



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

This edition applies to version 1, release 5 of the IBM Tivoli Netcool Service Quality Manager – GPRS 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	5
1.1	Audience.....	5
1.2	Required Skills and Knowledge	6
1.3	Document Conventions	6
1.4	Publications	8
2	Software and Hardware Requirements	11
3	Upgrade Procedure.....	11
3.1	Stopping the GPRS RAN PM Loader.....	12
3.2	Removing GPRS RAN PM 1.4.4 Loader deployment files	12
3.3	Backing up the GPRS RAN PM Loader Configuration	12
3.4	Installing GPRS GOM Version 1.5	13
3.5	Deploying GPRS RAN PM version 1.5 BO™ Universes	14
3.5.1	Prerequisite	14
3.5.2	Extracting BusinessObjects deliverables.....	14
3.5.3	Associating LOV files with universe	15
3.5.4	Export the universe and the list of values (LOV) files to the BusinessObjects server	15
3.5.5	Changing universes to local time format settings	16
3.5.6	Import reports BIAR file to the repository database	17
3.5.7	Checking the BusinessObjects reports installation	17
3.6	Installing GPRS RAN PM Version 1.5.....	18
3.7	Upgrading the GPRS GOM and GPRS RAN PM Provisioning to Version 1.5.....	19
3.8	Deploying the GPRS RAN PM Version 1.5 Loader.....	19
3.9	Restoring the GPRS RAN PM Loader Configuration.....	19
3.10	Upgrading the GPRS RAN PM Schema	20
3.11	Restarting the GPRS RAN PM Loader Process	20
4	Rollback Procedure	20
4.1	Stopping the GPRS RAN PM Loader.....	21
4.2	Rolling back the GPRS GOM and GPRS RAN PM provisioning to version 1.4.4	21
4.3	Deploying the GPRS RAN PM version 1.4.4 loader	22
4.4	Restoring the GPRS RAN PM version 1.4.4 Loader Configuration	22
4.5	Restoring the GPRS RAN PM version 1.4.4 Schema.....	23
4.6	Deploying GPRS RAN PM version 1.4.4 BO™ Universes	23
4.6.1	Prerequisite	23
4.6.2	Extracting BusinessObjects deliverables.....	23
4.6.3	Associating LOV files with universe	24
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	25
4.6.6	Import reports BIAR file to the repository database	26
4.6.7	Checking the BusinessObjects reports installation	26
4.7	Uninstalling GPRS GOM version 1.5	27
4.8	Uninstalling GPRS RAN PM version 1.5.....	28

TIVOLI NETCOOL SERVICE QUALITY MANAGER GPRS RAN PM SERVICE INSTALLATION GUIDE

4.9	Restarting the GPRS RAN PM Loader Process	28
Notices	29

1 About this Documentation

The *IBM® Tivoli® Netcool® Service Quality Manager GPRS RAN PM Solution Version 1.4.4 to 1.5 Upgrade Guide* is organized into the following chapters:

Table 1: Document Structure

<i>Chapter</i>	<i>Description</i>
About this Documentation	An overview of the Tivoli Netcool Service Quality Manager for GPRS 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 1.4.4

1.1 Audience

The target audience of this guide is IBM Tivoli Netcool Service Quality Manager GPRS 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 GPRS RAN PM Solution to version 1.5 you are strongly advised to read the release notes distributed with Tivoli Netcool Service Quality Manager GPRS 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
- GPRS 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 GPRS 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.
<i><Monospace italics></i>	<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 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 GPRS 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*,
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*
Reference guide that contains information for 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 GPRS 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 GPRS RAN PM Service library

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

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

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

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

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

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

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

Provides information on the Tivoli Netcool Service Quality Manager Module for GPRS 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 GPRS RAN PM Service version 1.4.4 is successfully installed prior to performing this upgrade.
- Any installed test data for the Tivoli Netcool Service Quality Manager GPRS 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 GPRS RAN PM loader
- Removing GPRS RAN PM 1.4.4 Loader deployment files
- Backing up the GPRS RAN PM 1.4.4 Loader configuration
- Installing GPRS GOM version 1.5
- Installing GPRS RAN PM version 1.5
- Deploying the GPRS RAN PM version 1.5 Business Objects™ Universes
- Upgrading the GPRS GOM and GPRS RAN PM Provisioning to version 1.5
- Deploying the GPRS RAN PM version 1.5 loader
- Restoring the GPRS RAN PM loader configuration
- Upgrading the GPRS RAN PM database schema

- Restarting the GPRS RAN PM loader

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

3.1 Stopping the GPRS RAN PM Loader

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

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

- Execute the command:

```
$ sap stop gprs_ran_pm_loader
```

3.2 Removing GPRS RAN PM 1.4.4 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/gprs_ran_pm_contextdef.xml  
  
$ rm $WMCROOT/conf/adapter/data/gprs_ran_pm_loader_parser.bl  
  
$ rm $WMCROOT/bin/gprs_ran_pm_loader.env
```

3.3 Backing up the GPRS RAN PM Loader Configuration

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

To back up the gprs_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 data source configuration by executing the following commands:

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

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

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

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

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

Note: Make a note of the directory location where the `gprs_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 GPRS GOM Version 1.5

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

Complete the following as user `saserver`:

1. Transfer the GPRS GOM package `ibm-tn-sqm-gprs_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 `gprs_ran_pm` package by executing the command:

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

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

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

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

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

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

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

Follow the on-screen prompts as directed.

3.5 Deploying GPRS RAN PM version 1.5 BO™ Universes

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

`gprs_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/gprs_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, use the existing service name for the connection to the SADB database. If this is the first set of reports being deployed, 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 uses this service name in its connection and reports 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 GPRS 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 user name 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 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 you are 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 GPRS 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*, 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 user name 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** screen, select **all the reports**.

Note: After the 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:

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. 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/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 GPRS 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 GPRS RAN PM package `ibm-tn-sqm-gprs_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 `gprs_ran_pm` package by executing the command:

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

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

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

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

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

6. Execute the `gprs_ran_pm` install procedure using the command:

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

Follow the on-screen prompts as directed.

3.7 Upgrading the GPRS GOM and GPRS RAN PM Provisioning to Version 1.5

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 `gprs_gom` package to version 1.5 by executing the command:

