IBM Marketing Platform
Version 8 Release 6
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Installation Guide

IBM

Contents

Chapter 1. Preparing to Install

Installing IBM® products is a multi-step process that involves working with a number of software and hardware elements that are not provided by IBM . While the IBM documentation provides some guidance regarding specific configurations and procedures required to install IBM products, for details on working with these systems that are not provided by IBM , consult those products' documentation.

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

Marketing Platform basic installation checklist

Read this chapter to gain an overview of the installation process and verify that your environment, planned order of installation, and knowledge levels fulfill the prerequisites.

The following list is a high-level overview of the steps required to perform a basic installation of the Marketing Platform. Additional details about these steps are provided in the rest of this guide.

Prepare the Marketing Platform data source

1. "Step: Create the Marketing Platform system table database or schema" on page 5

   Create the Marketing Platform system table database or schema and record the information.

2. "Step: Configure the web application server for your JDBC driver" on page 6

   Add the database driver for the Marketing Platform system table database to the web application server classpath.

3. "Step: Create the JDBC connection in the web application server" on page 6

   Create a JDBC connection to the Marketing Platform system table database. Be sure to use UnicaPlatformDS as the JNDI name for the connection.

Install the Marketing Platform

1. Chapter 3, "Installing the IBM Marketing Platform," on page 9

   Download the IBM and Marketing Platform installers.

2. "Step: Obtain required information" on page 16

   Gather the required database and web application server information.

3. "Step: Run the IBM installer" on page 17

   The IBM installer launches installers for all products it finds in the same directory.

4. "Step: Create and populate the Marketing Platform system tables manually, if necessary" on page 18

   If your company policy does not permit the installer to create the Marketing Platform system tables automatically, or if automatic creation did not occur due to a connection failure, create the tables manually.

Deploy the Marketing Platform

1. Chapter 4, "Deploying the IBM Marketing Platform," on page 21

   Follow the specific guidelines for WebSphere® or WebLogic.

2. "Step: Verify your Marketing Platform installation" on page 23

   Log in to IBM EMM and check basic functions.

Configure the Marketing Platform

1. Chapter 5, "Configuring the IBM Marketing Platform After Deployment," on page 25

   Set password constraints or configure the Java™ Message Service for optimum performance of the Scheduler, or install reporting.

2. Chapter 8, "Installing Reports," on page 47

   If you plan to use the reporting feature in any of the IBM Enterprise products, see the Reporting chapter.

IBM components and where to install them

The following diagram provides a brief overview of where to install IBM applications.

This setup is the basic installation that functions. You might require a more complex, distributed installation to meet your security and performance requirements.
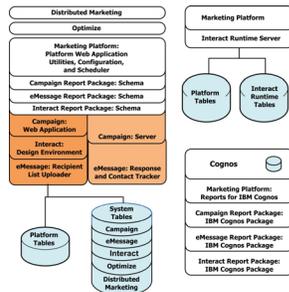
Prerequisites

The following are prerequisites for installing IBM EMM products.

System requirements

For detailed system requirements, see the *IBM EMM Enterprise Products Recommended Software Environments and Minimum System Requirements* guide.

JVM requirement

IBM EMM applications within a suite must be deployed on a dedicated Java Virtual Machine (JVM). IBM EMM products customize the JVM used by the web application server. You might need to create an Oracle WebLogic or WebSphere domain dedicated to IBM EMM products if you encounter JVM-related errors.

Network domain requirement

IBM EMM 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.

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.

Required permissions

Verify that your network permissions allow you to perform the procedures in this guide, that you have logins with appropriate permissions, and that the product installation files that you download have appropriate permissions, as follows.

- You must have the administrative login name and password for your web application server.
- You must have administration access for all necessary databases.
- You must have write permission for all files that you must edit.
- You must have write permission for all directories where you must save a file, such as the installation directory and backup directory if you are upgrading.
- 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.
- You must have appropriate read/write/execute permissions to run the installer.

   On UNIX, the user account that performs the IBM product installation must be a member of the same group as the user account that installed the web application server on which it will be deployed. This is because the web application server needs access to the product's file system.
- On UNIX, all of the installer files for IBM products must have full execute permissions (`rwxr-xr-x`).

If you are upgrading or installing in a cluster

If you are upgrading, you should read Chapter 7, "Upgrading the IBM Marketing Platform," on page 29.

If you are installing the Marketing Platform in a cluster, you should read Chapter 6, "Installing the IBM Marketing Platform in a Cluster," on page 27.

Chapter 2. Preparing the IBM Marketing Platform Data Source

This section provides the information you need to set up the database and JDBC connection for the Marketing Platform system tables. You will enter the details about this database when you run the IBM installer later in the installation process, so you should print and fill in the "Marketing Platform database information checklist" on page 8.

Step: Create the Marketing Platform system table database or schema

1. Work with a database administrator to create the Marketing Platform system table database or schema.

   Follow these vendor-specific guidelines.

   - If your Marketing Platform system tables are in Oracle, you must enable auto commit for the environment open. See the Oracle documentation for instructions.

   - If your Marketing Platform system tables are in DB2®, set the database page size to at least 16k (32k if you need to support Unicode). See the DB2 documentation for instructions.

   - If Marketing Platform system tables are in SQL Server, you must use either SQL Server authentication only, or both SQL Server and Windows authentication, because the Marketing Platform requires SQL Server authentication. If necessary, change the database configuration so that your database authentication includes SQL Server. Also be sure that TCP/IP is enabled in your SQL Server.

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

2. Have the database administrator create an account that can be used to create and populate the Marketing Platform system tables. This is done later in the installation process, and can be performed manually or automatically by the IBM EMM installer

   This account must have at least the following rights.

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

3. Obtain the information about your database or schema and the database account and then print and complete the "Marketing Platform database information checklist" on page 8. You will need this information during later steps in the installation process.

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 classpath of the web application server where you plan to deploy the Marketing Platform.

1. Obtain the latest vendor-provided Type 4 JDBC driver supported by IBM EMM, as described the the *Recommended Software Environments and Minimum System Requirements* document.

   - If the driver does not exist on the machine where the Marketing Platform will be deployed, obtain it and unpack it on the machine where you plan to deploy the Marketing Platform. Unpack the drivers in a path that does not include spaces.

   - If you obtain the driver from a machine where the data source client is installed, verify that the version is the latest supported by IBM .

   See the *Recommended Software Environments and Minimum System Requirements* document for supported drivers.

2. Include the full path to the driver, including the file name, in the classpath of the web application server where you plan to deploy the Marketing Platform, as follows.

   - For all supported versions of WebLogic, set the classpath 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 CLASSPATH 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/10.2.0/jdbc/lib/ojdbc14.jar:
       ${PRE_CLASSPATH}${CLASSPATHSEP}${WEBLOGIC_CLASSPATH}
       ${CLASSPATHSEP}${POST_CLASSPATH}${CLASSPATHSEP}${WLP_POST_CLASSPATH}"
     export CLASSPATH
     ```

     Windows

     ```
     set CLASSPATH=c:\oracle\jdbc\lib\ojdbc14.jar;%PRE_CLASSPATH%;
     %WEBLOGIC_CLASSPATH%;%POST_CLASSPATH%;%WLP_POST_CLASSPATH%
     ```

   - For all supported versions of WebSphere, you set the classpath in the next step, while you are setting up the JDBC providers for the Marketing Platform.

3. Make a note of this database driver classpath in the Marketing Platform database information checklist, as you will need to enter it 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 classpath contains the path to the database driver.

Step: Create the JDBC connection in the web application server

The Marketing Platform web application must be able to communicate with its system table database using a JDBC connection. You must create this JDBC connection in the web application server where you plan to deploy the Marketing Platform.

In WebSphere, set the classpath for your database driver during this process.

Important: You must use `UnicaPlatformDS` as the JNDI name. This is required, and is noted in the "Marketing Platform database information checklist" on page 8.

Note: When the Marketing Platform system tables are created in a different schema from the default schema of the database login user, you must specify that non-default schema name in the JDBC connection used to access the system tables.

Information for JDBC connections

When you create a JDBC connection, you can use this section to help you determine some of the values you must enter. If you are not using the default port setting for your database, change it to the correct value.

This information does not exactly 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
- 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>`
- 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>*

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>*

Marketing Platform database information checklist

Type	Name
Data source type	
Data source name	
Data source host name	
Data source port	
Data source account user name	
Data source account password	
JNDI name	UnicaPlatformDS
JDBC driver class	
JDBC connection URL	
JDBC driver classpath on your system	

Chapter 3. Installing the IBM Marketing Platform

Obtain the DVD, or download the software from IBM .

Important: Place all of the installation files in the same directory. This is an installation requirement.

To install the Marketing Platform you need the following.
- The IBM master installer
- The Marketing Platform installer

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 installers intended to be run in console mode, which are not operating system-specific. For UNIX, different installers are used depending on whether the installation mode is X-windows or console.

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 — *Product_N.N.N.N*_win.exe is version `N.N.N.N` and is intended for installation on the Windows operating systems.

