906	Average	Sum, Minimum, Maximum
VS_PPP_MeanThroughputKbps_Tx	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Mean Rx rate of a PPP link in a given measurement period. Unit: kbps.	B67109511.C67203907	Average	Sum, Minimum, Maximum
VS_PPP_PktUnexpectedRx	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:Tx lost Number of package received by a PPP link in a measurement period.	B67109511.C67192401	Sum	
VS_PPP_RX_BYTES	ACCUMULATION	INT8	Obsolete from UTRAN/V900 R011:Number of bytes received by a PPP link in a	B67109511.C67192399	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			measurement period.			
VS_PPP_RXBYTES	ACCUMULATION	INT8	Number of bytes received by a PPP link in a measurement period.	B67109491.C67194421	Sum	
VS_PPP_RXDROPS	ACCUMULATION	INTEGER	Number of error packets received by PPP LINK	B67109491.C67194422	Sum	
VS_PPP_RXMAXSPEED	INTENSITY	FLOAT	Maximum receive rate of PPP LINK	B67109491.C67194429	Average	Sum, Minimum, Maximum
VS_PPP_RXMEANSPEED	INTENSITY	FLOAT	Mean Rx rate of a PPP link in a given measurement period. Unit: kbps.	B67109491.C67194431	Average	Sum, Minimum, Maximum
VS_PPP_RXMINSPEED	INTENSITY	FLOAT	Minimum receive rate of PPP LINK	B67109491.C67194430	Average	Sum, Minimum, Maximum
VS_PPP_RXPACKETS	ACCUMULATION	INTEGER	Number of packets successfully received by PPP LINK	B67109491.C67194420	Sum	
VS_PPP_TX_BYTES	ACCUMULATION	INT8	Obsolete from UTRAN/V900 R011: Number of bytes sent by a PPP link in a measurement period.	B67109511.C67192400	Sum	

VS_PPP_TXBYTES	ACCUMULATION	INT8	Number of bytes sent by a PPP link in a measurement period.	B67109491.C67194418	Sum	
VS_PPP_TXDROPS	ACCUMULATION	INTEGER	Tx lost Number of package received by a PPP link in a measurement period.	B67109491.C67194419	Sum	
VS_PPP_TXMAXSPEED	INTENSITY	FLOAT	Maximum transmit rate of PPP LINK	B67109491.C67194426	Average	Sum, Minimum, Maximum
VS_PPP_TXMEANSPEED	INTENSITY	FLOAT	Mean Rx rate of a PPP link in a given measurement period. Unit: kbps.	B67109491.C67194428	Average	Sum, Minimum, Maximum
VS_PPP_TXMINSPEED	INTENSITY	FLOAT	Minimum transmit rate of PPP LINK	B67109491.C67194427	Average	Sum, Minimum, Maximum
VS_PPP_TXPACKETS	ACCUMULATION	INTEGER	Total Number of packets successfully transmitted by PPP LINK	B67109491.C67194417	Sum	

7.40 Processor Performance Indicators

This section shows the key performance indicators and other counters for the Processor object, divided into the following sub-sections:

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

- [Processor.Huawei.UMTS.CPUS](#)
- [Processor.Huawei.UMTS.CSU](#)
- [Processor.Huawei.UMTS.DPU](#)
- [Processor.Huawei.UMTS.GCU](#)
- [Processor.Huawei.UMTS.HPU](#)
- [Processor.Huawei.UMTS.INTERWORKING](#)
- [Processor.Huawei.UMTS.INT](#)
- [Processor.Huawei.UMTS.LPU](#)
- [Processor.Huawei.UMTS.MPU](#)
- [Processor.Huawei.UMTS.MUX](#)
- [Processor.Huawei.UMTS.NET](#)
- [Processor.Huawei.UMTS.PIU](#)
- [Processor.Huawei.UMTS.SCU](#)
- [Processor.Huawei.UMTS.SPU_V200](#)
- [Processor.Huawei.UMTS.SPU](#)
- [Processor.Huawei.UMTS.WFMR](#)
- [Processor.Huawei.UMTS.XIE](#)
- [Processor.Huawei.UMTS.XPU](#)

7.40.1 Processor.Huawei.UMTS.CPUS

CPUS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_CSLoad_Erlang_Equiv_CPUS	INTENSITY	FLOAT	Equivalent erlang values of all services in the cs domain of the CPUS.	B67109453_V900.C67203413	Average	Sum, Minimum, Maximum
VS_HSDPA_RAB_AttEstab_CPUS	ACCUMULATION	INTEGER	This measurement counter provides the number of HSDPA RAB requests in the CPUS subsystem.	B67109453_V900.C67193083	Sum	
VS_HSDPA_RAB_SuccEstab_CPUS	ACCUMULATION	INTEGER	This measurement counter provides the number of HSDPA RABs	B67109453_V900.C67193084	Sum	

			set up in the CPUS subsystem.			
VS_HSUPA_RAB_AttEstab_CPUS	ACCUMULATION	INTEGER	This measurement counter provides the number of HSUPA RAB requests in the CPUS subsystem.	B67109453_V90 0.C67193085	Sum	
VS_HSUPA_RAB_SuccEstab_CPUS	ACCUMULATION	INTEGER	This measurement counter provides the number of HSUPA RABs set up in the CPUS subsystem.	B67109453_V90 0.C67193086	Sum	
VS_RAB_AttEstab_AMR_CPUS	ACCUMULATION	INTEGER	The measurement items provide the number of RABs requested to establish in the CPUS subsystem according to different types of services - AMR.	B67109453_V90 0.C67193079	Sum	
VS_RAB_AttEstabPS_CPUS	ACCUMULATION	INTEGER	This measurement counter provides the number of PS RAB requests in the CPUS subsystem.	B67109453_V90 0.C67193087	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RAB_AttEstCS_Conv_64_CPUS	ACCUMULATION	INTEGER	The measurement items provide the number of RABs requested to establish in the CPUS subsystem according to different types of services - Conv 64.	B67109453_V900.C67193081	Sum	
VS_RAB_Rel_Abnorm_AMR_CPUS	ACCUMULATION	INTEGER	These measurement counters provide the number of RAB abnormal releases triggered by the RNC in the CPUS subsystem on the basis of domain type and service attribute. The abnormal release here refers to all RAB releases except the one made by the RNC normally.	B67109453_V900.C67193089	Sum	
VS_RAB_Rel_Abnorm_CS_Conv64K_CPUS	ACCUMULATION	INTEGER	These measurement counters provide the number of RAB abnormal releases triggered by the RNC in the CPUS subsystem on the basis of domain type and service attribute.	B67109453_V900.C67193091	Sum	

			The abnormal release here refers to all RAB releases except the one made by the RNC normally.			
VS_RAB_Rel_Abnorm_PS_CPUS	ACCUMULATION	INTEGER	These measurement counters provide the number of RAB abnormal releases triggered by the RNC in the CPUS subsystem on the basis of domain type and service attribute. The abnormal release here refers to all RAB releases except the one made by the RNC normally.	B67109453_V900.C67193093	Sum	
VS_RAB_Rel_Norm_AMR_CPUS	ACCUMULATION	INTEGER	Number of RABs normally released for AMR services in the CPUS subsystem.	B67109453_V900.C67193090	Sum	
VS_RAB_Rel_Norm_CS_Conv64K_CPUS	ACCUMULATION	INTEGER	Number of CS RABs normally released for 64kbit/s services in the CPUS subsystem.	B67109453_V900.C67193092	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RAB_Rel_Norm_PS_CPUS	ACCUMULATION	INTEGER	Number of PS RABs normally released in the CPUS subsystem.	B67109453_V900.C67193094	Sum	
VS_RAB_SuccEstab_AMR_CPUS	ACCUMULATION	INTEGER	Number of CS RABs successfully established on request for voice services in the CPUS subsystem.	B67109453_V900.C67193080	Sum	
VS_RAB_SuccEstabPS_CPUS	ACCUMULATION	INTEGER	This measurement counter provides the number of PS RABs set up in the CPUS subsystem.	B67109453_V900.C67193088	Sum	
VS_RAB_SuccEstCS_Conv_64_CPUS	ACCUMULATION	INTEGER	Number of CS RABs successfully established on request for 64kbit/s conversational services in the CPUS subsystem.	B67109453_V900.C67193082	Sum	
VS_RRC_AttConnEstab_CPUS	ACCUMULATION	INTEGER	This measurement item provides the number of RRC CONNECTION REQUEST messages processed by the RNC in the CPUS subsystem.	B67109453_V900.C67193077	Sum	
VS_RRC_Succ	ACCUMULATION	INTEGER	This	B67109453_V90	Sum	

ConnEstab_CPU S	TION	ER	measurement item provides the number of successful RRC connection setups in the CPUS subsystem.	0.C67193078		
--------------------	------	----	--	-------------	--	--

7.40.2 Processor.Huawei.UMTS.CSU

CSU data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_CSU_CPULOAD_LESS	INTENSITY	FLOAT	Obsolete in Vn00R010; Percentage of CSU CPU usage between alarm threshold and alarm restore threshold	B67109492.C67204333	Average	Sum, Minimum, Maximum
VS_CSU_CPULOAD_MAX	INTENSITY	INTEGER	Obsolete in Vn00R010; Maximum CPU usage of CSU	B67109492.C67194433	Average	Sum, Minimum, Maximum
VS_CSU_CPULOAD_MEAN	INTENSITY	FLOAT	Obsolete in Vn00R010; Average CPU usage of CSU	B67109492.C67204331	Average	Sum, Minimum, Maximum
VS_CSU_CPULOAD_OVER	INTENSITY	FLOAT	Obsolete in Vn00R010; Percentage of CSU CPU usage over alarm	B67109492.C67204332	Average	Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			threshold			
VS_CSU_DOSMEM_MAX	INTENSITY	INTEGER	Obsolete in Vn00R010; Maximum usage of dynamic memory of CSU	B67109492.C67194438	Average	Sum, Minimum, Maximum
VS_CSU_DOSMEM_MEAN	INTENSITY	FLOAT	Obsolete in Vn00R010; Average dynamic memory usage of CSU	B67109492.C67204509	Average	Sum, Minimum, Maximum
VS_CSU_MBUF_LOAD_MAX	INTENSITY	INTEGER	Obsolete in Vn00R010; Maximum MBUF usage of CSU	B67109492.C67194444	Average	Sum, Minimum, Maximum
VS_CSU_MBUF_LOAD_MEAN	INTENSITY	FLOAT	Obsolete in Vn00R010; Average MBUF usage of CSU	B67109492.C67204335	Average	Sum, Minimum, Maximum
VS_CSU_MSGL_OAD_MAX	INTENSITY	INTEGER	Obsolete in Vn00R010; Maximum message usage of CSU	B67109492.C67194441	Average	Sum, Minimum, Maximum
VS_CSU_MSGL_OAD_MEAN	INTENSITY	FLOAT	Obsolete in Vn00R010; Average message usage of CSU	B67109492.C67204334	Average	Sum, Minimum, Maximum

7.40.3 Processor.Huawei.UMTS.DPU

DPU data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_DPU_CPUL	INTENSITY	FLOAT	Percentage of	B67109516.C67204	Average	Sum,

OAD_LESS	TY	T	DPU CPU usage between alarm threshold and alarm restore threshold.	465		Minimum, Maximum
VS_DPU_CPULOAD_MAX	INTENSITY	FLOAT	Maximum DPU CPU utilization in a measurement period.	B67109516.C67194743	Average	Sum, Minimum, Maximum
VS_DPU_CPULOAD_MEAN	INTENSITY	FLOAT	Mean DPU CPU utilization in a measurement period.	B67109516.C67204463	Average	Sum, Minimum, Maximum
VS_DPU_CPULOAD_OVER	INTENSITY	FLOAT	Percentage of DPU CPU usage over alarm threshold.	B67109516.C67204464	Average	Sum, Minimum, Maximum
VS_DPU_MSGLOAD_MAX	INTENSITY	INTEGER	Obsolete from UTRAN/V900R 011:Maximum msg usage of DPU	B67109516.C67194748	Average	Sum, Minimum, Maximum
VS_DPU_MSGLOAD_MEAN	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:Average of msg usage of DPU	B67109516.C67204466	Average	Sum, Minimum, Maximum

7.40.4 Processor.Huawei.UMTS.GCU

GCU utilisation

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
-----	------	-----------	-------------	------------	--------------------	-------------------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_GCU_CPULOAD_LESS	INTENSITY	INT8	Percentage of GCU CPU usage between alarm threshold and alarm restore threshold	B67109493.C67204338	Average	Sum, Minimum, Maximum
VS_GCU_CPULOAD_MAX	INTENSITY	INTEGER	Maximum CPU usage of GCU	B67109493.C67194447	Average	Sum, Minimum, Maximum
VS_GCU_CPULOAD_MEAN	INTENSITY	FLOAT	Average CPU usage of GCU	B67109493.C67204336	Average	Sum, Minimum, Maximum
VS_GCU_CPULOAD_OVER	INTENSITY	INT8	Percentage of GCU CPU usage over alarm threshold	B67109493.C67204337	Average	Sum, Minimum, Maximum
VS_GCU_MSGLOAD_MAX	INTENSITY	INTEGER	Obsolete from UTRAN/V900R011:Maximum message usage of GCU	B67109493.C67194452	Average	Sum, Minimum, Maximum
VS_GCU_MSGLOAD_MEAN	INTENSITY	FLOAT	Obsolete from UTRAN/V900R011:Average message usage of GCU	B67109493.C67204339	Average	Sum, Minimum, Maximum

7.40.5 Processor.Huawei.UMTS.HPU

HPU data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_LessCPULoad_HPU	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Number of	B67109401.C67202923	Average	Sum, Minimum,

			times CPU usage of WHPU ranges between alarm restoration threshold and alarm threshold.			Maximum
VS_MaxCPUUtil_HPU	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Maximum WHPU CPU utilization in a measurement period.	B67109401.C67189918	Constant	Sum, Minimum, Maximum
VS_MeanCPUUtil_HPU	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Mean WHPU CPU utilization in a measurement period	B67109401.C67202453	Average	Sum, Minimum, Maximum
VS_OverCPULoad_HPU	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Number of times CPU usage of WHPU exceeds alarm threshold.	B67109401.C67202922	Average	Sum, Minimum, Maximum

7.40.6 Processor.Huawei.UMTS.INTERWORKING

Interworking between protocols

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_INTERWORKING_AAL2TOUOIP	INTENSITY	INT8	Obsolete from UTRAN/V900R011:AAL2 to UOIP	B67109497.C67204498	Average	Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						m
VS_INTERWORKING_AAL5TOUOIP	INTENSITY	INT8	Obsolete from UTRAN/V900R 011:AAL5 to UOIP	B67109497.C67204500	Average	Sum, Minimum, Maximum
VS_INTERWORKING_GTPUTOUOIP	INTENSITY	INT8	Obsolete from UTRAN/V900R 011:GTPU to UOIP	B67109497.C67204504	Average	Sum, Minimum, Maximum
VS_INTERWORKING_SCTPTOUOIP	INTENSITY	INT8	Obsolete from UTRAN/V900R 011:SCTP to UOIP	B67109497.C67204506	Average	Sum, Minimum, Maximum
VS_INTERWORKING_UDPTOUOIP	INTENSITY	INT8	Obsolete from UTRAN/V900R 011:UDP to UOIP	B67109497.C67204502	Average	Sum, Minimum, Maximum
VS_INTERWORKING_UOIPTOAAL2	INTENSITY	INT8	Obsolete from UTRAN/V900R 011:UOIP to AAL2	B67109497.C67204499	Average	Sum, Minimum, Maximum
VS_INTERWORKING_UOIPTOAAL5	INTENSITY	INT8	Obsolete from UTRAN/V900R 011:UOIP to AAL5	B67109497.C67204501	Average	Sum, Minimum, Maximum
VS_INTERWORKING_UOIPTOGTPU	INTENSITY	INT8	Obsolete from UTRAN/V900R 011:UOIP to GTPU	B67109497.C67204505	Average	Sum, Minimum, Maximum
VS_INTERWORKING_UOIPTO SCTP	INTENSITY	INT8	Obsolete from UTRAN/V900R 011:UOIP to SCTP	B67109497.C67204507	Average	Sum, Minimum, Maximum

VS_INTERWORKING_UOIP_UDP	INTENSITY	INT8	Obsolete from UTRAN/V900R 011:UOIP to UDP	B67109497.C67204503	Average	Sum, Minimum, Maximum
--------------------------	-----------	------	---	---------------------	---------	-----------------------

7.40.7 Processor.Huawei.UMTS.INT

INT data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_INT_CPULOAD_LESS	ACCUMULATION	INT8	Rate of the Period in which the CPU usage of the INT is lower than the Alarm Threshold	B82833961.C73415845	Sum	
VS_INT_CPULOAD_MAX	ACCUMULATION	INT8	Maximum CPU usage of the INT	B82833961.C73403674	Sum	
VS_INT_CPULOAD_MEAN	ACCUMULATION	FLOAT	Average CPU usage of the INT	B82833961.C73415843	Sum	
VS_INT_CPULOAD_OVER	ACCUMULATION	INT8	Rate of the Period in which the CPU usage of the INT exceeds the Alarm Threshold	B82833961.C73415844	Sum	

7.40.8 Processor.Huawei.UMTS.LPU

LPU data

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_MaxCPUUtil_LPU	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Maximum CPU Usage of WLPU.	B67109462.C67191646	Constant	Sum, Minimum, Maximum
VS_MaxMEMUtil_LPU	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Maximum Memory Usage of WLPU.	B67109462.C67191649	Constant	Sum, Minimum, Maximum
VS_MeanCPUUtil_LPU	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Average CPU Usage of WLPU.	B67109462.C67191647	Average	Sum, Minimum, Maximum
VS_MeanMEMUtil_LPU	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Average Memory Usage of WLPU.	B67109462.C67190767	Average	Sum, Minimum, Maximum
VS_OverCPULoad_LPU	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Number of Times CPU Usage Exceeds Alarm Threshold.	B67109462.C67191648	Average	Sum, Minimum, Maximum

7.40.9 Processor.Huawei.UMTS.MPU

MPU data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_MaxCPUUtil_MPU	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Maximum WMPU CPU	B67109461.C67191641	Constant	Sum, Minimum, Maximum

			Utilization.			m
VS_MaxMEMUtil_MPU	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Maximum Memory Utilization rate of MPU.	B67109461.C67191644	Constant	Sum, Minimum, Maximum
VS_MeanCPUUtil_MPU	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Mean WMPU CPU Utilization.	B67109461.C67191642	Average	Sum, Minimum, Maximum
VS_MeanMemoryUtil_MPU	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Memory Utilization rate of MPU.	B67109461.C67191645	Average	Sum, Minimum, Maximum
VS_MPU_CPU_LOAD_LESS	INTENSITY	INT8	Obsolete from UTRAN/V900R011:Percentage of MPU CPU usage between alarm threshold and alarm restore threshold	B67109537.C67204518	Average	Sum, Minimum, Maximum
VS_MPU_CPU_LOAD_MAX	INTENSITY	INTEGER	Obsolete from UTRAN/V900R011:Maximum CPU usage of MPU	B67109537.C67195023	Average	Sum, Minimum, Maximum
VS_MPU_CPU_LOAD_MEAN	INTENSITY	FLOAT	Obsolete from UTRAN/V900R011:Average CPU usage of MPU	B67109537.C67204516	Average	Sum, Minimum, Maximum
VS_MPU_CPU_LOAD_OVER	INTENSITY	INT8	Obsolete from UTRAN/V900R	B67109537.C67204517	Average	Sum, Minimum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			011:Percentage of MPU CPU usage over alarm threshold			m, Maximum
VS_MPU_DOSMEM_MAX	INTENSITY	INTEGER	Obsolete from UTRAN/V900R 011:Maximum usage of dynamic memory of MPU	B67109537.C67195028	Average	Sum, Minimum, Maximum
VS_MPU_DOSMEM_MEAN	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:Average dynamic memory usage of MPU	B67109537.C67204730	Average	Sum, Minimum, Maximum
VS_MPU_MBUF_LOAD_MAX	INTENSITY	INTEGER	Obsolete from UTRAN/V900R 011:Maximum MBUF usage of MPU	B67109537.C67195034	Average	Sum, Minimum, Maximum
VS_MPU_MBUF_LOAD_MEAN	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:Average MBUF usage of MPU	B67109537.C67204520	Average	Sum, Minimum, Maximum
VS_MPU_MSGL_OAD_MAX	INTENSITY	INTEGER	Obsolete from UTRAN/V900R 011:Maximum message usage of MPU	B67109537.C67195031	Average	Sum, Minimum, Maximum
VS_MPU_MSGL_OAD_MEAN	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:Average message usage of MPU	B67109537.C67204519	Average	Sum, Minimum, Maximum
VS_OverCPULoad_MPU	INTENSITY	FLOAT	Obsolete from UTRAN/V200R 010:CPUUtil Overload Times.	B67109461.C67191643	Average	Sum, Minimum, Maximum

VS_PSLoad_DL Thruput_MPU	INTENSI TY	FLOA T	DL traffic of PS domain in MPU	B67109537.C67204 522	Average	Sum, Minimu m, Maximu m
VS_PSLoad_UL Thruput_MPU	INTENSI TY	FLOA T	UL traffic of PS domain in MPU	B67109537.C67204 521	Average	Sum, Minimu m, Maximu m

7.40.10Processor.Huawei.UMTS.MUX

MUX data

KPI	Type	Data Type	Description	Derivation	Default Aggrega tor	Other Aggrega tors
CFG_INTERWO RKING_FAIL_N UM_MUX	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011: Number of failed interworking configuration attempts of the MUX.	B67109418.C671 93437	Sum	
CFG_INTERWO RKING_NUM_M UX	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011: Number of interworking configuration attempts of the MUX.	B67109418.C671 93436	Sum	
VS_CPUUtil_MU X_DENO	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011: No description available.	B67109418.C666 66628	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_CPUUtil_MUX_NUM	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:No description available.	B67109418.C66666629	Sum	
VS_LessCPULoad_MUX	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:No description available.	B67109418.C67202927	Average	Sum, Minimum, Maximum
VS_MaxCPUUtil_MUX	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Maximum WMUX CPU utilization in a measurement period.	B67109418.C67190494	Constant	Sum, Minimum, Maximum
VS_MeanCPUUtil_MUX	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Mean WMUX CPU utilization in a measurement period.	B67109418.C67202564	Average	Sum, Minimum, Maximum
VS_OverCPULoad_MUX	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:No description available.	B67109418.C67202926	Average	Sum, Minimum, Maximum

7.40.11Processor.Huawei.UMTS.NET

NET data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_MaxCPUUtil_NET	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Maximum CPU Usage of	B67109463.C67190768	Constant	Sum, Minimum, Maximum

			WNET.			m
VS_MaxMEMUtil_NET	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Maximum Memory Usage of WNET.	B67109463.C67190771	Constant	Sum, Minimum, Maximum
VS_MeanCPUUtil_NET	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Average CPU Usage of WNET.	B67109463.C67190769	Average	Sum, Minimum, Maximum
VS_MeanMemoryUtil_NET	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Average Memory Usage of WNET.	B67109463.C67190772	Average	Sum, Minimum, Maximum
VS_OverCPULoad_NET	INTENSITY	FLOAT	Obsolete from UTRAN/V200R010:Number of Times CPU Usage Exceeds Alarm Threshold.	B67109463.C67190770	Average	Sum, Minimum, Maximum

7.40.12 Processor.Huawei.UMTS.PIU

PIU data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_PIU_CFG_INTERWORKING_FAIL_NUM	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011:Number of failed interworking configuration attempts of the	B67109494.C67196209	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			PIU			
VS_PIU_CFG_IN TERWORKING_ NUM	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011: Number of interworking configuration attempts of the PIU	B67109494.C671 96208	Sum	
VS_PIU_CPULO AD_LESS	INTENSITY	FLOA T	Obsolete from UTRAN/V900 R011: Percenta ge of PIU CPU usage between alarm threshold and alarm restore threshold	B67109494.C672 04343	Average	Sum, Minimu m, Maximu m
VS_PIU_CPULO AD_MAX	INTENSITY	FLOA T	Obsolete from UTRAN/V900 R011: Maximu m PIU CPU utilization in a measurement period.	B67109494.C671 94458	Average	Sum, Minimu m, Maximu m
VS_PIU_CPULO AD_MEAN	INTENSITY	FLOA T	Obsolete from UTRAN/V900 R011: Mean PIU CPU utilization in a measurement period.	B67109494.C672 04341	Average	Sum, Minimu m, Maximu m
VS_PIU_CPULO AD_OVER	INTENSITY	FLOA T	Obsolete from UTRAN/V900 R011: Percenta ge of PIU CPU usage over alarm threshold.	B67109494.C672 04342	Average	Sum, Minimu m, Maximu m
VS_PIU_MSGLO AD_MAX	INTENSITY	INTEG ER	Obsolete from UTRAN/V900 R011: Maximu m message	B67109494.C671 94463	Average	Sum, Minimu m, Maximu

			usage of PIU			m
VS_PIU_MSGLOAD_MEAN	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011: Average message usage of PIU	B67109494.C67204344	Average	Sum, Minimum, Maximum

7.40.13 Processor.Huawei.UMTS.SCU

SCU data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_SCU_CPULOAD_LESS	INTENSITY	FLOAT	Percentage of SCU CPU usage between alarm threshold and alarm restore threshold.	B67109515.C67204469	Average	Sum, Minimum, Maximum
VS_SCU_CPULOAD_MAX	INTENSITY	FLOAT	Maximum CPU Usage of SCU.	B67109515.C67194751	Average	Sum, Minimum, Maximum
VS_SCU_CPULOAD_MEAN	INTENSITY	FLOAT	Average CPU usage of SCU.	B67109515.C67204467	Average	Sum, Minimum, Maximum
VS_SCU_CPULOAD_OVER	INTENSITY	FLOAT	Percentage of SCU CPU usage over alarm threshold.	B67109515.C67204468	Average	Sum, Minimum, Maximum
VS_SCU_MSGLOAD_MAX	INTENSITY	INTEGER	Obsolete from UTRAN/V900R	B67109515.C67194756	Average	Sum, Minimum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			011:Maximum msg usage of SCU			m, Maximum
VS_SCU_MSGLOAD_MEAN	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:Average msg usage of SCU	B67109515.C67204470	Average	Sum, Minimum, Maximum

7.40.14 Processor.Huawei.UMTS.SPU_V200

SPU CPU on V200

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_CSLoad_Erlang_Equiv_SPU	INTENSITY	FLOAT	Equivalent erlang values of all services in the cs domain of the SPU.	B67109453_V200.C67203413	Average	Sum, Minimum, Maximum
VS_SPU_CPULOAD_LESS	INTENSITY	INT8	Obsolete from UTRAN/V900R 011:Percentage of SPU CPU usage between alarm threshold and alarm restore threshold.	B67109453_V200.C67204303	Average	Sum, Minimum, Maximum
VS_SPU_CPULOAD_MAX	INTENSITY	INTEGER	Obsolete from UTRAN/V900R 011:Maximum CPU utilizations of a WSPU subsystem.	B67109453_V200.C67193963	Average	Sum, Minimum, Maximum
VS_SPU_CPULOAD_MEAN	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:Mean CPU utilizations of a WSPU subsystem.	B67109453_V200.C67204301	Average	Sum, Minimum, Maximum

VS_SPU_CPULOAD_OVER	INTENSITY	INT8	Obsolete from UTRAN/V900R 011:Percentage of SPU CPU usage over alarm threshold.	B67109453_V200.C 67204302	Average	Sum, Minimum, Maximum
VS_SPU_DOSMEM_MAX	INTENSITY	INTEGER	Obsolete from UTRAN/V900R 011:Maximum DOS memory utilizations of a WSPU subsystem.	B67109453_V200.C 67193968	Average	Sum, Minimum, Maximum
VS_SPU_DOSMEM_MEAN	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:Mean DOS memory utilizations of a WSPU subsystem.	B67109453_V200.C 67204508	Average	Sum, Minimum, Maximum
VS_SPU_MBUFLOAD_MAX	INTENSITY	INTEGER	Obsolete from UTRAN/V900R 011:Maximum MBUF usage of the SPU subsystem	B67109453_V200.C 67193974	Average	Sum, Minimum, Maximum
VS_SPU_MBUFLOAD_MEAN	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:Average MBUF usage of the SPU subsystem	B67109453_V200.C 67204305	Average	Sum, Minimum, Maximum
VS_SPU_MSGLOAD_MAX	INTENSITY	INTEGER	Obsolete from UTRAN/V900R 011:Maximum message memory usage of the SPU	B67109453_V200.C 67193971	Average	Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			subsystem			
VS_SPU_MSGL OAD_MEAN	INTENSI TY	FLOA T	Obsolete from UTRAN/V900R 011:Average message usage of the SPU subsystem	B67109453_V200.C 67204304	Average	Sum, Minimu m, Maximu m

7.40.15Processor.Huawei.UMTS.SPU

SPU data

KPI	Type	Data Type	Description	Derivation	Default Aggrega tor	Other Aggrega tors
VS_CSLoad_Erl ang_Equiv_SPU	ERLANG	FLOA T	Equivalent Erlang values of all services in the CS domain of the SPU.	B67109453.C672 03413	Average	Sum, Minimu m, Maximu m
VS_HSDPA_R AB_AttEstab_S PU	ACCUMULA TION	INTEG ER	This measurement counter provides the number of HSDPA RAB requests in the SPU subsystem.	B67109453.C671 93083	Sum	
VS_HSDPA_R AB_SuccEstab_ SPU	ACCUMULA TION	INTEG ER	This measurement counter provides the number of HSDPA RABs set up in the SPU subsystem.	B67109453.C671 93084	Sum	
VS_HSUPA_R AB_AttEstab_S PU	ACCUMULA TION	INTEG ER	This measurement counter provides the number of HSUPA RAB requests in the SPU subsystem.	B67109453.C671 93085	Sum	
VS_HSUPA_R	ACCUMULA	INTEG	This	B67109453.C671	Sum	

AB_SuccEstab_SPU	TION	ER	measurement counter provides the number of HSUPA RABs set up in the SPU subsystem.	93086		
VS_LessCPULoad_SPU	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:No description available.	B67109453.C67202925	Average	Sum, Minimum, Maximum
VS_MaxCPUUtil_SPU	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:This item provides the maximum CPU utilizations of a WSPU subsystem.	B67109453.C67183875	Constant	Sum, Minimum, Maximum
VS_MaxMEMUtil_SPU	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:This item provides the maximum DOS memory utilizations of a WSPU subsystem.	B67109453.C67183878	Constant	Sum, Minimum, Maximum
VS_MeanCPUUtil_SPU	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:This item provides the mean CPU utilizations of a WSPU subsystem	B67109453.C67199674	Average	Sum, Minimum, Maximum
VS_MeanMEMUtil_SPU	INTENSITY	FLOAT	Obsolete from UTRAN/V900R	B67109453.C67199675	Average	Sum, Minimum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			011:This item provides the mean DOS memory utilizations of a WSPU subsystem.			m, Maximum
VS_OverCPULoad_SPU	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:No description available.	B67109453.C67202924	Average	Sum, Minimum, Maximum
VS_PSLoad_DLThruput_SPU	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:Downlink traffic of all services in the PS domain of the SPU.	B67109453.C67203415	Average	Sum, Minimum, Maximum
VS_PSLoad_ULThruput_SPU	INTENSITY	FLOAT	Obsolete from UTRAN/V900R 011:Uplink traffic of all services in the PS domain of the SPU.	B67109453.C67203414	Average	Sum, Minimum, Maximum
VS_RAB_AttEstab_AMR_SPU	ACCUMULATION	INTEGER	The measurement items provide the number of RABs requested to establish in the SPU subsystem according to different types of services - AMR.	B67109453.C67193079	Sum	
VS_RAB_AttEstabPS_SPU	ACCUMULATION	INTEGER	This measurement counter provides the number of PS RAB	B67109453.C67193087	Sum	

			requests in the SPU subsystem.			
VS_RAB_AttEstCS_Conv_64_SPU	ACCUMULATION	INTEGER	The measurement items provide the number of RABs requested to establish in the SPU subsystem according to different types of services - Conv 64.	B67109453.C67193081	Sum	
VS_RAB_RelAbnorm_AMR_SPU	ACCUMULATION	INTEGER	These measurement counters provide the number of RAB abnormal releases triggered by the RNC in the SPU subsystem on the basis of domain type and service attribute. The abnormal release here refers to all RAB releases except the one made by the RNC normally.	B67109453.C67193089	Sum	
VS_RAB_RelAbnorm_CS_Conv64K_SPU	ACCUMULATION	INTEGER	These measurement counters provide the number of RAB abnormal releases triggered by the	B67109453.C67193091	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			RNC in the SPU subsystem on the basis of domain type and service attribute. The abnormal release here refers to all RAB releases except the one made by the RNC normally.			
VS_RAB_Rel_Abnorm_PS_SPU	ACCUMULATION	INTEGER	These measurement counters provide the number of RAB abnormal releases triggered by the RNC in the SPU subsystem on the basis of domain type and service attribute. The abnormal release here refers to all RAB releases except the one made by the RNC normally.	B67109453.C67193093	Sum	
VS_RAB_Rel_Norm_AMR_SPU	ACCUMULATION	INTEGER	Number of RABs normally released for AMR services in the SPU subsystem.	B67109453.C67193090	Sum	
VS_RAB_Rel_Norm_CS_Conv64K_SPU	ACCUMULATION	INTEGER	Number of CS RABs normally released for 64kbit/s services in the SPU subsystem.	B67109453.C67193092	Sum	

VS_RAB_Rel_Norm_PS_SPU	ACCUMULATION	INTEGER	Number of PS RABs normally released in the SPU subsystem.	B67109453.C67193094	Sum	
VS_RAB_SuccEstab_AMR_SPU	ACCUMULATION	INTEGER	Number of CS RABs successfully established on request for voice services in the SPU subsystem.	B67109453.C67193080	Sum	
VS_RAB_SuccEstabPS_SPU	ACCUMULATION	INTEGER	This measurement counter provides the number of PS RABs set up in the SPU subsystem.	B67109453.C67193088	Sum	
VS_RAB_SuccEstCS_Conv_64_SPU	ACCUMULATION	INTEGER	Number of CS RABs successfully established on request for 64kbit/s conversational services in the SPU subsystem.	B67109453.C67193082	Sum	
VS_RRC_AttConnEstab_SPU	ACCUMULATION	INTEGER	This measurement item provides the number of RRC CONNECTION REQUEST messages processed by the RNC in the SPU subsystem.	B67109453.C67193077	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RRC_Succ ConnEstab_SPU	ACCUMULATION	INTEGER	This measurement item provides the number of successful RRC connection setups in the SPU subsystem.	B67109453.C67193078	Sum	
------------------------------	--------------	---------	---	---------------------	-----	--

7.40.16 Processor.Huawei.UMTS.WFMR

WFMR data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
CFG_INTERWORKING_FAIL_NUM_FMR	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of failed interworking configuration attempts of the FMR.	B67109397.C67193439	Sum	
CFG_INTERWORKING_NUM_FMR	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of interworking configuration attempts of the FMR.	B67109397.C67193438	Sum	
VS_CPUUtil_FMR_DENO	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: No description available.	B67109397.C66666630	Sum	
VS_CPUUtil_FMR_NUM	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: No description available.	B67109397.C66666631	Sum	
VS_LessCPULoa	INTENSITY	FLOAT	Obsolete from	B67109397.C672	Average	Sum,

d_FMR		T	UTRAN/V900 R011:No description available.	02929		Minimum, Maximum
VS_MaxCPUUtil_FMR	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Maximum WFM CPU utilization in a measurement period.	B67109397.C67190497	Constant	Sum, Minimum, Maximum
VS_MeanCPUUtil_FMR	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:Mean WFM CPU utilization in a measurement period.	B67109397.C67202565	Average	Sum, Minimum, Maximum
VS_OverCPULoad_FMR	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:No description available.	B67109397.C67202928	Average	Sum, Minimum, Maximum

7.40.17 Processor.Huawei.UMTS.XIE

XIE data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
CFG_INTERWORKING_FAIL_NUM_INT	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:Number of failed interworking configuration attempts of the WXIE.	B67109404.C67193441	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

CFG_INTERWORKING_NUM_INT	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of interworking configuration attempts of the WXIE.	B67109404.C67193440	Sum	
VS_LessCPULoad_INT	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011: No description available.	B67109404.C67202931	Average	Sum, Minimum, Maximum
VS_MaxCPUUtil_INT	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011: Maximum WXIE CPU utilization in a measurement period.	B67109404.C67190500	Constant	Sum, Minimum, Maximum
VS_MeanCPUUtil_INT	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011: Mean WXIE CPU utilization in a measurement period.	B67109404.C67202566	Average	Sum, Minimum, Maximum
VS_OverCPULoad_INT	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011: No description available.	B67109404.C67202930	Average	Sum, Minimum, Maximum

7.40.18 Processor.Huawei.UMTS.XPU

XPU data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_XPU_CPU_LOAD_LESS	ACCUMULATION	INT8	Rate of the Period in which the CPU usage	B82833917.C73415212	Sum	

			of the XPU is lower than the Alarm Threshold			
VS_XPU_CPU_LOAD_MAX	ACCUMULATION	INT8	Maximum CPU usage of the XPU	B82833917.C73390062	Sum	
VS_XPU_CPU_LOAD_MEAN	ACCUMULATION	FLOAT	Average CPU usage of the XPU	B82833917.C73415210	Sum	
VS_XPU_CPU_LOAD_OVER	ACCUMULATION	INT8	Rate of the Period in which the CPU usage of the XPU exceeds the Alarm Threshold	B82833917.C73415211	Sum	

7.41 QosQueue Performance Indicators

This section shows the key performance indicators and other counters for the QosQueue object, divided into the following sub-sections:

- [QosQueue.Huawei.UMTS.QosQueue](#)

7.41.1 QosQueue.Huawei.UMTS.QosQueue

**Block obsolete in V200R010. QosQueue measurement.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IP_ByteTxQosQueue	ACCUMULATION	INT8	Obsolete from UTRAN/V200R010: Number of bytes sent by a QosQueue in a measurement period.	B67109513.C67192405	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_IP_PktDrop QosQueue	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200 R010: Number of packages dropped by a QosQueue in a measurement period.	B67109513.C67192406	Sum	
VS_IP_PktTxQosQueue	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200 R010: Number of packages sent by a QosQueue in a measurement period.	B67109513.C67192411	Sum	

7.42 RNC Performance Indicators

This section shows the key performance indicators and other counters for the RNC object, divided into the following sub-sections:

- [RNC.Huawei.UMTS.AMR_RNC](#)
- [RNC.Huawei.UMTS.AMR_WB_RNC](#)
- [RNC.Huawei.UMTS.DL_Inter_PS](#)
- [RNC.Huawei.UMTS.Hard_HO_RNC](#)
- [RNC.Huawei.UMTS.HSDPA_aggregated_from_cell](#)
- [RNC.Huawei.UMTS.HSUPA_aggregated_from_cell](#)
- [RNC.Huawei.UMTS.IMS_Statistics](#)
- [RNC.Huawei.UMTS.InterRAT_HO_CS_RNC](#)
- [RNC.Huawei.UMTS.InterRAT_HO_PS_RNC](#)
- [RNC.Huawei.UMTS.InterRAT_HO_SRNS_Relocation](#)
- [RNC.Huawei.UMTS.Location_Cell_Services_RNC](#)
- [RNC.Huawei.UMTS.MultiRab_RNC](#)
- [RNC.Huawei.UMTS.Paging_RNC](#)
- [RNC.Huawei.UMTS.PDCP_Statistics](#)
- [RNC.Huawei.UMTS.PDCPGTPU_Measurement](#)
- [RNC.Huawei.UMTS.RAB_Abnorm_Release_CS_RNC](#)
- [RNC.Huawei.UMTS.RAB_AttRelPS_RNC](#)
- [RNC.Huawei.UMTS.RAB_Establish_AMR_RNC](#)
- [RNC.Huawei.UMTS.RAB_Establish_CS_RNC](#)
- [RNC.Huawei.UMTS.RAB_Establish_Fail_CS_RNC](#)
- [RNC.Huawei.UMTS.RAB_Establish_Fail_PS_RNC](#)
- [RNC.Huawei.UMTS.RAB_Establishment_PS_Attempts_RNC](#)
- [RNC.Huawei.UMTS.RAB_Establishment_PS_RNC](#)

- [RNC.Huawei.UMTS.RAB_Loss_PLMN_RNC](#)
- [RNC.Huawei.UMTS.RAB_Modify_CS_RNC](#)
- [RNC.Huawei.UMTS.RAB_Modify_PS_RNC](#)
- [RNC.Huawei.UMTS.RAB_Release_CMB_RNC](#)
- [RNC.Huawei.UMTS.RAB_Release_CS_RNC](#)
- [RNC.Huawei.UMTS.RAB_Release_PS_RNC](#)
- [RNC.Huawei.UMTS.RB_Usage_CS_Conv_RNC](#)
- [RNC.Huawei.UMTS.RB_Usage_CS_Stream_RNC](#)
- [RNC.Huawei.UMTS.RB_Usage_DRD_RNC](#)
- [RNC.Huawei.UMTS.RB_Usage_PS_Bkg_RNC](#)
- [RNC.Huawei.UMTS.RB_Usage_PS_Conv_RNC](#)
- [RNC.Huawei.UMTS.RB_Usage_PS_Global_RNC](#)
- [RNC.Huawei.UMTS.RB_Usage_PS_Stream_RNC](#)
- [RNC.Huawei.UMTS.RLC_Statistics_RNC](#)
- [RNC.Huawei.UMTS.RRC_Connection_Setup_RNC](#)
- [RNC.Huawei.UMTS.RRC_Release_RNC](#)
- [RNC.Huawei.UMTS.RRC_States](#)
- [RNC.Huawei.UMTS.Signalling_Messages](#)
- [RNC.Huawei.UMTS.Soft_Handover_RNC](#)
- [RNC.Huawei.UMTS.SRNS_Relocation_Drift_RNC](#)
- [RNC.Huawei.UMTS.SRNS_Relocation_Serving_RNC_Failures](#)
- [RNC.Huawei.UMTS.SRNS_Relocation_Serving_RNC](#)
- [RNC.Huawei.UMTS.Traffic_category_with_Operator](#)
- [RNC.Huawei.UMTS.Traffic_Load](#)
- [RNC.Huawei.UMTS.Traffic_R99_HSDPA_HSUPA_MBMS](#)
- [RNC.Huawei.UMTS.UL_Inter_PS](#)

