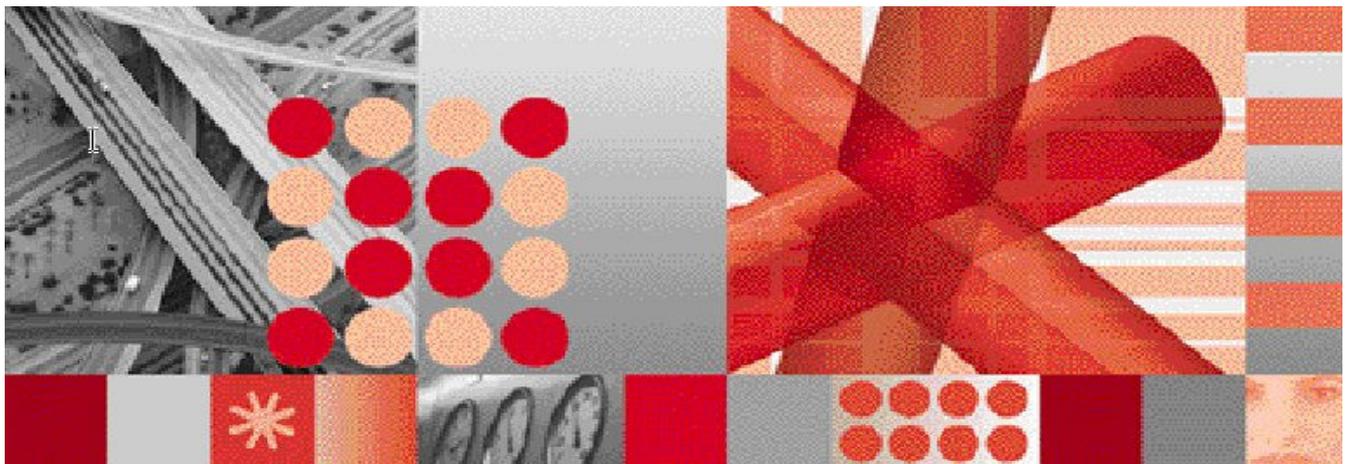




Version 5.2.2 IF0007



Upgrade Guide

Note: Before using this information and the product it supports, read the information in Notices on page 23.

This edition applies to Version 5, Release 2, Modification 2 IF0007 of IBM Tivoli Netcool Service Quality Manager For BlackBerry Service Solution.

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Table of Contents

1	About this Documentation	4
1.1	Audience.....	4
1.2	Required Skills and Knowledge	4
1.3	Document Conventions	5
1.4	User Publications	6
2	Software Requirements	9
3	Upgrade Procedure	10
3.1	Stopping the BlackBerry MIB Agent.....	10
3.2	Backing up BlackBerry MIB Agent Software components.....	11
3.3	Upgrading to BlackBerry MIB Agent Version 5.2.2 IF0007 Software.....	12
3.4	Stopping bb_mib_loader Process	12
3.5	Installing Version 5.2.2 IF0007 bb_gom Package	12
3.6	Installing Version 5.2.2 IF0007 bb_mib Package	13
3.7	Upgrading the bb_gom and bb_mib Provisioning Packages to Version 5.2.2 IF0007.....	14
3.8	Restarting the bb_mib_loader Process	14
3.9	Restarting the BlackBerry MIB Agent.....	14
4	Rollback Procedure	17
4.1	Stopping the BlackBerry MIB Agent.....	17
4.2	Restoring the BlackBerry MIB Agent version 5.2.2 Software	18
4.3	Stopping the bb_mib_loader Process	19
4.4	Rolling back the bb_gom and bb_mib Provisioning Packages to Version 5.2.2.....	19
4.5	Restarting the bb_mib_loader Process	20
4.6	Uninstalling Version 5.2.2.4 bb_gom Package	20
4.7	Uninstalling Version 5.2.2.4 bb_mib Package	20
4.8	Restarting the BlackBerry MIB Agent.....	21
	Appendix A Notices	23

1 About this Documentation

The IBM® Tivoli® Netcool® Service Quality Manager BlackBerry Service Solution version 5.2.2 IF0007 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 BlackBerry Service Solution Upgrade Guide documentation, which gives details of the intended audience and the structure of the guide.
Media Content	Details of media provided for the release.
Hardware Specification	Details of hardware required for the release.
Software Requirements	Details of software required for the release.
Upgrade Procedure	Describes the upgrade procedure itself .
Rollback Procedure	Describes the rollback procedure.

