Release Notes

Prospect® 8.0.4.1

Nortel GGU 4.0.14.0.20



DOCUMENT CONTROL

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1 Description

This document provides information on the Prospect® 8.0 for Nortel GSM/GPRS/UMTS RP14 patch 20 (4.0.14.0.20). This is a patch release. This release adds support for the PM statistic changes introduced by Nortel OMC-R/BSS V17.0 upgrade.

This release does not change the Prospect core version or the recommended Prospect client version.

- The Prospect Base version certified against this release is 8.0.4.1.05
- The client version certified against this release is 8.0.4.0.8
- The operating system version certified against this release is Solaris 9 and Solaris 10.
- The Oracle Database version certified against this release is Oracle 9i 9.2.0.8.

2 Supported Platforms

Complete platform support information for the current release is in the *Prospect Server Preparation Guide*. Complete client hardware and software requirements are in the *Prospect Installation Guide*.

Already Supported Vendor Software

Nortel Passport 15000 Wireless Gateway / UMTS SGSN / Aggregation Node UMTS03 3.0

Nortel Media Gateway (MGW) MGW17, MGW18, W-NMS 5.0.1/NSS 19

Nortel Passport 15000 GPRS SGSN GPRS 2.1, 3.0, 4.0, 5.0, 6.0, PC04

Nortel Shasta GGSN UMTS03 3.0, 3.2.1, 4.0, 4.1

Nortel SS7/IP Gateway - GPRS R2.1, R3.0, R4.0, UMTS03, GPRS6.0/UMTS4.0

Nortel RNC UMTS03 UA3.1, UA3.2 and UA4.0

Nortel Node B UMTS03 UA3.1, UA3.2 and UA4.0

Nortel MSC GSM13, GSM15, GSM/NSS17 (includes NSS16), GSM/NSS18, W-NMS 5.0.1/NSS 19

Nortel HLR GSM13, GSM15, GSM/NSS17 (includes NSS16), GSM/NSS18

Nortel USP 7.0, 8.1, 10.0, 12.0

Nortel SLR NSS17

Nortel Data Server NSS17

Nortel GSM/GPRS/EDGE BSS - 12.04, 12.04B, 12.04C, 12.04D, 13.02B, 14.3, 15.0, 15.1, 16.0 based on OMC-R v16.0

Nortel GPRS/EDGE PCUSN - 12.04, 12.04B, 12.04C, 12.04D, 13.02B, 14.3, 15.0, 15.1, 16.0 based on OMC-R v16.0

Added Supported Vendor Software in this release

Nortel GSM/GPRS/EDGE BSS - 17.0 based on OMC-R v17.0

Nortel GPRS/EDGE PCUSN - 17.0 based on OMC-R v17.0

3 New Features

3.1 Nortel GPRS/EDGE PCUSN

This release modifies the performance data dictionary in Nortel GPRS network elements. The following list shows changes to entities

| Prospect Entity | Managed Object | Counter Status | Technology |
|-----------------|----------------|----------------|------------|
| pBlock | PBK | added | GPRS |

New counters are as below:-

| Prospect Field Name | Entity Name | Heading Line 1 | Heading Line 2 | Datatype | Field Type | Description | Aggre gator |
|------------------------|----------------|-------------------|-------------------|----------|---------------|--|-------------|
| pcuNbCpuLoa dInd | pBlock | # Durations | CPU Load | I | С | 15314/0 Cumulative number of durationPeriods of 50 ms ± 8 ms (random), where the instantaneousCpuLoad is higher than 87.5% | S |

3.2 Nortel GSM

This release modifies the performance data dictionary in GSM/GPRS network elements. The following list shows the list of new entities and also changes made to existing entity.

| Prospect Entity | Managed Object | Counter Status | Technology |
|-----------------|----------------|----------------|------------|
| Handover_Utran | ACU | New | GSM |
| PCMA | PCMTCU | New | GSM |
| Sector | BTS | Added | GSM |
| PCM | PCMBSC | Added | GSM |
| Transceiver | TMA | Added | GSM |
| | | | GPRS |

New counters are as below:-

| Prospect Field Name | Entity Name | Heading Line 1 | Heading Line 2 | Datatype | Field Type | Description | Aggre gator |
|--|------------------------|------------------------------|--------------------------------|----------|---------------|--|-------------|
| hoNcellsReq uestUtranUpli nkStrength | Handov er_Utra n | HO NeighCell Req | Utran: Uplink Strength | I | С | 2210/0 Number of UMTS handover requests to the neighbour cell: Uplink Strength | S |
| hoNcellsReq uestUtranDo wnlinkStrengt h | Handov er_Utra n | HO NeighCell Req | Utran: Downlink Strength | I | С | 2210/1Number of UMTS handover requests to the neighbour cell: Downlink Strength | S |
| hoNcellsReq uestUtranUpli nkQuality | Handov er_Utra n | HO NeighCell Req | Utran: Uplink Quality | I | С | 2210/2 Number of UMTS handover requests to the neighbour cell: Uplink Quality | S |
| hoNcellsReq uestUtranDo wnlinkQuality | Handov er_Utra n | HO NeighCell Req | Utran: Downlink Quality | I | С | 2210/3 Number of UMTS handover requests to the neighbour cell: Downlink Quality | S |
| hoNcellsReq uestUtranDist ance | Handov er_Utra n | HO NeighCell Req | Utran: Distance | 1 | С | 2210/4 Number of UMTS handover requests to the neighbour cell: Distance | S |
| hoNcellsReq uestUtranPo werBudget | Handov er_Utra n | HO NeighCell Req | Utran: Power Budget | I | С | 2210/5 Number of UMTS handover requests to the neighbour cell: Power Budget | S |
| hoNcellsReq uestUtranTraf fic | Handov er_Utra n | HO NeighCell Req | Utran: Traffic | I | С | 2210/6 Number of UMTS handover requests to the neighbour cell: Traffic | S |
| hoNcellsReq uestUtranFor cedHo | Handov er_Utra n | HO NeighCell Req | Utran: Forced HO | I | С | 2210/7 Number of UMTS handover requests to the neighbour cell: Inter Cell O&M (forced handover) | S |
| hoNcellsReq uestUtranAM R | Handov er_Utra n | HO NeighCell Req | Utran: AMR | I | С | 2210/8Number of UMTS handover requests to the neighbour cell: Alarm AMR | S |
| hoNcellsExec utionUtran | Handov er_Utra n | HO NeighCell | Execution Utran | 1 | С | 2211/0 Number of UMTS handover attempts to the cell | S |
| hoNcellsUns uccessUtran OldChannel | Handov er_Utra n | HO NeighCell Unsuccess | Utran: Old Channel | 1 | С | 2212/0 Number of failures to execute UMTS handover to the cell, mobile returns to old channel | S |
| hoNcellsUns uccessUtran Timer | Handov er_Utra n | HO NeighCell Unsuccess | Utran: Timer | 1 | С | 2212/1Number of failures to execute UMTS handover to the cell, with cause BSC timer | S |

