HP Operations Manager Dependency Mapping Automation

For Windows®, UNIX®, and Linux Operating Systems

Software Version: 8.20

Getting Started Guide

Manufacturing Part Number: None Document Release Date: July 2011 Software Release Date: July 2011



Legal Notices

Warranty

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

The information contained herein is subject to change without notice.

Restricted Rights Legend

Confidential computer software. Valid license from HP required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

Copyright Notices

© Copyright 2007-2011 Hewlett-Packard Development Company, L.P.

Trademark Notices

Adobe® and Acrobat® are trademarks of Adobe Systems Incorporated.

AMD and the AMD Arrow symbol are trademarks of Advanced Micro Devices, Inc.

 $Google^{\mbox{\tiny TM}}$ and $Google\ Maps^{\mbox{\tiny TM}}$ are trademarks of Google Inc.

Intel®, Itanium®, Pentium®, and Intel® Xeon® are trademarks of Intel Corporation in the U.S. and other countries.

iPod is a trademark of Apple Computer, Inc.

Java is a registered trademark of Oracle and/or its affiliates.

Microsoft®, Windows®, Windows NT®, Windows® XP, and Windows Vista® are U.S. registered trademarks of Microsoft Corporation.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates.

UNIX® is a registered trademark of The Open Group.

Documentation Updates

The title page of this document contains the following identifying information:

- Software Version number, which indicates the software version.
- Document Release Date, which changes each time the document is updated.
- Software Release Date, which indicates the release date of this version of the software.

To check for recent updates or to verify that you are using the most recent edition of a document, go to:

http://h20230.www2.hp.com/selfsolve/manuals

This site requires that you register for an HP Passport and sign in. To register for an HP Passport ID, go to:

http://h20229.www2.hp.com/passport-registration.html

Or click the New users - please register link on the HP Passport login page.

You will also receive updated or new editions if you subscribe to the appropriate product support service. Contact your HP sales representative for details.

Support

You can visit the HP software support web site at:

www.hp.com/managementsoftware/services

HP software online support provides an efficient way to access interactive technical support tools. As a valued support customer, you can benefit by using the support site to:

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

Most of the support areas require that you register as an HP Passport user and sign in. Many also require a support contract.

To find more information about access levels, go to:

$www.hp.com/managements of tware/access_level$

To register for an HP Passport ID, go to:

www.managementsoftware.hp.com/passport-registration.html

Getting Started

Introducing HPOM DMA

HP Operations Manager Dependency Mapping Automation (HPOM DMA) enables IT operations teams to align their activities more fully with the business services that the IT infrastructure supports. By providing automated dependency mapping and configuration consistency across multiple HP Operations Manager (HPOM) servers, HPOM DMA optimizes the ability of IT organizations to support their businesses and enables enhanced productivity and efficiency within the IT operations teams.

HPOM DMA helps you to:

- Automate and simplify the creation and maintenance of business service views within HPOM to enable business-focused impact and root cause analysis for operational incidents.
- Streamline incident analysis activities by providing drill down from managed nodes or services in HPOM into their change history within HP Universal CMDB (UCMDB).
- Consolidate systems and managed services information in a single place, UCMDB, to provide shared and consistent views across multiple HPOM servers.
- Rationalize the process of identifying new servers and applications, and the deploying of appropriate HPOM monitoring to the business-critical infrastructure.

For a full run down of the HPOM DMA concepts, see the *HPOM DMA Installation and User's Guide*.

What Do I Need?

To get started with HPOM DMA, you need to meet the following requirements and complete the following general steps.



It is recommend that you read the *HPOM DMA Installation and User's Guide* before you start the installation wizard to plan your decisions and gather the information that you need.

However, experienced users should find that this condensed guide helps you to quickly get HPOM DMA installed, configured, and running. All users can use this document as a checklist for the necessary tasks and as a pointer to the detailed information available in the manuals and the online help.

Install HP Operations Manager

Make sure that a supported version of HP Operations Manager is installed, including all patches and prerequisites required by HPOM DMA as it will be installed on the system hosting the HPOM management server. For further information, see Chapter 4, Preparing HPOM DMA in the *HPOM DMA Installation and User's Guide*.

Install HP Universal CMDB or Business Availability Center

Make sure that a supported version of HP Universal CMDB or HP Business Availability Center is installed, including all patches and prerequisites required by HPOM DMA.

- Set up discovery to suit your environment. Specific BAC or UCMDB attributes must be available in UCMDB so that Smart Message Mapping works. For example, include the Host DNS Name attribute so that nodes can be created and the hosted_on attribute can be set. See Attribute Mapping in the HPOM DMA Installation and User's Guide.
- Create an integration user account to access BAC or UCMDB. See Enabling HPOM DMA to Access UCMDB or BAC in the HPOM DMA Installation and User's Guide.

What Do I Install on the HPOM Host System?

