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# HP Service Quality Management Solution V3.2



## Service Management Foundation Installation and Configuration Guide

**Edition: 1.0**

**For Windows 64bit & Linux 64bit Operating System**

**June 2014**

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# Preface

This guide describes how to install and configure the HP SQM Solution Service Management Foundation on Windows and Linux operating system.

## Intended Audience

This guide is intended for personnel who are responsible for installing and configuring the Service Management Foundation.

It is assumed that the reader has an understanding of the HP Business Service Management.

## Software Versions

The term Linux is used as a generic reference to the operating system, unless otherwise specified.

The software versions referred to in this document are as follows:

<b>HP Business Service Management</b>	<b>Linux &amp; Windows</b>
9.23	RedHat Enterprise Linux 5.3 or any later 5.x version (Intel x64 64 bit) Windows Server 2008 Enterprise Edition SP2 or later (64 bit) Windows Server 2008 Standard Edition SP2 or later (64 bit) Windows Server 2008 R2 Enterprise Edition SP1 or later (64 bit) Windows Server 2008 R2 Standard Edition SP1 or later (64 bit) Windows Server 2008 R2 Datacenter Edition SP1 or later (64 bit)

## Typographical Conventions

*Courier Font:*

- Source code and examples of file contents.
- Commands that you enter on the screen.
- Pathnames
- Keyboard key names

*Italic Text:*

- Filenames, programs and parameters.
- The names of other documents referenced in this manual.

**Bold Text:**

- To introduce new terms and to emphasize important words.

Convention	Meaning
<Ctrl><Key>	Hold down the Ctrl key and press the other key
<Return>	Press the Return key.

## Acronyms

Acronyms	Meaning
<b>BSM</b>	Business Service Management
<b>CI</b>	Configuration Item
<b>DDP</b>	Discovery & Dataload Package
<b>DFP</b>	Data Flow Probe
<b>DPS</b>	BSM Data Processing Server
<b>KPI</b>	Key Performance Indicator
<b>SLA</b>	Service Level Agreement
<b>SLM</b>	Service Level Management
<b>SMF</b>	Service Management Foundation
<b>SQM</b>	Service Quality Management

## Associated Documents

The following documents contain useful reference information:

- *HP Business Service Management Deployment Guide*
- *HP SQM Solution V3.2 Service Management Foundation Release Notes*

The HP Business *Service Management* documents and HP SQM Solution documents are available at:

<http://support.openview.hp.com/selfsolve/manuals>

Additional SQM Solution materials (like the SQM Solution product briefs) are available at:

<http://www.hp.com/cms>

→Section "Operations Support System (OSS)"

→Section "Operations Support System Assurance Solutions"

## Support

You can get support from SQM support mail address:  
[sqm\\_support@hp.com](mailto:sqm_support@hp.com)

You can also visit the HP Software support web site at:

<http://support.openview.hp.com/support.jsp>

This Web site provides contact information and details about the products, services, and support that HP Software offers.

HP Software online software support provides customer self-solving capabilities. It provides a fast and efficient way to access interactive technical support tools needed to manage your business. As a valued support customer, you can benefit by using the support site to:

- Search for knowledge documents of interest
- Submit enhancement requests online
- Download software patches
- Submit and track progress on support cases
- Manage a support contract
- Look up HP support contacts
- Review information about available services
- Enter discussions with other software customers
- Research and register for software training

## Introduction

### 1.1 Service Management Foundation Introduction

The Service Management Foundation is the core component of the HP SQM Solution. It provides a comprehensive service quality management solution that allows easily managing services from end-to-end services and monitoring real-time associated service levels.

It including the components and extended features:

#### **Telco Universe**

Providing the definition of CIT, Relationships for OSS domain, including packages:

- SQM\_BSM\_Update
- SQM\_SMF\_SID
- SQM\_SMF\_SQM
- SQM\_SMF\_TeMIP
- SQM\_SMF\_DigitalTV
- SQM\_SMF\_FixedMobileConvergence
- SQM\_SMF\_MobileNetwork
- SQM\_SMF\_MobileServiceElements

#### **SQM Generic Repository**

Providing repository definitions of Business Rules and generic KPI in BSM

#### **SQM TeMIP Repository**

Providing repository definitions of HI, KPI, HI assignment and KPI assignment for SQM TeMIP Solution

#### **SQM DigitalTV Repository**

Providing repository definitions of HI, KPI, HI assignment and KPI assignment for SQM DigitalTV Solution

#### **SQM RANCell Repository**



Providing repository definitions of HI, KPI Assignment, Filter for Mapping Rules and Mapping Rule for SQM OMi event example on CIT “RAN Cell”.

**Discovery & Dataload Package (DDP)**

Providing the functionality to discover CIs and relationships based on information retrieved from the following sources:

- External function which return the data source(provided by user)
- External 3PP database, including Oracle, MySQL
- XML files
- External function which return the data source(provided by TeMIP)

## 1.2 Code Signing

Below mentioned procedure\* allows you to assess the integrity of the delivered Product before installing it, by verifying the signature of the software packages.

Pick the signature (.sig) file shipped along with the product and use following GPG command

```
gpg --verify <product.sig> <product>
```

Example: `gpg --verify SQMSolSMFV320RevA.bin.sig SQMSolSMFV320RevA.bin`

## Note: Look for the comments shown below in the command output

**Good signature from "Hewlett-Packard Company (HP Code signing Service)"**

Note: If you are not familiar with signature verification using GPG and intended to verify HP Product signature, follow the steps given below.

1. Check whether gnupg gpg is installed on the system. If no, install gnupg gpg
2. Configure GPG for accepting HP signature. The steps are the following:

- a. Log as root on your system

- b. Get the hpPublicKey from following location:

<https://h20392.www2.hp.com/portal/swdepot/displayProductInfo.do?productNumber=HPLinuxCodeSigning> and save it as hpPublicKey.pub

Note that the hpPublicKey file will be located in the root's home directory.

- c. Follow the instruction found at above URL in the "Verification using GPG" section.

\*HP strongly recommends using signature verification on its products, but there is no obligation. Customers will have the choice of running this verification or not as per their IT Policies.

## Preparation to install Service Management Foundation

This chapter describes the prerequisites for installing the Service Management Foundation.

### 2.1 Pre-requisites

#### 2.1.1 Hardware Requirements

You can install the Service Management Foundation on any PC hardware or workstation against the HP BSM minimum hardware specification on Windows or Linux Platform.

Refer to *HP Business Service Management Deployment Guide* in Associated Documents.

#### 2.1.2 Software Requirements

To install the Service Management Foundation, you require the following software:

HP Business *Service Management 9.2.x* should also be installed and running on Windows Platform or Linux Platform.

**Note:** The character set for BSM Oracle Database should be 'AL32UTF8' and **only** this character set is supported.

#### 2.1.3 Disk Space Requirements

The Service Management Foundation installer shows the amount of disk in Table 2-1. The value shown is approximate and may vary from kit to kit. This value represents the disk space required if you copy the installer file to a directory on your disk before installing it.

**Table 2-2: Disk Space Requirements**

Software Subset	Disk Space (in MB)
SQMSolSMFV320RevA.bin	53.3
SQMSolSMFV320RevA.exe	53.4

Below table shows the disk space requirements to install the Service Management Foundation in directory **<HP\_BSM\_DIR>/SQM/Platform**. This value represents the disk space required for direct installation.

---

**Note:** The kit provided with JVM embedded. So you don't have to install JRE environment when performing the installation.

---

**Table 2-3: Disk Space Requirements (Installation Directories)**

Software Subset	BSM Server Type	$\{\text{HP\_BSM\_DIR}\}/\text{SQM}/\text{Platform}$
Service Management Foundation	Standalone or Data Processing Server	17.3M

The installation procedure creates the following directories (if they do not already exist):

**<HP\_BSM\_DIR>/SQM/Platform**

---

**Note:** **<HP\_BSM\_DIR>** is the directory where your HP BSM is installed.

The default BSM installed folder is /opt/HP/BSM on Linux server.

The default BSM installed folder is C:\HPBSM on Windows server.

---

## Service Management Foundation Installation

This chapter explains how to install the Service Management Foundation on BSM Server. If you want to install Service Management Foundation on a two-box BSM server, the installation only needs to be done on DPS side.

If you have multiple DPS Servers, please execute the installer kit on each DPS Server.

### 3.1 Installing SMF on Windows platform

#### 3.1.1 Installing the Service Management Foundation

- **Verification required before the installation**
  - i. If you are running Windows Server 2008, User Account Control (UAC) must be disabled.
  - ii. If you are running Windows Server 2008, please change Regional and Languages Options (include Standards and formats and Language for non-Unicode programs) to English (United States).
  - iii. If your setup different password on JMX admin and regular BSM admin users, please change to the same password via 'Configure HP Business Service Management' tools before SMF kit installation.
  - iv. Check HP Business Service Management 9.23 is in running status.

You can check to ensure that all processes started properly in the nanny manager by doing the following:

**Click:**

Start > Programs > HP Business Service Management > Administration > HP Business Service Management Status.

**Click:**

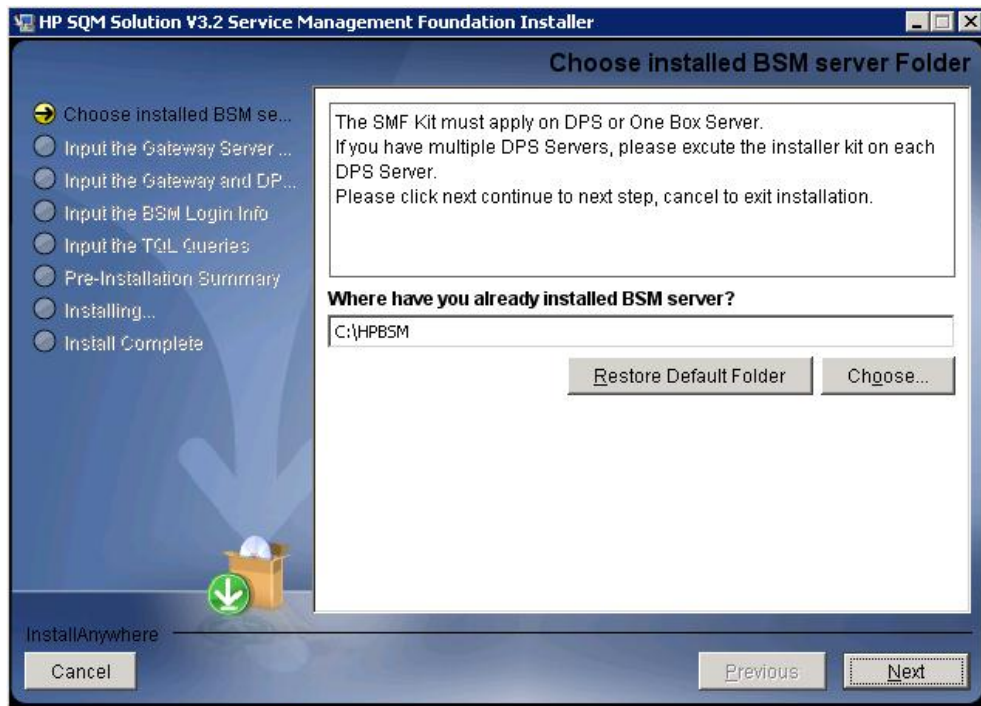
C:\HPBSM\tools\bsmstatus\bsmstatus.bat

- **Starting the installation procedure**

After verification done, you can start to install the Service Management Foundation, copy the kit SQMSolSMFV320RevA.exe to one folder of your installation machine. And double click it to start installation.

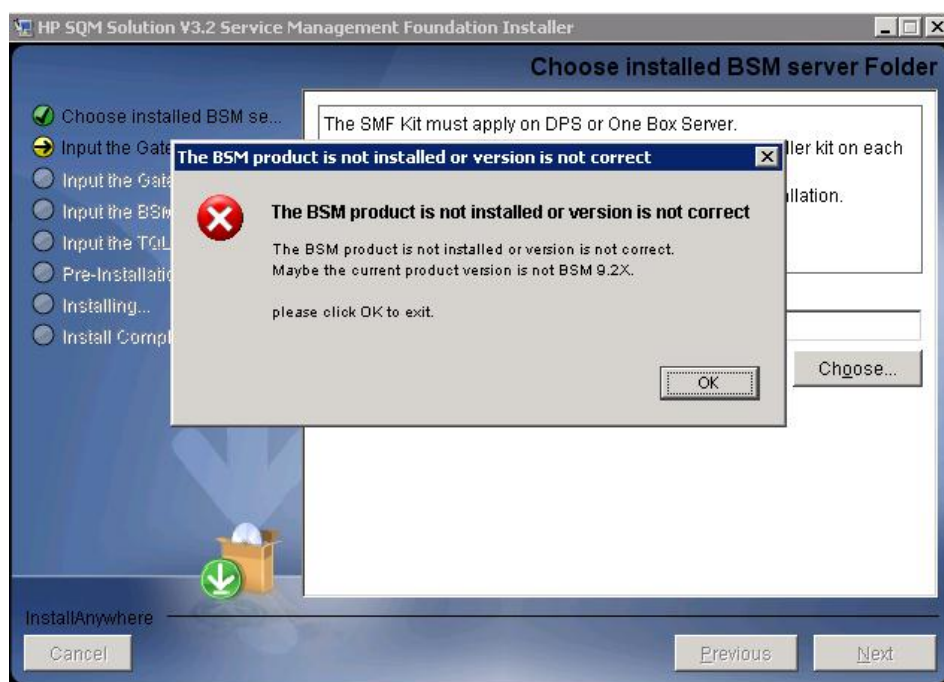
1. Choose the correct BSM Installed Folder, click **Next** button to continue.

The default BSM installed folder is: **C:\HPBSM**



2. The BSM product version must be 9.2X, otherwise the following error dialog box will appear, click ok to exit install application.

If the BSM product version is 9.2X, please ignore step 2 and excute next step 3.

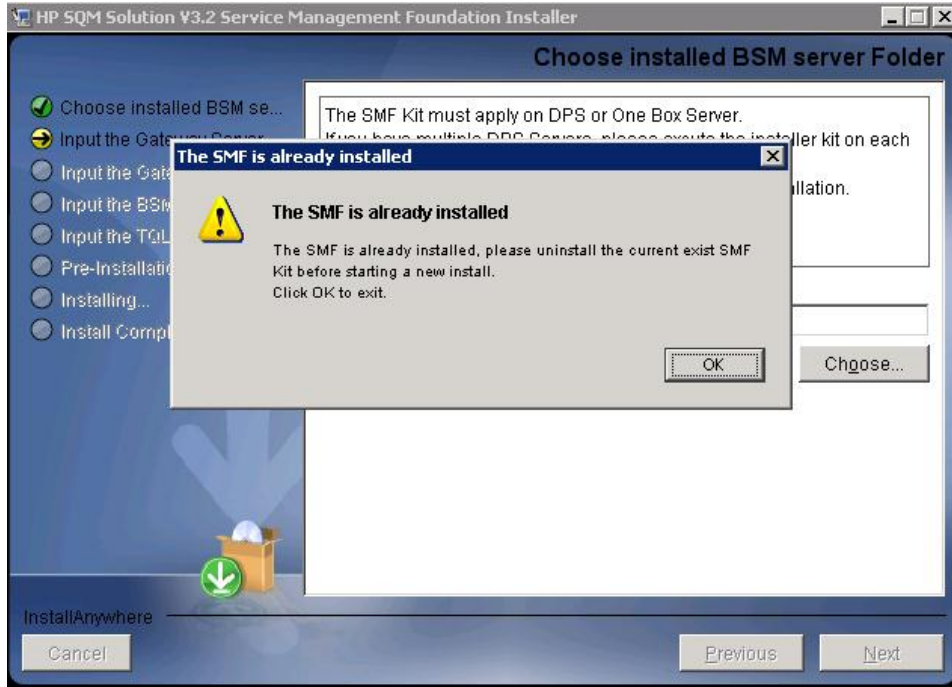


3. The SMF 3.2 Kit must apply on DPS or One Box Server, if not the following error dialog box will appear, click ok to exit install application.  
If the BSM is DPS or One Box Server, please ignore step 3 and execute next step 4.



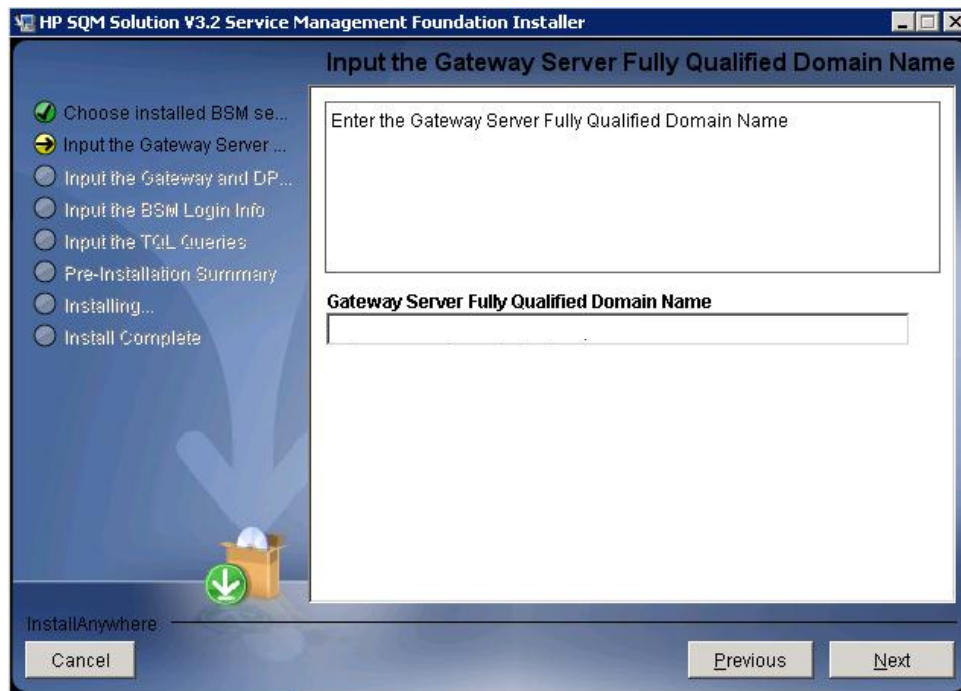
- If the SMF 3.2 or above version is already installed, the following dialog box will appear, click ok to exit install application, and then uninstall the current exist SMF Kit before strating a new install.

If the SMF is not installed, please ignore step 4 and excute next step 5.



- Input the correct Gateway Server Fully Qualified Domain Name, click **Next** button to continue.

For example, use the FQDN of BSM gateway server "BSMgtw01.abc.com".





