

IBM Interact
Version 9 Release 0
January 31, 2013

Installation Guide



Note

Before using this information and the product it supports, read the information in "Notices" on page 65.

This edition applies to version 8, release 6, modification 0 of IBM Interact and to all subsequent releases and modifications until otherwise indicated in new editions.

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Chapter 1. Preparing to install IBM

The installation process involves working with a number of software and hardware elements, including some that IBM® does not provide. The IBM documentation provides guidance for installing, configuring, and upgrading the IBM EMM product. For information about working with systems that IBM does not provide, see the documentation for those products.

Before you begin to install the IBM EMM software, plan your installation, including both your business objectives and the hardware and software environment that is required to support them.

Interact basic installation checklist

This section provides a summarized, high-level overview of the steps required to perform a basic installation of Interact. Each of the steps listed here is explained in more detail elsewhere in this documentation, as indicated.

Prepare data sources

1. “Step: Create databases or schemas” on page 7
Work with a database administrator to create the databases or schemas for the Interact runtime and design time system tables.
2. “Step: Create the ODBC or native connections on the Campaign machine” on page 8
If necessary, create the ODBC or native connections to the database that holds the design environment test run tables.
3. “Step: Configure the web application server for your JDBC driver” on page 8
Add the database drivers to the classpath of the web application servers where the design time and runtime components are installed.
4. “Step: Create JDBC connections in the web application server” on page 9
Create JDBC connections to the Interact, Campaign, and Marketing Platform system tables, using the required and recommended JNDI names.

Install IBM Interact

1. Chapter 3, “Step: Obtain the IBM installers,” on page 15
Download or locate the media containing the IBM , Interact, and Interact report package installers.
2. “Information required to install all IBM EMM products” on page 20
Gather the required database and web application server information.
3. “Step: Run the IBM EMM installer” on page 21
With the Marketing Platform installed, install the Interact components.

Configure IBM Interact before deployment

1. “Step: Create and populate the Interact system tables” on page 25
Use the provided SQL scripts to create and populate the Interact design time and runtime system tables.
2. “Step: Register Interact manually, if necessary” on page 29

If the installer was unable to register IBM Interact, use Marketing Platform utilities to register manually.

Deploy IBM Interact

1. Chapter 5, “Step: Deploy IBM Interact,” on page 35
Follow the deployment guidelines to deploy the Interact runtime component (the design time component is deployed when Campaign is deployed).

Configure IBM Interact after deployment

1. “Step: Create the Interact system users” on page 42
Set up system users to access the runtime and design environments.
2. “Steps: Set Interact configuration properties” on page 39
Set the required database properties to configure the design and runtime environments on the Settings > Configuration page.
3. “Step: Verify your Interact installation” on page 44
Log in to Campaign to verify the design environment, and access the runtime URL provided in this guide to verify the runtime environment.

Installing Interact with other system components

The following diagram provides an overview of where to install IBM applications. The diagram shows all the products, which are not all required for Interact.

This setup represents a basic installation. You might require a more complex, distributed installation to meet your security and performance requirements.

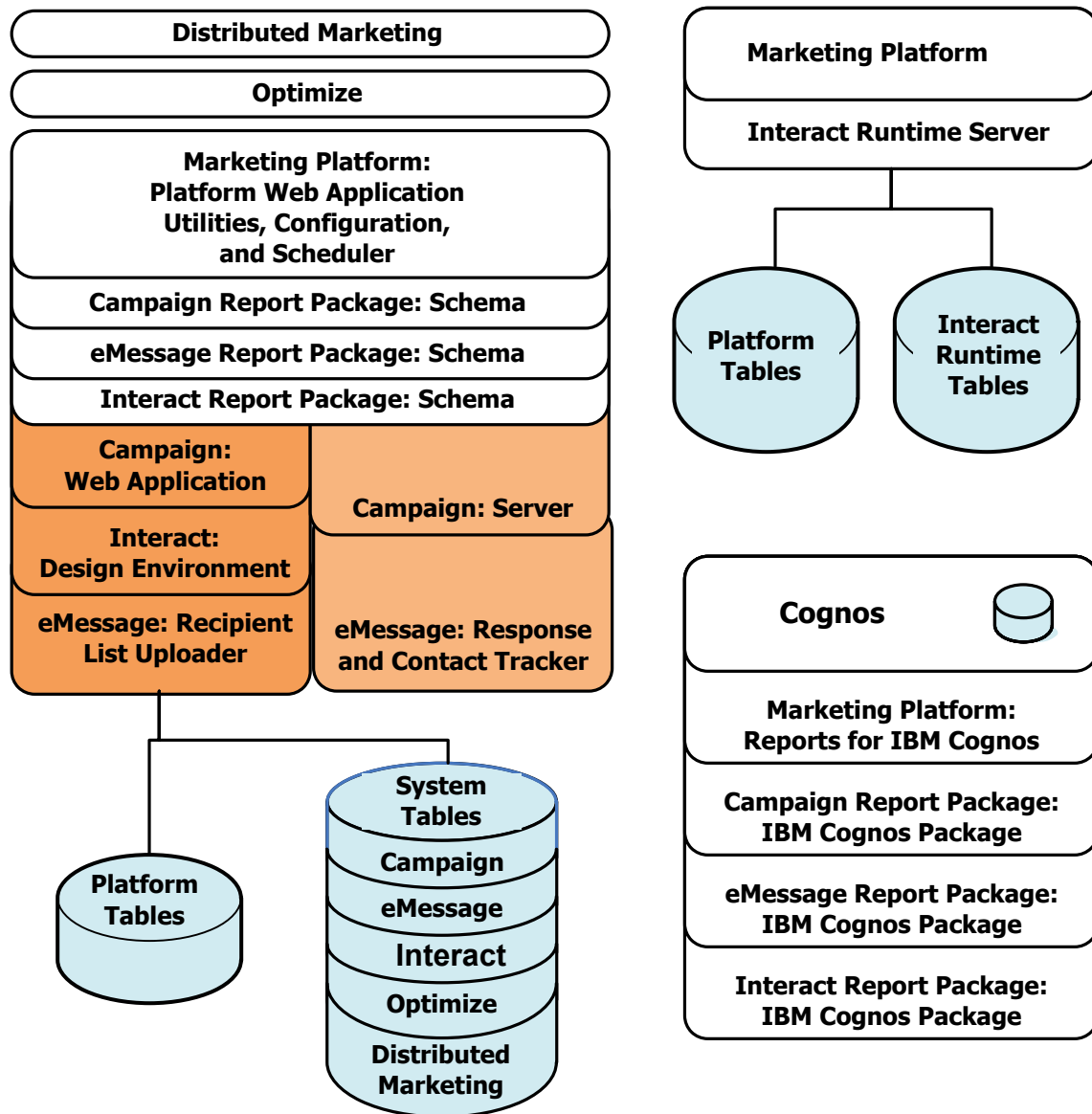


Figure 1. IBM EMM components

Basic installation of Interact

Interact is a member of the Campaign family of applications and has two components you must install, the design environment and the runtime environment.

Before you can install the Interact design environment, you must install and configure Campaign and an associated instance of Marketing Platform.

Before you can install a Interact runtime environment, you must install a separate instance of Marketing Platform. A runtime environment must have an instance of Marketing Platform and at least one instance of the Interact runtime server. You can configure multiple instances of the Interact runtime server to work in the same runtime environment.

The instructions in this guide are designed to enable you to successfully perform a basic installation of Interact. Basic installation is a necessary step, but it is not the end of the installation process. Interact typically requires additional configuration steps to prepare for use in achieving your business objectives.

IBM defines a basic installation as follows.

- All components of the product are installed.
- A system user is configured for the design environment, with administrator-level access to the Campaign system tables.
- A system user is configured for the runtime environment.

You can find information about advanced configurations as shown in the following table.

Topic	Guide
Customizing IBM EMM reporting schemas and sample reports	<i>The IBM Marketing Platform Administrator's Guide and the IBM Interact Administrator's Guide</i>
Configuring use of non-ASCII data or non-US locales	<i>IBM Campaign Administrator's Guide</i>
Configuring use of multiple languages and locales	<i>IBM Campaign Administrator's Guide</i>
Integrating with LDAP and web access control systems	<i>IBM Marketing Platform Administrator's Guide</i>
Configuring SSL	<i>IBM Marketing Platform Administrator's Guide</i>

Prerequisites

The following are prerequisites for installing IBM EMM products.

System requirements

For detailed system requirements, see the *Recommended Software Environments and Minimum System Requirements* guide for the IBM EMM products you plan to install.

Java™ Virtual Machine (JVM) requirements

Some IBM EMM applications within a suite must be deployed on a dedicated Java Virtual Machine (JVM). Some IBM EMM products require customized JVM settings. If you encounter JVM-related errors, you may need to create a WebLogic or WebSphere® domain dedicated to IBM EMM products.

For performance reasons, however, you should have a dedicated JVM for each Interact runtime.

Network domain requirement

IBM products that are installed as a Suite must be installed on the same network domain, to comply with browser restrictions designed to limit cross-site scripting security risks.

IBM Marketing Platform requirement

Before you install any IBM EMM products, the Marketing Platform must be fully installed and deployed, so that the products you install can register their configuration properties and security roles, and you can set values for configuration properties on the Marketing Platform Configuration page.

In general, for each group of products that you plan to have work together, you need to install the Marketing Platform only once. However, for Interact, the best practice is for each production Interact server group have its own installation of Marketing Platform.

IBM Campaign requirement

You must install Campaign before you install any of the following Campaign-family products that depend on it: Interact Design Time, Contact Optimization, Distributed Marketing, and eMessage.

Knowledge requirement

To install IBM EMM products, you must possess or work with people who possess a thorough knowledge of the environment in which the products are installed. This knowledge includes the operating systems, databases, and web application servers.

Client machines

Client machines must meet the following configuration requirements.

- The browser should not cache pages. In Internet Explorer, select **Tools > Internet Options > General > Browsing History > Settings** and choose the option that causes the browser to check for a newer version of the page on each visit.
- If software to block pop-up ad windows is installed on the client machine, Campaign might not function properly. For best results, disable the software to block pop-up ad windows while running Campaign.

Access permissions

Verify that your network permissions allow you to perform the procedures in this guide, and that you have logins with appropriate permissions.

