

## Unica Journey V12.1 Installation Guide



# Contents

<b>Chapter 1. Installation overview.....</b>	<b>3</b>
How the installers work.....	3
Modes of installation.....	3
<b>Chapter 2. Planning the Unica Journey installation.....</b>	<b>4</b>
Prerequisites.....	4
Installation order for Unica products.....	7
Unica Journey installation worksheet.....	8
Installation order for Unica Journey.....	12
Journey Oracle 12C Database Support.....	13
<b>Chapter 3. Creating the Unica Journey Data Sources.....</b>	<b>14</b>
Creating the JDBC connection in the web application server.....	15
Configuring the web application server for your JDBC driver.....	15
Information for creating JDBC connections.....	17
<b>Chapter 4. Installing Unica Journey.....</b>	<b>21</b>
Unica Journey components.....	22
Installing Unica Journey using the GUI mode.....	22
Installing Unica Journey using the console mode.....	28
Installing Unica Journey silently.....	29
Sample response files.....	30
<b>Chapter 5. Deploying Unica Journey application.....</b>	<b>32</b>
Deploying Unica Journey on Apache Tomcat application server.....	32
Guidelines for deploying Unica Journey on WebSphere.....	33
Guidelines for deploying Unica Journey on JBoss.....	36
<b>Chapter 6. Configuring Unica Journey after deployment.....</b>	<b>38</b>
Unica Journey configuration properties.....	38
Starting and Verifying Unica Journey installation.....	43
Setting properties for integration with Unica products.....	44
<b>Chapter 7. Deployment Diagram.....</b>	<b>46</b>
<b>Chapter 8. Uninstalling Unica Journey.....</b>	<b>47</b>

# Chapter 1. Installation overview

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

## 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 Journey, you must use the Unica suite installer and the Unica Journey 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 a 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 Journey.

### GUI X Window System mode

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

### UNIX™ X Window System mode

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

### Console mode

Use the console mode to install Unica Journey 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.

## Chapter 2. Planning the Unica Journey installation

When you plan your Unica Journey, you must ensure that you have set up your system correctly, and that you have configured your environment to deal with any failures.

### Prerequisites

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

#### System requirements

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

#### Network domain requirements

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



**Note:** Unica Journey and Unica Link installation must be done with domain name specified for the application URLs.

#### 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, Kafka, and web application servers.

#### Internet browser settings

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

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

#### Access permissions

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

- Administration access for all necessary databases



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

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

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

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

The following additional permissions are necessary for UNIX™:

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

### Points to consider before you install Unica Journey

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

#### JAVA\_HOME environment variable

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

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

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

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

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

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

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

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

## Unica Platform requirements

You must install or upgrade Unica Platform version 12.1.0.3 before you install Unica Journey. 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:** From version 12.1.0.3 and higher, users can use OneDB, MariaDB and SQL database as system table. See the *Unica V12.1.0.3 with OneDB as System Tables Guide* for more details.

For MariaDB, OneDB and SQL server there is one approach to upgrade to version 12.1.0.3

- Install Journey directly to version 12.1.0.3 as Full installer

For Oracle, there are two approaches to upgrade to version 12.1.0.3

1. 12.1.0 > 12.1.0.1 > 12.1.0.2 > 12.1.0.3
2. 12.1.0 > 12.1.0.3

For MariaDB ,OneDB and SQL server there are two approaches to upgrade to version 12.1.0.4

1. Upgrade from version 12.1.0.3 to 12.1.0.4
2. Install Journey directly to version 12.1.0.4 as Full installer

For Oracle, there are two approaches to upgrade to version 12.1.0.4

1. 12.1.0 > 12.1.0.1 > 12.1.0.2 > 12.1.0.3 > 12.1.0.4
2. 12.1.0 > 12.1.0.4



**Note:**

For Oracle database → After 12.1 Journey installation user needs to run report DB script manually on journey report db. Then only user can start any Journey upgrade for oracle database.





Path: <Journey\_installation\_location>/Web/ddl/JourneyReportOracleCreateTables.sql

## Installation order for Unica products

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


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

**Table 1. Installation or upgrade order for Unica products**

For this product or combination:	Install or upgrade in this order:
Unica Campaign (with or without Unica Deliver) and Unica Optimize	<ol style="list-style-type: none"> <li>1. Unica Platform</li> <li>2. Unica Campaign and Unica Optimize</li> </ol> <p> <b>Note:</b> Deliver is not supported for Campaign in clustered mode in version 12.1.</p> <p> <b>Note:</b> Unica Deliver is installed automatically when you install Unica Campaign. However, Unica Deliver is not configured or enabled during the Unica Campaign installation process.</p>
Unica Interact	<ol style="list-style-type: none"> <li>1. Unica Platform</li> <li>2. Unica Campaign</li> <li>3. Unica Interact Design Time environment</li> <li>4. Unica Interact Run Time environment</li> <li>5. Unica Interact Extreme Scale Server</li> </ol> <p>If you want to install or upgrade the Interact Design Time Environment only, then install or upgrade the Interact Design Time Environment in the following order:</p> <ol style="list-style-type: none"> <li>1. Unica Platform</li> <li>2. Unica Campaign</li> <li>3. Unica Interact Design Time environment</li> </ol> <p>If you want to install or upgrade the Interact Run Time Environment only, then install or upgrade the Interact Run Time Environment in the following order:</p>

**Table 1. Installation or upgrade order for Unica products**

(continued)

For this product or combination:	Install or upgrade in this order:
	<ol style="list-style-type: none"> <li>1. Unica Platform</li> <li>2. Unica Interact Run Time Environment</li> </ol> <p>If you want to install the Interact Extreme Scale Server only, then install the Interact Extreme Scale Server in the following order:</p> <ol style="list-style-type: none"> <li>1. Unica Platform</li> <li>2. Unica Interact Run Time environment</li> <li>3. Unica Interact Extreme Scale Server</li> </ol>
Unica Plan	<ol style="list-style-type: none"> <li>1. Unica Platform</li> <li>2. Unica Plan</li> </ol> <p> <b>Note:</b> If you are integrating Unica Plan with Unica Campaign, you must also install Unica Campaign. The order of installation for those two products does not matter.</p>
Unica Interact Advanced Patterns	<ol style="list-style-type: none"> <li>1. Unica Platform</li> <li>2. Unica Campaign</li> <li>3. Unica Interact</li> <li>4. Unica Interact Advanced Patterns</li> </ol>
IBM SPSS Modeler Advantage Enterprise Marketing Management Edition	<ol style="list-style-type: none"> <li>1. IBM SPSS Modeler Advantage Enterprise Marketing Management Edition</li> </ol>
Unica Journey	<ol style="list-style-type: none"> <li>1. Unica Platform</li> <li>2. Unica Journey</li> </ol>

## Unica Journey installation worksheet

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



Use the following table to gather information about the empty database that was created for the Unica Journey system tables. The empty database that you set up for Unica Journey can have any name.

