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:

HP Business Service Management	Linux & Windows
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></key></ctrl>	Hold down the Ctrl key and press the other key
<return></return>	Press the Return key.

Acronyms

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

- \rightarrow 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

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

Chapter 1

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>

 $Example: gpg --verify \ SQMSolSMFV320 RevA.bin.sig \ SQMSolSMFV320 RevA.bin$

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?produ ctNumber=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.

Chapter 2

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 Table2-1.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 embeded. So you don't have to install JRE environment when performing the installation.

Software Subset	BSM Server Type	\${HP_BSM_DIR}/SQM/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.

Chapter 3

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 excute 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:

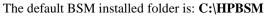
Click: Start > Programs > HP Business Service Management > Administration > HP Business Service Management Status. Click:

 $C:\BSM\tools\bsmstatus\bsmstatus.bat$

• 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.

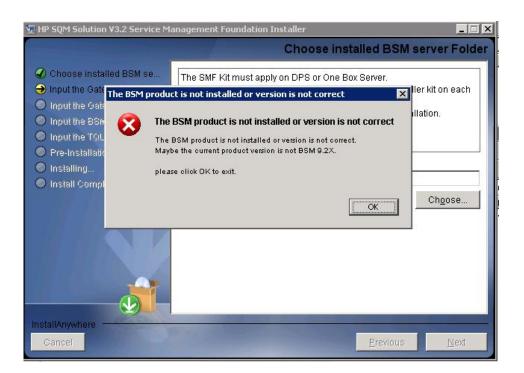
1. Choose the correct BSM Installed Folder, click **Next** button to continue.



📲 HP SQM Solution V3.2 Service Management Foundation Installer 📃 🔲 🗶	
	Choose installed BSM server Folder
 Choose installed BSM se Input the Gateway Server Input the Gateway and DP Input the BSM Login Info Input the TOL Quertes 	The SMF Kit must apply on DPS or One Box Server. If you have multiple DPS Servers, please excute the installer kit on each DPS Server. Please click next continue to next step, cancel to exit installation.
 Pre-Installation Summary Installing 	Where have you already installed BSM server?
Install Complete	C:\HPBSM
	<u>R</u> estore Default Folder Ch <u>o</u> ose
InstallAnywhere	
Cancel	Previous Next

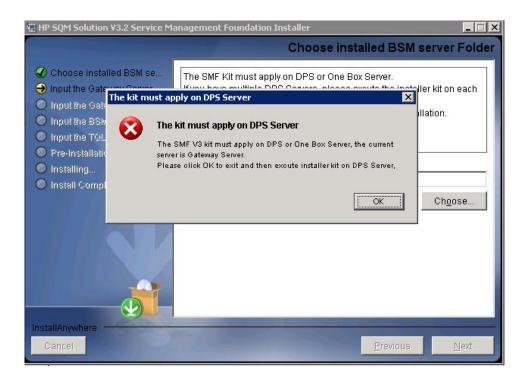
2. The BSM product version must be 9.2X, otherwise the following error dialog box will appear, click ok to exit install application.

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 excute next step 4.



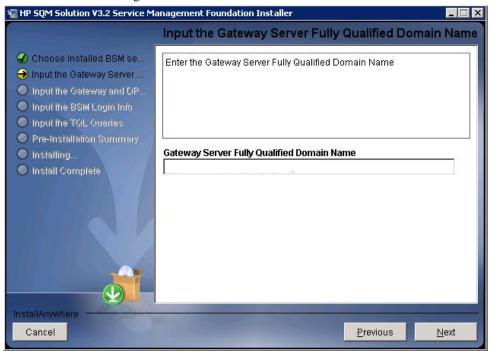
4. If the SMF 3.2 or above version is already installed, the following dialog box will appear, click ok to exit install application, and then uninstall the current exist SMF Kit before strating a new install.

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

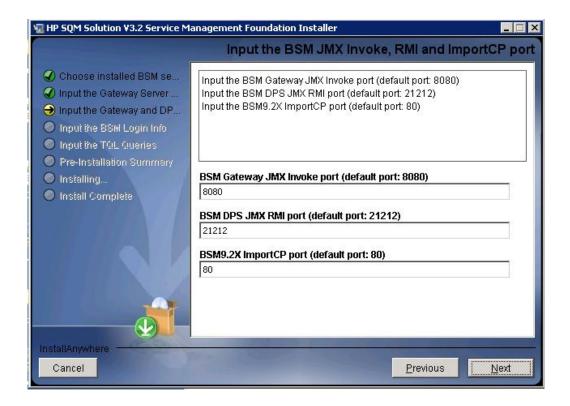
🐙 HP SQM Solution ¥3.2 Service M	anagement Foundation Installer	_ 🗆 🗙
	Choose installed BSM	server Folder
 Choose installed BSM se Input the Gate Input the Gate The SMF is alree 		0. 20
 Input the BSR Input the TQL Pre-Installatio Installing Install Compt 	SMF is already installed SMF is already installed, please uninstall the ourrent exist SMF efore starting a new install. OK to exit.	Ch <u>o</u> ose
InstallAnywhere Cancel	Erevious	Next

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

🖫 HP SQM Solution ¥3.2 Service M	anagement Foundation Installer
	Input the JMX Login username and password
 Choose installed BSM se Input the Gateway Server Input the Gateway and DP Input the BSM Login Info Input the TQL Queries 	Please input the JMX login information
 Pre-Installation Summary Installing 	login user
 Install Complete 	admin
	login password

