# **HCLSoftware**

**Unica Collaborate V12.1.6 Installation Guide** 



# Contents

Chapter 1. Installation overview1
Installation roadmap1
How the installers work3
Modes of installation3
Unica Collaborate documentation and help3
Chapter 2. Planning the Collaborate installation6
Prerequisites6
Unica Collaborate Installation database information worksheet8
Installation order for HCL Unica products9
Chapter 3. Preparing the Unica Collaborate data sources11
Creating the Distributed Marketing system table database or schema11
Required databases or schemas for Unica Interact12
Creating ODBC or native connections13
Configuring the web application server for your JDBC drivers13
Creating the JDBC connections in the web application server
Information for creating JDBC connections 17
Chapter 4. Installing Collaborate22
Installing Collaborate components23
Installing Collaborate by using the GUI mode23
Installing Collaborate by using the console mode 29
Installing Collaborate silently30
Sample response files32
Creating an EAR file after running the installer 33
Chapter 5. Configuring Unica Collaborate before deployment35
Optional: Registering Distributed Marketing manually35
•
Optional: Creating and populating the Collaborate system tables35
Creating the list tables
Creating Campaign system tables for Distributed Marketing37
Chapter 6. Deploying Collaborate web application38
Deploying Collaborate on WAS from a WAR file 38
Deploying Collaborate on WAS from an EAR file39
Specifying generic JVM arguments41
Creating webSphereDefaultIsolationLevel property41
Deploying Collaborate on WebLogic41
Deploying Unica Campaign on JBoss Application Server42
Deploying Unica Collaborate on Tomcat Application Server43

Chapter 7. Configuring Collaborate after deployment	45
Creating a system user	45
Basic installation parameters	45
List display configuration	48
Optional: Setting up data filters for the list display	49
Configure the View List and Search List pages	49
Disable the List Manager List tables	50
List display configuration files	50
Mapping Distributed Marketing tables in Campaign	57
Mapping Campaign system tables for Collaborate	58
Starting the Campaign server	58
Checking the installation log for errors	58
Verify Collaborate installation	59
	59
	59
	59
Chapter 8. Clustering your WebSphere Application Serve for Collaborate	er 61
Setting up your web-app cluster	61
Defining ehCache configurations for your clustered environment	
Chapter 9. Uninstalling Collaborate	
Chapter 10. configTool	
Index	71

# Chapter 1. Installation overview

An installation of Collaborate is complete when you install, configure, and deploy, install, and configure Collaborate. The Collaborate Installation Guide provides detailed information about installing, configuring, and deploying, installing, and configuring Collaborate.

Use the Installation Roadmap section to obtain a broad understanding about using the Collaborate Installation Guide.

## Installation roadmap

Use the installation roadmap to quickly find the information that you need for installing Collaborate.

You can use the Collaborate installation roadmap to scan the tasks that must be completed for installing Collaborate. The **Description** column in the following table provides links to the topics that describe the tasks for installing Collaborate:

Table 1. Collaborate installation roadmap

Торіс	Description
Installation overview on page 1	This topic provides the following information:
	How the installers work on page 3
	<ul> <li>Modes of installation on page 3</li> </ul>
	<ul> <li>Collaborate documentation and help on page 3</li> </ul>
Planning the Collaborate installation on page 6	This topic provides the following information:
	Prerequisites on page 6
	<ul> <li>Unica Collaborate installation database information</li> </ul>
	worksheet on page 8
	<ul> <li>Installation order for HCL Unica products on page 9</li> </ul>
Preparing data sources for Unica Collaborate on page 11	This topic provides the following information:
page	<ul> <li>Creating the Collaborate system table database or</li> </ul>
	schema on page 11
	<ul> <li>Configuring the web application server for your JDBC driver on page 13</li> </ul>
	Creating the JDBC connections in the web application
	server on page 16
Installing Collaborate on page 22	<ul> <li>Installing Collaborate components on page 23</li> </ul>
	<ul> <li>Installing Collaborate by using the X Window System</li> </ul>
	mode on page 23

#### Table 1. Collaborate installation roadmap

#### (continued)

Topic	Description
	Installing Unica Collaborate using the console mode on
	page 29
	Installing Unica Collaborate silently on page 30
Configuring Unica Collaborate before deployment on page 35	This topic provides the following information:
page	<ul> <li>Registering Collaborate manually on page 35</li> </ul>
	<ul> <li>Creating and populating the Collaborate system tables on page 35</li> </ul>
	Creating list tables on page 36
	<ul> <li>Creating Campaign system tables for Collaborate on page 37</li> </ul>
Deploying the Collaborate web application on page 38	This topic provides the following information:
page oo	Deploying Collaborate on WAS from a WAR file on
	<ul><li>page 38</li><li>Deploying Collaborate on WAS from an EAR file on</li></ul>
	page 39
	Deploying Collaborate on WebLogic on page 41
Configuring Collaborate after deployment on page 45	This topic provides the following information:
page 40	Creating a system user on page 45
	<ul> <li>List display configuration on page 48</li> </ul>
	<ul> <li>Mapping Collaborate tables in Campaign on page 57</li> </ul>
	<ul> <li>Mapping Campaign system tables for Collaborate on page 58</li> </ul>
	Changing CollaborateIntegrationServicesURL parameter
	<ul> <li>Verifying Collaborate installation on page 59</li> </ul>
Setting up a web-app clustered environment for Collaborate on page 61	This topic provides the following information:
Conastrate on page of	<ul> <li>Setting up your web-app cluster for Collaborate on page 61</li> </ul>
Uninstalling Collaborate on page 65	This topic provides the information about how to uninstall Collaborate.
configTool on page 67	Read more about the Config tool utilities in Collaborate.

## How the installers work

You must use the suite installer and the product installer when you install or upgrade any HCL Unica product. For example, for installing Collaborate, you must use the HCL Unica suite installer and the Unica Collaborate installer.

Make sure that you use the following guidelines before you use the HCL 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 the product.
- If you are planning to install a patch immediately after you install an HCL Unica product, make sure that the patch installer is in the same directory as that of the suite and product installers.
- The default top-level directory for HCL Unica installations is /HCL/UNICA for UNIX™ or C:\HCL\UNICA for Windows™. However, you can change the directory during installation.

#### Modes of installation

The HCL Unica suite installer can run in one of the following modes: GUI mode, X Window System mode, console mode, or silent mode (also called the unattended mode). Select a mode that suits your requirements when you install Collaborate.

For upgrades, you use the installer to perform many of the same tasks that you perform during the initial installation.

#### **GUI Window System mode**

Use the GUI mode for Windows™ to install Collaborate by using the graphical user interface.

#### **UNIX™ X Window System mode**

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

#### Console mode

Use the console mode to install Collaborate 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 Collaborate multiple times. The silent mode uses response files for installation, and does not require user input during the installation process.



**Note:** Silent mode is not supported for upgrade installations in clustered web application or clustered listener environments.

## Collaborate documentation and help

Collaborate provides documentation and help for users, administrators, and developers.

The following table describes the various tasks of Collaborate. The **Documentation** column contains names of documents where you can find more information about the tasks.

Table 2. Get up and running

Task	Documentation
Find out about new features, known issues, and limitations	Collaborate Release Notes
Learn about the structure of the Collaborate system tables	Collaborate System Tables and Data Dictionary
Install or upgrade Collaborate	One of the following guides:
	Collaborate Installation Guide
	Collaborate Upgrade Guide
Implement the IBM® Cognos® reports provided by Unica	Cognos Reports Installation and Configuration Guide
Collaborate	Unica Insights Installation and Configuration Guide
Implement Unica Insights reports provided by Unica Collaborate	

The following tables describe administrative tasks in Collaborate. The **Documentation** column contains names of documents where you can find more information about the tasks.

Table 3. Configure and use Collaborate

Task	Documentation
Set up and configure the system for users	Unica Collaborate Administrator's Guide
<ul> <li>Adjust security settings</li> </ul>	
<ul> <li>Map tables, define offer templates and custom attributes</li> </ul>	
<ul> <li>Run utilities and perform maintenance</li> </ul>	
<ul> <li>Create and deploy marketing campaigns</li> </ul>	Unica Collaborate Corporate Marketer's Guide
Analyze campaign results	Unica Collaborate Field Marketer's Guide
Use REST APIs	Unica Collaborate REST APIs

The following tables contain information about online help and obtaining PDFs for Collaborate. The **Instructions** column describes how to open online help and access documentation for Collaborate.

#### Table 4. Getting help

Task	Instructions
Open online	1. Choose <b>Help &gt; Help for this page</b> to open a context-sensitive help topic.
help	2. Click the <b>Show navigation</b> icon in the help window to display the full help.
	You must have web access to view context-sensitive online help. Contact HCL Support for more information about accessing and installing Unica Knowledge Center locally for offline documentation.
Obtain PDFs	Use either of the following methods:
	Choose Help > Product documentation to access Collaborate PDFs.
	<ul> <li>Choose Help &gt; All HCL Unica suite documentation to access all available documentation.</li> </ul>
Unica	To access the Unica Knowledge Center, choose <b>Help &gt; Support for this product</b> .
Knowledge	
Center	

# Chapter 2. Planning the Collaborate installation

When you plan your Collaborate installation, 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 any HCL Unica product, you must ensure that your computer complies with all of 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 HCL 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

HCL Unica applications within a suite must be deployed on a dedicated Java™ virtual machine (JVM). HCL Unica products customize the JVM that is used by the web application server. If you encounter errors that are related to the JVM, you must create an Oracle Weblogic domain or IBM Websphere profile that is dedicated to the HCL Unica products.

#### **Knowledge requirements**

To install HCL 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 subdirectories for the operating system account that you use to run the web application server and HCL 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
- Root access for the Linux<sup>™</sup> operating system.

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

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

The following additional permissions are necessary for UNIX™:

- The user account that installs Collaborate and Platform must be a member of the same group as the Campaign users. This user account must have a valid home directory, and have write permissions for that directory.
- All installer files for Unica products must have full permissions, for example, rwxr-xr-x.

#### JAVA\_HOME environment variable

If a JAVA\_HOME environment variable is defined on the computer where you install an HCL Unica product, verify that the variable points to a supported version of JRE. For information about system requirements, see the *HCL 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 HCL 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 HCL Unica installer installs a JRE in the top-level directory for the HCL Unica installation. Individual HCL Unica application installers do not install a JRE. Instead, they point to the location of the JRE that is installed by the HCL Unica installer. You can reset the environment variable after all installations are complete.

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

#### **Platform requirement**

You must install or upgrade Platform before you install or upgrade any HCL Unica products. For each group of products that work together, you must install or upgrade Platform only once. Each product installer checks whether the required products are installed. If your product or version is not registered with Platform, a message prompts you to install or upgrade Platform before you proceed with your installation. Platform must be deployed and running before you can set any properties on the **Settings > Configuration** page.

#### Campaign requirement

You must install or upgrade and configure Campaign before you install or upgrade Collaborate.

## Unica Collaborate installation database information worksheet

Use the Collaborate installation database worksheet to gather information about the Collaborate database and about other HCL Unica products that are required for the installation of Collaborate.

Use the Unica Collaborate installation database information worksheet to gather information about the database that contains your Collaborate system tables.

#### Table 5. Collaborate database information worksheet

	Field	Notes
Database type		
Database name		
Database account user name		
Database account password		
JNDI name		
ODBC name		

#### **Checklist for Platform**

The installation wizards for each HCL Unica product must be able to communicate with the Platform system table database to register the product. Each time that you run the installer, you must enter the following database connection information for the Platform system table database:

- · Database type
- JNDI name
- JDBC driver class
- · JDBC connection URL
- · JDBC driver class path on your computer
- Database host name
- · Database port
- · Database name or schema ID
- · User name and password for the database account

#### Information about web component

Obtain the following information for all HCL Unica products that have a web component, which you deploy on a web application server:

- The protocol that is HTTP or HTTPS, if SSL is implemented in the web application server.
- The name of the systems on which the web application servers are installed. You can have one or several web application servers, depending on the HCL Unica environment that you are setting up.
- The port on which the application server listens. If you plan to implement SSL, obtain the SSL port.
- The network domain for your deployment system. For example, mycompany.com.

## Installation order for HCL Unica products

When you install or upgrade multiple HCL Unica products, you must install them in a specific order.

The following table provides information about the order that you must follow when you install or upgrade multiple HCL Unica products.

#### Table 6. Installation or upgrade order for HCL Unica products

# For this product or combination: Install or upgrade in this order: Campaign (with or without Deliver) 1. Platform



**Note:** Deliver is installed automatically when you install Campaign. However, Deliver is not configured or enabled during the Campaign installation process.

Interact

1. Platform

2. Campaign

- 2. Campaign
- 3. Interact Design Time environment
- 4. Interact Run Time environment
- 5. Interact Extreme Scale Server

If you want to install or upgrade the Interact design time environment only, then install or upgrade the Interact design time environment in the following order:

- 1. Platform
- 2. Campaign
- 3. Interact Design Time environment

If you want to install or upgrade the Interact runtime environment only, then install or upgrade the Interact runtime environment in the following order:

- 1. Platform
- 2. Interact Run Time environment

## Table 6. Installation or upgrade order for HCL Unica products

## (continued)

For this product or combination:	Install or upgrade in this order:
	If you want to install the Interact Extreme Scale Server only, then install the Interact
	Extreme Scale Server in the following order:
	1. Platform
	2. Interact Run Time environment
	3. Interact Extreme Scale Server
Plan	1. Platform
	2. Plan
	Note: If you are integrating Plan with Campaign, you must also install Campaign. The order of installation for those two products does not matter.
Collaborate	1. Platform
	2. Campaign
	3. Collaborate
Interact Advanced Patterns	1. Platform
	2. Campaign
	3. Interact
	4. Interact Advanced Patterns

# Chapter 3. Preparing data sources for Unica Collaborate

You can use the Collaborate worksheet to enter the information that is required when you install Collaborate.

## Creating the Collaborate system table database or schema

Create the database or schema for Collaborate with the help of your database administrator. After you create a schema, enter the correct information about it in the data source information worksheet.

#### About this task

Complete the following tasks to create the Collaborate system tables or schema:

1. Work with a database administrator to create the required database or schema for Collaborate.



Note: The Collaborate system database must use UTF-8 character encoding. If you do not use UTF-8, you can encounter a problem when you copy certain characters from a Microsoft™ Word document into Collaborate. In an Oracle database, certain characters display as ? when you copy them from Word to a Collaborate field. For DB2®, this issue causes a problem when you view objects. To fix the problem, you must go into the database and remove the problem characters.