If you plan to install on Solaris using X-windows mode — *Product_N.N.N.N*_solaris.bin is version `N.N.N.N` and is intended for installation on the Solaris operating system.

If you plan to install on a UNIX type system using console mode — *Product_N.N.N.N*_.sh is version `N.N.N.N` and is intended for installation on all supported UNIX type operating systems.

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 enterprise products, you use a combination of installers.
- A master installer, which has `Unica_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 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 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.

Check for a JAVA_HOME environment variable

If you have a JAVA_HOME environment variable defined on the machine where you are installing an IBM EMM product, verify that it is pointing to version 1.6 of the Sun JRE.

This environment variable is not required for installing IBM EMM products, but if it is present, it must point to the 1.6 version of the Sun JRE.

If you have a JAVA_HOME environment variable, and it points to an incorrect JRE, you must unset the JAVA_HOME variable before you run the IBM EMM installers. You can do this as follows.

- Windows: In a command window, enter

  `set JAVA_HOME=`*leave empty and press return key*

- UNIX-type systems: In the terminal, enter

  `export JAVA_HOME=`*leave empty and press return key*

After the environment variable is unset, the IBM EMM installers use the JRE bundled with the installers.

You can reset the environment variable when installation is complete.

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 the user performing the installation has appropriate permissions.

The default top-level directory for IBM installations is named `IBM/Unica`. The product installers then install in subdirectories under the `Unica` 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 installer 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 these 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 response files are named as follows.
  - IBM installer - `installer.properties`
  - Product installer - `installer_` followed by initials for the product name. For example, the Campaign installer has a response file named `installer_uc.properties`.
  - Product reports packs installer - `installer_` followed by initials for the product name plus rp. For example, the Campaign reports pack installer has a response file named `installer_urpc.properties`.

  Edit the sample files as needed and place them in the same directory with your installers.
- Before you set up an unattended run, you can run the installer in Windows GUI or UNIX X-windows mode or in Console mode and choose to create the response files.

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

  The response files have `.properties` extensions, such as `installer_product.properties` and the file for the IBM 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.

Automatic vs. manual system table creation

The Marketing Platform installer lets you choose whether or not to allow the installer to create the system tables in the database.

If you choose to allow the installer to create the system tables, you must provide information that enables the installer to connect to the Marketing Platform database you created in an earlier step. For the Marketing Platform, this is the same information that you provide in the IBM master installer for product registration, as described in "Step: Obtain required information" on page 16.

If you choose to create the system tables manually, you must use your database client to run the SQL scripts provided with your Marketing Platform installation. Details for manual table creation are provided in "Step: Create and populate the Marketing Platform system tables manually, if necessary" on page 18.

Creating EAR files for clustered deployments

IBM supports clustering. The supported web application servers allow you to deploy and manage deployments from a single administration console. To take advantage of these features, you must use EAR files for deployments.

The master installer can create one or more EAR files containing the installed products that you specify. You then deploy the EAR file or files that include the products.

If you deploy more than one EAR file in a domain, the name you give the EAR file must be unique within that domain.

You can use the IBM installer to create a new EAR file of your installed products at any time after your initial installation. See "To create an EAR file after running the installer."

Note the following details about specific products.

- eMessage, Contact Optimization, and Interact Design Time do not include a WAR file to be deployed on a web application server, so they are not available for inclusion in an EAR file. Interact Run Time does have a WAR file and therefore can be included in an EAR file.

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_product.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.

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**.

IBM EMM installer exit codes

This section describes standard exit codes produced by the IBM EMM installer.

The codes are listed with the Windows code first, followed by the equivalent code in Linux, in parentheses.

If you see a value other than 0 or 1, it means the installation failed for one of the reasons cited below.

Code	Description
0 (0)	Success: The installation completed successfully without any warnings or errors.
1 (1)	The installation completed successfully, but one or more of the actions from the installation sequence caused a warning or a non-fatal error.
-1 (255)	Canceled by the user.
1000 (232)	The installation includes an invalid command-line option.
1001 (233)	One or more of the actions from the installation sequence caused an unrecoverable error.
2000 (208)	Unhandled error

Code	Description
2001 (209)	The installation failed the authorization check, may indicate an expired version.
2002 (210)	The installation failed a rules check. A rule placed on the installer itself failed.
2003 (211)	An unresolved dependency in silent mode caused the installer to exit.
2004 (212)	The installation failed because not enough disk space was detected during the execution of the Install action.
2005 (213)	The installation failed while trying to install on a Windows 64-bit system, but installation did not include support for Windows 64-bit systems.
2006 (214)	The installation failed because it was launched in a UI mode that is not supported by this installer.
3000 (184)	Unhandled error specific to a launcher.
3001 (185)	The installation failed due to an error specific to the lax.main.class property.
3002 (186)	The installation failed due to an error specific to the lax.main.method property.
3003 (187)	The installation was unable to access the method specified in the lax.main.method property.
3004 (188)	The installation failed due to an exception error caused by the lax.main.method property.
3005 (189)	The installation failed because no value was assigned to the lax.application.name property.
3006 (190)	The installation was unable to access the value assigned to the lax.nl.java.launcher.main.class property.
3007 (191)	The installation failed due to an error specific to the lax.nl.java.launcher.main.class property.
3008 (192)	The installation failed due to an error specific to the lax.nl.java.launcher.main.method property.
3009 (193)	The installation was unable to access the method specified in the lax.nl.launcher.java.main.method property.
4000 (160)	A Java executable could not be found at the directory specified by the java.home system property.
4001 (161)	An incorrect path to the installer jar caused the relauncher to launch incorrectly.
5000 (136)	Modification of existing instance failed because the instance has not been uninstalled properly or because the Registry has been corrupted.

Where to install Marketing Platform components

The Marketing Platform application contains the IBM common navigation, reporting, user administration, security, scheduling, and configuration management features. Follow these guidelines.

- For each IBM EMM environment, you must install and deploy the Marketing Platform once.
- If you want to use the Marketing Platform utilities on additional machines, you must install both the utilities and the web application. This is needed because

the utilities use the jar files in the web application. However, when you install the Marketing Platform for this purpose, you do not have to deploy the Marketing Platform again, nor do you have to create additional Marketing Platform system tables.

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

Component	Description
Marketing Platform utilities	Command line tools that allow you to work with the Marketing Platform system table database from the command line to import and export configurations, create partitions and data filters, and restore the platform_admin user. Install this on every machine where you want to be able to use Marketing Platform utilities.
Marketing Platform web application	The web application that supplies the common user interface, security, and configuration management for IBM EMM. Install this on the machine where you plan to deploy the Marketing Platform. Also, if you are configuring additional machines where you want to be able use the Marketing Platform utilities, you must also install the web application because the utilities use the JAR files included in the web application. You should not deploy on these additional machines.
Reports for IBM Cognos® BI	Reports integration components for IBM Cognos. Install this component only on the Cognos system.

Step: Obtain required information

The installer prompts you to enter some information about your Marketing Platform system table database and web application server. Gather this information before you start the installation.

Obtain connection information for the Marketing Platform database

The installation wizards for all products must be able to communicate with the Marketing Platform system table database, to register their menu items, security information, and configuration properties. Each time you run the installer in a new location, 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 and filled out the Marketing Platform database information checklist.

The master installer tests and validates this connection information when you perform the installation.

Obtain information about your deployment on the web application server

Obtain the following information about your planned Marketing Platform deployment.

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

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

Obtain information required to enable Marketing Platform utilities

If you plan to use the Marketing Platform utilities, obtain the following JDBC connection information before you start to install the Marketing Platform.

- Path to the JRE. The default value is the path to the 1.6 version of the JRE that the installer places under your IBM installation directory.

  You can accept this default or specify a different path. If you specify a different path, you must point to the 1.6 version of the Sun JRE.
- JDBC driver class. The installer automatically provides this, based on the database type you specifiy in the installer.
- JDBC connection URL. The installer provides the basic syntax, but you must provide the host name, database name, and port.
- JDBC driver classpath on your system.

You obtained the last three pieces of information listed above when you created the database or schema and filled out the Marketing Platform database information checklist.

Step: Run the IBM installer

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

- You have obtained the software products you plan to install, and you have put all of the installers in the same directory.
- You have available the information you gathered as described in "Step: Obtain required information" on page 16.

If your company policy does not allow the installer to create and populate the Marketing Platform system tables during installation, see "Step: Create and populate the Marketing Platform system tables manually, if necessary" on page 18.

Note: If you plan to deploy the Marketing Platform on WebLogic 9.2, do not include the Marketing Platform in an EAR file. See the WebLogic guidelines "Guidelines for deploying the Marketing Platform on WebLogic" on page 21 for details.

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

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

- **GUI or X-windows mode**

  Run the `Unica_Installer` file. On UNIX-type systems, use the `.bin` file.

- **Console mode on Windows**

  Open a command prompt, and from the directory where you placed the IBM software, run the `Unica_Installer` executable file with `-i console`. For example,

  `Unica_Installer_N.N.N.N_OS` `-i console`

- **Console mode on UNIX-type systems**

  Run the `Unica_installer.sh` file with no switch.