```
$ package_upgrade -t gprs_gom_1.5 -s gprs_gom_1.4.4
```

Follow the on-screen prompt as directed.

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

```
$ package_upgrade -t gprs_ran_pm_1.5 -s gprs_ran_pm_1.4.4
```

Follow the on-screen prompt as directed.

3.8 Deploying the GPRS 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 `gprs_ran_pm_loader` by executing the command:

```
$ wmc_ant -f adp_deploy.xml -Dsa.package=gprs_ran_pm_1.5 do-deploy
```

3.9 Restoring the GPRS RAN PM 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 data source configuration by executing the commands:

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

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

2. Restore the collector configuration by executing the commands:

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

3.10 Upgrading the GPRS 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/gprs_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 GPRS RAN PM schema files Version 1.4.4 to Version 1.5 by executing the following command:

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

3.11 Restarting the GPRS 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 GPRS RAN PM loader process, complete the following as user `saserver`:

Execute the commands:

```
$ sap start gprs_ran_pm_loader
```

4 Rollback Procedure

The rollback procedure comprises the following steps in sequence:

- Stopping the GPRS RAN PM loader
- Rolling back the GPRS GOM and GPRS RAN PM provisioning to version 1.4.4
- Deploying the GPRS RAN PM version 1.4.4 loader.
- Restoring the GPRS RAN PM version 1.4.4 Loader configuration
- Restoring the GPRS RAN PM version 1.4.4 schema
- Deploying GPRS RAN PM Version 1.4.4 BO™ Universes
- Uninstalling GPRS GOM version 1.5
- Uninstalling GPRS RAN PM version 1.5
- Restarting the GPRS RAN PM loader

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

4.1 Stopping the GPRS RAN PM Loader

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

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

Execute the command:

```
$ sap stop gprs_ran_pm_loader
```

4.2 Rolling back the GPRS GOM and GPRS RAN PM provisioning to version 1.4.4

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/gprs_gom_1.5/admin/provision/rollback/
```

2. Roll back the gprs_gom package to version 1.4.4 by executing the command:

```
$ wmc_ant -f rollback.xml -Dpackage.from=gprs_gom_1.5 -
Dpackage.name=gprs_gom_1.4.4 rollback
```

.

3. Execute the following command:

```
$ cd $WMCROOT/packages/gprs_ran_pm_1.5/admin/provision/rollback/
```

4. Roll back the `gprs_ran_pm` package to version 1.4.4 by executing the command:

```
$ wmc_ant -f rollback.xml -Dpackage.from=gprs_ran_pm_1.5 -  
Dpackage.name=gprs_ran_pm_1.4.4 rollback
```

4.3 Deploying the GPRS RAN PM version 1.4.4 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/gprs_ran_pm_loader.env  
  
$ rm $WMCROOT/conf/adapter/data/gprs_ran_pm_contextdef.xml  
  
$ rm $WMCROOT/conf/adapter/data/gprs_ran_pm_loader_parser.bl
```

2. Deploy the `gprs_ran_pm` version 1.4.4 loader by executing the commands:

```
$ cd $WMCROOT/packages  
  
$ wmc_ant -f adp_deploy.xml -Dsa.package=gprs_ran_pm_1.4.4 do-deploy
```

4.4 Restoring the GPRS RAN PM version 1.4.4 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>/gprs_ran_pm_loader.properties.datasource  
./gprs_ran_pm_loader.properties
```

2. Restore the collector configuration by executing the commands:

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

4.5 Restoring the GPRS RAN PM version 1.4.4 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/gprs_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 GPRS RAN PM schema files from Version 1.5 to Version 1.4.4 by executing the command:

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

4.6 Deploying GPRS RAN PM version 1.4.4 BO™ Universes

Execute the instructions in the following sections to deploy the updated Universe files for data source `gprs_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/gprs_ran_pm_1.4/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 GPRS 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 user name 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

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 you are 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 GPRS RAN PM and must be deployed to the BusinessObjects server.

Use the BusinessObjects Import Wizard tool to import the BIAR file into the BusinessObjects server. 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. 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/TNCM 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 GPRS GOM version 1.5

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

```
$ cd /appl
```

2. Execute the removal procedure using the command:

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

Follow the on-screen prompts as directed.

3. Extract the contents of the GPRS GOM Version 1.4.4 package by executing the command:

```
$ tar -xvf ibm-tn-sqm-gprs_gom-1.4.4.tar
```

4. Reinstall the GPRS GOM Version 1.4.4 package to restore the GPRS GOM software:

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

Follow the on-screen prompts as directed

4.8 Uninstalling GPRS 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-gprs_ran_pm.remove
```

Follow the on-screen prompts as directed.

3. Extract the contents of the GPRS RAN PM Version 1.4.4 package by executing the command:

```
$ tar -xvf ibm-tn-sqm-gprs_ran_pm-1.4.4.tar
```

4. Reinstall the GPRS RAN PM Version 1.4.4 package to restore the GPRS RAN PM software:

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

Follow the on-screen prompts as directed.

4.9 Restarting the GPRS 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 `gprs_ran_pm_loader` process, complete the following as user `saserver`:

- Execute the command:

```
$ sap start gprs_ran_pm_loader
```

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