



Note: Before using this information and the product it supports, read the information in “Notices” on page 29.

This edition applies to version 2, release 2 of the IBM Tivoli Netcool Service Quality Manager – GSM RAN PM service solution and to all subsequent releases and modifications until otherwise indicated in new editions.

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Table of Contents

1.	About this Documentation	4
1.1	Audience.....	4
1.2	Required Skills and Knowledge	5
1.3	Document Conventions	5
1.4	User Publications	7
2	Software and Hardware Requirements	10
3	Upgrade Procedure.....	10
3.1	Stopping the GSM RAN PM Loader.....	11
3.2	Removing GSM RAN PM 1.4.3 Loader deployment files	11
3.3	Backing up the GSM RAN PM Loader Configuration	11
3.4	Installing GSM GOM Version 1.5	12
3.5	Deploying GSM RAN PM version 1.5 BO™ Universes	13
3.5.1	Prerequisite	13
3.5.2	Extracting BusinessObjects deliverables.....	14
3.5.3	Associating LOV files with universe	14
3.5.4	Export the universe and the list of values (LOV) files to the BusinessObjects server	14
3.5.5	Changing universes to local time format settings	15
3.5.6	Import reports BIAR file to the repository database	16
3.5.7	Checking the BusinessObjects reports installation	17
3.6	Installing GSM RAN PM Version 1.5.....	17
3.7	Upgrading and Provisioning GSM GOM and GSM RAN PM.....	18
3.8	Deploying the GSM RAN PM Version 1.5 Loader.....	18
3.9	Restoring the GSM RAN PM Loader Configuration	19
3.10	Upgrading the GSM RAN PM Schema	19
3.11	Restarting the GSM RAN PM Loader Process	20
4	Rollback Procedure	20
4.1	Stopping the GSM RAN PM Loader.....	20
4.2	Rolling back the GSM GOM and GSM RAN PM provisioning to version 1.4.3	21
4.3	Deploying the GSM RAN PM version 1.4.3 loader	21
4.4	Restoring the GSM RAN PM version 1.4.3 Loader Configuration	22
4.5	Restoring the GSM RAN PM version 1.4.3 Schema.....	22
4.6	Deploying GSM RAN PM version 1.4.3 BO™ Universes	22
4.6.1	Prerequisite	23
4.6.2	Extracting BusinessObjects deliverables.....	23
4.6.3	Associating LOV files with universe	23
4.6.4	Export the universe and the list of values (LOV) files to the BusinessObjects server	24
4.6.5	Changing universes to local time format settings	24
4.6.6	Import reports BIAR file to the repository database	25
4.6.7	Checking the BusinessObjects reports installation	26
4.7	Uninstalling GSM GOM version 1.5	27
4.8	Uninstalling GSM RAN PM version 1.5.....	27
4.9	Restarting the GSM RAN PM Loader Process	28
	Notices	29

1. About this Documentation

The IBM® Tivoli® Netcool® Service Quality Manager GSM RAN PM Solution Version 1.4.3 to 1.5 Upgrade Guide is organized into the following chapters:

Table 1: Document Structure

Chapter	Description
About this Documentation	An overview of the Tivoli Netcool Service Quality Manager for GSM RAN PM Service Solution Upgrade Guide documentation, which gives details of the intended audience and the structure of the guide
Software Requirements	Details of software required for the release
Hardware Specification	Details of hardware required for the release
Media Content	Details of media provided for the release
Upgrade Procedure	Describes the upgrade procedure itself
Rollback Procedure	Describes the rollback procedure from version 1.5 back to version 1.4.3

1.1 Audience

The target audience of this guide is IBM Tivoli Netcool Service Quality Manager GSM RAN PM Solution customers. They should be familiar with telecommunication and IT principles and should also have a good understanding of Solaris and/or AIX®.

IMPORTANT: Before upgrading the Tivoli Netcool Service Quality Manager GSM RAN PM Solution to version 1.5 you are strongly advised to read the release notes distributed with Tivoli Netcool Service Quality Manager GSM RAN PM version 1.5 software. Release notes may contain information specific to your installation not contained in this guide. Failure to consult release notes may result in a corrupt, incomplete or failed installation.

Note: Tivoli Netcool Service Quality Manager Administrators should not, without prior consultation and agreement from IBM, make any changes to the database schema. Changes to the database schema may 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 Networking
- GSM RAN PM
- Service Quality Manager modeling concepts that is, service resources, KPIs, KQIs and SLAs

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 Document Conventions

The following command prompts can be seen throughout this document 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 document uses the typographical conventions shown in the following table:

Table 2: General Document 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.

TIVOLI NETCOOL SERVICE QUALITY MANAGER MODULE FOR GSM RAN PM SERVICE INSTALLATION GUIDE

Link	See www.sun.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 TRAFFIC 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.
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

This section lists the following publications:

1. IBM Tivoli Netcool Service Quality Manager core library
2. IBM Tivoli Netcool Service Quality Manager Module for GSM RAN PM Service library

It also describes how to access Tivoli publications online and how to order Tivoli publications.