InstallAnywhere	
Cancel	Previous <u>N</u> ext

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

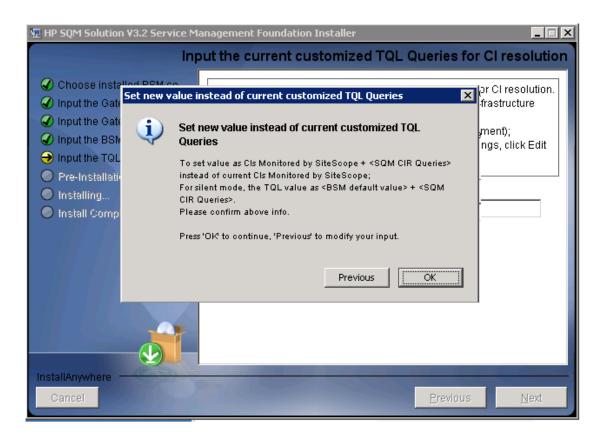
The default JMX Login information is:

User: admin

Password: admin

🖥 HP SQM Solution V3.2 Service Management Foundation Installer	
	Input the BSM Login username and password
 Choose installed BSM se Input the Gateway Server Input the Gateway and DP Input the BSM Login Info Input the TGL Queries Pre-Installation Summary 	Please input the BSM Login information
Installing	login user
Install Complete	admin login password *****
InstallAnywhere	
Cancel	Previous <u>Next</u>

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.



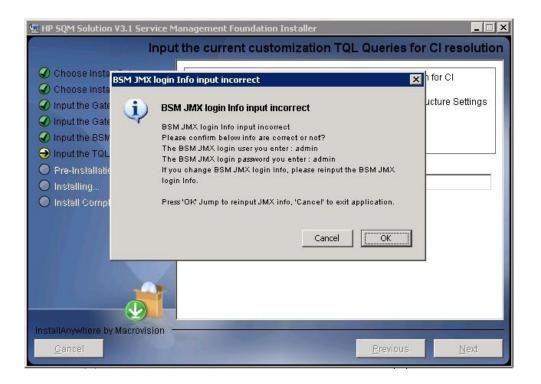
If the JMX info input correct then it will show you a preinstallation panel as step 10.

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.

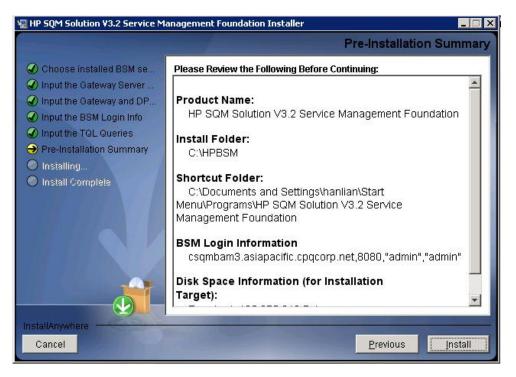
If the JMX info input correct, please ignore step 9 and excute next step 10.

	Inp	out the current customized TQL Queries for CI resolution
 Choose installed BSM Input the Gateway Serv Input the Gateway and 	er	Please input the current customized TQL Queries to run for CI resolution. Browse to Admin->Platform->Setup and Maintenance->Infrastructure Settings
	SINVOK BSM Plea The If you	e Port input incorrect ment); I JMX Invoke Port input incorrect JMX Invoke Port input incorrect BSM JMX Invoke Port or not? BSM JMX Invoke port, please reinput the JMX Invoke port. s'OK' Jump to reinput JMX info, 'Cancel' to exit application. Cancel OK
InstallAnywhere	20	Previous <u>N</u> ext

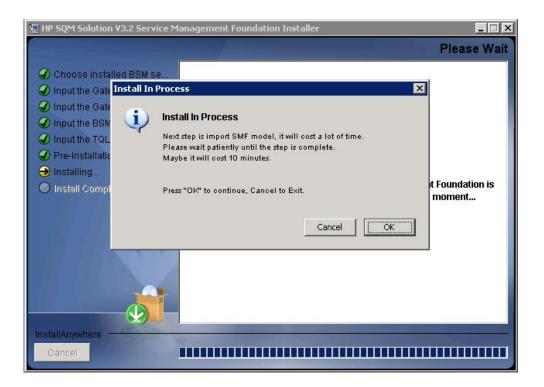
n HP SQM Solution V3.2 Service	Management Foundation Installer	
li li	nput the current customized TQL Queries fo	r CI resolution
Choose installed BSM se Input the Gateway Server	Please input the current customized TQL Queries to run Browse to Admin->Platform->Setup and Maintenance->I Settings	nfrastructure
Pre-Installatio Installing Install Compt Pr Pr	SM JMX RMI port input incorrect SM JMX RMI port input incorrect ease confirm below info is correct or not? ne BSM default JMX RMI port, please reinput the BSM JMX RMI out, ress 'OK' Jump to reinput JMX info, 'Cancel' to exit application. Cancel OK	ment); ngs, click Edit
InstallAnywhere	No. of Concession, Name	
Cancel	<u>Previous</u>	Next



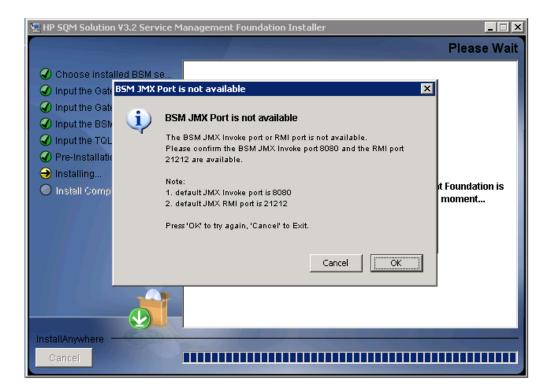
10. Click Install, installation begins.