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| | | | | | | expiration | |
|--|-----------------------------|---------------------------------------|---------------------------------|---|---|--|---|
| hoNcellsUns uccessOther | Handov er_Utra | HO NeighCell | Utran: Unsucces | I | С | 2212/2 Number of failures to execute UMTS handover to the | S |
| hoNcellsSucc essUtranUpli nkStrength | n Handov er_Utra n | HO NeighCell Success | s Other Utran: Uplink Strength | I | С | cell, with other cause 2213/0 Number of UMTS handover success to the neighbour cell: Uplink Strength | S |
| hoNcellsSucc essUtranDow nlinkStrength | Handov er_Utra n | HO NeighCell Success | Utran: Downlink Strength | I | С | 2213/1 Number of UMTS handover success to the neighbour cell: Downlink Strength | S |
| hoNcellsSucc essUtranUpli nkQuality | Handov er_Utra n | HO NeighCell Success | Utran: Uplink Quality | I | С | 2213/2 Number of UMTS handover success to the neighbour cell: Uplink Quality | S |
| hoNcellsSucc essUtranDow nlinkQuality | Handov er_Utra n | HO NeighCell Success | Utran: Downlink Quality | I | С | 2213/3 Number of UMTS handover success to the neighbour cell: Downlink Quality | S |
| hoNcellsSucc essUtranDist ance | Handov er_Utra n | HO NeighCell Success | Utran: Distance | I | С | 2213/4 Number of UMTS handover success to the neighbour cell: Distance | S |
| hoNcellsSucc essUtranPow erBudget | Handov er_Utra n | HO NeighCell Success | Utran: Power Budget | I | С | 2213/5 Number of UMTS handover success to the neighbour cell: Power Budget | S |
| hoNcellsSucc essUtranTraff ic | Handov er_Utra n | HO NeighCell Success | Utran: Traffic | I | С | 2213/6 Number of UMTS handover success to the neighbour cell: Traffic | S |
| hoNcellsSucc essUtranForc edHo | Handov er_Utra n | HO NeighCell Success | Utran: Forced HO | I | С | 2213/7 Number of UMTS handover requests to the neighbour cell: Inter Cell O&M (forced handover) | S |
| hoNcellsSucc essUtranAM R | Handov er_Utra n | HO NeighCell Success | Utran: AMR | I | С | 2213/8 Number of UMTS handover success to the neighbour cell: Alarm AMR | S |
| trafficRelease T3121 | Sector | Traffic Release | T3121 | 1 | С | 1164/34 Number of releases while the communication is in traffic phase: T3121 expiry | S |
| hoFailureInco mingIntraBss TchCellCong estion | Sector | HO FailureInco mingIntraBs s | TCH Cell Congestio n | I | С | 1758/5 Number of incoming intra BSS handover requests, on TCH with cause cell congestion, which have been refused | S |
| hoFailureInco mingIntraBss SdcchCellCo ngestion | Sector | HO FailureInco mingIntraBs s | SDCCH Cell Congestio n | I | С | 1759/4 Number of incoming intra BSS handover requests, on SDCCH with cause cell congestion, which have been refused | S |
| hoFailureInco mingInterBss TchCellCong estion | Sector | HO FailureInco mingInterBs s | TCH Cell Congestio n | I | С | 1760/6 Number of incoming inter BSS handover requests, on TCH with target cell congestion, which have been refused | S |
| hoFailureInco mingInterBss SdcchCellCo ngestion | Sector | HO FailureInco mingInterBs s | SDCCH Cell Congestio n | I | С | 1761/5 Number of incoming inter BSS handover requests, on SDCCH with cause target cell congestion, which have been refused | S |
| nbCM3From UmtsFddMs | Sector | Class Mark 3 From | UMTS FDD MS | I | С | 2202/0 Number of classmark 3 element received for MS supporting UMTS FDD | S |
| hoRequestIn comingUtran | Sector | HO Request | Incoming Utran | 1 | С | 2203/0 Number of handover from UMTS | S |
| hoExecutionI ncomingUtra n | Sector | HO Execution | Incoming Utran | | С | 2204/0 Number of incoming handover execution attempt from UMTS | S |
| hoSuccessIn comingUtran | Sector | HO Success | Incoming Utran | I | С | 2205/0 Number of successful incoming handover from UMTS | S |