Table 7. Guidelines for creating databases or schemas

Guidelines
Enable the auto commit feature for the environment open. See the Oracle documentation for instructions.
Set the database page size to at least 16K, or 32K if you need to support Unicode. See the DB2® documentation for instructions.
Use either the SQL Server authentication, or both the SQL Server and Windows™ authentication, because Platform requires SQL Server authentication. If necessary, change the database configuration so that your database authentication includes SQL Server. Also, be sure that TCP/IP is enabled in your SQL Server.



Data

bas

e ve

ndor Guidelines

Mari To support Unicode, set the appropriate database collation while creating databases or schemas. aDB



**Note:** If you plan to enable locales that use multi-byte characters, such as Chinese, Korean, and Japanese, ensure that the database is created to support them.



**Note:** When you create your databases, you should use the same code page for all of your databases. You cannot change this code page once it is set. If you did not create your databases to use the same code page, you must use only the characters supported in the code page. For example, if you create a zone in global offers that does not use a character in the profile database code page, the global offer does not work.



**Note:** Database names in Unica Collaborate must follow the naming convention for ordinary identifiers (also known as "non-quoted identifiers or regular identifiers) for the brand of SQL used (DB2, Oracle, SQL Server, MariaDB and so on). Refer to your database provider documentation for specific details. Typically, alphabetic letters, numbers, and underscores are allowed by all flavors of SQL. Hyphens and other characters not permitted in ordinary identifiers will likely cause SQL exceptions.

- http://docs.oracle.com/cd/E11882\_01/server.112/e41084/sql\_elements008.htm#SQLRF51129
- https://msdn.microsoft.com/en-us/library/ms175874.aspx
- 2. Have the database administrator create an account for the database or schema. Specify this account as a data source for a system user later in the installation process.

This account must have at least CREATE, DELETE, SELECT, INSERT, UPDATE, and DROP rights.

- If you are using DB2, make sure that the buffer pool for the table space is at least 32 K; otherwise, you are not able to create templates.
- 3. Obtain the information about your database or schema and the database account and then print and complete the Unica Collaborate installation database information worksheet on page 8.

## Required databases or schemas for Collaborate

The Unica Interact runtimeOpportunity Detect Design Time environment requires several databases to hold user and interaction data. You can use your Unica Campaign Customer (user) tables or set up a unique data source.

The Collaborate design time environment tables are manually created by running the scripts to the database or schema that holds the Unica Campaign system tables.

According to the type of data that must be stored, determine how many databases or schemas you must create for use with the Collaborate runtime environment.

In Interact setup, Interact design time tables database or schema is shared across all the server groups defined within that setup.

The following list provides a brief summary of the databases or schemas that are required for the Collaborate runtime environment:

- Database or schema to hold the Collaborate runtime tables. There must be a separate database or schema for each server group.
- Database, schema, or view to hold the user profile tables. The user profile tables can be in the same database as
  your Unica Campaign Customer (user) tables. There can be a separate set of user profile tables for each interactive
  channel.
- Database, schema, or view to hold the test run tables. The test run tables can be in the same database as your Unica Campaign Customer (user) tables.
- · If you want to use built-in learning, there must be a database or schema to hold the learning tables.
- If you want to use cross-session response tracking, there must be a database or schema to hold a copy of the Unica Campaign contact history tables. Alternatively, instead of creating a copy, you can use the Unica Campaign system tables database to run the cross-session response tracking scripts.

## Creating ODBC or native connections

Create ODBC or native connections so that the Unica Campaign server can access the database that contains the Unica Collaborate test run tables of the design time environment. Create ODBC or native connections on the computer where you installed the Unica Campaign server.

#### About this task

If you use the Unica Campaign customer (user) tables as your test run tables, then the ODBC connection is already created when Unica Campaign was installed.

If the Unica Collaborate design time environment test run tables are not the same as your customer (user) tables, use the following guidelines to create the ODBC or native connection to the database that holds them:

- For databases on UNIX™: Create a new native data source in an ODBC.ini file. The procedure for creating a native data source differs depending on the data source type and the version of UNIX™. See the data source and operating system documentation for specific ODBC driver installation and configuration instructions.
- For databases on Windows™: Browse to **Control Panel** and click **Administrative Tools > Data Sources (ODBC)** to create an ODBC data source.

Record the connection names in the Installation worksheet.

## Configuring the web application server for your JDBC driver

The web application server where you plan to deploy Collaborate must contain the correct JAR file to support JDBC connections. This enables your web application to connect to the system tables. The location of the JAR file must be included in the class path of the web application server.

## WebSphere

#### About this task

If you are using WebSphere and if you allow the installer to create the data source when you install the product, then you can skip the step in the following procedure about setting the classpath. Otherwise, if you want to allow the installer to create the data source, then perform the following step.

To enable automatic data source creation during installation, on the **Datasource Creation** panel, select the **Create Datasource** checkbox and provide information about your application server WebSphere profile.

## WebLogic

#### About this task

If you are using WebLogic, perform the complete steps.

- Obtain the latest vendor-provided Type 4 JDBC driver for your system table database that is supported by HCL Unica, as described in the *Recommended Software Environments and Minimum System Requirements* guide.
   Use the following guidelines after you obtain the JDBC driver.
  - If the driver does not exist on the server where you plan to deploy Unica Collaborate, obtain it and unpack it on the server. Unpack the drivers in a path that does not include spaces.
  - If you obtain the driver from a server where the data source client is installed, verify that the version is the latest supported by Unica Collaborate.
- 2. Add the full path to the driver, including the file name, to the class path of the web application server where you plan to deploy Unica Collaborate.

Use the following guidelines.

• For all supported versions of WebLogic, set the class path in the setDomainEnv script in the WebLogic\_domain\_directory/bin directory where environment variables are configured. Your driver entry must be the first entry in the class path list of values, before any existing values, to ensure that the web application server uses the correct driver. For example:

#### UNIX™

```
CLASSPATH="/opt/drivers/ojdbc8.jar":
${PRE_CLASSPATH}${CLASSPATHSEP}${WEBLOGIC_CLASSPATH}
${CLASSPATHSEP}${POST_CLASSPATH}$
export CLASSPATH
```

product="Campaign DAOP DistMkt Deliver Interact Leads Plan Optimize Platform AttribMod IntHist">

#### Windows™

```
set CLASSPATH=c:\oracle\jdbc\lib\ojdbc8.jar;%PRE_CLASSPATH%;
%WEBLOGIC_CLASSPATH%;%POST_CLASSPATH%;%WLP_POST_CLASSPATH%
```

- For all supported versions of WebSphere®, set the class path when you set up the JDBC providers for Unica Collaborate.
- 3. Make a note of the database driver class path in the Unica Collaborate installation worksheet, as you must enter the path when you run the installer.

4. Restart the web application server so that your changes take effect.

During startup, monitor the console log to confirm that the class path contains the path to the database driver.

#### **JBoss**

#### About this task

If you are using JBoss, you must perform this entire procedure.

- 1. Obtain the latest vendor-provided Type 4 JDBC driver for your system table database that is supported by HCL Unica, as described in the *Recommended Software Environments and Minimum System Requirements* guide.
  - Use the following guidelines after you obtain the JDBC driver.
    - If the driver does not exist on the server where you plan to deploy Unica Collaborate, obtain it and unpack it on the server. Unpack the drivers in a path that does not include spaces.
    - If you obtain the driver from a server where the data source client is installed, verify that the version is the latest supported by Unica Collaborate.
- 2. Add the full path to the driver, including the file name, to the class path of the web application server where you plan to deploy Unica Collaborate.

Use the following guidelines.

• For all supported versions of JBoss, add the JDBC driver as module. Use the following procedure to add the JDBC driver as a module.

For example, for SQL Server:

```
module add --name=com.microsoft.sqlserver.jdbc --resources=<JDBC_Driver_Location>\sqljdbc4.jar --dependencies=javax.api,javax.transaction.api
```

- Register this SQL JDBC Driver using the following guidelines: For example:
  - o /subsystem=datasources/jdbc-driver=sql:add(driver-modulename=com.microsoft.sqlserver.jdbc,driver-name=sql,driver-xa-datasource-classname=com.microsoft.sqlserver.jdbc.SQLServerXADataSource)
  - o /subsystem=datasources/jdbc-driver=sql:read-resource
  - $^{\circ} \ / \text{subsystem=ee/service=default-bindings:write-attribute(name=datasource, value=undefined)} \\$
- 3. Make a note of the database driver class path in the Unica Collaborate installation worksheet, as you must enter the path when you run the installer.
- 4. Restart the web application server so that your changes take effect.

During startup, monitor the console log to confirm that the class path contains the path to the database driver.

#### **Apache Tomcat**

#### About this task

If you are using Apache Tomcat, you must perform this entire procedure.

- Obtain the latest vendor-provided Type 4 JDBC driver for your system table database that is supported by HCL Unica, as described in the *Recommended Software Environments and Minimum System Requirements* guide. Use the following guidelines after you obtain the JDBC driver.
  - If the driver does not exist on the server where you plan to deploy Collaborate, obtain it and unpack it on the server. Unpack the drivers in a path that does not include spaces.
  - If you obtain the driver from a server where the data source client is installed, verify that the version is the latest supported by Unica Collaborate.
- 2. Add the full path to the driver, including the file name, to the class path of the (<Tomcat\_Installed Location>/lib) web application server where you plan to deploy Collaborate.
- 3. Make a note of the database driver class path in the Unica Collaborate installation worksheet, as you must enter the path when you run the installer.
- 4. Restart the web application server so that your changes take effect.

During startup, monitor the console log to confirm that the class path contains the path to the database driver.

## Creating the JDBC connections in the web application server

The Collaborate web application uses JDBC connections to communicate with the system table database and with the Platform system table database.

#### **About this task**

You must create the following JDBC connections to the following databases in the web application server where Collaborate is deployed:

If you are creating the data source in WebSphere®, set the classpath for your database driver during this process.

1. Create a connection to the database that contains the Collaborate system tables.

You can allow the installer to create this data source when you install Collaborate. To enable automatic data source creation during installation, on the Datasource Creation panel, select the **Create Collaborate Datasource** check box and supply information about your application server.

- The installer creates the data source using collaborateds as the JNDI name.
- Note that, if you are using WebLogic, you must add the JDBC driver to your classpath manually even if you allow the installer to create the data source. The installer does this automatically for WebSphere.

If you create this connection manually, use collaborateds as the JNDI name for the JDBC connection to the database that holds the Collaborate system tables. This is the default value of a configuration property that refers to this name. If you do not use the default value, you must set the value later in the configuration process.

2. Create a connection to the database that contains the Platform system tables.

If is Platform already installed, and if you deploy Collaborate. in the same JVM as Platform, this connection should already exist.

If you create this connection, use UnicaPlatformDS as the JNDI name for the JDBC connection to the database that holds the Platform system tables. This is the required name.

3. Create a connection to the customer database that contains your list tables.

If you plan to deploy Collaborate on a clustered environment, you must create JNDIs in the WebSphere Application Server. You can use any name for the connection to the customer database.

4. Record the JNDI names in the Unica Collaborate installation database information worksheet on page 8.

## Information for creating JDBC connections

Use default values when you create JDBC connections if specific values are not provided. For more information, see the application server documentation.



**Note:** If you are not using the default port setting for your database, make sure that you change it to the correct value

#### WebLogic

Use the following values if your application server is WebLogic:

#### **SQLServer**

- Database Driver: Microsoft™ MS SQL Server Driver (Type 4) Versions: 2012, 2012 SP1 and SP3, 2014, 2014 SP1, 2016 SP1
- Default port: 1433
- Driver class: com.microsoft.sqlserver.jdbc.SQLServerDriver
- Driver URL: jdbc:sqlserver://<your\_db\_host>[\\ \named\_instance>]:<your\_db\_port>;databaseName=<your\_db\_name>
- Properties: Add user=<your\_db\_user\_name>

#### **Oracle**

- Driver: Other
- · Default port: 1521
- Driver class: oracle.jdbc.OracleDriver
- Driver URL: jdbc:oracle:thin:@gour\_db\_host>:<your\_db\_port>:<your\_db\_service\_name>

Enter the driver URL by using the format that is shown. HCL Unica applications do not allow the use of Oracle's RAC (Real Application Cluster) format for JDBC connections.

• Properties: Add user=<your\_db\_user\_name>

#### DB2®

- · Driver: Other
- Default port: 50000
- Driver class: com.ibm.db2.jcc.DB2Driver
- Driver URL: jdbc:db2://<your\_db\_host>:<your\_db\_port>/<your\_db\_name>
- Properties: Add user=<your\_db\_user\_name>

#### **MariaDB**

• Database type: MYSQL

• Driver: mariadb-java-client-2.5.1.jar

• Default port: 3306

• Driver class: org.mariadb.jdbc.Driver

• Driver URL: jdbc:mariadb://<your\_db\_host>:<PORT>/<Your\_DB\_user\_name>

• Properties: Add user=<your\_db\_user\_name>

· Password=<your\_db\_user\_password>

#### **WebSphere**®

Use the following values if your application server is WebSphere®:

#### **SQLServer**

• Driver: N/A

• Default port: 1433

 $\bullet \ \, \textbf{Driver class:} \ \, \texttt{com.microsoft.sqlserver.jdbc.SQLServerConnectionPoolDataSource} \\$ 

• Driver URL: N/A

In the Database Type field, select User-defined.

After you create the JDBC Provider and data source, go to the **Custom Properties** for the data source, and add, modify properties as follows.

• serverName=<your\_SQL\_server\_name>

• portNumber =<SQL\_Server\_Port\_Number>

• databaseName=<your\_database\_name>

#### Add the following custom property:

Name: webSphereDefaultIsolationLevel

Value: 1

Datatype: Integer

#### Oracle

• Driver: Oracle JDBC Driver

• Default port: 1521

• Driver class: oracle.jdbc.OracleDriver

• Driver URL: jdbc:oracle:thin:@<your\_db\_host>:<your\_db\_port>:<your\_db\_service\_name>

Enter the driver URL by using the format that is shown. HCL Unica applications do not allow the use of Oracle's RAC (Real Application Cluster) format for JDBC connections.

