HCLSoftware

Unica Interact V12.1.8 Installation Guide

Contents

Chapter 1. Installation overview

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

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

Installation roadmap

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

You can use the following table to scan the tasks that must be completed for installing Unica Interact:

Table 1. Interact installation roadmap

Table 1. Interact installation roadmap

(continued)

How the installers work

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

Make sure that you use the following guidelines before you use the Unica suite installer and the product installer:

- The suite installer and the product installer must be in the same directory on the computer where you want to install the product. When multiple versions of a product installer are present in the directory with the master installer, the master installer always shows the latest version of the product on the Unica Products screen in the installation wizard.
- If you are planning to install a patch immediately after you install an 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 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 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 Unica Interact .

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

GUIX Window System mode mode

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

UNIX™ X Window System mode

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

Console mode

Use the console mode to install Unica Interact 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 Unica Interact 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.

Unica Interact documentation and help

Unica Interact provides documentation and help for users, administrators, and developers.

Use the following table to get information about how to get started with Unica Interact:

Table 2. Get up and running

Task	Documentation
View a list of new features, known issues, and workarounds	*Unica Interact Release Notes®*
Learn about the structure of the Unica Interact database	*Unica Interact System Tables and Data Dictionary*
Install or upgrade Unica Interact and deploy the Unica Interact web application	One of the following guides: • *Unica Interact Installation Guide* • *Unica Interact Upgrade Guide*
Implement the IBM Cognos® reports provided with Unica Interact	*Cognos Reports Installation and Configuration Guide*
Implement the Unica Insights reports provided with Unica Interact	*Unica Insights Reports Installation and Configuration Guide*

Use the following table to get information about how to configure and use Unica Interact:

Table 3. Configure and use Unica Interact

Task	Documentation
• Maintain users and roles • Maintain data sources • Configure Unica Interact optional offer serving features • Monitor and maintain runtime environment performance	*Unica Interact Administrator's Guide*
• Work with interactive channels, events, learning models, and offers • Create and deploy interactive flowcharts • View Unica Interact reports	*Unica Interact User's Guide*
Use Unica Interact macros	*Macros for Unica: User's Guide*
Adjust components to obtain optimal performance	*Unica Interact Tuning Guide*

Use the following table to get information about how to get help if you face issues when you use Unica Interact:

Table 4. Get help

Task	Instructions
Open online help	1. Choose **Help > Help for this page** to open a context-sensitive help topic.
	2. Click the **Show Navigation** icon in the help window to display the full help.
Obtain PDFs	Use either of the following methods:
	• Choose **Help > Product Documentation** to access Unica Interact PDFs.
	• Choose **Help > All HCL Unica Documentation** to access all available documentation.

Chapter 2. Planning the Unica Interact installation

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

JVM requirements

Unica applications within a suite must be deployed on a dedicated Java™ virtual machine (JVM). Unica products customize the JVM that is used by the web application server.

Knowledge requirements

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

Internet browser settings

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

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

Access permissions

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

- Administration access for all necessary databases

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

- Read and write access to the relevant directory and sub-directories for the operating system account that you use to run the web application server and Unica components.
- Write permission for all files that you must edit.

- Write permission for all directories where you must save a file, such as the installation directory and backup directory if you are upgrading.
- Appropriate read, write, and execute permissions to run the installer.

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

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

The following additional permissions are necessary for UNIX™:

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

Points to consider before you install Unica Plan

For Unica Plan installation you are required to consider the following points.

JAVA_HOME environment variable

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

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

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

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

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

export JAVA_HOME= (leave empty)

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

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

Unica Platform requirements

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

Note: For installations on UNIX, you may require to set the `Djava.awt.headless` property to true in your web application server. The setting is required only when you are unable to view Unica Optimize reports. See the Unica Campaign Installation Guide for details. You do not require to prepare any additional data sources for Unica Optimize because Unica Optimize uses the Unica Campaign system tables data source.

Note: For versions 12.0.0 and higher, ensure that you do not select the database type Informix as it is not functional. From version 12.1.0.3 and higher, users can use OneDB database as system tables and user tables. See the *Unica V12.1.0.3 Installation Guide for OneDB* for more details.

Note: For version 12.1.8, do not select the database type as PostgreSQL for Interact Design Time, Interact Runtime Reports, and PatternStateETL ddl.

Installation worksheet

Use the installation worksheet to gather information about the database that contains your system tables and about other Unica products that are required for the installation of Unica Interact.

Note: All the Interact data sources must be of the same type. For example, if your Unica Campaign system tables are in Oracle databases, all the other databases must be Oracle.

Runtime tables

Runtime tables contain deployment data from the design time environment, staging tables for contact and response history, and runtime statistics.

Enter the database information for each runtime environment in the following table:

Table 5. Information for the Unica Interact runtime environment

Database information	Notes®
Database schema 1	
JNDI name 1	

Contact response history tables

Contact response history tables are used when you implement cross-section tracking. The contact response history tables can be in the same schema as your Unica Campaign contact response history tables, or they can be in a different database server or schema.

Enter the database information for the contact response history tables in the following table:

Table 6. Information for the Interact contact response history tables

Database information	Notes®
Database schema	
JNDI name	

Learning tables

Learning tables are used only if you want to use the Interact built-in learning feature. Learning tables are optional.

Enter the database information for the learning tables in the following table:

Table 7. Information for the Interact learning tables

Database information	Notes®
Database schema	
JNDI name	

User profile tables

User profile tables contain customer data that is required by interactive flowcharts to place visitors into smart segments.

Enter the database information for the user profile tables in the following table:

Table 8. Information for the Interact user profile tables

Database information	Notes®
Database schema	
JNDI name	

Test run tables

Test run tables are used for test runs of interactive flowcharts only. Test run tables contain data that is required by interactive flowcharts to place visitors into smart segments.

Enter the database information for the test run tables in the following table:

Table 9. Information for the Interact test run tables

Database information	Notes®
Database schema	
DSN (ODBC or native connection name)	
JNDI name	

Unica Platform database information

The installation wizards for each Unica product must be able to communicate with the Unica 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 Unica Platform system table database:

- Database type
- Database host name
- Database port
- Database name or schema ID
- User name and password for the database account
- JDBC connection URL to the Unica Platform database

Information about the web component

Obtain the following information for all Unica products that have a web component, which you deploy on a 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 Unica environment 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, example.com.

Installation order for Unica products

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

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

Installation or upgrade order for Unica products

Product	Installation or upgrade order
Unica Campaign (with or without Unica Deliver)	1. Unica Platform 2. Unica Campaign **Note:** Unica Deliver is installed automatically when you install Unica Campaign. However, Unica Deliver is not configured or enabled during the Unica Campaign installation process.
Unica Interact	1. Unica Platform 2. Unica Campaign 3. Unica Interact Design Time environment 4. Unica Interact Run Time environment 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. Unica Platform 2. Unica Campaign 3. Unica 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. Unica Platform 2. Unica Interact Run Time environment **Note:** • In case of upgrade to 11.1, if the base has the CacheManager as 'EHCache' with 'CacheType' as 'Distributed' or CacheManager as 'ExtremeScale', then the upgrade would update to 'CacheManager' as Ignite and 'CacheType' as 'Distributed'. • From Version 12.1.6, Interact Design Time has been separated from Unica Campaign. Since Interact Design Time was a part of Unica Campaign only till version 12.1.5, Unica Campaign needs to be installed or upgraded till 12.1.5, even if you only want to install Interact Design time.
Unica Plan	1. Unica Platform 2. Unica Plan

Product	Installation or upgrade order
	Note: If you are integrating Unica Plan with Unica Campaign, you must also install Unica Campaign. The order of installation for those two products does not matter.
Unica Optimize	1. Unica Platform 2. Unica Campaign 3. Unica Optimize
Opportunity Detect	1. Unica Platform 2. Opportunity Detect If Opportunity Detect is integrated with Unica Interact, install the products in the following order: 1. Unica Platform 2. Unica Campaign 3. Unica Interact 4. Opportunity Detect
IBM SPSS Modeler Advantage Enterprise Marketing Management Edition	1. IBM SPSS Modeler Advantage Enterprise Marketing Management Edition

Chapter 3. Preparing data sources for Unica Interact

The Unica Interact runtime environment uses data sources to store user and interaction data.

About this task

Complete the following steps to prepare data sources for Unica Interact.

1. Create a database or a database schema for the Interact system tables. The empty database that you set up for Unica Campaign can have any name.
2. Create a database user account.

   The database user account must have the following rights: CREATE, DELETE, DROP, INSERT, SELECT, and UPDATE.
3. Create ODBC or native connections. If you use UA_SYSTEM_TABLES as the ODBC name for that database, the Unica Campaign system tables will be mapped automatically.
4. Configure the web application server for your JDBC driver.
5. Create JDBC data sources in the web application server.

Creating databases or schemas

Set up data sources so that the Unica Interact system can store user and interaction data. Use Unica Campaign Customer (user) tables or set up unique data sources based on the type of data that is stored.

Before you begin

> ⚠️ **Important:**
>
> - Although we have introduced support for PostgreSQL in 12.1.8, it is available only for clean installation of 12.1.8 and not when upgrading to 12.1.8.
> - For a clean installation of Unica Interact with PostgreSQL as the database, run the InteractDT upgrade tool and select 12.1.7 as the previous release.

About this task

Complete the following steps to create databases or schemas for Unica Interact.

1. Create a database or a database schema for the Unica Interact system tables.
   The following table provides information about vendor-specific guidelines for creating a database or a database schema for the Unica Interact system tables.

   > 📝 **Note:** If you are using multiple databases, for example for profile and lookup data and system tables, they must all be of the same supported type: DB2 or Oracle.

   Table 10. Guidelines for creating databases or schemas

Data base vend or	Guidelines
Orac le	Enable the auto commit feature for the environment open. See the Oracle documentation for instructions.
DB2 ®	Set the database page size to at least 16K, or 32K if you need to support Unicode. See the DB2® documentation for instructions.
SQL Serv er	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.
Mari aDB	To support Unicode, set the appropriate database collation while creating databases or schemas.

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 Interact 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 PostgreSQL). 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. Create a database user account.

    The account that you create must have at least CREATE, SELECT, INSERT, UPDATE, DELETE, and DROP rights.
3. Obtain information about your databases or schemas and database accounts and then print and add the information to the Interact installation worksheet. You can use this information later in the installation process.

Required databases or schemas for Interact

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 Interact 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 Interact 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 Interact runtime environment:

- Database or schema to hold the Interact 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 Interact 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 Interact 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.

Note: If you are configuring just one partition, name the data source UA_SYSTEM_TABLES. For all other partitions as well name the systen data source as UA_SYSTEM_TABLES, refer Configuring multiple partitions for Unica Interact on page 74.

Record the connection names in the Installation worksheet on page 8.

Configuring the web application server for your JDBC driver

The web application server where you plan to deploy Unica Interact 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.

1. Obtain the latest vendor-provided Type 4 JDBC driver for your system table database that is supported by 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 Interact, 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 Interact.
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 Interact.
   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}${CLASSPATHSEP}${WLP_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 Interact.

3. Make a note of the database driver class path in the Unica Interact 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 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 Interact, 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 Interact.

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 Interact.
   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:

- ◦ `/subsystem=datasources/jdbc-driver=sql:add(driver-module-name=com.microsoft.sqlserver.jdbc,driver-name=sql,driver-xa-datasource-class-name=com.microsoft.sqlserver.jdbc.SQLServerXADataSource)`
- ◦ `/subsystem=datasources/jdbc-driver=sql:read-resource`
- ◦ `/subsystem=ee/service=default-bindings:write-attribute(name=datasource, value=undefined)`

3. Make a note of the database driver class path in the Unica Interact 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.

1. Obtain the latest vendor-provided Type 4 JDBC driver for your system table database that is supported by 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 Interact, 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 Interact.

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 Interact.

3. Make a note of the database driver class path in the Unica Interact 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 JDBC connections in the web application server

Create JDBC connections on each of the web application servers where Unica Campaign and Unica Interact is deployed. Unica Campaign and Unica Interact use the JDBC connections to access the required databases.

You can use the list to simplify configuration because the names in the list match the default values of the configuration properties that refer to the JDBC connections.