| hoRequestUt ranUplinkStre ngth | Sector | HO Request | Utran Uplink Strength | I | С | 2206/0 Number of UMTS handover requests in the cell: Uplink Strength | S |
|--|--------|-------------------------|------------------------------|---|---|--|---|
| hoRequestUt ranDownlink Strength | Sector | HO Request | Utran Downlink Strength | I | С | Downlink Strength 2206/1 Number of UMTS handover requests in the cell: Downlink Strength | S |
| hoRequestUt ranUplinkQua lity | Sector | HO Request | Utran Uplink Quality | I | С | 2206/2 Number of UMTS handover requests in the cell: Uplink Quality | S |
| hoRequestUt ranDownlink Quality | Sector | HO Request | Utran Downlink Quality | I | С | 2206/3 Number of UMTS handover requests in the cell: Downlink Quality | S |
| hoRequestUt ranDistance | Sector | HO Request | Utran Distance | I | С | 2206/4 Number of UMTS handover requests in the cell: Distance | S |
| hoRequestUt ranPowerBud get | Sector | HO Request | Utran Power Budget | I | С | 2206/5 Number of UMTS handover requests in the cell: Power Budget | S |
| hoRequestUt ranTraffic | Sector | HO Request | Utran Traffic | I | С | 2206/6 Number of UMTS handover requests in the cell: Traffic | S |
| hoRequestUt ranForcedHo | Sector | HO Request | Utran Forced HO | I | С | 2206/7 Number of UMTS handover requests in the cell: inter-cell O&M (forced handover) | S |
| hoRequestUt ranAMR | Sector | HO Request | Utran AMR | I | С | 2206/8 Number of UMTS handover requests in the cell: Alarm AMR | S |
| hoExecution Utran | Sector | HO Execution | Utran | 1 | С | 2207/0 Number of UMTS handover attempts in the cell | S |
| hoUnsuccess UtranOldCha nnel | Sector | HO Unsuccess | Utran Old Channel | I | С | 2208/0 Number of failures to execute UMTS handover from the cell, with mobile returns to old channel | S |
| hoUnsuccess UtranTimer | Sector | HO Unsuccess | Utran Timer | I | С | 2208/1 Number of failures to execute UMTS handover from the cell, with cause BSC t3121 timer expiration | S |
| hoUnsuccess UtranOther | Sector | HO Unsuccess | Utran Other | I | С | 2208/2 Number of failures to execute UMTS handover from the cell, with other cause | S |
| hoFailureUtra nGeranIUMo de | Sector | HO FailureUtra n | GeranIUM ode | I | С | 2209/0 Number of UMTS handover requests that have been refused with cause GERAN lu-mode failure | S |
| hoFailureUtra nTrafficLoad | Sector | HO FailureUtra n | Traffic Load | I | С | 2209/1 Number of UMTS handover requests that have been refused with cause traffic load in the target cell higher than in the source cell | S |
| hoFailureUtra nRadioResou rce | Sector | HO FailureUtra n | Radio Resource | 1 | С | 2209/2 Number of UMTS handover requests that have been refused with cause no radio resource available | S |
| hoFailureUtra nOther | Sector | HO FailureUtra n | Other | ı | С | 2209/3 Number of UMTS handover requests that have been refused with other cause | S |
| estabIndicSig Emr | Sector | Receipts Estab Indic | Sig EMR | 1 | С | 2216/0 Number of receipt of an ESTABLISHMENT_INDICATION message in call establishment phase | S |
| pcmBscFault LsaRcHsaRc | PCM | PCM BSC Fault | Hardware Failure | I | С | 3067/1 Number of fault related to the PCM (Abis, Ater, Agprs) viewed from the BSC: hardware failure | S |

| pcmBscFault OutOfService | PCM | PCM BSC Fault | Out Of Service | I | С | 3067/2 Number of fault related to the PCM (Abis, Ater, Agprs) viewed from the BSC: O&M | S |
|--|-----------------|---------------------------------|-------------------------|---|---|--|---|
| pcmBscFault Pcm | PCM | PCM BSC Fault | PCM Failure | I | С | 3067/0 Number of fault related to the PCM (Abis, Ater, Agprs) viewed from the BSC: PCM failure | S |
| pcmBscUnav ailabilityCum | PCM | Total PCM BSC | Unavailabi lity | F | С | 3065/0 Total duration of unavailability of the PCM (Abis, Ater, Agprs) viewed from the BSC (in milli-seconds) | S |
| pcmBscUnav ailabilityEch | PCM | # Samp PCM BSC | Unavailabi lity | F | С | 3065/0 Number of samplings for duration of unavailability of the PCM (Abis, Ater, Agprs) viewed from the BSC. | J |
| pcmBscUnav ailabilityMax | PCM | Max PCM BSC | Unavailabi lity | F | С | 3065/0 Maximum duration of unavailability of the PCM (Abis, Ater, Agprs) viewed from the BSC (in milli-seconds) | Q |
| pcmBscUnav ailabilityMoy | PCM | Ave PCM BSC | Unavailabi lity | F | С | 3065/0 Average duration of unavailability of the PCM (Abis, Ater, Agprs) viewed from the BSC (in milli-seconds) | A |
| pcmTcuFault LsaRcHsaRc | PCMA | PCM TCU Fault | Hardware Failure | 1 | С | 3068/1 Number of fault related to the PCMA viewed from the TCU: hardware failure | S |
| pcmTcuFault OutOfService | PCMA | PCM TCU Fault | Out Of Service | I | С | 3068/2 Number of fault related to the PCMA viewed from the TCU: O&M | S |
| pcmTcuFault Pcma | PCMA | PCM TCU Fault | PCMA Failure | I | С | 3068/0 Number of fault related to the PCMA viewed from the TCU: PCMA failure | S |
| pcmTcuUnav ailabilityCum | PCMA | Total PCM TCU | Unavailabi lity | F | С | 3066/0 Total duration of unavailability of the PCMA viewed from the TCU (in milliseconds). | S |
| pcmTcuUnav ailabilityEch | PCMA | # Samp PCM TCU | Unavailabi lity | F | С | 3066/0 Number of samplings for duration of unavailability of the PCMA viewed from the TCU. | J |
| pcmTcuUnav ailabilityMax | PCMA | Max PCM TCU | Unavailabi lity | F | С | 3066/0 Maximum duration of unavailability of the PCMA viewed from the TCU (in milliseconds). | Q |
| pcmTcuUnav ailabilityMoy | PCMA | Avg PCM TCU | Unavailabi lity | F | С | 3066/0 Average duration of unavailability of the PCMA viewed from the TCU (in milliseconds). | A |
| nbBadDownli nkFramesCla ssicTdma | Transce iver | Bad Downlink Frames | Transmitte d Classic | I | С | 2201/0 Number of downlink bad frames transmitted in classic calls (FR, EFR) | S |
| nbEstimBadD ownlinkFram esAmrFr102T dma | Transce iver | Estim Bad Downlink Frames | AMR FR Codec 10.2 | I | С | 2197/3 Number of bad downlink radio frames for AMR FR calls in codec 10.2 | S |
| nbEstimBadD ownlinkFram esAmrFr475T dma | Transce iver | Estim Bad Downlink Frames | AMR FR Codec 4.75 | I | С | 2197/0 Number of bad downlink radio frames for AMR FR calls in codec 4.75 | S |
| nbEstimBadD ownlinkFram esAmrFr59Td ma | Transce iver | Estim Bad Downlink Frames | AMR FR Codec 5.9 | I | С | 2197/1 Number of bad downlink radio frames for AMR FR calls in codec 5.9 | S |
| nbEstimBadD ownlinkFram | Transce iver | Estim Bad Downlink | AMR FR Codec 6.7 | I | С | 2197/2 Number of bad downlink radio frames for AMR FR calls in | S |