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. After10-15 minutes, a **Install Complete** panel will display to you with congratulations message.

If show faild 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 manul 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.

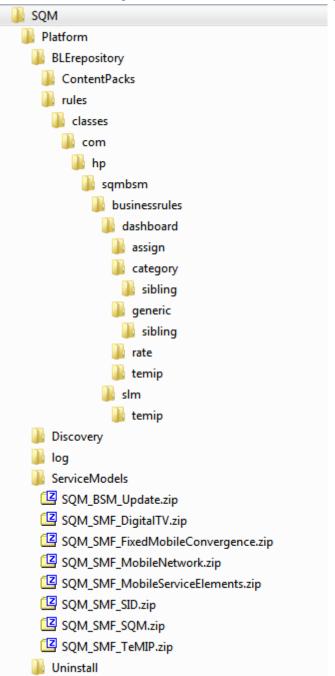
http://<BSM_DPS_SERVER_FULL_NAME>:29811/invoke?operation=reloadR ules&objectname=BSM-Platform%3Aservice%3DMarbleWorker

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 $\langle HP_BSM_DIR \rangle \langle SQM \rangle$ 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

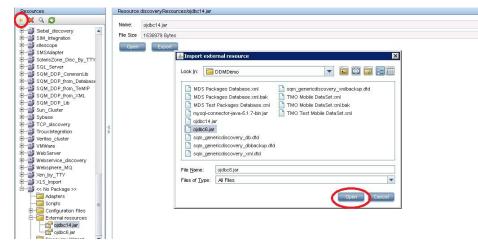
After installation if you want to run a DDP from Database job, firstly you need to import external DB driver to BSM and Data Flow Probe.

Please use Adapter management tools to import DB driver.

Go to Admin \rightarrow RTSM Administration \rightarrow Data Flow Management \rightarrow Adapter management

Click \rightarrow import external resource.

Select your DB driver (For example: ojdbc14.jar, ojdbc6.jar, sqljdbc.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.



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

X HP SQM Solution ¥3.2 Service Ma	anagement Foundation Installer 📃 🗖 🗙
	Choose installed BSM server Folder
 Choose installed BSM se Input the Gateway Serve Input the Gateway and Input the BSM Login Info Input the TQL Queries 	The SMF Kit must apply on DPS or One Box Server. If you have multiple DPS Servers, please excute the installer kit on each DPS Server. Please click next continue to next step, cancel to exit installation.
Pre-Installation Summany	Where have you already installed BSM server?
 Installing Install Complete 	/opt/HP/BSM
	<u>R</u> estore Default Folder Ch <u>o</u> ose
InstallAnywhere.	
Cancel	Previous <u>Next</u>

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.



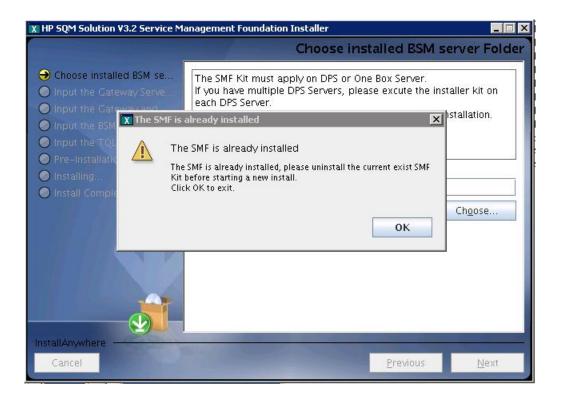
5. The SMF3.2 Kit must apply on DPS or One Box Server, if yes the following info dialog box will appear, click ok to next step.

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

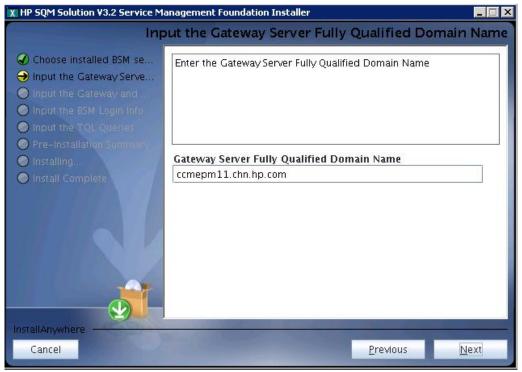


6. If the SMF 2.3 or above version kit is already installed, the following dialog box will appear, click ok to exit install application, and then uninstall the current exist SMF Kit before strating a new install.

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.



 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

🕱 HP SQM Solution V3.2 Service Management Foundation Installer		
	Input the BSM JMX Invoke, RMI and ImportCF	port
 Choose installed BSM se Input the Gateway Serve Input the Gateway and Input the BSM Login Info Input the TQL Queries Pre-Installation Summary 	Input the BSM Gateway JMX Invoke port (default port: 8080) Input the BSM DPS JMX RMI port (default port: 21212) Input the BSM9.2X ImportCP port (default port: 80)	
Installing.	BSM Gateway JMX Invoke port (default port: 8080)	
Install Complete	8080	
	BSM DPS JMX RMI port (default port: 21212)	
	21212	
	BSM9.2X ImportCP port (default port: 80)	
	80	
InstallAnywhere	- The second	
Cancel	Previous Ne	ext