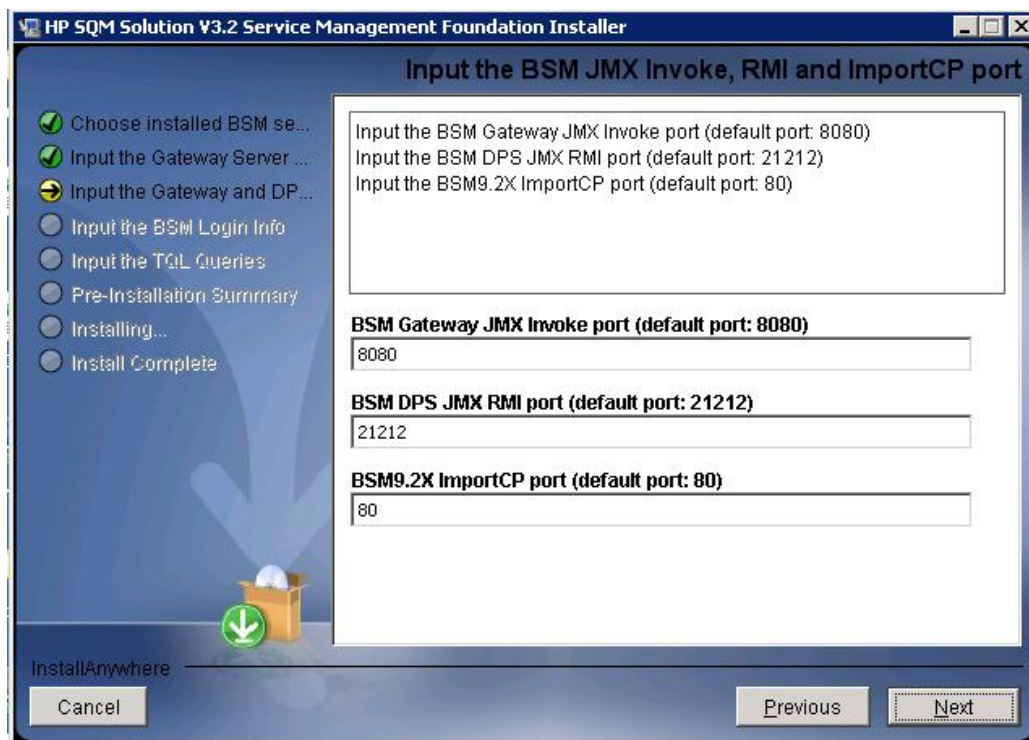
6. Input the correct JMX information, click **Next** button to continue.

The default BSM JMX information is:

BSM Gateway JMX invoke port: **8080**

BSM DPS JMX RMI port: **21212**

BSM 9.23 ImportCP port: **80**

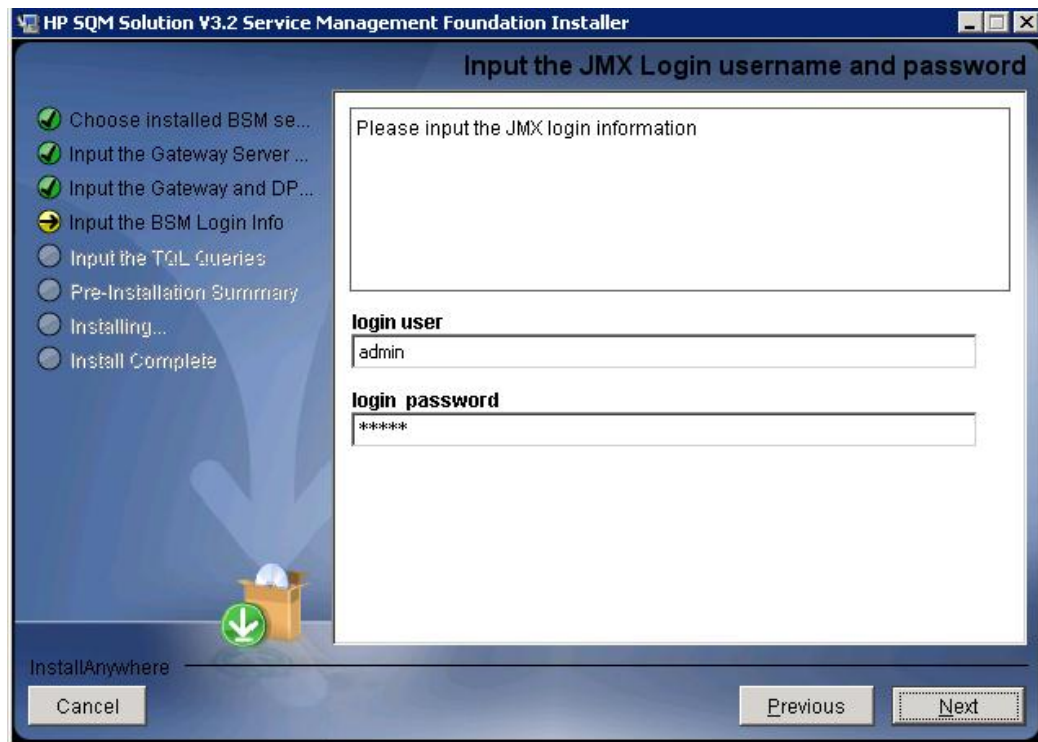


7. Input the correct JMX information, click **Next** button to continue, then it will show you a BSM Login information panel.

The default JMX Login information is:

User: **admin**

Password: **admin**

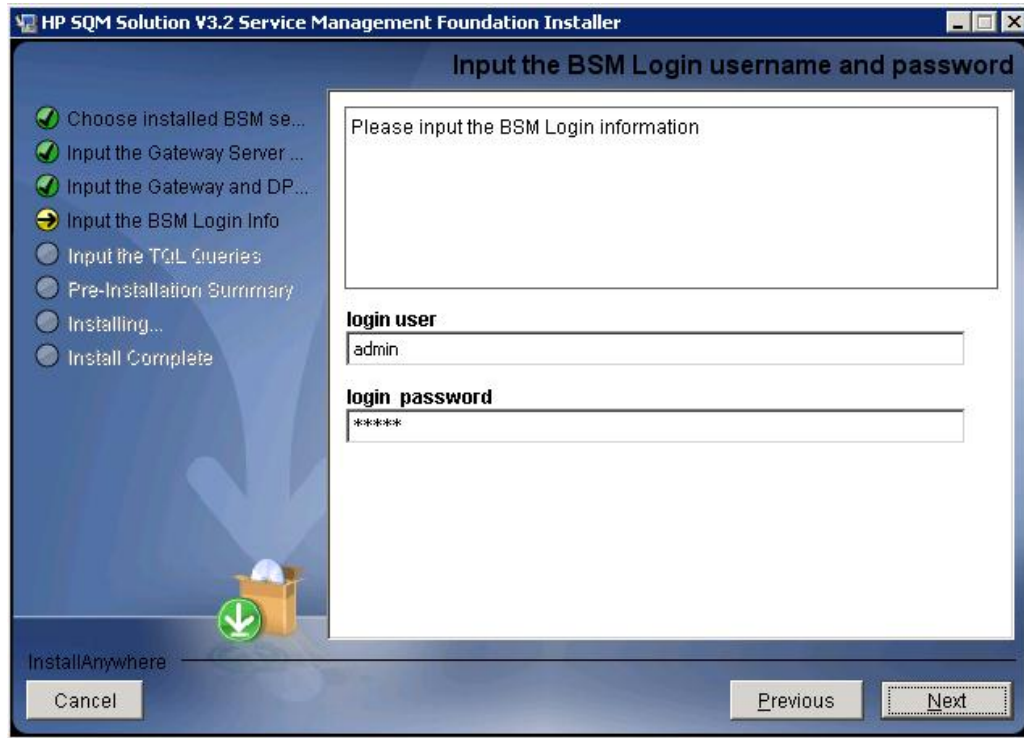


- 7.1 Input the correct BSM Login information, click **Next** button to continue, then it will show you a BSM Login information panel.

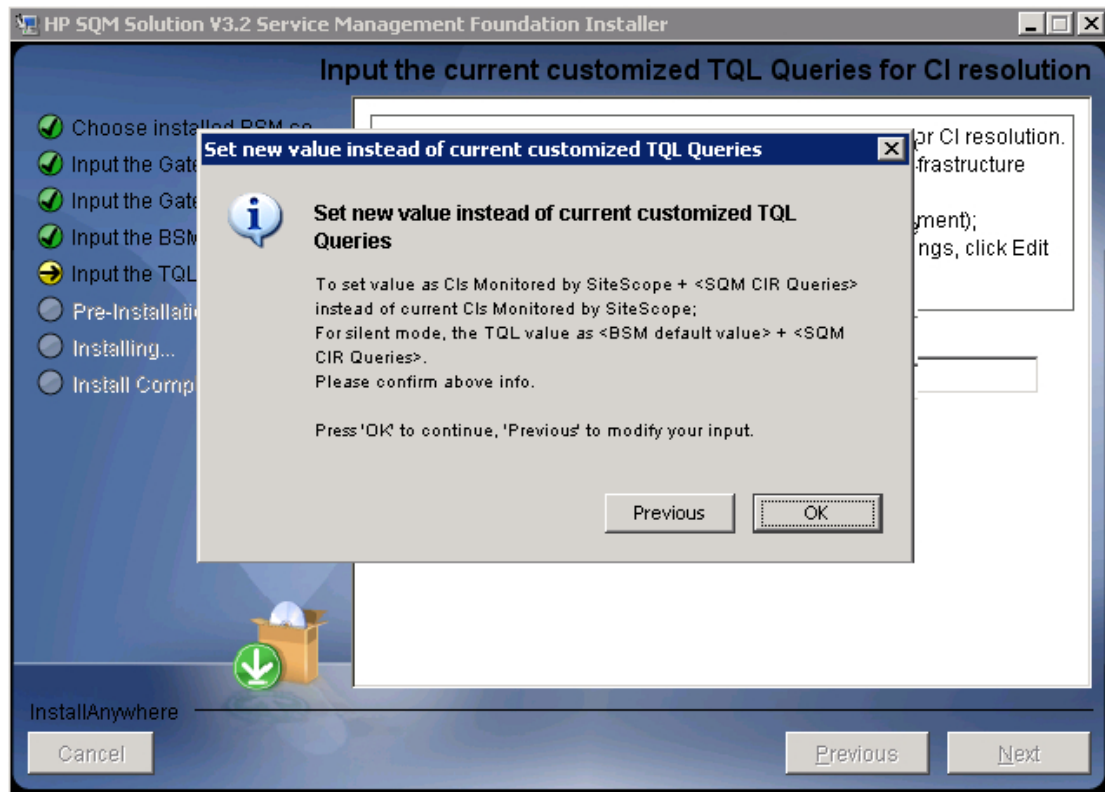
The default JMX Login information is:

User: **admin**

Password: **admin**



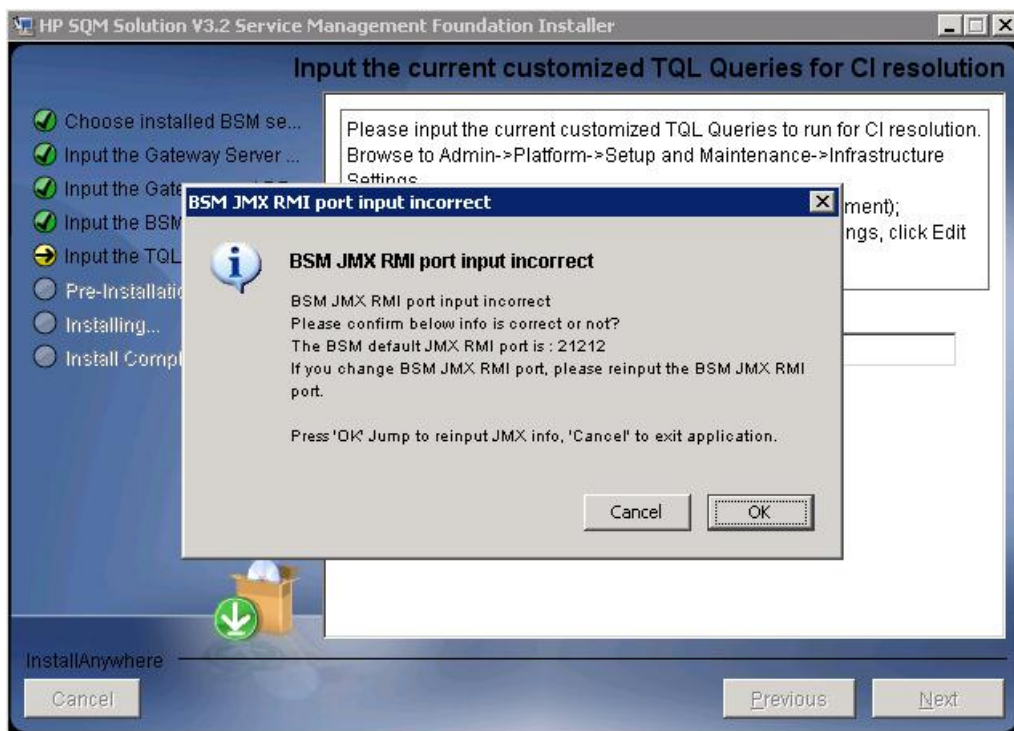
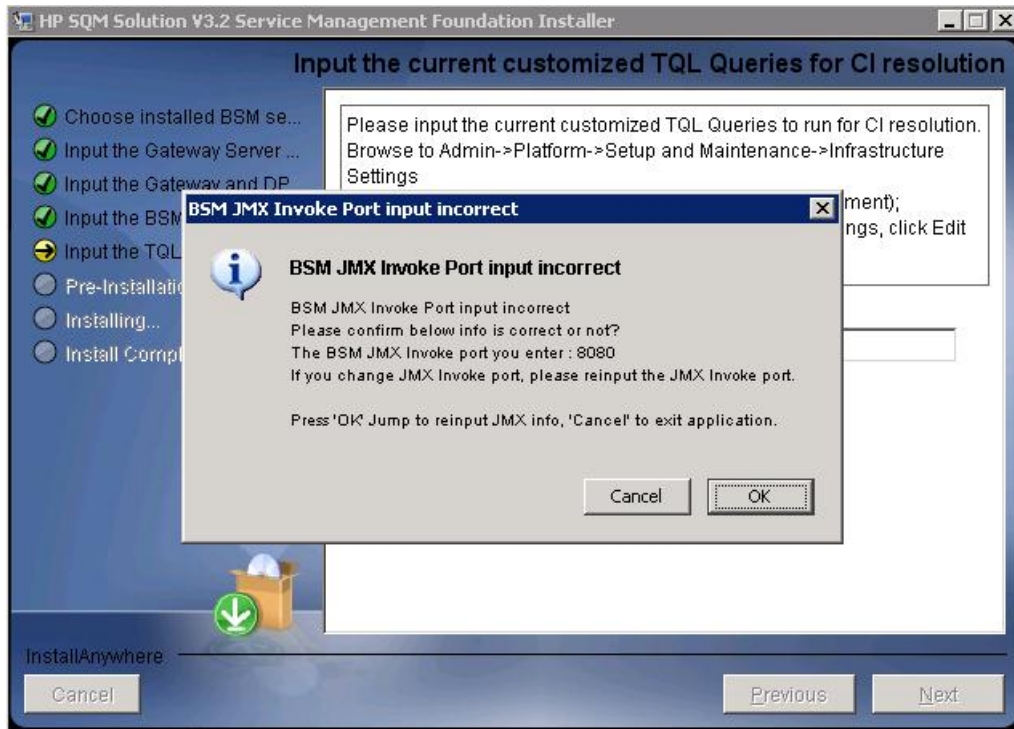
8. To set new value of TQL Queries to run for CI resolution.  
click **Next** button to continue. Then you will see a pop up window.

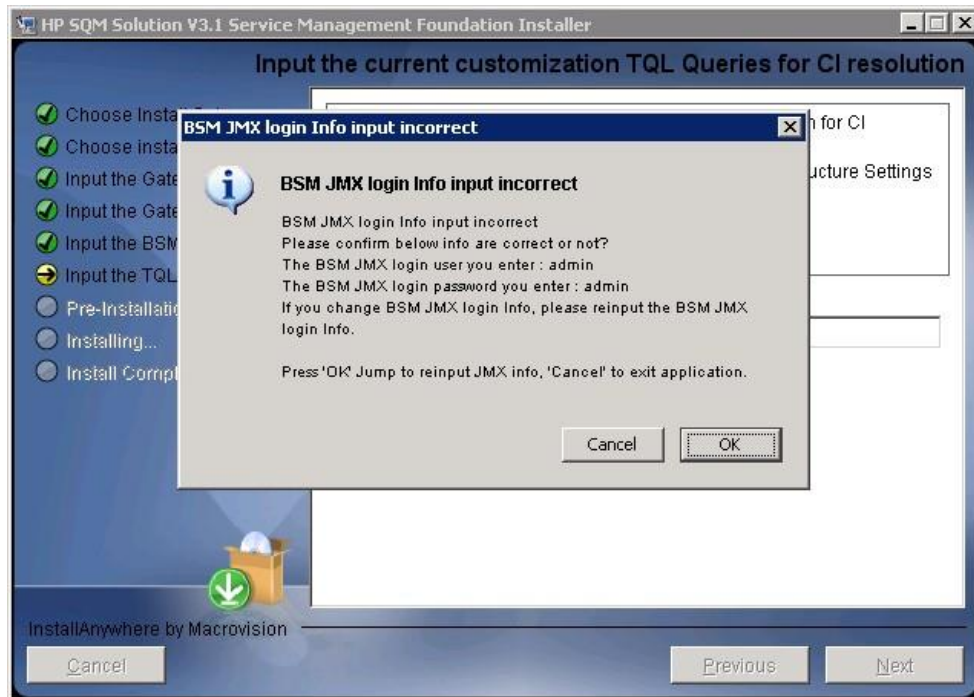


If the JMX info input correct then it will show you a pre-installation panel as step 10.

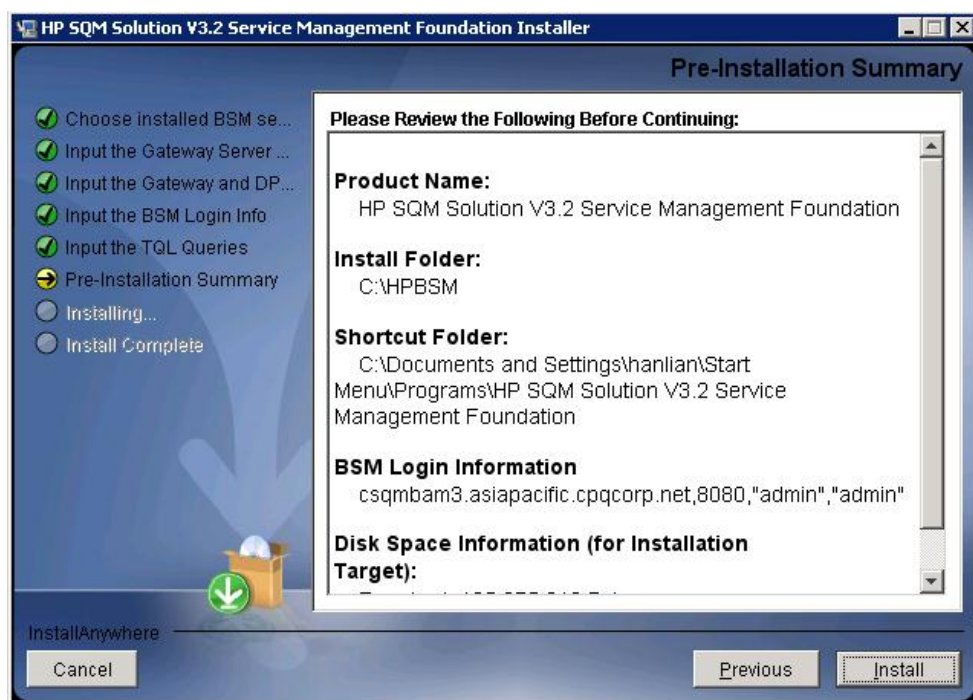
9. If the JMX Invoke port, RMI port, JMX username and password input incorrect, the following 3 dialog box will appear, click OK jump to reinput JMX info, click Cancel to exit install application.

If the JMX info input correct, please ignore step 9 and execute next step 10.