| esAmrFr67Td | | Frames | | | | codec 6.7 | |
|--|-----------------|---------------------------------|-------------------------|---|---|---|---|
| ma nbEstimBadD ownlinkFram esAmrHr475 Tdma | Transce iver | Estim Bad Downlink Frames | AMR HR Codec 4.75 | 1 | С | 2199/0 Number of bad downlink radio frames for AMR HR calls in codec 4.75 | S |
| nbEstimBadD ownlinkFram esAmrHr59T dma | Transce iver | Estim Bad Downlink Frames | AMR HR Codec 5.9 | I | С | 2199/1 Number of bad downlink radio frames for AMR HR calls in codec 5.9 | S |
| nbEstimBadD ownlinkFram esAmrHr67T dma | Transce iver | Estim Bad Downlink Frames | AMR HR Codec 6.7 | I | С | 2199/2 Number of bad downlink radio frames for AMR HR calls in codec 6.7 | S |
| nbTransDow nlinkFramesA mrFr102Tdm a | Transce iver | Trans Downlink Frames | AMR FR Codec 10.2 | I | С | 2196/3 Number of transmitted downlink radio frames for AMR FR calls in codec 10.2 | S |
| nbTransDow nlinkFramesA mrFr475Tdm a | Transce iver | Trans Downlink Frames | AMR FR Codec 4.75 | I | С | 2196/0 Number of transmitted downlink radio frames for AMR FR calls in codec 4.75 | S |
| nbTransDow nlinkFramesA mrFr59Tdma | Transce iver | Trans Downlink Frames | AMR FR Codec 5.9 | I | С | 2196/1 Number of transmitted downlink radio frames for AMR FR calls in codec 5.9 | S |
| nbTransDow nlinkFramesA mrFr67Tdma | Transce iver | Trans Downlink Frames | AMR FR Codec 6.7 | I | С | 2196/2 Number of transmitted downlink radio frames for AMR FR calls in codec 6.7 | S |
| nbTransDow nlinkFramesA mrHr475Tdm a | Transce iver | Trans Downlink Frames | AMR HR Codec 4.75 | I | С | 2198/0 Number of transmitted downlink radio frames for AMR HR calls in codec 4.75 | S |
| nbTransDow nlinkFramesA mrHr59Tdma | Transce iver | Trans Downlink Frames | AMR HR Codec 5.9 | I | С | 2198/1 Number of transmitted downlink radio frames for AMR HR calls in codec 5.9 | S |
| nbTransDow nlinkFramesA mrHr67Tdma | Transce iver | Trans Downlink Frames | AMR HR Codec 6.7 | I | С | 2198/2 Number of transmitted downlink radio frames for AMR HR calls in codec 6.7 | S |
| nbTransDow nlinkFrames ClassicTdma | Transce iver | Trans Downlink Frames | Transmitte d Classic | 1 | С | 2200/0 Number of downlink frames transmitted in classic calls (FR, EFR) | S |
| PaSwitchOff Duration | Transce iver | PA Switch Off | Duration | 1 | С | 2227/0 PA powered off duration during the current observation period | S |
| PaSwitchOff Number | Transce iver | PA Switch Off | Number | 1 | С | 2228/0 Number of PA powered off during the current observation period | S |
| trafficRelease T3121Tdma | Transce iver | Traffic Releases | T3121 TDMA | I | С | 1174/11 Number of releases for T3121 reason (during handover to Utran) while the communication is in "traffic" phase on the concerned TDMA | S |
| pcuLackAgpr sJokerTSCu m | Transce iver | Total PCU Lack | Agprs Joker TS | F | С | 15280/0 Total number of additional Agprs Jokers TS in the DL direction that would be required to reach the MCS targeted by the Link Adaptation | S |
| pcuLackAgpr sJokerTSNbs | Transce iver | # Samp PCU Lack | Agprs Joker TS | F | С | 15280/0 Number of samplings for additional Agprs Jokers TS in the DL direction that would be required to reach the MCS targeted by the Link Adaptation | J |

| pcuLackAgpr | Transce | Ave PCU | Agprs | F | С | 15280/0 Average number of | Α |
|-------------|---------|---------|----------|---|---|-----------------------------------|---|
| sJokerTSAvg | iver | Lack | Joker TS | | | additional Agprs Jokers TS in the | |
| | | | | | | DL direction | |
| | | | | | | that would be required to reach | |
| | | | | | | the MCS targeted by the | |
| | | | | | | Link Adaptation | |