Appropriate permissions include:

- The administrative password for your web application server.
- Administration access for all necessary databases.
- 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/execute permissions to run the installer.
- The operating system account that you use to run the web application server and IBM EMM components must have read and write access to the relevant directory and subdirectories.
- On UNIX, the user account that installs Campaign and the Marketing Platform must be a member of the same group as Campaign users. This user account must have a valid home directory, and have write permissions for that directory.
- On UNIX, all of the installer files for IBM products must have full execute permissions (for example, `rwxr-xr-x`).

If you are upgrading or configuring multiple partitions

If you are upgrading, see the sections on preparing to upgrade.

If you plan to create multiple partitions, see the section on configuring multiple partitions.

Chapter 2. About preparing the IBM Interact data sources

You must set up the required data sources and JDBC connections for Interact. You will need the details about the system table databases later in the installation process, so you should print and fill in the “IBM Interact database information checklist” on page 12 as you perform the steps in this section.

Step: Create databases or schemas

1. Work with a database administrator to create the required databases or schemas for Interact.
Be sure to see the remainder of this section before you start to create the schemas. It provides information on the databases or schemas you must create.
2. For each of the required databases or schemas have the database administrator create an account that you will specify for a system user later in the installation process.
This account must have at least CREATE, SELECT, INSERT, UPDATE, DELETE, and DROP rights.
3. Obtain the information about your databases or schemas and database accounts and then print and add the information to the “IBM Interact database information checklist” on page 12. You will use this information later in the installation process.

Required databases or schemas for Interact

The Interact runtime environment can require several databases to hold user and interaction data. Some of these requirements can be met by sharing your Campaign Customer (user) tables, while others require you to set up a unique data source.

Determine how many databases or schemas you must create or identify for use with the Interact runtime environment according to the requirements for each type of data that is stored. The Interact design environment requires tables that are not listed here because they are added to the database or schema that holds the Campaign system tables.

The following list provides a brief summary.

- Create a database or schema to hold the Interact runtime tables. Set up a separate database or schema for each server group.
- Create a database, schema, or view to hold the user Profile tables. You can use the customer profile database, which could be in the same database as your Campaign Customer (user) tables, as the Interact profile database. You might want a separate set of user profile tables for each interactive channel.
- Create a database, schema, or view to hold the Test run tables. The Test run tables could be in the same database as your Campaign Customer (user) tables.
- If you are using built-in learning, create a database or schema to hold the Learning tables.
- If you are using cross-session response tracking, create a database or schema to hold a copy of the Campaign Contact History tables. Alternatively, instead of creating a copy, you could use the Campaign system tables database to run the cross-session response tracking scripts.

Step: Create the ODBC or native connections on the Campaign machine

The machine on which the Campaign server is installed must be able to communicate with the database that holds the Interact design environment test run tables. These tables may be the same as your customer (user) tables. If so, the connection will already have been created when Campaign was installed.

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

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

Record the connection names in the "IBM Interact database information checklist" on page 12

Step: Configure the web application server for your JDBC driver

You must obtain the correct JAR file for the JDBC connections the Marketing Platform requires. You must also add the location of the file to the class path of the web application server where you plan to deploy the Marketing Platform.

Important: Perform this procedure for every web application server where you plan to deploy your IBM EMM products.

1. Obtain the latest vendor-provided Type 4 JDBC driver that is supported by IBM EMM, as described in the *IBM Marketing Platform Recommended Software Environments and Minimum System Requirements* document.
 - If the driver does not exist on the server where you plan to deploy the Marketing Platform, 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 IBM .

The following table lists the driver file name or names for the databases that are supported for IBM EMM system tables.

Database	Files
Oracle	ojdbc6.jar, ojdbc5.jar
DB2®	db2jcc.jar db2jcc4.jar - required for V10.1 db2jcc_license_cu.jar - not required in V9.5 and higher
SQL Server	You must use version 2.0 of the SQL Server driver and above. See the <i>IBM EMM Recommended Software Environments & Minimum System Requirements</i> for the exact version of this driver to use. sqljdbc.jar

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


```
UNIX
CLASSPATH="/home/oracle/product/11.0.0/jdbc/lib/ojdbc6.jar:
${PRE_CLASSPATH}${CLASSPATHSEP}${WEBLOGIC_CLASSPATH}
${CLASSPATHSEP}${POST_CLASSPATH}${CLASSPATHSEP}${WLP_POST_CLASSPATH}"
export CLASSPATH

Windows
set CLASSPATH=c:\oracle\jdbc\lib\ojdbc6.jar;%PRE_CLASSPATH%;
%WEBLOGIC_CLASSPATH%;%POST_CLASSPATH%;%WLP_POST_CLASSPATH%
```
 - For all supported versions of WebSphere, you set the class path in the next step, while you are setting up the JDBC providers for the Marketing Platform.
3. Make a note of this database driver class path in the Marketing Platform database information checklist, as you must enter the path when you run the installer.
4. Restart the web application server so your changes take effect.

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

Step: Create JDBC connections in the web application server

You must create JDBC connections in each of the web application servers on which Campaign and Interact will be deployed as listed in the following table.

The list also provides the recommended JNDI names. Using these names simplifies configuration, as they match the default values of configuration properties that refer to these connections.

Deployed web application	JDBC connections are required to these databases
Campaign	<p>In the web application server where Campaign is deployed, create JDBC connections to the databases that hold the following tables.</p> <ul style="list-style-type: none"> • Interact runtime tables JNDI name: InteractRTDS • Interact test run tables (which may be the same as the Customer (User) tables) JNDI name: testRunDataSource

Deployed web application	JDBC connections are required to these databases
Interact runtime (This is typically deployed in a different JVM from Campaign)	<p>In the web application server where Interact runtime is deployed, create JDBC connections to the databases that hold the following tables. Note that all JNDI names are recommended, unless otherwise indicated.</p> <ul style="list-style-type: none"> • Interact runtime tables JNDI name: InteractRTDS • Interact profile tables JNDI name: prodUserDataSource • Interact test run tables (required for test run server group only) JNDI name: testRunDataSource • Interact learning tables (if you are using built-in learning) JNDI name: InteractLearningDS • Campaign contact and response history tables (if you are using cross-session response tracking) Jndi name: contactAndResponseHistoryDataSource • Marketing Platform system tables JNDI name: UnicaPlatformDS Important: This is the required JNDI name for connections to the Platform system table database. You must set up this JDBC connection only if you are installing the Interact runtime in a web application server where Marketing Platform is not currently deployed. If Marketing Platform is deployed in the same web application server, this JDBC connection is already defined.

Record the JNDI names that you used in the “IBM Interact database information checklist” on page 12.

Information for creating JDBC connections

When you create a JDBC connection, you can use this section to help you determine some of the values you must enter.

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

This information does not reflect all of the information required by the web application servers. Where this section does not provide explicit instructions, you can accept the default values. Consult the application server documentation if you need more comprehensive help.

WebLogic

Use these values if your application server is WebLogic.

SQLServer

- Database Driver: Microsoft MS SQL Server Driver (Type 4) Versions: 2008, 2008R2
- Default port: 1433

- Driver class: `com.microsoft.sqlserver.jdbc.SQLServerDriver`
- Driver URL: `jdbc:sqlserver://<your_db_host>:<your_db_port>;databaseName=<your_db_name>`
- Properties: Add `user=<your_db_user_name>`

Oracle 11 and 11g

- 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 using the format shown. IBM EMM 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>`

WebSphere

Use these values if your application server is WebSphere.

SQLServer

- Driver: N/A
- Default port: 1433
- Driver class:
`com.microsoft.sqlserver.jdbc.SQLServerConnectionPoolDataSource`
- Driver URL: N/A

In the **Database Type** field, select **User-defined**.

After you create the JDBC Provider and Data Source, go to the Custom Properties for the Data Source, and add and modify properties as follows.

- `serverName=<your_SQL_server_name>`
- `portNumber =<SQL_Server_Port_Number>`
- `databaseName=<your_database_name>`
- `enable2Phase = false`

Oracle 11 and 11g

- 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 using the format shown. IBM EMM applications do not allow the use of Oracle's RAC (Real Application Cluster) format for JDBC connections.

DB2

- Driver: DB2 Universal JDBC 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>`

IBM Interact database information checklist

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

Runtime tables

You may have multiple databases containing runtime tables. Enter the information for each runtime environment.

Database schema 1	
JNDI name 1	
Database schema 2	
JNDI name 2	
Database schema 3	
JNDI name 3	

Contact response history tables

Used only when cross-session tracking is being implemented. These may be the same as your Campaign contact response history tables, or they may be in a different database server or schema.

Database schema	
JNDI name	

Learning tables

These are optional.

Database schema	
JNDI name	

User profile tables

These may be in your customer (user) tables.

Database schema	
-----------------	--

JNDI name	
-----------	--

Test run tables

These may be in your customer (user) tables.

Database schema	
DSN (ODBC or native connection name)	
JNDI name	

Chapter 3. Step: Obtain the IBM installers

Obtain the DVD, or download the software from IBM.

- The IBM installer
- The Interact installer

If you plan to use the IBM reporting feature, see the *IBM Marketing Platform Installation Guide* for instructions on how to install it.

This installation guide assumes you have already installed and configured Campaign for the design environment and at least one instance of Marketing Platform for each runtime environment.

Setting permissions on UNIX-type systems

On UNIX-type systems, ensure that the installation files have full execute permissions (rwxr-xr-x).

Choosing the right installer file

The IBM EMM installation files are named according to the version of the product and the operating system with which they are meant to be used, except for UNIX files intended to be run in console mode, which are not operating system-specific. For UNIX, different files are used depending on whether the installation mode is X-windows or console. If different installers exist for 32- and 64-bit operating systems, these numbers are also included in the file name. If no bit number is included, the installer is for both 32-bit and 64-bit operating systems.

Here are some examples of the installers you would choose based on your installation environment.

If you plan to install on Windows using either GUI or console mode —
ProductN.N.N.N_win.exe is version N.N.N.N and is intended for installation on the Windows 32-bit or 64-bit operating systems.

If you plan to install on Solaris using X-windows mode —
ProductN.N.N.N_solaris64.bin is version N.N.N.N and is intended for installation on the Solaris 64-bit operating system.

If you plan to install on UNIX using console mode — *ProductN.N.N.N.sh* is version N.N.N.N and is intended for installation on all UNIX operating systems.