7.42.1 RNC.Huawei.UMTS.AMR_RNC

AMR data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_AMR_RB_DL_10_2	INTENSITY	FLOAT	The mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL	B67109435.C67202489	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			directions. The RNC periodically takes a sample of the number of AMR speech UEs at each of the eight UL and DL rates. At the end of the measurement period, the RNC divides the sum of the numbers of AMR speech UEs at one bit rate by the number of samples to get the average number.			, Sum, Minimum, Maximum
VS_AMR_RB_DL_12_2	INTENSITY	FLOAT	The mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions. The RNC periodically takes a sample of the number of AMR speech UEs at each of the eight UL and DL rates. At the end of the measurement period, the RNC divides the sum of the numbers of AMR speech UEs at one bit rate by the number of samples to get the average number.	B67109435.C67202490	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_AMR_RB_DL_4_75	INTENSITY	FLOAT	The mean numbers of UEs	B67109435.C67202491	Average	hub99psl bh,

			using the variable-rate AMR speech service in a RNC in the UL and DL directions. The RNC periodically takes a sample of the number of AMR speech UEs at each of the eight UL and DL rates. At the end of the measurement period, the RNC divides the sum of the numbers of AMR speech UEs at one bit rate by the number of samples to get the average number.			hubcslbh , hubhsdpabh, hubpslbh , Sum, Minimum, Maximum
VS_AMR_RB_DL_5_15	INTENSITY	FLOAT	The mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions. The RNC periodically takes a sample of the number of AMR speech UEs at each of the eight UL and DL rates. At the end of the measurement period, the RNC	B67109435.C67202492	Average	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh , Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			divides the sum of the numbers of AMR speech UEs at one bit rate by the number of samples to get the average number.			
VS_AMR_RB_DL_5_9	INTENSITY	FLOAT	The mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions. The RNC periodically takes a sample of the number of AMR speech UEs at each of the eight UL and DL rates. At the end of the measurement period, the RNC divides the sum of the numbers of AMR speech UEs at one bit rate by the number of samples to get the average number.	B67109435.C67202493	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_AMR_RB_DL_6_7	INTENSITY	FLOAT	The mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions. The RNC periodically takes a sample of the number of AMR speech UEs at each of the	B67109435.C67202563	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum

			eight UL and DL rates. At the end of the measurement period, the RNC divides the sum of the numbers of AMR speech UEs at one bit rate by the number of samples to get the average number.			
VS_AMR_RB_DL_7_4	INTENSITY	FLOAT	The mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions. The RNC periodically takes a sample of the number of AMR speech UEs at each of the eight UL and DL rates. At the end of the measurement period, the RNC divides the sum of the numbers of AMR speech UEs at one bit rate by the number of samples to get the average number.	B67109435.C67202494	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_AMR_RB_DL_7_95	INTENSITY	FLOAT	The mean numbers of UEs using the	B67109435.C67202495	Average	hub99psl bh, hubcslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			variable-rate AMR speech service in a RNC in the UL and DL directions. The RNC periodically takes a sample of the number of AMR speech UEs at each of the eight UL and DL rates. At the end of the measurement period, the RNC divides the sum of the numbers of AMR speech UEs at one bit rate by the number of samples to get the average number.			, hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_AMR_RB_UL_10_2	INTENSITY	FLOAT	The mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions. The RNC periodically takes a sample of the number of AMR speech UEs at each of the eight UL and DL rates. At the end of the measurement period, the RNC divides the sum of the numbers of AMR speech UEs at one bit rate by the number of	B67109435.C67202496	Average	hub99pslbh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum

			samples to get the average number.			
VS_AMR_RB_UL_12_2	INTENSITY	FLOAT	The mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions. The RNC periodically takes a sample of the number of AMR speech UEs at each of the eight UL and DL rates. At the end of the measurement period, the RNC divides the sum of the numbers of AMR speech UEs at one bit rate by the number of samples to get the average number.	B67109435.C67202497	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_AMR_RB_UL_4_75	INTENSITY	FLOAT	The mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions. The RNC periodically takes a sample of the number of AMR speech UEs at each of the	B67109435.C67202498	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			eight UL and DL rates. At the end of the measurement period, the RNC divides the sum of the numbers of AMR speech UEs at one bit rate by the number of samples to get the average number.			
VS_AMR_RB_UL_5_15	INTENSITY	FLOAT	The mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions. The RNC periodically takes a sample of the number of AMR speech UEs at each of the eight UL and DL rates. At the end of the measurement period, the RNC divides the sum of the numbers of AMR speech UEs at one bit rate by the number of samples to get the average number.	B67109435.C67202499	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum
VS_AMR_RB_UL_5_9	INTENSITY	FLOAT	The mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions. The	B67109435.C67202488	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum,

			RNC periodically takes a sample of the number of AMR speech UEs at each of the eight UL and DL rates. At the end of the measurement period, the RNC divides the sum of the numbers of AMR speech UEs at one bit rate by the number of samples to get the average number.			Minimum, Maximum
VS_AMR_RB_UL_6_7	INTENSITY	FLOAT	The mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions. The RNC periodically takes a sample of the number of AMR speech UEs at each of the eight UL and DL rates. At the end of the measurement period, the RNC divides the sum of the numbers of AMR speech UEs at one bit rate by the number of samples to get the	B67109435.C67202562	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			average number.			
VS_AMR_RB_UL_7_4	INTENSITY	FLOAT	The mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions. The RNC periodically takes a sample of the number of AMR speech UEs at each of the eight UL and DL rates. At the end of the measurement period, the RNC divides the sum of the numbers of AMR speech UEs at one bit rate by the number of samples to get the average number.	B67109435.C67202500	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_AMR_RB_UL_7_95	INTENSITY	FLOAT	The mean numbers of UEs using the variable-rate AMR speech service in a RNC in the UL and DL directions. The RNC periodically takes a sample of the number of AMR speech UEs at each of the eight UL and DL rates. At the end of the measurement period, the RNC divides the sum	B67109435.C67202501	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum

			of the numbers of AMR speech UEs at one bit rate by the number of samples to get the average number.			
--	--	--	--	--	--	--

7.42.2 RNC.Huawei.UMTS.AMR_WB_RNC

AMR WB RNC data.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_AMR_WB_RB_DL_12_65	INTENSITY	FLOAT	Mean Number of AMR Speech UEs at Different DL Bit Rates	B67109435.C672038 27	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_AMR_WB_RB_DL_14_25	INTENSITY	FLOAT	Mean Number of AMR Speech UEs at Different DL Bit Rates	B67109435.C672038 26	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_AMR_WB_	INTENSITY	FLOAT	Mean Number of	B67109435.C672038	Average	hub99psl

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

RB_DL_15_85	TY	T	AMR Speech UEs at Different DL Bit Rates	25		bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_AMR_WB_ RB_DL_18_25	INTENSI TY	FLOA T	Mean Number of AMR Speech UEs at Different DL Bit Rates	B67109435.C672038 24	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_AMR_WB_ RB_DL_19_85	INTENSI TY	FLOA T	Mean Number of AMR Speech UEs at Different DL Bit Rates	B67109435.C672038 23	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_AMR_WB_ RB_DL_23_05	INTENSI TY	FLOA T	Mean Number of AMR Speech UEs at Different DL Bit Rates	B67109435.C672038 22	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu

						m, Maximu m
VS_AMR_WB_ RB_DL_23_85	INTENSI TY	FLOA T	Mean Number of AMR Speech UEs at Different DL Bit Rates	B67109435.C672038 21	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_AMR_WB_ RB_DL_6_60	INTENSI TY	FLOA T	Mean Number of AMR Speech UEs at Different DL Bit Rates	B67109435.C672038 29	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_AMR_WB_ RB_DL_8_85	INTENSI TY	FLOA T	Mean Number of AMR Speech UEs at Different DL Bit Rates	B67109435.C672038 28	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_AMR_WB_RB_UL_12_65	INTENSITY	FLOAT	Mean Number of AMR Speech UEs at Different UL Bit Rates	B67109435.C67203836	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_AMR_WB_RB_UL_14_25	INTENSITY	FLOAT	Mean Number of AMR Speech UEs at Different UL Bit Rates	B67109435.C67203835	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_AMR_WB_RB_UL_15_85	INTENSITY	FLOAT	Mean Number of AMR Speech UEs at Different UL Bit Rates	B67109435.C67203834	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_AMR_WB_RB_UL_18_25	INTENSITY	FLOAT	Mean Number of AMR Speech UEs at Different UL Bit Rates	B67109435.C67203833	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum,

						Minimum, Maximum
VS_AMR_WB_RB_UL_19_85	INTENSITY	FLOAT	Mean Number of AMR Speech UEs at Different UL Bit Rates	B67109435.C67203832	Average	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh , Sum, Minimum, Maximum
VS_AMR_WB_RB_UL_23_05	INTENSITY	FLOAT	Mean Number of AMR Speech UEs at Different UL Bit Rates	B67109435.C67203831	Average	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh , Sum, Minimum, Maximum
VS_AMR_WB_RB_UL_23_85	INTENSITY	FLOAT	Mean Number of AMR Speech UEs at Different UL Bit Rates	B67109435.C67203830	Average	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh , Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_AMR_WB_RB_UL_6_60	INTENSITY	FLOAT	Mean Number of AMR Speech UEs at Different UL Bit Rates	B67109435.C67203838	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_AMR_WB_RB_UL_8_85	INTENSITY	FLOAT	Mean Number of AMR Speech UEs at Different UL Bit Rates	B67109435.C67203837	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum

7.42.3 RNC.Huawei.UMTS.DL_Inter_PS

DL Inter PS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RB_DLInterPS_128_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202652	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum

VS_RB_DLInte rPS_144_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATION AL/STREAMING/ INTERACTIVE/B ACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202 649	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_DLInte rPS_16_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATION AL/STREAMING/ INTERACTIVE/B ACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202 661	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_DLInte rPS_256_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATION AL/STREAMING/ INTERACTIVE/B ACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202 646	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_DLInte rPS_32_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATION	B67109440.C67202 658	Average	hub99psl bh, hubcslbh ,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			AL/STREAMING/INTERACTIVE/B ACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.			hubhspdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_DLInte rPS_384_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATION AL/STREAMING/INTERACTIVE/B ACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202 643	Average	hub99psl bh, hubcslbh , hubhspdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_DLInte rPS_64_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATION AL/STREAMING/INTERACTIVE/B ACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202 655	Average	hub99psl bh, hubcslbh , hubhspdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_DLInte rPS_8_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATION AL/STREAMING/INTERACTIVE/B ACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202 664	Average	hub99psl bh, hubcslbh , hubhspdpa bh, hubpslbh , Sum, Minimu m, Maximu m

7.42.4 RNC.Huawei.UMTS.Hard_HO_RNC

Hard Handover data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
$\bar{\%_VS_HHO_InterFreq_Succ_RNC}$	PERCENTAGE	FLOAT	Percentage successful inter-frequency hard handovers initiated by the RNC.	$100 * \frac{\{VS_HHO_InterFreq_Succ_RNC\}}{\{VS_HHO_InterFreq_Att_RNC\}}$	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
$\bar{\%_VS_HHO_Succ_IntraFreq_RNC}$	PERCENTAGE	FLOAT	Percentage of successful intra-frequency hard handovers initiated by the RNC.	$100 * \frac{\{VS_HHO_Succ_IntraFreq_RNC\}}{\{VS_HHO_Att_IntraFreq_RNC\}}$	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
$\bar{\%_VS_HHO_Succ_RNC}$	PERCENTAGE	FLOAT	Percentage successful hard handovers initiated by the RNC.	$100 * \frac{\{VS_HHO_Succ_RNC\}}{\{VS_HHO_Att_RNC\}}$	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
Total_call_drops	ACCUMULATION	INTEGER	Total number of call drops (intra and inter)	$\{VS_HHO_InterFreq_Drop_RNC\} + \{VS_HHO_IntraFreq_Drop_RNC\}$	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_HHO_Att_IntraFreq_RNC	ACCUMULATION	INTEGER	Number of intra-frequency hard handover	B67109447.C67192284	Sum	hub99pslbh, hubcslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			requests initiated by the RNC.			, hubhsdpa bh, hubpslbh
VS_HHO_Att_RNC	ACCUMULATION	INTEGER	Number of hard handover requests initiated by the RNC.	B67109447.C67175426	Sum	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh
VS_HHO_Eval_RNC	ACCUMULATION	INTEGER	Number of hard handover decisions made by the RNC.	B67109447.C67175425	Sum	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh
VS_HHO_InterFreq_Att_RNC	ACCUMULATION	INTEGER	Number of inter-frequency hard handover requests initiated by the RNC.	B67109447.C67175428	Sum	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh
VS_HHO_InterFreq_Drop_RNC	ACCUMULATION	INTEGER	Number of call drops due to inter-frequency hard handover failure in the RNC.	B67109447.C67175430	Sum	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh
VS_HHO_InterFreq_Succ_RNC	ACCUMULATION	INTEGER	Number of successful inter-frequency hard handovers initiated by the RNC.	B67109447.C67175429	Sum	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh
VS_HHO_IntraFreq_Drop_RNC	ACCUMULATION	INTEGER	Number of call drops due to intra-frequency	B67109447.C67175431	Sum	hub99pslbh, hubcslbh

			hard handover failure in the RNC.			hubhsdpa bh, hubpslbh
VS_HHO_Succ _IntraFreq_RN C	ACCUMULA TION	INTEG ER	Number of successful intra-frequency hard handovers initiated by the RNC.	B67109447.C6719 2285	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_HHO_Succ _RNC	ACCUMULA TION	INTEG ER	Number of successful hard handovers initiated by the RNC.	B67109447.C6717 5427	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

7.42.5 RNC.Huawei.UMTS.HSDPA_aggregated_from_cell

HSDPA data aggregated from cell level.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_HSDPA_MACD_ AbnormRel	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900R011: Number of MAC-D flows released abnormally in a cell.	B67109390_RN C_GRP.C67190 689	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_HSDPA_MACD_ Mean_Cell	INTENSITY	FLOA T	Mean number of MAC-D flows in a	B67109390_RN C_GRP.C67202 941	Average	hub99psl bh, hubcslbh ,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			cell.			hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_HSDPA_MACD_ Rel	ACCUMULA TION	INTEG ER	Number of MAC-D flows released in a cell.	B67109390_RN C_GRP.C67190 688	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_HSDPA_MACD FailDelPerCell	ACCUMULA TION	INTEG ER	Number of unsuccessful HSDPA service deletions in a cell.	B67109390_RN C_GRP.C67189 837	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_HSDPA_MACD FailStpPerCell	ACCUMULA TION	INTEG ER	Number of unsuccessful HSDPA service setups in a cell.	B67109390_RN C_GRP.C67189 836	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_HSDPA_MACD SuccDelPerCell	ACCUMULA TION	INTEG ER	Number of successful HSDPA service deletions in a cell.	B67109390_RN C_GRP.C67189 835	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_HSDPA_MACD SuccStpPerCell	ACCUMULA TION	INTEG ER	Number of successful MAC-d Flow setups in a cell.	B67109390_RN C_GRP.C67189 834	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

VS_HSDPA_MeanChThroughput_Times	INTENSITY	FLOAT	Mean throughput of MAC-D flows in a cell. Times	B67109390_RN C_GRP.C67190567	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_HSDPA_MeanChThroughput_TotalBytes	INTENSITY	FLOAT	Mean throughput of MAC-D flows in a cell.Total bytes	B67109390_RN C_GRP.C67189840	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_HSDPA_MeanChThroughput	INTENSITY	FLOAT	Mean throughput of MAC-D flows in a cell.	B67109390_RN C_GRP.C67202894	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_HSDPA_MeanCopperBeChThroughput_TotalBytes	ACCUMULATION	INTEGER	Number of bytes transmitted in MAC-d	B67109390_RN C_GRP.C67194871	Sum	hub99psl bh, hubcslbh ,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			flow of copper BE traffic			hubhspdabh, hubpslhb
VS_HSDPA_MeanCopperBeChThroughput	INTENSITY	FLOAT	Average throughput of MAC-d flow of copper BE traffic	B67109390_RNC_GRP.C67204512	Average	hub99pslhb, hubcslhb, hubhspdabh, hubpslhb, Sum, Minimum, Maximum
VS_HSDPA_MeanGoldenBeChThroughput_TotalBytes	ACCUMULATION	INT8	Number of bytes transmitted in MAC-d flow of golden BE traffic	B67109390_RNC_GRP.C67194867	Sum	hub99pslhb, hubcslhb, hubhspdabh, hubpslhb
VS_HSDPA_MeanGoldenBeChThroughput	INTENSITY	FLOAT	Average throughput of MAC-d flow of golden BE traffic	B67109390_RNC_GRP.C67204510	Average	hub99pslhb, hubcslhb, hubhspdabh, hubpslhb, Sum, Minimum, Maximum
VS_HSDPA_MeanSilverBeChThroughput_TotalBytes	ACCUMULATION	INT8	Number of bytes transmitted in MAC-d flow of silver BE traffic	B67109390_RNC_GRP.C67194869	Sum	hub99pslhb, hubcslhb, hubhspdabh, hubpslhb
VS_HSDPA_MeanSilverBeChThroughput	INTENSITY	FLOAT	Average throughput of	B67109390_RNC_GRP.C67204	Average	hub99pslhb,

			MAC-d flow of silver BE traffic	511		hubcslbh , hubhsdpabh, hubpslbh , Sum, Minimum, Maximum
VS_HSDPA_RAB_AtEstab_BE_Copper	ACCUMULATION	INTEGER	Number of HSDPA RAB establishment attempts of be service for copper-level users	B67109390_RNC_GRP.C67195509	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh
VS_HSDPA_RAB_AtEstab_BE_Golden	ACCUMULATION	INTEGER	Number of HSDPA RAB Establishment Attempts of BE Service for Golden-Level Users	B67109390_RNC_GRP.C67195507	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh
VS_HSDPA_RAB_AtEstab_BE_Silver	ACCUMULATION	INTEGER	Number of HSDPA RAB establishment attempts of be service for silver-level users	B67109390_RNC_GRP.C67195508	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh
VS_HSDPA_RAB_AtEstab	ACCUMULATION	INTEGER	Number of requests to set up the HSDPA service in a	B67109390_RNC_GRP.C67190704	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			cell.			bh, hubpslbh
VS_HSDPA_RAB_Loss_Abnorm_NonRF	ACCUMULATION	INTEGER	Number of HSDPA Service Abnormal Released due to Different Cause in a cell.	B67109390_RNC_GRP.C67191162	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_HSDPA_RAB_Loss_InActivity	ACCUMULATION	INTEGER	Number of HSDPA Service Released due to User Inactivity in a cell.	B67109390_RNC_GRP.C67191161	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_HSDPA_RAB_Loss_Norm	ACCUMULATION	INTEGER	Number of HSDPA Service Nomal Released in a cell.	B67109390_RNC_GRP.C67191164	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_HSDPA_RAB_Loss_RF	ACCUMULATION	INTEGER	Number of HSDPA Service Abnormal Released due to Iu/RAB cause : - Radio Connection With UE Lost - Failure in the Radio Interface Procedure.	B67109390_RNC_GRP.C67191163	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_HSDPA_RAB_SuccEstab_BE_Copper	ACCUMULATION	INTEGER	Number of successful HSDPA RAB establishment	B67109390_RNC_GRP.C67195512	Sum	hub99pslbh, hubcslbh, hubhsdpa

			s of be service for copper-level users			bh, hubpslbh
VS_HSDPA_RAB_SuccEstab_BE_Golden	ACCUMULATION	INTEGER	Number of Successful HSDPA RAB Establishments of BE Service for Golden-Level Users	B67109390_RN C_GRP.C67195510	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_HSDPA_RAB_SuccEstab_BE_Silver	ACCUMULATION	INTEGER	Number of successful HSDPA RAB establishments of be service for silver-level users	B67109390_RN C_GRP.C67195511	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_HSDPA_RAB_SuccEstab	ACCUMULATION	INTEGER	Number of successful setups of the HSDPA service in each cell.	B67109390_RN C_GRP.C67190705	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_HSDPA_UE_Mean_Cell	INTENSITY	FLOAT	This item provides the average number of UEs in CELL_HSDPA state in a cell.	B67109390_RN C_GRP.C67202932	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						Maximum
--	--	--	--	--	--	---------

7.42.6 RNC.Huawei.UMTS.HSUPA_aggregated_from_cell

HSUPA data aggregated from cell

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
HSUPA_MACDFailDelPerCell	ACCUMULATION	INTEGER	Number of failures to delete EDCH MACD FLOW in a cell.	B67109471_RNC_GRP.C67192113	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
HSUPA_MACDFailSetupPerCell	ACCUMULATION	INTEGER	Number of failures of the RNC to set up EDCH MACD FLOW in a cell.	B67109471_RNC_GRP.C67192111	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
HSUPA_MACDSuccessDelPerCell	ACCUMULATION	INTEGER	Number of successful attempts to delete EDCH MACD FLOW from a UE in a cell.	B67109471_RNC_GRP.C67192112	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
HSUPA_MACDSuccessSetupPerCell	ACCUMULATION	INTEGER	Number of successful attempts of the RNC to set up the EDCH MACD FLOW in a cell.	B67109471_RNC_GRP.C67192110	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
HSUPA_MeanChThr	ACCUMULATION	INTEGER	No	B67109471_RNC_GRP.C67192110	Sum	hub99pslbh

oughput_Times	TION	ER	description.	C_GRP.C67192 487		bh, hubcslbh , hubhsdpa bh, hubpslbh
HSUPA_MeanChThroug hput_TotByte	ACCUMULA TION	INT8	Number of bytes received by the MAC-d flow in a cell.	B67109471_RN C_GRP.C67192 486	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
HSUPA_MeanChThroug hput	INTENSITY	FLOA T	Average UL throughput of MAC-d flow in a cell.	B67109471_RN C_GRP.C67203 932	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
HSUPA_RAB_AtEst ab	ACCUMULA TION	INTEG ER	Number of attempts to set up HSUPA RABs in a cell.	B67109471_RN C_GRP.C67192 114	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
HSUPA_RAB_Loss_ Abnorm	ACCUMULA TION	INTEG ER	Number of HSUPA RABs abnormally released by the RNC in a cell.	B67109471_RN C_GRP.C67192 364	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

HSUPA_RAB_Loss_Norm	ACCUMULATION	INTEGER	Number of HSUPA RABs normally released by the RNC in a cell.	B67109471_RNC_GRP.C67192365	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh
HSUPA_RAB_Loss_UEGen	ACCUMULATION	INTEGER	Number of HSUPA RABs released by the RNC for the release of the UE signaling connection.	B67109471_RNC_GRP.C67192366	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh
HSUPA_RAB_SuccEstab	ACCUMULATION	INTEGER	Number of successful attempts to set up the HSUPA RABs in a cell.	B67109471_RNC_GRP.C67192115	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh
HSUPA_SHO_ServCellChg_Att	ACCUMULATION	INTEGER	Number of attempts to change the EDCH serving cells because the soft handover is performed or multiple links exist.	B67109471_RNC_GRP.C67192370	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh
HSUPA_SHO_ServCellChg_Succ	ACCUMULATION	INTEGER	Number of successful attempts to change the EDCH serving cells because the soft handover is	B67109471_RNC_GRP.C67192369	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh

			performed or multiple links exist.			
VS_HSUPA_CopperBeMeanChThroughput_TotalBytes	ACCUMULATION	INTEGER	Number of bytes receive in MAC-d flow of copper BE traffic	B67109471_RNC_GRP.C67194889	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_HSUPA_CopperBeMeanChThroughput	INTENSITY	FLOAT	Mean uplink throughput of MAC-d flows of copper BE traffic	B67109471_RNC_GRP.C67204515	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_HSUPA_GoldenBeMeanChThroughput_TotalBytes	ACCUMULATION	INT8	Number of bytes receive in MAC-d flow of golden BE traffic	B67109471_RNC_GRP.C67194873	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_HSUPA_GoldenBeMeanChThroughput	INTENSITY	FLOAT	Mean uplink throughput of MAC-d flows of golden BE traffic	B67109471_RNC_GRP.C67204513	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						Maximum
VS_HSUPA_RAB_AttEstab_BE_Copper	ACCUMULATION	INTEGER	Number of HSUPA RAB establishment attempts of be service for copper-level users	B67109471_RNC_GRP.C67192971	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh
VS_HSUPA_RAB_AttEstab_BE_Golden	ACCUMULATION	INTEGER	Number of HSUPA RAB establishment attempts of be service for golden-level users	B67109471_RNC_GRP.C67192969	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh
VS_HSUPA_RAB_AttEstab_BE_Silver	ACCUMULATION	INTEGER	Number of HSUPA RAB establishment attempts of be service for silver-level users	B67109471_RNC_GRP.C67192970	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh
VS_HSUPA_RAB_SuccessEstab_BE_Copper	ACCUMULATION	INTEGER	Number of successful HSUPA RAB establishments of be service for copper-level users	B67109471_RNC_GRP.C67192974	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh
VS_HSUPA_RAB_SuccessEstab_BE_Golden	ACCUMULATION	INTEGER	Number of successful HSUPA RAB establishments of be service for golden-level	B67109471_RNC_GRP.C67192972	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh

			users			
VS_HSUPA_RAB_SuccEstab_BE_Silver	ACCUMULATION	INTEGER	Number of successful HSUPA RAB establishments of be service for silver-level users	B67109471_RN C_GRP.C67192973	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_HSUPA_SilverBeMeanChThroughput_TotalBytes	ACCUMULATION	INT8	Number of bytes receive in MAC-d flow of silver BE traffic	B67109471_RN C_GRP.C67194875	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_HSUPA_SilverBeMeanChThroughput	INTENSITY	FLOAT	Mean uplink throughput of MAC-d flows of silver BE traffic	B67109471_RN C_GRP.C67204514	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_HSUPA_UE_Mean_Cell	INTENSITY	FLOAT	Average number of UEs in CELL_HSUPA state in a cell.	B67109471_RN C_GRP.C67203850	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						Maximum
--	--	--	--	--	--	---------

7.42.7 RNC.Huawei.UMTS.IMS_Statistics

IP Multimedia Subsystem data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IMS_NumSigUser	ACCUMULATION	INTEGER	This item provides the number of UEs setting up IMS services in the RNC	B67109449.C67202546	Sum	hub99pslbh, hubcslbh, hubhspdabh, hubpslbh
VS_RABCmb_I MSSigCon16_16	INTENSITY	FLOAT	The above items provide the average numbers of UEs according to different IMS service types in the RNC, Signaling rate is 16K, and service rate is 16K	B67109449.C67203422	Average	hub99pslbh, hubcslbh, hubhspdabh, hubpslbh, Sum, Minimum, Maximum
VS_RABCmb_I MSSigCon16_32	INTENSITY	FLOAT	The above items provide the average numbers of UEs according to different IMS service types in the RNC, Signaling rate is 16K, and service rate is 32K	B67109449.C67203418	Average	hub99pslbh, hubcslbh, hubhspdabh, hubpslbh, Sum, Minimum, Maximum
VS_RABCmb_I MSSigCon16_4	INTENSITY	FLOAT	The above items provide	B67109449.C67203417	Average	hub99pslbh,

2_8			the average numbers of UEs according to different IMS service types in the RNC, Signaling rate is 16K,and service rate is 42.8K			hubcslbh , hubhsdpabh, hubpslbh , Sum, Minimum, Maximum
VS_RABCmb_I MSSigCon16_64	INTENSITY	FLOAT	The above items provide the average numbers of UEs according to different IMS service types in the RNC, Signaling rate is 16K,and service rate is 64K	B67109449.C67203419	Average	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh , Sum, Minimum, Maximum
VS_RABCmb_I MSSigCon8_16	INTENSITY	FLOAT	The above items provide the average numbers of UEs according to different IMS service types in the RNC, Signaling rate is 8K,and service rate is 16K	B67109449.C67203420	Average	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh , Sum, Minimum, Maximum
VS_RABCmb_I MSSigCon8_32	INTENSITY	FLOAT	The above items provide the average numbers of UEs according to different	B67109449.C67203421	Average	hub99pslbh, hubcslbh , hubhsdpabh,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			IMS service types in the RNC, Signaling rate is 8K, and service rate is 32K			hubpslbh, Sum, Minimum, Maximum
VS_RABcmb_NumIMS_Con8_8	INTENSITY	FLOAT	The average numbers of UEs according to different IMS service types in the RNC, Voice Over IP (VoIP)	B67109449.C67202542	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum
VS_RABcmb_NumIMS_Str8_8	INTENSITY	FLOAT	The average numbers of UEs according to different IMS service types in the RNC, PoC (PTT over Cellular)	B67109449.C67202541	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum

7.42.8 RNC.Huawei.UMTS.InterRAT_HO_CS_RNC

InterRAT Handover CS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_IRATHO_SuccCSOut_RNC	PERCENTAGE	FLOAT	Percentage successful CS domain inter-RAT outgoing handovers.	$100 * \frac{\text{\{VS_IRATHO_SuccCSOut_RNC\}}}{\text{\{VS_IRATHO_AttCSOut_RNC\}}}$	Average	hub99pslbh, hubcslbh, hubhsdpabh,

				NC}		hubpsl bh
VS_IRATHO_AttCS Out_RNC	ACCUMULA TION	INTEG ER	Number of UEHANDOVE R FROM UTRAN COMMAND messages initiated from the SRNC to a UE.	B67109443.C6 7175945	Sum	hub99psl bh, hubcs l bh , hubhsdpa bh, hubpsl bh
VS_IRATHO_AttEx ecCSIn_RNC	ACCUMULA TION	INTEG ER	Number of CS domain inter- RAT incoming handover commits.	B67109443.C6 7176008	Sum	hub99psl bh, hubcs l bh , hubhsdpa bh, hubpsl bh
VS_IRATHO_FaiCS OutAbortRNC	ACCUMULA TION	INTEG ER	Number of CS domain inter- RAT outgoing handovers terminated in the handover commit phase, that is, the number of IU RELEASE COMMAND messages with any cause other than Successful Relocation or Normal Release received by the SRNC after sending a HANDOVER FROM UTRAN	B67109443.C6 7190764	Sum	hub99psl bh, hubcs l bh , hubhsdpa bh, hubpsl bh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			COMMAND message.			
VS_IRATHO_FailCSOut_CfgUnRNC	ACCUMULATION	INTEGER	the numbers of CS domain inter-RAT outgoing handover failures due to Configuration Unsupported	B67109443.C67190309	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh
VS_IRATHO_FailCSOut_PhyFaRNC	ACCUMULATION	INTEGER	the numbers of CS domain inter-RAT outgoing handover failures due to Physical Channel Failure	B67109443.C67190310	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh
VS_IRATHO_FailExecCSIn_Abort	ACCUMULATION	INTEGER	This item provides the number of IU RELEASE COMMAND wait timeouts during CS domain inter-RAT outgoing handovers	B67109443.C67190299	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh
VS_IRATHO_FailExecCSIn_NRply	ACCUMULATION	INTEGER	Number of CS domain inter-RAT incoming handover commit failures due to no response from the UE	B67109443.C67176011	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh
VS_IRATHO_FailExecCSIn_RNC	ACCUMULATION	INTEGER	Number of CS domain inter-RAT handovers failures.	B67109443.C67190300	Sum	hub99psl bh, hubcslbh , hubhsdpabh,

						hubpslbh
VS_IRATHO_PrepAttCSIn_RNC	ACCUMULATION	INTEGER	Number of CS domain inter-RAT incoming handover preparations.	B67109443.C67190311	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_IRATHO_PrepFaiCSInAborRNC	ACCUMULATION	INTEGER	Number of IU RELEASE COMMAND Messages Received During CS Domain Inter-RAT Incoming Handover Preparation.	B67109443.C67190614	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_IRATHO_PrepFaiCSInCongRNC	ACCUMULATION	INTEGER	The numbers of RELOCATION PREPARATION FAILURE messages received by the SRNC for different causes No Resource Available	B67109443.C67190304	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_IRATHO_PrepFaiCSInTfailRN	ACCUMULATION	INTEGER	The numbers of RELOCATION PREPARATION FAILURE messages received by the	B67109443.C67190307	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			SRNC for different causes Relocation Failure in Target CN/RNC or Target System			
VS_IRATHO_PrepFaiCSInTgtOveL	ACCUMULATION	INTEGER	Numbers of CS Domain Inter-RAT Outgoing Handover Preparation Failures due to Different Causes. Cause Traffic Load In The Target Cell Higher Than In The Source Cell.	B67109443.C67192196	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_IRATHO_PrepFaiCSInTunsRNC	ACCUMULATION	INTEGER	The numbers of RELOCATION PREPARATION FAILURE messages received by the SRNC for different causes Relocation not supported in Target RNC or Target system	B67109443.C67175741	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_IRATHO_PrepFaiCSOut_NoRsrc	ACCUMULATION	INTEGER	The numbers of RNC-initiated CS domain inter-RAT outgoing handover preparation failures due to	B67109443.C67175954	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh

			No Resource Available			
VS_IRATHO_PrepFailCSOut_UkwnRNC	ACCUMULATION	INTEGER	The numbers of RNC-initiated CS domain inter-RAT outgoing handover preparation failures due to Unknown Target RNC	B67109443.C67175955	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_IRATHO_PrepFailCSOutRelocAbort	ACCUMULATION	INTEGER	Number of CS domain inter-RAT outgoing handover preparations terminated by the IU RELEASE COMMAND message.	B67109443.C67191655	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_IRATHO_PrepFailCSOutReqinfnotavai	ACCUMULATION	INTEGER	the numbers of RNC-initiated CS domain inter-RAT outgoing handover preparation failures due to Reqinfnotavai	B67109443.C67191656	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_IRATHO_PrepSuccessCSIn_RNC	ACCUMULATION	INTEGER	This item provides the number of CS domain inter-RAT incoming handover preparation successes.	B67109443.C67190312	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_IRATHO_SuccCSOut_RNC	ACCUMULATION	INTEGER	This item provides the number of CS domain inter-RAT outgoing handovers.	B67109443.C67190399	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_IRATHO_SuccExecCSIn_RNC	ACCUMULATION	INTEGER	This item provides the number of CS domain inter-RAT incoming handover successes.	B67109443.C67190314	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_SRELOC_Fail_IRATCSOutTOve	ACCUMULATION	INTEGER	Numbers of CS Domain Inter-RAT Outgoing Handover Preparation Failures due to Different Causes. Cause Traffic Load In The Target Cell Higher Than In The Source Cell	B67109443.C67192195	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

7.42.9 RNC.Huawei.UMTS.InterRAT_HO_PS_RNC

InterRAT Handover PS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_IRATHO_SuccPSInUE_RNC	PERCENTAGE	FLOAT	Percentage successful PS domain inter-RAT incoming handovers initiated by UEs	$100 * \frac{\{VS_IRATHO_SuccPSInUE_RNC\}}{\{VS_IRATHO_AttPSInUE_RNC\}}$	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

$\frac{\text{VS_IRATHO_SuccPSOutUE_RNC}}{\text{VS_IRATHO_AttPSOutUE_RNC}}$	PERCENTAGE	FLOAT	Percentage successful PS domain inter-RAT outgoing handovers initiated by UE.	$100 * \frac{\{\text{VS_IRATHO_SuccPSOutUE_RNC}\}}{\{\text{VS_IRATHO_AttPSOutUE_RNC}\}}$	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
$\frac{\text{VS_IRATHO_SuccPSOutUTRAN_RNC}}{\text{VS_IRATHO_AttPSOutUTRAN_RNC}}$	PERCENTAGE	FLOAT	Percentage successful PS domain inter-RAT outgoing handovers initiated by RNC.	$100 * \frac{\{\text{VS_IRATHO_SuccPSOutUTRAN_RNC}\}}{\{\text{VS_IRATHO_AttPSOutUTRAN_RNC}\}}$	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_IRATHO_At tPSInUE_RNC	ACCUMULATION	INTEGER	This item provides the number of PS domain inter-RAT incoming handovers initiated by UEs.	B67109444.C6717 4508	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_IRATHO_At tPSOutUE_RNC	ACCUMULATION	INTEGER	Number of PS domain inter-RAT outgoing handover requests initiated by UE.	B67109444.C6719 0316	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_IRATHO_At tPSOutUTRAN_RNC	ACCUMULATION	INTEGER	Number of transmissions of the HANDOVER FROM UTRAN COMMAND messages from RNC.	B67109444.C6717 6098	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_IRATHO_C COPSOOutUTRA N_RNC	ACCUMULA TION	INTEG ER	This item provides the number of successful cell changes during PS domain inter- RAT outgoing handovers initiated by the RNC	B67109444.C6719 0315	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_IRATHO_Ev alPSOutUTRAN _RNC	ACCUMULA TION	INTEG ER	Number of PS domain inter- RAT outgoing handovers decisions initiated from RNC	B67109444.C6717 6097	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_IRATHO_PS Out_CfgUnsup	ACCUMULA TION	INTEG ER	The numbers of RNC- initiated PS domain inter- RAT outgoing handover failures due to Configuration unacceptable	B67109444.C6717 6103	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_IRATHO_PS Out_Fail	ACCUMULA TION	INTEG ER	Number of unsuccessful PS domain inter-RAT outgoing handovers initiated by RNC.	B67109444.C6717 6099	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_IRATHO_PS Out_NoReply	ACCUMULA TION	INTEG ER	Number of RNC-initiated PS domain inter-RAT outgoing handover failures due to timeout to	B67109444.C6717 6107	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

			wait for the IU RELEASE COMMAND message.			
VS_IRATHO_PS Out_PhyCHFail	ACCUMULATION	INTEGER	The numbers of RNC-initiated PS domain inter-RAT outgoing handover failures due to Physical Channel Failure	B67109444.C6717 6104	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_IRATHO_PS Out_Unpec	ACCUMULATION	INTEGER	The numbers of RNC-initiated PS domain inter-RAT outgoing handover failures due to Unspecified	B67109444.C6717 6106	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_IRATHO_Su ccPSInUE_RNC	ACCUMULATION	INTEGER	This item provides the number of successful PS domain inter-RAT incoming handovers initiated by UEs	B67109444.C6717 4572	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_IRATHO_Su ccPSOutUE_RNC	ACCUMULATION	INTEGER	Number of successful PS domain inter-RAT outgoing handovers initiated by UE.	B67109444.C6717 6102	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_IRATHO_SuccPSOutUTRAN_RNC	ACCUMULATION	INTEGER	Number of successful PS domain inter-RAT outgoing handovers initiated by RNC.	B67109444.C67176100	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
------------------------------	--------------	---------	---	---------------------	-----	---

7.42.10RNC.Huawei.UMTS.InterRAT_HO_SRNS_Relocation

InterRAT Handover Serving Radio Network Subsystem

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_SRELOC_SuccPrep_IRHOCS	PERCENTAGE	FLOAT	Successful CS domain inter-RAT outgoing handover preparation successes.	$100 * \frac{\{VS_SRELOC_SuccPrep_IRHOCS\}}{\{VS_SRELOC_AttPrep_IRHOCS\}}$	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_SRELOC_AttPrep_IRHOCS	ACCUMULATION	INTEGER	This item provides the number of CS domain inter-RAT outgoing handover preparations triggered by the RNC	B67109443.C67190398	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_SRELOC_Fail_IRATCSOutCanc	ACCUMULATION	INTEGER	The numbers of RNC-initiated CS domain inter-RAT outgoing handover preparation failures due to Relocation Cancelled	B67109443.C67190303	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_SRELOC_Fail_IRATCSOut	ACCUMULATION	INTEGER	Number of SRNC	B67109443.C67175743	Sum	hub99pslbh,

NRpl			relocation preparation failures due to timeout to wait for a RELOCATION COMMAND message after the SRNC sends a RELOCATION REQUIRED message.			hubcslbh , hubhsdpa bh, hubpslbh
VS_SRELOC_Fail_IRATCSOutTexp	ACCUMULATION	INTEGER	The numbers of RNC-initiated CS domain inter-RAT outgoing handover preparation failures due to TRELOCalloc Expiry	B67109443.C67190306	Sum	hub99pslbh, hubcslbh , hubhsdpa bh, hubpslbh
VS_SRELOC_Fail_IRATCSOutTfai	ACCUMULATION	INTEGER	The numbers of RNC-initiated CS domain inter-RAT outgoing handover preparation failures due to Relocation Failure in Target CN/RNC or Target System	B67109443.C67190308	Sum	hub99pslbh, hubcslbh , hubhsdpa bh, hubpslbh
VS_SRELOC_FailPrep_IRATCSOut	ACCUMULATION	INTEGER	This item provides the number of CS domain inter-	B67109443.C67190305	Sum	hub99pslbh, hubcslbh ,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			RAT outgoing handover preparation failures			hubhsdpabh, hubpslbh
VS_SRELOC_SuccPrep_IRHOC S	ACCUMULATION	INTEGER	This item provides the number of CS domain inter-RAT outgoing handover preparation successes.	B67109443.C67190400	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh

7.42.11RNC.Huawei.UMTS.Location_Cell_Services_RNC

Location Cell Services data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_LCS_AGps_MeanTime	INTENSITY	FLOAT	This item provides the mean delay of UE A-GPS positioning due to DIRECTY event type in the RNC.	B67109434.C67199713	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum
VS_LCS_Agps_Selec	ACCUMULATION	INTEGER	The numbers of times of positioning using different positioning methods in a measurement period.	B67109434.C67176209	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_LCS_Agps_UuMeanTime	INTENSITY	FLOAT	This item provides the mean delay of	B67109434.C67199710	Average	hub99pslbh, hubcslbh

			UE-assisted A-GPS positioning on the Uu interface.			hubhsdpabh, hubpslhb, Sum, Minimum, Maximum
VS_LCS_AOtdoa_Selec	ACCUMULATION	INTEGER	The numbers of times of positioning using different positioning methods in a measurement period.	B67109434.C67176211	Sum	hub99pslhb, hubcslhb, hubhsdpabh, hubpslhb
VS_LCS_AsstGpsDataTransDel	ACCUMULATION	INTEGER	Number of successful provisions of GPS assistance data by RNC on receipt of the positioning related data request from the CN	B67109434.C67190216	Sum	hub99pslhb, hubcslhb, hubhsdpabh, hubpslhb
VS_LCS_AttCsa	ACCUMULATION	INTEGER	The numbers of positioning requests by different event types in the LOCATION REPORTING CONTROL message received by the RNC from CN - Change of service area	B67109434.C67176214	Sum	hub99pslhb, hubcslhb, hubhsdpabh, hubpslhb

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_LCS_AttDir	ACCUMULATION	INTEGER	The numbers of positioning requests by different event types in the LOACTION REPORTING CONTROL message received by the RNC from CN - Direct	B67109434.C67176213	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_LCS_CellId_MeanTime	INTENSITY	FLOAT	This item provides the mean delay of UE-assisted CELL-ID positioning due to DIRECTY event type in the RNC.	B67109434.C67199712	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_LCS_CellId_Selec	ACCUMULATION	INTEGER	The numbers of times of positioning using different positioning methods in a measurement period.	B67109434.C67176219	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_LCS_CellID_UuMeanTime	INTENSITY	FLOAT	This item provides the mean delay of UE-assisted CELL-ID positioning on the Uu interface.	B67109434.C67199708	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m