1.1 Audience

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

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
- BlackBerry Enterprise Server
- 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 will be displayed if the user is logged in as user `root`.
- \$ (dollar): This prompt will be displayed if the user is logged in as either the `saserver` or `oracle` user.

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

This 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.
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	./wminstall \$ cd /cdrom/cdrom0 /xml/dict addmsc.sh core.spec 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	[root] # pkginfo grep -i perl system Perl5 On-Line Manual Pages system Perl 5.005_03 (POD Documentation) system Perl 5.005_03	For contrast in a code example to show lines the user is expected to enter.
<Monospace italics>	# cd <oracle_setup>	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 User Publications

The following user publications are provided with the Tivoli Netcool Service Quality Manager BlackBerry Service Solution software in Adobe® Portable Document Format (PDF).

Table 3: BlackBerry Service Solution Documentation

Document	Description
<i>Tivoli Netcool Service Quality Manager BlackBerry Service Solution Release Notes</i>	Provides information on Tivoli Netcool Service Quality Manager BlackBerry Service Solution release contents, platform requirements, installation and upgrade procedures, and known issues.
<i>Tivoli Netcool Service Quality Manager BlackBerry Service Solution Overview Guide</i>	Provides a functional and architectural overview of the BlackBerry Service Solution product architecture.
<i>Tivoli Netcool Service Quality Manager Service Solutions Installation Guide</i>	Details the generic steps required to install any Service Quality Manager Service Solution including BlackBerry.
<i>Tivoli Netcool Service Quality Manager Blackberry MIB Agent</i>	Provides information on installing the BlackBerry MIB Agent software and the format of the data extracted from a

<i>Installation and MIB Interface Control Guide</i>	BlackBerry Enterprise Server SNMP MIB.
<i>Tivoli Netcool Service Quality Manager Blackberry Upgrade Guide</i>	Describes how to upgrade the Service Quality Manager BlackBerry Service Solution while maintaining existing data and configuration.

The following user publications are provided with the Tivoli Netcool Service Quality Manager Version 4.1.3 software in Adobe Portable Document Format (PDF). Online Help is available in HTML format.

Table 4 - Tivoli Netcool Service Quality Manager User Publications & Online help

Document	Description
<i>Release Notes</i>	Provides information on the Tivoli Netcool Service Quality Manager 4.1.3 release contents, platform requirements, installation and upgrade procedures, and known issues.
<i>Configuration Guide</i>	Describes SLA Provisioning (Parties, SLAs, and SLA Templates applications) and SQM Provisioning (Services Resources, KQI and Service Models applications) in Service Quality Manager.
<i>Monitoring Guide</i>	Describes Monitoring (SLA Monitor, KQI Analyzer, Alarm Monitor, Audit Manager and SLA Web Monitor applications) in <i>Tivoli Netcool</i> Service Quality Manager.
<i>CEM Monitoring Guide</i>	Describes how to use and monitor the Customer Experience Management [CEM] feature in Tivoli Netcool Service Quality Manager.
<i>CEM Provisioning Guide</i>	Reference Guide containing information for provisioning the Customer Experience Management system.
<i>Solaris Server Installation Guide</i>	Describes how to install the Tivoli Netcool Service Quality Manager Server system on Solaris 10g.
<i>Client Installation Guide</i>	Describes how to install the Tivoli Netcool Service Quality Manager Client.
<i>AIX Server Installation Guide</i>	Describes how to install the Tivoli Netcool Service Quality Manager Server system on AIX 5.3L.