Copying installation files (DVD only)

If you received your IBM installation files on a DVD, or if you created a DVD from a downloaded ISO image file, you must copy its contents to a writable directory available to the system on which you are installing the IBM products before running the installers.

Note: For more information about where to place the installation files, see “How the IBM EMM installers work” on page 16.

How the IBM EMM installers work

You should read this section if you are not familiar with the basic functions of the IBM EMM installers.

Single directory requirement for installer files

When you install IBM EMM enterprise products, you use a combination of installers.

- A master installer, which has `IBM_EMM_Installer` in the file name
- Product-specific installers, which all have the product name as part of their file names

To install IBM EMM products, you must place the master installer and the product installers in the same directory. When you run the master installer, it detects the product installation files in the directory. You can then select the products you want to install.

When multiple versions of a product installer are present in the directory with the master installer, the master installer always shows the latest version of the product on the IBM EMM Products screen in the installation wizard.

Installing patches

You might be planning to install a patch immediately after you perform a new installation of an IBM EMM product. If so, place the patch installer in the directory with the base version and master installer. When you run the installer, you can select both the base version and the patch. The installer then installs both in correct order.

Installing the products

This section describes how to install IBM EMM products.

Choosing product installation directories

You can install to any directory on any network-accessible system. You can specify an installation directory by entering a path or by browsing and selecting it.

You can specify a path relative to the directory from which you are running the installer by typing a period before the path.

If the directory you specify does not exist, the installer creates it, assuming that your login has the appropriate permissions.

The default top-level directory for IBM EMM installations is `/IBM/EMM` (UNIX) or `C:\IBM\EMM` (Windows). The product installers then install product files in individual subdirectories under the EMM directory.

Installation types

The IBM EMM installer performs the following types of installation.

- **New installation:** When you run the installer and select a directory where an IBM EMM product has never been installed, the installer automatically performs a new installation.
- **Upgrade installation:** When you run the installer and select a directory where an *earlier* version of an IBM EMM product is installed, the installer automatically

performs an upgrade installation. For products where installers automatically update the database, upgrade installation adds new tables but does not overwrite data in existing tables.

For products where installers automatically update the database, errors can occur during an upgrade because the installer does not create tables in the database if they exist. You can safely ignore these errors. See the chapter on Upgrading for details.

- **Reinstallation:** When you run the installer and select a directory where *the same* version of an IBM EMM product is installed, the installer overwrites your existing installation. To preserve any existing data, back up your installation directories and your system table databases before reinstalling. Typically, reinstallation is not recommended.

Installation modes

The IBM EMM installer can run in the following modes.

- Console (command line) mode

In console mode, options are presented in numbered lists. You supply a number to select the option you want. If you press Enter without entering a number, the installer uses the default option. The default option is indicated by one of the following symbols.

--> To select an option when this symbol appears, type the number of the option you want then press Enter.

[X] This symbol indicates that you can choose one, several, or all of the options in the list. If you type the number of an option that has the [X] symbol next to it then press Enter, you clear or deselect that option. If you type the number of an option that is not currently selected (it has [] next to it), that option is selected when you press Enter.

To deselect or select more than one option, enter a comma-separated list of numbers.

- Windows GUI or UNIX X-windows mode
- Unattended, or silent, mode, which allows no user interaction

Unattended mode can be used to install an IBM EMM product multiple times, for example when you set up a clustered environment. For more information, see "Installing multiple times using unattended mode."

Installing multiple times using unattended mode

If you must install IBM EMM products multiple times, for example when setting up a clustered environment, you may want to run the IBM EMM installers in unattended mode, which requires no user input.

About the response files

Unattended mode (also known as silent mode) requires a file or set of files to provide the information that a user would enter at the installation prompts when using the console or GUI modes. These files are known as response files.

You can use either of the following options to create response files.

- You can use the sample response file as a template for directly creating your response files. The sample files are included with your product installers in a compressed archive named ResponseFiles. The sample response files are named as follows.
 - IBM EMM master installer - `installer.properties`

- Product installer - `installer_` followed by initials for the product name and numbers for the version. For example, the Campaign installer has a response file named `installer_ucN.N.N.N.properties`.
- Product reports packs installer - `installer_` including initials for the report pack and the product name, plus numbers for the version. For example, the Campaign reports pack installer has a response file named `installer_urpcN.N.N.N.properties`.

Edit the sample files as needed and place them in the same directory with your installers.

- Alternatively, before you set up an unattended run, you can run the installers in Windows GUI or UNIX X-windows mode or in Console mode and choose to create the response files.

The IBM EMM master installer creates one file, and each IBM EMM product you install also creates one or more files.

The response files created when you run the installers have `.properties` extensions, such as `installer_productversion.properties` and the file for the IBM EMM installer itself, which is named `installer.properties`. The installer creates these files in the directory you indicate.

Important: For security reasons, the installer does not record database passwords in the response files. When you create response files for unattended mode, you must edit each response file to enter database passwords. Open each response file and search for `PASSWORD` to find where you must perform these edits.

Where the installer looks for response files

When the installer runs in unattended mode, it looks for the response file as follows.

- First, the installer looks in the installation directory.
- Next, the installer looks in the home directory of the user performing the installation.

All response files must be 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
```

Effect of unattended mode when you uninstall

When you uninstall a product that was installed using unattended mode, the uninstall is performed in unattended mode (without presenting any dialogs for user interaction).

Unattended mode and upgrades

When you are upgrading, if a response file was previously created and you run in unattended mode, the installer uses the installation directory that was previously set. If you want to upgrade using unattended mode when no response file exists, create a response file by running the installer manually for your first installation, and be sure to select your current installation directory in the installation wizard.

Where to install IBM Interact components

The Interact design environment must be installed with Campaign. For best performance, IBM recommends that you install a runtime server on its own machine, where no other IBM EMM products are installed.

Important: You must fully install and deploy a Marketing Platform for each server group. If you install multiple Interact server groups, you must fully install and deploy the Marketing Platform in each runtime server group.

The following table describes the components you can select when you install Interact.

Component	Description
Interact Runtime Environment	<p>The Interact runtime server. You integrate Interact runtime servers with a touchpoint, such as a web site, to present offers based on real-time data.</p> <p>You can install multiple runtime servers in your environment and organize them into server groups. Each server group must have one instance of the Marketing Platform separate from the Marketing Platform for Campaign and separate from other server groups.</p>
Interact Design Environment	<p>The design environment for Interact. You must install the design environment on the same machine as Campaign. You must install only one design environment.</p>

Where to install IBM Interact Report Package components

The reports package for Interact contains two installation components, as follows.

- Install the reporting schemas on the Marketing Platform system.
- Install the IBM Cognos[®] package on the IBM Cognos system.

The following table describes the components you can select when you install the reports package for Interact.

Component	Description
IBM Interact reporting schemas (to be installed on the IBM EMM system)	<p>The Interact reporting schemas make interactive channel-based campaign, offer, and cell data from all three Interact data sources available for reporting.</p>
IBM Cognos package for IBM Interact (to be installed on the IBM Cognos system)	<p>The IBM Cognos package includes a reporting metadata model for the Interact database tables and a set of example reports that you can use to track campaign, offer, and cell performance.</p>

About multiple Interact runtime servers

When you install more than one Interact runtime server, you must configure the runtime servers that constitute a server group to use the same runtime tables, profile tables, and learning tables, and one or more instances of the Marketing Platform accessible by each server group. There are also specific configuration settings for monitoring and deployment to be aware of.

All Interact runtime servers in a single server group must use the same schema for runtime tables, profile tables, and learning tables.

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

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

Although not required, you can also install a unique instance of Marketing Platform for each Interact runtime server, or a few instances of Marketing Platform supporting subsets of runtime servers. For example, if your server group contains 15 runtime servers, 5 runtime servers can report to one instance of Marketing Platform, for a total of three instances of Marketing Platform.

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

If you are installing a test environment and have multiple Interact runtime servers on the same system:

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

You must also set the instance name if you are using a database load utility to work with several Interact servers running on the same machine.

Information required to install all IBM EMM products

Gather the required information as described in this section.

Marketing Platform information

The installation wizards for each IBM EMM product must be able to communicate with the Marketing Platform system table database, to register the product.

Each time you run the installer, you must enter the following database connection information for the Marketing Platform system table database.

- Database type.
- Database host name.
- Database port.
- Database name or schema ID.
- User name and password for the database account.

You obtained this information when you created the database or schema.

Web component information

For all IBM EMM products that have a web component that you deploy on a web application server, you must obtain the following.

- The name of the systems on which the web application servers are installed. You might have one or several, depending on the IBM EMM environment you are setting up.
- The port on which the application server listens. If you plan to implement SSL, obtain the SSL port.
- The network domain for your deployment system. For example, `mycompany.com`.

Step: Run the IBM EMM installer

Before you run the IBM EMM installer, verify that you have met the following prerequisites.

- You have downloaded the IBM EMM installer and the installers for products you plan to install. Both the IBM EMM and product installers must be in the same directory.
- You have available the information you gathered as described in “Information required to install all IBM EMM products” on page 20.

If you are rerunning the installer on a system where other IBM EMM products are installed, do not reinstall these other products.

See the other topics in this section for details about the installer, or if you need help entering information in the wizard.

Run the IBM EMM installer as described here, and follow the instructions in the wizard.

- GUI or X Window System mode
Run the `IBM_EMM_Installer` file. On UNIX, use the `.bin` file.
- Console mode
Open a command prompt and from the directory where you downloaded the IBM software, run the `IBM_EMM_Installer` executable file as follows.
On Windows, run the `IBM_EMM_Installer` executable file with `-i console`. For example, `IBM_EMM_Installer_N.N.N.OS -i console`
On UNIX, run the `IBM_EMM_Installer.sh` file with no switch.

Note: On Solaris, you must run the installer from a Bash shell. For example: #
bash ./IBM_EMM_Installer_9.0.0.0.sh

- Unattended mode

Open a command prompt and from the directory where you downloaded the IBM EMM software, run the IBM_EMM_Installer executable file with `-i silent`. On UNIX, use the `.bin` file. For example, to specify a response file located in the same directory as the installer:

```
IBM_EMM_Installer_N.N.N.N_OS -i silent
```

To specify a response file in a different directory, use `-f filepath/filename`. Use a fully qualified path. For example:

```
IBM_EMM_Installer_N.N.N.N_OS -i silent -f filepath/filename
```

For more information about unattended mode, see “Installing multiple times using unattended mode” on page 17.

Navigating in the installation wizards

When the installer runs in GUI mode, you navigate using the **Next**, **Previous**, **Cancel**, and **Done** buttons.

When the installer runs in console mode, you navigate by entering numbers that correspond to the buttons in GUI mode, as described in the help text on each screen of the wizard. In console mode, an additional redisplay command is available.

In console mode, a number or letter is displayed in square brackets at the end of the prompt line; this is the default command issued if you press **Enter** without typing anything. You can type **back** to go to a previous screen, or **quit** to cancel the installation.

IBM Site ID

The installer might prompt you to enter your IBM Site ID. Your IBM Site ID can be found on the IBM Welcome letter, Tech Support Welcome letter, Proof of Entitlement letter, or other communications sent when you purchased your software.

IBM might use data provided by the software to better understand how customers use our products and to improve customer support. The data gathered does not include any information that identifies individuals.

If you do not want to have such information collected, after the Marketing Platform is installed, log on to the Marketing Platform as a user with administration privileges. Navigate to the **Settings > Configuration** page, and set the **Disable Page Tagging** property under the **Platform** category to **True**.

To create an EAR file after running the installer

Use this procedure if you want to create an EAR file after you have installed IBM EMM products. You might want to do this if you decide you want a different combination of products in the EAR file.

The WAR files must be in a single directory. You will run the installer in console mode, from the command line.

1. If this is the first time you are running the installer in console mode, make a backup copy of the installer's `.properties` file for each of your installed products.

Each IBM product installer creates one or more response files with a `.properties` extension. These files are located in the same directory where you have placed the installers. Be sure to back up all files with the `.properties` extension, including the `installer_productversion.properties` files and the file for the IBM installer itself, which is named `installer.properties`.

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

2. Open a command window and change directories to the directory that contains the installer.
3. Run the installer executable with this option:
`-DUNICA_GOTO_CREATEEARFILE=TRUE`
On UNIX-type systems, run the `.bin` file rather than the `.sh` file.
The installer wizard runs.
4. Follow the instructions in the wizard.
5. Before you create additional EAR files, overwrite the `.properties` file or files with the backup(s) you created before you ran in console mode for the first time.

Chapter 4. About pre-deployment configuration of IBM Interact

You must perform the tasks described in this section before you deploy Interact.

Neither the design environment or the runtime environment has pre-deployment configuration tasks.

Step: Create and populate the Interact system tables

Use your database client to run the Interact SQL scripts against the appropriate database or schema to create and populate the Interact runtime environment; design environment; learning; user profile; and contact and response tracking data sources.

Design environment tables

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

The following tables list the SQL scripts you can use to manually create and populate the design environment tables.

The SQL scripts are in the <Interact_HOME>/interactDT/dd1 directory in your Interact design environment.

If your Campaign system tables are configured for Unicode, use the appropriate script that is in the <Interact_HOME>/interactDT/dd1/unicode directory in your Interact design environment. There are no Unicode equivalent scripts for the aci_populate_systab scripts that are used to populate the design environment tables.

Table 1. Scripts for creating design time tables

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

Table 2. Scripts for populating design-time tables

Data source type	Script name
IBM DB2	aci_populate_systab_db2.sql
Microsoft SQL Server	aci_populate_systab_sqlsvr.sql
Oracle	aci_populate_systab_ora.sql

Runtime environment tables

The following tables list the SQL scripts you can use to create and populate the Interact runtime 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 these scripts one time for each server group data source.

Table 3. Scripts for creating runtime environment tables

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

Table 4. Scripts for populating runtime environment tables

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

Tables for optional features

The following tables list the SQL scripts you can use to create and populate tables for Interact features, including learning, global offers, score override, and contact and response history tracking.

Learning

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

Note: The built-in learning module requires a separate data source from the Interact runtime environment tables. If you are using the built-in learning module, you must create a data source to hold all of the learning data. This 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.

Table 5. Learning table scripts

Data source type	Script name
IBM DB2	aci_lrntab_db2.sql
Microsoft SQL Server	aci_lrntab_sqlsvr.sql
Oracle	aci_lrntab_ora.sql

Contact and response history

The following tables list the SQL scripts you must run against the contact history tables if you are using cross-session response tracking or the advanced learning feature.

All of the SQL scripts are in directories that are found in your Interact installation.

Note: Using contact and response history features requires a separate data source from the Interact runtime environment tables. If you are using contact and response history, you must create a data source to reference contact and response data. This separate data source can communicate with all server groups.

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

Table 6. Contact history table scripts

Data source type	Script name
IBM DB2	<Interact_HOME>/ddl/aci_crhtab_db2.sql <Interact_HOME>/interactDT/ddl/acifeatures/aci_lrnfeature_db2.sql
Microsoft SQL Server	<Interact_HOME>/ddl/aci_crhtab_sqlsvr.sql <Interact_HOME>/interactDT/ddl/aci_lrnfeature_sqlsvr.sql
Oracle	<Interact_HOME>/ddl/aci_crhtab_ora.sql <Interact_HOME>/interactDT/ddl/aci_lrnfeature_ora.sql

Step: Create the Interact user profile tables

Some optional features in Interact, such as global offers, offer suppression, and score override, require specific tables in your user profile databases. Refer to the *IBM Interact Administrator's Guide* for details about the profile database, and the role that the offer suppression, global offers, and score override tables play in offer serving.

Use your database client to run the appropriate SQL scripts against the appropriate database or schema and create these required user tables. If you have more than one audience level defined, you need to create one of each required table for each audience level.

User profile tables

The following table lists the SQL scripts you must use to create the following optional profile tables:

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

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

You must run these scripts once per audience level. Modify the script for each different audience level (after the first) and rename the profile tables created after running the scripts.

Table 7. Scripts for creating user profile tables

Data source type	Script name
IBM DB2	aci_usrtab_db2.sql
Microsoft SQL Server	aci_usrtab_sqlsvr.sql
Oracle	aci_usrtab_ora.sql

Advanced scoring (optional)

The following tables list the SQL scripts you must run if you are using the advanced scoring feature to override the Interact learning algorithm.

All of the SQL scripts are located in the `ddl/aci/features` directory under your Interact installation.

If your scoring tables are configured for Unicode, use the appropriate script located in the `ddl/aci/features/Unicode` directory under your Interact installation to create the learning tables.

Note that these scripts are intended to be run against the User Profile database.

Table 8. Scoring table scripts

Data source type	Script name
IBM DB2	aci_scoringfeature_db2.sql
Microsoft SQL Server	aci_scoringfeature_sqlsvr.sql
Oracle	aci_scoringfeature_ora.sql

Running database scripts to enable Interact features

Several of the optional features available with Interact require changes to specific tables in your profile databases. Your Interact installation, both design environment and runtime environment, includes feature `ddl` scripts. These scripts add any required columns to your tables.

To enable any of these features, run the appropriate script against the database or table that is indicated.

dbType is the database type, such as sqlsvr for Microsoft SQL Server, ora for Oracle, or db2 for IBM DB2.

Feature Name	Feature Script	Run Against	Change
Global offers, offer suppression, and score override	Runtime environment installation directory:Interact_Home\ddl\ acifeatures\ aci_usrtab_dbType.sql	Your profile database (userProdDataSource)	Creates the DefaultOffers, UACI_BlackList, and UACI_ScoreOverride tables.
Scoring	Runtime environment installation directory:Interact_Home\ddl\ acifeatures\ aci_scoringfeature_dbType.sql	Score override tables in your profile database (userProdDataSource)	Adds the LikelihoodScore and AdjExploreScore columns.
Learning	Design time environment installation directoryInteract_Home\ InteractDT\ddl\acifeatures\ aci_lrnfeature_dbType.sql	Campaign database that contains your contact history tables	Adds the column RTSelectionMethod to the UA_Dt1ContactHist table. This script is also required by the reporting features provided by the optional Interact Reports Pack.

Step: Register Interact manually, if necessary

If the Interact installer could not connect with the Marketing Platform system tables during the installation process, an error message appears that notifies you of this failure. The installation process will proceed, but if you see the error message, you must import the Interact information into the Marketing Platform system tables manually after the installer closes. Follow the directions for each product as shown in this section.

The utilities mentioned in these procedures are located in the tools/bin directory under your Marketing Platform installation.

To register IBM Interact design environment manually

If the Interact installer cannot connect to the Marketing Platform database to register the product, run the configTool utility, using the following example commands as guidelines. This imports menu items and sets configuration properties. Note that you run the utility as many times as there are files. Because there is one file, you must run the utility one time.

```
configTool -i -p "Affinium|suite|uiNavigation|mainMenu|Campaign" -f
"full_path_to_Interact_DT_installation_directory\interactDT\conf\
interact_navigation.xml"
```

```
configTool -v -i -o -p "Affinium|Campaign|about" -f
"full_path_to_Interact_DT_installation_directory\interactDT\conf\
interact_subcomponent_version.xml"
```

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

For detailed instructions on using the configTool utility, see "The configTool utility" on page 30 in the *IBM Marketing Platform Installation Guide*.

You may need to manually enable Interact by setting the Campaign > partitions > partition[n] > server > Internal > interactInstalled configuration property to yes.

To register IBM Interact runtime environment manually

If the Interact installer cannot connect to the Marketing Platform database to register the product, run the configTool utility, using the following example commands as guidelines. This imports configuration properties. Note that you run the utility as many times as there are files. Because there is one file, you must run the utility one time.

Important: You should register only one instance of the Interact runtime environment with the Marketing Platform per server group. All instances of Interact runtime server in a server group use the same set of configuration properties. If you register a second Interact runtime server with the Marketing Platform, you may overwrite previous configuration settings.

