HPE Database and Middleware Automation

Premium and Express

Software Version: 10.50.000.000

Middleware Capsule User Guide

Hewlett Packard Enterprise

Legal Notices

Warranty

The only warranties for Hewlett Packard Enterprise 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. Hewlett Packard Enterprise 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 Hewlett Packard Enterprise 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 Notice

© 2016 Hewlett Packard Enterprise Development LP

Trademark Notices

Apache HTTP Server and Apache Tomcat are trademarks of The Apache Software Foundation.

JBoss® is a registered trademark of Red Hat, Inc.

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

WebSphere® is a registered trademark of IBM Corporation.

Support

Visit the HP Software Support site at: https://softwaresupport.hp.com.

This website provides contact information and details about the products, services, and support that HP Software offers.

HP Software online support provides customer self-solve capabilities. It provides a fast and efficient way to access interactive technical support tools needed to manage your business. As a valued support customer, you can benefit by using the support website 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 to sign in. Many also require a support contract. To register for an HP Passport ID, click **Register** on the HP Support site or click **Create an Account** on the HP Passport login page.

To find more information about access levels, go to: https://softwaresupport.hp.com/web/softwaresupport/access-levels.

HP Software Solutions Now accesses the HPSW Solution and Integration Portal website. This site enables you to explore HP Product Solutions to meet your business needs, includes a full list of Integrations between HP Products, as well as a listing of ITIL Processes. The URL for this website is http://h20230.www2.hp.com/sc/solutions/index.jsp.

Contents

Introduction

HPE Database and Middleware Premium Edition (DMA Premium) and Express Edition (DMA Express) enable DBaaS and PaaS services using HPE Cloud Service Automation (CSA) and HPE Operations Orchestration (OO). The DMA Premium - Middleware and DMA Express - Middleware service designs simplify and accelerate the creation of the Middleware lifecycle service designs and implementation so that it can be consumed more easily by multiple business users and managed more quickly and consistently by application server administrators. The DMA Premium - Middleware and DMA Express - Middleware service designs enable customers to provide PaaS self-service offerings to install application server instances and to manage their lifecycle.

The following are the packages in the Premium and Express middleware capsules:

- Apache (DMA_Premium_Apache_10.50.000.000.zip and DMA_Express_Apache_ 10.50.000.000.zip)

- JBoss (DMA_Premium_JBoss_10.50.000.000.zip and DMA_Express_Jboss_10.50.000.000.zip)

- Tomcat (DMA_Premium_Tomcat_10.50.000.000.zip and DMA_Express_Tomcat_ 10.50.000.000.zip)

- WebLogic (DMA_Premium_WebLogic_10.50.000.000.zip and DMA_Express_WebLogic_ 10.50.000.000.zip)

- WebSphere (DMA_Premium_WebSphere_10.50.000.000.zip and DMA_Express_WebSphere_ 10.50.000.000.zip)

HPE DMA Capsule files

The following files for Premium and Express Middleware capsules are available on HPE Live Network.
You can download the files based on your requirement:

Files	Packages

Premium Capsules	DMA_Premium_Middleware_Capsules_10.50.000.000.zip
	
	• DMA_Premium_Apache_10.50.000.000.zip
	
	• DMA_Premium_JBoss_10.50.000.000.zip
	
	• DMA_Premium_Tomcat_10.50.000.000.zip
	
	• DMA_Premium_WebLogic_10.50.000.000.zip
	
	• DMA_Premium_WebSphere_10.50.000.000.zip
	
	• Client Solution pack (file share content)
	
	• DMA_Express_Middleware_Capsules-docs.zip
	
	   ○ Release Notes
	
	   ○ User guide

Express Capsules	DMA_Express_Middleware_Capsules_10.50.000.000.zip
	
	• ○ DMA_Express_Apache_10.50.000.000.zip
	
	   ○ DMA_Express_JBoss_10.50.000.000.zip
	
	   ○ DMA_Express_Tomcat_10.50.000.000.zip
	
	   ○ DMA_Express_WebLogic_10.50.000.000.zip
	
	   ○ DMA_Express_WebSphere_10.50.000.000.zip
	
	• Client Solution pack (file share content)
	
	• DMA_Express-Middleware_Capsules-docs.zip
	
	   ○ Release Notes
	
	   ○ User guide

Use cases and value realization

DMA capsules represent the commonly performed tasks in your enterprise datacenter. Each of the capsules represents specific use case and are the fastest way to achieve your automation goals.