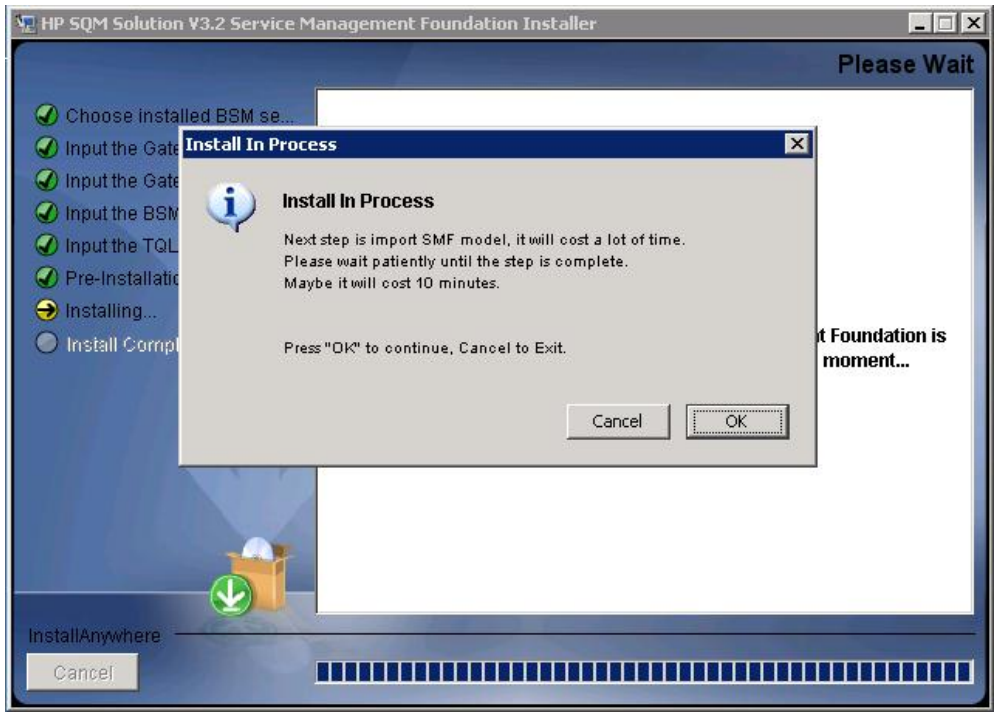




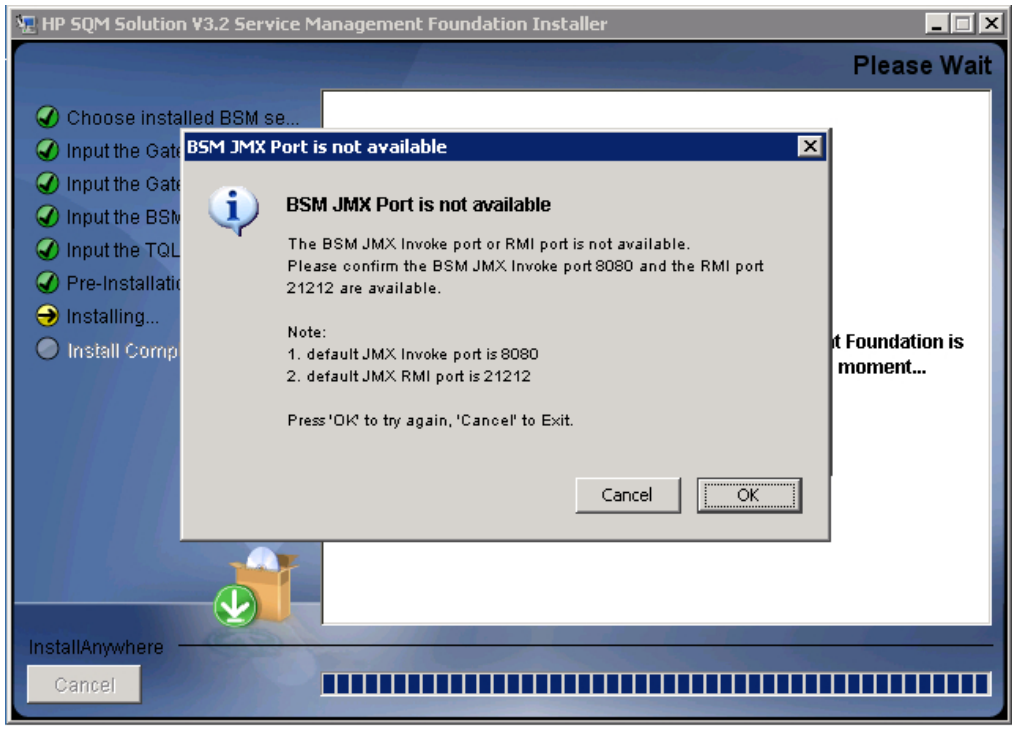
10. Click **Install**, installation begins.



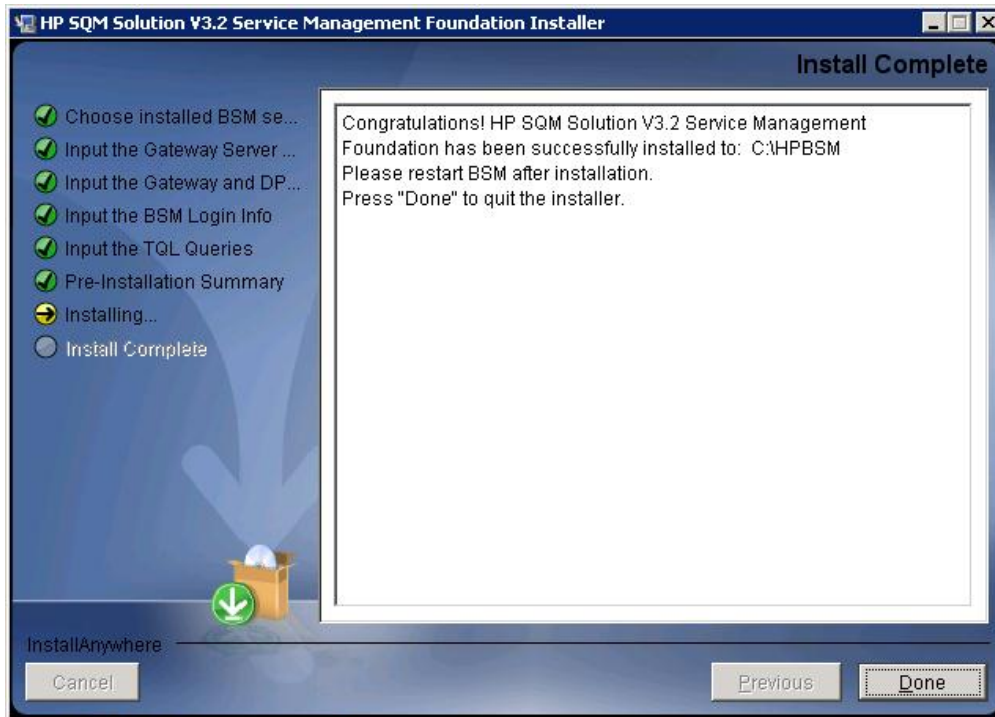
11. After wait a bit time, a **Install In Process** dialog box will display to you with message 'it will cost a lot of time. Please wait patiently until the step is complete'.  
Click **OK** to continue.



12. If BSM stopped or JMX port changed while installing the kit, it will popup a dialog like below. Press **OK** to try again and **Cancel** to exit the install application.



13. After 10-15 minutes, a **Install Complete** panel will display to you with congratulations message.  
If show failed panel, please check detail info in log file under folder <SMF\_HOME>/log.



---

**Note:**

If you are installing on a two-box server, please just do the installation on Data processing server.

After installation, one manual operation has to be done to enable all new SQM Business Rules in BSM platform:  
please open IE browser, access JMX port 29811 for marble\_worker\_1, within BSM DPS-Platform, select the services called *Marble Worker* and invoke the 'reloadRules' method. This method is applied to all the customers served by this worker.

[http://<BSM\\_DPS\\_SERVER\\_FULL\\_NAME>:29811/invoke?operation=reloadRules&objectname=BSM-Platform%3AService%3DMarbleWorker](http://<BSM_DPS_SERVER_FULL_NAME>:29811/invoke?operation=reloadRules&objectname=BSM-Platform%3AService%3DMarbleWorker)

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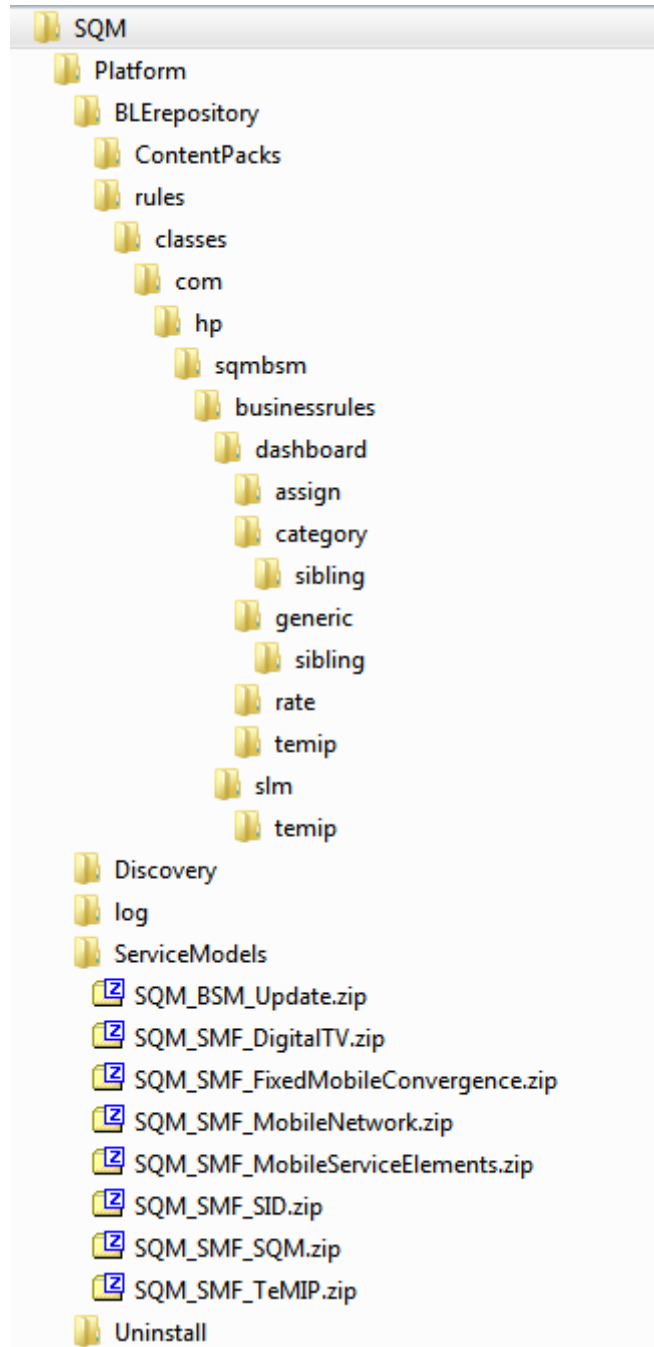
## 3.1.2 Post-Installation

### 3.1.2.1 Checking Components

After installation, you can check which Service Management Foundation components are installed on a HP Business Service Management server by doing the following:



1. Open the <HP\_BSM\_DIR>\SQM\Platform folder.
2. Check that all the components that do exist under this directory.



### 3.1.2.2 Checking Installation Status and Log Files

The file named *InstallationStatus* is located in the directory <HP\_BSM\_DIR>\SQM\Platform\.

If the installation is successful, the content of the file should be 'SUCCESS'.

The file named *version.txt* is located in the directory <HP\_BSM\_DIR>\SQM\Platform\.

The content of the file should include sub version info, it will help you to check sub version of SMF installation kit.

Two installation log files are located in  
<HP\_BSM\_DIR>\SQM\Platform\log

*install\_anywhere.log*

*platform\_install.log*

### 3.1.2.3 Import external resource to Adapter management

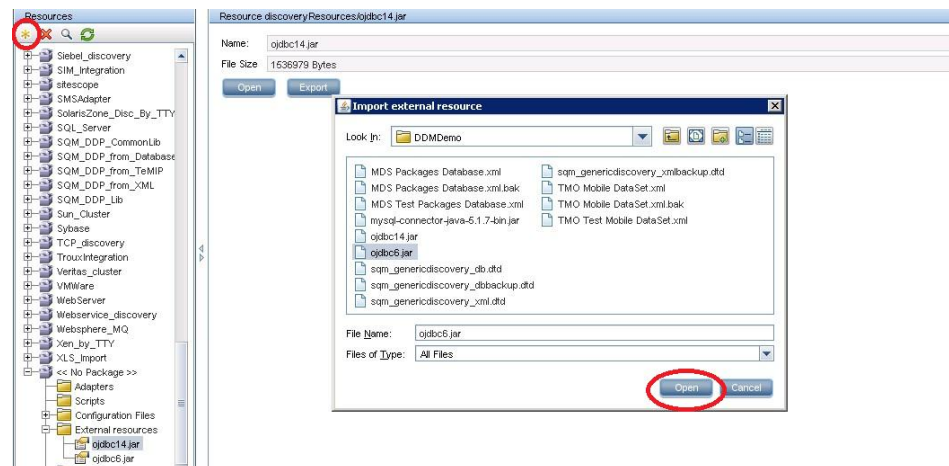
After installation if you want to run a DDP from Database job, firstly you need to import external DB driver to BSM and Data Flow Probe.

Please use Adapter management tools to import DB driver.

Go to Admin → RTSM Administration → Data Flow Management → Adapter management

Click  → import external resource.

Select your DB driver (For example: ojdbc14.jar, ojdbc6.jar, sqjldb.jar) jar files as below graph.



## 3.2 Installing SMF on Linux platform

### 3.2.1 Installing the Service Management Foundation

- Verification required before the installation

- i. If you are running on Red Hat Enterprise Linux Server release 5.5 (Tikanga), your laptop IE should be higher version, at least IE 7.

- ii. If you are running Red Hat Enterprise Linux Server release 5.5 (Tikanga), you must be a root user to install SMF on server machine.
- iii. If you are running Red Hat Enterprise Linux Server release 5.5 (Tikanga), The DISPLAY environment variable must be properly configured on the HP Business Service Management server machine. The machine from which you are installing must be running an X-Server.
- iv. If your setup different password on JMX admin and regular BSM admin users, please change to the same password via 'Configure HP Business Service Management' tools before SMF kit installation.
- v. Check HP Business Service Management 9.23 is in running status.

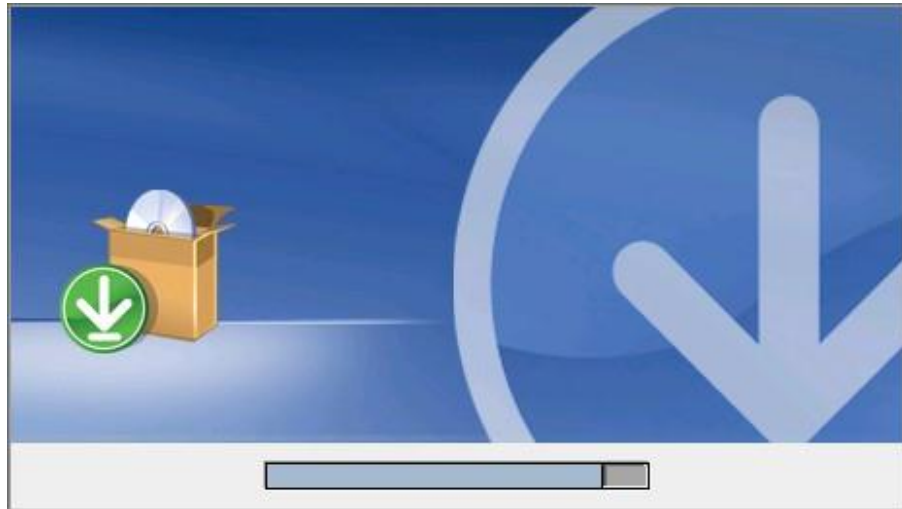
- **Note: Before the installation on Linux**

The Data Flow Probe that runs on a Linux platform is intended only for integrations. If you want to run discovery job with Linux BSM, you need to connect Data Flow Probe on Windows.

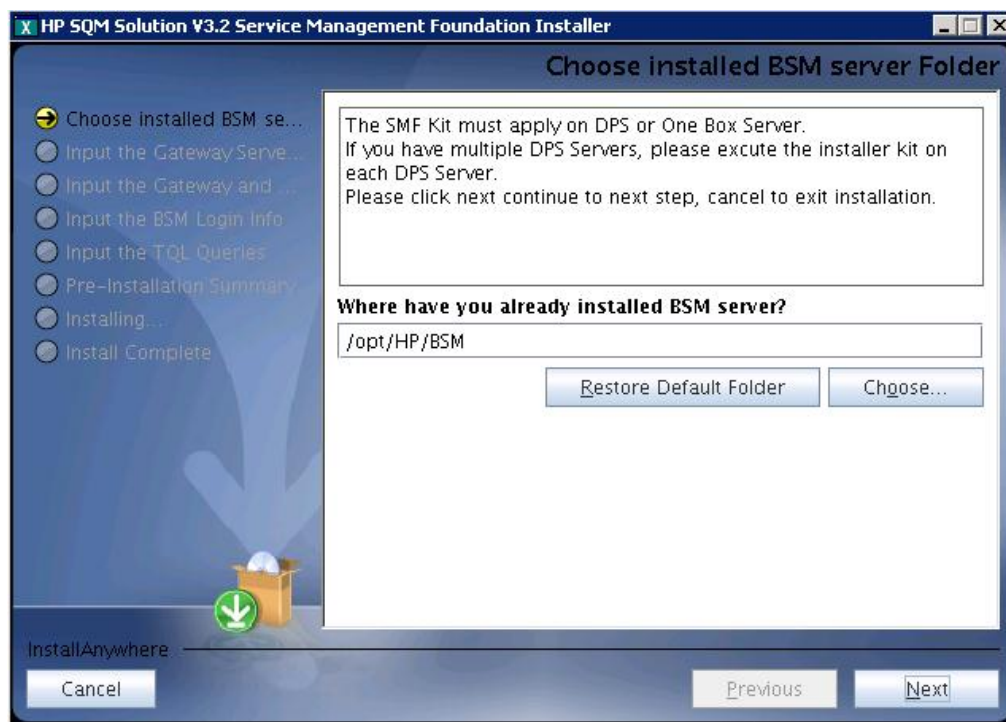
- **Starting the installation procedure**

After verification done, you can start to install the Service Management Foundation, copy the kit SQMSolSMFV320RevA.bin to one folder of your installation machine.

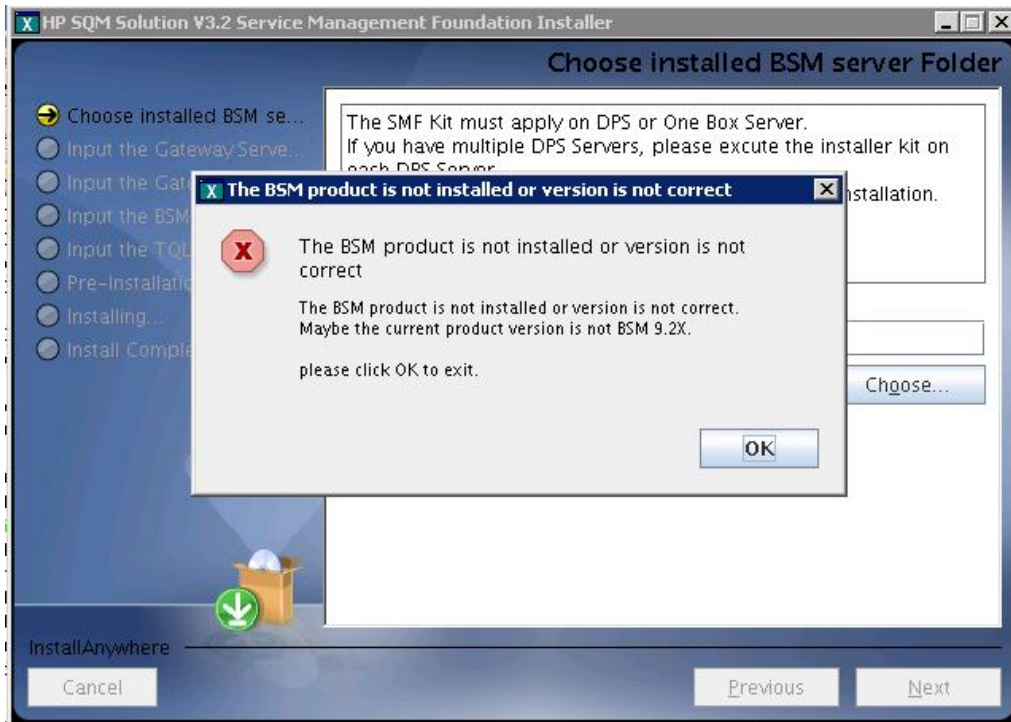
- i. Log into the server as user root.
- ii. Go to the installation root directory.
- iii. Run the following script:  
`./SQMSolSMFV320RevA.bin`
- iv. Follow the on-screen instructions for server installation.