  On Solaris systems only, you must run the installer from a bash shell.

- **Unattended mode**

  Open a command prompt, and from the directory where you placed the IBM software, run the `Unica_Installer` executable file with `-i silent`. On UNIX-type systems, use the `.bin` file.

  For example, to specify a response file located in the same directory as the installer:

  `Unica_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:

  `Unica_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 11.

Pay close attention to the installation summary windows. If errors are reported, check the installer log files, and contact IBM technical support if necessary.

Step: Create and populate the Marketing Platform system tables manually, if necessary

The IBM installer can create the Marketing Platform system tables during installation, but if your company policy does not permit this, you must create and populate the tables manually.

1. Run the IBM installer as described in "Step: Run the IBM installer" on page 17, but with the following differences in your choices when it launches the Marketing Platform installer.

   - Select **Manual database setup**.
   - Deselect the **Run Platform configuration** checkbox.

2. After the installer finishes, create the system tables manually by running the following SQL scripts appropriate for your database type against your Marketing Platform system table database, as described in "Creating system tables" on page 103.

Run the scripts in this order.

- `ManagerSchema_DBType.sql`

  If you plan to support multi-byte characters (for example, Chinese, Japanese, or Korean) and your database is DB2, use the `ManagerSchema_DB2_unicode.sql` script.

- `ManagerSchema__DBType_CeateFKConstraints.sql`
- `active_portlets.sql`
- `quartz__DBType.sql`

3. Run the IBM installer again, making the following selections when it launches the Marketing Platform installer.

   - Select **Manual database setup**.
   - Select the **Run Platform configuration** checkbox.

     This will add default data to the system tables.

Chapter 4. Deploying the IBM Marketing Platform

When you deploy the Marketing Platform in your web application server, you must follow the guidelines described in this section.

When you ran the IBM installer, you may have included the Marketing Platform in an EAR file, or you may choose to deploy the Marketing Platform's WAR file (`unica.war`). If you included 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.

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.

Guidelines for deploying the Marketing Platform on WebLogic

Follow the guidelines in this section when you deploy the Marketing Platform on WebLogic.

All versions of WebLogic

Follow the guidelines in this section when you deploy the Marketing Platform products on any supported version of WebLogic.

1. 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.
2. 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 BEA WebLogic documentation.
3. Deploy the Marketing Platform as a web application.
4. **Only if your instance of WebLogic is configured to use a JVM version 1.6 or newer**, do the following to work around an issue with the time zone database.
   - Stop WebLogic.
   - Download the Timezone Updater tool from the Oracle web site:
     http://www.oracle.com/technetwork/java/javase/tzupdater-readme-136440.html
   - Follow the steps provided by the Timezone Updater tool to update the time zone data in your JVM.
5. If you are configuring WebLogic to use the IIS plug-in, review the BEA WebLogic documentation.

Additional guidelines for WebLogic 10 and 11 G only

Follow the guidelines in this section when you deploy the Marketing Platform on WebLogic 10 or 11 G.

1. **Only if your installation must support non-ASCII characters**, for example for Portuguese or for locales that require multi-byte characters, edit the `setDomainEnv` script, located in the `bin` directory under your WebLogic domain directory, as follows.
   - Add the following to `JAVA_OPTIONS`.

     `-Dfile.encoding=UTF-8`
2. In the WebLogic console, click the **Domain** link on the home page, and check the **Archived Real Path Enabled** box on the Web Applications tab.
3. Restart WebLogic.
4. Deploy and start the EAR file or the WAR file (`unica.war`.

Guidelines for deploying the Marketing Platform on all versions of WebSphere

Follow the guidelines in this section when deploying the Marketing Platform on IBM WebSphere.

1. Be sure that the version of WebSphere meets the requirements described in the *IBM Enterprise Products Recommended Software Environments and Minimum System Requirements* document, including any necessary fix packs or upgrades, including any necessary fix packs or upgrades.
2. Set a custom property in the server as follows.
   - Name: `com.ibm.ws.webcontainer.invokefilterscompatibility`
   - Value: `true`

   See http://www-01.ibm.com/support/docview.wss?uid=swg21284395 for instructions on setting a custom property in WebSphere.
3. Deploy the IBM EAR file or `unica.war` file as an enterprise application.

   Follow the guidelines below. Unless otherwise noted below, you can accept the default settings.

   Ensure that the JDK source level of the JSP compiler is set to Java 15 and that JSP pages are precompiled, as follows.
   - In the form where you browse to and select the WAR file, select **Show me all installation options and parameters** so the **Select Installation Options** wizard runs.
   - In step 1 of the **Select Installation Options** wizard, select **Precompile JavaServer Pages files**.
   - In step 3 of the **Select Installation Options** wizard, ensure that the **JDK Source Level** is set to 15.

   The context root must be the following.
   - If you deploy a WAR file, name it /unica, all lower case.
   - If you deploy an EAR file, name it /unica, all lower case.
4. In the server's **Web Container Settings > Web Container > Session Management** section, enable cookies.
5. Specify a different session cookie name for each deployed application. Use the procedure that is appropriate for your deployment, as follows.
   - **If you deployed separate WAR files**, 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** checkbox.

- **If you deployed EAR files**, 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** checkbox.

6. **Only if your installation must support non-ASCII characters**, for example for Portuguese or for locales that require multi-byte characters, add the following to **Generic JVM Arguments** at the server level.

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

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

   Navigation tip: select **Servers > Application Servers > Java and Process Management > Process Definition > Java Virtual Machine > Generic JVM Arguments**. See the WebSphere documentation for additional details.

7. In the server's **Applications > Enterprise Applications** section, select the EAR file or WAR file that you deployed, then select **Class loading and update detection** and set the following General Properties.
   - If you are deploying a WAR file:
     – For **Class loader order**, select **Classes loaded with local class loader first (parent last)**.
     – For **WAR class loader policy**, select **Single class loader for application**.
   - If you are deploying 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**.

8. Start your deployment.

9. **Only if your instance of WebSphere is configured to use a JVM version 1.6 or newer**, do the following to work around an issue with the time zone database.
   - Stop WebSphere.
   - Download the IBM Time Zone Update Utility for Java (JTZU) from the IBM web site:

     http://www.ibm.com/developerworks/java/jdk/dst/index.html
   - Follow the steps provided by the IBM (JTZU) to update the time zone data in your JVM.

10. Restart WebSphere.

Step: Verify your Marketing Platform installation

1. Access the IBM EMM URL using Internet Explorer.

   If you entered a domain when you installed, the URL is the following, where *host* is the machine where the Marketing Platform is installed, *domain.com* is the domain in which the host machine resides, and *port* is the port number on which the web application server listens.

   ```
   http://host.domain.com:port/unica
   ```

2. Log in using the default administrator login, which is `asm_admin` with `password` as the password.

   You will be asked to change the password. You can enter the existing password, but for good security you should choose a new one.

The default home page is the dashboard, which you will configure later. A 'page not found' message may be displayed on the dashboard page until it has been configured.

3. Under the **Settings** menu, check the Users, User Groups, and User Permissions pages to verify that the pre-configured users, groups, roles, and permissions are present, as described in the *Marketing Platform Administrator's Guide*.

4. Add a new user and group and verify that data is entered into the Marketing Platform system table database.

5. Under the **Settings** menu, check the Configuration page to verify that the Marketing Platform configuration properties exist.

There are additional configuration tasks, such as configuring the dashboard, setting up user access to IBM applications, and integrating with an LDAP or web access control system (optional). See the *IBM Marketing Platform Administrator's Guide* for instructions.

Chapter 5. Configuring the IBM Marketing Platform After Deployment

For a basic installation of the Marketing Platform, you must perform additional configuration only under the following conditions.

- If you are using the IBM EMM reporting feature, see Chapter 8, "Installing Reports," on page 47

- If you have a particular password policy in mind, see "To change default password settings" to determine whether you must change the default password settings.

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

To change default password settings

You set password policies on the IBM EMM Configuration page in the `Unica > General > Password settings` category.

These password options apply only to passwords for internal users (created within IBM EMM), not to users imported through synchronization with an external system (such as Windows Active Directory, a supported LDAP directory server, or web access control server). The exception is the `Maximum failed login attempts allowed` property, which affects both internal and external users. Also note that this property does not override any similar restriction set in an external system.

The default settings are as follows.

- `Maximum failed login attempts allowed` - 3
- `Password history count` - 0
- `Validity (in days)` - 30
- `Blank passwords allowed` - True
- `Allow identical user name and password` - True
- `Minimum number of numeric characters` - 0
- `Minimum number of letter characters` - 0
- `Minimum character length` - 4

See the online help for descriptions of these properties.

Chapter 6. Installing the IBM Marketing Platform in a Cluster

Use this procedure to install the Marketing Platform in a clustered environment when you deploy on WebLogic 10 or any version of WebSphere.