The capsules provide ready to use service designs and rich set of components. You can use these service designs as is, modify them to create more specific service designs, or use the components to develop custom service designs.

The following example uses the Oracle capsule to demonstrate lifecycle management of Oracle database.

> The end Middleware users of your organization, who need to deploy the application server, must use Middleware User service design. At the WebLogic instance level, the Instance Admin service design enables you to manage an already provisioned WebLogic application server. Instance Owner service design encompasses all the automation tasks for the WebLogic application server including provisioning and patching it's software.

You must follow the same convention to manage other application servers.

The following tables show the actions in the corresponding Premium service designs available in the Premium and Express capsules:

> **Note:** The X mark in blue (X) indicates that the action is also available in Express Capsules.

JBoss Standalone Service Designs

Action display names	Instance Owner	Instance Admin	Middleware Owner	Middleware Admin	Middleware User
Patch JBoss Standalone Instance	X	X			
Rollback Patch JBoss Standalone Instance	X	X			
Provision JBoss Standalone Instance	X				
Update JBoss Application Code	X	X	X	X	X

WebLogic Service Designs

Action display names	Instance Owner	Instance Admin	Middleware Owner	Middleware Admin	Middleware User
Provision Weblogic Cluster	X				
Provision Weblogic Managed Servers	X				
Provision Weblogic Domain and Admin Server	X				
Provision Weblogic Instance	X				
Create Trust and Identity Keystore for WebLogic	X	X			
Patch WebLogic Domain	X	X			
Rollback Patch from WebLogic Standalone Instance	X	X			
Update WebLogic Application Code	X	X	X	X	X

WebSphere Standalone Service Designs

Action display names	Instance Owner	Instance Admin	Middleware Owner	Middleware Admin	Middleware User
Patch WebSphere Network Cell	X	X			
Provision WebSphere Instance and Deployment Manager	X				
Provision WebSphere Instance and Custom Node	X				
Provision WebSphere Instance and Standalone Profile	X				
Provision WebSphere Custom Node Profile From Existing Install	X				
Provision WebSphere Standalone Profile From Existing Install	X				
Update WebSphere Application Code	X	X	X	X	X

Apache Service Designs

Action display names	Instance Owner	Instance Admin	Middleware Owner	Middleware Admin	Middleware User
Provision Apache Standalone Instance	X	X			

Tomcat Service Designs

Action display names	Instance Owner	Instance Admin	Middleware Owner	Middleware Admin	Middleware User
Provision Tomcat Standalone Instance	X	X			

Requirements

Before you import an HPE DMA Capsule, you must ensure that you have performed the following tasks:

Configuring HP OO RAS Server

Perform the following configuration steps in either of the following situations:

- If you have installed HP OO Central on Linux and want to run any DMA Premium and DMA Express flows, you must install RAS on Windows and create a worker group and assign a worker to it. For more information about installing RAS, see "Installing an HP OO RAS Server" below. For more information about creating a worker group and assigning a worker to it, see "Creating a new worker group and assigning a worker to it" on page 12.

- If you have installed HP OO Central on Windows, you must create a worker group and assign a worker to it. For more information about creating a worker group and assigning a worker to it, see "Creating a new worker group and assigning a worker to it" on page 12.

> **Note:** Before running any DMA Premium or DMA Express flows in HP OO Central or RAS installed on Windows, you must be logged in and running the service using Administrator privilege

Installing an HP OO RAS Server

Before you run any DMA Premium and Express flows on a Windows target and the HP OO Central is installed on Linux, you must install Remote Access Service on a Windows machine. Perform the following steps to install RAS:

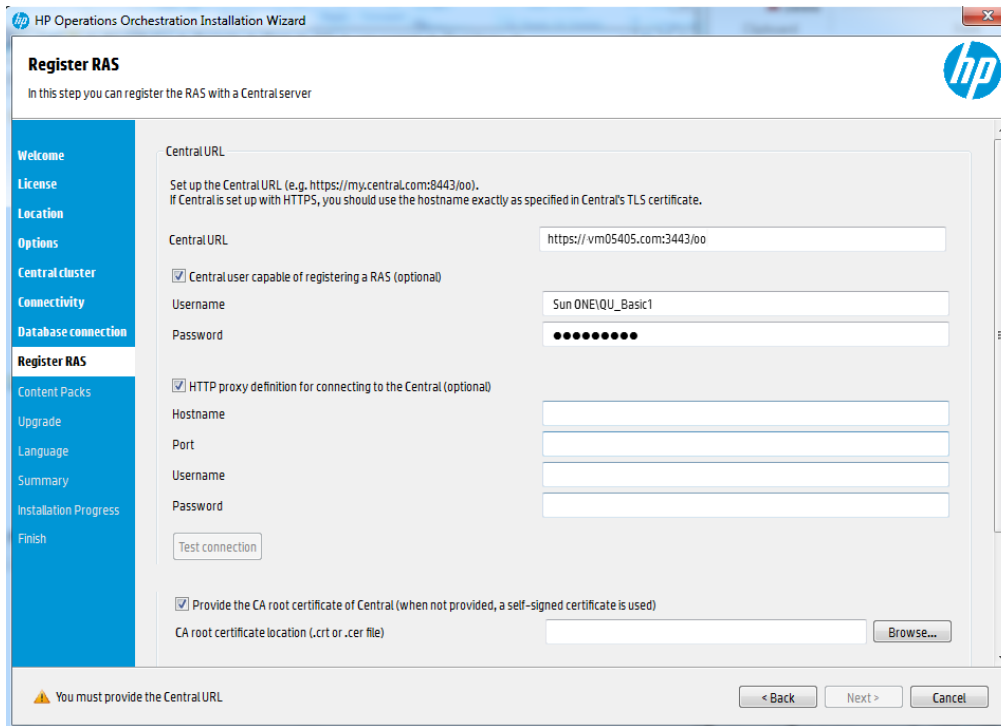1. Run the HP OO Installation Wizard.

2. In the **Options** step, select **Remote Access Server (RAS)**, and then click **Next**.
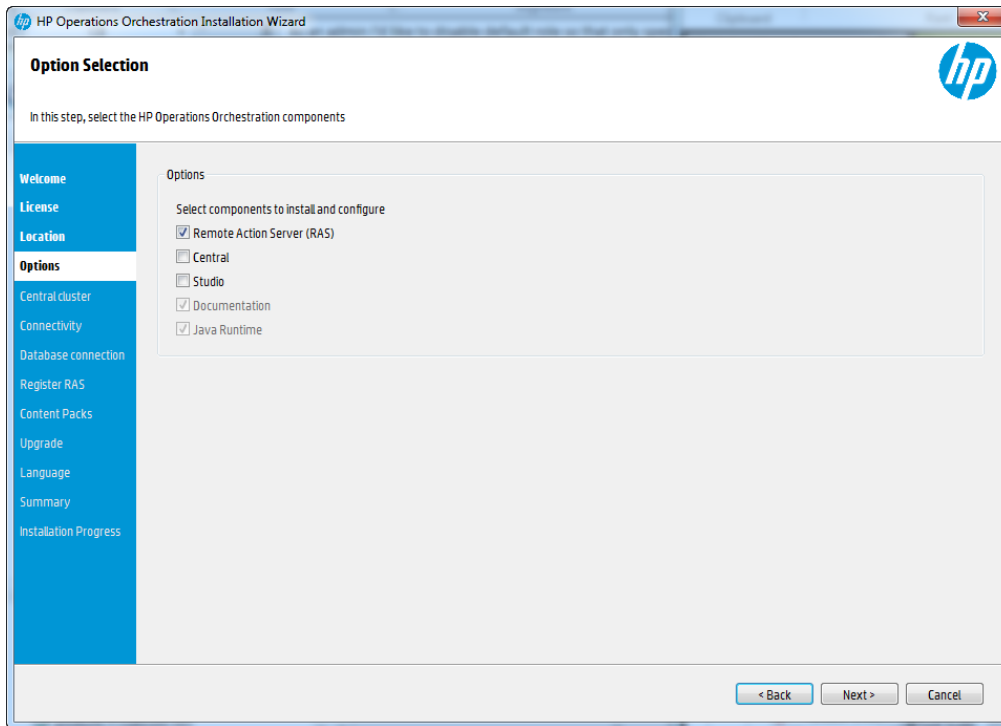
3. In the **Register RAS** step, in the **Central URL** box, enter the properties and location of the Central.

   Make sure to use the FQDN (Fully Qualified Domain Name) for the Central URL.

   If you want to use IPv6, put the IPv6 address in brackets, for example, [3fff::20].