Retired counters are as below:-

| Prospect Field Name | Entity Name | Heading Line 1 | Heading Line 2 | Datatype | Field Type | Description | Aggre gator |
|--|----------------|-------------------|-----------------------|----------|---------------|---|-------------|
| cardSynthLo adCum | BSC_Pr oc | Synth Load | Proc Cum | I | С | 1835 Cumulative synthetic load on Processor (Counter is not supported in BSS V17.0) | S |
| cardSynthLo adEch | BSC_Pr oc | Synth Load | Proc NoS | I | С | 1835 Number of samples for Synthetic load on Processor (Counter is not supported in BSS V17.0) | S |
| cardSynthLo adMax | BSC_Pr oc | Synth Load | Proc Max | I | С | 1835 Maximum synthetic load on Processor (Counter is not supported in BSS V17.0) | Q |
| cardSynthLo adMoy | BSC_Pr oc | Synth Load | Proc Ave | F | С | 1835 Average synthetic load on Processor (Counter is not supported in BSS V17.0) | S |
| cgOverloadR ejectedOpCh annelReqCg | BSC_Pr oc | CPUE Overload | Rejct ChanReq | F | С | 1803/1 Number of rejected calls on channel requests due to overload (Counter is not supported in BSS V17.0) | S |
| cgOverloadR ejectedOpEst ablishIndCg | BSC_Pr oc | CPUE Overload | Rejct Establnd | F | С | 1803/2 Number of rejected calls on establish indication due to overload (Counter is not supported in BSS V17.0) | S |
| cgOverloadR ejectedOpHo ReqCg | BSC_Pr oc | CPUE Overload | Rejct HOreq | F | С | 1803/3 Number of rejected calls on handover request due to overload (Counter is not supported in BSS V17.0) | S |
| cgOverloadR ejectedOpPa geReqBtsCg | BSC_Pr oc | CPUE Overload | Rej PageReqB TS | F | С | 1803/4 Number of rejected calls on handover requests due to an overloaded cell (Counter is not supported in BSS V17.0) | S |
| cgOverloadR ejectedOpPa geReqCg | BSC_Pr oc | CPUE Overload | Rejct PageReq | F | С | 1803/0 Number of rejected calls on paging requests due to overload (Counter is not supported in BSS V17.0) | S |
| cgOverloadR ejectedOpSm sCbCg | BSC_Pr oc | CPUE Overload | Rejct Sms-cb | F | С | 1803/5 Number of rejected sms- cb messages due to overload situation (Counter is not supported in BSS V17.0) | S |
| lapdOverload RejectedOpS icd | BSC_Pr oc | LAPD CallRejd | Overload SICD | I | С | 1834 Number of rejected calls on paging requests due to SICD board overload (Counter is not supported in BSS V17.0) | S |
| prLoadCum | BSC_Pr oc | Processor load | (2g-BSC) % Cum | I | С | 1400 Cumulative value for the load of the Processor board in percent (Counter is not supported in BSS V17.0). | S |
| prLoadEch | BSC_Pr oc | Processor load | (2g-BSC) % Nbs | I | С | 1400 Number of samples for load of the Processor board (Counter is not supported in BSS V17.0) | S |

| prLoadMax | BSC_Pr oc | Processor load | (2g-BSC) % Max | I | С | 1400 Maximum for the load of the Processor board in percent (Counter is not supported in BSS V17.0). | Q |
|---------------------------------|--------------|-------------------|--|---|---|---|---|
| prLoadMoy | BSC_Pr oc | Processor load | (2g-BSC) % Avg | F | С | 1400 Average load of the Processor board in percent (Counter is not supported in BSS V17.0). | A |
| pcmFaultDD TIBoard | PCM | PCM Fault | DDTI Board | F | С | 1755/2 Number of faults relating to the PCM with cause DDTI/SLTI board fault (Counter is not supported in BSS V17.0) | S |
| pcmFaultExte rnal | PCM | PCM Fault | External | F | С | 1755/0 Number of faults relating to the PCM with cause external PCM fault (Counter is not supported in BSS V17.0) | S |
| pcmFaultInter nal | PCM | PCM Fault | Internal | F | С | 1755/1 Number of faults relating to the PCM with cause internal fault (Counter is not supported in BSS V17.0) | S |
| pcmFaultOut OfService | PCM | PCM Fault | Out of Service | F | С | 1755/3 Number of faults relating to the PCM with cause taken out of service for an O&M reason (Counter is not supported in BSS V17.0) | S |
| pcmUnavaila bilityCum | PCM | PCM Unavail | Cum | I | С | 1114 Total for time of PCM unavailability (Counter is not supported in BSS V17.0) | S |
| pcmUnavaila bilityEch | PCM | PCM Unavail | NoS | I | С | 1114 Number of samples for time of PCM unavailability (Counter is not supported in BSS V17.0) | S |
| pcmUnavaila bilityMax | PCM | PCM Unavail | Max | I | С | 1114 Maximum time of PCM unavailability (Counter is not supported in BSS V17.0) | Q |
| pcmUnavaila bilityMoy | PCM | PCM Unavail | Ave | F | С | 1114 Average time of PCM unavailability (Counter is not supported in BSS V17.0) | S |
| chainStandB yResponse | BSC | ChainStand | ByRespon se-retired fr 4.0.12.0.0 | I | С | 1122 Number of passive chain response messages (Counter is not supported in BSS V17.0) | S |
| chainStandB yUpdate | BSC | ChainStand | ByUpdate- retired fr 4.0.12.0.0 | I | С | 1121 Number of passive chain update messages (Counter is not supported in BSS V17.0) | S |
| omcInputIFra me | BSC | OMC input | I-Frame- retired fr 4.0.12.0.0 | I | С | 1301 Number of I frames received (Counter is not supported in BSS V17.0) | S |
| omcInputRep eatedIFrame | BSC | OMC input | Reptd I- frame- retired fr 4.0.12.0.0 | I | С | 1303 Number of repeated I frames received (Counter is not supported in BSS V17.0) | S |
| omcInputRnr Frame | BSC | OMC input | RNR- frame- retired fr 4.0.12.0.0 | I | С | 1305 Number of RNR frames received (Counter is not supported in BSS V17.0) | S |
| omcLinkSwitc hOver | BSC | OMClink | SwitchOve r | I | С | 1115 Number of link changeovers (Counter is not supported in BSS V17.0) | S |
| omcOutputIFr ame | BSC | OMC output | I-Frame- retired fr 4.0.12.0.0 | I | С | 1300 Number of I frames sent (Counter is not supported in BSS V17.0) | S |
| omcOutputR epeatedIFra me | BSC | OMC output | Reptd I- frame- retired fr | I | С | 1302 Number of repeated I frames sent (Counter is not supported in BSS V17.0) | S |

