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<th>Section</th>
<th>Page</th>
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<td>configTool</td>
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<td></td>
<td>Index</td>
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</tr>
</tbody>
</table>
Chapter 1. Upgrade overview

An upgrade of Unica Interact is complete when you upgrade, configure, and deploy Unica Interact. The Unica Interact Upgrade Guide provides detailed information about upgrading, configuring, and deploying Unica Interact.

Use the Upgrade roadmap section to obtain a broad understanding about using the Unica Interact Upgrade Guide.

Upgrade roadmap

Use the upgrade roadmap to quickly find the information that you need for upgrading Unica Interact.

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

Table 1. Unica Interact upgrade roadmap

This two-columned table describes the topics that are included in the Unica Interact Upgrade Guide in one column, and the explanation of the tasks in the second column.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upgrade overview (on page 1)</td>
<td>This chapter provides the following information:</td>
</tr>
<tr>
<td></td>
<td>• How the installers work (on page 3)</td>
</tr>
<tr>
<td></td>
<td>• Modes of installation (on page 3)</td>
</tr>
<tr>
<td></td>
<td>• Unica Interact documentation and help (on page 6)</td>
</tr>
<tr>
<td>Planning the Unica Interact upgrade (on page 9)</td>
<td>This chapter provides the following information:</td>
</tr>
<tr>
<td></td>
<td>• Prerequisites (on page 14)</td>
</tr>
<tr>
<td></td>
<td>• Upgrade prerequisites for all Unica products (on page 17)</td>
</tr>
<tr>
<td></td>
<td>• Unica Interact upgrade tools (on page 19)</td>
</tr>
<tr>
<td>Topic</td>
<td>Information</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>Upgrading Unica Interact (on page 45)</td>
<td>This chapter provides the following information:</td>
</tr>
<tr>
<td></td>
<td>• Backing up the Unica Interact runtime environment (on page 45)</td>
</tr>
<tr>
<td></td>
<td>• Undeploying the Unica Interact runtime server (on page 46)</td>
</tr>
<tr>
<td></td>
<td>• Running the installer (on page 46)</td>
</tr>
<tr>
<td></td>
<td>• Reviewing and modifying the SQL upgrade script (on page 47)</td>
</tr>
<tr>
<td></td>
<td>• Setting environment variables (on page 52)</td>
</tr>
<tr>
<td></td>
<td>• Running the Unica Interact upgrade tools (on page 57)</td>
</tr>
<tr>
<td></td>
<td>• Redeploying the Unica Interact runtime server in the web application server (on page 60)</td>
</tr>
<tr>
<td></td>
<td>• Upgrade log (on page 60)</td>
</tr>
<tr>
<td></td>
<td>• Upgrading partitions (on page 60)</td>
</tr>
<tr>
<td></td>
<td>• Creating and populating the Unica Interact system tables (on page 61)</td>
</tr>
<tr>
<td>Deploying Unica Interact (on page 66)</td>
<td>This chapter provides information: on deploying Unica Interact.</td>
</tr>
<tr>
<td>Uninstalling Unica Interact (on page 81)</td>
<td>This chapter provides information about how to uninstall Unica Interact.</td>
</tr>
<tr>
<td>configTool (on page 84)</td>
<td>This chapter provides information about how to use the configTool utility.</td>
</tr>
</tbody>
</table>
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 Campaign and Unica Optimize, you must use the Unica suite installer and the Unica Campaign installer.

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

- The Unica 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 Unica installer, the Unica 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.

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 2. Description of sample response files

<table>
<thead>
<tr>
<th>Sample response file</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>installer.properties</td>
<td>The sample response file for the Unica master installer.</td>
</tr>
<tr>
<td>installer_product initials and</td>
<td>The sample response file for the Unica Interact installer.</td>
</tr>
</tbody>
</table>
### Sample response file

<table>
<thead>
<tr>
<th>Sample response file</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>product version number.properties</code></td>
<td>For example, <code>installer_ucn.n.n.n.properties</code> is the response file of the Unica Campaign installer, where n.n.n.n is the version number. For example, <code>installer_umpn.n.n.n.properties</code> is the response file of the Platform installer, where n.n.n.n is the version number. For example, <code>installer_uln.n.n.n.properties</code> is the response file of the Leads installer, where n.n.n.n is the version number.</td>
</tr>
<tr>
<td><code>installer_report pack initials, product initials, and version number.properties</code></td>
<td>The sample response file for the reports pack installer. For example, <code>installer_urpcn.n.n.n.properties</code> is the response file of the Unica Campaign reports pack installer, where n.n.n.n is the version number. For example, <code>installer_urpl.properties</code> is the response file of the Leads reports pack installer.</td>
</tr>
</tbody>
</table>

Table 3. Description of sample response files

<table>
<thead>
<tr>
<th>Sample response file</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>installer.properties</code></td>
<td>The sample response file for the Unica master installer.</td>
</tr>
<tr>
<td><code>installer_product initials and product version number.properties</code></td>
<td>The sample response file for the Unica Interact installer. For example, <code>installer_ucln.n.n.n.properties</code> is the response file of the Unica Campaign installer, where n.n.n.n is the version number. For example, <code>installer_umpn.n.n.n.properties</code> is the response file of the Unica Platform installer, where n.n.n.n is the version number.</td>
</tr>
</tbody>
</table>
Unica Interact V12.1 Upgrade Guide | 1 - Upgrade overview | 6

Sample response file

- 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 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 4. Get up and running**

**This two-columned table provides information about the tasks in one column, and documentation in the second column.**

<table>
<thead>
<tr>
<th>Task</th>
<th>Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>View a list of new features, known issues, and workarounds</td>
<td><em>Unica Interact Release Notes®</em></td>
</tr>
<tr>
<td>Learn about the structure of the Unica Interact database</td>
<td><em>Unica Interact System Tables and Data Dictionary</em></td>
</tr>
</tbody>
</table>
| 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 5. Configure and use Unica Interact**
This two-columned table provides information about the tasks in one column, and documentation in the second column.

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

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

**Table 6. Get help**

This two-columned table provides information about the tasks in one column, and documentation in the second column.

<table>
<thead>
<tr>
<th>Task</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open online help</td>
<td>1. Choose Help &gt; Help for this page to open a context-sensitive help topic.</td>
</tr>
<tr>
<td></td>
<td>2. Click the Show Navigation icon in the help window to display the full help.</td>
</tr>
<tr>
<td>Obtain PDFs</td>
<td>Use either of the following methods:</td>
</tr>
<tr>
<td>Task</td>
<td>Instructions</td>
</tr>
<tr>
<td>------</td>
<td>--------------</td>
</tr>
<tr>
<td></td>
<td>- Choose <strong>Help &gt; Product Documentation</strong> to access Unica Interact PDFs.</td>
</tr>
<tr>
<td></td>
<td>- Choose <strong>Help &gt; All HCL Unica Documentation</strong> to access all available documentation.</td>
</tr>
</tbody>
</table>
Chapter 2. Planning the Unica Interact upgrade

Upgrade your installation of Unica Interact after understanding the guidelines that are specific to your current version of Unica Interact.

Use the following guidelines for upgrading Unica Interact:

Note: See the Interact Fast Upgrade guide for fast upgrade instructions.

Table 7. Upgrade scenarios for Unica Interact

This two-columned table provides information about the source version of Unica Interact in one column, and about the upgrade path in the second column.

<table>
<thead>
<tr>
<th>Source version</th>
<th>Upgrade path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any 7.x or pre-8.6.x version</td>
<td>Complete the following steps to upgrade to Unica Interact version 12.1:</td>
</tr>
<tr>
<td></td>
<td>1. Upgrade from your earlier version to version 8.6.x.</td>
</tr>
<tr>
<td></td>
<td>2. Upgrade your 8.6.x version to version 10.1 by following the instructions in the Interact 10.1 Upgrade Guide.</td>
</tr>
<tr>
<td></td>
<td>3. Upgrade your 10.1 version to 11.0.1 by following the instructions in the Interact 11.0.1 Upgrade Guide.</td>
</tr>
<tr>
<td></td>
<td>4. Upgrade your 11.0.1 version to 11.1.</td>
</tr>
<tr>
<td></td>
<td>a. Perform an in-place installation of version 11.1 over your old version.</td>
</tr>
<tr>
<td></td>
<td>Important: You must upgrade Unica Campaign before you upgrade the Unica Interact design time environment.</td>
</tr>
<tr>
<td></td>
<td>Use the Unica Interact installer for both the design time environment and the runtime environment.</td>
</tr>
</tbody>
</table>
### Source version | Upgrade path
--- | ---

| | b. Run the upgrade tools to upgrade configuration settings, files, and data from your source Unica Interact version.  
| | c. Upgrade the reports package as explained in the *Unica Reports Installation and Configuration Guide*. |
| | 5. Upgrade your 11.1 version to 12.0.0 version by following the instructions in the Interact 12.0 Upgrade guide. |
| | 6. Upgrade your 12.0.0 version to 12.1.0 by following the instructions in this guide. |

| Any 8.6.x version | Complete the following steps to upgrade to Unica Interact version 12.1: |
| | 1. Upgrade your 8.6.x version to version 10.1 by following the instructions in the Interact 10.1 Upgrade Guide. |
| | 2. Upgrade your 10.1 version to 11.0.1 by following the instructions in the Interact 11.0.1 Upgrade Guide. |
| | 3. Upgrade your 11.0.1 version to 11.1. |
| | a. Perform an in-place installation of version 11.1 over your old version.  
| | Use the Unica Interact installer for both the design time environment and the runtime environment. |
| | **Important:** You must upgrade Unica Campaign before you upgrade the Unica Interact design time environment.  
| | b. Run the upgrade tools to upgrade configuration settings, files, and data from your source Unica Interact version.  
| | c. Upgrade the reports package as explained in the *Unica Reports Installation and Configuration Guide*. |


