HP Service Quality Management Solution

TeMIP Service Adapter V3.0
Installation, Configuration and User's Guide

Edition: 2.0

for Microsoft Windows Operating System

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Preface

This document provides reference information to help install and configure the TeMIP Service Adapter.

The TeMIP Service Adapter is a mandatory software component to make TeMIP Service Console solution working properly.

This document only describes the TeMIP Service Adapter, Please refer to TeMIP Service Console related documents for more information.

Intended Audience

This document is intended for Solution Architects, TSC/SQM Solution deployment team and TSC/SQM Solution administrators.

Software version

Name	Version	Operating System	Description
TeMIP Service Adapter	3.0.0	Windows 2003 Server Windows 2008 Server	SQM Service Adapter for TeMIP

Abbreviations and Acronyms

The following table defines abbreviations and acronyms used in this document.

Abbreviation or acronym	Meaning
BSM	HP Business Service Management
BSM Entity Loader	HP TeMIP to BSM Entity Loader
BAF	HP TeMIP to BSM Alarm Forwarder
CMDB	Configuration Management DataBase
DDM	Discovery and Dependency Mapping
DDP	HP SQM Generic Discovery and Dataload pack
KPI	Key Performance Indicator
HI	Health Indicator
MA	Monitoring Adapter
SiS	HP SiteScope
SQM	HP Service Quality Manager
SMF	Service Management Foundation
TeMIP	HP Telecommunication Management Platform
TSC	HP TeMIP Service Console

Associated documents

The following documents contain useful reference information:

- *The TeMIP Service Console Installation & Configuration Guide.*
- *HP SiteScope Deployment Guide*
- *Using SiteScope*
- *HP SQM Solution TeMIP Service Adapter Release Notes.*

The HP Business Service Management and SiteScope documents are available at:

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

Additional SQM Solution materials (like the SQM Solution product briefs) and information about SQM Solution updates are available at:

http://www.hp.com/cms

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- Research and register for software training

Chapter 1

Introduction

1.1   TeMIP Service Adapter Overview

HP TeMIP Service Console (TSC) is a HP TeMIP and HP Business Service Management (BSM) based solution for monitoring the health of network links, service platforms and the services carried over the resources.

Using the data collected and published by the TeMIP (alarms), TeMIP Service Console continuously correlates them to maintain an up-to-date consolidated view of the operational state of all circuits and services that exist in the network.

To learn more about TSC, please read the "*The TeMIP Service Console Installation & Configuration Guide*".

Figure 1 shows the overview of the TeMIP Service Adapter:

TeMIP BSM Alarm Forwarder is a component of TSC: it collects TeMIP alarm events and translates to TeMIP Service Adapter.
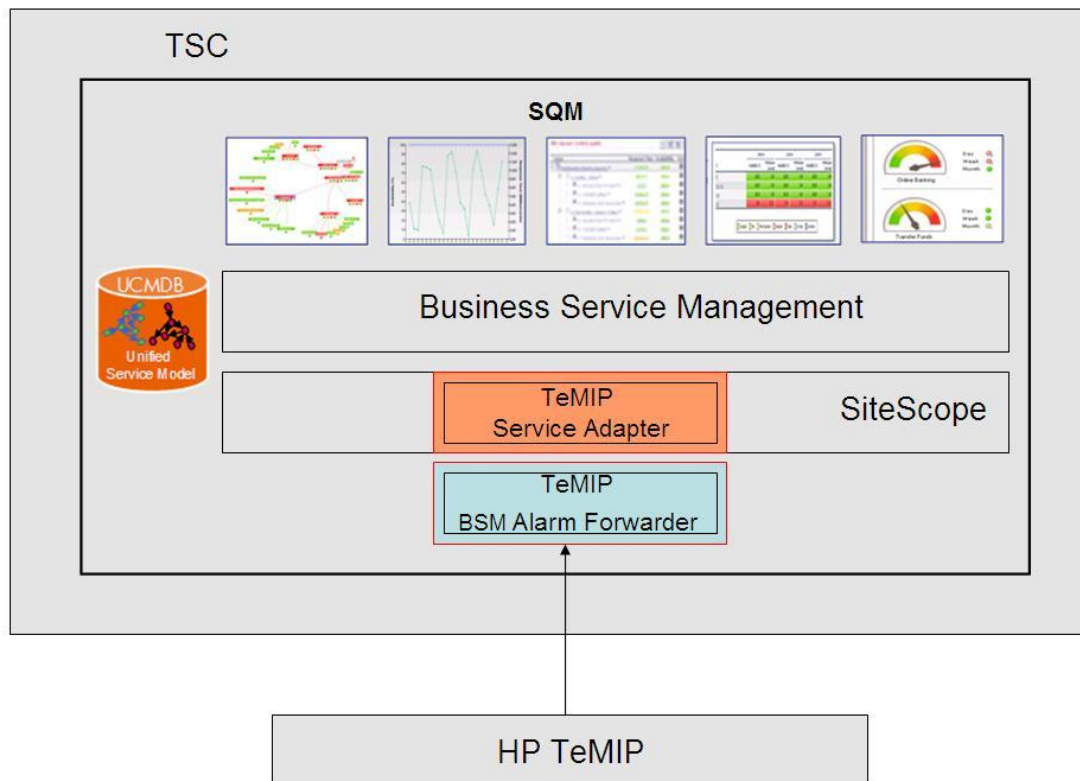