1.4.1 IBM Tivoli Netcool Service Quality Manager core library

The IBM Tivoli Netcool Service Quality Manager core library contains the following publications:

- *IBM Tivoli Netcool Service Quality Manager AIX Server Installation Guide*
Describes how to install the Tivoli Netcool Service Quality Manager Server system on IBM AIX® systems.
- *IBM Tivoli Netcool Service Quality Manager Solaris Server Installation Guide*
Describes how to install the Tivoli Netcool Service Quality Manager Server system on Solaris systems.
- *IBM Tivoli Netcool Service Quality Manager Client Installation Guide*
Describes how to install the Tivoli Netcool Service Quality Manager client.
- *IBM Tivoli Netcool Service Quality Manager Upgrade Guide*
Details how to upgrade from one Tivoli Netcool Service Quality Manager version to another.
- *IBM Tivoli Netcool Service Quality Manager AIX System Administration Guide*
Provides an overview of the IBM AIX® Tivoli Netcool Service Quality Manager administrative tasks including instructions on how to complete the following tasks:
 - Starting and stopping the Tivoli Netcool Service Quality Manager product
 - Running batch processes such as archiving trace files and log files
 - Backing up and restoring the system
- *IBM Tivoli Netcool Service Quality Manager Solaris System Administration Guide*
Provides an overview of the Solaris Tivoli Netcool Service Quality Manager administrative tasks including instructions on how to complete the following tasks:
 - Starting and stopping the Tivoli Netcool Service Quality Manager product
 - Running batch processes such as archiving trace files and log files
 - Backing up and restoring the system
- *IBM Tivoli Netcool Service Quality Manager Provisioning Service SI Guide*
Provide information about provisioning the Tivoli Netcool Service Quality Manager system.
- *IBM Tivoli Netcool Service Quality Manager Customer Experience Manager Provisioning Guide*
Provides information about provisioning the Tivoli Netcool Customer Experience Manager system.
- *IBM Tivoli Netcool Service Quality Manager Customer Experience Manager Monitoring Guide*

TIVOLI NETCOOL SERVICE QUALITY MANAGER MODULE FOR GSM RAN PM SERVICE INSTALLATION GUIDE

Describes how to use and monitor the Tivoli Netcool Customer Experience Manager feature in the Tivoli Netcool Service Quality Manager product.

- *IBM Tivoli Netcool Service Quality Manager Monitoring Guide*

Describes monitoring (service level agreement (SLA) monitor, key quality indicator (KQI) analyzer, alarm monitor, audit manager, and SLA Webview applications) in the Tivoli Netcool Service Quality Manager product.

- *IBM Tivoli Netcool Service Quality Manager Configuration Guide*

Describes SLA provisioning (parties, SLAs, and SLA templates applications). It also describes Tivoli Netcool Service Quality Manager provisioning (services resources, KQI models, and service models applications) in the Tivoli Netcool Service Quality Manager product.

- *IBM Tivoli Netcool Service Quality Manager BusinessObjects Installation and Configuration Guide*

Provides information about the steps required to install and configure the BusinessObjects server and client for use with the Tivoli Netcool Service Quality Manager product.

- *IBM Tivoli Netcool Customer Experience Manager Customer Relationship Management Development Guide*

Provides an overview of the customer relationship management (CRM) proxy server and the CRM plug-in module. The CRM plug-in modules, developed using Java™ code, mediate between the Tivoli Netcool Customer Experience Management framework and an external CRM system.

- *IBM Tivoli Netcool Service Quality Manager Release Notes*

Provides information about the Tivoli Netcool Service Quality Manager release contents, platform requirements, installation and upgrade procedures, and known issues.

1.4.2 IBM Tivoli Netcool Service Quality Manager Module for GSM RAN PM Service library

- *IBM Tivoli Netcool Service Quality Manager Module for GSM RAN PM Service Installation Guide*

Provides the steps required to install the Tivoli Netcool Service Quality Manager Module for GSM RAN PM Service and its data sources.

- *IBM Tivoli Netcool Service Quality Manager Module for GSM RAN PM Service Overview Guide*

Provides an overview of the Tivoli Netcool Service Quality Manager Module for GSM RAN PM Service product architecture and its entities.

- *IBM Tivoli Netcool Service Quality Manager Module for GSM RAN PM Interface Control Guide*

Provides details about the Tivoli Netcool Service Quality Manager Module for GSM RAN PM Service input interface.

- *IBM Tivoli Netcool Service Quality Manager Module for GSM RAN PM Release Notes*

Provides information on the Tivoli Netcool Service Quality Manager Module for GSM RAN PM Service release contents, platform requirements, installation procedures, and known issues.

1.4.3 Accessing terminology online

The IBM Terminology web site consolidates the terminology from IBM product libraries in one convenient location. You can access the terminology web site at:

<http://www.ibm.com/software/globalization/terminology>.

1.4.4 Accessing publications online

The product CD contains the publications that are in the product library. The format of the publications is PDF. IBM posts publications for Tivoli products, as they become available and whenever they are updated, to the Tivoli Documentation Central web site at <http://www.ibm.com/tivoli/documentation>

Note: If you print PDF documents on anything other than letter-sized paper, set the option in the **File -> Print** window that allows Adobe® Reader to print letter-sized pages on your local paper.