<table>
<thead>
<tr>
<th>Source version</th>
<th>Upgrade path</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4. Upgrade your 11.1 version to 12.0 version by following the instructions in Interact Upgrade 12.0 guide.</td>
</tr>
<tr>
<td></td>
<td>5. Upgrade your 12.0.0 version to 12.1.0 by following the instructions in this guide.</td>
</tr>
<tr>
<td>Any 9.x.x version</td>
<td>Complete the following steps to upgrade to Unica Interact version 12.1:</td>
</tr>
<tr>
<td></td>
<td>1. Upgrade your 9.x.x version to version 10.1 by following the instructions in the Interact 10.1 Upgrade Guide.</td>
</tr>
<tr>
<td></td>
<td>2. Upgrade your 10.1 version to 11.0.1 by following the instructions in the Interact 11.0.1 Upgrade Guide.</td>
</tr>
<tr>
<td></td>
<td>3. Upgrade your 11.0.1 version to 11.1</td>
</tr>
<tr>
<td></td>
<td>a. Perform an in-place installation of version 11.1 over your old version.</td>
</tr>
<tr>
<td></td>
<td>Use the Unica Interact installer for both the design time environment and the runtime environment.</td>
</tr>
<tr>
<td></td>
<td><strong>Important:</strong> You must upgrade Unica Campaign before you upgrade the Unica Interact design time environment.</td>
</tr>
<tr>
<td></td>
<td>b. Run the upgrade tools to upgrade configuration settings, files, and data from your source Unica Interact version.</td>
</tr>
<tr>
<td></td>
<td>c. Upgrade the reports package as explained in the</td>
</tr>
<tr>
<td></td>
<td>Unica Reports Installation and Configuration Guide.</td>
</tr>
<tr>
<td></td>
<td>4. Upgrade your 11.1 version to 12.0 version by following the instructions in Interact Upgrade 12.0 guide.</td>
</tr>
<tr>
<td></td>
<td>5. Upgrade your 12.0.0 version to 12.1.0 by following the instructions in this guide.</td>
</tr>
<tr>
<td>Source version</td>
<td>Upgrade path</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Any 10.0.0.x version</td>
<td>Complete the following steps to upgrade to Unica Interact version 12.1:</td>
</tr>
<tr>
<td></td>
<td>1. Perform an upgrade to 10.1 over your old version by following the instructions in the HCL Interact 10.1 Upgrade Guide.</td>
</tr>
<tr>
<td></td>
<td>Perform an in-place upgrade from 10.1 to 11.0.1 by following the upgrade guide.</td>
</tr>
<tr>
<td></td>
<td>Perform an in-place upgrade from 11.0.1 to 11.1.</td>
</tr>
<tr>
<td></td>
<td>Use the Unica Interact installer for both the design time environment and the runtime environment.</td>
</tr>
<tr>
<td></td>
<td>▶️ <strong>Important:</strong> You must upgrade Unica Campaign before you upgrade the Unica Interact design time environment.</td>
</tr>
<tr>
<td></td>
<td>2. Run the upgrade tools to upgrade configuration settings, files, and data from your source Unica Interact version.</td>
</tr>
<tr>
<td></td>
<td>3. Upgrade the reports package as explained in the <em>Unica Reports Installation and Configuration Guide</em>.</td>
</tr>
<tr>
<td></td>
<td>4. Upgrade your 11.1 version to 12.0 version by following the instructions in Interact Upgrade 12.0 guide.</td>
</tr>
<tr>
<td></td>
<td>5. Upgrade your 12.0.0 version to 12.1.0 by following the instructions in this guide.</td>
</tr>
<tr>
<td>Any 10.1.x version</td>
<td>Complete the following steps to upgrade to Unica Interact version 12.1:</td>
</tr>
<tr>
<td></td>
<td>1. Perform an in-place upgrade from 10.1.x to 11.0.1 by following the 11.0.1 Interact Upgrade guide.</td>
</tr>
<tr>
<td></td>
<td>2. Perform an in-place installation of version 11.1 over your old version.</td>
</tr>
</tbody>
</table>
Use the Unica Interact installer for both the design time environment and the runtime environment.

⚠️ **Important:** You must upgrade Unica Campaign before you upgrade the Unica Interact design time environment.

3. Run the upgrade tools to upgrade configuration settings, files, and data from your source Unica Interact version.

4. Upgrade the reports package as explained in the *Unica Reports Installation and Configuration Guide*.

5. Upgrade your 11.1 version to 12.0 version by following the instructions in Interact Upgrade 12.0 guide.

6. Upgrade your 12.0.0 version to 12.1.0 by following the instructions in this guide.

<table>
<thead>
<tr>
<th>Source version</th>
<th>Upgrade path</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.0 version</td>
<td>1. Fast upgrade to 11.0.1 Version.</td>
</tr>
<tr>
<td></td>
<td>2. From 11.0.1 version, you can upgrade directly to 11.1 by following the instructions in this guide.</td>
</tr>
<tr>
<td></td>
<td>3. Fast upgrade from 11.0 to 11.1 is supported.</td>
</tr>
<tr>
<td></td>
<td>4. Upgrade your 11.1 version to 12.0 version by following the instructions in Interact Upgrade 12.0 guide.</td>
</tr>
<tr>
<td></td>
<td>5. Upgrade your 12.0.0 version to 12.1.0 by following the instructions in this guide.</td>
</tr>
<tr>
<td>11.0.1.x version</td>
<td>1. Upgrade to 12.0 version by following the instructions in Interact Upgrade 12.0 guide.</td>
</tr>
<tr>
<td></td>
<td>2. Upgrade to 12.1.0 by following the instructions in this guide.</td>
</tr>
<tr>
<td>11.1.x version</td>
<td>Upgrading from Unica Interact 11.1.x is considered an in-place upgrade. You must install the new version into the same directory where Unica Interact is installed, so that Unica Interact can detect the upgrade.</td>
</tr>
</tbody>
</table>
### Source version

<table>
<thead>
<tr>
<th>Upgrade path</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fast upgrade to version 12.1.0 is supported.</td>
</tr>
<tr>
<td>2. Upgrade to version 12.1.0 by following the instructions in this guide.</td>
</tr>
</tbody>
</table>

---

**Prerequisites**

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

**Flowcharts with eMessage Process box**

If you are having any in-use flowchart with eMessage process box - you will need to remove this process box from flowchart before upgrading to v12.1. Campaign flowcharts with old eMessage process box will not work in v12.1.

**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.

⚠️ **Important:** For best performance, install Campaign listener to execute Optimize session on its own system, where no other Unica products are installed. Unica Optimize requires significant computation and data processing resources. You have the greatest control and flexibility for performance-tuning if you operate Unica Optimize in a dedicated environment.
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 Campaign 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.

💡 Note: For versions 12.0.0 and later, to execute Optimize sessions, users are required to apply for licenses. For more details, contact the HCL Support or Sales team.