Figure 1 - TeMIP Service Adapter overview

The TeMIP Service Adapter is installed on SiteScope server; it is a mandatory component to make TSC solution working properly. The TeMIP Service Adapter is made of the following component:

- The TeMIP Monitoring Adapter

The TeMIP Monitoring Adapters receive the normalized Health Indicator and Key Performance Indicators data from the TeMIP BSM Alarm Forwarder and published the data into BSM CMDB. These data will be used by BSM logic engine to calculate states for targeted CIs and impacted service.

1.2 Data Collection

The TeMIP Service Adapter collects the events sent by BAF and converts the events into BSM samples which are used to calculate HI and KPI status. The events are processed as soon as they arrive.

The TeMIP Service Adapter is delivered with a list of monitors; each monitor is responsible for collecting data for a special type HI/KPI. These HI/KPIs are pre-defined in the BSM and below is a list of the HI/KPIs based on the events sent by the BAF:

Table 1 - List of HI/KPIs related to the TeMIP

His/KPIs	Description
Communication Status	Based on TeMIP Communications Alarm severity
Environmental Status	Based on Environmental Alarm severity
Equipment Status	based on Equipment Alarm severity
Processing Error Status	based on Processing Error Alarm severity
Quality Of Service Status	based on Quality Of Service Alarm severity
Fault Status	based on any listed alarm severity

The mapping between the TeMIP events severity and the HI state used in TeMIP Service Adapter is as following table:

Table 2 – Mapping of event severity and HI status

Event severity	KPI status
Critical	Critical
Major	Major
Minor	Minor
Warning	Warning
Indeterminate	Warning
Clear	OK
Unknown	No data

Chapter 2

TeMIP Service Adapter installation

This chapter describes how to install the component that makes up the TeMIP Service Adapter:

- The TeMIP Monitoring Adapter

2.1 Pre-requisites

This section describes the software, hardware and configuration pre-requisites which need to be validated and implemented before starting the installation of the TeMIP Service Adapter.

2.1.1 Hardware pre-requisites

The TeMIP Service Adapter should be installed on the same server as SiteScope.

The Server used to install SiteScope and TeMIP Service Adapter should have the following hardware requirements:

Table 3 - Hardware pre-requisites

Hardware element	Required capacity
Processor	800 MHZ or higher
Physical memory	1 GB minimum (2 GB+ recommended)
Hard disk	2 GB or more (10 GB+ recommended)

The requirements above are needed by SiteScope and TeMIP Service Adapter and they must be added to the hardware requirements of the other softwares hosted by the Windows server.

2.1.2 Software pre-requisites

The TeMIP Service Adapter has the following software requirements that must be **installed, configured and successfully started** before installing the TeMIP Service Adapter:

Table 4 – Software pre-requisites

Software	Version

Microsoft Windows (a)	➢ Microsoft Windows 2003 SP1, SP2 Standard/Enterprise Edition ➢ Microsoft Windows Server 2003 R2 SP1, SP2 Enterprise Edition ➢ Microsoft Windows Server 2008 R2 SP2 Standard/Enterprise Edition
HP Service Management Foundation	3.0
HP SiteScope	11.12
HP Business Service Management	9.1.X
HP TeMIP Service Console	6.2
Java Run Time Environment (b)	1.6 Update 14 (or higher)

(a): the OS requirement is from SiteScope

(b): JRE is required by HP TeMIP Service Console if you install TSC on the same server.

IMPORTANT NOTE: when you install SiteScope and TeMIP Service Adapter on windows 2008 server, You have to turn off the UAC(User Access Control) policy. Otherwise it will forbid installer to access some files which may result the failure of installation.

2.1.3   Configuration pre-requisites

The TeMIP Service Adapter has the following configuration requirements that must be done before starting the TeMIP Service Adapter for the first time:

Table 5 - Configuration pre-requisites

Configuration domain	Needed configuration
SiteScope and Business Service Management	The connection between SiteScope and Business ServiceManagement has been successfully created as described in "Using SiteScope" document and SiteScope is accessible to Business Service Management.

2.2   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 VPNSVP-X51-3A.zip.sig VPNSVP-X51-3A.zip
```

```
## 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.