#### DB2®

• Driver: JCC Driver Provider

• Default port: 50000

• Driver class: com.ibm.db2.jcc.DB2Driver

• Driver URL: jdbc:db2://<your\_db\_host>:<your\_db\_port>/<your\_db\_name>

Add the following custom property:

Name: webSphereDefaultIsolationLevel

Value: 2

Datatype: Integer

#### **MariaDB**

Database Driver: MariaDB JDBC Driver

• Default Port: 3306

• Driver Class: org.mariadb.jdbc.MySQLDataSource

• Driver URL: org.mariadb://<your\_db\_host> [\\<named\_instance>]:<your\_db\_port>;databaseName=<your\_db\_name>, valid-connection-checker class

 $\verb|name="org.jboss.jca.adapters.jdbc.extensions.mysql.MySQLValidConnectionChecker|| \\$ 

 $\textbf{For example:} \ / \texttt{subsystem-data} sources / \texttt{data-source-UnicaPlatformDS:} \texttt{add(jndi-name="java:/linear-li$ 

UnicaPlatformDS",connection-url="jdbc:mariadb:// localhost:3306/plat11",driver-name=MariaDBDriver,user-name=root,password=test123,valid-connection-checker-class-

name="org.jboss.jca.adapters.jdbc.extensions.mysql.MySQLValidConnectionChecker")

#### **JBoss**

Specify the native library path of the database driver JAR file on your server. For example: db2jcc4.jar/ojdbc8.jar/sqljdbc4.jar/mariadb-java-client.jar/ifxjdbc.jar.

Use the following values if your application server is JBoss:

**SQLServer** 

- Database Driver: Microsoft MS SQL Server Driver (Type 4) Versions: 2012, 2012 SP1 and SP3, 2014, 2014 SP1, 2016
   SP1
- Default port: 1433
- Driver class: com.microsoft.sqlserver.jdbc.SQLServerDriver
- Driver URL: jdbc:sqlserver://<your\_db\_host>[\

\<named\_instance>]:<your\_db\_port>;databaseName=<your\_db\_name>,valid-connection-checker-class-name
=org.jboss.jca.adapters.jdbc.extensions.mssql.MSSQLValidConnectionChecker

For example:/subsystem=datasources/data-source=UnicaPlatformDS:add(jndi-name="java:/UnicaPlatformDS",connection-url="jdbc:sqlserver://localhost:1433;databaseName=platl1",driver-name=sql,user-name=sa,password=test1234,valid-connection-checker-class-name="org.jboss.jca.adapters.jdbc.extensions.mssql.MSSQLValidConnectionChecker")

#### **Oracle**

· Driver: Oracle JDBC Driver

• Default port: 1521

• Driver class: oracle.jdbc.OracleDriver

• Driver URL: jdbc:oracle:thin:@<your\_db\_host>:<your\_db\_port>:<your\_db\_service\_name>

#### For example

#### DB2

· Driver: JCC Driver Provider

• Default port: 50000

• Driver class: com.ibm.db2.jcc.DB2Driver

• Driver URL: jdbc:db2://<your\_db\_host>:<your\_db\_port>/<your\_db\_name>

#### MariaDB

• Database Driver: MariaDB JDBC Driver

• Default Port: 3306

• Driver Class: org.mariadb.jdbc.MySQLDataSource

• Driver URL: Org.mariadb://<your\_db\_host> [\\<named\_instance>]:<your\_db\_port>;databaseName=<your\_db\_name>, valid-connection-checker class

name="org.jboss.jca.adapters.jdbc.extensions.mysql.MySQLValidConnectionChecker"

For example: /subsystem=datasources/data-source=UnicaPlatformDS:add(jndi-name="java:/UnicaPlatformDS",connection-url="jdbc:mariadb://localhost:3306/plat11",driver-name=MariaDBDriver,user-name=root,password=test123,valid-connection-checker-class-name="org.jboss.jca.adapters.jdbc.extensions.mysql.MySQLValidConnectionChecker")

#### **Tomcat**

Specify the native library path of the database driver JAR file on your server. For example: db2jcc4.jar/ojdbc8.jar/sqljdbc4.jar. to create a datasource under Tomcat Interact Instance, add folder hierarchy as <Tomcat\_Home>/conf/ Catalina/localhost, create a xml file with the name interact.xml under localhost folder. Add data source pointing to Runtime, Test, Production and learning database in interact.xml, refer platform or Campaign xml file which is created through installers under there respective Tomcat instance directory. You will need to create these Data source entry in Campaign Tomcat instance too.



**Note:** If you want to encrypt password, then run utility encryptTomcatDBPasswords.sh from PLATFORM\_HOME>/
tools/bin. To know more about utility, see the Unica Platform Administrator Guide > Unica Platform utilities and
SQL scripts > Platform Utilities > encryptTomcatDBPassword.

Use the following values if your application server is Tomcat:

#### **SQLServer**

- Database Driver: Microsoft MS SQL Server Driver (Type 4) Versions: 2012, 2012 SP1 and SP3, 2014, 2014 SP1, 2016
   SP1
- Default port: 1433
- Driver class: com.microsoft.sqlserver.jdbc.SQLServerDriver
- Driver type: javax.sql.DataSource
- Driver URL: jdbc:sqlserver://<your\_db\_host>[\\<named\_instance>]:<your\_db\_port>;databaseName=<your\_db\_name>

#### **Oracle**

- Driver: Oracle JDBC Driver
- Default port: 1521
- Driver class: oracle.jdbc.OracleDriver
- Driver URL: jdbc:oracle:thin:@<your\_db\_host>:<your\_db\_port>:<your\_db\_service\_name>

#### DB2

- · Driver: JCC Driver Provider
- Default port: 50000
- Driver class: com.ibm.db2.jcc.DB2Driver
- Driver URL: jdbc:db2://<your\_db\_host>:<your\_db\_port>/<your\_db\_name>

#### MariaDB

- Database Driver: MariaDB JDBC Driver
- Default Port: 3306
- Driver Class: org.mariadb.jdbc.MySQLDataSource
- Driver URL: org.mariadb://<your\_db\_host> [\\<named\_instance>]:<your\_db\_port>;databaseName=<your\_db\_name>, valid-connection-checker class

 $\verb|name="org.jboss.jca.adapters.jdbc.extensions.mysql.MySQLValidConnectionChecker"| \\$ 

For example: /subsystem=datasources/data-source=UnicaPlatformDS:add(jndi-name="java:/

UnicaPlatformDS",connection-url="jdbc:mariadb:// localhost:3306/plat11",driver-

name=MariaDBDriver,user-name=root,password=test123,valid-connection-checker-class-

name="org.jboss.jca.adapters.jdbc.extensions.mysql.MySQLValidConnectionChecker")

# Chapter 4. Installing Collaborate

You must run the HCL Unica installer to start the installation of Collaborate. The HCL Unica installer starts the Collaborate installer during the installation process. Make sure that the HCL Unica installer and the product installer are saved at the same location.



**Note:** Collaborate 12.1.0.0 installation is supported by HCL\_Unica\_Installer\_12.1.0.3. Previous versions of HCL Unica Installers will not detect Collaborate binaries for installation.

Each time that you run the HCL Unica suite installer, you must first enter database connection information for the Platform system tables. When the Collaborate installer starts, you must enter the required information for Collaborate.



Note: The HCL Unica installer requires information about Platform.

After installing Collaborate, you can create an EAR file for your product, and you can install the reports package for your product. Creating the EAR file and installing the reports package are not mandatory actions.



**Important:** Before you install Collaborate, make sure that the available temporary space on the computer where you install Collaborate is more than three times the size of the Collaborate installer.

#### Collaborate installation on MariaDB

If you want to install Collaborate on MariaDB, then you can directly install Collaborate 12.1.0.4 without installing Collaborate 12.1.0. Installation of Collaborate 12.1.0.4 on MariaDB will act as a clean installation for Collaborate, creating a clean system database. There are two options for Collaborate database during the installation.

- Automatic Database setup: This will create clean system database as part of installation.
- Manual Database setup: Installation will complete without creating any database and user has to create database
  using udmdbsetup utility after the installation is complete.



#### Note:

If Collaborate installation is on MariadB system database, after installation is complete, you are required to execute the following SQL file on Campaign database.

Campaign\_Home\ddl\clb\_systab\_mariadb.sql (For non-unicode system DB)

Campaign\_Home\ddl\unicode\clb\_systab\_mariadb.sql (For unicode system DB)

#### Installation files

The installation files are named according to the version of the product and the operating system on which they must be installed, except  $UNIX^{\text{\tiny{M}}}$ . For  $UNIX^{\text{\tiny{M}}}$ , different installation files exist for the X Window System mode and the console mode.

#### **Example**

The following table displays examples of the installation files that are named according to the product version and the operating system:

#### **Table 8. Installation files**

Operating system	Installation file
Windows™: GUI and console	$Product\_N.N.N.N\_win64$ . exe, where $Product$ is the name of your product, $N.N.N.N$ is the version number of your product, and Windows <sup>™</sup> 64-bit is the operating system on which the file must be
mode	installed.
UNIX™: X Window	${\it Product\_N.N.N.}$ linux.bin, where ${\it Product}$ is the name of your product, and ${\it N.N.N.N}$ is the
System mode	version number of your product.

#### Table 9. Installation files

Operating system	Installation file
UNIX™: X Window System and	Product_N.N.N_aix.bin, where Product is the name of your product, N.N.N.N
Console mode	is the version number of your product.

## Installing Collaborate components

For best performance, install Collaborate on its own machine where no other HCL Unica products are installed.

The following table describes the components that you can select when you install Collaborate:

Table 10. Unica Collaborate installation components

Component	Description
J2EE Application	The J2EE application, which runs Lists, On-demand Campaigns, and Corporate Campaigns. For best performance, HCL recommends that you install this application on a dedicated system.
Developer toolkits	The Collaborate developer toolkits, which provide the Collaborate APIs.
Insights Reports	Collaborate supports multiple Insights reports.

## Installing Collaborate by using the X Window System mode

For Windows™, use the GUI mode to install Collaborate. For UNIX™, use the X Window System mode to install Collaborate.

#### Before you begin

- Important: Before you use the GUI mode to install Collaborate, make sure that the available temporary space on the computer where you install Collaborate is more than three times the size of the Collaborate installer.
- Important: On Microsoft Windows 2019 server and Microsoft Windows 2022 server, to launch the installers, set the parameter SET JAVA\_TOOL\_OPTIONS="-Dos.name=Windows 7" at the command prompt and launch the installers from the same command prompt.

Make sure that the HCL Unica installer and the Collaborate installers are in the same directory on the computer where you want to install Collaborate. You must also ensure that you have configured the application server profile and the database schema.

Before you install Collaborate, ensure that you have configured the following.

- An application server profile
- · A database schema

To install Collaborate by using the GUI mode (for Windows™) or the X Window System mode (for UNIX™):

- 1. Go to the folder where you have saved the HCL 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 HCL Unica installer.

Table 11. HCL Unica installer GUI

Window	Description
Introduction	This is the first window of the HCL Unica suite installer. You can open the Collaborate installation and upgrade guides from this window.
	Click <b>Next</b> to go to the next window.
Response Files Destination	Click the <b>Generate Response File</b> 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.
	Click <b>Choose</b> to browse to a location where you want to store the response files.  Click <b>Next</b> to go to the next window.
HCL Unica <b>Products</b>	In the <b>Install Set</b> list, select <b>Custom</b> to select the products that you want to install.
	In the <b>Install Set</b> area, you can see all the products whose installation files are in the same directory on your computer.

Window	Description
	In the <b>Description</b> field, you can view the description of the product that you select in the <b>Install Set</b> area.
	Click <b>Next</b> to go to the next window.
Installation Directory	Click <b>Choose</b> to browse to the directory where you want to install HCL Unica.
	Click <b>Next</b> to go to the next window.
Select Application Server	Select one of the following application servers for the installation:  • IBM® WebSphere®  • Oracle WebLogic  • Tomcat  • JBOSS
	Click <b>Next</b> to go to the next window.
Platform Database Type	Select the appropriate Platform database type.
	Click <b>Next</b> to go to the next window.
Platform Database Connection	Enter the following information about your database:  • Database host name  • Database port  • Database name or System ID (SID)  • Database user name  • Database password  Click Next to go to the next window.
	Important: If HCL 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.
Platform Database Connection	Review and confirm the JDBC connection.
(continued)	Click <b>Next</b> to go to the next window.
Preinstallation Summary	Review and confirm the values that you added during the installation process.
	Click <b>Install</b> to start the installation process.
	The Platform installer opens. If a previous instance of Platform exists, the instance is upgraded to the current version. If a previous instance of Platform does not exist, Platform is installed.

- 4. Follow the instructions on the Platform installer to install or upgrade Platform. See the *Platform Installation Guide* for more information.
- 5. In the **Installation Complete** window, click **Done**.

#### Result

The Platform installation is complete, and the Collaborate installer opens.

6. Use the information in the following table to navigate the Collaborate installer. In the **Platform Database Connection** window, enter all the required information and click **Next** to start the Collaborate installer.

Table 12. Unica Collaborate installer GUI

Window	Description
Introduction	This is the first window of the Collaborate installer. You can open the Collaborate installation and upgrade guides from this window.
	Click <b>Next</b> to go to the next window.
Software License Agreement	Carefully read the agreement. Use <b>Print</b> to print the agreement. Click <b>Next</b> after you accept the agreement.
Installation Directory	Click <b>Choose</b> to browse to the directory where you want to install Collaborate.
	Click <b>Next</b> to go to the next window.
Unica Collaborate Components	Select the components that you want to install.
	Click <b>Next</b> to go to the next window.
Unica Collaborate Database Setup	Select one of the following options for setting up the Collaborate database:  • Automatic database setup  • Manual database setup
	Click <b>Next</b> to go to the next window.
Unica Collaborate Database type	Select the appropriate database type.
	Click <b>Next</b> to go to the next window.
Unica Collaborate Database connection	Enter the following details for the Collaborate database:  • Database host name  • Database port  • Database system ID (SID)  • Database user name  • Password
	Important: If HCL 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

Window Description



different from the default ports 80 or 443 for your deployment, do not use a port number in the value of this property.

Click Next to go to the next window.

Unica Collaborate JDBC connection

Review and confirm the JDBC connection.