**Points to consider before you install Unica Campaign**

For Unica Campaign 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:

```bash
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.

**JDK requirements**

To integrate Unica Interact with MQ, Unica Interact runtime must be on appserver with JDK 1.8. For WebSphere and WebLogic, it is recommended to use the latest supplied JDK fix pack version.

**Upgrade prerequisites for all Unica products**

Meet all requirements for permissions, operating system, and knowledge correctly before you upgrade Interact to ensure a seamless upgrade experience.
Removing response files generated by previous installations

If you are upgrading from a version before 8.6.0, you must delete the response files that are generated by previous Unica Interact installations. Old response files are not compatible with the 8.6.0 and later installers.

Failure to remove old response files can result in having incorrect data pre-filled in installer fields when the installer is run, or in the installer failing to install some files or skipping configuration steps.

The response file is named `installer.properties`.

The response files for each product are named `installer_productversion.properties`.

The installer creates response files in the directory that you specify during installation. The default location is the home directory of the user.

User account requirement for UNIX

On UNIX, the user account that installed the product must complete the upgrade, otherwise the installer fails to detect a previous installation.

32-bit to 64-bit version upgrades

If you are moving from a 32-bit to a 64-bit version of Unica Interact, ensure that you complete the following tasks:

- Ensure that the database client libraries for your product data sources are 64-bit.
- Ensure that all relevant library paths, for example startup or environment scripts, correctly reference the 64-bit versions of your database drivers.

Unloading unused files from memory on AIX®

For installations on AIX, run the `slibclean` command that is included with your AIX installation to unload unused libraries from the memory before you run the installer in the upgrade mode.

⚠️ Note: You must run the `slibclean` command as a root user.
Back up custom files

Before starting the upgrade to Unica 12.1, backup all the custom files that exist in the `<UNICA_HOME>/jre/` location. If you do not backup the custom files that exist in the `<UNICA_HOME>/jre/` location, you will lose the files because the Unica 12.1 upgrade deletes the existing `jre` folder and installs a new `jre` folder containing Oracle JRE files.

**Note:** If the operating system is IBM AIX, Unica 12.1 installs IBM JRE.

Unica Interact upgrade tools

You must upgrade the runtime environment and the design time environment when you upgrade Unica Interact. Run the Unica Interact upgrade tools to upgrade system tables, contact and response history tables, and Unica Interact user profile tables.

Unica Interact provides five upgrade tools, one for upgrading the design time environment (`aciUpgradeTool`) and four for upgrading the runtime environment (`aciUpgradeTool_crhtab`, `aciUpgradeTool_lrntab`, `aciUpgradeTool_runtab`, and `aciUpgradeTool_usrtab`). The upgrade scripts are delivered with the new version of Unica Interact, and are available after you run the Unica Interact installer in clean or upgrade mode for both the runtime environment and the design time environment.

You can upgrade the Unica Interact design time environment configuration properties when you upgrade the Unica Campaign configuration properties.

Use the following table to understand the purpose of the Unica Interact upgrade tools:

**Table 8. Unica Interact upgrade tools**

This three-columned table describes the Unica Interact upgrade tools in the first column, the location of the tools in the second column, and the purpose of the tools in the third column.

<table>
<thead>
<tr>
<th>Tool</th>
<th>Location</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>aciUpgradeTool</td>
<td><code>Interact_Design_Install_Directory</code>/interactDT/tools/upgrade</td>
<td>Upgrades the Unica Interact</td>
</tr>
<tr>
<td>Tool</td>
<td>Location</td>
<td>Purpose</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>aciUpgradeTool_runtab</td>
<td>$\text{Interact_Runtime_Install_Directory}/\text{tools/upgrade}$</td>
<td>Upgrades the Unica Interact runtime environment tables and the Unica Interact runtime environment configuration properties.</td>
</tr>
<tr>
<td>aciUpgradeTool_lrntab</td>
<td>$\text{Interact_Runtime_Install_Directory}/\text{tools/upgrade}$</td>
<td>Upgrades the Unica Interact learning tables.</td>
</tr>
<tr>
<td>aciUpgradeTool_crhtab</td>
<td>$\text{Interact_Runtime_Install_Directory}/\text{tools/upgrade}$</td>
<td>Upgrades the contact and response history tables that are used with cross-session response tracking.</td>
</tr>
<tr>
<td>aciUpgradeTool_usrtab</td>
<td>$\text{Interact_Runtime_Install_Directory}/\text{tools/upgrade}$</td>
<td>Upgrades the Unica Interact tables that are required in your</td>
</tr>
</tbody>
</table>
### Strategy migration utility tool

A utility is provided to migrate the strategies created using the old Strategy user interface prior to version 12.0 to the new models so that they can be viewed and edited on the new Strategy user interface.

In addition, this strategy migration tool can be used to revert the migration, i.e., smart strategies introduced in Unica Interact version 12.0 to the older model.

**Note:** This migration utility only needs to be run when upgrading Interact from version prior to 12.0 to any version up to 12.1.0.2. From 12.1.0,3 onwards, Interact DT Upgrade Tool will run this utility automatically to migrate all old strategies to smart strategies.

### Usage

By running the strategy migration utility, an older strategy can be planned to migrate to a smart strategy introduced in Interact version 12.0. Users are able to migrate selective strategies or all strategies based on their requirements.

By running the same utility, a migrated smart strategy can be reverted back to the old model. Similarly, reversion can be done on selective strategies or all strategies based on their requirements.

### Properties setups for the strategy migration utility

Before running this utility, users must navigate to the path `<Installation_Directory>\Interact\interactDT\tools\upgrade\conf` and open `StrategyMigration.properties` file for configuring properties required for the desired migration or reversion.
Users must change the following properties based on the usage.

- **DeleteOldRulesAndRuleGroups**: This property decides whether the migrated rule group (UACL_RuleGroup) and rule (UACL_Rule) data after migration must be deleted. This property is only applicable for migration.
  - If this property is set to **YES**, then the migrated strategy cannot be reverted to the old model. Therefore, it is recommended to keep the value of this property to **NO**, so that there is a possibility of comparison to decide whether reversion is required after migration. In case this property is set to **YES**, you must keep the back up of data for UACL_RuleGroup and UACL_Rule tables.
  - If this property is set to **NO**, the old strategy is still available for viewing through the associated campaign object. However, it cannot be edited or deployed.

- **ICNameList**: This property specifies the interactive channels whose strategies will be migrated or reverted. It must be a comma (,) separated list of interactive channel names. For example: ICNameList=WebIC1, WebIC2. If the strategies in all interactive channels are required to be migrated or reverted, use an asterisk (*) as the value: ICNameList=*

- **StrategyNameList**: This property specifies the strategies that are migrated or reverted. It must be a comma (,) separated list of strategy names. For example: StrategyNameList= WebStrategy1, WebStrategy2. If all strategies need to be migrated/reverted, use an asterisk (*) as the value: StrategyNameList=*.
Note: ICNameList and StrategyNameList work together to determine which strategies will be affected. In other words, a strategy specified in StrategyNameList must exist in an interactive channel specified in ICNameList in order for it to be migrated or reverted.

Procedure for running the utility for migration or reverting migration
Once the properties are set properly, the strategy migration or reversion can be performed by the following approaches.

• Running the strategy migration utility for strategy migration
   The strategy migration can be performed by executing the standalone batch file aciSmartStrategyUpgradeTool.bat or the shell script file aciSmartStrategyUpgradeTool.sh from path <Installation_Directory>\Interact\interactDT\tools\upgrade.

   Note:
   ◦ If a strategy is marked for deployment or un-deployment state, it is skipped while this tool continues the migration for the rest of the strategies.
   ◦ If a strategy is already migrated and users are running the strategy migration tool for the same strategy, the tool gives the error message "The Strategy ID <strategyId> is already present in database and it is already migrated. Please use this migration tool to clean the new data and try again."

• Running the strategy migration utility for reverting strategy migration
   Users can revert the migration of the smart strategy introduced in version 12.0 to the previous version by running strategy migration utility. Users must run the command "aciSmartStrategyUpgradeTool.bat REVERT" or "aciSmartStrategyUpgradeTool.sh REVERT" from <Installation_Directory>\Interact\interactDT\tools\upgrade to revert the migration.

   Note:
   ◦ If a strategy is marked for deployment or undeployment, it is skipped and this tool continues to revert the rest of the strategies.
After being reverted, a strategy is displayed on the interactive channel Summary page, but not available on the new strategy UI. It will also be editable and can be marked for deployment or undeployment.

- If the users have migrated the strategy from old to smart strategy and added or modify the migrated smart strategy from new UI, the new or updated rules will not be available after being reverted.

**Strategy Data for migration**

The strategy data migration process from the previous version to the current version 12.1 copies the data from the older UACI_Rule/UACI_RuleGroup/UACI_Predicate tables into UACI_SmartRule/ UACI_SmartRuleGroup/UACI_SmartRuleToRuleGroup tables.

The strategy data migration from the previous versions to the current version 12.1 includes the data upgrade to the UACI_SmartRule, UACI_SmartRuleGroup, and UACI_SmartRuleToRuleGroup tables.

- **Data migration into UACI_SmartRule table**: The data of UACI_Rule, UACI_RuleGroup, and UACI_Predicate tables is migrated into UACI_SmartRule table. The column wise details of data migration from UACI_Rule, UACI_RuleGroup and UACI_Predicate tables into UACI_SmartRule table are as follows.

  - The data of UACI_Rule table is migrated to UACI_SmartRule table. The column wise details of data migration from UACI_Rule table to UACI_SmartRule table is as follows.

<table>
<thead>
<tr>
<th>Existing column name of UACI_Rule table</th>
<th>Migrated column name of UACI_SmartRule table</th>
</tr>
</thead>
<tbody>
<tr>
<td>RuleId</td>
<td>RuleId</td>
</tr>
<tr>
<td>MarketWeight</td>
<td>MarketWeight</td>
</tr>
<tr>
<td>Disabled</td>
<td>Disabled</td>
</tr>
<tr>
<td>OfferID</td>
<td>OfferID</td>
</tr>
<tr>
<td>ZoneID</td>
<td>ZoneID</td>
</tr>
<tr>
<td>Existing column name of UACI_Rule table</td>
<td>Migrated column name of UACI_SmartRule table</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>CreateDate</td>
<td>CreateDate</td>
</tr>
<tr>
<td>CreateBy</td>
<td>CreateBy</td>
</tr>
<tr>
<td>UpdateDate</td>
<td>UpdateDate</td>
</tr>
<tr>
<td>UpdateBy</td>
<td>UpdateBy</td>
</tr>
<tr>
<td>MaxScore</td>
<td>MaxScore</td>
</tr>
<tr>
<td>SuppressCount</td>
<td>SuppressCount</td>
</tr>
</tbody>
</table>

- The data of UACI_RuleGroup table is migrated to UACI_SmartRule table. The column wise details of data migration from UACI_RuleGroup table to UACI_SmartRule table is as follows.

<table>
<thead>
<tr>
<th>Existing column name of UACI_RuleGroup table</th>
<th>Migrated column name of UACI_SmartRule table</th>
</tr>
</thead>
<tbody>
<tr>
<td>CellId</td>
<td>CellId</td>
</tr>
<tr>
<td>StrategyId</td>
<td>StrategyId</td>
</tr>
<tr>
<td>SegmentId</td>
<td>SegmentId</td>
</tr>
<tr>
<td>LearningMode</td>
<td>LearningMode</td>
</tr>
<tr>
<td>LearningModeId</td>
<td>LearningModeId</td>
</tr>
</tbody>
</table>

- The data of UACI_Predicate table will be migrated to UACI_SmartRule table. The column wise details of data migration from UACI_Predicate table to UACI_SmartRule table is as follows.