4. (Optional) Select the **Central user capable of registering a RAS** check box and enter the user name and password of this user.

5. (Optional) Select the **HTTP proxy definition for connecting to the Central** and enter the HTTP proxy definition.

6. Click **Test Connection**.

> **Note:** If you test the connection to a Central with a custom CA certificate without providing the certificate to the RAS, a java.lng.RuntimeException error message will appear.

7. If you are installing Central and a RAS at the same time, if you provided a certificate for Central, you must provide the root CA certificate for the RAS. This certificate will be imported to the RAS TrustStore:

   a. Select the **Provide the CA root certificate of Central** check box.

   b. Click **Browse** to select the relevant CA root certificate.

   c. Click **Test Connection**.

   If the default certificates were used in Central, you should leave this check box cleared, to automatically use the self-signed certificate.
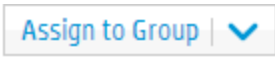
For more information about using SSL certificates, see the HP OO Hardening Guide.

8. If Central requires an X.509 certificate from the client, follow these steps:

   a. Click the **Provide an X.509 client certificate of the RAS** check box. A UUID for the RAS is automatically generated.

   b. Create the client certificate using this RAS UUID. The client certificate must be in PKCS format and must be with a **.pfx** or **.p12** extension.

   c. Click **Browse** to select the X.509 client certificate that you created.

   d. Enter the password of the X.509 client certificate that you created.

   e. Click **Test Connection**.

9. Click **Next**. A summary of the installation is displayed. Click **Install**.

10. Click **Finish** to complete the installation.

Creating a new worker group and assigning a worker to it

Perform the following steps to create the new worker group, DMA_RAS_Path and assign a worker to it:

1. In **System Configuration** workspace, select **Topology** > **Workers**.

2. Select the check box next to the worker name.

3. Click **Assign to Group** .

4. Click the check box next to the empty box and enter **DMA_RAS_Path**.
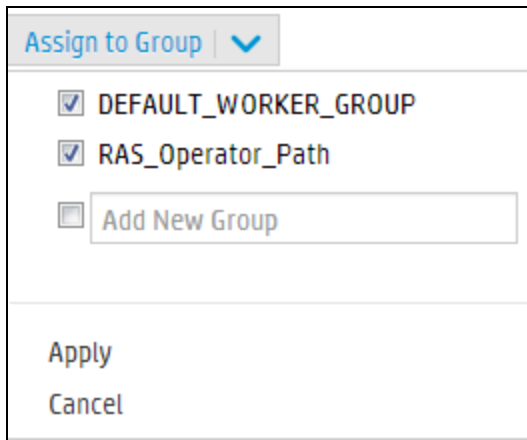
5. Click **Apply**.

Installing Nmap

Installation of Nmap for Windows target servers. Nmap, an open source tool for network exploration and security auditing, must be installed on the source machine (OO Studio/OO Central/RAS) from http://www.nmap.org.

Access control

Roles control what a user can access in HPE CSA. Adding a DN to a role grants the members of the OUs access to specific areas of the Cloud Service Management Console or Marketplace Portal. If a user has access to the Cloud Service Management Console, a user may have access to one or more of the functional areas in the console. If a user has access to the Marketplace Portal, a user has access to all areas in the portal.

Access control can be applied for different personas of your organization to grant access to select service designs, by configuring the integrated LDAP. It allows you to add or remove directory service groups or organization units (ou) to a CSA role by associating the ou's distinguished name (DN) to the desired role. Authenticated LDAP users, who are members of a group or organization unit that is assigned to a predefined role, can perform specific tasks and access specific parts of the Cloud Service Management Console or access the Marketplace Portal.

Only members of a group or organization unit are assigned to the role. To ensure secure role assignment, access control inheritance stops at the assigned organizational unit. This does not follow the traditional directory service pattern where inheritance flows down the organizational unit's hierarchy. Instead, assignments to roles must be assigned to individual organizational units (ou). A group or organization unit DN can be assigned to more than one role.

In the LDAP directory, all the database users are assigned the 'DB Users' role. If the CSA Admin creates a catalogue (DB Users Catalogue) with access privileges to the corresponding LDAP group (DB Users), while creating a Service Offering for 'Oracle DB User' Service Design, the CSA Admin must publish this offering into the appropriate Catalogue (DB Users Catalogue). You can create similar groups in LDAP, corresponding catalogues with matching access privileges, for the other software applications & personas.

