

Unica Centralized Offer Management V12.1.6 Upgrade Guide



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Chapter 1. Upgrade overview

The upgrade of HCL Unica products is complete when you upgrade, configure, and deploy the HCL Unica products. The *Unica Centralized Offer Management Upgrade Guide* provides detailed information about upgrading, configuring, and deploying the products.

How the installers work

Use the Unica installer with the Centralized Offer Management installer when you install or upgrade Centralized Offer Management.

Ensure that you adhere to the following guidelines before you use the Unica suite installer and the product installer:

- The suite installer and the product installer must be in the same directory on the computer where you want to install or upgrade the product. When multiple versions of a product installer are present in the directory with the master installer, the master installer always shows the latest version of the product on the Unica Products screen in the installation wizard.
- The default top-level directory for Unica installations is `/root/HCL/Unica` for UNIX™ or `C:\HCL\Unica` for Windows™. However, you can change the directory during installation.

Modes of installation

The Unica suite installer can run in one of the following modes: GUI mode, X Window System mode, Console mode, or the Silent mode (also called the unattended mode). Select a mode that suits your requirements when you install Unica Centralized Offer Management.

GUI X Window System mode

Use the GUI mode for Windows™ or the X Window System mode for UNIX™ to install Centralized Offer Management by using the graphical user interface.

UNIX™ X Window System mode

Use the X Window System mode for UNIX™ to install Centralized Offer Management by using the graphical user interface.

Console mode

Use the console mode to install Centralized Offer Management by using the command line window.



Note: To display the Installer screens correctly in console mode, configure your terminal software to support `UTF-8` character encoding. Other character encoding, such as ANSI, will not render the text correctly, and some information will not be readable.

Silent mode

Use the silent or unattended mode to install Centralized Offer Management multiple times. The silent mode uses response files for installation and does not require user input during the installation process.

Sample response file

You must create response files to set up a silent installation of Unica Centralized Offer Management. You can use sample response files to create your response files. The sample response files are included with the installers in the ResponseFiles compressed archive.

Example for Microsoft Windows OS-specific sample response file

The following is an example for a sample response file:

```
#Choose Install Folder
#-----
USER_INSTALL_DIR=<INSTALLATION_DIRECTORY>/CentralizedOffer

#Choose Unica Centralized Offer Management Components
#-----
CHOSEN_FEATURE_LIST=J2EEApp
CHOSEN_INSTALL_FEATURE_LIST=J2EEApp
CHOSEN_INSTALL_SET=Typical

#Backup Folder Destination
#-----
UNICA_ENABLE_BACKUP_GUI=0
UNICA_BACKUP_DESTINATION=<BACKUP_DESTINATION>
UNICA_ENABLE_BACKUP=No

#Unica Campaign Database Type
#-----
UNICA_COM_DB_TYPE_INPUT="\",\"SQL Server\",\"\",\"\",\"\","
UNICA_COM_DB_TYPE_INPUT_1=
UNICA_COM_DB_TYPE_INPUT_2=SQL Server
UNICA_COM_DB_TYPE_INPUT_3=
UNICA_COM_DB_TYPE_INPUT_4=
UNICA_COM_DB_TYPE_INPUT_5=
UNICA_COM_DB_TYPE_INPUT_BOOLEAN_1=0
UNICA_COM_DB_TYPE_INPUT_BOOLEAN_2=1
UNICA_COM_DB_TYPE_INPUT_BOOLEAN_3=0
UNICA_COM_DB_TYPE_INPUT_BOOLEAN_4=0
UNICA_COM_DB_TYPE_INPUT_BOOLEAN_5=0

#Unica Campaign Database Connection
#-----
UNICA_COM_DB_HOSTNAME=<CAMPAIGN_DATABASE_HOST_NAME>
UNICA_COM_DB_PORT=<CAMPAIGN_DATABASE_PORT>
UNICA_COM_DB_DBNAME=<CAMPAIGN_DATABASE_SID>
UNICA_COM_DB_USERNAME=<CAMPAIGN_DATABASE_USER_SCHEMA>
UNICA_COM_DB_PASSWORD=<CAMPAIGN_DATABASE_USER_SCHEMA_PASSWORD>

#JDBC Connection
#-----
UNICA_COM_DB_JDBC_CONNECTION_STRING=jdbc:sqlserver://<CAMPAIGN_DATABASE_HOST_NAME>
:<CAMPAIGN_DATABASE_PORT>;databaseName=<CAMPAIGN_DATABASE_SID>

#Default Locale
#-----
UNICA_LOCALE_ENUS=1
UNICA_LOCALE_FRFR=0
```



```
<product name="Offer" id="dd6f88e0-1ef1-11b2-accf-c518be47c366"
version=" 12.1.6 " copyright="2020" info_url="" support_url=""
location="<HCL_Unica_Home>\Offer" last_modified="2013-07-25 15:34:01">
```

In this case, you would change all entries that refer to `version="12.1.6 "` to the base version, which is 12.1.x in this case.

Unica Centralized Offer Management documentation and help

The following table describes the various tasks in the installation of Unica Centralized Offer Management.

