

Version 1.5



Upgrade Guide

Table of Contents

1	About this Documentation	1
1.1	Audience.....	2
1.2	Required Skills and Knowledge	2
1.3	Document Conventions	2
1.4	Publications	4
2	Software and Hardware Requirements	7
3	Upgrade Procedure.....	8
3.1	Stopping the GSM MSC PM Loader	8
3.2	Removing GSM MSC PM 1.4.3 Loader deployment files	9
3.3	Backing up the GSM MSC PM Loader Configuration	9
3.4	Installing GSM GOM Version 1.5	10
3.5	Deploying GSM MSC PM version 1.5 BO™ Universes	11
	Prerequisite	11
	Extracting BusinessObjects deliverables	12
	Associating LOV files with universe	12
	Export the universe and the list of values (LOV) files to the BusinessObjects server	12
	Changing universes to local time format settings	13
	Import reports BIAR file to the repository database.....	14
	Checking the BusinessObjects reports installation	15
3.6	Installing GSM MSC PM Version 1.5	16
3.7	Upgrading the GSM GOM and GSM MSC PM Provisioning to Version 1.5	16
3.8	Deploying the GSM MSC PM Version 1.5 Loader	17
3.9	Restoring the GSM MSC PM Loader Configuration	17
3.10	Upgrading the GSM MSC PM Schema.....	17
3.11	Restarting the GSM MSC PM Loader Process.....	18
4	Rollback Procedure	19
4.1	Stopping the GSM MSC PM Loader	19
4.2	Rolling back the GSM GOM and GSM MSC PM provisioning to version 1.4.3.....	19
4.3	Deploying the GSM MSC PM version 1.4.3 loader	20
4.4	Restoring the GSM MSC PM version 1.4.3 Loader Configuration.....	20
4.5	Restoring the GSM MSC PM version 1.4.3 Schema	21
4.6	Deploying GSM MSC PM version 1.4.3 BO™ Universes	21
	Prerequisite	21
	Extracting BusinessObjects deliverables	22
	Associating LOV files with universe	22
	Export the universe and the list of values (LOV) files to the BusinessObjects server	22
	Changing universes to local time format settings	23
	Import reports BIAR file to the repository database.....	24
	Checking the BusinessObjects reports installation	25
4.7	Uninstalling GSM GOM version 1.5	25
4.8	Uninstalling GSM MSC PM version 1.5	26
4.9	Restarting the GSM MSC PM Loader Process	26
	Notices	27

1 About this Documentation

The *IBM® Tivoli® Netcool® Service Quality Manager GSM MSC PM Solution Version 1.4.3 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 GSM MSC 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 MSC PM Solution customers. These customers should be familiar with telecommunication and IT principles and should also have a good understanding of Solaris and/or AIX®.

IMPORTANT: Before you upgrade of the Tivoli Netcool Service Quality Manager GSM MSC PM Solution to version 1.5 you are strongly advised to read the release notes distributed with Tivoli Netcool Service Quality Manager GSM MSC 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 MSC PM
- Service Quality Manager modeling concepts i.e. 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.
<u>Link</u>	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>	# cd <i><oracle_setup></i>	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]	log-archiver.sh [-i][-w][-t]	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 GSM MSC 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 containing information for provisioning the Tivoli Netcool Service Quality Manager system.
- *IBM Tivoli Netcool Service Quality Manager Customer Experience Manager Provisioning Guide*
Provides information for provisioning the Tivoli Netcool Customer Experience Manager system.
- *IBM Tivoli Netcool Service Quality Manager Customer Experience Manager Monitoring 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 MSC PM Service library

- *IBM Tivoli Netcool Service Quality Manager Module for GSM MSC PM Service Installation Guide*
Provides the steps that are required to install the Tivoli Netcool Service Quality Manager Module for GSM MSC PM Service and its data sources.

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

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

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

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

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

Provides information on the Tivoli Netcool Service Quality Manager Module for GSM MSC 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 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 MSC PM Service version 1.4.3 must be successfully installed prior to performing this upgrade.
- Any installed test data for the Tivoli Netcool Service Quality Manager GSM MSC 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 required to operate this product

3 Upgrade Procedure

The upgrade procedure comprises the following steps in sequence:

1. Stopping the GSM MSC PM loader
2. Removing GSM MSC PM 1.4.3 loader deployment files
3. Backing up the GSM MSC PM 1.4.3 loader configuration
4. Installing GSM GOM version 1.5
5. Installing GSM MSC PM version 1.5
6. Deploying the GSM MSC PM version 1.5 Business Objects™ Universes
7. Upgrading the GSM GOM and GSM MSC PM Provisioning to version 1.5
8. Deploying the GSM MSC PM version 1.5 loader
9. Restoring the GSM MSC PM loader configuration
10. Upgrading the GSM MSC PM database schema
11. Restarting the GSM MSC PM loader

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

3.1 Stopping the GSM MSC PM Loader

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

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

- Execute the command:

```
$ sap stop gsm_msc_pm_loader
```

3.2 Removing GSM MSC 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_msc_pm_contextdef.xml

$ rm $WMCROOT/conf/adapter/data/gsm_msc_pm_loader_parser.bl

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

3.3 Backing up the GSM MSC 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 `gsm_msc_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 gsm_msc_pm_loader.properties
$WMCROOT/<BACKUP_DIR>/gsm_msc_pm_loader.properties.datasource
```

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

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

Note: Make a note of the directory where the `gsm_msc_pm_loader`, configuration is located, its contents may be needed at a later date if a rollback needs to be performed.

3.4 Installing GSM 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 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_msc_pm` package by executing the command:

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

4. Extract the contents of the `gsm_msc_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 MSC PM version 1.5 BO™ Universes

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

`gsm_msc_pm`

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_msc_pm_1.5/report.zip` file from your Tivoli Netcool Service Quality Manager server to the BusinessObjects server instance using ftp or any other method.

Defining the service name using Oracle Net Manager

If the core reports or any other service model set of reports were 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, create an Oracle service name (also called a 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 against the database this service name points to.

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

See the *Configuring Clients for Oracle Connection Manager* section, chapter 11, *Configuring and Administering Oracle Connection Manager* in the Oracle 11g

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

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`
- `loves`
- `reports`
- `universes`

Associating LOV files with universe

Note: LOV files are not available for every service model, so these steps can be ignored if there is no `/lovs` directory.

Before exporting the universe to the BusinessObjects repository, the 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

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 export, 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 MSC PM Service module.

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 is saserver and saserver01, respectively (if the password has changed, enter the new password). 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 universe file (.unv) from the **/universes** directory.
3. Change universe connection parameters and use the new BusinessObjects connection you created during step 1.
4. Save the universe with the new parameters.
5. Export the universe and the LOV files to the BusinessObjects repository.

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

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 usually 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 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 details, 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**

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 MSC PM and the file must be deployed to the BusinessObjects server.

To import the BIAR file to the BusinessObjects server, you must use the BusinessObjects Import Wizard tool. For information on using the 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**.

The following options must be selected through the import process:

- In the **Source environment** display screen, 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** display screen, type the name of the BusinessObjects central management server (CMS) and the user name and password.
- In the **Select objects to import** display screen, select these two options:
 - **Import folders and objects**
 - **Import application folders and objects**
- In the **Incremental import** display screen, leave **Overwrite object contents** selected and clear **Overwrite object rights**.
- In the **Folders and objects** display 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`
-

Checking the BusinessObjects reports installation

When the reports are imported to the BusinessObjects server, check that they are installed and available in 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: See the TNSQM/TNCEM Installation and Configuration Guide to set up the authorization rights assigned to the report folder created in the BusinessObjects Server during the installation

3.6 Installing GSM MSC PM 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 GSM MSC PM package `ibm-tn-sqm-gsm_msc_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_msc_pm` package by executing the command:

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

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

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

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

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

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

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

Follow the on-screen prompts as directed.

3.7 Upgrading the GSM GOM and GSM MSC 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 `gsm_gom` package to version 1.5 by executing the command:

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

Follow the on-screen prompt as directed.

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

```
$ package_upgrade -t gsm_msc_pm_1.5 -s gsm_msc_pm_1.4.3
```

Follow the on-screen prompt as directed.

3.8 Deploying the GSM MSC 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_msc_pm_loader` by executing the command:

```
$ wmc_ant -f adp_deploy.xml -Dsa.package=gsm_msc_pm_1.5 do-deploy
```

3.9 Restoring the GSM MSC 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 datasource configuration by executing the commands:

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

2. Restore the collector configuration by executing the commands:

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

3.10 Upgrading the GSM MSC 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_msc_pm_1.5/admin/oracle/schema
```

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

```
$ sqlplus saserver@sadb
```

3. Upgrade the GSM MSC 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 MSC 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 MSC PM loader process, complete the following as user saserver:

1. Execute the commands:

```
$ sap start gsm_msc_pm_loader
```

4 Rollback Procedure

The rollback procedure comprises the following steps in sequence:

1. Stopping the GSM MSC PM loader
2. Rolling back the GSM GOM and GSM MSC PM provisioning to version 1.4.3
3. Deploying the GSM MSC PM version 1.4.3 loader.
4. Restoring the GSM MSC PM version 1.4.3 Loader configuration
5. Restoring the GSM MSC PM version 1.4.3 schema
6. Deploying GSM MSC PM Version 1.4.3 BO™ Universes
7. Uninstalling GSM GOM version 1.5
8. Uninstalling GSM MSC PM version 1.5
9. Restarting the GSM MSC PM loader

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

4.1 Stopping the GSM MSC PM Loader

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

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

- Execute the command:

```
$ sap stop gsm_msc_pm_loader
```

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

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_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_msc_pm_1.5/admin/provision/rollback/
```

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

```
$ wmc_ant -f rollback.xml -Dpackage.from=gsm_msc_pm_1.5 -  
Dpackage.name=gsm_msc_pm_1.4.3 rollback
```

4.3 Deploying the GSM MSC 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_msc_pm_loader.env  
$ rm $WMCROOT/conf/adapter/data/gsm_msc_pm_contextdef.xml  
$ rm $WMCROOT/conf/adapter/data/gsm_msc_pm_loader_parser.bl
```

2. Deploy the `gsm_msc_pm` version 1.4.3 loader by executing the commands:

```
$ cd $WMCROOT/packages  
$ wmc_ant -f adp_deploy.xml -Dsa.package=gsm_msc_pm_1.4.3 do-deploy
```

4.4 Restoring the GSM MSC 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_msc_pm_loader.properties.datasource
./gsm_msc_pm_loader.properties
```

2. Restore the collector configuration by executing the commands:

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

4.5 Restoring the GSM MSC 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_msc_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 MSC PM schema files from Version 1.5 to Version 1.4.3 by executing the command:

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

```
$ @updt_slat_status.dml;
```

4.6 Deploying GSM MSC PM version 1.4.3 BO™ Universes

Execute the instructions in the following sections to deploy the updates universe files for datasource `gsm_msc_pm`

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_msc_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.

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`
- `loves`
- `reports`
- `universes`

Associating LOV files with universe

Note: LOV files are not available for every service model, so these steps can be ignored if there is no `/lovs` directory.

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:

1. 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

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 export, 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 MSC 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 is saserver and saserver01, respectively (if the password has changed, enter the new password). 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 universe file (.unv) from the **/universes** directory.
3. Change universe connection parameters and use the new BusinessObjects connection 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: See the sections on exporting a universe to the repository in chapter 2 the *Designer's Guide* for BusinessObjects XI Release 3.1, available at http://help.sap.com/businessobject/product_guides/.

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 details, 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**

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 MSC PM and must be deployed to the BusinessObjects server.

To import the BIAR file into the BusinessObjects server requires using the BusinessObjects Import Wizard tool. For details 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 from 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**.

These are the options that should be selected through the import process:

- In the **Source environment** display screen, 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** display screen, type the name of the BusinessObjects central management server (CMS) and the user name and password.
- In the **Select objects to import** display screen, select these two options:
 - **Import folders and objects**
 - **Import application folders and objects**
- In the **Incremental import** display screen, keep **Overwrite object contents** selected and clear **Overwrite object rights**.
- In the **Folders and objects** display screen, select **all the reports**.

Note: After the 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`
-

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:

- 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: See the TNSQM/TNCM Installation and Configuration Guide to set up authorization rights assigned to the report folder created in the BusinessObjects Server during the installation

4.7 Uninstalling GSM 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-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 MSC 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_msc_pm.remove
```

Follow the on-screen prompts as directed.

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

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

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

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

Follow the on-screen prompts as directed.

4.9 Restarting the GSM MSC 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_msc_pm_loader` process, complete the following as user `saserver`:

- Execute the command:

```
$ sap start gsm_msc_pm_loader
```

Notices

IBM may not offer the products, services, or features discussed in this document in all countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk NY 10504-1785
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing
Legal and Intellectual Property Law
IBM Japan Ltd.
1623-14, Shimotsuruma, Yamato-shi
Kanagawa 242-8502 Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the

exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation
5300 Cork Airport Business Park
Kinsale Road
Cork
Ireland.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

Trademarks

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at “Copyright and trademark information” at www.ibm.com/legal/copytrade.shtml.

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Java and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.



Other company, product or service names may be trademarks or service marks of others.



Printed in the USA