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

	Input the JMX Login username and pa	ssword
 Choose installed BSM se Input the Gateway Serve Input the Gateway and Input the BSM Login Info Input the TQL Queries 	Thease input the jack login morthation	
 Pre-Installation Summary Installing 	login user	
Install Complete	admin	
	login password	
	•••••	
IstallAnywhere	Previous	Next

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:

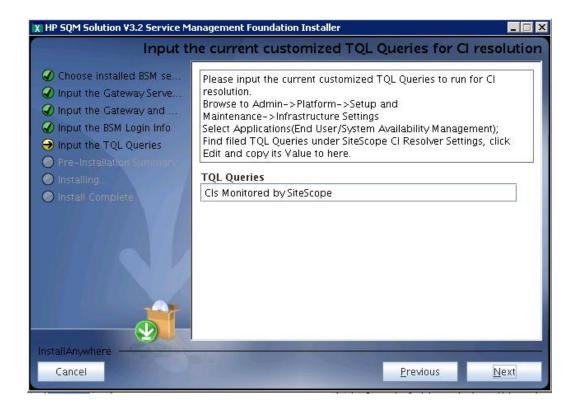
User: admin

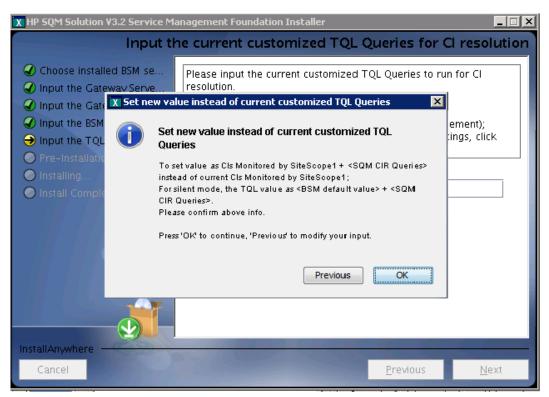
Password: admin

	Input the BSM Login username and passwor
 Choose installed BSM se Input the Gateway Serve Input the Gateway and Input the BSM Login Info Input the TQL Quenes Pre-Installation Summary 	Please input the BSM Login information
 Installing 	login user
 Install Complete 	admin
	login password
	•••••
nstallAnywhere	
Cancel	<u>Previous</u> <u>Next</u>

10. 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.

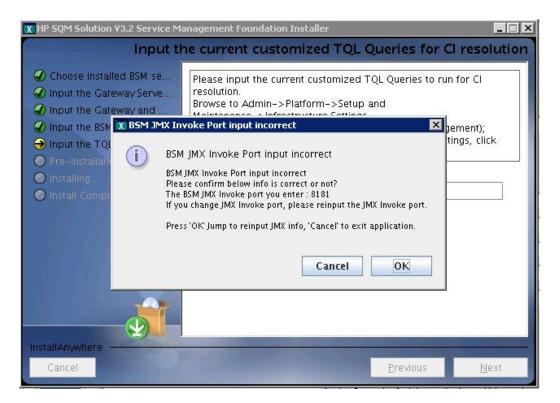


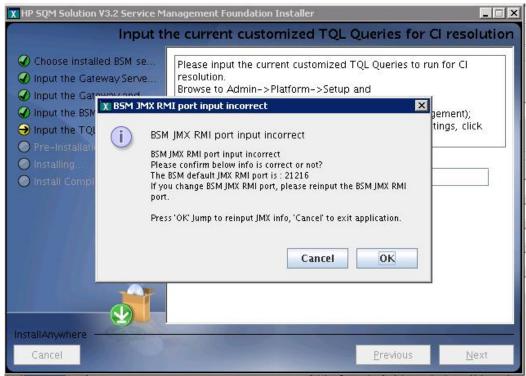


if the JMX info input correct then it will show you a pre-installation panel as step 12.

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.

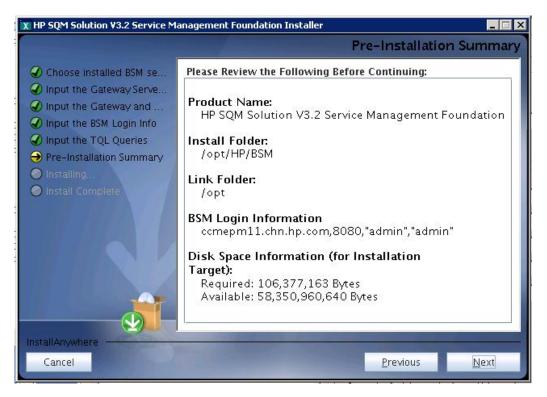
If the JMX info input correct, please ignore step 11 and excute next step 12.

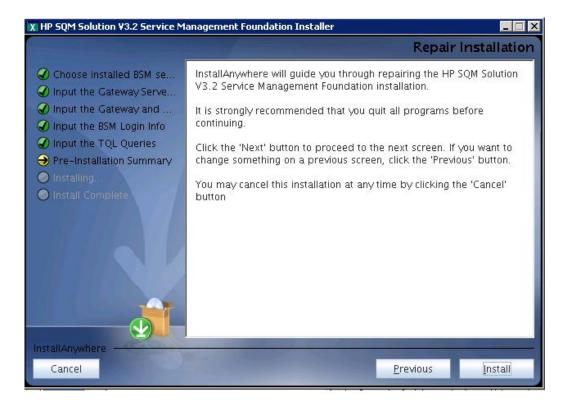




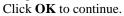
X HP SQM Solution V3.2 Service M	anagement Foundation Installer	
Input ti	he current customized TQL Queries for	Cl resolution
 Choose installed BSM se Input the Gateway Serve Input the Gat Input the BSM Input the TQI Pre-Installation Installing Install Complete 	Please input the current customized TQL Queries to resolution. Browse to Acimin ->Platform ->Seturn and gin Info input incorrect 1 JMX login Info input incorrect 1 JMX login Info input incorrect ase confirm below info are correct or not? BSM JMX login password you enter : admin BSM JMX login password you enter : admin s. ss 'OK' Jump to reinput JMX info, 'Cancel' to exit application.	run for Cl
InstallAnywhere Cancel	Cancel OK Previous	Next