The IBM EMM scheduler does not support clustering. Therefore, if you use the IBM EMM scheduler with any of the following products, you should not use a clustered installation of the Marketing Platform with that product.

- Campaign, when you use the IBM EMM scheduler for flowchart runs.
- Interaction History, which relies on the IBM EMM scheduler to set up data loading and report generation.

Leads does not use the scheduler, so clustering is fully supported for an environment that includes Leads alone.

Note: For upgrades, see Chapter 7, "Upgrading the IBM Marketing Platform," on page 29

1. Install one instance of the Marketing Platform.
2. Verify that your installation works.
3. Use your web application server's automatic deployment features to deploy the EAR file in your cluster.

   All machines in the cluster on which you deploy the Marketing Platform must have network access to the database containing the Marketing Platform system tables.

Chapter 7. Upgrading the IBM Marketing Platform

Before you upgrade the Marketing Platform, be sure you have read and understood "Upgrade prerequisites for all IBM EMM products" and "Marketing Platform upgrade scenarios" on page 31.

Note: Although IBM changed the names of its Enterprise products with the 8.0.0. release, some configuration categories and properties on the Configuration page retain the 7.5.x names after upgrade, to provide continuity. Properties and categories in new installations display the updated names.

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 2 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.properties`, except for the file for the IBM installer itself, which is named `installer.properties`. The installer creates these files in the directory where the installer is located.

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.

- The basic function of the IBM installer, as described in "How the IBM EMM installers work" on page 9
- 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 your source and target systems
- The installation and configuration process for reports, if you are using these reports

Oracle or DB2 only: auto commit requirement

If your Marketing Platform system tables are in Oracle or DB2, you must enable auto commit for the environment open. See the Oracle or DB2 documentation for instructions.

Upgrading Schedules with time zone support

In version 8.5.0, the Marketing Platform Scheduler allows you to select any of a large number of world wide time zones for your tasks. If you had scheduled tasks in your pre-8.5.0 version of the Marketing Platform, they will be set to the default time zone, which is the time zone of the server on which the Marketing Platform is installed.

To take advantage of the time zone support in the Scheduler, you should edit your scheduled tasks and select the new time zone as needed. See the *IBM Marketing Platform Administrator's Guide* for information about using the Scheduler.

If you have re-branded the IBM frameset

If you have re-branded the IBM frameset as described in the *IBM Marketing Platform Administrator's Guide*, you must back up the files you modified before you proceed with the upgrade, and restore them after you have completed the upgrade installation but before you deploy your new version.

Typically, these files are the `corporatetheme.css` file and branding images. This file and the images are located under the `css\theme` directory within the `unica.war` file.

Therefore, you should do the following.
1. Make a backup copy of the `unica.war` file before you start the upgrade procedure.
2. Extract the `unica.war` file and set aside copies of your `corporatetheme.css` file and branding images.
3. Proceed with the upgrade as described in this chapter, but do not deploy.
4. Extract the new `unica.war` file and overwrite the existing images and `corporatetheme.css` file with your backed-up versions.
5. Re-war the new `unica.war` file, and deploy.

See the *IBM Marketing Platform Administrator's Guide* for additional details on re-branding.

Marketing Platform upgrade scenarios

Follow these guidelines for upgrading the Marketing Platform.

Source version	Upgrade path

Marketing Platform version before 8.2.0 that is integrated with an LDAP server	1. If you have mapped LDAP groups in the `LDAP references for AM user creation` property that are not mapped in the `LDAP reference to AM group map` property, you must do the following when in your current version of the Marketing Platform before proceeding with the upgrade.
	
	  • Identify any groups in the **LDAP references for AM user creation** property that are not mapped in the **LDAP reference to AM group map** property.
	
	  • Map the LDAP groups you have identified to an appropriate Marketing Platform group. After you perform an LDAP synchronization, you can map these users to additional Marketing Platform groups to control their application access as needed. For instructions, see the *IBM Marketing Platform Administrator's Guide*.
	
	  Performing the previous steps ensures that all desired users are created in the Marketing Platform.
	
	2. Follow the upgrade procedures for your version, as shown in the remainder of this table.

Pre-7.5.0 versions of Affinium Manager	An upgrade from these versions directly to the Marketing Platform is not supported. Perform the following steps. 1. Obtain the 7.5.1 Affinium Manager software and upgrade to that version. **Important:** To upgrade from pre-7.5.0 versions of the Marketing Platform to version 8.0.0 or later, you must first upgrade to version 7.5.1. The installation guides packaged with the Manager 7.5.0 and 7.5.1 software contain an error. If you use either of those guides, you may have problems with the upgrade. Instead, you must follow the instructions in the corrected *Affinium Manager 7.5.1 Installation Guide*, which is available on Customer Central or by contacting IBM Technical Support. (Although the software supports a direct upgrade from any 7.5.x version to 8.1.x, the upgrade instructions in the *Affinium Manager 7.5.0 Installation Guide* have not been corrected. Therefore, if your version is pre-7.5.0, you must upgrade to version 7.5.1 and use the corrected instructions.) To ensure that you have the corrected guide, look for a publication date of July 6, 2010 or later on the title page. 2. Upgrade your 7.5.1 installation of Affinium Manager to the Marketing Platform, as described in "To upgrade from Manager 7.5.x with automatic migration" on page 39 or "To upgrade from Manager 7.5.x with manual migration" on page 40 in this guide.
Affinium Manager version 7.5.x	1. Follow the instructions in "To upgrade from Manager 7.5.x with automatic migration" on page 39 or "To upgrade from Manager 7.5.x with manual migration" on page 40 in this guide.
Marketing Platform version 8.x	1. **If you are upgrading from a version earlier than 8.2.0.7**, follow the instructions described in "To upgrade from version 8.x with automatic migration" on page 32 or "To upgrade from version 8.x with manual migration" on page 33. 2. **If you are upgrading from version 8.2.0.7 or later**, automatic upgrade is not supported. Follow the instructions described in "To upgrade from version 8.x with manual migration" on page 33.

To upgrade from version 8.x with automatic migration

Upgrading from version 8.x is an in-place upgrade. You install to the directory where your current Marketing Platform is installed.

Ensure that you have the following in one directory.
- The IBM master installer
- The Marketing Platform installer

A best practice is to do the following.
- Place the installers in the same directory where you originally placed the installers for the earlier versions of your products.
- Remove any earlier versions of the IBM product installers from the directory, to avoid having the master installer attempt to install the earlier versions.

1. Make a backup copy of your Marketing Platform system table database.

   Important: Do not skip this step. If upgrade fails, you will not be able to roll back your database and your data will be corrupted.

2. Undeploy your Marketing Platform deployment.

   Depending on your web application server, you may have deployed a packed or extracted `dashboard.war` file and a `unica.war` file, or you may have deployed an EAR file containing the Marketing Platform. In 8.6.0 and later versions, the dashboard is no longer in a separate WAR file.

3. Run the IBM master installer.

   The IBM master installer starts. See "Step: Run the IBM installer" on page 17 for details on running the installer.

   - When the IBM master installer prompts you to choose an installation directory, choose the root IBM installation directory, not the Marketing Platform installation directory which is under this IBM directory.

   - When the IBM master installer prompts you to enter Marketing Platform database connection information, enter the information that pertains to your current Marketing Platform system tables.

   The IBM master installer will pause and launch the Marketing Platform installer.

4. Follow these guidelines in the Marketing Platform installer.
   - When the Marketing Platform installer asks whether you want to upgrade Manager 7.5.x, select **No**.
   - When the Marketing Platform installer prompts you for an installation directory, select the directory of your current Marketing Platform installation, usually named `Platform`.
   - Select **Automatic database setup**.
   - Follow all the remaining steps in the installation wizard, entering all requested information.

5. Deploy your installation following the guidelines in Chapter 4, "Deploying the IBM Marketing Platform," on page 21.

6. Pay close attention to the installation summary windows. If errors are reported, check the installer log files and contact IBM technical support if necessary.

To upgrade from version 8.x with manual migration

The Marketing Platform upgrade installer can perform all of the data migration required for an upgrade automatically, but if your company does not allow this, you must perform this procedure to upgrade manually.

This procedure applies only to upgrades from Marketing Platform version 8.x. See "Marketing Platform upgrade scenarios" on page 31 for information on upgrading from other versions.

Ensure that you have the following in one directory.
- The IBM master installer
- The Marketing Platform installer
- The installers for any product reports packages you want to upgrade

Also, ensure that your installation of Marketing Platform 8.x is fully functional and that you can run the command line tools. This procedure requires the use of two Marketing Platform utilities located in the `tools/bin` directory under your Marketing Platform installation. Complete information on using these utilities, including example commands for common tasks, is available as follows.
- "The populateDb utility" on page 97
- "The configTool utility" on page 89

 1. Make a backup of your Marketing Platform system table database.

    Important: Do not skip this step. If upgrade fails, you will not be able to roll back your database and your data will be corrupted.