Install the HP Operations Manager Dependency Mapping Automation software. Run and complete the installation process on the HPOM host system. For details, see Chapter 5, Installing HPOM DMA in the HPOM DMA Installation and User's Guide.

- If you are upgrading from HPOM DMA 8.10 to 8.20, follow the instructions in Chapter 8, Upgrading HPOM DMA in the *HPOM DMA Installation and User's Guide*.
- 2 If you want to synchronize your BAC or UCMDB information with an HPOM for UNIX installation on the PA-RISC platform, follow the instructions in Chapter 6, Installing HPOM DMA for HPOM for UNIX on PA-RISC Systems in the HPOM DMA Installation and User's Guide.
- 3 On the HPOM system, delete all shared files installed with HPOM:
 - a Close all open applications.
 - b Delete all files in the following directory:

```
<SharedDir>/server/conf/dma/
```

The files in this directory are installed with HPOM and must be replaced by the newer HPOM DMA 8.20 versions of the files. If you do not delete the files, the installation of HPOM DMA 8.20 will not be able to replace them.

- 4 Start the HPOM DMA application installer by executing the command:
 - UNIX and Linux:

```
<dvd-mountpoint>/hpdma_setup.sh
```

— Windows:

```
<dvd drive>:\hpdma setup.bat
```

5 Follow the on screen instructions and progress through the installation process using the **Next** and **Install** buttons.



To use BAC/UCMDB UI Launch from HPOM for Windows, you must install the Sun Java Plug-in, version 1.6.0 or higher, with an integration into your web browser.

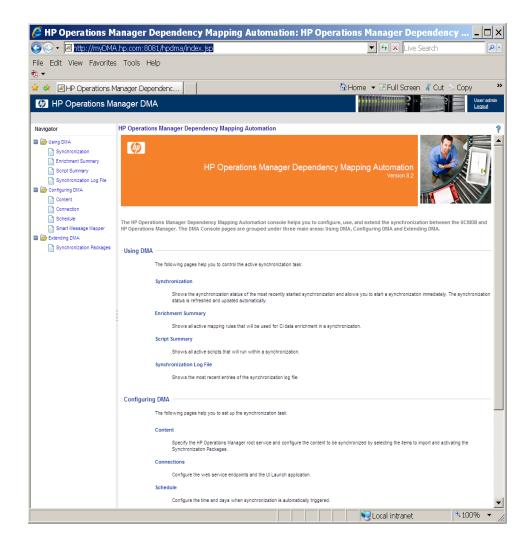
To use the HPOM for UNIX or Linux Java console on Windows, you must install a Java SE Runtime Environment (JRE). It is recommended that you configure HPOM for UNIX or Linux tools to use Internet Explorer when accessing URLs.

See Enabling UI Launch from HPOM to BAC or UCMDB in the *HPOM DMA Installation and User's Guide*.

How Do I Start the HPOM DMA Console?

Start the HPOM DMA console by double-clicking the desktop icon (Windows) or by entering the following address into a web browser:

http://<HPOM_Server_System>:8081/hpdma



What Do I Install on the UCMBD or BAC Host System?

HPOM DMA delivers predefined TQL queries for operating system SPIs and database SPIs which must be deployed and registered on the system hosting BAC or UCMDB.

Upload and Deploy the HPOM DMA Packages

To deploy and register the predefined TQL queries on your BAC or UCMDB host system:

1 Go to the directory:

Version 7.5x

<InstallDir>/misc/dma/ucmdb/7

Version 8.0x

<InstallDir>/misc/dma/ucmdb/8

Version 9.0x

<InstallDir>/misc/dma/ucmdb/9

- 2 Deploy the hpdmacore.zip file. This package must be deployed before any of the other HPOM DMA packages.
- 3 Deploy any of the following packages that you want to use:
 - hpdmaos.zip for operating systems
 - hpdmadb.zip for databases
 - hpdmasamples.zip an example to customize Service Navigator views
 - hpdmaEUM.zip for HP BAC End User Monitors

For details, see Deploying HPOM DMA Packages to UCMDB or BAC in the *HPOM DMA Installation and User's Guide*.

Review and Adapt the TQL Queries

Review the TQL queries in BAC or UCMDB and adapt them to your environment.

For details, see Reviewing the HPOM DMA Packages and Adapting HPOM DMA TQL Queries in the HPOM DMA Installation and User's Guide.

Apply the Enrichment Rules

Apply the enrichment rules.

For details, see Apply Enrichment Rules in the *HPOM DMA Installation and User's Guide*.

What Do I Configure in HPOM for UNIX or Linux?