| | | | 4.0.12.0.0 | | | | |
|--|--------|-------------------|--|---|---|--|---|
| omcOutputR nrFrame | BSC | OMC output | RNR- frame- retired fr 4.0.12.0.0 | I | С | 1304 Number of RNR frames sent (Counter is not supported in BSS V17.0) | S |
| abisLevel1Err orsBadFrame | LAPD | LAPD Level-1 | BadFrame Rcvd | I | С | 1084/0 Number of LAPD Level 1 errors: Erroneous frame received (Counter is not supported in BSS V17.0) | S |
| abisLevel1Err orsCrcError | LAPD | LAPD Level-1 | CRC Error | I | С | 1084/3 Number of LAPD Level 1 errors: CRC error (Counter is not supported in BSS V17.0) | S |
| abisLevel1Err orsLostAlign | LAPD | LAPD Level-1 | Lost Align | I | С | 1084/4 Number of LAPD Level 1 errors: Loss of alignment (Counter is not supported in BSS V17.0) | S |
| channelActiv ateTchHrDat aNT6000 | Sector | ChanActiv TCH/ | HR DataNT60 00 | 1 | С | 1708/0 Number of channel activation for non-transparent data service on half rate TCH with a 6000 b/s transmission rate (Counter is removed in BSS V17.0). | S |
| channelActiv ateTchHrDat aT1200 | Sector | ChanActiv TCH/ | HR DataT120 0 | I | С | 1706/2 Number of channel activation for transparent data service on half rate TCH with a 1200 b/s transmission rate (Counter is removed in BSS V17.0). | S |
| channelActiv ateTchHrDat aT16 | Sector | ChanActiv TCH/ | HR DataT16 | I | С | 1706/0 Number of channel activation for transparent data service on half rate TCH (Counter is removed in BSS V17.0) | S |
| channelActiv ateTchHrDat aT2400 | Sector | ChanActiv TCH/ | HR DataT240 0 | I | С | 1706/3 Number of channel activation for transparent data service on half rate TCH with a 2400 b/s transmission rate (Counter is removed in BSS V17.0). | S |
| channelActiv ateTchHrDat aT4800 | Sector | ChanActiv TCH/ | HR DataT480 0 | 1 | С | 1706/4 Number of channel activation for transparent data service on half rate TCH with a 4800 b/s transmission rate (Counter is removed in BSS V17.0). | S |
| channelActiv ateTchHrDat aT600 | Sector | ChanActiv TCH/ | HR DataT600 | I | С | 1706/1 Number of channel activation for transparent data service on half rate TCH with a 600 b/s transmission rate (Counter is removed in BSS V17.0). | S |
| channelActTc hHrDataNT | Sector | ChannelActi v | TCH/HR DataNT | I | С | 1712/0 Number of TCH/HR activation for non-transparent data service (Counter is removed in BSS V17.0) | S |
| channelActTc hHrDataT | Sector | ChannelActi v | TCH/HR DataT | I | С | 1711/0 Number of TCH/HR activation for transparent data service (Counter is removed in BSS V17.0) | S |

4 Known Problems

Please refer to the release notes for NortelGGU RP14 (4.0.14.0.0) for known issues

5 Upgrade Instructions

5.1 Prerequisites

This release requires a Prospect system running NortelGGU RP14 (4.0.14.0.10)

5.1.1 Network Timeouts

If your system has a security policy in place such that a session is disconnected after a lengthy period of apparent inactivity, you should disable it during this upgrade. The upgrade can take a few hours to run and requires no user input during the majority of the upgrade. This can make the upgrade session appear idle. If timeouts are not disabled, the upgrade terminal could be disconnected during the upgrade.

5.1.2 Disk Space and Table Space Requirements

Check the disk space under /u01 for sufficient space. The installation of the patch requires additional 17 MB disk space under /u01 file system.

The install script also requires that at least 10% of total tablespace size is available for each tablespace. Please contact customer support if there is less than 10% of total tablespace available for any of the tablespaces.

5.1.3 XDK

The Oracle Database must have XDK installed. Log into the database using SQL*Plus:

```
$ sqlplus $DB_CONNECT
```

Please use the following sql statement to check if the XDK is installed accordingly. Oracle XDK for Java should be there in the result. The version must be 9.2.0.x.

5.1.4 Perl Version

Make sure that /usr/bin/env perl is version 5.6.1. Type the following command:

```
$ /usr/bin/env perl -v
This is perl, v5.6.1 ...
```

If either version is wrong, especially if it is earlier than required, some scripts might not run, or might produce incorrect results.

5.1.5 Java Version

Make sure that the java is version 1.4.2 and above. Type the following command to check the java version.

```
$ java -version
```

```
java version "1.4.2_05"

Java(TM) 2 Runtime Environment, Standard Edition (build
1.4.2_05-b04)

Java HotSpot(TM) Client VM (build 1.4.2_05-b04, mixed mode)
```

If either version is wrong, especially if it is earlier than required, some scripts might not run, or might produce incorrect results.

5.1.6 Checking Environment Variables

Execute the following command to verify that the environment variables LOG and OK are NOT set to anything:

```
$ echo $LOG $OK
$ <- default setting should be empty</pre>
```

If the above environment variables are set, please unset the environment variables as below:

```
$ unset LOG
$ unset OK
$ echo $LOG $OK
$ <- it should show null value</pre>
```

5.1.7 Baseline Requirements

The base environment that this release will be applied against:

 Prospect® 8.0 for Nortel GSM/GPRS/UMTS 4.0.14.0.10.4 (either a fresh install or an upgrade from an earlier release)

You can check this by running the following command as the Prospect UNIX user:

```
$ show_installed
```

The output will look something like this (Base is 4.0.14.0.10.4 fresh install):-

| COMPONENT | INSTALL_TY | INSTALL_DATE |
|---|------------|--------------------|
| | | |
| CORE Prospect rev 8.0.4.1 b5 | INSTALL | 08-AUG-04 16:32:44 |
| VENDOR NorGPRS_Core rev 4.0.14.0.10 b4 | UPGRADE | 08-AUG-06 12:38:37 |
| VENDOR NorGSM rev 4.0.14.0.10 b4 | UPGRADE | 08-AUG-06 12:54:18 |
| VENDOR NorGPRS_Radio rev 4.0.14.0.0 b2 | INSTALL | 08-AUG-04 17:04:19 |
| VENDOR NorUMTS_RAN rev 4.0.14.0.0 b2 | INSTALL | 08-AUG-04 17:18:10 |
| VENDOR NorHLR_Univity rev 4.0.14.0.0 b2 | INSTALL | 08-AUG-04 17:26:58 |

The versions (rev) of CORE Prospect and VENDOR module must be greater than or equal to those shown. The build number (b1) and install type (INSTALL or UPGRADE) for each component is unimportant. The install dates will be different from those shown.

Important! It is critical that you apply this patch to an environment at the correct patch level. Please verify the environment carefully. For more information, please contact customer support.