The **Documentation** column contains names of documents where you can find more information about the tasks.

Table 1. Get up and running

Task	Documentation
View a list of new features, known issues, and workaround	<i>Unica Centralized Offer Management Release Notes</i>
Install Unica Centralized Offer Management and deploy the Unica Centralized Offer Management web application	One of the following guides: <ul style="list-style-type: none"> • <i>Unica Centralized Offer Management Installation Guide</i> • <i>Unica Centralized Offer Management Upgrade Guide</i>

The following tables describes administrative tasks in Unica Centralized Offer Management. The **Documentation** column contains names of documents where you can find more information about the tasks.

Table 2. Configure and use Unica Centralized Offer Management

Task	Documentation
<ul style="list-style-type: none"> • Create custom attributes • Create custom templates • Create offers without template 	<i>Unica Centralized Offer Management Administrator's Guide</i>
<ul style="list-style-type: none"> • Create offers • Create offer lists 	<i>Unica Centralized Offer Management User's Guide</i>

The following tables contains information about Online Help and obtaining PDFs for Unica Centralized Offer Management. The **Instructions** column describes how to open Online Help and access documentation for the Unica Centralized Offer Management.

Table 3. Getting help

Task	Instructions
Obtain PDFs	Use either of the following methods: <ul style="list-style-type: none">• Choose Help > Product Documentation to access Unica Centralized Offer Management PDFs.• Choose Help > All Unica Suite Documentation to access all available documentation.

Chapter 2. Planning Unica Centralized Offer Management upgrade

When you plan your Unica Centralized Offer Management upgrade, ensure that you have set up your system correctly, and that you have configured your environment to deal with any failures.

Prerequisites

Before you install or upgrade a Unica product, you must ensure that your computer complies with all the prerequisite software and hardware.

System requirements

For information about system requirements, see the *Recommended Software Environments and Minimum System Requirements* guide.

Network domain requirements

The Unica products that are installed as a suite must be installed on the same network domain to comply with the browser restrictions that are designed to limit the security risks that can occur with cross-site scripting.

JVM requirements

Unica applications within a suite must be deployed on a dedicated Java™ virtual machine (JVM). You can deploy Unica Centralized Offer Management on a dedicated JVM, or you can deploy it in the same JVM of Unica Platform and Unica Campaign.

Knowledge requirements

To install or upgrade Unica products, you must have a thorough knowledge of the environment in which the products are installed. This knowledge includes knowledge about operating systems, databases, and web application servers.

Internet browser settings

Make sure that your internet browser complies with the following settings:

- The browser must not cache web pages.
- The browser must not block pop-up windows.

Access permissions

Verify that you have the following network permissions to complete the installation tasks:

- Administration access for all necessary databases



Note: Administrator must have `CREATE`, `SELECT`, `INSERT`, `UPDATE`, `DELETE`, and `DROP` rights for both tables and views.

- Read and write access to the relevant directory and sub-directories for the operating system account that you use to run the web application server and Unica components
- Write permission for all files that you must edit
- Write permission for all directories where you must save a file, such as the installation directory and backup directory if you are upgrading
- Appropriate read, write, and execute permissions to run the installer

Verify that you have the administrative password for your web application server.

For UNIX™, all installer files for products must have full permissions, for example, `rwrxr-xr-x`.

The following additional permissions are necessary for UNIX™:

- The user account that installs Unica Centralized Offer Management and Unica Platform must be a member of the same group as the Unica Centralized Offer Management users. This user account must have a valid home directory and have write permissions for that directory.
- All installer files for HCL Marketing Software products must have full permissions, for example, `rwrxr-xr-x`.

Points to consider before you install or upgrade Unica Centralized Offer Management

For Unica Centralized Offer Management installation, you are required to consider the following points.

JAVA_HOME environment variable

If a `JAVA_HOME` environment variable is defined on the computer where you install a Unica product, verify that the variable points to a supported version of JRE. For information about system requirements, see the *Unica Recommended Software Environments and Minimum System Requirements* guide.

If the `JAVA_HOME` environment variable points to an incorrect JRE, you must clear the `JAVA_HOME` variable before you run the Unica installers.

You can clear the `JAVA_HOME` environment variable by using one of the following methods:

- Windows™: In a command window, enter `set JAVA_HOME=` (leave empty) and press **Enter**.
- UNIX™: In the terminal, enter `export JAVA_HOME=` (leave empty) and press **Enter**.

You can clear the `JAVA_HOME` environment variable by running the following command in the terminal:

```
export JAVA_HOME= (leave empty)
```

The Unica installer installs a JRE in the top-level directory for the Unica installation. Individual Unica application installers do not install a JRE. Instead, they point to the location of the JRE that is installed by the Unica installer. You can reset the environment variable after all installations are complete.

For more information about the supported JRE, see the *Marketing Software Recommended Software Environments and Minimum System Requirements* guide.