You must make the following assignments on the HPOM for UNIX or Linux management server:

- Assign the ROOT_DMA_Service Service Group to an HPOM User
- Assign the CMDB Node Groups to an HPOM User

If you want to monitor HPOM DMA, you should:

 Assign and Deploy the OM DMA Policy Group to the HPOM for UNIX or Linux Management Server

If you want to automatically create STDs to suit non-matching CIs as they are imported into HPOM, you should:

• Create Automatic Service Type Definitions

If you want to assign user profiles to services in HPOM, you should:

• Assign User Profiles to Services

If you want to configure automatic policy distribution, you should activate the Script: Trigger Policy Distribution Synchronization Package as described in:

Automating Policy Distribution

The agent types are automatically configured during installation, but if you add or delete agent types on the HPOM server, you must:

• Configure the Agent Types Installed on the HPOM Management Server

Assign the ROOT DMA Service Service Group to an HPOM User

opcservice -assign <HPOM_User_Name> ROOT_DMA_Service

For details, see Assigning the CMDB Service Group to an HPOM User in the *HPOM DMA Installation and User's Guide*.

Assign the CMDB Node Groups to an HPOM User

From the HPOM UI, select an HPOM user and assign the following CMDB node groups as responsibilities for this user:

- CMDB
- CMDB_removed

For details, see Assigning the CMDB Node Groups to an HPOM User in the *HPOM DMA Installation and User's Guide*.

Assign and Deploy the OM DMA Policy Group to the HPOM for UNIX or Linux Management Server

You can monitor the operation of your HPOM DMA installation. You can monitor the following:

- Failure of the HPOM DMA synchronization from UCMDB to HPOM
- HPOM DMA synchronization log file
- HPOM Web Service log file
- Nodes in UCMDB previously synchronized to HPOM but missing from the current synchronization.

If you want to monitor HPOM DMA, you should assign and deploy the OM DMA policy group to the HPOM management server.

For details, see Assigning the OM DMA Policy Group in the *HPOM DMA Installation and User's Guide*.

Create Automatic Service Type Definitions

Service Type Definitions (STDs) are used to identify how CIs from UCMDB are to be handled when building services in HPOM on synchronization. If an STD for an imported CI is not available in HPOM, it cannot be displayed in Service Navigator and an error message is displayed explaining that STDs are missing. HPOM DMA can automatically create STDs to suit non-matching CIs as they are imported into HPOM.



Automatic service type definition creation is disabled by default.

To enable automatic service type definition creation, follow these steps:

1 Enable automatic service type definition creation in the HPOM web service:

```
ovconfchg -ovrg server -ns
opc.WebService.ConfigurationItem -set StdCreationEnabled
true
```

2 Restart the Tomcat server:

```
ovc -restart ovtomcatB
```

Assign User Profiles to Services

User Profile or Role Assignment allows you to map a service to an HPOM user profile or role. After synchronization, the service is assigned to all operators that are included in the specified HPOM user profile or role.

User profile assignment for services is disabled by default, and can be enabled as follows:

1 Configure the HPOM for UNIX or Linux service engine to consider user profiles and restart the service engine:

```
ovconfchg -ovrg server -ns opc -set
OPCSVC_CONSIDER_PROFILES TRUE
HPOM 8.xx: opcsv -start
HPOM 9.xx: ovc -restart SERVER
```

- 2 Create user profiles and assign operators to the profiles (see HPOM for UNIX or Linux documentation).
- 3 Create the user profiles in the service engine repository:

```
opcservice -operator <UserProfile>
```

4 Assign and deassign the user profiles to and from an existing service:

```
opcservice -assign <UserProfile> <ServiceName>
opcservice -deassign <UserProfile> <ServiceName>
```

5 Enable user profile assignment in the HPOM web service:

```
ovconfchg -ovrg server -ns
opc.WebService.ConfigurationItem -set
UserProfileAssignmentEnabled true
```

6 Restart the Tomcat server, if required:

```
ovc -restart ovtomcatB
ovc -start dmamsg
```

For details, see Assigning User Profiles for Services on HPOM for UNIX or Linux in the *HPOM DMA Installation and User's Guide*.

Automatic Policy Distribution

The HPOM DMA Script: Trigger Policy Distribution synchronization package contains a post upload script that triggers policy distribution.

To enable automatic policy distribution, activate the Script: Trigger Policy Distribution synchronization package from the Content page.

For details, see Automatic Policy Distribution in the *HPOM DMA Installation* and *User's Guide*.

Configure the Agent Types Installed on the HPOM Management Server

The agent types are automatically configured during installation, but if you add or delete agent types on the HPOM management server, you must update the agent packages installed on the HPOM management server.

For details, see Configuring HPOM Agent Types in the HPOM DMA Installation and User's Guide.

What Do I Configure in HPOM for Windows?

The following assignments may be made on the HPOM for Windows management server:

- Deploy the OM DMA Policy Group to the HPOM for Windows Management Server, if you want to monitor HPOM DMA.
- Create Automatic Service Type Definitions, if you want to automatically create STDs to suit non-matching CIs as they are imported into HPOM.

Assign User Roles to Services, if you want to map a service to an HPOM user role.