```
configTool -r Interact -f "full_path_to_Interact_RT_installation_directory\conf\interact_configuration.xml"
```

The Interact runtime environment has no graphical user interface, so there is no need to register any navigation files.

For detailed instructions on using the configTool utility, see “The configTool utility” in the *IBM Marketing Platform Installation Guide*.

The configTool utility

The properties and values on the Configuration page are stored in the Marketing Platform system tables. The configTool utility imports and exports configuration settings to and from the Marketing Platform system tables.

When to use configTool

You might want to use configTool for the following reasons.

- To import partition and data source templates supplied with Campaign, which you can then modify and duplicate using the Configuration page.
- To register (import configuration properties for) IBM EMM 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 IBM EMM.
- 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 using configTool to import the edited XML.

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

Valid product names

The configTool utility uses product names as parameters with the commands that register and unregister products, as described later in this section. With the 8.0.0 release of IBM EMM, many product names changed. However, the names recognized by configTool did not change. The valid product names for use with configTool are listed below, along with the current names of the products.

Product name	Name used in configTool
Marketing Platform	Manager
Campaign	Campaign
Distributed Marketing	Collaborate
eMessage	emessage
Interact	interact
Contact Optimization	Optimize
Marketing Operations	Plan
CustomerInsight	Insight
Digital Analytics for On Premises	NetInsight
PredictiveInsight	Model
Leads	Leads

Syntax

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

```
configTool -i -p "parent ElementPath" -f importFile [-o]
```

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

```
configTool -r productName -f registrationFile [-o]
```

```
configTool -u productName
```

Commands

-d -p "*elementPath*"

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, which you can obtain by going to the Configuration page, selecting the wanted category or property, and looking at the path displayed in parentheses in the right pane. Delimit a path in the configuration property hierarchy using the | character, and surround the path with double quotation marks.

Note the following.

- Only categories and properties within an application may be deleted 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.

`-i -p "parentElementPath" -f importFile`

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, which you can obtain by going to the Configuration page, selecting the desired category or property, and looking at the path displayed in parentheses in the right pane. Delimit a path in the configuration property hierarchy 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 displayed in parentheses in the right pane. Delimit a path in the configuration property hierarchy 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 Marketing Platform installation. If you do not provide the `xml` extension, `configTool` adds it.

`-r productName -f registrationFile`

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

Note the following.

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

-u *productName*

Unregister an application specified by *productName*. You do not have to include a path to the product category; the product name is sufficient. The *productName* parameter must be one of those listed above. This removes all properties and configuration settings for the product.

Options

-o

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

When used with `-d` allows you to 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` located in the `conf` directory under the Marketing Platform installation.

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

```
configTool -i -p "Affinium|Campaign|partitions|partition1|dataSources" -f OracleTemplate.xml
```
- Export all configuration settings to a file named `myConfig.xml` located in the `D:\backups` directory.

```
configTool -x -f D:\backups\myConfig.xml
```
- Export an existing Campaign partition (complete with data source entries), save it to a file named `partitionTemplate.xml`, and store it in the default `tools/bin` directory under the Marketing Platform installation.

```
configTool -x -p "Affinium|Campaign|partitions|partition1" -f partitionTemplate.xml
```
- Manually register an application named `productName`, using a file named `app_config.xml` located in the default `tools/bin` directory under the Marketing Platform installation, and force it to overwrite an existing registration of this application.

- ```
configTool -r product Name -f app_config.xml -o
```
- Unregister an application named productName.  