**Table 2. Supported Database**

Field	Notes®
Database type	
Database name	
Database account user name	
Database account password	
JNDI name	JourneyDS, JourneyReportDS
ODBC name	

### Oracle

For oracle database create a system user account and a report user for creating Report schema. The system user account must have the following rights:

- CREATE TABLES
- CREATE VIEWS (for reporting)
- CREATE SEQUENCE (Oracle only)
- CREATE INDICES
- ALTER TABLE
- INSERT
- UPDATE
- DELETE



**Note:** Report user also have the above mentioned rights. In addition, report user have to grant permission to system user for accessing the Report schema table. Run the following command

```
GRANT ALL PRIVILEGES TO (SYSTEM_SCHEMA_USER_NAME)
```

For more details, see [Unica Journey deployment \(on page 30\) on page 32](#)

**Table 3. Information about the Kafka Instance**

Fields	Notes
Kafka server host	
Kafka server port	
Kafka server certificate (if Kafka is SSL enabled)	
Kafka server - user id (if Kafka connection is SASL plaintext)	
Kafka server - user password (if Kafka connection is SASL plaintext)	

**SQL Server**

- Database Driver: `com.microsoft.sqlserver.jdbc.SQLServerDriver`
- Default port: 1433
- Driver class: `journey.datasource.driver-class-name=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>`

```
<Context docBase="<Journey_Install_Path>/Journey/journey.war" >
  <Environment name="journey.web.home" value="<Journey_Install_Path>" type="java.lang.String"/>
  <Resource name="JourneyDS" type="javax.sql.DataSource"
    maxActive="30" maxIdle="10" maxWait="10000"
    username="" password=""
    driverClassName="com.microsoft.sqlserver.jdbc.SQLServerDriver"
    url="jdbc:sqlserver://host:port;databaseName=journey"/>

  <Resource name="JourneyReportDS" type="javax.sql.DataSource"
    maxActive="30" maxIdle="10" maxWait="10000"
    username="" password=""
    driverClassName="com.microsoft.sqlserver.jdbc.SQLServerDriver"
    url="jdbc:sqlserver://host:port;databaseName=report"/>
</Context>
```

**OneDB Database**

- Database Driver: `com.informix.jdbc.IfxDriver`
- Default port: 9088
- Driver class: `journey1:informixserver=onedb_1;CLIENT_LOCALE=en_us.57372;DB_LOCALE=en_us.57372;`

- Driver URL: `jdbc:Informix-sqli://host:port/database_name:informixserver=servername`
- Properties: Add `user=<your_db_user_name>`

```
<Context docBase="<Journeys_Install_Path>/Web/journey.war" >
  <Environment name="journey.web.home" value="<Journeys_Install_Path>/Web/" type="java.lang.String"/>
  <Resource name="JourneyReportDS" type="javax.sql.DataSource"
    maxActive="30" maxIdle="10" maxWait="10000"
    username="" password=""
    driverClassName="com.informix.jdbc.IfxDriver"

    url="jdbc:informix-sqli://
host:port/report:informixserver=onedb;CLIENT_LOCALE=en_us.57372;DB_LOCALE=en_us.57372"/>

  <Resource name="JourneyDS" type="javax.sql.DataSource"
    maxActive="30" maxIdle="10" maxWait="10000"
    username="" password=""
    driverClassName="com.informix.jdbc.IfxDriver"

    url="jdbc:informix-sqli://
host:port/journey:informixserver=onedb;CLIENT_LOCALE=en_us.57372;DB_LOCALE=en_us.57372"/>
</Context>
```

## MariaDB Database

- Database Driver: `org.mariadb.jdbc.Driver`
- Default port: 3306
- Driver class: `org.mariadb.jdbc.Driver`
- Driver URL: `"jdbc:mariadb://10.134.45.113:3306/<DB_USER_NAME>"`
- Properties: Add `user=<your_db_user_name>`

```
<Context docBase="D:\Journey\workspace\Journey\server\journey\build\libs\journey-0.0.1-SNAPSHOT.war" >
  <Environment name="journey.web.home" value="D:\Journey_Web\" type="java.lang.String"/>

  <Resource name="JourneyDS" type="javax.sql.DataSource"
    maxActive="30" maxIdle="10" maxWait="10000"
    username="" password=""
    driverClassName="org.mariadb.jdbc.Driver"
    url="jdbc:mariadb://<server>:<port>/journey"/>

  <Resource name="JourneyReportDS" type="javax.sql.DataSource"
    maxActive="30" maxIdle="10" maxWait="10000"
    username="" password=""
    driverClassName="org.mariadb.jdbc.Driver"
    url="jdbc:mariadb://<server>:<port>/report"/>
</Context>
```

## Checklist for Unica Platform database

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:

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

## Checklist for Unica Platform deployment on the web application server

Obtain the following information before deploying Unica Platform:

- **Protocol:** HTTP, or HTTPS if SSL is implemented in the web application server.
- **Host:** The name of the machine on which the Unica Platform will be deployed.
- **Port:** The port on which the web application server listens.
- **Domain name:** The company domain of each machine where HCL products are installed. For example, `example.com`. All HCL products must be installed in the same company domain, and you must enter the domain name in all lower case letters.

If there is a mismatch in domain name entries, you might encounter problems when you attempt to use Unica Platform features or navigate among products. You can change the domain name after the products are deployed by logging in and changing values of the relevant configuration properties in the product navigation categories on the **Settings > Configuration** page.

## Checklist for Unica Journey Installation

Obtain the following information to install Unica Journey's different components.

- **hostname** - The name of the system on which Journey web application will be installed.
- The port on which the application server listens. If you plan to implement SSL, obtain the SSL port.
- The network domain for your deployment system. For example, `mycompany.com`.

## Installation order for Unica Journey

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

The following table provides information about the order that you must follow when you install Unica Journey.

**Table 4. Installation order for Unica Journey**

Product	Install in this order
Unica Journey	<ol style="list-style-type: none"> <li>1. Unica Platform</li> <li>2. Unica Journey</li> </ol>



**Note:** Unica Journey installs three components:

- Unica Journey Web application – Unica Journey web application can be deployed in supported application server i.e. tomcat.
- Unica Journey Engine: It does not require any deployment in application server, Journey engine can get started from command line / terminal as a standalone application.
- Apache Kafka: Kafka server and zookeeper gets installed together and can be started on command line or terminal. Unica Journey all three components can be installed on same or different machines.

## Journey Oracle 12C Database Support

### Journey Upgrade 12.1 > 12.1.0.3 on Oracle 12C (12.1.0.2)

If you want to upgrade Journey 12.1.0.3 on oracle 12C then first clean database schema for Journey Web and Journey report and run 12.1.0.3 scripts(Provided as a Hotfix) manually.

### Journey Upgrade 12.1 > 12.1.0.4 on Oracle 12C (12.1.0.2)

If you want to upgrade Journey 12.1.0.4 on oracle 12C then first need to upgrade to version 12.1.0.3. Clean the database schema for Journey Web and Journey report and run 12.1.0.3 scripts (Provided as a Hotfix) manually and then run the 12.1.0 FP4 installer.



**Note:** Contact the Support team for the hotfix.

### Limitation

Oracle 12C has a limitation that the object name should not be greater than 30 characters.


# Chapter 3. Creating the Unica Journey Data Sources

You must create Unica Journey data sources before you can install Unica Journey. Complete the following steps to prepare the data sources for Unica Journey:

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

**Table 5. Guidelines for creating data sources**

Da tab ase ven dor	Guideline
Ora cle	Enable the auto commit feature for the environment open. See the Oracle documentation for instructions.
Mar i aDB	Lower_case_table_names is 1 so that table names are considered case insensitive. Set wait_timeout=<Time in seconds that the server waits for a connection to become active before closing it. The session value is initialized when a thread starts up from either the global value, if the connection is non-interactive, or from the interactive_timeout value, if the connection is interactive.> e.g. Set this to 25,92,000 (seconds) in case the set up can be inactive for 30days max_connections=<The maximum number of simultaneous client connections.>
SQL Ser ver	Use either SQL Server authentication only, or both SQL Server and Windows™ authentication, because the Platform requires SQL Server authentication. If required, change the database configuration so that your database authentication includes SQL Server. Also be sure that TCP/IP is enabled in your SQL Server.

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

- 2. Create a system user account.  
The system user account must have the following rights:
  - CREATE TABLES
  - CREATE VIEWS (for reporting)
  - CREATE SEQUENCE (Oracle only)
  - CREATE INDICES
  - ALTER TABLE
  - INSERT

- UPDATE
  - DELETE
3. Create ODBC or native connections.
  4. Configure the web application server for your JDBC driver.
  5. Create JDBC connections in the web application server.

## Creating the JDBC connection in the web application server

### About this task

The Unica Journey web application must be able to communicate with its system table database using a JDBC connection.

You must create this JDBC connection in the web application server where you plan to deploy Unica Journey.

Follow these guidelines if you decide to create the data source manually.

