



Release Notes

Note: Before using this information and the product it supports, read the information in “Notices” on page 25.

This edition applies to version 1, release 5 of the IBM Tivoli Netcool Service Quality Manager GPRS service solution and to all subsequent releases and modifications until otherwise indicated in new editions.

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1 About this documentation

The *IBM Tivoli Netcool Service Quality Manager GPRS Service Solution Release Notes* guide is organized into the following chapters:

Table 1 Guide structure

<i>Chapter</i>	<i>Description</i>
About this documentation	An overview of the Tivoli Netcool Service Quality Manager GPRS service solution documentation, which gives details of the intended audience and the structure of the guide.
Release details	Information on functionality provided in the release.
Hardware specification	Details of hardware required for the release.
Software requirements	Details of software required for the release.
Installation	Details on guides to be followed during the installation of the product for the release.
Known issues	Details on known issues included in the release and workarounds, if available.

1.1 Audience

The target audience of this guide is IBM® Tivoli® Netcool® Service Quality Manager GPRS (Global System for Mobile Communications) service solution customers. They must be familiar with telecommunication and IT (Information Technology) principles and must also have a good understanding of Solaris and IBM AIX®.

IMPORTANT: Before installing the Tivoli Netcool Service Quality Manager GPRS service solution, you are strongly advised to read the release notes distributed with your Tivoli Netcool Service Quality Manager GPRS software. Release notes may contain information specific to your installation. Failure to consult release notes may result in a corrupt, incomplete or failed installation.

Note: Tivoli Netcool Service Quality Manager administrators must not, without prior consultation and agreement from IBM, make any changes to the index organized tables or database schema. Changes to the index organized tables or database schema can result in corruption of data and failure of the Service Quality Manager system. This applies to all releases of Tivoli Netcool Service Quality Manager using all versions of interfaces.

1.2 Required skills and knowledge

This guide assumes you are familiar with the following:

- General IT principles
- UNIX® operating systems
- IP (Internet Protocol) networking
- GPRS
- Service Quality Manager modeling concepts such as service resources, KPIs (key performance indicators), KQIs (key quality indicators) and SLAs (service level agreements).

This guide also assumes that you are familiar with your company's network and with procedures for configuring, monitoring, and solving problems on your network.

1.3 Guide conventions

The following command prompts can be seen throughout this guide where the user has to enter commands at the command line:

- # (hash): This prompt is displayed if the user is logged in as user `root`.
- \$ (dollar): This prompt is displayed if the user is logged in as either the `saserver` or `oracle` user.

Note the above prompts are not part of commands. All commands must be entered after these prompts.

This guide uses the typographical conventions shown in the following table:

Table 2: General guide conventions

<i>Format</i>	<i>Examples</i>	<i>Description</i>
ALL UPPERCASE	GPS NULL MYWEBSERVER	Acronyms, device names, logical operators, registry keys, and some data structures.
Link	See www.ibm.com	For links within a document or to the Internet.
Bold	Note: The busy hour determiner is...	Heading text for Notes, Tips, and Warnings.

SMALL CAPS	The STORED SQL dialog box... ...click VIEW... In the main GUI window, select the FILE menu, point to NEW, and then select TRAF- FIC TEMPLATE.	Any text that appears on the GUI.
<i>Italic</i>	<i>A busy hour</i> is... A web Server <i>must</i> be installed... See the <i>User Guide</i>	New terms, emphasis, and book titles.
Monospace	<code>./wminstall</code> <code>\$ cd /cdrom/cdrom0</code> <code>/xml/dict</code> <code>addmsc.sh</code> <code>core.spec</code> Type OK to continue.	Code text, command line text, paths, scripts, and file names. Text written in the body of a paragraph that the user is expected to enter.
Monospace Bold	<code>[root] # pkginfo grep -i perl</code> system Perl5 On-Line Manual Pages system Perl 5.005_03 (POD Documentation) system Perl 5.005_03	For contrast in a code example to show lines the user is expected to enter.
<Monospace italics>	<code># cd <oracle_setup></code>	Used in code examples: command-line variables that you replace with a real name or value. These are always marked with arrow brackets.
[square bracket]	<code>log-archiver.sh [-i][-w][-t]</code>	Used in code examples: indicates options.