<table>
<thead>
<tr>
<th>Existing column name of UACI_Predicate table</th>
<th>Migrated column name of UACI_SmartRule table</th>
</tr>
</thead>
<tbody>
<tr>
<td>PredicateId</td>
<td>EligibilityPredicateId, ScorePredicateId</td>
</tr>
<tr>
<td>Existing column name of UACI_Predicate table</td>
<td>Migrated column name of UACI_SmartRule table</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>EnableStateID</td>
<td>EligibilityPredicateEnabled, ScorePredicateEnabled</td>
</tr>
</tbody>
</table>

The value of EligibilityPredicateId, ScorePredicateId, EligibilityPredicateEnabled and ScorePredicateEnabled of UACI_SmartRule table will be migrated based on the following condition:

<table>
<thead>
<tr>
<th>Value of column UACI_Predicate.EnableStateID</th>
<th>Migrated column value of UACI_SmartRule table</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>UACI_SmartRule.EligibilityPredicateId = UACI_Predicate.PredicateId, EligibilityPredicateEnabled = 1, ScorePredicateEnabled = 0</td>
</tr>
<tr>
<td>3</td>
<td>UACI_SmartRule.ScorePredicateId = UACI_Predicate.PredicateId, EligibilityPredicateEnabled = 0, ScorePredicateEnabled = 1</td>
</tr>
<tr>
<td>1</td>
<td>EligibilityPredicateEnabled = 0, ScorePredicateEnabled = 0</td>
</tr>
</tbody>
</table>

- If UACI_Predicate.EnableStateID = 2, then value of UACI_Predicate.PredicateId is migrated to the value of UACI_SmartRule.EligibilityPredicateId, and value of EligibilityPredicateEnabled and ScorePredicateEnabled will be set as 1 and 0, respectively.
- If UACI_Predicate.EnableStateID = 3, then value of UACI_Predicate.PredicateId is migrated to the value of UACI_SmartRule.ScorePredicateId, and value of EligibilityPredicateEnabled and ScorePredicateEnabled will be set as 0 and 1, respectively.
- If UACI_Predicate.EnableStateID = 1, then value of both the columns EligibilityPredicateEnabled and ScorePredicateEnabled is set as 0. We
will keep default value as 0 for both EligibilityPredicateEnabled and ScorePredicateEnabled column.

**Note:** The value of UACI_SmartRule.RuleName is migrated as MigratedRule-< UACI_Rule .RuleId>. The values of other columns of UACI_SmartRule table are migrated as their default values.

**• Data migration into UACI_SmartRuleGroup table:** The data of UACI_RuleGroup table will be migrated into UACI_SmartRuleGroup table. The column wise details of data migration from UACI_RuleGroup table to UACI_SmartRuleGroup table is as follows.

<table>
<thead>
<tr>
<th>Existing column name of UACI_RuleGroup table</th>
<th>Migrated column name of UACI_RuleGroup table</th>
</tr>
</thead>
<tbody>
<tr>
<td>RuleGroupId</td>
<td>RuleGroupId</td>
</tr>
<tr>
<td>StrategyId</td>
<td>StrategyId</td>
</tr>
<tr>
<td>CreateDate</td>
<td>CreateDate</td>
</tr>
<tr>
<td>CreateBy</td>
<td>CreateBy</td>
</tr>
<tr>
<td>UpdateDate</td>
<td>UpdateDate</td>
</tr>
<tr>
<td>UpdateBy</td>
<td>UpdateBy</td>
</tr>
</tbody>
</table>

**Note:** The value of UACI_SmartRuleGroup.RuleGroupName is migrated as MigratedRuleGroup-< UACI_RuleGroup .RuleGroupId>. The value of UACI_SmartRuleGroup.RuleGroupType is migrated as value 1, which indicates the ‘Normal’ value for ‘ABTesting’. The value of all other column of UACI_SmartRuleGroup table is migrated as per their default values.

**• Data migration into UACI_SmartRuleToRuleGroup table:** The data of UACI_Rule table will be migrated into UACI_SmartRuleToRuleGroup table. The column wise details of data migration from UACI_Rule table to UACI_SmartRuleToRuleGroup table is as follows:
<table>
<thead>
<tr>
<th>Existing column name of UACI_Rule table</th>
<th>Migrated column name of UACI_SmartRuleToRuleGroup table</th>
</tr>
</thead>
<tbody>
<tr>
<td>RuleID</td>
<td>RuleID</td>
</tr>
<tr>
<td>RuleGroupID</td>
<td>RuleGroupID</td>
</tr>
</tbody>
</table>

**Strategy data for reverting migration**

If users run the strategy migration utility for reverting the migration of smart strategies introduced in Version 12.0 to a previous version, then all the rules or rule-groups data of the migrated smart strategy from UACI_SmartRule or UACI_SmartRuleGroup / UACI_SmartRuleToRuleGroup tables will be deleted.

**ILPB tables upgrade utility tool**

The Strategy user interface is redesigned for better usability. You can use score predicate and eligibility predicate simultaneously. The ILPB migration upgrade utility migrates the existing Interact List process box (ILPB) tables to create new fields and populate with values from existing predicate fields.

- The existing structure of the ILPB tables remain valid. The users can decide not to use this utility, if they do not want new fields for existing ILPB tables.
- The users can migrate the existing ILPB table and use the migrated table to create a new ILPB through UI.

**Usage**

This utility facilitates the migration of data from old predicate and enableStateId fields to new predicate fields scorepredicate, scorepredicateenabled, eligibilitypredicate and eligibilitypredicateenabled for the ILPB tables and add effectivedate and expirationdate for record eligibility.
• **Existing fields**

The following are the existing fields in ILPB tables, which facilitate the user to map predicate field as score predicate or eligibility predicate

- **Predicate**
- **EnableStateId**

If the value of EnableStateId field in ILPB is mapped to 3, the expression in predicate field is used as score predicated. If the value of EnableStateId field is mapped to 2, the expression in predicate field is used as eligibility predicated.

• **New fields**

The following are the new fields added by the utility.

<table>
<thead>
<tr>
<th>Name</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ScorePredicateEnabled</td>
<td>Numeric</td>
<td>Valid values are 0 or 1. Any numeric value other than 1 is treated as 0.</td>
</tr>
<tr>
<td>ScorePredicate</td>
<td>Text</td>
<td>When ScorePredicateEnabled is set to 1, the column value is used as score predicate.</td>
</tr>
<tr>
<td>EligibilityPredicateEnabled</td>
<td>Numeric</td>
<td>Valid values are 0 or 1. Any numeric value other than 1 is treated as 0.</td>
</tr>
<tr>
<td>EligibilityPredicate</td>
<td>Text</td>
<td>When EligibilityPredicateEnabled is set to 1, the column value is used as eligibility predicate.</td>
</tr>
<tr>
<td>EffectiveDate</td>
<td>Timestamp</td>
<td>The date from when the ILPB record is effective. Null is considered as a record valid.</td>
</tr>
<tr>
<td>ExpirationDate</td>
<td>Timestamp</td>
<td>The date when the ILPB record must expire. Null is considered as the record not expired.</td>
</tr>
</tbody>
</table>

• **Migration rules**
If the Predicate and EnableStateId fields are not present in the table, the table is ignored by the migration utility.

New fields ScorePredicateEnabled, ScorePredicate, EligibilityPredicateEnabled, EligibilityPredicate, EffectiveDate and ExpirationDate is added to the ILPB table, if not already present.

The values of the EnableStateId and Predicate columns are migrated on following conditions.

<table>
<thead>
<tr>
<th>Value of column EnableStateID</th>
<th>Migrated column values</th>
</tr>
</thead>
</table>
| 2                             | EligibilityPredicateEnabled = 1  
|                               | EligibilityPredicate = Predicate  
|                               | ScorePredicateEnabled = 0  
|                               | ScorePredicate = null |
| 3                             | EligibilityPredicateEnabled = 0  
|                               | EligibilityPredicate = null  
|                               | ScorePredicateEnabled = 1  
|                               | ScorePredicate = Predicate |
| 1                             | EligibilityPredicateEnabled = 0  
|                               | EligibilityPredicate = null  
|                               | ScorePredicateEnabled = 0  
|                               | ScorePredicate = null |

EffectiveDate and ExpirationDate is populated with initial values as null. Note that null is considered as the valid dates for the ILPB record.

The Utility can run for multiple times for the same table. If the utility is run for an already migrated table, the values of the new predicate fields is updated as per the latest values in predicate or enableStateId fields. This refreshes the latest values in
the new predicate fields since the new predicate fields for existing ILPBs through UI are not available.

- Predicate and EnableStateld fields are dropped from the table after migration.

Properties setups for the ILPB migration upgrade utility

Users must navigate to the path `<Installation_Directory>\Interact\tools\upgrade\conf` and open `ACIILPBUpgradeTaskList_usrtab.properties` file for doing the properties setup.

Users must change the following properties:

- **ILPB_TABLES_TO_UPDATE** - This appends the ILPB (whitelist offers, default offers, offer by SQL) table names which you want to migrate data from old fields to new predicate fields. The utility will only work on the tables mentioned for this property. The utility will create new predicate fields, if not already present, populate new predicate fields based on the existing predicate column values and drop these old columns.

- **ILPB_MIGRATIONTASK_BATCHSIZE** - Users can set this property for specifying the batch size for data update operations of this utility. The default value is 5000. It indicates the number of record processed at a time for update operation.

Procedure for running the ILPB migration upgrade

Users must run the standalone batch file `aciILPBUpgradeTool_usrtab.bat` or the shell script file `aciILPBUpgradeTool_usrtab.sh` from path `<Installation_Directory>\Interact\tools\upgrade` to run the migration utility.

Unica Interact upgrade worksheet

Use the Unica Interact upgrade worksheet to gather information about the database that contains your Unica Interact upgrade system tables and about other Unica products that are required for upgrading Unica Interact.
**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 required to upgrade the Unica Interact runtime environment**

Gather information about your Unica Interact runtime installation before you run the Unica Interact runtime environment upgrade tools.

*aciUpgradeTool_runtab*

Collect the following information about the configuration of the target system:

- The directory where Unica Platform is installed.
- Full path of the Unica Interact configuration file (`interact_configuration.xml`). The file is in the `conf` directory under the Unica Interact installation.

If you connect to the runtime environment system tables by using the web application server, collect the following information:

- Host name
- Port
- User name
- Password
- For WebLogic: Full path and file name of the WebLogic JAR file
If you connect to the runtime environment system tables by using JDBC, collect the following information:

- Java class name for the JDBC driver
- JDBC URL
- Additional properties that are required by the JDBC driver
- Database user name and password

Collect the following information about the target runtime environment database:

- Catalog (or database) containing the target runtime environment system tables
- Schema
- Whether the tables are configured for Unicode

Consider the following points.

- If Learning is enabled, for version 2, using SampleMethod1, for version 1, using SampleMethod1.
- During the interact configuration process, system verifies if the setting are matching.
- During the interact offer treatment optimizer process in learning version2, the offer learning is handles based on SampleMethod1 and SampleMethod2 setting.
- The offer RWA is calculated based on SampleMethod1 and SampleMethod2 settings.

Collect the following information about the Unica Interact installation on the source system:

- Version of Unica Interact you are upgrading from

aciUpgradeTool_lrntab

Collect the following information about the configuration of the target system:

- The directory where Unica Platform is installed

If you connect to the learning tables by using the web application server, collect the following information:
- Host name
- Port
- User name
- Password
- For WebLogic: Full path and file name of the WebLogic JAR file

If you connect to the learning tables by using JDBC, collect the following information:

- Java class name for the JDBC driver
- JDBC URL
- Additional properties that are required by the JDBC driver
- Database user name and password

Collect the following information about the target learning database:

- Catalog (or database) containing the target learning tables
- Schema
- Whether the tables are configured for Unicode

Collect the following information about the Unica Interact installation on the source system:

- Version of Unica Interact you are upgrading from