- In WebSphere®, set the classpath for your database driver during this process.
- When the Unica Journey system tables are created in a different schema from the default schema of the database login user, you must specify that non-default schema name in the JDBC connection used to access the system tables.
- In Tomcat, set the classpath for your database driver during this process.
- In JBOSS, set the classpath for your database driver by adding the module for the JDBC driver and register the SQL JDBC driver.
- You must use `JourneyDS` and `JourneyReportDS` as the JNDI name. This name is required, and is noted in the [Unica Journey installation worksheet on page 8](#).

## Configuring the web application server for your JDBC driver

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

### WebSphere

#### About this task

Automatic Datasource Creation by the installer is not supported in the Journey Application. We need to do Manual steps to create the DataSources for the Journey Application.

Perform the following step to create the datasource:

1. Access the WebSphere Admin Console
2. Set Up the Data Source in WebSphere
3. Continue the Wizard: Set Up the JDBC Provider

4. Specify Security Aliases
5. Test the Data Source

For more information, please refer the WebSphere documentation.

## JBoss

### About this task

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

1. Obtain the latest vendor-provided Type 4 JDBC driver for your system table database that is supported by Unica, as described in the *Recommended Software Environments and Minimum System Requirements* guide.

Use the following guidelines after you obtain the JDBC driver.

- If the driver does not exist on the server where you plan to deploy Unica Journey, obtain it and unpack it on the server. Unpack the drivers in a path that does not include spaces.
  - If you obtain the driver from a server where the data source client is installed, verify that the version is the latest supported by Unica Journey.
2. Add the full path to the driver, including the file name, to the class path of the web application server where you plan to deploy Unica Journey.

Use the following guidelines.

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

For example, for SQL Server:

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

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

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

## Apache Tomcat

### About this task



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

1. Obtain the latest vendor-provided Type 4 JDBC driver for your system table database that is supported by Unica, as described in the *Recommended Software Environments and Minimum System Requirements* guide.

Use the following guidelines after you obtain the JDBC driver.

- If the driver does not exist on the server where you plan to deploy Unica Journey, obtain it and unpack it on the server. Unpack the drivers in a path that does not include spaces.
  - If you obtain the driver from a server where the data source client is installed, verify that the version is the latest supported by Unica.
2. Add the full path to the driver, including the file name, to the class path of the (<Tomcat\_Installed Location>/lib) web application server where you plan to deploy Unica Journey.
  3. Make a note of the database driver class path in the [Unica Journey installation worksheet on page 8](#), as you must enter the path when you run the installer.
  4. Restart the web application server so that your changes take effect.

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

## 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.

## WebSphere

Use the following values if your application server is WebSphere:

### SQLServer

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

In the Database Type field, select User-defined.

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

- `serverName=<your_SQL_server_name>`
- `portNumber =<SQL_Server_Port_Number>`
- `databaseName=<your_database_name>`

Add the following custom property:

- Name: `webSphereDefaultIsolationLevel`
- Value: 1
- Datatype: Integer

## Oracle

- Driver: Oracle JDBC Driver
- Default port: 1521
- Driver class: `oracle.jdbc.OracleDriver`
- Driver URL: `jdbc:oracle:thin:@<your_db_host>:<your_db_port>:<your_db_service_name>`

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

Add the following custom property:

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

## 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 user = `password=<your_db_password>`
- Driver module `xa-datasource-class= org.mariadb.jdbc.MySQLDataSource`

## OneDB

- Database Driver: `onedb-jdbc-complete-8.0.0-SNAPSHOT.jre8.jar`
- Database Port :20195
- Driver: Informix JDBC Driver
- Driver class: `com.informix.jdbc.IfxDriver`
- Driver URL: `jdbc:informix-sqli://<your_db_host>/<your_db_name>:INFORMIXSERVER=<your_db_servername>;`

## JBoss

Specify the native library path of the database driver JAR file on your server. For example: `db2jcc4.jar/ojdbc8.jar/sqljdbc4.jar`.

Use the following values if your application server is JBoss:

### SQLServer

- Database Driver: Microsoft MS SQL Server Driver (Type 4) Versions: 2012, 2012 SP1 and SP3, 2014, 2014 SP1, 2016 SP1
- Default port: 1433
- Driver class: `com.microsoft.sqlserver.jdbc.SQLServerDriver`
- Driver URL: `jdbc:sqlserver://<your_db_host>[\<named_instance>]:<your_db_port>;databaseName=<your_db_name>,valid-connection-checker-class-name=org.jboss.jca.adapters.jdbc.extensions.mssql.MSSQLValidConnectionChecker`

For example `./subsystem=datasources/data-source=UnicaPlatformDS:add(jndi-name="java:/UnicaPlatformDS",connection-url="jdbc:sqlserver://localhost:1433;databaseName=plat11",driver-name=sql,user-name=sa,password=test1234,valid-connection-checker-class-name="org.jboss.jca.adapters.jdbc.extensions.mssql.MSSQLValidConnectionChecker")`

### Oracle

- Driver: Oracle JDBC Driver
- Default port: 1521
- Driver class: `oracle.jdbc.OracleDriver`
- Driver URL: `jdbc:oracle:thin:@<your_db_host>:<your_db_port>:<your_db_service_name>`

For example

### 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 user = `password=<your_db_password>`
- Driver module `xa-datasource-class= org.mariadb.jdbc.MySQLDataSource`

### OneDB

- Database Driver: `onedb-jdbc-complete-8.0.0-SNAPSHOT.jre8.jar`
- Database Port :20195
- Driver: Informix JDBC Driver
- Driver class: `com.informix.jdbc.IfxDriver`
- Driver URL: `jdbc:informix-sqli://<your_db_host>/<your_db_name>; INFORMIXSERVER=<your_db_servername>;`

## Tomcat

Specify the native library path of the database driver JAR file on your server. For example: db2jcc4.jar/ojdbc7.jar/sqljdbc4.jar.



**Note:** If you want to encrypt the password then run the utility `encryptTomcatDBPasswords.sh` from `<JOURNEY_HOME>/tools/bin`. To know more about utility, visit Unica Platform Admin Guide > Chapter 20. Unica Platform utilities and SQL scripts > Unica Journey Utilities > `encryptTomcatDBPassword`.

Use the following values if your application server is Tomcat:

### SQLServer

- Database Driver: Microsoft MS SQL Server Driver (Type 4) Versions: 2012, 2012 SP1 and SP3, 2014, 2014 SP1, 2016 SP1
- Default port: 1433
- Driver class: `com.microsoft.sqlserver.jdbc.SQLServerDriver`
- Driver type: `javax.sql.DataSource`
- Driver URL: `jdbc:sqlserver://<your_db_host>[\<named_instance>]:<your_db_port>;databaseName=<your_db_name>`

### Oracle

- Driver: Oracle JDBC Driver
- Default port: 1521
- Driver class: `oracle.jdbc.OracleDriver`
- Driver URL: `jdbc:oracle:thin:@<your_db_host>:<your_db_port>:<your_db_service_name>`

### MariaDB

- Driver: MariaDB JDBC Driver
- 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>`

### OneDB

- Database Driver: `onedb-jdbc-complete-8.0.0-SNAPSHOT.jre8.jar`
- Database Port :20195
- Driver: Informix JDBC Driver
- Driver class: `com.informix.jdbc.IfxDriver`
- Driver URL: `jdbc:informix-sqli://<your_db_host>/<your_db_name>; INFORMIXSERVER=<your_db_servername>;`

# Chapter 4. Installing Unica Journey

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

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



**Note:** Unica Journey web application deployment using EAR file in tomcat is not supported.

## Installation files

The installation files are named according to the version of the product and the operating system on which they must be installed, except UNIX™. For UNIX™, different installation files exist for the X Window System mode and the console mode.