 2. Undeploy your current version.

    Depending on your web application server, you may have deployed a packed or extracted `dashboard.war` file and a `unica.war` file, or you may have deployed an EAR file containing the Marketing Platform. Undeploy both components if they are deployed separately. In 8.6.0 and later versions, the dashboard is no longer in a separate WAR file.

 3. Run the IBM master installer.

    The IBM master installer starts. Follow these guidelines in the IBM master installer.
    - When the IBM master installer prompts you to enter Marketing Platform database connection information, enter the information that pertains to your current Marketing Platform system tables.
    - When the IBM master installer prompts you to choose an installation directory, choose the root IBM installation directory, not the Marketing Platform installation directory which is under this IBM directory.

    The IBM master installer will pause and launch the Marketing Platform installer.

 4. Follow these guidelines in the Marketing Platform installer.
    - When the Marketing Platform installer prompts you for an installation directory, select the directory of your current Marketing Platform installation, usually named `Platform`.
    - When the installer asks whether you want to upgrade Manager 7.5.x, select **No**.
    - Allow the installer to back up your previous installation.
    - Select **Manual database setup**.

- Deselect the **Run Platform configuration** checkbox.
- Follow all the remaining steps in the Marketing Platform installer, entering all requested information.

5. When the reports package installers launch, install the reporting schema components.

6. After all of the installers finish, use the `configTool` utility to perform the following steps to ensure that the SQL scripts you run in the next steps work correctly.

   a. Export all of your configuration properties, from the root node Affinium.

      For example, the following command exports the properties to a file named `config_property_export.xml`, which is written to the `install` directory under your Marketing Platform installation. This is a Windows example.

      ```
      configTool.bat -x -p "Affinium" -f "C:\Unica\Platform\install\
      config_property_export.xml
      ```

   b. Delete all of the configuration properties, from the root node Affinium.

      For example, the following command deletes the properties. This is a Windows example.

      ```
      configTool.bat -d -o -p "Affinium"
      ```

   c. Import the configuration properties you exported.

      For example, the following command imports the properties from a file named `config_property_export.xml`, located in the install directory under your Marketing Platform installation. This is a Windows example.

      ```
      configTool.bat -i -o -f "C:\Unica\Platform\install\
      config_property_export.xml
      ```

7. **Only if you are upgrading from version 8.2.0.7 or later**, perform the following steps.

   In the `db\upgrade82to85` directory under your Marketing Platform installation, edit a SQL script as follows.

   a. The SQL script is `ManagerSchema_DB_Type_85upg.sql`, where `DB_Type` is the database type of your system tables database

   b. For all database types, remove the following statement.

      ```
      ALTER TABLE USCH_RUN ADD PAYLOAD NVARCHAR(4000);
      ```

   c. If your database is DB2, also remove the following statements.

      ```
      ALTER TABLE qrtz_job_details ALTER COLUMN job_data SET DATA TYPE
      blob(4000);
      ```

      ```
      ALTER TABLE qrtz_triggers ALTER COLUMN job_data SET DATA TYPE
      blob(4000);
      ```

8. Use the appropriate table below to locate the SQL scripts, provided with your new Marketing Platform installation, against your Marketing Platform system table database. Run the SQL scripts in the order shown.

Table 1. Use this table if you are upgrading from version 8.0.x

Script Name	Location
`ManagerSchema_DB_Type_81upg.sql`, where `DB_Type` is the database type of your system tables database	`db\upgrade80to81`
`ManagerSchema_DB_Type_8201upg.sql`, where `DB_Type` is the database type of your system tables database	`db\upgrade82to8201`
`ManagerSchema_DB_Type_85upg.sql`, where `DB_Type` is the database type of your system tables database	`db\upgrade82to85`

Table 1. Use this table if you are upgrading from version 8.0.x (continued)

Script Name	Location
`insert_new_85_locales.sql`	`db\upgrade82to85`
`ManagerSchema_DB_Type_86upg.sql`, where *DB_Type* is the database type of your system tables database	`db\upgrade85to86`
`active_portlets.sql`	`db`

Table 2. Use this table if you are upgrading from version 8.1.x or 8.2.0

Script Name	Location
`ManagerSchema_DB_Type_8201upg.sql`, where *DB_Type* is the database type of your system tables database	`db\upgrade82to8201`
`ManagerSchema_DB_Type_85upg.sql`, where *DB_Type* is the database type of your system tables database	`db\upgrade82to85`
`insert_new_85_locales.sql`	`db\upgrade82to85`
`ManagerSchema_DB_Type_86upg.sql`, where *DB_Type* is the database type of your system tables database	`db\upgrade85to86`
`active_portlets.sql`	`db`

Table 3. Use this table if you are upgrading from version 8.2.0.1 or a later patch version

Script Name	Location
`ManagerSchema_DB_Type_85upg.sql`, where *DB_Type* is the database type of your system tables database	`db\upgrade82to85`
`insert_new_85_locales.sql`	`db\upgrade82to85`
`ManagerSchema_DB_Type_86upg.sql`, where *DB_Type* is the database type of your system tables database	`db\upgrade85to86`
`active_portlets.sql`	`db`

Table 4. Use this table if you are upgrading from version 8.5.0.0

Script Name	Location
`ManagerSchema_DB_Type_86upg.sql`, where *DB_Type* is the database type of your system tables database	`db\upgrade85to86`
`active_portlets.sql`	`db`

9. Use the `populateDb` utility to populate the system tables with default Marketing Platform configuration properties, users and groups, and security roles and permissions.

   This utility is located in the `tools/bin` directory under your Marketing Platform installation.

   Example: `populateDb -n Manager`

   See "The populateDb utility" on page 97 for complete usage details.

10. Use the `configTool` utility to import the scheduler configuration properties required for Interaction History.

    The `configTool` utility is located in the `tools/bin` directory under your Marketing Platform installation.

    Use the `interaction_history_scheduler.xml` file, located in the `conf/upgrade85to86` directory under your Marketing Platform installation.

Example (Windows): `configTool -i -p
"Affinium|suite|scheduler|taskRegistrations" -f C:\Unica\Platform\conf\
upgrade85to86\interaction_history_scheduler.xml`

11. Use the `configTool` utility to import the scheduler configuration properties required for Attribution Modeler.

Use the `attribution_modeler_scheduler.xml` file, located in the `conf/upgrade85to86` directory under your Marketing Platform installation.

Example (Windows): `configTool -i -p
"Affinium|suite|scheduler|taskRegistrations" -f C:\Unica\Platform\conf\
upgrade85to86\attribution_modeler_scheduler.xml`

12. Use the `configTool` utility to import the configuration properties required for single sign-on with IBM Coremetrics®.

Use the `coremetrics_configuration.xml` and `coremetrics_navigation.xml` files, located in the `conf` directory under your Marketing Platform installation.

Examples (Windows):

- `configTool -i -p "Affinium" -f C:\Unica\Platform\conf\
  coremetrics_configuration.xml`

- `configTool -i -p "Affinium|suite|uiNavigation|mainMenu|Analytics" -f
  C:\Unica\Platform\conf\coremetrics_navigation.xml`

13. Use the `configTool` utility to import the configuration properties required for reporting.

Use the `cognos10_integration.xml` file, located in the `conf/upgrade85to86` directory under your Marketing Platform installation.

Example (Windows): `configTool -i -p "Affinium|Report|integrations" -f
C:\Unica\Platform\conf\upgrade85to86\cognos10_integration.xml`

14. Use the `configTool` utility to remove JMS configuration properties that are no longer used.

Examples (Windows):

- `configTool -d -o -p "Affinium|suite|jmsServer"`

- `configTool -d -o -p "Affinium|suite|jmsPort"`

15. **Only if you are upgrading from version 8.2.0 or later**, use the `configTool` utility to import a new LDAP configuration property.

Use the `LDAP_Anonymous_bind.xml` file, located in the `conf/upgrade85to86` directory under your Marketing Platform installation.

Example (Windows): `configTool -i -p
"Affinium|suite|security|loginModes|LDAPPartitionLogin" -f
C:\Unica\Platform\conf\upgrade85to86\LDAP_Anonymous_bind.xml`

16. To upgrade the dashboard, run the `upgrade85Dashboard` script, located in the `tools\bin` directory under your Marketing Platform installation.

17. Update the **Help > About** page, as follows.

    a. Use the `configTool` utility to export the `Affinium | Manager | about` category (this category is not visible on the Configuration page, as it is marked hidden).

    Example (Windows): `configTool -x -p "Affinium|Manager|about" –f
    C:\Unica\Platform\conf\about.xml`

    b. Edit the exported XML file you just created (`about.xml` in the example) to change the version number and display name, as follows.

    Find the `releaseNumber` property and change the value to the current version of the Marketing Platform. In the example, below, change 7.5.1 to your new version.

```
<property name="releaseNumber" type="string">

<displayNameKey>about.releaseNumber</displayNameKey>

<value>7.5.1</value>

</property>
```

   c. Find the `displayName` property and change the value to the new name of the product. In the example, below, change `Affinium Manager` to `Marketing Platform` .

```
<property id="4" name="displayName" type="string_property"
width="40">

<value>Affinium Manager</value>

</property>
```

   d. Use the `configTool` utility to import the revised file. You must use the –o option to overwrite the node. Remember that you must specify the parent node when you import.