1.4.5 Ordering publications

You can order many Tivoli publications online at

<http://www.elink.ibm.link.ibm.com/publications/servlet/pbi.wss>

You can also order by telephone by calling one of these numbers:

- In the United States: 800-879-2755
- In Canada: 800-426-4968

In other countries, contact your software account representative to order Tivoli publications. To locate the telephone number of your local representative, perform the following steps:

1. Go to <http://www.elink.ibm.link.ibm.com/publications/servlet/pbi.wss>
2. Select your country from the list and click **Go**.
3. Click **About this site** in the main panel to see an information page that includes the telephone number of your local representative.

2 Software and Hardware Requirements

The minimum prerequisite software requirements are:

- Tivoli Netcool Service Quality Manager version 4.1.4
- Global Object Model (GOM) 1.8
- Tivoli Netcool Service Quality Manager GSM RAN PM Service version 1.4.3 is successfully installed prior to performing this upgrade.
- Any installed test data for the Tivoli Netcool Service Quality Manager GSM RAN PM Service must be uninstalled prior to performing this upgrade.

Note: Execute the following command to check the Tivoli Netcool Service Quality Manager version:

```
sap version
```

If the current version of Tivoli Netcool Service Quality Manager is already installed, continue. If the current version of Tivoli Netcool Service Quality Manager is not installed, see the Tivoli Netcool Service Quality Manager installation guides, or the *IBM Tivoli Netcool Service Quality Manager Upgrade Guide*.

See the IBM Tivoli Netcool Service Quality Manager Version 4.1.4 Server Installation Guides for the minimum hardware that is required to operate this product

3 Upgrade Procedure

The upgrade procedure comprises the following steps in sequence:

- Stopping the GSM RAN PM loader
- Removing GSM RAN PM 1.4.3 Loader deployment files
- Backing up the GSM RAN PM 1.4.3 Loader configuration
- Installing GSM GOM version 1.5
- Installing GSM RAN PM version 1.5
- Deploying the GSM RAN PM version 1.5 Business Objects™ Universes
- Upgrading & Provisioning GSM GOM and GSM RAN PM
- Deploying the GSM RAN PM version 1.5 loader
- Restoring the GSM RAN PM loader configuration
- Upgrading the GSM RAN PM database schema

- Restarting the GSM RAN PM loader

See the sections below for details on how to complete each of the main steps identified above.

3.1 Stopping the GSM RAN PM Loader

Note (Distributed Installation): In a distributed system, perform the procedures in this section on the Gateway server only.

To stop the GSM RAN PM loader processes, complete the following as user saserver:

- Execute the command:

```
$ sap stop gsm_ran_pm_loader
```

3.2 Removing GSM RAN PM 1.4.3 Loader deployment files

Note (Distributed Installation): In a distributed system, perform the procedures in this section on the Gateway server only.

Complete the following as user saserver:

Execute the following commands:

```
$ rm $WMCROOT/conf/adapter/data/gsm_ran_pm_contextdef.xml
```

```
$ rm $WMCROOT/conf/adapter/data/gsm_ran_pm_loader_parser.bl
```

```
$ rm $WMCROOT/bin/gsm_ran_pm_loader.env
```

```
$ rm $WMCROOT/conf/adapter/collector/gsm_ran_pm_loader.properties
```

3.3 Backing up the GSM RAN PM Loader Configuration

Note (Distributed Installation): In a distributed system, perform the procedures in this section on the Gateway server only.

To backup the `gsm_ran_pm_loader` configurations, choose a directory `<BACKUP_DIR>` where the backup will be stored, and then complete the following as user saserver:

1. Create the backup directory:

```
$ cd $WMCROOT
```

```
$ mkdir <BACKUP_DIR>
```

Where `<BACKUP_DIR>` denotes the directory where the backup is to be stored.

2. Back up the datasource configuration by executing the following commands:

```
$ cd $WMCROOT/conf/adapter/datasource

$ cp gsm_ran_pm_loader.properties
$WMCROOT/<BACKUP_DIR>/gsm_ran_pm_loader.properties.datasource
```

3. Back up the collector configuration by executing the following commands:

```
$ cd $WMCROOT/conf/adapter/collector

$ cp gsm_ran_pm_loader.properties
$WMCROOT/<BACKUP_DIR>/gsm_ran_pm_loader.properties.collector
```

Note: Make a note of the directory location where the `gsm_ran_pm_loader`, configuration is backed up to, because its contents may be needed at a later date if a rollback must be performed.

3.4 Installing GSM GOM Version 1.5

Notes (Distributed Installation):

1. In a distributed system, perform the procedures in this section on both the Application server and Gateway server.
 2. Perform this section only if yet to upgrade GSM GOM.
-

Complete the following as user `saserver`:

1. Transfer the GSM GOM package `ibm-tn-sqm-gsm_gom-1.5.tar.gz` to the `/appl` directory on the Service Quality Manager host machine.

