HP Service Quality Management Solution

Service Management Foundation V3.0

Release Notes

Edition: 2.0

for Microsoft Windows Operating Systems

November 2011

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Contents

Preface

This document consists of the release notes for the HP SQM Solution V3.0 Service Management Foundation Maintenance Release software kit.

The software kit name is **SMF V300 RevC**. The following installation kit is available for the current version:

- SQMSolSMFV300RevC.exe - *required when installing SMF for the first time*.

The installation kit includes all the Service Management Foundation (SMF) components:

- Telco Universe
- Generic Discovery & Dataload Package
- SQM Generic Repository
- TeMIP Discovery & Dataload Package
- SQM TeMIP Repository
- SQM DigitalTV Repository

It is recommended that this document is read prior to installing SMF.

Intended Audience

This document is intended for Solution Architects, SQM Solution deployment teams and SQM Solution administrators.

Software Versions

The term Windows is used as a generic reference to the operating system, unless otherwise specified. The software versions referred to in this document are as follows:

Software	Version
HP SQM Service Management Foundation	3.0
HP Business Service Management	9.10 and upper
HP uCMDB	9.03 and upper
HP UCMDB Data Flow Probe	9.03 and upper
HP SiteScope	11.12 and upper
Windows	2003 x64 and 2008 x64

Typographical Conventions

`Courier` font is used for:
- Source code and examples of file contents
- Commands that you enter on the screen
- Path names
- Keyboard key names.

Italic text is used for:
- Filenames, programs, and parameters
- The names of other documents referenced in this manual.

Bold text is used for:
- New terms
- Fields names
- Menus
- Buttons
- Important information and concepts.

Terms and Acronyms

Term	Description
BR	Business Rule
BSM	Business Service Management
CIT	Configuration Item Type
CI	Configuration Item
CMDB	Configuration Management Data Base
CR	Change Request
DDM	Discovery and Dependency Mapping
DDP	Discovery & Dataload Pack
DTV	Digital TV
HI	Health Indicator
KPI	Key Performance Indicator
MA	Monitoring Adapter
RTSM	Real-time Service Model
SiS	SiteScope
SMF	Service Management Foundation
SQM	Service Quality Management solution
UAC	User Access Control

Support

You can visit the HP Software support web site at:
http://support.openview.hp.com/support.jsp
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 Product Goals

HP SQM SMF provides the additional components to a BSM platform to support common OSS use cases.

1.2 Product Content

1.2.1 Telco Universe

It provides predefined service quality models provided as CMDB package, contains the definition of CIT, Relationship, Triplet, Query and View for OSS domain.

It includes 7 packages:

- Shared Information Model (*SQM_SMF_SID.zip*)
- Service Quality Management (*SQM_SMF_SQM.zip*)
- TeMIP (*SQM_SMF_TeMIP.zip*)
- Digital TV (*SQM_SMF_DigitalTV.zip*)
- FixedMobileConvergence (*SQM_SMF_FixedMobileConvergence.zip*)
- MobileNetwork (*SQM_SMF_MobileNetwork.zip*)
- MobileServiceElements (*SQM_SMF_MobileServiceElements.zip*)

> **Note:**
>
> Modification to the content of **Telco Universe**, including CIT, Relationship, is usually done when a project is deployed. While such modifications are not supported from a product standpoint, such modifications are supported on a project basis.

1.2.2 Discovery & Dataload Package

The discovery functionality is used by SQM to instantiate the service models and create the corresponding CIs in the CMDB.

The kit include 2 DDP parts: **Generic DDP** and **TeMIP DDP**.

1.2.2.1 Generic DDP

Generic DDP is used to

- o Discover CIs and relationships based on information retrieved from the following sources:
    - External 3PP database, including Oracle, MySQL
    - XML files
- o Create the discovered objects and save to the CMDB.

It provides the discovery scripts for HP Discovery Probe.

Generic DDP provides pre-defined discovery module and discovery pattern, user can customize them with the actual environment.

> For more information about Discovery and Dataload Pack, refer to the *HP SQM Solution Generic DDP Integration Guide*.

1.2.2.2 TeMIP DDP

TeMIP DDP is used to discover TeMIP relative CIs and relationships based on information retrieved from the XML file.

1.2.3 Repository

SMF contains pre-defined BSM Repositories, including BR, HI, HI Assignment, KPI, KPI Assginment and Context Menu.