     Example (Windows): `configTool –i –p "Affinium|Manager" –f "about.xml" -o`

18. Deploy and verify your installation as described in the chapter Chapter 4, "Deploying the IBM Marketing Platform," on page 21.

    Note that the web component of Reports is no longer a separate deployment. It is now included in the Marketing Platform and is deployed when you deploy the EAR file that contains the Marketing Platform.

After you upgrade your IBM EMM applications, see Chapter 9, "Upgrading reports," on page 71 for additional steps required for reporting upgrades.

About upgrading from Affinium Manager 7.5.x

The installer automatically runs in upgrade mode when you allow it to search for an installation of Affinium Manager 7.5.x to upgrade.

In upgrade mode, the Marketing Platform installer automatically migrates data from your existing version of Affinium Manager. See "To upgrade from Manager 7.5.x with automatic migration" on page 39.

If your company policy does not allow you to use the installer to perform the migration automatically, you can do this manually using the scripts provided with your Marketing Platform installation. See "To upgrade from Manager 7.5.x with manual migration" on page 40.

Files generated by automatic migration

The installer exports your Affinium Manager 7.5x configuration to an XML file named `Manager_config_upgrade7xto80.xml`. The file is located in the `install` directory under your Marketing Platform installation. When you choose automatic migration, you do not have to do anything with this file during the upgrade process. When you choose manual migration, you import these settings after you update the database.

The installer generates an upgrade log named `upgrade7xto80.log`. The file is located in the `install` directory under your Marketing Platform installation.

Additional permissions required for the database user

When you run the installer to upgrade to the Marketing Platform, you must enter database connection information for the Marketing Platform system table database, just as you do when you perform a new installation. However, the database account that you use must have the following rights in addition to the ones listed in Step: Create the Marketing Platform system table database or schema.

- DROP TABLES
- DROP SEQUENCES (Oracle only)

What happened to Affinium Reports?

In version 8.x, reporting is one of the components provided by the Marketing Platform. Reporting is no longer provided by a separate web application as it was with Affinium Reports 7.5.x.

When you upgrade Affinium Manager 7.5x to Marketing Platform version 8.x, the installer and database scripts also upgrade the reporting feature, although some manual steps may be required. See Chapter 9, "Upgrading reports," on page 71 for details.

About the All Users group and upgrades

If your installation of Affinium Manager includes a user group named **All Users**, this group is migrated to your new installation of the Marketing Platform. Any application access assignments associated with your **All Users** group are retained, except they are called roles in the Marketing Platform.

The only functional difference between the **All Users** group in Affinium Manager and the migrated version of this group in the Marketing Platform is that when a new user is created in the Marketing Platform, that user is *not* automatically added to the **All Users** group.

You can continue to use the **All Users** group, or you can delete this group. If you have been relying on this group to provide application access to users and you delete it, you must provide former members of the group with equivalent roles in Marketing Platform if you want those users to retain the permissions they had before you upgraded.

Expected database changes

The following tables are not present in the Marketing Platform after upgrade because they are no longer used.

- usm_otype
- usm_object
- usm_group
- usm_grp_obj_map
- usm_user_obj_map

In addition, some tables have new names. See the Marketing Platform system table document for a description of the current Marketing Platform system table database.

To upgrade from Manager 7.5.x with automatic migration

This procedure applies only to upgrades from Affinium Manager version 7.5.x.

Ensure that you have the following in one directory.
- The IBM master installer
- The Marketing Platform installer
- The installers for any product reports packages you plan to upgrade

Also, ensure that your installation of Affinium Manager 7.5.x is fully functional and that you can run the command line tools.

1. Use the `configTool` utility to export all of your old configuration settings.
   - The utility is located in the `tools/bin` directory under your Affinium Manager installation. See "The configTool utility" on page 89 for complete usage details.
   - Here is an example command.

     `configTool -x -f "path_to_any_directory/config_backup.xml"`

     This command creates a `config_backup.xml` file in the directory you specified in the command. Verify that the file exists and contains all of your settings.
2. Make a backup of your Affinium Manager system table database.

   Important: Do not skip this step. If upgrade fails, you will not be able to roll back your database and your data will be corrupted.
3. Undeploy the Affinium Manager WAR file and the Reports WAR file.
4. Run the IBM installer.
   - When the IBM master installer prompts you for the installation directory, you may accept the default, create a new directory, or select any existing directory. The directory you specify will become the root (parent) directory for your product installation. Each product you install under this parent will have its own sub-directory.
   - When the IBM master installer prompts you for Marketing Platform database connection information, enter the information that pertains to your Affinium Manager 7.5.x system tables.

   The IBM master installer will pause and launch the Marketing Platform installer.
5. Follow these guidelines in the Marketing Platform installer.
   - When the Marketing Platform installer asks whether you have a Manager 7.5.x installation that you want to upgrade, select **Yes**.
   - Select your Affinium Manager 7.5.x installation directory as the upgrade directory.
   - Select **Automatic database setup**.
6. When the reports package wizards launch, install the reporting schema components.
7. Obtain the database driver and create the JDBC connection to the Marketing Platform system tables as described in "Step: Configure the web application server for your JDBC driver" on page 6 and "Step: Create the JDBC connection in the web application server" on page 6.
8. Deploy and verify your installation.

Note that the web component of Reports is no longer a separate deployment. It is now included in the Marketing Platform and is deployed when you deploy the EAR file that contains the Marketing Platform.

Verify your installation as described in "Step: Verify your Marketing Platform installation" on page 23.

After you upgrade your IBM EMM applications, see Chapter 9, "Upgrading reports," on page 71 for additional steps required for reporting upgrades.

To upgrade from Manager 7.5.x with manual migration

The Marketing Platform upgrade installer can perform all of the data migration required for an upgrade automatically, but if your company does not allow this, you must perform this procedure to upgrade manually.

This procedure applies only to upgrades from Affinium Manager version 7.5.x. See "Marketing Platform upgrade scenarios" on page 31 for information on upgrading from other versions.

Ensure that you have the following in one directory.
* The IBM master installer
* The Marketing Platform installer
* The installers for any product reports packages you want to upgrade

Also, ensure that your installation of Affinium Manager 7.5.x is fully functional and that you can run the command line tools. This procedure requires the use of two Marketing Platform utilities located in the `tools/bin` directory under your Marketing Platform installation. Complete information on using these utilities, including example commands for common tasks, is available as follows.
* "The populateDb utility" on page 97
* "The configTool utility" on page 89

1. Use the `configTool` utility to export all of your old configuration settings.

   The utility is located in the `tools/bin` directory under your Affinium Manager installation.

   Here is an example command.

   `configTool -x -f "path_to_any_directory/config_backup.xml"`

   This command creates a `config_backup.xml` file in the directory you specified in the command.
   * Verify that the file exists and contains all of your settings.
   * Make a note of the file name and location, as you will change the name and move the file in a later step.

   See "The configTool utility" on page 89 for complete usage details.
2. Make a backup of your Affinium Manager system table database.

   Important: Do not skip this step. If upgrade fails, you will not be able to roll back your database and your data will be corrupted.
3. Undeploy Affinium Manager WAR file and the Reports WAR file.
4. Run the IBM master installer.

   The IBM master installer starts.
   * When the IBM master installer prompts you for Marketing Platform database connection information, enter the information that pertains to your

Affinium Manager 7.5.x system tables. In some cases, the installer cannot detect your previous Manager installation. In that case, you see an extra confirmation window asking if you would like to continue. Click **OK**.

The IBM master installer pauses and launches the Marketing Platform installer.

5. Follow these guidelines in the Marketing Platform installer.
   - When the Marketing Platform installer asks whether you have a Manager 7.5.x installation that you want to upgrade, select **Yes**.
   - When the installer prompts you for an installation directory, select or create a directory different from your Affinium Manager 7.5.x installation directory.
   - Select **Manual database setup**.
   - Deselect the **Run Platform configuration** checkbox.
   - Follow all the remaining steps in the Marketing Platform installer, entering all requested information.

6. When the reports package installers launch, install the reporting schema components.

7. After all the installers finish, run the following SQL scripts, provided with your new Marketing Platform installation, against your Affinium Manager 7.5.x system table database. Run the scripts in the order shown in the following table.

Script Name	Location
0_Platform_Upgrade75to80_DropConstraints.sql	db\upgrade75to80
1_Platform_Upgrade75to80_*DB_Type*_backup.sql, where *DB_Type* is the database type of your system tables database	db\upgrade75to80
2_Platform_Upgrade75to80_BackupData.sql	db\upgrade75to80
ManagerSchema80_*DB_Type*.sql, where *DB_Type* is the database type of your system tables database	db\upgrade75to80

Script Name	Location

ManagerSchema_*DB_Type*_81upg.sql, where *DB_Type* is the database type of your system tables database
 	
Only if your system table database is SQL Server, you must do one of the following.
• Open the script and edit it to add GO before and after the CREATE TABLE statement "CREATE TABLE USM_DB_RESOURCE_BUNDLE(...);". This part of the script should look like this when you have completed the edit.
 	