2.3 The TeMIP Monitoring Adapter installation

2.3.1 Setting on SiteScope before installation

Using SiteScope 11.12 or latter kit, following setting need to be finished on SiteScope before installing TeMIP MA:

1. Open SiteScope interface, choose the "Preferences →Infrastructure Preferences→Template Settings", make sure "Allow creation of template monitors directly under a template entity" is selected
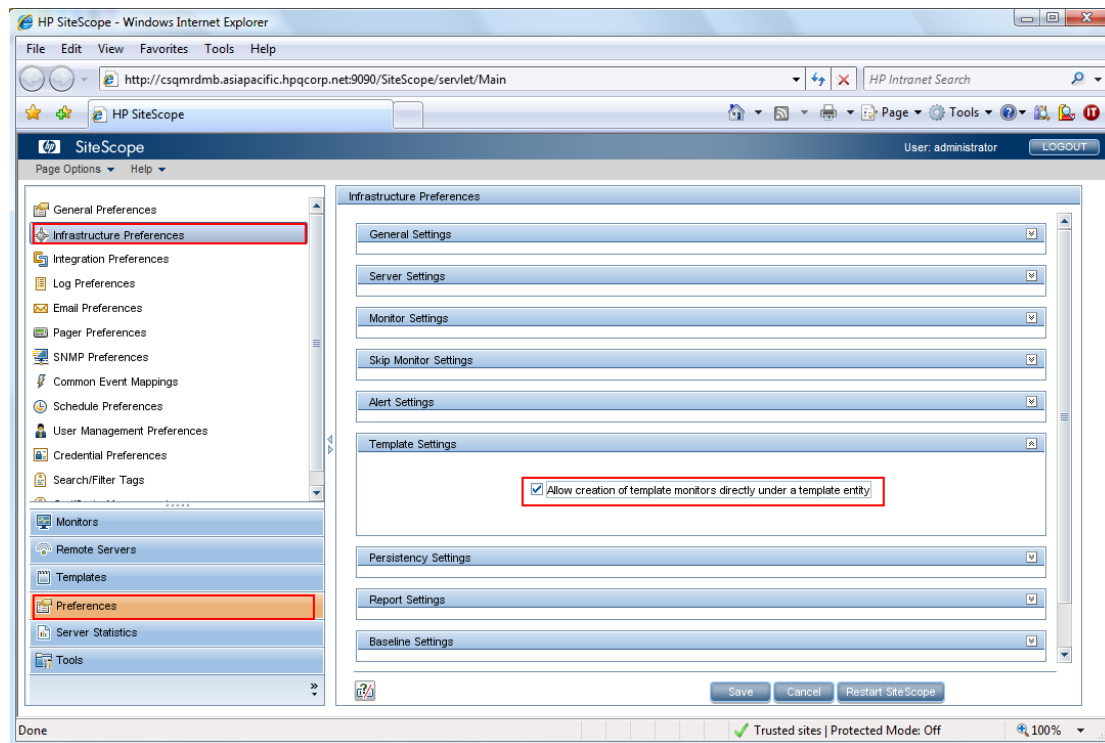
Figure 2 - Setting on SiteScope 11.xx for TeMIP MA Installation

2. Restart SiteScope.

2.3.2 Steps to install the TeMIP Monitoring Adapter

1. Run the TeMIP Monitoring Adapter installer

   Double click on the TeMIP Sevice Adapter installation kit "SQMSolTEMV300RevA.exe"

2. The wizard requests the user to provide the SiteScope installation directory

Figure 3 - TeMIP MA Installation Directory Input

3. Click the "Next" button, it shows that it will install TeMIP MA on HP SiteScope11.xx
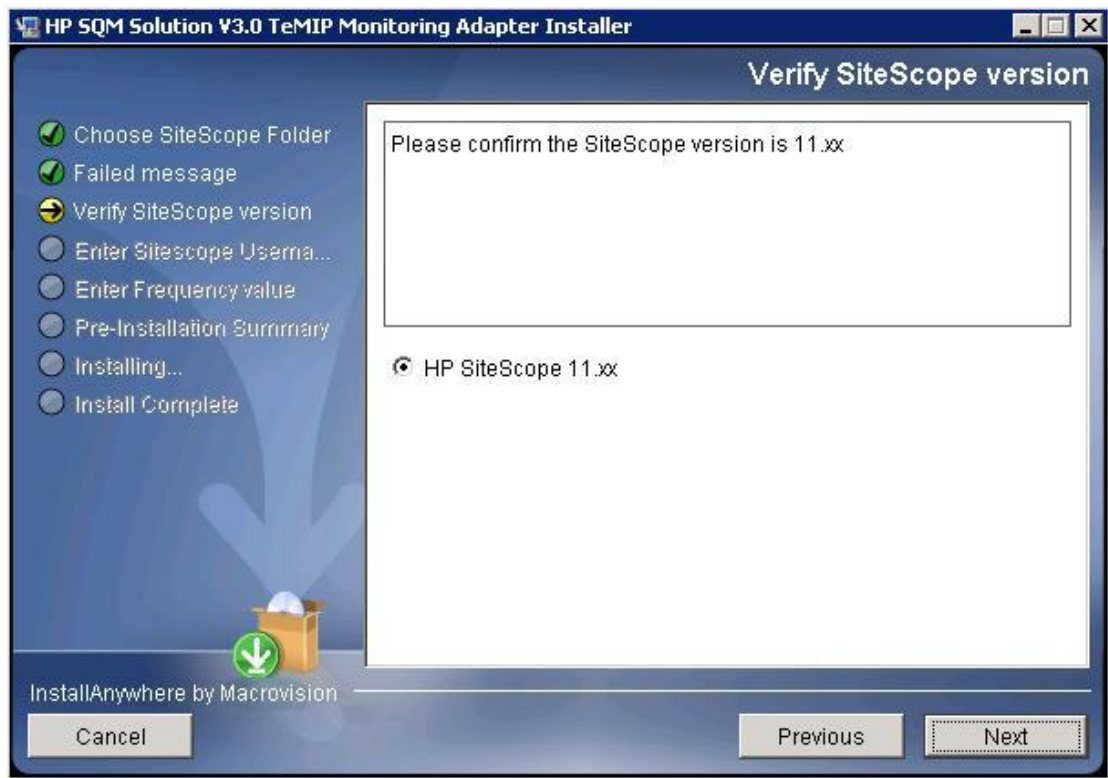