Unica Platform and Unica Campaign requirements

You must install or upgrade Unica Platform to 12.1.6 version and Unica Campaign 12.1.6 before you install or upgrade Unica Centralized Offer Management. The product installer checks whether the required products are installed. If your product or version is not registered with Unica Platform, a message prompts you to install or upgrade Unica Platform before you proceed with your installation. Unica Platform must be deployed and running before you can set any properties on the **Settings > Configuration** page.

Backing up Unica Centralized Offer Management

You must back up your current installation of Unica Centralized Offer Management before upgrading it.

Backing up your current installation of Unica Centralized Offer Management ensures that you can restore your installation to a known working state if any issues occur during the upgrade process. You can back up your installation of Centralized Offer Management manually or automatically when you run the installers.

Complete the following steps to back up your current installation of Unica Centralized Offer Management manually:

1. Back up your Unica Centralized Offer Management installation directory.

The Unica Centralized Offer Management upgrade process installs all files that are required to run Unica Centralized Offer Management.

Exporting configuration settings

You can use the configuration settings of your current installation of Unica Centralized Offer Management for the upgraded version of Unica Centralized Offer Management.

Use the `configTool` utility to export your Centralized Offer Management configuration parameters before upgrading. Specify and make a note of the unique file name and location of the `exported.xml` file that the `configTool` utility creates, so you can locate the file after the upgrade process is complete.

Error logs and warning messages

When you perform an upgrade, the system logs messages produced during the upgrade. Access and view the log files to see any informational messages or error messages that occur during the upgrade process.

Sample log files

- `<HCL_Unica_Home>/HCL_Unica_Installer_Install<date_time>.log`
- `<Offer_Home>/Unica_Centralized_Offer_Management_Install_<date_time>.log`
- `<Platform_Home>/Platform_Install<date_time>.log`
- `<USER_HOME>/HCL_Unica_Installer_stdout.log`
- `<USER_HOME>/HCL_Unica_Installer_stderr.log`
- `<USER_HOME>/Platform_stdout.log`

- <USER_HOME>/Platform_stderr.log
- <USER_HOME>/CentralizedOfferManagement_stdout.log
- <USER_HOME>/CentralizedOfferManagement_stderr.log

Unica Centralized Offer Management upgrade worksheet

Gather the following information about your Unica Centralized Offer Management installation

- Fully qualified path of your Unica Centralized Offer Management installation directory
- Database type
- Data source name
- Data source account user name
- Data source account password
- JNDI name
- Path to the JDBC driver
- Version of Unica Centralized Offer Management you are upgrading from

Chapter 3. Upgrading Unica Centralized Offer Management

You can upgrade Unica Centralized Offer Management to version 12.1.6 from version 12.1.x and 12.1.0.x

Upgrade from Unica Centralized Offer Management:

- 12.1.x → 12.1.6
- 12.1.0.x → 12.1.6

You must install the new version into the same directory where Unica Centralized Offer Management installed, so that Unica Centralized Offer Management can detect the upgrade.

Since Unica Platform and Unica Campaign is a prerequisite for Unica Centralized Offer Management, it is mandatory to have the latest version Unica Platform and Unica Campaign installed or updated. The install or upgrade sequence is as follows:

- Unica Platform
- Unica Campaign
- Unica Centralized Offer Management

You can upgrade using one of the following modes:

- GUI mode
- Console mode

During upgrade, in any installation mode, select the appropriate option to take a backup of the previous version.

Upgrading Unica Centralized Offer Management in GUI mode

For Windows™, use the GUI mode to install or upgrade Unica Centralized Offer Management. For UNIX™, use the X Window System mode to install or upgrade Centralized Offer Management.

Before you begin



Important: Before you use the GUI mode to install or upgrade Unica Centralized Offer Management, ensure that the available temporary space on the computer where you install, or upgrade, Unica Centralized Offer Management is more than three times the size of the Unica Centralized Offer Management installer. Also ensure that the Unica installer and the Unica Centralized Offer Management installers are in the same directory on the computer where you want to install or upgrade Unica Centralized Offer Management.

To install or upgrade Unica Centralized Offer Management using the GUI mode (for Windows™) or the X Window System mode (for UNIX™):


1. Go to the folder where you have saved the Unica installer and double-click the installer to start it.
2. Click **OK** on the first screen to see the **Introduction** window.

3. Follow the instructions on the installer and click **Next**.

Use the information in the following table to take the appropriate actions on each window in the Unica installer.

Table 4. Unica installer GUI

Window	Description
Introduction	<p>This is the first window of the Unica suite installer. You can open the Unica Centralized Offer Management installation and upgrade guides from this window.</p> <p>Click Next to go to the next window.</p>
Response Files Destination	<p>Click the Generate Response File check box if you want to generate response files for your product. Response files store the information that is necessary for the installation of your product. You can use response files for an unattended installation of your product.</p> <p>Click Choose to browse to a location where you want to store the response files.</p> <p>Click Next to go to the next window.</p>
HCL Unica Products	<p>In the Install Set list, select Custom to select the products that you want to install.</p> <p>In the Install Set area, you can see all the products whose installation files are in the same directory on your computer.</p> <p>In the Description field, you can view the description of the product that you select in the Install Set area.</p> <p>Click Next to go to the next window.</p>
Installation Directory	<p>Click Choose to browse to the directory where you want to install Unica.</p> <p>Click Next to go to the next window.</p>
Select Application Server	<p>Select one of the following application servers for the installation:</p> <ul style="list-style-type: none"> • IBM® WebSphere® • Oracle WebLogic • JBoss • Tomcat <p>Click Next to go to the next window.</p>
Platform Database Type	<p>Select the appropriate Unica Platform database type.</p> <p>Click Next to go to the next window.</p>
Platform Database Connection	<p>Enter the following information about your database:</p> <ul style="list-style-type: none"> • Database host name • Database port