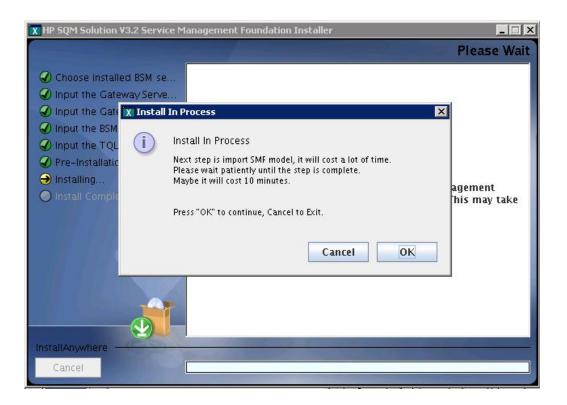
12. Click Next and then press Install, installation begins.





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'.



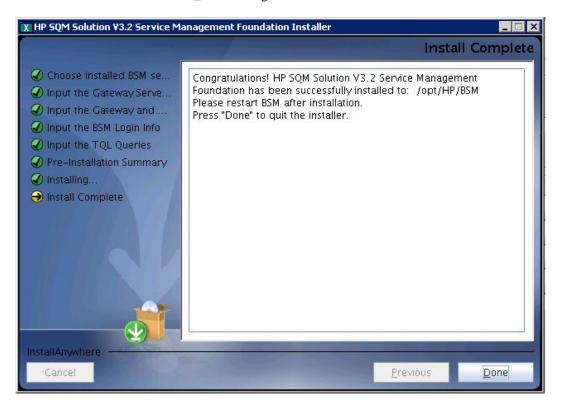


14. If BSM stopped or JMX port changed while installing the kit, it will popup a dialog like below. Press **OK** to try again and **Cancel** to exit the install application.

X HP SQM Solution V3.2 Servi	ce Management Foundation Installer	
		Please Wait
 Choose installed BSM set Input the Gateway Serve Input the Gate Input the BSM Input the TQL Pre-Installatic Install Comple 	<u></u>	agement his may take
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Cancel		

15. After10-15 minutes, a **Install Complete** panel will display to you with congratulations message.

If show faild 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.

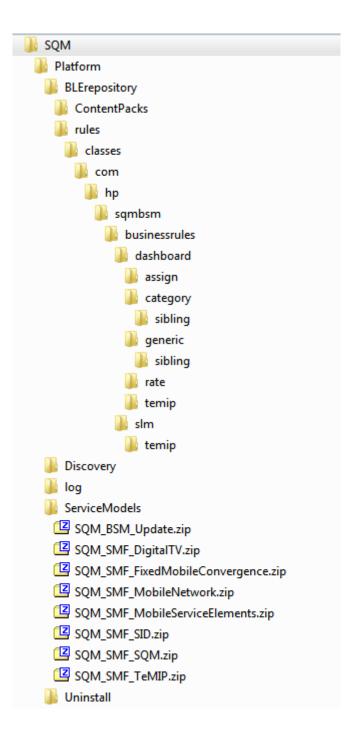
http://<BSM_DPS_SERVER_FULL_NAME>:29811/invoke?operation=reloadR ules&objectname=BSM-Platform%3Aservice%3DMarbleWorker

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 *InstallationStatus* 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

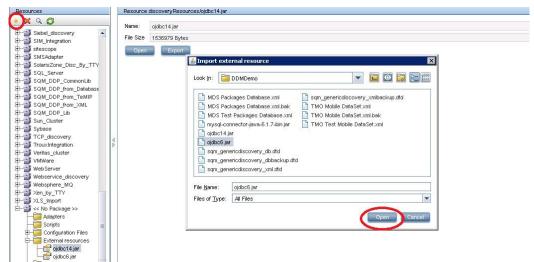
After installation if you want to run a DDP from Database job, firstly you need to import external DB driver to BSM and Data Flow Probe.

Please use Adapter management tools to import DB driver.

Go to Admin \rightarrow RTSM Administration \rightarrow Data Flow Management \rightarrow Adapter management

Click \rightarrow 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

	1	1
Name	≐ Type	e Description
Default	Predefin	ed Applied by default to any service that does not have an alternative service offering selected in the Agreement wiz
Gold	Predefin	ed Designed for business-critical applications.
Platinum	Predefin	ed Designed for mission-critical applications and systems that can never go down.
Silver	Predefin	ed Designed to meet the needs for infrastructure with less demanding availability requirements, such as test and dev
TeMIP Service Offering	gs Custom	Applied by default to any service that does not have an alternative service offering selected in the Agreement wi
Cl Offerings	G	
Cl Offerings		Applied by default to any service that does not have an alternative service offering selected in the Agreement with the Agreeme