### Example

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

**Table 6. Installation files**

Operating system	Installation file
Windows™: GUI and console mode	<p><i>Product_N.N.N.N_win64.exe</i>, where <i>Product</i> is the name of your product, <i>N.N.N.N</i> is the version number of your product, and Windows™ 64-bit is the operating system on which the file must be installed.</p> <p><i>Product_N.N.N.N_win.exe</i>,</p> <p>where <i>Product</i> is the name of your product, <i>N.N.N.N</i> is the version number of your product, and Windows™ 32 is the operating system on which the file must be installed.</p>
LINUX: X Window System mode	<p><i>Product_N.N.N.N_linux.bin</i>, where <i>Product</i> is the name of your product, and <i>N.N.N.N</i> is the version number of your product.</p> <p><i>Product_N.N.N.N_linuxrhel64.bin</i>, where <i>Product</i> is the name of your product, and <i>N.N.N.N</i> is the version number of your product.</p>
LINUX: Console mode	<p><i>Product_N.N.N.N.bin</i>, where <i>Product</i> is the name of your product, and <i>N.N.N.N</i> is the version number of your product. This file can be used for installation on all UNIX™ operating systems.</p>

## Unica Journey components

To use the Unica Journey utilities on additional computers, you must install the utilities and the web application on the additional computers. This is required because the utilities use the jar files in the web application. However, when you install the Unica Journey to use the utilities, you do not have to deploy the Unica Journey again, and you do not have to create additional Unica Journey system tables.

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

**Table 7. Journey components**

Component	Description
Journey Web Application	Journey Web component gives user ability to use to design entry source, data definition and journey flows.
Journey Engine	Journey Engine processes the audience data, sends the communications to touch points and listens and capture the response information.
Kafka Standalone	Journey will be installing Kafka and Zookeeper components along with current installation process.

## Installing Unica Journey using the GUI mode

For Windows™, use the GUI mode to install Unica Journey. For LINUX, use the X Window System mode to install Unica Journey.

### Before you begin



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

Make sure that the Unica installer and the Unica Journey installers are in the same directory on the computer where you want to install Unica Journey.

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

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

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

Table 8. Unica Installer

Window	Description
<b>Introduction</b>	<p>This is the first window of the Unica suite installer. You can open the Unica Journey installation and upgrade guides from this window. You can also see a link for the installation and upgrade guides for the products whose installers are saved in the installation directory.</p> <p>Click <b>Next</b>.</p>
<b>Response Files Destination</b>	<p>Click the <b>Generate Response File</b> check box if you want to generate response files for your product. Response files store the information that is necessary for the installation of your product. You can use response files for an unattended installation of your product, or to get pre-filled answers if you rerun the installer in GUI mode.</p> <p>Click <b>Choose</b> to browse to a location where you want to store the response files.</p> <p>Click <b>Next</b>.</p>
<b>Unica Products</b>	<p>In the <b>Install Set</b> list, select <b>Custom</b> to select the products that you want to install.</p> <p>In the <b>Install Set</b> area, you see all of the products whose installers are in the same directory on your computer.</p> <p>The <b>Description</b> field shows the description of the product that you select in the <b>Install Set</b> area.</p> <p>Click <b>Next</b>.</p>
<b>Installation Directory</b>	<p>In the <b>Specify the installation directory</b> field, click <b>Choose</b> to browse to the directory where you want to install your product.</p> <p>If you want to install the product in the folder where the installers are stored, click <b>Restore Default Folder</b>.</p> <p>Click <b>Next</b>.</p>

Window	Description
<b>Select Application Server</b>	<p>Select Application Server type. If you are installing other products along with Journey in same installation - then you can select application server type where Platform will be deployed.</p> <p>Click <b>Next</b>.</p>
<b>Platform Database Type</b>	<p>Select Oracle or OneDB for Unica Platform database type.</p> <p>Click <b>Next</b>.</p>
<b>Platform Database Connection</b>	<p>Enter the following information about your database:</p> <ul style="list-style-type: none"> <li>◦ Database host name</li> <li>◦ Database port</li> <li>◦ Database name or System ID (SID)</li> <li>◦ Database user name</li> <li>◦ Database password</li> </ul> <p>Click <b>Next</b>.</p>
<b>Platform Database Connection (continued)</b>	<p>Review and confirm the JDBC connection.</p> <p>Click <b>Next</b>. The URL can be customized with additional parameters if needed.</p>
<b>Preinstallation Summary</b>	<p>Review and confirm the values that you added during the installation process.</p> <p>Click <b>Install</b> to start the installation process.</p> <p>The Unica Journey installer opens.</p>

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

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


#### Result


The Unica Platform installation is complete and the Unica Journey installer opens.


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

**Table 9. Unica Journey Installer GUI**



Window	Description
<b>Introduction</b>	<p>This is the first window of the Unica Journey installer. You can open the Unica Journey installation and upgrade guides from this window.</p> <p>Click <b>Next</b>.</p>
<b>Software License Agreement</b>	<p>Carefully read the agreement. Use <b>Print</b> to print the agreement. Click <b>Next</b> after you accept the agreement.</p>
<b>Installation Directory</b>	<p>Click <b>Choose</b> to browse to the directory where you want to install Unica Journey.</p> <p>Click <b>Next</b>.</p>
<b>Components</b>	<p>Select the components that you want to install.</p> <p>When you select the components, the installer displays information about the components.</p> <p>Click <b>Next</b>.</p> <p> <b>Note:</b> You can select any of these components for installation. Unica Journey all three components can be installed on same or different machines.</p> <ul style="list-style-type: none"> <li>◦ Unica Journey Web application</li> <li>◦ Unica Journey Engine</li> <li>◦ Apache Kafka</li> </ul>
<b>Unica Journey Database Setup</b>	<p>Unica Journey database setup is automatic. By default, it runs the SQL with Unicode support.</p> <p>If you select Automatic database setup, select Run Unicode SQL Script if your system tables are configured for Unicode.</p> <p>Click <b>Next</b>.</p>

Window	Description
Unica Journey Database Type	<p>Select the database type from Oracle, SQL. MariaDB or OneDB.</p> <p>Click <b>Next</b>.</p>
Unica Journey Database Connection	<p>Enter the following details for the Journey database:</p> <ul style="list-style-type: none"><li>◦ Database host name</li><li>◦ Database port</li><li>◦ Database system ID (SID)</li><li>◦ Database user name</li><li>◦ Password</li></ul> <p>Click <b>Next</b>.</p>
JDBC Connection	<p>Review and confirm the JDBC connection.</p> <p>Click <b>Next</b>.</p>
Unica Journey Connection Settings	<p>Enter the following connection settings:</p> <ul style="list-style-type: none"><li>◦ Network domain name</li></ul> <div> <b>Note:</b><p>When you add the network domain name, you might see the following message:</p><div>Warning-Server name includes domain name, final URL contains several occurrences of domain name</div><p>Select <b>Modify</b> to change the domain name or click <b>Cancel</b> to cancel the message.</p></div> <ul style="list-style-type: none"><li>◦ Host name</li><li>◦ Port number</li></ul> <p>Select the <b>Use secure connection</b> check box if necessary.</p> <p>Click <b>Next</b>.</p>

Window	Description
<b>Unica Platform Connection Settings</b>	<p>Enter the following connection settings:</p> <ul style="list-style-type: none"> <li>◦ Network domain name</li> </ul> <p> <b>Note:</b></p> <p>When you add the network domain name, you might see the following message:</p> <div style="border: 1px solid #ccc; background-color: #f9f9f9; padding: 5px; margin: 10px 0;"> Warning-Server name includes domain name, final URL contains several occurrences of domain name </div> <p>Select <b>Modify</b> to change the domain name or click <b>Cancel</b> to cancel the message.</p> <ul style="list-style-type: none"> <li>◦ Host name</li> <li>◦ Port number</li> </ul> <p>Select the <b>Use secure connection</b> check box if necessary.</p> <p>Click <b>Next</b>.</p>
<b>Kafka Standalone Server Details</b>	<p>If you are installing Kafka standalone instance along with this instance it will update below details in Kafka configuration.</p> <ul style="list-style-type: none"> <li>◦ Host name: Include the host name of Kafka Standalone server, where Kafka is installed.</li> <li>◦ Port number: Include the port number of Kafka Zookeeper.</li> </ul>
<b>Preinstallation Summary</b>	<p>Review and confirm the values that you added during the installation process.</p> <p>Click <b>Install</b> to start the installation process.</p> <p>The Unica Journey installer opens.</p>
<b>Installation Complete</b>	<p>Click <b>Done</b> to close the Unica Journey installer and go back to the Unica installer.</p>

- 7. In the **Installation Complete** window, click **Done** to exit the Unica Journey installer and go back to the Unica installer.
- 8. Follow the instructions on the Unica installer to finish installing Unica Journey.  
Use the information in the following table to take the appropriate actions on each window in the Unica installer.

