



Service Asset and Configuration Management (SACM) Solution

Software Version: 9.41
Windows operating systems

Configuration Guide

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Welcome

This guide provides information for setting up and configuring the Service Asset and Configuration Management (SACM) solution. This guide outlines the integration between HP Asset Manager, HP Universal CMDB, and HP Service Manager. It explains how to install and configure the components of the integration, as well as outlining how functionality of the integrated applications is enhanced.

This chapter includes:

- ["How This Guide is Organized" below](#)
- ["Who Should Read This Guide" on the next page](#)
- ["Additional Online Resources" on page 7](#)

How This Guide is Organized

This guide contains the following chapters:

Introduction to SACM

In addition to providing an overview of the Service Asset and Configuration Management Solution, provides an introduction to SACM integrations and briefly describes how the following products work with each other:

- HPE Service Manager (SM)
- HPE Universal CMDB (UCMDB)
- HPE Asset Manager (AM)
- HPE Connect-It (CIT)

"HPE Service Manager and HPE Universal CMDB Integration" on page 21

Provides the installation and configuration steps required to configure and verify the integration between Service Manager and Universal CMDB .

"HPE Asset Manager and HPE Universal CMDB Integration" on page 21

Provides the installation and configuration steps required to configure and verify the integration between Asset Manager and Universal CMDB .

"HPE Asset Manager - HPE Service Manager Integration" on page 21

Provides the installation and configuration steps required to configure and verify the integration between Service Manager and Asset Manager pursuant to a request from the catalog.

"CI Reconciliation Priority Best Practices" on page 37

Provides the Best Practices guidelines and configuration instructions for how to prioritize the information received from Asset Manager and Service Manager into UCMDB in order for UCMDB to contain the most accurate CI information.

"Technical Reference" on page 41

Describes how data objects are sourced and mapped by which scenario or adapter, as well as the reconciliation keys used, and any special requirements needed for data transfers to work properly

Who Should Read This Guide

This solution is intended for IT organizations that want to better manage all their assets from procurement to decommissioning, all the while supplying both operational as well as IT Financial Management data.

This guide is intended for:

- Customers
- Presales and sales personnel
- PSO
- Anyone who wants to learn about the solution, its flow, and its value or the value it delivers

The information in this guide may duplicate information available in other SACM documentation, but is provided here for convenience.

Additional Online Resources

Troubleshooting & Knowledge Base accesses the Troubleshooting page on the HP Software Support Web site where you can search the Self-solve knowledge base. Choose **Help >**

Troubleshooting & Knowledge Base. The URL for this Web site is

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Introduction to SACM

This chapter includes:

Note: If you have any feedback or comments, please contact solutionpackagingandscp@hp.com.

Service Asset and Configuration Management - Overview

SACM provides a necessary data foundation that is core to operating IT. This enables the business to function within its own constraints while taking into account the unique needs of the business. Many key IT (ITIL) processes rely on SACM being in place in the organization; including all of the following:

- Service Portfolio Management (Service Strategy)
- IT Financial Management (Service Strategy)
- Service Level Management (Service Design)
- Incident Management (Service Operations)
- Problem Management (Service Operations)
- Request Management (Service Operations)
- Configuration Management (Service Transition)
- Change Management (Service Transition)

By enabling and supporting these processes, SACM contributes to:

- Planning and proactive management of IT to support the needs of the business.
- Financial traceability—the ability to understand where the IT budget is being spent and in support of which business drivers

This also supports better financial decision making in general and specifically determining if the IT budget is truly supporting the important business services that drive the company's revenue stream.

- Maintaining appropriate service levels to support the business adequately IT should not over-deliver, which is expensive and wasteful, or under-deliver, which inhibits the business from producing better results. SACM provides the data points and transparency to more accurately meet business needs.
- Enabling services to be operated effectively and efficiently
- Populating and managing the Configuration Management Database (CMDB)—discovering and recording all the relevant components that comprise the IT environment
- Providing a process for on-boarding Assets and CIs—managing them throughout their respective life cycles and retiring them in an organized manner to minimize the negative impact on the business
- Improving the understanding of the complex interdependencies between the various components of IT and reducing the negative impact they may have on each other
- Standardizing IT environments, resulting in reducing maintenance costs and improving consistency and predictability of IT outcomes

SACM provides these values to the business throughout the entire service life cycle, from request through procurement to deployment into the IT environment, management of the service in production, and ending at the retirement and disposal phases. SACM is responsible for creating and managing the Configuration Management System (CMS) and as such provides IT organizations with more control over their IT environments, better adherence to the policies it defines, and greater accessibility to the necessary information. SACM does so by delivering the following:

- Management and planning: Designing what level of configuration management is needed and how this level will be achieved
- Configuration identification: Establishing a system of classification of Configuration Items (CIs) into types, defining the relevant attributes for each CI type, determining the key attributes and the relationships between the various CI types
- Configuration Control: Governing the addition, removal and updating of each CI and ensuring that the appropriate process and procedures are followed for each such activity
- Status accounting and reporting: Providing an accurate account of the status of each CI/Asset
- Verification and audit: Conducting periodical audits to ensure that there are no discrepancies between the documented and/or desired state of the environment and the actual state

Installing SACM Products

Before you can install and configure the integration, the SACM products must be installed and accessible by the integration components via the network.

In-depth knowledge and administration privileges to each of the following integration products are required to install, configure and manage the integration successfully.

- HPE Asset Manager
- HPE Universal CMDB and its probe
- HPE Service Manager
- HPE Connect-It
- HPE Service Manager <-> HP Universal CMDB integration (reuse the CI Types that are mapped from UCMDDB to SM)

Note: For more information about the SM <-> UCMDDB integration, see the *HPE Universal CMDB to HPE Service Manager Integration Guide*, which is available from the Service Manager help center:

System Administration > Integrations > HP Universal CMDB (UCMDDB) > HPE Universal CMDB to HPE Service Manager Integration Guide

Refer to the installation guides provided with each of the products that represent the SACM solution.

Note: Although not in the scope of the SACM solution, integrating AM with IT infrastructure discovery tools such as HPE Discovery and Dependency Mapping Inventory can complement the SACM solution by providing accurate, up-to-date inventory data which serves as the foundation of the SACM solution. It is suggested to implement this integration before installing and configuring the SACM solution.

Refer to the AM support matrix for the supported versions of various discovery tools. Refer to the documentation provided with the discovery tools for integration information.

SACM Prerequisites

This guide expects that the following products are installed and fully functional:

- **HPE Universal CMDB (UCMDB) 10.21 or later:** Server should be installed. Data flow probe should be connected and running.
- **HPE Service Manager (SM) 9.41 or later:** Server, Client, Help Server, and Web Tier should be installed and running.
- **HPE Asset Manager (AM) 9.50 or later:** Application designer, client, and AM web application.
- **HPE Connect-It 9.60 or later:** Scenarios from SACM 9.41 kit.