```aciUpgradeTool_crhtab```

Collect the following information about the configuration of the target system:

- The directory where Unica Platform is installed

If you connect to the contact history tables for cross-session response by using the web application server, collect the following information:

- Host name
- Port
- User name
• Password
• For WebLogic: Full path and file name of the WebLogic JAR file

If you connect to the contact history tables for cross-session response by using JDBC, collect the following information:

• Java class name for the JDBC driver
• JDBC URL
• Additional properties that are required by the JDBC driver
• Database user name and password

Collect the following information about the target contact history tables for cross-session response database:

• Catalog (or database) containing the target contact history tables for cross-session response
• Schema
• Whether the tables are configured for Unicode

Collect the following information about the Unica Interact installation on the source system:

• Version of Unica Interact you are upgrading from

aciUpgradeTool_usrtab

Collect the following information about the configuration of the target system:

• The directory where Unica Platform is installed

If you connect to the user profile tables by using the web application server, collect the following information:

• Host name
• Port
• User name
• Password
• For WebLogic: Full path and file name of the WebLogic JAR file

If you connect to the user profile tables by using JDBC, collect the following information:

• Java class name for the JDBC driver
• JDBC URL
• Additional properties that are required by the JDBC driver
• Database user name and password

Collect the following information about the target user profile database:

• Catalog (or database) containing the target user profile tables
• Schema
• Whether the tables are configured for Unicode

Collect the following information about the Unica Interact installation on the source system:

• Version of Unica Interact you are upgrading from

Information required to upgrade the Unica Interact design time environment

Gather information about your Unica Interact design time installation before you run the Unica Interact design time environment upgrade tool.

aciUpgradeTool

Collect the following information about the configuration of the target system:

• The name of the partition you are upgrading.
• The directory where Unica Platform is installed.
• Full path to the Unica Campaign configuration file (campaign_configuration.xml).
  The Unica Campaign configuration file is in the conf directory under your Unica Campaign installation.
If you connect to the design time environment system tables by using the web application server, collect the following information:

- Host name
- Port
- User name
- Password
- For WebLogic: Full path and file name of the WebLogic JAR file

If you connect to the design time environment system tables by using JDBC, collect the following information:

- Java class name for the JDBC driver
- JDBC URL
- Additional properties that are required by the JDBC driver
- Database user name and password

Collect the following information about the target design time environment database:

- Catalog (or database) containing the target design time environment system tables
- Schema
- Whether the tables are configured for Unicode

Collect the following information about the Unica Interact installation on the source system:

- Version of Unica Interact that you are upgrading from

**Note:**

For customers using DB2 database, if on adding Event Pattern it did not display in Pattern list after upgrading to version 12.1.0.3, they must run `REORG table UACI_EventPatternItem` for Campaign database.
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>

MariaDB

• Database type: MYSQL
• Driver: mariadb-java-client-2.5.1.jar
• Default port: 3306
• Driver class: org.mariadb.jdbc.Driver
• Driver URL: jdbc:mariadb://<your_db_host>:<PORT>/<Your_DB_user_name>
• Properties: Add user=<your_db_user_name>
• Password=<your_db_user_password>

WebSphere

Use the following values if your application server is WebSphere:

SQLServer

• Driver: N/A
• Default port: 1433
• 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, navigate to the Custom Properties for the data source, and add or modify properties as follows.

• serverName=<your_SQL_server_name>
• portNumber =<SQL_Server_Port_Number>
• databaseName=<your_database_name>
Add the following custom properties.

- **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>`

To add the custom properties, complete the following steps.

1. Click the data source that you created. Go to the Custom Properties for the data source.
2. Select the **Custom properties** link.
3. 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.
4. Set the value for the `webSphereDefaultIsolationLevel` property to 2. If you do not see the `webSphereDefaultIsolationLevel` property, create the `webSphereDefaultIsolationLevel` property and set its value to 2.

The following are the custom properties.

- **Name:** `webSphereDefaultIsolationLevel`
- **Value:** 2
- **Datatype:** Integer

### MariaDB

- **Database type:** User_define
- **Implementation class name:** `org.mariadb.jdbc.MySQLDataSource`
- **Driver:** `mariadb-java-client-2.5.1.jar`

  JNDI custom properties
  - **Component-managed authentication alias:** = Select the authentication details for user
  - **Mapping-configuration alias:** = WSLogin
  - **portNumber:** = 3306
  - **relaxAutoCommit:** = true
  - **databaseName:** = `<DATABASE NAME>`
  - **serverName:** = the host name of the MariaDB server
  - **user:** = the user name of the MariaDB server
  - **password:** = the password associated with the user name

### Tomcat

Use the following values if your application server is Tomcat:

### MariaDB

- **Driver:** `mariadb-java-client-2.5.1.jar`
- **Default port:** 3306
- **Driver class:** `org.mariadb.jdbc.Driver`
- **Driver URL:** `jdbc:mariadb://<your_db_host>:<PORT>/<Your_DB_user_name>`
Properties: Add user=<your_db_user_name>
Properties: Add password=<your_db_password>

**JBoss**

Specify the native library path of the database driver JAR file on your server.

Use the following values if your application server is JBoss:

**SQL Server**

- 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>:<your_db_port>;databaseName=<your_db_name>,validconnection-checker-class>
- name: org.jboss.jca.adapters.jdbc.extensions.mssql.MSSQLValidConnectionChecker

For example:

```
```  

**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>
- valid-connection-checker class-name=
  org.jboss.jca.adapters.jdbc.extensions.db2.DB2ValidConnectionChecker

MariaDB

- Database Driver: mariadb-java-client-2.5.1.jar
- Default port: 3306
- Driver class: org.mariadb.jdbc.Driver
- Driver URL: jdbc:mariadb://<your_db_host>:<PORT>/<Your_DB_user_name>
- Properties: Add user=<your_db_user_name>
- Properties: Add password=<your_db_password>
- Driver module xa-datasource-class= org.mariadb.jdbc.MySQLDataSource

Correcting the registry file when upgrade installation fails

If installation fails because the installer could not detect the base version of your installed product, you can correct the registry file as described here.

The InstallAnywhere Global registry file, named .com.zerog.registry.xml, is created when a Unica product is installed. The registry file tracks all installed Unica products, including their features and components, on that server.


   Depending on the server on which you are installing, the .com.zerog.registry.xml file is in one of the following locations.
• On Windows servers, the file is in the \Program Files/Zero G Registry\ folder.

  Zero G Registry is a hidden directory. You must enable the setting to view hidden files and folders.

• On UNIX systems, the file is in one of the following directories.
  - Root user - /var/
  - Non-root user - $HOME/

2. Make a backup copy of the file.

3. Edit the file to change all entries that refer to the version of your installed product.

   For example, this is a section of the file that corresponds to Unica Campaign version 8.6.0.3.