2. Move to the `/appl` directory by executing the command:

```
$ cd /appl
```

3. Extract the contents of the `gsm_ran_pm` package by executing the command:

```
$ gzip -d ibm-tn-sqm-gsm_gom-1.5.tar.gz
```

4. Extract the contents of the `gsm_ran_pm` package by executing the command:

```
$ tar -xvf ibm-tn-sqm-gsm_gom-1.5.tar
```

5. Verify that the following files are now located in the `/appl` directory:

```
ibm-tn-sqm-gsm_gom.install
ibm-tn-sqm-gsm_gom.license
ibm-tn-sqm-gsm_gom.remove
ibm-tn-sqm-gsm_gom.sw
```

6. Execute the GSM GOM install procedure using the command:

```
$ ./ibm-tn-sqm-gsm_gom.install
```

Follow the on-screen prompts as directed.

3.5 Deploying GSM RAN PM version 1.5 BO™ Universes

Execute the instructions in the following sections to deploy the updates Universe files for these datasource:

gsm_ran_pm

3.5.1 Prerequisite

BusinessObjects XI release 3.1 server with Oracle client software must be installed and configured.

Note (for distributed installations): In a distributed system, the **report.zip** file is available either on the gateway server or the application server.

Complete the following steps as user **saserver**:

- Copy the **\$WMCROOT/packages/gsm_ran_pm_1.5/report.zip** file from your Tivoli Netcool Service Quality Manager server to the BusinessObjects server instance using ftp or other methods available.

Defining the service name using Oracle Net Manager

If the core reports or any other service model set of reports have been deployed, then use the existing service name for the connection to the SADB database. If this is the first set of reports being deployed then create an Oracle service name by following these directions.

Before exporting BusinessObjects artifacts, you must create an Oracle service name (also called protocol address) in the BusinessObjects server to connect the BusinessObjects software with the **sadb** database server. The BusinessObjects universe will use this service name in its connection and reports will refresh with the database this service name points to.

To create a new service name in Oracle, you can use the Oracle Net Manager tool, provided in the Oracle client installed on the BusinessObjects server.

See *Configuring Clients for Oracle Connection Manager*, Chapter 11. *Configuring and Administering Oracle Connection Manager* in the Oracle 11g online documentation available at:

http://download.oracle.com/docs/cd/B28359_01/network.111/b28316/cman.htm

3.5.2 Extracting BusinessObjects deliverables

Ensure that all prerequisites are met before extracting BusinessObjects deliverables.

To copy the BusinessObjects deliverable to the BO server, complete the following steps:

1. Create a new destination directory for the contents of the BusinessObjects deliverables.
2. Transfer and extract the `report.zip` file to the destination directory.

Depending on the contents of the BusinessObjects deliverable, some or all of the following directories can be created when the `report.zip` file is extracted:

- `logos`
- `lovs`
- `reports`
- `universes`

3.5.3 Associating LOV files with universe

Note: LOV files are not available for every service model so these steps can be ignored if the `/lovs` directory does not exist.

Before exporting the universe to the BusinessObjects repository, LOV files must be in the same folder as the universe. To comply with this requirement, complete the following step:

Open the directory where the `report.zip` file was extracted to (see the *Extracting BusinessObjects deliverables* section). Copy all contents of the `/lovs` directory to the `/universes` directory

3.5.4 Export the universe and the list of values (LOV) files to the BusinessObjects server

The process of exporting the universe with its list of values (LOV) files must be completed with the BusinessObjects XI Universe Designer tool.

To complete the export process, complete the following steps:

1. Define a new BusinessObjects connection that points to the `sadb` database. The `sadb` database is located in the Tivoli Netcool Service Quality Manager database server and contains the installed Tivoli Netcool Service Quality Manager Module for GSM RAN PM Service module.

To complete this step you must define the following parameters within the BusinessObjects connection:

- Database middleware: **Oracle 11**

- Service: **Oracle service name**
- User Name: **saserver database user**
- Password: **Oracle password for the saserver user**

The default username and password for the `sadb` database are `saserver` and `saserver01`, respectively (if the password has changed, enter the new password). Enter the Oracle service name defined in the *Defining the Service Name using Oracle Net Manager* section.

Note: To complete the connection definition, see the *Setting universe parameters → Defining a new connection* subsection in chapter 2 of the *Designer's Guide* for BusinessObjects XI release 3.1, available at the following link: http://help.sap.com/businessobject/product_guides/

2. Open the universe file (.unv) from the `/universes` directory.
3. Change the universe connection parameters and use the new BusinessObjects connection that you created during step 1.
4. Save the universe with the new parameters.
5. Export the universe with its LOV files to the BusinessObjects repository.

Note: Refer to the Exporting a universe to the repository sections in chapter 2 the Designer's Guide for BusinessObjects XI Release 3.1, available at: http://help.sap.com/businessobject/product_guides/.

3.5.5 Changing universes to local time format settings

Note: All universes that are delivered in the `report.zip` file are preset with European date formats.

If deploying on a non-European BusinessObjects system, complete the following steps:

- Change the following objects where applicable in the universes to your localized time format settings: `Week/Day/Month-Day/Hour/Sample`. These objects are normally found under the `Calendar` class.

Complete the following step to change from European to localized time formats. The example details changing the objects for American date format.