Deploy the OM DMA Policy Group to the HPOM for Windows Management Server

You can monitor the operation of your HPOM DMA installation. You can monitor the following:

To deploy the OM DMA policy group, from HPOM UI, follow these steps:

- 1 Policy management \rightarrow Policy groups \rightarrow OM DMA
- 2 Right-click \rightarrow All Tasks \rightarrow Deploy on...
- 3 Select the management server and click **OK**.

For details, see Assigning and Deploying the OM DMA Policy Group in the *HPOM DMA Installation and User's Guide*.

Create Automatic Service Type Definitions

Service type definitions (STDs) are used to identify how CIs from UCMDB are to be handled when building services in HPOM on synchronization. If an STD for an imported CI is not available in HPOM, it cannot be displayed in Service Navigator and an error message is displayed explaining that STDs are missing. HPOM DMA can automatically create STDs to suit non-matching CIs as they are imported into HPOM.



Automatic service type definition creation is disabled by default.

To enable automatic service type definition creation, follow these steps:

1 Enable automatic service type definition creation in the HPOM web service:

ovconfchg -ovrg server -ns
opc.WebService.ConfigurationItem -set StdCreationEnabled
true

2 Restart the Tomcat server:

ovc -restart ovtomcatB

Assign User Roles to Services

User Profile or Role Assignment allows you to map a service to an HPOM user profile or role. After synchronization, the service is assigned to all operators that are included in the specified HPOM user profile or role.

User profile assignment for services is disabled by default.

To configure user role assignment:

1 Enable user role assignment in the HPOM web service:

```
ovconfchg -ovrg server -ns
opc.WebService.ConfigurationItem -set
UserProfileAssignmentEnabled true
```

- 2 Restart the IIS Admin Service.
- 3 Restart Smart Message Mapping, if required:

```
ovc -start dmamsg
```

For details, see Assigning User Roles for Services on HPOM for Windows in the *HPOM DMA Installation and User's Guide* and the *HPOM Extensibility Guide*.

What Do I Configure in HPOM DMA?

The following configuration steps must be completed before you are ready to synchronize HPOM with BAC or UCMDB:

- Change the HPOM DMA Console Default Password
- Specify the Connections in HPOM DMA on page 19
- Specify the Synchronization Content in HPOM DMA on page 20

Change the HPOM DMA Console Default Password

To aid security, it is recommend that you immediately create at least one new user with an associated password or switch to LDAP authentication and delete the default user admin.

To add a new user, enter the following command:

UNIX and Linux:

```
<InstallDir>/bin/dmauser.sh -a <user name> <password>
```

Windows 32-bit:

```
<InstallDir>/bin/dmauser -a <user name> <password>
```

Windows 64-bit:

```
<InstallDir>/bin/win64/dmauser -a <user name> <password>
```

Check that the new user account is available and delete the default user from the local users store.

To delete the default user admin, enter the following command:

UNIX and Linux:

```
<InstallDir>/bin/dmauser.sh -d admin
```

Windows 32-bit:

```
<InstallDir>/bin/dmauser -d admin
```

Windows 64-bit:

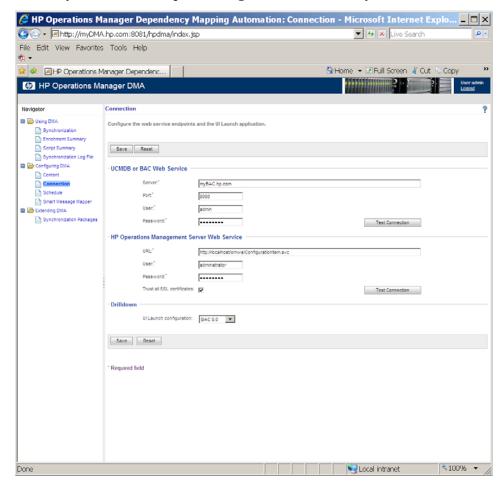
```
<InstallDir>/bin/win64/dmauser -d admin
```

For details on managing HPOM DMA users, see Managing Users and Passwords in the *HPOM DMA Installation and User's Guide*.

For details on LDAP authentication, see LDAP Authentication in the *HPOM DMA Installation and User's Guide*.

Specify the Connections in HPOM DMA

Specify the web service endpoint connections between UCMDB and the HPOM system and the import settings for HPOM DMA synchronization.



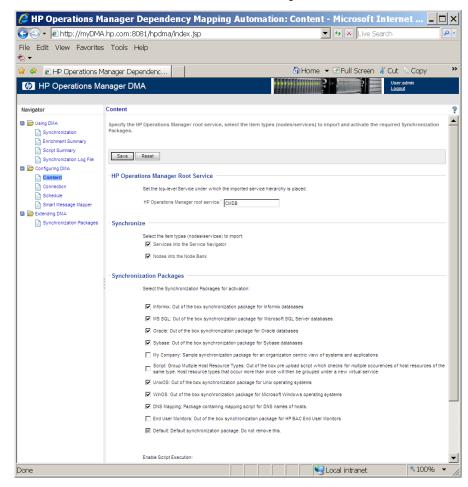
For details, see Specifying Web Service Endpoints in the *HPOM DMA Installation and User's Guide*.