2. Choose the correct BSM Installed Folder, click **Next** button to continue.  
The default BSM installed folder is: **/opt/HP/BSM**

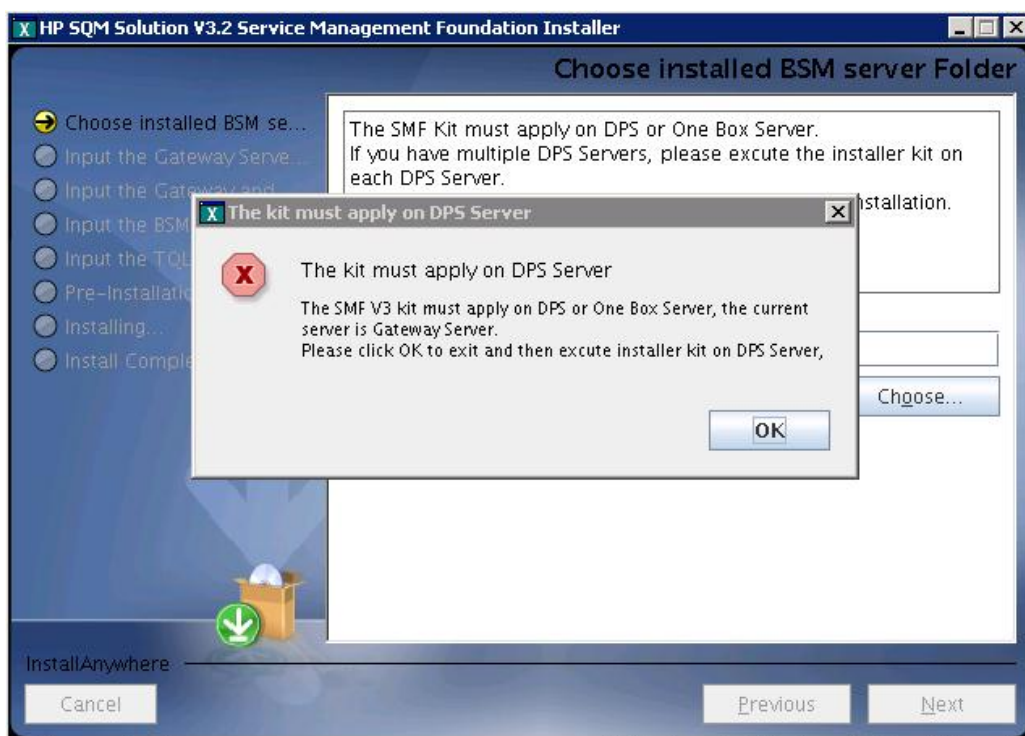


3. The BSM product version must be 9.2X, otherwise the following error dialog box will appear, click ok to exit install application.  
If the BSM product version is 9.2X, please ignore step 3 and excute next step 4.



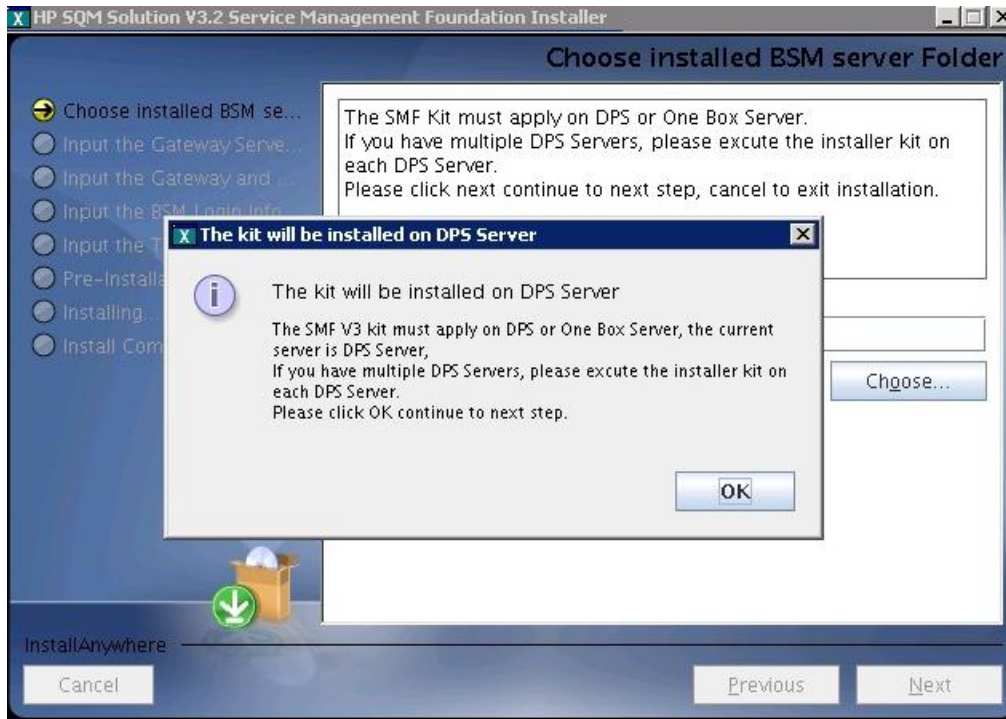
4. The SMF3.2 Kit must apply on DPS or One Box Server, if not the following error dialog box will appear, click ok to exit install application.

If the BSM is DPS or One Box Server, please ignore step 4 and excute next step 5.



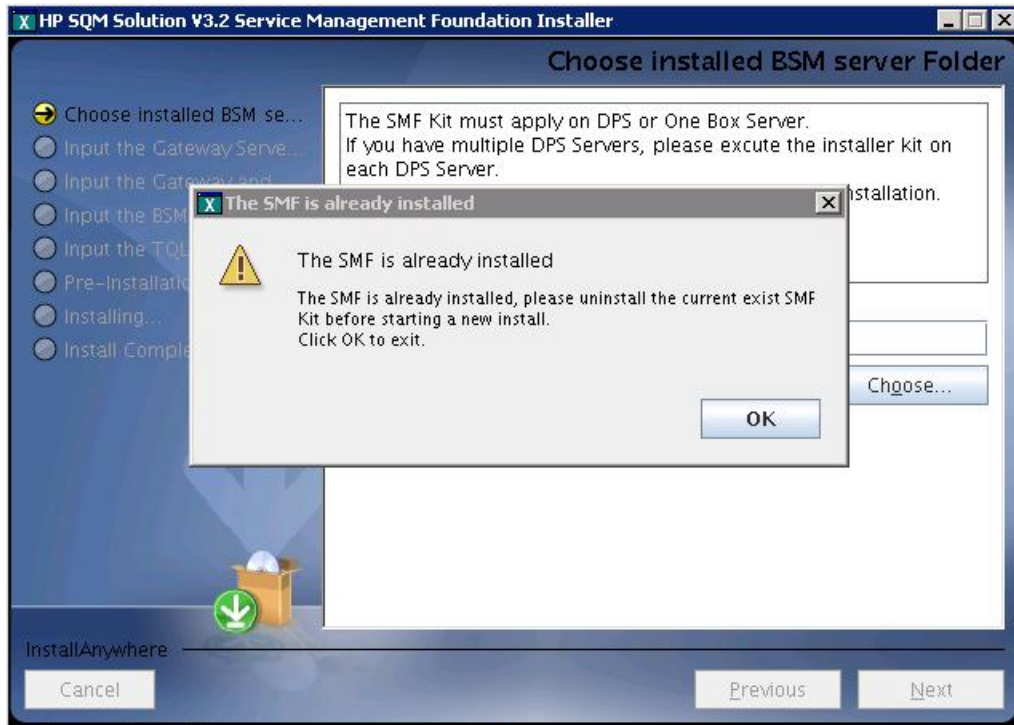
5. The SMF3.2 Kit must apply on DPS or One Box Server, if yes the following info dialog box will appear, click ok to next step.

If the BSM is DPS or One Box Server, excute next step 6.



6. If the SMF 2.3 or above version kit is already installed, the following dialog box will appear, click ok to exit install application, and then uninstall the current exist SMF Kit before strating a new install.

If the SMF is not installed, please ignore step 6 and excute next step 7.

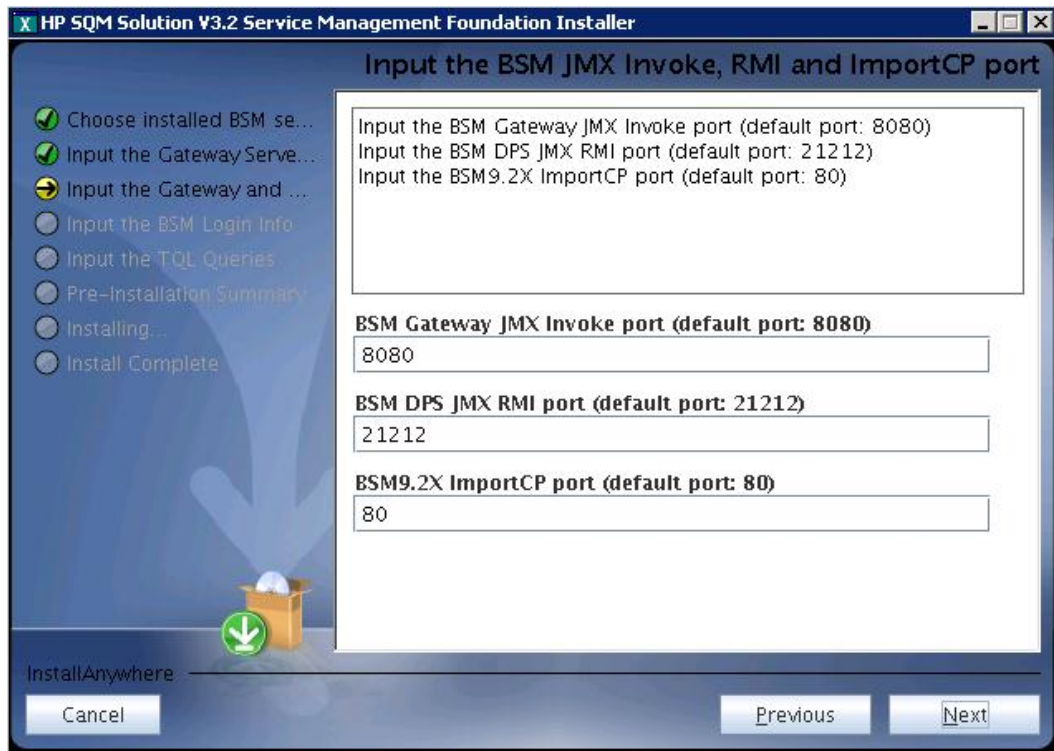


7. Input the correct Gateway Server Fully Qualified Domain Name, click **Next** button to continue.



8. Input the correct JMX information, click **Next** button to continue.  
 The default BSM JMX information is:  
 BSM Gateway JMX invoke port: **8080**  
 BSM DPS JMX RMI port: **21212**

BSM 9.2X ImportCP port: 80



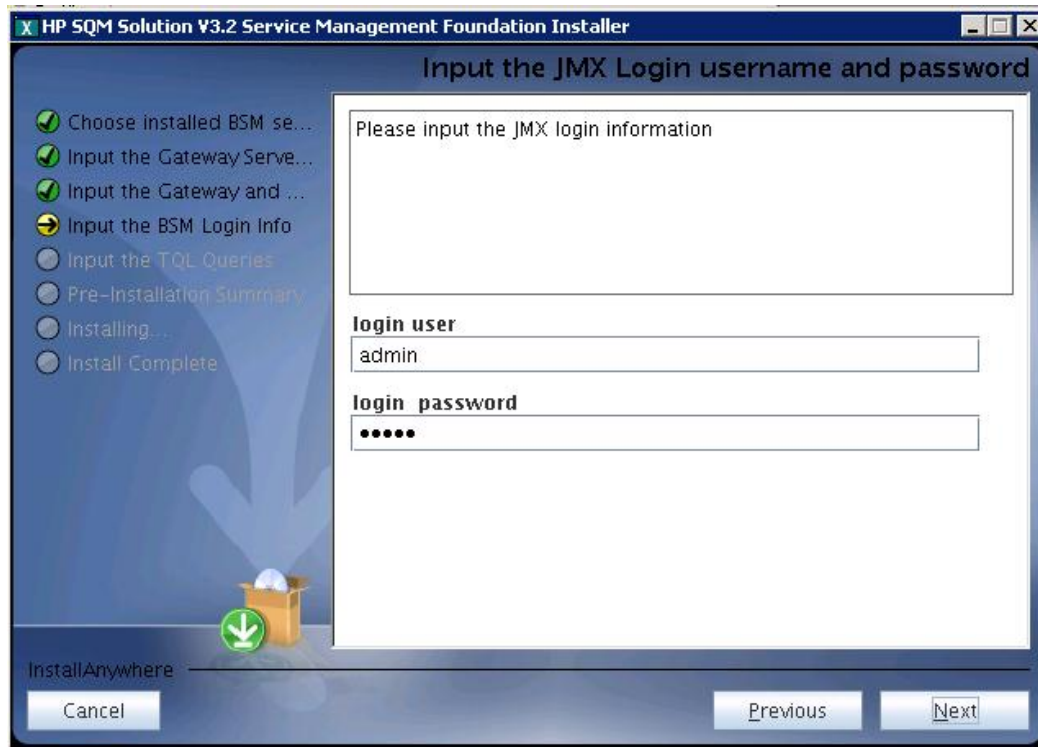
9. Input the correct JMX information, click **Next** button to continue, then it will show you a BSM Login information panel.

The default JMX Login information is:

User: **admin**

Password: **admin**



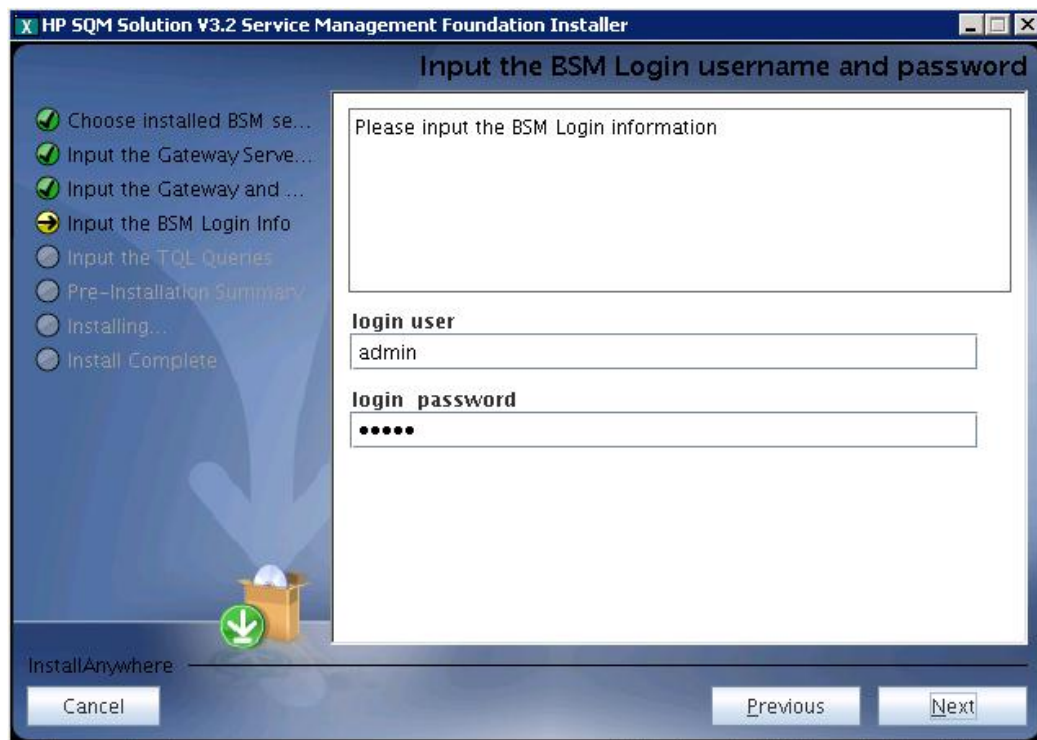


9.1 Input the correct BSM information, click **Next** button to continue, then it will show you a TQL Queries information panel.