> For detailed KPI and BR list, refer to the *Chapter Repository List*.

1.2.3.1 Generic Repository

It provides SQM generic KPI definitions, Business Rules definition for Service Health and SLM in BSM.

It includes:
- 18 Business Rule definitions;
- 22 KPI definitions.

1.2.3.2 Common Repository

It provides SQM specific KPI definitions of common usage for Service Health in BSM.

It includes:
- 25 KPI definitions.

1.2.3.3   TeMIP Repository

It provides repository definitions of TeMIP specific HI, KPI, HI assignment, KPI assignment and Business Rules for Service Health and SLM in BSM.

TeMIP specific pre-defined context menu is provided for Service Health.

It includes:

–   6 Business Rule definitions

–   6 HI definitions;

–   11 KPI definitions;

–   5 HI Assignment definitions;

–   5 KPI Assignment definitions;

–   1 Context Menu definition.

1.2.3.4   DigitalTV Repository

It provides repository definitions of HI, KPI, HI assignment, KPI assignment for SQM DigitalTV Solution.

It includes:

–   67 HI definitions;

–   4 KPI definitions;

–   1 HI Assignment definition;

–   1 KPI Assignment definition.

1.3 Product Compatibility

Below SQM Solution modules are compatible with current SMF version

Product	Version	Note
Service Designer	3.0	
TeMIP Service Adapter	3.0	
TeMIP Service Console	6.2	TSC is released in TeMIP Media

Chapter 2

Installation Prerequisites

2.1   Software Prerequisites

Product	Version	Note
Windows Server	2003 x64 and 2008 x64	BSM supported Windows Operating Systems
HP Business Service Management	9.10 and upper	

For more information about Software Prerequisites, refer to the *HP Business Service Management Release Notes*, the *HP Business Service Management Deployment Guide* and the *HP SQM Solution Service Management Foundation Installation and Configuration Guide*.

Chapter 3

Installation

3.1 Kit

The installation kit bundled with the of HP SQM Solution V3.0 SMF software are:

Setup File Name	Usage
SQMSolSMFV300RevC.exe	Use this setup to install SMF for the first time. This will install SMF V3.0 RevC

3.2 New Installation

3.2.1 Pre-installation Actions

3.2.1.1   Preparing Information Required for Installation

Have the following information ready before installation:

> **Target Directory Name**. The BSM installation directory.

> **Gateway Server Fully Qualified Domain Name**. User need to collect **full domain name** of the BSM gateway server or BSM typical server.

> **BSM Gateway JMX port**. User need to collect JMX-Console port of the BSM gateway server or BSM typical server. It is the HTTP channel for same machine components. The default value is 8080.

> **BSM Login Info**.

3.2.1.2   Disable UAC on Windows 2008 x64 Server

Due to BSM limitation, on Windows Server 2008 R2 or Windows Server 2008 SP2 servers, User Access Control (UAC) must be disabled before starting SMF installation.

3.2.1.3 Check "CI Resolver Settings" settings

If BSM default value of "CI Resolver Settings" changed, user need to record its customized value.

1. On BSM GUI, browse to **Admin** > **Platform** > **Setup and Maintenance** > **Infrastructure Settings**;

2. In **End User/System Availability Management - SiteScope CI Resolver Settings**, check if value of "**TQL Queries**" equals with default value "CIs Monitored by SiteScope".

    a. If default value not changed, no action needed.

    b. If value customized, user needs to

        i. Record that **CustomizedValue**.

        ii. After SMF installation completed, user needs to set the value as "$**CustomizedValue**$;SQM_CIR;SQM_CIR_LOCATION;SQM_CIR_PARTY"

3.2.2 Kit installation

The kit **SQMSolSMFV300RevC.exe** should be used to install SMF V3.0 RevC.

Please run the installer and follow the tip step by step to complete the installation procedures.

> For SMF installation on **BSM Typical deployment**, since **the standalone server** act as both Gateway server and DPS server, user should enter the **Full Domain Name** and **JMX Port of the server itself**.
>
> **Important**:
> On Windows 2008 server, SMF instllation will fail if user use default value "**localhost**" instead of actual full domain name for **Gateway Server Fully Qualified Domain Name** filed.

3.2.3 Post Installation Action

3.2.3.1 Modify Groovy Business Rules

There are 8 SQM Groovy Business Rules.