Specify the Synchronization Content in HPOM DMA

Before attempting to import node and service information from BAC or UCMDB into HPOM, you must specify some basic settings:

- HPOM root service for services imported from BAC or UCMDB. This root service must be contained in the existing service hierarchy.
- Services and nodes configuration items to be synchronized.
- Synchronization packages that you wish to activate.

For details, see Configuring HPOM DMA in the *HPOM DMA Installation and User's Guide* and the HPOM DMA online help.



Restricting Service Synchronization to Nodes Managed by a Selected HPOM Management Server

If you want to restrict service synchronization to nodes managed by a specific HPOM management server, you must follow these steps:

• Modify BAC or UCMDB Classloader

- Install the DMA OM Agent Discovery Pattern on BAC or UCMDB system
- Configure the TQL queries to match your selected HPOM management server

For details, see Restricting Service Synchronization to Managed Nodes in the *HPOM DMA Installation and User's Guide*.

How Do I Synchronize HPOM with BAC or UCMDB?

Manually Synchronize Services and Nodes in HPOM

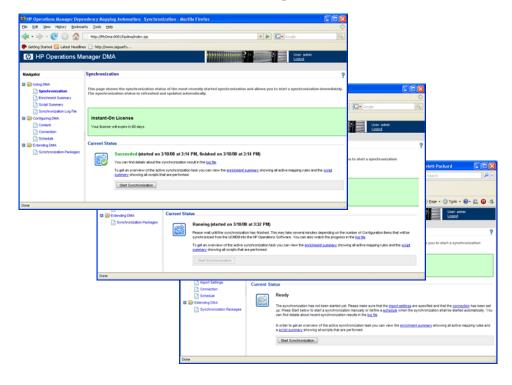
Now you are ready to manually synchronize nodes and services in HPOM with their associated CI values in BAC or UCMDB to provide you with:

- Near real-time view of your environment
- Business services
- Dependencies between applications
- Data from other HP Software products

From the HPOM DMA console, open the Synchronization page and click **Start Synchronization** to import the latest information from BAC or UCMDB.

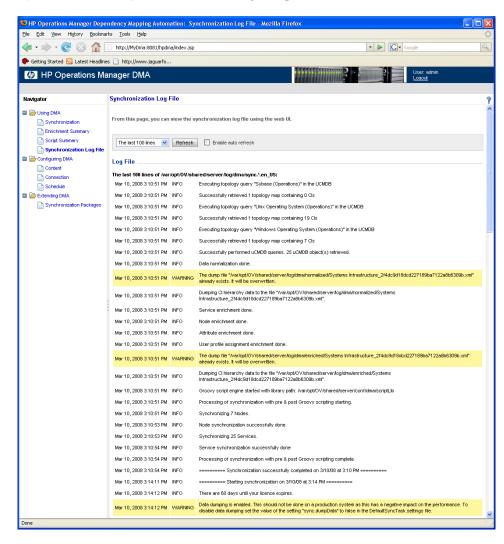
Alternatively, set up a schedule to automatically trigger synchronizations.

For details, see the HPOM DMA online help.

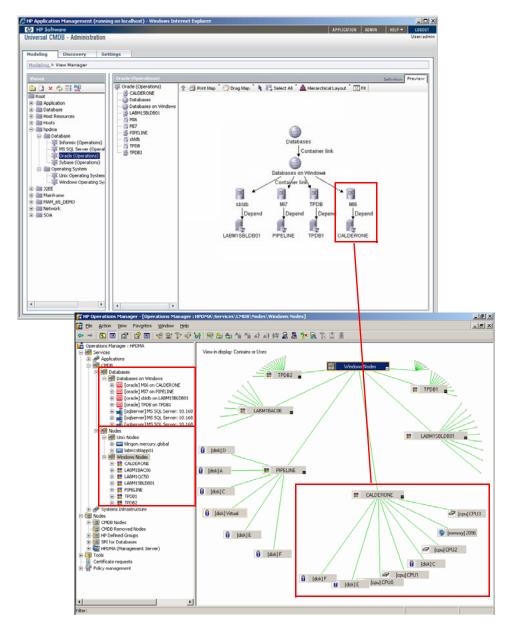


Check the Synchronization Log File

To take a more detailed look at the synchronization results, check the synchronization log file. The log file can be viewed from within the HPOM DMA console using the **log file** link on the Synchronization page or by selecting **Synchronization Log File** from the Navigator pane.



Discovery data from BAC or UCMDB and the associated CI information is added by HPOM DMA into the HPOM Service Map, along with some associated hardware dependency details.



How Does HPOM DMA Help Me Solve Problems?