Use the following table to create JDBC connections to the databases that hold the Interact, Unica Campaign, and Unica Platform tables:

Table 11. JDBC connections in the web application server

Deployed web application	JDBC connections required to the databases

Unica Campaign	In the web application server where Campaign is deployed, create JDBC connections to the databases that hold the following tables:
	
	• Unica Interact runtime tables
	
	  JNDI name: InteractRTDS
	• Unica Interact test run tables (which can be the same as the Customer (User) tables)
	
	  JNDI name: testRunDataSource

Unica Interact runtime environment
 	
(The Unica Interact runtime environment is typically deployed in a different JVM from Unica Campaign)
	In the web application server where the Unica Interact runtime environment is deployed, create JDBC connections to the databases that hold the following tables:
	
	• Unica Interact runtime tables
	
	  JNDI name: InteractRTDS
	• Unica Interact profile tables
	
	  JNDI name: prodUserDataSource
	• Interact test run tables (required for test run server group only)
	
	  JNDI name: testRunDataSource
	• Unica Interact learning tables (if you are using built-in learning)
	
	  JNDI name: InteractLearningDS
	• Unica Campaign contact and response history tables (if you are using cross-session response tracking)
	
	  JNDI name: contactAndResponseHistoryDataSource
	• Unica Platform system tables
	
	  JNDI name: UnicaPlatformDS
	
	⚠️ **Important:** This is the required JNDI name for connections to the Platform system table database.
	
	You must set up the JDBC connection only if you install the Unica Interact runtime environment in a web application server where Unica Platform is not currently deployed. If Unica Platform is deployed in the same web application server, the JDBC connection is already defined.

Table 11. JDBC connections in the web application server

(continued)

Deployed web application	JDBC connections required to the databases
	All JNDI names are recommended, unless otherwise indicated.

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:@<your_db_host>:<your_db_port>:<your_db_service_name>

  Enter the driver URL by using the format that is shown. 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>`

PostgreSQL®

- Driver: `PostgreSQL JDBC Driver`
- Default port: `5432`
- Driver class: `org.postgresql.Driver`
- Driver URL: `jdbc: postgresql://<your_db_host>:<your_db_port>/<your_db_name>`
- Properties: Add `user=<your_db_user_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")

WebSphere®

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

SQLServer

- Driver: N/A
- Default port: 1433
- Driver class: `com.microsoft.sqlserver.jdbc.SQLServerConnectionPoolDataSource`
- Driver URL: jdbc:sqlserver://<DBhostName>:1433;databaseName=<DBName>

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. 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>

PostgreSQL®

- Driver: `PostgreSQL JDBC Driver`
- Default port: `5432`
- Driver class: `org.postgresql.Driver`
- Driver URL: `jdbc: postgresql://<your_db_host>:<your_db_port>/<your_db_name>`
- Properties: Add `user=<your_db_user_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 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")

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=plat11",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>

PostgreSQL®

- Driver: `PostgreSQL JDBC Driver`
- Default port: `5432`
- Driver class: `org.postgresql.Driver`
- Driver URL: `jdbc: postgresql://<your_db_host>:<your_db_port>/<your_db_name>`
- Properties: Add `user=<your_db_user_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>

PostgreSQL®

- Driver: `PostgreSQL JDBC Driver`
- Default port: `5432`
- Driver class: `org.postgresql.Driver`
- Driver URL: `jdbc: postgresql://<your_db_host>:<your_db_port>/<your_db_name>`
- Properties: Add `user=<your_db_user_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")

Chapter 4. Installing Unica Interact

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

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

Note: The Unica installer requires information about Platform.

After installing Interact, 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.

After installing Interact, you can create an EAR file if necessary.

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

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™. For UNIX™, 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:

Note: For Suse Linux operating system use the corresponding product Linux build except for Campaign and Optimize.

Note: : EAR deployments are not supported on Tomcat application server.

Table 12. Installation files

Operating system	Installation file
Windows™: GUI and console mode	`HCL_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™ 64-bit is the operating system on which the file must be installed. `HCL_Product_N.N.N.N_win.exe`,

Table 12. Installation files

(continued)

Operating system	Installation file
	where *Product* is the name of your product, *N.N.N.N* is the version number of your product, and Windows™ 64-bit is the operating system on which the file must be installed.
UNIX™: X Window System mode	HCL_*Product_N.N.N.N*_linux.bin, where *Product* is the name of your product, and *N.N.N.N* is the version number of your product.
	HCL_*Product_N.N.N.N*_linux.bin, where *Product* is the name of your product, and *N.N.N.N* is the version number of your product.
	HCL_*Product_N.N.N.N*_RHEL64.bin, where *Product* is the name of your product, and *N.N.N.N* is the version number of your product.
UNIX™: Console mode	HCL_*Product_N.N.N.N*.bin, where *Product* is the name of your product, and *N.N.N.N* is the version number of your product. This file can be used for installation on all UNIX™ operating systems.
SUSE Linux	HCL_*Product_N.N.N.N*_linuxsuse64.bin, where *Product* is the name of your product, and *N.N.N.N* is the version number of your product. This file can be used for installation on all ™SUSE Linux operating systems.

Installing Unica Interact by using the GUI mode

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

Before you begin

⚠️ **Important:** Before you use the GUI mode to install Unica Interact, make sure that the available temporary space on the computer where you install Unica Interact is more than three times the size of the Unica Interact installer.

⚠️ **Important:** If Unica products are installed in a distributed environment, you must use the machine name rather than an IP address in the navigation URL for all of the applications in the suite. Also, if you are on a clustered environment and choose to use ports that are different from the default ports `80` or `443` for your deployment, do not use a port number in the value of this property.

⚠️ **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 Unica installer and the Interact installers are in the same directory on the computer where you want to install Unica Interact.

Make sure that you install Unica Platform and Unica Campaign before installing the Unica Interact design time environment. For more information about installing Unica Platform, see the *Unica Platform Installation Guide*. For more information about installing Unica Campaign, see the *Unica Campaign Installation Guide*.

About this task

Complete the following actions to install Unica Interact by using the GUI mode:

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

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

   Table 13. Unica installer GUI

Window	Description
Introduction	This is the first window of the Unica suite installer. You can open the Interact installation and upgrade guides from this window. You can also see a link for the installation and upgrade guides for the products whose installers are saved in the installation directory.
	Click **Next** to go to the next window.
Response Files Destination	Click the **Generate Response File** check box if you want to generate response files for your product. Response files store the information that is necessary for the installation of your product. You can use response files for an unattended installation of your product.
	In the **Response files destination** field, click **Choose** to browse for a destination where you want to save the response files. Alternatively, click **Restore Default Folder** to save the response files in the default `C:\` location.
	Click **Next** to go to the next window.
HCL Unica Products	In the **Install Set** list, select **Custom** to select Unica Interact as the product that you want to install.
	In the **Install Set** area, you can see all the products whose installation files are in the same directory on your computer.
	In the **Description** field, you can view the description of the product that you select in the **Install Set** area.
	Click **Next** to go to the next window.
Installation Directory	In the **Specify the installation directory** field, click **Choose** to browse to the directory where you want to install your product.
	If you want to install the product in the folder where the installers are stored, click **Restore Default Folder**.
	Click **Next** to go to the next window.

Window	Description
Select Application Server	Select one of the following application servers for the installation: • IBM WebSphere® • Oracle WebLogic • Tomcat • JBOSS Click **Next** to go to the next window.
Platform Database Type	Select the appropriate Unica Platform database type. Click **Next** 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.
Platform Database Connection (continued)	Review and confirm the JDBC connection. Click **Next** to go to the next window.
Preinstallation Summary	Review and confirm the values that you added during the installation process. Click **Install** to start the installation process. The Unica Interact installer opens.

4. Follow the instructions on the Unica Interact installer to start installing Unica Interact.

Use the information in the following table to navigate through the Unica Interact installer and take appropriate actions on each window in the Unica Unica Interact installer:

Table 14. Unica Interact installer GUI

Window	Description
Introduction	This is the first window of the Unica Interact installer. You can open the installation guide, upgrade guide, and all documentation available for Unica Interact from this window. Click **Next** to go to the next window.
Software License Agreement	Carefully read the agreement. Use **Print** to print the agreement. Click **Next** after you accept the agreement.

Window	Description
Installation Directory	Click **Choose** to browse to the directory where you want to install Interact.
	Click **Next** to go to the next window.
Interact Components	In the **Install Set** list, select **Typical** to install only the Unica Interact Runtime Environment.
	In the **Install Set** area, select **Custom** to install the Unica Interact Runtime Environment, Unica Interact Design Time Environment, Reports, and Pattern State ETL.
	To install the Pattern State ETL, the Interact Runtime Environment must already be installed or selected for installation.
	In the **Description** field, you can view the description of the item that you select in the **Install Set** area.
	Click **Next** to go to the next window.
Interact Database Setup	Select one of the following options for setting up the Unica Interact database:
	• Automatic database setup: Select this option to proceed with the automatic setup of database through the installer. Perform the following steps.
	a. Select one of the databases and click **Next**.
	b. Based on the features you choose to install, provide the values for the following fields.
	◦ Database host name
	◦ Database port
	◦ Database name or System ID (SID)
	◦ Database user name
	◦ Database password
	• Manual database setup: See the Creating and populating the Unica Interact system tables on page 39 section.
	Click **Next** to go to the next window.
Preinstallation Summary	Review and confirm the values that you added during the installation process.
	Click **Install** to start the Unica Interact installation.
Installation Complete	Use this window to view information about the locations of log files that are created during installation.
	Click **Done** to exit the Unica Interact installer and to go back to the Unica suite installer.

5. Follow the instructions on the Unica installer to finish installing Unica Interact.

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

Table 15. Unica installer GUI

Window	Description
Deployment EAR file	Specify whether you want to create an enterprise archive (EAR) file to deploy your Unica products.
	Click **Next** to go to the next window.
	Note: Ear deployment on Tomcat server is not supported.
Package EAR file	You can see this window if you select **Create an EAR file for deployment** in the **Deployment EAR file** window.
	Select the applications that you want to package in the EAR file.
EAR file details	Enter the following information for your EAR file: • Enterprise application identifier • Display name • Description • EAR file path
Deployment EAR file	Select **Yes** or **No** to create an additional EAR file. If you select **Yes**, you must enter the details for the new EAR file.
	Click **Next** to complete the installation of your product.
Installation Complete	Use this window to view information about the installation log, error log, and output log of your installation.
	Click **Done** to exit the Unica installer.

Creating an EAR file after running the installer

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

About this task

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

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

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

For example, the properties files for Unica Platform `installer_ump12.1.0.0.properties` and the properties file for Campaign `installer_uo12.1.0.0.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™ type systems, run the `.bin` file rather than the `.sh` file.

   The installer wizard runs.

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

Installing Unica Interact using the console mode

The console mode allows you to install Interact 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
Before you install Unica Interact, ensure that you have configured the following.

- An application server profile
- A database schema

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

1. Open a command-line prompt window and navigate to the directory where you have saved the Unica installer and the Interact installer.
2. Complete one of the following actions to run the Unica installer.
   Choose from:
   - For Windows™, enter the following command:

     HCL_Unica_installer_full_name -i console

     For example, HCL_Unica_Installer_12.0.0.0_win.exe -i console
   - For UNIX™, invoke the *HCL_Unica_installer_full_name*.sh file.

     For example: HCL_Unica_Installer_12.0.0.0.sh
3. Run the Unica installer file.
   Example

For example: HCL_Unica_Installer_12.0.0.0.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] Unica Platform

2 [X] Unica Campaign

3 [ ] Unica Optimize

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

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

1 [X] Unica Platform

2 [ ] Unica Campaign

3 [ ] Unica Optimize

4 [ ] Unica Interact

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

5. The Unica installer launches the Interact installers during the installation process. Follow the instructions in the command-line prompt window of the Interact installers.

6. After you enter `quit` in the Interact installers command-line prompt window, the window shuts down. Follow the instructions in the command-line prompt window of the Unica installer to complete the installation of Interact.

> **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 Interact silently

Use the unattended or silent mode to install Unica Interact multiple times.