Figure 4 - TeMIP MA Installation SiteScope Version input

4. Click on the "Next" button and enter the user account information if you enable the user administration in SiteScope.

Figure 5 - TeMIP MA Installation User Account input

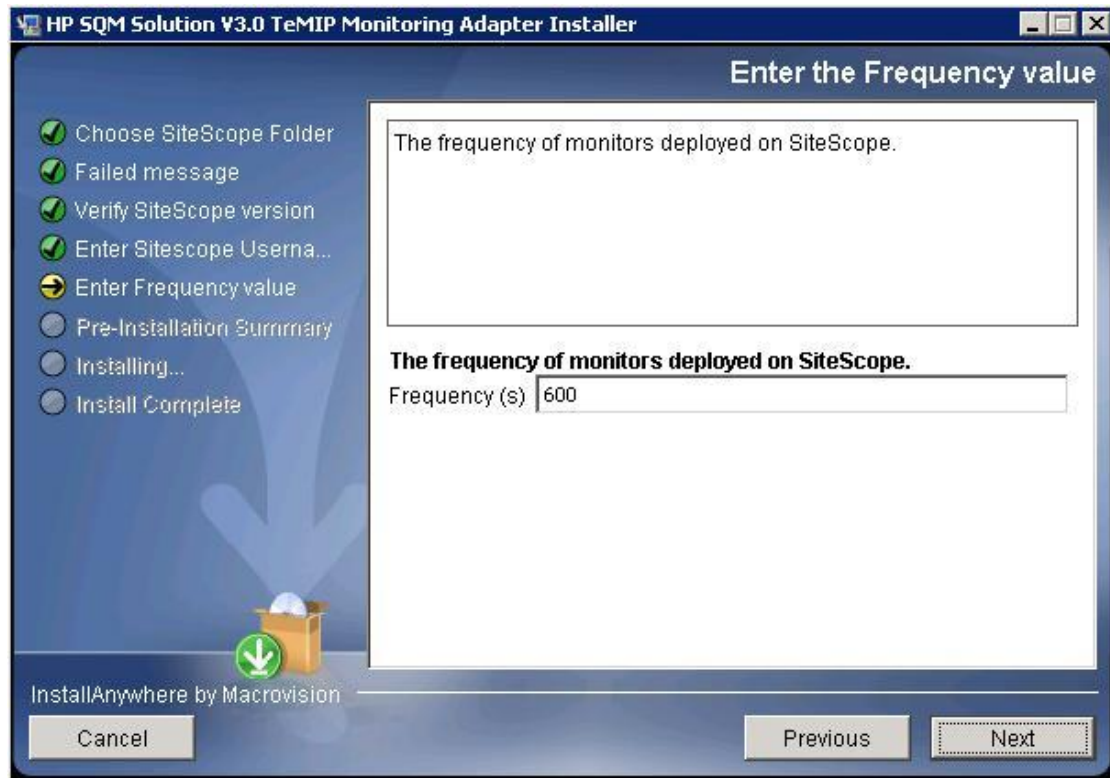5. Click on the "Next" button and enter the frequency of monitors