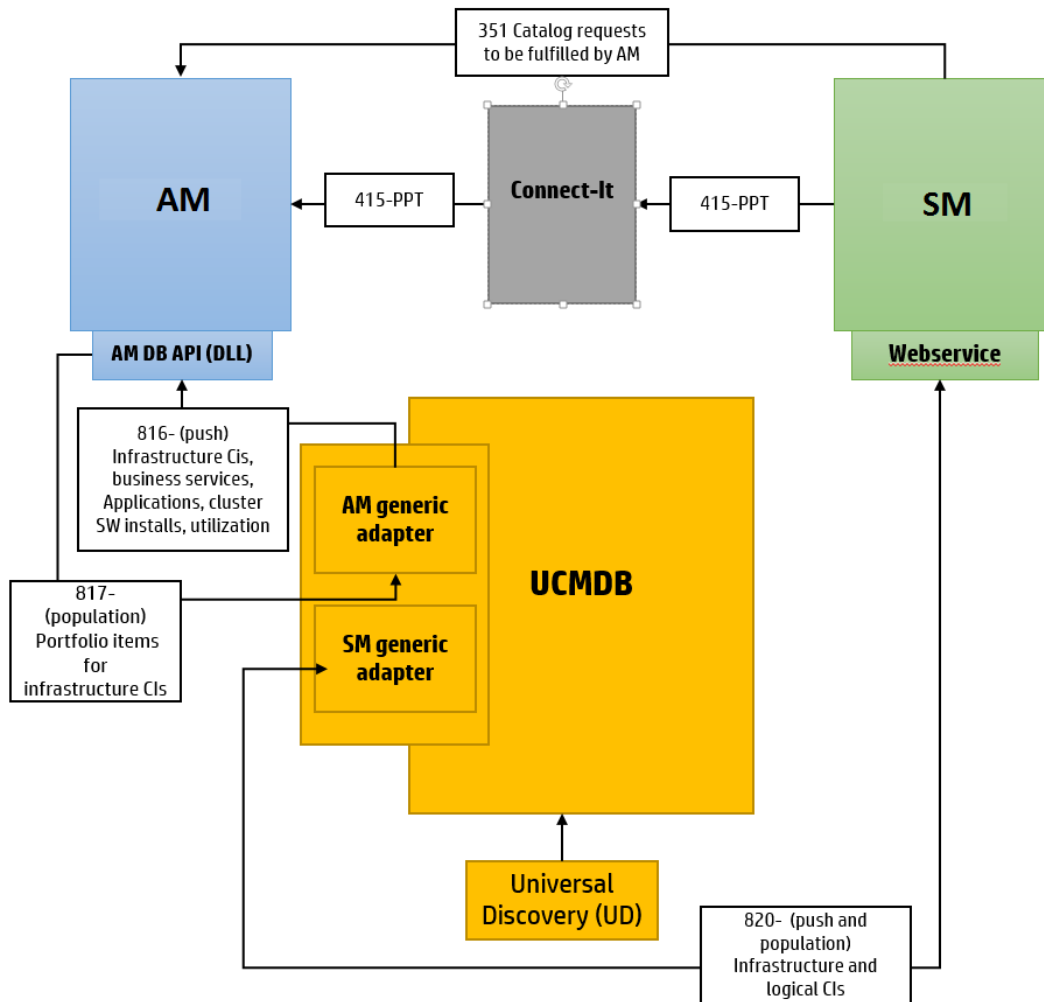
Important: For find out the most recent version of each product to be certified for use in SACM 9.41, visit [Service Asset and Configuration Management](#).

Note: This guide assumes that the SACM products are installed in the following default locations:

- Universal CMDB – C:\hpe\UCMDB\
- Service Manager – C:\Program Files\HPE\Service Manager <X.xx>
- Asset Manager – C:\Program Files\HPE\Asset Manager <X.xx> en
- HP Connect-It – C:\Program Files\HPE\Connect-It <X.xx> en

SACM 9.41 Solution Diagram

The following diagram displays a typical deployment of the SACM Solution.



ID#	Integration Name
#351	Employee Self-Service Catalog for Asset Manager (AM - SM)
#415	Reference Data Synchronization via Connect-It (AM <-> SM)
#816	Inventory, Software Utilization and Business Data Synch (UCMDB to AM)

ID#	Integration Name
#817	Asset to CI Replication (AM -> UCMDB)
#820	CI sync and actual state federation (UCMDB to SM)

Hardware and Software Requirements

The instructions in this document assume that products are installed in the default location. If this is not the case, you will need to make the appropriate modifications to file paths mentioned in this document.

Supported Versions

The following product versions were validated for the SACM 9.41 solution:

Product	Version	Instructions
UCMDB	10.21 or later	For installation instructions, see the HPE Universal CMDB Deployment Guide .
Service Manager	9.41 or later	For installation instructions, see the HPE Service Manager Interactive Upgrade Guide .
Connect-It	9.60 or later	For installation instructions, see the HPE Connect-IT Connector Guide .
Asset Manager	9.50 (with the SACM 9.41 content pack) or later	For installation instructions, see HPE Asset Manager Installation and Upgrade .

Note: Make sure that each application you install is up and running before you perform any configuration steps.

Hardware and Software Requirements

For detailed information about hardware and software requirements, including supported operating systems, databases, and browsers, refer to the Support Matrix for each product.

UCMDB

- **10.21**

<https://softwaresupport.hpe.com/km/KM01737045>

- **10.30**

<https://softwaresupport.hpe.com/km/KM02557405>

Service Manager

- **9.41**

<https://softwaresupport.hpe.com/kb/KM01793337>

- **9.50**

<https://softwaresupport.hpe.com/kb/KM02588593>

Asset Manager

- **9.5x**

<https://softwaresupport.hpe.com/kb/KM01450310>

Connect-It

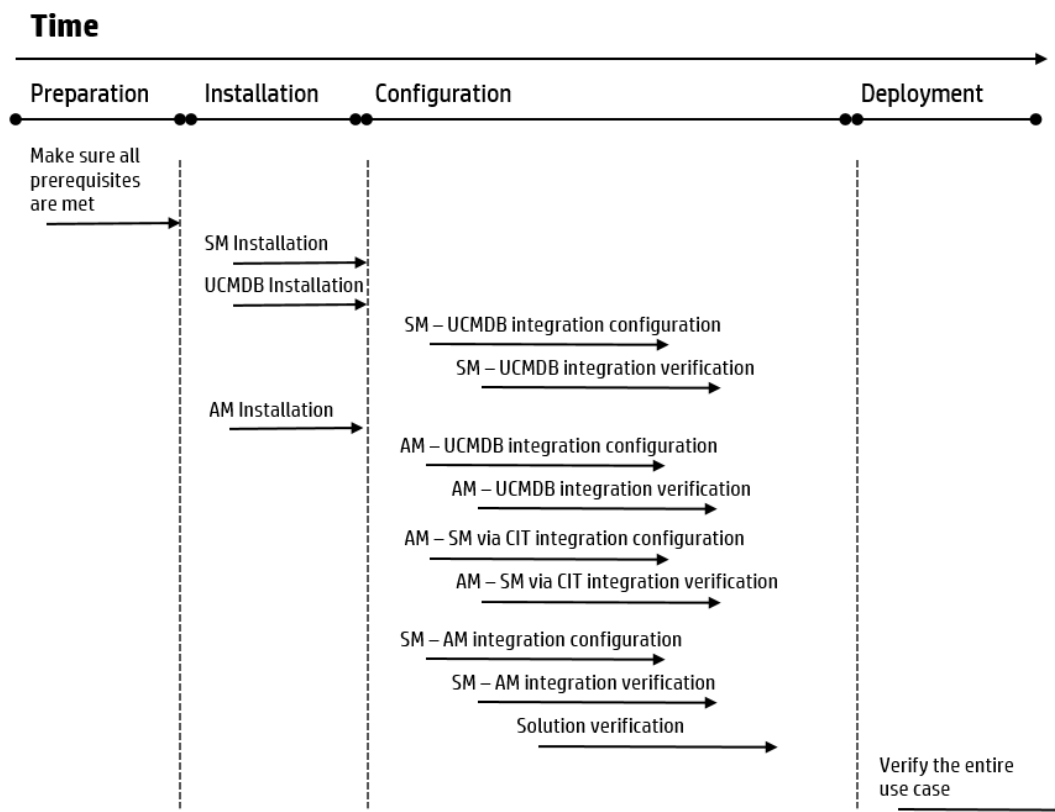
- **9.60**

<https://softwaresupport.hpe.com/kb/KM01292731>

SACM Project Planning

HPE Service Asset and Configuration Management

The various tasks that must be done in order to use the SACM solution appear in the following diagram:



HPE Asset Manager - Overview

HPE Asset Manager (AM) helps IT organizations minimize their compliance risk, effectively manage their IT services, and maximize the utilization of IT.