```
configTool -u productName
```

---

## Chapter 5. Step: Deploy IBM Interact

Follow the guidelines in this topic for deploying the Interact design environment and runtime servers.

We assume that you know how to work with your web application server. Consult your web application server documentation for details such as navigation in the Administration console.

### Deploying the design environment

When you ran the IBM installer, you may have included Interact in an EAR file, or you may choose to deploy the Interact WAR file. If you included the Marketing Platform or other products in an EAR file, you must follow all the deployment guidelines detailed in the individual install guides for the products included in the EAR file.

After you have installed Interact, the design environment is deployed automatically when you deploy Campaign. After you deploy the Campaign.war file, there are some configuration procedures that will enable the design environment in Campaign. Note that the Campaign.war file is located in the Campaign installation directory.

### Deploying the runtime server

You must deploy the Interact runtime server for every instance of the runtime server you install. For example, if your performance requirements require six instances of a runtime server, you must install and deploy Interact runtime six times. You can deploy the runtime server on the same server as the design environment, or on a separate server. InteractRT.war is located in the Interact installation directory.

**Note:** When you deploy the Interact runtime, the context root should be set to interact by default. If it is not, update the context root so that it is set to interact. Do not use a context root other than this value, or navigation to the runtime, and within Interact runtime links and pages, will not operate correctly.

---

## Guidelines for deploying IBM Campaign on WebSphere

Follow these guidelines to deploy IBM Campaign application files on WebSphere Application Server.

For complete information about WebSphere, see the following links:

- For WebSphere Application Server version 8, see [Welcome to the WebSphere Application Server information center](#).
- For WebSphere Application Server version 7, see the [WebSphere Application Server Version 7.0 Information Center](#).

### Steps for deploying on WebSphere

1. 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.

2. Confirm that you created the data sources and database provider in WebSphere.
3. If your system tables are in DB2, go to the Custom Properties for the data source. Set the value for **resultSetHoldability** to **1**.  
If you do not see a field named **resultSetHoldability**, add a custom property with that name and set its value to **1**.
4. Deploy the IBM WAR or EAR file as an enterprise application.  
Follow the guidelines below. Unless otherwise noted, you can accept the default settings.
  - In the form where you browse to and select the WAR or EAR file, select **Show me all installation options and parameters** so the **Select Installation Options** or **Install New Application** wizard runs.
  - In step 1 of the installation wizard, select **Precompile JavaServer Pages files**.
  - In step 3 of the installation wizard, set the **JDK Source Level** to 16. If 16 is not available, select 15. If you deployed an EAR file, set the **JDK Source Level** for each web module (.war file).
5. In the server's **Web Container Settings > Session Management** section, enable cookies.
6. Specify a different session cookie name for each deployed application:
  - If you deployed a WAR file:
    - In the WebSphere console, in the server's **Applications > Enterprise Applications > [deployed\_application] > Session Management > Enable Cookies > Cookie Name** section, specify a session cookie name that is unique.
    - Select the **Override session management** check box in Session Management.
  - If you deployed an EAR file:
    - In the WebSphere console, in the server's **Applications > Enterprise Applications > [deployed\_application] > Module Management > [deployed\_module] > Session Management > Enable Cookies > Cookie Name** section, specify a session cookie name that is unique.
    - Select the **Override session management** check box in Session Management.
7. In the server's **Applications > Enterprise Applications** section, select the WAR file or EAR file that you deployed, then select **Class loading and update detection** and set the following **General Properties** on the **Configuration** tab:
  - If you deployed 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**.
  - If you deployed an EAR file:
    - For **Class loader order**, select **Classes loaded with local class loader first (parent last)**.
    - For **WAR class loader policy**, select **Class loader for each WAR file in application**.
    - Select **Enterprise Applications > [deployed\_application] > Manage Modules > [module name]** and set **Class loader order** to **Classes loaded with local class loader first (parent last)**.
8. Start your deployment.



---

## Guidelines for deploying IBM EMM products on WebLogic

Follow these guidelines to deploy IBM EMM products on WebLogic.

### All versions of WebLogic, all IBM EMM products

- IBM EMM products customize the JVM used by WebLogic. You may need to create a WebLogic instance dedicated to IBM EMM 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 IBM EMM 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. In some cases, however, 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. Please contact IBM 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.
- If deploying in a production environment, set the JVM memory heap size parameters to 1024 by adding the following line to the `setDomainEnv` script: `Set MEM_ARGS=-Xms1024m -Xmx1024m -XX:MaxPermSize=256m`



---

## Chapter 6. About post-deployment configuration of Interact

You must perform the tasks described in this section after you deploy Interact.

In addition, if you are using the IBM EMM reporting feature, you must install the reports packs for Interact as described in the *Marketing Platform Installation Guide*.

---

### Steps: Set Interact configuration properties

This section describes the minimum configuration properties you must set on the Configuration page for a basic installation of Interact.

Interact also has properties on the Configuration page that perform important functions that you can optionally adjust. See the *IBM Interact Administrator's Guide* or the context help for the properties to learn more about what they do and how to set them.

You must set these required properties as described in this section.

#### The Interact runtime environment

- "Step: Configure Interact runtime environment properties"
- "Step: Configure multiple Interact runtime servers" on page 40

#### The Interact design environment

1. "Step: Configure the Test Run data source" on page 40.
2. "Step: Add server groups" on page 41
3. "Step: Select a server group for interactive flowchart test run" on page 41
4. "Step: Configure the contact and response history module" on page 41

### Step: Configure Interact runtime environment properties

The following properties must be set for basic Interact runtime operation. There are other properties you can configure later to tune your performance.

You must configure these properties for every server group.

- Data source for the profile tables for the runtime environment.
- Data source for the runtime environment system tables.
- Data source for the test run tables.
- Data source for built-in learning tables. These properties are required only if you are using built-in learning.
- Data source of the contact and response history tables for cross-session response tracking. These properties are required only if you are using cross-session response tracking.
- Interact > profile > Audience Levels

These categories must match the audience levels you have defined for Campaign, however you only need to configure the audience levels used in interactive flowcharts.

## Step: Configure multiple Interact runtime servers

If possible, you should configure your server groups to work with a load balancer with persistent (sticky) sessions enabled. If this is not possible, you must create some method of selecting runtime servers from a server group when working with the Interact API.

If you cannot use a load balancer with persistent (sticky) sessions, you can configure the runtime servers in a server group to use a multicast address for sharing cache data. All of these servers must comprise a single server group.

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

1. Install additional Interact runtime servers as described in this guide.

When installing multiple runtime servers, you must remove network connectivity for the Interact Run Time machine before running the installer, so that additional Interact installations do not overwrite the Marketing Platform configuration.

After installing all instances of the Interact Run Time server, restart Marketing Platform.

2. To enable a distributed cache, when configuring the configuration properties, also configure the following properties:
  - **Interact > sessionManagement > cacheType** — set to **Distributed**.
  - **Interact > sessionManagement > multicastIPAddress** — define the IP address all the Interact servers for this server group use for listening. This IP address must be unique across your server groups.
  - **Interact > sessionManagement > multicastPort** — define the port all the Interact servers use for listening.

**Note:** When uninstalling an Interact server from a server group, you must follow special instructions to be sure that you do not accidentally remove all IBM EMM configuration.

## Step: Configure the Test Run data source

Interactive flowcharts require a connection to the Interact test run tables by adding the Interact test run tables as a Campaign data source. To add an additional Campaign data source, add a new category to Campaign > partitions > partitionN > datasources as described in the *IBM Campaign Installation Guide*.

Use the `OwnerForTableDisplay` property to define a database schema to limit the tables displayed when mapping tables in an interactive channel.

The test run data source used in the Interact design time should specify the JNDI name of the design time test run tables.

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

If you are using a SQL Server database and you are setting your locale to Japanese or Korean, you must configure the following properties in your test run data source.

- **Campaign > partitions > partitionN > datasources > testRunDataSource > ODBCUnicode** — UCS-2

- Campaign > partitions > partitionN > datasources > testRunDataSource > stringEncoding — WIDEUTF-8

## Step: Add server groups

You must define the locations of the Interact runtime servers on the Configurations page in the Marketing Platform for the design environment to access them for deployment and performing test runs of Interactive flowcharts.

You must create at least one server group, and the server group must contain at least one Interact runtime server, defined by the instance URL. You may have multiple server groups, for example, one to Interact with your web site, one to Interact with your call center, and one for testing. Each server group can contain multiple instance URLs, each instance URL representing one instance of Interact runtime.

**Important:** Each Interact runtime can be associated with one design time only.

If you have multiple Interact design time systems running in your environment, any Interact server configured with a particular design time cannot be configured with any other design time. If two different design times send deployment data to the same Interact runtime, the deployments may become corrupted and undefined behavior will occur.

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

Create these server groups using the **Campaign > partitions > partitionn > Interact > serverGroups > (serverGroup)** configuration property template. The category name is only used for organizational purposes, however, you can use the same name for the category as for the serverGroupName property to avoid confusion.

## Step: Select a server group for interactive flowchart test run

Interactive flowcharts require an instance of the Interact runtime to run. You cannot use the Campaign batch flowchart engine to run an interactive flowchart. You must define a server group for Campaign to reference for performing test runs of interactive flowcharts.

Set the following configuration properties to configure interactive flowchart test run. This server group is also used for validating table mapping for the interactive channel, and checking the syntax of user macros in interactive flowcharts.

- Campaign > partitions > partitionN > Interact > flowchart > serverGroup
- Campaign > partitions > partitionN > Interact > flowchart > dataSource

Note that the data source you specify for the dataSource property must be a Campaign data source.

## Step: Configure the contact and response history module

The Interact runtime servers store contact and response history in staging tables. To make this data available for reporting and use with Campaign, you must configure the contact and response history module to copy the data from the Interact runtime servers to the Campaign contact and response history tables.

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

1. Confirm that you have added the Interact runtime databases to the web application server hosting Campaign.
2. Add a runtime data source using the Campaign > partitions > partitionN > Interact > contactAndResponseHistTracking > runtimeDataSources > (*runtimeDataSource*) configuration property template.
3. Repeat these steps for each Interact runtime server group from which you want to collect contact and response history data.

---

## Step: Create the Interact system users

Interact requires you to configure two sets of users, runtime environment users and design environment users.

- **Runtime environment users** are IBM user accounts configured to work with the Interact runtime servers. This user is required to send Interact configuration data from the design environment to the runtime environment and when using JMX monitoring with the JMXMP protocol.
- **Design environment users** are Campaign users. Configure the security for the various members of your design team as described in the *Campaign Administrator's Guide*.

### Runtime environment user

**Important:** The Interact runtime user account must be an internal user account.

The person who sends Interact configuration data from the design environment to the runtime environment must log in as a IBM EMM user. This internal user account must exist in the instance of the Marketing Platform that the Interact runtime server is dependent on.

**Important:** All Interact servers belonging to the same server group must share the same user credentials for runtime deployment. If you have separate Marketing Platform instances for each Interact server, you must create an account with the same user login name and password on each.

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

### Design environment users

You configure Interact design environment users in the same way you configure Campaign users, as described in the *Campaign Administrator's Guide*.

You should configure a Interact design environment user to have all the permissions of a Campaign user to edit flowcharts and the permissions listed in the following table.

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

| Category             | Permissions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Campaigns            | <ul style="list-style-type: none"> <li>• View Campaign Interaction Strategies — Ability to see but not edit interaction strategy tabs in a campaign.</li> <li>• Edit Campaign Interaction Strategies — Ability to make changes to interaction strategy tabs, including treatment rules.</li> <li>• Delete Campaign Interaction Strategies — Ability to remove interaction strategy tabs from campaigns. Deletion of an interaction strategy tab is restricted if the interactive channel to which it has been assigned has been deployed.</li> <li>• Add Campaign Interaction Strategies — Ability to create new interaction strategy tabs in a campaign.</li> <li>• Initiate Campaign Interaction Strategy Deployments — Ability to mark an interaction strategy tab for deployment or undeployment.</li> </ul>                                                                                                                                                                                                                              |