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	100000000000000000000000000000000000000	offering selected in the Agreement wizard. Note: The Default Service Offering cannot be deleted from the Service Offerings					
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Calendars and Trackin	a Periods						
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				a ta statu mini			
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Name Business Hours	Hour	Day V	Week	t Month	n Quarter	Year V	SLA Period
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Business Hours 24x7 Objectives Definition F * Ø X %	v v or:Business I b	Hours Hour;	Business Hours D	ay;Business Hou	IT Week;Business	Hours Month; Busin	Pess Hours Quarter;
Business Hours 24x7 Objectives Definition F * 🖉 💥 🗞 🖓	v v or:Business I b b ⊥	Hours Hour;	Business Hours D	ay;Business Hou	ITS Week;Business	Hours Month; Busir	hess Hours Quarter; Failed
Business Hours 24x7 Objectives Definition F * Ø 💥 <table-cell> 🖓 🖓 Name Communication Stat</table-cell>	✓ ✓ Or:Business I	Hours Hour; Operator >=	Business Hours D	ay;Business Hou	ITS Week;Business	Hours Month; Busir	Failed Otherwise
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Business Hours 24x7 Objectives Definition F * Image: Communication State Communication State Environmental Status ProcessingError State	v v v v v v v v v v v v v v v v v v v v	Hours Hour; Operator >= >= >= >=	Business Hours D	Arr (2000)	Minor Br 70.0 70.0 70.0 70.0 70.0 70.0	Hours Month;Busin 60.0 60.0 60.0 60.0 60.0	Cherwise Otherwise Otherw
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2. Create CI Offerings

2
Designed to meet the needs for infrastructure with less demanding availability requirements, such as test and dev
Applied by default to any service that does not have an alternative service offering selected in the Agreement wiz

name =	туре	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 wiza
TeMIP CI Offerings	Custom	Applied by default to any non - service CIs that does not have an alternative CI offering selected in the Agreement wizar

Name:	TeMIP	CI Offerings						
Description:	offerin	Applied by default to any non - service CIs that does not have an alternative CI offering selected in the Agreement wizard. Note: The Default CI Offering cannot be deleted from the CI Offerings list.						
jectives Definition								1
Calendars and Tracki	na Perioda							
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					1			
Name	Hour	Day	Week	Month	Quarter	Year	SLA Period	
Name Business Hours	Hour	Day V	Week	Month	Quarter	Year V	SLA Period	
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Business Hours 24x7 Objectives Definition I	✓ ✓ <	Hours Hour; Busine	Exceeded 90.0 90.0	iness Hours V Met 80.0 80.0	Veek; Business Hou	V Irs Month; Busine V Breached 60.0 50.0	Sess Hours Quarter; Sess Hours Quarter; Sess Hours Quarter; Cherwise Otherwise	
Business Hours 24x7 Objectives Definition I	✓ ✓ <	dours Hour; Busine	Exceeded 90.0 90.0 90.0	Met 80.0 80.0 80.0 80.0 80.0	Veek; Business Hou Minor B 70.0 60.0 70.0 70.0 70.0 70.0	Month;Busine Breached 60.0 50.0 60.0 60.0	Failed Otherwise Otherwise Otherwise Otherwise	
Business Hours 24x7 Objectives Definition I	✓ ✓ <	dours Hour; Busine	Exceeded 90.0 90.0 90.0	Met 80.0 80.0 80.0 80.0 80.0	Veek; Business Hou Minor B 70.0 60.0 70.0 70.0 70.0 70.0	Month;Busine Breached 60.0 50.0 60.0 60.0	Failed Otherwise Otherwise Otherwise Otherwise	

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

Chapter 5

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 automaticly, 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 \rightarrow RTSM Administration \rightarrow Modeling \rightarrow 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 \rightarrow RTSM Administration \rightarrow CI Type Manager

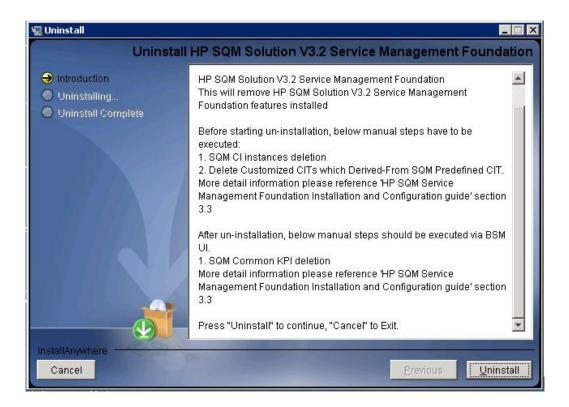
Filter as 'CI Types' Select which you want to delete of CIT

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

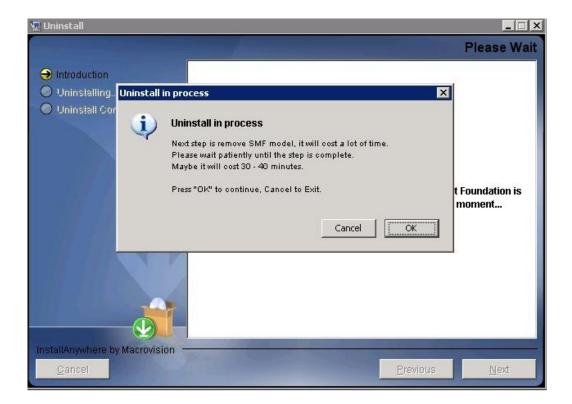
Starting the Uninstallation procedure

uninstall.exe file is under directory <HP_BSM_DIR>\SQM\Platform\Uninstall And double click it to start Uninstallation.