   ```xml
   <product name="Campaign" id="dd6f88e0-1ef1-11b2-acce-c518be47c366"
   version=" 8.6.0.3 " copyright="2013" info_url="" support_url=""
   location="<HCL_Unica_Home>\Campaign" last_modified="2013-07-25
   15:34:01">
   ...
   </product>
   
   In this case, you would change all entries that refer to version=" 8.6.0.3 " to the base version, which is 8.6.0.0 in this case.
Chapter 3. Upgrading Unica Interact

You can upgrade Unica Interact by overwriting your existing Unica Interact installation. If you cannot upgrade your current version of Unica Interact directly, you must install Unica Interact in a new location.

An in-place upgrade is one where you overwrite your existing installation. You can complete in-place upgrades for Unica Interact version 12.1.

To ensure that the installer automatically upgrades your existing Unica Interact design time and runtime environment, select the same location as your old Unica Interact design time and runtime location.

When in-place upgrades are not possible, you must install Unica Interact in a new location. Because of the architectural changes between Unica Interact version 8.5.0 and previous versions of Unica Interact, there is no upgrade path from earlier versions of Unica Interact.

Complete the following steps to upgrade Unica Interact:

1. Back up the Unica Interact runtime environment
2. Undeploy the Unica Interact runtime server
3. Run the Unica installer
4. Review and modify the SQL upgrade script
5. Set environment variables
6. Run the upgrade tool for the Unica Interact design time environment
7. Run the upgrade tools for the Unica Interact runtime environment
8. Redeploy the Unica Interact runtime server in the web application server
9. Check the upgrade log

Backing up the Unica Interact runtime environment

Before you upgrade Unica Interact, back up all the files, system table database, and configuration settings that are used by the Unica Interact runtime environment to prevent loss of data and configuration settings.
\textbf{Note:} You must back up only one Unica Interact runtime server per server group.

If your Unica Interact runtime environment installation requires any of the configuration settings from your old Unica Interact version in addition to the new (default) settings in the new version, use the configTool utility to export the old Unica Interact configuration parameters. Specify a different file name for the \texttt{exported.xml} file and note the location where you save it.

\section*{Undeploying the Unica Interact runtime server}

Before you upgrade Unica Interact, you must undeploy the Unica Interact runtime server so that the Unica Interact installer can complete a clean and error-free upgrade.

You must undeploy the Unica Interact runtime server so that the web application server releases the lock on the \texttt{InteractRT.war} file, which is updated during the Unica Interact upgrade. Releasing the lock on the \texttt{interactRT.war} file allows the Unica Interact installer to cleanly update the \texttt{interactRT.war} file and register the new version of Unica Interact in the Unica console.

Complete the following steps to undeploy the Unica Interact runtime server:

\begin{itemize}
  \item[1.] Follow the instructions in your web application server to undeploy the \texttt{interactRT.war} file, and save or activate all changes.
  \item[2.] Shut down and restart the web application server after you undeploy the Unica Interact runtime server to ensure that the lock on the \texttt{InteractRT.war} file is released.
\end{itemize}

\section*{Running the installer}

You must run the Unica installer to upgrade Unica Interact. The Unica installer starts the Unica Interact installer during the process.

After you undeploy the Unica Interact runtime environment, run the Unica installer. When the installer prompts you to select the Unica product that you want to install, select Unica
Interact. The Unica Interact installer starts. The Unica Interact installer detects that you have an earlier version installed and runs in upgrade mode.

You can install or upgrade the following Interact components:

- Unica Interact Runtime Environment
- Unica Interact Design Time Environment
- Unica Interact Pattern State ETL
- Unica Insights reports

⚠️ Note: Extreme Scale is not supported in the 11.1 release. In case of upgrade to 11.1, if the base has the CacheManager as 'EHCatche' with 'CacheType' as 'Distributed' or CacheManager as 'ExtremeScale', then the upgrade would update to 'CacheManager' as Ignite and 'CacheType' as 'Distributed'.

After you finish upgrading Unica Interact, you must deploy the Unica Interact runtime environment on WebSphere Application Server, or on WebLogic. You do not need to deploy the Unica Interact design time environment. The design time environment is automatically deployed with the Campaign WAR or EAR file.

### Reviewing and modifying the SQL upgrade script

If your Unica Interact runtime environment includes customizations to the runtime system tables that modified the default Data Definition Language (DDL) included with Unica Interact, you must modify the default SQL upgrade script for your database to match your customizations.

Common customizations include changes to support multiple audience levels or using views of tables. You can review the data dictionaries for the new versions of products to confirm that column sizes map correctly and that foreign key constraints from additional products do not conflict.

The aci_runtab_upgrd and the aci_usrtab_upgrd are the SQL upgrade scripts that most likely require revisions.
Important: You must complete the changes before you run the Unica Interact upgrade tool.

Complete the following steps to review and modify the SQL upgrade script:

1. Locate the upgrade script for your database type. The scripts are installed in the `/ddl/Upgrades` or `/ddl/Upgrades/Unicode` directory under your Unica Interact installation after you run the Unica installer in upgrade mode.

2. Ensure that your database schema matches the Data Definition Language (DDL) included with Unica Interact. If your database schema does not match the DDL in the upgrade script, edit the script for your database type to match your environment.

   The following example shows the required modifications to the aci_runtab_upgrd SQL upgrade script to support the Household audience level:

   Your existing Unica Interact design time environment contains an additional audience level called Household. To support the Household audience level, your Unica Interact runtime environment database contains tables named HH_CHStaging and HH_RHStaging.

   Required changes to the upgrade script:

   a. Locate the code in the SQL upgrade script that updates the response history and treatment sizes for the Customer audience level and replicate it for your Household audience level. Change the table names in the SQL statements to the appropriate names for your Household audience level.

   b. You must also revise the SQL script to support the data type change for the SeqNum column in the UACL_RHStaging table. The value of the SeqNum is a sequential number across all response history staging tables. The next value that is used is tracked by the NextID column in the UACL_IdsByType table, where TypeID is 2. For example, you have three audience levels, customer, household, and account. In the customer response history staging table, the highest SeqNum is 50. In the household response history staging table, the highest SeqNum is 75. In the account response history staging table, the highest SeqNum is 100. Therefore,
you must alter the SQL to set the NextID for TypeID = 2 in the UACI_IdsByType to 101.

The following example SQL statements show the required additions to the aci_runtab_upgrd_sqlsvr.sql script for a SQL Server database that contains the Household audience level. The text that is added to support the Household audience level is in bold:

```sql
ALTER TABLE UACI_CHStaging ADD RTSelectionMethod int NULL
GO

ALTER TABLE UACI_RHStaging ADD RTSelectionMethod int NULL
GO

ALTER TABLE HH_CHStaging ADD RTSelectionMethod int NULL
GO

ALTER TABLE HH_RHStaging ADD RTSelectionMethod int NULL
GO

insert into UACI_IdsByType (TypeID, NextID) (select 2,
    IDENT_CURRENT('UACI_RHStaging') + IDENT_CURRENT('HH_RHStaging')
+ IDENT_INCR( 'UACI_RHStaging' ))
GO

select * into UACI_RHStaging_COPY from UACI_RHStaging
GO

select * into HH_RHStaging_COPY from HH_RHStaging
GO

DROP TABLE UACI_RHStaging
GO
```
CREATE TABLE UACI_RHStaging ( 
    SeqNum        bigint NOT NULL, 
    TreatmentCode varchar(512) NULL, 
    CustomerID    bigint NULL, 
    ResponseDate  datetime NULL, 
    ResponseType  int NULL, 
    ResponseTypeCode varchar(64) NULL, 
    Mark          bigint NOT NULL 
                      DEFAULT 0, 
    UserDefinedFields    char(18) NULL, 
    RTSelectionMethod  int NULL, 
    CONSTRAINT iRHStaging_PK 
                      PRIMARY KEY (SeqNum ASC) 
) 
) 
go

insert into UACI_RHStaging (SeqNum, TreatmentCode, CustomerID, ResponseDate, ResponseType, ResponseTypeCode, Mark, UserDefinedFields, RTSelectionMethod) 
(select SeqNum, TreatmentCode, CustomerID, ResponseDate, ResponseType, ResponseTypeCode, Mark, UserDefinedFields, RTSelectionMethod from 
UACI_RHStaging_COPY) 
go

DROP TABLE UACI_RHStaging_COPY 
go

DROP TABLE HH_RHStaging 
go
CREATE TABLE HH_RHStaging (  
    SeqNum               bigint NOT NULL,  
    TreatmentCode        varchar(512) NULL,  
    HouseholdID           bigint NULL,  
    ResponseDate         datetime NULL,  
    ResponseType         int NULL,  
    ResponseTypeCode     varchar(64) NULL,  
    Mark                 bigint NOT NULL  
        DEFAULT 0,  
    UserDefinedFields    char(18) NULL,  
    RTSelectionMethod    int NULL,  
    CONSTRAINT iRHStaging_PK  
        PRIMARY KEY (SeqNum ASC)  
)  
go  
insert into HH_RHStaging (SeqNum, TreatmentCode, HouseholdID, ResponseDate, ResponseType, ResponseTypeCode, Mark, UserDefinedFields, RTSelectionMethod)  
    (select SeqNum, TreatmentCode, HouseholdID, ResponseDate, ResponseType, ResponseTypeCode, Mark, UserDefinedFields, RTSelectionMethod from HH_RHStaging_COPY)  
go  
DROP TABLE HH_RHStaging_COPY  
go  

For DB2 and Oracle databases, the following statement is used for inserting values into the UACI_IdsByType table:

INSERT INTO UACI_IdsByType (TypeID, NextID)
If you have multiple audiences, you must add the following sections to the aci_usrtab_upgrd SQL script for each audience level:

```sql
ALTER TABLE HH_ScoreOverride ADD
    OverrideTypeID int NULL,
    CellCode varchar(64) NULL,
    Zone varchar(64) NULL
GO