TIVOLI NETCOOL SERVICE QUALITY MANAGER BLACKBERRY SERVICE SOLUTION UPGRADE GUIDE

<i>Solaris System Administration Guide</i>	Provides an overview of the Tivoli Netcool Service Quality Manager administrative tasks including instructions on how to complete the following tasks: <ul style="list-style-type: none">- Starting and stopping Tivoli Netcool Service Quality Manager.- Running batch processes such as archiving trace files and log files.- Backing up and restoring the system.
<i>AIX System Administration Guide</i>	Provides an overview of the AIX Tivoli Netcool Service Quality Manager administrative tasks including instructions on how to complete the following tasks: <ul style="list-style-type: none">- Starting and stopping Tivoli Netcool Service Quality Manager.- Running batch processes such as archiving trace files and log files.- Backing up and restoring the system.
<i>Upgrade Guide</i>	Details how to upgrade Tivoli Netcool Service Quality Manager from v4.1.2 to v 4.1.3.
<i>Business Objects Installation & Configuration Guide</i>	Provides information on the steps required to install and configure the Business Objects (v 6.5 or Xi) Server and Client for use with Tivoli Netcool Service Quality Manager.
<i>Service Quality Manager Core Online Help</i>	Provides information and procedures for using Tivoli Netcool Service Quality Manager client applications.
<i>Customer Experience Management Online Help</i>	Describes how to use and monitor the Customer Experience Management feature in the Tivoli Netcool Service Quality Manager.
<i>SLA Webview Online Help</i>	Describes how to use and monitor the SLA Webview feature in the Tivoli Netcool Service Quality Manager.

2 Software Requirements

The minimum pre-requisite software requirements are:

- Tivoli Netcool Service Quality Manager Version 4.1.1 or later.
-

Note: Refer to the *Tivoli Netcool Service Quality Manager Version 4.1.1 Release Notes* for the minimum software required to operate the Service Quality Manager product.

- Tivoli Netcool Service Quality Manager BlackBerry Service Solution version IF0006 is successfully installed prior to performing this upgrade.
- Any installed test data for the Tivoli Netcool Service Quality Manager BlackBerry Service Solution is uninstalled prior to performing this upgrade.

3 Upgrade Procedure

The upgrade procedure is composed of the following steps in sequence:

- Stopping the BlackBerry MIB Agent.
- Backing up the BlackBerry MIB Agent software components
- Upgrading the BlackBerry MIB Agent to version 5.2.2 IF0007.
- Stopping the `bb_mib_loader` process.
- Backing up the `bb_mib_loader` configuration.
- Upgrading the `bb_mib_loader` to version 5.2.2 IF0007.
- Restarting the `bb_mib_loader` process.
- Restarting the BlackBerry MIB Agent.