**Table 10. HCL Unica Installer GUI**

Window	Description
Deployment EAR file	<p>Specify whether you want to create an enterprise archive (EAR) file to deploy your Unica products.</p> <p>Click <b>Next</b>.</p>
Installation Complete	<p>This window provides the locations of the log files that are created during installation.</p> <p>Click <b>Previous</b> if you want to change any installation details.</p> <p>Click <b>Done</b> to close the Unica installer.</p>

## Installing Unica Journey using the console mode

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

### Before you begin

Before you install Unica Journey, ensure that you have configured the following.

- An application server profile
- A database schema

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

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

- For Windows™, enter the following command:

```
HCL_Unica_installer_12.1.0.3 -i console
```

For example, `HCL_Unica_Installer_12.1.0.3_win.exe -i console`

- For UNIX™, invoke the `HCL_Unica_installer_12.1.0.3.sh` file.

For example: `HCL_Unica_installer_12.1.0.3.sh`

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

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

#### Example

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

- ```
1 [X] Unica Platform
2 [X] Unica Journey
```



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

4. The Unica installer launches the Unica Journey installer during the installation process. Follow the instructions in the command-line prompt window of the Unica Journey installer.
5. After you enter `quit` in the Unica Journey installer command-line prompt window, the window shuts down. Follow the instructions in the command-line prompt window of the Unica installer to complete the installation of Unica Journey.



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

## Installing Unica Journey silently

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

### Before you begin

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

- An application server profile
- A database schema

### About this task

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

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



**Important:** For security reasons, the installer does not save database passwords in the response files.

When you create response files, you must edit each response file to enter database passwords. Open each response file and search for `PASSWORD` to find where you must edit the response file.

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

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

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

Use the following command for Windows™:

- `HCL_Unica_installer_12.1.0.3 -i silent`

#### Example

For example:

`HCL_Unica_installer_12.1.0.3_win.exe -i silent`

Use the following command for Linux™:

- `HCL_Unica_installer_12.1.0.3_operating_system.bin -i silent`

#### Example

For example:

`HCL_Unica_installer_12.1.0.3_linux.bin -i silent`

## Sample response files

You must create response files to set up a silent installation of Unica Journey. 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 11. Description of sample response files**

| Sample response file                                                                  | Description                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <code>installer.properties</code>                                                     | The sample response file for the Unica suite installer.                                                                                                                                                                                                                                                                                                                                             |
| <code>installer_product_initials<br/>and product version<br/>number.properties</code> | <p>The sample response file for the Unica Journey installer.</p> <p>For example, <code>installer_ujn.n.n.n.properties</code> is the response file of the Unica Journey installer, where <i>n.n.n.n</i> is the version number.</p> <p>For example, <code>installer_ujn.n.n.n.properties</code> is the response file of the Unica Platform installer, where <i>n.n.n.n</i> is the version number.</p> |

# Chapter 5. Deploying Unica Journey application

You can deploy the Unica Journey web application by using a WAR file or you can deploy the individual WAR files.

To deploy Unica Journey, follow the guidelines in this section and then start the Unica Journey server.

Unica Journey web application needs to be deployed in separate tomcat instance. It must not be included in Unica Platform (unica.war) deployment application server profile (tomcat instance)

## Deploying Unica Journey on Apache Tomcat application server

### About this task

You can deploy or run the following Journey components.

- Journey Web -It is required to be deployed in Tomcat.
- Journey Engine - It is run as a standalone application.
- Kafka Server - It is run as a standalone application (Kafka server and Zookeeper).

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

- Unica products customize the JVM used by Tomcat. You must create a new tomcat instance dedicated for Unica Journey web application deployment.
- If you are deploying in a production environment, set the JVM memory heap size parameters to at least 1024 by adding the following line to the setenv.bat/sh e.g : set CATALINA\_OPTS=%CATALINA\_OPTS% -Xms1024m -Xmx1024m

```
-XX:MaxPermSize=512m.
```

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

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

```
set JAVA_OPTS=%JAVA_OPTS% -DUNICA_PLATFORM_CACHE_ENABLED=true -Dclient.encoding.override=UTF-8.
```

- You must add Unica Journey deployment XML file with name journey.xml along with the path of journey.war to the Unica Journey Tomcat instance. For example:

```
<?xml version="1.0"?>
<Context docBase="<Journey_HOME>/Web/journey.war">
  <Environment name="journey.web.home" value="<Journey_HOME>/Web/" type="java.lang.String"/>
  <Resource name="JourneyDS" type="javax.sql.DataSource"
factory="com.hcl.journey.tomcat.util.JourneyTomcatDSFactory"
maxActive="30" maxIdle="10" maxWait="10000"
username="<USERNAME>" password="<PASSWORD>" driverClassName="DRIVER_CLASS_NAME"
url="<DRIVER_URL>"/>
<Resource name="JourneyReportDS" type="javax.sql.DataSource"
factory="com.hcl.journey.tomcat.util.JourneyTomcatDSFactory"
maxActive="30" maxIdle="10" maxWait="10000"
```



```
username="<USERNAME>" password="<PASSWORD>" driverClassName="DRIVER_CLASS_NAME"
url="<DRIVER_URL>" />
</Context>
```

**Note:**

- docBase = path should point to journey web war
- {{You can encrypt DB password using }} `JourneyEncryptionUtility.sh` located in `<Journey_Install_Path>/tools`

Important Tips for creating DataSource connection:

**Oracle:**

DRIVER\_URL : jdbc:oracle:thin:@<DB\_HOST\_NAME>:<DB\_PORT>:<SID\_NAME>

DRIVER\_CLASS\_NAME : oracle.jdbc.OracleDriver

**MariaDB:**

DRIVER\_URL : jdbc:mariadb://<DB\_HOST\_NAME>:<DB\_PORT>/<DB\_USER\_NAME>

DRIVER\_CLASS\_NAME : org.mariadb.jdbc.Driver

**SQL Server**

DRIVER\_URL : jdbc:sqlserver://<DB\_HOST\_NAME>:<DB\_PORT>;databaseName=<DB\_USER\_NAME>

DRIVER\_CLASS\_NAME : com.microsoft.sqlserver.jdbc.SQLServerDriver

**OneDB**

DRIVER\_URL : jdbc:informix-sqli://<DB\_HOST\_NAME>:<DB\_PORT>/  
<DB\_SCHEMA\_NAME>;informixserver=<INFORMIX\_SERVER\_NAME>

DRIVER\_CLASS\_NAME : com.informix.jdbc.IfxDriver

- Restart the Tomcat application server.

## Guidelines for deploying Unica Journey on WebSphere

Version V12.1.0.4 onwards we can deploy Unica Journey on WebSphere. You must follow a set of guidelines when you deploy Unica Journey on WebSphere.