The installer prompts to enter the JDBC Driver Classpath.

Click **Next** to go to the next window.

Unica Collaborate Connection Settings Select one of the following connections types:

- HTTP
- HTTPS

Enter the following connection settings:

- · Network domain name
- Host name
- · Port number

Select the **Use secure connection** check box if necessary.

Click Next to go to the next window.

**Datasource creation** 

The installer can create the JDBC data source in your web application server (WebSphere or WebLogic). This data source is required to enable theCollaborate web application to connect to the Collaborate system tables. You have the option to skip this step in the installer and create the data source in the administration console of your web application server after installation is complete.

If you select the **Create Collaborate Datasource** check box, the installer creates the data source using information you provide..

- · Your application server must be running.
- Enter any name for the datasource.

The installer creates the JNDI name automatically (collaborateDS).

Enter the directory in which the application server is installed.

For WebSphere, this is the directory that contains the profiles directory. You must restart WebSphere after the installer finishes and before you use this data source.

For WebLogic, this is the directory that contains the  ${\tt common}$  directory.

Click Next to go to the next window.

Window	Description
Application server information (WebSphere)	Applies only if your application server is WebSphere.  • Enter the application server profile where you plan to deploy Collaborate.  • Enter the name of the server in the profile.  • If security is enabled in WebSphere, enter the administrator user ID and password.
	Click <b>Next</b> to go to the next window.
Application server information (WebLogic)	Applies only if your application server is WebLogic.
	Enter the domain server name and the administrator user ID and password. If SSL is enabled, enter the HTTP port for the domain.
	Note that you must add the database driver classpath to WebLogic in the WebLogic administration console.
	Click <b>Next</b> to go to the next window.
Default Locale	Select a default locale for your installation. English is selected by default.
	Click <b>Next</b> 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 Collaborate installer opens.
Installation Complete	Click <b>Done</b> to close the Platform installer and go back to the HCL Unica installer.

- 7. In the **Installation Complete** window, click **Done** to exit the Collaborate installer and go back to the HCL Unica installer.
- 8. Follow the instructions on the HCL Unica installer to finish installing Collaborate.

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

Table 13. HCL Unica installer GUI

Window	Description
Deployment EAR file	Specify whether you want to create an enterprise archive (EAR) file to deploy your HCL Unica products.
	Click <b>Next</b> to go to the next window.
Package EAR file	You can see this window if you select <b>Create an EAR file for deployment</b> in the <b>Deployment EAR file</b> window.
	Select the applications that you want to package in the EAR file.
EAR file details	Enter the following information for your EAR file:

Window	Description
	Enterprise application identifier
	Display name
	Description
	• EAR file path
EAR file details (continued)	Select <b>Yes</b> or <b>No</b> to create an additional EAR file. If you select <b>Yes</b> , you must enter the details for the new EAR file.
	Click <b>Next</b> to complete the installation of your product.
Deployment EAR file	Specify whether you want to create another EAR file to deploy your HCL Unica products.
	Click <b>Next</b> to go to the next window.
Installation Complete	This window provides the locations of the log files that are created during installation.
	Click <b>Previous</b> if you want to change any installation details.
	Click <b>Done</b> to close the HCL Unica installer.

## Installing Unica Collaborate using the console mode

The console mode allows you to install Unica Collaborate using the 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.

#### Before you begin



**Important:** Before you use the console mode to install Collaborate, make sure that the available temporary space on the computer where you install Collaborate is more than three times the size of the Collaborate installer. Make sure that the HCL Unica installer and the Collaborate installers are in the same directory on the computer where you want to install Collaborate.

Before you install Collaborate, 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 HCL Unica installer and Collaborate installers.
- 2. Complete one of the following actions to run the HCL Unica installer.

#### Choose from:

• For Windows<sup>™</sup>, enter the following command:

```
hcl_unica_installer_full_name -i CONSOle
```

For example, HCL\_Unica\_12.1.0.3\_win.exe -i console

• For  $UNIX^{\text{m}}$ , invoke the  $hcl\_unica\_installer\_full\_name$ . sh file.

For example: HCL\_Unica\_Installer\_12.1.0.3.sh

3. Run the HCL Unica installer file.

#### **Example**

For example: HCL\_Unica\_Installer\_12.1.0.3.sh

- 4. Follow the directions that are displayed in the command-line prompt. Use the following guidelines when you have to 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] Platform
- 2 [X] Campaign
- 4 [] Collaborate

If you want to install Collaborate, and do not want to install Campaign, enter the following command: 2,4

The following list would then display the options that you selected:

- 1 [X] Platform
- 2[] Campaign
- 4 [X] Collaborate



Note: Do not clear the option for Platform unless you have already installed it.

- 5. The HCL Unica installer launches the Collaborate installers.
- 6. After you enter quit in the Collaborate installers command-line prompt window, the window shuts down. Follow the instructions in the command-line prompt window of the HCL Unica installer to complete the installation of Collaborate.



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

# Installing Unica Collaborate silently

Use the unattended or silent mode to install Collaborate multiple times.

#### Before you begin



**Important:** Before you start silent mode to install Collaborate, make sure that the available temporary space on the computer where you install Collaborate is more than three times the size of the Collaborate installer. Make sure that the HCL Unica installer and the Collaborate installers are in the same directory on the computer where you want to install Collaborate.

Before you install Collaborate, make sure that you have configured the following elements:

- · An application server profile
- · A database schema

#### **About this task**

When you install Collaborate using the silent mode, response files are used to obtain the information that is required during installation. You must create response files for a silent installation of your product. You can create response files by using one of the following methods:

- Using the sample response files as a template for creating your response files. The sample response files are included with your product installers in the ResponseFiles compressed archive. For more information about sample response files, see Sample response files on page 32.
- Running the product installers in the GUI (Windows™) or X Window System (UNIX™) mode or the console mode before
  you install the product in the silent mode. One response file is created for the HCL Unica suite installer, and one or
  more response files are created for your product installer. The files are created in the directory that you specify.



**Important:** For security reasons, the installer does not save database passwords in the response files. When you create response files, you must edit each response file to enter database passwords. Open each response file and search for PASSWORD to find where you must edit the response file.

When the installer runs in the silent mode, it looks for the response files in the following directories sequentially:

- · In the directory where the HCL Unica installer is saved
- In the home directory of the user who installs the product

Make sure that all response files are in the same directory. You can change the path where response files are read by adding arguments to the command line. For example: -DUNICA\_REPLAY\_READ\_DIR="myDirPath" -f myDirPath/installer.properties

Use the following command for Windows™:

• hcl\_unica\_installer\_full\_name -i silent

#### Example

For example:

HCL\_UNICA\_12.1.0.0\_win.exe -i silent

Use the following command for  $Linux^{m}$ :

• hcl\_unica\_installer\_full\_name \_operating\_system .bin -i silent

#### **Example**

For example:

HCL\_UNICA\_12.1.0.0\_linux.bin -i silent

## Sample response files

You must create response files to set up a silent installation of Collaborate. 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.

The following table provides information about sample response files:

Table 14. Description of sample response files

Sample response file	Description
installer.properties	The sample response file for the HCL Unica master installer.
installer_product initials and	The sample response file for the Collaborate installer.
product version number.properties	For example, $installer\_ucn.n.n.n.properties$ is the response file of the Campaign installer, where $n.n.n.n$ is the version number.
	For example, $installer\_umpn.n.n.n.properties$ is the response file of the Unica Platform installer, where $n.n.n.n$ is the version number.
	For example, $installer\_uln.n.n.n.properties$ is the response file of the Leads installer, where $n.n.n.n$ is the version number.
installer_report pack initials,	The sample response file for the reports pack installer.
<pre>product initials, and version number.properties</pre>	For example, installer_urpcn.n.n.n.properties is the response file of the Campaign reports pack installer, where n.n.n.n is the version number
	For example, installer_urpl.properties is the response file of the Leads reports pack installer.

Table 15. Description of sample response files

Sample response file	Description
installer.properties	The sample response file for the HCL Unica master installer.

#### Table 15. Description of sample response files

#### (continued)

Sample response file	Description
installer_product intials	The sample response file for the Collaborate installer.
and product version number.properties	For example, $installer\_ucn.n.n.n.properties$ is the response file of the Campaign installer, where $n.n.n.n$ is the version number.
	For example, $installer\_umpn.n.n.n.properties$ is the response file of the Unica Platform installer, where $n.n.n.n$ is the version number.
	For example, $installer\_uln.n.n.n.properties$ is the response file of the Leads installer, where $n.n.n.n$ is the version number.



**Note:** After you install Collaborate successfully, copy the reports zip and model file from Collaborate installation directory, for example <*Collaborate\_Home>*/reports, to the folder where Cognos® server and framework manager are installed, for example, <*cognos\_installation\_directy>*/deployment.

## Creating an EAR file after running the installer

You can create an EAR file after you install HCL 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 HCL 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 Unica 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>cproduct version number>.properties files and the file for the Unica installer itself, which is named installer.properties.
  - For example, the properties files for Platform  $installer\_ump12.1.0.0.properties$  and the properties file for Optimize  $installer\_uo12.2.0.0.properties$ .
  - 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  $^{\!\scriptscriptstyle{M}}$  type systems, run the .bin file rather than the  $.\mathtt{sh}$  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.

# Chapter 5. Configuring Unica Collaborate before deployment

Complete the configuration tasks before you deploy the web application.

# Registering Collaborate manually

If the Collaborate installer cannot connect with the Platform system table database during the installation, your installation fails. In this case, you must register Collaborate manually.

#### About this task

Complete the following tasks to register Collaborate manually:

The configTool utility is located in the tools/bin directory under your Platform installation. For detailed instructions on using the configTool utility, see configTool on page 67.

Run the configTool utility, using the following example commands as guidelines. This imports configuration properties and menu items. Note that you run the utility as many times as there are files.

configTool.bat -v -i -p "Affinium|suite|uiNavigation|mainMenu|Analytics" -f "%NAVIGATION\_DIR% \Collaborate\_navigation\_analytics.xml"

configTool.bat -v -i -p "Affinium|suite|uiNavigation|alerts" -f "%NAVIGATION\_DIR%\Collaborate\_alert.xml" configTool -r Collaborate -f "<full\_path\_to\_Collaborate\_installation\_directory>\conf\Collaborate\_configuration.xml" configTool -v -i -p "Affinium|suite|uiNavigation|mainMenu" -f "<full\_path\_to\_Collaborate\_installation\_directory>\conf\Collaborate\_navigation.xml"

configTool -v -i -p "Affinium|suite|uiNavigation|settingsMenu" -f "<full\_path\_to\_Collaborate\_installation\_directory>\conf\Collaborate\_setings.xml"

# Creating and populating the Collaborate system tables

If the automatic database setup fails during the installation of Collaborate, you must create and populate Collaborate system tables manually.

#### Before you begin

Update the unencrypted value for udm\_data\_source.password in the udm\_jdbc.properties file that is located in the <Collaborate\_Home>/tools/bin directory before you run udmdbsetup.

#### About this task

When the Collaborate installer is run in manual database setup mode, an SQL file is created in the <Collaborate\_Home>/
tools directory. The SQL file is provided for manual review before you run on the Collaborate database. If this file is not
created because of any installation errors, you can create this SQL by using the udmdbsetup.sh tool. Complete the following
tasks if you select manual database setup, or if the automatic database setup failed during installation:

- 1. Open the <collaborate\_Home>/tools directory.
- 2. Set the JAVA\_HOME and DBDRIVER\_CLASSPATH parameters if they are not already set.
- 3. Run the udmdbsetup.bat or udmdbsetup.sh file, in the <collaborate\_Home>/tools directory. Follow the instructions for the installation type: new installation, reinstallation, or upgrade.

#### Example

For a new installation or a reinstallation:

The name of the file is udm\_install\_[12.1.x.x].sql.

Run udmdbsetup by using the full installation parameter. Use the correct parameter values for your locale and installation type. The following example creates and populates the Collaborate system tables for a new installation on Windows $^{\text{\tiny M}}$  in the en\_US locale: udbmdbsetup.bat -L en\_US -t full -v.

If you want to configure Collaborate for a locale other than  $en_Us$ , run the udmdbsetup utility for different locales, such as  $fr_FR$ ,  $de_DE$ , and so on.

If you are upgrading Collaborate:

The name of the file is  $udm_upgrade_[10.1.x.x]_[11.0.0.0]$ . sql. Before you run udmdbsetup.sh, you must the run database parameters in  $udm_jdbc.properties$ , which is in the <Collaborate\_Home>/tools directory.

Run udmdbsetup.sh by using the upgrade parameter. Use the correct parameter values for your locale, installation type, and the version you are upgrading from. The following example creates the SQL file for an upgrade from version 10.x on  $UNIX^{\text{TM}}$  in the fr\_FR locale: ./udmdbsetup.sh -m -b 10.1.x.x -L fr\_FR -tupgrade -v.



Note: The -m option does not run the script on the database automatically.

To automatically run the script on the database, you can run the following command: ./udmdbsetup.sh -b 10.1.x.x -L fr\_FR -tupgrade -v.

If you run this command for the first time, an extra parameter must be added: **-E**. This parameter encrypts the password of the database user and successfully runs the script.

# Creating list tables

You must create list tables in your customer database to enable lists in your application. The data in the system tables populates various lists in the Collaborate. Make sure that you store list tables in the same folder as customer tables.

#### About this task

Create the following tables in your customer database:

- uacc\_lists a list of contacts generated as a List.
- uacc\_ondemand\_lists a list of contacts generated by On-demand Campaigns.
- uacc\_corporate\_lists a list of contacts generated by a flowchart in a Corporate Campaign.
- uacc\_permanent a list of contacts to be permanently added to or deleted from Lists.

- uacc\_ondemand\_permanent a list of contacts to be permanently added to or deleted from On-demand Campaigns.
- uacc\_corporate\_permanent a list of contacts to be permanently added to or deleted from Corporate Campaigns.



**Important:** These tables store the selected contacts ID of the list and must be created in the same database as the customer tables.

If you are using DB2 10.5 BLU, you must run the list tables in the user database (enabled with BLU) with the clause Organize by ROW.

Complete the following steps to create list tables:

1. Add any additional columns for your audience levels in the listmanager.sql table creation script.

The listmanager.sql file is in the tools\admin\db\db\_type directory under your Collaborate installation, where  $db_type$  is the database you are using, sqlserver, oracle, db2, Netezza, Or Teradata.