Importing the HPE DMA Capsule

The HP CSA Administrator performs the following tasks to install the content capsule:

Download the Content Capsule Installer

Perform the following steps to download the latest *Content Installation Guide* and the Installer ZIP file:

1. Log on to HPE Live Network.

2. On the Home page, click **Products A - Z**, navigate to **Cloud Service Automation (CSA)** > click **Cloud Service Automation**.

3. Under **All Content**, click **HPE CSA Content Installer**.

4. In the **HPE CSA Content Installer** page, click **Download** to download HPE CSA Content Installer , Version 4.60.63.

   The **CapsuleInstaller_15.12_4.6.63.zip** file is downloaded.

> **Note:** You can also download the Content Installer | Version 4.60.63 from the DMA Premium Edition - Cloud Service Automation Capsules page at <<HPELNPremium link>> and DMA Express Edition - Cloud Service Automation Capsules package at <HPELNExpressLink>.

To install contents, run HPE Cloud Content Capsule Installer 4.60.63 manually in GUI mode or Silent mode.

Verify the Content Capsule Installer

To verify HPE Cloud Content Capsule Installer 4.60.63, complete the following steps:

1. Execute the installer from the command line with the `-version` as input. If the installer fails to handle this command-line argument flag properly, the version that you have downloaded is not the latest.

2. View the title bar for the installer. The installer title bar must display the current version of the installer.

3. Open the help screen with `-?` or `-h` or `-help` option for available options to execute using this installer.

After verifying the installer, continue with the configuration steps in this document.

Import the Capsule

You can import the HPE DMA Capsule using the graphical user interface (GUI) mode of installation in Windows or using the silent install mode in Linux. You can choose either of the modes based on your requirement:

- "GUI mode" below

- "Silent install mode" on page 19

GUI mode

1. Log on to the server as root or as a user with administrator privileges.

2. Launch the installer by performing either of the following steps:

   a. Double-click the **CapsuleInstaller.jar** file.

   b. In the command prompt, navigate to the location, where the installer executable is saved, and enter the following command:

      ```
      java –jar CapsuleInstaller.jar
      ```

      The installer will be launched.

      The HPE Cloud Content Capsule Installer attempts to automatically detect information for the local HPE CSA and its HPE Operations Orchestration instances.

3. On the Introduction screen, click the **Browse** and navigate to the content capsule folder. Choose the capsule and click **Select**.

   > **Note:** You can import only one capsule at a time.

4. Select an installation option:

   a. If you want to import HPE Operations Orchestration content and HPE CSA service designs, select **Deploy HPE Operations Orchestration content(s) and import HPE Cloud Service Automation blueprint(s)**.

   b. If you want to import only the HPE Operations Orchestration content, select **Deploy HPE Operations Orchestration content(s) only**.

      By default, the Deploy HPE Operations Orchestration content(s) and import HPE Cloud Service Automation blueprint(s) option is selected.

5. Select the content, and then click **Next**.

6. Once a viable content zip file is found, the Content Details information screen opens. This screen displays the HPE CSA and HPE Operations Orchestration versions installed in your setup.The Content Capsule you downloaded determines the versions displayed in the Installer UI. Click **Next**.

7. On the **License Agreement** screen, select **I ACCEPT the terms and conditions**, and then click **Next**.

    The **HPE Cloud Service Automation details** screen opens. The screen displays the details about the HPE CSA instance that is installed on the user's server.

8. In the **HPE Cloud Service Automation details** screen, the Nickname, Hostname/IP, and Port values are prepopulated. You can also modify the displayed details, if required. Enter the password, and then click **Authenticate HPE CSA** to continue.

9. After successful authentication, click **OK**.

    The **Resource details** screen is displayed. Based on the OO, the Resource details screen displays an additional column, Deployment Type. Deployment types are sequence and topology. If both the OOs are pointing to the same host, you will see the Deployment Type as sequence, topology.

10. (Optional) Under the Operations Orchestration hosts, you can add as many HPE Operations Orchestration instances as needed.

11. Click **Next**. The Select contents screen displays.

12. In the **Select contents** screen, you can choose to update the existing service designs or install new service designs.

    a. If you want to update existing service designs to new, select **Update existing services**.

        > **Note:** The existing service designs are overwritten when you select this option.

    b. If you want to install new service designs and keep the existing service designs as is, select **Update and preserve existing services**.

    c. If you want to install the new service designs, proceed to selecting content.