VS_LCS_Hybr_MeanTime	INTENSITY	FLOAT	This item provides the mean delay of hybrid positioning due to DIRECTY event type in the RNC.	B67109434.C67199715	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_LCS_Hybr_Selec	ACCUMULATION	INTEGER	The numbers of times of positioning using different positioning methods in a measurement period.	B67109434.C67176210	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_LCS_LR_AGPS_RNC_CUM	ACCUMULATION	INTEGER	No description.	B67109434.C67181028	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_LCS_LR_AGPS_RNC_SAMPLE	ACCUMULATION	INTEGER	No description.	B67109434.C67181029	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_LCS_LRC_CellId_RNC_CUM	ACCUMULATION	INTEGER	No description.	B67109434.C67181026	Sum	hub99psl bh, hubcslbh , hubhsdpa

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						bh, hubpslbh
VS_LCS_LRC_CellId_RNC_SAMPLE	ACCUMULATION	INTEGER	No description.	B67109434.C67181027	Sum	hub99pslbh, hubeslbh, , hubhsdpabh, hubpslbh
VS_LCS_LRC_HM_RNC_CUM	ACCUMULATION	INTEGER	No description.	B67109434.C67181032	Sum	hub99pslbh, hubeslbh, , hubhsdpabh, hubpslbh
VS_LCS_LRC_HM_RNC_SAMPLE	ACCUMULATION	INTEGER	No description.	B67109434.C67181033	Sum	hub99pslbh, hubeslbh, , hubhsdpabh, hubpslbh
VS_LCS_MTime_AGPS_RNC_CUM	ACCUMULATION	INTEGER	No description.	B67109434.C67176226	Sum	hub99pslbh, hubeslbh, , hubhsdpabh, hubpslbh
VS_LCS_MTime_AGPS_RNC_SAMPLE	ACCUMULATION	INTEGER	No description.	B67109434.C67176227	Sum	hub99pslbh, hubeslbh, , hubhsdpabh, hubpslbh
VS_LCS_MTime_CellId_RNC_CUM	ACCUMULATION	INTEGER	No description.	B67109434.C67176222	Sum	hub99pslbh, hubeslbh, , hubhsdpabh

						bh, hubpslbh
VS_LCS_MTime _CellId_RNC_SA MPLE	ACCUMULA TION	INTEG ER	No description.	B67109434.C671 76223	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_LCS_MTime _OTDOA_RNC_ CUM	ACCUMULA TION	INTEG ER	No description.	B67109434.C671 76224	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_LCS_MTime _OTDOA_RNC_ SAMPLE	ACCUMULA TION	INTEG ER	No description.	B67109434.C671 76225	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_LCS_MTime _UEbased_RNC_ CUM	ACCUMULA TION	INTEG ER	No description.	B67109434.C671 76228	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_LCS_MTime _UEbased_RNC_ SAMPLE	ACCUMULA TION	INTEG ER	No description.	B67109434.C671 76229	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_LCS_Otdoa_	INTENSITY	FLOA	This item	B67109434.C671	Average	hub99psl

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

UuMeanTime		T	provides the mean delay of UE-assisted OTDOA positioning on the Uu interface.	99709		bh, hubcslbh, hubhsdpa bh, hubpslbh, Sum, Minimum, Maximum
VS_LCS_QoSAccurMet	ACCUMULATION	INTEGER	This item provides the number of positioning reports meeting accuracy requirement from the RNC to CN.	B67109434.C67181025	Sum	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh
VS_LCS_RTT_Dir_RNC_CUM	ACCUMULATION	INTEGER	No description.	B67109434.C67176220	Sum	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh
VS_LCS_RTT_Dir_RNC_SAMPLE	ACCUMULATION	INTEGER	No description.	B67109434.C67176221	Sum	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh
VS_LCS_RTT_UuMeanTime	INTENSITY	FLOAT	This item provides the mean delay of RTT measurement.	B67109434.C67199707	Average	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh, Sum, Minimum

						m, Maximu m
VS_LCS_SuccCsa	ACCUMULA TION	INTEG ER	The numbers of reports on successful positioning by different event types sent by the RNC to the CN - Change of service area	B67109434.C671 76218	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_LCS_SuccDir	ACCUMULA TION	INTEG ER	The numbers of reports on successful positioning by different event types sent by the RNC to the CN - direct	B67109434.C671 76217	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_LCS_UeBsd_ UuMeanTime	INTENSITY	FLOA T	This item provides the mean delay of UE-based A- GPS positioning on the Uu interface.	B67109434.C671 99711	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m

7.42.12RNC.Huawei.UMTS.MultiRab_RNC

MultiRAB data

KPI	Type	Data Type	Description	Derivation	Default Aggregat	Other Aggrega
-----	------	--------------	-------------	------------	---------------------	------------------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

					or	tors
VS_MultRAB_0CS_2PS	INTENSITY	FLOAT	Average number of UEs using 2PS RABs.	B67109431.C67199688	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_MultRAB_0CS3PS	INTENSITY	FLOAT	Average number of UEs using 3PS RABs.	B67109431.C67199690	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_MultRAB_0CS4PS	INTENSITY	INTEGER	Average number of UEs using 0CS+4PS RABs.	B67109431.C67204757	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_MultRAB_1CS1PS	INTENSITY	FLOAT	Average number of UEs using 1CS+1PS RABs.	B67109431.C67199684	Average	hub99psl bh, hubcslbh , hubhsdpa bh,

						hubpsl bh, Sum, Minimum, Maximum
VS_MultRAB_1CS2PS	INTENSITY	FLOAT	Average number of UEs using 1CS+2PS RABs.	B67109431.C67199685	Average	hub99psl bh, hubcsl bh, hubhsdp bh, hubpsl bh, Sum, Minimum, Maximum
VS_MultRAB_1CS3PS	INTENSITY	FLOAT	Average number of UEs using 1CS+3PS RABs.	B67109431.C67199695	Average	hub99psl bh, hubcsl bh, hubhsdp bh, hubpsl bh, Sum, Minimum, Maximum
VS_MultRAB_HHO	ACCUMULATION	INTEGER	Number of successful hard handovers of the UE using multiple RABs.	B67109431.C67176173	Sum	hub99psl bh, hubcsl bh, hubhsdp bh, hubpsl bh
VS_MultRAB_SHO	INTENSITY	FLOAT	Average number of UEs	B67109431.C67199689	Average	hub99psl bh,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			using multiple RLs and RABs			hubcslbh , hubhsdpabh, hubpslbh , Sum, Minimum, Maximum
--	--	--	--------------------------------	--	--	---

7.42.13RNC.Huawei.UMTS.Paging_RNC

Paging data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_RANAP_Paging_Succ_IdleUE	PERCENTAGE	FLOAT	Percentage RRC CONNECTION REQUEST messages from UEs to the RNC as responses to PAGING TYPE 1 messages sent by the RNC for paging UEs in idle mode.	$100 * \frac{\{VS_RANAP_Paging_Succ_IdleUE\}}{\{VS_RANAP_Paging_Att_IdleUE\}}$	Average	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh
%_VS_UTRAN_SuccPage1	PERCENTAGE	FLOAT	Percentage CELL UPDATE messages from UEs to the RNC as successful responses to PAGING TYPE 1 messages from the RNC to UEs in CELL_PCH or URA_PCH state. Upon reception of PAGING TYPE 1 messages, UEs	$100 * \frac{\{VS_UTRAN_SuccPage1\}}{\{VS_UTRAN_Paging1_Att\}}$	Average	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh

			in CELL_PCH or URA_PCH state send CELL UPDATE messages with the cause of paging response to the RNC. The following gives the possible causes for sending a PAGING TYPE 1 message to a UE in CELL_PCH or URA_PCH state: The RNC receives a PAGING message from the CN. The UTRAN is to cause the UE to update system information or support data transmission.			
VS_CN_Page_Loss_IUFC	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. Number of PAGING messages discarded due to Iu interface flow control.	B67109438.C67174407	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_CN_Page_Loss_PCHCon g	ACCUMULATION	INTEGER	Obsolete in release Vn00R010.	B67109438.C67174408	Sum	hub99psl bh, hubcslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Number of PAGING TYPE 1 messages lost due to PCH congestion.			, hubhsdpa bh, hubpslbh
VS_RANAP_ CsPaging_Att	ACCUMULA TION	INTEG ER	Number of CS- oriented paging messages from the CN	B67109438.C6719 3711	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RANAP_ CsPaging_Loss	ACCUMULA TION	INTEG ER	Number of failures to respond to CS- oriented paging messages from the CN	B67109438.C6719 3713	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RANAP_P aging_Att_Idle UE	ACCUMULA TION	INTEG ER	Number of PAGING TYPE 1 messages from the RNC to UEs in idle mode upon reception of PAGING messages from the CN.	B67109438.C6717 4402	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RANAP_P aging_Att	ACCUMULA TION	INTEG ER	Obsolete in release Vn00R010. Number of PAGING messages from the CN to the RNC.In the mobile terminating call, the CN pages a UE by sending a PAGING message to the UTRAN.	B67109438.C6717 4401	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

VS_RANAP_Paging_Succ_IdleUE	ACCUMULATION	INTEGER	Number of RRC CONNECTION REQUEST messages from UEs to the RNC as responses to PAGING TYPE 1 messages sent by the RNC for paging UEs in idle mode.	B67109438.C67174403	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RANAP_PsPaging_Att	ACCUMULATION	INTEGER	Number of PS-oriented paging messages from the CN	B67109438.C67193712	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RANAP_PsPaging_Loss	ACCUMULATION	INTEGER	Number of failures to respond to PS-oriented paging messages from the CN	B67109438.C67192714	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_UTRAN_Paging1_Att	ACCUMULATION	INTEGER	Number of PAGING TYPE 1 messages originated by the RNC for triggering the state transition of a UE in CELL_PCH or URA_PCH state. UEs in CELL_PCH or URA_PCH state cannot support data	B67109438.C67174405	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			transmission. Therefore, before delivering data to such a UE, the RNC needs to send a PAGING TYPE 1 message to it to trigger state transition.			
VS_UTRAN_Paging2_Att	ACCUMULATION	INTEGER	Number of PAGING TYPE 2 messages from the RNC to UEs in CELL_FACH or CELL_DCH state upon reception of PAGING messages from the CN.	B67109438.C67174404	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_UTRAN_SuccPage1	ACCUMULATION	INTEGER	Number of CELL UPDATE messages from UEs to the RNC as successful responses to PAGING TYPE 1 messages from the RNC to UEs in CELL_PCH or URA_PCH state. Upon reception of PAGING TYPE 1 messages, UEs in CELL_PCH or URA_PCH state send CELL UPDATE messages with the cause of paging response to the RNC. The following gives	B67109438.C67174406	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh

			the possible causes for sending a PAGING TYPE 1 message to a UE in CELL_PCH or URA_PCH state: The RNC receives a PAGING message from the CN. The UTRAN is to cause the UE to update system information or support data transmission.			
--	--	--	--	--	--	--

7.42.14RNC.Huawei.UMTS.PDCP_Statistics

Packet Data Convergence Protocol data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_PDCP_DL_2507_Other	ACCUMULATION	INTEGER	According to the RFC2507 Protocol, data flows with different attributes have different context types, either TCP or NONTCP. This item provides the number of data flows with the DL packet	B67109437.C67202510	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			type as NONTCP, after PS domain service			
VS_PDCP_DL_2507_TCP	ACCUMULATION	INTEGER	According to the RFC2507 Protocol, data flows with different attributes have different context types, either TCP or NONTCP. This item provides the number of data flows with the DL packet type as TCP, after PS domain service	B67109437.C67202509	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_PDCP_DL_Compress	ACCUMULATION	INTEGER	This item provides the number of DL packets with headers compressed by a PDCP entity, after PS domain services are set up in an RNC and transmit data.	B67109437.C67202940	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_PDCP_DL_HdrCompressRatio	ACCUMULATION	FLOAT	This item provides the ratio of packet header size before header compression to that after for all DL packets of PS services in an RNC in a	B67109437.C67202525	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh

			measurement period. This item is valid when the header compression algorithm is con			
VS_PDCP_DL_HdrLength_After Compress	ACCUMULATION	INT8	Packet header size after header compression to that after for all DL packets of PS services in an RNC in a measurement period.	B67109437.C67190293	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_PDCP_DL_HdrLength_BeforeCompress	ACCUMULATION	INT8	Packet header size before header compression to that after for all DL packets of PS services in an RNC in a measurement period.	B67109437.C67190294	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_PDCP_DL_PktCompressRatio	ACCUMULATION	FLOAT	This item provides the ratio of packet size before header compression to that after for all DL packets of PS services in an RNC in a measurement period. This	B67109437.C67202526	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			item is valid when the header compression algorithm is configured			
VS_PDCP_DL_PktLength_AfterCompress	ACCUMULATION	INT8	DL packet length after compression	B67109437.C67190295	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_PDCP_DL_PktLength_BeforeCompress	ACCUMULATION	INT8	DL packet length before compression	B67109437.C67190296	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_PDCP_NbrBlocksSent_AM_1	ACCUMULATION	INTEGER	Number of PDCP PDUs that are smaller than 50% of the maximum RLC PDU size.	B67109437.C67204180	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_PDCP_NbrBlocksSent_AM_2	ACCUMULATION	INTEGER	Number of PDCP PDUs that are equal to or greater than 50% of the maximum RLC PDU size and smaller than or equal to the maximum RLC PDU size.	B67109437.C67204181	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_PDCP_NbrBlocksSent_AM_3	ACCUMULATION	INTEGER	Number of PDCP PDUs that are greater than the maximum RLC	B67109437.C67204182	Sum	hub99pslbh, hubcslbh, hubhsdpabh

			PDU size.			bh, hubpslbh
VS_PDCP_UL_ DecompressError	ACCUMULA TION	INTEG ER	This item provides the number of UL packets that PS services in an RNC fail to extract. The item is valid when the header compression algorithm is configured.	B67109437.C67202512	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_PDCP_UL_ Decompress	ACCUMULA TION	INTEG ER	This item provides the number of UL packets with headers extracted by a PDCP entity, after PS domain services are set up in an RNC and receive data.	B67109437.C67202939	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

7.42.15RNC.Huawei.UMTS.PDCPGTPU_Measurement

Packet/header under ROHC compression

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_PDCP_DL_R OHC_HdrCompre ssRatio	INTENSI TY	FLOA T	Ratio of DL packet headers compression	B67109437.C67204484	Average	hub99psl bh, hubcslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			under ROHC			, hubhsdpabh, hubpslhb, Sum, Minimum, Maximum
VS_PDCP_DL_ROHC_PktCompressRatio	INTENSITY	FLOAT	Ratio of DL packets compression under ROHC	B67109437.C67204485	Average	hub99pslhb, hubcslhb, hubhsdpabh, hubpslhb, Sum, Minimum, Maximum
VS_PDCP_UL_ROHC_FailDecompRatio	INTENSITY	FLOAT	Ratio of UL ROHC decompression failures to Total UL ROHC decompression operations	B67109437.C67204486	Average	hub99pslhb, hubcslhb, hubhsdpabh, hubpslhb, Sum, Minimum, Maximum

7.42.16RNC.Huawei.UMTS.RAB_Abnorm_Release_CS_RNC

RAB Abnormal Release CS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_Norm_Rel_PS_0kbps_TOut_RNC	ACCUMULATION	INTEGER	VS Norm Rel PS 0kbps Timeout RNC	B67109430.C67196305	Sum	hub99pslhb, hubcslhb

						hubhsdpa bh, hubpslbh
VS_RAB_Loss_ CS_Abnorm_R NC	ACCUMULA TION	INTEG ER	Numbers of Abnormally Released CS RABs	B67109430.C671 74963	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_Loss_ CS_AMR_RNC	ACCUMULA TION	INTEG ER	Number of released CS AMR service RABs triggered by RNC	B67109430.C671 74951	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_Loss_ CS_Congstion_ RNC	ACCUMULA TION	INTEG ER	Numbers of released CS RABs triggered by RNC due to CELL congestion	B67109430.C671 90839	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_Loss_ CS_Conv64K_R NC	ACCUMULA TION	INTEG ER	Number of released CS 64 k service RABs triggered by RNC	B67109430.C671 74952	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_Loss_ CS_Norm_RNC	ACCUMULA TION	INTEG ER	Numbers of Normally Released CS RABs	B67109430.C671 74965	Sum	hub99psl bh, hubcslbh , hubhsdpa bh,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						hubpslbh
VS_RAB_Loss_CS_RelUEGen_RNC	ACCUMULATION	INTEGER	Numbers of Released CS RABs Triggered by RNC due to UE Signalling Connection Release	B67109430.C67190454	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RAB_Loss_CS_RF_RNC	ACCUMULATION	INTEGER	Number of Released CS RABs Triggered by RNC due to RF Reason	B67109430.C67174954	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RAB_Loss_PS_128K_RNC	ACCUMULATION	INTEGER	Number of released PS RABs triggered by RNC (Max DL bit rate = 128 kbps)	B67109430.C67174961	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RAB_Loss_PS_384K_RNC	ACCUMULATION	INTEGER	Number of released PS RABs triggered by RNC (Max DL bit rate = 384 kbps)	B67109430.C67174960	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RAB_Loss_PS_64K_RNC	ACCUMULATION	INTEGER	Number of released PS RABs triggered by RNC (Max DL bit rate = 64 kbps)	B67109430.C67174962	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RAB_Loss_PS_Abnorm_RNC	ACCUMULATION	INTEGER	Numbers of Abnormally Released PS RABs	B67109430.C67174964	Sum	hub99pslbh, hubcslbh, hubhsdpabh,

						hubpslhb
VS_RAB_Loss_PS_Congstion_RNC	ACCUMULATION	INTEGER	Numbers of released PS RABs triggered by RNC due to CELL congestion	B67109430.C67190838	Sum	hub99pslhb, hubcslhb, hubhsdpa bh, hubpslhb
VS_RAB_Loss_PS_Norm_RNC	ACCUMULATION	INTEGER	Numbers of Normally Released PS RABs	B67109430.C67174966	Sum	hub99pslhb, hubcslhb, hubhsdpa bh, hubpslhb
VS_RAB_Loss_PS_ReUEGen_RNC	ACCUMULATION	INTEGER	Numbers of Released PS RABs Triggered by RNC due to UE Signalling Connection Release	B67109430.C67190455	Sum	hub99pslhb, hubcslhb, hubhsdpa bh, hubpslhb
VS_RAB_Loss_PS_RF_RNC	ACCUMULATION	INTEGER	Number of Released PS RABs Triggered by RNC due to RF Reason	B67109430.C67174955	Sum	hub99pslhb, hubcslhb, hubhsdpa bh, hubpslhb
VS_RAB_Loss_VP_LIMIT_RNC	ACCUMULATION	INTEGER	Number of normally released CS VP RABs triggered by RNC(with cause of "Network Optimization") because VP is	B67109430.C67196236	Sum	hub99pslhb, hubcslhb, hubhsdpa bh, hubpslhb

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			forbidden in target cell.			
VS_RAB_RelAbnormalPS_CMB_RNC	ACCUMULATION	INTEGER	Obsolete from UTRAN/V100V 200R011: The above item provides the number of abnormally released RABs according to CMB service. Here, the abnormally released RABs refer to all released RABs except normally released RABs and released RABs triggered by the RNC due to RF reason.	B67109430.C67190605	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh

7.42.17 RNC.Huawei.UMTS.RAB_AttRelPS_RNC

RAB PS Attempt Release data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RAB_AttRelPS_Bkg_RNC	ACCUMULATION	INTEGER	The number of the PS RABs of a traffic class requested to release in the RNC, Number of PS background service RABs requested to release	B67109429.C67174804	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RAB_AttRelPS_Conv_R	ACCUMULATION	INTEGER	The number of the PS RABs of	B67109429.C67174801	Sum	hub99pslbh,

NC			a traffic class requested to release in the RNC, Number of PS conversational service RABs requested to release			hubcslbh , hubhsdpabh, hubpslbh
VS_RAB_AtRelPS_Itr_RNC	ACCUMULATION	INTEGER	The number of the PS RABs of a traffic class requested to release in the RNC, Number of PS interactive service RABs requested to release	B67109429.C67174803	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh
VS_RAB_AtRelPS_Str_RNC	ACCUMULATION	INTEGER	The number of the PS RABs of a traffic class requested to release in the RNC, Number of PS streaming service RABs requested to release	B67109429.C67174802	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh

7.42.18RNC.Huawei.UMTS.RAB_Establish_AMR_RNC

RAB Establish AMR RNC data

The performance data measurements for this KPI group are recorded against the combination of RNC and CNOOPERATOR (cnoperator_id) .

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
-----	------	-----------	-------------	------------	--------------------	-------------------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RAB_AttE stab_AMR_PL MN_RNC	ACCUMULA TION	INTEG ER	Number of AMR service RABs requested to establish for each operator.	B67109553.C6719 6186	Sum	
VS_RAB_AttE stab_CS64_PL MN_RNC	ACCUMULA TION	INTEG ER	Number of CS 64kbts/s conversational service RABs requested to establish for each operator.	B67109553.C6719 6188	Sum	
VS_RAB_AttE stab_PS_PLM N_RNC	ACCUMULA TION	INTEG ER	Number of PS RABs requested to establish for each operator.	B67109553.C6719 6190	Sum	
VS_RAB_Succ Estab_AMR_P LMN_RNC	ACCUMULA TION	INTEG ER	Number of AMR service RABs successfully established for each operator.	B67109553.C6719 6187	Sum	
VS_RAB_Succ Estab_CS64_P LMN_RNC	ACCUMULA TION	INTEG ER	Number of CS 64kbts/s conversational service RABs successfully established for each operator.	B67109553.C6719 6189	Sum	
VS_RAB_Succ Estab_PS_PLM N_RNC	ACCUMULA TION	INTEG ER	Number of PS RABs successfully established for each operator	B67109553.C6719 6191	Sum	

7.42.19RNC.Huawei.UMTS.RAB_Establish_CS_RNC

RAB Establish CS data

KPI	Type	Data Type	Description	Derivation	Default Aggrega tor	Other Aggrega tors
-----	------	--------------	-------------	------------	---------------------------	--------------------------

RAB_AttEstabCS_Conv	ACCUMULATION	INTEGER	Number of the CS RABs requested to establish for conversational services	B67109422.C67174721	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_AttEstabCS_Strm	ACCUMULATION	INTEGER	Number of the CS RABs requested to establish for streaming services	B67109422.C67174722	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_SuccEstabCs_Conv_RNC_Rate	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:RAB SuccEstabCs Conv RNC Rate	B67109422.C67204855	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
RAB_SuccEstabCSNoQueuing_Conv	ACCUMULATION	INTEGER	Numbers of CS RABs Established Successfully for Conversational Services (No Queuing)	B67109422.C67190077	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_SuccEstabCSNoQueuing_Strm	ACCUMULATION	INTEGER	Numbers of CS RABs Established Successfully for Streaming	B67109422.C67190078	Sum	hub99psl bh, hubcslbh , hubhsdpa

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Services (No Queuing)			bh, hubpslbh
RAB_SuccEstabCSQueuing_Conv	ACCUMULATION	INTEGER	Numbers of CS RABs Established Successfully for Conversational Service (Queuing)	B67109422.C67190079	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RAB_SuccEstabCSQueuing_Strm	ACCUMULATION	INTEGER	Numbers of CS RABs Established Successfully for Streaming Service (Queuing)	B67109422.C67190080	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RAB_SuccEstabCSSetupTime_Cum	ACCUMULATION	INTEGER	Numbers of CS RABs Established Successfully for Streaming Service (Queuing). Cumulative value	B67109422.C67174734	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RAB_SuccEstabCSSetupTime_Sample	ACCUMULATION	INTEGER	Numbers of CS RABs Established Successfully for Streaming Service (Queuing). Sample value	B67109422.C67174735	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RAB_SuccEstabCSSetupTimeMax	ACCUMULATION	INTEGER	Maximum Signalling Delays of CS RAB Setup on DCH	B67109422.C67174733	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RAB_SuccEstabCSS	INTENSITY	FLOAT	Mean	B67109422.C6	Average	hub99psl

etupTimeMean		T	Signalling Delays of CS RAB Setup on DCH	7199414		bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RAB_AttEstabCS_VP_LIMIT_RNC	ACCUMULATION	INTEGER	Number of CS VP RABs requested to establish in cell where VP is forbidden.	B67109422.C6 7196235	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_AttEstCSConv0_32_RNC	ACCUMULATION	INTEGER	Number of CS RABs requested to establish for conversational services (Max DL bit rate in [0,32]kbps)	B67109422.C6 7174739	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_AttEstCSConv32_64_RNC	ACCUMULATION	INTEGER	Number of CS RABs requested to establish for conversational services (Max DL bit rate in (32,64]kbps)	B67109422.C6 7174740	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_AttEstCSstr0_32_RNC	ACCUMULATION	INTEGER	Number of CS RABs requested to establish for streaming	B67109422.C6 7174741	Sum	hub99psl bh, hubcslbh , hubhsdpa

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			services (Max DL bit rate in [0,32]kbps)			bh, hubpslbh
VS_RAB_AttEstCSStr32_64_RNC	ACCUMULATION	INTEGER	Number of CS RABs requested to establish for streaming services (Max DL bit rate in (32,64]kbps)	B67109422.C67174742	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RAB_Num_CS_Mean	INTENSITY	FLOAT	Average number of CS RABs in a measurement period.	B67109422.C67199791	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum
VS_RAB_SucEstCSConv0_32_RNC	ACCUMULATION	INTEGER	Number of CS RABs successfully established for conversational services (Max DL bit rate in [0,32]kbps)	B67109422.C67174743	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RAB_SucEstCSConv32_64_RNC	ACCUMULATION	INTEGER	Number of CS RABs successfully established for conversational services (Max DL bit rate in (32,64]kbps)	B67109422.C67174744	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RAB_SucEstCSStr0_32_RNC	ACCUMULATION	INTEGER	Number of CS RABs successfully established for	B67109422.C67174745	Sum	hub99pslbh, hubcslbh,

			streaming services (Max DL bit rate in [0,32]kbps)			hubhsdpa bh, hubpslbh
VS_RAB_SucEstCS Str32_64_RNC	ACCUMULATION	INTEGER	Number of CS RABs successfully established for streaming services (Max DL bit rate in (32,64]kbps)	B67109422.C6 7174746	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

7.42.20RNC.Huawei.UMTS.RAB_Establish_Fail_CS_RNC

RAB Establish Fail CS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
RAB_FailEstabCS NoQueuing_DirRetry	ACCUMULATION	INTEGER	The numbers of CS RABs established unsuccessfully on request due to Direct retry	B67109423.C67 190081	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabCS NoQueuing_DLGrateUnavail	ACCUMULATION	INTEGER	The numbers of CS RABs established unsuccessfully on request due to Requested guaranteed bit rate on DL not available	B67109423.C67 190082	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabCS NoQueuing_DLMaxrateUnavail	ACCUMULATION	INTEGER	The numbers of CS RABs established	B67109423.C67 190083	Sum	hub99psl bh, hubcslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			unsuccessfully on request due to Requested max bit rate on DL not available			, hubhsdpa bh, hubpsl bh
RAB_FailEstabCS NoQueuing_InvGrate	ACCUMULATION	INTEGER	The numbers of CS RABs established unsuccessfully on request due to Condition violation for guaranteed bit rate	B67109423.C67 190084	Sum	hub99psl bh, hubcsl bh, hubhsdpa bh, hubpsl bh
RAB_FailEstabCS NoQueuing_InvRA BId	ACCUMULATION	INTEGER	The numbers of CS RABs established unsuccessfully on request due to Invalid RAB ID	B67109423.C67 190085	Sum	hub99psl bh, hubcsl bh, hubhsdpa bh, hubpsl bh
RAB_FailEstabCS NoQueuing_InvRA Bparam	ACCUMULATION	INTEGER	The numbers of CS RABs established unsuccessfully on request due to Invalid RAB parameters value	B67109423.C67 190086	Sum	hub99psl bh, hubcsl bh, hubhsdpa bh, hubpsl bh
RAB_FailEstabCS NoQueuing_InvRA BPComb	ACCUMULATION	INTEGER	The numbers of CS RABs established unsuccessfully on request due to Invalid RAB parameters combination	B67109423.C67 190087	Sum	hub99psl bh, hubcsl bh, hubhsdpa bh, hubpsl bh
RAB_FailEstabCS NoQueuing_InvSD Uparam	ACCUMULATION	INTEGER	The numbers of CS RABs established unsuccessfully on request due	B67109423.C67 190088	Sum	hub99psl bh, hubcsl bh, hubhsdpa

			to Condition violation for SDU parameters			bh, hubpslbh
RAB_FailEstabCS NoQueuing_InvTrf Pri	ACCUMULATION	INTEGER	The numbers of CS RABs established unsuccessfully on request due to Condition violation for traffic handling priority	B67109423.C67 190089	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RAB_FailEstabCS NoQueuing_IUEstabFail	ACCUMULATION	INTEGER	The numbers of CS RABs established unsuccessfully on request due to IU transport connection failed to establish	B67109423.C67 190090	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RAB_FailEstabCS NoQueuing_MaxrateUnavail	ACCUMULATION	INTEGER	The numbers of CS RABs established unsuccessfully on request due to Requested max bit rate not available	B67109423.C67 190091	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RAB_FailEstabCS NoQueuing_Reloc Trig	ACCUMULATION	INTEGER	The numbers of CS RABs established unsuccessfully on request due to Relocation triggered	B67109423.C67 190093	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

RAB_FailEstabCS NoQueuing_ResUn avail	ACCUMULA TION	INTEG ER	The numbers of CS RABs established unsuccessfully on request due to No resource available	B67109423.C67 190094	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabCS NoQueuing_TrFClas sUnavail	ACCUMULA TION	INTEG ER	The numbers of CS RABs established unsuccessfully on request due to Requested traffic class not available	B67109423.C67 190095	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabCS NoQueuing_ULGr ateUnavail	ACCUMULA TION	INTEG ER	The numbers of CS RABs established unsuccessfully on request due to Requested guaranteed bit rate on UL not available	B67109423.C67 190096	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabCS NoQueuing_ULMa xrateUnavail	ACCUMULA TION	INTEG ER	The numbers of CS RABs established unsuccessfully on request due to Requested max bit rate on UL not available	B67109423.C67 190097	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabCS NoQueuing_UPver Unsupp	ACCUMULA TION	INTEG ER	The numbers of CS RABs established unsuccessfully on request due to User plane versions not supported	B67109423.C67 190099	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabCS Queuing_DirRetry	ACCUMULA TION	INTEG ER	The numbers of CS RABs	B67109423.C67 190100	Sum	hub99psl bh,

			established unsuccessfully on request due to Direct retry			hubcs1bh , hubhsdpa bh, hubps1bh
RAB_FailEstabCS Queuing_DLGrate Unavail	ACCUMULA TION	INTEG ER	The numbers of CS RABs established unsuccessfully on request due to Requested guaranteed bit rate on DL not available	B67109423.C67 190101	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
RAB_FailEstabCS Queuing_DLMaxra teUnavail	ACCUMULA TION	INTEG ER	The numbers of CS RABs established unsuccessfully on request due to Requested max bit rate on DL not available	B67109423.C67 190102	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
RAB_FailEstabCS Queuing_IUEstabF ail	ACCUMULA TION	INTEG ER	The numbers of CS RABs established unsuccessfully on request due to IU transport connection failed to establish	B67109423.C67 190109	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
RAB_FailEstabCS Queuing_RadioFail	ACCUMULA TION	INTEG ER	The numbers of CS RABs established unsuccessfully on request due to Failure in the radio	B67109423.C67 190111	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			interface procedure			
RAB_FailEstabCS Queuing_RelocTrig	ACCUMULATION	INTEGER	The numbers of CS RABs established unsuccessfully on request due to Relocation triggered	B67109423.C67 190112	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabCS Queuing_ReqSuppd	ACCUMULATION	INTEGER	The numbers of CS RABs established unsuccessfully on request due to Request superceded	B67109423.C67 190113	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabCS Queuing_ResUnavail	ACCUMULATION	INTEGER	The numbers of CS RABs established unsuccessfully on request due to No resource available	B67109423.C67 190114	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabCS Queuing_TqueExp	ACCUMULATION	INTEGER	The numbers of CS RABs established unsuccessfully on request due to Tqueing Expiry	B67109423.C67 190115	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabCS Queuing_ULGrate Unavail	ACCUMULATION	INTEGER	The numbers of CS RABs established unsuccessfully on request due to Requested guaranteed bit rate on UL not available	B67109423.C67 190118	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabCS Queuing_ULMaxrateUnavail	ACCUMULATION	INTEGER	The numbers of CS RABs established	B67109423.C67 190119	Sum	hub99psl bh, hubcslbh

			unsuccessfully on request due to Requested max bit rate on UL not available			, hubhsdpa bh, hubpslbh
--	--	--	--	--	--	----------------------------------

7.42.21RNC.Huawei.UMTS.RAB_Establish_Fail_PS_RNC

RAB Establish Fail PS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
RAB_FailEstabPS NoQueuing_DLGr ateUnavail	ACCUMULATION	INTEGER	The numbers of PS RABs established unsuccessfully on request due to Requested guaranteed bit rate on DL not available	B67109427.C67 190134	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabPS NoQueuing_DLMa xrateUnavail	ACCUMULATION	INTEGER	The numbers of PS RABs established unsuccessfully on request due to Requested max bit rate on DL not available	B67109427.C67 190135	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabPS NoQueuing_InvGr ate	ACCUMULATION	INTEGER	The numbers of PS RABs established unsuccessfully on request due to Condition violation for	B67109427.C67 190136	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			guaranteed bit rate			
RAB_FailEstabPS NoQueuing_InvRA BId	ACCUMULATION	INTEGER	The numbers of PS RABs established unsuccessfully on request due to Invalid RAB ID	B67109427.C67 190137	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabPS NoQueuing_InvRA Bparam	ACCUMULATION	INTEGER	The numbers of PS RABs established unsuccessfully on request due to Invalid RAB parameters value	B67109427.C67 190138	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabPS NoQueuing_InvRA BPComb	ACCUMULATION	INTEGER	The numbers of PS RABs established unsuccessfully on request due to Invalid RAB parameters combination	B67109427.C67 190139	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabPS NoQueuing_InvSD Upam	ACCUMULATION	INTEGER	The numbers of PS RABs established unsuccessfully on request due to Condition violation for SDU parameters	B67109427.C67 190140	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabPS NoQueuing_InvTrf Pri	ACCUMULATION	INTEGER	The numbers of PS RABs established unsuccessfully on request due to Condition violation for traffic handling priority	B67109427.C67 190141	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

RAB_FailEstabPS NoQueuing_IUEst abFail	ACCUMULA TION	INTEG ER	The numbers of PS RABs established unsuccessfully on request due to IU transport connection failed to establish	B67109427.C67 190142	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabPS NoQueuing_Reloc Trig	ACCUMULA TION	INTEG ER	The numbers of PS RABs established unsuccessfully on request due to Relocation triggered	B67109427.C67 190144	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabPS NoQueuing_ReqSu psed	ACCUMULA TION	INTEG ER	The numbers of PS RABs established unsuccessfully on request due to Request superceded	B67109427.C67 190145	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabPS NoQueuing_ResUn avail	ACCUMULA TION	INTEG ER	The numbers of PS RABs established unsuccessfully on request due to No resource available	B67109427.C67 190146	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabPS NoQueuing_TrDel ayUnavail	ACCUMULA TION	INTEG ER	The numbers of PS RABs established unsuccessfully on request due to Requested transfer delay not achievable	B67109427.C67 190147	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

RAB_FailEstabPS NoQueuing_Trffc ssUnavail	ACCUMULA TION	INTEG ER	The numbers of PS RABs established unsuccessfully on request due to Requested traffic class not available	B67109427.C67 190148	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabPS NoQueuing_ULGr ateUnavail	ACCUMULA TION	INTEG ER	The numbers of PS RABs established unsuccessfully on request due to Requested guaranteed bit rate on UL not available	B67109427.C67 190149	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabPS NoQueuing_ULMa xrateUnavail	ACCUMULA TION	INTEG ER	The numbers of PS RABs established unsuccessfully on request due to Requested max bit rate on UL not available	B67109427.C67 190150	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabPS NoQueuing_UPver Unsupp	ACCUMULA TION	INTEG ER	The numbers of PS RABs established unsuccessfully on request due to User plane versions not supported	B67109427.C67 190152	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabPS Queuing_DirRetry	ACCUMULA TION	INTEG ER	The numbers of PS RABs established unsuccessfully on request due to Direct retry	B67109427.C67 190153	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabPS Queuing_DLGrate	ACCUMULA TION	INTEG ER	The numbers of PS RABs	B67109427.C67 190154	Sum	hub99psl bh,

Unavail			established unsuccessfully on request due to Requested guaranteed bit rate on DL not available			hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabPS Queuing_DLMaxra teUnavail	ACCUMULA TION	INTEG ER	The numbers of PS RABs established unsuccessfully on request due to Requested max bit rate on DL not available	B67109427.C67 190155	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabPS Queuing_IUEstabF ail	ACCUMULA TION	INTEG ER	The numbers of PS RABs established unsuccessfully on request due to IU transport connection failed to establish	B67109427.C67 190162	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabPS Queuing_RadioFail	ACCUMULA TION	INTEG ER	The numbers of PS RABs established unsuccessfully on request due to Failure in the radio interface procedure	B67109427.C67 190164	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_FailEstabPS Queuing_RelocTri g	ACCUMULA TION	INTEG ER	The numbers of PS RABs established unsuccessfully on request due	B67109427.C67 190165	Sum	hub99psl bh, hubcslbh , hubhsdpa

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			to Relocation triggered			bh, hubpslbh
RAB_FailEstabPS Queuing_ReqSupsed	ACCUMULATION	INTEGER	The numbers of PS RABs established unsuccessfully on request due to Request superceded	B67109427.C67190166	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RAB_FailEstabPS Queuing_ResUnavail	ACCUMULATION	INTEGER	The numbers of PS RABs established unsuccessfully on request due to No resource available	B67109427.C67190167	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RAB_FailEstabPS Queuing_TqueExp	ACCUMULATION	INTEGER	The numbers of PS RABs established unsuccessfully on request due to Tqueing Expiry	B67109427.C67190168	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RAB_FailEstabPS Queuing_ULGrateUnavail	ACCUMULATION	INTEGER	The numbers of PS RABs established unsuccessfully on request due to Requested guaranteed bit rate on UL not available	B67109427.C67190171	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RAB_FailEstabPS Queuing_ULMaxrateUnavail	ACCUMULATION	INTEGER	The numbers of PS RABs established unsuccessfully on request due to Requested max bit rate on UL not available	B67109427.C67190172	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh

7.42.22RNC.Huawei.UMTS.RAB_Establishment_PS_Attempts_RNC

RAB Establishment PS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
RAB_AttEstabPS_Bgrd	ACCUMULATION	INTEGER	Number of the PS RABs requested to establish for background services	B67109426.C67174785	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RAB_AttEstabPS_Conv	ACCUMULATION	INTEGER	Number of the PS RABs requested to establish for conversational services	B67109426.C67174788	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RAB_AttEstabPS_Intact	ACCUMULATION	INTEGER	Number of the PS RABs requested to establish for interactive services	B67109426.C67174787	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RAB_AttEstabPS_Strm	ACCUMULATION	INTEGER	Number of the PS RABs requested to establish for streaming services	B67109426.C67174786	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RAB_AttEstabPS_128_RNC	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011:The numbers of PS RABs requested	B67109426.C67174850	Sum	hub99pslbh, hubcslbh, hubhsdpabh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			to establish in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs requested to establish (Max DL bit rate = 128 kbps)			bh, hubpslbh
VS_RAB_AttEstabPS_384_RNC	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011:The numbers of PS RABs requested to establish in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs requested to establish (Max DL bit rate = 384 kbps)	B67109426.C67174849	Sum	hub99pslbh, hubcslbh, , hubhsdpabh, hubpslbh
VS_RAB_AttEstabPS_64_RNC	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011:The numbers of PS RABs requested to establish in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs	B67109426.C67174851	Sum	hub99pslbh, hubcslbh, , hubhsdpabh, hubpslbh

			requested to establish (Max DL bit rate = 64 kbps)			
VS_RAB_AttEstabPS_CMB_Rnc	ACCUMULATION	INTEGER	Obsolete from UTRAN/V100 V200R011: The above item provides the number of the CMB RABs requested to establish in the RNC.	B67109426.C67190603	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh
VS_RAB_AttEstPSBkg0_32_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs requested to establish in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs requested to establish for background services (Max DL bit rate in [0,32] kbps)	B67109426.C67174827	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh
VS_RAB_AttEstPSBkg144384_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs requested to establish in the RNC according to different traffic classes and maximum downlink bit	B67109426.C67174830	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			rates, Number of PS RABs requested to establish for background services (Max DL bit rate in [144,384] kbps)			
VS_RAB_AttEstPSBkg32_64_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs requested to establish in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs requested to establish for background services (Max DL bit rate in [32,64] kbps)	B67109426.C67174828	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RAB_AttEstPSBkg64_144_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs requested to establish in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs requested to establish for background services (Max DL bit rate in [64,144] kbps)	B67109426.C67174829	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RAB_AttEstPSBkgMor384_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs	B67109426.C67174831	Sum	hub99pslbh,

C			requested to establish in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs requested to establish for background services (Max DL bit rate more than 384 kbps)			hubcslbh , hubhsdpabh, hubpslbh
VS_RAB_AttEstP SConv0_32_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs requested to establish in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs requested to establish for conversational services (Max DL bit rate in [0,32] kbps)	B67109426.C67 174815	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh
VS_RAB_AttEstP SConvMor32_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs requested to establish in the RNC according to different traffic classes	B67109426.C67 174816	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			and maximum downlink bit rates, Number of PS RABs requested to establish for conversational services (Max DL bit rate more than 32 kbps)			
VS_RAB_AttEstPSInt0_32_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs requested to establish in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs requested to establish for interactive services (Max DL bit rate in [0,32] kbps)	B67109426.C67174822	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RAB_AttEstPSInt144384_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs requested to establish in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs requested to establish for interactive services (Max DL bit rate in [144,384] kbps)	B67109426.C67174825	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh

VS_RAB_AttEstPSInt32_64_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs requested to establish in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs requested to establish for interactive services (Max DL bit rate in [32,64] kbps)	B67109426.C67174823	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_AttEstPSInt64_144_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs requested to establish in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs requested to establish for interactive services (Max DL bit rate in [64,144] kbps)	B67109426.C67174824	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_AttEstPSIntMor384_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs requested to establish in the RNC according to different	B67109426.C67174826	Sum	hub99psl bh, hubcslbh , hubhsdpa bh,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			traffic classes and maximum downlink bit rates, Number of PS RABs requested to establish for interactive services (Max DL bit rate more than 384 kbps)			hubpslhb
VS_RAB_AttEstP SStr0_32_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs requested to establish in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs requested to establish for streaming services (Max DL bit rate in [0,32] kbps)	B67109426.C67 174817	Sum	hub99psl bh, hubcslhb , hubhsdpa bh, hubpslhb
VS_RAB_AttEstP SStr144384_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs requested to establish in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs requested to establish for streaming services (Max DL bit rate in	B67109426.C67 174820	Sum	hub99psl bh, hubcslhb , hubhsdpa bh, hubpslhb