- To change the object format, right-click the different time objects for each time and select **object format**. Update the format with these recommendations:

Objects Name = `Week`

ObjectFormat = `mm/dd/yyyy`

Object Name = `Day (or Month-Day)`

ObjectFormat = `mm/dd/yyyy`

Object Name = `Hour`

ObjectFormat = `mm/dd/yyyy hh:mm AM/PM`

Object Name = `Sample`

ObjectFormat = mm/dd/yyyy hh:mm AM/PM

Make these changes by using the BusinessObjects Universe Designer tool. For more information, see the Designer's Guide for BusinessObjects XI Release 3.1 available at:

http://help.sap.com/businessobject/product_guides/.

Access the Designer's Guide quickly using these filters:

- Select **all products** under **all products**.
- Select **BusinessObjects XI Release 3.1** under **all releases**

3.5.6 Import reports BIAR file to the repository database

A business intelligence archive resource (BIAR) file can be found in the `/reports` folder. The BIAR file contains all the reports for the Tivoli Netcool Service Quality Manager Module for GSM RAN PM and must be deployed to the BusinessObjects server.

You must use the BusinessObjects Import Wizard tool to import the BIAR file into the BusinessObjects server. For details on how to use this tool, see the *Using the Import Wizard* section in chapter 5 of the Windows *BusinessObjects Enterprise XI 3.1 Import Wizard Guide* for Business Objects XI Release 3.1, available at:

http://help.sap.com/businessobject/product_guides/

Access the Windows *BusinessObjects Enterprise XI Release 3.1 Import Wizard Guide* quickly using these filters:

- Select **BusinessObjects Enterprise** under **all products**.
- Select **BusinessObjects XI Release 3.1** under **all releases**.

Select the following options through the import process:

- On the **Source environment** window, select **Business Intelligence Archive Resource (BIAR) File** in the combo box and browse to the file in the **BIAR File** section.
- On the **Destination environment** window, type the name of the BusinessObjects central management server (CMS) and the username and password.
- On the **Select objects to import** window, select the following options:
 - **Import folders and objects**
 - **Import application folders and objects**
- On the **Incremental import** window, select **Overwrite object contents** and clear **Overwrite object rights**.
- On the **Folders and objects** display screen, select **all the reports**.

Note: After import process is complete, restart `reportom` from Tivoli Netcool Service Quality Manager database server by executing the following command:

- `sap stop reportom`
-

-
- `sap start reportom`
-

3.5.7 Checking the BusinessObjects reports installation

When the reports are imported to the BusinessObjects server, check whether they are installed and available on the server.

To complete the process, follow these steps:

- Open BusinessObjects Infoview in a navigator. The default URL is:

http://<BO_SERVER>:8090/InfoViewApp/logon.jsp

where *<BO_SERVER>* is the name of the server with BusinessObjects platform installed.

- Go to Document List, navigate through **Public Folders** -> **TNSQM** -> **Service** in the **Folders** menu on the left. The content of the last folder should contain the reports listed here:
 - Report 1
 - Report 2
 - ...

Note: Refer to the TNSQM/TNCCEM Installation and Configuration Guide to set up the authorization rights that are assigned to the report folder that is created in the BusinessObjects Server during the installation

3.6 Installing GSM RAN PM Version 1.5

Note (Distributed Installation): In a distributed system, perform the procedures in this section on both the Application server and the Gateway server.

Complete the following as user `saserver`:

1. Transfer the GSM RAN PM package `ibm-tn-sqm-gsm_ran_pm-1.5.tar.gz` to the `/appl` directory on the Service Quality Manager host machine.
2. Move to the `/appl` directory by executing the command:

```
$ cd /appl
```
3. Extract the contents of the `gsm_ran_pm` package by executing the command:

```
$ gzip -d ibm-tn-sqm-gsm_ran_pm-1.5.tar.gz
```
4. Extract the contents of the `gsm_ran_pm` package by executing the command:

```
$ tar -xvf ibm-tn-sqm-gsm_ran_pm-1.5.tar
```

5. Verify that the following files are now located in the /app1 directory:

```
ibm-tn-sqm-gsm_ran_pm.install  
ibm-tn-sqm-gsm_ran_pm.license  
ibm-tn-sqm-gsm_ran_pm.remove  
ibm-tn-sqm-gsm_ran_pm.sw
```

6. Execute the gsm_ran_pm install procedure using the command:

```
$ ./ibm-tn-sqm-gsm_ran_pm.install
```

Follow the on-screen prompts as directed.

3.7 Upgrading and Provisioning GSM GOM and GSM RAN PM

Note (Distributed Installation): In a distributed system, perform the procedures in this section on the Application server only.

Complete the following as user saserver:

1. Execute the command:

```
$ cd $WMCROOT/packages
```

2. Upgrade the gsm_gom package to version 1.5 by executing the command: (**Note:** Execute the command only if yet to upgrade and provision to GSM GOM version 1.5)

```
$ package_upgrade -t gsm_gom_1.5 -s gsm_gom_1.4.3
```

Follow the on-screen prompt as directed.

3. Upgrade the gsm_ran_pm package to version 1.5 by executing the command:

```
$ package_upgrade -t gsm_ran_pm_1.5 -s gsm_ran_pm_1.4.3
```

Follow the on-screen prompt as directed.

3.8 Deploying the GSM RAN PM Version 1.5 Loader

Note (Distributed Installation): In a distributed system, perform the procedures in this section on the Gateway server only.