Before you begin

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

- An application server profile
- A database schema

About this task

When you install Unica Interact by 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 .
- 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 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 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_12.0.0.0_win.exe -i silent

Use the following command for Linux™:

- `HCL_Unica_installer_full_name _operating_system` .bin -i silent

  Example

  For example:

  HCL_Unica_Installer_12.0.0.0_linux.bin -i silent

Sample response files

You must create response files to set up a silent installation of Unica Interact. 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 16. Description of sample response files

Sample response file	Description
`installer.properties`	The sample response file for the Unica master installer.
`installer_`*product initials and product version number*`.properties`	The sample response file for the Unica Interact installer.
	For example, `installer_ucn.n.n.n.properties` is the response file of the Unica 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 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, product initials, and version number*`.properties`	The sample response file for the reports pack installer.
	For example, `installer_urpcn.n.n.n.properties` is the response file of the Unica 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 17. Description of sample response files

Sample response file	Description
`installer.properties`	The sample response file for the Unica master installer.
`installer_`*product intials and product version number*`.properties`	The sample response file for the Unica Interact installer.
	For example, `installer_ucn.n.n.n.properties` is the response file of the Unica 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.

Unica Interact Reports

Unica Interact reports supports integration with both IBM Cognos and Unica Insights.

Unica Interact Report Package components

To use the reporting feature for Interact, install the IBM Cognos® package and reporting schemas on the Unica Platform system.

The following table describes the components that you can select when you install the report package for Interact:

Table 18. Unica Interact Report Package components

Component	Description
Unica Interact reporting schemas (to be installed on the Unica system)	The Unica Interact reporting schemas make the following data from all Unica Interact data sources available for reporting: • Interactive channel-based campaign • Offers • Cells
IBM Cognos® package for Unica Interact (to be installed on the IBM Cognos® system)	The IBM Cognos® package includes the following components: • A reporting metadata model for the UnicaInteract database tables • A set of example reports that you can use to track campaign, offer, and cell performance

For information about installing the report package for Unica Interact, see the Cognos *Reports Installation and Configuration Guide*.

Unica Insights Reports

Unica Interact integrates with Unica Insights reports, which is shipped with Unica Platform. Reporting relies on the following components:

- A set of reports for the Unica Interact application, which are installed with the Unica Interact installer.
- The Unica Insights web application which is shipped with Unica Platform.

For more details on how to install and configure Unica Insights reporting for Unica Interact see the Unica Platform Installation Guide and Unica Insights Installation and Configuration guide.

Post installation steps

After Unica Interact run time is successfully installed, it is required to set the INTERACT_HOME environment variable pointing to the Unica Interact installation directory before starting the Application Server. If this is not done, Unica Interact logs will not get generated. If IBM WebSphere is used as the application server hosting Interact run time instance, ensure that you add a JVM parameter `-DDDEFAULT_PERSISTENCE_PROVIDER=false`.

Installing the ETL process

To process large numbers of event pattern ETL processes, you can install the ETL process for optimal performance. By default, the ETL process is installed when installing InteractRT.

Before you begin

Before you can install the Interact Event Pattern ETL process, you must have completed the following tasks:

- Install a complete Unica Interact setup, including the Unica Platform server and one or more Unica Interact run-time servers.

   The installation process is described in detail in the *Unica Interact Installation Guide*.
- Install and configure the data source in which you want the event pattern ETL process to store its data. This may be the same data source in which the Unica Interact runtime tables are stored, or it may be a different data source for performance reasons.
- Collect and have available the Unica Platform server networking information, as described in the *Unica Interact Installation Guide*. You need this information during this installation process.
- Be sure that a supported Java run-time environment is installed on the server where you are installing the ETL process.
- Connect to the server on which you are installing the ETL process with administrator or root privileges.

About this task

When you complete this task, the files necessary to run the ETL process will be available on the server. You will still need to configure the process before you can run it.

1. On the server where you want to run the event pattern ETL process, copy the Unica master installation program for the operating system along with the Unica Unica Interact installer.
   Remember that both the master installer and the Unica Interact installer must be in the same directory, and that you must run the installer as a user with administrator-level privileges on the server.
2. Follow the instructions in the Unica Interact Installation Guide to launch the master installation program.
   Be sure to provide the connection information for the Unica Platform server used by your runtime servers and design time server.
3. When the Unica Interact installer launches and displays the Interact Components page, select **Interact Runtime** component, and then the **Interact Event Pattern ETL** option under the Interact Tuntime component to install.
4. Follow the prompts until you complete the installation.
5. On the server where you installed the ETL process, locate the `<Unica Interact_Home>/PatternStateETL/ddl` directory.

   > 📝 **Note:** For release 12.1.8, PatternStateETL `DDL` does not support PostgreSQL. We will provide it in a future release.

6. Using your database management software, run the appropriate script in the `DDL` directory against the database that you will use as the target database for the output from the ETL process.

The scripts in this directory create four tables in the target database that are required to use the ETL process. Depending on the target database you are using, run one of the following scripts:

- `aci_evpattab_db2.sql` if the target database is IBM DB2.
- `aci_evpattab_ora.sql` if the target database is Oracle.
- `aci_evpattab_sqlsvr.sql` if the target database is Microsoft SQL Server.
- `aci_evpattab_mariadb.sql` if the target database is MariaDB.
- `aci_evpattab_ifx.sql` if the target database is OneDB.

Results

You have now installed the event pattern ETL process on the server. If you accepted the default installation directory during installation, you can find the installed files in `C:\HCL\Unica\Interact` on a supported Microsoft Windows platform, or in `/HCL/Unica/Interact` on a supported UNIX-like operating system.

What to do next

To continue with the event pattern ETL process, you need to configure the process by modifying files on the ETL process server, and in the Platform configuration pages. For more information, see Configuring the ETL process on page 68.

Chapter 5. Configuring Unica Interact before deployment

You must complete specific tasks before you deploy Unica Interact. There are no pre-deployment configuration tasks for Unica Interact Design Time and Unica Interact Run Time.

Creating and populating the Unica Interact system tables

If you have not created and populated the system tables during the installation process, use your database client to run the Unica Interact SQL scripts against the appropriate database or to create and populate the Unica Interact runtime environment, design time environment, learning, user profile, and contact and response tracking data sources.

Design time environment tables

Before you can enable the Unica Interact design time environment in Unica Campaign, you must add some tables to your Unica Campaign system table database.

The SQL scripts are in the *INTERACTDT_HOME*/ddl directory under your Interact design time environment installation.

If your Unica Campaign system tables are configured for Unicode, use the appropriate script that is in the *INTERACTDT_HOME*/ddl directory in your Unica Interact design time environment. There are no Unicode equivalent scripts for the aci_populate_systab scripts that are used to populate the design time environment tables.

Use the scripts in the following table to create the UnicaInteract design time environment tables:

Table 19. Scripts for creating design time environment tables

Data source type	Script name
DB2®	aci_systab_db2.sql
	The user table space and system temporary table space where the Unica Campaign system tables exist must each have a page size of 32K or greater.
Microsoft™ SQL Server	aci_systab_sqlsvr.sql
Oracle	aci_systab_ora.sql
MariaDB	aci_systab_mariadb.sql
PostgreSQL	aci_systab_pgsql.sql

Use the scripts in the following table to populate the Interact design time environment tables:

Table 20. Scripts for populating design time environment tables

Data source type	Script name
DB2®	aci_populate_systab_db2.sql
Microsoft™ SQL Server	aci_populate_systab_sqlsvr.sql
Oracle	aci_populate_systab_ora.sql
MariaDB	aci_populate_systab_mariadb.sql
PostgreSQL	aci_populate_systab_pgsql.sql

Runtime environment tables

The SQL scripts are in the `<INTERACT_HOME>/ddl` directory under your Interact installation.

If your Interact runtime tables are configured for Unicode, use the appropriate script that is in the `<INTERACT_HOME>/ddl/Unicode` directory to create the runtime tables. There are no Unicode equivalent scripts for the aci_populate_runtab scripts that are used to populate the runtime tables.

You must run the SQL scripts once for each server group data source.

Use the scripts in the following table to create the Interact runtime tables:

Table 21. Scripts for creating runtime environment tables

Data source type	Script name
DB2®	aci_runtab_db2.sql The user table space and system temporary table space where the Interact runtime environment tables exist must each have a page size of 32K or greater.
Microsoft™ SQL Server	aci_runtab_sqlsvr.sql
Oracle	aci_runtab_ora.sql
MariaDB	aci_runtab_mariadb.sql
PostgreSQL	aci_runtab_pgsql.sql

Use the scripts in the following table to populate the Interact runtime tables:

Table 22. Scripts for populating runtime environment tables

Data source type	Script name
DB2®	aci_populate_runtab_db2.sql
	You must use the following command when you run the script: db2 +c -td@ -vf aci_populate_runtab_db2.sql
Microsoft™ SQL Server	aci_populate_runtab_sqlsvr.sql
Oracle	aci_populate_runtab_ora.sql
MariaDB	aci_populate_runtab_mariadb.sql
PostgreSQL	aci_populate_runtab_pgsql.sql

> **Note:** You should alter the size of the `UACI_EligStat.offerName` column from 64 to 130 (or 390 for Unicode tables) to preserve compatibility with Unica Campaign. Use the following sample SQL statements for this modification.

```
Non-Unicode
DB2: ALTER table UACI_EligStat ALTER COLUMN OfferName SET DATA TYPE varchar(130);
ORACLE: ALTER TABLE UACI_EligStat MODIFY OfferName varchar2(130);
SQLSVR: ALTER TABLE UACI_EligStat alter column OfferName varchar(130) not null;
MariaDB: ALTER TABLE UACI_EligStat modify column OfferName varchar(130) not null;
```

```
Unicode
DB2: ALTER table UACI_EligStat ALTER COLUMN OfferName SET DATA TYPE varchar(390);
ORACLE: ALTER TABLE UACI_EligStat MODIFY OfferName varchar2(390);
SQLSVR: ALTER TABLE UACI_EligStat alter column OfferName nvarchar(390) not null;
MariaDB: ALTER TABLE UACI_EligStat modify column OfferName nvarchar(390) not null;
```

Learning tables

You can use SQL scripts to create and populate tables for optional features such as learning, global offers, score override, and contact and response history tracking.

All the SQL scripts are in the `<Interact_HOME>/ddl` directory.

> **Note:** The built-in learning module requires a separate data source from the Unica Interact runtime environment tables. For the built-in learning module, you must create a data source to hold all the learning data. The separate data source can communicate with all server groups, which means you can learn from your different touchpoints at the same time.

If your Interact runtime tables are configured for Unicode, use the appropriate script that is in the `<Interact_HOME>/ddl/Unicode directory` to create the learning tables.

Use the scripts in the following table to create the Interact learning tables:

Table 23. Scripts for creating learning tables

Data source type	Script name
DB2®	aci_lrntab_db2.sql
Microsoft™ SQL Server	aci_lrntab_sqlsvr.sql
Oracle	aci_lrntab_ora.sql
MariaDB	aci_lrntab_mariadb.sql
PostgreSQL	aci_lrntab_pgsql.sql

Contact and response history tables

You must run SQL scripts against the contact history tables if you want to use cross-session response tracking or the advanced learning feature.

All the SQL scripts are in the Interact installation directory.

📝 **Note:** Using contact and response history features requires a separate data source from the Interact runtime environment tables. To use the contact and response history features, you must create a data source to reference contact and response data. The separate data source can communicate with all server groups.

If your contact history tables are configured for Unicode, use the appropriate script that is in the `Unicode` directory under the same location as the standard script to create the learning tables.

Use the scripts in the following table to create the Interact contact and response history tables:

Table 24. Scripts for creating contact history tables

Data source type	Script name
DB2®	• aci_crhtab_db2.sql in the `<Interact_HOME>`/ddl/ directory. The script impacts the Interact runtime tables. • aci_lrnfeature_db2.sql in the `<InteractDT_HOME>`/ddl/acifeatures/ directory. The script impacts the Campaign design time tables.
Microsoft™ SQL Server	• aci_crhtab_sqlsvr.sql in the `<Interact_HOME>`/ddl/ directory. • aci_lrnfeature_sqlsvr.sql in the `<InteractDT_HOME>`/ddl/ directory.
Oracle	• aci_crhtab_ora.sql in the `<Interact_HOME>`/ddl/ directory. • aci_lrnfeature_ora.sql in the `<InteractDT_HOME>`/ddl/ directory.