        > **Note:** If you select this option and a service design exists, the installer skips installing the selected service designs.

13. To select content, select the **Capsule(s)** check box. This selects all the capsules in the Capsule

(s) directory. Click **Next**.

The **Pre-installation summary** screen containing the details of the selected capsule is displayed.

14. Click **Install** to begin the deployment process. The deployment process includes the following:

- Deploys HPE Operations Orchestration flows.

- Manages communication between HPE CSA and HPE Operations Orchestration using the Process Definition Tool provided by HPE CSA.

- Imports the selected and associated service designs into HPE CSA.

The Installing and configuring content pack(s) screen, which shows the progress of the installation appears.

15. To view the details of the installation, click the **Click to show details** option. The details include the information about the status of the deployment to HPE Operations Orchestration and the installation of service designs to HPE CSA.

The HPE Operations Orchestration flows are deployed as per the selected contents. If you use the silent installation mode, all the contents are deployed to HPE Operations Orchestration. After completing the deployment, the installer copies supplemental information about each piece of deployed content into the propertysources directory within the HPE CSA installation file system. The propertysources directory is located in <CSA_HOME>/<JBOSS_DIR>/standalone/deployments/csa.war/propertysources.

16. After the installation is completed, either successfully or with errors, click the **Next** button. The Post installation summary screen opens. You can view the detailed information about the installation in the installation log, which is available in the installer directory.

17. To complete the installation process, click **Finish** on the Post-installation summary screen.

To view the details about the installation, check the CPInstaller.log file. The CPInstaller.log file is available in the same directory where the installer is extracted.

Subsequent run log gets appended to the end of the CPInstaller.log file with a starting timestamp pointer or marker. If the log file size is greater than 1 MB while starting the execution of CapsuleInstaller.jar, the existing log file is renamed with the latest timestamp and a new log file is created in the same location. A command line JVM argument can be used to create the log file in any specified location.

For example, `java -DCCC_INSTALL_LOG_DESTINATION=<OTHER_PATH_TO_GENERATE_LOG_FILE> -jar CapsuleInstaller.jar`

After the installation is completed, "DMA Basic" is added as a resource provider in your HPE CSA. Continue with the configuration steps detailed in the following sections.

Silent install mode

1. Log on to the server as root or as a user with administrator privileges.

2. Open a command prompt.

3. Navigate to the location, where the installer executable is saved.

4. Ensure that the silent_install.xml file is in the same directory as the jar-file installer.

   The silent_install.xml file is bundled with the CapsuleInstaller.zip file.

5. Open the silent_install.xml file with an editor.

6. Modify the following XML elements:

   a. Provide the absolute path of the <capsule-pack-download>.zip file.

   b. If this installation is requesting only HP Operations Orchestration, set the following XML element to true: <installtype ooonly="true">

   c. Update the necessary XML elements for HP Operations Orchestration and HP CSA credentials.

   d. Provide appropriate HP Operations Orchestration engine file and database properties file names.

      - If you provide only the file names, the file names are searched for within the HP CSA installation Tools directory.

      - If you provide absolute paths, the absolute path is used as the location of the files.

      - For information about generic silent installation mode XML file, see the section "Generic silent installation mode XML file".

7. Save the changes to the silent_install.xml file.

8. Execute the following command: `java –jar CapsuleInstaller.jar –silent`

   This deploys all of the available content from the content pack using the silent_install.xml file.

   > **Note:** If the file name is other than silent_install.xml, then the file name must be added after the -silent flag.

Generic silent installation mode XML file

```
java -jar CapsuleInstaller.jar -silent <silent_file_name>
```

In the Silent mode, a tag 'forceImportBlueprints' is defined to enable the force import option of service designs