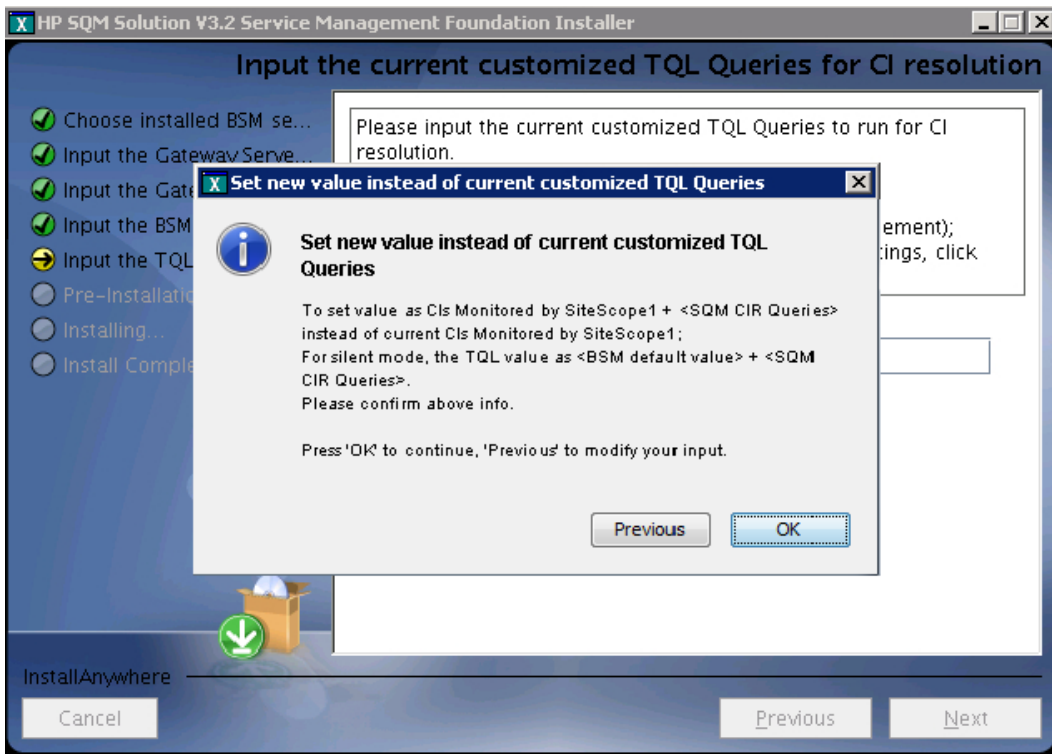
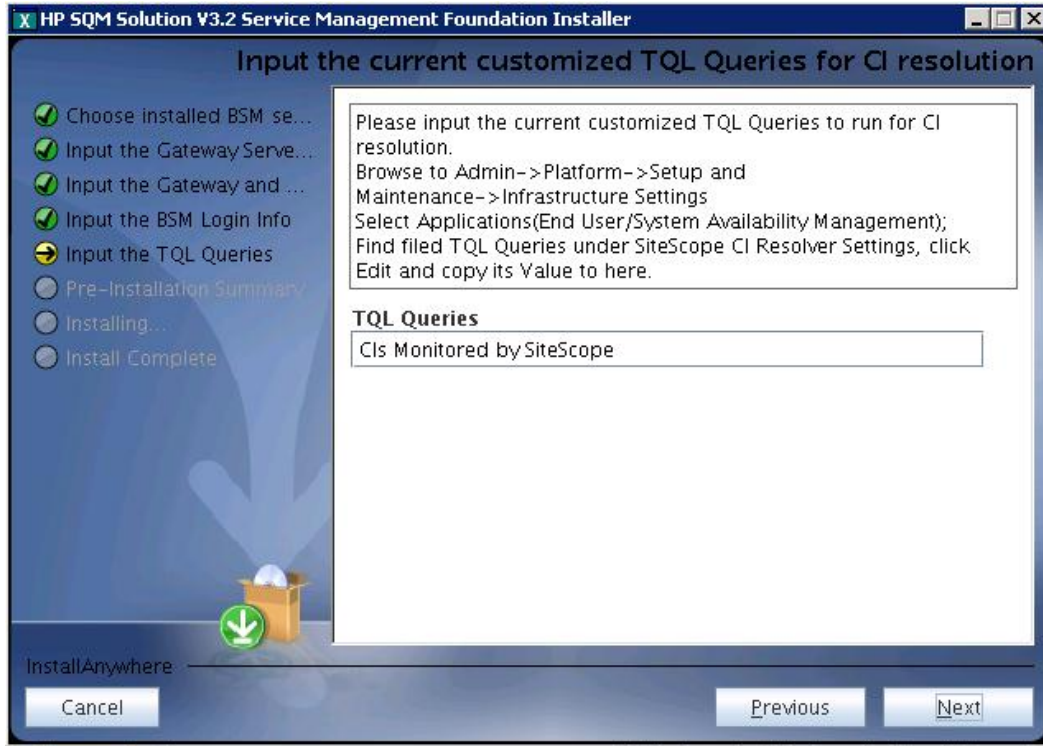
The default JMX Login information is:

User: **admin**

Password: **admin**



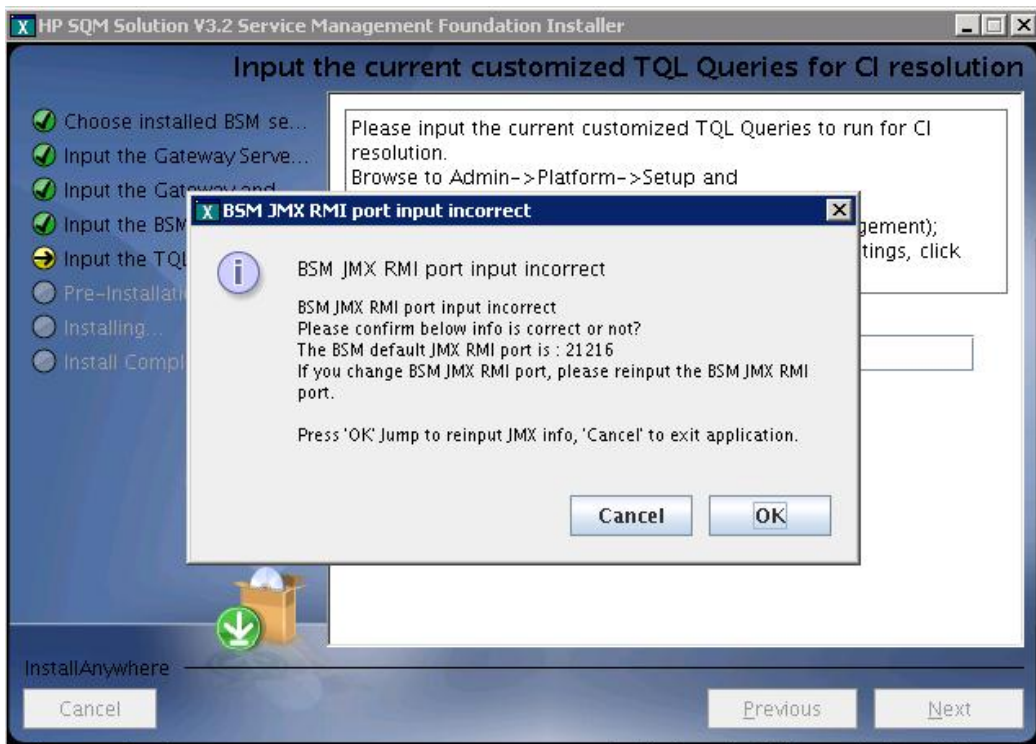
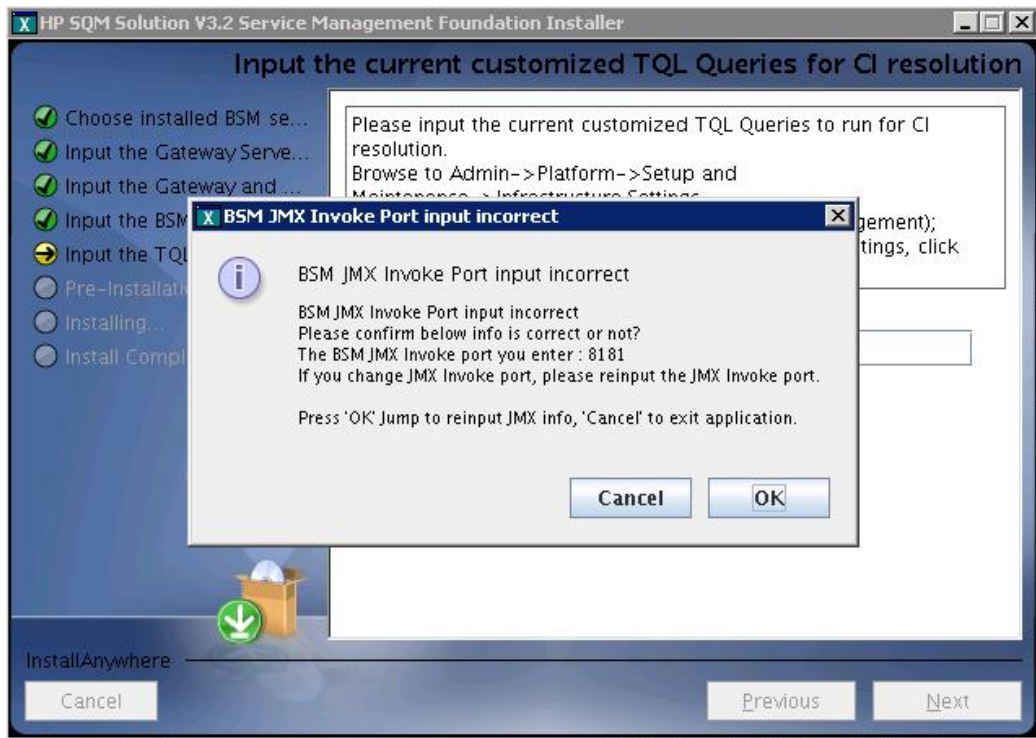
- To set new value of TQL Queries to run for CI resolution.  
click **Next** button to continue. Then you will see a pop up window.

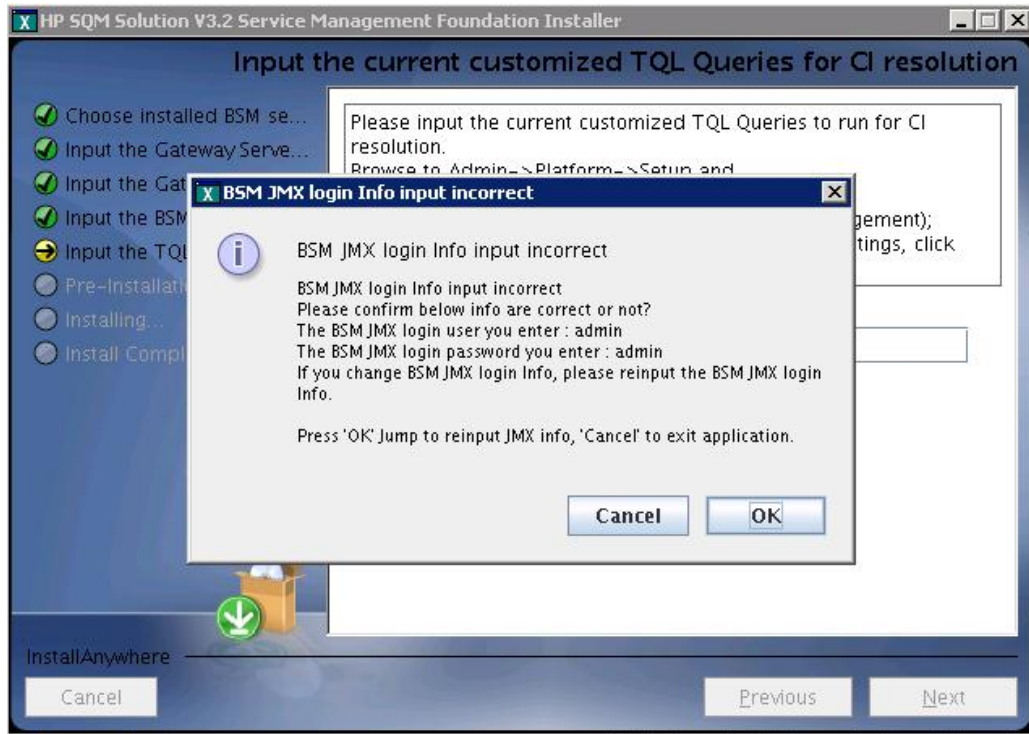


if the JMX info input correct then it will show you a pre-installation panel as step 12.

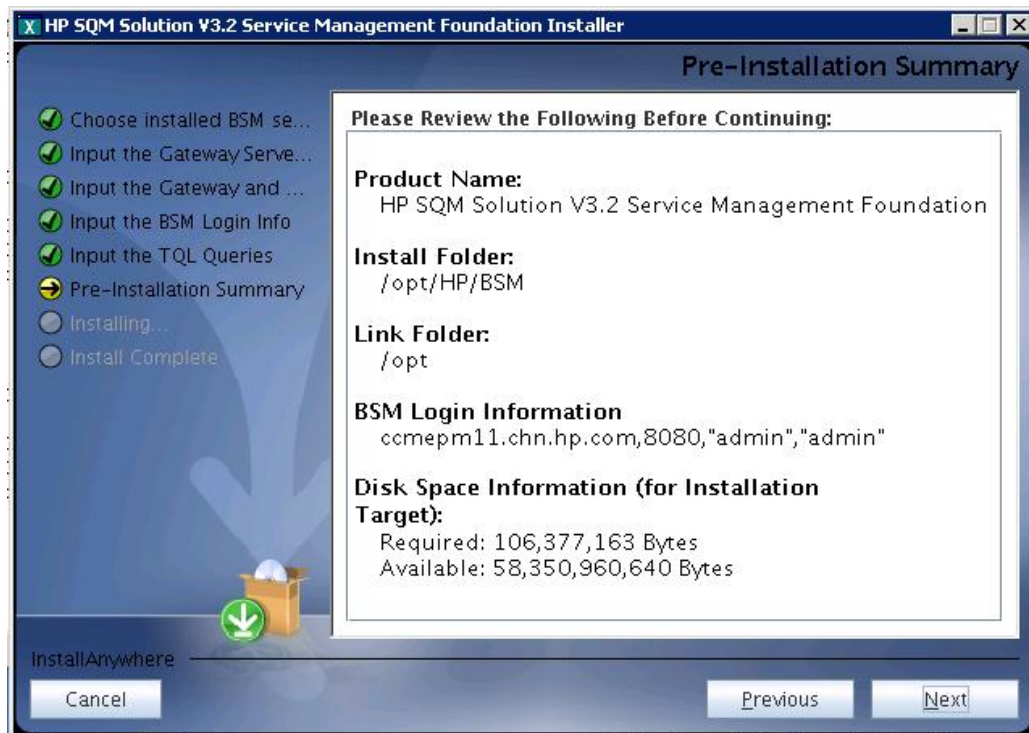
11. If the JMX Invoke port, RMI port, JMX username and password input incorrect, the following 3 dialog box will appear, click OK jump to reinput JMX info, click Cancel to exit install application.

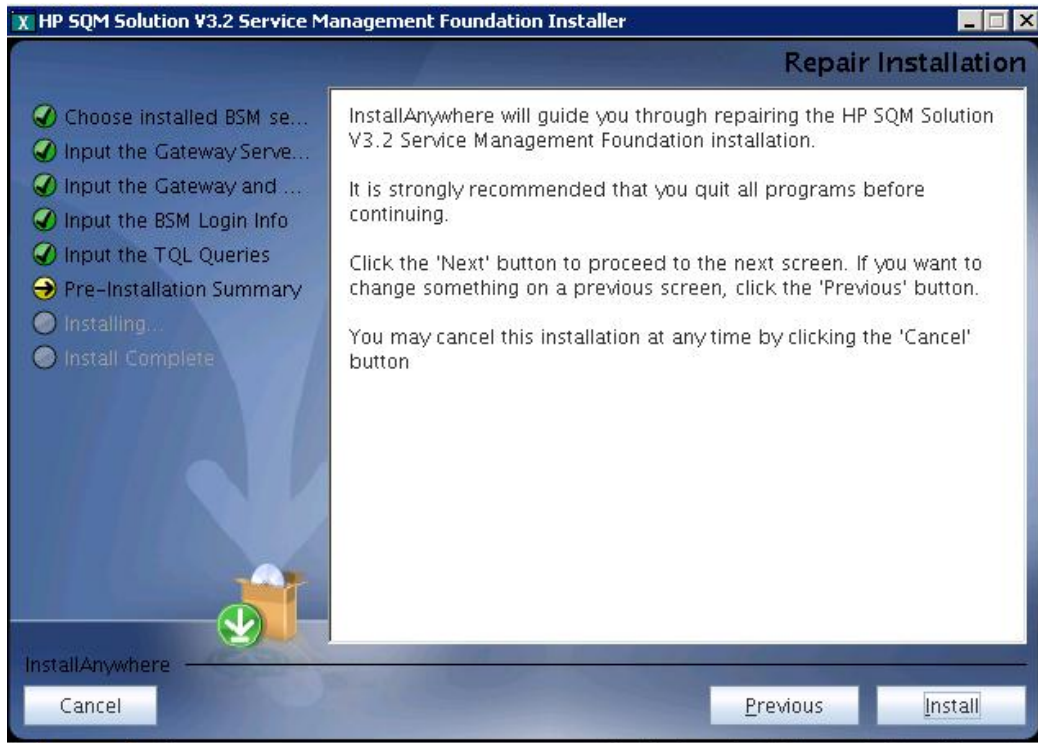
If the JMX info input correct, please ignore step 11 and execute next step 12.