1.4 User Publications

The following user publications are provided with the GPRS Service Quality Manager service solution:

Table 3 : GPRS service solution user documentation

Document	Description
<i>Tivoli Netcool Service Quality Manager Service Solutions Installation Guide</i>	Details the generic steps required to install any Service Quality Manager service solution.
<i>Tivoli Netcool Service Quality Manager GPRS RAN PM Service Solution Interface Control Guide</i>	Details the GPRS RAN PM service solution input interface.

<i>Tivoli Netcool Service Quality Manager GPRS Service Solution Release Notes</i>	Provides information on the GPRS Service Solution release contents, platform requirements, installation and upgrade procedures, and known issues.
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The following user publications are provided with the Service Quality Manager core software as Adobe® PDFs (portable document format). Online help is available in HTML format.

Table 4: Service Quality Manager user documentation

Guide title	Description
<i>Release Notes</i>	Provides information on the Service Quality Manager release contents, platform requirements, installation and upgrade procedures, and known issues.
<i>Configuration Guide</i>	Describes SLA provisioning (Parties, SLAs, and SLA templates applications) and Service Quality Manager provisioning (services resources, KQI models and service models applications) in Service Quality Manager.
<i>Monitoring Guide</i>	Describes monitoring (SLA Monitor, KQI analyzer, alarm monitor, audit manager and SLA web monitor applications) in Service Quality Manager.
<i>Customer Experience Manager Monitoring Guide</i>	Describes how to use and monitor the Customer Experience Manager feature in Service Quality Manager.
<i>Customer Experience Manager Provisioning Guide</i>	Reference guide that contains information for provisioning the Customer Experience Manager system.
<i>Solaris Server Installation Guide</i>	Describes how to install the Service Quality Manager server system on Solaris 10g.
<i>Client Installation Guide</i>	Describes how to install the Service Quality Manager client.
<i>AIX Installation Guide</i>	Describes how to install the Tivoli Netcool Service Quality Manager server system on IBM AIX® 5.3L.
<i>Solaris System Administration Guide</i>	Provides an overview of the Service Quality Manager administrative tasks, including instructions on how to complete these tasks: <ul style="list-style-type: none"> - Starting and stopping Service Quality Manager - Running batch processes such as archiving trace files and log files - Backing up and restoring the system

<p><i>AIX System Administration Guide</i></p>	<p>Provides an overview of the AIX Service Quality Manager administrative tasks including instructions on how to complete these tasks:</p> <ul style="list-style-type: none"> - Starting and stopping Service Quality Manager - Running batch processes such as archiving trace files and log files - Backing up and restoring the system
<p><i>Upgrade Guide</i></p>	<p>Details how to upgrade from one Service Quality Manager version to another</p>
<p><i>BusinessObjects Installation and Configuration Guide</i></p>	<p>Provides information on the steps required to install and configure the BusinessObjects (v 6.5 or XI) server and client for use with Service Quality Manager.</p>
<p><i>Service Quality Manager Core Online Help</i></p>	<p>Provides information and procedures for using Service Quality Manager client applications.</p>
<p><i>Customer Experience Manager Online Help</i></p>	<p>Describes how to use and monitor the Customer Experience Manager feature in the Service Quality Manager.</p>
<p><i>SLA Webview Online Help</i></p>	<p>Describes how to use and monitor the SLA Webview feature in the Service Quality Manager.</p>

2 Release details

Service Quality Manager GPRS v1.5 service solution provides the following data sources:

- Radio Access Network – Performance Management (RAN PM)