2. Run the  ${\tt listmanager.sql}$  script to create the required tables.

#### Example

Note the following points when you create list tables:

- The script creates the tables in the customer database.
- You can also add columns to the tables based on your particular requirements for data filtering. For example, you can add a column to filter by region.

# Creating Campaign system tables for Collaborate

You must create Campaign system tables for Collaborate if you do not select the **Automatic database setup** option while you install Collaborate.

#### About this task



**Important:** Complete this step if you selected **Automatic database setup** when you ran the installer, or if the automatic database set up failed during installation.

If you chose to set up your database manually when you ran the Unica installer, you must create extra system tables in the Unica Campaign system table database schema for Collaborate.

Run the clb\_systab\_<db\_type>.sql script in the <Campaign\_home>\ddl directory to create these tables. Run the script in the schema that is hosting the Campaign system tables.

# Chapter 6. Deploying the Collaborate web application

You can deploy the web application by either including Collaborate in an EAR file or by deploying the Collaborate WAR file.

Use the following guidelines to deploy Collaborate:

- When you run the Unica installer, you might include Collaborate in an EAR file, or you can choose to deploy the Collaborate WAR file. If you included the Platform or other products in an EAR file, you must follow all the deployment quidelines that are detailed in the individual installation quides for the products included in the EAR file.
- Set the JSP Compilation level in the WebSphere application server to 18.
- You must know how to work with web application server. Consult your web application server documentation for details such as navigation in the Administration console.



**Note:** In case of Collaborate 12.1.0.4 and higher, remove the following JVM parameters, if they are set for application server

- -Dlog4j.configurationFile
- -Dlog4j2.configurationFile
- -Dlog4j2.contextSelector

# Deploying Collaborate on WAS from a WAR file

You can deploy the Collaborate application from a WAR file on WAS.

#### Before you begin

Complete the following tasks before you deploy Collaborate:

- Confirm that your version of WebSphere® meets the requirements in the *Recommended Software Environments and Minimum System Requirements* document, including any necessary fix packs or upgrades.
- Confirm that you created the data sources and database provider in WebSphere®.
- 1. Go to the WebSphere® Integrated Solutions Console.
- 2. Complete the following steps if your system tables are in DB2®:
  - a. Click the data source that you created. Go to the Custom Properties for the data source.
  - b. Select the Custom properties link.
  - c. Set the value for the **resultSetHoldability** property to 1.
    - If you do not see the **resultSetHoldability** property, create the **resultSetHoldability** property and set its value to 1
- 3. Go to Applications > Application Types > WebSphere enterprise applications and click Install.

- 4. In the **Preparing for the application installation** window, select the **Detailed Show all options and parameters** check box and click **Next**.
- 5. Click **Continue** to see the **Install New Application** wizard.
- 6. Accept the default settings on the windows of the Install New Application wizard except the following windows:
  - In step 1 of the Install New Application wizard, select the Precompile JavaServer Pages files check box.
  - In step 3 of the installation wizard, set the JDK Source Level to 18.
  - In step 9 of the installation wizard, set the **Context Root** to /collaborate.
- 7. In the left navigation panel of WebSphere® Integrated Solutions Console, navigate to **Applications > Application Types > WebSphere enterprise applications**.
- 8. In the Enterprise Applications window, click the collaborate.war file.
- 9. In the Web Module Properties section, click Session Management and select the following check boxes:
  - · Override session management
  - Enable Cookies
- 10. Click **Enable Cookies**, and in the **Cookie name** field, enter a unique cookie name.
- 11. If you are using version 8 of WebSphere® Application Server, select Servers > WebSphere application server > server

  1 > Session management > Enable Cookies and clear the check box for Set session cookies to HTTPOnly to help
  prevent cross-site scripting attacks.
- 12. In the Applications > Enterprise Applications section of the server, select the WAR file that you deployed.
- 13. In the **Detail Properties** section, select **Class loading and update detection**.
- 14. In the Class loader order section, select the Classes loaded with local class loader first (parent last) option.
- 15. In the Modules section, select Manage modules > detect, and under Class loader order select the Classes loaded with local class loader first (parent last) option.
- 16. Enter the context root for the application as /collaborate.
- 17. Go to Application Servers > your server > Process definition > Java Virtual Machine.
- 18. In the Generic JVM arguments section, enter the following JVM arguments:

```
-Dcom.ibm.websphere.webservices.DisableIBMJAXWSEngine=true
-Dibm.cl.verbose=PersistenceProvider
-Dibm.cl.verbose=PersistenceProviderImpl
-agentlib:getClasses -verbose:dynload
-Dcom.ibm.xml.xlxp.jaxb.opti.level=3
```

## Deploying Collaborate on WAS from an EAR file

You can deploy Collaborate by using an EAR file if you included Collaborate in an EAR file when you ran the HCL Unica installer.

#### Before you begin

- Confirm that your version of WebSphere® meets the requirements in the *Recommended Software Environments and Minimum System Requirements* document, including any necessary fix packs or upgrades.
- Confirm that you created the data sources and database provider in WebSphere®.
- 1. Go to the WebSphere® Integrated Solutions Console.
- 2. Complete the following steps, if your system tables are in DB2®:

- a. Click the data source that you created. Go to the **Custom Properties** for the data source.
- b. Select the Custom properties link.
- c. Set the value for the resultSetHoldability property to 1.
  - If you do not see the **resultSetHoldability** property, create the **resultSetHoldability** property and set its value to 1.
- 3. Go to Applications > Application Types > WebSphere enterprise applications and click Install.
- 4. In the **Preparing for the application installation** window, select the **Detailed Show all options and parameters** check box and click **Next**.
- 5. Click Continue to see the Install New Application wizard.
- Accept the default settings on the windows of the Install New Application wizard except the following windows:
  - In step 1 of the Install New Application wizard, select the Precompile JavaServer Pages files check box.
  - In step 3 of the installation wizard, set the **JDK Source Level** to 18.
  - In step 8 of the installation wizard, set the Context Root to /collaborate.
- 7. In the left navigation panel of WebSphere® Integrated Solutions Console, navigate to **Applications > Application Types > WebSphere enterprise applications**.
- 8. In the Enterprise Applications window, select the EAR file that you want to deploy.
- 9. In the Web Module Properties section, click Session Management and select the following check boxes:
  - Override session management
  - · Enable Cookies
- 10. Click **Enable Cookies**, and in the **Cookie name** field, enter a unique cookie name.
- 11. If you are using version 8 of WebSphere® Application Server, select Servers > WebSphere application server > server
  - 1 > Session management > Enable Cookies and clear the check box for Set session cookies to HTTPOnly to help prevent cross-site scripting attacks.
- 12. In the Detail Properties section, select Class loading and update detection.
- 13. In the Class loader order section, select the Classes loaded with local class loader first (parent last) option.
- 14. In Collaborate.ear, open the Manage Modules section and select the Classes loaded with local class loader first (parent last) option.
- 15. For WAR class loader policy, select the Class loader for each WAR file in application option.
- 16. In Websphere Enterprise Applications, select **Your Application > Manage Modules > Your Application > Class**Loader Order > Classes loaded with local class loader first (parent last).
- 17. Go to Application Servers > your server > Process definition > Java Virtual Machine.
- 18. In the **Generic JVM arguments** section, enter the following JVM arguments:

```
-Dcom.ibm.websphere.webservices.DisableIBMJAXWSEngine=true
-Dibm.cl.verbose=PersistenceProvider
-Dibm.cl.verbose=PersistenceProviderImpl
-agentlib:getClasses -verbose:dynload
-Dcom.ibm.xml.xlxp.jaxb.opti.level=3
```

For more information about WebSphere® Application Server version 8.5, see Welcome to the WebSphere® Application Server information center.

## Specifying generic JVM arguments

The generic Java™ Virtual Machine (JVM) arguments are used to configure and adjust how the JVM runs in the application. Specify the generic JVM arguments while you deploy Collaborate on WebSphere®.

#### About this task

Specify following generic JVM arguments in the server's JVM properties field:

- -Dcollaborate.home= <Collaborate installation directory> -noverify
- -Dclient.encoding.override=UTF-8
- Set the memory heap size parameters for the JVM by entering 1024 in both the **Initial Heap Size** and **Maximum Heap Size** fields.

# Creating webSphereDefaultIsolationLevel property

You must create the webSphereDefaultIsolationLevel property in WebSphere® console if it is not already created.

Complete the following steps to create the webSphereDefaultIsolationLevel property:

- 1. Log on to the WebSphere administrative console.
- 2. Click Resources > JDBC > Data sources.
- Click the Collaborate data source name.
   The JNDI name for Collaborate data source is collaborateds.
- 4. In the Configuration tab, click Additional Properties and then click Custom properties.
- 5. Click **New** and enter the name of property as webSphereDefaultIsolationLevel.
- 6. In the Value field, enter 2.
- 7. In the **Type** field, enter <code>java.lang.Integer</code>.
- 8. Click Apply.
- 9. Restart the server.

# Deploying Collaborate on WebLogic

You can deploy HCL Unica products on WebLogic.

#### About this task

Use the following guidelines when you deploy Collaborate on WebLogic:

- HCL Unica products customize the JVM used by WebLogic. You might need to create a WebLogic instance that is
  dedicated to HCL Unica products if you encounter JVM-related errors.
- Verify that the 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.
- Deploy the HCL Unica products as web application modules.

• On UNIX™ systems, you must start WebLogic from the console to allow correct rendering of graphical charts. The console is usually the machine on which the server is running. However, in some cases the web application server is set up differently.

If a console is not accessible or does not exist, you can emulate a console using Exceed. You must configure Exceed so that your local Xserver process connects to the UNIX™ machine in root window or single window mode. If you start the web application server using Exceed, you must keep Exceed running in the background to allow the web application server to continue running. Contact the Technical Support for detailed instructions if you encounter problems with chart rendering.

Connecting to the UNIX™ machine via telnet or SSH always causes problems rendering charts.

- If you are configuring WebLogic to use the IIS plug-in, review the WebLogic documentation.
- Add the following parameters in the JAVA\_OPTIONS section of startWeblogic.cmd or startWeblogic.sh:

```
-Dcollaborate.home=Collaborate installation directory
-Dfile.encoding=UTF-8
```

• 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 setDomainEnv script:

```
Set MEM_ARGS=-Xms1024m -Xmx1024m -XX:MaxPermSize=256m
```

 Under certain circumstances, deploying older legacy interactive channels or interactive channels with large deployment histories can stress the system and require 2048mb or greater of Campaign designtime and/or Interact runtime Java™ heap space.

System administrators can adjust the amount of memory available to the deployment systems via the following JVM parameters:

```
-Xms####m -Xmx#####m -XX:MaxPermSize=256m
```

Where the characters #### should be 2048 or higher (depending on their system load.) Note that a 64-bit application server and JVM are usually necessary for values greater than 2048.

These are the suggested minimum values. Analyze your sizing requirements to determine correct values for your needs.

# Deploying Unica Campaign on JBoss Application Server

You can deploy Unica products on Jboss application server.

#### About this task

Use the following guidelines when you deploy Unica Campaign on Jboss:

- Verify that your version of JBoss meets the requirements that are described in the *Recommended Software Environments and Minimum System Requirements* document, including any necessary fix packs or upgrades.
- HCL Unica products customizes the JVM used by Jboss. You might need to create a Jboss instance that is dedicated to HCL Unica 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 in the JBOSS\_EAP\_HOME/bin

```
e.g: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 that 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

-Djboss.as.management.blocking.timeout=3600"

-Dcollaborate.https.port=<a href="https://doi.org/10.1001/jbos.4001"/">https://doi.org/10.1001/jbos.4001</a>
```

- Go to the JBoss Enterprise Application management Console e.g http://<Jboss\_Host\_IP>:<Port>/management
- · Deploy Campaign.war/EAR on JBOSS.
- Alternately you can also deploy Campaign.war using jboss-cli.bat/sh.
- e.g Execute the command: jboss-cli.bat/sh and connect to Jboss instance using the command connect <Jboss\_Host\_IP>:<JBOSS management Port>
- deploy < Campaign\_Install\_Path/Campaign/Campaign.war
- · After all these changes restart the Jboss application server.

# Deploying Unica Collaborate on Tomcat Application Server

You can deploy HCL Unica products on Tomcat application server.

#### About this task

Use the following guidelines when you deploy Unica Collaborate on Tomcat:

- HCL Unica products customize the JVM used by Tomcat. You may require to create a Tomcat instance that is dedicated to HCL Unica 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 setenv.bat/sh e.g: set CATALINA\_OPTS=%CATALINA\_OPTS% -Xms1024m -Xmx1024m -XX:MaxPermSize=512m.

These are the suggested minimum values. Analyze your sizing requirements to determine correct values for your needs. Depending upon system load **-Xmx** value should be adjusted. Note that a 64-bit application server and JVM are usually necessary for values greater than 2048.

• Modify the JAVA\_OPTIONS parameter to add the following value in setenv.bat/sh.

```
\textbf{SQT} \  \, \texttt{JAVA\_OPTS=\$JAVA\_OPTS\$-DUNICA\_PLATFORM\_CACHE\_ENABLED=true-Dclient.encoding.override=UTF-8.}
```

 When Unica Insights war is deployed on Tomcat, complete the following configuration in server.xml, where Collaborate.war is deployed.

Add relaxedOueryChars under Collaborate server.xml as mentioned below.

```
<Connector port="8080" protocol="HTTP/1.1"
connectionTimeout="20000"</pre>
```

```
redirectPort="8443"
relaxedQueryChars="|,[,],\,`,{,},^" />
```

• You must add Unica Platform and Unica Collaborate data source in Collaborate.xml along with the path of Collaborate.war to the Unica Collaborate Tomcat instance. For example:

```
<Context docBase="<Campaign_Install_Path>/Campaign/Campaign.war">
<Resource name="<UnicaPlatformDS>" factory="com.unica.manager.tomcat.utils.TomcatDSFactory"
auth="Application" type="javax.sql.DataSource"
maxActive="30" maxIdle="10" maxWait="10000"
username="<db user for Platform schema>" password="<db password>" driverClassName=
"<db specific class name>" url="<db specific jdbc url>"/>

<Resource name="<campaignPartition1DS>" factory="com.unica.manager.tomcat.utils.TomcatDSFactory"
auth="Application" type="javax.sql.DataSource"
maxActive="30" maxIdle="10" maxWait="10000"
username="<db user for Campaign schema>" password="<db password>" driverClassName=
"<db specific class name>" url="<db specific jdbc url> </Context>"/>
```



**Note:** {{You can encrypt DB password using }} encryptTomcatDBPasswords utility located in <Platform\_Home>/tools/bin

Restart the Tomcat application server.