Table 24. Scripts for creating contact history tables

(continued)

Data source type	Script name
MariaDB	• aci_crhtab_mariadb.sql in the <Interact_Home>/ddl/ directory. • aci_lrnfeature_mariadb.sql in the *<InteractDT_Home>*/ddl directory.
PostgreSQL	• aci_crhtab_pgsql.sql in the <Interact_Home>/ddl/ directory.

Creating Unica Interact user profile tables

Some features of Unica Interact, such as global offers, offer suppression, and score override, require specific tables in your user profile databases. Run SQL scripts to create the required user tables.

Use your database client to run the appropriate SQL scripts against the appropriate database or schema and create the required user tables. If you have multiple audience levels defined, you must create a table for each audience level.

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.

For more information about the profile database, and the role that offer suppression, global offers, and score override tables play in offer serving, see the Unica Interact Administrator's Guide.

User profile tables

You must use SQL scripts to create the following optional profile tables:

- Global offers table (UACI_DefaultOffers)
- Offer suppression table (UACI_BlackList)
- Score override table (UACI_ScoreOverride)

The SQL scripts are in the `ddl` directory under your Interact installation.

You must run the SQL scripts once for every audience level. Modify the script for each audience level, after the first, and rename the profile tables that are created after you run the scripts.

Use the scripts in the following table to create the Interact user profile tables:

Table 25. Scripts for creating user profile tables

Data source type	Script name
IBM DB2®	aci_usrtab_db2.sql

Table 25. Scripts for creating user profile tables

(continued)

Data source type	Script name
Microsoft™ SQL Server	aci_usrtab_sqlsvr.sql
Oracle	aci_usrtab_ora.sql
MariaDB	aci_usrtab_mariadb.sql
PostgreSQL	aci_usrtab_pgsql.sql

Advanced scoring (optional)

For Interact built-in learning, you can use the advanced scoring feature to override components of the Interact learning algorithm.

All the SQL scripts are in the `ddl/acifeatures` directory under your Interact installation.

If your scoring tables are configured for Unicode, use the appropriate script in the `ddl/acifeatures/Unicode` directory under your Interact installation to create the learning tables. You must run the SQL scripts against the User Profile database.

Use the scripts in the following table to create the Interact scoring tables:

Table 26. Scripts for creating advanced scoring tables

Data source type	Script name
IBM DB2®	aci_scoringfeature_db2.sql
Microsoft™ SQL Server	aci_scoringfeature_sqlsvr.sql
Oracle	aci_scoringfeature_ora.sql
MariaDB	aci_scoringfeature_mariadb.sql
PostgreSQL	aci_scoringfeature_pgsql.sql

Running database scripts to enable Unica Interact features

To use the optional features that are available in Unica Interact, run database scripts against the database to create tables or update existing tables.

Your Interact installation, both the design time environment and runtime environment, includes feature ddl scripts. The ddl scripts add required columns to your tables.

To enable any one of the optional features, run the appropriate script against the database or table which is indicated.

`dbType` is the database type, such as `sqlsvr` for Microsoft™ SQL Server, `ora` for Oracle, `db2` for DB2®, `MariaDB` for MariaDB database, and `PostgreSQL` for PostgreSQL database.

Use the following table to run database scripts against the database to create tables or update existing tables:

Table 27. Database scripts

Feature Name	Feature Script	Run Against	Change
Global offers, offer suppression, and score override	aci_usrtab_*dbType*.sql in `Interact_Home\ddl\acifeatures\` (Runtime environment installation directory)	Your profile database (userProdDataSource)	Creates the UACI_DefaultOffers, UACI_BlackList, and UACI_ScoreOverride tables.
Scoring	aci_scoringfeature_*dbType*.sql in `Interact_Home\ddl\acifeatures\` (Runtime environment installation directory)	Score override tables in your profile database (userProdDataSource)	Adds the LikelihoodScore and AdjExploreScore columns.
Learning	aci_lrnfeature_*dbType*.sql in `InteractDT_Home\ddl\acifeatures\` (Design time environment installation directory)	Unica Campaign database that contains your contact history tables	Adds the columns RTSelectionMethod, RTLearningMode, and RTLearningModelID to the UA_DtlContactHist table. Also adds the columns RTLearningMode and RTLearningModelID to the UA_ResponseHistory table. This script is also required by the reporting features provided by the optional Reports Pack.

Registering Unica Interact manually

If the Unica Interact installer cannot connect to the Platform database during the installation process, you must register Unica Interact manually.

About this task

You must import the Interact information into the Unica Platform system tables manually after the installer closes to register Interact manually.

Execute the following commands:

1.
```
configTool.bat -vp -p "Affinium|suite|uiNavigation|mainMenu" -f "MenuCategory-Interact.xml"
```
   File Path: `InteractDT/conf/MenuCategory-Interact.xml`

2. `configTool.bat -vp -p "Affinium|suite|uiNavigation|mainMenu|Analytics" -f "MenuCategory-InteractAnalytics.xml"`

   File Path: `InteractDT/conf/MenuCategory-InteractAnalytics.xml`

Registering the Unica Interact design time environment manually

Run the configTool utility to register the Unica Interact design time environment manually if the environment was not automatically registered during the installation process.

About this task

The configTool utility imports menu items and sets configuration properties. You must run the configTool utility as many times as there are files.

The following commands can be used as an example to register the Unica Interact design time environment manually:

- configTool -i -p "Affinium|suite|uiNavigation|mainMenu" -f "interactDT\conf\interact_navigation.xml"
- configTool -v -i -o -p "Affinium|Campaign|about|components" -f "\interactDT\conf\interact_subcomponent_version.xml"

The Unica Interact design time environment configuration properties are included with the configuration properties for Unica Campaign.

You can manually enable Unica Interact by setting the **interactInstalled** property in the **Campaign > partitions > partition***N* **> server > internal** category to yes.

Registering the Unica Interact runtime environment manually

Run the configTool utility to register the Interact runtime environment manually if the environment was not automatically registered during the installation process.

About this task

The configTool utility imports configuration properties. You must run the configTool utility as many times as there are files.

⚠️ **Important:** You must register only one instance of the Interact runtime environment with the Unica Platform for each server group. All instances of Interact runtime server in a server group use the same set of configuration properties. If you register a second Interact runtime server with Unica Platform, you can overwrite previous configuration settings.

Use the following example command as guidelines to register the Unica Interact runtime environment manually:

configTool -r interact -f "*full_path_to_Interact_RT_installation_directory* \conf\interact_configuration.xml"

Chapter 6. Deploying Unica Interact

You must deploy the Unica Interact runtime environment for every instance of the runtime server that you install. You can deploy Interact Design time environment on the same machine or a different machine as runtime environment using the InteractDT EAR or InteractDT WAR.

You must know how to work with your web application server. Consult your web application server documentation for details.

HTTP proxy support in API and the OMO gateway

- When triggered messages are configured to use a HTTP connection, a HTTP proxy can be configured optionally with authentication between Interact and the endpoint.
- When the client library (interact_client.jar) is used to connect the client to Interact run time servers, an HTTP proxy can be configured optionally with authentication between the client application and Interact runtime.

Deploying the design time environment

After you install Unica Interact, deploy the design time environment using the `InteractDT.war` file. The `InteractDT.war` file is available in the InteractDT installation directory.

Deploying the runtime environment

You must deploy the Unica Interact runtime environment by deploying the `InteractRT.war` file for every instance of the runtime server that you install or upgrade. For example, if six instances of a runtime server exist, you must install and deploy the Unica Interact runtime environment six times. You can deploy the runtime environment on the same server as the design time environment, or you can deploy the Unica Interact runtime environment on a separate server. The `InteractRT.war` is in the Unica Interact installation directory.

> **Note:** When you deploy the Unica Interact runtime environment, the context root must be set to `/interact`. Do not use any other value for the context root, or navigation to the runtime environment, and within Interact runtime links and pages, do not operate correctly. When deploying the Unica Interact designtime environment, you must set the context root to `/InteractDT`.

> **Note:** If Unica Interact is upgraded it is required to set the INTERACT_HOME environment variable pointing to the Unica Interact installation directory to generate interact.log file. Release 11.1 onwards, the log4j is changed to 'log4j2'. You will need to copy any custom entries from the 'interact_log4j.peoperties' file of base setup to the 11.1 target setup in the `interact_log4j2.xml`. Set the `INTERACTDT_HOME` environment variable and point it to the Unica InteractDT installation directory.

> **Note:** In case of deployment of Tomcat, include the following parameters in the `instance_name/conf/server.xml` file.
>
> `maxHttpHeaderSize="209715200"`

> 📝 `maxPostSize="-1"`

Configuration of JVM parameters for Unica products

You must configure the following JVM parameters in the Unica porducts.

Table 28. Unica Products and the JVM Parameters to be Configured

Unica Product Name	JVM Parameters
Unica Campaign	`-DUNICA_PLATFORM_CACHE_ENABLED=true` `-Dcampaign.log4j.async=true` `-Dcom.sun.management.jmxremote` `-Dcom.sun.management.jmxremote` `-Dcom.sun.management.jmxremote.port=1007` `-Dcom.sun.management.jmxremote.ssl=false` `-Dcom.sun.management.jmxremote.authenticate=false` `-Dcom.sun.management.jmxremote.password.file=../conf/jmxremote.password` `-Dcom.sun.management.jmxremote.access.file=../conf/jmxremote.access` `-DUNICA_GOTO_CREATEEARFILE=TRUE` `-Dfile.encoding=UTF-8` `-Dclient.encoding.override=UTF-8` `-DUNICA_GOTO_CREATEEARFILE=TRUE` `-Dclient.encoding.override=UTF-8` `-Djboss.as.management.blocking.timeout=3600` SET SSL_OPTIONS=-Djavax.net.ssl.keyStoreType="JKS" `-Djavax.net.ssl.trustStore="C:\security\myTrustStore.jks"` `-Djavax.net.ssl.trustStorePassword=myPassword` Configuring the `ACOOptAdmin` tool (`ACOOptAdmin.sh` (UNIX) or `ACOOptAdmin.bat` (Windows) file)

Table 28. Unica Products and the JVM Parameters to be Configured (continued)

Unica Product Name	JVM Parameters

	• `-Djavax.net.ssl.keyStoreType=keyStoreTypeValue`
	• `-Djavax.net.ssl.keyStore=<keyStoreValue>`
	• `-Djavax.net.ssl.keyStorePassword=<keyStorePasswordValue>`
	• `-Djavax.net.ssl.trustStore=<trustStoreValue>`
	• `-Djavax.net.ssl.trustStorePassword=<trustStorePasswordValue>`
	• `-Djava.awt.headless=true`
	• `-Dcampaign.deliveretl.disabled=true`
	• `-Dcampaign.interactetl.disabled=true`
	• `-Dcampaign.journeyetl.disabled=false`
	• `-Dcampaign.journeyetl.disabled=true`
	
	`EMAIL_TLS_ENABLED`
	
	`EMAIL_SSL_TRUST_ENABLED`
	
	`SCH_ASYNCH_EXECUTION_ENABLED`

Unica Audience Central	• `-DAUDIENCE_CENTRAL_HOME=<Install_Base_DIR>/AudCentral`
Unica Contact Central	• `CONTACTCENTRAL_HOME` • `UNICA_PLATFORM_HOME`
Unica Content Integration	• `-DASSET_PICKER_HOME` • `-DUNICA_PLATFORM_HOME`
Unica Deliver	• `-Dcampaign.deliveretl.disabled=true`
Unica Interact	**Interact design time** The following are the JVM parameters for Interact design time: • `INTERACTDT_HOME` • `Interact.UsernameToAlwaysDeployFor` • `com.unicacorp.interact.deliver.templateTimeout` • `DeploymentServletParameterEncoding` • `com.unicacorp.interact.flexoffers.defaultDateTimeFormat` • `com.unicacorp.interact.flexoffers.defaultDateFormat` • `com.unicacorp.Campaign.interact.offermapping.batchsize`