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

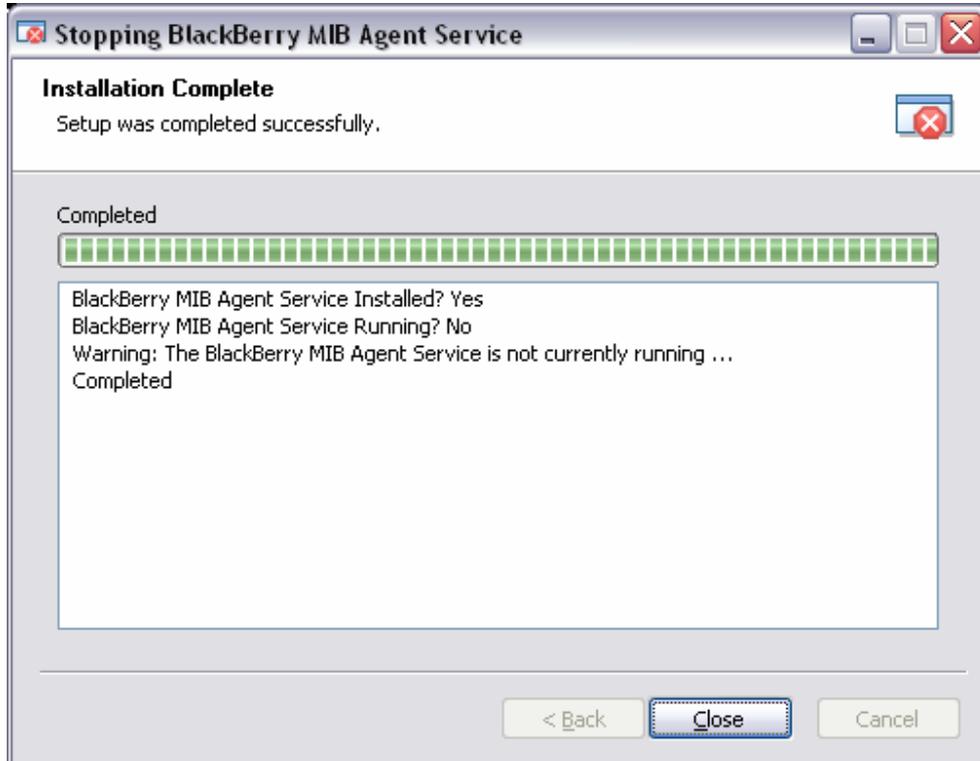
3.1 Stopping the BlackBerry MIB Agent

To stop the BlackBerry MIB Agent, complete the following step:

1. Select START->ALL PROGRAMS ->IBM TIVOLI NETCOOL-> BLACKBERRY MIB AGENT ->STOP BLACKBERRY MIB AGENT SERVICE.

The STOPPING BLACKBERRY MIB AGENT SERVICE page displays as shown in Figure 1.

Figure 1: Stopping BlackBerry MIB Agent Service Window



Note: The entries on the Start menu for the BlackBerry MIB Agent will act only on the original agent instance created as part of the BlackBerry MIB Agent installation. If additional agent instances have been configured on the same MIB Agent PC (see Section 3.5.1 of the *Tivoli Netcool Service Quality Manager BlackBerry MIB Agent Installation and MIB Interface Control Guide*) it will not be possible to stop these manually created MIB Agent instances from the Start menu. Such instances can only be stopped via the Windows Service Control Applet.

3.2 Backing up BlackBerry MIB Agent Software components

To backup the BlackBerry MIB Agent software components, complete the following steps:

1. Copy the following files from `C:\Program Files\IBM Tivoli Netcool\BlackBerry MIB Agent\lib\` to another directory.
 - `bes-mib-agent.jar`

Note: Take note of the directory location where the BlackBerry MIB Agent software is backed up to - its contents may be needed at a later date if a rollback needs to be performed.

3.3 Upgrading to BlackBerry MIB Agent Version 5.2.2 IF0007 Software

To install Tivoli Netcool Service Quality Manager BlackBerry MIB Agent version 5.2.2 IF0007 software, complete the following:

1. Close all applications on the BlackBerry MIB Agent PC.
2. Unzip the contents of the BlackBerry MIB Agent software package `bb_mib_mediation_5.2.2.4.zip` to the directory `C:\Program Files\IBM Tivoli Netcool\BlackBerry MIB Agent\`. The package will contain the following directories and files
 - `lib\bes-mib-agent.jar`

3.4 Stopping bb_mib_loader Process

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

To stop the `bb_mib_loader` process, complete the following as user `saserver`:

1. Execute the command:

```
$ sap stop bb_mib_loader
```

3.5 Installing Version 5.2.2 IF0007 bb_gom Package

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

Complete the following as user `root`:

1. Transfer the BlackBerry package `ibm-tn-sqm-bb_gom-5.2.2.4.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. Unzip the contents of the `bb_gom` package by executing the command:

```
# gzip -d ibm-tn-sqm-bb_gom-5.2.2.4.tar.gz
```