# Chapter 7. Configuring Collaborate after deployment

After you deploy Collaborate, configure the Collaborate environment. Configuring environments completes the basic installation of Collaborate.

To use Collaborate to fulfill your business requirements, complete the extra configuration steps described in the Unica Collaborate Administrator's Guide.

# Creating a system user

After the installation of Collaborate, create a system user with an administrative role in either Collaborate or Campaign. Users with an administrative role have different privileges than a normal user and can perform administrative tasks.

Log in to HCL Unica as a user with an administrative role in the Platform and create a user with at least the following permissions:

- The Collaborate Admin role in Collaborate
- The Admin role in Campaign

Make a note of the user name, as you must use this name as the value of the systemUserLoginName and flowchartServiceCampaignServicesAuthorizationLoginName parameters in a later step.

# Basic installation parameters

Use the **Configuration** window to set the parameters that are required for basic installation.

To update the following parameters and more configuration properties, go to **Platform > Settings > Collaborate > UDM Configuration Settings > Configuration** in the HCL Unica user interface.

See the Collaborate Administrator's Guide for complete details.

Table 16. Collaborate installation window parameter names and description

Parameter	Description	
jndiname	JNDI name that you configured in the web	
Affinium   Collaborate   UDM Configuration	application server for the connection to the	
Settings   Datasource	Collaborate system table database.	
asmJndiName	Data source name that needs to be set to start	
Affinium   Collaborate   UDM Configuration Settings   Datasource	Collaborate. You can set it to the Platform data source JNDI name, which is UnicaPlatformDS by default.	
systemUserLoginName	Login name of a Platform user to be used	
Affinium   Collaborate   UDM Configuration Settings	for system tasks (for example, the system	

Table 16. Collaborate installation window parameter names and description

#### (continued)

**Parameter** Description task monitor or the scheduler). HCL strongly recommends that the system user is not a normal Collaborate user. The fully qualified URL for Collaborate. Edit this notifyCollaborateBaseURL URL by entering the computer name and company Affinium | Collaborate | UDM Configuration domain where you installed Collaborate and Settings | Notifications the port number to the port on which the web application server is listening. For example: http://collaborateserver. companyDomain:7001/collaborate flowchartServiceCampaignServicesURL The URL to the CampaignServices web service that must be used to run flowcharts, get flowchart Affinium | Collaborate | UDM Configuration data, and so on. Settings | Flowchart The default is http://Server-Name:Port/ Campaign/services/CampaignServices30Service. where Server-Name and Port are defined by the notifyCollaborateBaseURL parameter. flowchartServiceCampaignServices A Campaign user with administrative permissions, AuthorizationLoginName including access to all data sources, for example, Affinium | Collaborate | UDM Configuration asm\_admin. Settings | Flowchart flowchartServiceCampaignServices Login name of the Campaign user to be used for AuthorizationLoginName authorization. Affinium | Collaborate | UDM Configuration

#### flowchartServiceNotificationServiceURL

Settings | Flowchart

Affinium | Collaborate | UDM Configuration Settings | Flowchart

**Note:** Campaign user is not required to be a Collaborate user.

The URL to the Collaborate notification service that receives notifications from Campaign.

#### Table 16. Collaborate installation window parameter names and description

#### (continued)

uploadDir

Parameter Description



**Important:** You must set this parameter for Collaborate to work.



**Note:** If you use a nonstandard context root, you must specify this parameter.

Affinium | Collaborate | UDM Configuration

Settings | Attachment Folders

Edit this path to include the full path to the Collaborate upload directories. For example,

The full path to the Collaborate upload directories.

c:\HCL\UNICA\Collaborate\projectattachments.

If you are using  $UNIX^{\mathbb{N}}$ , confirm that Collaborate users have permission to read, write, and run files in this directory.

The full path to the Collaborate task upload directories. Edit this path to include the full path to the Collaborate task upload directories. For example,

c:\HCL\UNICA\Collaborate\taskattachments.

If you are using  $UNIX^{\mathbb{T}}$ , confirm that Collaborate users have permission to read, write, and run files in this directory.

The full path to the Collaborate template directories. Edit this path to include the full path to the Collaborate template directories. For example,

 $\verb|c:\HCL\UNICA\COllaborate\templates.|$ 

If you are using  $UNIX^{\mathbb{M}}$ , confirm that Collaborate users have permission to read, write, and run files in this directory.

The type of web application server you are using. The valid values are weblogic, websphere, jboss, or tomcat.

The default Campaign partition. Collaborate uses this parameter if you do not define the

#### taskUploadDir

Affinium | Collaborate | UDM Configuration Settings | Attachment Folders

#### templatesDir

Affinium | Collaborate | UDM Configuration Settings | Templates

#### serverType

Affinium | Collaborate | UDM Configuration Settings

#### defaultCampaignPartition

Table 16. Collaborate installation window parameter names and description

#### (continued)

Parameter	Description
Affinium Collaborate UDM Configuration	<campaign-partition-id> tag in a project template</campaign-partition-id>
Settings   Campaign Integration	file.
	Set value to partition1.
defaultCampaignFolderId	The default Campaign folder ID. Collaborate uses this parameter if you do not define the
Affinium Collaborate UDM Configuration	
Settings   Campaign Integration	<campaign-folder-id> tag in a project template file.</campaign-folder-id>
	Set value to 2.
collaborateAttachmentsDIRECTORY_directory	Specifies the directory for attachments that
Affinium Collaborate UDM Configuration	are generated by flowcharts in Campaign. This
Settings   Attachment	path must match the default Campaign partition directory.
netify. The ille on the state of the state o	·
notifyEMailMonitorJavaMailHost	The machine name or IP address of your organization's SMTP server.
Affinium   Collaborate   UDM Configuration	organization's Switz Server.
Settings   Notifications   Email	
notifyDefaultSenderEmail	A valid email address for Collaborate to use to
Affinium   Collaborate   UDM Configuration	send emails when there is otherwise no valid email address available to send notification
Settings   Notifications   Email	emails.
templateAdminGroup_Name	The list of groups that have access to template
	configuration options. Groups with the same
Affinium   Collaborate   UDM Configuration Settings   Templates	name must exist in Platform. You must separate
beceings   rempraces	multiple groups with commas. The default value is
	Template Administrators.
defaultListTableDSName	The data source name that is used for templates
Affinium Collaborate UDM Configuration	while you import the template if the data source
Settings   Templates	name is not defined.

# List display configuration

Settings | Templates

Create list tables to configure the list display in Collaborate. You can link lists to your customer data by configuring Collaborate database settings.

To enable corporate marketers to share lists with field marketers, you must configure these lists to link to your customer data. As you configure your Collaborate database settings, you first need to create the list tables. Later, you configure the display format, search criteria, and table relationships.

## Data filters for the list display

Data filters are used to filter data sets so that you can view the required data. Use data filter in Platform to limit the data that HCL Unica users can see.

For example, you can create a data filter based on region so your regional field marketers can see only the customers in their region. The data filters apply to all data viewed in Collaborate, including when you create lists, when field marketers review lists and search for other contacts, and when you work with forms.

#### Components affected by data level filtering for the list display

Configuring data filters requires coordination between following components of the Platform:

- · The data filters in the Platform as a whole
- · Lists and forms in Collaborate
- · Table mapping and flowcharts in Campaign

#### Example workflow for configuring data filters

The following example shows the steps that are involved in setting up data level filtering for the list display bases on the customer regions:

- 1. Create a **region\_id** column in the list tables in Collaborate.
- 2. Create data filters in the Platform for each region, which is based on the **region\_id** column of the list manager tables in your customer database.
- 3. Map the region\_id column in the list tables to the region\_id column in your customer database by using Campaign.
- 4. Create flowcharts in Campaign that populate the region\_id column.
- 5. Configure the list display and the form templates in Collaborate to filter on the **region\_id** column.



**Note:** You must coordinate your configuration across the Platform, Campaign, and Collaborate. You must ensure that you use the same naming conventions across these components.

## View List and Search List pages

You can configure the **View List** and **Search List** pages to enable field marketers to review lists. To configure the **View List** and **Search List** pages, modify the <code>ViewList</code> and <code>SearchList</code> configuration files.

The following guidelines describe the general changes that you must make to the ViewList and SearchList configuration files.



**Note:** If no search screen is configured for an audience level, users cannot add records when you review a list for this audience level, and the **Add Records** link is disabled.

#### Configuring the database connection

Edit the listmanager\_tables.xml file, which is in the conf directory under your Collaborate installation, as follows:

- Define the data source that is containing your customer tables.
- Define the tables that you want to access.
- Define the columns in the tables that you want to display on the View List page.



**Note:** There is only one copy of listmanager\_tables.xml, and it defines the columns that are used in view list and search list screens. Configure the listmanager\_tables.xml appropriately for both the listmanager\_list.xml and listmanager\_searchScreens.xml files.

#### **Configuring the View List page**

Edit the listmanager\_list.xml file, in the conf directory under your Collaborate installation, as follows:

- Define the type of data views with the List element.
- · Define the data that is displayed in each view.
- Define the sort order of each view.
- · Define an application to display customer details.

#### Configuring the List Search page

Edit the listmanager\_searchScreens.xml file, which is in the conf directory under your Collaborate installation, as follows:

- Define the available search criteria.
- Define the way Collaborate displays the results.

## Disable List Manager list tables

If you do not want to use the List Manager, edit the <code>collaborate\_configuration.xml</code> file and set the <code>listManagerEnabled</code> parameter to false.

# List display configuration files

Configuration files maintain display of lists in the application. The configuration files are xml files, and are stored in the configuration files are xml files, and are stored in the configuration files are xml files, and are stored in the configuration files are xml files, and are stored in the configuration files are xml files, and are stored in the configuration files are xml files, and are stored in the configuration files are xml files, and are stored in the configuration files are xml files, and are stored in the configuration files are xml files, and are stored in the configuration files are xml files, and are stored in the configuration files are xml files, and are stored in the configuration files are xml files, and are stored in the configuration files are xml files, and are stored in the configuration files are xml files, and are stored in the configuration files are xml files, and are stored in the configuration files are xml files, and are stored in the configuration files are xml files, and are xml files are

Collaborate controls the display of lists through the following XML files:

- listmanager\_tables.xml
- listmanager list.xml
- listmanager\_searchScreens.xml

During installation, the XML files are populated with examples that work with the sample data.

Use the following guidelines while editing the configuration files:

- To add special characters to the listmanager XML files, use Unicode encoding. For example, \( \epsilon \) must be encoded as \( \psi \) +00E9.
- To use certain characters in the configuration files, you must use XML entities. For example, by using < as a value breaks the configuration file, as it is part of the XML syntax. You must use the entity for <, which is alt:
- If you update the <code>listmanager</code> XML files (for example if you add new columns or a new list display), you must also update the corresponding properties files (<code>list\_language.properties</code> or <code>searchscreen\_language.properties</code>).

#### The listmanager\_tables.xml file

You can save or declare information about audience level, data source, and tables that are used in **Search** and **List** pages in the listmanager\_tables.xml file.

Each type of information stored in <code>listmanager\_tables.xml</code> file contains attributes. While you store the information, provide correct values for these attributes.

#### AudienceLevel

AudienceLevel defines the audience levels of your data model. It contains the following attributes:

- Label: A short description of the audience level.
- Name: The code for identifying the audience level. This must match the AudienceLevel attribute of the list element of the listmanager\_list.xml file.
- Table: The name of the table that contains the audience level.
- Datasource: The name of the data source used to access the table from the customer database.

#### For example:

```
<AudienceLevel Label="Indiv" Name="Individual" Table="v_indiv_contact"
Datasource="JNDI_Name_for_customer_DB">
```

Each AudienceLevel element contains a child element, Column:

```
<AudienceLevel ...>
<Column... />
</AudienceLevel>
```

#### Column

The Column parameter specifies the ID column in the audience level table. Column contains a single attribute, Name, for the name of the ID columns in the Audience table. For example:

```
<Column Name="Indiv_ID"/>
```

#### **DataSource**

The Datasource element defines the data source declared to access the tables. It contains the following attributes:

- Name: The JNDI name of the data source in the web application server.
- Type: The database type. The valid values are solserver, DB2, ORACLE, NETEZZA, OF TERADATA.
- pecimalseparator: The character that denotes the decimal place. The valid values are period (.) or comma (,).

#### For example:

```
<Datasource Name="ACC_DEMO" Type="SQLSERVER" DecimalSeparator="."/>
```

#### **Table**

Table defines the tables on which the search screens and list screens are based. This element contains the following attributes:

- Name: The name of the table.
- DataSource: The data source that is used to access the table.
- owner: The owner or schema of the database (used to prefix the table name).

#### For example:

```
<Table Name="v_indiv_contact" Datasource="ACC_DEMO" Owner="dbo">
```

Each Table element contains a child element, Column, which can optionally include a LinkedTo parameter:

```
<Table ...>
<Column...>
<LinkedTo ... />
</Column>
</Table>
```

#### Column

The column parameter describes each column in the table that is defined by the parent Table element. It contains the following attributes:

- Name: The name of the column.
- Type: The type of data that is stored in the column. Valid values are A (alphanumeric), N (numerical), D (date that is stored as VARCHAR yyyymmdd), F (date stored as DATE/DATETIME).
- Length: The length of the column.
- $\bullet$   ${\tt DecimalLength}.$  The length of the decimal part for a numeric column.

#### For example:

```
<Column Name="Indiv_ID" Type="N" Length="10" />
```

The LinkedTo parameter specifies the relationship between a column and a table that defines references. For example, a table contains userID and householdID columns. These columns must reference another table that relates userID to the Customer audience and householdID to the Household audience.

This element contains the following attributes:

- Table: The table where the reference is defined.
- Column: The key column of the table on which the reverence is defined.