The following is an example of the content of the generic silent installation mode XML file.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<install>
        <contentpack bundled="false"> <!-- Value "false" will load the capsule pack path
as mentioned in "contentpath" -->
                <contentpath>ABSOLUTE_PATH_TO_CAPSULE_PACK_ZIP_FILE</contentpath>
        </contentpack>
        <installtype ooonly="false" forceImportBlueprints="false" /> <!-- Value "false"
will import Service Designs along with the OO contents. Value "true" will deploy
only the OO contents. forceImportBlueprints Value "true" will force import
blueprinst-->
                <machine>
                        <csa>
                                <host>HOST_IP</host>
                                <port>CSA_PORT</port>
                                <user>CSA_ADMIN_USER</user>
                                <password>CSA_ADMIN_PASSWORD</password>
                        </csa>
                        <oo>
                                <host>HOST_IP</host>
                                <port>OO_PORT</port>
                                <user>OO_ADMIN_USER</user>
                                <password>OO_ADMIN_PASSWORD</password>
                        </oo>
                </machine>
                <ooenginefilename>HP_OO_INFO_XML_FILE_NAME</ooenginefilename>
                <dbpropertiesfilename>DB_PROPERTIES_FILE_NAME</dbpropertiesfilename>
</install>
```

where, <ABSOLUTE_PATH_TO_CAPSULE_PACK_ZIP_FILE> is the path of the directory where the capsule pack is located. For example, **/tmp/DMA_Premium_Apache_10.50.000.000.zip** for Linux and **C:\DMA_Premium_Apache_10.50.000.000.zip** for Windows.

Administering

Resource categories that are referenced in a service design will be automatically created when the service design archive is imported.

The HPE CSA Administrator performs the following tasks to configure service offering in the Cloud Service Management Console:

1. "Configuring Resource Providers"

2. "Associating Resource Offerings with Providers"

3. "Changing Service Design properties"

4. "Configuring Subscriber options"

5. "Publishing Service Design"

6. "Creating Service Offering"

7. "Publishing Service Offering"

Configuring Resource Providers

Resource providers must be created in HPE CSA. The following table lists the resource providers required for this integration and typical service access points. You may need to change them to reflect your environment.

Provider Name	Service Access Point
DMA Basic	Provide DMA Basic identity service access endpoint: http://<ip or host>:<port>/version Example: `https://mycompany.com:8445/oo`

To create resource providers, perform the following task:

1. Log on to the Cloud Service Management Console as an administrator.

2. Click **Providers**.

3. From the list of all providers, select **DMA Basic** provider type, and then click **Create Resource Provider**.

4. In the Create Resource Provider dialog box, enter the required details, and then click **Create**. You must enter the Operations Orchestration (OO) Central URL in the **Service Access Point**.

Associating Resource Offerings with Providers

New resource offerings that were imported with the service design archive must be associated with providers.

To associate resource offerings with providers:

1. Navigate to the Cloud Service Management Console.

2. Click **Designs** > **Sequenced** > **Resource Offerings**.

3. Select the **DMA Basic** as the provider that you want to associate with the offering.

4. Select the **Offerings** tab. Resource offerings for the selected provider will be displayed.

5. Double-click on the offering, click **Providers** tab, and click the plus **+** button.

6. Select the provider **DMA Basic** for the offering and click **Associate**.

7. Repeat Steps 4 through 6 for all the offerings.

> **Note:** The resource offerings should be bound to at least one provider, because without that an offering based on the service design cannot be published. The content will always use the provider specified in the offering section by CSA admin, which is detailed in the next section.

Changing Service Design properties

You can change the properties for the service design that are appropriate for your environment.

Complete the following steps for each property that you may need to change:

1. Navigate to the Cloud Service Management Console.

2. Click **Designs** > **Sequenced** > **Designer**.

> **Note:** In CSA 4.2, select the service design, open the Version tab, and click the service design version. Example: 10.40.000.001

3. Select the service design. For example: WebLogic Instance Owner.

4. Change values for the service design properties as required.

5. Verify the values and click **Save**.

Configuring Subscriber options

Subscriber options are shown to the subscriber in the service offering. You may need to change options to values that are appropriate for your environment. You may also add or remove images as needed.

To configure subscriber options, perform the following steps:

1. Navigate to the Cloud Service Management Console.

2. Click **Designs** > **Sequenced** > **Designer**.

3. Select the service design.

4. Select the **Subscriber Options** tab.

5. Modify the required subscriber option.

6. Verify the values and click **Save**.

Changing Component properties

Perform the following steps to change the values of the component properties:

1. Navigate to the Cloud Service Management Console.

2. Click **Designs** > **Sequenced** > **Components**.

3. Select **HP DMA Sequenced Palette** and select the component you want to modify.

4. Go to the **Properties** tab.

5. Select the property that you want to modify from the Defined Properties or the Inherited Properties list.