Window	Description
	<ul style="list-style-type: none"> • Database name or System ID (SID) • Database username • Database password <p>Click Next to go to the next window.</p> <p> Important: If Unica products are installed in a distributed environment, you must use the machine name rather than an IP address in the navigation URL for all of the applications in the suite. Also, if you are on a clustered environment and choose to use ports that are different from the default ports 80 or 443 for your deployment, do not use a port number in the value of this property.</p>
Platform Database Connection	<p>Review and confirm the JDBC connection.</p> <p>Click Next to go to the next window.</p>
Preinstallation Summary	<p>Review and confirm the values that you added during the installation process.</p> <p>Click Install to start the installation process.</p> <p>The Unica Platform installer opens. If a previous instance of Unica Platform exists, the instance is upgraded to the current version. If a previous instance of Unica Platform does not exist, Unica Platform is installed.</p>

4. Follow the instructions on the Unica Platform installer to upgrade Platform. See *Unica Platform Upgrade Guide* for more information.

5. In the **Installation Complete** window, click **Done**.

Result



The Unica Platform installation is complete and the Unica Campaign installer opens. For more information, see *Unica Platform Upgrade Guide*.

6. After Unica Campaign upgrade is completed, Unica Centralized Offer Management installer opens.

7. Use the information in the following table to navigate the Unica Centralized Offer Management installer.

Table 5. Unica Centralized Offer Management installer GUI

Window	Description
Introduction	<p>This is the first window of the Unica Centralized Offer Management installer. You can open the Unica Centralized Offer Management installation guide and upgrade guide from this window.</p> <p>Click Next to go to the next window.</p>
License Agreement	<p>Carefully read the agreement. Use Print to print the agreement. Click Next after you accept the agreement.</p>

Window	Description
Installation Directory	<p>Click Choose to browse to the directory where you want to install or upgrade Unica Centralized Offer Management.</p> <p>Click Next to go to the next window.</p>
Components	<p>Select J2EE Application and click Next to go to the next window.</p> <p>If you wish to take a backup of the previous install, select the checkbox and provide a location to take the backup.</p> <p>Click Next.</p>
Components	<p>The installer detects and displays the version of an existing installation of Unica Centralized Offer Management.</p> <p>Click Next to continue with the upgrade.</p>
Unica Campaign Database Type	<p>Select a database on which Unica Campaign is setup and click Next to go to the next window.</p> <p> Note: Do not select the database type "Informix" during installation or upgrade as it is not functional.</p>
Unica Campaign Database Connection	<p>Enter the following details for the Campaign database:</p> <ul style="list-style-type: none"> • Database host name • Database port • Database system ID (SID) • Database username • Password <p> Important: If Unica products are installed in a distributed environment, you must use the machine name rather than an IP address in the navigation URL for all of the applications in the suite. Also, if you are on a clustered environment and choose to use ports that are different from the default ports 80 or 443 for your deployment, do not use a port number in the value of this property.</p>
JDBC connection	<p>Click Next to go to the next window.</p> <p>Review and confirm the JDBC connection.</p> <p>Click Next to go to the next window.</p>
Unica Centralized Offer Management Connection Settings	<p>Enter the following connection settings:</p> <ul style="list-style-type: none"> • Network domain name • Host name • Port number

Window	Description
	Select the Use secure connection check box if necessary. Click Next to go to the next window.
Pre-Installation Summary	Review and confirm the values that you added during the installation process. Click Install to start the installation process. The Unica Centralized Offer Management installer opens.
Installation Complete	Click Done to close the Unica Platform installer and go back to the Unica installer.

Upgrading Unica Centralized Offer Management using console mode

The console mode allows you to install or upgrade Unica Centralized Offer Management command-line window. You can select various options in the command-line window to complete tasks such as selecting the products to install or selecting the home directory for the installation or upgrade.

Before you begin

Before you install or upgrade Unica Centralized Offer Management, ensure that you have configured the following.

- An application server profile
- A database schema

To display the installer screens correctly in console mode, configure your terminal software to support `UTF-8` character encoding. Other character encodings, such as `ANSI`, do not render the text correctly, and some information is not readable with these encodings.

1. Open a command-line prompt window and navigate to the directory where you have saved the Unica installer and the Interact installer.
2. Complete one of the following actions to run the Unica installer.