AM supports the life cycle management of physical and logical assets. AM's modules—Asset Tracking, IT Procurement, Contract Management, Software Asset Management and Financial Management—will ensure that IT organizations get full visibility on their portfolio and can smoothly run operations and optimize their use of IT.

AM's main benefits are described as follows:

- **Asset Tracking:**

- Track and manage fiscally relevant physical and virtual assets throughout their life cycle
- Optimize IT spending
- Reduce the number of lost and unused assets
- Improve IT governance

- **IT Procurement:**

- Streamline IT procurement life cycle process
- Optimize purchase costs by tracking vendor prices
- Manage approvals and fulfillment of requests
- Measure contract objectives against vendor delivery metrics

- **Contract Management:**

- Automatically manage the operational state of contracts in use
- Track compliance with vendor terms and conditions
- Link assets to contracts (purchase, leasing, maintenance, support contracts)
- Monitor and re-evaluate contracts and suppliers
- Optimize cost of IT contracts

- **Software Asset Management (SAM):**

- Ensure vendor software license compliance using out-of-the-box SAM best practices
- Allow organizations to optimize what is already owned
- Enable active management for the authoritative state of software CIs
- **IT Financial Management:**
 - Track cost of assets and business services
 - Define service offerings, manage user subscriptions
 - Support showback/chargeback for use of business services
 - Execute Budget Management Best Practices

HPE Service Manager - Overview

HPE Service Manager stores the managed or expected state of CIs and CI relationships as attribute values in a CI record. To be part of the integration, a CI attribute in your UCMDB system must map to a managed field in the SM CI record. You can add, remove, or update the managed fields that are part of the integration by tailoring the SM Web services that manage the integration.

SM runs according to a set of rules that define what actions you want the system to take whenever a CI's actual state does not match the expected state as defined in the CI record. You define these rules from the Discovery Event Manager (DEM) in SM where you can do the following:

- Automatically update a CI record to match the attribute values listed in the actual state. (This is the default behavior.)
- Automatically create a change record to review the differences between the actual state and the managed state.
- Automatically create an incident record to review the differences between the actual state and the managed state.

HPE Universal CMDB - Overview

HPE Universal CMDB (UCMDB) consists of a rich business-service-oriented data model with built-in discovery of configuration items (CIs) and configuration item dependencies, visualization and mapping of business services, and tracking of configuration changes.

UCMDB implements data model, data flow management, and data modeling capabilities, and also provides impact analysis, change tracking, and reporting capabilities to transform CMDB data into comprehensible, actionable information that helps answer critical questions and solve business problems.

HPE Connect-It - Overview

Connect-It is an Enterprise Application Integration (EAI) type integration platform. An EAI solution enables a company to integrate the different applications from which it can obtain or to which it can provide internal data (Internal support, equipment management software, and so on) or external data (ERP, B2B, B2C). Connect-It integrates not only data, but also a company's application processes.

You can use Connect-It to:

- Transfer information from one database to another.
- Duplicate the information from one database to another in real-time.
- Import information from e-mails, delimited text files, XML files or other formats into a database.
- Export information from a database to e-mails, delimited text files, XML files or other formats.
- Import NT Security-based information into a database.

HPE Service Manager and HPE Universal CMDB Integration

For information about the necessary steps to configure and verify the integration between SM and UCMDB, refer to chapters 13 and 14 of [Universal Discovery Content Guide - HPE Integrations](#).

HPE Asset Manager and HPE Universal CMDB Integration

For information about the necessary steps to configure and verify the integration between out-of-box versions of UCMDB and AM, refer to chapters 2, 3 and 4 of [Universal Discovery Content Guide - HPE Integrations](#).

HPE Asset Manager - HPE Service Manager Integration

This chapter includes:

Overview

This chapter describes the necessary steps to configure and verify the integration between SM and AM following a request from the catalog. This integration enables the Employee Self Service (ESS) user of Service Manager to create a request which will be transferred to Asset Manager and will be processed there until completion (Service Catalog integration).

A typical request handled by this integration includes the procurement of new IT assets—such as the purchase of a new laptop computer for an employee or a new server for a data center.

Prerequisites

Before integrating AM and SM, there is some data that needs to be synchronized via HPE Connect-It (CIT). This data includes information about People, Places, Things (PPT, not CIs), commonly referred to as PPT in the description described in this chapter. Depending on the current customer implementation phase, the master data source can be either Service Manager or Asset Manager—or each product will contain master data for specific record types.

By default, the provided HPE Connect-It scenarios transfer the same PPT types from AM to SM and from SM to AM. You cannot implement the scenarios as they are, because data replication would circle back and forth. Therefore, you must decide whether the AM or SM database will store the reference data for each of the PPT types:

- Companies
- Vendors
- Locations
- Departments
- Contacts
- Models
- Stock rooms

Run scenarios to synchronize PPT data between AM and SM:

1. Install HPE Connect-It 9.60.
2. Download the SACM 9.41 content pack from HPLN (<https://hpln.hpe.com>) and unzip it to C:\SACM941.
3. The HPE Connect-It scenarios depend on the SACM Integration Web Service. You need to add this web service to SM:
 - a. Log on to HPE Service Manager client with administrative rights.
 - b. Select **Menu Navigation > Tailoring > Database Manager** in the navigation pane.
 - c. Right-click the screen in the right pane and select **Import/Load**.
 - d. In the **File Name** field, enter C:\SACM941\datakit\sc\sm94\SACMintegration.unl.
 - e. Click **Load FG**.

- f. Select **Menu Navigation > Tailoring > Web Services > Web Service Configuration** in the navigation pane
- g. In the **Service Name** field, enter `SACMIntegration`.
- h. Click **Search**.

Verify that you see a list of entries prefixed with **SACM**.

4. Open HPE Connect-It , browse to `C:\SACM941`.
5. Select one of the following scenarios:
 - If the reference database for all PPT types is AM:
 - Use `amsm-ppt.scn` to transfer the PPTs from AM to SM.
 - Do not use `amsm-ci-ppt-link.scn` because links between CIs and Contact, Model, Vendor, Location and Department are managed by the `amsm-ppt.scn` scenario.
 - If the reference database for all PPT types is SM:
 - Use `smam-ppt.scn` to transfer the PPTs from AM to SM.
 - Use `smam-wo.scn` to transfer changes and tasks.
 - If the reference database for PPT types is a mixed solution between AM or SM according to PPT type:
 - Customize `smam-ppt.scn` so that PPTs referenced in SM are transferred to AM.
 - Customize `amsm-ppt.scn` so that PPTs referenced in AM are transferred to SM.
 - Do not use `amsm-ci-ppt-link.scn` because links between CIs and Contact, Model, Vendor, Location and Department are managed by the `amsm-ppt.scn` scenario.
 - Use `smam-wo.scn` to transfer changes and tasks.
6. For each scenario, define the AM details and SM details.
7. After all the details are defined in the components, click **Produce now** to run the scenario.

Note: In an environment where an Employee Self Service (ESS) Catalog integration is planned (as described in "[Use the Request Self-Service to Verify Asset Manager- Service Manager Integration](#)" on page 34), it is necessary to disable Contact synchronization in order to prevent possible data duplication.

To disable the synchronization of Contact records:

1. Open the amsm-ppt.scn scenario in Connect-It.
2. In the **Scenario diagram** pane, select the **Mapping** box, and then select the **Mappings** tab.
3. In the Detail of the connector 'Mapping' pane, uncheck **Creation of a contact** and **Update a contact**.
4. Save the changes and exit the scenario.

Install and Configure Asset Manager Web Service

This section shows you how to install and configure AM web service. For more information about Asset Manager web configuration, refer to the Installation and upgrade guide.