1. Click the **Uninstall** Button.

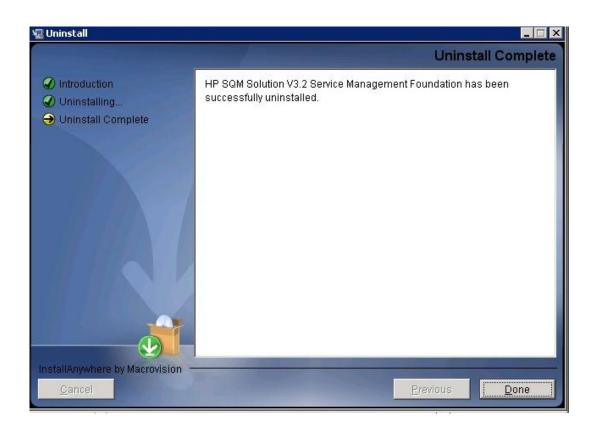


2. The dialog box will be shown and the Uninstallation action will take 30-40 minutes. Click OK to next step.



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 automaticly, 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 \rightarrow RTSM Administration \rightarrow 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 \rightarrow RTSM Administration \rightarrow CI Type Manager

Filter as 'CI Types' Select which you want to delete of CIT Click button "Delete Selected Item(s) Ctrl+Del"

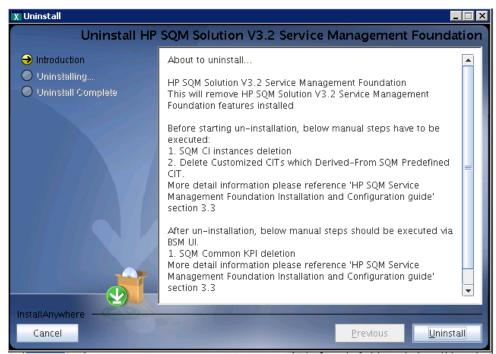
• Starting the Uninstallation procedure

uninstall.bin file is under directory <HP_BSM_DIR>\SQM\Platform\Uninstall

- i. Log in to the server as user root.
- ii. Go to the installation root directory.
- iii. Run the following script:

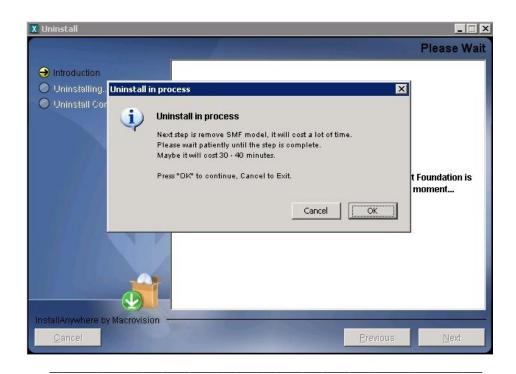
/uninstall.bin

iv. Follow the on-screen instructions for server installation.



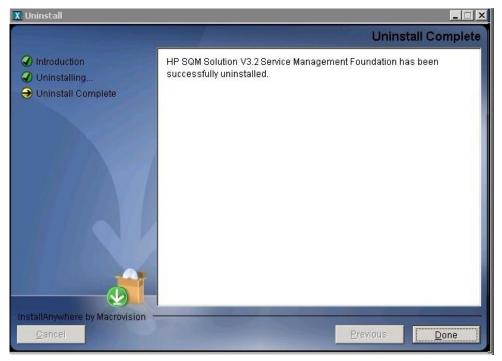
1. Click the **Uninstall** Button.

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 backuped.

Recommend contacting the SQM Support team for assistance.

6.2.1 Backup and Delete Cls, 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	

 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"

ے CIT Instances <region></region>	×
CIT Instances <region></region>	
Here you can see all discovered Cl instances	
Show Clinstances of: Region (2) 🔽 🗶 📄 🥵 🝸 🎡 🚉 🔍 🔤	P
	Export Displayed CIs To CSV
Display Label	Issi Export Displayed Cis To CSV Issi Export Displayed Cis To PDF
P Chong_Qing P Shang Hai	Export Displayed Cis To Excel
	Export Displayed Cls To XML
	Export Displayed CIS TO XME
	Export Selected CIS To CSV
	Export Selected CIS TO Excel
	Export Selected CIS To XML
L	Tant Export Selected CIS TO XIME
M	0. 0.1
Total rows: 2 Rows per page: 1000 💌 🕅 🔍	1 of 1 🕨 🕅
	OK Cancel Help

Delete CIs:

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

l≝ CIT Instances <region></region>			×			
CIT Instances <region> Here you can see all discovered CI instances</region>						
Show Clinstances of: Region (2) 💌 🗶 💣 🥩 🝸 🎇 🛄 🖆 🔍 🔤 🎦 👻						
	Display Label					
☐ Chong_Qing ☐ Shang Hai	Properties CI History Label Note X Delete from CMDB Delete from CMDB C Get Related CIs Relate to CI Add CIs to View Add CIs to View Add CIs to Model Actions Run Impact Analysis Show Impact Show Root Cause					
Total rows: 2						
		ОК	Cancel			

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 \rightarrow RTSM Administration \rightarrow Modeling \rightarrow 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 \rightarrow RTSM Administration \rightarrow Modeling \rightarrow Enrichment Manager

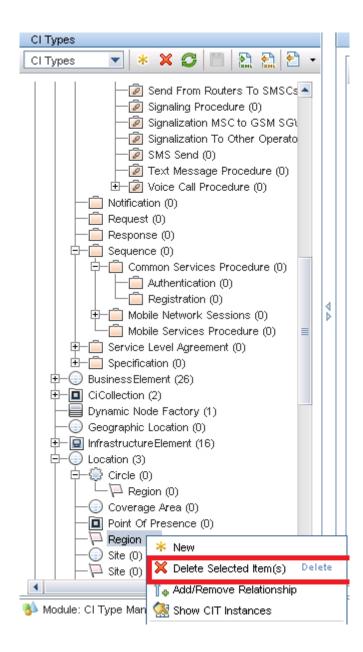
Remove Enrichment Rule which used delete CIT.