Choose from:

- For Windows™, enter the following command:

```
Unica_installer_full_name -i console
```

For example, `HCL_Unica_Installer_12.1.6_win.exe -i console`

- For UNIX™, invoke the `HCL_Unica_installer_full_name.sh` file.

For example: `HCL_Unica_Installer_12.1.6.sh`

3. Run the Unica installer file.

Example

For example: `HCL_Unica_Installer_12.1.6.sh`

4. Follow the directions that are displayed in the command-line prompt. Use the following guidelines when you must select an option in the command-line prompt:

- The default options are defined by the symbol [X].
- To select or clear an option, type the number that is defined for the option, and then press `Enter`.

Example

For example, suppose that the following list displays the components that you can install:

- 1 [X] Unica Platform
- 2 [X] Unica Campaign
- 3 [X] Unica Centralized Offer Management

5. The Unica installer launches the Unica Platform installer during the installation process. Follow the instructions in the command-line prompt window of the Platform installer. After completing the Unica Platform and Unica Campaign installations, the Unica installer launches the Unica Centralized Offer Management installer. Follow the instructions in the command-line prompt of the Unica Centralized Offer Management installer.
6. During `Upgrade Confirmation`, the installer shows that it has detected an existing installation of Unica Centralized Offer Management and its version. Press `Enter` to continue with the upgrade.
7. In the `Backup Folder` prompt, press `1` if you want to take a backup of the previous version or press `2` if you do not want a backup.
8. Proceed with the remaining steps.
9. After you enter `quit` in the Unica Centralized Offer Management installer command-line prompt window, the window shuts down. Follow the instructions in the command-line prompt window of the Unica installer to complete the installation of Unica Centralized Offer Management.



Note: If any error occurs during the installation, a log file is generated. You must exit the installer to view the log file.

Creating an EAR file after running the installer

You can create an EAR file after you install or upgrade Unica products. You might do this to create an EAR file with a desired combination of products.

About this task



Note: Run the installer in console mode from the command line.

Use the following procedure if you want to create an EAR file after you install Unica products:

1. If this is the first time you are running the installer in console mode, make a backup copy of the installer's `.properties` file for each of your installed products.
 - Each product installer creates one or more response files with a `.properties` extension. These files are in the same directory where you placed the installers. Be sure to back up all files with the `.properties` extension, including the `installer_<product initials><product version number>.properties` files and the file for the installer itself, which is named `installer.properties`.

For example, the properties files for Unica Platform `installer_ump12.1.6.properties` and the properties file for Unica Campaign `installer_uo12.1.6.properties`.

- If you plan to run the installer in unattended mode, you must back up the original `.properties` files, because when the installer runs in unattended mode, it clears these files. To create an EAR file, you need the information that the installer writes in the `.properties` files during the initial installation.

2. Open a command window and change directories to the directory that contains the installer.
3. Run the installer executable with this option:

```
-DUNICA_GOTO_CREATEEARFILE=TRUE
```

On UNIX™ type systems, run the `.bin` file rather than the `.sh` file.

The installer wizard runs.

4. Follow the instructions in the wizard.
5. Before you create more EAR files, overwrite the `.properties` file or files with the backups you created before you ran in console mode for the first time. **Please note EAR is not supported for Apache Tomcat application server.**

Chapter 4. Configuring Unica Centralized Offer Management Before Deployment

Before you deploy, Unica Centralized Offer Management perform the below configuration:

Custom validation and offer code plugin configuration

From version 12.1.0.3 onwards, Unica Centralized Offer Management supports offer validation and code generation using Unica Campaign's Plugin Developer's Kit (PDK). For more information on the development and use of the plugin, see Unica Campaign Validation PDK Guide.

If you have already configured the plugin in Unica Campaign, and are using the plugin for Campaign's offers, complete the following steps to use the same plugin in Centralized Offer Management:

1. Before copying the plugin, or plugins, developed in Campaign, take a backup of the validation folder in the `<Unica CentralizedOffer_home>\devkits\` location.
2. Copy all Campaign plugins from the `<Unica Campaign_home >\devkits \validation\` folder to `<Unica CentralizedOffer_home>\devkits \validation\` folder.
 - a. If the Campaign plugins reside in a different folder, copy the plugins from that folder.
 - b. If the Campaign plugins reside in a different folder, ensure that you update the configurations in in offer | partitions | partition <n> | validation and offer | partitions | partition<n> | offerCodeGenerator. For more details, refer *Centralized Offer Management Administrator's guide*.
3. Restart the Centralized Offer Management application.

Changes in Logging Configuration

Starting version 12.1.0.4, log4j.xml and log4j2.xml are merged in single log4j2.xml. So, if you had made changes in the logging configuration, merge those changes over the installation location in log4j2.xml file. Typically, it is located at - `<CentralizedOffer_Installation_path>/conf/logging`

Chapter 5. Deploying Unica Centralized Offer Management

There are general guidelines for deploying Unica Centralized Offer Management on WebSphere® and WebLogic.

If you created an EAR file after running the installer and your EAR file includes any other products, you must follow all the deployment guidelines detailed in the individual install guides for the products included in the EAR file in addition to those listed in this chapter.