ALTER TABLE HH_ScoreOverride ADD
    Predicate varchar(4000) NULL,
    FinalScore float NULL,
    EnableStateID int NULL
GO

CREATE INDEX iScoreOverride_IX1 ON HH_ScoreOverride
    ( HouseHoldID ASC )
GO
```

### Setting environment variables

Set environment variables in the `setenv` file to upgrade the Unica Interact design time and runtime environment.

Edit the `setenv` file to set the environment variables that are required by the Unica Interact upgrade tools.
For the Unica Interact design time environment, the file is in the
`Interact_Design_Environment_Install_Directory/interactDT/tools/upgrade` directory under the Unica Interact design time environment installation. For the Unica Interact runtime environment, the file is in the `Interact_Runtime_Environment_Install_Directory/tools/upgrade` directory under the Unica Interact runtime environment installation.

For more information, read the comments in the `setenv` file.

The following table describes the environment variables that you must set for the Unica Interact design time upgrade tools in the `setenv` file:

**Table 9. Environment variables for the Unica Interact design time environment**

This two-columned table provides information about the names of the environment variables in one column, and the description of the environment variables in the second column.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAVA_HOME</td>
<td>The root directory of the JDK used by your new Unica Campaign installation.</td>
</tr>
<tr>
<td></td>
<td>For example, <code>&lt;Installation_HOME&gt;/jre</code></td>
</tr>
<tr>
<td>JDBCDRIVER_CP</td>
<td>The path to the directory that contains the JDBC driver. <strong>JDBCDRIVER_CP</strong> is the default path to the JDBC driver; you can override the path when you run the upgrade tool.</td>
</tr>
<tr>
<td></td>
<td>Specify the same JDBC driver that was used while installing Unica Platform.</td>
</tr>
<tr>
<td>JDBCDRIVER_CLASS</td>
<td>The class for the JDBC driver. <strong>JDBCDRIVER_CLASS</strong> is the default class to the JDBC driver; you can override the class when you run the upgrade tool.</td>
</tr>
</tbody>
</table>
### Variable Description

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JDBCDRIVER_URL</td>
<td>The URL for the JDBC driver. <em>JDBCDRIVER_URL</em> is the default URL for the JDBC driver; you can override the URL when you run the upgrade tool.</td>
</tr>
<tr>
<td>ERROR_MSG_LEVEL</td>
<td>The desired logging level that has the following valid values, which are listed from most to least verbose:</td>
</tr>
</tbody>
</table>
|                           | • DEBUG  
|                           | • INFO   
|                           | • ERROR  
|                           | • FATAL  |
| LOG_TEMP_DIR              | The directory where you want the migration tool to create the log files.                                                                   |
| LOG_FILE_NAME             | The name of the log file for the upgrade tool.                                                                                              |

The following table describes the environment variables that you must set for the Unica Interact runtime upgrade tools in the *setenv* file:

**Table 10. Environment variables for the Unica Interact runtime environment**

This two-columned table provides information about the names of the environment variables in one column, and the description of the environment variables in the second column.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAVA_HOME</td>
<td>The root directory of the JDK used by your new Unica Interact installation.</td>
</tr>
<tr>
<td>Variable</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>JDBCDRIVER_CP</td>
<td>The path to the directory that contains the JDBC driver. <strong>JDBCDRIVER_CP</strong> is the default path to the JDBC driver; you can override the path when you run the upgrade tool.</td>
</tr>
<tr>
<td>JDBCDRIVER_CLASS</td>
<td>The class for the JDBC driver. <strong>JDBCDRIVER_CLASS</strong> is the default class to the JDBC driver; you can override the class when you run the upgrade tool.</td>
</tr>
<tr>
<td>JDBCDRIVER_URL</td>
<td>The URL for the JDBC driver. <strong>JDBCDRIVER_URL</strong> is the default URL for the JDBC driver; you can override the URL when you run the upgrade tool.</td>
</tr>
<tr>
<td>ERROR_MSG_LEVEL</td>
<td>The desired logging level that has the following valid values, which are listed from most to least verbose:</td>
</tr>
<tr>
<td></td>
<td>• DEBUG</td>
</tr>
<tr>
<td></td>
<td>• INFO</td>
</tr>
<tr>
<td></td>
<td>• ERROR</td>
</tr>
<tr>
<td></td>
<td>• FATAL</td>
</tr>
<tr>
<td>LOG_TEMP_DIR</td>
<td>The directory where you want the migration tool to create the log files.</td>
</tr>
<tr>
<td>LOG_FILE_NAME</td>
<td>The name of the log file for the upgrade tool.</td>
</tr>
</tbody>
</table>

The environment variables for SSL upgrade are required for both the Unica Interact design time and runtime environments.

The following table describes the environment variables that you must set to support SSL upgrade for the design time and runtime environment:

**Table 11. Environment variables to support SSL upgrade (runtime and design time environments)**
This two-columned table provides information about the names of the environment variables in one column, and the description of the environment variables in the second column.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS_WEBLOGIC_SSL</td>
<td>Should the connection to the server of the target system be through SSL? The valid values are YES and NO. If the value is set to NO, you do not need to set the remaining SSL properties.</td>
</tr>
<tr>
<td>BEA_HOME_PATH</td>
<td>The path to the location where the WebLogic server of the target system is installed. You must point to the license.bea file in this path. If you install Unica Interact in a distributed environment where the WebLogic server of the target system is not available locally to the script, copy the license.bea file locally to some folder, and specify the path to that folder by using this environment variable.</td>
</tr>
<tr>
<td>SSL_TRUST_KEYSTORE_FILE_PATH</td>
<td>The path of the trust store that is used to configure SSL in the WebLogic server of the target system. The trusted certificates are saved at this location. The SSL_TRUST_KEYSTORE_FILE_PATH variable is used for SSL handshake.</td>
</tr>
<tr>
<td>SSL_TRUST_KEYSTORE_PASSWORD</td>
<td>The password of the trust store that is used to configure SSL in the WebLogic server of the target system. If there is no password, set it to &quot;&quot; or nothing. The SSL_TRUST_KEYSTORE_PASSWORD variable is used for SSL handshake.</td>
</tr>
</tbody>
</table>
Running the Unica Interact upgrade tools

Run the upgrade tool for the design time environment to update the Unica Interact tables in the Unica Campaign system tables. Run the upgrade tools for the runtime environment to update the Unica Interact run time, learning, contact history, response history, and user profile tables.

Running the upgrade tool for the design time environment

Before you run the upgrade tool, start the web application server on the target system.

The Unica Interact design time environment uses the Unica Campaign system tables as the database.

When running the upgrade tool for the design time environment, you can stop the upgrade at any prompt by typing `abort`.

The user who runs the upgrade tool must have access to the appropriate database client executable files (`sqlplus`, `db2`, or `osql`) for the Campaign system tables data source.

The latest version of the upgrade tool (aciUpgradeTool) is in the `/interactDT/tools/upgrade` directory under your Unica Interact design time environment installation. Enter the requested information at the prompts to upgrade your system tables for the new version of Unica Interact. When the tool completes successfully, your upgrade process is complete.

If you have multiple partitions, configure and run the upgrade tool once for each partition.

**Note:** If audience specific Detail contact history tables (example: UA_DTLContactHist) are not mapped in Campaign configuration under the path `partitions|partition#|systemTableMapping` before upgrading environment for upgraded customers (if customers are upgrading to version 12.1.0.3 and onwards), then upgraded customers must add "ABTestBranchID" column in audience specific Detail contact history tables (example: UA_DTLContactHist) manually to view A/B Test Performance related informations. Upgraded customers can add this column by using the following query:
• For Oracle DB:

```
ALTER TABLE <audience specific Detail contact history table> ADD ABTestBranchID NUMBER(19,0);
```

• For other DBs:

```
ALTER TABLE <audience specific Detail contact history table> ADD ABTestBranchID BIGINT;
```

• Example:

```
ALTER TABLE UA_DTLContactHist ADD ABTestBranchID BIGINT;
```

Note: From version 12.1.0.3 onwards, all the old strategies will be migrated to smart strategies after running the Interact DT upgrade tool. In case of a failure in migration of old strategies, you can use Strategy migration utility tool to migrate specific strategy to smart strategy after fixing the issue.

Note: If customers are upgrading the Interact product from version 12.1.0.3 to version 12.1.0.4, then the task

```
TASK4=com.unicacorp.migration.upgradeTool.SmartStrategyUpgradeTask
```

must be disabled or commented in AClUpgradeTaskList.properties file under