Table 28. Unica Products and the JVM Parameters to be Configured (continued)

Unica Product Name	JVM Parameters
	• `com.unicacorp.Campaign.interact.offermapping.service.synctimeout` • `com.unicacorp.interact.cacheTTL` • `com.unicacorp.interact.cacheRefreshIntervalInMin` • `com.unicacorp.interact.enableDTPerfLogging` • `com.unicacorp.interact.compressAPIResponse` • `ignoreSpecialCharacterValidator` • `Interact.CustomStringDelimiter` • `com.unicacorp.interact.playback.maxFilteredIdsCount` • `com.unicacorp.interact.playback.APITimeoutInSecs` **Interact run time** The following are the JVM parameters for Interact run time: • `INTERACT_HOME` • `com.unicacorp.interact.deliver.templateTimeout` • `INBOUND_GATEWAYS_USING_MAPPING_FROM_PROPERTIES` • `com.hcl.interact.http.proxyProtocol` • `com.hcl.interact.http.proxyHost` • `com.hcl.interact.http.proxyPort` • `com.hcl.interact.http.proxyUsername` • `com.hcl.interact.http.proxyPassword` • `interact.jmx.monitoring.port` • `interact.offerserving.maxOfferAllocationInMemoryPerInstance` • `interact.offerserving.maxDistributionPerIntervalPerInstanceFactor` • `interact.ignitePort` • `com.unicacorp.interact.chDupeCheckLimit` • `com.unicacorp.interact.rhDupeCheckLimit` • `com.unicacorp.interact.chSuppressDupe` • `com.unicacorp.interact.rhSuppressDupe` • `com.unicacorp.interact.testclient.nullValue` • `interact.ehcache.config` • `interact.api.dateFormat` • `com.hcl.interact.testrun.rowlimit` • `Interact.DisableExceptionStackTracesInMacros` • `com.unicacorp.interact.enableDetailStats` • `com.unica.interact.deployment.timeoutInSecs`

Table 28. Unica Products and the JVM Parameters to be Configured (continued)

Unica Product Name	JVM Parameters
	• `com.ibm.interact.instance.name` • `com.unicacorp.interact.invalidPaths` • `interact.XSessResponseConsumerManager.generateOnlyOne Response` • `tryToPreserveInexactFloatValues` • `com.unicacorp.interact.propertyRefreshInterval` • `com.unicacorp.interact.scheduledTasksProcessInterval` • `com.unicacorp.interact.eventpatterns.parallelism` • `com.unicacorp.interact.eventpatterns.restartRetries` • `com.unicacorp.interact.eventpatterns.evaluateTimeoutM illi` • `com.unicacorp.interact.eventpatterns.restartRetryDela yInSec` • `Interact.advisoryMessageEncodingOverrides` • `com.unica.interact.api.insertSessionIDAsCookie` • `com.unica.interact.api.SessionIDCookieName` • `InteractMsgCode` • `com.ibm.interact.triggeredmessage.enableJMSConsumer` • `com.unicacorp.interact.maxStringLengthInFormatMacro` • `ContinueEvaluatingBranchAndAdvOptTreatmentLogicDespit eExMessageList` • `DisableDecisionProcessBoxAndAdvOptTreatmentLogging` Valid values are `True` or `False`. The default value is `False`. If you set the value to `False`, when evaluating the expressions of each branch, if the system encounters any errors, it logs the errors. • `Interact.DPB.MuffleErrorsForMutuallyExclusiveBranches WithNullValues` Valid values are `True` and `False`. The default value is `False`. If you set the value to `False` and if the value of `-DDisableDecisionProcessBoxAndAdvOptTreatmentLogging` is also set to `False`, during the evaluation of the expressions of each branch, of a Decision process box whose branches are mutually exclusive, if the system encounters any errors, it logs the errors. Otherwise, the system logs the errors as debug. • `TwoDigitYearStartDate` • `Interact.enableTwoDigitYearFix`

Table 28. Unica Products and the JVM Parameters to be Configured (continued)

Unica Product Name	JVM Parameters
	`com.ibm.interact.evpatetl.conf` `com.unicacorp.interact.minTreatmentsPerThread` `com.unicacorp.interact.maxTreatmentPoolSize` `CircuitBreaker.processTimeoutMillis` `com.unicacorp.interact.event.asyncTimeoutMSec` `com.unicacorp.interact.eventActionTimeout` `Interact.HTMI.Enabled` `Interact.HTMI.MaxRequestDurationInMs` `Interact.HTMI.RecordIndividualAPIs` `Interact.HTMI.MaxStartSessionDurationInMs` `Interact.HTMI.MaxGetOffersDurationInMs` `Interact.HTMI.MaxPostEventDurationInMs` `Interact.HTMI.MaxGetProfileDurationInMs` `Interact.HTMI.LogErrorsEveryNthTime` `Interact.HTMI.UseMillisecondTimers` `Interact.HTMI.Debug` `com.unicacorp.interact.suppressWarningOnAnonymousUser` `com.hcl.interact.eventpatterns.printPatternAction` `com.hcl.interact.eventpatterns.eagerPersist` `com.ibm.interact.triggeredmessage.addPerfData` `com.unicacorp.interact.learning.disableAggregator` `com.unicacorp.interact.learning.disableDeletion` `com.unicacorp.interact.learning.ignoreInterval` `interact.services.loader.saveLoaderFiles` `ConvertEveryNULLAttributeValueToAJEPNullConstant` `includeJoinInfo` `com.unicacorp.interact.deployment.reloadTimeout` `com.ibm.interact.lockTimeWarningThreshold` `com.unicacorp.interact.cache.maxWaitTime` `DEFAULT_PERSISTENCE_PROVIDER` `com.unicacorp.interact.playback.purgeBatchSize` 📝 **Note:** We have removed the JVM parameter `interact.runtime.instance.name`. Use the JVM parameter `com.ibm.interact.instance.name` to set the name of the Interact run-time instance.
Unica Journey	

Table 28. Unica Products and the JVM Parameters to be Configured (continued)

Unica Product Name	JVM Parameters
Unica Plan	`-Dplan.log4j.config=<plan_home>/conf/plan_log4j.xml` `-Dplan.log4j.async=true` `-Dplan.home=<plan_home>` `-Dplan.slow.query.threshold=<value in milliseconds>` (optional) `-Dplan.slow.query.show.stack.trace=true` (optional) `-Dcampaign.https.port=<campaign's https port>` If Plan communicates with Campaign over `https`, and if Campaign is configured to run on the `https` port other than 8443, add this system property to the JVM arguments of the Plan application's JVM.
Unica Platform	`-DENABLE_PLATFORM_LOG4J_XML_LOGGING=TRUE` `-DENABLE_PERSISTENT_NAMEID_FORMAT=TRUE` `-DUNICA_PLATFORM_HOME=<platform_home_directory_path>`
Unica Centralized Offer Management	`-DOFFER_HOME=<Install_Base_DIR>/CentralizedOffer` `-DUNICA_PLATFORM_CACHE_ENABLED=false` `-DUNICA_PLATFORM_LOCAL_CACHE_ENABLED=false` `-DOffer.isDebug=false` `-Dlog4j2.formatMsgNoLookups=true`
Unica Segment Central	`-DSEGMENT_CENTRAL_HOME=<Install_Base_DIR>/SegCentral`

Deploying Unica Interact on WebSphere Application Server

You can deploy the product runtime environment on supported versions of WebSphere® Application Server (WAS) from a WAR file or EAR file. The design time environment is deployed automatically with the product EAR or WAR file.

About this task

- Ensure that multiple language encoding is enabled in WAS.
- When you run the Install New Application wizard, ensure that you set the JDK Source Level to 18.
- Ensure that you add javax.el-3.0.1-b11.jar in WAS server lib directory.

Deploying Unica Interact on WAS from an EAR file

You can deploy Unica Interact by using an EAR file if you included Interact in an EAR file when you ran the 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.
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 /Interact.
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 parent class loader first** option.
14. In `campaign.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. Go to **Application Servers > your server > Process definition > Java Virtual Machine**.
17. 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
```

18. Start your deployment.

Deploying Unica Interact on WAS from a WAR file

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

Before you begin

Complete the following tasks before you deploy the product:

- 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 /Campaign.
    - In step 10 of the installation wizard, set the **Context Root** to /interact.
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 `unica.war` file.
9. In the Enterprise Applications window, click the `Campaign.war` file.
10. In the Enterprise Applications window, click the `InteractRT.war` file.
11. In the Enterprise Applications window, click the `InteractDT.war` file.

    In *Step 11* of the installation wizard, set the Context Root to `/InteractDT`.
12. In the **Web Module Properties** section, click **Session Management** and select the following check boxes:
    - **Override session management**
    - **Enable Cookies**

13. Click **Enable Cookies**, and in the **Cookie name** field, enter a unique cookie name.

14. 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**.

15. In the **Applications > Enterprise Applications** section of the server, select the WAR file that you deployed.

16. In the **Detail Properties** section, select **Class loading and update detection**.

17. In the **Class loader order** section, select the **Classes loaded with local class loader first (parent last)** option.

18. In the **Modules** section, select **Manage modules > interact**, and under **Class loader order** select the **Classes loaded with local class loader first (parent last)** option.

19. Enter the context root for the application as `/interact`.

20. In the **WAR class loader policy section**, select the **Single class loader for application** option.

21. To deploy Interact, select **interact > Manage Modules > interact.war > Class loader order**. For **Class loader order**, select **Classes loaded with local class loader first (parent last)** in **Manage Modules**.

22. For **WAR class loader policy**, select **Single class loader for application**.

23. Go to **Application Servers > your server > Process definition > Java Virtual Machine**.

24. 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
```

25. Start your deployment.

Deploying Unica Interact on WebLogic

You can deploy Unica products on WebLogic.

About this task

Use the following guidelines when you deploy Unica Interact on WebLogic:

- HCL Unica products customize the JVM used by WebLogic. You might need to create a WebLogic instance that is dedicated to 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 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 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`:

```
-Dinteract.home=Unica Interact 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 Unica 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 Interact on Tomcat Application Server

You can deploy the Unica Interact WAR on the Tomcat Application Server (TAS).

Procedure to include during Tomcat Application Server configuration

When you configure Unica Interact on Tomcat Application Server you must perform the following steps:

You must add Test, Production and Interact Runtime Data Source in `InteractDT.xml` of the Unica Campaign Tomcat instance. For example:

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


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


<Resource name="<InteractRunTimeDataSource>" factory="com.unica.manager.tomcat.utils.TomcatDSFactory"
auth="Application" type="javax.sql.DataSource"
maxActive="30" maxIdle="10" maxWait="10000"
```

```
username="<db user for runtime schema>" password="<db password>"
driverClassName="<db specific class name>" url="<db specific jdbc url>"/>


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