It is assumed that you know how to work with your web application server. Consult your web application server documentation for details about things like how to use the Administration console.

Deploying Unica Centralized Offer Management on WebSphere

You can deploy the Unica Centralized Offer Management application from a WAR file or an EAR file on the WebSphere® Application Server (WAS).

Before you begin

Consider the following points before you deploy Unica Centralized Offer Management on WebSphere:

- Verify that your version of WebSphere® meets the requirements that are described in the *Recommended Software Environments and Minimum System Requirements* document, including any necessary fix packs or upgrades.
- You use the WebSphere® Integrated Solutions console to configure your WebSphere® Application Server. The steps that follow provide guidance for setting specific controls.



Note: Different versions of WebSphere® Application Server present user interface controls in varying sequences and with alternative labels.

About this task

Complete the following steps to set up the environment for deploying Unica Centralized Offer Management:

1. Configure the JVM: On the **Application servers > <server> > Process definition > Java Virtual Machine** form, identify the Classpath then add the following entries as Generic JVM arguments, separated by a space:

- `-DOFFER_HOME=<UNICA_HOME>\<Offer_Home>`

where `<Unica_Home>` is the path to the top-level HCL directory and `<Offer_Home>` is the path to the directory where you installed Unica Centralized Offer Management. Typically, this path is `<UNICA_HOME>/CentralizedOffer`.

- For your installation to support non-ASCII characters, example for Portuguese or for locales that require multi-byte characters, add the following arguments to Generic JVM Arguments at the server level:

```
-Dfile.encoding=UTF-8  
-Dclient.encoding.override=UTF-8
```

- For the Oracle database, set the following system property:

```
-Doracle.jdbc.J2EE13Compliant=true
```

2. Set the JSP Compilation level in the WebSphere application server to 18.

Deploying the WAR file

When you deploy a new enterprise application, the WebSphere® Integrated Solutions Console presents a series of forms. The steps that follow provide guidance for setting specific controls on these forms. Different versions of WebSphere® can present controls in another sequence or with other labels.

About this task

Complete the following steps to deploy the WAR or EAR file:

1. Select **Applications > New Application > New Enterprise Application**.
2. On the initial form, select **Remote** file system and then **Browse** to the `Offer.war` file or your EAR file.
3. On the next **Preparing for the Application Installation** window:
 - Select **Detailed**.
 - Select **Generate Default Bindings**.
 - Select **Override existing bindings**.
4. On the **Select Installation Options** window, complete the following actions:
 - Select **Precompile JavaServer Pages files**.
 - For **Application name**, enter `offer`.
 - Select **Override class reloading settings for Web and EJB modules**.
 - For **Reload interval in seconds**, enter an integer such as 4.
5. On the **Map Modules to Servers** window, select the **Module**. If you deployed an EAR, select every WAR file.
6. On the **Provide Options to Compile JSPs** window, select the **Web module**. If you deployed an EAR, select every WAR file.
7. Set the **JDK Source Level** to 18.
8. On the **JSP reloading options for Web modules** form, select **JSP enable class reloading** and for **JSP reload interval in seconds** enter 5.
9. On the **Map shared libraries** window, select the **Application** and the **Module**.
10. On the **Map shared library relationships** window, select the **Application** and the **Module**.
11. On the **Map resource references to resources** window, select the module and for **Target Resource JNDI Name** enter `campaignPartitionLDS`.
12. On the **Map context roots for Web modules** window, for **Context Root** enter `/offer`.
13. Review and save your settings.

Defining class loader policy

Class loader policy defines how the application is configured on WAS. You must change some of the default settings on WAS before you deploy Unica Centralized Offer Management.

About this task

Complete the following steps to define the class loader policy:

1. On the **Enterprise Applications > offer > Class loader**, select **Override class reloading settings for Web and EJB modules** and provide an appropriate value for the **Polling interval for updated files field**.
2. For **Class loader order**, select **Classes loaded with local class loader first (parent last)**.

3. Perform one of the following options depending on the file:

Choose from:

- **WAR:** For **WAR class loader policy**, select **Single class loader for application**.
- **EAR:** For **WAR class loader policy**, select **Class loader for each WAR file in application**.

4. Click **Apply** and **Save Settings**.

Defining settings for cookies

You must define and set settings for cookies by using **Session Management** option on the **Websphere Enterprise Applications**.

About this task

Complete the following steps to define the settings for cookies:

1. Go to the **Enterprise Applications > offer > Session management**.
2. Select **Override session management**.
3. Select **Enable cookies**.
4. Click **Apply**, then go to the **Enterprise Applications > offer > Session management > Cookies**.
5. Change the Unica Centralized Offer Management **Cookie name** from `JSESSIONID` to `OMSESSIONID`.
6. Click **Apply** and **Save Settings**.

Defining EAR module settings

If you deployed an EAR file, you must define settings for the individual WAR files that are contained by the EAR files.