Complete the following as user saserver:

1. Execute the command:

```
$ cd $WMCROOT/packages
```

2. Deploy the gsm_ran_pm_loader by executing the command:

```
$ wmc_ant -f adp_deploy.xml -Dsa.package=gsm_ran_pm_1.5 do-deploy
```

3.9 Restoring the GSM RAN PM Loader Configuration

Notes (Distributed Installation):

1. In a distributed system, perform the procedures in this section on the Gateway server only.
 2. Ignore the steps in this section if restoring of loader configuration is not required.
-

To restore the loader configurations, complete the following as user `saserver`:

1. Restore the datasource configuration by executing the commands:

```
$ cd $WMCROOT/conf/adapter/datasource
$ cp $WMCROOT/<BACKUP_DIR>/gsm_ran_pm_loader.properties.datasource
./gsm_ran_pm_loader.properties
```

2. Restore the collector configuration by executing the commands:

```
$ cd $WMCROOT/conf/adapter/collector
$ cp $WMCROOT/<BACKUP_DIR>/gsm_ran_pm_loader.properties.collector
./gsm_ran_pm_loader.properties
```

3. Add the following syntax to file `gsm_ran_pm_loader.properties` in `$WMCROOT/conf/adapter/collector` if step 2 has been performed.

```
com.comnitel.sm.adapter.collector.contextfuncs=com.ibm.ie.sa.atk.CustomSyntax
```

3.10 Upgrading the GSM RAN PM Schema

Note (Distributed Installation): In a distributed system, perform the procedures in this section on the Gateway server only.

Complete the following as user `saserver`:

1. Execute the following command:

```
$ cd $WMCROOT/packages/gsm_ran_pm_1.5/admin/oracle/schema
```

2. Connect to oracle database `sadb` as user `saserver` using `sqlplus`: (**Note:** You will be prompted for the `saserver` DB user password)

```
$ sqlplus saserver@sadb
```

3. Upgrade the GSM RAN PM schema files Version 1.4.3 to Version 1.5 by executing the following command:

```
$ @upgd_kpi_tab.ddl;
```

3.11 Restarting the GSM RAN PM Loader Process

Note (Distributed Installation): In a distributed system, perform the procedures in this section on the Application server only.

To restart the GSM RAN PM loader process, complete the following as user `saserver`:

Execute the command:

```
$ sap start gsm_ran_pm_loader
```

4 Rollback Procedure

The rollback procedure comprises the following steps in sequence:

- Stopping the GSM RAN PM loader
- Rolling back the GSM GOM and GSM RAN PM provisioning to version 1.4.3
- Deploying the GSM RAN PM version 1.4.3 loader.
- Restoring the GSM RAN PM version 1.4.3 Loader configuration
- Restoring the GSM RAN PM version 1.4.3 schema
- Deploying GSM RAN PM Version 1.4.3 BO™ Universes
- Uninstalling GSM GOM version 1.5
- Uninstalling GSM RAN PM version 1.5
- Restarting the GSM RAN PM loader

See the sections below for details on how to complete each of the main steps identified above.

4.1 Stopping the GSM RAN PM Loader

Note (Distributed Installation): In a distributed system, perform the procedures in this section on the Gateway server only.

To stop the GSM RAN PM loader processes, complete the following as user `saserver`:

Execute the command:

```
$ sap stop gsm_ran_pm_loader
```

4.2 Rolling back the GSM GOM and GSM RAN PM provisioning to version 1.4.3

Notes (Distributed Installation):

1. In a distributed system, perform the procedures in this section on the Gateway server only.
 2. If GSM GOM 1.5 is still require, skip steps 1 & 2, and perform only steps 3 & 4 in this section.
-

Complete the following as user saserver:

1. Execute the following command:

```
$ cd $WMCROOT/packages/gsm_gom_1.5/admin/provision/rollback/
```

2. Rollback the gsm_gom package to version 1.4.3 by executing the command:

```
$ wmc_ant -f rollback.xml -Dpackage.from=gsm_gom_1.5 -  
Dpackage.name=gsm_gom_1.4.3 rollback
```

3. Execute the following command:

```
$ cd $WMCROOT/packages/gsm_ran_pm_1.5/admin/provision/rollback/
```

4. Rollback the gsm_ran_pm package to version 1.4.3 by executing the command:

```
$ wmc_ant -f rollback.xml -Dpackage.from=gsm_ran_pm_1.5 -  
Dpackage.name=gsm_ran_pm_1.4.3 rollback
```

4.3 Deploying the GSM RAN PM version 1.4.3 loader

Note (Distributed Installation): In a distributed system, perform the procedures in this section on the Gateway server only.

Complete the following as user saserver:

1. Remove the existing loader by executing the commands:

```
$ rm $WMCROOT/bin/gsm_ran_pm_loader.env
```

```
$ rm $WMCROOT/conf/adapter/data/gsm_ran_pm_contextdef.xml
```

```
$ rm $WMCROOT/conf/adapter/data/gsm_ran_pm_loader_parser.bl
```

```
$ rm $WMCROOT/conf/adapter/collector/gsm_ran_pm_loader.properties
```

2. Deploy the gsm_ran_pm version 1.4.3 loader by executing the commands:

```
$ cd $WMCROOT/packages
$ wmc_ant -f adp_deploy.xml -Dsa.package=gsm_ran_pm_1.4.3 do-deploy
```

4.4 Restoring the GSM RAN PM version 1.4.3 Loader Configuration

Note (Distributed Installation): In a distributed system, perform the procedures in this section on the Gateway server only.