5.2 Installation Privileges Required

The following privileges are required for an upgrade.

| Privilege | Required |
|---|----------|
| UNIX flexpm user in DBA group | Yes |
| Root privilege required | No |
| Oracle sys user password set to default (change_on_install) | Yes |

5.3 Pre-Installation Instructions

5.3.1 System Backup

This patch cannot be uninstalled. This upgrade involves updates to the database and the metadata; therefore recovery from backup is the only way to reverse the changes made by this upgrade. You must perform a full system backup before installing this upgrade. If needed, please refer to the "Backing up the Database" section of the *Prospect Administration Guide*. Please contact customer support if you require further support.

5.3.2 Note schedule_maint Settings

If the server is down for an extended period of time the script schedule_maint could display some jobs as not scheduled. Thus the jobs will not run and the system will fail.

Before the upgrade, run schedule_maint to get a list of the current schedule settings. Make a note of the next run time of each job.

5.3.3 Note Partition Maintenance Settings

During the upgrade a number of new tables are added to the Prospect system. Occasionally this can cause the script <code>past_part_maint.sh</code> to display data retention settings as "Unlimited."

Before the upgrade, run past_part_maint.sh to get a list of the current data retention settings.

5.3.4 Oracle Sys Account Access

Prospect 8.0 requires that all logins using the sys account must be qualified as sysdba. The following Oracle changes may be required.

1. Telnet to Prospect server from a remote system to verify if the change is needed. After connect to Prospect server, try to log in using sqlplus:

```
$ sqlplus /nolog
SQL> connect sys/change_on_install@flexpm as sysdba
If you can log in, you can skip the rest of this procedure.
```

If you get an error concerning privileges, then you need to continue with the following steps.

2. Set the remote_login_passwordfile parameter in the init<sid>.ora file. On most Prospect systems the sid is flexpm. Log in as the oracle user, and then enter the following command.

```
$ cd $ORACLE BASE/admin/flexpm/pfile
```

Edit the init<sid>.ora file (for example, initflexpm.ora) and add the following line.

```
remote_login_passwordfile=EXCLUSIVE
```

4. Create the Oracle password file to allow remote sys access. While still logged in as the oracle user verify that <code>\$ORACLE_HOME</code> and <code>\$ORACLE_SID</code> are correct, then enter the following command.

```
$ orapwd file=${ORACLE_HOME}/dbs/orapw${ORACLE_SID} \
password=change_on_install entries=10
```

- 5. Bounce the database so that the parameter and password file take effect. If you get an error concerning the password file, verify that it is in the dbs directory and that the filename is orapwflexpm.
- 6. To verify that the changes have taken effect, repeat step 1.

5.4 Installation Instructions

- If this Prospect system is associated with a Prospect Web system, it is advisable to use the Prospect Web Administration Tool to disable the datasource associated with this Prospect system. See the Prospect Web Administration Guide for more information.
- 2. Log in as user flexpm
- 3. Stop the middleware before installing the patch.

```
$ ps-mgr stop all
$ ps-mgr halt
```

4. Download and copy the TAR package to be installed on to the appropriate Prospect Server into a staging directory, for example,

```
$ mkdir -p /var/tmp/4.0.14.0-TIV-PROSPECT-NORGGU-IF0020
```

5. cd to the staging directory

```
$ cd /var/tmp/4.0.14.0-TIV-PROSPECT-NORGGU-IF0020
```

6. Untar the TAR package using the following command:

```
$ tar -xvf 4.0.14.0-TIV-PROSPECT-NORGGU-IF0020.tar
```

7. Check the environment setting for WM_PRODUCT. The WM_PRODUCT variable should be pointing to PROSPECT.

```
$ env|grep WM_PRODUCT
WM PRODUCT=PROSPECT
```

If the value is different, add the below statement to the .profile

```
export WM_PRODUCT
WM_PRODUCT="${WM_PRODUCT:=${wm_product}}";
```

Logout from the terminal and login as flexpm user again. Grep the WM_PRODUCT variable again and it should be pointing to PROSPECT.

8. Run the installation tool preview option by typing the following command, examine the log for any abnormal message. Please contact customer support if you need any help.

```
$ ./wminstall -b $FLEXPM_BASE -i ProspectBase -portbase $PORT_GROUP -d $DB_CONNECT -core_spec core.spec.9i -v -preview
```

9. The output of the command line should be same as the following. You should check the line that have UPGRADE word:

```
Vendor Tarball :
| Module - NorGPRS_Radio, version - 4.0.14.0.20.2 : All prerequisites met
| FlexPM-NorGPRS_Radio_4014020.tgz : UPGRADE - VENDOR - 4.0.14.
0.20.2
| Vendor Tarball :
| Module - NorGSM, version - 4.0.14.0.20.2 : All prerequisites met
| FlexPM-NorGSM_4014020.tgz : UPGRADE - VENDOR -
4.0.14.0.20.1
```

If the output from the preview contains no errors, install the application by running the same command again, but without the -preview option.

```
$ ./wminstall -b $FLEXPM_BASE -i ProspectBase -portbase $PORT_GROUP -d $DB_CONNECT -core_spec core.spec.9i -v
```

10. A license agreement is displayed. Use the scroll bar to read the complete text if it does not display in the window. Enter yes (case sensitive) to continue with the installation. The installation aborts if you do not enter yes.

Note:

The installation of the upgrade might take a while to complete, the log file (with filename like <YYYY> $_-<$ MM> $_-<$ DD> $_-<$ HH> $_-<$ MM> $_-<$ SS>) under /var/tmp can be viewed from another console during the installation for the installation progress. The date changes as each module installs.

```
After wminstall is completed, examine the detail.log under the directory $FLEXPM_HOME/audit/<
YYYYY>__<MM>__<DD>__<HH>__<MM>__<SS>__<running_number> for any error messages.
```

5.5 Post-Installation Instructions

5.5.1 Re-source the Profile

After the install finishes, log out and log back in as ${\tt flexpm}$, if you have not done so already.

5.5.2 Check for invalid objects

After an upgrade finishes, it is useful to check for any invalid objects in the database. Log into the database using SQL*Plus:

```
$ sqlplus $DB_CONNECT
SQL> select object_type, object_name from user_objects where
status='INVALID' and object_type<>'VIEW';
This should produce the output:
```

```
no rows selected
```

If the above SELECT statement outputs some rows, please recompile the schema. Use the correct value for <code>schema_name</code> if it differs from below:

```
SQL> execute dbms_utility.compile_schema('schema_name', FALSE);
If your schema_name is FLEXPM, you can use the command as below:-
SQL> execute dbms_utility.compile_schema('FLEXPM', FALSE);
```

5.5.3 Installed Version Verification

It is helpful to run show_installed, to confirm that everything is installed correctly.