4. Untar the contents on the `bb_gom` package by executing the command:

```
# tar -xvf ibm-tn-sqm-bb_gom-5.2.2.4.tar
```

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

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

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

```
# ./ibm-tn-sqm-bb_gom.install
```

3.6 Installing Version 5.2.2 IF0007 bb_mib Package

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

Complete the following as user `root`:

1. Transfer the BlackBerry package `ibm-tn-sqm-bb_mib-5.2.2.4.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. Unzip the contents of the `bb_mib` package by executing the command:

```
# gzip -d ibm-tn-sqm-bb_mib-5.2.2.4.tar.gz
```

4. Untar the contents on the `bb_mib` package by executing the command:

```
# tar -xvf ibm-tn-sqm-bb_mib-5.2.2.4.tar
```

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

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

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

```
# ./ibm-tn-sqm-bb_mib.install
```

3.7 Upgrading the `bb_gom` and `bb_mib` Provisioning Packages to Version 5.2.2 IF0007

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 $WMROOT/packages
```

2. Upgrade the `bb_gom` package to version 5.2.2.4 by executing the command:

```
$ package_upgrade -t bb_gom_5.2.2.4 -s bb_gom_5.2.2
```

3. Upgrade the `bb_mib` package to version 5.2.2.4 by executing the command:

```
$ package_upgrade -t bb_mib_5.2.2.4 -s bb_mib_5.2.2
```

3.8 Restarting the `bb_mib_loader` Process

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

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

1. Execute the command:

```
$ sap start bb_mib_loader
```

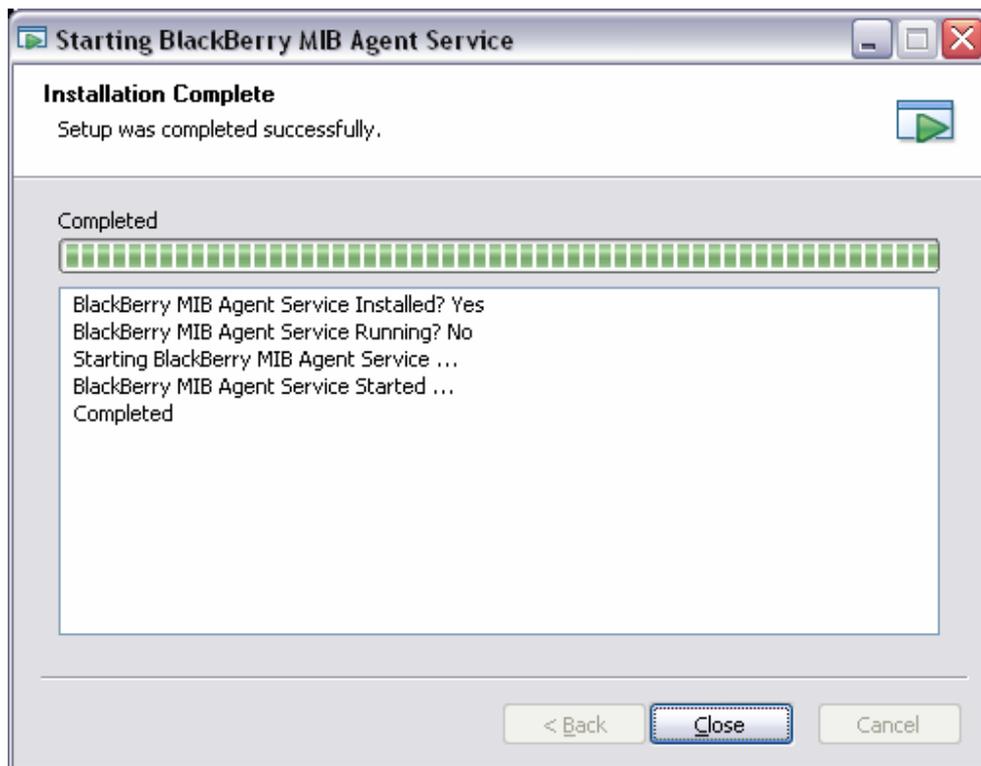
3.9 Restarting the BlackBerry MIB Agent

To restart the BlackBerry MIB Agent, complete the following:

- Select START->ALL PROGRAMS ->IBM TIVOLI NETCOOL-> BLACKBERRY MIB AGENT ->START BLACKBERRY MIB AGENT SERVICE.

The STARTING BLACKBERRY MIB AGENT SERVICE page displays as shown in Figure 2.

Figure 2: Starting BlackBerry MIB Agent Service



Note: The entries on the Start menu for the BlackBerry MIB Agent will act only on the original agent instance created as part of the BlackBerry MIB Agent installation. If additional agent instances have been configured on the same MIB Agent PC (see Section 3.5.1 of the *Tivoli Netcool Service Quality Manager BlackBerry MIB Agent Installation and MIB Interface Control Guide*) it will not be possible to restart these manually created MIB Agent instances from the Start menu. Such instances can only be restarted via the Windows Service Control Applet.

If you are using a firewall, complete the following to verify that the firewall has allowed the Agent Service(s) to restart:

1. Select START, CONTROL PANEL, ADMINISTRATIVE TOOLS.
2. Select SERVICES.
3. Verify the state of the BlackBerry MIB Agent service(s).

4. Verify with the local IT Administrator that each BlackBerry MIB Agent can connect to the BlackBerry Enterprise Server SNMP MIB.

4 Rollback Procedure

The rollback procedure is composed of the following steps in sequence:

- Stopping the BlackBerry MIB Agent.
- Restoring retained BlackBerry MIB Agent software components
- Stopping the `bb_mib_loader` process.
- Rolling back the `bb_mib_loader`
- Restarting the `bb_mib_loader` process.
- Restarting the BlackBerry MIB Agent.

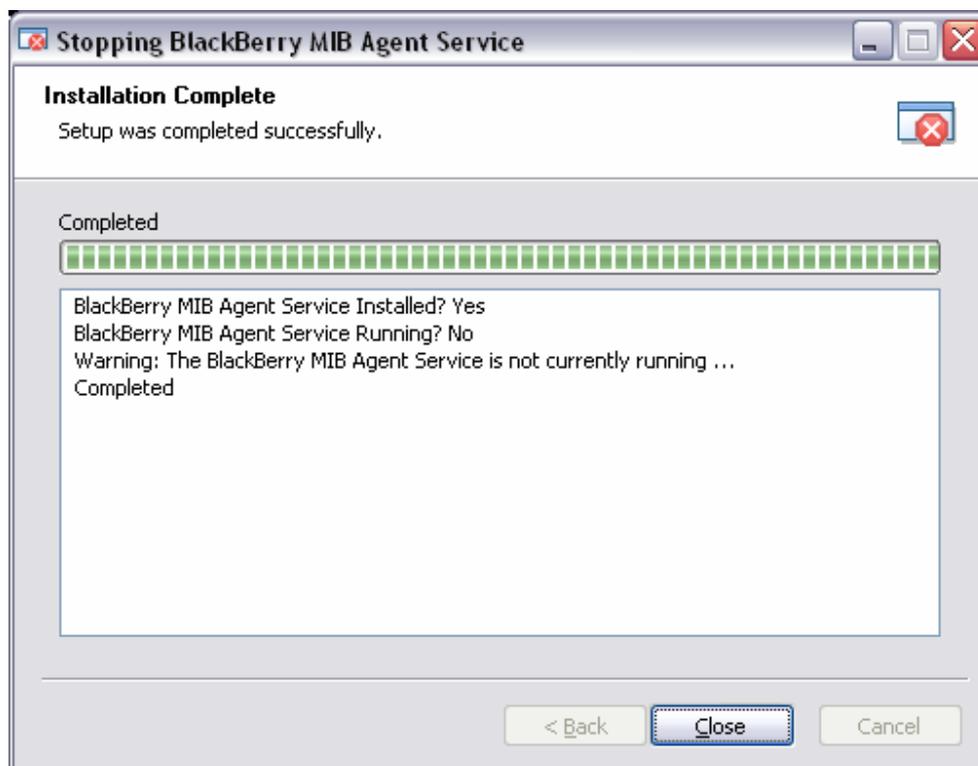
4.1 Stopping the BlackBerry MIB Agent

To stop the BlackBerry MIB Agent, complete the following step:

- Select `START->ALL PROGRAMS ->IBM TIVOLI NETCOOL-> BLACKBERRY MIB AGENT ->STOP BLACKBERRY MIB AGENT SERVICE`.

The `STOPPING BLACKBERRY MIB AGENT SERVICE` page displays as shown in Figure 3.

Figure 3: Stopping BlackBerry MIB Agent Service Window



Note: The entries on the Start menu for the BlackBerry MIB Agent will act only on the original agent instance created as part of the BlackBerry MIB Agent installation. If additional agent instances have been configured on the same MIB Agent PC (see Section 3.5.1 of the *Tivoli Netcool Service Quality Manager Blackberry MIB Agent Installation and MIB Interface Control Guide*) it will not be possible to stop these manually created MIB Agent instances from the Start menu. Such instances can only be stopped via the Windows Service Control Applet.

4.2 Restoring the BlackBerry MIB Agent version 5.2.2 Software

To restore the BlackBerry MIB Agent 5.2.2 software components, complete the following:

1. Copy the following files (choosing to overwrite any existing files when prompted) from the temporary location chosen in Section 3.2 to C:\Program Files\IBM Tivoli Netcool\BlackBerry MIB Agent\lib\
 - bes-mib-agent.jar

4.3 Stopping the bb_mib_loader Process

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

To stop the `bb_mib_loader` process, complete the following as user `saserver`:

- Execute the command:

```
$ sap stop bb_mib_loader
```

4.4 Rolling back the bb_gom and bb_mib Provisioning Packages to Version 5.2.2

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 following commands:

```
$ cd $WMCROOT/packages/bb_gom_5.2.2.4/admin/provision/rollback/
```

2. Rollback the `bb_gom` package to version 5.2.2 by executing the command:

```
$ wmc_ant -f rollback-4.1.2.xml -Dpackage.from=bb_gom_5.2.2.4 -  
Dpackage.name=bb_gom_5.2.2 rollback
```

3. Rollback the `bb_mib` package to version 5.2.2 by executing the command:

```
$ wmc_ant -f rollback-4.1.2.xml -Dpackage.from=bb_mib_5.2.2.4 -  
Dpackage.name=bb_mib_5.2.2 rollback
```

4.5 Restarting the bb_mib_loader Process

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

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

- Execute the command:

```
$ sap start bb_mib_loader
```

4.6 Uninstalling Version 5.2.2.4 bb_gom Package

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

Complete the following as user `root`:

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

```
# cd /appl
```

2. Execute the `bb_gom` uninstall procedure using the command:

```
# ./ibm-tn-sqm-bb_gom.remove
```

3. Execute the following command to restore the 5.2.2 `bb_gom` package deployment files

```
# tar -xvf ibm-tn-sqm-bb_gom-5.2.2.2.tar
```

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

```
ibm-tn-sqm-bb_gom.install
```

```
ibm-tn-sqm-bb_gom.license
```

```
ibm-tn-sqm-bb_gom.remove
```

```
ibm-tn-sqm-bb_gom.sw
```

4.7 Uninstalling Version 5.2.2.4 bb_mib Package

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 `root`:

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

```
# cd /appl
```

2. Execute the `bb_mib` uninstall procedure using the command:

```
# ./ibm-tn-sqm-bb_mib.remove
```

- Execute the following command to restore the 5.2.2 bb_mib package deployment files