To restore the loader configurations, complete the following as user `saserver`:

1. Restore the datasource configuration by executing the commands:

```
$ cd $WMCROOT/conf/adapter/datasource
$ cp $WMCROOT/<BACKUP_DIR>/gsm_ran_pm_loader.properties.datasource
./gsm_ran_pm_loader.properties
```

2. Restore the collector configuration by executing the commands:

```
$ cd $WMCROOT/conf/adapter/collector
$ cp $WMCROOT/<BACKUP_DIR>/gsm_ran_pm_loader.properties.collector
./gsm_ran_pm_loader.properties
```

4.5 Restoring the GSM RAN PM version 1.4.3 Schema

Note (Distributed Installation): In a distributed system, perform the procedures in this section on the Gateway server only.

Complete the following as user `saserver`:

1. Execute the following command:

```
$ cd $WMCROOT/packages/gsm_ran_pm_1.5/admin/oracle/schema
```

2. Connect to oracle database `sadb` as user `saserver` using `sqlplus`: (**Note:** You will be prompted for the `saserver` DB user password)

```
$ sqlplus saserver@sadb
```

3. Downgrade the GSM RAN PM schema files from Version 1.5 to Version 1.4.3 by executing the command:

```
$ @rlbk_kpi_tab.ddl;
```

4.6 Deploying GSM RAN PM version 1.4.3 BO™ Universes

Execute the instructions in the following sections to deploy the updated Universe files for datasource `gsm_ran_pm`

4.6.1 Prerequisite

BusinessObjects XI release 3.1 server with Oracle client software must be installed and configured.

Note (for distributed installations): In a distributed system, the `report.zip` file is available either on the gateway server or the application server.

Complete the following steps as user `saserver`:

- Copy the `$WMCROOT/packages/gsm_ran_pm_1.4.3/report.zip` file from your Tivoli Netcool Service Quality Manager server to the BusinessObjects server instance using FTP or other methods available.

4.6.2 Extracting BusinessObjects deliverables

Ensure that all prerequisites are met before extracting BusinessObjects deliverables.

To copy the BusinessObjects deliverable to the BO server, complete the following steps:

1. Create a new destination directory for the contents of the BusinessObjects deliverables.
2. Transfer and extract the `report.zip` file to the destination directory.

Depending on the contents of the BusinessObjects deliverable, some or all of the following directories are created when the `report.zip` file is extracted:

- `logos`
- `lovs`
- `reports`
- `universes`

4.6.3 Associating LOV files with universe

Note: LOV files are not available for every service model so these steps can be ignored if the `/lovs` directory does not exist.

Before exporting the universe to the BusinessObjects repository, LOV files must be in the same folder as the universe. To comply with this requirement, complete the following step:

Open the directory where the `report.zip` file was extracted to (see the *Extracting BusinessObjects deliverables* section). Copy all contents of the `/lovs` directory to the `/universes` directory

4.6.4 Export the universe and the list of values (LOV) files to the BusinessObjects server

The process of exporting the universe with its list of values (LOV) files must be completed with the BusinessObjects XI Universe Designer tool.

To complete the export process, complete the following steps:

1. Define a new BusinessObjects connection that points to the `sadb` database. The `sadb` database is located in the Tivoli Netcool Service Quality Manager database server and contains the installed Tivoli Netcool Service Quality Manager Module for GSM RAN PM Service module.

To complete this step, define the following parameters within the BusinessObjects connection:

- Database middleware: **Oracle 11**
- Service: **Oracle service name**
- User Name: **saserver database user**
- Password: **Oracle password for the saserver user**

The default username and password for the `sadb` database are `saserver` and `saserver01` respectively (if the password has changed, enter the new password as appropriate). Enter the Oracle service name as previously defined in the *Defining the Service Name using Oracle Net Manager* section.

Note: To complete the connection definition, see the *Setting universe parameters → Defining a new connection* subsection in chapter 2 of the *Designer's Guide for BusinessObjects XI release 3.1*, available at: http://help.sap.com/businessobject/product_guides/

2. Open the universe file (.unv) from the `/universes` directory.
3. Change the universe connection parameters and use the new BusinessObjects connection created during step 1.
4. Save the universe with the new parameters.
5. Export the universe with its LOV files to the BusinessObjects repository.

Note: See the Exporting a universe to the repository sections in chapter 2 of the *Designer's Guide for BusinessObjects XI Release 3.1*, available at: http://help.sap.com/businessobject/product_guides/.

4.6.5 Changing universes to local time format settings

Note: All universes delivered in the `report.zip` file are preset with European date formats.

If deploying on a non-European BusinessObjects system, complete the following steps:

- Change the following objects where applicable in the universes to your localized time format settings: `Week/Day/Month-Day/Hour/Sample`. These objects are normally found under the `Calendar` class.

Complete the following step to change from European to localized time formats. The

following example details changing the objects for American date format.