Due to Installer limitation, user needs to update Groovy Script of each Groovy Business Rule.

1. Go to **Admin** -> **Service Health** -> **Repositories** -> **Business Rules**;

2. Select a SQM Groovy Business Rules, click button "**Edit Rule**";

3. In "**Edit Rule**" dialog, expand "**Rule Parameters**", select parameter "**KPI Calculation Script**" and click button "**Edit Rule Parameter**";

4. In "**Edit Rule Parameter**" dialog, split the source codes in "**Default Value**" to one clause per line.

For more information about Installation Steps and Configuration Settings, refer to the *HP SQM Solution Service Management Foundation Installation and Configuration Guide*.

Chapter 4

Known Problems and Limitations

4.1 Limitations

#	Description
CR#2252	SMF installer will not check if the default value of "CI Resolver Settings" changed. It just set fixed value. Workaround: Follow the *HP SQM Solution Service Management Foundation Installation and Configuration Guide* to backup customized value and update the setting after SMF installation completed.
CR#2289	Groovy Scripts are defined in Rule Parameter "KPI Calculation Script". There is only 1 line, which cause the Groovy Rules does not work after deployed. Workaround: Follow the *HP SQM Solution Service Management Foundation Installation and Configuration Guide* to split script source code to lines.

Chapter 5

Repository List

5.1   KPI List

5.1.1   Service Health KPI

KPI Name	Category
availability	Generic
accessibility speed	
accessibility accuracy	
retainability speed	
retainability accuracy	
support	
security	
accessibility	
data accuracy	
integrity	
retainability	
MOS	Common
Mean Delay	
Call Set-up Mean Time	
Set-up Mean Time	
Packet Error Ratio	
Session Set-up Time	
Failure Ratio	
Average Bandwidth	
Bandwidth	
Second Attempt Success Ratio	
Transfer Delay	
Packet Loss Ratio	

KPI Name	Category
Set-up Time	
Average Throughput	
First Attempt Success Ratio	
Mean Time	
Round Trip Time	
Trustability	
Call Set-up Time	
Session Set-up Mean Time	
Round Trip Mean Time	
Attempts	
Jitter	
Success Ratio	
Utilization	
Communication Status	
Environmental Status	
Equipment Status	**TeMIP**
Processing Error Status	
Quality Of Service Status	
Fault Status	
Jitter Discards	
Out Of Sequence	**Digital TV**
Program Rate	
Video Quality	

5.1.2 Service Level Management KPI

KPI Name	Category
availability	
accessibility speed	
accessibility accuracy	
retainability speed	
retainability accuracy	
support	**Generic**
security	
accessibility	
data accuracy	
integrity	
retainability	

Communication Status	
Environmental Status	
Equipment Status	**TeMIP**
Processing Error Status	
Quality Of Service Status	
Fault Status	

5.2   Business Rule List

5.2.1   Service Health BR

Business Rule Name	Category
SQM % of Violated Subordinates	
SQM Generic Formula Rule	
SQM Generic Sample Rule	
SQM Average of Values	
SQM Average of Efficiency %	
SQM Worst of Siblings	
SQM Number of Degraded Subordinates	
SQM % of Degraded Subordinates	
SQM % of Normal Subordinates	**Generic**
SQM Set KPI from One Child KPI	
SQM Compute MAX(HI, HI2)	
SQM Compute MIN(HI, HI2)	
SQM Compute RATE(HI, HI2)	
SQM Compute SUM(HI, HI2)	
SQM Max Value	
SQM Min Value	
SQM Ratio Above Average	
SQM Ratio Below Average	
TeMIP Event Sample Rule	
TeMIP Worst Child Rule	**TeMIP**
TeMIP number of alarms	

5.2.2 Service Level Management BR

Business Rule Name	Category
TeMIP cumulated outage duration	**TeMIP**
TeMIP HI availability	
TeMIP number of alarms	

Chapter 6

Documents

6.1 Associated Documents

The following documents contain useful reference information:

- HP SQM Solution Service Management Foundation Installation and Configuration Guide
- HP SQM Solution Generic DDP Integration Guide
- HP Service Quality Management Solution User Guide
- HP Business Service Management Release Notes
- HP Business Service Management Deployment Guide.

The HP Business Service Management documents are available at:

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