```
Note  - {{You can encrypt DB password using  }}encryptTomcatDBPasswords utility located in
 <Platform_Home>/tools/bin
```

> **Note:** Add prefix "`java:/comp/env/`" when defining datasource/JNDI.
>
> For example: Runtime datasource must be given as "`java:/comp/env/InteractRTDS`" and
> similarly for other datasources: InteractLearningDS, prodUserDataSource, testRunDataSource,
> contactAndResponseHistoryDataSource.

Deploying Unica Interact on JBoss

You can deploy the Unica Interact application from a WAR file or an EAR file on the JBoss Application Server (JAS).

Before you begin

Consider the following points before you deploy Unica Interact 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.
- You use the JBoss Integrated Solutions console to configure your JBoss Application Server. The steps that follow provide guidance for setting specific controls.

> **Note:** Different versions of JBoss Application Server present user interface controls in varying sequences and with alternative labels.

About this task

Complete the following steps to set up the environment for deploying Unica Interact:

1. JVM settings can be added to the standalone.conf script in the `JBOSS_EAP_HOME/bin` folder.
2. 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` script:`Set MEM_ARGS=-Xms1024m -Xmx1024m -XX:MaxPermSize=256m`
3. 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 design-time 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**: 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.

4. Go to the JBoss Enterprise Application Platform Admin Console.
5. Deploy interact.ear /interactRT.war on JBOSS.

Configuring activityOrchastrator feature with JBOSS

To use activityOrchastrator feature please perform following steps.

1. Start JBOSS Standalone service with following command: standalone.bat –server-config=standalone-full.xml standalone.sh –server-config=standalone-full.xml
2. Open JBOSS CLI and connect to JBoss server and execute following commands:jms-queue add --queue-address=<queue-name> --entries=[java:/jms/<queue-name>] <queue-name>: Queue Name (For e.g. test)
3. Add application server user as well using following command from <JBOSS-HOME>/bin location by using: add-user.bat/sh -a -u <username> -p <password> -g guest For e.g. uname/pass : jboss/jboss123
4. Create JDBC connections as mentioned in JBOSS section of "Information for creating JDBC connections" in this guide.
5. Deploy <path-to-war>/interactRT.war
6. You needs to add two receiver parameters to configure activityOrchastrator - Username and Password .Note - [Username and Password is the credential of JBOSS application server]
7. Restart the server.

Chapter 7. Configuring Unica Interact after deployment

After you deploy Unica Interact, you must configure the Unica Interact design time and runtime environments. Configuring the environments completes a basic installation of Unica Interact.

About this task

The Interact configuration properties on the **Configuration** page are used to complete important functions. If you want, you can adjust the Interact configuration properties.

For more information about the properties, see the *Unica Interact Administrator's Guide*.

1. Complete the following steps to configure the Interact runtime environment after you deploy Inteact:
    a. Configure Interact runtime environment properties
    b. Configure multiple Interact runtime servers
2. Complete the following steps to configure the Interact design time environment after you deploy Interact:
    a. Configure the test run data source
    b. Add server groups
    c. Select a server group for interactive flowchart test run
    d. Configure the contact and response history module
3. **Optional:** If you want to use the Unica reporting feature, you must install the Reports Package for Interact. For more information about Interact reports, see the *Unica Reports Installation and Configuration Guide*.

Google Chrome and Microsoft Edge configuration

Recently, the browsers Google Chrome and Microsoft Edge updated a security fix and this security fix affects the access of Unica applications. We have received some issues from our customers like:

- issues with UI
- unable to edit flowcharts
- getting logged out from Unica

These issues are observed due to the change of behavior in browsers after applying the security fix. Applying the security fix automatically enables **Origin-keyed Agent Clusters by default**. If the setting **Origin-keyed Agent Clusters by default** is enabled automatically, it prevents changes in document referrer and domain values so that malicious websites cannot execute any type of impersonation. The setting **Origin-keyed Agent Clusters by default** existed earlier as well, but was not enabled by default.

If you update Google Chrome or Microsoft Edge to the latest version, you will observe the earlier mentioned issues. Because of how Unica is designed and because the Unica suite is deployed over multiple JVMs, it is essential that you disable the **Origin-keyed Agent Clusters by default** setting for Unica to function correctly and to provide a good user experience.

As a solution, we recommend that you perform the steps mentioned in the following Knowledge Base article: https://support.hcltechsw.com/csm?id=kb_article&sysparm_article=KB0107185.

> **Note:** The update to Microsoft Edge browser is very recent and the Knowledge Base article is not yet updated for the Microsoft Edge browser.

The CliffsNotes solution is as follows:

1. Open your browser and navigate to one of the following URLs based on your browser:
   - **Google Chrome**: chrome://flags/#origin-agent-cluster-default
   - **Microsoft Edge**: edge://flags/#origin-agent-cluster-default
2. From the dropdown of the highlighted parameter **Origin-keyed Agent Clusters by default**, select `Disabled`.
3. At the bottom of the page, click the **Apply Changes** button.
4. Log out of Unica applications, log back in, and verify if everything is working as expected.

Configuring Unica Interact runtime environment properties

For Unica Interact runtime operation, you must configure data sources for every server group in the Unica Interact runtime environment.

About this task

You must configure the following configuration properties on the **Configuration** page for every server group:

- Data source for the profile tables for the runtime environment
- Data source for the runtime environment system tables
- Data source for the test run tables
- Data source for built-in learning tables

  The data source properties are required only if you use built-in learning.
- Data source of the contact and response history tables for cross-session response tracking

  The data source properties are required only if you use cross-session response tracking.
- Audience levels for the profile

  The audience level configuration properties must match the audience levels that you define for Unica Campaign. However, you must configure the audience levels that are used in interactive flowcharts only. Set the **Audience Levels** configuration property in the **Interact > profile** category.

Multiple Unica Interact runtime servers

When you install multiple Unica Interact runtime servers, configure the runtime server group to use the same schema for runtime tables, profile tables, learning tables, and Unica Platform.

For best performance, install each production Unica Interact server group with its own instance of Unica Platform, although this is not a firm requirement. By default, Unica Interact runtime servers in the same server group use the same instance of Unica Platform, as in the following example:

1. Install and configure Unica Platform and the Unica Interact runtime environment on the first server and ensure that they are configured and working correctly.
2. Install only Interact runtime environment on the second server. Provide the same Unica Platform data source details and credentials that you used for the Unica Platform installation on the first server. This configuration registers the second Unica Interact server to use the same instance of Unica Platform.
3. Deploy the Unica Interact runtime WAR file on the second server.
4. Verify that UnicaInteract runtime environment is deployed and running correctly on the second server.
5. Use the URL of the first Unica Interact runtime server and the second server in a single server group in your Unica Interact design time configuration.

Although not required, you can also install a unique instance of Unica Platform for each Unica Interact runtime server, or a few instances of Unica Platform that support subsets of runtime servers. For example, for your server group that contains 15 runtime servers, if five runtime servers report to one instance of Unica Platform, you have a total of three instances of Unica Platform for 15 runtime servers.

If you have multiple instances of Unica Platform, the Unica Interact configuration must match across all instances of Unica Platform for a server group. You must define the same runtime tables, profile tables, and learning tables for all instances of Unica Platform in each server group. All Interact servers that belong to the same server group must share user credentials. If you have separate Unica Platform instances for each Unica Interact server, you must create the same user and password on each instance of Unica Platform.

If you install a test environment and have multiple Unica Interact runtime servers on the same system, you must make sure that you complete the following requirements:

- Each Unica Interact runtime server instance must be in a separate web application instance.
- If you configure JMX monitoring for Unica Interact servers that are running on the same system, you must configure the JMX monitoring for each Unica Interact runtime server to use a different port and instance name. Edit **JAVA_OPTIONS** in your web application server startup script and add the following options:
    - -Dinteract.jmx.monitoring.port=*portNumber*
    - -Dcom.ibm.interact.instance.name=*instanceName*

You must also set the instance name if you use a database load utility to work with several Unica Interact servers that run on the same computer.

Configuring multiple Interact runtime servers

You can install multiple runtime servers in your environment and organize the servers into server groups. The Unica Interact runtime servers enable the design time environment to complete test runs of interactive flowcharts.

About this task

When you install multiple Interact runtime servers, you must remove network connectivity for the Unica Interact runtime computer before you run the installer. Removing the network connectivity ensures that additional Interact runtime server installations do not overwrite the Unica Platform configuration.

After you install all instances of the Interact runtime server, restart Unica Platform.

If possible, you must configure your server groups to work with a load balancer with persistent (sticky) sessions enabled. Alternatively, you can use a method of selecting runtime servers from a server group when you work with the Interact API.

If you cannot use a load balancer with persistent (sticky) sessions, you can configure the runtime servers in a server group to use distributed cache. All the servers must comprise a single server group.

Note: If you use a distributed cache, you must enable multicast to work between all members of a server group.

To enable a distributed cache, configure the following configuration properties under the **Affinium|interact| cacheManagement|Cache Managers|EHCache|Parameter Data** category:

- **cacheType** - set to Distributed.
- **multicastIPAddress** - define the IP address that all the Unica Interact servers for the server group use for listening. The IP address must be unique across your server groups.
- **multicastPort** - define the port that all the Unica Interact servers use for listening.

Note: If you are using the WebSphere application server and are using JDK 1.8, you must add the following JVM parameter for all additional runtime servers. The JVM parameter is not required for the first runtime server.

`-Djavax.xml.stream.XMLInputFactory=com.ibm.xml.xlxp.api.stax.XMLInputFactoryImpl`

Note: When you uninstall an Interact server from a server group, make sure that you do not accidentally remove all Unica configuration.

Configuring the test run data source

Add the Unica Interact test run tables as a Unica Campaign data source so that Unica Campaign can complete test runs of interactive flowcharts.

About this task

To add additional Unica Campaign data sources, add data source configuration properties to the **Campaign > partitions > partition***N***>datasources** category on the **Configuration** page by using the appropriate data source template. For more information , see the *Unica Campaign Installation Guide*.

Use the **OwnerForTableDisplay** property to define a database schema to limit the tables that are displayed when you map tables in an interactive channel.

The test run data source that is used in the Unica Interact design time environment must specify the JNDI name of the design time test run tables.

If you configure your Unica Interact environment for multiple locales, see the *Unica Campaign Administrator's Guide* for information about configuring the encoding properties as required for your database type.

If you use an SQLServer database and you set your locale to Japanese or Korean, you must configure the following properties in the **Campaign > partitions > partition***N***>datasources > testRunDataSource** category for the test run data source:

- **ODBCUnicode** - set to UCS-2
- **stringEncoding** - set to WIDEUTF-8

Adding server groups

Create server groups for Unica Campaign to complete test runs of interactive flowcharts. Define the location of at least one runtime server in the server group.

About this task

⚠️ **Important:** You must fully install and deploy Unica Platform for each server group. If you install multiple Unica Interact server groups, you must fully install and deploy Unica Platform for each runtime server group. Each Unica Interact runtime server can be associated with one design time environment only.

You must define the locations of the Unica Interact runtime servers on the **Configuration** page in Unica Platform. The design time environment must be able to access the runtime servers for deploying and completing test runs of interactive flowcharts.

You must create at least one server group, and the server group must contain at least one Interact runtime server that is defined by the instance URL.

You can have multiple server groups. For example, you can have one server group to interact with your website, one server group to interact with your call center, and one server group for testing. Each server group can contain multiple instance URLs, and each instance URL can represent one instance of Unica Interact runtime.

If you have multiple UnicaInteract design time systems running in your environment, an Interact runtime server that is configured with a design time cannot be configured with any other design time. If two different design times send deployment data to the same Unica Interact runtime, the deployments can become corrupted and undefined behavior occurs.

For every server group in the Unica Interact design time configuration, you must specify the JNDI name for the user profile tables. This is necessary to support runtime features in Unica Interact, such as global offers, offer suppression, score override, and SQL offers in the **Interact List** process box.