Make sure that the version of WebSphere® meets the requirements as described in the Recommended Software Environments and Minimum System Requirements document, including fix packs (if necessary). Following are the guidelines for deploying Unica Journey on WebSphere®:

- Deploy the journey.war File as an enterprise application. When you deploy the journey.war file, ensure that the JDK source level of the JSP compiler is set to Java 18 for SDK 1.8 and the JSP pages are precompiled as per the following information:
  - In the form where you browse and select the WAR file, select **Show me all installation options and parameters**, so that the **Select Installation Options** wizard runs.
  - In step 1 of the **Select Installation Options** wizard, select **Precompile JavaServer Page files**.
  - In step 3 of the **Select Installation Options** wizard, ensure that the **JDK Source Level** is set to 18 for SDK 1.8.
  - In step 8 of the **Select Installation Options** wizard, select **JourneyDS** as the matching Target Resource.
  - In step 10 of the **Select Installation Options** wizard, the context root must be set to `/journey`, (all lower case).
    - Click on Finish and wait for the Application to be installed.
    - In WebSphere Enterprise Applications, select **Your Application ex:** journey.war
- In the **Web Container, Settings > Web Container > Session Management** section of the server enable cookies. Specify a different session cookie name for each application that is deployed. Use one of the following procedures to specify a cookie name:
  - Select the **Override session management** check box under **Session Management**. If you deployed separate WAR files for your Unica products, in the WebSphere console under **Applications > Enterprise Applications > [deployed\_application] > Session Management > Enable Cookies > Cookie Name** section of the server, then specify a unique session cookie name.
  - If your installation must support non-ASCII characters, for example for Portuguese or for locales that require multi-byte characters, add the following arguments to **Generic JVM Arguments** at the server level:

`-Dfile.encoding=UTF-8`

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

In case you are deploying a non-production setup, add

```
-DENABLE_NON_PROD_MODE=true
```

Add the **Journey Web Home** path variable like below where we used to put properties & config folder:

`-Djourney.web.home=<Journeys_Home>/Web/`

In case of a production setup, this Java option must be removed or set to `false`.

Navigation tip: Select **Servers > Application Servers > Java and Process Management > Process Definition > Java Virtual Machine > Generic JVM Arguments**.

Additional Details:

- In the **Applications > Enterprise Applications** section of the server, select the WAR file that you deployed, then select **Class loading and update detection** and specify the following properties.

- In the **Applications > Enterprise Applications** section of the server, select the EAR file or WAR file that you deployed, then select **Class loading and update detection** and specify the following properties.
  - If you are deploying a WAR file:
    - For **Class loader order**, select **Classes loaded with local class loader first (parent last)**.
    - For **WAR class loader policy**, select **Single class loader for application**.
- In WebSphere Enterprise Applications, select **Your Application > Manage Modules > Your Application > Class Loader Order > Classes loaded with local class loader first (parent last)**.
- The recommended minimum heap size for the basic functioning of the application is 512 and the recommended maximum heap size is 1024.

Complete the following tasks to specify the heap size:

1. In WebSphere® Enterprise Applications, select **Servers > WebSphere application servers > server1 > Server Infrastructure > Java and Process Management > Process definition > Java Virtual Machine**.
2. Set the initial heap size to 512.
3. Set the maximum heap size to 1024

See the WebSphere® documentation for more information about sizing.

Add a specific web container custom property:

1. Click Servers > Server Types > Application Servers, and select the server initially created.
2. Click Web Container Settings > Web container.
3. Click Custom properties.
4. Click New.
5. Enter the property values:

Property	Value
Name	com.ibm.ws.webcontainer.invokeFlushAfterService
Value	False
Description	See <a href="http://www.ibm.com/support/docview.wss?uid=swg1PM50111">http://www.ibm.com/support/docview.wss?uid=swg1PM50111</a>

6. Click OK.
7. Click Save.



**Note:** For deployment on WebSphere you need to import the HTTPS certificates. As Journey is integrated with Link and Deliver, if these applications are deployed on HTTPS then you need to import HTTPS certificates in WebSphere application server, otherwise journey will not be able to access the Link and Deliver.



In case if need how to import SSL certificate then following URL will help: [https://www.ibm.com/support/knowledgecenter/en/SSEKCU\\_1.1.2.1/com.ibm.psc.doc/rs\\_original/installer/rs\\_t\\_import\\_client\\_cert\\_was.html](https://www.ibm.com/support/knowledgecenter/en/SSEKCU_1.1.2.1/com.ibm.psc.doc/rs_original/installer/rs_t_import_client_cert_was.html)



**Note:** If you are using OneDB database with WebSphere and OneDB has DB\_LOCALE set to en\_us.57372 then in WebSphere console also set the datasource Custom properties locale to ifxDB\_LOCALE = "en\_us.57372" and ifxCLIENT\_LOCALE="en\_us.57372".

- Restart WebSphere



**Note:** Once platform starts successfully then we need to start Journey application manually in Websphere server.

- Start your deployment for journey.war (Journey Application).

## Guidelines for deploying Unica Journey on JBoss

V12.1 Fixpack 4 onwards we can deploy Unica Journey on JBoss. You must follow a set of guidelines when you deploy Unica Journey on JBoss.

Make sure that the version of JBoss meets the requirements that are described in the HCL Enterprise Products Recommended Software Environments and Minimum System Requirements document. Use the following guidelines when you deploy Unica Journey on JBoss:

Use the following guidelines when you deploy the Unica Journey products on any supported version of JBoss:

1. Deploy the HCL EAR file or the unica.war file as an enterprise application.

For example: deploy <Journey\_Install>\unica.war

See <https://docs.jboss.org/jbossweb/3.0.x/deployer-howto.html> for instructions on Deploying Web Server Application in JBoss.

2. Complete the following tasks if your installation must support non-ASCII characters, for example for Portuguese or for locales that require multi-byte characters:

- a. Edit the `standalone.conf` script in the bin directory under your JBOSS /bin directory to add

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

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

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

```
to JAVA_VENDOR.
```

In case you are deploying a non-production setup, add

```
-DENABLE_NON_PROD_MODE=true
```

In case of a production setup, this Java option must be removed or set to `false`.

b. Restart JBoss server.

3. To ensure that the Scheduler works correctly, complete the following substeps.

- Take a backup of `<JBOSS_HOME>/standalone/configuration/standalone.xml` file.
- In `<JBOSS_HOME>/standalone/configuration/standalone.xml`, search the module name for driver.

```
<driver name="oracledriver" module="oracle.jdbc">
  <xa-datasource-class>oracle.jdbc.OracleDriver</xa-datasource-class>
</driver>
```

- Installer will not update the datasources, so you need to manually configure the datasources.
- Add the following statement underneath `<subsystem xmlns="urn:jboss:domain:ee:4.0">` to make the module name global.

```
<global-modules>
  <module name="oracle.jdbc"/>
</global-modules>
```

- Edit the `standalone.conf` script in the bin directory under your JBOSS `/bin` directory to add  
`Dlog4j.configuration=file:///<Drive_loc>\Campaign_git_repo\AffiniumWebApps\Campaign\conf\campaign_log4j.properties`
- Restart JBOSS server.
- The log file name for log4j 1.x related to Journey logging in Campaign is `"log4j.appender.FILE.File=${CAMPAIGN_HOME}/logs/campaignweb_unicacommon_1x.log"` in `campaign_log4j.properties`.

# Chapter 6. Configuring Unica Journey after deployment

After you deploy Unica Journey, you must set up the Unica Journey system user, set Unica Journey configuration properties, and verify the Unica Journey installation.

## Unica Journey configuration properties

The Unica Journey has additional properties on the Configuration page that perform important functions that you must specify. See the *Unica Journey User Guide* to learn more about what they do and how to set them.

### Setting the Link and Deliver configuration properties

You can configure Unica Journey to connect to the Unica Link by using Link Configuration under the path `Affinium|Journey|Link_Configurations`.

Set the following Unica Link configuration properties under the **Journey > Link\_Configurations** category manually:

- **Link\_URL**: Specify Unica Link design server URL. Ensure that it does not have the trailing /. Example: `http://<FQDN>:<PORT>`
- **Link\_Data\_Source\_User**: Specify the Platform user which stores the credentials to Unica Link design server.
- **Link\_Data\_Source\_Name**: Specify the datasource name which has the credentials information.