			[144,384] kbps)			
VS_RAB_AttEstP SStr32_64_RNC	ACCUMULA TION	INTEG ER	The numbers of PS RABs requested to establish in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs requested to establish for streaming services (Max DL bit rate in [32,64] kbps)	B67109426.C67 174818	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_AttEstP SStr64_144_RNC	ACCUMULA TION	INTEG ER	The numbers of PS RABs requested to establish in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs requested to establish for streaming services (Max DL bit rate in [64,144] kbps)	B67109426.C67 174819	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_AttEstP SStrMor384	ACCUMULA TION	INTEG ER	The numbers of PS RABs requested to establish in the RNC according	B67109426.C67 174821	Sum	hub99psl bh, hubcslbh , hubhsdpa

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			to different traffic classes and maximum downlink bit rates, Number of PS RABs requested to establish for streaming services (Max DL bit rate more than 384 kbps)			bh, hubpslbh
VS_RAB_Num_P S_Mean	INTENSITY	FLOAT	Average number of PS RABs in a measurement period.	B67109426.C67 199790	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum

7.42.23RNC.Huawei.UMTS.RAB_Establishment_PS_RNC

Successful PS RAB Establishments and Setup delays

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
RAB_SuccEstabPs_RNC_Rate	INTENSITY	FLOAT	Obsolete from UTRAN/V900 R011:RAB SuccEstabPs RNC Rate	B67109426.C6 7204856	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum

						m
RAB_SuccEstabPSNoQueuing_Bgrd	ACCUMULATION	INTEGER	Numbers of PS RABs Established Successfully for Background Service (No Queuing)	B67109426.C67190122	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RAB_SuccEstabPSNoQueuing_Conv	ACCUMULATION	INTEGER	Numbers of PS RABs Established Successfully for Conversational Service (No Queuing)	B67109426.C67190123	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RAB_SuccEstabPSNoQueuing_Intact	ACCUMULATION	INTEGER	Numbers of PS RABs Established Successfully for Interactive Service (No Queuing)	B67109426.C67190124	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RAB_SuccEstabPSNoQueuing_Strm	ACCUMULATION	INTEGER	Numbers of PS RABs Established Successfully for Streaming Service (No Queuing)	B67109426.C67190125	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RAB_SuccEstabPSQueuing_Bgrd	ACCUMULATION	INTEGER	Numbers of PS RABs Established Successfully for Background Service	B67109426.C67190126	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			(Queuing)			
RAB_SuccEstabPSQ ueuing_Conv	ACCUMULA TION	INTEG ER	Numbers of PS RABs Established Successfully for Conversational Service (Queuing)	B67109426.C6 7190127	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_SuccEstabPSQ ueuing_Intact	ACCUMULA TION	INTEG ER	Numbers of PS RABs Established Successfully for Interactive Service (Queuing)	B67109426.C6 7190128	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_SuccEstabPSQ ueuing_Strm	ACCUMULA TION	INTEG ER	Numbers of PS RABs Established Successfully for Streaming Service (Queuing)	B67109426.C6 7190129	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_SuccEstabPSS etupTime_Cum	ACCUMULA TION	INTEG ER	No description.	B67109426.C6 7190131	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_SuccEstabPSS etupTime_Sample	ACCUMULA TION	INTEG ER	No description.	B67109426.C6 7190132	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_SuccEstabPSS etupTimeMax	ACCUMULA TION	INTEG ER	Maximum Signalling Delays of CS RAB Setup	B67109426.C6 7190130	Sum	hub99psl bh, hubcslbh , hubhsdpa

						bh, hubpslbh
RAB_SuccEtabPSS etupTimeMean	INTENSITY	FLOA T	Mean Signalling Delays of CS RAB Setup	B67109426.C6 7202487	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RAB_PSSetupTi meCCH_Cum	ACCUMULA TION	INTEG ER	Signalling delay of PS RAB setup on CCH. cumulative value	B67109426.C6 7174813	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_PSSetupTi meCCH_Sample	ACCUMULA TION	INTEG ER	Signalling delay of PS RAB setup on CCH. sample value	B67109426.C6 7174814	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_PSSetupTi meDCH_Cum	ACCUMULA TION	INTEG ER	Signalling delay of PS RAB setup on DCH. Cumulative value.	B67109426.C6 7174810	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_PSSetupTi meDCH_Max	ACCUMULA TION	INTEG ER	Maximum signalling delay of PS	B67109426.C6 7174809	Sum	hub99psl bh, hubcslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			RAB setup on DCH			, hubhsdpa bh, hubpsl bh
VS_RAB_PSSetupTimeDCH_Mean	INTENSITY	FLOAT	Average signalling delay of PS RAB setup on DCH	B67109426.C67199427	Average	hub99psl bh, hubcsl bh, hubhsdpa bh, hubpsl bh, Sum, Minimum, Maximum
VS_RAB_PSSetupTimeDCH_Sample	ACCUMULATION	INTEGER	Signalling delay of PS RAB setup on DCH. Sample value.	B67109426.C67174811	Sum	hub99psl bh, hubcsl bh, hubhsdpa bh, hubpsl bh
VS_RAB_PSSetupTimeMax_CCH	ACCUMULATION	INTEGER	Maximum signalling delay of PS RAB setup on CCH	B67109426.C67174812	Sum	hub99psl bh, hubcsl bh, hubhsdpa bh, hubpsl bh
VS_RAB_PSSetupTimeMean_CCH	INTENSITY	FLOAT	Average signalling delay of PS RAB setup on CCH	B67109426.C67199679	Average	hub99psl bh, hubcsl bh, hubhsdpa bh, hubpsl bh, Sum, Minimum, Maximum
VS_RAB_Suc_Est_P	ACCUMULATION	INTEGER	UE establishes	B67109426.C6	Sum	hub99psl

S_0kbps_RNC	TION	ER	with 0kbps even when resource is limited. This measurement item takes statistics of the time of RAB established successfully with 0kbps in RNC level.	7196304		bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_SuccEstab PS_128_RNC	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011:The numbers of PS RABs successfully established in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs successfully established (Max DL bit rate = 128 kbps)	B67109426.C6 7174853	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_SuccEstab PS_384_RNC	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011:The numbers of PS RABs successfully established in the RNC	B67109426.C6 7174852	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			according to different traffic classes and maximum downlink bit rates, Number of PS RABs successfully established (Max DL bit rate = 384 kbps)			
VS_RAB_SuccEstab PS_64_RNC	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: The numbers of PS RABs successfully established in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs successfully established (Max DL bit rate = 64 kbps)	B67109426.C67174854	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
VS_RAB_SuccEstab PS_CMB_Rnc	ACCUMULATION	INTEGER	Obsolete from UTRAN/V100 V200R011: The above item provides the number of the CMB RABs established successfully in the RNC	B67109426.C67190604	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
VS_RAB_SucEstPS Bkg0_32_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs successfully	B67109426.C67174844	Sum	hub99psl bh, hubcs1bh

			established in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs successfully established for background services (Max DL bit rate in [0,32] kbps)			, hubhsdpa bh, hubpslbh
VS_RAB_SucEstPS Bkg144384_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs successfully established in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs successfully established for background services (Max DL bit rate in (144,384] kbps)	B67109426.C6 7174847	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_SucEstPS Bkg32_64_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs successfully established in the RNC according to	B67109426.C6 7174845	Sum	hub99psl bh, hubcslbh , hubhsdpa bh,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			different traffic classes and maximum downlink bit rates, Number of PS RABs successfully established for background services (Max DL bit rate in (32,64] kbps)			hubpslbh
VS_RAB_SucEstPS Bkg64_144_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs successfully established in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs successfully established for background services (Max DL bit rate in (64,144] kbps)	B67109426.C6 7174846	Sum	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh
VS_RAB_SucEstPS BkgMor384_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs successfully established in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs successfully established for background	B67109426.C6 7174848	Sum	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh

			services (Max DL bit rate more than 384 kbps)			
VS_RAB_SucEstPS Conv0_32_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs successfully established in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs successfully established for conversational services (Max DL bit rate in [0,32] kbps)	B67109426.C6 7174832	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
VS_RAB_SucEstPS ConvMor32_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs successfully established in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs successfully established for conversational services (Max DL bit rate more than 32	B67109426.C6 7174833	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			kbps)			
VS_RAB_SucEstPSInt0_32_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs successfully established in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs successfully established for interactive services (Max DL bit rate in [0,32] kbps)	B67109426.C67174839	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_SucEstPSInt144384_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs successfully established in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs successfully established for interactive services (Max DL bit rate in (144,384] kbps)	B67109426.C67174842	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_SucEstPSInt32_64_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs successfully established in the RNC according to	B67109426.C67174840	Sum	hub99psl bh, hubcslbh , hubhsdpa bh,

			different traffic classes and maximum downlink bit rates, Number of PS RABs successfully established for interactive services (Max DL bit rate in (32,64] kbps)			hubpslbh
VS_RAB_SucEstPSInt64_144_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs successfully established in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs successfully established for interactive services (Max DL bit rate in (64,144] kbps)	B67109426.C67174841	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RAB_SucEstPSIntMor384_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs successfully established in the RNC according to different traffic classes and maximum downlink bit	B67109426.C67174843	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			rates, Number of PS RABs successfully established for interactive services (Max DL bit rate more than 384 kbps)			
VS_RAB_SucEstPS Str0_32_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs successfully established in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs successfully established for streaming services (Max DL bit rate in [0,32] kbps)	B67109426.C6 7174834	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
VS_RAB_SucEstPS Str144384_RNC	ACCUMULATION	INTEGER	The numbers of PS RABs successfully established in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs successfully established for streaming services (Max DL bit rate in (144,384]	B67109426.C6 7174837	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh

			kbps)			
VS_RAB_SucEstPS Str32_64_RNC	ACCUMULA TION	INTEG ER	The numbers of PS RABs successfully established in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs successfully established for streaming services (Max DL bit rate in (32,64] kbps)	B67109426.C6 7174835	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
VS_RAB_SucEstPS Str64_144_RNC	ACCUMULA TION	INTEG ER	The numbers of PS RABs successfully established in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs successfully established for streaming services (Max DL bit rate in (64,144] kbps)	B67109426.C6 7174836	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
VS_RAB_SucEstPS StrMor384_RNC	ACCUMULA TION	INTEG ER	The numbers of PS RABs successfully	B67109426.C6 7174838	Sum	hub99psl bh, hubcs1bh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			established in the RNC according to different traffic classes and maximum downlink bit rates, Number of PS RABs successfully established for streaming services (Max DL bit rate more than 384 kbps)			, hubhsdpabh, hubpslbh
--	--	--	--	--	--	------------------------------

7.42.24RNC.Huawei.UMTS.RAB_Loss_PLMN_RNC

RAB Loss PLMN RNC data

The performance data measurements for this KPI group are recorded against the combination of RNC and CNOOPERATOR (cnoperator_id) .

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RAB_Loss_AMR_Abnormal_PLMN_RNC	ACCUMULATION	INTEGER	VS RAB Loss AMR Abnorm PLMN RNC	B67109554.C67196192	Sum	
VS_RAB_Loss_AMR_Norm_PLMN_RNC	ACCUMULATION	INTEGER	VS RAB Loss AMR Norm PLMN RNC	B67109554.C67196193	Sum	
VS_RAB_Loss_CS64_Abnormal_PLMN_RNC	ACCUMULATION	INTEGER	VS RAB Loss CS64 Abnorm PLMN RNC	B67109554.C67196194	Sum	
VS_RAB_Loss_CS64_Norm_PLMN_RNC	ACCUMULATION	INTEGER	VS RAB Loss CS64 Norm PLMN RNC	B67109554.C67196195	Sum	
VS_RAB_Loss_PS_Abnormal_	ACCUMULATION	INTEGER	VS RAB Loss PS Abnorm	B67109554.C67196196	Sum	

PLMN_RNC			PLMN RNC			
VS_RAB_Loss _PS_Norm_PL MN_RNC	ACCUMULA TION	INTEG ER	VS RAB Loss PS Norm PLMN RNC	B67109554.C6719 6197	Sum	

7.42.25RNC.Huawei.UMTS.RAB_Modify_CS_RNC

RAB Modify CS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_RAB_Succ ModCS_Conv_RNC	PERCENTAGE	FLOAT	Percentage CS conversational service RABs successfully modified	100 * {VS_RAB_Succ ModCS_Conv_RNC}/ {VS_RAB_AttM odCS_Conv_RNC}	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
%_VS_RAB_Succ ModCS_Str_RNC	PERCENTAGE	FLOAT	Percentage CS streaming service RABs successfully modified	100 * {VS_RAB_Succ ModCS_Str_RNC}/ {VS_RAB_AttM odCS_Str_RNC}	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_SuccModCS NoQueuing_Conv	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of CS conversational service RABs successfully modified (No Queuing)	B67109424.C67 203841	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_SuccModCS NoQueuing_Strm	ACCUMULATION	INTEGER	Number of CS streaming service RABs	B67109424.C67 203842	Sum	hub99psl bh, hubcslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			successfully modified(No Queuing)			, hubhsdpa bh, hubpslbh
RAB_SuccModCS Queuing_Conv	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of CS conversational service RABs successfully modified(Queuing)	B67109424.C67 192293	Sum	hub99pslbh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_SuccModCS Queuing_Strm	ACCUMULATION	INTEGER	Number of CS streaming service RABs successfully modified(Queuing)	B67109424.C67 192294	Sum	hub99pslbh, hubcslbh , hubhsdpa bh, hubpslbh
VS_FBack_RABModReqCs_Conv_RNC	ACCUMULATION	INTEGER	Number of RNC-initiated service change and UDI fallback.	B67109424.C67 203800	Sum	hub99pslbh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_AttModCS_Conv_RNC	ACCUMULATION	INTEGER	Number of CS conversational service RABs requested to modify	B67109424.C67 174725	Sum	hub99pslbh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_AttModCS_Str_RNC	ACCUMULATION	INTEGER	Number of CS streaming service RABs requested to modify	B67109424.C67 174726	Sum	hub99pslbh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_SuccMo	ACCUMULATION	INTEGER	Number of CS	B67109424.C67	Sum	hub99pslbh

dCS_Conv_RNC	TION	ER	conversational service RABs successfully modified	174727		bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_SuccModCS_Str_RNC	ACCUMULATION	INTEGER	Number of CS streaming service RABs successfully modified	B67109424.C67174728	Sum	hub99pslbh, hubcslbh , hubhsdpa bh, hubpslbh

7.42.26RNC.Huawei.UMTS.RAB_Modify_PS_RNC

RAB Modify PS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_RAB_SuccModPS_Bkg_RNC	PERCENTAGE	FLOAT	Percentage PS RABs of a traffic class successfully modified in the RNC, Number of PS background service RABs successfully modified	$100 * \frac{\{VS_RAB_SuccModPS_Bkg_RNC\}}{\{VS_RAB_AttModPS_Bkg_RNC\}}$	Average	hub99pslbh, hubcslbh , hubhsdpa bh, hubpslbh
%_VS_RAB_SuccModPS_Conv_RNC	PERCENTAGE	FLOAT	Percentage PS RABs of a traffic class successfully modified in the RNC, Number of PS	$100 * \frac{\{VS_RAB_SuccModPS_Conv_RNC\}}{\{VS_RAB_AttModPS_Conv_RNC\}}$	Average	hub99pslbh, hubcslbh , hubhsdpa bh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			streaming service RABs successfully modified			
$\frac{\text{VS_RAB_Succ}}{\text{ModPS_Int_RNC}}$	PERCENTAGE	FLOAT	Percentage PS RABs of a traffic class successfully modified in the RNC, Number of PS interactive service RABs successfully modified	$100 * \frac{\{\text{VS_RAB_Succ ModPS_Int_RNC}\}}{\{\text{VS_RAB_AttModPS_Int_RNC}\}}$	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
$\frac{\text{VS_RAB_Succ}}{\text{ModPS_Str_RNC}}$	PERCENTAGE	FLOAT	Percentage PS RABs of a traffic class successfully modified in the RNC, Number of PS conversational service RABs successfully modified	$100 * \frac{\{\text{VS_RAB_Succ ModPS_Str_RNC}\}}{\{\text{VS_RAB_AttModPS_Str_RNC}\}}$	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_SuccModPS NoQueuing_Bgrd	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of PS background service RABs successfully modified (No Queuing)	B67109428.C67 192109	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_SuccModPS NoQueuing_Conv	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of PS conversational service RABs successfully modified (No	B67109428.C67 192106	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

			Queuing)			
RAB_SuccModPS NoQueuing_Intact	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011: Number of PS interactive service RABs successfully modified(No Queuing)	B67109428.C67 192108	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
RAB_SuccModPS NoQueuing_Strm	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011: Number of PS streaming service RABs successfully modified(No Queuing)	B67109428.C67 192107	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
RAB_SuccModPS Queuing_Bgrd	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011: Number of PS background service RABs successfully modified(Queu ing)	B67109428.C67 192298	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
RAB_SuccModPS Queuing_Conv	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011: Number of PS conversational service RABs successfully modified(Queu ing)	B67109428.C67 192295	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
RAB_SuccModPS	ACCUMULA	INTEG	Obsolete from	B67109428.C67	Sum	hub99psl

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Queuing_Intact	TION	ER	UTRAN/V900 R011: Number of PS interactive service RABs successfully modified(Queu ing)	192297		bh, hubcslbh , hubhsdpa bh, hubpslbh
RAB_SuccModPS Queuing_Strm	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011: Number of PS streaming service RABs successfully modified(Queu ing)	B67109428.C67 192296	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_AttMod PS_Bkg_RNC	ACCUMULA TION	INTEG ER	The number of the PS RABs of a traffic class requested to modify in the RNC, Number of PS background service RABs requested to modify	B67109428.C67 174796	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_AttMod PS_Conv_RNC	ACCUMULA TION	INTEG ER	The number of the PS RABs of a traffic class requested to modify in the RNC, Number of PS conversational service RABs requested to modify	B67109428.C67 174793	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RAB_AttMod PS_Int_RNC	ACCUMULA TION	INTEG ER	The number of the PS RABs of a traffic class requested	B67109428.C67 174795	Sum	hub99psl bh, hubcslbh ,

			to modify in the RNC, Number of PS interactive service RABs requested to modify			hubhsdpa bh, hubpsl bh
VS_RAB_AttMod PS_Str_RNC	ACCUMULATION	INTEGER	The number of the PS RABs of a traffic class requested to modify in the RNC, Number of PS streaming service RABs requested to modify	B67109428.C67 174794	Sum	hub99psl bh, hubcsl bh , hubhsdpa bh, hubpsl bh
VS_RAB_FailMod PS_RNC	ACCUMULATION	INTEGER	This item provides the number of PS RABs unsuccessfully modified in the RNC.	B67109428.C67 190175	Sum	hub99psl bh, hubcsl bh , hubhsdpa bh, hubpsl bh
VS_RAB_SuccMod dPS_Bkg_RNC	ACCUMULATION	INTEGER	The number of the PS RABs of a traffic class successfully modified in the RNC, Number of PS background service RABs successfully modified	B67109428.C67 174800	Sum	hub99psl bh, hubcsl bh , hubhsdpa bh, hubpsl bh
VS_RAB_SuccMod dPS_Conv_RNC	ACCUMULATION	INTEGER	The number of the PS RABs	B67109428.C67 174797	Sum	hub99psl bh,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			of a traffic class successfully modified in the RNC, Number of PS streaming service RABs successfully modified			hubcslbh , hubhsdpabh, hubpslbh
VS_RAB_SuccModPS_Int_RNC	ACCUMULATION	INTEGER	The number of the PS RABs of a traffic class successfully modified in the RNC, Number of PS interactive service RABs successfully modified	B67109428.C67174799	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh
VS_RAB_SuccModPS_Str_RNC	ACCUMULATION	INTEGER	The number of the PS RABs of a traffic class successfully modified in the RNC, Number of PS conversational service RABs successfully modified	B67109428.C67174798	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh

7.42.27RNC.Huawei.UMTS.RAB_Release_CMB_RNC

RAB CMB RRC signalling release measurement

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RAB_UISigRel_CMB_R	ACCUMULATION	INTEGER	Obsolete from UTRAN/V100V	B67109430.C67191697	Sum	hub99pslbh,

NC			200R011:Numbers of RRC SIG RELEASE IND (CMB)			hubcslbh, hubhsdpabh, hubpslbh
----	--	--	--	--	--	--------------------------------------

7.42.28RNC.Huawei.UMTS.RAB_Release_CS_RNC

RAB Release CS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
RAB_AttRelCS_sum	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011:No description.	B67109425.C67192101	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RAB_AttRelCS_Conv_RNC	ACCUMULATION	INTEGER	Number of CS conversational service RABs requested to release	B67109425.C67174729	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RAB_FailRelCS	ACCUMULATION	INTEGER	Number of the CS RABs requested to release unsuccessfully.	B67109425.C67192103	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RAB_SuccRelCS	ACCUMULATION	INTEGER	Number of the CS RABs requested to release successfully.	B67109425.C67192102	Sum	hub99pslbh, hubcslbh, hubhsdpabh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						bh, hubpslbh
--	--	--	--	--	--	-----------------

7.42.29RNC.Huawei.UMTS.RAB_Release_PS_RNC

RAB release PS RNC data.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RAB_FailRelPS	ACCUMULATION	INTEGER	Number of the CS RABs requested to release unsuccessfully.	B67109429.C67192105	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RAB_SuccRelPS	ACCUMULATION	INTEGER	Number of the PS RABs requested to release successfully.	B67109429.C67192104	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh

7.42.30RNC.Huawei.UMTS.RB_Usage_CS_Conv_RNC

RB Usage CS Conversational data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RB_DLConvCS_28_8_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202757	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum

VS_RB_DLCon vCS_32_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATION AL/STREAMING/ INTERACTIVE/B ACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C6720 2760	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_DLCon vCS_56_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATION AL/STREAMING/ INTERACTIVE/B ACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C6720 2763	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_DLCon vCS_64_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATION AL/STREAMING/ INTERACTIVE/B ACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C6720 2766	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_ULCon vCS_28_8_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATION	B67109440.C6720 2769	Average	hub99psl bh, hubcslbh ,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			AL/STREAMING/INTERACTIVE/B ACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.			hubhspdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_RB_ULCon vCS_32_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATION AL/STREAMING/INTERACTIVE/B ACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C6720 2772	Average	hub99psl bh, hubcslbh , hubhspdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_RB_ULCon vCS_56_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATION AL/STREAMING/INTERACTIVE/B ACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C6720 2775	Average	hub99psl bh, hubcslbh , hubhspdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_RB_ULCon vCS_64_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATION AL/STREAMING/INTERACTIVE/B ACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C6720 2778	Average	hub99psl bh, hubcslbh , hubhspdpa bh, hubpslbh , Sum, Minimum, Maximum

7.42.31RNC.Huawei.UMTS.RB_Usage_CS_Stream_RNC

RB Usage CS Streaming data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RB_DLStrCS_14_4_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202745	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum
VS_RB_DLStrCS_28_8_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202742	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum
VS_RB_DLStrCS_57_6_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and	B67109440.C67202739	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			using the variable-rate in a RNC in the UL and DL directions.			Minimum, Maximum
VS_RB_ULStrCS_14_4_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202754	Average	hub99pslbh, hubeslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum
VS_RB_ULStrCS_28_8_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202751	Average	hub99pslbh, hubeslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum
VS_RB_ULStrCS_57_6_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202748	Average	hub99pslbh, hubeslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum

7.42.32RNC.Huawei.UMTS.RB_Usage_DRD_RNC

RB usage DRD RNC data.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
%_VS_DRD_RB_D2H_Success_RNC	PERCENTAGE	FLOAT	Percentage successful DRD procedure with channel transformation type of "DCH TO HSDPA" in RNC.	$100 * \frac{\{VS_DRD_RB_D2H_Succ_RNC\}}{\{VS_DRD_RB_D2H_Att_RNC\}}$	Average	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
VS_DRD_RB_D2H_Att_RNC	ACCUMULATION	INTEGER	Number of DRD procedure attempted with channel transformation type of "DCH TO HSDPA" in RNC.	B67109440.C67192444	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
VS_DRD_RB_D2H_Success_RNC	ACCUMULATION	INTEGER	Number of DRD procedure successfully executed with channel transformation type of "DCH TO HSDPA" in RNC.	B67109440.C67192445	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh

7.42.33RNC.Huawei.UMTS.RB_Usage_PS_Bkg_RNC

RB Usage PS Background data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RB_DLBkg_PS_128_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is	B67109440.C67202700	Average	hub99psl bh, hubcs1bh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			CONVERSATION AL/STREAMING/ INTERACTIVE/B ACKGROUND in PS domain and using the variable- rate in a RNC in the UL and DL directions.			, hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_DLBkg PS_144_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATION AL/STREAMING/ INTERACTIVE/B ACKGROUND in PS domain and using the variable- rate in a RNC in the UL and DL directions.	B67109440.C67202 697	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_DLBkg PS_16_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATION AL/STREAMING/ INTERACTIVE/B ACKGROUND in PS domain and using the variable- rate in a RNC in the UL and DL directions.	B67109440.C67202 709	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_DLBkg PS_256_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATION AL/STREAMING/ INTERACTIVE/B ACKGROUND in PS domain and using the variable- rate in a RNC in the UL and DL	B67109440.C67202 694	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu

			directions.			m
VS_RB_DLBkg PS_32_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202 706	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_DLBkg PS_384_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202 691	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_DLBkg PS_64_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202 703	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_DLBkg PS_8_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose	B67109440.C67202 712	Average	hub99psl bh,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.			hubcslbh , hubhsdpabh, hubpslbh , Sum, Minimum, Maximum
VS_RB_ULBkg PS_128_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202724	Average	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh , Sum, Minimum, Maximum
VS_RB_ULBkg PS_144_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202721	Average	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh , Sum, Minimum, Maximum
VS_RB_ULBkg PS_16_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the	B67109440.C67202733	Average	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh , Sum, Minimum, m,

			UL and DL directions.			Maximum
VS_RB_ULBkg PS_256_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202718	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_RB_ULBkg PS_32_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202730	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_RB_ULBkg PS_384_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202715	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_RB_ULBkg	INTENSITY	FLOAT	The mean numbers	B67109440.C67202	Average	hub99psl

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

PS_64_RNC	TY	T	of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	727		bh, hubcs1bh, hubhsdpa bh, hubps1bh, Sum, Minimum, Maximum
VS_RB_ULBkg PS_8_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202736	Average	hub99ps1bh, hubcs1bh, hubhsdpa bh, hubps1bh, Sum, Minimum, Maximum

7.42.34RNC.Huawei.UMTS.RB_Usage_PS_Conv_RNC

RB Usage PS Conversational data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RB_DLConvPS_16_RNC	INTENSITY	FLOAT	Number of conversational service RBs in PS domain at DL bit rate of 16 kbit/s	B67109440.C67202580	Average	hub99ps1bh, hubcs1bh, hubhsdpa bh, hubps1bh, Sum, Minimum, Maximum
VS_RB_DLConv	INTENSITY	FLOAT	Number of	B67109440.C67202	Average	hub99ps1

vPS_32_RNC	TY	T	conversational service RBs in PS domain at DL bit rate of 32 kbit/s	583		bh, hubcslbh, hubhsdpa bh, hubpslbh, Sum, Minimum, Maximum
VS_RB_DLCon vPS_38_8_RNC	INTENSITY	FLOAT	Number of PS conversational services in downlink 38.8kbps in the RNC.	B67109440.C67204798	Average	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh, Sum, Minimum, Maximum
VS_RB_DLCon vPS_39_2_RNC	INTENSITY	FLOAT	Number of PS conversational services in downlink 39.2kbps in the RNC.	B67109440.C67204799	Average	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh, Sum, Minimum, Maximum
VS_RB_DLCon vPS_40_RNC	INTENSITY	FLOAT	Number of PS conversational services in downlink 40kbps in the RNC.	B67109440.C67204800	Average	hub99pslbh, hubcslbh, hubhsdpa

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						bh, hubpsl bh, Sum, Minimum, Maximum
VS_RB_DLCon vPS_42_8_RNC	INTENSI TY	FLOA T	Number of PS conversational services in downlink 42.8kbps in the RNC.	B67109440.C67204 801	Average	hub99psl bh, hubcsl bh, hubhsdpa bh, hubpsl bh, Sum, Minimum, Maximum
VS_RB_DLCon vPS_64_RNC	INTENSI TY	FLOA T	Number of conversational service RBs in PS domain at DL bit rate of 64 kbit/s	B67109440.C67202 586	Average	hub99psl bh, hubcsl bh, hubhsdpa bh, hubpsl bh, Sum, Minimum, Maximum
VS_RB_DLCon vPS_8_RNC	INTENSI TY	FLOA T	Number of conversational service RBs in PS domain at DL bit rate of 8 kbit/s	B67109440.C67202 577	Average	hub99psl bh, hubcsl bh, hubhsdpa bh, hubpsl bh, Sum, Minimum, Maximum

VS_RB_ULCon vPS_16_RNC	INTENSI TY	FLOA T	Number of conversational service RBs in PS domain at UL bit rate of 16 kbit/s	B67109440.C67202 592	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_ULCon vPS_32_RNC	INTENSI TY	FLOA T	Number of conversational service RBs in PS domain at UL bit rate of 32 kbit/s	B67109440.C67202 595	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_ULCon vPS_38_8_RNC	INTENSI TY	FLOA T	Number of PS conversational services in uplink 38.8kbps in the RNC.	B67109440.C67204 802	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_ULCon vPS_39_2_RNC	INTENSI TY	FLOA T	Number of PS conversational services in uplink 39.2kbps in the	B67109440.C67204 803	Average	hub99psl bh, hubcslbh ,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			RNC.			hubhspdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_RB_ULCon vPS_40_RNC	INTENSI TY	FLOA T	Number of PS conversational services in uplink 40kbps in the RNC.	B67109440.C67204 804	Average	hub99psl bh, hubcslbh , hubhspdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_RB_ULCon vPS_42_8_RNC	INTENSI TY	FLOA T	Number of PS conversational services in uplink 42.8kbps in the RNC.	B67109440.C67204 805	Average	hub99psl bh, hubcslbh , hubhspdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_RB_ULCon vPS_64_RNC	INTENSI TY	FLOA T	Number of conversational service RBs in PS domain at UL bit rate of 64 kbit/s	B67109440.C67202 598	Average	hub99psl bh, hubcslbh , hubhspdpa bh, hubpslbh , Sum, Minimum, Maximum

VS_RB_ULCon vPS_8_RNC	INTENSI TY	FLOA T	Number of conversational service RBs in PS domain at UL bit rate of 8 kbit/s	B67109440.C67202 589	Average	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh , Sum, Minimu m, Maximu m
--------------------------	---------------	-----------	--	-------------------------	---------	--

7.42.35RNC.Huawei.UMTS.RB_Usage_PS_Global_RNC

RB Usage PS Global data

KPI	Type	Data Type	Description	Derivation	Default Aggrega tor	Other Aggrega tors
VS_RB_AttRec fgPS_CMB_Rn c	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V100V 200R011:The item above provides the numbers of RB Reconfig about CMB service in RNC.	B67109440.C671 90606	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
VS_RB_Loss_P S_0_64_RNC	ACCUMULA TION	INTEG ER	Number of released PS RBs triggered by RNC (Current DL bit rate in (0,64] kbps)	B67109440.C671 90722	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
VS_RB_Loss_P S_144_384_RN C	ACCUMULA TION	INTEG ER	Number of released PS RABs triggered	B67109440.C671 90724	Sum	hub99psl bh, hubcs1bh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP
Schedule Contract with IBM Corp.

			by RNC (Current DL bit rate in (144,384] kbps)			, hubhsdpa bh, hubpslhb
VS_RB_Loss_PS_64_144_RNC	ACCUMULATION	INTEGER	Number of released PS RABs triggered by RNC (Current DL bit rate in (64,144] kbps)	B67109440.C671 90723	Sum	hub99psl bh, hubcslhb , hubhsdpa bh, hubpslhb
VS_RB_Loss_PS_MOR384_RNC	ACCUMULATION	INTEGER	Number of released PS RABs triggered by RNC (Current DL bit rate more than 384kbps)	B67109440.C671 90725	Sum	hub99psl bh, hubcslhb , hubhsdpa bh, hubpslhb
VS_RB_RateDown_To_0kbps_RNC	ACCUMULATION	INTEGER	This measurement item takes statistics of the time of RAB rated down to 0kbps for low activity or other reasons in RNC level.	B67109440.C671 96306	Sum	hub99psl bh, hubcslhb , hubhsdpa bh, hubpslhb
VS_RB_Successful_PS_Reconfig_CMB_Rnc	ACCUMULATION	INTEGER	Obsolete from UTRAN/V100V 200R011:The item above provides the numbers of RB Reconfig successfully about CMB service in RNC.	B67109440.C671 90607	Sum	hub99psl bh, hubcslhb , hubhsdpa bh, hubpslhb

7.42.36RNC.Huawei.UMTS.RB_Usage_PS_Stream_RNC

RB Usage PS Streaming data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
-----	------	-----------	-------------	------------	--------------------	-------------------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RB_DLStr PS_128_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202607	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_RB_DLStr PS_144_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202604	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_RB_DLStr PS_16_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202616	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_RB_DLStr PS_256_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and	B67109440.C67202601	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum,

			using the variable-rate in a RNC in the UL and DL directions.			Minimum, Maximum
VS_RB_DLStr PS_32_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202613	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum
VS_RB_DLStr PS_64_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202610	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum
VS_RB_DLStr PS_8_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202619	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RB_ULStr PS_128_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202 628	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_ULStr PS_144_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202 625	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_ULStr PS_16_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202 637	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_ULStr PS_256_RNC	INTENSI TY	FLOA T	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and	B67109440.C67202 622	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum,

			using the variable-rate in a RNC in the UL and DL directions.			Minimum, Maximum
VS_RB_ULStr PS_32_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202634	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum
VS_RB_ULStr PS_64_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202631	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum
VS_RB_ULStr PS_8_RNC	INTENSITY	FLOAT	The mean numbers of RBs whose traffic class is CONVERSATIONAL/STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL and DL directions.	B67109440.C67202640	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

7.42.37RNC.Huawei.UMTS.RLC_Statistics_RNC

Radio Link Control data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
RLC_DiscardedBlocksByRNC	ACCUMULATION	INTEGER	This item provides the number of packets discarded by all RLCs in the RNC.	B67109448.C67202539	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh
RLC_NbrBlocksReceived_AM	ACCUMULATION	INTEGER	This item provides the number of packets received by all RLCs in AM mode in the RNC.	B67109448.C67202537	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh
RLC_NbrBlocksReceived_TM	ACCUMULATION	INTEGER	This item provides the number of packets received by all RLCs in TM mode in the RNC.	B67109448.C67202536	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh
RLC_NbrBlocksReceived_UM	ACCUMULATION	INTEGER	This item provides the number of packets received by all RLCs in UM mode in the RNC.	B67109448.C67202538	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh
RLC_NbrBlocksSent_AM	ACCUMULATION	INT8	This item provides the number of packets sent	B67109448.C67202534	Sum	hub99psl bh, hubcslbh ,

			by all RLCs in AM mode in the RNC.			hubhsdpa bh, hubpslbh
RLC_NbrBlocksSent_TM	ACCUMULATION	INTEGER	This item provides the number of packets sent by all RLCs in TM mode in the RNC.	B67109448.C67 202533	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RLC_NbrBlocksSent_UM	ACCUMULATION	INTEGER	This item provides the number of packets sent by all RLCs in UM mode in the RNC.	B67109448.C67 202535	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RLC_Retransmitted BlocksToUE	ACCUMULATION	INTEGER	This item provides the number of packets retransmitted by all RLCs in AM mode in the RNC.	B67109448.C67 202540	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RLC_DL_BufferOccupancyCountNum	ACCUMULATION	INTEGER	No description.	B67109448.C67 190344	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RLC_DL_BufferOccupancyLEN_HIGH	INTENSITY	INTEGER	No description.	B67109448.C67 190343	Average	hub99psl bh, hubcslbh , hubhsdpa bh,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						hubpslbh, Sum, Minimum, Maximum
VS_RLC_DL_BufferOccupYLEN_LOW	INTENSITY	INTEGER	No description.	B67109448.C67190342	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum
VS_RLC_DLBuff_Len	ACCUMULATION	INT8	No description.	B67109448.C67202532	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RLC_DLBuff_Mean_Occup_Len	INTENSITY	FLOAT	No description.	B67109448.C67202530	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum

7.42.38RNC.Huawei.UMTS.RRC_Connection_Setup_RNC

RRC Connection Setup data

KPI	Type	Data Type	Description	Derivation	Default Aggrega	Other Aggrega
-----	------	-----------	-------------	------------	-----------------	---------------

					tor	tors
%_VS_RRC_SuccConnEstab	PERCENTAGE	FLOAT	Percentage RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to VS.RRC.SuccConnEstab provides the number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC. This item includes VS.RRC.SuccConnEstab.DCH and VS.RRC.SuccConnEstab.CCH	$100 * \frac{\{VS_RRC_SuccConnEstab\}}{\{VS_RRC_AttConnEstab\}}$	Average	hub99pslbh, hubeslbh, hubhsdpabh, hubpslbh
RRC_ConnEstab_Succ_RNC_Rate	INTENSITY	FLOAT	Obsolete from UTRAN/V900R011:RRC ConnEstab Succ RNC Rate	B67109420.C67204854	Average	hub99pslbh, hubeslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum
VS_RRC_AttConnEstab_CCH	ACCUMULATION	INTEGER	Number of RRC CONNECTION REQUEST messages from UEs to the RNC through which messages the RNC judges that the RRC connections are to be set up on CCH.	B67109420.C67174705	Sum	hub99pslbh, hubeslbh, hubhsdpabh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RRC_Att ConnEstab_CellRes	ACCUMULATION	INTEGER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC due to Inter-RAT cell re-selection	B67109420.C6 7174507	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Att ConnEstab_CMB_Rnc	ACCUMULATION	INTEGER	Obsolete from UTRAN/V100V200R011: The numbers of RRC CONNECTION SETUP messages from the RNC to UEs according to CMB Identifier.	B67109420.C6 7190601	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Att ConnEstab_DCH	ACCUMULATION	INTEGER	Number of RRC CONNECTION REQUEST messages from UEs to the RNC through which messages the RNC judges that the required RRC connections are to be set up on DCH.	B67109420.C6 7174689	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Att ConnEstab_Detach	ACCUMULATION	INTEGER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC due to Detach	B67109420.C6 7174510	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Att ConnEstab_Emg	ACCUMULATION	INTEGER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC due to Emergency Call	B67109420.C6 7174506	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Att ConnEstab_MB_MSPtp	ACCUMULATION	INTEGER	These measurement items take statistics of the number of RRC CONNECTION	B67109420.C6 7195969	Sum	hub99psl bh, hubcslbh ,

			REQUEST messages that the RNC receives from the UEs and then actually processes for different RRC connection request causes, excluding cases that such request is rejected because of redirection based on specific services - MBMS PTP RB Request.			hubhsdpabh, hubpslbh
VS_RRC_AttConnEstab_MBMSRep	ACCUMULATION	INTEGER	These measurement items take statistics of the number of RRC CONNECTION REQUEST messages that the RNC receives from the UEs and then actually processes for different RRC connection request causes, excluding cases that such request is rejected because of redirection based on specific services - MBMS Reception.	B67109420.C67195968	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RRC_AttConnEstab_Msg	ACCUMULATION	INTEGER	Number of RRC CONNECTION REQUEST messages from UEs to the RNC. This item includes VS.RRC.AttConnEstab.	B67109420.C67174449	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RRC_AttConnEstab_OrgBkg	ACCUMULATION	INTEGER	The number of RRC CONNECTION REQUEST messages actually processed by	B67109420.C67174500	Sum	hub99pslbh, hubcslbh, ,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			the RNC due to Originating Background Call			hubhsdpa bh, hubpslbh
VS_RRC_Att ConnEstab_O rgConv	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC due to Originating Conversational Call	B67109420.C6 7174497	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Att ConnEstab_O rgHPSig	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC due to Originating High Priority Signalling	B67109420.C6 7174511	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Att ConnEstab_O rgInt	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC due to Originating Interactive Call	B67109420.C6 7174499	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Att ConnEstab_O rgLPSig	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC due to Originating Low Priority Signalling	B67109420.C6 7174512	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Att ConnEstab_O rgStr	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC due to Originating Streaming Call	B67109420.C6 7174498	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Att ConnEstab_O rgSubs	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION REQUEST messages actually processed by	B67109420.C6 7174501	Sum	hub99psl bh, hubcslbh ,

			the RNC due to Originating Subscribed traffic Call			hubhsdpa bh, hubpslbh
VS_RRC_Att ConnEstab_Reg	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC due to Registration	B67109420.C6 7174509	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Att ConnEstab_R est	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC due to Call re-Establishment	B67109420.C6 7174513	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Att ConnEstab_T mHPSig	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC due to Terminating High Priority Signalling	B67109420.C6 7174514	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Att ConnEstab_T mLPSig	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC due to Terminating Low Priority Signalling	B67109420.C6 7174515	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Att ConnEstab_Tr mBkg	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC due to Terminating Background Call	B67109420.C6 7174505	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_RRC_Att ConnEstab_TrmConv	ACCUMULATION	INTEGER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC due to Terminating Conversational Call	B67109420.C6 7174502	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh
VS_RRC_Att ConnEstab_TrmInt	ACCUMULATION	INTEGER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC due to Terminating Interactive Call	B67109420.C6 7174504	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh
VS_RRC_Att ConnEstab_TrmStr	ACCUMULATION	INTEGER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC due to Terminating Streaming Call	B67109420.C6 7174503	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh
VS_RRC_Att ConnEstab_Unknown	ACCUMULATION	INTEGER	The number of RRC CONNECTION REQUEST messages actually processed by the RNC due to Terminating - cause unknown	B67109420.C6 7174516	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh
VS_RRC_Att ConnEstab	ACCUMULATION	INTEGER	Number of RRC CONNECTION REQUEST messages actually processed by the RNC. This item includes VS.RRC.AttConnEstab.CCH and VS.RRC.AttConnEstab.DCH	B67109420.C6 7174450	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh
VS_RRC_Fail ConEst_Cng_RNC	ACCUMULATION	INTEGER	Number of RRC CONNECTION REJECT messages from the RNC to UEs due to network	B67109420.C6 7174625	Sum	hub99pslbh, hubcslbh , hubhsdpabh

			congestion upon reception of RRC CONNECTION REQUEST messages from the UEs.			bh, hubpslbh
VS_RRC_FailConEst_RNC	ACCUMULATION	INTEGER	This item provides the number of RRC Connection fail. The value of VS.RRC.FailConEst.RNC is equal to the value of VS.RRC.FailConEst.Cng.RNC	B67109420.C67174453	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RRC_SetupConnEstab_DCH	ACCUMULATION	INTEGER	VS.RRC.SetupConnEstab.DCH provides the number of RRC CONNECTION SETUP messages from the RNC to UEs. Where, RRC connections need to be set up on DCHs.	B67109420.C67174690	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RRC_SetupConnEstab	ACCUMULATION	INTEGER	VS.RRC.SetupConnEstab provides the number of RRC CONNECTION SETUP messages from the RNC to UEs	B67109420.C67174451	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_RRC_SuccConnEstab_CCH	ACCUMULATION	INTEGER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to VS.RRC.SuccConnEstab.CCH provides the number of RRC CONNECTION	B67109420.C67174706	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			SETUP COMPLETE messages from UEs to the RNC. Where, RRC connections are set up on CCHs.			
VS_RRC_SuccConnEstab_CellRes	ACCUMULATION	INTEGER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to Inter-RAT cell re-selection	B67109420.C67174571	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_SuccConnEstab_CMB_Rnc	ACCUMULATION	INTEGER	Obsolete from UTRAN/V100V200R011: The numbers of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC according to CMB Identifier.	B67109420.C67190602	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_SuccConnEstab_DCH	ACCUMULATION	INTEGER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to VS.RRC.SuccConnEstab.DCH provides the number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC. Where, RRC connections are set up on DCHs.	B67109420.C67174691	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_SuccConnEstab_Detach	ACCUMULATION	INTEGER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to Detach	B67109420.C67174574	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_SuccConnEstab_	ACCUMULATION	INTEGER	The number of RRC CONNECTION	B67109420.C67174570	Sum	hub99psl bh,