Figure 6 - Enter the frequency

6. Click on the "Next" button and the installer displays the pre-installation summary screen:
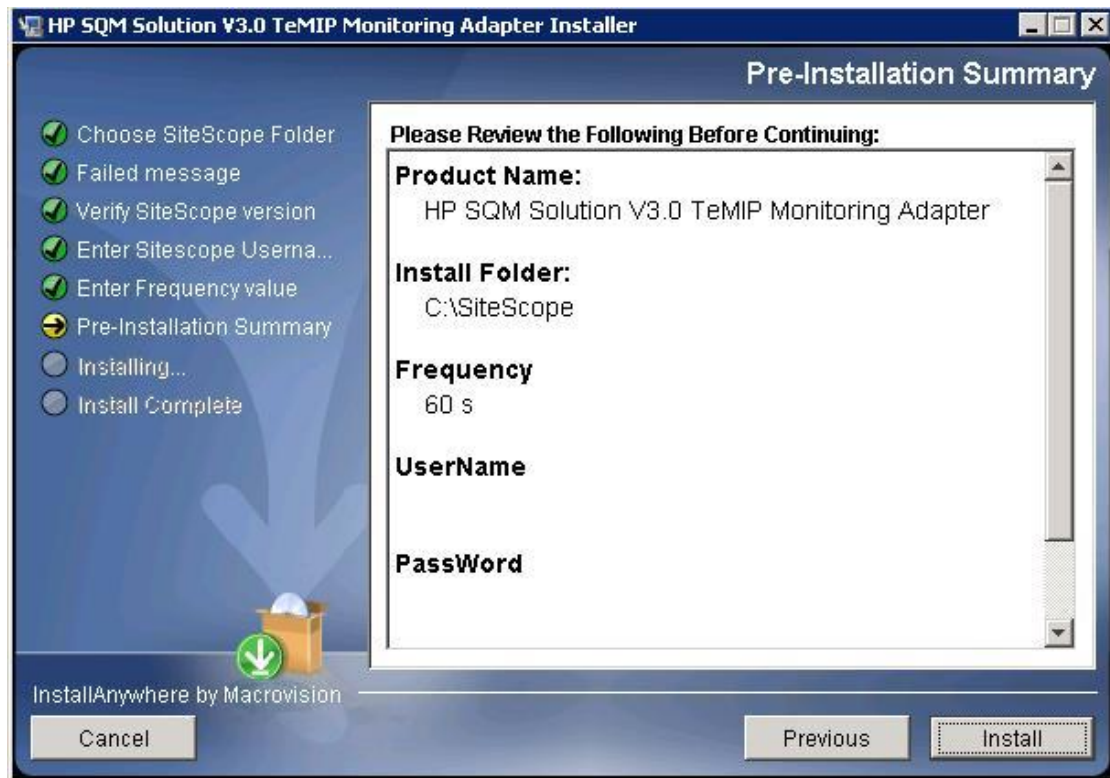
Figure 7 - TeMIP MA Installation Summary

7. Review the values you have selected and click on the "Install" button when you are ready to proceed with the installation
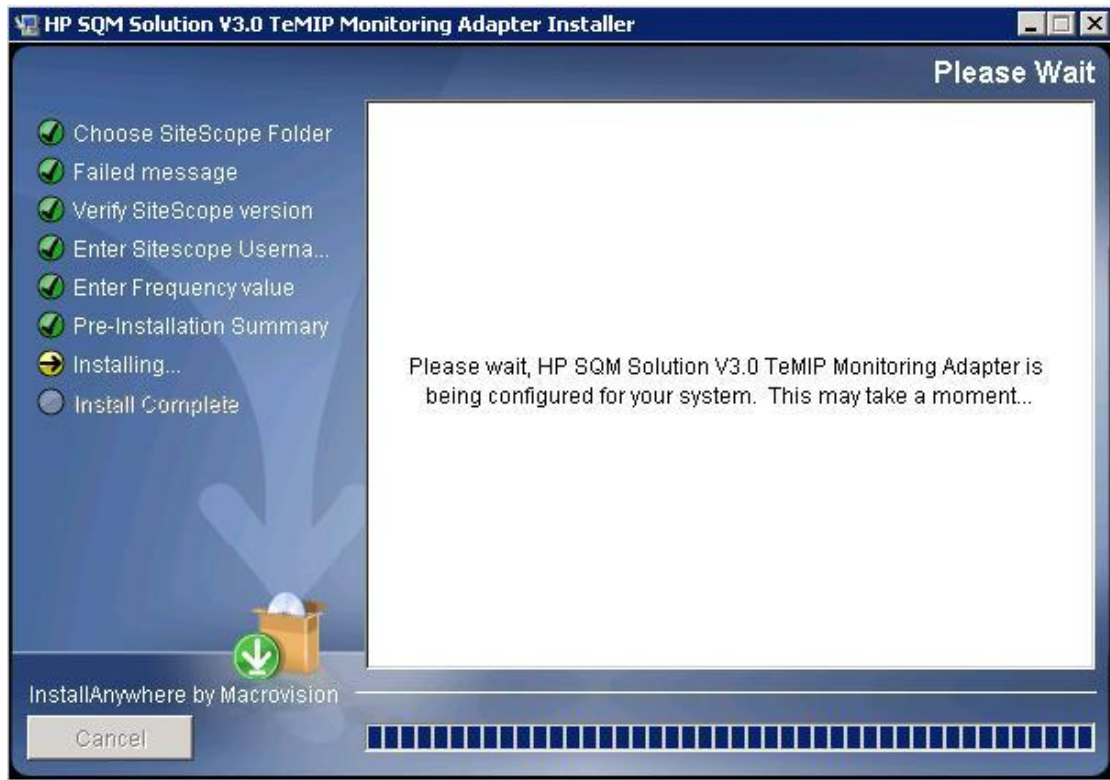
Figure 8 - TeMIP MA Is Installing