About this task

Complete the following steps to define EAR file module settings:

1. Go to **Enterprise Applications** and select the EAR file.
2. On the **Manage Modules** form, select one of the WAR files; for example, `Offer.war`.
3. On the **Enterprise Applications > EAR > Manage Modules > WAR** form, complete the following sub-steps:
 - a. Set **Starting weight** to `10000`.
 - b. For **Class loader order**, select **Classes loaded with application class loader first**.
4. On the **Enterprise Applications > EAR > Manage Modules > WAR > Session management**, select **Enable cookies**.
5. On the **Enterprise Applications > EAR > Manage Modules > WAR > Session Management > Cookies**, complete the following steps:
 - a. Set the **Cookie name** to `CMPJSESSIONID`.
 - b. For the **Cookie maximum age**, select **Current browser session**.
6. On the **Enterprise Applications > EAR > Manage Modules > WAR > Session management**, enter the following information:
 - a. Select **Allow overflow**.
 - b. For **Maximum in-memory sessions**, enter `1000`.
 - c. For **Session timeout**, select **Set timeout** and enter `30`.

7. Define the same settings for each of the other WAR files, including `unica.war` and `Offer.war`.



Note: If the `Campaign.war` file also exists in the EAR file and you plan to integrate Unica Centralized Offer Management with Unica Campaign, define the same settings for the `Campaign.war` file.

Deploying Unica Centralized Offer Management on WebLogic

Use the following guidelines for deploying Unica Centralized Offer Management on WebLogic.

About this task

- Unica products customize the JVM used by WebLogic. You might create a WebLogic instance dedicated to Unica products if you encounter JVM-related errors.
- Do not install more than one Unica Centralized Offer Management application under the same WebLogic domain.
- Verify that the Software Development Kit (SDK) selected for the WebLogic domain you are using is the Sun SDK by looking in the startup script (`startWebLogic.cmd`) for the `JAVA_VENDOR` variable. It should be set to `JAVA_VENDOR=Sun`. If it is set to `JAVA_VENDOR=BEA`, JRockit has been selected. JRockit is not supported. To change the selected SDK, refer to the WebLogic documentation.

Complete the following steps to deploy Unica Centralized Offer Management to WebLogic:

1. If your operating system is AIX®, extract the Unica Centralized Offer Management WAR file, delete the `xercesImpl.jar` file from `WEB_INF/lib` directory, and recreate the WAR file.
If the installer combined products in an EAR file, you must first extract that file to obtain the WAR file, and you must recreate the EAR file.
2. If you are configuring WebLogic to use the IIS plug-in, review the WebLogic documentation to determine whether you have additional requirements.
3. From the `bin` directory under your WebLogic domain directory, locate and open the `setDomainEnv` script in a text editor. Scroll to the `JAVA_OPTIONS` property and add the following entries. Use a space to separate entries.

- `-DOFFER_HOME=<UNICA_HOME>\<Offer_Home>`

Where `<UNICA_HOME>` is the path to the top-level directory and `<Offer_Home>` is the path to the directory where you installed Unica Centralized Offer Management. Typically, this directory is `<UNICA_HOME>/CentralizedOffer`.

- For your installation to support non-ASCII characters, example for Portuguese or for locales that require multi-byte characters, add the following arguments to Generic JVM Arguments at the server level:

```
-Dfile.encoding=UTF-8
-Dclient.encoding.override=UTF-8
```

- For the Oracle database, set the following system property:

```
-Doracle.jdbc.J2EE13Compliant=true
```

4. Save and close the file.
5. Restart WebLogic.
6. Deploy Unica Centralized Offer Management as a web application module: select `Offer.war`.
7. Start the deployed web application.

Deploying Unica Centralized Offer Management on JBOSS

You can deploy Unica products on JBOSS application server. Use the following guidelines when you deploy Unica Centralized Offer Management on JBOSS:

- Verify that your version of JBOSS meets the requirements that are described in the *Recommended Software Environments and Minimum System Requirements* guide, including any necessary fix packs or upgrades.
- HCL Marketing Software products customizes the JVM used by JBOSS. You might need to create a JBOSS instance that is dedicated to HCL Marketing Software products, if you encounter JVM-related errors.
- If you are deploying in a production environment, set the JVM memory heap size parameters to at least 1024 by adding the following line to the `standalone.conf` file in the `JBOSS_EAP_HOME/bin`:

```
JAVA_OPTS="-Xms1024m -Xmx1024m -XX:MetaspaceSize=96M - XX:MaxMetaspaceSize=256m "
```

These are the suggested minimum values. Analyze your sizing requirements to determine correct values for your needs. Depending upon system load `-Xmx` and `MaxMetaspaceSize` value should be adjusted.



Note: A 64-bit application server and JVM are usually required for values greater than 2048.