  GO
 	
  CREATE TABLE USM_DB_RESOURCE_BUNDLE
 	
  (
 	
  ID BIGINT IDENTITY(1, 1) NOT NULL,
 	
  NAME VARCHAR(256) NOT NULL,
 	
  LOCALE VARCHAR(16),
 	
  APPLICATION INT,
 	
  BUNDLE_PROPERTIES VARCHAR(MAX),
 	
  PRIMARY KEY CLUSTERED (ID asc)
 	
  );
 	
  GO
 	
  Then run the script.
• Run this script one line at a time rather than all at once.
	upgrade80to81

quartz_*DB_Type*.sql, where *DB_Type* is the database type of your system tables database	db
• **Only if your system table database is Oracle or DB2** , use 3_Platform_Upgrade75to80_CopyDataToNewTables.sql • **Only if your system table database is SQL Server**, use 3_Platform_Upgrade75to80_CopyDataToNewTables_SQLServer.sql	db\upgrade75to80
ManagerSchema_*DB_Type*_8201upg.sql, where *DB_Type* is the database type of your system tables database	db\upgrade82to8201
ManagerSchema_*DB_Type*_85upg.sql, where *DB_Type* is the database type of your system tables database	db\upgrade82to85
ManagerSchema_*DB_Type*_86upg.sql, where *DB_Type* is the database type of your system tables database	db\upgrade85to86
active_portlets.sql	db

8. Do the following with the file that contains your exported configuration settings that you created in an earlier step. This enables the script to automatically import your settings in the next step.

   • Move or copy the file to the install directory under your new Marketing Platform installation.

   • Change the name of the file to Manager_config_upgrade7xto80.xml.

9. Run upgrade7xto80 (extension is .bat for Windows and .sh for UNIX). This script is located in the tools/bin directory under your new Marketing Platform installation.

   If you see an error similar to the following, and your operating system is **not** AIX®, perform the procedure described in "To obtain the latest JCE policy files" on page 45 and then run the script.

ERROR com.unica.manager.utils.KeyManager - Cannot retrieve the key from the file [C:\...\Affinium\Manager\conf\kfile], cause: Illegal key size

10. Run the `4_Platform_Upgrade75to80_Drop7xTables.sql` script against your Affinium Manager 7.5.x system table database.

11. Run the `insert_new_85_locales.sql` script, located in the `db\upgrade82to85` directory under your new Marketing Platform installation, against your Affinium Manager 7.5.x system table database.

12. Perform the following steps to delete orphan records that could lead to errors when you run the SQL in the next step.

    - Run the following SQL against your Affinium Manager 7.5.x system table database.

      `SELECT * FROM USM_ROLE_ROLE_MAP WHERE PARENT_ROLE_ID NOT IN (SELECT ID FROM USM_ROLE)`

      `SELECT * FROM USM_USER_ROLE_MAP WHERE USER_ID NOT IN (SELECT ID FROM USM_USER)`

    - The records returned from these queries are orphan rows. Delete them.

13. Run the `ManagerSchema_DB_Type_CreateFKConstraints.sql` script against your Affinium Manager 7.5.x system table database, where *DB_Type* is the database type of your system tables database.

14. Use the `populateDb` utility to populate the system tables with default Marketing Platform users and groups, and security roles and permissions. Follow the steps shown here.

    This utility is located in the `tools/bin` directory under your Marketing Platform installation.

    - First, you must edit the script file that runs the utility to increase memory, as follows.

      – Open the `populateDb` file in a text editor and find the line that looks like this. The example shown is for Windows. The UNIX version will look slightly different.

        `"%JAVA_HOME%\bin\java" -DUNICA_PLATFORM_HOME="`
        `%UNICA_PLATFORM_HOME%" com.unica.manager.tools.PopulateDb %*`

      – Add `-Xmx512m`, followed by a space, just before `-DUNICA_PLATFORM_HOME`.

      – Save and close the file.

    - Next, run the `populateDb` utility.

      Example: `populateDb -n Manager`

      See "The populateDb utility" on page 97 for complete usage details.

15. Use the `configTool` utility to import the scheduler configuration properties required for Interaction History.

    The `configTool` utility is located in the `tools/bin` directory under your Marketing Platform installation.

    Use the `interaction_history_scheduler.xml` file, located in the `conf/upgrade85to86` directory under your Marketing Platform installation.

    Example (Windows): `configTool -i -p`
    `"Affinium|suite|scheduler|taskRegistrations" -f C:\Unica\Platform\conf\`
    `upgrade85to86\interaction_history_scheduler.xml`

16. Use the `configTool` utility to import the scheduler configuration properties required for Attribution Modeler.

    Use the `attribution_modeler_scheduler.xml` file, located in the `conf/upgrade85to86` directory under your Marketing Platform installation.

Example (Windows): `configTool -i -p`
`"Affinium|suite|scheduler|taskRegistrations" -f C:\Unica\Platform\conf\`
`upgrade85to86\attribution_modeler_scheduler.xml`

17. Use the `configTool` utility to register Marketing Platform menu items.

    Use the `config_navigation.xml` file, located in the `conf` directory under your Marketing Platform installation.

    Example (Windows): `configTool -i -p "Affinium|suite" -f`
    `C:\Unica\Platform\conf\config_navigation.xml`

If you are upgrading from version 8.x to the current version, go to step 18.

If you are upgrading from version 7.x to the current version, go to step 19.

18. Use the `configTool` utility to import the configuration properties required for single sign-on with IBM Coremetrics.

    Use the `coremetrics_configuration.xml` and `coremetrics_navigation.xml` files, located in the `conf` directory under your Marketing Platform installation.

    Examples (Windows):

    - `configTool -i -p "Affinium" -f C:\Unica\Platform\conf\`
      `coremetrics_configuration.xml`

    - `configTool -i -p "Affinium|suite|uiNavigation|mainMenu|Analytics" -f`
      `C:\Unica\Platform\conf\coremetrics_navigation.xml`

19. Use the `configTool` utility to import the configuration properties required for reporting.

    Use the `cognos10_integration.xml` file, located in the `conf/upgrade85to86` directory under your Marketing Platform installation.

    Example (Windows): `configTool -i -p "Affinium|Report|integrations" -f`
    `C:\Unica\Platform\conf\upgrade85to86\cognos10_integration.xml`

20. Use the `configTool` utility to import a new LDAP configuration property.

    Use the `LDAP_Anonymous_bind.xml` file, located in the `conf/upgrade85to86` directory under your Marketing Platform installation.

    Example (Windows): `configTool -i -p`
    `"Affinium|suite|security|loginModes|LDAPPartitionLogin" -f`
    `C:\Unica\Platform\conf\upgrade85to86\LDAP_Anonymous_bind.xml`

21. Update the **Help > About** page, as follows.

    a. Use the `configTool` utility to export the `Affinium | Manager | about` category (this category is not visible on the Configuration page, as it is marked hidden).

       Example (Windows): `configTool -x -p "Affinium|Manager|about" —f`
       `C:\Unica\Platform\conf\about.xml`

    b. Edit the exported XML file you just created (`about.xml` in the example) to change the version number and display name, as follows.

       Find the `releaseNumber` property and change the value to the current version of the Marketing Platform. In the example, below, change `7.5.1` to your new version.

       `<property name="releaseNumber" type="string">`

       `<displayNameKey>about.releaseNumber</displayNameKey>`

       `<value>7.5.1</value>`

       `</property>`

    c. Find the `displayName` property and change the value to the new name of the product. In the example, below, change `Affinium Manager` to `Marketing Platform` .

    `<property id="4" name="displayName" type="string_property" width="40">`

    `<value>Affinium Manager</value>`

    `</property>`

    d. Use the `configTool` utility to import the revised file. You must use the –o option to overwrite the node. Remember that you must specify the parent node when you import.

    Example (Windows): `configTool –i –p "Affinium|Manager" –f "about.xml" -o`

22. Obtain the database driver and create the JDBC connection to the Marketing Platform system tables as described in "Step: Configure the web application server for your JDBC driver" on page 6 and "Step: Create the JDBC connection in the web application server" on page 6.

23. Deploy your installation as described in Chapter 4, "Deploying the IBM Marketing Platform," on page 21.

    Note that the web component of Reports is no longer a separate deployment. It is now included in the Marketing Platform and is deployed when you deploy the Marketing Platform.

24. Do the following before going to any other page in IBM EMM.
    • Point your browser to `http://host:port/unica/jsp/configmanager.jsp`, where `host` and `port` are appropriate values for your installation.
    • Log in to IBM EMM as the asm_admin user.
    • Go to the **Settings > Configuration** page.
    • Verify the following configuration values and change them if necessary.
      – General > Navigation > Unica® URL—This should be the URL for the Marketing Platform, using a fully qualified host and port. For example, `http://myHost.myCompanyDomain.com:8080/unica`.
      – Affinium Suite > Domain name—This value must match the domain used in the Marketing Platform URL, including case. In the above example, this is `myCompanyDomain.com`
    • Log out.