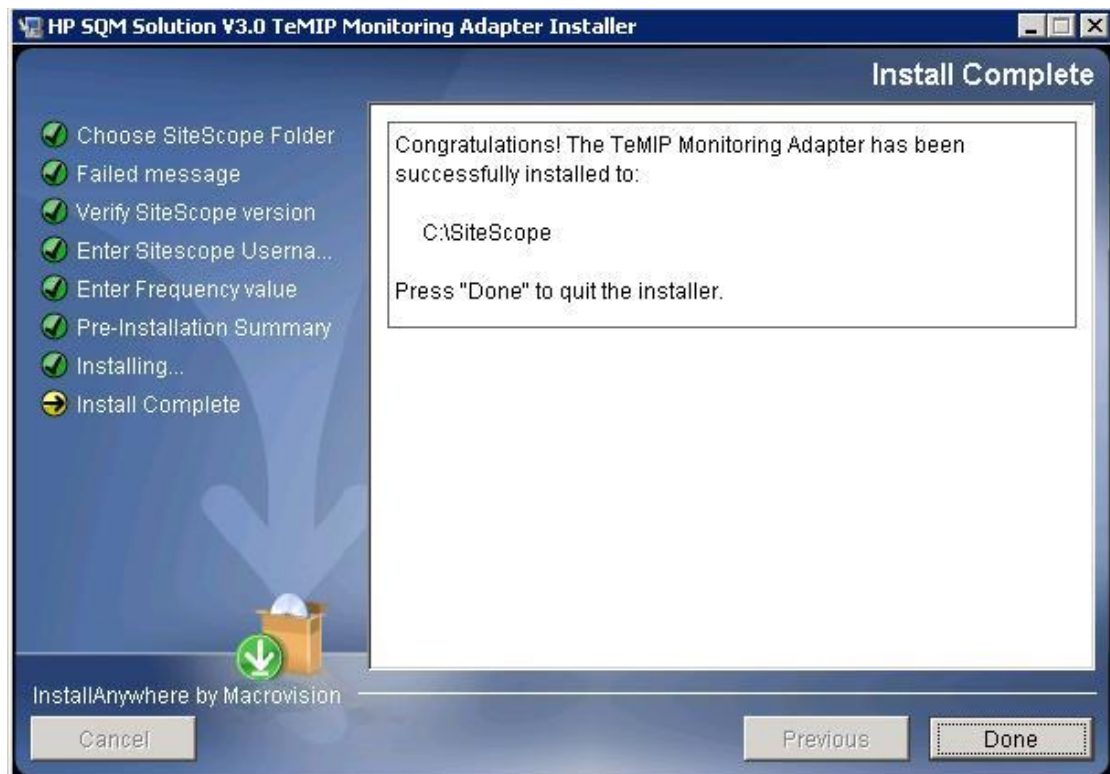8. Check the status of the installation and click on the "Done" button to terminate it:

Figure 9 - TeMIP MA Installation Completion

2.3.3   Post Installation Verification

After a successful installation of the Monitoring Adapter, the installer creates a file named "InstallationStatus" with the string "SUCCESS" as content in the installation directory:

<SITESCOPE_INSTALL_DIR>/SQM/TeMIP_adapter/

After installing the TeMIP Monitoring Adapter , the following monitors should be created in SiteScope:

- One monitor group:
    - "TEMIP_FAULT"
- Eight "Technology Web Service Integration" monitors under this monitor group

Table 6 – "Technology Web Service Integration" Monitors

| Monitor	Function
TMP_FLT_CommunicationsAlarm	This monitor maps the alarms of type "Communications" to the KPI "Communication Status"
TMP_FLT_EnvironmentalAlarm	This monitor maps the alarms of type "Environment" to the KPI "Environmental Status"
TMP_FLT_EquipmentAlarm	This monitor maps the alarms of type "Equipment" to the KPI "Equipment Status"
TMP_FLT_ProcessingErrorAlarm	This monitor maps the alarms of type "Processing" to the KPI "Processing Status"
TMP_FLT_QualityOfServiceAlarm	This monitor maps the alarms of type "Quality Of Service" to the KPI "Quality Of Service Status"
TMP_FLT_ResynchAlarm	This monitor maps the re-synchronization events to the TeMIP KPIs
TMP_FLT_SelfManagement	This monitor maps TSC self-management events to SelfManagement KPI "Fault Status"
TMP_FLT_TeMIP	This monitor maps the alarms of all types to the TeMIP KPI "Fault Status"
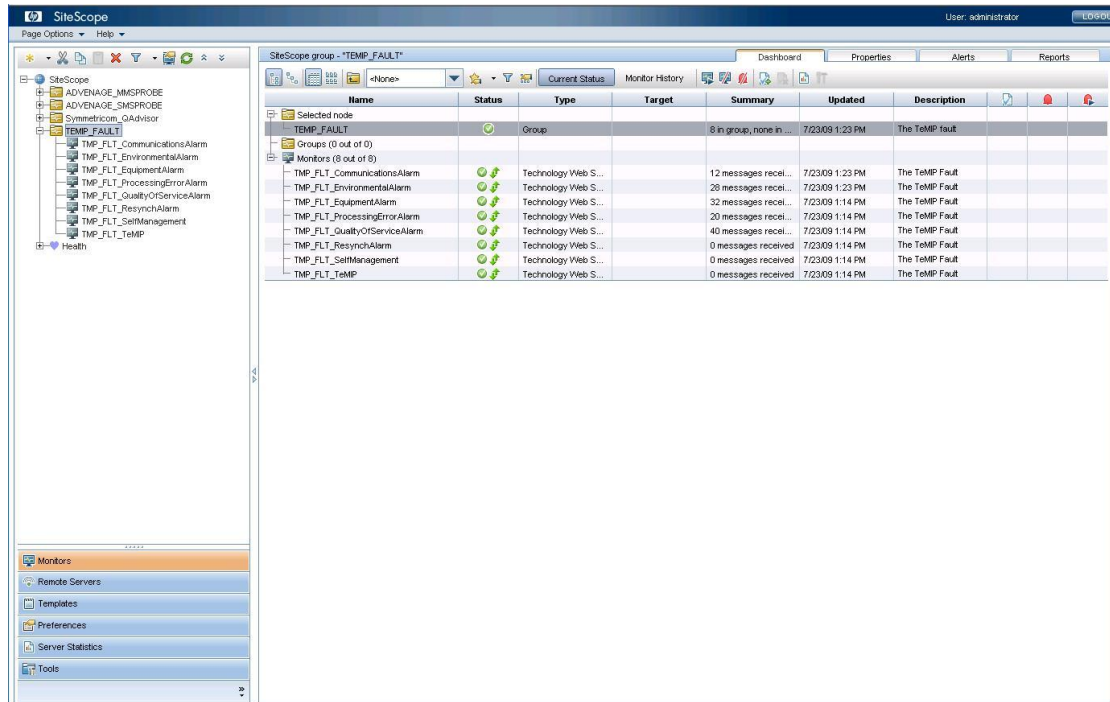
Figure 10 - Overview of the monitors created by the TeMIP MA