1. Install JDK 7 and configure the environment variable of the JAVA_HOME to JDK folder; for example, C:\Java\jdk1.7.0_65.
2. Install Apache Tomcat7.0.42 to C:\Tomcat7042.
3. In order for some required libraries to be found by AM Web, make sure <Asset Manager Installation folder>\bin or <Asset Manager Installation folder>\bin\x64 is in an environment variable of path.
4. Implement AM Automated Process Manager in Windows:
 - a. Browse to **Start > Run**.
 - b. Type `services.msc`.
 - c. Select **Asset Manager Automated Process Manager 9.xx** and change the startup type to automatic.
 - d. Click **Start** and **OK**.
 - e. Browse to **Start > All Programs > HP > Asset Manager 9.xx en > Automated Process Manager**.
 - f. Click **File** to connect to the new database.
 - g. Select the relevant database and enter the credentials.
5. Start the Tomcat configuration console (In Windows, click **Start > All Programs > Apache Tomcat 7.0 Tomcat7 > Configure Tomcat**), click the **JAVA** tab, populate the following fields:

Field	Value
Java Virtual Machine	C:\Java\jdk1.7.0_65\jre\bin\client\jvm.dll
Java Classpath	C:\Java\jdk1.7.0_65\lib\tools.jar;C:\Tomcat7042\bin\bootstrap.jar
Java Options	<p>Add the following lines:</p> <pre>-Djava.library.path=<Asset Manager Installation folder>\bin -Dsun.lang.ClassLoader.allowArraySyntax=true</pre> <p>Note: If you are running the x64 version of Windows Server 2008, the path needs to be replaced by <code>-Djava.library.path=<Asset Manager Installation folder>\x64 -XX:MaxPermSize=128m</code>.</p>
Initial memory pool	512 (or another value adapted to your computer)
Maximum memory pool	1024 (or another value adapted to your computer)
Thread stack size	1000 (or another value adapted to your computer ; it should be less than the total RAM of the computer ; at least 250 Mb less than the total RAM of the computer)

6. Make a backup copy of `<Asset Manager Installation folder>\websvc`, and then edit the parameters in the `<Asset Manager Installation folder>\websvc\package.properties` file. For parameter descriptions, see the Installation Guide of Asset Manager.
7. Open a command-line prompt, go to the `<Asset Manager installation folder>\deploy` folder, run the command:

```
deploy.bat ..\websvc\package.properties
```

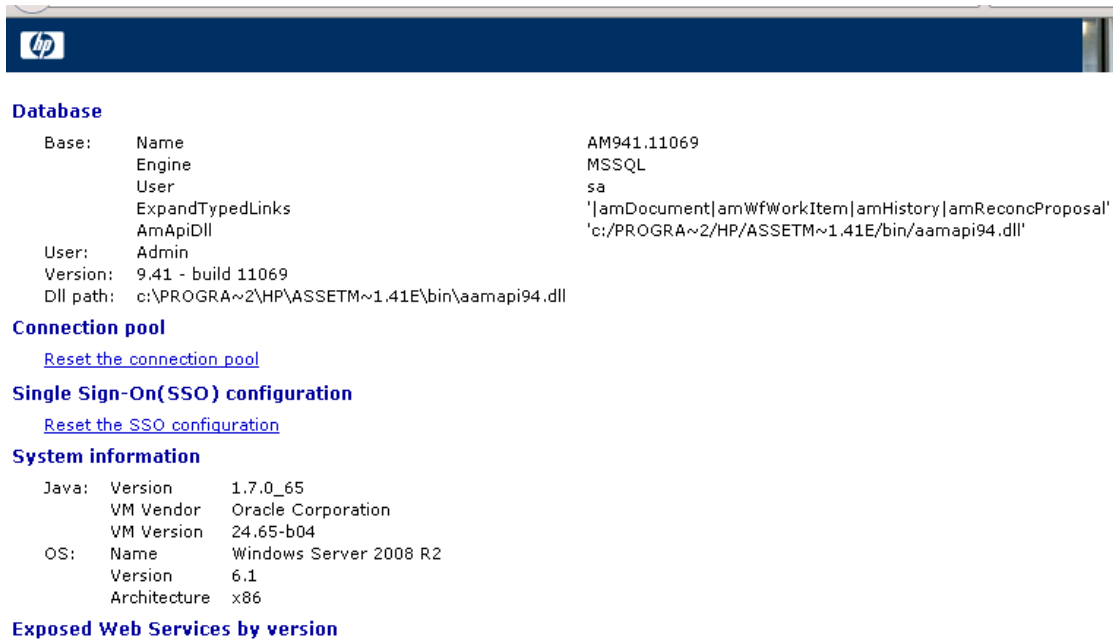
If you are running the x64 version of Windows Server 2008, run the following command instead:

```
deploy.bat /x64 ..\websvc\package.properties
```
8. Copy `<Asset Manager installation folder>\websvc\AssetManagerWebService.war` to `C:\Tomcat7042\webapps`.
9. Start Tomcat.
10. Open a browser and go to following URL:

http://<Name or IP address of the Asset Manager Web Service server>:<Asset Manager Web Service port>/AssetManagerWebService

For example, http://localhost:8080/AssetManagerWebService

11. Make sure that the a page that resembles the following appears (this image is taken from an earlier Asset Manager release).



Database

Base:	Name	AM941.11069
	Engine	MSSQL
	User	sa
	ExpandTypedLinks	' amDocument amWfWorkItem amHistory amReconcProposal'
	AmApiDll	'c:/PROGRA~2/HP/ASSETM~1.41E/bin/aamapi94.dll'
User:	Admin	
Version:	9.41 - build 11069	
Dll path:	c:\PROGRA~2\HP\ASSETM~1.41E\bin\aaamapi94.dll	

Connection pool

[Reset the connection pool](#)

Single Sign-On (SSO) configuration

[Reset the SSO configuration](#)

System information

Java:	Version	1.7.0_65
	VM Vendor	Oracle Corporation
	VM Version	24.65-b04
OS:	Name	Windows Server 2008 R2
	Version	6.1
	Architecture	x86

Exposed Web Services by version

Install and Configure AM Web Service Proxy

The web service proxy is an interface that is used to convert a query to create a purchase request from the HPE Service Manager catalog into a series of calls to Asset Manager web service which enable the purchase request to be created in Asset Manager.

You can install the web service proxy on any computer (for example, on the computer that runs Asset Manager web service).

1. Install Apache Ant (<http://ant.apache.org>) on the computer where you want to set up the web service proxy.
2. Install Java SE.
3. Back up <Asset Manager installation folder>\esscat\build\ant.properties.default and rename the duplicated file to ant.properties.

4. Edit `ant.properties` and change the **ws.host**, **ws.port** and **ws.service** parameters to have the `http://<ws.host>/<ws.port>/<ws.service>` link point to the computer where Asset Manager web service is installed.
5. Open a command-line prompt and go to the `<Asset Manager installation folder>\esscat\build\` folder.

Execute the following command:

```
ant webapp
```

6. Deploy the generated `ServiceCatalog.war` file on your application server by following the standard procedure.
7. Because the Java virtual machine launched by the application server uses a lot of memory, you need to increase the available memory to at least 256 MB. To do so, modify the JVM (Java Virtual Machine) **MaxPermSize** parameter with the following switch:

```
-XX:MaxPermSize=256m
```

If you are using the Tomcat application server, follow these steps.

- a. Start the Tomcat configuration console (**Start > All Programs > Apache Tomcat 7.0 Tomcat7 > Configure Tomcat Windows menu**).
 - b. Select the **Java** tab.
 - c. Add the following line to the Java Options section:


```
-XX:MaxPermSize=256m
```
 - d. Close the Tomcat configuration console.
8. Create ESS reference records in Asset Manager.