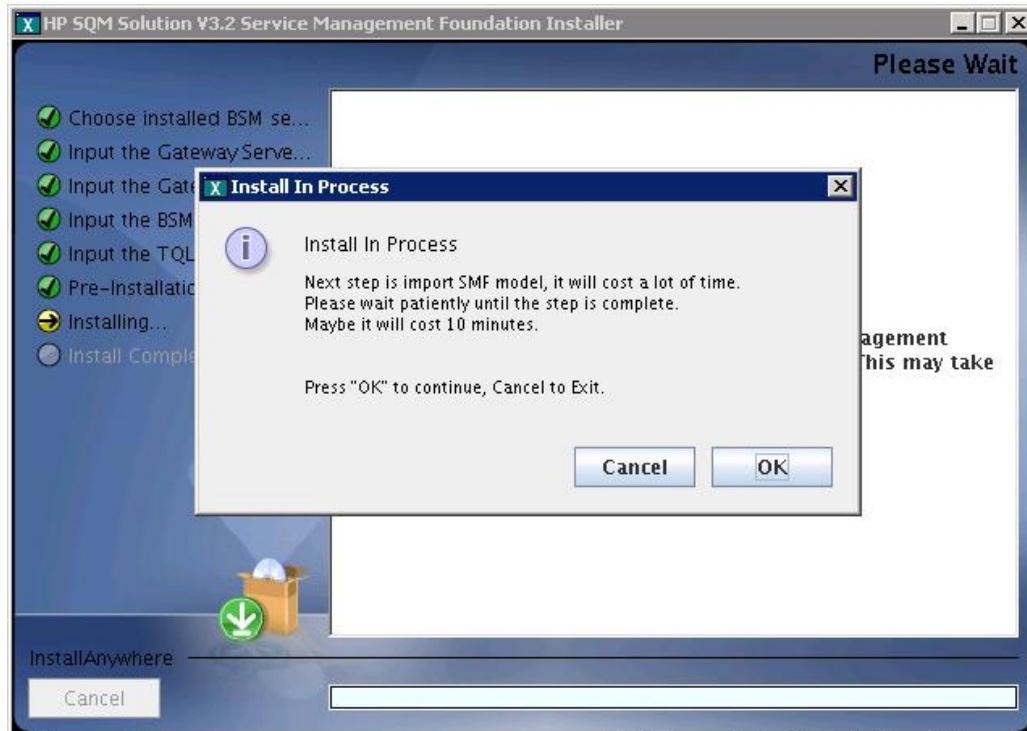


12. Click **Next** and then press **Install**, installation begins.

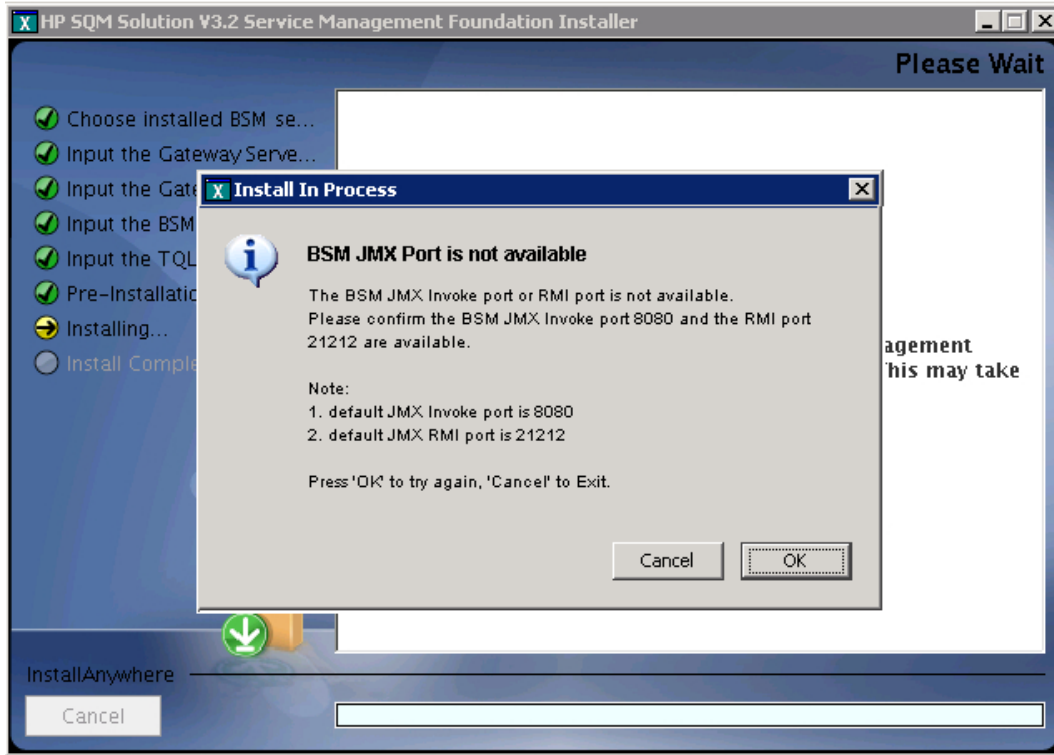




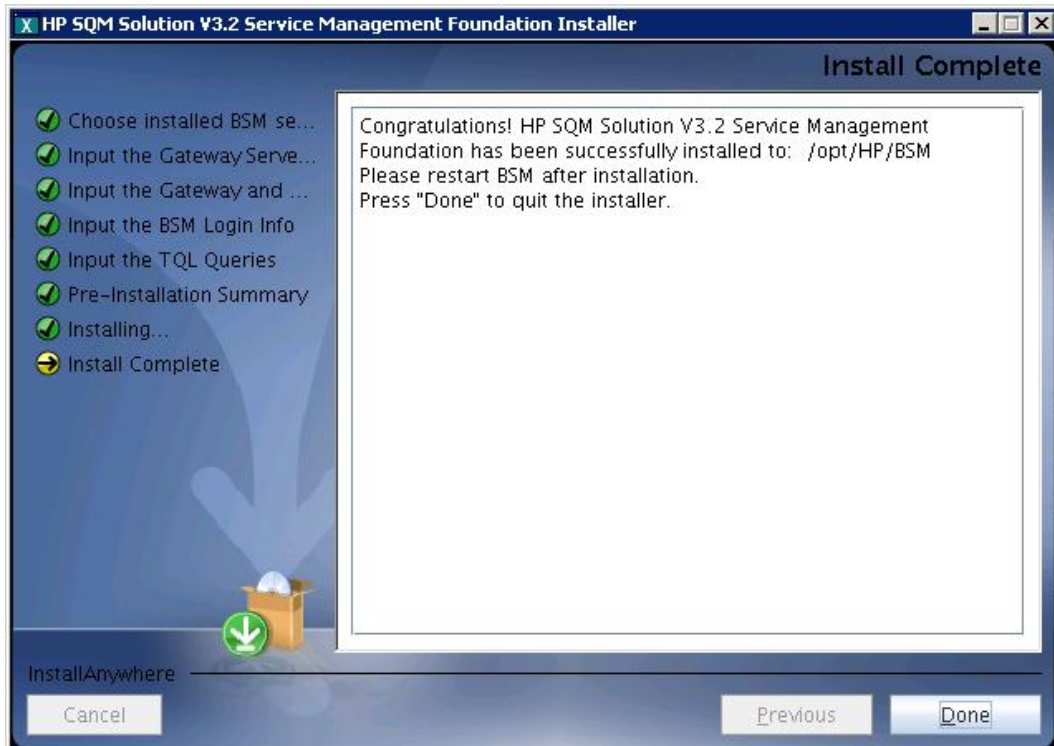
13. After wait a bit time, a **Install In Process** dialog box will display to you with message 'it will cost a lot of time. Please wait patiently until the step is complete'. Click **OK** to continue.



14. If BSM stopped or JMX port changed while installing the kit, it will popup a dialog like below. Press **OK** to try again and **Cancel** to exit the install application.



15. After 10-15 minutes, an **Install Complete** panel will display to you with a congratulations message. If a failed panel is shown, please check the detail info in the log file under the folder `<SMF_HOME>/log`.



---

**Note:**

If you are installing on a two-box server, please just do the installation on Data processing server.

After installation, one manual operation has to be done to enable all new SQM Business Rules in BSM platform:

please open IE browser, access JMX port 29811 for *marble\_worker\_1*, within BSM DPS-Platform, select the services called *Marble Worker* and invoke the '*reloadRules*' method. This method is applied to all the customers served by this worker.

[http://<BSM\\_DPS\\_SERVER\\_FULL\\_NAME>:29811/invoke?operation=reloadRules&objectname=BSM-Platform%3AService%3DMarbleWorker](http://<BSM_DPS_SERVER_FULL_NAME>:29811/invoke?operation=reloadRules&objectname=BSM-Platform%3AService%3DMarbleWorker)

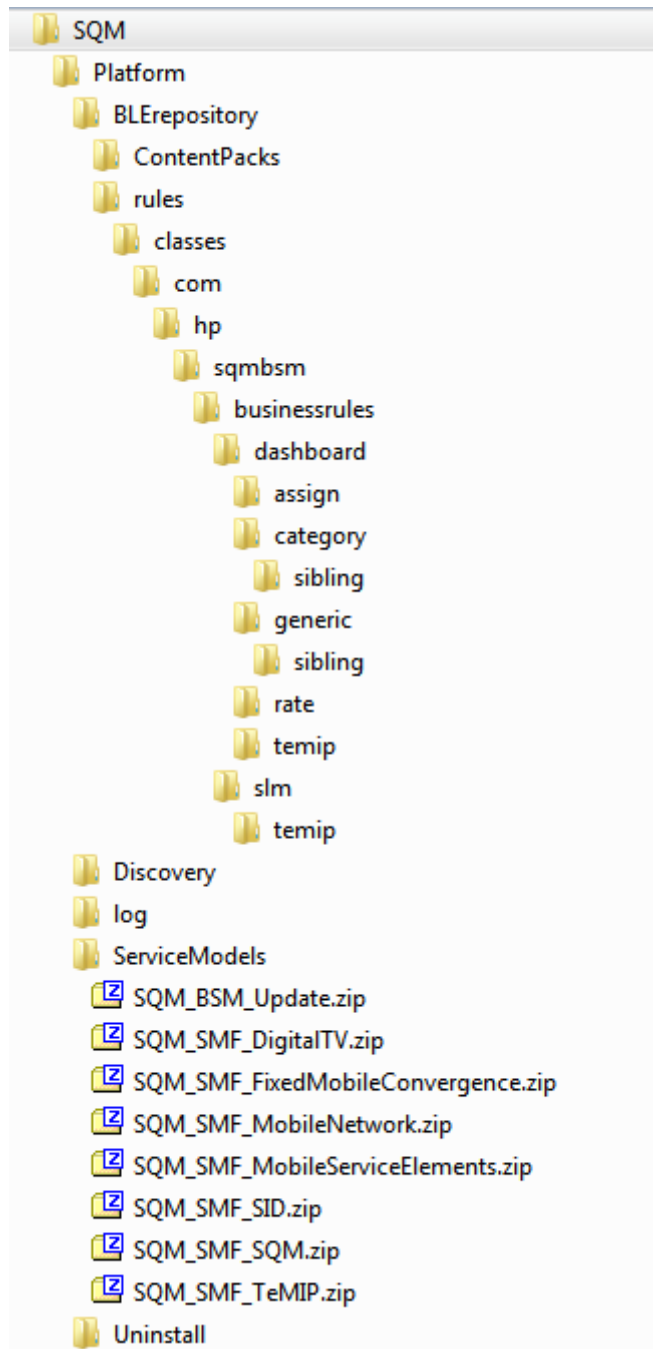
---

## 3.2.2 Post-Installation

### 3.2.2.1 Checking Components

After installation, you can check which Service Management Foundation components are installed on a HP Business Service Management server by doing the following:

1. Open the <HP\_BSM\_DIR>\SQM\Platform folder.
2. Check that all the components that do exist under this directory.



### 3.2.2.2 Checking Installation Status and Log Files

The file named *Installation.Status* is located in the directory <HP\_BSM\_DIR>\SQM\Platform\.

If the installation is successful, the content of the file should be 'SUCCESS'.

Two installation log files are located in <HP\_BSM\_DIR>\SQM\Platform\log

*install\_anywhere.log*

*platform\_install.log*




### 3.2.2.3 Import external resource to Adapter management

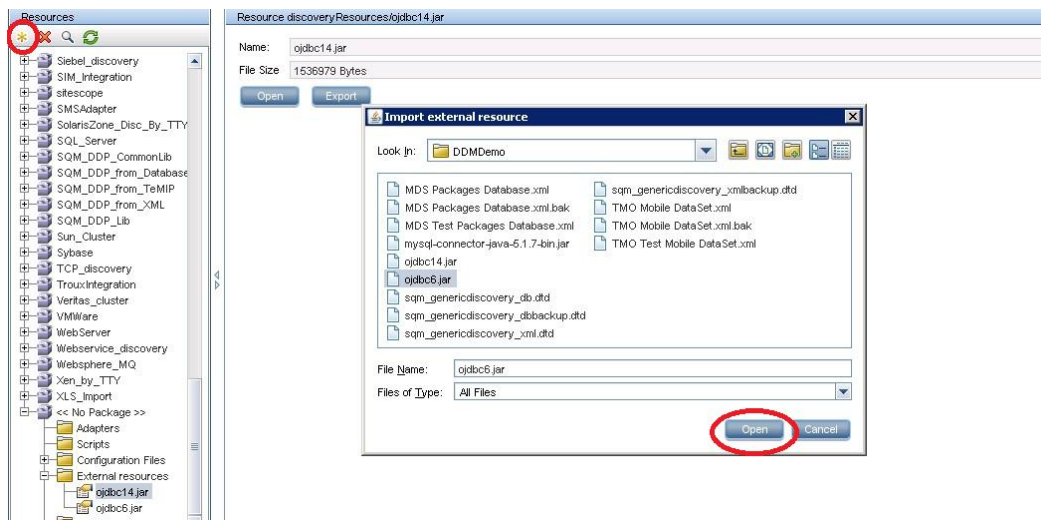
After installation if you want to run a DDP from Database job, firstly you need to import external DB driver to BSM and Data Flow Probe.

Please use Adapter management tools to import DB driver.

Go to Admin → RTSM Administration → Data Flow Management → Adapter management

Click  → import external resource.

Select your DB driver (For example: ojdbc14.jar, ojdbc6.jar, sqljdbc.jar) jar files as below graph.



# Chapter 4

## Service Management Foundation Configuration

This chapter provides the description of the steps which need to be manually performed to finalize the configuration on the BSM Server:

- SLM Configuration
- Generic Discovery & Dataload Pack Configuration

### 4.1 SLM Configuration

After successfully complete automatic set up of Service Management Foundation, it remains some configurations that must be completed manually.

The SLM creation part, Service Offering is not provided with our model, so that they should be added manually.

This must be done via the Admin platform UI. Go to the Admin -> Service Level Management -> Repositories -> Service and CI Offerings

Refer below graph.

1. Create Service Offerings

The screenshot shows two tables from the Admin platform UI. The first table is titled 'Service Offerings' and has a toolbar with icons for add, edit, delete, refresh, and search. The table has three columns: Name, Type, and Description. The second table is titled 'CI Offerings' and has a toolbar with icons for add, edit, delete, refresh, and search. The table has three columns: Name, Type, and Description.

Name	Type	Description
Default	Predefined	Applied by default to any service that does not have an alternative service offering selected in the Agreement wizard.
Gold	Predefined	Designed for business-critical applications.
Platinum	Predefined	Designed for mission-critical applications and systems that can never go down.
Silver	Predefined	Designed to meet the needs for infrastructure with less demanding availability requirements, such as test and development.
TeMIP Service Offerings	Custom	Applied by default to any service that does not have an alternative service offering selected in the Agreement wizard.

Name	Type	Description
Default CI Offering	Predefined	Applied by default to any non - service CIs that does not have an alternative CI offering selected in the Agreement wizard.
TeMIP CI Offerings	Custom	Applied by default to any non - service CIs that does not have an alternative CI offering selected in the Agreement wizard.

**Service Offering Definition**

\* Name: TeMIP Service Offerings

Description: Applied by default to any service that does not have an alternative service offering selected in the Agreement wizard.  
Note: The Default Service Offering cannot be deleted from the Service Offerings

---

**Objectives Definition**

**Calendars and Tracking Periods**

Name	Hour	Day	Week	Month	Quarter	Year	SLA Period
Business Hours	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
24x7	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Objectives Definition For: Business Hours Hour; Business Hours Day; Business Hours Week; Business Hours Month; Business Hours Quarter; ...

Name	Units	Operator	Exceeded	Met	Minor Br...	Breached	Failed
Communication Status		>=	90.0	80.0	70.0	60.0	Otherwise
Environmental Status		>=	90.0	80.0	70.0	60.0	Otherwise
Equipment Status		>=	90.0	80.0	70.0	60.0	Otherwise
ProcessingError Status		>=	90.0	80.0	70.0	60.0	Otherwise
QualityOfService Status		>=	90.0	80.0	70.0	60.0	Otherwise

Save Cancel Help

## 2. Create CI Offerings

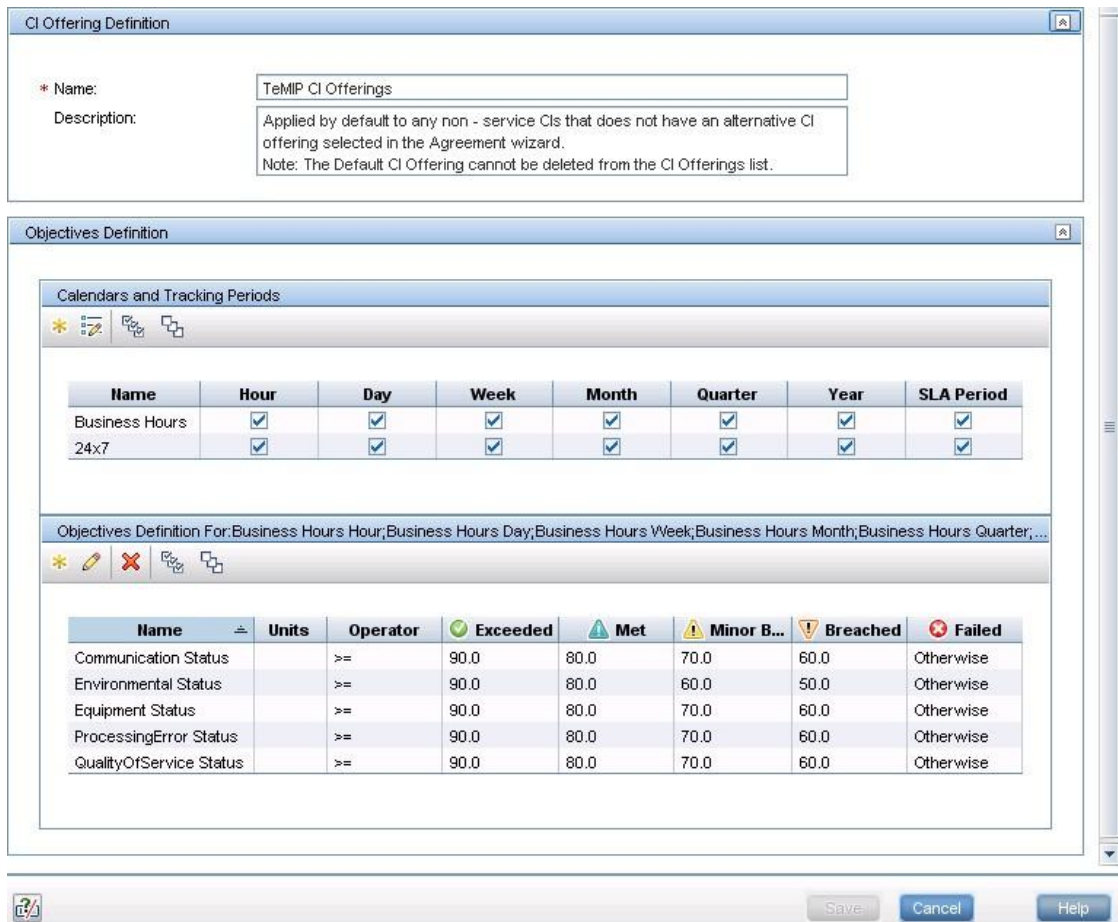
**Service Offerings**

Name	Type	Description
Default	Predefined	Applied by default to any service that does not have an alternative service offering selected in the Agreement wizard
Gold	Predefined	Designed for business-critical applications.
Platinum	Predefined	Designed for mission-critical applications and systems that can never go down.
Silver	Predefined	Designed to meet the needs for infrastructure with less demanding availability requirements, such as test and development.
TeMIP Service Offerings	Custom	Applied by default to any service that does not have an alternative service offering selected in the Agreement wizard

---

**CI Offerings**

Name	Type	Description
Default CI Offering	Predefined	Applied by default to any non - service CIs that does not have an alternative CI offering selected in the Agreement wizard
TeMIP CI Offerings	Custom	Applied by default to any non - service CIs that does not have an alternative CI offering selected in the Agreement wizard



## 4.2 Generic Discovery & Dataload Pack Configuration

After Installation, Please refer to the associated document *HP SQM Solution 3.0 Generic DDP Integration guide*, this document describes how to perform the additional settings of Generic Discovery & Dataload Pack component on the platform.

The HP Business *Service Management* documents and HP SQM Solution documents are available at:

<http://support.openview.hp.com/selfsolve/manuals>

## Service Management Foundation Uninstallation

### 5.1 Uninstalling the Service Management Foundation on Windows platform

The Uninstall of Service Management Foundation will undeploy all the files and packages of SMF that deployed to BSM.

---

**Note:** If there are CIs existing in CMDB, it will not undeploy package zip file automatically, you need to manually delete CIs for CIT firstly and then undeploy the zip package from Package Manager.