Also, You can configure Unica Journey to connect to the Unica Deliver by using Deliver Configuration under the path `Affinium|Journey|Deliver_Configurations`.

Set the following Unica Link configuration properties under the **Journey > Deliver\_Configurations** category manually:

- **Deliver\_URL**: Specify the Unica Deliver TMS server URL. For example: `http://<UNICA_DELIVER_HOST>/delivertms/services/TMS`.
- **Deliver\_Partition**: Specify the partition name in Campaign where Deliver TMS is configured.



**Note:** Make sure you entered correct partition name in Deliver\_Partition.

You can use the following configurations to enable Unica Link and Unica Deliver integrations:

You can navigate under Platform configuration settings:

Settings for 'Journey' (Affinium|Journey)

**Link\_Configured** - This configuration defines whether Unica Link is integrated with Unica Journey (for email/SMS/CRM channels).

Possible values - Yes/ No

Yes - Enables Unica Link integration with Journey

**Deliver\_Configured** - This configuration defines whether Unica Deliver is integrated with Unica Journey for email.

Possible values - Yes/ No

Yes - Enables Unica Deliver integration with Journey

You are required to restart Journey web and engine components.

**Platform\_Configured** - This configuration defines whether Unica Platform is integrated with Unica Journey

Following Platform APIs should be disabled for integrating Journey:

Path = Configuration/Unica Platform/Security/API Management/Unica Platform

- Authentication = Disable all
- Datasource = Disable all
- User details = Disable all
- Get Configuration Property = Disable all
- Configuration = Disable all
- Login = Disable all
- User roles permission = Disable all
- User details = Disable all
- License = Disable all
- Get installed applications = Disable all



**Note:** After applying these configuration changes, restart the Platform application.



**Note:** The token validity of platform should be increased manually to 1800 seconds (30 minutes) because the default token validity of platform is 15 seconds. You will find the Path for increase token validity for platform: **Platform > Settings > Configuration > General > Miscellaneous > Token lifetime**

#### API settings to access Journey in HTTPS:

- Settings for 'Authentication' (Affinium|suite|security|apiSecurity|manager|managerAuthentication)
  - API URI - /authentication/login
  - Block API access - Disabled
  - Secure API access over HTTPS - Enabled
  - Require authentication for API access - Disabled
- Settings for 'User' (Affinium|suite|security|apiSecurity|manager|managerUser)
  - API URI - /user/partitions/\*
  - Block API access - Disabled
  - Secure API access over HTTPS - Disabled
  - Require authentication for API access - Enabled
- Settings for 'Policy' (Affinium|suite|security|apiSecurity|manager|managerPolicy)

- API URI - /policy/partitions/\*
- Block API access - Disabled
- Secure API access over HTTPS - Disabled
- Require authentication for API access - Enabled
- Settings for 'Configuration' (Affinium|suite|security|apiSecurity|manager|Configuration)
  - API URI - /datasource/config
  - Block API access - Disabled
  - Secure API access over HTTPS - Enabled
  - Require authentication for API access - Enabled
- Settings for 'Datasource' (Affinium|suite|security|apiSecurity|manager|Datasource)
  - API URI - /datasource
  - Block API access - Disabled
  - Secure API access over HTTPS - Enabled
  - Require authentication for API access - Disabled
- Settings for 'Login' (Affinium|suite|security|apiSecurity|manager|Login)
  - API URI - /authentication/v1/login
  - Block API access - Disabled
  - Secure API access over HTTPS - Enabled
  - Require authentication for API access - Disabled
- Settings for 'User roles permissions' (Affinium|suite|security|apiSecurity|manager|managerGetRolesPermission)
  - API URI - /policy/roles-permissions
  - Block API access - Disabled
  - Secure API access over HTTPS - Disabled
  - Require authentication for API access - Enabled
- Settings for 'User details' (Affinium|suite|security|apiSecurity|manager|managerGetUserDetails)
  - API URI - /user/user-details
  - Block API access - Disabled
  - Secure API access over HTTPS - Enabled
  - Require authentication for API access - Enabled
- Settings for 'Get configuration property' (Affinium|suite|security|apiSecurity|manager|managerGetConfigProperty)
  - API URI - /configuration/get
  - Block API access - Disabled
  - Secure API access over HTTPS - Enabled
  - Require authentication for API access - Disabled
- Settings for 'License' (Affinium|suite|security|apiSecurity|manager|managerLicense)
  - API URI - /license/\*
  - Block API access - Disabled
  - Secure API access over HTTPS - Disabled
  - Require authentication for API access - Disabled

## How to generate encrypted password



You are required to generate encrypted passwords for each plain test password. Run encryption tool multiple times to generate encrypted passwords.

1. Navigate to `<JOURNEY_WEB_HOME>/tools/`.
2. Set `JAVA_HOME` in `JourneyEncryptionUtility`.

```
JAVA_HOME=<UNICA_HOME>/jre export JAVA_HOME
```

3. If you are using Linux operating system, convert `JourneyEncryptionUtility` to Unix mode using the following command:

```
dos2unix JourneyEncryptionUtility
```

4. Run `JourneyEncryptionUtility` with the following command:

```
JourneyEncryptionUtility <PASSWORD TEXT>
```

5. `JourneyEncryptionUtility` prompts the password in encrypted mode on the console output.

Use this password in the `application.properties` and other places before starting applications. Run this tool multiple times to generate different encrypted passwords. In cases where database password is expired or changed you require to use this utility to create new encrypted password.

## Update the Journey Web and Journey Engine application properties

You are required to set passwords in encrypted format in `application.properties` files, This is a manual process. The following procedure provide the following steps to perform updates.

### Update journey.xml used in Tomcat deployment

Journey deployment `xml` file needs to have encrypted password for Journey system tables. You can encrypt the password using `JourneyEncryptionUtility` and specify the `journey.xml` file for field "password".

### Verify and update the path for Update Journey Web - `application.properties` file

Journey Web component reads configurations from `application.properties` file. You are required to complete the following steps to perform the updates in `application.properties`.

1. Update encrypted password for following properties:

Run Unica Platform's `clientDetailsUtility` to generate client details for Journey as below. On Linux system, use `.sh` file instead of `.bat`.

- a. Navigate to `PLATFORM_HOME\tools\bin` directory. If you have Platform installed on different machine, you can execute this command on the machine where Platform is installed.
- b. Execute command as `- clientDetails -a Journey`. This generates the `ClientID` and `ClientSecret`. The following is an example.

```
C:\Unica\Platform\tools\bin>clientDetails.bat -a Journey
```

- c. Add the `ClientID` and `ClientSecret` in Journey Web application properties.

```
C:\Unica\Platform\tools\bin>echo off
```

```
WARN com.unica.manager.configuration.ConfigurationManager - Local cache is turned off. Default
behavior implies based on Hibernate cache parameter value
```

```
ClientID: 885345
```

```
ClientSecret: IfnKG2eqniVnaT8
```

```
AppName: Journey
```

```
ClientSecret and ClientId generated successfully!!
```

- d. Encrypt the ClientSecret using Journeys password encryption utility, JourneyEncryptionUtility. It should not be blank.
- e. Use generated ClientID and ClientSecret in Journey Web's application.properties:

```
platform.clientId=ClientID generated in above step.
```

```
platform.clientSecret= encrypted ClientSecret in above step.
```

- f. Below mentioned properties are used to start Platform and Journey parallelly. Platform must be started before journey start; some application server takes more time than usual to start the platform. These properties are used while starting journey, it will try to connect platform in specified retry number and time interval.

- `platform.connect.retry.number`: number of retries to connect platform
- `platform.connect.retry.interval`: retry interval time for connect to platform in milliseconds

Values of these properties are different based on which application server is used. For Tomcat default values will work and for Websphere Application Server (WAS) need to increase time interval between retries.