Create server groups by setting the **serverGroup** configuration property in the **Campaign > partitions > partition***N***>Interact > serverGroups** template category. The name is used only for organizational purposes. However, you can use the same name for the property as the **serverGroupName** property to avoid confusion.

Selecting a server group for interactive flowchart test run

Select a server group from the server groups that you created so that Unica Campaign can complete a test run of interactive flowcharts.

About this task

Interactive flowcharts require an instance of the Unica Interact runtime to run. You cannot use the Unica Campaign batch flowchart engine to run an interactive flowchart. You must define a server group for Unica Campaign to reference for completing test runs of interactive flowcharts. The server group is used to validate the table mapping for the interactive channel, and check the syntax of user macros in interactive flowcharts.

Set the following configuration properties in the **Campaign > partitions > partition***N***>Interact > flowchart** category to configure the test run of an interactive flowchart:

- **serverGroup**
- **dataSource**

The data source that you specify for the **dataSource** property must be a Unica Campaign data source.

> ✏️ **Note:** Flowchart Test Run is designed for verifying the conditions and functionality of the create flowchart with a small set of input profile data. For a large set (in the magnitude of 1000 or more), the test run must be done directly on the run time with a performance testing tool.

Configuring the contact and response history module

You must make contact and response history data available for reporting and use with Unica Campaign. You must copy the data from the staging tables in the Unica Interact runtime servers to the Unica Campaign contact and response history tables.

About this task

> ✏️ **Note:** You must configure the Unica Interact runtime data source credentials in the design time environment configuration page for the contact and response history module to function.

Complete the following steps to collect contact and response history data for each Unica Interact runtime server group:

1. Confirm that you have added the Unica Interact runtime databases to the web application server that hosts Unica Campaign.
2. Add a runtime data source by setting the **runtimeDataSource** configuration property in the **Campaign > partitions > partition***N* > **Interact > contactAndResponseHistTracking > runtimeDataSources** template category.
3. Repeat the preceding steps for each Unica Interact runtime server group from which you want to collect contact and response history data.

Creating Unica Interact system users

The Unica Interact runtime environment users work with the Unica Interact runtime servers to send configuration data from the design time environment to the runtime environment. The Unica Interact design time environment users can edit interactive flowcharts.

Unica Interact has the following types of system users:

- **Runtime environment users** are user accounts that are configured to work with the Unica Interact runtime servers. The users must be able to send the Interact configuration and deployment data from the design time environment to the runtime environment.
- **Design time environment users** are Unica Campaign users. Configure the security for the various members of your design time team as described in the *Unica Campaign Administrator's Guide*.

Runtime environment user

The Unica Interact runtime user account must be an internal user account.

The person who sends Unica Interact configuration data from the design time environment to the runtime environment must log in as an Unica user. The internal user account must exist in the instance of the Unica Platform that the Unica Interact runtime server is dependent on.

All Unica Interact servers that belong to the same server group must share user credentials for runtime deployment. If you have separate Unica Platform instances for each Unica Interact server, you must create an account with the same user login name and password on each Unica Platform instance.

If you enable security for JMX monitoring with the JMXMP protocol, you might require a separate user for JMX monitoring security.

Design time environment users

Configure the Unica Interact design time environment users in the same way you configure Unica Campaign users, as described in the Unica Campaign Administrator's Guide.

You must configure an Interact design time environment user to have all the permissions of a Unica Campaign user to edit flowcharts.

For a Unica Campaign user who has permission to edit interactive flowcharts, you must store data source credentials for the Unica Interact test run tables in their account.

The following table provides information about the permissions that a Unica Campaign user must have to edit campaigns, channels, and flowcharts:

Table 29. Permissions for design time environment users

Category	Permissions
Campaigns	The following list provides information about the permissions that users must have to modify campaigns: - View Campaign Interaction Strategies - Ability to see but not edit interaction strategy tabs in a campaign. - Edit Campaign Interaction Strategies - Ability to change the interaction strategy tabs, including treatment rules.

Table 29. Permissions for design time environment users

(continued)

Category	Permissions
	• Delete Campaign Interaction Strategies - Ability to remove interaction strategy tabs from campaigns. Deletion of an interaction strategy tab is restricted if the interactive channel to which it is already assigned is deployed. • Add Campaign Interaction Strategies - Ability to create new interaction strategy tabs in a campaign. • Initiate® Campaign Interaction Strategy Deployments - Ability to mark an interaction strategy tab for deployment or undeployment.
Interactive Channels	The following list provides information about the permissions that users must have to modify interactive channels: • Deploy Interactive Channels - Ability to deploy an interactive channel to Interact runtime environments. • Edit Interactive Channels - Ability to change the interactive channels. • Delete Interactive Channels - Ability to remove interactive channels. Deletion of interactive channels is restricted if the interactive channel is already deployed. • View Interactive Channels - Ability to see but not edit interactive channels. • Add Interactive Channels - Ability to create new interactive channels. • View Interactive Channel Reports - Ability to see the analysis tab of the interactive channel. • Add Interactive Channel Child Objects - Ability to add interaction points, zones, events, and categories.
Sessions	The following list provides information about the permissions that users must have to modify flowcharts: • View Interactive Flowcharts - Ability to see an interactive flowchart in a session. • Add Interactive Flowcharts - Ability to create new interactive flowcharts in a session. • Edit Interactive Flowcharts - Ability to change the interactive flowcharts. • Delete Interactive Flowcharts - Ability to remove interactive flowcharts. Deletion of interactive flowcharts is restricted if the interactive channel to which this interactive flowchart is assigned is already deployed. • Copy Interactive Flowcharts - Ability to copy interactive flowcharts. • Test Run Interactive Flowcharts - Ability to initiate a test run of an interactive flowchart.

Table 29. Permissions for design time environment users

(continued)

Category	Permissions
	• Review Interactive Flowcharts - Ability to see an interactive flowchart and open processes to view settings, but unable to make changes.
	• Deploy Interactive Flowcharts - Ability to mark an interactive flowcharts for deployment or undeployment.

Verifying the Unica Interact installation

You must verify whether Unica Interact is correctly installed by confirming that you can access the interactive channels and the Unica Interact runtime URL.

1. To verify that the Unica Interact design time environment is installed, log in to the Unica console and confirm that you can access **Campaign > Interactive Channels**.
2. Complete the following steps to verify that the Unica Interact runtime environment is correctly installed:

    a. Access the Unica Interact runtime URL by using a supported web browser.
       The runtime URL is:

    ```
    http://host.domain.com:port/interact/jsp/admin.jsp
    ```

    where *host.domain.com* is the computer where UnicaInteract is installed and *port* is the port number on which the Interact application server is listening.

    b. Click **Interact Initialization Status**.

    Result
    If the Unica Interact server is running correctly, UnicaInteract responds with the following message:

    ```
    System initialized with no errors!
    ```

    If the initialization fails, review the installation procedure and confirm that you followed all the instructions.

Configuring the ETL process

After you install the Unica Interact ETL process, you need to configure the process by modifying files on the ETL process server, and in the Unica Platform configuration pages.

About this task

To configure the ETL process, there are files in the Interact home directory on the ETL process server to indicate where the necessary Java runtime files are found, as well as other environment variables. Then, you need to connect to the Platform server associated with this installation and use the configuration pages there to set up the necessary properties to run the ETL process.

1. On the server on which you installed the ETL process, open the following file in any text editor:

   `<Unica Interact_home>\PatternStateETL\bin\setenv.bat` on Microsoft Windows, or `<Unica Interact_home>\PatternStateETL\bin\setenv.sh` on a UNIX-like operating system.

   a. Complete the line that reads `set JAVA_HOME=[CHANGE ME]`, changing `[CHANGE ME]` to the actual path to the 64-bit Java runtime you want to use.

      > **Note:** Although the Unica installer provides a Java runtime in `<Unica Interact_home>\..\jre`, such as `C:\HCL\UNICA\jre`, this is a 32-bit Java runtime used only for installation. This runtime is not suitable for running the ETL process. Install a supported 64-bit Java runtime if one is not already installed, and update the `setenv` file to use that runtime.

   b. Complete the line that reads `set JDBCDRIVER_CP=` with the actual location of the JDBC driver for the connection to the database that contains the system tables.

      For example, if you were connecting to an Oracle database, you might specify the path to a local copy of `ojdbc8.jar`, in case of MariaDB, you may specify the path to local copy of mariadb-java-client-2.3.0.jar.

2. In a supported web browser, connect to the Unica Platform server associated with this installation and log in using administer-level credentials.

3. Open the **Configuration** page by clicking **Settings > Configuration** in the toolbar.

   Result

   The **Configuration** page shows the Configuration Categories tree.

4. Navigate to **interact | ETL** in the Configuration Categories tree.

5. Click **PatternStateETLConfig Template** under **patternStateETL**in the tree to create a new Pattern State ETL configuration.

   In the right pane, complete the following information:

   - **New category name**. Provide a name that uniquely identifies this configuration. Note that you must provide this exact name when you run the ETL process. For convenience in specifying this name on the command line, you might want to avoid a name that contains spaces or punctuation, such as `ETLProfile1`.
   - **runOnceADay**. Determines whether the ETL process in this configuration should run once each day. Valid answers are **Yes** or **No**. If you answer **No** here, the **processSleepIntervalInMinutes** determines the run schedule for the process.
   - **preferredStartTime**. The preferred time at which the ETL process should start. Specify the time in the format HH:MM:SS AM/PM, as in `01:00:00 AM`.
   - **preferredEndTime**. The preferred time at which the ETL process should stop. Specify the time in the format HH:MM:SS AM/PM, as in `08:00:00 AM`.
   - **processSleepIntervalInMinutes**. If you have not configured the ETL process to run once a day (as specified in the **runOnceADay** property), this property specifies the interval between ETL process runs. For example, if you specify `15` here, the ETL process will wait for 15 minutes after it stops running before starting the process again.
   - **maxJDBCInsertBatchSize**. The maximum number of records of a JDBC batch before committing the query. By default, this is set to 5000. Note that this is not the maximum number of records that the

ETL processes in one iteration. During each iteration, the ETL processes all available records from the UACI_EVENTPATTERNSTATE table. However, all those records are broken into **maxJDBCInsertSize** chunks.

- **maxJDBCFetchBatchSize**. The maximum number of records of a JDBC batch to fetch from the staging database.

  You might need to increase this value to tune the performance of the ETL.

- **communicationPort**. The network port on which the ETL process listens for a stop request. Under normal circumstances, there should be no reason to change the network port from the default value.

- **queueLength**. A value used for performance tuning. Collections of pattern state data are fetched and transformed into objects that are added to a queue to be processed and written to the database. This property controls the size of the queue.

- **completionNotificationScript**. Specifies the absolute path to a script to run when the ETL process is completed. If you specify a script, three arguments are passed to the completion notification script: start time, end time, and total number of event pattern records processed. The start time and end time are numeric values representing number of milliseconds elapsed since 1970.

- **requireAuthentication**. Specifies whether a password is required to run the Pattern State ETL command. The platform user who is running the Pattern State ETL command must have administrative privileges.

6. When you finish completing the configuration, click **Save**.

   Result

   When you save the configuration, three additional categories are automatically created in the tree underneath the new configuration: Report, RuntimeDS, and TargetDS. Use the Report category to configure the report aggregation ETL integration. Use the RunteimDS and TargetDS categories to specify the data source where the ETL process should retrieve the data that it will process (the database that contains the Interact runtime tables), and the data source where the results are stored.

7. Configure the **Interact | ETL | patternStateETL | <patternStateETLName> | Report** categories for the report aggregation ETL integration configuration.

   In the right pane, click **Edit Settings** and complete the following fields:

   - **enable** . Enable or disable the report integration with ETL. This property is set to disable by default.
   - **retryAttemptsIfAggregationRunning**. The number of times the ETL attempts to check whether the report aggregation is completed if the lock flag is set. This property is set to 3 by default.
