



## Release Notes

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**Note:** Before using this information and the product it supports, read the information in “Notices” on page 16.

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This edition applies to version 1, release 4, modification 2 of the IBM Tivoli Netcool Service Quality Manager GSM 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 GSM Service Solution Release Notes* guide is organized into the following chapters:

**Table 1 Guide structure**

<i><b>Chapter</b></i>	<i><b>Description</b></i>
About this documentation	An overview of the Tivoli Netcool Service Quality Manager GSM 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 GSM (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®.

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**IMPORTANT:** Before attempting an installation of the Tivoli Netcool Service Quality Manager GSM service solution you are strongly advised to read the release notes distributed with your Tivoli Netcool Service Quality Manager GSM 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.

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## 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
- GSM
- Service Quality Manager modeling concepts i.e. 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 will be displayed if the user is logged in as user `root`.
- \$ (dollar): This prompt will be displayed if the user is logged in as either the `saserver` or `oracle` user.

Please 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**

<b><i>Format</i></b>	<b><i>Examples</i></b>	<b><i>Description</i></b>
ALL UPPERCASE	GPS NULL MYWEBSERVER	Acronyms, device names, logical operators, registry keys, and some data structures.
<u>Link</u>	See <a href="http://www.ibm.com">www.ibm.com</a>	For links within a document or to the Internet.
<b>Bold</b>	<b>Note:</b> 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>	A <i>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.
<b>Monospace Bold</b>	<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 &lt;oracle_setup&gt;</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 GSM Service Quality Manager service solution:

**Table 3 : GSM service solution user documentation**

<i>Document</i>	<i>Description</i>
<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 GSM RAN PM Service Solution Interface Control Guide</i>	Details the GSM RAN PM service solution input interface.

<i>Tivoli Netcool Service Quality Manager GSM End to End AT Service Solution Interface Control Guide</i>	Details the GSM End to End AT service solution input interface.
<i>Tivoli Netcool Service Quality Manager GSM MSC PM Service Solution Interface Control Guide</i>	Details the GSM MSC PM service solution input interface.
<i>Tivoli Netcool Service Quality Manager GSM SS7 Service Solution Interface Control Guide</i>	Details the GSM SS7 service solution input interface.
<i>Tivoli Netcool Service Quality Manager GSM Service Solution Release Notes</i>	Provides information on the GSM Service Solution release contents, platform requirements, installation and upgrade procedures, and known issues.

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**

<b>Guide title</b>	<b>Description</b>
<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 containing 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.

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<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>	<p>Provides an overview of the Service Quality Manager administrative tasks including instructions on how to complete these tasks:</p> <ul style="list-style-type: none"><li>- Starting and stopping Service Quality Manager.</li><li>- Running batch processes such as archiving trace files and log files.</li><li>- Backing up and restoring the system.</li></ul>
<i>AIX System Administration Guide</i>	<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"><li>- Starting and stopping Service Quality Manager.</li><li>- Running batch processes such as archiving trace files and log files.</li><li>- Backing up and restoring the system.</li></ul>
<i>Upgrade Guide</i>	Details how to upgrade from one Service Quality Manager version to another.
<i>BusinessObjects Installation and Configuration Guide</i>	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.
<i>Service Quality Manager Core Online Help</i>	Provides information and procedures for using Service Quality Manager client applications.



<i>Customer Experience Manager Online Help</i>	Describes how to use and monitor the Customer Experience Manager feature in the Service Quality Manager.
<i>SLA Webview Online Help</i>	Describes how to use and monitor the SLA Webview feature in the Service Quality Manager.

## 2 Release details

Service Quality Manager GSM v1.4.2 service solution provides the following data sources:

- End-to-End Active Test (E2E AT)
- Mobile Switching Centres – Performance Management (MSC PM)
- Radio Access Network – Performance Management (RAN PM)
- Signalling System 7 (SS7)

## 3 Hardware specification

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

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

The Service Quality Manager GSM 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 pre-requisite software requirements are:

- Tivoli Netcool Service Quality Manager v4.1.2 or later.
- Tivoli Netcool Service Quality Manager GOM v1.4.10 or later.