```
<Installation-Home-Directory>\Interact\interactDT\tools\upgrade\conf.
```

Running the upgrade tools for the runtime environment

Before you run the upgrade tools, start the web application server on the target system.

The Unica Interact runtime environment uses the Unica Interact system tables as the database.

When running the upgrade tools for the runtime environment, you can stop the upgrade at any prompt by typing abort.

The latest versions of the upgrade tools are in the /tools/upgrade directory under your Unica Interact runtime environment installation. Enter the requested information at
the prompts to upgrade your tables for the new version of Unica Interact. When the tool completes successfully, your upgrade process is complete.

⚠️ **Important:** Run the SQL scripts/upgrade tools once for each server group.

Run the tools in the following order to upgrade the Unica Interact runtime environment:

1. Run `aciUpgradeTool_runtab` to update the `systemTablesDataSource` and the Unica Interact runtime configuration properties.

2. If you are using built-in learning, run `aciUpgradeTool_lrntab` to update the `learningTablesDataSource`.

3. If you are using cross-session response tracking, modify the `/tools/upgrade/conf/ACIUUpgradeTaskList_crhtab.properties` file if necessary, and then run `aciUpgradeTool_crhtab` to update the `contactAndResponseHistoryDataSource`.

   You must modify the `ACIUUpgradeTaskList_crhtab.properties` file if you are upgrading from Unica Interact version 8.x and if the Unica Interact runtime data source (as specified in the `contactAndResponseHistoryDataSource` configuration property under the **Interact | general** category) is not the same as the Unica Campaign system tables data source.

4. If you are using the `scoreOverride` or `defaultOffers` tables, run `aciUpgradeTool_usrtab` to update the `prodUserDataSource`.

   🔄 **Note:** If customers are having Platform-Campaign on one VM and Platform-Interact on second VM, then on Platform-Interact VM users must copy `jdbc.properties` from Platform-Campaign VM and replace by taking backup at the following locations `<Interact_Home>/tools/bin` and `<Install Location>/install` and run `aciUpgradeTool_crhtab.sh`.

   After running `aciUpgradeTool_crhtab.sh` tool, the users must restore `jdbc.properties` file on Platform-Interact VM.
Redeploying the Unica Interact runtime server in the web application server

After you finish upgrading Unica Interact, redeploy the newly installed version of the Unica Interact runtime server in the WebSphere Application Server, or on WebLogic. **NOTE:** After upgrade, it is observed that configuration Node treatmentStore is displayed under :Affinium|Interact|services|contactHist| Removal of this configuration can be done using the Platform configTool.sh/configTool.bat

Upgrade log

When you upgrade Unica Interact, the Unica Interact upgrade tools write processing details, warnings, and errors to the `aci_upgrade.log` file. Check the log file to verify that you have an error-free and clean upgrade.

By default, the name of the log file is `aci_upgrade.log` and the log file is in the `logs` directory, which is in the same directory as the Unica Interact upgrade tools. The location of the log file and level of verbosity are specified in the `setenv` file. You can modify the `setenv` file before you run the Unica Interact upgrade tools.

Upgrading partitions

For the design time environment, if you have multiple partitions, you must run the upgrade tool once for each partition. For the runtime environment, if you have multiple partitions, run the upgrade tool once on each runtime server.

Partitions must have the same names in the source and target versions of Unica Interact.
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 INTERACT_HOME/interactDT/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 INTERACT_HOME/interactDT/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 Unica Interact design time environment tables:

Table 12. Scripts for creating design time environment tables

This two-columned table provides information about the data source type in one column, and the script name in the second column.

<table>
<thead>
<tr>
<th>Data source type</th>
<th>Script name</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB2</td>
<td>aci_systab_db2.sql</td>
</tr>
</tbody>
</table>

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.
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<table>
<thead>
<tr>
<th>Data source type</th>
<th>Script name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft SQL Server</td>
<td>aci_systab_sqlsvr.sql</td>
</tr>
<tr>
<td>Oracle</td>
<td>aci_systab_ora.sql</td>
</tr>
<tr>
<td>MariaDB</td>
<td>aci_systab_mariadb.sql</td>
</tr>
</tbody>
</table>

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

**Table 13. Scripts for populating design time environment tables**

This two-columned table provides information about the data source type in one column, and the script name in the second column.

<table>
<thead>
<tr>
<th>Data source type</th>
<th>Script name</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB2</td>
<td>aci_populate_systab_db2.sql</td>
</tr>
<tr>
<td>Microsoft SQL Server</td>
<td>aci_populate_systab_sqlsvr.sql</td>
</tr>
<tr>
<td>Oracle</td>
<td>aci_populate_systab_ora.sql</td>
</tr>
<tr>
<td>MariaDB</td>
<td>aci_populate_systab_mariadb.sql</td>
</tr>
</tbody>
</table>

**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 14. Scripts for creating runtime environment tables**
This two-columned table provides information about the data source type in one column, and the script name in the second column.

<table>
<thead>
<tr>
<th>Data source type</th>
<th>Script name</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB2</td>
<td>aci_runtab_db2.sql</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>Microsoft SQL Server</td>
<td>aci_runtab_sqlsvr.sql</td>
</tr>
<tr>
<td>Oracle</td>
<td>aci_runtab_ora.sql</td>
</tr>
<tr>
<td>MariaDB</td>
<td>aci_runtab_mariadb.sql</td>
</tr>
</tbody>
</table>

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

**Table 15. Scripts for populating runtime environment tables**

This two-columned table provides information about the data source type in one column, and the script name in the second column.

<table>
<thead>
<tr>
<th>Data source type</th>
<th>Script name</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB2</td>
<td>aci_populate_runtab_db2.sql</td>
</tr>
<tr>
<td></td>
<td>You must use the following command when you run the script: db2 +c -td@ -vf aci_populate_runtab_db2.sql</td>
</tr>
<tr>
<td>Microsoft SQL Server</td>
<td>aci_populate_runtab_sqlsvr.sql</td>
</tr>
<tr>
<td>Oracle</td>
<td>aci_populate_runtab_ora.sql</td>
</tr>
<tr>
<td>MariaDB</td>
<td>aci_populate_runtab_mariadb.sql</td>
</tr>
</tbody>
</table>

**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 16. Scripts for creating learning tables**
This two-columned table provides information about the data source type in one column, and the script name in the second column.

<table>
<thead>
<tr>
<th>Data source type</th>
<th>Script name</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB2</td>
<td>aci_lrntab_db2.sql</td>
</tr>
<tr>
<td>Microsoft SQL</td>
<td>aci_lrntab_sqlsvr.sql</td>
</tr>
<tr>
<td>Server</td>
<td></td>
</tr>
<tr>
<td>Oracle</td>
<td>aci_lrntab_ora.sql</td>
</tr>
<tr>
<td>MariaDB</td>
<td>aci_lrntab_mariadb.sql</td>
</tr>
</tbody>
</table>

**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:](image) **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 17. Scripts for creating contact history tables**
This two-columned table provides information about the data source type in one column, and the script name in the second column.

<table>
<thead>
<tr>
<th>Data source type</th>
<th>Script name</th>
</tr>
</thead>
</table>
| DB2              | • aci_crhtab_db2.sql in the `<Interact_HOME>/ddl/` directory. The script impacts the Interact runtime tables.  
• aci_lrnfeature_db2.sql in the `<Interact_HOME>/interactDT/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 `<Interact_HOME>/interactDT/ddl/` directory. |
| Oracle           | • aci_crhtab_ora.sql in the `<Interact_HOME>/ddl/` directory.  
• aci_lrnfeature_ora.sql in the `<Interact_HOME>/interactDT/ddl/` directory. |
| MariaDB          | • aci_crhtab_mariadb.sql in the `<Interact_Home>/ddl/` directory.  
• aci_lrnfeature_mariadb.sql in the `<Interact_Home>/interactDT/ddl/` directory. |

### Deploying Unica Interact

You must deploy the Unica Interact runtime environment for every instance of the runtime server that you install. The Interact design time environment is deployed automatically with the Campaign EAR or WAR file.

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 runtime 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, the design time environment is deployed automatically when you deploy Unica Campaign. After you deploy the Campaign.war file, configuration procedures automatically enable the Unica Interact design time environment in Campaign. The Campaign.war file is in the Campaign 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.

⚠️ 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.properties' file of base setup to the 11.1 target setup in the 'interact_log4j2.xml'.
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.

- 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 el-api.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.

- 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.


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.

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 plan.war file.

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:dyload
```
25. Start your deployment.

Deploying Unica Interact on WebLogic

You can deploy Unica products on WebLogic.

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 Campaign.xml of the Unica Campaign Tomcat instance for eg. :
<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>"/>
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).

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.

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.

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 Unica Interact is installed and `port` is the port number on which the Interact application server is listening.

   b. Click **Interact Initialization Status**.

      If the Unica Interact server is running correctly, Unica Interact 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.

### 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`.

```xml
<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 4. 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.

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 a 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. To drop the Unica Optimize tables from the system table database, run the aco_systab_drop.sql script in the `ddl` directory under your Unica Interact installation. 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.

4. Shut down WebSphere or WebLogic.

5. Stop the processes that are related to Unica Interact.

6. 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.

7. Complete one of the following steps to uninstall Interact:
   - 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 5. 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

```bash
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 \texttt{-d} with the \texttt{-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.

\texttt{-r \textit{productName} -f \textit{registrationFile}}

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

Note the following.

- When you use the \texttt{-r} command, the registration file must have \texttt{<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 \texttt{-i} command. Only the file that has the \texttt{<application>} tag as the first tag can be used with the \texttt{-r} command.

- The registration file for the Unica Platform is named \texttt{Manager_config.xml}, and the first tag is \texttt{<Suite>}. To register this file on a new installation, use the \texttt{populateDb} utility, or rerun the Unica Platform installer as described in the \textit{Unica Platform Installation Guide}.

- After the initial installation, to re-register products other than the Unica Platform, use \texttt{configTool} with the \texttt{-r} command and \texttt{-o} to overwrite the existing properties.

The \texttt{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 \texttt{configTool} did not change. The valid product names for use with \texttt{configTool} are listed below, along with the current names of the products.

<table>
<thead>
<tr>
<th>Product name</th>
<th>Name used in configTool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unica Platform</td>
<td>Manager</td>
</tr>
<tr>
<td>Unica Campaign</td>
<td>Campaign</td>
</tr>
</tbody>
</table>
### Product name | Name used in configTool
---|---
| 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 productName -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`.

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