Emg			SETUP COMPLETE messages from UEs to the RNC due to Emergency Call			hubcslbh , hubhsdpabh, hubpslbh
VS_RRC_SuccConnEstab_First_RNC	ACCUMULATION	INTEGER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to This item provides the number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC and the RNC judges that the RRC connection is set up on the first RRC CONNECTION REQUEST message.	B67109420.C67190590	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh
VS_RRC_SuccConnEstab_MBMSPTp	ACCUMULATION	INTEGER	The preceding measurement counters provide the number of RRC CONNECTION SETUP COMPLETE messages for different causes received by the RNC from UEs in a cell - MBMS PTP RB Request.	B67109420.C67195971	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh
VS_RRC_SuccConnEstab_MBMSRep	ACCUMULATION	INTEGER	The preceding measurement counters provide the number of RRC CONNECTION SETUP COMPLETE messages for different causes received by the RNC from UEs in a cell - MBMS	B67109420.C67195970	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Reception.			
VS_RRC_Suc cConnEstab_ OgLPSig	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to Originating Low Priority Signalling	B67109420.C6 7174576	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Suc cConnEstab_ OrgBkg	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to Originating Background Call	B67109420.C6 7174564	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Suc cConnEstab_ OrgConv	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to Originating Conversational Call	B67109420.C6 7174561	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Suc cConnEstab_ OrgHPSi	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to Originating High Priority Signalling	B67109420.C6 7174575	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Suc cConnEstab_ OrgInt	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to Originating Interactive Call	B67109420.C6 7174563	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Suc cConnEstab_ OrgStr	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to Originating Streaming	B67109420.C6 7174562	Sum	hub99psl bh, hubcslbh , hubhsdpa bh,

			Call			hubpslbh
VS_RRC_Suc cConnEstab_ OrgSubs	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to Originating Subscribed traffic Call	B67109420.C6 7174565	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Suc cConnEstab_ Reg	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to Registration	B67109420.C6 7174573	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Suc cConnEstab_ Rest	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to Call re-establishment	B67109420.C6 7174577	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Suc cConnEstab_ S econd_RNC	ACCUMULA TION	INTEG ER	This Item provides the number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC and the RNC judges that the RRC connection is set up on the second RRC CONNECTION REQUEST message	B67109420.C6 7190591	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Suc cConnEstab_ Third_RNC	ACCUMULA TION	INTEG ER	This item provides the number of RRC CONNECTION SETUP COMPLETE messages from UEs to	B67109420.C6 7190592	Sum	hub99psl bh, hubcslbh , hubhsdpa

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			the RNC and the RNC judges that the RRC connection is set up on the third RRC CONNECTION REQUEST message.			bh, hubpslbh
VS_RRC_Suc cConnEstab_ TmHPSi	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to Terminating High Priority Signalling	B67109420.C6 7174578	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Suc cConnEstab_ TmLPSi	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to Terminating Low Priority Signalling	B67109420.C6 7174579	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Suc cConnEstab_ TrmBkg	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to Terminating Background Call	B67109420.C6 7174569	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Suc cConnEstab_ TrmConv	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to Terminating Conversational Call	B67109420.C6 7174566	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Suc cConnEstab_ TrmInt	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to Terminating Interactive Call	B67109420.C6 7174568	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Suc	ACCUMULA	INTEG	The number of RRC	B67109420.C6	Sum	hub99psl

cConnEstab_ TrmStr	TION	ER	CONNECTION SETUP COMPLETE messages from UEs to the RNC due to Terminating Streaming Call	7174567		bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Suc cConnEstab_ Unknown	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to Terminating - cause unknown	B67109420.C6 7174580	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_Suc cConnEstab	ACCUMULA TION	INTEG ER	The number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC due to VS.RRC.SuccConnEst ab provides the number of RRC CONNECTION SETUP COMPLETE messages from UEs to the RNC. This item includes VS.RRC.SuccConnEst ab.DCH and VS.RRC.SuccConnEst ab.CCH	B67109420.C6 7174452	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

7.42.39RNC.Huawei.UMTS.RRC_Release_RNC

RRC Release data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RRC_A	ACCUMULA	INTEG	the number of RRC	B67109421.C	Sum	hub99psl

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

ttConRel_Cng_RNC	TION	ER	CONNECTION RELEASE messages from the RNC to UEs due to congestion	67190072		bh, hubcslbh, hubhsdpa bh, hubpslbh
VS_RRC_AttConRel_NormRel_RNC	ACCUMULATION	INTEGER	the number of RRC CONNECTION RELEASE messages from the RNC to UEs due to normal event	B67109421.C67174641	Sum	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh
VS_RRC_AttConRel_Preempt_RNC	ACCUMULATION	INTEGER	the number of RRC CONNECTION RELEASE messages from the RNC to UEs due to pre-emptive release	B67109421.C67190073	Sum	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh
VS_RRC_AttConRel_ReEstRj_RNC	ACCUMULATION	INTEGER	the number of RRC CONNECTION RELEASE messages from the RNC to UEs due to re-establishment reject	B67109421.C67190075	Sum	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh
VS_RRC_AttConRel_RNC	ACCUMULATION	INTEGER	Number of RRC CONNECTION RELEASE messages from the RNC to UEs. This item includes VS.RRC.AttConRel.NormRel.RNC VS.RRC.AttConRel.Cng.RNC VS.RRC.AttConRel.Preempt.RNC VS.RRC.AttConRel.UsrIact.RNC VS.RRC.AttConRel.ReEstRj.RNC VS.RRC.AttConRel.SigR	B67109421.C67174454	Sum	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh

			Est.RNC VS.RRC.AttConRel.Uns pec.RNC			
VS_RRC_AttConRel_SigRest_RNC	ACCUMULATION	INTEGER	the number of RRC CONNECTION RELEASE messages from the RNC to UEs due to directed signalling connection re-establishment	B67109421.C 67190076	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_AttConRel_Unspec_RNC	ACCUMULATION	INTEGER	the number of RRC CONNECTION RELEASE messages from the RNC to UEs due to unspecified	B67109421.C 67174647	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RRC_AttConRel_UserInact_RNC	ACCUMULATION	INTEGER	the number of RRC CONNECTION RELEASE messages from the RNC to UEs due to user inactivity	B67109421.C 67190074	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

7.42.40RNC.Huawei.UMTS.RRC_States

RRC States data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_CellIDCHUEs_RNC	INTENSITY	FLOAT	Average number of UEs in the CELL_DCH state.	B67109450.C67199 465	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						, Sum, Minimu m, Maximu m
VS_CellFACHU Es_RNC	INTENSI TY	FLOA T	Average number of UEs in the CELL_FACH state.	B67109450.C67199 466	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_CellPCHUES _RNC	INTENSI TY	FLOA T	Average number of UEs in the CELL_PCH state.	B67109450.C67199 467	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_UraPCHUES _RNC	INTENSI TY	FLOA T	Average number of UEs in the URA_PCH state.	B67109450.C67199 468	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m

7.42.41RNC.Huawei.UMTS.Signalling_Messages

Signalling Message data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_IU_Att_Sec Mode	ACCUMULATION	INTEGER	Number SECURITY MODE COMMAND messages received by the SRNC from the CN.	B67109445.C67190317	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_IU_RejSec Md_NAS	ACCUMULATION	INTEGER	The numbers of SECURITY MODE REJECT messages sent from the RNC to CN according to different causes, NAS Cause	B67109445.C67190321	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_IU_RejSec Md_Opt	ACCUMULATION	INTEGER	The numbers of SECURITY MODE REJECT messages sent from the RNC to CN according to different causes, Network Optimization	B67109445.C67190322	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_IU_RejSec Md_Rnl	ACCUMULATION	INTEGER	The numbers of SECURITY MODE REJECT	B67109445.C67190319	Sum	hub99pslbh, hubcslbh,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			messages sent from the RNC to CN according to different causes, Radio Network Layer Cause			hubhsdpabh, hubpslbh
VS_IU_RejSecMd_Tnl	ACCUMULATION	INTEGER	The numbers of SECURITY MODE REJECT messages sent from the RNC to CN according to different causes, Transport Layer Cause	B67109445.C67190320	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh
VS_IU_RejSecMd_Unsp	ACCUMULATION	INTEGER	The numbers of SECURITY MODE REJECT messages sent from the RNC to CN according to different causes, Unspecified Failure	B67109445.C67190323	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh
VS_IU_SuccSecMode	ACCUMULATION	INTEGER	Number of SECURITY MODE COMPLETE messages sent from the RNC to the CN	B67109445.C67190318	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh
VS_Uu_Att_SecMode	ACCUMULATION	INTEGER	Number of SECURITY MODE COMMAND messages sent from an RNC to a UE.	B67109445.C67190324	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh

VS_Uu_Succ_SecMode	ACCUMULATION	INTEGER	Number SECURITY MODE COMPLETE messages received by the RNC from a UE.	B67109445.C67190325	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
--------------------	--------------	---------	---	---------------------	-----	---

7.42.42RNC.Huawei.UMTS.Soft_Handover_RNC

Soft Handover data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_SHO_AS_1	INTENSITY	FLOAT	Average number of UEs with one RL in the RNC in the soft handover procedure.	B67109446.C67199432	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_SHO_AS_2 Soft	INTENSITY	FLOAT	Average number of UEs with two RLs and both uncombined.	B67109446.C67199434	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_SHO_AS_2 Softer	INTENSITY	FLOAT	Average number of UEs with two RLs and both combined in the same NodeB.	B67109446.C6719 9433	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_SHO_AS_3 Soft2Softer	INTENSITY	FLOAT	Average number of UEs with three RLs and two of the three combined.	B67109446.C6719 9437	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_SHO_AS_3 Soft	INTENSITY	FLOAT	Average number of UEs with three RLs and all of the three uncombined.	B67109446.C6719 9436	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_SHO_AS_3 Softer	INTENSITY	FLOAT	Average number of UEs with three RLs and all of the three combined in the same NodeB.	B67109446.C6719 9435	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum,

						Minimum, Maximum
VS_SHO_AS_4	INTENSITY	FLOAT	Average number of UEs with four RLs in the RNC.	B67109446.C67203933	Average	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh , Sum, Minimum, Maximum
VS_SHO_AS_5	INTENSITY	FLOAT	Average number of UEs with five RLs in the RNC.	B67109446.C67203934	Average	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh , Sum, Minimum, Maximum
VS_SHO_AS_6	INTENSITY	FLOAT	Average number of UEs with six RLs in the RNC.	B67109446.C67203935	Average	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh , Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_SHO_Att_RNC	ACCUMULATION	INTEGER	This item provides the number of softer handovers decided by the RNC to initiated.	B67109446.C67175266	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_SHO_Drop_RNC	ACCUMULATION	INTEGER	This item provides the number of call drops due to soft handover in the RNC.	B67109446.C67175283	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_SHO_Succ	ACCUMULATION	INTEGER	This item provides the number of successful softer handovers.	B67109446.C67175267	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_SoHO_ASU_AttRNC	ACCUMULATION	INTEGER	Number of softer handovers initiated by the RNC.	B67109446.C67175268	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_SoHo_Succ	ACCUMULATION	INTEGER	This item provides the number of Successful softer handovers	B67109446.C67175269	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh

7.42.43RNC.Huawei.UMTS.SRNS_Relocation_Drift_RNC

Serving RNS Relocation Drift RNC data

KPI	Type	Data Type	Description	Derivation	Default Aggrega	Other Aggrega
-----	------	-----------	-------------	------------	-----------------	---------------

					tor	tors
RELOC_AttResAllocUEInvolCS	ACCUMULATION	INTEGER	Numbers of resource allocations for TRNC relocations in CS domain according to different Cause in RELOCATION REQUEST, UE Involved.	B67109433.C67191107	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RELOC_AttResAllocUEInvolPS	ACCUMULATION	INTEGER	Numbers of resource allocations for TRNC relocations in PS domain according to different Cause in RELOCATION REQUEST, UE Involved.	B67109433.C67191091	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RELOC_AttResAllocUENotInvolCS	ACCUMULATION	INTEGER	The numbers of resource allocations for TRNC relocations in CS domain according to different Cause in RELOCATION REQUEST, UE Not Involved.	B67109433.C67191108	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RELOC_AttResAllocUENotInvolPS	ACCUMULATION	INTEGER	The numbers of resource	B67109433.C67191092	Sum	hub99pslbh,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			allocations for TRNC relocations in PS domain according to different Cause in RELOCATION REQUEST, UE Not Involved.			hubcslbh , hubhsdpa bh, hubpslbh
RELOC_FailResAllocUEInvolCS_CiphUnSupp	ACCUMULATION	INTEGER	The numbers of RELOCATION FAILURE messages sent by the TRNC for Requested Ciphering and/or Integrity Protection Algorithms not Supported according to different types in CS Domain, UE not involved	B67109433.C 67191115	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_FailResAllocUEInvolCS_ResUnavail	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200 R010:The numbers of RELOCATION FAILURE messages sent by the TRNC for Requested Ciphering and/or Integrity Protection Algorithms not Supported : UE involved	B67109433.C 67175884	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_FailResAllocUEInvolPS_CiphUnSupp	ACCUMULATION	INTEGER	The numbers of RELOCATION FAILURE	B67109433.C 67191099	Sum	hub99psl bh, hubcslbh

			messages sent by the TRNC for Requested Ciphering and/or Integrity Protection Algorithms not Supported according to different types in PS Domain, UE not involved			, hubhsdpa bh, hubpslbh
RELOC_FailResAllocUEInvolPS_ResUnavailable	ACCUMULATION	INTEGER	The numbers of RELOCATION FAILURE messages sent by the TRNC for No Resource Available according to different types in PS Domain, UE involved	B67109433.C67191101	Sum	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh
RELOC_FailResAllocUENotInvolCS_CiphUnSupp	ACCUMULATION	INTEGER	The numbers of RELOCATION FAILURE messages sent by the TRNC for Requested Ciphering and/or Integrity Protection Algorithms not Supported according to different types in CS Domain, UE not	B67109433.C67191116	Sum	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			involved			
RELOC_FailResAllocUENotInvolCS_ResUnavail	ACCUMULATION	INTEGER	The numbers of RELOCATION FAILURE messages sent by the TRNC for Requested Ciphering and/or Integrity Protection Algorithms not Supported according to different types in CS Domain, UE not involved	B67109433.C67191117	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh
RELOC_FailResAllocUENotInvolPS_CiphUnSupp	ACCUMULATION	INTEGER	The numbers of RELOCATION FAILURE messages sent by the TRNC for Requested Ciphering and/or Integrity Protection Algorithms not Supported according to different types in PS Domain, UE not involved	B67109433.C67191100	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh
RELOC_FailResAllocUENotInvolPS_ResUnavail	ACCUMULATION	INTEGER	The numbers of RELOCATION FAILURE messages sent by the TRNC for Requested Ciphering and/or Integrity Protection Algorithms not Supported	B67109433.C67191102	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh

			according to different types in PS Domain, UE not involved			
RELOC_SuccResAll ocUEInvolCS	ACCUMULATION	INTEGER	The numbers of successful resource allocations for TRNC relocations for CS Domain according to, UE Involved.	B67109433.C 67191113	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_SuccResAll ocUEInvolPS	ACCUMULATION	INTEGER	The numbers of successful resource allocations for TRNC relocations for PS Domain according to, UE Involved.	B67109433.C 67191097	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_SuccResAll ocUENotInvolCS	ACCUMULATION	INTEGER	The numbers of successful resource allocations for TRNC relocations for CS Domain according to different Cause, UE Not Involved.	B67109433.C 67191114	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_SuccResAll ocUENotInvolPS	ACCUMULATION	INTEGER	The numbers of successful resource allocations for TRNC	B67109433.C 67191098	Sum	hub99psl bh, hubcslbh , hubhsdpa

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			relocations for PS Domain according to different Cause, UE Not Involved.			bh, hubpslbh
VS_DRELOC_Exec Fail_Cong	ACCUMULATION	INTEGER	Number of TRNC relocation commit failures due to resource unavailable.	B67109433.C 67175893	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh
VS_DRELOC_Exec Fail_Unsp	ACCUMULATION	INTEGER	Number of TRNC relocation commit failures due to unknown causes.	B67109433.C 67175894	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh
VS_DRELOC_PrepF ail_Iurel	ACCUMULATION	INTEGER	This item provides the number of relocation resource allocation failures due to reception of an IU RELEASE COMMAND message before the TRNC sends a RELOCATION REQUEST ACKNOWLEDGE message to the CN upon reception of a RELOCATION REQUEST message from the CN.	B67109433.C 67190207	Sum	hub99pslbh, hubcslbh , hubhsdpabh, hubpslbh

VS_DRELOC_PrepFail_NAS	ACCUMULATION	INTEGER	The numbers of RELOCATION FAILURE messages sent by the TRNC for different causes: NAS Cause	B67109433.C 67175881	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_DRELOC_PrepFail_OM	ACCUMULATION	INTEGER	The numbers of RELOCATION FAILURE messages sent by the TRNC for different causes: OM Intervention	B67109433.C 67175883	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_DRELOC_PrepFail_RNL	ACCUMULATION	INTEGER	The numbers of RELOCATION FAILURE messages sent by the TRNC for different causes: Radio Network Layer Cause	B67109433.C 67175879	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_DRELOC_PrepFail_TNL	ACCUMULATION	INTEGER	The numbers of RELOCATION FAILURE messages sent by the TRNC for different causes: Transport Layer Cause	B67109433.C 67175880	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_SRELOC_AttExec_UEInvCS_RNC	ACCUMULATION	INTEGER	Number of reconfigurations initiated by the RNC towards the UE (CS)	B67109432.C 67192683	Sum	hub99psl bh, hubcslbh , hubhsdpa

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						bh, hubpslbh
VS_SRELOC_AttExec_UEInvPS_RNC	ACCUMULATION	INTEGER	Number of reconfigurations initiated by the RNC towards the UE (PS)	B67109432.C 67192684	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_TRELOC_AttExec_UEInv	ACCUMULATION	INTEGER	This item provides the number of reconfiguration completions during TRNC relocations (UE involved).	B67109433.C 67190208	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_TRELOC_AttExec_UENonInv	ACCUMULATION	INTEGER	This item provides the number of RELOCATION COMMIT messages from SRNC to TRNC during relocations (UE not involved).	B67109433.C 67190209	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_TRELOC_AttPrep_UEInv	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. The numbers of resource allocations for TRNC relocations: UE involved	B67109433.C 67190210	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_TRELOC_AttPrep_UENonInv	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. The numbers of resource allocations for TRNC	B67109433.C 67190211	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh

			relocations: UE not involved			
VS_TRELOC_SuccExec_UEInv	ACCUMULATION	INTEGER	The numbers of successful TRNC relocations: UE involved	B67109433.C67190213	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_TRELOC_SuccExec_UENotInv	ACCUMULATION	INTEGER	The numbers of successful TRNC relocations: UE not involved	B67109433.C67190212	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_TRELOC_SuccPrep_UEInv	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. The numbers of successful resource allocations for TRNC relocations: UE involved	B67109433.C67190214	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_TRELOC_SuccPrep_UENonInv	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. The numbers of successful resource allocations for TRNC relocations: UE not involved	B67109433.C67190215	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

7.42.44RNC.Huawei.UMTS.SRNS_Relocation_Serving_RNC_Failures

Serving RNS Relocation Serving RNC data - Failures.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
RELOC_Fail_Prep_CiphUnSupp	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:Numbers of SRNC Relocation Preparation Failures due to Different Causes. Cause Requested Ciphering and/or Integrity Protection Algorithms not Supported.	B67109432.C67192188	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RELOC_Fail_Prep_OM	ACCUMULATION	INTEGER	Obsolete in Vn00R010 release. Numbers of SRNC Relocation Preparation Failures due to Different Causes. Cause Requested Ciphering and/or Integrity Protection Algorithms not Supported.	B67109432.C67192192	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RELOC_Fail_Prep_RelocTgBarred	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:Numbers of SRNC Relocation Preparation Failures due to	B67109432.C67192191	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh

			Different Causes. Cause Relocation target not allowed.			
RELOC_Fail_Prep_ResUnavail	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:Numbers of SRNC Relocation Preparation Failures due to Different Causes. Cause No resources available.	B67109432.C67192193	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_Fail_Prep_TAExp	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:Numbers of SRNC Relocation Preparation Failures due to Different Causes. Cause TRELOCalloc Expiry.	B67109432.C67192189	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_Fail_Prep_TSysRelocUns	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:Numbers of SRNC Relocation Preparation Failures due to Different Causes. Cause Relocation not supported in target RNC or target system.	B67109432.C67192190	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

RELOC_Fail_Prep_Unsp	ACCUMULATION	INTEGER	Obsolete in Vn00R010 release. Numbers of SRNC Relocation Preparation Failures due to Different Causes. Cause Unspecified Failure.	B67109432.C67192194	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RELOC_FailPrepUEInvolCS_CiphUnSupp	ACCUMULATION	INTEGER	numbers of RELOCATION PREPARATION FAILURE messages received by the SRNC from CS Domain for different causes, Requested Ciphering and/or Integrity Protection Algorithms not Supported	B67109432.C67190192	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RELOC_FailPrepUEInvolCS_OM	ACCUMULATION	INTEGER	numbers of RELOCATION PREPARATION FAILURE messages received by the SRNC from CS Domain for different causes, OM Intervention	B67109432.C67175736	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RELOC_FailPrepUEInvolCS_RelocTgBarred	ACCUMULATION	INTEGER	numbers of RELOCATION PREPARATION FAILURE messages	B67109432.C67190193	Sum	hub99pslbh, hubcslbh, hubhsdpabh

			received by the SRNC from CS Domain for different causes, Relocation Target not allowed			bh, hubpslbh
RELOC_FailPrepUEInvolCS_ResUnavail	ACCUMULATION	INTEGER	numbers of RELOCATION PREPARATION FAILURE messages received by the SRNC from CS Domain for different causes, No resources available	B67109432.C67190194	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RELOC_FailPrepUEInvolCS_TrelocprepExp	ACCUMULATION	INTEGER	numbers of RELOCATION PREPARATION FAILURE messages received by the SRNC from CS Domain for different causes, Trelocprep Expiry	B67109432.C67175739	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RELOC_FailPrepUEInvolCS_TSysRelocUns	ACCUMULATION	INTEGER	numbers of RELOCATION PREPARATION FAILURE messages received by the SRNC from CS Domain for	B67109432.C67175740	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			different causes, Relocation not supported in Target RNC or Target system			
RELOC_FailPrepUEInvolCS_Unsp	ACCUMULATION	INTEGER	numbers of RELOCATION PREPARATION FAILURE messages received by the SRNC from CS Domain for different causes, Unspecified Failure	B67109432.C67190195	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RELOC_FailPrepUEInvolPS_CiphUnSupp	ACCUMULATION	INTEGER	The numbers of RELOCATION PREPARATION FAILURE messages received by the SRNC from PS Domain, Requested Ciphering and/or Integrity Protection Algorithms not Supported	B67109432.C67191072	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RELOC_FailPrepUEInvolPS_OM	ACCUMULATION	INTEGER	The numbers of RELOCATION PREPARATION FAILURE messages received by the SRNC from PS Domain, OM Intervention	B67109432.C67191080	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RELOC_FailPrepUEInvolPS_RelocTg	ACCUMULATION	INTEGER	The numbers of RELOCATION	B67109432.C67191078	Sum	hub99pslbh,

Barred			PREPARATIO N FAILURE messages received by the SRNC from PS Domain, Relocation Target not allowed			hubcslbh , hubhsdpa bh, hubpslbh
RELOC_FailPrepU EInvolPS_ResUna vail	ACCUMULA TION	INTEG ER	The numbers of RELOCATION PREPARATIO N FAILURE messages received by the SRNC from PS Domain, No resources available	B67109432.C67 191082	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_FailPrepU EInvolPS_Trelocpr epExp	ACCUMULA TION	INTEG ER	The numbers of RELOCATION PREPARATIO N FAILURE messages received by the SRNC from PS Domain, Trelocprep Expiry	B67109432.C67 191074	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_FailPrepU EInvolPS_TSysRel ocUns	ACCUMULA TION	INTEG ER	The numbers of RELOCATION PREPARATIO N FAILURE messages received by the SRNC from PS Domain, Relocation not supported in Target RNC or	B67109432.C67 191076	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Target system			
RELOC_FailPrepUEInvolPS_Unsp	ACCUMULATION	INTEGER	The numbers of RELOCATION PREPARATION FAILURE messages received by the SRNC from PS Domain, Unspecified Failure	B67109432.C67191084	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_FailPrepUENotInvolCS_CiphUnSupp	ACCUMULATION	INTEGER	The numbers of RELOCATION PREPARATION FAILURE messages received by the SRNC from CS Domain, Requested Ciphering and/or Integrity Protection Algorithms not Supported	B67109432.C67191053	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_FailPrepUENotInvolCS_OM	ACCUMULATION	INTEGER	The numbers of RELOCATION PREPARATION FAILURE messages received by the SRNC from CS Domain, OM Intervention	B67109432.C67191057	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_FailPrepUENotInvolCS_RelocTgBarred	ACCUMULATION	INTEGER	The numbers of RELOCATION PREPARATION FAILURE messages received by the SRNC from CS Domain, Relocation	B67109432.C67191056	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

			Target not allowed			
RELOC_FailPrepU ENotInvolCS_Res Unavail	ACCUMULA TION	INTEG ER	The numbers of RELOCATION PREPARATIO N FAILURE messages received by the SRNC from CS Domain, No resources available	B67109432.C67 191058	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_FailPrepU ENotInvolCS_Trel ocprepExp	ACCUMULA TION	INTEG ER	The numbers of RELOCATION PREPARATIO N FAILURE messages received by the SRNC from CS Domain, Trellocprep Expiry	B67109432.C67 191054	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_FailPrepU ENotInvolCS_TSy sRelocUns	ACCUMULA TION	INTEG ER	The numbers of RELOCATION PREPARATIO N FAILURE messages received by the SRNC from CS Domain, Relocation not supported in Target RNC or Target system	B67109432.C67 191055	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_FailPrepU ENotInvolCS_Uns p	ACCUMULA TION	INTEG ER	The numbers of RELOCATION PREPARATIO N FAILURE messages	B67109432.C67 191059	Sum	hub99psl bh, hubcslbh , hubhsdpa

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			received by the SRNC from CS Domain, Unspecified Failure			bh, hubpslbh
RELOC_FailPrepUENotInvolPS_CiphUnSupp	ACCUMULATION	INTEGER	The numbers of RELOCATION PREPARATION FAILURE messages received by the SRNC from PS Domain, Requested Ciphering and/or Integrity Protection Algorithms not Supported	B67109432.C67191073	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RELOC_FailPrepUENotInvolPS_OM	ACCUMULATION	INTEGER	The numbers of RELOCATION PREPARATION FAILURE messages received by the SRNC from PS Domain, OM Intervention	B67109432.C67191081	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RELOC_FailPrepUENotInvolPS_RelocTgBarred	ACCUMULATION	INTEGER	The numbers of RELOCATION PREPARATION FAILURE messages received by the SRNC from PS Domain, Relocation Target not allowed	B67109432.C67191079	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
RELOC_FailPrepUENotInvolPS_ResUnavail	ACCUMULATION	INTEGER	The numbers of RELOCATION PREPARATION FAILURE	B67109432.C67191083	Sum	hub99pslbh, hubcslbh,

			messages received by the SRNC from PS Domain, No resources available			hubhsdpa bh, hubpslbh
RELOC_FailPrepU ENotInvolPS_Trel ocprepExp	ACCUMULA TION	INTEG ER	The numbers of RELOCATION PREPARATIO N FAILURE messages received by the SRNC from PS Domain, Trelocprep Expiry	B67109432.C67 191075	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_FailPrepU ENotInvolPS_TSys RelocUns	ACCUMULA TION	INTEG ER	The numbers of RELOCATION PREPARATIO N FAILURE messages received by the SRNC from PS Domain, Relocation not supported in Target RNC or Target system	B67109432.C67 191077	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_FailPrepU ENotInvolPS_Uns p	ACCUMULA TION	INTEG ER	The numbers of RELOCATION PREPARATIO N FAILURE messages received by the SRNC from PS Domain, Unspecified Failure	B67109432.C67 191085	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_SRELOC_Exec	ACCUMULA	INTEG	The numbers of	B67109432.C67	Sum	hub99psl

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

cFail_CfgIncmp	TION	ER	Unsuccessful SRNC relocations with hard handover during reconfigurations for different causes, Configuration Incomplete	175803		bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_SRELOC_ExecFail_CfgInvalid	ACCUMULATION	INTEGER	The numbers of Unsuccessful SRNC relocations with hard handover during reconfigurations for different causes, Invalid Configuration	B67109432.C67175802	Sum	hub99pslbh, hubcslbh , hubhsdpa bh, hubpslbh
VS_SRELOC_ExecFail_CfgUnsup	ACCUMULATION	INTEGER	The numbers of Unsuccessful SRNC relocations with hard handover during reconfigurations for different causes, Configuration Unsupported	B67109432.C67175799	Sum	hub99pslbh, hubcslbh , hubhsdpa bh, hubpslbh
VS_SRELOC_ExecFail_ExpCS_RNC	ACCUMULATION	INTEGER	Numbers of SRNC relocation commit failures due to timeout to wait for an IU RELEASE COMMAND message by different CN domain.	B67109432.C67192141	Sum	hub99pslbh, hubcslbh , hubhsdpa bh, hubpslbh
VS_SRELOC_Exec	ACCUMULATION	INTEGER	Numbers of	B67109432.C67	Sum	hub99psl

cFail_ExpPS_RNC	TION	ER	SRNC relocation commit failures due to timeout to wait for an IU RELEASE COMMAND message by different CN domain.	192140		bh, hubcslbh, hubhsdpa bh, hubpslbh
VS_SRELOC_ExecFail_IuRel	ACCUMULATION	INTEGER	Number of SRNC relocation commit failures due to reception of IU RELEASE COMMAND messages from the CN with cause NOT Successful Relocation or Normal Release during SRNC relocations.	B67109432.C67175805	Sum	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh
VS_SRELOC_ExecFail_PhyFail	ACCUMULATION	INTEGER	The numbers of Unsuccessful SRNC relocations with hard handover during reconfigurations for different causes, Physical Channel Failure	B67109432.C67175800	Sum	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh

7.42.45RNC.Huawei.UMTS.SRNS_Relocation_Serving_RNC

Serving RNS Relocation Serving RNC data

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
-----	------	-----------	-------------	------------	--------------------	-------------------

RELOC_AttPrepUEInvolCS	ACCUMULATION	INTEGER	The numbers of RELOCATION REQUIRED messages in which the relocation is UE Involved sent by the SRNC to CS Domain according to different causes, UE Involved.	B67109432.C 67190186	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_AttPrepUEInvolPS	ACCUMULATION	INTEGER	The numbers of RELOCATION REQUIRED messages in which the relocation is UE Involved sent by the SRNC to PS Domain, UE Involved.	B67109432.C 67191064	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_AttPrepUENotInvolCS	ACCUMULATION	INTEGER	The numbers of RELOCATION REQUIRED messages in which the relocation is UE not Involved sent by the SRNC to CS Domain, UE not Involved.	B67109432.C 67191049	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_AttPrepUENotInvolPS	ACCUMULATION	INTEGER	The numbers of RELOCATION REQUIRED messages in which the relocation is UE not Involved sent by the SRNC to PS Domain, UE not Involved.	B67109432.C 67191065	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_SuccCS	ACCUMULATION	INTEGER	Obsolete in	B67109432.C	Sum	hub99psl

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

	TION	ER	release Vn00R010. This item provides the number of successful SRNC relocation commits.	67190196		bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_SuccPrep UEInvolCS	ACCUMULA TION	INTEG ER	The numbers of successful preparations for SRNC relocations(The relocation type is UE Involved) at CS Domain due to UE Involved.	B67109432.C 67190189	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_SuccPrep UEInvolPS	ACCUMULA TION	INTEG ER	The numbers of successful preparations for SRNC relocations(The relocation type is UE Involved) at PS Domain, UE Involved.	B67109432.C 67191070	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_SuccPrep UENotInvolCS	ACCUMULA TION	INTEG ER	The numbers of successful preparations for SRNC relocations(The relocation type is UE Involved) at CS Domain due to UE not Involved.	B67109432.C 67191052	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
RELOC_SuccPrep UENotInvolPS	ACCUMULA TION	INTEG ER	The numbers of successful preparations for SRNC relocations(The relocation type is UE Involved) at PS Domain due to UE not Involved.	B67109432.C 67191071	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

RELOC_SuccPS	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. This item provides the number of successful SRNC relocation commits.	B67109432.C 67191086	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
VS_RELOC_AttPrepUEInvolCS_RF	ACCUMULATION	INTEGER	The numbers of RELOCATION REQUIRED messages in which the relocation is UE Involved sent by the SRNC to CS Domain according to different causes, Relocation desirable for radio reasons	B67109432.C 67190185	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
VS_RELOC_AttPrepUEInvolCS_TimeCrit	ACCUMULATION	INTEGER	The numbers of RELOCATION REQUIRED messages in which the relocation is UE Involved sent by the SRNC to CS Domain according to different causes, Time Critical Relocation	B67109432.C 67190184	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
VS_RELOC_AttPrepUEInvolPS_RF	ACCUMULATION	INTEGER	The numbers of RELOCATION REQUIRED messages in which the relocation is UE Involved sent by the SRNC to	B67109432.C 67191062	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			PS Domain, Relocation desirable for radio reasons			
VS_RELOC_AttPrepUEInvolPS_TimeCrit	ACCUMULATION	INTEGER	The numbers of RELOCATION REQUIRED messages in which the relocation is UE Involved sent by the SRNC to PS Domain, Time Critical Relocation	B67109432.C 67191060	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RELOC_AttPrepUENotInvolCS_RF	ACCUMULATION	INTEGER	The numbers of RELOCATION REQUIRED messages in which the relocation is UE not Involved sent by the SRNC to CS Domain, Relocation desirable for radio reasons	B67109432.C 67191048	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RELOC_AttPrepUENotInvolCS_TimeCrit	ACCUMULATION	INTEGER	The numbers of RELOCATION REQUIRED messages in which the relocation is UE not Involved sent by the SRNC to CS Domain, Time Critical Relocation	B67109432.C 67191047	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RELOC_AttPrepUENotInvolPS_RF	ACCUMULATION	INTEGER	The numbers of RELOCATION REQUIRED messages in which the relocation is UE not Involved sent by the SRNC to PS Domain,	B67109432.C 67191063	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh

			Relocation desirable for radio reasons			
VS_RELOC_AttPrepUENotInvolvedPS_TimeCrit	ACCUMULATION	INTEGER	The numbers of RELOCATION REQUIRED messages in which the relocation is UE not Involved sent by the SRNC to PS Domain, Time Critical Relocation	B67109432.C 67191061	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
VS_RELOC_ReqPrep_ResOpto	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R0 11: This item provides the number of successful SRNC relocation commits.	B67109432.C 67190186_R6	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
VS_RELOC_ReqPrep_TimeCrit	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R0 11: This item provides the number of successful preparations for SRNC relocations	B67109432.C 67190184_R6	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh
VS_RELOC_SuccPrep_RF	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R0 11: The numbers of RELOCATION REQUIRED messages in which the relocation is UE Involved sent by the SRNC to CS Domain	B67109432.C 67190188_R6	Sum	hub99psl bh, hubcs1bh , hubhsdpa bh, hubps1bh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			according to different causes, Resource optimization relocation			
VS_RELOC_Succ PrepUEInvolCS_R F	ACCUMULA TION	INTEG ER	The numbers of successful preparations for SRNC relocations(The relocation type is UE Involved) at CS Domain due to Relocation desirable for radio reasons	B67109432.C 67190188	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RELOC_Succ PrepUEInvolCS_Ti meCrit	ACCUMULA TION	INTEG ER	The numbers of successful preparations for SRNC relocations(The relocation type is UE Involved) at CS Domain due to Time Critical Relocation	B67109432.C 67190187	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RELOC_Succ PrepUEInvolPS_R F	ACCUMULA TION	INTEG ER	The numbers of successful preparations for SRNC relocations(The relocation type is UE Involved) at PS Domain, Relocation desirable for radio reasons	B67109432.C 67191068	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh
VS_RELOC_Succ PrepUEInvolPS_Ti meCrit	ACCUMULA TION	INTEG ER	The numbers of successful preparations for SRNC relocations(The relocation type is	B67109432.C 67191066	Sum	hub99psl bh, hubcslbh , hubhsdpa bh,

			UE Involved) at PS Domain, Time Critical Relocation			hubpslhb
VS_RELOC_Succ PrepUENotInvolC S_RF	ACCUMULA TION	INTEG ER	The numbers of successful preparations for SRNC relocations(The relocation type is UE Involved) at CS Domain due to Relocation desirable for radio reasons	B67109432.C 67191051	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslhb
VS_RELOC_Succ PrepUENotInvolC S_TimeCrit	ACCUMULA TION	INTEG ER	The numbers of successful preparations for SRNC relocations(The relocation type is UE Involved) at CS Domain due to Time Critical Relocation	B67109432.C 67191050	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslhb
VS_RELOC_Succ PrepUENotInvolPS _RF	ACCUMULA TION	INTEG ER	The numbers of successful preparations for SRNC relocations(The relocation type is UE Involved) at PS Domain due to Relocation desirable for radio reasons	B67109432.C 67191069	Sum	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslhb
VS_RELOC_Succ PrepUENotInvolPS _TimeCrit	ACCUMULA TION	INTEG ER	The numbers of successful preparations for	B67109432.C 67191067	Sum	hub99psl bh, hubcslbh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			SRNC relocations(The relocation type is UE Involved) at PS Domain due to Time Critical Relocation			, hubhsdpa bh, hubpsl bh
VS_SRELOC_Att Ex_UENonInvCS_RNC	ACCUMULATION	INTEGER	Numbers of RELOCATION COMMIT messages from SRNC to TRNC during SRNC relocations (UE not Involved) by different CN domain.	B67109432.C 67192143	Sum	hub99psl bh, hubcsl bh, hubhsdpa bh, hubpsl bh
VS_SRELOC_Att Ex_UENonInvPS_RNC	ACCUMULATION	INTEGER	Numbers of RELOCATION COMMIT messages from SRNC to TRNC during SRNC relocations (UE not Involved) by different CN domain.	B67109432.C 67192142	Sum	hub99psl bh, hubcsl bh, hubhsdpa bh, hubpsl bh
VS_SRELOC_Att Exec_UEInv	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. The number of reconfiguration initiations from the RNC to UEs in preparations for SRNC relocations (UE Involved). A reconfiguration procedure can be triggered by either of the following messages: RADIO BEARER SETUP, RADIO BEARER	B67109432.C 67190201	Sum	hub99psl bh, hubcsl bh, hubhsdpa bh, hubpsl bh

			RECONFIGURATION, RADIO BEARER RELEASE, TRANSPORT CHANNEL RECONFIGURATION			
VS_SRELOC_AttExec_UENonInv	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. This item provides the number of RELOCATION COMMIT messages from SRNC to TRNC during SRNC relocations (UE not Involved).	B67109432.C67190203	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh
VS_SRELOC_SuccExec_UEInvCS_RNC	ACCUMULATION	INTEGER	Number of successful UE-involved SRNS relocations (CS)	B67109432.C67192685	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh
VS_SRELOC_SuccExec_UEInv	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. The numbers of successful SRNC relocations: UE involved	B67109432.C67190204	Sum	hub99psl bh, hubcslbh , hubhsdpabh, hubpslbh
VS_SRELOC_SuccExec_UEInvPS_RNC	ACCUMULATION	INTEGER	Number of successful UE-involved SRNS relocations (PS)	B67109432.C67192686	Sum	hub99psl bh, hubcslbh , hubhsdpabh

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						bh, hubpslbh
VS_SRELOC_SuccessExec_UENonInvCS_RNC	ACCUMULATION	INTEGER	Number of successful UE-not-involved SRNS relocations (CS)	B67109432.C67192687	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_SRELOC_SuccessExec_UENonInv	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. The numbers of successful SRNC relocations: UE not involved	B67109432.C67190202	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_SRELOC_SuccessExec_UENonInvPS_RNC	ACCUMULATION	INTEGER	Number of successful UE-not-involved SRNS relocations (PS)	B67109432.C67192688	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh
VS_SRELOC_TrelPrpEx	ACCUMULATION	INTEGER	Obsolete in release Vn00R010. The above items provide the numbers of RELOCATION PREPARATION FAILURE messages received by the SRNC and the Cause is Trelprep Expiry.	B67109432.C67190397	Sum	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh

7.42.46RNC.Huawei.UMTS.Traffic_category_with_Operator

Traffic category per Operator

The performance data measurements for this KPI group are recorded against the combination of RNC and CNOOPERATOR (cnoperator_id) .