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

Go to Admin \rightarrow RTSM Administration \rightarrow CI Type Manager

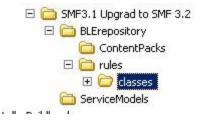
Filter as 'CI Types' Select which you want to delete of CIT

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 \rightarrow RTSM Administration \rightarrow Administration

Click deploy package button as below graphe:

Administration > Package Manager				
Modeling Data Flow Management Administration				
View + Tools +				
× / × ⊆ 원 · ↔ 参 등 ♀ ♀ ⓑ ▼ 葉 Щ				
	Category	Readme	Version	
Active_Directory	Applications	Readme	11.05-744	
📗 AlertsModel				
📗 AlertsTqls	Alerts		8.0	
Alteon_application_switch	Network	Readme	11.05-744	
AMAdapter		Readme	9.02 U1	
ApacheTomcat	Web Tier		11.05-744	
Aperture_Vista_Integration	Integration	Readme	11.05-744	
📗 ApiAdapter			9.0	
ARIS_Integration	Integration	Readme	9.02	
E AS400	Network	Readme	11.05-744	
Assets			11.05-744	
E Atrium_Import	Integration	Readme	9.03	
📗 AtriumPushAdapter	Integration	Readme	10.0	
Auto Discovery Content	Basic		11.05-744	
AutoDiscoveryInfra	Basic		9.0	
BAC_perspectives			8.0	
BACKPIsAdapter			7.5	
Basic_Business	Basic		11.05-744	

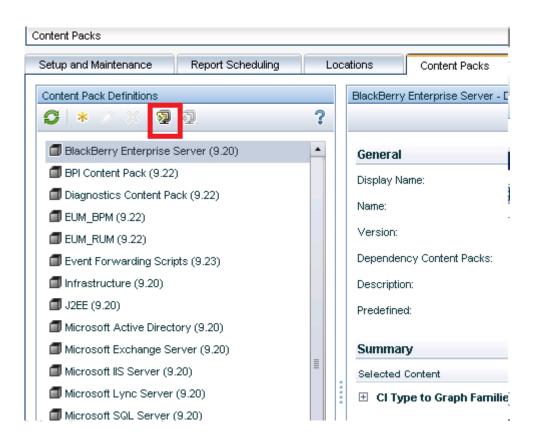
And then show deploy packages windows, please clcik Add button chose new packgae files as below graphe, click deploy button to finish Deploy action.

🚣 Deploy Packages to	Server					×
Cheese the package zi	o files to be deployed —					
Packag	je(zip)			Path		
	ages to server (from ServiceModels	local disk)		▼ 🖬	×	
Seler SQM_SM Seler SQM_SM SQM_SM SQM_SM SQM_SM SQM_SM SQM_SM SQM_SM SQM_SM SQM_SM SQM_SM SQM_SM	M_Update.zip F_DigitalTV.zip F_FixedMobileConverger F_MobileNetwork.zip F_MobileServiceElements F_SID.zip F_SQM.zip F_TeMIP.zip					
File <u>N</u> ame: Files of <u>T</u> ype:	ements.zip" "SQM_SMF	_SID.zip" "S	QM_SMF_SQM.zi	p" "SQM_SM	MF_TeMIP.zip"	
				Dep	loy Car	ncel

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

Go to Admin \rightarrow Platform \rightarrow Content Packs

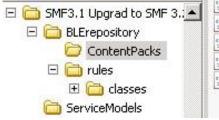
Click Import Content Pack button as below graphe:



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



ContentPack_SQM_Common.xml
 ContentPack_SQM_DigitalTV.xml
 ContentPack_SQM_RanCell_E...
 ContentPack_SQM_TeMIP.xml
 ContentPack_SQM-Generic.xml

143 KB	XML Docum
309 KB	XML Docum
44 KB	XML Docum
109 KB	XML Docum
204 KB	XML Docum

aintenance	Report Scheduling L	ocations Content Packs Users and Permissions	s Recipients Downtime Management Event Management	
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erry Enterpr	ise Server (9.20)	General	Select file to upload by ccmepm11.chn.hp.com	? ×
itent Pack (9.22)	Display Name: BlackBerry Enterprise Ser	rve 🛛 Look in: 🔂 ContentPacks 📃 🗸 🌍 😰 🖽 🗸	
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PM (9.22)	ContentPack_Solw_Common.xnii - in	nport Content Pack 🛛 💌	ContentPack_SQM_Common.xml ContentPack_SQM_DigitalTV.xml	
JM (9.22)	Content Pack File: * ContentPa	ck_SQM_Common.xml	My Recent ContentPack_SQM_RanCell_Example.xml	
orwarding		Documents ContentPack_SQM_TeMIP.xml		
ucture (9.:			ContentPack_SQM-Generic.xml	
.20)	Test		Desktop	
oft Active I	Active Run import in test mode only. No changes are committed to the database.			
)ft Exchan				
)ft IIS Serv	(*) Required field		My Documents	
oft Lync Si				-
oft SQL Se				
ntent Pack		Import Cancel Help	My Computer	
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The upgrade is complete.