3 Hardware specification

The Service Quality Manager GPRS service solution can be installed on a Solaris system with the following configuration:

- Server with T2/SPARC64 VI or UltraSPARC IV+ processor
- 146GB of disk space
- 32GB of memory
- Gigabit Ethernet

The Service Quality Manager GPRS service solution can be installed on an AIX system with the following configuration:

- JS22 blade or equivalent
- 146GB of disk space
- 32GB of memory
- Gigabit Ethernet

4 Software requirements

The minimum prerequisite software requirements are:

- Tivoli Netcool Service Quality Manager v4.1.4 (4.1.4-TIV-TNSQM)
- Tivoli Netcool Service Quality Manager GOM v1.8 or later

Note: See the *Tivoli Netcool Service Quality Manager Version 4.1.4 Release Notes* for the minimum software required to operate this product.

5 Installation

5.1 Installation

To install the Tivoli Netcool Service Quality Manager GPRS Service Solution, *see* the *Tivoli Netcool Service Quality Manager Service Solutions Installation Guide*.

Note: Tivoli Netcool Service Quality Manager GPRS service solution depends on Tivoli Netcool Service Quality Manager GOM version v1.8 or later. Deploy this software using the instructions in chapter three of the *Tivoli Netcool Service Quality Manager Service Solutions Installation Guide* before installing the Tivoli Netcool Service Quality Manager GPRS service solution.

5.2 Service solution model version

Note: Chapter four of the *Tivoli Netcool Service Quality Manager Service Solutions Installation Guide* requires the person installing the software to enter the service solution name, data source name and model version of the GPRS service solution.

The service solution name, data source name and model version of the GPRS service solution are:

- Solution name = GPRS
- Data source name = RAN PM
- Model version = 1.5

5.3 Default resource mapping

This service solution supports Tivoli Netcool Service Quality Manager "Default Resource" instances. These instances are provided so that data with the following characteristics can be processed and stored by the service solution adapter:

- Any data row that contains ResourceType references that cannot be recognized against the provisioned resource set
- Any data row that has missing references to one or more resource types

In each of these cases, the reference is attributed to the "Default Resource" instance of that ResourceType. For example, if the ResourceType is "CellArea," the default resource for that ResourceType is named "unknown_CellArea". For all other purposes, the default resource can be treated the same as any other instance of the ResourceType. The service solution produces KQI values for the default resource and these values can be monitored for diagnostic purposes if required. The default resource metrics are also visible in the BusinessObjects reports.

If a customer does not want default resource metrics to be created, the default resource instances can be safely deleted using the Tivoli Netcool Service Quality Manager user interface or the provisioning broker. Any data rows that match the characteristics detailed above are not included in KQI metrics and are not included in metrics that are displayed in BusinessObject reports.

6 Known issues

There are no known issues to report with the v1.5 release of Tivoli Netcool Service Quality Manager GPRS service solution.

7 Fixed issues

The following issues have been addressed with the v1.5 release of Tivoli Netcool Service Quality Manager GPRS RAN service solution.

MR 1123104521: Enhancement Request

To include KPI and KQI for GPRS service monitoring, where paging and Location Update to be tracked up to LAC level.

8 Changes in this release

This release includes the following important changes, which should be noted carefully:

8.1 GPRS RAN PM Datasource - New KQI metrics on Location_GERAN resource type

The GPRS RAN PM data source was updated to provide new KQI metrics on the Location_GERAN resource type. These measurements are produced from existing CSV KPI fields and are available for all existing instances of the relevant resource types.

8.1.1 KPI Schema update – MARKET & BTS added

The GPRS RAN PM KPI database schema was updated to include the following new fields

Table 5: Additional KPI table fields in GPRS RAN PM

Name	Type	Description
MARKET_ID	Integer	This field is populated from the Cell-Market mapping file loaded by the adapter.
BTS_ID	Integer	This field is populated from the Cell-BTS mapping file loaded by the adapter.