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_AMR_Erlang_Equiv_PLMN_RNC	INTENSITY	FLOAT	This measurement item provides the equivalent Erlang values of AMR services in the CS domain of the RNC for each Operator.	B67109519.C67204835	Average	Sum, Minimum, Maximum
VS_CSLoad_Erlang_Equiv_PLMN_RNC	INTENSITY	FLOAT	Total erlang values of all services in the CS domain of the RNC for each operator. This item only will be counted when the ran sharing function is switched on.	B67109519.C67203962	Average	Sum, Minimum, Maximum
VS_CSLoad_MaxErlang_Equiv_PLMN_RNC	INTENSITY	INTEGER	Maximum equivalent erlang values of all services in the CS domain of the RNC for each operator. This item only will be counted when the ran sharing function is switched on.	B67109519.C67192511	Average	Sum, Minimum, Maximum
VS_HSDPAPSLoad_DLThruput_PLMN_RNC	INTENSITY	FLOAT	Downlink traffic of HSDPA PS domain of RNC for each operator	B67109519.C67204147	Average	Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						m
VS_HSDPAPSLoad_MaxDLThruput_PLMN_RNC	INTENSITY	INTEGER	Maximum downlink traffic of HSDPA PS domain of RNC for each operator	B67109519.C67193016	Average	Sum, Minimum, Maximum
VS_HSUPAPSLoad_MaxULThruput_PLMN_RNC	INTENSITY	INTEGER	Maximum uplink traffic of HSUPA PS domain of RNC for each operator	B67109519.C67193019	Average	Sum, Minimum, Maximum
VS_HSUPAPSLoad_ULThruput_PLMN_RNC	INTENSITY	FLOAT	Uplink traffic of HSUPA PS domain of RNC for each operator	B67109519.C67204148	Average	Sum, Minimum, Maximum
VS_MBMSPSLoad_DLThruput_PLMN_RNC	INTENSITY	FLOAT	Downlink traffic of MBMS PS domain of RNC for each operator	B67109519.C67204149	Average	Sum, Minimum, Maximum
VS_MBMSPSLoad_MaxDLThruput_PLMN_RNC	INTENSITY	INTEGER	Maximum downlink traffic of MBMS PS domain of RNC for each operator	B67109519.C67193022	Average	Sum, Minimum, Maximum
VS_PS_CellDCH_UEs_PLMN	INTENSITY	FLOAT	This measurement item provides the number of Cell_DCH UEs in the PS domain of the RNC for each Operator.	B67109519.C67204840	Average	Sum, Minimum, Maximum
VS_PSLoad_DLTThruput_PLMN_RNC	INTENSITY	FLOAT	Obsolete in Vn00R010; Downlink traffic of PS domain of RNC for each operator	B67109519.C67203964	Average	Sum, Minimum, Maximum
VS_PSLoad_Max	INTENSITY	INTEGER	Obsolete in	B67109519.C67192	Average	Sum,

DLThruput_PLMN_RNC	TY	ER	Vn00R010; Maximum downlink traffic of PS domain of RNC for each operator	517		Minimu m, Maximu m
VS_PSLoad_Max ULThruput_PLMN_RNC	INTENSI TY	INTEG ER	Obsolete in Vn00R010; Maximum uplink traffic of PS domain of RNC for each operator	B67109519.C67192 514	Average	Sum, Minimu m, Maximu m
VS_PSLoad_ULThruput_PLMN_RNC	INTENSI TY	FLOA T	Obsolete in Vn00R010; Uplink traffic of PS domain of RNC for each operator	B67109519.C67203 963	Average	Sum, Minimu m, Maximu m
VS_R99PSLoad_ DLThruput_PLMN_RNC	INTENSI TY	FLOA T	Downlink traffic of R99 PS domain of RNC for each operator	B67109519.C67204 146	Average	Sum, Minimu m, Maximu m
VS_R99PSLoad_ MaxDLThruput_ PLMN_RNC	INTENSI TY	INTEG ER	Maximum downlink traffic of R99 PS domain of RNC for each operator	B67109519.C67193 013	Average	Sum, Minimu m, Maximu m
VS_R99PSLoad_ MaxULThruput_ PLMN_RNC	INTENSI TY	INTEG ER	Maximum uplink traffic of R99 PS domain of RNC for each operator	B67109519.C67193 010	Average	Sum, Minimu m, Maximu m
VS_R99PSLoad_ ULThruput_PLMN_RNC	INTENSI TY	FLOA T	Uplink traffic of R99 PS domain of RNC for each operator	B67109519.C67204 145	Average	Sum, Minimu m, Maximu

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

						m
VS_VP_Erlang_Equiv_PLMN_RNC	INTENSITY	FLOAT	This measurement item provides the equivalent Erlang values of VP services in the CS domain of the RNC for each Operator.	B67109519.C67204836	Average	Sum, Minimum, Maximum

7.42.47RNC.Huawei.UMTS.Traffic_Load

Traffic Load data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
PSLoad_Thruput_RNC_busy_hour	INTENSITY	FLOAT	Obsolete in release Vn00R010. Uplink and Downlink traffic of all services in the PS domain of the RNC. Busy hour measurement.	{VS_PSLoad_DLT_hruput_RNC} + {VS_PSLoad_ULThruput_RNC}	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum
VS_CSLoad_Erlang_Equiv_AllSpu	ERLANG	FLOAT	Obsolete from UTRAN/V900R011:No description.	B67109460.C67203917	Average	hub99pslbh, hubcslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum
VS_CSLoad_Erla	ERLANG	FLOA	Equivalent	B67109460.C67202	Average	hub99psl

ng_Equiv_RNC		T	Erlang values of all services in the CS domain of the RNC.	970		bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_CSLoad_MaxErlang_Equiv_RNC	ERLANG	FLOAT	Maximum equivalent CS Conversational Erlang for RNC	B67109460.C67192086	Constant	hub99pslbh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_PSLoad_DLT hruput_AllSpu	ERLANG	FLOAT	Obsolete from UTRAN/V900R011:No description.	B67109460.C67203919	Average	hub99pslbh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_PSLoad_DLT hruput_RNC	INTENSITY	FLOAT	Obsolete in release Vn00R010. Downlink traffic of all services in	B67109460.C67202972	Average	hub99pslbh, hubcslbh , hubhsdpa

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			the PS domain of the RNC.			bh, hubpslbh, Sum, Minimum, Maximum
VS_PSLoad_MaxDLThruput_RNC	INTENSITY	FLOAT	Obsolete in release Vn00R010. Max downlink traffic of all services in the PS domain of the RNC.	B67109460.C67192088	Constant	hub99pslbh, hubeslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum
VS_PSLoad_MaxULThruput_RNC	INTENSITY	FLOAT	Obsolete in release Vn00R010. Max uplink traffic of all services in the PS domain of the RNC.	B67109460.C67192087	Constant	hub99pslbh, hubeslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum
VS_PSLoad_ULThruput_AllSpu	INTENSITY	FLOAT	Obsolete from UTRAN/V900R011:No description.	B67109460.C67203918	Average	hub99pslbh, hubeslbh, hubhsdpabh, hubpslbh, Sum, Minimum, Maximum

VS_PSLoad_ULThruput_RNC	INTENSITY	FLOAT	Obsolete in release Vn00R010. Uplink traffic of all services in the PS domain of the RNC.	B67109460.C67202971	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
-------------------------	-----------	-------	---	---------------------	---------	--

7.42.48RNC.Huawei.UMTS.Traffic_R99_HSDPA_HSUPA_MBMS

R99 HSDPA/HSUPA/MBMS traffic

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
R99PSLoad_Thruput_RNC	INTENSITY	FLOAT	Uplink and Downlink traffic of all services in the R99 PS domain of the RNC. Busy hour measurement.	{VS_R99PSLoad_ULThruput_RNC} + {VS_R99PSLoad_DLThruput_RNC}	Average	hub99psl bh, Sum, Minimum, Maximum
VS_HSDPAPSLoad_DLThruput_RNC	INTENSITY	FLOAT	DL traffic of HSDPA PS domain in RNC	B67109460.C67204137	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_HSDPAPSLoad_MaxDLThruput_RNC	INTENSITY	INTEGER	Maximum DL traffic of HSDPA PS domain in RNC	B67109460.C67192991	Average	hub99pslbh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_HSUPAPSLoad_MaxULThruput_RNC	INTENSITY	INTEGER	Maximum UL traffic of HSUPA PS domain in RNC	B67109460.C67192994	Average	hub99pslbh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_HSUPAPSLoad_ULThruput_RNC	INTENSITY	FLOAT	UL traffic of HSUPA PS domain in RNC	B67109460.C67204138	Average	hub99pslbh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_MBMSPSLoad_DLThruput_RNC	INTENSITY	FLOAT	DL traffic of MBMS PS domain in RNC	B67109460.C67204139	Average	hub99pslbh, hubcslbh , hubhsdpa bh, hubpslbh , Sum,

						Minimum, Maximum
VS_MBMSPSLoad_MaxDLThruput_RNC	INTENSITY	INTEGER	Maximum DL traffic of MBMS PS domain in RNC	B67109460.C67192997	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_R99PSLoad_DLThruput_RNC	INTENSITY	FLOAT	DL traffic of R99 PS domain in RNC	B67109460.C67204136	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_R99PSLoad_MaxDLThruput_RNC	INTENSITY	INTEGER	Maximum DL traffic of R99 PS domain in RNC	B67109460.C67192988	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_R99PSLoad_MaxULThruput_RNC	INTENSITY	INTEGER	Maximum UL traffic of R99 PS domain in RNC	B67109460.C67192985	Average	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh, Sum, Minimum, Maximum
VS_R99PSLoad_ULThruput_RNC	INTENSITY	FLOAT	UL traffic of R99 PS domain in RNC	B67109460.C67204135	Average	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh, Sum, Minimum, Maximum

7.42.49RNC.Huawei.UMTS.UL_Inter_PS

UL inter PS data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_RB_ULInterPS_128_RNC	INTENSITY	FLOAT	Mean numbers of RBs whose traffic class is STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL directions.	B67109440.C67202676	Average	hub99pslbh, hubcslbh, hubhsdpa bh, hubpslbh, Sum, Minimum, Maximum

VS_RB_ULInter PS_144_RNC	INTENSI TY	FLOA T	Mean numbers of RBs whose traffic class is STREAMING/IN TERACTIVE/BA CKGROUND in PS domain and using the variable- rate in a RNC in the UL directions.	B67109440.C67202 673	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_ULInter PS_16_RNC	INTENSI TY	FLOA T	Mean numbers of RBs whose traffic class is STREAMING/IN TERACTIVE/BA CKGROUND in PS domain and using the variable- rate in a RNC in the UL directions.	B67109440.C67202 685	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_ULInter PS_256_RNC	INTENSI TY	FLOA T	Mean numbers of RBs whose traffic class is STREAMING/IN TERACTIVE/BA CKGROUND in PS domain and using the variable- rate in a RNC in the UL directions.	B67109440.C67202 670	Average	hub99psl bh, hubcslbh , hubhsdpa bh, hubpslbh , Sum, Minimu m, Maximu m
VS_RB_ULInter PS_32_RNC	INTENSI TY	FLOA T	Mean numbers of RBs whose traffic class is STREAMING/IN	B67109440.C67202 682	Average	hub99psl bh, hubcslbh ,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			TERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL directions.			hubhspdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_RB_ULInter PS_384_RNC	INTENSITY	FLOAT	Mean numbers of RBs whose traffic class is STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL directions.	B67109440.C67202 667	Average	hub99psl bh, hubcslbh , hubhspdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_RB_ULInter PS_64_RNC	INTENSITY	FLOAT	Mean numbers of RBs whose traffic class is STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL directions.	B67109440.C67202 679	Average	hub99psl bh, hubcslbh , hubhspdpa bh, hubpslbh , Sum, Minimum, Maximum
VS_RB_ULInter PS_8_RNC	INTENSITY	FLOAT	Mean numbers of RBs whose traffic class is STREAMING/INTERACTIVE/BACKGROUND in PS domain and using the variable-rate in a RNC in the UL directions.	B67109440.C67202 688	Average	hub99psl bh, hubcslbh , hubhspdpa bh, hubpslbh , Sum, Minimum, Maximum

7.43 SAAL_Link Performance Indicators

This section shows the key performance indicators and other counters for the SAAL_Link object, divided into the following sub-sections:

- [SAAL_Link.Huawei.UMTS.SAAL_Link_Measurement_UTRAN](#)
- [SAAL_Link.Huawei.UMTS.SAALLNK_PVCLAYER](#)
- [SAAL_Link.Huawei.UMTS.SAALPVC](#)

7.43.1 SAAL_Link.Huawei.UMTS.SAAL_Link_Measurement_UTRAN

SAAL Link measurements

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
Total_VS_AAL5_SAALLnk_Bytes	ACCUMULATION	INTEGER	Total number of bytes sent and received on an SAAL link.	{VS_AAL5_SAALLnk_BytesTx} + {VS_AAL5_SAALLnk_BytesRx}	Sum	
VS_AAL5_SAALLnk_BytesRx	ACCUMULATION	INTEGER	Number of bytes received by an SAAL link in a measurement period.	B67109451.C67190615	Sum	
VS_AAL5_SAALLnk_BytesTx	ACCUMULATION	INTEGER	Number of bytes sent by an SAAL link in a measurement period.	B67109451.C67190616	Sum	
VS_SAAL_FailLnk_AlignFail	ACCUMULATION	INTEGER	Number of NNI SAAL link alignment failures	B67109451.C67182598	Sum	
VS_SAAL_FailLnk_AllReasons	ACCUMULATION	INTEGER	Number of NNI SAAL link failures	B67109451.C67182594	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_SAAL_Fail Lnk_ExcesErr_ Rat	ACCUMULA TION	INTEG ER	Number of SAAL link failures because the bit error rate is excessively high. the RNC measures NNI SAAL links only.	B67109451.C671 82596	Sum	
VS_SAAL_Fail Lnk_ExcesNoC red	ACCUMULA TION	INTEG ER	Number of NNI SAAL link failures due to no credit	B67109451.C671 82597	Sum	
VS_SAAL_Fail Lnk_NoRspTim Exp	ACCUMULA TION	INTEG ER	Number of SAAL link failures due to no_response timer expiry	B67109451.C671 82595	Sum	
VS_SAAL_Lnk Err_BufferLoss	ACCUMULA TION	INTEG ER	This measurement item provides the number of packets discarded on the SAAL link due to buffer full in a measurement period.	B67109451.C671 96153	Sum	
VS_SAAL_Lnk Err_OthReasons	ACCUMULA TION	INTEG ER	Number of PDUs received by an SAAL link with the error code from q to t. the RNC measures NNI SAAL links only.	B67109451.C671 82601	Sum	
VS_SAAL_Lnk Err_PDUIval	ACCUMULA TION	INTEG ER	Number of unsolicited or inappropriate PDUs received by NNI SAAL link	B67109451.C671 82600	Sum	

VS_SAAL_Lnk Err_RetransFail	ACCUMULATION	INTEGER	Number of retransmission failures of NNI SAAL link connection control message.	B67109451.C67182602	Sum	
VS_SAAL_Lnk Err_SDLoss	ACCUMULATION	INTEGER	Number of retransmissions of a packet on SAAL link due to loss of the packet. To provide reliable signalling transmission for the upper layer, the SAAL link retransmits a packet when losing it.	B67109451.C67182599	Sum	
VS_SAAL_Lnk ServDur_Time	INTENSITY	INTEGER	Duration of in-service of NNI SAAL link	B67109451.C67182593	Average	Sum, Minimum, Maximum

7.43.2 SAAL_Link.Huawei.UMTS.SAALLNK_PVCLAYER

SAAL Link PVC Layer

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_SAALLNK_PVCLAYER_DROPFORCINTERCELLS	ACCUMULATION	INTEGER	Number of cells discarded by SAAL PVC due to error contents	B67109517.C67194777	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_SAALLNK_PVCLAYER_DROPFORLENERCELLS	ACCUMULATION	INTEGER	Number of cells discarded by SAAL PVC due to error packet length	B67109517.C67194778	Sum	
VS_SAALLNK_PVCLAYER_PEAK_BYTESRX	INTENSITY	INTEGER	Obsolete in Vn00R010; Maximum number of bytes sent	B67109517.C67194774	Average	Sum, Minimum, Maximum
VS_SAALLNK_PVCLAYER_PEAK_BYTESTX	INTENSITY	INTEGER	Obsolete in Vn00R010; Maximum number of bytes received	B67109517.C67194772	Average	Sum, Minimum, Maximum
VS_SAALLNK_PVCLAYER_PEAK_RXRATE	INTENSITY	FLOAT	Peak rate received by the SAAL PVC in the specified measurement period	B67109517.C67204474	Average	Sum, Minimum, Maximum
VS_SAALLNK_PVCLAYER_PEAK_TXRATE	INTENSITY	FLOAT	Peak rate transmitted by the SAAL PVC in the specified measurement period.	B67109517.C67204473	Average	Sum, Minimum, Maximum
VS_SAALLNK_PVCLAYER_RXBYTES	ACCUMULATION	FLOAT	Number of cells received by an SAAL PVC link in a measurement period.	B67109517.C67194773	Sum	
VS_SAALLNK_PVCLAYER_DROPFORLENERCELLS	ACCUMULATION	INTEGER	Number of	B67109517.C	Sum	

YER_RXBYTESOF AAL5CPSPKTS	TION	ER	bytes of correct AAL5 CPS packets received by SAAL PVC	67194779		
VS_SAALLNK_PVCLAYER_RXCORRECTPKTS	ACCUMULATION	INTEGER	Number of correct packets received by SAAL PVC	B67109517.C 67194775	Sum	
VS_SAALLNK_PVCLAYER_RXOVERFLOW DROPPEDCELLS	ACCUMULATION	INTEGER	Number of cells discarded by SAAL PVC due to overflow of receive buffer	B67109517.C 67194781	Sum	
VS_SAALLNK_PVCLAYER_TXBYTES	ACCUMULATION	FLOAT	Number of cells sent by an SAAL PVC link in a measurement period.	B67109517.C 67194771	Sum	
VS_SAALLNK_PVCLAYER_TXBYTESOF AAL5CPSPKTS	ACCUMULATION	INTEGER	Number of bytes of correct AAL5 CPS packets transmitted by SAAL PVC	B67109517.C 67194780	Sum	
VS_SAALLNK_PVCLAYER_TXCORRECTPKTS	ACCUMULATION	INTEGER	Number of correct packets transmitted	B67109517.C 67194776	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			by SAAL PVC			
VS_SAALLNK_PVCLAYER_TXOVERFLOWDROPPEDCELLS	ACCUMULATION	INTEGER	Number of cells discarded by SAAL PVC due to overflow of transmit buffer	B67109517.C67194782	Sum	

7.43.3 SAAL_Link.Huawei.UMTS.SAALPVC

SAAL PVC Link measurements

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_AAL_5_SAAL_BYTESRX	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011: Number of cells received by an SAAL PVC link in a measurement period.	B67109458.C67190503	Sum	
VS_AAL_5_SAAL_BYTESTX	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011: Number of cells sent by an SAAL PVC link in a measurement period.	B67109458.C67190504	Sum	
VS_AAL_5_SAAL_PEAK_BYTESRX	INTENSITY	INTEGER	Obsolete from UTRAN/V900R 011: Peak number of cells received by an SAAL PVC link in a measurement period.	B67109458.C67190743	Average	Sum, Minimum, Maximum

VS_AAL_5_S AAL_PEAK_BYTE TESTX	INTENSITY	INTEGER	Obsolete from UTRAN/V900R 011:Peak number of cells sent by an SAAL PVC link in a measurement period.	B67109458.C6719 0744	Average	Sum, Minimum, Maximum
VS_AAL_5_S AAL_PEAK_RX RATE	INTENSITY	INT8	Obsolete from UTRAN/V900R 011:No description.	B67109458.C6720 2980	Average	Sum, Minimum, Maximum
VS_AAL_5_S AAL_PEAK_TX RATE	INTENSITY	INT8	Obsolete from UTRAN/V900R 011:No description.	B67109458.C6720 2981	Average	Sum, Minimum, Maximum

7.44 SCCP Performance Indicators

This section shows the key performance indicators and other counters for the SCCP object, divided into the following sub-sections:

- [SCCP.Huawei.UMTS.SCCP](#)

7.44.1 SCCP.Huawei.UMTS.SCCP

Signalling Connection control Part data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
OS_SCCP_CC_RX	ACCUMULATION	INT8	Number of CC Messages Received by SCCP	B67109452.C734 03253	Sum	
OS_SCCP_CC_TX	ACCUMULATION	INT8	Number of CC	B67109452.C734	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

x	TION		Messages Sent by SCCP	03252		
OS_SCCP_CR_Rx	ACCUMULATION	INT8	Number of CR Messages Received by SCCP	B67109452.C73403249	Sum	
OS_SCCP_CR_Tx	ACCUMULATION	INT8	Number of CR Messages Sent by SCCP	B67109452.C73403248	Sum	
OS_SCCP_CREF_Rx	ACCUMULATION	INT8	Number of CREF Messages Received by SCCP	B67109452.C73403251	Sum	
OS_SCCP_CREF_Tx	ACCUMULATION	INT8	Number of CREF Messages Sent by SCCP	B67109452.C73403250	Sum	
OS_SCCP_Fail_Rel_Cmp	ACCUMULATION	INTEGER	Number of SCCP connection release timeouts	B67109452.C67178881	Sum	
OS_SCCP_HandleLocalSSNMsg	ACCUMULATION	INTEGER	Number of messages sent by SCCP to the local subsystem	B67109452.C67178836	Sum	
OS_SCCP_HandleTotalMsg	ACCUMULATION	INTEGER	Total number of messages from both local and peer end handled by SCCP	B67109452.C67178835	Sum	
OS_SCCP_Msg_TooLarge	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:This measurement item calculates the number of message sending failures	B67109452.C67178904	Sum	

			because the length of the message exceeds the maximum capability of the SCCP.			
OS_SCCP_ProvIn itRel	ACCUMULA TION	INTEG ER	Number of NSP-initiated SCCP connection releases.	B67109452.C671 78883	Sum	
OS_SCCP_Reass _Expir	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011: Number of SCCP message reassemble failures due to XUDT/LUDT reassemble timeout.	B67109452.C671 78901	Sum	
OS_SCCP_Reass _NoSpace	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011: Number of SCCP XUDT/LUDT message reassemble failures due to insufficient buffer space.	B67109452.C671 78903	Sum	
OS_SCCP_Reass _OutOfSeq	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011: Number of SCCP message reassemble failures due to	B67109452.C671 78902	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			out of sequence of the XUDT/LUDT message.			
OS_SCCP_REJ_Local	INTENSITY	INT8	Ratio of the CREF Messages from the Local SCCP	B67109452.C73415659	Average	Sum, Minimum, Maximum
OS_SCCP_REJ_Remote	INTENSITY	INT8	Ratio of the CREF Messages from the Peer SCCP	B67109452.C73415658	Average	Sum, Minimum, Maximum
OS_SCCP_RLC_RX	ACCUMULATION	INT8	Number of RLC Messages Received by SCCP	B67109452.C73403256	Sum	
OS_SCCP_RLC_Tx	ACCUMULATION	INT8	Number of RLC Messages Sent by SCCP	B67109452.C73403255	Sum	
OS_SCCP_RLSD_Tx	ACCUMULATION	INT8	Number of RLSD Messages Sent by SCCP	B67109452.C73403254	Sum	
OS_SCCP_RouteFail_DSP_Unavail	ACCUMULATION	INTEGER	Number of SCCP routing failures due to DSP not reachable or not present.	B67109452.C67178896	Sum	
OS_SCCP_RouteFail_SSNFail	ACCUMULATION	INTEGER	Number of SCCP routing failures due to subsystem faults.	B67109452.C67178897	Sum	
OS_SCCP_RouteFail_SSNUnequip	ACCUMULATION	INTEGER	Number of SCCP routing failures due to subsystem unequipped.	B67109452.C67178898	Sum	

OS_SCCP_Route Fail_Unkown	ACCUMULA TION	INTEG ER	Number of SCCP routing failures due to other causes except DSP faults, subsystem faults and subsystem unequipped.	B67109452.C671 78899	Sum	
OS_SCCP_Rx_C REF_DstInacc	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011: Number of connection rejection messages (CREF) received by the SCCP due to DSP inaccessible.	B67109452.C671 78894	Sum	
OS_SCCP_Rx_C REF_DstNotRea	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011: Number of connection rejection messages (CREF) received by the SCCP due to DSP not reachable.	B67109452.C671 78893	Sum	
OS_SCCP_Rx_C REF_QOS_Unava il	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900 R011: Number of connection rejection messages (CREF) received by the	B67109452.C671 78895	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			SCCP due to QoS unavailable.			
OS_SCCP_Rx_Msg_0_1	ACCUMULATION	INTEGER	Number of class 0 and class 1 messages received by SCCP, that is, number of connectionless messages received by SCCP. SCCP connectionless messages include UDT, XUDT, LUDT, UDTS, XUDTS and LUDTS.	B67109452.C67178838	Sum	
OS_SCCP_Rx_Msg_2	ACCUMULATION	INTEGER	Number of class 2 messages received by SCCP, that is, number of connection-oriented messages received by SCCP. SCCP connection-oriented messages include CR, CC, CREF, RLSD, RLC, DT1 and IT.	B67109452.C67178840	Sum	
OS_SCCP_Rx_UDTS_Msg	ACCUMULATION	INTEGER	Number of UDTS messages received by SCCP	B67109452.C67178834	Sum	

OS_SCCP_SegmentFail	ACCUMULATION	INTEGER	Number of SCCP XUDT segmentation failures.	B67109452.C67178884	Sum	
OS_SCCP_SyntaxError	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of messages handled by SCCP due to syntax errors. SCCP syntax errors include the following: protocol type errors, address error of the calling party, address error of the called party, connection reference number error and unknown messages.	B67109452.C67178900	Sum	
OS_SCCP_TiarTimeout	ACCUMULATION	INTEGER	Number of connection releases due to SCCP inactivity test. After the connection setup, the SCCP starts the inactivity receive timer (TIAR) and inactivity send timer	B67109452.C67178882	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			(TIAS).The SCCP restarts the TIAS timer after sending a connection-oriented message. If it does not send connection-oriented messages until the expiry of the TIAS timer, the SCCP sends an inactivity test message (IT). The SCCP restarts the TIAR timer on receipt of a connection-oriented message (including the IT message). If it does not receive connection oriented messages until the expiry of the TIAR timer, the SCCP releases the connection			
OS_SCCP_Tx_Msg_0_1	ACCUMULATION	INTEGER	Number of class 0 and class 1 messages sent by SCCP, that is, number of connectionless messages sent by	B67109452.C67178837	Sum	

			SCCP.SCCP connectionless messages include UDT, XUDT, LUDT, UDTs, XUDTs and LUDTs.			
OS_SCCP_Tx_Msg_2	ACCUMULATION	INTEGER	Number of class 2 messages sent by SCCP, that is, number of connection-oriented messages sent by SCCP. SCCP connection-oriented messages include CR, CC, CREF, RLSD, RLC, DT1 and IT.	B67109452.C67178839	Sum	
OS_SCCP_Tx_UTS_Msg	ACCUMULATION	INTEGER	Number of UTDS messages transmitted by SCCP	B67109452.C67178833	Sum	
VS_SCCP_Rx_CREF_Cong	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of connection rejection messages (CREF) received by the SCCP due to network congestion.	B67109452.C67178892	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_SCCP_Rx_CREF_SSNUnequipped	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011: Number of connection refusal messages (CREF) received by the SCCP due to subsystem unequipped.	B67109452.C67178889	Sum	
VS_SCCP_Rx_ErrorPDU	ACCUMULATION	INTEGER	Number of PDU ERROR messages received by SCCP	B67109452.C67190756	Sum	
VS_SCCP_Rx_RLSD_Cong	ACCUMULATION	INTEGER	Number of connection release messages (RLSD) received by the SCCP due to congestion.	B67109452.C67178887	Sum	
VS_SCCP_Rx_RLSD_MtpFail	ACCUMULATION	INTEGER	Number of connection release messages (RLSD) received by the SCCP due to MTP faults.	B67109452.C67178886	Sum	
VS_SCCP_RX_RLSD_NORMAL	ACCUMULATION	INTEGER	Number of RLSD messages received by SCCP for normal causes	B67109452.C67195059	Sum	
VS_SCCP_Rx_RLSD_Other	ACCUMULATION	INTEGER	Number of connection release messages (RLSD)	B67109452.C67178888	Sum	

			received by the SCCP due to other causes.			
VS_SCCP_Rx_RLSD_SubFail	ACCUMULATION	INTEGER	Number of connection release messages (RLSD) received by the SCCP due to subsystem faults.	B67109452.C67178885	Sum	
VS_SCCP_Rx_UDTS_FragFail	ACCUMULATION	INTEGER	Number of UDTs messages received by the SCCP due to segmentation failure.	B67109452.C67178891	Sum	
VS_SCCP_Rx_XUDTS_ErrorMsg	ACCUMULATION	INTEGER	Number of XUDTS messages received by the SCCP due to transmission error.	B67109452.C67178890	Sum	
VS_SCCP_Tx_ErrPDU	ACCUMULATION	INTEGER	Number of PDU ERROR messages transmitted by SCCP	B67109452.C67190757	Sum	

7.45 SCTPIP Performance Indicators

This section shows the key performance indicators and other counters for the SCTPIP object, divided into the following sub-sections:

- [SCTPIP.Huawei.UMTS.SCTPIP](#)

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

7.45.1 SCTPIP.Huawei.UMTS.SCTPIP

SCTP IP data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_SCTP_RX_PKGNUM	ACCUMULATION	INTEGER	Number of IP packets retransmitted by the SCTP link in the specified measurement period.	B67109469.C67192144	Sum	
VS_SCTP_RX_BYTES	ACCUMULATION	INT8	No description available.	B67109469.C67191610	Sum	
VS_SCTP_RX_ERRPKGNUM	ACCUMULATION	INT8	Number of Error Packets Received on SCTP Link	B67109469.C67184352	Sum	
VS_SCTP_RX_MAXBYTES	INTENSITY	INT8	No description available.	B67109469.C67191614	Constant	Sum, Minimum, Maximum
VS_SCTP_RX_MAXPKGNUM	INTENSITY	INT8	No description available.	B67109469.C67191616	Constant	Sum, Minimum, Maximum
VS_SCTP_RX_PKGNUM	ACCUMULATION	INT8	No description available.	B67109469.C67191612	Sum	
VS_SCTP_TX_BYTES	ACCUMULATION	INT8	No description available.	B67109469.C67191611	Sum	
VS_SCTP_TX_MAXBYTES	INTENSITY	INT8	No description available.	B67109469.C67191615	Constant	Sum, Minimum, Maximum
VS_SCTP_TX_MAXPKGNUM	INTENSITY	INT8	No description available.	B67109469.C67191617	Constant	Sum, Minimum

						m, Maximu m
VS_SCTP_TX_PKGNUM	ACCUMULATION	INT8	No description available.	B67109469.C67191613	Sum	

7.46 SCTPLNK Performance Indicators

This section shows the key performance indicators and other counters for the SCTPLNK object, divided into the following sub-sections:

- [SCTPLNK.Huawei.UMTS.SCTP_IPLAYER](#)
- [SCTPLNK.Huawei.UMTS.SCTPLNK](#)

7.46.1 SCTPLNK.Huawei.UMTS.SCTP_IPLAYER

SCTP IP Layer

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_SCTP_IPLAYER_RXBYTES	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011: Number of bytes received by SCTPLNK.IPLAYER	B67109485.C67194087	Sum	
VS_SCTP_IPLAYER_RXDROPPEDBYTES	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011: Number of discarded bytes received by SCTPLNK.IPLAYER	B67109485.C67194089	Sum	
VS_SCTP_IPLAYER_RXDROPPEDPACKETS	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R011: Number of discarded packets received by	B67109485.C67194088	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			SCTPLNK.IPLA YER			
VS_SCTP_IPLA YER_RXMAXS PEED	INTENSITY	FLOA T	Maximum receive rate of SCTPLNK.IPLA YER	B67109485.C6 7194093	Average	Sum, Minimu m, Maximu m
VS_SCTP_IPLA YER_RXMEAN SPEED	INTENSITY	FLOA T	Average receive rate of SCTPLNK.IPLA YER	B67109485.C6 7194095	Average	Sum, Minimu m, Maximu m
VS_SCTP_IPLA YER_RXMINSP EED	INTENSITY	FLOA T	Minimum receive rate of SCTPLNK.IPLA YER	B67109485.C6 7194094	Average	Sum, Minimu m, Maximu m
VS_SCTP_IPLA YER_RXPACKE TS	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900R0 11: Number of discarded bytes transmitted by SCTPLNK.IPLA YER	B67109485.C6 7194086	Sum	
VS_SCTP_IPLA YER_TXBYTES	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900R0 11: Number of bytes transmitted by SCTPLNK.IPLA YER	B67109485.C6 7194083	Sum	
VS_SCTP_IPLA YER_TXDROPP BYTES	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900R0 11: Number of discarded bytes transmitted by SCTPLNK.IPLA YER	B67109485.C6 7194085	Sum	
VS_SCTP_IPLA YER_TXDROPP PACKETS	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900R0 11: Number of	B67109485.C6 7194084	Sum	

			discarded packets transmitted by SCTPLNK.IPLA YER			
VS_SCTP_IPLA YER_TXMAXS PEED	INTENSITY	FLOA T	Maximum transmit rate of SCTPLNK.IPLA YER	B67109485.C6 7194090	Average	Sum, Minim u m, Maximu m
VS_SCTP_IPLA YER_TXMEAN SPEED	INTENSITY	FLOA T	Average transmit rate of SCTPLNK.IPLA YER	B67109485.C6 7194092	Average	Sum, Minim u m, Maximu m
VS_SCTP_IPLA YER_TXMINSP EED	INTENSITY	FLOA T	Minimum transmit rate of SCTPLNK.IPLA YER	B67109485.C6 7194091	Average	Sum, Minim u m, Maximu m
VS_SCTP_IPLA YER_TXPACKE TS	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V900R0 11: Number of packets transmitted by SCTPLNK.IPLA YER	B67109485.C6 7194082	Sum	

7.46.2 SCTPLNK.Huawei.UMTS.SCTPLNK

SCTP LNK data

KPI	Type	Data Type	Description	Derivation	Default Aggrega tor	Other Aggrega tors
UPUSER_RECE IVE_MSG_NU M	ACCUMULA TION	INT8	Number of Packets Received on SCTP Link	B67109468.C734 03175	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

UPUSER_SEND_MSG_NUM	ACCUMULATION	INT8	Number of Packets Sent on the SCTP Link	B67109468.C73403174	Sum	
VS_SCTP_CONGESTION_INTERVAL	ACCUMULATION	INTEGER	This measurement item provides the interval when the SCTP link is in congested state.	B67109468.C67191619	Sum	
VS_SCTP_CONGESTION	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900 R011:This measurement item provides the number of congestions on the SCTP link.	B67109468.C67196150	Sum	
VS_SCTP_SERVICE_INTERVAL	ACCUMULATION	INTEGER	This measurement item provides the interval when the SCTP link provides services.	B67109468.C67191618	Sum	

7.47 Signalling_Link Performance Indicators

This section shows the key performance indicators and other counters for the Signalling_Link object, divided into the following sub-sections:

- [Signalling_Link.Huawei.UMTS.IMA_Link](#)
- [Signalling_Link.Huawei.UMTS.MTP3BLNK](#)
- [Signalling_Link.Huawei.UMTS.SAALLNK](#)
- [Signalling_Link.Huawei.UMTS.SAALPVC](#)

7.47.1 Signalling_Link.Huawei.UMTS.IMA_Link

Transmitted and received cells over an IMA Link.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
-----	------	-----------	-------------	------------	--------------------	-------------------

Total_IMALNK_CELLS	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200R010:**Moved under IMA_Link.Total number of cells sent and received by an IMA link	{VS_IMALNK_TXCELLS} + {VS_IMALNK_RXCELLS}	Sum	
VS_IMA_Lnk_MeanKbps_Rx	INTENSITY	FLOAT	Mean Rx rate of a single IMA link in a given measurement period. Unit: kbps.	B67109403.C67202909	Average	Sum, Minimum, Maximum
VS_IMA_Lnk_MeanKbps_Tx	INTENSITY	FLOAT	Mean Tx rate of a single IMA link in a given measurement period. Unit: kbps	B67109403.C67202910	Average	Sum, Minimum, Maximum
VS_IMALNK_PEAK_RXCELLS	INTENSITY	INTEGER	Obsolete from UTRAN/V200R010:**Moved under IMA_Link.Peak number of cells received by an IMA link in a measurement period.	B67109403.C67190733	Constant	Sum, Minimum, Maximum
VS_IMALNK_PEAK_RXRATE	INTENSITY	INT8	Peak Rate Received by IMA LINK	B67109403.C67203408	Average	Sum, Minimum, Maximum
VS_IMALNK_PEAK_TXCELL	INTENSITY	INTEGER	Obsolete from UTRAN/V200R	B67109403.C67190734	Constant	Sum, Minimum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

LS			010:**Moved under IMA_Link.Peak number of cells transmitted by an IMA link in a measurement period.			m, Maximum
VS_IMALNK_PEAK_TXRATE	INTENSITY	INT8	Peak Rate Sent by IMA LINK	B67109403.C67203409	Average	Sum, Minimum, Maximum
VS_IMALNK_RXCELLS	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200R 010:**Moved under IMA_Link.Number of cells received by an IMA link in a measurement period.	B67109403.C67190484	Sum	
VS_IMALNK_TXCELLS	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200R 010:**Moved under IMA_Link.Number of cells sent by an IMA link in a measurement period	B67109403.C67190485	Sum	

7.47.2 Signalling_Link.Huawei.UMTS.MTP3BLNK

Message Transfer Part Level 3 data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
OS_MTP3B_Lnk_Cho	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200R	B67109416.C67182856	Sum	

			010:**Moved under MTP3B_Link.N number of changeovers of the service to other MTP3B links.			
OS_MTP3B_Link_Cong_Dur	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200R 010:**Moved under MTP3B_Link.Duration (in seconds) of MTP3B link congestion.	B67109416.C67182862	Sum	
OS_MTP3B_Link_Cong	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200R 010:**Moved under MTP3B_Link.N number of MTP3B link congestions.	B67109416.C67182861	Sum	
OS_MTP3B_Link_Fail_Dur	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200R 010:**Moved under MTP3B_Link.Out-of-service duration (in seconds) of the MTP3B link.	B67109416.C67182851	Sum	
OS_MTP3B_Link_Fail	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200R 010:**Moved under MTP3B_Link.N	B67109416.C67182850	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			umber of MTP3B link failures for all reasons. When the MTP3B link fails, it stops providing service.			
OS_MTP3B_Link_LocalInh_Dur	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200R010:**Moved under MTP3B_Link.Number of inhibitions on the MTP3B link by the local end.	B67109416.C67182853	Sum	
OS_MTP3B_Link_LocalInhibit	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200R010:**Moved under MTP3B_Link.Duration (in seconds) when the MTP3B link stays locally inhabited after being inhibited at the local end.	B67109416.C67182852	Sum	
OS_MTP3B_Link_RmtInhibit_Dur	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200R010:**Moved under MTP3B_Link.Duration (in seconds) when the MTP3B link stays remotely inhabited after being inhibited by the remote signalling point.	B67109416.C67182855	Sum	
OS_MTP3B_L	ACCUMULATION	INTEGER	Obsolete from	B67109416.C6718	Sum	

nk_RmtInhibit	TION	ER	UTRAN/V200R 010:**Moved under MTP3B_Link.N umber of inhibitions on the MTP3B link by the remote signalling point.	2854		
OS_MTP3B_L nk_Rx_Msg	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V200R 010:**Moved under MTP3B_Link.N umber of message signalling units (MSU) received on the MTP3B link.	B67109416.C6718 2858	Sum	
OS_MTP3B_L nk_Service_Du r	ACCUMULA TION	INTEG ER	Obsolete from UTRAN/V200R 010:**Moved under MTP3B_Link.S ervice duration (in seconds) of the MTP3B link.	B67109416.C6718 2849	Sum	
OS_MTP3B_L nk_SIO_SIF_R x	ACCUMULA TION	INT8	Obsolete from UTRAN/V200R 010:**Moved under MTP3B_Link.N umber of octets of message signalling units (MSU) received by the MTP3B link.The octets	B67109416.C6718 2860	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			include SIF and SIO. SIF includes upper layer signalling content and routing label. SIO includes network indicator and service indicator.			
OS_MTP3B_Link_SIO_SIF_Tx	ACCUMULATION	INT8	Obsolete from UTRAN/V200R010:**Moved under MTP3B_Link. Number of octets of message signalling units (MSU) sent on the MTP3B link. The octets include SIF and SIO. The SIF includes upper layer signalling content and routing label. The SIO includes network indicator and service indicator.	B67109416.C67182859	Sum	
OS_MTP3B_Link_Tx_Msg	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200R010:**Moved under MTP3B_Link. Number of message signalling units (MSU) sent by the MTP3B Link.	B67109416.C67182857	Sum	

Total_OS_MTP3B_Lnk_SIO_SIF	ACCUMULATION	INT8	Obsolete from UTRAN/V200R010:**Moved under MTP3B_Link.Total number of octets of messages sent and received	{OS_MTP3B_Lnk_SIO_SIF_Rx} + {OS_MTP3B_Lnk_SIO_SIF_Tx}	Sum	
----------------------------	--------------	------	--	---	-----	--

7.47.3 Signalling_Link.Huawei.UMTS.SAALLNK

Signalling ATM Adaption Layer link data.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
Total_VS_AAL5_SAALLnk_Bytes	ACCUMULATION	INT8	Obsolete from UTRAN/V200R010:**Moved under SAAL_Link.Total number of bytes sent and received on an SAAL link.	{VS_AAL5_SAALLnk_BytesTx} + {VS_AAL5_SAALLnk_BytesRx}	Sum	
VS_AAL5_SAALLnk_BytesRx	ACCUMULATION	INT8	Number of bytes received by an SAAL link in a measurement period.	B67109451.C67190615	Sum	
VS_AAL5_SAALLnk_BytesTx	ACCUMULATION	INT8	Number of bytes sent by an SAAL link in a measurement period.	B67109451.C67190616	Sum	
VS_SAAL_FailLnk_AlignFail	ACCUMULATION	INTEGER	Number of NNI SAAL link alignment	B67109451.C67182598	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			failures.It measures NNI SAAL links only.			
VS_SAAL_Fail Lnk_AllReasons	ACCUMULATION	INTEGER	Number of NNI SAAL link failures. The failures include broken NNI SAAL link by any reason and alignment failure in the link setup procedure. It measures NNI SAAL links only	B67109451.C67182594	Sum	
VS_SAAL_Fail Lnk_ExcesErr_Rat	ACCUMULATION	INTEGER	Number of SAAL link failures due to too high bit error rate.It measures NNI SAAL links only	B67109451.C67182596	Sum	
VS_SAAL_Fail Lnk_ExcesNoCred	ACCUMULATION	INTEGER	Number of NNI SAAL link failures due to no credit for a long time. It measures NNI SAAL links only.NNI SAAL controls flow by sliding window. The credit refers to the size of the sliding window.	B67109451.C67182597	Sum	
VS_SAAL_Fail Lnk_NoRspTimExp	ACCUMULATION	INTEGER	Number of SAAL link failures due to no response	B67109451.C67182595	Sum	

			from the peer end.			
VS_SAAL_Lnk Err_OthReasons	ACCUMULATION	INTEGER	Number of PDUs received by SAAL link with error code from Q to T. Error code Q: indicates the erroneous sequence number N(S) of an SD or POLL message. Error code R: indicates the erroneous sequence number N(PS) of a STAT message.	B67109451.C671 82601	Sum	
VS_SAAL_Lnk Err_PDUIval	ACCUMULATION	INTEGER	Number of unsolicited or inappropriate protocol data units (PDUs) received by SAAL NNI link. An unsolicited or inappropriate PDU refers to the erroneous PDU received by the SAAL link with the error code from A to M.	B67109451.C671 82600	Sum	
VS_SAAL_Lnk Err_RetransFail	ACCUMULATION	INTEGER	Number of failures in retransmitting	B67109451.C671 82602	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			an NNI SAAL link connection control message. The NNI SAAL link connection control messages include BGN, END, RS, and ER. For example, the SAAL link fails to receive a response from the peer.			
VS_SAAL_LnkErr_SDLoss	ACCUMULATION	INTEGER	Number of retransmissions of a packet on SAAL link due to loss of the packet. To provide reliable signalling transmission for the upper layer, the SAAL link retransmits a packet when losing it.	B67109451.C67182599	Sum	
VS_SAAL_LnkServDur_Time	ACCUMULATION	INTEGER	In-service duration (in seconds) of an NNI SAAL link. It measures NNI SAAL links only.	B67109451.C67182593	Sum	

7.47.4 Signalling_Link.Huawei.UMTS.SAALPVC

Signalling ATM Adaption Layer Permanent Virtual Circuit link data.