   You can choose to to indicate if the property is visible in the topology design. You can also choose to show or hide the description of the property.

6. Click **Edit** and modify the values.

7. Click **Save**.

> **Note:** The changes will be reflected when you create a new service design using the same component.

Publishing Service Design

To publish the service design:

1. Navigate to the Cloud Service Management Console.

2. Click **Designs** > **Sequenced** > **Designer**.

3. Select the service design, open the Version tab, and click the service design version. For example: 10.50.000.000.

4. On the Overview tab, click **Publish**.

> **Note:** In CSA 4.2, there is no need to publish a service design.

Creating Service Offering

A service offering must be created in HPE CSA before subscribers can request services based on this service design.

To create a service offering:

1. Navigate to the Cloud Service Management Console.

2. Click **Offerings**.

3. Click **Create offering**. The Create Offering dialog box will open.

4. Select **DMA Premium - Middleware** or **DMA Express - Middleware** service design and click **Create**.

5. Enter details in the Create Offering dialog box. The name entered here is the name of the offering that will be visible to the subscribers of this service.

6. Click **Create**.

After creating the offering, you can modify the pricing information, associate documents, or modify the subscriber options.

Publishing Service Offering

After creating the service offering, you must publish the service offering to the selected catalog.

Global Shared Catalog is installed by default when HPE CSA is installed. When you publish a service offering to this catalog, that service offering will be visible in every organization's Marketplace Portal.

To publish the service offering to the selected catalog, perform the following task:

1. Navigate to the Cloud Service Management Console.

2. Click **Offerings** and select the **DMA Premium - Middleware** or **DMA Express - Middleware** service offering you created..

3. Open Publishing tab and click **Publish**.

4. Select the catalog. For example: **Global Shared Catalog**.

   > **Note:** If you have created a specific catalog for specific LDAP User groups and have provided appropriate access privileges to the Users of those groups, you must publish a Service Offering to that catalog. For more information, see "Access control" on page 14.

5. Click the **In Category** drop down, and then select the category from the list. In the Marketplace Portal, the service offering will appear under this category.

6. Click **Publish**.

A service offering published to a catalog will be available to the user for subscription.

Modifying a Service

After a service is successfully deployed, modify a service to perform the following actions:

1. Log on to Cloud Service Management Console as an administrator.

2. Click **Marketplace**.

   Log in to the marketplace portal with user credentials.

3. Select the **My Service** from the Sidebar Menu.

4. Select the service that you created. The service options are displayed in the My Service Details page.

5. Click the Settings icon for the service in deployed state to display the actions associated with the service.

6. Select the actions to be performed. As shown in the following example of Apache Tomcat Instance Owner service design:

    a. Select Tomcat - Provision Software action.

    b. Enter the required details.

    c. Click Execute. The action is requested and the action Request Number is generated.

    d. Click View Request to view details of the request or Return to Service to go to My Service Details page.

    e. The service will transition from Online to Modifying to Online after the action is successfully performed. Click Refresh to view status.

Using

After a service is published a consumer can subscribe to the service and cancel an existing subscription. The following tasks are performed by the consumer.

Subscribing to Service

Complete the following steps to order a service:

1. Log on to Cloud Service Management Console as an administrator.

2. Click **Marketplace**.

   Log in to the marketplace portal with user credentials.

3. Select the **Browse Catalog** from the Sidebar Menu or click **New Releases** in the Dashboard.

4. Select a catalog. The offerings available in this catalog will be displayed.

5. Enter option values as required.

6. Click **Checkout**.

7. Enter values such as the subscription name and subscription period.

8. Click **Submit Request**.

9. Click **View Request** to view the details of your subscription or click **Shop More** to subscribe for other services.

After the service is successfully deployed, it can be managed from the **My Services** menu.

Canceling Subscription

To cancel a subscription:

1. On the **Sidebar Menu**, click **Subscriptions**.

2. Identify the subscription that you want to cancel.

3. Click **Cancel** to cancel the subscription.

4. Click **Yes** to confirm that you want to cancel the subscription.

5. Confirm that the status for the subscription is canceled.

When you cancel the subscription, the resource IDs that were assigned to the service (VLAN ID, IP details, and ACL rule numbers) are automatically released.

Send Documentation Feedback

If you have comments about this document, you can contact the documentation team by email. If an email client is configured on this system, click the link above and an email window opens with the following information in the subject line:

Feedback on Middleware Capsule User Guide (HPE Database and Middleware Automation 10.50.000.000)

Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to hpe_dma_docs@hpe.com.

We appreciate your feedback!