#### For example:

```
<LinkedTo Table="v_indiv_contact" Column="Indiv_ID"/>
```

## The listmanager\_list.xml file

You can use the <code>listmanager\_list.xml</code> file to configure the format of the lists that are displayed in the Collaborate. The <code>listmanager\_list.xml</code> file contains <code>List</code> as the main element and following child elements namely: Select, Order, and Link.

#### List

The List element describes the list display format. You can define several display formats if the code is unique. You can choose the format to apply when you open the list screen. For example, you can create a contact format that displays only the name, address, and phone number of the contact and create a demographic format to display the income, age, and gender of the contact.

This element contains the following attributes:

- Name: The name of the list display format.
- code: The code of the list display format. It must be unique.
- AudienceLevel: The audience level the list display format is based on. This audience level is defined in the listmanager\_tables.xml file.
- Multiple: If set to true, you can select more than one member of the list. If set to false, you can select only one member of the list.
- Datasource: The name of the data source that is used to access the table from the customer database.

#### For example:

```
<List Name="Contact" Code="CONTACT" AudienceLevel="Individual"

Datasource="JNDI_Name_for_customer_DB">
```

Each Listelement can contain Select, Order, and Link child elements:

#### Select

The Select element describes the table and columns to display in the list content. Collaboratedisplays the columns in the same order as they are displayed in this file.

This element contains the following attributes:

- Table: The name of the table to display. It must also be defined in the listmanager\_tables.xml file.
- column: The name of the column to display from the related table. It must also be defined in the listmanager\_tables.xml file.
- Label: The label of the column header. It is a tag that is replaced by globalized descriptor that is contained in each list \_language.properties resource bundle file.

```
<Select Table="v_indiv_contact" Column="indiv_id" Label="indiv_id"/>
```

#### Order

The Order element describes the default sorting columns. It contains the following attributes:

- Table: The name of the table that contains the sorting columns. It must also be defined in the listmanager\_tables.xml file.
- column: The column on which the sorting is based. It must also be defined in the listmanager\_tables.xml file.
- Label: The order type. The valid values are ASC for ascendant sorting or DESC for descendant sorting.

#### For example:

```
<Order Table="v_indiv_contact" Column="last_name" Type="ASC"/>
```

#### Link

The  $_{
m Link}$  element describes the URL for the external application that contains customer details. The  $_{
m Link}$  element is optional. It contains the following attributes:

- URL: The base URL of the application, without any parameters.
- Label: The link label or icon tooltip.
- Logo: The name of a file as use as the icon (optional).
- LogoHeight: The height of the icon. (Use only with the Logo attribute.)
- LogoWidth: The width of the icon. (Use only with the Logoattribute.)
- NavName: The browser name.

Each Link element can contain multiple Param child elements.

#### For example:

```
<Link Url="http://localhost:7073/LeadsContact/callLeads.jsp"
Label="last_name" Logo="contact.gif">
  <Param Name="affiniumUserName" Type="user" Value="userlogin"/>
  <ParamName="LeadsRmcTbid" Type="column"
  Value="v_customer_contact.customer_id"/>
  </Link>
```

#### Param

The Param element describes a parameter to add to the base URL. It contains the following attributes:

- Name: The http parameter name.
- Type: The type of information to send. The valid values are user to send the current logged user information and column to send the value of a specified column.
- value: The specific information to send. If the Type attribute value is user, the valid values of the value attribute are userlogin and userid. If the Type attribute value is column, the valid value of the value attribute is the column whose value must be appended to the base URL, specified as Table.column.
- DateFormat: The format for sent dates. Used only for a date column (type D or F).

```
<Param Name="affiniumUserName" Type="user" Value="userlogin"/>
<ParamName="LeadsRmcTbid" Type="column" Value="v_customer_contact.customer_id"/>
```

#### The listmanager searchScreens.xml file

You can use the <code>listmanager\_searchScreens.xml</code> file to customize list search pages. The <code>listmanager\_searchScreens.xml</code> file contains criteria and result fields. Criteria is a search criteria while result field contains searching result sets.

The listmanager\_searchScreens.xml file defines:

- · The criteria fields
- · The displayed result fields

You can define several search screens that are based on different audiences, different criteria, and searching results to be used in Collaborate When the field marketers use search, the screen appearance is based on the audience levels configured the <code>listmanager\_searchScreens.xml</code> file. If the various screens are based on the same audience level, the field marketer can choose from the various predefined searches. For example, you can create a basic search that contains only name and address, then an advanced search, which contains name, address, income, and account activity.

You can choose not to define a search screen for the described audience level to prevent adding people to the List Manager for a campaign or List. The field marketers would not be able to add a contact that is based on that audience level because no search screen is defined.

Following are descriptions of each element and subelement and their related attributes.

listmanager\_searchScreens.xml contains several SearchScreen elements. Each of these sets up a multi criteria searches screen criteria and result set. This element contains the following attributes:

- Name: The name of the screen.
- AudienceLevel: The audience level the search screens are based on. The AudienceLevel is defined in the listmanager\_searchScreens.xml file.
- Label: The label of the column header.
- MultiSelect: If set to true, you can select more than one element in the final list. If set to false, you can select only one element in the final list.
- Datasource: The name of the data source that is used to access the table from the customer database.

```
<SearchScreen Name="default_indiv_search" AudienceLevel="Individual"

Label="default_indiv_search" MultiSelect="true"

Datasource="JNDI_Name_for_customer_DB">
```

Each SearchScreen tag has the following structure:

#### Criteria

The Criteria element specifies the search criteria. It contains the Field element, which describes the search criteria fields.

#### Field

The Field element contains the following attributes:

- Table: The table on which the search is based.
- Column: The column on which the search is based.
- Label: The descriptor that is displayed on the screen for the criteria. It is a tag that is replaced by globalized descriptor that is contained in each searchScreen\_language.properties resource bundle file.
- Operator: The type of operation. The valid values are =, like, <, >, <=, >=, <>.
- Default: The optional default value. It can be set to @userlogin and replaced by the user login at execution.
- order: The display order of the criteria on the screen.
- Long: (Optional) The length of the criteria value. If not specified, the criteria takes the value that is defined in the attribute length of the table's column in the listmanager\_tables.xml file.
- Minimallength: (Optional) The minimal number of characters of the criteria value.
- case: (Optional) The case of the criteria value. The valid values are Lower or Upper.
- Displayed: (Optional) whether the criteria is displayed or hidden. The valid values are true or false.

#### For example:

```
<Field Table="v_indiv_contact" Column="username" Label="username"
Operator="=" Displayed="false" Default="@userlogin" Order="5"/>
```

A Field element can contain a Lookup element. The Lookup element specifies how to populate a list box criteria. The Lookup element contains the following attributes:

- Table: The table that is containing the data of the list.
- Id: The ID column that is containing the data of the list.
- Desc: A description of the list.

- where: (Optional) you can filter the values according to a Where clause.
- Display: (Optional) Specifies what is displayed in the list box: the code and the description. The values can be: id, desc, id : desc, or desc : id.

```
<Lookup Table="lkp_region" Id="Region_id" Desc="Region"
Where="" Display="desc"/>
```

#### Result

The Result element specifies the searching result sets. It contains Field and Order elements.

#### Field

The Field element specifies the displayed result fields. Field contains the following attributes:

- $\bullet$   ${\tt Table}.$  The table that is containing the searching results.
- Column: The column that is containing the searching results.
- Label: The descriptor that is displayed on the header of the result list.
- Format: The format (such as code and description) to display in the list box criteria in the case of a column that has a relationship with a lookup table. The value can be code, label, code: label, or label: code.

#### For example:

```
<Field Table="v_indiv_contact" Column="Indiv_ID" Label="indiv_id"/>
```

#### Order

The order element specifies the displayed sorting column for the result records. Order contains the following attributes:

- Table: The table of the column on which the records are sorted.
- Column: The columns on which the records are sorted.
- Type: The sorting order. The valid values are ASC or DESC.

#### For example:

```
<Order Table="v_indiv_contact" Column="Last_Name" Type="ASC"/>
```

# Mapping Collaborate tables in Campaign

You can exchange data from a data source and an application by mapping tables between two applications. Map the list tables in Collaborate with Campaign tables.

Map the following tables:

- uacc\_lists
- · uacc\_ondemand\_lists
- · uacc\_corporate\_lists
- · uacc\_permanent

- uacc\_ondemand\_permanent
- · uacc\_corporate\_permanent

For information about mapping tables, see the Campaign Administrator's Guide.

# Mapping Campaign system tables for Collaborate

After you run the clb\_systab\_<db\_type>.sql script in the schema that is hosting the Campaign system tables, map the new tables in Campaign.

#### **About this task**

Map the following tables:

Table 17. Mapping system tables with database tables

System table	Database table to map to
Process Table	UA_Process
FlowChart Parameters Table	UA_ProcAttribute
User Variables table	UA_UserVariable
User Variable Enumeration Table	UA_EnumUserVarVal
Display Order Table	UA_ccDisplayOrder
Run Result Table	UA_RunResult
Sub Attribute Table	UA_Subattribute

For instructions on mapping system tables in Campaign, see the Campaign Administrator's Guide.

# Starting the Campaign server

Make sure that Platform and Campaign web applications are deployed and running when you start the Campaign server.

#### About this task

You can start the Campaign server directly, or install it as a service.

# Checking the installation log for errors

You must check the installation log file after you finish the installation of Collaborate. Make sure that the product installation is error-free.

#### **About this task**

After the installation is completed, check the <code>collaborate\_Install\_DD\_MM\_YYY\_HH\_MM\_ss.log</code> file in the installation directory of your Collaborate installation for any errors.



Note: For a new installation, the error that is related to drop table commands is normal and expected.

# Verifying Collaborate installation

To verify that Collaborate is installed successfully, log in to the HCL Unica application and confirm that you can access the **Local Marketing** menu. The **Local Marketing** menu provides access to Lists, On-demand Campaigns, Corporate Campaigns, your Subscriptions, and your Calendar.



Note: If you want to restart Campaign or Collaborate, you must restart both applications.

# Additional configuration for enhanced security

The procedures in this section describe some additional configurations in the web application server. They are optional, but you might want to perform them for enhanced security.

## Disabling the X-Powered-By flag

If your organization is concerned that the X-Powered-By flag in the header variable is a security risk, you can disable it using this procedure.

- 1. If you are using WebLogic, in the administration console, under *domainName* > Configuration > Web Application, set X-Powered-By Header to X-Powered-By Header will not be sent.
- 2. If you are using WebSphere®, perform the following steps.
  - a. In the WebSphere® administration console, navigate toServers > Server Types > WebSphere application servers > server\_name > Web Container Settings > Web container.
  - b. Under Additional Properties select Custom Properties.
  - c. On the Custom Properties page, click New.
  - d. On the Settings page, create a custom property named <code>com.ibm.ws.webcontainer.disablexPoweredBy</code> and set the value to <code>false</code>.
  - e. Click Apply or OK.
  - f. Click Save on the console task bar to save your configuration changes.
  - g. Restart the server.

# Configuring a restrictive cookie path

In your web application server, you can restrict cookie access to a specific application for enhanced security. If not restricted, cookies are valid across all the deployed applications.

- 1. If you are using WebLogic, perform the following steps.
  - a. Extract the weblogic.xml file from the WAR or EAR package where you want to add the restrictive cookie path.
  - b. Add the following to the weblogic.xml file, where *context-path* is the context path for the deployed application. For HCL Unica applications the context path is typically /unica.

- c. Rebuild the WAR or EAR file.
- 2. If you are using WebSphere®, perform the following steps.
  - a. In the WebSphere® administration console, navigate to the Session Manager > Cookie tab.
  - b. Set the **Cookie Path** to the context path of your application.

For HCL Unica applications the context path is typically /unica.

# Chapter 8. Setting up a web-app clustered environment for Collaborate

You can create a clustered environment in the IBM WebSphere Application Server to use within Unica Collaborate.

Because Unica Collaborate is an application that is accessed by many users, such as brokers, branch managers, local sales, and partners, a clustered environment within WebSphere helps deliver high availability and scalability.

Currently, Unica Collaborate supports only a WebSphere clustered deployment.

You must perform the following steps to add Unica Collaborate to your clustered environment.

- 1. Set up IBM WebSphere Application Server clusters on two or more WebSphere servers.
  - a. Configure the IBM WebSphere Application Server Deployment Manager.
  - b. Configure the IBM WebSphere Application Server Cluster Nodes.
  - c. Configure the web server with the IBM WebSphere Application Server (IBM HTTP Server).
- 2. Mount the Unica Collaborate application file system across the cluster servers.
- 3. Deploy Unica Collaborate on the IBM WebSphere Application Server cluster.

## Setting up your web-app cluster for Collaborate

You must set up a cluster in the WebSphere Application Server so that you can create server nodes.

#### About this task

To set up the IBM WebSphere Application Server cluster, refer to the IBM WebSphere Application Server documentation. Make sure that the IBM HTTP Server and the IBM HTTP Server plug-ins are installed on the server machine on which the IBM WebSphere Application Server Deployment Manager Profile is created. Contact your system administrator to install the IBM HTTP Server and plug-ins on the application server.

## Starting the web-app cluster nodes

#### About this task

Before you start the IBM WebSphere Application Server cluster from the WebSphere console, you must start the WebSphere Application Server cluster nodes on each machine and then start the web server (IBM HTTP Server). If the cluster did not start successfully, make sure that your WebSphere Application Server cluster nodes are running on each application server. Then, make sure that each server started. You can go to the cluster members and start each application server manually. Finally, create the application server JNDIs.

# Deploying the EAR and WAR files on your cluster

#### About this task

The WAR deployment steps are slightly different in an IBM WebSphere Application Server cluster for Collaborate. Before you proceed with the WAR deployment, you must deploy Platform and Campaign applications.

- 1. Deploy Collaborate on the WebSphere Application Server cluster. When you select the node for application deployment, select the WebSphere Application Server cluster node name to browse for the application.
- 2. Select the cluster application server and WebServer on the **Map Modules to servers** screen of deployment. Check the check box for **collaborate.war**, and click **Apply**.

#### What to do next

For the other deployment steps, you can follow the normal WAR file deployment process in IBM WebSphere Application Server.

## Deploying Collaborate on each node

#### About this task

Collaborate must be deployed on each node present in the WebSphere Application Server cluster. There are additional steps that you must follow in addition to the WebSphere guidelines that are apart from the normal deployment steps.