- Each "Web Service Integration" monitor contains the Field Mapping information used to forward the collected values to SQM

- Only the TMP_ELT_SelfManagement monitor contains a topology script used to create in the SQM CMDB the self management CIs to monitoring the BAF status.

After the installation, on theSiteScope UI, goes to Templates, you can find a template container TeMIP_MA was created. Under the container, the template TeMIP_MA_Template was created.
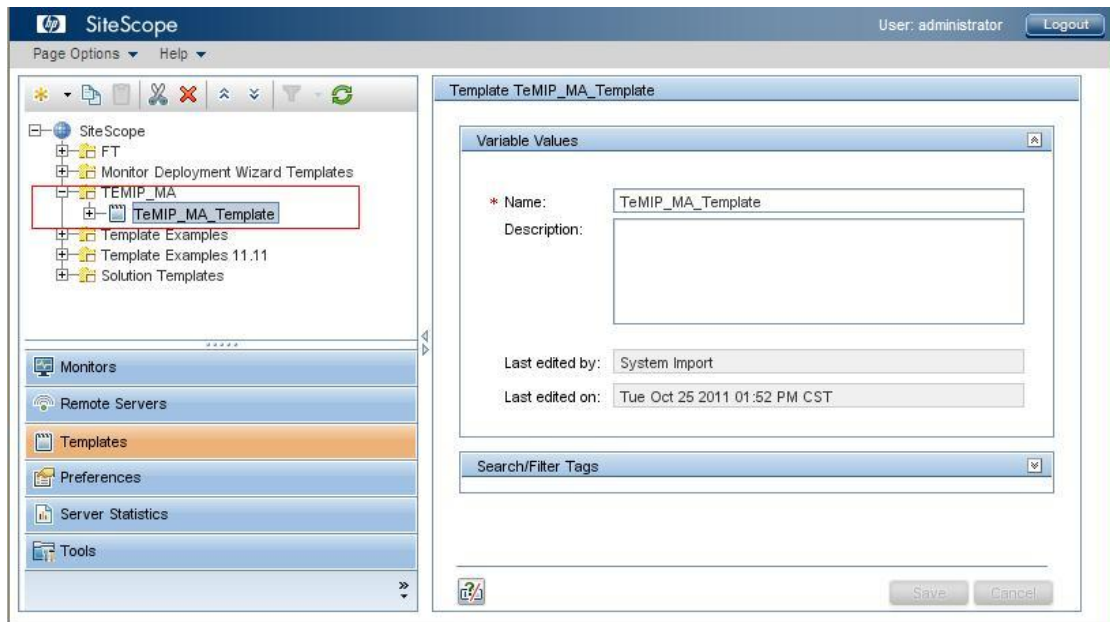
Figure 11 - TeMIP_MA template

Note: if the TeMIP monitors are not created automatically in SiteScope Monitors UI panel when you do installation on SiteScope 11.xx. Then you need a manually operation to deploy the monitors:

Right click on the 'SitScope' root node and left click the 'Deploy Template' action, and choose the Template 'TeMIP_MA_Template', click the 'OK' button.
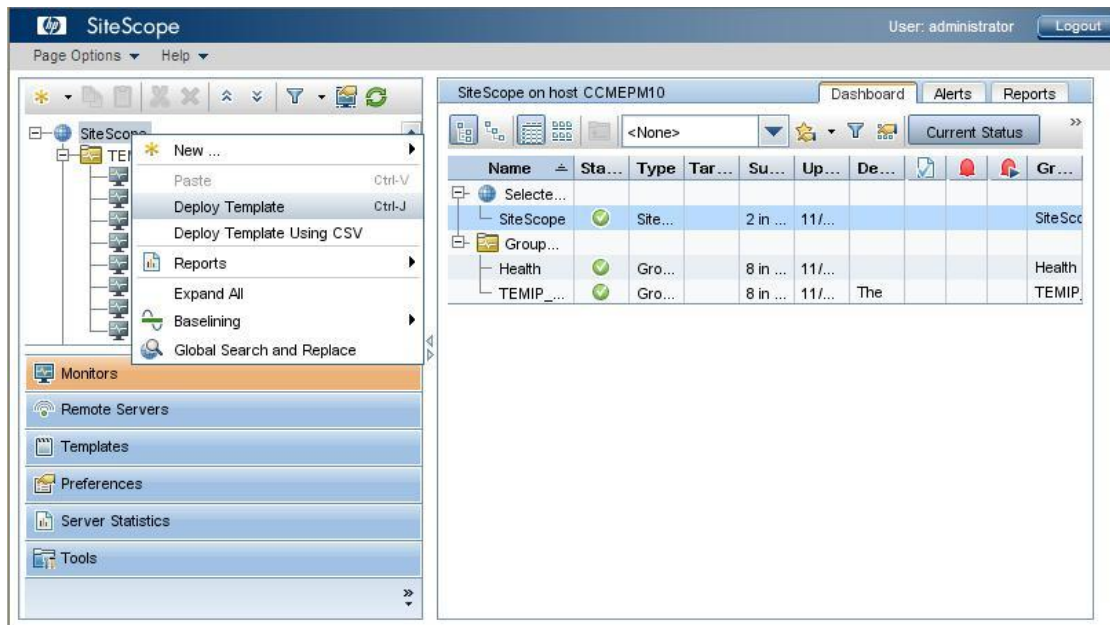

Figure 12 - Manually deploy the monitors

2.4 The TeMIP Monitoring Adapter un-installation

The un-installation kit will be delivered under
<SITESCOPE_INSTALL_DIR>\SQM\TeMIP_adapter\Uninstall\uninstall.exe after you have
done the installation.

Note: <SITESCOPE_INSTALL_DIR> is the folder where your SiteScope is installed.

The following steps need to be completed to un-install the Monitoring Adapter:

1. Run kit uninstall.exe under
   <SITESCOPE_INSTALL_DIR>\SQM\TeMIP_adapter\Uninstall

2. The un-installation wizard displays the introduction screen:

Figure 13 - Monitor Adpater component un-installation introduction

3. Click the '**Uninstall'** button to do the un-installation.

4. Check the status of the un-installation and click on the "**Done**" button to terminate it:

Figure 14 - TeMIP MA component un-installation completion

After a successful un-installation of the MA component, all the installed files will be removed from installed folder except the files that were added or updated after installation.

Note: when you do un-installation TeMIP MA on HP SiteScope version 11.xx, it will not delete the monitors automatically; you should manually delete them on SiteScope UI.

Chapter 3

TeMIP Service Adapter Configuration

The configuration file of TSC sets the configuration for the TeMIP BSM Alarm Forwarder and SiteScope information. There is no other configuration file for TeMIP MA.

Refer to "*HP TeMIP Service Console Installation & Configuration Guide*" for the configuration.

Chapter 4

TeMIP Service Adapter operation

This chapter describes how to operate the TeMIP Service Adapter.

As TeMIP Service Adapter is a subset of TSC, for more TSC operation including the TeMIP BSM Alarm Forwarder please refer to TSC documents.

4.1   Start/Stop Monitoring Adapter

The TeMIP Monitoring Adapter is hosted by SiteScope and it is therefore operated (start, stop…) as part of the overall SiteScope module.

- Refer to "*HP SiteScope Deployment Guide*" for detailed information about SiteScope operation.

Chapter 5

TeMIP Service Adapter troubleshooting

This chapter presents the information needed to troubleshoot the TeMIP Service Adapter.

5.1   Problem encountered during installation

The installer creates a file named "InstallationStatus" in the installation directory during installation of the SQM Service Adapter, Data Source Adapter and during installation of the Monitoring Adapter. The content of this file is the string "SUCCESS" in case of successful installation.

The installer logs MA installation information in the directory <TeMIP MA>\log\:

1. install_anywhere.log: this file provides the status of the different steps (including the custom actions) executed during the installation

2. temip_ma_install.log: this file provides detailed information about the execution of the custom actions

In case of problem during the installation of a component, the user can first look at the install_anywhere.log file and search for an execution step with a failed status. If the failed step is a custom action, then the specific file (temip_ma_install.log) provides detailed information about the reason of the failure.

5.2   Problem encountered during operation

The TeMIP Monitoring Adapter is hosted by SiteScope and it is therefore troubleshoot as part of the overall SiteScope module.

Refer to HP SiteScope documents for detailed information about SiteScope troubleshooting.