The different items that need to be created beforehand in Asset Manager are:

- Employees that can connect to the database and use the request self-service system (`amEmplDept` table). These employees must have a user account and password.
- Employees for whom a request is made (`amEmplDept` table).
- Standard request and product models (`amModel` table).
- Standard requests (`amRequest` table), products (`amCatProduct` table) and off-catalog products (`amModel` table).

Install and Configure HPE Service Manager Website

This section shows how to install and configure Service Manager website.

Installation

1. Stop and copy the SM web tier war file to TOMCAT_HOME\webapps\, and then rename it to sm941.war.
2. Start Tomcat to deploy this war file.
3. Search and modify these value of parameters in web.xml under C:\Tomcat7042\webapps\sm941\WEB-INF\.

```
<context-param>
  <param-name>secureLogin</param-name>
  <param-value>>false</param-value>
</context-param>
```

Set this value to **false** if Service Manager is not configured as secure login.

```
<param-name>serverHost</param-name>
  <param-value>192.168.0.1</param-value>
</init-param>
```

This IP address goes to the SM server. Generally, the param-value should be "localhost".

```
<init-param>
  <param-name>serverPort</param-name>
  <param-value>13080</param-value>
</init-param>
```

The SM service port is specified in the installation wizard. The initial value is 13080. If that is incorrect, contact the technician who installed the SM server (sm.ini).

4. Remove sm941.war, and then restart Tomcat.
5. Test SM web with the following URL.

```
http://<Name or IP address of the SM Web client server>:<SM Web client server
port number>/<SM instance name>/index.do
```

For example:

`http://localhost:8080/sm941/index.do`

6. For ESS user, test `http://<Name or IP address of the SM Web client server>:<SM Web client server port number>/<SM instance name>/ess.do`

For example:

`http://localhost:8080/sm941/ess.do`

Configuration

If you already have a full version of HPE Service Manager, make sure that you have installed HPE Service Manager web for an ESS (Employee Self-Service) user or consult the HP Service Manager installation guide to install it.

1. Disable the request validation.
 - a. Log on to the SM website.
 - b. In the browser, select **Menus Service Catalog > Administration > Approval Activities**.
 - c. Select the first line of the **General Approval** table.
 - d. Click the **Remove Approval Activity** link.
 - e. Click **Finish**.
2. Enable the transfer of catalog items.
 - a. Log on to the SM website with administrative rights.
 - b. Select **Menu Tailoring > Database Dictionary** in the navigation pane.
 - c. Enter `svcDisplay` in the **File name** field, click **Search**.
 - d. Select the descriptor entry in the table (first line of the table, do not click the name column).
 - e. Click the **New Field/Key** button.
 - f. Populate the **Name** field with the **optionList** value, the **Type** field with the character value, and click **Add Field**.
 - g. Edit the **optionList** entry in the table to populate the SQL Name field with `OPTIONLIST`, SQL Type with `IMAGE`, and SQL Table with `m1`, then click **OK**.
 - h. Click **OK**, click **SM Alters**.

- i. Enter `svcDisplay` in the **File name** field, click **Search**.
 - j. Select the descriptor entry in the table (first line of the table) again.
 - k. Click the **New Field/Key** button.
 - l. Populate the **Name** field with the **optionOptions** value, the **Type** field with the character value, and click **Add Field**.
 - m. Edit the **optionOptions** entry in the table to populate the **SQL Name** field with `OPTIONOPTIONS`, **SQL Type** with `IMAGE`, and **SQL Table** with `m1`, and then click **OK**.
 - n. Click **OK**, click **SM Alters**.
 - o. Select **Tailoring > Database Manager**.
 - p. Click **More > Import/Load**.
 - q. In the **File Name** field, select the **<Asset Manager Installation folder>\lesscat\sc\sm71\SCR42940.unl** file path, and then click the **Load FG** button.
 - r. Wait until you get a message like "SCR42940.unl file loaded".
3. Enable the transfer of images.
 - a. Log on to SM website with administrative rights.
 - b. Select **Tailoring > Database Manager**.
 - c. Click **More > Import/Load**.
 - d. Right-click the **Database Manager** screen and select **Import/Load** in the contextual menu.
 - e. In the **File Name** field, select the **<Asset Manager Installation folder>\lesscat\sc\sm71\QC8955.unl** file, and then click the **Load FG** button.
 - f. Wait until you get a message like "QC8955.unl file loaded".
 4. Expose the detailed **Description** field in the ServiceCatalog web service so that the cart status can be updated by the HPE Connect-It scenario.
 - a. Log on to the SM website with administrative rights.
 - b. Select **Tailoring- Web Services > Web Service Configuration** from the navigation bar.
 - c. In the **Service Name** field, enter `ServiceCatalog`, click **Search**.
 - d. Select the **ServiceCatalog** entry in the list of results, uncheck the **Deprecated** option.
 - e. In the details of the ServiceCatalog web service, select the **Fields** tab.

At the end of the list of fields, add a new entry with the following information:

- Field: detailedDescription
 - Caption: DetailedDesc
 - Type: StringType
- f. Click **Save** and **OK**.
5. Expose the resolution field in the ServiceDesk web service so that images can be transferred from Asset Manager to HPE Service Manager by the HPE Connect-It scenario.
- a. Log on to the SM website client with administrative rights.
 - b. Select **Tailoring > Web Services > WSDL Configuration** from the navigation bar.
 - c. In the **Service Name** field, enter *ServiceDesk*, click **Search**.
 - d. Select the **ServiceDesk** entry in the list of results.

In the details of the **ServiceDesk** web service, select the **Fields** tab.

- e. At the end of the list of fields, modify the resolution field with the following information:
 - Caption: Resolution
 - Type: StringType
 - f. In the same list, modify the **resolution.code** field with the following information:
 - Caption: ResolutionCode
 - g. Click **Save** and **OK**.
6. As the web service proxy acts as a link between HPE Service Manager and Asset Manager Web Service, you will need to configure the links between these elements.

To configure the link between HPE Service Manager and the web service proxy, configure the Catalog connector in HPE Service Manager as follows:

- a. Log on to SM website with administrative rights.
- b. Select **Service Catalog > Tailoring > Catalog Connectors**.
- c. Click **Search**.
- d. Select the connector named **Open a Standard Request** in Asset Manager.
- e. On the **Expressions** tab, enter the path to the web service proxy just after **\$L.url**:

```
$L.url="http://<Name or IP address of the AM Web Service Proxy>:<AM Web Service Proxy port number>/ServiceCatalog/services/ServiceCatalog"
```

For example:

```
$L.url="http://ProxyServer:8080/ServiceCatalog/services/ServiceCatalog"
```

- f. Enter user account and password value for **\$L.login** and **\$L.pwd**, for example:

```
$L.login="Admin"
```

```
$L.pwd=""
```

7. Update the AM web service proxy JAVA script.

- a. Log on to the SM website with administrative rights.
- b. Select **Tailoring > Web Services > Run WSDL to JS**.
- c. Enter the URL for the WSDL of Asset Manager web service proxy.

The format is:

```
http://<Name or IP address of the AM Web Service Proxy>:<AM Web Service Proxy port number>/ServiceCatalog/wsd1/ServiceCatalog.wsd1
```

For example:

```
http://ProxyServer:8080/ServiceCatalog/wsd1/ServiceCatalog.wsd1
```

- d. Click **Proceed**.

This displays a window with the new Java script corresponding to the web service proxy.

- e. Click **Replace**.

You should get the following message:

```
Successful compilation of JavaScript function or expression.
```

- f. Click **Save**.
- g. Click **Compile**.

You should get the following message:

```
Successful compilation of JavaScript function or expression.
```

8. Activate the linker scheduler.

- a. Log on to SM website with administrative rights.
- b. Select **Miscellaneous > System Status**.
- c. Check linker that appears in the list.
- d. If the linker scheduler already appears in the list, restart it.