KPI	Type	Data Type	Description	Derivation	Default Aggregat	Other Aggrega
-----	------	-----------	-------------	------------	------------------	---------------

					or	tors
VS_AAL_5_S AAL_BYTESTRX	ACCUMULATION	INT8	Obsolete from UTRAN/V200R010:**Moved under SAAL_Link. Number of cells received by an SAAL PVC link in a measurement period.	B67109458.C67190503	Sum	
VS_AAL_5_S AAL_BYTESTX	ACCUMULATION	INT8	Obsolete from UTRAN/V200R010:**Moved under SAAL_Link. Number of cells sent by an SAAL PVC link in a measurement period.	B67109458.C67190504	Sum	
VS_AAL_5_S AAL_PEAK_BYTESTRX	ACCUMULATION	INT8	Obsolete from UTRAN/V200R010:**Moved under SAAL_Link. Peak number of cells received by an SAAL PVC link in a measurement period.	B67109458.C67190743	Sum	
VS_AAL_5_S AAL_PEAK_BYTESTX	ACCUMULATION	INT8	Obsolete from UTRAN/V200R010:**Moved under SAAL_Link.	B67109458.C67190744	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Peak number of cells sent by an SAAL PVC link in a measurement period.			
VS_AAL_5_SAAL_PEAK_RXRATE	INTENSITY	INT8	Obsolete from UTRAN/V200R010:**Moved under SAAL_Link.No description.	B67109458.C67202980	Average	Sum, Minimum, Maximum
VS_AAL_5_SAAL_PEAK_TXRATE	INTENSITY	INT8	Obsolete from UTRAN/V200R010:**Moved under SAAL_Link.No description.	B67109458.C67202981	Average	Sum, Minimum, Maximum

7.48 Signalling_LinkSet Performance Indicators

This section shows the key performance indicators and other counters for the Signalling_LinkSet object, divided into the following sub-sections:

- [Signalling_LinkSet.Huawei.UMTS.IMA_Group](#)
- [Signalling_LinkSet.Huawei.UMTS.MTP3BLNKSET](#)

7.48.1 Signalling_LinkSet.Huawei.UMTS.IMA_Group

IMA group data.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
Total_VS_IMAGR_P_CELLS	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200R010:**Moved under IMA_Group.Total number of cells sent and received by an IMA group	{VS_IMAGR_P_TXCELLS} + {VS_IMAGR_P_RXCELLS}	Sum	

VS_IMA_Grp_MeanKbps_Rx	INTENSITY	FLOAT	Mean Rx rate of an IMA group in a given measurement period. Unit: kbps	B67109402.C67202907	Average	Sum, Minimum, Maximum
VS_IMA_Grp_MeanKbps_Tx	INTENSITY	FLOAT	Mean Tx rate of an IMA group in a given measurement period. Unit: kbps	B67109402.C67202908	Average	Sum, Minimum, Maximum
VS_IMAGRP_PEAK_RXCELLS	INTENSITY	INTEGER	Obsolete from UTRAN/V200R010:**Moved under IMA_Group.Peak number of cells received by an IMA group in a measurement period	B67109402.C67190731	Constant	Sum, Minimum, Maximum
VS_IMAGRP_PEAK_RXRATE	INTENSITY	INT8	Obsolete from UTRAN/V200R010:**Moved under IMA_Group.Peak Rate Received by IMA GROUP	B67109402.C67203411	Average	Sum, Minimum, Maximum
VS_IMAGRP_PEAK_TXCELLS	INTENSITY	INTEGER	Obsolete from UTRAN/V200R010:**Moved under IMA_Group. Peak number of cells transmitted by an IMA group in a	B67109402.C67190732	Constant	Sum, Minimum, Maximum

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			measurement period			
VS_IMAGRP_PEAK_TXRATE	INTENSITY	INT8	Obsolete from UTRAN/V200R010:**Moved under IMA_Group. Peak Rate Sent by IMA GROUP	B67109402.C67203412	Average	Sum, Minimum, Maximum
VS_IMAGRP_RXCELLS	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200R010:**Moved under IMA_Group.	B67109402.C67190482	Sum	
VS_IMAGRP_TXCELLS	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200R010:**Moved under IMA_Group. Number of cells sent by an IMA group in a measurement period.	B67109402.C67190483	Sum	

7.48.2 Signalling_LinkSet.Huawei.UMTS.MTP3BLNKSET

Message Transfer Part level 3 linkset data.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
OS_MTP3B_Lnkset_Unavail_Dur	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200R010:**Moved under MTP3B_LinkSet. Duration (in seconds) of the MTP3B link set in unavailable state.	B67109417.C67183106	Sum	

OS_MTP3B_Lnkset_Unavail	ACCUMULATION	INTEGER	Obsolete from UTRAN/V200R 010:**Moved under MTP3B_LinkSet .Number of MTP3B link set failures.The MTP3B link set fails when it shifts from available state to the unavailable state	B67109417.C67183105	Sum	
-------------------------	--------------	---------	--	---------------------	-----	--

7.49 Signalling_Point Performance Indicators

This section shows the key performance indicators and other counters for the Signalling_Point object, divided into the following sub-sections:

- [Signalling_Point.Huawei.UMTS.MTP3BDSP](#)

7.49.1 Signalling_Point.Huawei.UMTS.MTP3BDSP

Message Transfer Part level 3 DSP data.

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
OS_MTP3B_DSP_Unavail_Dur	ACCUMULATION	INTEGER	Obsolete from UTRAN/V900R 011:**Moved under MTP3B_Point. Duration (in seconds) of an MTP3B DSP in inaccessible state.	B67109415.C67183234	Sum	
OS_MTP3B_D	ACCUMULATION	INTEGER	Obsolete from	B67109415.C6718	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

SP_Unavail	TION	ER	UTRAN/V900R 011:**Moved under MTP3B_Point. Number of MTP3B DSP status changes from the accessible state to inaccessible state.	3233		
------------	------	----	--	------	--	--

7.50 UDSP Performance Indicators

This section shows the key performance indicators and other counters for the UDSP object, divided into the following sub-sections:

- [UDSP.Huawei.UMTS.UDSP](#)

7.50.1 UDSP.Huawei.UMTS.UDSP

Measurement related to DSP performance

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_DSP_AMRLC ResetToMax	ACCUMULATION	INT8	No description.	B67109546.C67195789	Sum	
VS_DSP_AMRLC Setup	ACCUMULATION	INT8	No description.	B67109546.C67195788	Sum	
VS_DSP_DSPUsageAvgCount	ACCUMULATION	INT8	No description.	B67109546.C67196336	Sum	
VS_DSP_DSPUsageAvg	INTENSITY	INT8	No description.	B67109546.C67195771	Average	Sum, Minimum, Maximum
VS_DSP_DSPUsageAvgValue	ACCUMULATION	INT8	No description.	B67109546.C67196335	Sum	
VS_DSP_DSPUsagePeak	ACCUMULATION	INT8	No description.	B67109546.C67195770	Sum	

VS_DSP_FPCfgFail	ACCUMULATION	INT8	No description.	B67109546.C67195775	Sum	
VS_DSP_FPCfg	ACCUMULATION	INT8	No description.	B67109546.C67195774	Sum	
VS_DSP_FPTrchSyncFail	ACCUMULATION	INT8	No description.	B67109546.C67195757	Sum	
VS_DSP_FPTrchSync	ACCUMULATION	INT8	No description.	B67109546.C67195756	Sum	
VS_DSP_IUUPCfgFail	ACCUMULATION	INT8	No description.	B67109546.C67195781	Sum	
VS_DSP_IUUPCfg	ACCUMULATION	INT8	No description.	B67109546.C67195780	Sum	
VS_DSP_IUUPInitFail	ACCUMULATION	INT8	No description.	B67109546.C67195604	Sum	
VS_DSP_IUUPInit	ACCUMULATION	INT8	No description.	B67109546.C67195603	Sum	
VS_DSP_MACDCfgFail	ACCUMULATION	INT8	No description.	B67109546.C67195777	Sum	
VS_DSP_MACDCfg	ACCUMULATION	INT8	No description.	B67109546.C67195776	Sum	
VS_DSP_PSDLThruput	ACCUMULATION	INT8	No description.	B67109546.C67204774	Sum	
VS_DSP_PSULThruput	ACCUMULATION	INT8	No description.	B67109546.C67204775	Sum	
VS_DSP_RLCCfgFail	ACCUMULATION	INT8	No description.	B67109546.C67195779	Sum	
VS_DSP_RLCCfg	ACCUMULATION	INT8	No description.	B67109546.C67195778	Sum	
VS_DSP_TimerStartFail	ACCUMULATION	INT8	No description.	B67109546.C67195761	Sum	
VS_DSP_TimerStart	ACCUMULATION	INT8	No description.	B67109546.C67195760	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

7.51 UNILNK Performance Indicators

This section shows the key performance indicators and other counters for the UNILNK object, divided into the following sub-sections:

- [UNILNK.Huawei.UMTS.UNILNK](#)

7.51.1 UNILNK.Huawei.UMTS.UNILNK

UNI LNK data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_UNI_Lnk_MeanKbps_Rx	INTENSITY	FLOAT	Mean Rx rate of a UNI link in a given measurement period. Unit: kbps.	B67109456.C67202915	Average	Sum, Minimum, Maximum
VS_UNI_Lnk_MeanKbps_Tx	INTENSITY	FLOAT	Mean Tx rate of a UNI link in a given measurement period. Unit: kbps.	B67109456.C67202916	Average	Sum, Minimum, Maximum
VS_UNILNK_Allotted_Ave_Bwd	INTENSITY	FLOAT	Mean backward bandwidth assigned to a UNI link	B67109456.C67204197	Average	Sum, Minimum, Maximum
VS_UNILNK_Allotted_Ave_Fwd	INTENSITY	FLOAT	Mean forward bandwidth assigned to a UNI link	B67109456.C67204196	Average	Sum, Minimum, Maximum
VS_UNILNK_Allotted_Max_Bwd	INTENSITY	FLOAT	Peak backward bandwidth assigned to a UNI link	B67109456.C67193236	Average	Sum, Minimum, Maximum

VS_UNILNK_All oced_Max_Fwd	INTENSITY	FLOA T	Peak forward bandwidth assigned to a UNI link	B67109456.C671 93235	Average	Sum, Minimu m, Maximu m
VS_UNILNK_B wd_Cong_Dur	ACCUMULA TION	INT8	Duration of UNI Link Backward Congestions	B67109456.C671 93240	Sum	
VS_UNILNK_B wd_Cong	ACCUMULA TION	INT8	Number of UNI Link Backward Congestions	B67109456.C671 93239	Sum	
VS_UNILNK_Fw d_Cong_Dur	ACCUMULA TION	INTEG ER	Duration of forward congestion on a UNI link	B67109456.C671 93238	Sum	
VS_UNILNK_Fw d_Cong	ACCUMULA TION	INTEG ER	Number of forward congestions on a UNI link	B67109456.C671 93237	Sum	
VS_UNILNK_PE AK_RXCELLS	INTENSITY	FLOA T	Obsolete from UTRAN/V200 R010:Peak Rate of Cells Received by UNI Link.	B67109456.C671 90739	Constant	Sum, Minimu m, Maximu m
VS_UNILNK_PE AK_RXRATE	INTENSITY	FLOA T	Peak rate of cells received by a UNI link in a measurement period.	B67109456.C672 02976	Constant	Sum, Minimu m, Maximu m
VS_UNILNK_PE AK_TXCELLS	INTENSITY	FLOA T	Obsolete from UTRAN/V200 R010:Peak Rate of Cells	B67109456.C671 90740	Constant	Sum, Minimu m, Maximu

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			Transmitted by UNI Link.			m
VS_UNILNK_PEA K_TXRATE	INTENSITY	INTEGER	Peak rate of cells sent by a UNI link in a measurement period.	B67109456.C67202977	Constant	Sum, Minimum, Maximum
VS_UNILNK_RXCELLS	ACCUMULATION	INTEGER	Number of cells received by a UNI link in a measurement period.	B67109456.C67190490	Sum	
VS_UNILNK_RXDROPS	ACCUMULATION	INTEGER	Number of cells discarded by UNILINK	B67109456.C67194050	Sum	
VS_UNILNK_RXHCSERRCELLS	ACCUMULATION	INTEGER	Number of error cells received by UNILINK	B67109456.C67194049	Sum	
VS_UNILNK_TXCELLS	ACCUMULATION	INTEGER	Number of cells sent by a UNI link in a measurement period.	B67109456.C67190491	Sum	

7.52 UOI_Board Performance Indicators

This section shows the key performance indicators and other counters for the UOI_Board object, divided into the following sub-sections:

- [UOI_Board.Huawei.UMTS.UOI](#)

7.52.1 UOI_Board.Huawei.UMTS.UOI

UOI Board data

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_UOI_RXMAXSPEED	INTENSITY	FLOAT	The max receiving speed	B67109549_V200.C67204851	Average	Sum, Minimum

			of fiber board			m, Maximum
VS_UOI_TXMAXSPEED	INTENSITY	FLOAT	The max transmitting speed of fiber board	B67109549_V200.C67204852	Average	Sum, Minimum, Maximum

7.53 VC_ACROSS Performance Indicators

This section shows the key performance indicators and other counters for the VC_ACROSS object, divided into the following sub-sections:

- [VC_ACROSS.Huawei.UMTS.VCCCROSS_Traffic](#)

7.53.1 VC_ACROSS.Huawei.UMTS.VCCCROSS_Traffic

VCCCROSS utilisation

KPI	Type	Data Type	Description	Derivation	Default Aggregator	Other Aggregators
VS_VCCCROSS_RXBYTES	ACCUMULATION	INTEGER	Number of bytes received by VCCCROSS	B67109498.C67194494	Sum	
VS_VCCCROSS_RXCELLS	ACCUMULATION	INTEGER	Number of cells received by VCCCROSS	B67109498.C67194496	Sum	
VS_VCCCROSS_RXDROPCELLS	ACCUMULATION	INTEGER	Number of discarded cells received by VCCCROSS	B67109498.C67194499	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

VS_VCCROSS_RXHCSE RCELLS	ACCUMULA TION	INTEG ER	Number of HCS error cells received by VCCROSS	B67109498. C67194498	Sum	
VS_VCCROSS_RXMAXSP EED	INTENSITY	FLOA T	Maximum receive rate of VCCROSS	B67109498. C67194509	Average	Sum, Minimu m, Maximu m
VS_VCCROSS_RXMEAN SPEED	INTENSITY	FLOA T	Average receive rate of VCCROSS	B67109498. C67194511	Average	Sum, Minimu m, Maximu m
VS_VCCROSS_RXMINSP EED	INTENSITY	FLOA T	Minimum receive rate of VCCROSS	B67109498. C67194510	Average	Sum, Minimu m, Maximu m
VS_VCCROSS_RXOVERF LOWDROPCELLS	ACCUMULA TION	INTEG ER	Number of cells discarded by VCCROSS due to overflow of receive buffer	B67109498. C67194500	Sum	
VS_VCCROSS_RXRECTIF IABLEHECERRCELLS	ACCUMULA TION	INTEG ER	Number of rectifiable HEC error cells received by VCCROSS	B67109498. C67194501	Sum	
VS_VCCROSS_RXUNREC TIFIABLEHECERRCELLS	ACCUMULA TION	INTEG ER	Number of un- correctable HEC error cells	B67109498. C67194502	Sum	

			received by VCCROSS			
VS_VCCROSS_TXBYTES	ACCUMULATION	INTEGER	Number of bytes transmitted by VCCROSS	B67109498. C67194495	Sum	
VS_VCCROSS_TXCELLS	ACCUMULATION	INTEGER	Number of cells transmitted by VCCROSS	B67109498. C67194497	Sum	
VS_VCCROSS_TXDROPC ELLS	ACCUMULATION	INTEGER	Number of cells abnormally discarded by VCCROSS	B67109498. C67194504	Sum	
VS_VCCROSS_TXMAXSP PEED	INTENSITY	FLOAT	Maximum transmit rate of VCCROSS	B67109498. C67194506	Average	Sum, Minimu m, Maximu m
VS_VCCROSS_TXMEANS PEED	INTENSITY	FLOAT	Average transmit rate of VCCROSS	B67109498. C67194508	Average	Sum, Minimu m, Maximu m
VS_VCCROSS_TXMINSP PEED	INTENSITY	FLOAT	Minimum transmit rate of VCCROSS	B67109498. C67194507	Average	Sum, Minimu m, Maximu m
VS_VCCROSS_TXOVERF LOWCELLS	ACCUMULATION	INTEGER	Number of overflow cells of	B67109498. C67194505	Sum	

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

			VCCROSS			
VS_VCCROSS_TXOVERF LOWDROPCELLS	ACCUMULA TION	INTEG ER	Number of user cells discarded by VCCROSS due to overflow of transmit buffer	B67109498. C67194503	Sum	

8 Performance Alarms

This section shows details of the alarms that are defined in this technology pack module:
None.

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

9 Reports

This section shows details of the reports that are defined in this technology pack module.

All reports can be run as raw, daily, weekly or monthly reports.

Where a KPI is marked (DA), it means Data Availability is to be reported upon it.

- [AAL2PATH Reports.](#)
- [ATM_Node Reports.](#)
- [Cell Reports.](#)
- [GPRS_Tunnel Reports.](#)
- [Iu Reports.](#)
- [Neighbour Reports.](#)
- [NodeB Reports.](#)
- [Processor Reports.](#)
- [RNC Reports.](#)
- [Signalling_Link Reports.](#)

9.1 AAL2PATH Reports.

This section shows reports for the AAL2PATH object.

- [AAL2PATH Connection Report](#)

9.1.1 AAL2PATH Connection Report

AAL2PATH Connection Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.AAL2PATH
Primary Object	AAL2PATH
Connections	AAL2PATH.Huawei.AAL2PATH_Connections.VS_AAL2PATH_Act_Con, AAL2PATH.Huawei.AAL2PATH.VS_AAL2PATH_MeasKbps_Rx, AAL2PATH.Huawei.AAL2PATH.VS_AAL2PATH_MeasKbps_Tx, AAL2PATH.AAL2PATH_Id, AAL2PATH.Region_Id

9.2 ATM_Node Reports.

This section shows reports for the ATM_Node object.

- [ATMNode Connections and Allocations Report](#)

9.2.1 ATMNode Connections and Allocations Report

ATMNode Connections and Allocations Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.ATM_Node
Primary Object	ATM_Node
Allocations	ATM_Node.ATM_Node_Id, ATM_Node.Region_Id, ATM_Node.Huawei.QAAL2_Allocations.VS_QAAL2IP_AttResAllo c, ATM_Node.Huawei.QAAL2_Allocations.VS_QAAL2IP_SuccResAll oc, ATM_Node.Huawei.QAAL2_Allocations.VS_QAAL2PART_Allocated Bwd_AAL2BitRate, ATM_Node.Huawei.QAAL2_Allocations.VS_QAAL2PART_Allocated Fwd_AAL2BitRate, ATM_Node.Huawei.QAAL2_Allocations.VS_QAAL2_AllocatedBwd_ AAL2BitRate, ATM_Node.Huawei.QAAL2_Allocations.VS_QAAL2_AllocatedFwd_ AAL2BitRate
Connections	ATM_Node.Huawei.QAAL2_Connections.VS_QAAL2PART_ERQ_ Rx, ATM_Node.Huawei.QAAL2_Connections.VS_QAAL2PART_ERQ_ Tx, ATM_Node.Huawei.QAAL2_Connections.VS_QAAL2PART_Est_E CF_Rx, ATM_Node.Huawei.QAAL2_Connections.VS_QAAL2PART_Est_E CF_Tx, ATM_Node.Huawei.QAAL2_Connections.VS_QAAL2PART_Est_R LC_Cong_Rx, ATM_Node.Huawei.QAAL2_Connections.VS_QAAL2PART_Est_R LC_Cong_Tx, ATM_Node.Huawei.QAAL2_Connections.VS_QAAL2PART_Est_R LC_Fail_Rx,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

	ATM_Node.Huawei.QAAL2_Connections.VS_QAAL2PART_Est_RLC_Fail_Tx, ATM_Node.Huawei.QAAL2_Connections.VS_QAAL2PART_Est_RLC_Rx, ATM_Node.Huawei.QAAL2_Connections.VS_QAAL2PART_Est_RLC_Tx, ATM_Node.Huawei.QAAL2_Connections.VS_QAAL2PART_Rel_RLC_Rx, ATM_Node.Huawei.QAAL2_Connections.VS_QAAL2PART_Rel_RLC_Tx, ATM_Node.Huawei.QAAL2_Connections.VS_QAAL2PART_Rel_Rx, ATM_Node.Huawei.QAAL2_Connections.VS_QAAL2PART_Rel_Tx, ATM_Node.Huawei.QAAL2_Connections.VS_QAAL2PART_RxMod, ATM_Node.Huawei.QAAL2_Connections.VS_QAAL2PART_RxModRej, ATM_Node.Huawei.QAAL2_Connections.VS_QAAL2PART_TxMod, ATM_Node.Huawei.QAAL2_Connections.VS_QAAL2PART_TxModRej, ATM_Node.ATM_Node_Id, ATM_Node.Region_Id
--	--

9.3 Cell Reports.

This section shows reports for the Cell object.

- [Cell Hard Handover Failure Report](#)
- [Cell Inter RAT HO Incoming PS Report](#)
- [Cell Inter RAT HO Outgoing PS Report](#)
- [Cell RAB Abnrml Rls HSDPAHSUPA Report](#)
- [Cell Soft Handover Report](#)
- [Huawei UTRAN Cell Hard HO Global Report](#)
- [Huawei UTRAN Cell Hard HO Inter Freq 1 Report](#)
- [Huawei UTRAN Cell Hard HO Inter Freq 2 Report](#)
- [Huawei UTRAN Cell Hard HO Inter Freq 3 Report](#)
- [Huawei UTRAN Cell Hard HO Inter Freq 4 Report](#)
- [Huawei UTRAN Cell Hard HO Inter RNCCN Report](#)
- [Huawei UTRAN Cell Hard HO Intra Freq Report](#)
- [Huawei UTRAN Cell Hard HO Iur Report](#)
- [Huawei UTRAN Cell HSPDA Report](#)
- [Huawei UTRAN Cell HSUPA Report](#)
- [Huawei UTRAN Cell InterRAT HO In CS Report](#)
- [Huawei UTRAN Cell InterRAT HO In PS Report](#)
- [Huawei UTRAN Cell InterRAT HO PS Report](#)
- [Huawei UTRAN Cell RAB Establish AMR Report](#)

- [Huawei UTRAN Cell RAB Establish CS Failure Report](#)
- [Huawei UTRAN Cell RAB Establish CS Report](#)
- [Huawei UTRAN Cell RAB Establish PS Failure Report](#)
- [Huawei UTRAN Cell RAB Establish PS Report](#)
- [Huawei UTRAN Cell RAB Modify CS Report](#)
- [Huawei UTRAN Cell RAB Modify PS Report](#)
- [Huawei UTRAN Cell Radio Bearer Report](#)
- [Huawei UTRAN Cell Resource Report](#)
- [Huawei UTRAN Cell RRC Connect Global Report](#)
- [Huawei UTRAN Cell Service RRC Report](#)
- [Huawei UTRAN Cell Soft HO Report](#)
- [Huawei UTRAN Cell Traffic PS Report](#)
- [Huawei UTRAN Cell UL Speech Quality Report](#)

9.3.1 Cell Hard Handover Failure Report

Cell Hard Handover Failure Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
Hard Handover Fail	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.Hard_HO_Global.VS_HHO_Fail_RLAddFail_Out, Cell.Huawei.Hard_HO_Global.VS_HHO_Fail_RACDenyDL_Out, Cell.Huawei.Hard_HO_Global.VS_HHO_Fail_CfgUnsup_In, Cell.Huawei.Hard_HO_Global.VS_HHO_Fail_PhyChFail_In, Cell.Huawei.Hard_HO_Global.VS_HHO_Fail_Isr_In, Cell.Huawei.Hard_HO_Global.VS_HHO_Fail_CellUpd_In, Cell.Huawei.Hard_HO_Global.VS_HHO_Fail_InvCfg_In
Hard Handover Iur Fail	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.Hard_HO_Iur.VS_HHO_FailOInteRNiur_CfgUnsup, Cell.Huawei.Hard_HO_Iur.VS_HHO_FailOInteRNiur_PhChFail, Cell.Huawei.Hard_HO_Iur.VS_HHO_FailOInteRNiur_ISR, Cell.Huawei.Hard_HO_Iur.VS_HHO_FailOInteRNiur_InvCfg, Cell.Huawei.Hard_HO_Iur.VS_HHO_FailOInteRNiur_IncoCfg
Hard Handover Attempt	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.Hard_HO_Global.VS_HHO_Att_In, Cell.Huawei.Hard_HO_Global.VS_HHO_EvalIn,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

	Cell.Huawei.Hard_HO_Global.VS_HHO_EvalOut, Cell.Huawei.Hard_HO_Global.VS_HHO_AttInterCell_LB, Cell.Huawei.Hard_HO_Global.VS_HHO_SuccInterCell_LB, Cell.Huawei.Hard_HO_Global.VS_HHO_FailInterCell_NRly_LB
Hard Handover RNCCN Fail	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.Hard_HO_Inter_RNCCN.HHO_FailRelocPrepOutInterR NCCN_NoResAvail, Cell.Huawei.Hard_HO_Inter_RNCCN.HHO_FailRelocPrepOutInterR NCCN_TExp, Cell.Huawei.Hard_HO_Inter_RNCCN.HHO_FailRelocPrepOutInterR NCCN_TgtF, Cell.Huawei.Hard_HO_Inter_RNCCN.HHO_FailRelocPrepOutInterR NCCN_RNSp, Cell.Huawei.Hard_HO_Inter_RNCCN.HHO_FailRelocPrepOutInterR NCCN_RelocTgtNotAllo, Cell.Huawei.Hard_HO_Inter_RNCCN.HHO_FailRelocPrepOutInterR NCCN_OM, Cell.Huawei.Hard_HO_Inter_RNCCN.HHO_FailRelocPrepOutInterR NCCN_ResUnavail, Cell.Huawei.Hard_HO_Inter_RNCCN.HHO_FailRelocPrepOutInterR NCCN_UnspFail

9.3.2 Cell Inter RAT HO Incoming PS Report

Inter RAT Handover Incoming PS Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
Inter RAT Handover Incoming PS	Cell.Huawei.InterRAT_HO_Incoming_PS.VS_IRATHO_Reloc_FailI nPS_NRply, Cell.Huawei.InterRAT_HO_Incoming_PS.VS_IRATHO_Reloc_FailP repInPS_ReloNoSup, Cell.Huawei.InterRAT_HO_Incoming_PS.VS_IRATHO_Reloc_FailP repInPS_ResUnavail, Cell.Huawei.InterRAT_HO_Incoming_PS.VS_IRATHO_Reloc_FailP repInPS_TLoadHigher, Cell.Huawei.InterRAT_HO_Incoming_PS.VS_IRATHO_Reloc_FailP repInPS_TgtFail, Cell.Huawei.InterRAT_HO_Incoming_PS.VS_IRATHO_Reloc_Succ InPS, Cell.Huawei.InterRAT_HO_Incoming_PS.VS_IRATHO_Reloc_Succ PrepInPS, Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id

9.3.3 Cell Inter RAT HO Outgoing PS Report

Inter RAT Handover Outgoing Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
Inter RAT Handover Relocations Outgoing PS	Cell.Huawei.InterRAT_HO_Outgoing_PS.VS_IRATHO_Reloc_AttOutPSUTRAN, Cell.Huawei.InterRAT_HO_Outgoing_PS.VS_IRATHO_Reloc_AttPrepOutPS, Cell.Huawei.InterRAT_HO_Outgoing_PS.VS_IRATHO_Reloc_FailOutPSUTRAN_CfgUnsupp, Cell.Huawei.InterRAT_HO_Outgoing_PS.VS_IRATHO_Reloc_FailOutPSUTRAN_NRply, Cell.Huawei.InterRAT_HO_Outgoing_PS.VS_IRATHO_Reloc_FailOutPSUTRAN_PhyChFail, Cell.Huawei.InterRAT_HO_Outgoing_PS.VS_IRATHO_Reloc_FailPrepOutPS_NoResAvail, Cell.Huawei.InterRAT_HO_Outgoing_PS.VS_IRATHO_Reloc_FailPrepOutPS_ReloNoSup, Cell.Huawei.InterRAT_HO_Outgoing_PS.VS_IRATHO_Reloc_FailPrepOutPS_TAExp, Cell.Huawei.InterRAT_HO_Outgoing_PS.VS_IRATHO_Reloc_FailPrepOutPS_TLoadHigher, Cell.Huawei.InterRAT_HO_Outgoing_PS.VS_IRATHO_Reloc_FailPrepOutPS_TgtFail, Cell.Huawei.InterRAT_HO_Outgoing_PS.VS_IRATHO_Reloc_FailPrepOutPS_UKnowRNC, Cell.Huawei.InterRAT_HO_Outgoing_PS.VS_IRATHO_Reloc_SuccOutPSUTRAN, Cell.Huawei.InterRAT_HO_Outgoing_PS.VS_IRATHO_Reloc_SuccPrepOutPS, Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id

9.3.4 Cell RAB Abnrml Rls HSDPAHSUPA Report

RAB Abnormal Release HSDPA Report

Report Feature	Details
----------------	---------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
RAB Abnormal Release HSDPA_and_HSDPA	Cell.Huawei.RAB_Abnorm_Release_HSDPA.VS_RAB_RelReqPS_BE_HSDPA_Cong_Golden, Cell.Huawei.RAB_Abnorm_Release_HSDPA.VS_RAB_RelReqPS_BE_HSDPA_Cong_Silver, Cell.Huawei.RAB_Abnorm_Release_HSDPA.VS_RAB_RelReqPS_BE_HSDPA_Cong_Copper, Cell.Huawei.RAB_Abnorm_Release_HSUPA.VS_RAB_RelReqPS_BE_HSUPA_Cong_Golden, Cell.Huawei.RAB_Abnorm_Release_HSUPA.VS_RAB_RelReqPS_BE_HSUPA_Cong_Silver, Cell.Huawei.RAB_Abnorm_Release_HSUPA.VS_RAB_RelReqPS_BE_HSUPA_Cong_Copper, Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id

9.3.5 Cell Soft Handover Report

Cell Soft Handover Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
Soft Handover Attempt Success	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.Soft_Handover.VS_SHO_AMR_AttOut, Cell.Huawei.Soft_Handover.VS_SHO_CS64_AttOut, Cell.Huawei.Soft_Handover.VS_SHO_PS64_AttOut, Cell.Huawei.Soft_Handover.VS_SHO_PS128_AttOut, Cell.Huawei.Soft_Handover.VS_SHO_PS144_AttOut, Cell.Huawei.Soft_Handover.VS_SHO_PS384_AttOut, Cell.Huawei.Soft_Handover.VS_SHO_AMR_SuccOut, Cell.Huawei.Soft_Handover.VS_SHO_CS64_SuccOut, Cell.Huawei.Soft_Handover.VS_SHO_PS64_SuccOut, Cell.Huawei.Soft_Handover.VS_SHO_PS128_SuccOut, Cell.Huawei.Soft_Handover.VS_SHO_PS144_SuccOut, Cell.Huawei.Soft_Handover.VS_SHO_PS384_SuccOut
Softer Handover Failure	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.Soft_Handover.VS_SoHO_ASU_FailRLAdd_CfgUns, Cell.Huawei.Soft_Handover.VS_SoHO_ASU_FailRLAdd_Isr, Cell.Huawei.Soft_Handover.VS_SoHO_ASU_FailRLAdd_InvCfg, Cell.Huawei.Soft_Handover.VS_SoHO_ASU_FailRLAdd_NoRepl
Soft Handover Failure	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id,

	Cell.Huawei.Soft_Handover.SHO_FailRLAddUESide_CfgUnsup, Cell.Huawei.Soft_Handover.SHO_FailRLAddUESide_Isr, Cell.Huawei.Soft_Handover.SHO_FailRLAddUESide_InvCfg, Cell.Huawei.Soft_Handover.SHO_FailRLAddUESide_NoReply
--	---

9.3.6 Huawei UTRAN Cell Hard HO Global Report

Huawei UTRAN Cell Hard HO Global Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
% Successful Incoming Hard HO	Cell.Huawei.Hard_HO_Global._%_VS_HHO_Succ_In, Cell.Huawei.Hard_HO_Global.VS_HHO_Succ_In

9.3.7 Huawei UTRAN Cell Hard HO Inter Freq 1 Report

Huawei UTRAN Cell Hard HO Inter Frequency Incoming and Outgoing failure per cause report.

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
Outgoing Failures	Cell.Cell_Id, Cell.Cell_Name, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_InterFreqOut_PyhChFail, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_InterFreqOut_NoReply, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_InterFreqOut_FailUSR, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_InterFreqOut_DLCodeRej, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_InterFreqOut_DLAdmsnDeny, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_InterFreqOut_CfgUnsupp, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_InterFreqOut_CfgInvalid, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_InterFreqOut_CellUpdt, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_InterFreq_Out_Drop, Cell.BSC_Id, Cell.BS_Id
Incoming Failures	Cell.Cell_Id, Cell.Cell_Name,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

	Cell.Huawei.Hard_HO_InterFreq.VS_HHO_InterFreqIn_PyhChFail, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_InterFreqIn_NoReply, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_InterFreqIn_FailUSR, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_InterFreqIn_DLCodeRej, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_InterFreqIn_DLAdmsnDeny, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_InterFreqIn_CfgUnsupp, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_InterFreqIn_CfgInvalid, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_InterFreqIn_CellUpdt, Cell.Huawei.Hard_HO_InterFreq.Total_HHO_InterFreq_Drops, Cell.BSC_Id, Cell.BS_Id
--	---

9.3.8 Huawei UTRAN Cell Hard HO Inter Freq 2 Report

Huawei UTRAN Cell Hard HO Inter Frequency Report for NodeB

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
Intra NodeB HO	Cell.Cell_Id, Cell.Cell_Name, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_AttOutIntraNodeBInterFreq, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_FailOutIntraNodeBInterFreq_IncompCfg, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_FailOutIntraNodeBInterFreq_ISR, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_FailOutIntraNodeBInterFreq_PhyChFail, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_FailOutIntraNodeBInterFreq_CfgUnsup, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_FailOutIntraNodeBInterFreq_InvCfg, Cell.BSC_Id, Cell.BS_Id
Inter NodeB HO	Cell.Cell_Id, Cell.Cell_Name, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_FailOutInterNodeBIntraRNCInterFreq_CfgUnsup, Cell.Huawei.Hard_HO_InterFreq.FailOutInterNodeBIntraRNCInterFreq_PhyChFail, Cell.Huawei.Hard_HO_InterFreq.FailOutInterNodeBIntraRNCInterFreq_IncompCfg, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_FailOutInterNodeBIntraRNCInterFreq_InvCfg, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_FailOutInterNodeBIntraRNCInterFreq_ISR,

	Cell.Huawei.Hard_HO_InterFreq.VS_HHO_AttOutInterNodeBIntraRNCInterFreq, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_SuccOutInterNodeBIntraRNCInterFreq, Cell.BSC_Id, Cell.BS_Id
--	---

9.3.9 Huawei UTRAN Cell Hard HO Inter Freq 3 Report

Huawei UTRAN Cell Hard HO Inter Frequency Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
% Incoming Hard HO	Cell.Huawei.Hard_HO_InterFreq._%_VS_HHO_InterFreqIn_Succ, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_InterFreqIn_Succ
% Outgoing Hard HO	Cell.Huawei.Hard_HO_InterFreq._%_VS_HHO_InterFreq_SuccOut, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_InterFreq_SuccOut
Dropped Calls	Cell.Huawei.Hard_HO_InterFreq.Total_HHO_InterFreq_Drops

9.3.10 Huawei UTRAN Cell Hard HO Inter Freq 4 Report

Huawei UTRAN Cell Hard HO Inter Frequency Report for RNC

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
Inter RNC HO	Cell.Cell_Id, Cell.Cell_Name, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_FailOutInterRNCInterFreqCN_CfgUnsup, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_FailOutInterRNCInterFreqIur_CfgUnsup, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_FailOutInterRNCInterFreqCN_InvCfg, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_FailOutInterRNCInterFreqIur_InvCfg, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_FailOutInterRNCInterFreqCN_IncompCfg,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

	Cell.Huawei.Hard_HO_InterFreq.VS_HHO_FailOutInterRNCInterFreqIur_IncompCfg, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_FailOutInterRNCInterFreqCN_PhyChFail, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_FailOutInterRNCInterFreqIur_PhyChFail, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_AttOutInterRNCInterFreqCN, Cell.Huawei.Hard_HO_InterFreq.VS_HHO_AttOutInterRNCInterFreqIur
--	--

9.3.11 Huawei UTRAN Cell Hard HO Inter RNCCN Report

Huawei UTRAN Cell Hard HO Inter RNCCN Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
% Successful Reloc Prep Outgoing Hard HO	Cell.Huawei.Hard_HO_Inter_RNCCN._ _HHO_SuccAttRelocPrepOutInterRNCCN, Cell.Huawei.Hard_HO_Inter_RNCCN.HHO_AttRelocPrepOutInterRNCCN
Failed Relocation Preparations	Cell.Cell_Id, Cell.Cell_Name, Cell.Huawei.Hard_HO_Inter_RNCCN.HHO_FailRelocPrepOutInterRNCCN_RNSp, Cell.Huawei.Hard_HO_Inter_RNCCN.HHO_FailRelocPrepOutInterRNCCN_UnspFail, Cell.Huawei.Hard_HO_Inter_RNCCN.HHO_FailRelocPrepOutInterRNCCN_TgtF, Cell.Huawei.Hard_HO_Inter_RNCCN.HHO_FailRelocPrepOutInterRNCCN_TExp, Cell.Huawei.Hard_HO_Inter_RNCCN.HHO_FailRelocPrepOutInterRNCCN_ResUnavail, Cell.Huawei.Hard_HO_Inter_RNCCN.HHO_FailRelocPrepOutInterRNCCN_RelocTgtNotAllo, Cell.Huawei.Hard_HO_Inter_RNCCN.HHO_FailRelocPrepOutInterRNCCN_OM, Cell.Huawei.Hard_HO_Inter_RNCCN.HHO_FailRelocPrepOutInterRNCCN_NoResAvail, Cell.BSC_Id, Cell.BS_Id

9.3.12 Huawei UTRAN Cell Hard HO Intra Freq Report

Huawei UTRAN Cell Hard HO Intra Frequency Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
% Successful intra NodeB	Cell.Huawei.Hard_HO_IntraFreq._ %_VS_HHO_SuccOutIntraNodeBIntraFreq, Cell.Huawei.Hard_HO_IntraFreq.VS_HHO_SuccOutIntraNodeBIntraFreq
% Successful inter NodeB	Cell.Huawei.Hard_HO_IntraFreq._ %_VS_HHO_SuccOutInterNodeBIntraRNCIntraFreq, Cell.Huawei.Hard_HO_IntraFreq.VS_HHO_SuccOutInterNodeBIntraRNCIntraFreq
% Successful relocations	Cell.Huawei.Hard_HO_IntraFreq._ %_VS_HHO_SuccOutInterRNCIntraFreqCN, Cell.Huawei.Hard_HO_IntraFreq.VS_HHO_SuccOutInterRNCIntraFreqCN
HHO Attempt Success	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.Hard_HO_IntraFreq.VS_HHO_AttOutIntraNodeBIntraFreq, Cell.Huawei.Hard_HO_IntraFreq.VS_HHO_SuccOutIntraNodeBIntraFreq, Cell.Huawei.Hard_HO_IntraFreq.VS_HHO_AttOutInterNodeBIntraRNCIntraFreq, Cell.Huawei.Hard_HO_IntraFreq.VS_HHO_SuccOutInterNodeBIntraRNCIntraFreq, Cell.Huawei.Hard_HO_IntraFreq.VS_HHO_AttOutInterRNCIntraFreqCN, Cell.Huawei.Hard_HO_IntraFreq.VS_HHO_SuccOutInterRNCIntraFreqCN
HHO Failure	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.Hard_HO_IntraFreq.VS_HHO_FailOutIntraNodeBIntraFreq_CfgUnsup, Cell.Huawei.Hard_HO_IntraFreq.VS_HHO_FailOutIntraNodeBIntraFreq_PhyChFail, Cell.Huawei.Hard_HO_IntraFreq.VS_HHO_FailOutIntraNodeBIntraFreq_ISR, Cell.Huawei.Hard_HO_IntraFreq.VS_HHO_FailOutIntraNodeBIntraFreq_InvCfg,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

	Cell.Huawei.Hard_HO_IntraFreq.VS_HHO_FailOutIntraNodeBIntraFreq_IncompCfg, Cell.Huawei.Hard_HO_IntraFreq.VS_HHO_FailOutInterNodeBIntraRNCIntraFreq_CfgUnsup, Cell.Huawei.Hard_HO_IntraFreq.VS_HHO_FailOutInterNodeBIntraRNCIntraFreq_ISR, Cell.Huawei.Hard_HO_IntraFreq.VS_HHO_FailOutInterNodeBIntraRNCIntraFreq_InvCfg
--	---

9.3.13 Huawei UTRAN Cell Hard HO Iur Report

Huawei UTRAN Cell Hard HO Iur Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
% Successful outgoing intra frequency HO	Cell.Huawei.Hard_HO_Iur._%_VS_HHO_SuccOutInterRNCIntraFreqIur, Cell.Huawei.Hard_HO_Iur.VS_HHO_SuccOutInterRNCIntraFreqIur