- Modify the `JAVA_OPTIONS` parameter to add the following value in `setenv.bat/sh`:

```
set "JAVA_OPTS=%JAVA_OPTS% -DUNICA_PLATFORM_CACHE_ENABLED=true
-Dclient.encoding.override=UTF-8 -DOFFER_HOME=<UNICA_HOME>\<Offer_Home>"
```

- Navigate to the JBOSS Enterprise Application management Console, for example `http://<Jboss_Host_IP>:<Port>/management`.
- Deploy `Offer.war` on JBOSS.
- You can also deploy `Offer.war` using `jboss-cli.bat/sh`. Run the following command:

```
jboss-cli.bat/sh
```

and connect to the JBOSS instance using the following command:

```
connect <Jboss_Host_IP>:<JBoss management Port>
deploy <UNICA_HOME>/CentralizedOffer/Offer.war
```

- For the Oracle database, set the following system property:

```
-Doracle.jdbc.J2EE13Compliant=true
```

- After making the changes, restart the JBOSS application server.

Deploying Unica Centralized Offer Management on Apache Tomcat

You must follow a set of guidelines when you deploy Unica Centralized Offer Management on Apache Tomcat.

Ensure that the version of Apache Tomcat meets the requirements that are described in the *Recommended Software Environments and Minimum System Requirements* document.



Note: Deployment of EAR file is not supported on Apache Tomcat.

Use the following guidelines when you deploy Unica Centralized Offer Management on Apache Tomcat:

1. From the bin directory, inside the Apache Tomcat installation directory (Inside the `<Tomcat_Instance_Home>\instanceN\bin`), locate or create the `setenv.sh` or `setenv.bat` script appropriate for your operating system in a text editor, and add or modify `JAVA_OPTIONS` property, and add the following entries. Use a space to separate entries.

- `-DOFFER_HOME=<UNICA_HOME>\<Offer_Home>`

Where `<UNICA_HOME>` is the path to the top-level directory and `<Offer_Home>` is the path to the directory where you installed Unica Centralized Offer Management. Typically, this directory is `<UNICA_HOME>/CentralizedOffer`.

```
set "JAVA_OPTS=%JAVA_OPTS% -DOFFER_HOME=<CentralizedOffer_home>
-DUNICA_PLATFORM_CACHE_ENABLED=false"
```

- For your installation to support non-ASCII characters, example for Portuguese or for locales that require multi-byte characters, add the following arguments to Generic JVM Arguments at the server level:

```
-Dfile.encoding=UTF-8
-Dclient.encoding.override=UTF-8
```

- For the Oracle database, set the following system property:

```
-Doracle.jdbc.J2EE13Compliant=true
```

2. Create the `Offer.xml` file and place in `<Tomcat_Install_Home>\instanceN\conf\Catalina\localhost`. The following is a sample file

```
<?xml version="1.0"?>
<Context docBase="<OFFER_HOME>\Offer.war">
  <Resource name="UnicaPlatformDS" factory="com.unica.manager.tomcat.utils.TomcatDSFactory"
    auth="Application" type="javax.sql.DataSource"
      maxActive="30" maxIdle="10" maxWait="10000"
      username="<USER_NAME>" password="<ENCRYPTED_PASSWORD>"
    driverClassName="com.microsoft.sqlserver.jdbc.SQLServerDriver"
      url="jdbc:sqlserver://Host:port;databaseName=<Platform_DB_Name>"/>

  <Resource name="campaignPartition1DS" factory="com.unica.manager.tomcat.utils.TomcatDSFactory"
    auth="Application" type="javax.sql.DataSource"
      maxActive="30" maxIdle="10" maxWait="10000"
      username="<USER_NAME>" password="<ENCRYPTED_PASSWORD>"
    driverClassName="com.microsoft.sqlserver.jdbc.SQLServerDriver"
      url="jdbc:sqlserver://Host:port;databaseName=<Campaign_Partition1_DB_NAME>"/>

  <Resource name="campaignPartition2DS" factory="com.unica.manager.tomcat.utils.TomcatDSFactory"
    auth="Application" type="javax.sql.DataSource"
      maxActive="30" maxIdle="10" maxWait="10000"
      username="<USER_NAME>" password="<ENCRYPTED_PASSWORD>"
    driverClassName="com.microsoft.sqlserver.jdbc.SQLServerDriver"
      url="jdbc:sqlserver://Host:port;databaseName=<Campaign_Partition2_DB_NAME>"/>
</Context>
```

3. Inside `<PLATFORM_HOME>/tools/bin`, encrypt the password using `encryptTomcatDBPasswords.bat/sh`.

```
encryptTomcatDBPasswords.bat -d <PASSWORD>
```

4. Copy the database driver in `<Tomcat_Instance_Home>\lib`.
5. Start the offer application by running the following command:

```
startup.sh/bat instanceN
```

Verifying Unica Centralized Offer Management upgrade after deployment

You need to verify successful deployment of Unica Centralized Offer Management after upgrade.

After deployment of Unica Centralized Offer Management, perform the following steps to verify the upgrade:

1. Start Unica Centralized Offer Management.
2. Log in with user having OfferAdmin role, for example, `asm_admin`.
3. Access the following features of Unica Centralized Offer Management for verification of successful deployment:
 - a. **Settings > Offer settings**
 - b. **Offer > Offers**

Chapter 6. Uninstalling Unica Centralized Offer Management

Run the Unica Centralized Offer Management uninstaller to uninstall Unica Centralized Offer Management. For more information, see *Unica Centralized Offer Management Installation Guide*.