The following registered entries will be updated and shown as:

```
COMPONENT INSTALL_TY INSTALL_DATE

-----
"
VENDOR NorGPRS_Radio rev 4.0.14.0.20 b2 UPGRADE 08-SEP-11 12:13:05

VENDOR NorGSM rev 4.0.14.0.20 b2 UPGRADE 08-SEP-11 12:28:10
```

The VENDOR modules for NorGPRS_Radio and NorGSM should be at 4.0.14.0.20 b1 respectively.

The version numbers (rev) should be the same as those shown. The install type (INSTALL, PATCH or UPGRADE) is not important. The install dates and times will be different from those shown.

5.5.4 Configure Time Zone Region

For further information on Time Zone Regions please refer to the Prospect Administration Guide.

This can be configured as follows:

 Review your current Time Zone Region. If your time zone information is correct, skip to 5.5.5.

```
$ set_tzr.sh -t
Connected.
Greenwich Mean Time
```

2. Review the list of available Time Zone Regions:

```
S timezoneregion.sh -t

Connected.

America/Anchorage -540 [1] First Sunday on or after Mar 8 at 02:00 ... First Sunday in Nov at 02:00, 60 minutes

America/Buenos Aires -180

America/Caracas -240

America/Chicago -360 [1] First Sunday on or after Mar 8 at 02:00 ... First Sunday in Nov at 02:00, 60 minutes

America/Denver -420 [1] First Sunday on or after Mar 8 at 02:00 ... First Sunday in Nov at 02:00, 60 minutes

America/Honolulu -600

America/Indianapolis -300

America/Lima Peru -300

America/Mexico City -480 [1] First Sunday on or after Mar 8 at 02:00 ... First Sunday in Nov at 02:00, 60 minutes
```

```
America/New York -300 [1] First Sunday on or after Mar 8 at 02:00 ... First Sunday in Nov at 02:00, 60 minutes America/Noronha -120
```

3. Set your Time Zone Region using one of the existing options:

```
$ set_tzr.sh -n "America/Seattle"
Connected.
OK: America/Seattle
```

5.5.5 Start the Middleware

Once the installation has been completed, you should start the middleware so that data can be loaded and the system can be used.

- 1. Log in as user flexpm, if you are not already logged in.
- 2. Start the middleware.

```
$ ps-mgr init
```

5.5.6 Check schedule settings

After the middleware has been restarted, run <code>schedule_maint</code> to check the next run time of the scheduled jobs. If any of the jobs display the next run time as "job not scheduled," then run <code>schedule_maint</code> and update the values to an appropriate future time based on the settings you recorded in Section 5.3.2.

For example, to set the pm_daily job to run at 1:00 am on 1 May 2006.

```
schedule_maint pm_daily 20060501 0100
```

Note: Remember to enter a time in the future. If unsure of appropriate times then please contact customer support

5.5.7 Check partition settings

Run past_part_maint.sh to get a list of the current data retention settings. If any of the number displays is different that settings you recorded in Section 5.3.3, then run past_part_maint.sh to update the values.

For example, to have 30 days data retention for traffic table types.

```
past_part_maint.sh traffic 30
```

5.5.8 Enable Datasource in Prospect Web

If this Prospect system is associated with a Prospect Web system and you disabled the datasource in section 5.4 step 1, then use the Prospect Web Administration Tool to enable the datasource with this Prospect system.

5.6 Uninstallation Procedure

This patch cannot be uninstalled. It involves updates to the database or the metadata, therefore recovery from backup is the only way to reverse the changes made by this release/patch. You must perform a full system backup before installing this patch. If

needed, please refer to the "Backing up the Database" section of the *Prospect Administration Guide*. Please contact customer support if you require further support.

6 Useful Hints

6.1 Prospect Client/Server Compatibility

The Prospect client is backward compatible with older Prospect servers. If you try to use an older client with newer server, the results are undefined.

6.2 Prospect Single Client

This release features a single, uniform client for all vendor versions.

Users of the Prospect system have expressed the need to connect to all of their Prospect servers with a single client. Several customers have installed multiple Prospect servers, which cover several different vendor technologies. Two key benefits to the single client are:

- Reduced number of clients that your IT department need to install
- Reduced confusion among users over which Prospect client should be used with which Prospect server.

The single Prospect client supports Prospect servers co-released with the client and a defined number of server versions released before the client. Prospect servers released after the client are not supported (that is, the Prospect client is not forward-compatible). Contact your Vallent customer support representative to identify the server versions that your client supports.

This feature removes support for two or more Prospect clients installed on the same PC. Side-by-side installations were originally supported because the Prospect client was not backward compatible with older versions of the server. Full support for backward compatibility removes the need for side-by-side support.

6.3 Ports Used by the Prospect Client

The Prospect client uses two ports to connect to the Prospect server:

- **FX port** Most queries from the Prospect client, status monitor, Auto Downloader, and DSMonitor (DSMonitor is a process that registers for updates from the DataServer) use this port. By default the FX port number is the base port plus four (4). For example, if the base port is 6440, the FX port would be 6444.
- **Event port** DSMonitor and Prospect Alarm use this port. By default the Event port number is the base port plus three (3). For example, if the base port is 6440, the Event port would be 6443.

If you have closed the ports required by the Prospect client for security reasons, or if you are using these ports for other services, you need to either re-open or re-assign them to the Prospect FX and Event ports. Otherwise, the ability for the Prospect client to be able to communicate with the Prospect server is compromised.

To determine which port numbers are required for your system, log on as flexpm and run the following commands:

```
$ echo $FX_DS_PORT
$ echo $EVENT_PORT
```

6.4 add_filetype_timeout.sh

The add_filetype_timeout.sh script is not recommended to be used for checking the data file if it does not arrive as expected. If used, user will have to wait for a very long period of time as the add_filetype_timeout.sh script increases the time to clean up the schedule table when the middleware is started up.

7 Customer Support

Contact customer support if a problem is encountered during the installation of this patch or release.

8 Manifest

Please refer to manifest.txt in the staging directory.

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