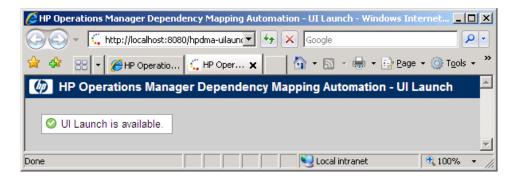
When operators receive status change messages, they can open BAC or UCMDB from the HPOM console and drill down directly to the problem area using one of the following UI Launch tools:

- Show Correlated CI Map
- Show Change Report
- Show Neighborhood Map
- Show Triage Report (BAC only)
- Show End User Monitors (BAC only)
- Show Service Impact (BAC only)

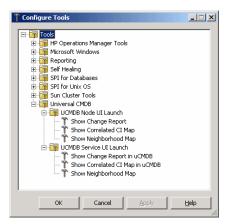
To do this, you must complete some integration steps to set up the required tools:

- Upload tools into HPOM using the dmadrilldown-toolgen command.
- Configure the UI Launch web tool in the HPOM DMA console.

For details, see Installing and Configuring the UI Launch in the *HPOM DMA Installation and User's Guide*.



The following tools are installed for UCMDB:



The complete list of tools is:

- Show Correlated CI Map
- Show Change Report
- Show Neighborhood Map
- Show Triage Report (BAC only)
- Show End User Monitors (BAC only)
- Show Service Impact (BAC only)

UI Launch for Nodes and Messages from HPOM for UNIX or Linux

To UI launch into BAC or UCMDB from HPOM and display node-related or message-related information:

- 1 From the Java UI, open the shortcut menu from a node or message.
- 2 From the shortcut menu, select:

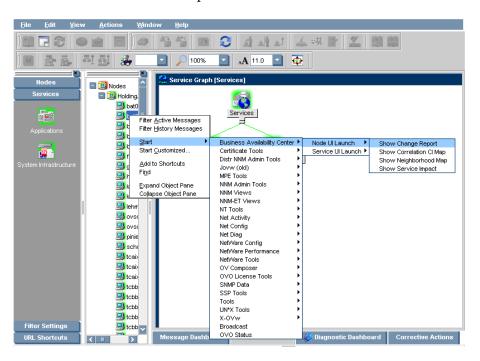
Start \to Tools \to UCMDB or Business Availability Center \to Node UI Launch The Node UI Launch tools are displayed.

3 Click the tool associated with the UI launch that you require.
The selected UI launch view opens in a web browser.

UI Launch for Services from HPOM for UNIX or Linux

To UI launch into BAC or UCMDB from the HPOM and display service-related information:

- 1 From the Java UI, open the shortcut menu from a service.
- 2 From the shortcut menu, select:
 - Start \to Tools \to UCMDB or Business Availability Center \to Service UI Launch The Service UI Launch tools are displayed.
- 3 Click the tool associated with the UI launch that you require.
 The selected UI launch view opens in a web browser.



UI Launch for Nodes and Services from HPOM for Windows

To UI launch into BAC or UCMDB from HPOM and display node-related or service-related information:

- Right-click a node or service to open the shortcut menu.
- 2 From the shortcut menu, select:

All Tasks → Launch Tool

3 In the Tool dialog, select the tool associated with the UI launch that you require and click **Launch**.

The selected UI launch view opens in a web browser.

UI Launch for Messages from HPOM for Windows

To UI launch into BAC or UCMDB from the HPOM Message Browser and display node-related information:

- 1 Right-click a message to open the shortcut menu.
- 2 From the shortcut menu, select:

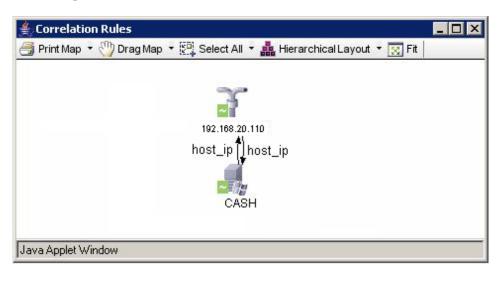
Launch Tool \rightarrow Nodes...

3 In the Tool dialog, select the tool associated with the UI launch that you require and click **Launch**.

The selected UI launch view opens in a web browser.

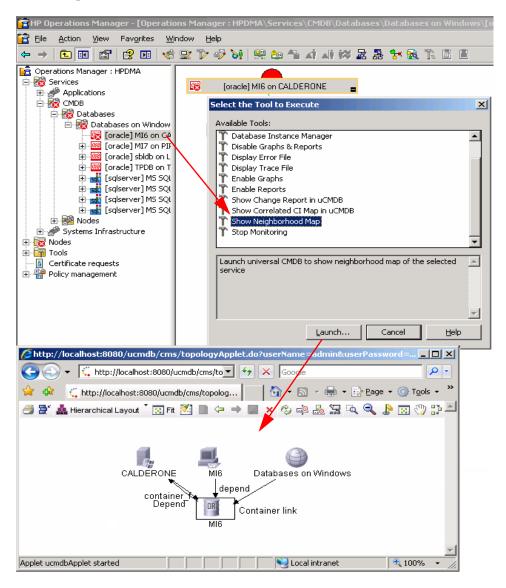
Launch the Correlated CI Map

For details on how to launch UCMDB and BAC tools, see the HPOM DMA online help.