   - **sleepBeforeRetryDurationInMinutes**. Sleep time in minutes between consecutive attempts. This property is set to 5 minutes by default.
   - **aggregationRunningCheckSql**. Use this property to define a custom SQL, which can be run to see whether the report aggregation lock flag is set. By default this property is empty.
     When this property is not set, the ETL runs the following SQL to get the lock flag.

     ```
     select count(1) AS ACTIVERUNS from uari_pattern_lock where islock='Y'
     => If ACTIVERUNS is > 0, lock is set
     ```

   - **aggregationRunningCheck**. Enable or disable the check if the report aggregation is running before the ETL run is performed. This property is set to enable by default.

   Save the changes when you are done.

8. Configure the **Interact | ETL | patternStateETL | <patternStateETLName> | RuntimeDS** and **Interact | ETL | patternStateETL | <patternStateETLName> | TargetDS** categories for the ETL configuration.

The two categories determine the data sources for retrieving and storing the event pattern data used by the ETL process.

> 📝 **Note:** The data source that you specify for the **TargetDS** configuration might be the same data source in which the Unica Interact runtime tables are stored, or it might be a different data source for performance reasons.

a. Click the category (**RuntimeDS** or **TargetDS**) that you want to configure.

b. In the right pane, click **Edit Settings** and complete the following fields:
   - **type**. A list of the supported database types for the data source you are defining.
   - **dsname**. The JNDI name of the data source. This name must also be used in the user's data source configuration to ensure that the user has access to the target and runtime data sources.
   - **driver**. The name of the JDBC driver to use, such as any of the following:

     Oracle: `oracle.jdbc.OracleDriver`

     Microsoft SQL Server: `com.microsoft.sqlserver.jdbc.SQLServerDriver`

     IBM DB2: `com.ibm.db2.jcc.DB2Driver`

     MariaDB: `org.mariadb.jdbc.MySQLDataSource`

     PostgreSQL: `org.postgresql.Driver`
   - **serverUrl**. The data source URL, such as any of the following:

     Oracle: `jdbc:oracle:thin:@ <your_db_host>:<your_db_port>:<your_db_service_name>`

     Microsoft SQL Server: `jdbc:sqlserver:// <your_db_host>:<your_db_port> ;databaseName=<your_db_name>`

     IBM DB2: `jdbc:db2:// <your_db_host>:<your_db_port>/<your_db_name>`

     MariaDB: `jdbc:mariadb://<your_db_host>:<your_db_port>/<your_db_name>`

     PostgreSQL: `jdbc: postgresql://<your_db_host>:<your_db_port>/<your_db_name>`
   - **connectionpoolSize**. A value that indicates the size of the connection pool, provided for performance tuning. Pattern state data is read and transformed concurrently depending upon the available database connections. Increasing the connection pool size allows for more concurrent database connections, subject to limitations of memory and database read/write capabilities. For example, if this value is set to 4, four jobs run concurrently. If you have a large amount of data, you might need to increase this value to a number such as 10 or 20, as long as sufficient memory and database performance is available.
   - **schema**. The name of the database schema to which this configuration is connecting.
   - **connectionRetryPeriod**. The `ConnectionRetryPeriod` property specifies the amount of time in seconds Unica Interact automatically retries the database connection request on failure. Unica Interact automatically tries to reconnect to the database for this length of time before reporting a database

error or failure. If the value is set to 0, Unica Interact retries indefinitely; if the value is set to -1, no retry is attempted.

- **connectionRetryDelay**. The `ConnectionRetryDelay` property specifies the amount of time in seconds Unica Interact waits before it tries to reconnect to the database after a failure. If the value is set to -1, no retry is attempted.

Save the changes when you are done specifying both the runtime and target data sources.

9. Still in Unica Platform server, click **Settings > Users** in the toolbar.
10. Edit the user that is running the ETL process and click **Edit Data Sources**.
11. Define data sources for the user to match the **TargetDS** and **RuntimeDS** categories you defined for the ETL category. The Data Source name that you specify for the user data source must match the value of the dsname property for TargetDS or RuntimeDS configuration.
The event pattern state ETL read the user name and password you specify here to connect to the database during processing.

Alternate procedure to configure the ETL process

A property file can be used to configure Pattern State ETL.

1. Copy all the configuration settings from Platform into a property file. A sample of such file is included in `{{$INTERACT_HOME/PatternStateETL/conf}}`.
2. In the command that starts pattern state ETL, remove both username and password and add the following JVM parameter`{{-Dcom.ibm.interact.evpatetl.conf=<absolute path of the property file>}}`.
3. Start the ETL process.

Results
You have now configured the Unica Platform for use with the event pattern ETL process. Be aware that any changes you make to the ETL configuration other than the communication port are automatically implemented in the next run of the ETL process. There is no need to restart the ETL process after you change the configuration, unless you specify a new communication port.

What to do next
With the installation and configuration of the event pattern ETL process that is completed, you are now ready to run the process.

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 to **Servers > 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 `com.ibm.ws.webcontainer.disablexPoweredBy` and set the value to `false`.

   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 Unica applications the context path is typically /unica.

   ```
   <session-descriptor>
       <session-param>
         <param-name>CookiePath</param-name>
         <param-value>/context-path> </param-value>
       </session-param>
   </session-descriptor>
   ```

   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 Unica applications the context path is typically /unica.

Chapter 8. Configuring multiple partitions for Unica Interact

In the Unica family of products, partitions provide a way to secure the data that is associated with different groups of users. When you configure Unica Campaign or a related Unica application to operate with multiple partitions, users can see each partition as a separate instance of the application. There is no indication that other partitions exist on the same computer.

How multiple partitions work

For the Unica applications that operate with Unica Campaign, you can configure the application within the partitions where you have configured an instance of Unica Campaign. Application users within each partition can access the Unica Campaign functions, data, and customer tables that are configured for Unica Campaign in the same partition.

Partition benefits

Multiple partitions are useful for setting up strong security between groups of users, because each partition has its own set of Unica Campaign system tables. Multiple partitions cannot be used when groups of users must share data.

Each partition has its own set of configuration settings, and Unica Campaign can be customized for each group of users. However, all partitions share the same installation binaries. With the same binaries for all partitions, you can minimize the installation and upgrade efforts for multiple partitions.

Partition user assignment

Access to partitions is managed through membership in Unica Platform groups.

Except for the partition superuser (platform_admin), each HCL user can belong to one partition. A user who requires access to multiple partitions must have a separate user account for each partition.

If there is only one partition, users do not have to be explicitly assigned to that partition to have access to Unica Campaign.

Partition data access

In a multi-partition configuration, partitions have the following security characteristics:

- A user cannot access a partition if the user is not a member of a group that is assigned to a partition.
- A user of one partition cannot view or change data in another partition.
- Users cannot navigate the Unica Campaign file system above the root directory of their partition from the browse dialog boxes in Unica Campaign. For example, if two partitions, named partition1 and partition2 exist, and you belong to the group that is associated with partition1, you cannot navigate the directory structure for partition2 from a dialog box.

Setting up multiple partitions for the Unica Interact design time environment

In the Unica Campaign family of products, partitions provide a way to secure the data that is associated with different groups of users. You can create multiple partitions only for the Interact design time environment.

About this task

You can create multiple partitions to use with Unica Campaign and the Interact design time environment. You can use partitions to configure Unica Interact and Unica Campaign so that different groups of users have access to different sets of Unica Interact and Unica Campaign data.

> **Note:** The Unica Interact runtime environment does not support multiple partitions. You cannot configure the Unica Interact runtime environment to work in multiple partitions, nor can one Interact runtime environment work with multiple partitions from a design time.

If you set up multiple partitions with Unica Campaign, you set up multiple partitions for Interact. You must configure each partition in the design time environment to communicate with a separate Unica Interact runtime environment, including separate Unica Platform and runtime tables. If you set up multiple partitions with Campaign, you must configure each partition to communicate with a separate Interact runtime environment.

The following diagram shows multiple partitions configured for Interact:
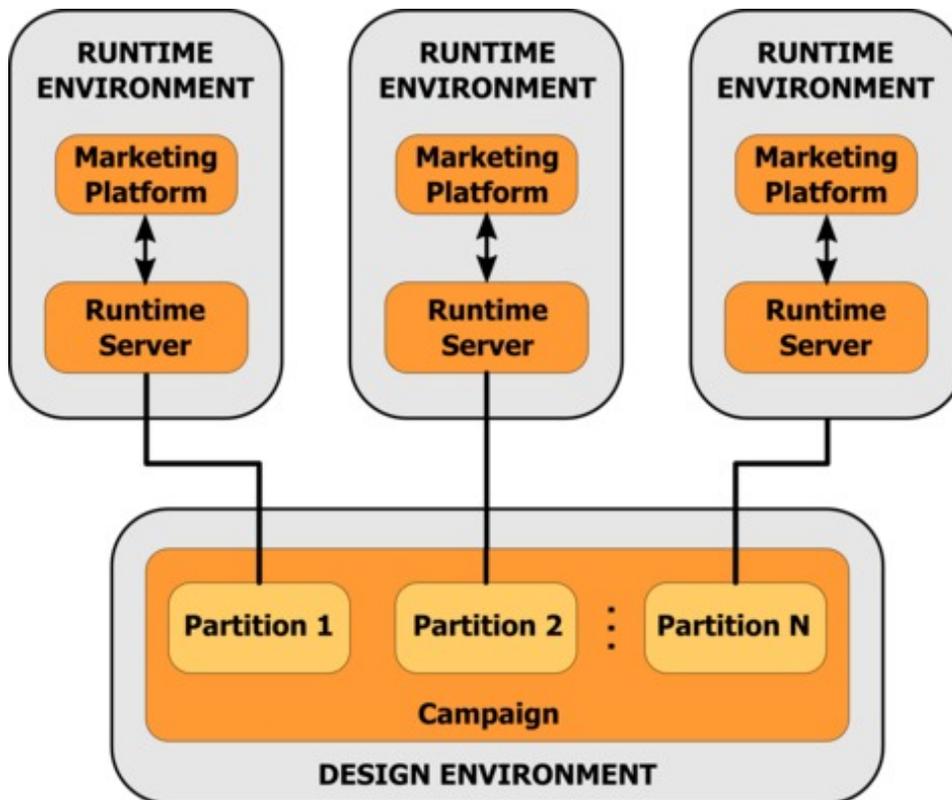
Complete the following steps to set up multiple partitions for the UnicaInteract design time environment:

1. You must manually enable Unica Interact for each partition by setting the **interactInstalled** configuration property in the **Campaign > partitions > partition***N* **> server > internal** to yes.
2. Complete the following configuration steps for each partition:
    a. Configure the test run data source
    b. Add server groups

        c. Select a server group for interactive flowchart test runs

        d. Configure the contact and response history module

Chapter 9. Uninstalling Unica Interact

Run the Unica Interact uninstallers to uninstall Unica Interact. When you run the Unica Interact 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 Unica products, an uninstaller is included in the `Uninstall_Product` directory, where *Product* is the name of your product. On Windows™, 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 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 Unica products, follow the guidelines when you uninstall Unica Interact:

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

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

1. If you have deployed the Unica Interact web application, undeploy the web application from WebSphere® or WebLogic.
2. Stop the Unica Interact listener.
3. Shut down WebSphere® or WebLogic.
4. Stop the processes that are related to Unica Interact.
5. 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.
6. Complete one of the following steps to uninstall Interact:

   Choose from:
   - Click the Unica Interact uninstaller that exists in the `Uninstall_Product` directory. The uninstaller runs in the mode in which you installed Unica Interact.
   - In a command-line window, navigate to the directory where the uninstaller exists, and run the following command to uninstall Unica Interact 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 Unica Interact:

  ./Uninstall_interact.

  > **Note:** UNIX™ requires spaces after \.

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

  Uninstall_*Product* -i silent

  When you uninstall Unica Interact 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 Unica Interact, the Unica Interact uninstaller runs in the mode in which Unica Interact is installed.

Chapter 10. configTool

The properties and values on the **Configuration** page are stored in the Unica Platform system tables. You can use the `configTool` 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 Unica Campaign, which you can then modify and duplicate by using the **Configuration** page.
- To register (import configuration properties for) 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 Unica.
- To delete categories that do not have the **Delete Category** link. You do this by using `configTool` to export your configuration, then manually deleting the XML that creates the category, and by using `configTool` to import the edited XML.

> ⚠️ **Important:** This utility modifies the `usm_configuration` and `usm_configuration_values` tables in the Unica 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 [o]`

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™, / or \ on Windows™), `configTool` writes the file to the `tools/bin` directory under your Unica 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 Unica 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 `-o` 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 Unica 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 Unica 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 Unica Platform installer as described in the *Unica Platform Installation Guide*.
- After the initial installation, to re-register products other than the Unica 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 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.

Table 30. Product names for configTool registration and unregistration

Product name	Name used in configTool
Unica Platform	`Manager`
Unica Campaign	`Campaign`
Unica Interact	`interact`
Unica Optimize	`Optimize`
Unica Plan	`Plan`

-u *productName*

Unregister an application that is specified by *productName*. 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

`-o`

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 Unica Platform installation.

  ```
  configTool -i -p "Affinium" -f Product_config.xml
  ```
- Import one of the supplied Unica Campaign data source templates into the default Unica Campaign partition, partition1. The example assumes that you placed the Oracle data source template, `OracleTemplate.xml`, in the `tools/bin` directory under the Unica 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 Unica 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 Unica Platform installation.

  ```
  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 Unica 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
  ```
- Run the following command to enable encodeCSV feature:

  ```
  configTool -vp -p "Affinium|Plan|umoConfiguration" -f Plan_Home\conf\Plan_encodeProperty_12.0.xml
  ```
- Register Unica Interact Settings as configuration menu under `AffiniumWebApps\Campaign\interact\conf\interact_setup_navigation.xml` using

  ```
  configTool.bat -v -i -p "Affinium|suite|uiNavigation|settingsMenu" -f "interact_setup_navigation.xml"
  ```