```
# tar -xvf ibm-tn-sqm-bb_mib-5.2.2.2.tar
```

- Verify the following files are now located in the /app1 directory:

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

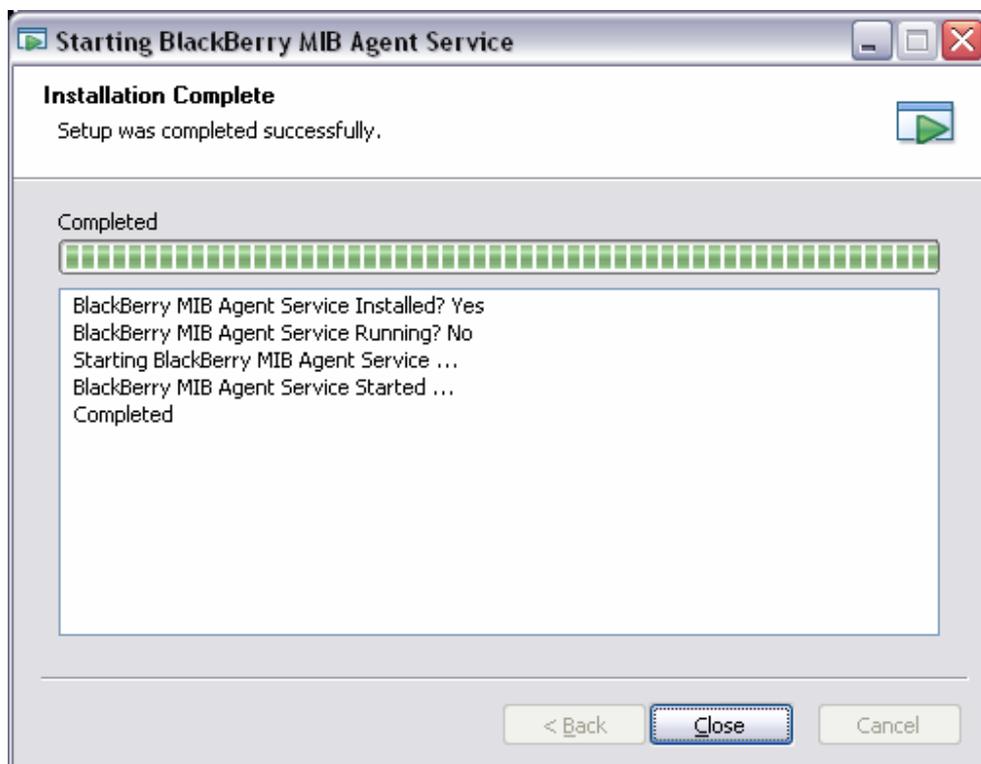
4.8 Restarting the BlackBerry MIB Agent

To restart the BlackBerry MIB Agent, complete the following:

- Select START->ALL PROGRAMS ->IBM TIVOLI NETCOOL-> BLACKBERRY MIB AGENT ->START BLACKBERRY MIB AGENT SERVICE.

The STARTING BLACKBERRY MIB AGENT SERVICE page displays as shown in Figure 4

Figure 4: Starting BlackBerry MIB Agent Service



Note: The entries on the Start menu for the BlackBerry MIB Agent will act only on the original agent instance created as part of the BlackBerry MIB Agent installation. If additional agent instances have been configured on the same MIB Agent PC (see Section 3.5.1 of the *Tivoli Netcool Service Quality Manager Blackberry MIB Agent Installation and MIB Interface Control Guide*) it will not be possible to restart these manually created MIB Agent instances from the Start menu. Such instances can only be restarted via the Windows Service Control Applet.

If you are using a firewall, complete the following to verify that the firewall has allowed the Agent Service(s) to restart:

1. Select START, CONTROL PANEL, ADMINISTRATIVE TOOLS.
2. Select SERVICES.
3. Verify the state of each BlackBerry MIB Agent service.
4. Verify with the local IT Administrator that each BlackBerry MIB Agent can connect to the BlackBerry Enterprise Server SNMP MIB.

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