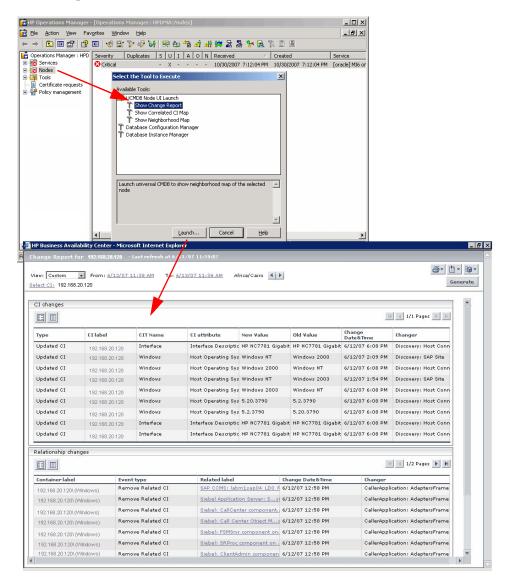
Launch the Neighborhood Map for the M16 Oracle Instance

For details on how to launch UCMDB and BAC tools, see the HPOM DMA online help.

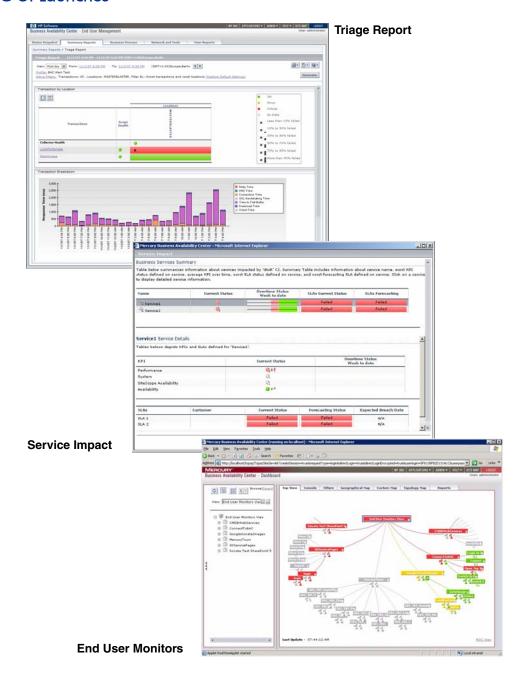


Launch the Change Report for a Node

For details on how to launch UCMDB and BAC tools, see the HPOM DMA online help.



BAC UI Launches



How Does HPOM DMA Help Me to Assign Messages to Services?

With HPOM DMA, you can choose UCMDB as the discovery source of your services (see also Select the Discovery Source on page 37). With UCMDB as the discovery source), services are based on CIs that are uploaded from BAC or UCMDB. The HPOM DMA synchronization process determines and generates the service IDs, which differ from the service names contained in traditional HPOM messages.

To direct HPOM messages generated by existing custom or SPI monitoring policies to the associated services synchronized from UCMDB, you can choose between enabling and using Smart Message Mapping and customizing the service IDs generated by HPOM DMA (see also Customize the ID of Services Synchronized from UCMDB on page 37).

Configure and Start Smart Message Mapping

Smart Message Mapping allows you to use existing custom or SPI monitoring policies without modifications. It solves the difficulties of mapping service IDs between products and provides a smooth switch between UCMDB discovery and SPI discovery.

Without Smart Message Mapping, a message containing the precise service ID is required to update the status of a service. See also Figure 1 on page 36.

Smart Message Mapping does not need the *exact* service ID. Smart Message Mapping looks for hints in a message that help to identify the service. Such hints include, for example, the service name, object, or application attribute of the message. It then compares the hints and hostname with all attributes of all services. When the best match is found, it replaces the existing service name in the message with the service ID of the best matching service. The modified message is then forwarded to HPOM and the message colors the service.

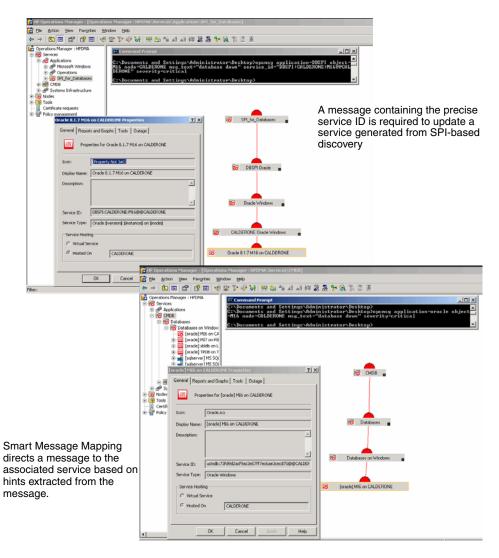
In addition, Smart Message Mapping enables you to attach CI attributes as custom message attributes to HPOM messages. In HPOM, you can then look up CI information directly in the message instead of viewing the properties of services.