- To change the object format, right-click the different time objects for each time and select **object format**. Update the format with the following recommendations:

Objects Name = **Week**

ObjectFormat = **mm/dd/yyyy**

Object Name = **Day (or Month-Day)**

ObjectFormat = **mm/dd/yyyy**

Object Name = **Hour**

ObjectFormat = **mm/dd/yyyy hh:mm AM/PM**

Object Name = **Sample**

ObjectFormat = **mm/dd/yyyy hh:mm AM/PM**

Make these changes by using the BusinessObjects Universe Designer tool. For more information, see the *Designer's Guide for BusinessObjects XI Release 3.1* available at:

http://help.sap.com/businessobject/product_guides/.

Access the Designer's Guide quickly using these filters:

- Select **all products** under **all products**.
- Select **BusinessObjects XI Release 3.1** under **all releases**

4.6.6 Import reports BIAR file to the repository database

A business intelligence archive resource (BIAR) file can be found in the **/reports** folder. The BIAR file contains all the reports for the Tivoli Netcool Service Quality Manager Module for GSM RAN PM and must be deployed to the BusinessObjects server.

Use the BusinessObjects Import Wizard tool to import the BIAR file into the BusinessObjects .For information on how to use this tool, see the section *Using the Import Wizard* in chapter 5 of the Windows *BusinessObjects Enterprise XI 3.1 Import Wizard Guide* for Business Objects XI Release 3.1, available at:

http://help.sap.com/businessobject/product_guides/

Access the Windows *BusinessObjects Enterprise XI Release 3.1 Import Wizard Guide* quickly using these filters:

- Select **BusinessObjects Enterprise** under **all products**.
- Select **BusinessObjects XI Release 3.1** under **all releases**.

The following options must be selected through the import process:

- In the **Source environment** window, select **Business Intelligence Archive Resource (BIAR) File** in the combo box and browse to the file in the **BIAR File** section.
- In the **Destination environment** window, type the name of the BusinessObjects central management server (CMS) and the username and password.

- In the **Select objects to import** window, just select these two options:
 - **Import folders and objects**
 - **Import application folders and objects**
- In the **Incremental import** window, keep **Overwrite object contents** checked and uncheck **Overwrite object rights**.
- In the **Folders and objects** window, select **all the reports**.

Note: After import process is completed, restart `reportom` from Tivoli Netcool Service Quality Manager database server by executing the following command:

- `sap stop reportom`
 - `sap start reportom`
-

4.6.7 Checking the BusinessObjects reports installation

When the reports are imported to the BusinessObjects server, check that they are installed and available on the server.

To complete the process, follow these steps:

1. Open BusinessObjects Infoview in a navigator. The default URL is:

http://<BO_SERVER>:8090/InfoViewApp/logon.jsp

where `<BO_SERVER>` is the name of the server with BusinessObjects platform installed.

2. Go to Document List, navigate through **Public Folders** -> **TNSQM** -> **Service** in the **Folders** menu on the left. The content of the last folder should contain the reports listed here:

- Report 1
- Report 2
- ...

Note: See the TNSQM/TNCEM Installation and Configuration Guide to set up the authorization rights that are assigned to the report folder that is created in the BusinessObjects Server during the installation

4.7 Uninstalling GSM GOM version 1.5

Notes (Distributed Installation):

1. In a distributed system, perform the procedures in this section on the Application server only.
 2. Skip this section if GSM GOM 1.5 is still required.
-

Complete the following as user `saserver`:

1. Change to the `/appl` directory by executing the command:

```
$ cd /appl
```

2. Execute the removal procedure using the command:

```
$ ./ibm-tn-sqm-gsm_gom.remove
```

Follow the on-screen prompts as directed.

3. Extract the contents of the GSM GOM Version 1.4.3 package by executing the command:

```
$ tar -xvf ibm-tn-sqm-gsm_gom-1.4.3.tar
```

4. Reinstall the GSM GOM Version 1.4.3 package to restore the GSM GOM software:

```
$ ./ibm-tn-sqm-gsm_gom.install
```

Follow the on-screen prompts as directed

4.8 Uninstalling GSM RAN PM version 1.5

Note (Distributed Installation): In a distributed system, perform the procedures in this section on the Application server and Gateway Servers.

Complete the following as user `saserver`:

1. Change to the `/appl` directory by executing the command:

```
$ cd /appl
```

2. Execute the removal procedure using the command:

```
./ibm-tn-sqm-gsm_ran_pm.remove
```

Follow the on-screen prompts as directed.

3. Extract the contents of the GSM RAN PM Version 1.4.3 package by executing the command:

```
$ tar -xvf ibm-tn-sqm-gsm_ran_pm-1.4.3.tar
```

4. Reinstall the GSM RAN PM Version 1.4.3 package to restore the GSM RAN PM software:

```
$ ./ibm-tn-sqm-gsm_ran_pm.install
```

Follow the on-screen prompts as directed.

4.9 Restarting the GSM RAN PM Loader Process

Note (Distributed Installation): In a distributed system, perform the procedures in this section on the Application server only.

To restart the `gsm_ran_pm_loader` process, complete the following as user `saserver`:

- Execute the command:

```
$ sap start gsm_ran_pm_loader
```

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Printed in the Republic of Ireland.