### Update Journey Engine - application.properties file

1. Generate encrypted password for the following properties and mention in the application.properties file:

- `journey.datasource.password`
- `journey.report.datasource.password`

2. If you are using Windows, perform the following sub-steps.

- a. Modify `JOURNEY_HOME/KafkaStandalone/config/zookeeper.properties` under to update "dataDir" parameter path to include double forward slash (\\) instead of back slash (/).
- b. Modify `JOURNEY_HOME/KafkaStandalone/config/server.properties` to update "log.dirs" parameter path to include double forward slash (\\) instead of back slash (/).



**Note:** When you upgrade from version 12.1.0.3 to 12.1.0.4, then application.properties for Journey Engine and Web should be configured again. Example: the below mentioned properties should be set manually:



- `spring.entity.files.upload.defaultPath=C:\\wasfp4MsSql\\Journeys\\Files\\`
- `spring.ignite.storage.path=C:\\wasfp4MsSql\\Journeys\\Web\\ignite`

Journey engine properties file changes -

- `journey.datasource.password = <encrypted pwd>`
- `journey.report.datasource.password= <encrypted pwd>`

## Starting and Verifying Unica Journey installation

If you performed all of the steps to install and configure Unica Journey, deploy the Unica Journey web application, and configure Unica Journey after deployment, you are ready to verify your installation.

### Before you begin

#### Prerequisites for starting Journey application

Prerequisites to start Journey Web or Engine application:

- Unica Platform must be started.
- Zookeeper server is up and running.
- Kafka server is up and running.

### Starting and Verifying Unica Journey

Unica Journey web application which is deployed in Tomcat application server is required to be started by starting the Tomcat instance.

#### Starting Unica Journey Engine/Server

- Unica Journey Engine application is a standalone application and that can be started as below.
  - Navigate to `JOURNEY_HOME/Engine` directory.
  - Run Engine application by running the following command: `java -jar journeyEngine.jar`. You can optionally write script to start this as a service.

#### Starting Kafka server and Zookeeper

You can use the following commands to start Kafka server and Zookeeper server.

- Navigate to `JOURNEY_HOME/KafkaStandalone/bin` (for Linux)
- Navigate to `JOURNEY_HOME/KafkaStandalone/bin/windows` (for Windows)

Execute the following command to start Zookeeper first (Zookeeper needs to be up and running while you start stop Kafka server).

```
zookeeper-server-start <PATH TO ZOOKEEPER CONF FILE>
```

For example: `zookeeper-server-start JOURNEY_HOME/KafkaStandalone/config/zookeeper.properties`

`kafka-server-start <PATH TO SERVER CONF FILE>`

For example: `kafka-server-start JOURNEY_HOME/KafkaStandalone/config/server.properties`

## Verifying Journey Installation

If you have not already done, log in to Unica as a user that exists in the Unica Platform Administrators role (such as `asm_admin`). You require to define the user roles and permissions for the Unica Journey user by navigating to **Settings > User Roles and Permissions**. Under User Roles and Permissions, you must assign roles and permissions for Unica Journey application. You cannot assign new user roles and work with system provided user roles - JourneyAdmin and JourneyUser. You can review and edit the roles these two user roles can perform. Once you define user roles and permissions for JourneyAdmin and JourneyUser, you can assign these roles to any Platform user which you require to provide access in Journey application to different application functionalities.

## Setting properties for integration with Unica products

Unica Journey integrates with various applications.

See the documentation map in below tables to get more information on Unica Journey integration with other Unica suite products.

### Installing and Configuring Unica Link

Task	Documentation
Installation and configuration of Unica Link	<i>Unica Link V12.1 Installation Guide</i>
Installing Unica Link connector app for Journey	<i>Unica Link V12.1 Installation Guide</i>
Installing Unica Link connector – MailChimp	<i>Unica Link Mailchimp Connector User Guide</i>
Installing Unica Link connector – Mandrill	<i>Unica Link Mandrill Connector User Guide</i>
Installing Unica Link connector – Twilio	<i>Unica Link Twilio Connector User Guide</i>
Installing Unica Link connector – Salesforce	<i>Unica Link Salesforce Connector User Guide</i>

### Integrate Unica Campaign with other HCL products

Task	Documentation
------	---------------

Integration of Unica Campaign and Unica Journey	<i>Unica Campaign Administration Guide and Unica Campaign User Guide</i>
Integration of Unica Campaign and Unica Interact	<i>Unica Interact Administration Guide</i>
Integration of Unica Deliver with Unica Journey	<i>Unica Journey User Guide</i>

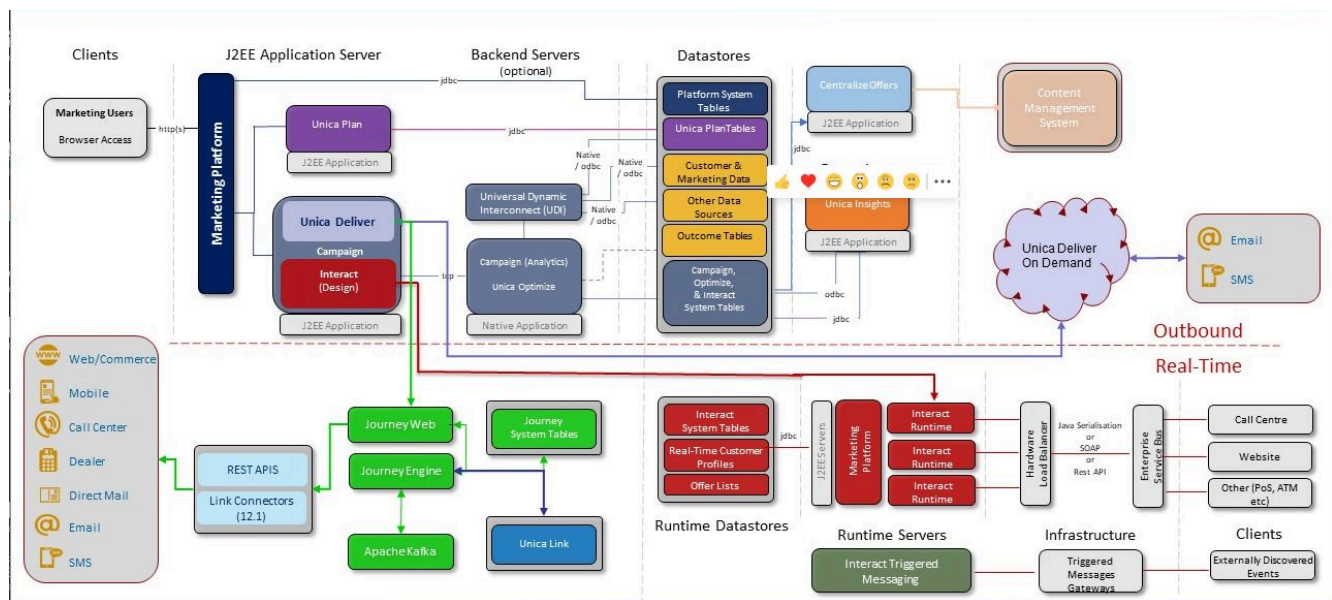
# Chapter 7. Deployment Diagram

Please find below Unica applications deployment diagram including Unica Journey. Unica Journey needs to be installed on top of Unica Platform being used for other products in Unica suite.

Unica Journey Web and Engine components can be deployed on the same or different machines. Unica Journey product has below components:

1. Unica Journey Web
2. Unica Journey Engine
3. Kafka Instance being used for underlying communications. Kafka instance has kafka server and zookeeper

Currently Journey Web and Journey Engine are supported as standalone installations. Please reach out to HCL Support Team if you need to deploy them in cluster.



## Chapter 8. Uninstalling Unica Journey

Run the Unica Journey uninstaller to uninstall Unica Journey. When you run the 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. Stop the processes that are related to Unica Journey before uninstallation.

### About this task

When you install Unica products, an uninstaller is included in the `Uninstall_Product` directory, where *Product* is the name of your product. On Windows™, an entry is also added to the **Add or Remove Programs** list in the Control Panel.

If you manually remove the files in your installation directory instead of running the uninstaller, the result might be an incomplete installation if you later reinstall 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.



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