---

Before starting un-installation, below manual steps have to be executed:

1. SQM CI instances deletion.

Go to Admin → RTSM Administration → Modeling → CI Type Manager

Filter as 'CI Types'

Select which you want to delete of CIT

Right click button and select Show CIT Instances

Select all of them and click button "Delete from CMDB"

2. Delete Customized CITs which Derived-From SQM Predefined CIT.

Go to Admin → RTSM Administration → CI Type Manager

Filter as 'CI Types'

Select which you want to delete of CIT

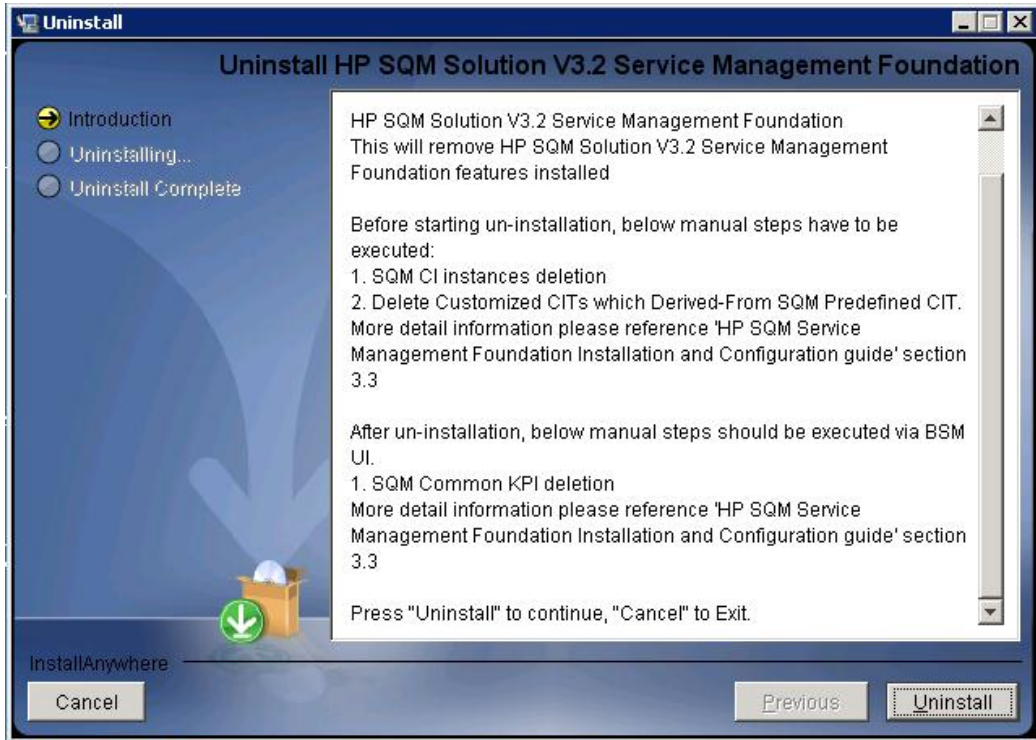
Click button "Delete Selected Item(s) Ctrl+Del"

- **Starting the Uninstallation procedure**

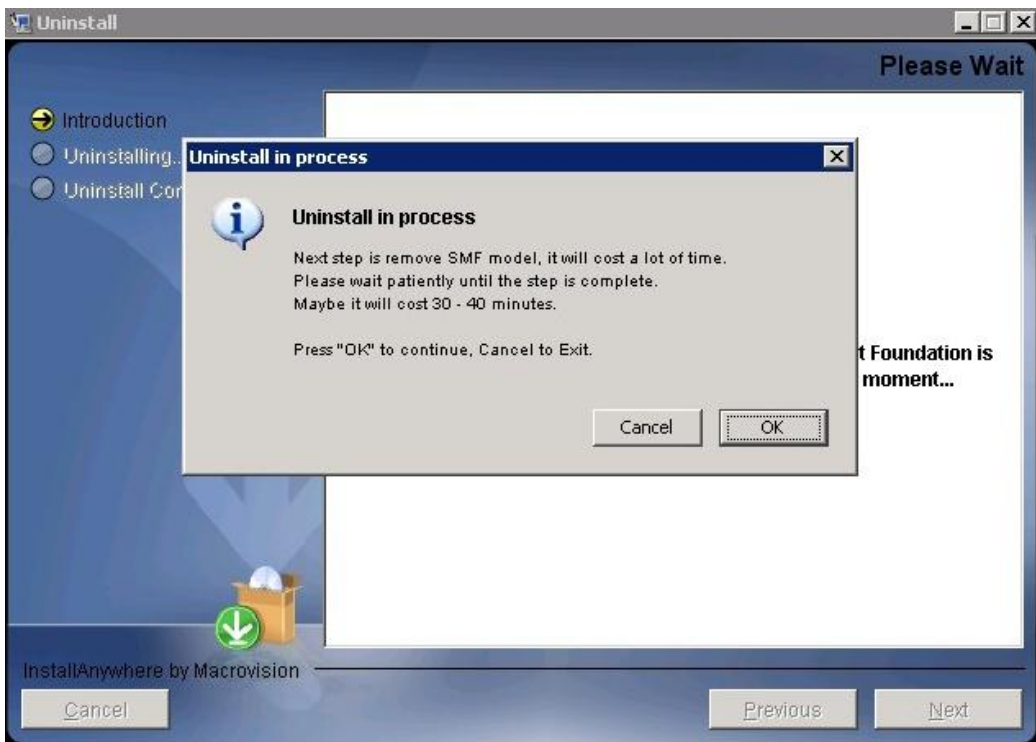
uninstall.exe file is under directory <HP\_BSM\_DIR>\SQM\Platform\Uninstall

And double click it to start Uninstallation.

1. Click the **Uninstall** Button.



2. The dialog box will be shown and the Uninstallation action will take 30-40 minutes. Click OK to next step.

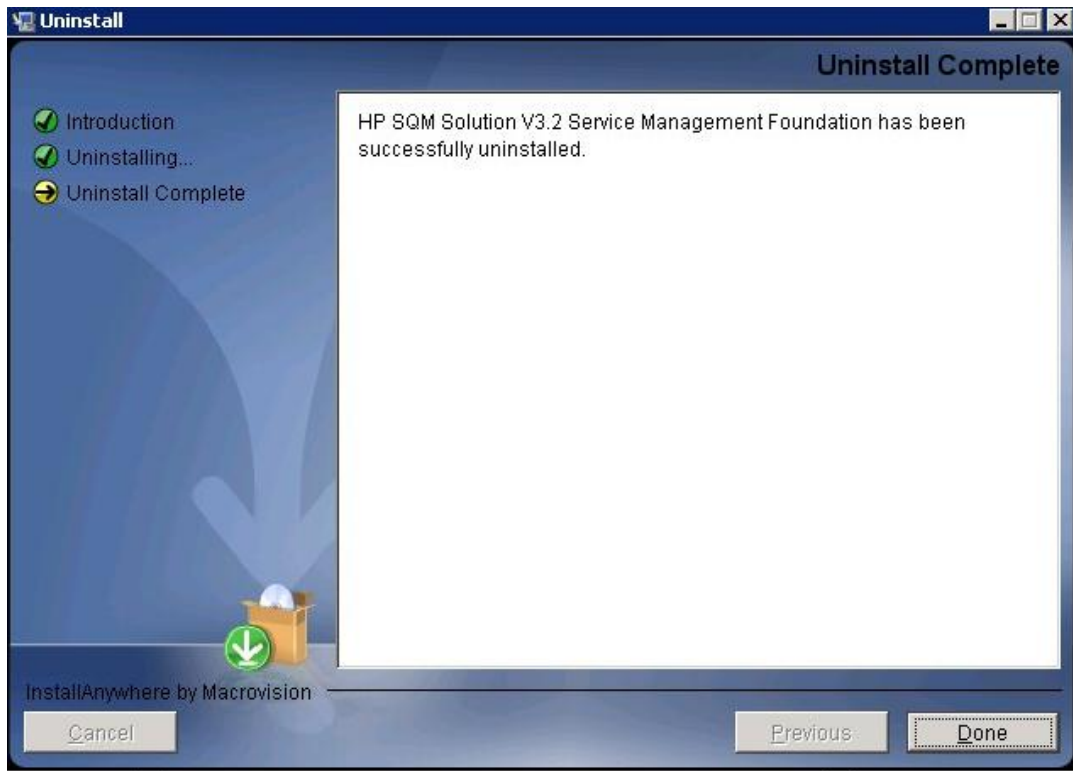


---

**Note:** If the customer does not accept the long time operation, click Cancel to exit uninstall action.

---

3. After 30-40 minutes, an **UnInstall Complete** panel will display to you with congratulations message, press Done to finish uninstallation.



## 5.2 Uninstalling the Service Management Foundation on Linux platform

The Uninstall of Service Management Foundation will undeploy all the files and packages of SMF that deployed to BSM.

---

**Note:** If there are CIs existing in CMDB, it will not undeploy package zip file automatically, you need to manually delete CIs for CIT firstly and then undeploy the zip package from Package Manager.

---

Before starting un-installation, below manual steps have to be executed:

1. SQM CI instances deletion.

Go to Admin → RTSM Administration → CI Type Manager

Filter as 'CI Types'

Select which you want to delete of CIT

Right click button and select Show CIT Instances

Select all of them and click button “Delete from CMDB”

2. Delete Customized CITs which Derived-From SQM Predefined CIT.

Go to Admin → RTSM Administration → CI Type Manager

Filter as ‘CI Types’

Select which you want to delete of CIT

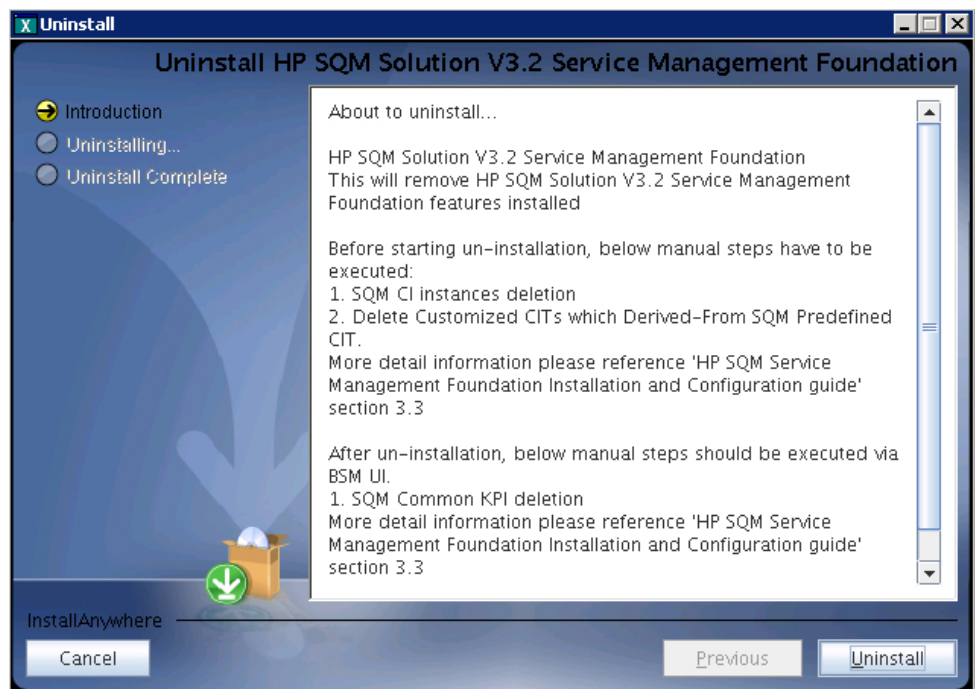
Click button “Delete Selected Item(s) Ctrl+Del”

- **Starting the Uninstallation procedure**

uninstall.bin file is under directory <HP\_BSM\_DIR>\SQM\Platform\Uninstall

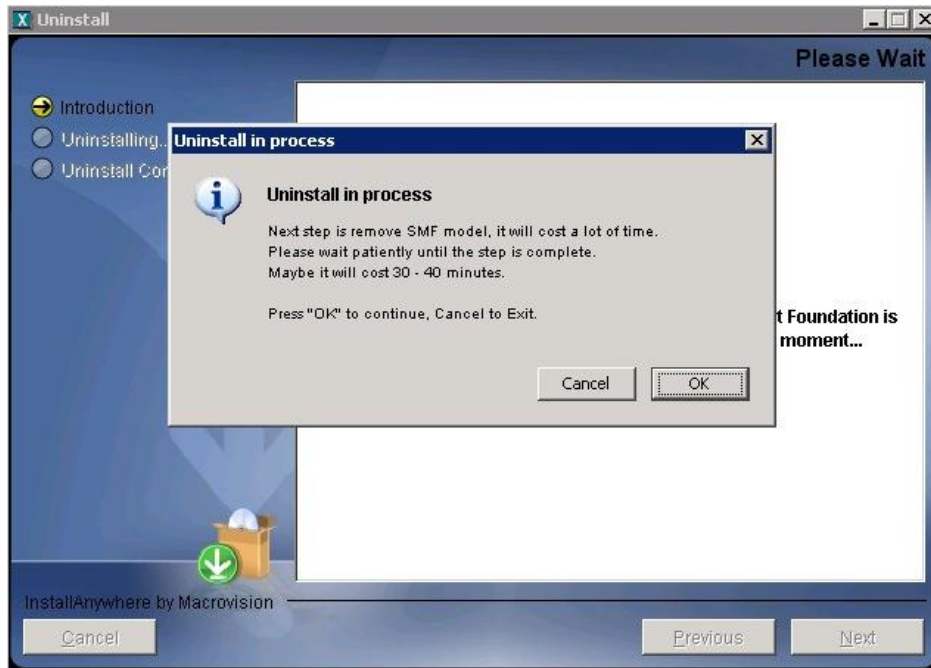
- Log in to the server as user root.
- Go to the installation root directory.
- Run the following script:  
/uninstall.bin
- Follow the on-screen instructions for server installation.

1. Click the **Uninstall** Button.



2. The dialog box will show and the Uninstallation action will cost 30-40 minutes. Click OK to next step.



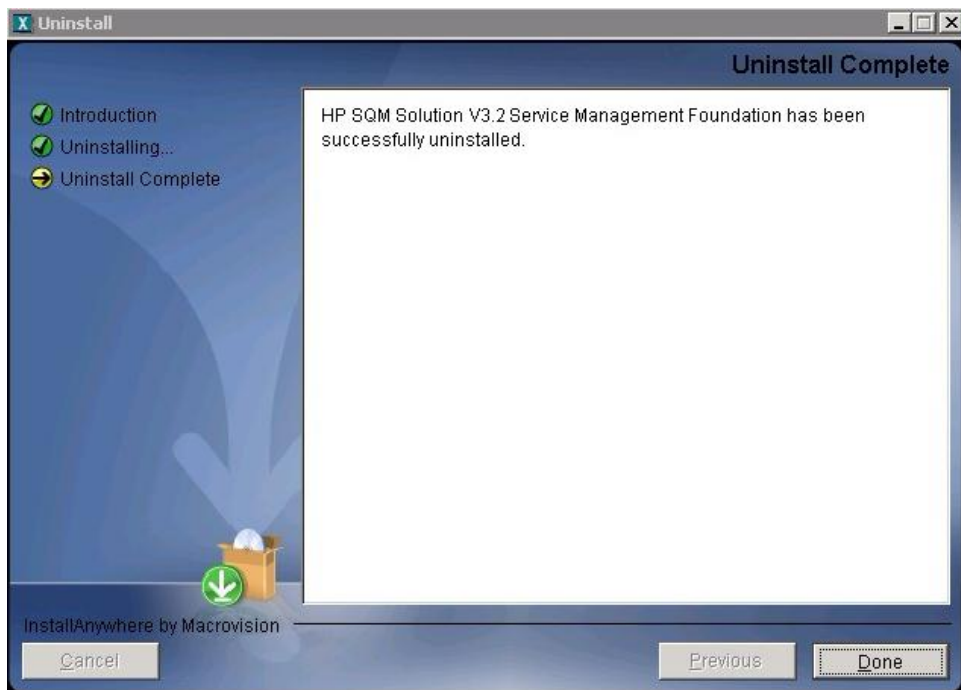


---

**Note:** If the customer does not accept long time, click Cancel to exit uninstall action.

---

3. After 30-40 minutes, an **UnInstall Complete** panel will display to you with congratulations message, press Done to finish uninstallation.



# Chapter 6

## SMF3.1 upgrade to SMF 3.2

### 6.1 Uninstall SMF 3.1 and Install SMF 3.2

The recommended option is to first uninstall SMF 3.1 and then install SMF 3.2 on a clean BSM environment.

Please follow below procedures:

- i. Uninstall SMF 3.1 by following the instructions described in *HP SQM Solution 3.1 Service Management Foundation Installation and Configuration Guide*.
- ii. Restart BSM
- iii. Install SMF 3.2 as Chapter 3 described.

### 6.2 Manual upgrade from SMF 3.1

In case there are customized updates made based on SMF 3.1, and the uninstallation of SMF 3.1 is not suitable. Please follow below instructions to manually upgrade from SMF 3.1 to SMF 3.2.

---

**Note:**

Before implement any manual upgrade action, please make sure all customized packages and Content Packs are already backedup.

Recommend contacting the SQM Support team for assistance.

---

#### 6.2.1 Backup and Delete CIs, CITs, relationships

Before deploy all the new files and packages of SMF3.2 to BSM, below manual steps have to be executed:

Remove the CITs listed in below table and their children CITs from SQM 3.1 environment.

---

**Note:** If there are CIs and relationships existing in CMDB, it will not undeploy CIT automaticly, you need to manually delete CIs and relationships for CIT firstly and then undeploy the CIT from CI Type Manager.

---

CIT Display Name	CIT Class Name
Region	sqm_region
Authentication	fmc_authentication
Registration	fmc_registration
APN DNS Resolution	mse_apn_dns_resolution
Mobile Services Procedure	mse_mobile_services_procedure
PDP Context Creation	mse_pdp_context_creation
PDP Context Activation	mse_pdp_ctx_activation
PDP Context Deactivation	mse_pdp_ctx_deactivation
Radius Authentication	mse_radius_authentication
Roaming In	mse_roaming_in
Roaming Out	mse_roaming_out
Roaming	mse_sms_roaming
Location Area Update	mse_location_area_update
Controller	sqm_access_controller
Transceiver	sqm_access_transceiver
Gateway	sqm_network_gateway
Stream	sqm_stream

1. SQM CI instances backup. Delete of which CIT you need to remove.

Go to Admin → RTSM Administration → CI Type Manager

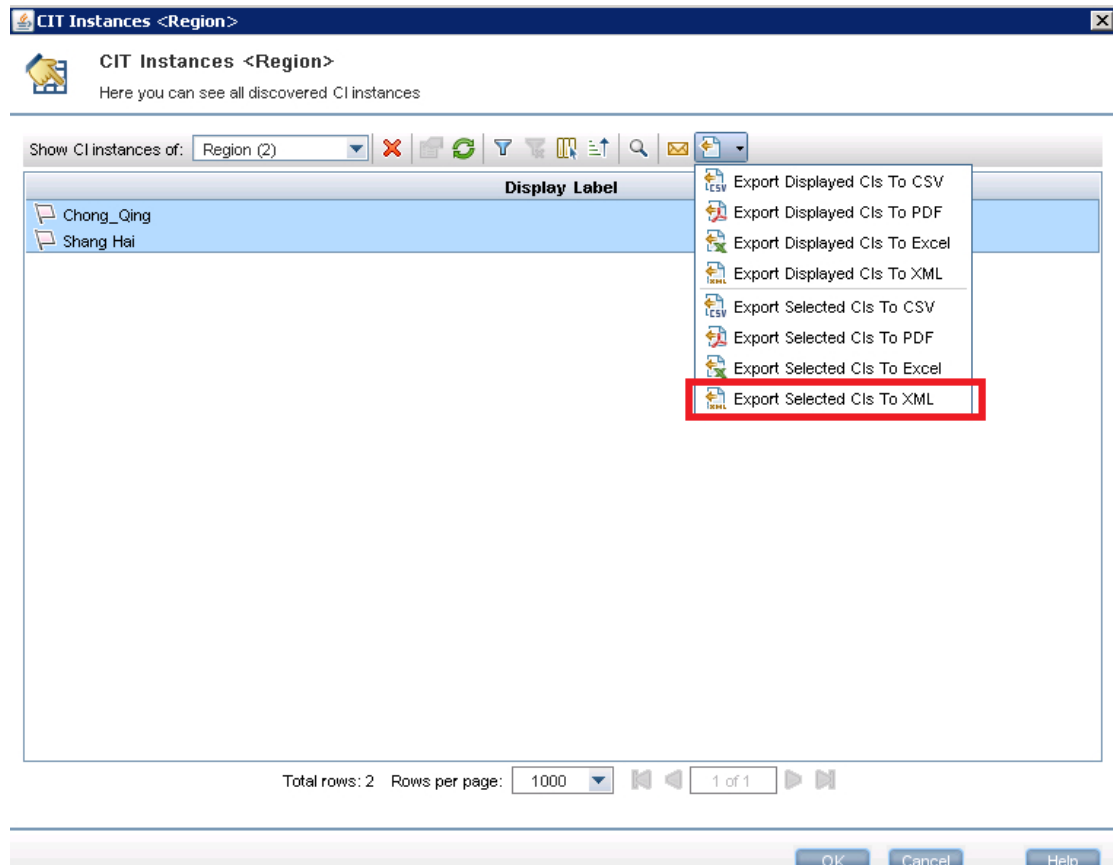
Filter as 'CI Types'

Select which you want to delete of CIT (for example: CIT Region)