8.1.2 Additional KQI metrics in GPRS RAN PM 1.5

Definitions for the following KQI metrics on the Location_GERAN resource type were added in GPRS 1.5

Table 6: Additional KQI metrics in GPRS RAN PM 1.5

Category	KQI Name	Description
GPRS_RAN_Accessibility	TBF_UL_SR_GPRS_RAN_Location_GERAN_PM	TBF Success Rate in the Uplink direction over Location dimension
GPRS_RAN_Accessibility	TBF_DL_SR_GPRS_RAN_Location_GERAN_PM	TBF Success Rate in the Downlink direction over Location dimension

GPRS_RAN_Accessibility	TBF_SR_GPRS_RAN_Location_GERAN_PM	TBF Success Rate in both directions over Location dimension
GPRS_RAN_Accessibility	PDCH_Occ_GPRS_RAN_Location_GERAN_PM	This is a measure of the PDCHs that are available to be used compared to the PDCHs that are currently in use or have been in use during the measurement period over Location dimension.
GPRS_RAN_Accessibility	PDCH_SR_GPRS_RAN_Location_GERAN_PM	This is a measure of the ability of the system to allocate PDCHs from the circuit switched domain when they are required over Location dimension.
GPRS_RAN_Accessibility	Availability_GPRS_RAN_Location_GERAN_PM	This is a measure of the availability of Cells in a Cell Area in the measurement period over Location dimension.
GPRS_RAN_Retainability	TBF_DR_GPRS_RAN_Location_GERAN_PM	This is a measure of the TBF Drop Rate in both directions over Location dimension
GPRS_RAN_Data_Quality	TBF_UL_TH_GPRS_RAN_Location_GERAN_PM	This is the the Average UL throughput per TBF over Location dimension

GPRS_RAN_Data_Quality	TBF_DL_TH_GPRS_RAN_Location_GERAN_PM	This is the Average DL throughput per TBF over Location dimension
GPRS_RAN_Data_Quality	EDG_UL_TH_GPRS_RAN_Location_GERAN_PM	This is the the Average UL throughput per TBF (Edge) over Location dimension
GPRS_RAN_Data_Quality	EDG_DL_TH_GPRS_RAN_Location_GERAN_PM	This is the Average DL throughput per TBF (Edge) over Location dimension
GPRS_RAN_Usage	TOT_VOLUM_GPRS_RAN_Location_GERAN_PM	This is the Total Data Volume over Location dimension
GPRS_RAN_Other	SOFT_BR_GPRS_RAN_Location_GERAN_PM	This is the Soft Blocking Rate over Location dimension
GPRS_RAN_Other	HARD_BR_GPRS_RAN_Location_GERAN_PM	This is the Hard Blocking Rate over Location dimension

8.2 GPRS RAN PM Data Source - New SLAT

The GPRS RAN PM data source was updated to provide new SLAT on the Location_GERAN resource type.

8.2.1 Additional SLAT on Location_GERAN type

The following SLAT were added in GPRS RAN PM 1.5 for the Location_GERAN resource type.

Table 7: Additional RAN SLAT in GPRS RAN PM 1.5

SLAT Name	Description
COTS_RAN_PM_LocationGERAN	This SLA contains KQIs calculated on the Location GERAN Resource Type for GPRS RAN PM

8.3 GPRS RAN PM Data Source - New Service Element

The GPRS RAN PM data source was updated to provide a new service element for the Location_GERAN resource type.

8.3.1 Additional Service Element on Location_GERAN type

The following service elements were added in GPRS RAN PM 1.5 for the Location_GERAN resource type.

Table 8: Additional RAN Service Element in GPRS RAN PM 1.5

Service Element Name	Description
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GPRS_RAN_Location_GERAN	This represents the KQI models associated with the GPRS RAN segment. It contains Location_GERAN KQIs.
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