If you want to run Smart Message Mapping, you must:

- 1 Enable the Server MSI.
- 2 Start the Smart Message Mapping component.
- 3 Optional. Configure Smart Message Mapping defaults.

For details, see the HPOM DMA online help.

Figure 1 Smart Message Mapping



Customize the ID of Services Synchronized from UCMDB

When HPOM DMA synchronizes services from BAC or UCMDB, it applies the following default service ID:

```
ucmdb:<ci_uuid>@@<host>
```

This service ID is different from the service ID that is traditionally contained in HPOM messages. Therefore, without additional configuration, HPOM is not able to map messages generated by existing custom or SPI monitoring policies to services synchronized from UCMDB.

If you do not want to use Smart Message Mapping, you can use attribute mapping or scripting to customize the service ID that HPOM DMA assigns to services synchronized from UCMDB.

For details, see the HPOM DMA online help.

Select the Discovery Source

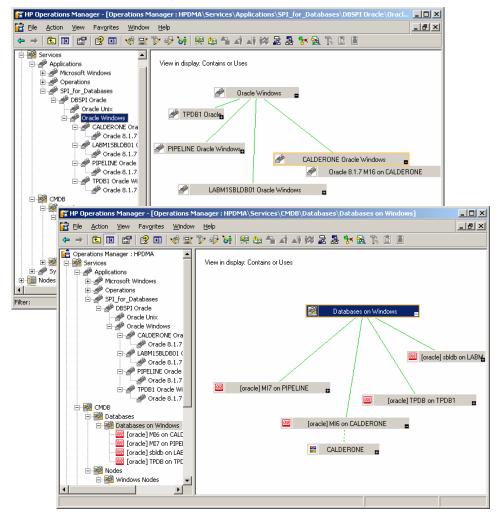
You can choose how to discover your services in the Service Navigator. The two types of discovery sources are:

- SPI discovery (agent-based)
- UCMDB discovery (agent-less)

Figure 2 on page 38 shows a service hierarchy generated by the SPI for Databases, and a service hierarchy generated by the HPOM DMA synchronization package for Oracle databases.

Figure 2 Types of Discovery

SPI-Based Service Discovery

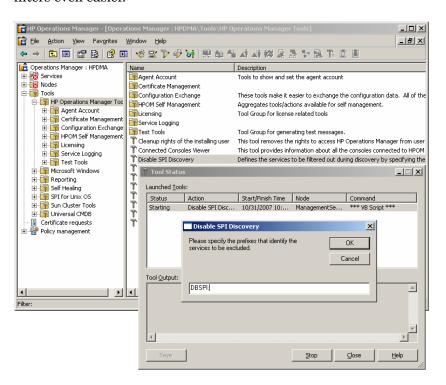


UCMDB-Based Service Discovery

If you want to use UCMDB-based discovery, you must disable the service upload of the SPI discovery to avoid displaying two instances of the same service.

To disable discovery sources:

- 1 Set filters in the XPL configuration under the namespace DiscoveryServiceFilter.
 - These filters filter out services based on service ID patterns, for example DPSPI:.
- 2 Delete service trees that were created from discovery sources that are no longer required.
 - The Disable SPI Discovery tool under Windows makes setting filters even easier.



In the example, you delete the service generated from the SPI:

```
DBSPI:CALDERONE:M16@@CALDERONE
```

However, the SPI discovery is still active. It is not recommended to switch off SPI discovery as some SPIs still need it for setting up their monitors.

The SPI sends a message:

```
opcmsg application=oracle object=M16 node=CALDERONE
msg_text="database down"
service id="DBSPI:CALDERONE:M16@@CALDERONE" severity=critical
```

Smart Message Mapping finds the best matching service using information contained in the service ID of the message.

For details, see Configuring Smart Message Mapping and Selecting the Discovery Source in the *HPOM DMA Installation and User's Guide*.

How Do I Extend HPOM DMA?

You can synchronize any CI types from BAC or UCMDB. However, to do this, you need to create a dedicated synchronization package. How to do this is documented in the *HPOM Extensibility Guide*.

To help you to get started, it is recommended that you familiarize yourself with the concepts of HPOM DMA and take a look at the out-of-the-box synchronization packages. See Concepts of HPOM DMA in the *HPOM DMA Installation and User's Guide*.

From the HPOM DMA console, you can maintain synchronization packages. To understand how HPOM DMA works, and to make synchronization package creation easier, duplicate one of the out-of-the-box synchronization packages and try out additional and alternative enrichments. The My Company example shows you how to arrange your CIs differently in Service Navigator.

The *HPOM Extensibility Guide* covers creating synchronization packages in detail and provides some worked examples to guide you through the process differently.