- i. In the **Command** column of the linker line, enter **K**.
 - ii. Click the **Execute Commands** button.
 - iii. Repeat this action until the linker line disappears.
 - e. Click the **Start Scheduler** button.
 - f. Double-click **linker-startup** in the list.
9. Configure User profiles for ESS (Employ Self Service).
 - a. Log on to SM website with administrative rights.
 - b. Select **System Administration > Ongoing Maintenance > Operators**.
 - c. Enter `Template_SelfService` in the **Login Name** field, and then click **Search**.
 - d. On the **Self Service** tab, check the **Self Service Access Only** checkbox.
 - e. On the **Startup** tab, section **Execute Capabilities**, if `svcCatEmployeeRequester` is not in the list, add `svcCatEmployeeRequester` to the first empty line of the table
 - f. Save your changes

Verify Asset Manager - Service Manager Normal Integration

To verify the normal integration of Asset Manager and Service Manager, follow these steps.

1. Log on to the SM website and open a new change request.
2. Browse to **Change Management > Changes > Create New Change**.
3. Enter all relevant data and mandatory fields.
4. Click **Save**.
5. Open HPE Connect-It.
6. Open the scenario `smam-wo.scn`.
7. Fill the relevant parameters for each product.
8. Click **Produce Now**.
9. Log on to HPE Asset Manager.

10. Browse to **Asset Lifecycle > Work Orders > Work Orders**.
11. Confirm that AM receives the change request .

Note: This out-of-the-box integration synchronizes all Change and Change Tasks records from Service Manager to Asset Manager. In the production environment, the user may want to limit the scope for specific Change categories. To achieve this, there is a need to modify the smam-wo.scn scenario.

Use the Request Self-Service to Verify Asset Manager- Service Manager Integration

1. Run the OOB scenarios in Connect-It to synchronize the basic data from Asset Manager to Service Manager.
 - a. Open Connect-It 9.60, click **File > Open**.
 - b. Open and run scenarios located in <HPE Connect-It installation folder>\scenario\ac\am94\esscat\am94sm933\ in the following order:
 - users.scn: Synchronization of employees
 - sso.scn: Synchronization of logins
 - categories.scn: Synchronization of standard request and product models
 - catalogitems.scn: Synchronization of standard requests, products and off-catalog products
 - status.scn: Synchronization of request/cart statuses

Note: Synchronized logins in Service Manager use the default password "P@assword1." If you would like to change the default password, open the Service Manager WSDL definition for "Operator700," and then change the default password in the following expression:

```
if ($L.bg.action="add" and null(password in $L.file)) then (password in $L.file="P@assword1")
```

- c. In the **Scenario diagram** window, modify the configuration of the SM web service connectors and AM connectors.

- d. Save your changes.
 - e. Run the scenarios.
2. Check the operator in Service Manager.
 - a. Log on to SM website with administrative rights.
 - b. Select **System Administration > Ongoing Maintenance > Operators**.
 - c. Enter the logon name(amEmpIDept.name in AM) in the **Login Name** field, for example, Shivute, who is administrator in AM.
 - d. On the **Self Service** tab, make sure that the **Self Service Access Only** option is selected.
 - e. On the **Startup** tab, the user has the following execute capabilities:
 - partial.key
 - partial.key.msg.skip
 - service desk
 - service catalog
 - change request
 - svcCatEmployeeRequester
 - svcCatDeptRequester
 3. Create the request self-service.
 - a. Log on to the SM ESS website (<http://<Name or IP address of the SM Web client server>:<SM Web client server port number>/<SM instance name>/ess.do>) with a user account that has self-service right.
 - b. Select **Miscellaneous > Order from Catalog**.
 - c. Select a service catalog in the right list which is from Asset Manager, for example: Deskpro HPE EliteDesk 800 G1 (000025).
 - d. Select the user in the list for **Request for** field, select the **Quantity**, add attachments if needed.
 - e. Click **Add to Cart**, you will get a message like :
 Deskpro HPE EliteDesk 800 G1 (000025) has been added to your cart.
 - f. Click **View Cart/Checkout**.
 - g. Click **Submit Request**.
 - h. Enter values in the **Purpose** and **Urgency** fields.

- i. Click **Submit**.
- j. Log on to AM, from menu **Asset lifecycle > Procurement lifecycle > Purchase requests**, the request created in SM should be in the list.
- k. The request is then processed in Asset Manager and the standard procurement cycle is triggered.
- l. The status of the cart is updated in HPE Service Manager through the status.scn scenario in HPE Connect-It.

For more information about the HPE Service Manager Service Catalog and the request creation procedure in HPE Service Manager, refer to the Service Catalogs section of the HPE Service Manager online help.

CI Reconciliation Priority Best Practices

This chapter includes:

Overview

In the SACM Solution, as well as from the ITPS Suite perspective, UCMDB is the central CI repository. As such, it is populated with CI information from various HP and third-party products. Therefore, UCMDB must decide which source is more reliable and which source has the most accurate information.

UCMDB uses internal out-of-the-box reconciliation rules that make sure no duplications are created and the CI information is accurate. In addition, it also uses the Reconciliation Priority module that gives the Configuration Manager the power to determine for UCMDB which integration points are more reliable for which CI Types or Attributes (for more information, see Chapter 10 Reconciliation Priority in the HP UCMDB Data Flow Management Guide).

In the SACM Solution, UCMDB is populated with CI information from two products – AM and SM.

This chapter details the Best Practice guidelines and configuration instructions for how to prioritize the information received from AM and SM into UCMDB in order for your UCMDB to contain the most accurate CI information.

Priorities Logic

Consider the following when building the priorities detailed in the following CI Reconciliation Priority Mapping table:

- UCMDB DDMA discovery reflects reality by its capability and is the most reliable source of information for discoverable CITs.
- Business services and applications information is most likely to be more accurate in SM as the owner of the Service Catalog.

- There are CITs that are coming from AM or SM—but not both. Thus, if it is a discoverable CIT, DDMA will get the highest priority, and AM or SM will get the lower priority. Otherwise, the relevant product will get the priority. For example, for the Asset CIT, AM gets the highest priority.

Note: The following table of priorities is based only on CITs and Attributes that are supported by the Out-of-the-Box (OOTB) population integration.

The CI Reconciliation Priority Mapping table maps the various CITs and attributes between the three products—UCMDB, AM, and SM. The table also contains the necessary values to be defined for each integration point using the following instructions.

UCMDB CI / Attribute	Data Sources in the other products		Reconciliation Priority		
	AM	SM	Discovery	AM	SM
/Asset	deviceAsset	N/A	100	300	
asset_tag	AssetTag				
/ConfigurationItem/BusinessElement/Service/BusinessService	N/A	Business Service/ Business Service	100		200
name		Identifier			
/ConfigurationItem/BusinessElement/BusinessApplication	N/A	Business Service/ Application Service	100		200
name		Identifier			
/ConfigurationItem/BusinessElement/Service/InfrastructureService	N/A	Business Service/ Infrastructure Service	100		200
name		Identifier			
/ConfigurationItem/InfrastructureElement/Location	amLocation	N/A	100	200	
name	Name				
location_type	LocationType				
/ConfigurationItem/InfrastructureElement/Node	host	Computer	300	100	100
name	TcpIpHostName	N/A			
serial_number	AssetSerialNo	SerialNo	300	200	100
bios_serial_number	N/A	BIOSId			
discovered_os_name	OperatingSystem	OS			
discovered_os_version	OSServiceLevel	OSVersion			
memory_size	IMemorySizeMb	PhysicalMemory			
discovered_vendor	N/A	Vendor	300		200
node_role	ComputerType	CI-SubType			
/ConfigurationItem/InfrastructureElement/NetworkEntity/IpAddress	amNetworkCard	Computer/addlIPAddr	300	100	100
ip_isdhcp	bdHCPEEnabled	N/A			
ip_address	TcpIpAddress	N/A			
ip_address_value	ip_address_value	N/A			
ip_address_property	ip_address_property	N/A			
name	TcpIpAddress	AddIPAddress			
ip_netmask	SubnetMask	AddSubnet			
/ConfigurationItem/InfrastructureElement/NodeElement/Interface	amNetworkCard	Computer/AddlMacAddress	300	100	100
mac_address	PhysAddress	AddMacAddress			
name	N/A	AddMacAddress			
/ConfigurationItem/InfrastructureElement/NodeElement/CPU	N/A	Computer/CPU	300	100	100
name		CpuName			
cpu_id		CpuID			
cpu_clock_speed		CpuClockSpeed			
/ConfigurationItem/InfrastructureElement/NodeElement/DiskDevice	N/A	Computer/disk.device	300	100	100
name		DiskName			
model_name		ModelName			
vendor		DiskVendor			
/ConfigurationItem/InfrastructureElement/NodeElement/FileSystem	N/A	Computer/file.system	300	100	100
disk_size		DiskSize			
mount_point		MountPoint			
filesystem_type		FilesystemType			
disk_type		DiskType			
/ConfigurationItem/InfrastructureElement/RunningSoftware	N/A	Running Software (???)	300		200
discovered_product_name		Identifier			
product_name		ApplicationName			
application_version		ProductVersion			
vendor		Vendor			
version		Version			