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**Note:** Refer to *Tivoli Netcool Service Quality Manager Version 4.1.2 Release Notes* for the minimum software required to operate this product.

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## 5 Installation

### 5.1 Installation

To install the Tivoli Netcool Service Quality Manager GSM Service Solution, refer to the *Tivoli Netcool Service Quality Manager Service Solutions Installation Guide*.

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**Note:** Tivoli Netcool Service Quality Manager GSM service solution is dependant on the Tivoli Netcool Service Quality Manager GOM version v1.4.10 or later. Deploy this software using the instructions in chapter 3 of the *Tivoli Netcool Service Quality Manager Service Solutions Installation Guide* prior to proceeding with the installation of Tivoli Netcool Service Quality Manager GSM service solution.

## 5.2 Service solution model version

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**Note:** Chapter 4 of the *Tivoli Netcool Service Quality Manager Service Solutions Installation Guide* requires the person installing the software to input the service solution name, data source name and model version of the GSM service solution.

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The service solution name, data source name and model version of the GSM service solution, are as follows:

- Solution name = GSM
- Data source name = E2E AT
- Model Version = 1.4.2
  
- Solution name = GSM
- Data source name = MSC PM
- Model version = 1.4.2
  
- Solution name = GSM
- Data source name = RAN PM
- Model version = 1.4.2
  
- Solution name = GSM
- Data source name = SS7
- Model version = 1.4.2

## 5.3 Default resource mapping

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

- Any data row which contains ResourceType references that cannot be recognized against the provisioned resource set.
  
- Any data row which 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" then 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 will produce KQI values for the default resource and these can be monitored for diagnostic purposes if required. The default resource metrics will also be visible in the BusinessObjects reports.

If a customer does not wish to have any default resource metrics 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 matching the characteristics detailed above will then not be included for any KQI metrics and will they not be included in metrics displayed in BusinessObject reports either.

## 5.4 Test data

Please note that the adapter test input files supplied with the GSM RAN release v1.4.1 are not compatible with 1.4.2. A new set of data has been provided to test this adapter.

## 6 Known issues

There are no known issues to report with the v1.4.2 release of Tivoli Netcool Service Quality Manager GSM service solution.

## 7 Fixed issues

There are no fixed issues to report with the v1.4.2 release of Tivoli Netcool Service Quality Manager GSM service solution.

## 8 Changes in this release

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

### 8.1 GSM RAN PM – New CSV KPI fields and KQI metrics

Some new KPI fields have been added to the CSV input file for GSM RAN PM. An updated Interface Control Guide has been included which documents the fields. The document is named as follows

- ◆ TNSQM\_GSM\_RAN\_PM\_ServiceSolutions\_InterfaceControlGuideV1.4.2.doc

The KPI database schema has been updated such that these new fields can be stored and a schema upgrade is included in this delivery. The following nullable fields have been added to the database table

**Table 5: Additional KPI table fields in RAN PM**

Name	Type
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DROP_SDCCH	Number
SUCC_SDCCH	Number
SUCC_RATE_RACH	Number
SUCC_RATE_WT_RACH	Number

The new KPI fields are included in order to provide the inputs for the following additional KQI metrics on the **CellArea** resource type

**Table 6: Additional KQI metrics in RAN PM**

Category	Display Name	Description
GSM_RAN_Accessibility	GSM SDCCH Drop Rate	This KQI calculates the proportion of dropped SDCCH connections out of the total number of SDCCH connections without TCH congestion.
GSM_RAN_Accessibility	GSM RACH Success Rate	This KQI calculates the proportion of RACH Requests which were serviced.

Customers with existing mediation solutions delivering data to the 1.4.1 release of GSM RAN PM will only need to update for the new ICG definition if they wish to monitor these new metrics. If the new CSV fields are not included in the data file, the loader will continue to process the data as normal but the above metrics will not be produced. In that scenario, the above KQI metrics would never be evaluated if they were included in a monitored Service Level Agreement.

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