You must provide the absolute path for the following configuration parameters when you deploy Collaborate on a web-app clustered environment. This is required because the different WebSphere cluster nodes running Collaborate are not able to access the relative path if these configurations are not defined.

In Collaborate, data for templates, forms, and attachments is stored in the file system. The object store location is specified in the Collaborate configuration. For example:

- $1. \ \ \textbf{Settings for Attachment (Affinium | \texttt{Collaborate} | \texttt{UDM Configuration Settings} | \texttt{Attachment)}.$ 
  - It contains the file system location for Campaign Attachments:
  - collaborateAttachmentsDIRECTORY\_directory = "/IMS/Campaign/partitions/partition1.
- 2. Settings for Attachment Folders (Affinium | Collaborate | UDM Configuration Settings | Attachment Folders).

It contains the file system location for Lists, On-demand Campaigns, and Corporate Campaigns workflow tasks attachments:

- uploadDir = /opt/DMCluster/Collaborate/projectattachments
- taskUploadDir = /opt/DMCluster/Collaborate/taskattachments
- 3. Settings for Templates (Affinium | Collaborate | UDM Configuration Settings | Templates).

It contains the file system location for storing templates: templatesDir = /opt/DMCluster/Collaborate/template.

# Disabling notification threads

#### About this task

If you are running a notification on a single node in a cluster, you must provide the following JVM parameter to disable notification threads on a particular cluster node.

-Ddm.suppressNotifications=true

- If the WebSphere Application Server cluster has four nodes, you need to add the JVM parameter in three JVM cluster nodes except the one you want to run the notifications.
- If the WebSphere Application Server cluster has four nodes and you added this JVM parameter in two nodes and notification threads are enabled on more than one cluster node, there is a chance multiple notifications are sent.

# Defining Ehcache configurations for your clustered environment

Ehcache is used to support high availability and scalability replication of application cached data across different nodes in the cluster.

#### About this task

You can define the Ehcache configurations present in the configuration file on following location: <Collaborate Home>/ conf/collaborate\_ehcache.xml.



Note: Configuration changes are not required if Unica Collaborate is not deployed on a web-app server cluster.

Unica Collaborate Ehcache configuration support two different types of peer discoveries: automatic peer discovery and manual peer discovery.

1. For automatic peer discovery, you can change the multicastGroupAddress and multicastGroupPort for your local network settings:

```
<cacheManagerManagerPeerProviderFactory
class="net.sf.ehcache.distribution.RMICacheManagerPeerProviderFactory"
properties="peerDiscovery=automatic, multicastGroupAddress=230.0.0.1,
multicastGroupPort=3232, timeToLive=32"/>
<cacheManagerPeerListenerFactory
class="net.sf.ehcache.distribution.RMICacheManagerPeerListenerFactory"/>
```

For manual peer discovery, you can define cluster nodes and RMI ports to replicate cached data across cluster nodes. You can change the machine name and port as per your IBM Websphere cluster environment configuration.

```
<cacheManagerPeerProviderFactory
class="net.sf.ehcache.distribution.RMICacheManagerPeerProviderFactory"
properties="peerDiscovery=manual,
miUrls=//<machineA>:40000/DMEventCache//<machineB>:40000/DMEventCache
//<machineA>:40000/DMSessionObjectLockCache//<machineB>:40000/DMSessionObjectLockCache
//<machineA>:40000/DMListLockCache//<machineB>:40000/DMListLockCache"/>

<cacheManagerPeerListenerFactory
class="net.sf.ehcache.distribution.RMICacheManagerPeerListenerFactory"
properties="port=40000, socketTimeoutMillis=20000"/>
```

3. You can add more RMI URLs in the following format in case of you have more than two nodes participating in the IBM Websphere application server cluster.

```
miUrls=
//<machineA>:40000/DMEventCache
```

```
//<machineA>:40000/DMSessionObjectLockCache
//<machineA>:40000/DMListLockCache
```

4. You will also need to enable cache replication for individual cache by uncommenting the configurations in collaborate\_ehcache.xml for DMEventCache, DMSessionObjectLockCache, and DMListLockCache.

# Chapter 9. Uninstalling Collaborate

Run the Collaborate uninstallers to uninstall Collaborate. When you run the Collaborate uninstaller, the files that were created during the installation process are removed. For example, files such as configuration files, installer registry information, and user data are removed from the computer.

#### About this task

When you install HCL Unica products, an uninstaller is included in the Uninstall\_Product directory, where Product is the name of your Unica product. On Windows<sup>M</sup>, an entry is also added to the **Add or Remove Programs** list in the Control Panel.

If you manually remove the files in your installation directory instead of running the uninstaller, the result might be an incomplete installation if you later reinstall an Unica product in the same location. After uninstalling a product, its database is not removed. The uninstaller only removes default files that are created during installation. Any file that is created or generated after installation is not removed.

In addition to the general instructions for uninstalling HCL Unica products, follow the guidelines when you uninstall Collaborate:

- If you have multiple Collaborate runtime installations using the same Platform installation, you must remove network
  connectivity for the Collaborate runtime workstation before you run the uninstaller. Failure to do so uninstalls the
  configuration data for all the other Collaborate runtime installations from Platform.
- · You can safely ignore any warnings about failure to unregister with Platform.
- You can export a copy of your configuration as a precaution before uninstalling Collaborate.
- If you uninstall the Collaborate design time environment, after you run the uninstaller, you may need to manually unregister Collaborate. Use the configtool utility to unregister full\_path\_to\_Collaborate\_installation\_directory\Collaborate\conf\Collaborate\_navigation.xml.



**Note:** On UNIX™, the same user account that installed Collaborate must run the uninstaller.

- 1. If you have deployed the Collaborate web application, undeploy the web application from WebSphere® or WebLogic.
- 2. Shut down WebSphere® or WebLogic.
- 3. Stop the processes that are related to Collaborate.
- 4. If the ddl directory exists in the product installation directory, run the scripts that are provided in the ddl directory to drop tables from the system table database.
- 5. Make sure that the IBM® SPSS® Modeler Collaboration and Deployment Service (C&DS) is uninstalled.
  - Open the Installation Manager and verify that C&DS is uninstalled. If C&DS is not uninstalled, use the IBM® Installation Manager to uninstall C&DS.
- 6. Complete one of the following steps to uninstall Collaborate:

#### Choose from:

- Click the Collaborate uninstaller that exists in the Uninstall\_Product directory. The uninstaller runs in the mode in which you installed Collaborate.
- In a command-line window, navigate to the directory where the uninstaller exists, and run the following command to uninstall Collaborate by using the console mode:

Uninstall\_Product -i console

• If you are uninstalling on a UNIX™ environment, navigate to the directory where the uninstaller exists, and run the following command to uninstall Collaborate:

./Uninstall\ Interaction\ History.



**Note:** UNIX<sup>™</sup> requires spaces after \.

• In a command-line window, navigate to the directory where the uninstaller exists, and run the following command to uninstall Collaborate by using the silent mode:

Uninstall\_Product -i silent

When you uninstall Collaborate by using the silent mode, the uninstallation process does not present any dialogs for user interaction.



**Note:** If you do not specify an option for uninstalling Collaborate, the Collaborate uninstaller runs in the mode in which Collaborate is installed.

# Chapter 10. configTool

The properties and values on the **Configuration** page are stored in the Platform system tables. You can use the <code>configTool</code> utility to import and export configuration settings to and from the system tables.

#### When to use configTool

You might want to use configTool for the following reasons.

- To import partition and data source templates that are supplied with Campaign, which you can then modify and duplicate by using the **Configuration** page.
- To register (import configuration properties for) HCL Unica products, if the product installer is unable to add the
  properties to the database automatically.
- To export an XML version of configuration settings for backup or to import into a different installation of HCL Unica.
- To delete categories that do not have the **Delete Category** link. You do this by using <code>configTool</code> to export your configuration, then manually deleting the XML that creates the category, and by using <code>configTool</code> to import the edited XML.



**Important:** This utility modifies the usm\_configuration and usm\_configuration\_values tables in the Platform system table database, which contains the configuration properties and their values. For best results, either create backup copies of these tables, or export your existing configurations by using configTool and back up the resulting file so you have a way to restore your configuration if you make an error when you use configTool to import.

#### **Syntax**

```
configTool -d -p "elementPath" [-o]
configTool -i -p "parent ElementPath" -f importFile [-o]
configTool -x -p "elementPath" -f exportFile
configTool -vp -p "elementPath" -f importFile [-d]
configTool -r productName -f registrationFile [-o] configTool -u productName
```

#### **Commands**

```
-d -p "elementPath" [o]
```

Delete configuration properties and their settings, specifying a path in the configuration property hierarchy.

The element path must use the internal names of categories and properties. You can obtain them by going to the **Configuration** page, selecting the wanted category or property, and looking at the path that is displayed in parentheses in the right pane. Delimit a path in the configuration property hierarchy by using the | character, and surround the path with double quotation marks.

Note the following.

- Only categories and properties within an application can be deleted by using this command, not whole applications.

  Use the -u command to unregister a whole application.
- To delete categories that do not have the **Delete Category** link on the **Configuration** page, use the -o option.

When you use -d with the -vp command, the configTool deletes any child nodes in the path you specify if those nodes are not included in the XML file you specify.

```
-i -p "parentElementPath" -f importFile [0]
```

Import configuration properties and their settings from a specified XML file.

To import, you specify a path to the parent element under which you want to import your categories. The configTool utility imports properties under the category you specify in the path.

You can add categories at any level below the top level, but you cannot add a category at same level as the top category.

The parent element path must use the internal names of categories and properties. You can obtain them by going to the **Configuration** page, selecting the required category or property, and looking at the path that is displayed in parentheses in the right pane. Delimit a path in the configuration property hierarchy by using the | character, and surround the path with double quotation marks.

You can specify an import file location relative to the tools/bin directory or you can specify a full directory path. If you specify a relative path or no path, configTool first looks for the file relative to the tools/bin directory.

By default, this command does not overwrite an existing category, but you can use the -o option to force an overwrite.

```
-x -p "elementPath" -f exportFile
```

Export configuration properties and their settings to an XML file with a specified name.

You can export all configuration properties or limit the export to a specific category by specifying a path in the configuration property hierarchy.

The element path must use the internal names of categories and properties, which you can obtain by going to the **Configuration** page, selecting the wanted category or property, and looking at the path that is displayed in parentheses in the right pane. Delimit a path in the configuration property hierarchy by using the | character, and surround the path with double quotation marks.

You can specify an export file location relative to the current directory or you can specify a full directory path. If the file specification does not contain a separator (/ on UNIX $^{\text{\tiny M}}$ , / or \ on Windows $^{\text{\tiny M}}$ ), configTool writes the file to the tools/bin directory under your Platform installation. If you do not provide the xml extension, configTool adds it.

```
-vp -p "elementPath" -f importFile [-d]
```

This command is used mainly in manual upgrades, to import configuration properties. If you applied a fix pack that contains a new configuration property, and you then upgrade, importing a configuration file as part of a manual upgrade process can override values that were set when the fix pack was applied. The -vp command ensures that the import does not override previously set configuration values.



Important: After you use the configTool utility with the -vp option, you must restart the web application server on which Platform is deployed so the changes are applied.

When you use -d with the -vp command, the configTool deletes any child nodes in the path you specify if those nodes are not included in the XML file you specify.

#### -r productName -f registrationFile

Register the application. The registration file location can be relative to the tools/bin directory or can be a full path. By default, this command does not overwrite an existing configuration, but you can use the -0 option to force an overwrite. The productName parameter must be one of those names that are listed above.

#### Note the following.

- When you use the -r command, the registration file must have <application> as the first tag in the XML.

  Other files can be provided with your product that you can use to insert configuration properties into the Platform database. For these files, use the -i command. Only the file that has the <application> tag as the first tag can be used with the -r command.
- The registration file for the Platform is named Manager\_config.xml, and the first tag is <Suite>. To register this file on a new installation, use the populateDb utility, or rerun the Platform installer as described in the *Platform Installation Guide*.
- After the initial installation, to re-register products other than the Platform, use configTool with the -r command and -o to overwrite the existing properties.

The configTool utility uses product names as parameters with the commands that register and unregister products. With the 8.5.0 release of HCL Unica, many product names changed. However, the names that are recognized by configTool did not change. The valid product names for use with configTool are listed below, along with the current names of the products.

Name used in

Table 18. Product names for configTool registration and unregistration

Draduat nama

	Product name	Name used in configTool
Platform		Manager
Campaign		Campaign
Collaborate		Collaborate
Deliver		emessage
Interact		interact
Optimize		Optimize
Plan		Plan
Opportunity Detect		Detect

Table 18. Product names for configTool registration and unregistration (continued)

# Product name Name used in configTool IBM® SPSS® Modeler Advantage Enterprise Marketing Management Edition Digital Analytics Coremetrics

#### -u productName

Unregister an application that is specified by <code>productName</code>. You do not have to include a path to the product category; the product name is sufficient, and it is required. The process removes all properties and configuration settings for the product.

#### **Options**

-0

When used with -i or -r, it overwrites an existing category or product registration (node).

When used with -d, you can delete a category (node) that does not have the Delete Category link on the Configuration page.

#### **Examples**

• Import configuration settings from a file named Product\_config.xml in the conf directory under the Platform installation.

```
configTool -i -p "Affinium" -f Product_config.xml
```

• Import one of the supplied Campaign data source templates into the default Campaign partition, partition1. The example assumes that you placed the Oracle data source template, <code>OracleTemplate.xml</code>, in the <code>tools/bin</code> directory under the Platform installation.

```
configTool -i -p "Affinium|Campaign|partitions|partition1|dataSources" -f OracleTemplate.xml
```

• Export all configuration settings to a file named myConfig.xml in the D:\backups directory.

```
configTool -x -f D:\backups\myConfig.xml
```

• Export an existing Campaign partition (complete with data source entries), save it to a file named partitionTemplate.xml, and store it in the default tools/bin directory under the Platform installation.

```
\verb|configTool -x -p "Affinium| Campaign| partitions| partition1" -f partitionTemplate.xml|
```

• Manually register an application named productName, by using a file named app\_config.xml in the default tools/bin directory under the Platform installation, and force it to overwrite an existing registration of this application.

```
configTool -r product Name -f app_config.xml -o
```

• Unregister an application named productName.

```
configTool -u productName
```

# Index

```
C configTool 67 configTool utility 67
U utilities configTool 67
```