Note: For more information about the impact of the Global ID solution on CI reconciliation priorities, see the "CI Reconciliation Rules" section of the *HP Universal CMDB to HP Service Manager Integration Guide*, which is available from the following HP website:

<https://softwaresupport.hp.com/group/software/support/search-result/-/facetsearch/document/KM01294561>

CI Reconciliation Priority

One of the challenges of managing an asset in its lifecycle phase as an active CI is to have as much information on it as possible collected from various systems—in addition to Discovery (such as


business-related information)—but at the same time prevent duplication in the CMS system and, most importantly, keep the data's integrity. For these reasons, UCMDB holds the reconciliation capability and, in addition, allows the Configuration Manager to set priorities for the various sources of CIs.

In the SACM Solution, we have three sources – AM, SM and DDM. As part of the Solution's assets, there are Best Practices guidelines on how to set the Reconciliation Priority between AM, SM and DDM.


To configure CI Reconciliation Priority


1. Log on to UCMDB as an administrator.
2. From the left-hand navigation pane, select **Data Flow Management > Reconciliation Priority**.
3. In the CI Types pane, in the **Managed Object** tree, select the relevant CI type.
4. In the CI Type Overrides pane, select the integration name you wish to change the priority value for and click the **Priority** field to modify the value.


Repeat this step for every Integration Name you wish to change the Priority value for.

5. When the changes for the CI types are complete, click the **Save**  button in the CI Types pane.

To set the priority for a specific attribute for a particular CI type:

1. Select the relevant integration name in the CI Type Overrides pane.
2. In the Attribute Overrides pane, click the **Add**  button. The Add Attribute dialog box is displayed.
3. Select the relevant Attribute from list and click **OK**. The selected CI Attribute appears in Attribute Overrides pane.
4. Modify the **Priority** value.

Note: If you add the wrong attribute to the list, use the **Reset Attribute**  button to reset the Attribute Overrides list. Be aware this action clears all values in the **Attribute Overrides** list.

5. When finished with the changes to that CI type, click the **Save**  button in the CI Types pane.

Technical Reference

This Appendix includes:

Overview

This appendix explains, for each database involved in the SACM integration, which data objects are sourced and mapped by which scenario or adapter, as well as the reconciliation keys used and any special requirements needed for data transfers to work properly.

HP Service Manager <-> HP Asset Manager

This section includes:

Overview

Overview of the HP Asset Manager – HP Service Manager integration

Integration direction	From AM to SM	From SM to AM
Integration technology	HP Connect-It	HP Connect-It
Populated data	<ul style="list-style-type: none">• amsm-ppt.scn:<ul style="list-style-type: none">◦ Companies◦ Vendors◦ Locations◦ Departments◦ Contacts◦ Models	<ul style="list-style-type: none">• smam-ppt.scn:<ul style="list-style-type: none">◦ Companies◦ Vendors◦ Locations◦ Departments◦ Contacts◦ Models

Integration direction	From AM to SM	From SM to AM
	<ul style="list-style-type: none"> ○ Stock rooms ○ Links between CIs and Contact, Model, Vendor, Location, Department ● amsm-ci-ppt-link.scn ○ Links between CIs and Contact, Model, Vendor, Location, Department 	<ul style="list-style-type: none"> ○ Stock rooms ● smam-wo.scn: <ul style="list-style-type: none"> ○ Changes and tasks
HP Connect-It scenarios	<ul style="list-style-type: none"> ● amsm-ppt.scn ● amsm-ci-pptlink. scn 	<ul style="list-style-type: none"> ● smam-ppt.scn ● smam-wo.scn

Note: These scenarios do not create CIs. CIs are created in AM directly or created in HP Discovery and Dependency Mapping Inventory and populated in AM.

AM CIs are populated/federated to UCMDB.

UCMDB CIs are populated to SM.

What happens when a CI does not exist in SM

If a CI does not exist in SM yet when a PPT/CI link is presented, an AM output event is created by the HP Connect-It scenarios.

HP Connect-It will try and process the output events whenever the scenario is rerun.

Note that output events automatically expire according to the AM database options:

1. Start the AM Windows client and connect to the database.
2. Use the **Administration/ Database options...** menu.
3. Configure the **Event management/ Expiration time for output events (hours)** option.

Reconciliation keys for amsm-ppt.scn

This section includes:

Companies

Key in SM	AM value searched for in the SM key
company:customer.id	amCompany.Code

Only AM companies for which **amCompany.Qualif1 = Parent company** are replicated.

For languages other than English, the <HP Connect-It installation folder>\config\ac\strings\qualif.str file must be customized. The ID of the string to modify in this file is **AMQUALIF_PARENT**. Replace **Parent** company with the right string for your language.

The AM amCompany:Code field must be populated.

Vendors

Key in SM	AM value searched for in the SM key
vendor:vendor	amCompany.Name
AND vendor:location	amCompany.MainSite:Barcode

Locations

Key in SM	AM value searched for in the SM key
location:location	amLocation.BarCode

The AM **amLocation.BarCode** field must be populated.

Departments

Key in SM	AM value searched for in the SM key
dept:company + dept:dept	<p>amEmplDept.Location.Company.Code Reconciliation uses the following rule:</p> <pre>RetVal = RemoveSlashAtExtremity([FullName]) If [Location.Company.Code] <> "" Then</pre>

Key in SM	AM value searched for in the SM key
	<pre data-bbox="488 310 1040 506">RetVal = [Location.Company.Code] & "/" - & RetVal End If</pre> <p data-bbox="488 531 607 562">Example:</p> <p data-bbox="488 583 873 615">In AM, we have four departments:</p> <ul data-bbox="488 636 976 1052" style="list-style-type: none"> <li data-bbox="488 636 764 716">• Department NameA FullName = /NameA/ <li data-bbox="488 737 927 821">• Department NameB under NameA FullName = /NameA/NameB/ <li data-bbox="488 842 976 926">• Department NameC under NameB FullName = /NameA/NameB/NameC/ <li data-bbox="488 947 1073 1031">• Department NameD under NameC FullName = /NameA/NameB/NameC/NameD/ <p data-bbox="521 1073 1149 1136">NameD is linked to a location linked to a company with amCompany.Code = COMPANY_CODE SM.</p> <p data-bbox="488 1157 1382 1199">The key for NameD is COMPANY_CODE/NameA/NameB/NameC/NameD.</p> <p data-bbox="488 1220 1040 1262">The key for NameC is NameA/NameB/NameC.</p>

Only AM departments for which **amEmpIDept.bDepartment = 1** are replicated.