| Interactive Channels | <ul style="list-style-type: none"> <li>• Deploy Interactive Channels — Ability to deploy an interactive channel to Interact runtime environments.</li> <li>• Edit Interactive Channels — Ability to make changes to interactive channels.</li> <li>• Delete Interactive Channels — Ability to remove interactive channels. Deletion of interactive channels is restricted if the interactive channel has been deployed.</li> <li>• View Interactive Channels — Ability to see but not edit interactive channels.</li> <li>• Add Interactive Channels — Ability to create new interactive channels.</li> <li>• View Interactive Channel Reports — Ability to see the analysis tab of the interactive channel.</li> <li>• Add Interactive Channel Child Objects — Ability to add interaction points, zones, events, and categories.</li> </ul>                                                                                                                                                                                                  |
| Sessions             | <ul style="list-style-type: none"> <li>• View Interactive Flowcharts — Ability to see an interactive flowchart in a session.</li> <li>• Add Interactive Flowcharts — Ability to create new interactive flowcharts in a session.</li> <li>• Edit Interactive Flowcharts — Ability to make changes to interactive flowcharts.</li> <li>• Delete Interactive Flowcharts — Ability to remove interactive flowcharts. Deletion of interactive flowcharts is restricted if the interactive channel to which this interactive flowchart is assigned has been deployed.</li> <li>• Copy Interactive Flowcharts — Ability to copy interactive flowcharts.</li> <li>• Test Run Interactive Flowcharts — Ability to initiate a test run of an interactive flowchart.</li> <li>• Review Interactive Flowcharts — Ability to see an interactive flowchart and open processes to view settings, but unable to make changes.</li> <li>• Deploy Interactive Flowcharts — Ability to mark an interactive flowcharts for deployment or undeployment.</li> </ul> |

If you have Interact installed and configured, the following additional options are available for the default Global Policy and new policies. Remember that some Interact users also require some Campaign permissions such as Custom Macros.

---

## Step: Verify your Interact installation

To verify that the Interact design environment is installed, log into the IBM EMM and confirm you can access **Campaign > Interactive Channels**.

To verify that a Interact runtime environment is correctly installed, use the following procedure.

1. Access the Interact runtime URL using Internet Explorer.

The URL is:

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

where `host.domain.com` is the machine where Interact is installed and `port` is the port number on which the Interact application server is listening.

2. Click **Interact Initialization Status**.

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

System initialized with no errors!

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



---

## Chapter 7. About partitions

In the Campaign family of products, partitions provide a way to secure the data associated with different groups of users.

When you configure Campaign or a related IBM EMM application to operate with multiple partitions, each partition appears to application users as a separate instance of the application. There is no indication that other partitions exist on the same system.

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

---

### Setting up multiple partitions for Interact

You can configure Interact to work with multiple partitions, as described in the following sections.

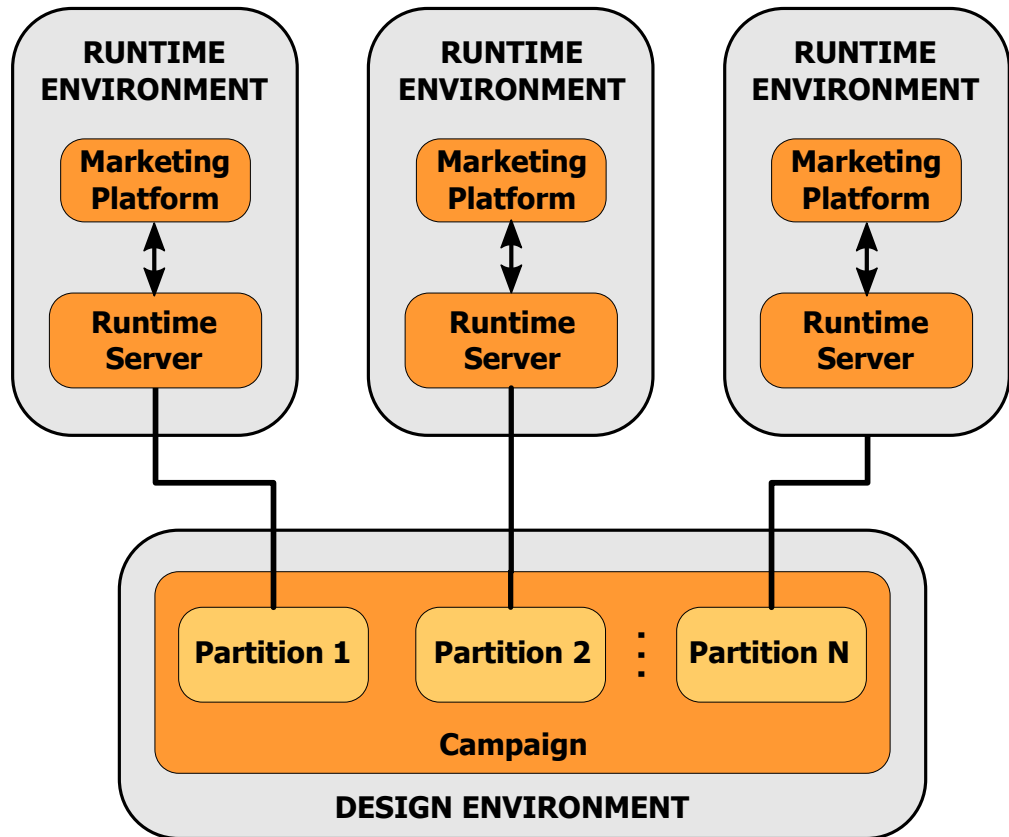
#### Runtime environments

Interact runtime does not support multiple partitions. You cannot configure the Interact runtime to work in multiple partitions, nor can one Interact runtime work with multiple partitions from a design time.

#### Design time environments

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

If you set up multiple partitions with Campaign, you are setting up multiple partitions for Interact. You must configure each partition to communicate with a separate Interact runtime environment, including separate Marketing Platform and runtime tables, for each design time partition, as shown in the following diagram.



You must manually enable Interact for the partition by setting the Campaign > partitions > partitionN > server > internal > interactInstalled configuration property to yes.

For each partition, you must perform the Design Time configuration steps listed in “Steps: Set Interact configuration properties” on page 39.

---

## Chapter 8. Upgrade prerequisites for all IBM EMM products

To upgrade any IBM EMM product, you must meet all of the prerequisites listed under “Prerequisites” on page 4 in the “Preparing to Install” chapter.

In addition, you must meet the prerequisites listed in this section.

### Remove response files generated by previous installations

Before you run the installer to upgrade from pre-8.6.0 versions, you must delete any response files generated by previous installations.

Old response files are not compatible with 8.6.0 and later installers because changes were made to installer behavior and response file format.

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 files are named `installer_<product><version>.properties`, except for the file for the IBM installer itself, which is named `installer.properties`. The installer creates these files in the directory specified by the user during installation. The default location is the user's home directory.

### User account requirement (UNIX only)

On UNIX, the same user account that installed the product must perform the upgrade.

### 32-bit to 64-bit version upgrades

If you are moving from a 32-bit to a 64-bit version of an IBM EMM product, ensure that the following conditions are met.

- The database client libraries for your product data sources are also 64-bit
- All relevant library paths (for example, startup or environment scripts) correctly reference the 64-bit versions of your database drivers

### Knowledge requirements

These instructions assume that the person performing the upgrade has an understanding of the following areas:

- The basic function of the IBM installer, as described in “How the IBM EMM installers work” on page 16
- General IBM EMM product functionality and components, including the structure of the file system
- The installation and configuration process for the source product version and for the new version
- Maintaining configuration properties in the source and target systems
- The installation and configuration process for reports, if you are using these reports

---

## Order of upgrading

The same considerations described in “IBM Marketing Platform requirement” on page 5 apply when you upgrade Interact.

Generally, it is a best practice to upgrade your runtime environments before your design environment.

Also be aware that you must successfully upgrade Marketing Platform prior to or at the same time as the upgrade of any other IBM EMM product. You cannot upgrade any IBM EMM products without also upgrading Marketing Platform to the compatible release.

---

## Interact upgrade scenarios

Follow these guidelines for upgrading to the new version of Interact.

| Source version              | Upgrade path                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Any 5.x or 6.x version      | Perform a new installation of the new version of Interact in a new location.<br><b>Note:</b> There is no upgrade path from Interact 5.x or 6.x to the new version of Interact.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Any 7.x or pre-8.5x version | <ol style="list-style-type: none"><li>Upgrade your earlier version to version 8.5 or 8.6.<ol style="list-style-type: none"><li>Perform an in-place installation of version 8.5 or 8.6 over your old version.<br/>Use the Interact installer for both the design environment and the runtime environment.<br/><b>Important:</b> You must upgrade Campaign before upgrading your Interact design environment.</li><li>Run the upgrade tools to upgrade configuration settings, files, and data from your source Interact version.</li><li>Upgrade your reports following the instructions in the chapter "Upgrading Reports" in the <i>Marketing Platform Installation Guide</i>.</li></ol></li><li>Follow the instructions below for upgrading any version 8.5x or later to the new version.</li></ol> |
| Any 8.5x version or later   | <ol style="list-style-type: none"><li>Perform an in-place installation of the new version over your old version.<br/>Use the Interact installer for both the design environment and the runtime environment.<br/><b>Important:</b> You must upgrade Campaign before upgrading your Interact design environment.</li><li>Run the upgrade tools to upgrade configuration settings, files, and data from your source Interact version.</li><li>Upgrade your reports following the instructions in the chapter "Upgrading Reports" in the <i>Marketing Platform Installation Guide</i>.</li></ol>                                                                                                                                                                                                         |

---

## Chapter 9. About upgrading Interact

Before you upgrade from any version of Interact, be sure you have read and understood the following information.

- The introductory chapter Chapter 8, “Upgrade prerequisites for all IBM EMM products,” on page 47, which contains important information about upgrading all IBM EMM products.
- All the topics in this section, to understand what you must do to upgrade from your old version of Interact to the new version.

---

### Upgrading Interact

You can upgrade Interact beginning with version 8.5.x.

Due to the architectural changes between Interact version 8.5.0 and previous versions of Interact, there is no upgrade path from earlier versions of Interact.

The following sections describe how to perform an in-place upgrade of Interact.

#### About the Interact upgrade tools

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

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

| Tool                               | Location                                                                     | Purpose                                                                                                         |
|------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <code>aciUpgradeTool</code>        | <i>Interact_Design_Install_Directory</i><br><i>/interactDT/tools/upgrade</i> | Upgrades the Interact design environment tables in the Campaign system tables.                                  |
| <code>aciUpgradeTool_runtab</code> | <i>Interact_Runtime_Install_Directory</i><br><i>/tools/upgrade</i>           | Upgrades the Interact runtime environment tables and the Interact runtime environment configuration properties. |
| <code>aciUpgradeTool_lrntab</code> | <i>Interact_Runtime_Install_Directory</i><br><i>/tools/upgrade</i>           | Upgrades the Interact learning tables.                                                                          |
| <code>aciUpgradeTool_crhtab</code> | <i>Interact_Runtime_Install_Directory</i><br><i>/tools/upgrade</i>           | Upgrades the contact and response history tables used with cross-session response tracking.                     |
| <code>aciUpgradeTool_usrtab</code> | <i>Interact_Runtime_Install_Directory</i><br><i>/tools/upgrade</i>           | Upgrades the Interact tables required in your profile user tables.                                              |

When running any of the upgrade tools, you can abort the upgrade at any prompt by typing `abort`.

## About the upgrade log

When you run the upgrade tool, it writes processing details, warnings, and errors to a log file.

By default, the log is named `aci_upgrade.log` and is located in a `logs` directory in the same directory as the upgrade tool. The log file's location and level of verbosity are specified in the `setenv` script file, and you can modify those settings prior to running the tool if needed by opening the `setenv` script in any text editor.

## About upgrading partitions

If you have multiple partitions in the Interact design environment, run the upgrade tool once for each partition.

**Important:** Partitions must have the same names in the source and target versions.

The Interact runtime environment does not require additional procedures if you have multiple partitions.

## About starting and stopping servers during upgrading

When the JDBC drivers in WebLogic are used for migration, the web application server on which the new version of the Interact runtime server is deployed must always remain running to provide access to the database drivers.

---

## To upgrade from Interact 8.5x version or higher

The following lists provide the tasks that you need to complete before you can upgrade from any supported version of Interact to the current version.

- Upgrade the Interact runtime environments.
- Upgrade Interact design environment
- After you upgrade your Interact design environment and runtime environments, you are ready to upgrade your Interact implementation.

## Back up Interact runtime environment

Back up all files and the system table database used by your old installation of Interact runtime environment. You only need to back up one Interact runtime server per server group.

If your Interact runtime environment installation will require any of the configuration settings from your old Interact version in addition to the new (default) settings in the new version, use the `configTool` utility to export the old Interact configuration parameters. Specify a different file name for the exported.xml file and note the location to which you save it.

## Undeploy Interact runtime server

You must perform this step so that the web application server releases the lock on the `InteractRT.war` file, which will be updated by the Interact upgrade installation. This allows the upgrade to cleanly update the `InteractRT.war` file and register the new version of Interact in the IBM EMM console.

1. Follow the instructions in your web application server to undeploy the `Interact.war` file, and save or activate all changes.
2. Shut down and restart the web application server after undeploying the `Interact` runtime server to ensure that the lock on `.war` file is released.

## Unload unused files from memory (AIX only)

For installations on AIX®, run the `slibclean` command included with your AIX installation to unload unused libraries from memory before you run the installer in upgrade mode. Note that you must be root to run the `slibclean` command for this purpose.

## Install the new version of Interact

Follow the detailed installation steps in “Installing the products” on page 16 to install the new version of Interact. To ensure that the installer automatically upgrades your existing installation, make sure you perform the following step:

- When upgrading the design environment, when prompted for the install location during installation, select the same location as your old Interact Design Time system’s location.
- When upgrading the runtime environment, when prompted for the install location during installation, select the same location as your old Interact Run Time system’s location.

## Review SQL upgrade script and modify, if necessary

If your Interact runtime environment includes customizations to the runtime system tables that modified the default Data Definition Language (DDL) included with 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 may want to review the data dictionaries for the new versions of IBM products to confirm 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 these changes before running the Interact upgrade tool.

1. Locate the upgrade script for your database type. The scripts are installed in the `/ddl/Upgrades` or `/ddl/Upgrades/Unicode` directory under your Interact installation after you run the IBM EMM installer in upgrade mode.
2. Ensure that your database schema matches the DDL included with 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.

### Example modifications to the SQL upgrade script

The following example shows required modifications to the `aci_runtab_upgrd` SQL upgrade script for supporting additional audience levels.

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

## Required changes to the upgrade script

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

You must also revise the SQL to support the data type change for the SeqNum column in the UACI\_RHStaging table. The value of the SeqNum is a sequential number across all response history staging tables. The next value used is tracked by the NextID column in the UACI\_IdsByType table where the 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 containing the Household audience level. Text that has been changed to support the Household audience level is in bold:

```
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 would be used for inserting values into the UACI\_IdsByType table:

```

INSERT into UACI_IdsByType (TypeID, NextID)
(select 2, COALESCE(max(a.seqnum)+1,1)
+ COALESCE(max(b.seqnum)+1,1)
from UACI_RHSTAGING a, ACCT_UACI_RHSTAGING b);

```

If you have multiple audiences, you will need to add sections to the aci\_usrtab\_upgrd SQL script for each audience level as shown in the following example. The example shows the modified additions only.

```

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
```

## Set environment variables

Edit the setenv file to set environment variables required by the upgrade tool.

For the Interact design environment, the file is located in the /interactDT/tools/upgrade directory under your Interact design environment installation.

For the Interact runtime environment, the file is located in the /tools/upgrade directory under your Interact runtime environment installation.

### Environment variables required by the upgrade tool

The following tables describe the environment variables you must set for the Interact upgrade tools in the setenv files.

The environment variables for SSL upgrade are required for both the design and run time environments.

The setenv file for the design environment is located in the *Interact\_Design\_Environment\_Install\_Directory/interactDT/tools/upgrade* directory.

The setenv file for the runtime environment is located in the *Interact\_Runtime\_Environment\_Install\_Directory/tools/upgrade* directory.

### Interact design environment

| Variable         | Description                                                                                                                                                                         |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| JAVA_HOME        | Root directory of the JDK used by your new Campaign installation.                                                                                                                   |
| JDBCDRIVER_CP    | The path to the directory which contains the JDBC driver. This is the default path to the JDBC driver; you can override this path when running the upgrade tool.                    |
| JDBCDRIVER_CLASS | The class for the JDBC driver. This is the default class to the JDBC driver; you can override this class when running the upgrade tool.                                             |
| JDBCDRIVER_URL   | The URL for the JDBC driver. This is the default URL for the JDBC driver; you can override this URL when running the upgrade tool.                                                  |
| ERROR_MSG_LEVEL  | Desired logging level. Valid values, listed from most to least verbose. <ul style="list-style-type: none"> <li>• DEBUG</li> <li>• INFO</li> <li>• ERROR</li> <li>• FATAL</li> </ul> |
| LOG_TEMP_DIR     | Directory where you want the migration tool to create log files.                                                                                                                    |
| LOG_FILE_NAME    | The filename for the log file for the upgrade tool.                                                                                                                                 |

## Interact runtime environment

| Variable          | Description                                                                                                                                                                    |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| JAVA_HOME         | Root directory of the JDK used by your new Interact installation.                                                                                                              |
| JDBC_DRIVER_CP    | The path to the directory which contains the JDBC driver. This is the default path to the JDBC driver; you can override this path when running the upgrade tool.               |
| JDBC_DRIVER_CLASS | The class for the JDBC driver. This is the default class to the JDBC driver; you can override this class when running the upgrade tool.                                        |
| JDBC_DRIVER_URL   | The URL for the JDBC driver. This is the default URL for the JDBC driver; you can override this URL when running the upgrade tool.                                             |
| ERROR_MSG_LEVEL   | Desired logging level. Valid values, listed from most to least verbose. <ul style="list-style-type: none"><li>• DEBUG</li><li>• INFO</li><li>• ERROR</li><li>• FATAL</li></ul> |
| LOG_TEMP_DIR      | Directory where you want the migration tool to create log files.                                                                                                               |
| LOG_FILE_NAME     | The filename for the log file for the upgrade tool.                                                                                                                            |

## Environment variables to support SSL upgrade (run time and design environments)

| Variable                     | Description                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IS_WEBLOGIC_SSL              | Should the connection to the target system's server be via SSL? Valid values are YES and NO. If this value is set to NO, you do not need to set the remaining SSL properties.                                                                                                                                                                                                                     |
| BEA_HOME_PATH                | The path to the location where the target system's WebLogic server is installed. This is required to point to the license.bea file in this path. If you are installing in a distributed environment where the target system's WebLogic server is not available locally to this script, copy the license.bea file locally to some folder, and specify the path to that folder using this variable. |
| SSL_TRUST_KEYSTORE_FILE_PATH | Path of the trust store used to configure SSL in the target system's WebLogic server. This is where the trusted certificates reside. Used for SSL handshake.                                                                                                                                                                                                                                      |
| SSL_TRUST_KEYSTORE_PASSWORD  | Password of the trust store used to configure SSL in the target system's WebLogic server. If there is no password, set it to "" or nothing. Used for SSL handshake.                                                                                                                                                                                                                               |

## Run the upgrade tool for the design environment

Before running the upgrade tool, start the Web application server on the target system.

You must run the upgrade tool to update the Interact tables in the Campaign system tables. If you have multiple partitions, configure and run the upgrade tool once for each partition.

**Important:** The appropriate database client executable (sqlplus, db2, or osql) for the Campaign system tables data source must be accessible on the PATH of the user who will run the upgrade tool.

The latest versions of the upgrade tool (aciUpgradeTool) is located in the /interactDT/tools/upgrade directory under your Interact design environment installation. If your version is not listed, use the latest version available. Enter the requested information at the prompts to upgrade your system tables for the new version of Interact. When the tool completes successfully, your upgrade process is complete.

### **Information required for running the design environment upgrade tool (aciUpgradeTool)**

Gather the following information about your Interact design environment installation before running the upgrade tool (aciUpgradeTool).

#### **Target system configuration information**

- The name of the partition you are upgrading
- The directory where Marketing Platform is installed
- Full path of the Campaign configuration file (campaign\_configuration.xml). This file is located in the conf directory under your Campaign installation.

**If you connect to the design environment system tables 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 environment system tables using JDBC, collect the following information.**

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

#### **Target design environment database information**

- Catalog (or database) containing the target design environment system tables
- Schema
- Whether or not the tables are configured for Unicode

#### **Interact Design Time installation on source system**

- Version of Interact Design Time you are upgrading from

## **Run the upgrade tools for the runtime environment**

Before running the upgrade tools, start the Web application server on the target system.

You must run the upgrade tools to update the Interact tables in the runtime, learning, contact history, response history, and user profile tables.

The latest versions of the upgrade tools are located in the `/tools/upgrade` directory under your Interact runtime environment installation. If your version is not listed, use the latest version available. Enter the requested information at the prompts to upgrade your tables for the new version of Interact. When the tool completes successfully, your upgrade process is complete.

**Important:** Run these scripts only once for each server group.

You must run the tools in the following order.

1. Run `aciUpgradeTool_runtab` to update the `systemTablesDataSource` and the Interact runtime configuration properties.
2. ONLY if you are using built-in learning, run `aciUpgradeTool_lrntab` to update the `learningTablesDataSource`.
3. ONLY if you are using cross-session response tracking, modify the `/tools/upgrade/conf/ACIUpgradeTaskList_crhtab.properties` if necessary, then run `aciUpgradeTool_crhtab` to update the `contactAndResponseHistoryDataSource`.

Note that you need to modify the `ACIUpgradeTaskList_crhtab.properties` file only if you are upgrading from Interact version 8.x and the Interact runtime data source (as specified in the Interact | general | `contactAndResponseHistoryDataSource` configuration property) is **not** the same as the Campaign system tables data source. The properties file contains instructions for enabling the three required settings for this situation.

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

## Information required for running the runtime environment upgrade tools

Gather the following information about your Interact runtime installation before you run the upgrade tools

### `aciUpgradeTool_runtab`

#### Target system configuration information

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

**If you connect to the runtime environment system tables 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 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

**Target runtime environment database information**

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

**Interact installation on source system**

- Version of Interact you are upgrading from

**aciUpgradeTool\_Irntab****Target system configuration information**

- The directory where Marketing Platform is installed

**If you connect to the learning tables 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 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

**Target learning database information**

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

**Interact installation on source system**

- Version of Interact you are upgrading from

**aciUpgradeTool\_crhtab****Target system configuration information**

- The directory where Marketing Platform is installed

**If you connect to the contact history tables for cross-session response 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 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

**Target contact history tables for cross-session response database information**

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

**Interact installation on source system**

- Version of Interact you are upgrading from

**aciUpgradeTool\_usrtab**

**Target system configuration information**

- The directory where Marketing Platform is installed

**If you connect to the user profile tables 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 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

**Target user profile database information**

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

**Interact installation on source system**

- Version of Interact you are upgrading from

## **Redeploy Interact runtime server in the web application server**

Redeploy the newly-installed version of Interact runtime server in your web application server.





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## Appendix. Uninstalling IBM products

You might need to uninstall an IBM product if you are doing the following.

- Retiring a system.
- Removing an IBM product from your system.
- Freeing up space on a system.

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

Running the IBM uninstaller ensures that all configuration files, installer registry information, and user data are removed from the system. If you manually remove the files in your installation directory instead of running the uninstaller, the result might be an incomplete installation if you later reinstall an IBM product in the same location. After uninstalling a product, its database is not removed. The uninstaller only removes default files that get created during installation. Any file created or generated after installation is not removed.

---

### To uninstall Interact

In addition to the general instructions for uninstalling IBM EMM products, follow these guidelines when uninstalling Interact.

If you have multiple Interact runtime installations using the same Marketing Platform installation, you must remove network connectivity for the Interact runtime machine before running the uninstaller. Failure to do so will uninstall all of the configuration data for all other Interact runtime installations from Marketing Platform.

You can safely ignore any warnings regarding failure to unregister with Marketing Platform.

You may want to export a copy of your configuration as a precaution before uninstalling Interact.

If you choose to uninstall the Interact design environment, after you run the uninstaller, you may need to manually unregister Interact. Use `configtool` to unregister `full_path_to_Interact_DT_installation_directory\interactDT\conf\interact_navigation.xml`.

1. Undeploy the IBM EMM product web application from WebSphere or WebLogic.
2. Shut down WebSphere or WebLogic.
3. Run the IBM EMM uninstaller and follow the directions in the wizard.

The uninstaller is located in the `Uninstall_Product` directory, where *Product* is the name of your IBM EMM product.

When you uninstall a product that was installed using unattended mode, the uninstall is performed in unattended mode (without presenting any dialogs for user interaction).



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## Contacting IBM technical support

If you encounter a problem that you cannot resolve by consulting the documentation, your company's designated support contact can log a call with IBM technical support. To ensure that your problem is resolved efficiently and successfully, you collect information before you log your call.

If you are not a designated support contact at your company, contact your IBM administrator for information.

### Information to gather

Before you contact IBM technical support, gather the following information:

- A brief description of the nature of your issue.
- Detailed error messages that you see when the issue occurs.
- Detailed steps to reproduce the issue.
- Related log files, session files, configuration files, and data files.
- Information about your product and system environment, which you can obtain as described in "System information."

### System information

When you call IBM technical support, you might be asked to provide information about your environment.

If your problem does not prevent you from logging in, much of this information is available on the About page, which provides information about your IBM applications.

You can access the About page by selecting **Help > About**. If the About page is not accessible, you can obtain the version number of any IBM application by viewing the `version.txt` file that is located under the installation directory for each application.

### Contact information for IBM technical support

For ways to contact IBM technical support, see the IBM Product Technical Support website: ([http://www.ibm.com/support/entry/portal/open\\_service\\_request](http://www.ibm.com/support/entry/portal/open_service_request)).

**Note:** To enter a support request, you must log in with an IBM account. If possible, this account must be linked to your IBM customer number. To learn more about associating your account with your IBM customer number, see **Support Resources > Entitled Software Support** on the Support Portal.



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