9.3.14 Huawei UTRAN Cell HSDPA Report

Huawei UTRAN Cell HSDPA Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
% Successful Setups	Cell.Huawei.HSDPA._%_VS_HSDPA_RAB_SuccEstab, Cell.Huawei.HSDPA.VS_HSDPA_RAB_SuccEstab
HSDPA Performance	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.HSDPA.VS_HSDPA_RAB_AttEstab, Cell.Huawei.HSDPA.VS_HSDPA_RAB_SuccEstab, Cell.Huawei.HSDPA.VS_HSDPA_MACD_Mean_Cell, Cell.Huawei.HSDPA.VS_HSDPA_MACD_Rel, Cell.Huawei.HSDPA.VS_HSDPA_MACDFailDelPerCell, Cell.Huawei.HSDPA.VS_HSDPA_MACDFailStpPerCell, Cell.Huawei.HSDPA.VS_HSDPA_MACDSuccDelPerCell, Cell.Huawei.HSDPA.VS_HSDPA_MACDSuccStpPerCell, Cell.Huawei.HSDPA.VS_HSDPA_RAB_Loss_InActivity, Cell.Huawei.HSDPA.VS_HSDPA_RAB_Loss_Abnorm_NonRF, Cell.Huawei.HSDPA.VS_HSDPA_RAB_Loss_RF,

	Cell.Huawei.HSDPA.VS_HSDPA_RAB_Loss_Norm, Cell.Huawei.HSDPA.VS_HSDPA_UE_Mean_Cell
HSDPA Throughput	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.HSDPA.VS_HSDPA_MeanChThroughput, Cell.Huawei.HSDPA.VS_HSDPA_MeanChThroughput_TotalBytes

9.3.15 Huawei UTRAN Cell HSUPA Report

Huawei UTRAN Cell HSUPA Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
% Successful HSUPA RAB Established	Cell.Huawei.HSUPA._%_HSUPA_RAB_SuccEstab, Cell.Huawei.HSUPA.HSUPA_RAB_SuccEstab
HSUPA Performance	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.HSUPA.HSUPA_RAB_AttEstab, Cell.Huawei.HSUPA.HSUPA_RAB_SuccEstab, Cell.Huawei.HSUPA.HSUPA_MACDSuccStpPerCell, Cell.Huawei.HSUPA.HSUPA_MACDFailStpPerCell, Cell.Huawei.HSUPA.HSUPA_MACDSuccDelPerCell, Cell.Huawei.HSUPA.HSUPA_MACDFailDelPerCell, Cell.Huawei.HSUPA.VS_HSUPA_UE_Mean_Cell, Cell.Huawei.HSUPA.HSUPA_RAB_Loss_Abnorm, Cell.Huawei.HSUPA.HSUPA_RAB_Loss_Norm, Cell.Huawei.HSUPA.HSUPA_RAB_Loss_UEGen
HSUPA Throughput	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.HSUPA.HSUPA_MeanChThroughput, Cell.Huawei.HSUPA.HSUPA_MeanChThroughput_TotByte

9.3.16 Huawei UTRAN Cell InterRAT HO In CS Report

Huawei UTRAN Cell InterRAT HO Incoming CS Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Primary Object	Cell
% Successful CS Incoming HO	Cell.Huawei.InterRAT_HO_Incoming_CS._%_IRATHO_SuccIncCS, Cell.Huawei.InterRAT_HO_Incoming_CS.IRATHO_SuccIncCS

9.3.17 Huawei UTRAN Cell InterRAT HO In PS Report

Huawei UTRAN Cell InterRAT HO Incoming PS Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
% Successful Load	Cell.Huawei.InterRAT_HO_PS._%_VS_IRATHO_Load_SuccOutPSUTRAN, Cell.Huawei.InterRAT_HO_PS.VS_IRATHO_Load_SuccOutPSUTRAN
% Successful UE	Cell.Huawei.InterRAT_HO_PS._%_IRATHO_SuccOutPSUE, Cell.Huawei.InterRAT_HO_PS.IRATHO_SuccOutPSUE
% Successful RF	Cell.Huawei.InterRAT_HO_PS._%_VS_IRATHO_RF_SuccOutPSUTRAN, Cell.Huawei.InterRAT_HO_PS.VS_IRATHO_RF_SuccOutPSUTRAN
% Successful Services	Cell.Huawei.InterRAT_HO_PS._%_IRATHO_Srvc_SuccOutPSUTRAN, Cell.Huawei.InterRAT_HO_PS.VS_IRATHO_Service_SuccOutPSUTRAN

9.3.18 Huawei UTRAN Cell InterRAT HO PS Report

Huawei UTRAN Cell InterRAT HO PS Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
% Successful HSUPA	Cell.Huawei.InterRAT_HO_PS._%_HSUPA_IRATHO_SuccOutPSUTRAN, Cell.Huawei.InterRAT_HO_PS.HSUPA_IRATHO_SuccOutPSUTRAN
% Successful HSDPA	Cell.Huawei.InterRAT_HO_PS._%_IRATHO_HSDPA_SuccOutPSUTRAN,

	Cell.Huawei.InterRAT_HO_PS.VS_IRATHO_HSDPA_SuccOutPSUTRAN
InterRAT Handover	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.InterRAT_HO_PS.IRATHO_AttOutPSUTRAN, Cell.Huawei.InterRAT_HO_PS.IRATHO_SuccOutPSUTRAN, Cell.Huawei.InterRAT_HO_PS.IRATHO_FailOutPSUTRAN_CfgUn supp, Cell.Huawei.InterRAT_HO_PS.IRATHO_FailOutPSUTRAN_PhyCh Fail, Cell.Huawei.InterRAT_HO_PS.HSUPA_IRATHO_AttOutPSUTRAN , Cell.Huawei.InterRAT_HO_PS.HSUPA_IRATHO_SuccOutPSUTRA N

9.3.19 Huawei UTRAN Cell RAB Establish AMR Report

Huawei UTRAN Cell RAB Establishment AMR Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
% Successful AMRWB RABs Established	Cell.Huawei.RAB_Establishment_AMR_WB._ %_VS_RAB_SuccEstab_AMRWB, Cell.Huawei.RAB_Establishment_AMR_WB.VS_RAB_SuccEstab_A MRWB
% Successful CS RABs Established	Cell.Huawei.RAB_Establishment_AMR._ %_VS_RAB_SuccEstab_AMR, Cell.Huawei.RAB_Establishment_AMR.VS_RAB_SuccEstab_AMR

9.3.20 Huawei UTRAN Cell RAB Establish CS Failure Report

Huawei UTRAN Cell RAB Establishment CS Failure Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

CS RAB Establishment Fail	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.RAB_Establish_Failure_CS.VS_RAB_FailEstabCS_Con g, Cell.Huawei.RAB_Establish_Failure_CS.VS_RAB_FailEstabCS_RN L, Cell.Huawei.RAB_Establish_Failure_CS.VS_RAB_FailEstabCS_TN L, Cell.Huawei.RAB_Establish_Failure_CS.VS_RAB_FailEstCS_Relo, Cell.Huawei.RAB_Establish_Failure_CS.VS_RAB_FailEstCS_RIPFa il, Cell.Huawei.RAB_Establish_Failure_CS.VS_RAB_FailEstCS_Unsp, Cell.Huawei.RAB_Establish_Failure_CS.VS_RAB_FailEstCs_Power _Cong, Cell.Huawei.RAB_Establish_Failure_CS.VS_RAB_FailEstCs_ULCE _Cong, Cell.Huawei.RAB_Establish_Failure_CS.VS_RAB_FailEstCs_DLCE _Cong, Cell.Huawei.RAB_Establish_Failure_CS.VS_RAB_FailEstCs_Code_ Cong, Cell.Huawei.RAB_Establish_Failure_CS.VS_RAB_FailEstCs_IUB_B and
CS RAB Loss	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.RAB_Abnorm_Release_CS.VS_RAB_Loss_CS_AMR_ 12_2, Cell.Huawei.RAB_Abnorm_Release_CS.VS_RAB_Loss_CS_AMR_ 4_75, Cell.Huawei.RAB_Abnorm_Release_CS.VS_RAB_Loss_CS_AMR_ 5_9, Cell.Huawei.RAB_Abnorm_Release_CS.VS_RAB_Loss_CS_AMR_ 7_95, Cell.Huawei.RAB_Abnorm_Release_CS.VS_RAB_Loss_CS_AMRW B_12_65, Cell.Huawei.RAB_Abnorm_Release_CS.VS_RAB_Loss_CS_AMRW B_8_85, Cell.Huawei.RAB_Abnorm_Release_CS.VS_RAB_Loss_CS_Congsti on_CELL, Cell.Huawei.RAB_Abnorm_Release_CS.VS_RAB_Loss_CS_Conv64 K, Cell.Huawei.RAB_Abnorm_Release_CS.VS_RAB_Loss_CS_Norm, Cell.Huawei.RAB_Abnorm_Release_CS.VS_RAB_Loss_CS_Norm_ AcCell, Cell.Huawei.RAB_Abnorm_Release_CS.VS_RAB_Loss_CS_Norm_ AMR, Cell.Huawei.RAB_Abnorm_Release_CS.VS_RAB_Loss_CS_Norm_ AMR_AcCell,

	Cell.Huawei.RAB_Abnorm_Release_CS.VS_RAB_Loss_CS_RF, Cell.Huawei.RAB_Abnorm_Release_CS.VS_RAB_Loss_CS_RF_Ac Cell, Cell.Huawei.RAB_Abnorm_Release_CS.VS_RAB_Loss_CS_RF_A MR, Cell.Huawei.RAB_Abnorm_Release_CS.VS_RAB_Loss_CS_RF_A MR_AcCell
--	---

9.3.21 Huawei UTRAN Cell RAB Establish CS Report

Huawei UTRAN Cell RAB Establishment CS Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
% Successful CS Conv RABs Established	Cell.Huawei.RAB_Establishment_CS_Conv._ %_VS_RAB_SuccEstabCS_Conv, Cell.Huawei.RAB_Establishment_CS_Conv.VS_RAB_SuccEstabCS_Conv
% Successful CS Streaming RAB Establishments	Cell.Huawei.RAB_Establishment_CS_Stream._ %_VS_RAB_SuccEstabCS_Str, Cell.Huawei.RAB_Establishment_CS_Stream.VS_RAB_SuccEstabCS_Str

9.3.22 Huawei UTRAN Cell RAB Establish PS Failure Report

Huawei UTRAN Cell RAB Establish PS Failure Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
PS RAB Estbalishment Fail	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.RAB_Establish_Failure_PS.VS_RAB_FailEstPS_Par, Cell.Huawei.RAB_Establish_Failure_PS.VS_RAB_FailEstPS_Relo, Cell.Huawei.RAB_Establish_Failure_PS.VS_RAB_FailEstPS_RIPFail, Cell.Huawei.RAB_Establish_Failure_PS.VS_RAB_FailEstPS_Unsp,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

	Cell.Huawei.RAB_Establish_Failure_PS.VS_RAB_FailEstPS_NResAvail, Cell.Huawei.RAB_Establish_Failure_PS.VS_RAB_FailEstPS_RNL, Cell.Huawei.RAB_Establish_Failure_PS.VS_RAB_FailEstPS_TNL, Cell.Huawei.RAB_Establish_Failure_PS.VS_RAB_FailEstPs_ULCE_Cong, Cell.Huawei.RAB_Establish_Failure_PS.VS_RAB_FailEstPs_DLCE_Cong, Cell.Huawei.RAB_Establish_Failure_PS.VS_RAB_FailEstPs_Code_Cong, Cell.Huawei.RAB_Establish_Failure_PS.VS_RAB_FailEstPs_IUB_Band
PS RAB Loss	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.RAB_Abnorm_Release_PS.VS_RAB_Loss_PS_Abnorm, Cell.Huawei.RAB_Abnorm_Release_PS.VS_RAB_Loss_PS_Abnorm_AcCell, Cell.Huawei.RAB_Abnorm_Release_PS.VS_RAB_Loss_PS_Congestion_CELL, Cell.Huawei.RAB_Abnorm_Release_PS.VS_RAB_Loss_PS_GTPULoss, Cell.Huawei.RAB_Abnorm_Release_PS.VS_RAB_Loss_PS_Norm, Cell.Huawei.RAB_Abnorm_Release_PS.VS_RAB_Loss_PS_RF, Cell.Huawei.RAB_Abnorm_Release_PS.VS_RAB_Loss_PS_RF_AcCell, Cell.Huawei.RAB_Abnorm_Release_PS.VS_RAB_Loss_PS_RF_Other, Cell.Huawei.RAB_Abnorm_Release_PS.VS_RAB_Loss_PS_RF_RL_CRst, Cell.Huawei.RAB_Abnorm_Release_PS.VS_RAB_Loss_PS_RF_ULSync, Cell.Huawei.RAB_Abnorm_Release_PS.VS_RAB_Loss_PS_RF_UuNoReply, Cell.Huawei.RAB_Abnorm_Release_PS.VS_RAB_Loss_PS_SRBReset, Cell.Huawei.RAB_Abnorm_Release_PS.VS_RAB_Loss_PS_TRBReset, Cell.Huawei.RAB_Abnorm_Release_PS.VS_RAB_Loss_PS_UEGen

9.3.23 Huawei UTRAN Cell RAB Establish PS Report

Huawei UTRAN Cell RAB Establishment PS Report

Report Feature	Details
----------------	---------

Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
% Successful PS Background RABs Established	Cell.Huawei.RAB_Establishment_PS_Bkg._ %_VS_RAB_SuccEstabPS_Bkg, Cell.Huawei.RAB_Establishment_PS_Bkg.VS_RAB_SuccEstabPS_Bkg
% Successful PS Conversational RAB Establishment	Cell.Huawei.RAB_Establishment_PS_Conv._ %_VS_RAB_SuccEstabPS_Conv, Cell.Huawei.RAB_Establishment_PS_Conv.VS_RAB_SuccEstabPS_Conv
% Successful PS Streaming RAB Establishments	Cell.Huawei.RAB_Establishment_PS_Stream._ %_VS_RAB_SuccEstabPS_Str, Cell.Huawei.RAB_Establishment_PS_Stream.VS_RAB_SuccEstabPS_Str
% Successful PS Inter RAB Establishment	Cell.Huawei.RAB_Establishment_PS_Inter._ %_VS_RAB_SuccEstabPS_Inter, Cell.Huawei.RAB_Establishment_PS_Inter.VS_RAB_SuccEstabPS_Inter

9.3.24 Huawei UTRAN Cell RAB Modify CS Report

Huawei UTRAN Cell RAB Modify CS Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
% Successful Modify CS Conv RAB	Cell.Huawei.RAB_Modify_CS._%_VS_RAB_SuccModCS_Conv, Cell.Huawei.RAB_Modify_CS.VS_RAB_SuccModCS_Conv
% Successful Modify CS Stream RAB	Cell.Huawei.RAB_Modify_CS._%_VS_RAB_SuccModCS_Str, Cell.Huawei.RAB_Modify_CS.VS_RAB_SuccModCS_Str

9.3.25 Huawei UTRAN Cell RAB Modify PS Report

Huawei UTRAN Cell RAB Modify PS Report

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
% Successful Modify PS Conv RABs	Cell.Huawei.RAB_Modify_PS._%_VS_RAB_SuccModPS_Conv, Cell.Huawei.RAB_Modify_PS.VS_RAB_SuccModPS_Conv
% Successful Modify PS Background RABs	Cell.Huawei.RAB_Modify_PS._%_VS_RAB_SuccModPS_Bkg, Cell.Huawei.RAB_Modify_PS.VS_RAB_SuccModPS_Bkg
% Successful Modify PS Inter RABs	Cell.Huawei.RAB_Modify_PS._%_VS_RAB_SuccModPS_Inter, Cell.Huawei.RAB_Modify_PS.VS_RAB_SuccModPS_Inter
% Successful Modify PS Stream RABs	Cell.Huawei.RAB_Modify_PS._%_VS_RAB_SuccModPS_Str, Cell.Huawei.RAB_Modify_PS.VS_RAB_SuccModPS_Str

9.3.26 Huawei UTRAN Cell Radio Bearer Report

Huawei UTRAN Cell Radio Bearer Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
% Successful RB Reconfiguration	Cell.Huawei.Radio_Bearer._%_VS_SuccRBRecfg, Cell.Huawei.Radio_Bearer.VS_SuccRBRecfg
% Successful RB Release	Cell.Huawei.Radio_Bearer._%_VS_SuccRBRel, Cell.Huawei.Radio_Bearer.VS_SuccRBRel
% Successful RB Setup	Cell.Huawei.Radio_Bearer._%_VS_SuccRBSetup, Cell.Huawei.Radio_Bearer.VS_SuccRBSetup

9.3.27 Huawei UTRAN Cell Resource Report

Huawei UTRAN Cell Resource Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
Cell Power	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.Rx_and_Tx_Power.VS_MeanRTWP, Cell.Huawei.Rx_and_Tx_Power.VS_MinRTWP, Cell.Huawei.Rx_and_Tx_Power.VS_MaxRTWP,

	Cell.Huawei.Rx_and_Tx_Power.VS_MeanTCP, Cell.Huawei.Rx_and_Tx_Power.VS_MinTCP, Cell.Huawei.Rx_and_Tx_Power.VS_MaxTCP, Cell.Huawei.Rx_and_Tx_Power.VS_MeanTCP_NonHS, Cell.Huawei.Rx_and_Tx_Power.VS_MaxTCP_NonHS, Cell.Huawei.Rx_and_Tx_Power.VS_MinTCP_NonHS, Cell.Huawei.Rx_and_Tx_Power.VS_HSDPA_MeanRequiredPwr, Cell.Huawei.Rx_and_Tx_Power.VS_HSDPA_MinRequiredPwr, Cell.Huawei.Rx_and_Tx_Power.VS_HSDPA_MaxRequiredPwr
Channel Switching Breathing	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.Channel_Switching.VS_DCCC_D2C_Att, Cell.Huawei.Channel_Switching.VS_DCCC_D2C_Succ, Cell.Huawei.Channel_Switching.VS_DCCC_C2D_Att, Cell.Huawei.Channel_Switching.VS_DCCC_C2D_Succ, Cell.Huawei.Cell_Breathing.VS_CellBreath_CPICHMin_Time, Cell.Huawei.Cell_Breathing.VS_CellBreath_CPICHMax_Time, Cell.Huawei.Cell_Breathing.VS_CellBreath_CPICHUp, Cell.Huawei.Cell_Breathing.VS_CellBreath_CPICHDown, Cell.Huawei.Cell_Breathing.VS_CellBreath_TCPUnder_Time, Cell.Huawei.Cell_Breathing.VS_CellBreath_TCPOver_Time
Radio Admission	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.Radio_Admission_Control.VS_RAC_HHOCallReq, Cell.Huawei.Radio_Admission_Control.VS_RAC_NewCallAcc, Cell.Huawei.Radio_Admission_Control.VS_RAC_ReconfigCallReq, Cell.Huawei.Radio_Admission_Control.VS_RAC_ReconfigCallAcc, Cell.Huawei.Radio_Admission_Control.VS_RAC_TrChSwitchCallReq, Cell.Huawei.Radio_Admission_Control.VS_RAC_TrChSwitchCallAcc

9.3.28 Huawei UTRAN Cell RRC Connect Global Report

Huawei UTRAN Cell RRC Connection Global Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
% Successful Outgoing DRDs	Cell.Huawei.RRC_Connection_Global._

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

	%_VS_DRD_RRC_Out_Succ, Cell.Huawei.RRC_Connection_Global.VS_DRD_RRC_Out_Succ
% Successful Connections CCH	Cell.Huawei.RRC_Connection_Global._ %_VS_RRC_SuccConEst_CCH, Cell.Huawei.RRC_Connection_Global.VS_RRC_SuccConEst_CCH
% Successful Connections DCH	Cell.Huawei.RRC_Connection_Global._ %_VS_RRC_SuccConEst_DCH, Cell.Huawei.RRC_Connection_Global.VS_RRC_SuccConEst_DCH

9.3.29 Huawei UTRAN Cell Service RRC Report

Huawei UTRAN Cell Service RRC Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
RRC Connection	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.RRC_Connection_Global.VS_RRC_AttConnEstab_Cell, Cell.Huawei.RRC_Connection_Global.VS_RRC_SuccConnEstab_Cell, Cell.Huawei.RRC_Connection_Global.VS_RRC_AttConEst_CCH, Cell.Huawei.RRC_Connection_Global.VS_RRC_AttConEst_DCH, Cell.Huawei.RRC_Connection_Global.VS_RRC_SuccConEst_CCH, Cell.Huawei.RRC_Connection_Global.VS_RRC_SuccConEst_DCH, Cell.Huawei.RRC_Connection_Global.VS_RRC_AttConnEstab_EDCH, Cell.Huawei.RRC_Connection_Global.VS_RRC_AttConnEstab_HSDSCH, Cell.Huawei.RRC_Connection_Global.VS_RRC_SuccConnEstab_EDCH, Cell.Huawei.RRC_Connection_Global.VS_RRC_SuccConnEstab_HSDSCH
Establishment per cause	Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id, Cell.Huawei.RRC_Connection_Request_per_cause.RRC_AttConnEstab_OrgConvCall, Cell.Huawei.RRC_Connection_Request_per_cause.RRC_AttConnEstab_OrgStrCall, Cell.Huawei.RRC_Connection_Request_per_cause.RRC_AttConnEstab_OrgInterCall, Cell.Huawei.RRC_Connection_Request_per_cause.RRC_AttConnEstab_OrgBkgCall, Cell.Huawei.RRC_Connection_Request_per_cause.RRC_AttConnEstab_OgSubCall,

	Cell.Huawei.RRC_Connection_Request_per_cause.RRC_AttConnEst ab_TmConvCall, Cell.Huawei.RRC_Connection_Request_per_cause.RRC_AttConnEst ab_TmStrCall, Cell.Huawei.RRC_Connection_Request_per_cause.RRC_AttConnEst ab_TmInterCall, Cell.Huawei.RRC_Connection_Request_per_cause.RRC_AttConnEst ab_TmBkgCall, Cell.Huawei.RRC_Connection_Request_per_cause.RRC_AttConnEst ab_EmgCall, Cell.Huawei.RRC_Connection_Request_per_cause.RRC_AttConnEst ab_IRATCelRes, Cell.Huawei.RRC_Connection_Request_per_cause.RRC_AttConnEst ab_IRATCCO, Cell.Huawei.RRC_Connection_Request_per_cause.RRC_AttConnEst ab_Reg, Cell.Huawei.RRC_Connection_Request_per_cause.RRC_AttConnEst ab_Detach, Cell.Huawei.RRC_Connection_Request_per_cause.RRC_AttConnEst ab_OgHhPrSig, Cell.Huawei.RRC_Connection_Request_per_cause.RRC_AttConnEst ab_OgLwPrSig, Cell.Huawei.RRC_Connection_Request_per_cause.RRC_AttConnEst ab_CallReEst, Cell.Huawei.RRC_Connection_Request_per_cause.RRC_AttConnEst ab_TmHhPrSig, Cell.Huawei.RRC_Connection_Request_per_cause.RRC_AttConnEst ab_TmLwPrSig, Cell.Huawei.RRC_Connection_Request_per_cause.RRC_AttConnEst ab_Unknown
--	--

9.3.30 Huawei UTRAN Cell Soft HO Report

Huawei UTRAN Cell Soft Handover Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

% Successful First RL Setup	Cell.Huawei.Soft_Handover._%_VS_FirstRLSetup_Succ, Cell.Huawei.Soft_Handover.VS_FirstRLSetup_Succ
% Successful AMR Outgoing	Cell.Huawei.Soft_Handover._%_VS_SHO_AMR_SuccOut, Cell.Huawei.Soft_Handover.VS_SHO_AMR_SuccOut
% Successful RL Add SRNS	Cell.Huawei.Soft_Handover._%_VS_SHO_SuccRLAddSRNS, Cell.Huawei.Soft_Handover.VS_SHO_SuccRLAddSRNS

9.3.31 Huawei UTRAN Cell Traffic PS Report

Huawei UTRAN Cell Traffic PS Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
Cell Traffic	Cell.Huawei.Traffic_PS.Cell_Traffic_busy_hour
UL MAC PDUs	Cell.Huawei.Traffic_PS.Total_VS_MAC_SRNCIubBytesPS_Rx
DL MAC PDUs	Cell.Huawei.Traffic_PS.Total_VS_MAC_SRNCIubBytesPS_Tx

9.3.32 Huawei UTRAN Cell UL Speech Quality Report

Huawei UTRAN Cell UL Speech Quality Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Cell
Primary Object	Cell
UL Speech Quality Report	Cell.Huawei.UL_Speech_Quality.VS_Speech_SQI_Accept, Cell.Huawei.UL_Speech_Quality.VS_Speech_SQI_Bad, Cell.Huawei.UL_Speech_Quality.VS_Speech_SQI_Good, Cell.Cell_Id, Cell.BS_Id, Cell.BSC_Id

9.4 GPRS_Tunnel Reports.

This section shows reports for the GPRS_Tunnel object.

- [Huawei UTRAN GPRS Tunnel Report](#)

9.4.1 Huawei UTRAN GPRS Tunnel Report

Huawei UTRAN GPRS Tunnel Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.GPRS_Tunnel
Primary Object	GPRS_Tunnel
GTPU PDU Bytes	GPRS_Tunnel.Huawei.GTP_U.Total_VS_GTPU_BytesPayldBkg, GPRS_Tunnel.Huawei.GTP_U.Total_VS_GTPU_BytesPayldConv, GPRS_Tunnel.Huawei.GTP_U.Total_VS_GTPU_BytesPayldStr, GPRS_Tunnel.Huawei.GTP_U.Total_VS_GTPU_BytesPayldInt
GTPU Packets	GPRS_Tunnel.Huawei.GTP_U.Total_VS_GTPU_Pkt
GTPI Buffer Overload Loss	GPRS_Tunnel.Huawei.GTP_U.Total_VS_GTPU_PktLossBuffOverld

9.5 Iu Reports.

This section shows reports for the Iu object.

- [Huawei UTRAN Iu Interface CS Report](#)
- [Huawei UTRAN Iu Interface PS Report](#)

9.5.1 Huawei UTRAN Iu Interface CS Report

Huawei UTRAN Iu Interface CS Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Iu
Primary Object	Iu
Total Payload	Iu.Huawei.IU_CS_Bytes.Total_VS_IuCS_BytesPayld_Tx, Iu.Huawei.IU_CS_Bytes.Total_VS_IuCS_BytesPayld_Rx
Payload Service	Iu.Huawei.IU_CS_Bytes.Total_VS_IuCS_BytesPayldConv, Iu.Huawei.IU_CS_Bytes.Total_VS_IuCS_BytesPayldStr

9.5.2 Huawei UTRAN Iu Interface PS Report

Huawei UTRAN Iu Interface PS Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Iu

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Primary Object	Iu
Total Payload	Iu.Huawei.IU_PS_Bytes.Total_VS_IuPS_BytesPayld_Rx, Iu.Huawei.IU_PS_Bytes.Total_VS_IuPS_BytesPayld_Tx
Payload Service	Iu.Huawei.IU_PS_Bytes.Total_VS_IuPS_BytesPayldConv, Iu.Huawei.IU_PS_Bytes.Total_VS_IuPS_BytesPayldBgnd, Iu.Huawei.IU_PS_Bytes.Total_VS_IuPS_BytesPayldIntact, Iu.Huawei.IU_PS_Bytes.Total_VS_IuPS_BytesPayldStr

9.6 Neighbour Reports.

This section shows reports for the Neighbour object.

- [Huawei UTRAN Neighbour Handover Cell Report](#)
- [Huawei UTRAN Neighbour Inter RAT Handover Report](#)

9.6.1 Huawei UTRAN Neighbour Handover Cell Report

Huawei UTRAN Neighbour Handover Cell Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Neighbour
Primary Object	Neighbour
3G to 3G Handover	Neighbour.Neighbour_Id, Neighbour.Source_Cell_Id, Neighbour.Huawei.Handover_3G_3G_per_Neighbour.VS_SHO_AttA SU_N, Neighbour.Huawei.Handover_3G_3G_per_Neighbour.VS_SHO_AddR LAtt_NCell, Neighbour.Huawei.Handover_3G_3G_per_Neighbour.VS_SHO_DelR LAtt_NCell, Neighbour.Huawei.Handover_3G_3G_per_Neighbour.VS_SHO_Repla ceRLAtt_NCell, Neighbour.Huawei.Handover_3G_3G_per_Neighbour.VS_HHO_AttO utInterCell_N, Neighbour.Huawei.Handover_3G_3G_per_Neighbour.VS_HSDPA_H HO_NoChR_Att_N

9.6.2 Huawei UTRAN Neighbour Inter RAT Handover Report

Huawei UTRAN Neighbour Inter RAT Handover Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Neighbour

Primary Object	Neighbour
InterRAT Handover	Neighbour.Neighbour_Id, Neighbour.Source_Cell_Id, Neighbour.Huawei.InterRAT_HO_per_Neighbour.VS_IRATHO_AtOutCS_N, Neighbour.Huawei.InterRAT_HO_per_Neighbour.VS_IRATHO_AtOutPSUTRAN_N, Neighbour.Huawei.InterRAT_HO_per_Neighbour.VS_IRATHO_SuccOutCS_N, Neighbour.Huawei.InterRAT_HO_per_Neighbour.VS_IRATHO_SuccOutPSUTRAN_N

9.7 NodeB Reports.

This section shows reports for the NodeB object.

- [Huawei UTRAN NodeB Availability Report](#)
- [Huawei UTRAN NodeB IuB Congestion Report](#)

9.7.1 Huawei UTRAN NodeB Availability Report

Huawei UTRAN NodeB Availability Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.NodeB
Primary Object	NodeB
NodeB Availability	NodeB.Huawei.NodeB_Availability.VS_NodeB_Ratio_UnavailTime_OM, NodeB.Huawei.NodeB_Availability.VS_NodeB_UnavailTime_OM

9.7.2 Huawei UTRAN NodeB IuB Congestion Report

Huawei UTRAN NodeB IuB Congestion Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.NodeB
Primary Object	NodeB
NodeB IuB Congestion	NodeB.NodeB_Id, NodeB.NodeB_Name, NodeB.RNC_Id,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

	NodeB.Huawei.Iub_Congestion.VS_IUB_CongDL, NodeB.Huawei.Iub_Congestion.VS_IUB_CongUL, NodeB.Huawei.Iub_Congestion.VS_IUB_TimeCongDL, NodeB.Huawei.Iub_Congestion.VS_IUB_TimeCongUL
--	---

9.8 Processor Reports.

This section shows reports for the Processor object.

- [Huawei UTRAN Proc HPU CPU Util Report](#)
- [Huawei UTRAN Proc LPU CPU Util Report](#)
- [Huawei UTRAN Proc MPU CPU Util Report](#)
- [Huawei UTRAN Proc MUX CPU Util Report](#)
- [Huawei UTRAN Proc NET CPU Util Report](#)
- [Huawei UTRAN Proc SPU CPU Util Report](#)
- [Huawei UTRAN Proc Utilisation Report](#)
- [Huawei UTRAN Proc WFM CPU Util Report](#)
- [Huawei UTRAN Proc XIE CPU Util Report](#)

9.8.1 Huawei UTRAN Proc HPU CPU Util Report

Huawei UTRAN Proc HPU CPU Util Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Processor
Primary Object	Processor
Mean HPU CPU Utilisation	Processor.Huawei.HPU.VS_MeanCPUUtil_HPU

9.8.2 Huawei UTRAN Proc LPU CPU Util Report

Huawei UTRAN Proc LPU CPU Util Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Processor
Primary Object	Processor
Mean LPU CPU Utilisation	Processor.Huawei.LPU.VS_MeanCPUUtil_LPU

9.8.3 Huawei UTRAN Proc MPU CPU Util Report

Huawei UTRAN Proc MPU CPU Util Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Processor
Primary Object	Processor
Mean MPU CPU Utilisation	Processor.Huawei.MPU.VS_MeanCPUUtil_MPU

9.8.4 Huawei UTRAN Proc MUX CPU Util Report

Huawei UTRAN Proc MUX CPU Util Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Processor
Primary Object	Processor
Mean MUX CPU Utilisation	Processor.Huawei.MUX.VS_MeanCPUUtil_MUX

9.8.5 Huawei UTRAN Proc NET CPU Util Report

Huawei UTRAN Proc NET CPU Util Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Processor
Primary Object	Processor
Mean NET CPU Utilisation	Processor.Huawei.NET.VS_MeanCPUUtil_NET

9.8.6 Huawei UTRAN Proc SPU CPU Util Report

Huawei UTRAN Proc SPU CPU Util Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Processor
Primary Object	Processor
Mean SPU CPU Utilisation	Processor.Huawei.SPU.VS_MeanCPUUtil_SPU

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

9.8.7 Huawei UTRAN Proc Utilisation Report

Huawei UTRAN Processor Utilisation Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Processor
Primary Object	Processor
Mean HPU CPU Utilisation	Processor.Huawei.HPU.VS_MeanCPUUtil_HPU
Mean LPU CPU Utilisation	Processor.Huawei.LPU.VS_MeanCPUUtil_LPU
Mean XIE CPU Utilisation	Processor.Huawei.XIE.VS_MeanCPUUtil_INT
Mean WFMR CPU Utilisation	Processor.Huawei.WFMR.VS_MeanCPUUtil_FMR
Mean SPU CPU Utilisation	Processor.Huawei.SPU.VS_MeanCPUUtil_SPU
Mean NET CPU Utilisation	Processor.Huawei.NET.VS_MeanCPUUtil_NET
Mean MUX CPU Utilisation	Processor.Huawei.MUX.VS_MeanCPUUtil_MUX
Mean MPU CPU Utilisation	Processor.Huawei.MPU.VS_MeanCPUUtil_MPU

9.8.8 Huawei UTRAN Proc WFMR CPU Util Report

Huawei UTRAN Proc WFMR CPU Util Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Processor
Primary Object	Processor
Mean WFMR CPU Utilisation	Processor.Huawei.WFMR.VS_MeanCPUUtil_FMR

9.8.9 Huawei UTRAN Proc XIE CPU Util Report

Huawei UTRAN Proc XIE CPU Util Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Processor
Primary Object	Processor
Mean XIE CPU Utilisation	Processor.Huawei.XIE.VS_MeanCPUUtil_INT

9.9 RNC Reports.

This section shows reports for the RNC object.

- [Huawei UTRAN RNC Hard HO Report](#)
- [Huawei UTRAN RNC InterRAT CS HO Report](#)
- [Huawei UTRAN RNC InterRAT PS HO Report](#)
- [Huawei UTRAN RNC InterRAT SRNS HO Report](#)
- [Huawei UTRAN RNC Paging Report](#)
- [Huawei UTRAN RNC RAB Modify CS Report](#)
- [Huawei UTRAN RNC RAB Modify PS Report](#)
- [Huawei UTRAN RNC Resource Report](#)

9.9.1 Huawei UTRAN RNC Hard HO Report

Huawei UTRAN RNC Hard Handover Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.RNC
Primary Object	RNC
% Successful Hard HO	RNC.Huawei.Hard_HO_RNC._%_VS_HHO_Succ_RNC, RNC.Huawei.Hard_HO_RNC.VS_HHO_Succ_RNC
% Successful Hard HO Inter Freq	RNC.Huawei.Hard_HO_RNC._%_VS_HHO_InterFreq_Succ_RNC, RNC.Huawei.Hard_HO_RNC.VS_HHO_InterFreq_Succ_RNC
Total call drops	RNC.Huawei.Hard_HO_RNC.Total_call_drops
% Successful Hard HO Intra Freq	RNC.Huawei.Hard_HO_RNC._%_VS_HHO_Succ_IntraFreq_RNC, RNC.Huawei.Hard_HO_RNC.VS_HHO_Succ_IntraFreq_RNC

9.9.2 Huawei UTRAN RNC InterRAT CS HO Report

Huawei UTRAN RNC InterRAT CS Handover Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.RNC
Primary Object	RNC
% Successful outgoing HO	RNC.Huawei.InterRAT_HO_CS_RNC._ %_VS_IRATHO_SuccCSOut_RNC,

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

	RNC.Huawei.InterRAT_HO_CS_RNC.VS_IRATHO_SuccCSOut_RNC
--	---

9.9.3 Huawei UTRAN RNC InterRAT PS HO Report

Huawei UTRAN RNC InterRAT PS Handover Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.RNC
Primary Object	RNC
% Successful incoming UE HO	RNC.Huawei.InterRAT_HO_PS_RNC._%_VS_IRATHO_SuccPSInUE_RNC, RNC.Huawei.InterRAT_HO_PS_RNC.VS_IRATHO_SuccPSInUE_RNC
% Successful outgoing UE HO	RNC.Huawei.InterRAT_HO_PS_RNC._%_VS_IRATHO_SuccPSOutUE_RNC, RNC.Huawei.InterRAT_HO_PS_RNC.VS_IRATHO_SuccPSOutUE_RNC
% Successful outgoing RNC HO	RNC.Huawei.InterRAT_HO_PS_RNC._%_VS_IRATHO_SuccPSOutUTRAN_RNC, RNC.Huawei.InterRAT_HO_PS_RNC.VS_IRATHO_SuccPSOutUTRAN_RNC

9.9.4 Huawei UTRAN RNC InterRAT SRNS HO Report

Huawei UTRAN RNC InterRAT SRNS Handover Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.RNC
Primary Object	RNC
% Successful HO preparations	RNC.Huawei.InterRAT_HO_SRNS_Relocation._%_VS_SRELOC_SuccPrep_IRHOCS, RNC.Huawei.InterRAT_HO_SRNS_Relocation.VS_SRELOC_SuccPrep_IRHOCS

9.9.5 Huawei UTRAN RNC Paging Report

Huawei UTRAN RNC Paging Report

Report Feature	Details
----------------	---------

Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.RNC
Primary Object	RNC
% Successful idle UEs	RNC.Huawei.Paging_RNC._%_VS_RANAP_Paging_Succ_IdleUE, RNC.Huawei.Paging_RNC.VS_RANAP_Paging_Succ_IdleUE
% successful paging type 1	RNC.Huawei.Paging_RNC._%_VS_UTRAN_SuccPage1, RNC.Huawei.Paging_RNC.VS_UTRAN_SuccPage1
Paging Measurement	RNC.RNC_Id, RNC.Huawei.Paging_RNC.VS_RANAP_Paging_Att, RNC.Huawei.Paging_RNC.VS_RANAP_Paging_Att_IdleUE, RNC.Huawei.Paging_RNC.VS_RANAP_Paging_Succ_IdleUE, RNC.Huawei.Paging_RNC.VS_UTRAN_Paging1_Att, RNC.Huawei.Paging_RNC.VS_UTRAN_Paging2_Att, RNC.Huawei.Paging_RNC.VS_UTRAN_SuccPage1, RNC.Huawei.Paging_RNC.VS_CN_Page_Loss_IUFC, RNC.Huawei.Paging_RNC.VS_CN_Page_Loss_PCHCong

9.9.6 Huawei UTRAN RNC RAB Modify CS Report

Huawei UTRAN RNC RAB Modify CS Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.RNC
Primary Object	RNC
% Successful conversational service	RNC.Huawei.RAB_Modify_CS_RNC._%_VS_RAB_SuccModCS_Conv_RNC, RNC.Huawei.RAB_Modify_CS_RNC.VS_RAB_SuccModCS_Conv_RNC
% Successful streaming service	RNC.Huawei.RAB_Modify_CS_RNC._%_VS_RAB_SuccModCS_Str_RNC, RNC.Huawei.RAB_Modify_CS_RNC.VS_RAB_SuccModCS_Str_RNC

9.9.7 Huawei UTRAN RNC RAB Modify PS Report

Huawei UTRAN RNC RAB Modify PS Report

Report Feature	Details
----------------	---------

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.RNC
Primary Object	RNC
% Successful background service	RNC.Huawei.RAB_Modify_PS_RNC._ %_VS_RAB_SuccModPS_Bkg_RNC, RNC.Huawei.RAB_Modify_PS_RNC.VS_RAB_SuccModPS_Bkg_RNC
% Successful conversational service	RNC.Huawei.RAB_Modify_PS_RNC._ %_VS_RAB_SuccModPS_Conv_RNC, RNC.Huawei.RAB_Modify_PS_RNC.VS_RAB_SuccModPS_Conv_RNC
% Successful streaming service	RNC.Huawei.RAB_Modify_PS_RNC._ %_VS_RAB_SuccModPS_Str_RNC, RNC.Huawei.RAB_Modify_PS_RNC.VS_RAB_SuccModPS_Str_RNC
% Successful interactive service	RNC.Huawei.RAB_Modify_PS_RNC._ %_VS_RAB_SuccModPS_Int_RNC, RNC.Huawei.RAB_Modify_PS_RNC.VS_RAB_SuccModPS_Int_RNC

9.9.8 Huawei UTRAN RNC Resource Report

Huawei UTRAN RNC Resource Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.RNC
Primary Object	RNC
MultiRab	RNC.RNC_Id, RNC.Huawei.MultiRab_RNC.VS_MultRAB_0CS_2PS, RNC.Huawei.MultiRab_RNC.VS_MultRAB_1CS1PS, RNC.Huawei.MultiRab_RNC.VS_MultRAB_1CS2PS, RNC.Huawei.MultiRab_RNC.VS_MultRAB_1CS3PS, RNC.Huawei.MultiRab_RNC.VS_MultRAB_0CS3PS, RNC.Huawei.MultiRab_RNC.VS_MultRAB_0CS4PS, RNC.Huawei.MultiRab_RNC.VS_MultRAB_2CS0PS, RNC.Huawei.MultiRab_RNC.VS_MultRAB_2CS1PS

9.10 Signalling_Link Reports.

This section shows reports for the Signalling_Link object.

- [Huawei UTRAN Signal Link IMA Link Report](#)

9.10.1 Huawei UTRAN Signal Link IMA Link Report

Huawei UTRAN Signalling Link IMA Link Report

Report Feature	Details
Report Tree Branch	System.UMTS.Engineering.UTRAN.Huawei.Signalling_Link
Primary Object	Signalling_Link
Total IMA Cells Transmitted and Received	Signalling_Link.Huawei.IMA_Link.Total_IMALNK_CELLS

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in all countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

*IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk NY 10504-1785
U.S.A.*

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

*Intellectual Property Licensing
Legal and Intellectual Property Law
IBM Japan Ltd.
1623-14, Shimotsuruma, Yamato-shi
Kanagawa 242-8502 Japan*

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

*IBM Corporation
2Z4A/101
11400 Burnet Road
Austin, TX 78758
U.S.A.*

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

This edition applies to IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corp. 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Trademarks

IBM, the IBM logo and ibm.com are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "[Copyright and trademark information](http://www.ibm.com/legal/copytrade.shtml)" at www.ibm.com/legal/copytrade.shtml.

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.

Microsoft and Windows are trademarks of Microsoft Corporation in the United States, other countries, or both.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Intel, Intel logo, Intel Inside, Intel Inside logo, Intel Centrino, Intel Centrino logo, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.



Java and all Java-based trademarks and logos are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Other company, product or service names may be trademarks or service marks of others.



Printed in the U.S.A.