Contacts

Key in SM	AM value searched for in the SM key
contacts:contact.name	amEmpIDept.Name, Name.FirstName (amEmpIDept.BarCode)

Note:

- **amEmpIDept:Name** can be up to 50 characters long, **Name:FirstName** up to 30 characters, and **amEmpIDept.BarCode** up to 255 characters long.
- **contacts.contact.name** can only store 140 characters.

- If the **amEmpIDept.BarCode** field does not exceed 55 characters, the reconciliation keys work fine.

Models

Key in SM	AM value searched for in the SM key
model:part.no	amModels.BarCode

Note: The AM **amModels.BarCode** field must be populated.

Stock rooms

Key in SM	AM value searched for in the SM key
stockroom:stockroom	amStock.Name

Reconciliation keys for amsm-ci-ppt-link.scn

This section includes:

Links between device CIs and PPT objects

Key in SM	AM value searched for in the SM key
device:asset.tag	amComputer.AssetTag
<p>Devices are linked to the following objects:</p> <ul style="list-style-type: none"> • Contact • Model • Vendor • Location • Department 	<p>The same keys are used as for the transfer of PPTs themselves. See tables above.</p>

The AM **amComputer:AssetTag** field must be populated.

Reconciliation keys for smam-ppt.scn

This section includes:

The smam-ppt.scn scenario uses the SACMIntegration web service.

Locations and their link to a company and a country

Key in AM	SM value searched for in the AM key
amLocation.BarCode	location:location
amCompany.Code	location:company
amLocation.Country.Name	location:country

If no country can be found for which **amCompany:Code = location:country**, the location will be linked to a location with **amCompany:Code = Unknown country**.

Make sure the AM **amCompany:Code** field is populated.

Make sure the AM **amCountry:Name** field is populated with unique values.

smam-ppt.scn uses the **ScCountryToAc** map table in the catmod.mpt file to map SM countries to AM countries.

Companies

Key in AM	SM value searched for in the AM key
amCompany.Code	company:CompanyCode
amCompany.MainSite.Name	company:CompanyCode
amCompany.Sites.Name	company:CompanyCode

Make sure the AM **amCompany.CompanyCode** field is populated with unique values.

Make sure the AM **amCompany.Code** field is populated.

SM Companies replicated as AM departments

Key in AM	SM value searched for in the AM key
amEmplDept.BarCode	company:CompanyCode
amEmplDept.Location.FullName	company:CompanyCode

Make sure the SM **amCompany.CompanyCode** field is populated with unique values.

amEmplDept.bDepartment is set to 1.

Departments

Key in AM	SM value searched for in the AM key
amEmplDept.FullName	dept:dept.structure

amEmplDept.bDepartment is set to 1.

A function converts **dept:dept.structure** to **amEmplDept.FullName**.

Contacts

Key in AM	SM value searched for in the AM key
amEmplDept.BarCode	contacts:contactname
amEmplDept.Location.BarCode	contacts:location
amEmplDept.Parent.FullName	contacts:dept

Make sure the SM **contacts:locationcode** field is populated with unique values.

Operators

Key in AM	SM value searched for in the AM key
amEmplDept.BarCode	operator:name
amEmplDept.WorkUnit.Description	operator:name

Key in AM	SM value searched for in the AM key
amEmplDept.WorkUnit.Model.Name	The scenario links the employee to the model for which amModel.Name = Hourly rate

Operators is an extension of the contacts table.

After contacts have been imported, operators are imported to populate **amEmplDept.WorkUnit**.

A model is created in AM with **amModel.Name = Hourly rate**.

This model is linked to a nature (which must pre-exist) with **amNature.Code = TCO_WORK_UNIT** and also linked to a parent model which **amModel.Name = Work** unit and which will be created if it does not exist.

The parent model must also be linked to a similar nature.

This must be created by hand or can be retrieved through the import of **Financials – Line-of-business data (TCO-budgets-chargeback)**.

Vendors

Key in AM	SM value searched for in the AM key
amCompany.Name	vendor:vendor
amCompany.MainSite.FullName	vendor:vendor.id + vendor:vendor.location
amCompany.MainSite.Country.Name	vendor:country
amCompany.Contact.FirstName + amCompany.Contact.Name	<ul style="list-style-type: none"> • vendor:contract.person • vendor:order.person • vendor:sales.mgr • vendor:service

Make sure **vendor:contract.person**, **vendor:order.person**, **vendor:sales.mgr** and **vendor:service** use the **<Last name>**, **<First name>** format.

This is split into **amCompany.Contact.FirstName** and **amCompany.Contact.Name** in AM.

Make sure the SM **vendor:vendor** field is populated with unique values. If two different SM vendors have the same value for the **vendor:vendor** field in SM in different locations, only the first vendor is imported to AM.

Make sure the SM **vendor:vendor.location + vendor:vendor.id** fields are populated with unique values. If two SM vendors have the same value for the **vendor:vendor.location** field and for the **vendor:vendor.id** field although they are linked to different locations (address differs), the two vendors will be linked to the same location (the first that was transferred to AM)

Make sure the AM **amCountry.Name** field is populated with unique values.

The HP Connect-It scenario uses the **ScCountryToAc** map table in the catmod.mpt file to map **amCountry.Name**.

SM vendor sites replicated as companies in AM

Key in AM	SM value searched for in the AM key
amLocation.FullName	vendor:vendor.id + vendor:location are used to create a full name
amLocation.Company.Name	vendor:vendor

Make sure the SM **vendor:vendor.id + vendor:location** fields are populated with unique values. If two SM vendors have the same value for the **vendor:vendor.id + vendor:location** fields although they are linked to different locations (address differs), the two vendors locations will result in a single location in AM (the first that was transferred to AM)

When vendors were created (see "[Vendors](#)" on the previous page), if two different SM vendors have the same value for the **vendor:vendor** field in SM in different locations, only the first vendor is imported to AM. So when the location created by this mapping is linked to a company, it may be associated to the wrong company.

Stocks

Key in AM	SM value searched for in the AM key
amStocks.Name	stockRoom:stockroom
amStock.Supervisor.BarCode	stockRoom:manager
amStock.DelivLocation.Field1	location:location

Models

Key in AM	SM value searched for in the AM key
amModel.BarCode	model:part.no
amModel.Brand.Name + amModel.Brand.Com- model:manufacturer pany.Name	model:manufacturer
amModel.Nature.Code	model:Category
amModel.Parent.BarCo de	model:Category
amModel.Photo	<pre> if [RetrieveSACMModelResponse.model.instance.attachments.attac hment(0).name] = "" then RetVal = [RetrieveSACMModelResponse.mod el.instance.Model] + "_" + [RetrieveSAC MModelResponse.model.instance.PartNumber] else RetVal = "SM_" & [RetrieveSACMModelResp onse.model.instance.attachments.attachment(0).name] end if </pre>

amModel.Nature.Code is mapped using the **ScToAcNature** map table located in <HP Connect-It installation folder>\scenario\ac\ac53\sacm\mpt\catmod.mpt.

The natures listed in the **ScToAcNature** map table must exist in the AM database.

A model is not created in AM unless at least one of following is populated in SM: **model:Model**, **model:PartNumber**, **model:Category**.

Reconciliation keys for smam-wo.scn

This section includes:

This scenario propagates details of unplanned changes and tasks from SM to AM as Work Orders.

The relevant links between CIs and PPT data are propagated from AM to SM by another HP Connect-It scenario.

Changes > Workorders

Key in AM	SM value searched for in the AM key
amWorkOrder.WoNo	cm3r:header.number

Tasks > Workorders

Key in AM	SM value searched for in the AM key
amWorkOrder.WoNo	cm3t:header.number

For the corresponding CI

Key in AM	SM value searched for in the AM key
amComputer.AssetTag	device:logical.name

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