Right click button and select Show CIT Instances

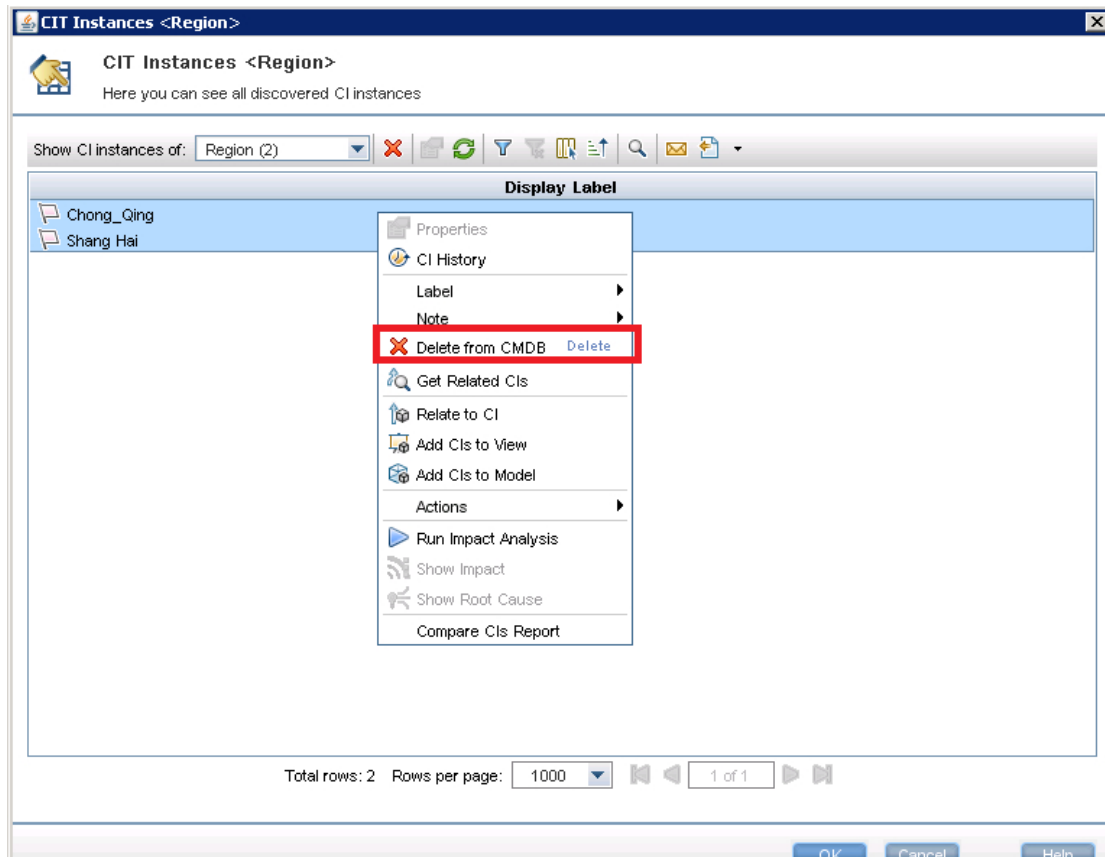
Backup CIs:

Select all of them and click button "Export Selected CIs TO XML"



Delete CIs:

Select all of them and click button "Delete from CMDB"



2. Delete Customized relationships (View, Query, Enrichment Rule) CIT.

For example: if View, TQL Query and Enrichment Rule use CIT Region, we must delete all relationships, and then we can delete CIT Region.

Go to Admin → RTSM Administration → Modeling → Modeling Studio

Filter as 'Resource', select Resource Type Views to remove view which used delete CIT.

Filter as 'Resource', select Resource Type Queries to remove TQL Query which used delete CIT.

Go to Admin → RTSM Administration → Modeling → Enrichment Manager

Remove Enrichment Rule which used delete CIT.

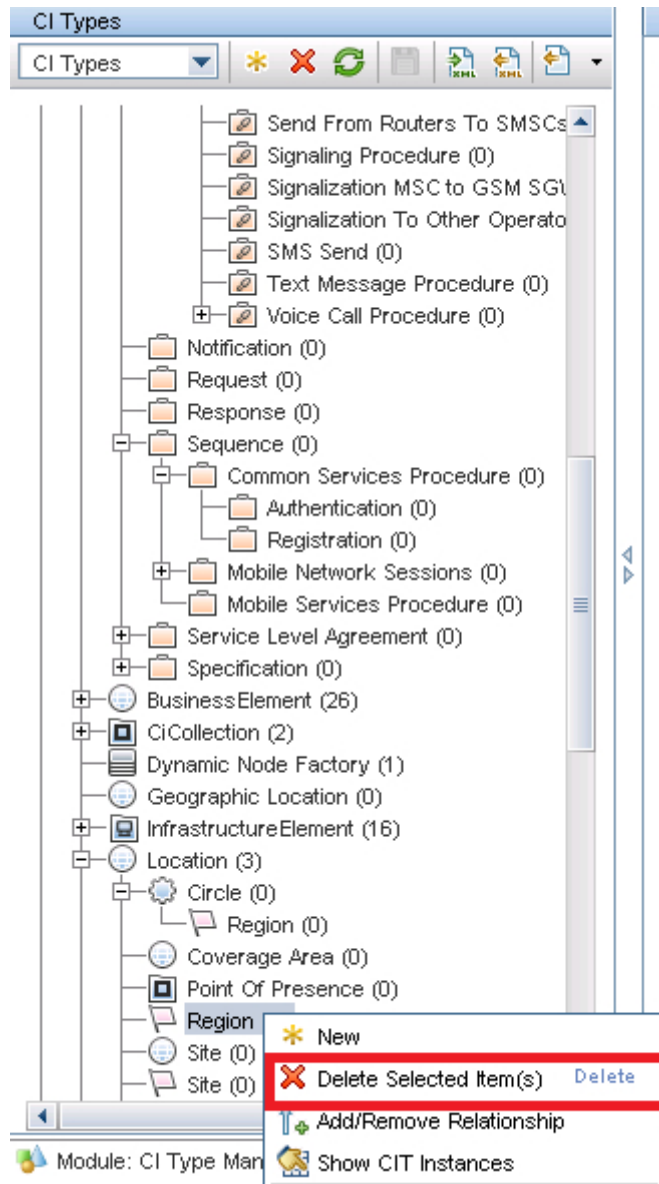
3. After remove all relationships of CIT, then you can delete Customized CITs which Derived-From SQM Predefined CIT.

Go to Admin → RTSM Administration → CI Type Manager

Filter as 'CI Types'

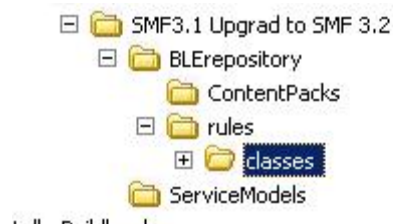
Select which you want to delete of CIT

Click button "Delete Selected Item(s) Ctrl+Del"



## 6.2.2 Deploy all new files, packages and Content packs of SMF 3.2

Deploy SMF 3.2 BLE repository files and Service Model packages:



1. Prepare for deployment

**Linux:**

Copy and replace all BLE Class files (SMF3.1 Upgrad to SMF 3.2\BLErepository\rules\classes) to BSM folder /opt/HP/BSM/BLE/rules.

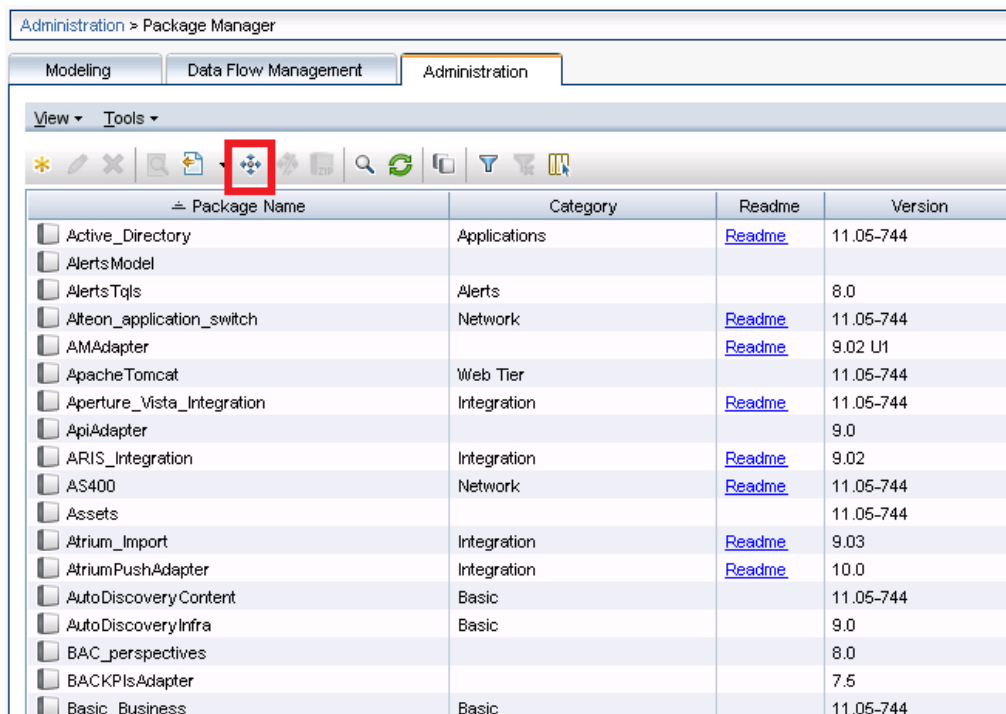
**Windows:**

Copy and replace all BLE Class files (SMF3.1 Upgrad to SMF 3.2\BLErepository\rules\classes) to BSM folder C:\HPBSM\BLE\rules

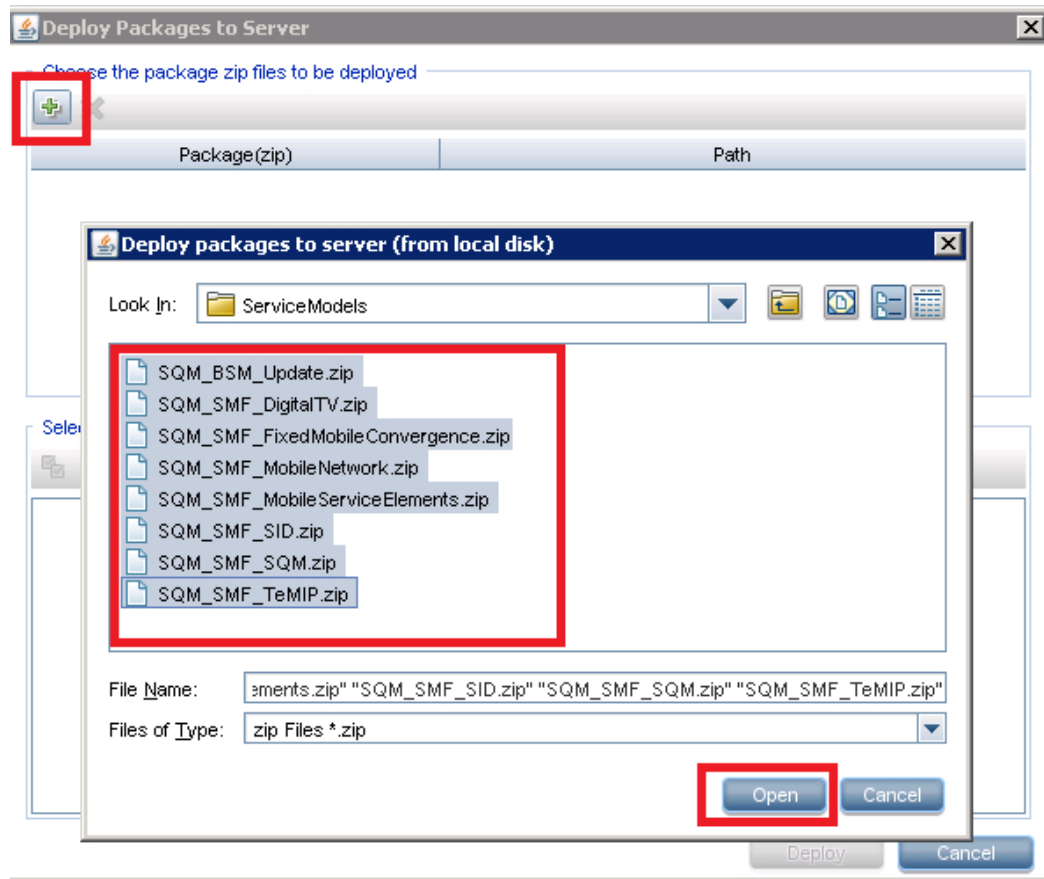
2. Deploy new packages to BSM

Go to Admin → RTSM Administration → Administration

Click deploy package button as below graphe:



And then show deploy packages windows, please clicik Add button chose new packgae files as below graphe, click deploy button to finish Deploy action.

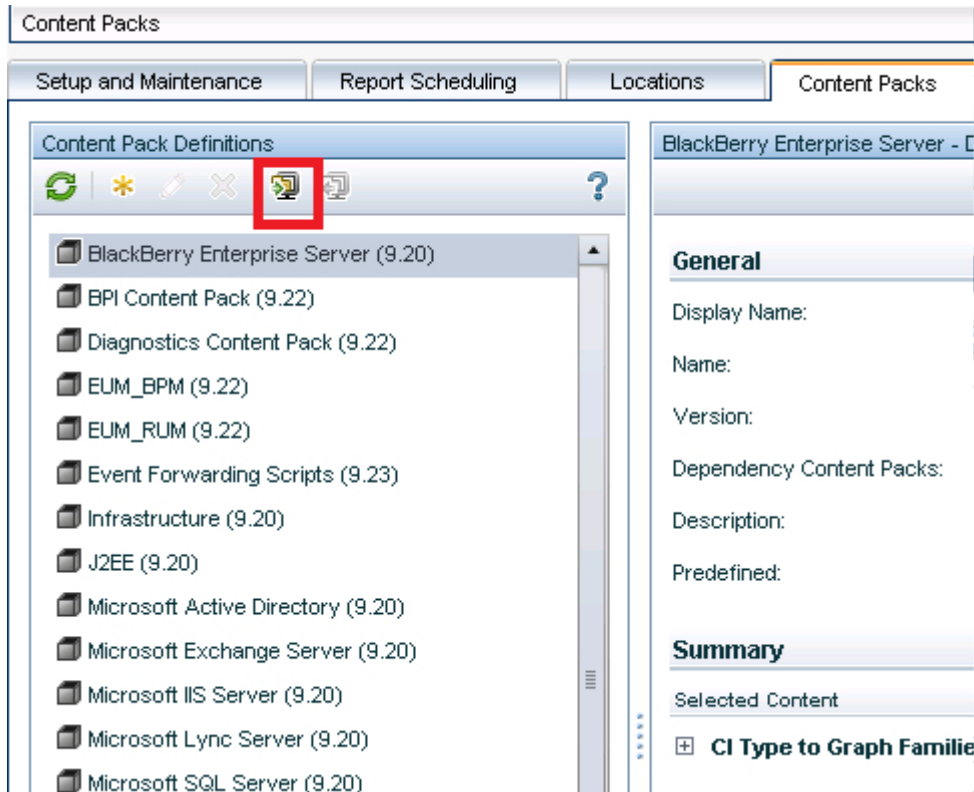


3. After deploy package action finished, please deploy SMF 3.2 content packs in BSM Platform.

Go to Admin → Platform → Content Packs

Click Import Content Pack button as below graphe:

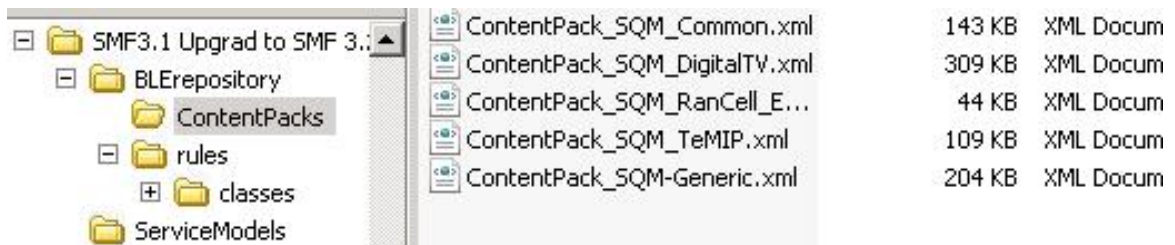


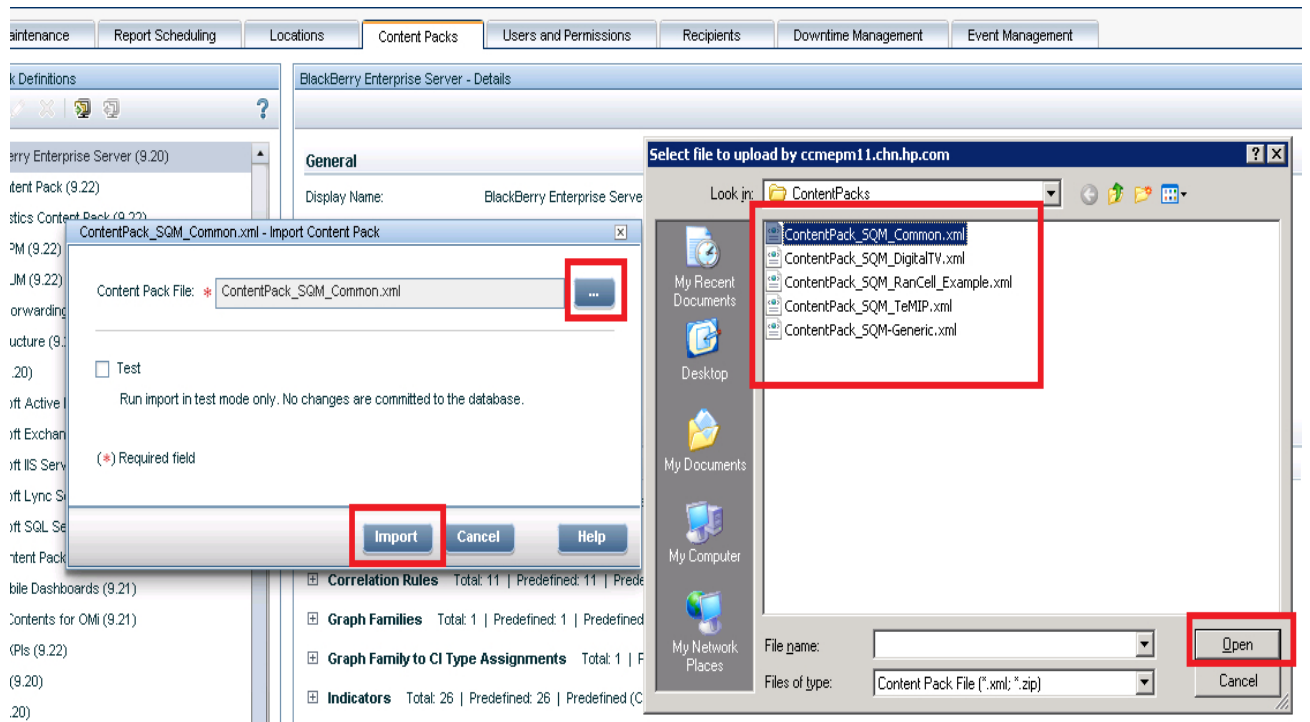


Chose Content Pack and click Import to finish Import action, please Import all 5 Content Packs.

The Content Pack deployment order is:

- ContentPack\_SQM-Generic
- ContentPack\_SQM\_Common
- ContentPack\_SQM\_TeMIP
- ContentPack\_SQM\_RanCell\_Example
- ContentPack\_SQM\_DigitalTV





The upgrade is complete.