25. Go to the normal Marketing Platform URL, log in, and verify your installation as described in "Step: Verify your Marketing Platform installation" on page 23.

26. If you have assigned data sources and data source passwords to any users, check the data source passwords and re-set them manually, if necessary. You will definitely have to do this if your operating system is AIX.

After you upgrade your IBM EMM applications, see Chapter 9, "Upgrading reports," on page 71 for additional steps required for reporting upgrades.

To obtain the latest JCE policy files

Perform this procedure if you see the following error when you run the `upgrade7xto80` script.

`ERROR com.unica.manager.utils.KeyManager - Cannot retrieve the key from the file [C:\...\Affinium\Manager\conf\kfile], cause: Illegal key size`

Note that this workaround does not apply when the Marketing Platform is installed on AIX. In that case, after you complete the upgrade, you must log in to IBM EMM and change data source passwords manually.

This procedure ensures that you have the latest Java Cryptography Extension (JCE) Unlimited Strength Jurisdiction Policy Files 5.0.

Download these files here: http://java.sun.com/javase/downloads/index_jdk5.jsp

Scroll to Java Cryptography Extension (JCE) Unlimited Strength Jurisdiction Policy Files 5.0 and do the following.

1. Ensure that the JRE in your Manager 7.5.x installation has the updated JCE Unlimited Strength Jurisdiction files. Follow instructions in the download to copy the `local_policy.jar` and `US_export_policy.jar` to the `jre/lib/security` directory.
2. Use `encryptPasswords -k` to encrypt your keystore password again.
3. If you are NOT using the JRE provided in the Marketing Platform installer, also update the JCE Unlimited Strength Jurisdiction files for the JRE you intend to use.
4. Run the Marketing Platform installer and your keys will be migrated to 8.x.

If the JCE updates are not made, or if you were unable to use the workaround because your Marketing Platform system table database is AIX, you may see these errors:

```
Cannot retrieve the key from the file [<INSTALL_DIR>\Affinium\Manager\conf\
kfile], cause: Illegal key size
```

```
javax.crypto.BadPaddingException: pad block corrupted
```

If these errors occur, when your upgrade is complete, log in to IBM EMM and change data source passwords manually.

Upgrading in a clustered environment

Use the following guidelines when you upgrade multiple instances of Affinium Manager to Marketing Platform in a clustered environment.

- Undeploy all of the instances of Affinium Manager and Affinium Reports.
- Uninstall all instances of Affinium Manager except one.
- Follow the directions in this chapter to upgrade.
- Follow the clustering instructions in Chapter 6, "Installing the IBM Marketing Platform in a Cluster," on page 27.

Chapter 8. Installing Reports

For its reporting feature, IBM EMM integrates with IBM Cognos BI, a third-party business intelligence application. Reporting relies on the following components:

- An installation of IBM Cognos BI
- A set of IBM EMM components that integrate the IBM system with the IBM Cognos installation
- For Campaign, eMessage, and Interact, reporting schemas that enable you to build reporting views or tables in the application's system tables
- The example reports for the IBM EMM application(s), built with IBM Cognos Report Studio

The Marketing Platform provides the IBM side of the reporting integration. To install reporting, you do the following:

- Install the reporting schemas from the application report package on the machine where the Marketing Platform is installed.
- Set up the reporting views or tables.
- Install the IBM integration components and report models on the IBM Cognos system.

This chapter describes how to install and set up reporting for your IBM applications. For information about the individual components and how they interact with each other, see the *IBM Marketing Platform Administrator's Guide*.

Install reporting components

Installing and configuring IBM EMM product report packages is a multi-step process. Perform the tasks in this section in the order shown to install reports.

Step: Set up a user with the ReportsSystem role, if necessary

Configure a user with access to the IBM EMM **Settings > Configuration** and **Settings > Report SQL Generator** pages so you can log in as this user when you need to configure the reporting properties and generate the SQL used to create reporting schema.

The easiest way to do this is to assign the **ReportSystem** role to the **platform_admin** user. This role is under **Report > PartitionN** on the User Roles and Permissions page.

See "To assign a role to or remove a role from a user" for general information on performing this task.

To assign a role to or remove a role from a user

1. Click **Settings > Users**.

   The Users page displays.
2. Click the name of the user account that you want to work with.

   The user detail page displays a list of the user's attributes, roles, groups, and data sources.
3. Click **Edit Roles**.

The Edit Roles page displays. Roles that are not assigned to the user are shown in the **Available Roles** box on the left. Roles that are currently assigned to the user are shown in the **Roles** box on the right.

4. Click a role name in the Available Roles box to select it.

   The selected role name is highlighted.

5. Click **Add** or **Remove** to move the role name from one box to the other.

6. Click **Save Changes** to save your changes.

   A window displays the message, Save Successful.

7. Click **OK**.

   The user details display in the right pane, with your changes shown in the **Roles** list.

Step: Install the reporting schemas on the IBM EMM system

Use the IBM master installer and the reports package installers to install the desired reporting schemas on the machine where the Marketing Platform is installed. See "How the IBM EMM installers work" on page 9 for detailed information on the IBM installers.

Follow these guidelines when the reports package installer launches.

1. In the **ReportsPack***Product* **Components** window, select **Reporting Schema**.

2. If more than one option appears in the **Schema Type Selection** window, it means that the IBM application has prepackaged custom attributes. Do one of the following:

   a. To install reporting schemas that include the custom attributes, select **Custom**. The sample reports for Campaign are configured to use custom attributes. Therefore, if you are installing the Campaign report package and you want the sample reports to function correctly, you must select this option.

   b. To install reporting schemas that do not include the custom attributes, select **Base**.

   The installer places the reporting schema in the file system and registers the schema with the Marketing Platform.

3. Verify that the reporting schema are registered in the Marketing Platform, as follows.

   a. Log in to the IBM EMM system as the **platform_admin** user.

   b. Select **Settings > Configuration**.

   c. Expand **Reports > Schemas >** *ProductName*.

   If you see the schema configuration properties for your application, you installation is complete.

   If the schema configuration properties for your application are not present, the report package has not been registered, and you must register them manually as described in the next step.

4. **Only if the schema configuration properties are not present**, register them manually as follows.

   a. Edit the `import_all` script and edit it as follows.

      The script is located in the `tools` directory under your reports package installation.

      Set the value of the `MANAGER_TOOLS_BIN_DIR` variable to the path of the `tools/bin` directory under your Marketing Platform installation.

   b. Run the script.

The script invokes the Marketing Platform`configTool` utility and registers the schemas.

c. Verify that the schema configuration properties are present.

Step: Determine which authentication mode to configure

The IBM Authentication Provider is one of the components that integrates the IBM Cognos Business Intelligence system with IBM EMM. This component enables the IBM Cognos BI applications to use IBM authentication to communicate with the IBM EMM system as though it were another IBM application in the suite.

There are three authentication options: anonymous, authenticated, and authenticated per user.

- **Anonymous** means authentication is disabled. You use this mode to test your configuration without the added complication of authentication settings.
- **Authenticated** means that the communications between the IBM system and the IBM Cognos system are secured at the machine level. You configure a single system user and configure it with the appropriate access rights. By convention, this user is named "cognos_admin."
- **Authenticated per user** means that the system evaluates individual user credentials.

Determine which authentication mode you need to configure. For a complete description of these options, see "Reporting and security" in the *IBM Marketing Platform Administrator's Guide*.

Step: Create JDBC data sources

The IBM EMM Reports SQL Generator tool must be able to connect to the IBM EMM application databases to generate SQL scripts that create reporting tables, . The SQL Generator can generate SQL scripts that create views or materialized views without access to the these application databases, but it cannot validate the SQL without a data source connection.

In the application server hosting the Marketing Platform, configure a JDBC data source for each IBM EMM application for which you want to enable reporting. Use the default JNDI name listed below. If you do not use the default JNDI names described in the following tables, make a note of what they are so you can specify the correct name of the data source when you run the SQL Generator tool.

IBM application	Default JNDI name
Campaign	`campaignPartition1DS` If there are multiple partitions, create a data source for each partition.
eMessage	`campaignPartition1DS` for the system tables `eMessagePartition1TrackingDS` for the tracking tables
Interact	`campaignPartition1DS` for the design-time database `InteractRTDS` for the runtime database `InteractLearningDS` for the learning tables

If you need additional help with this task, see the application server documentation. See also the section on creating JDBC data sources in the installation guide for your IBM application.

Optional step: Obtain email server information

If you want report results to be sent through email, obtain the following information.

- Host name or IP address of your SMTP server
- User name and password for the account on that server
- Email address for the default sender email

Set up the reporting views or tables

To implement reporting for Campaign, eMessage, and Interact, you create reporting views or tables from which the reports extract reportable data. This section describes how to run the Reports SQL Generator, which uses the reporting schemas to generate view or table creation scripts. You then run those scripts on the IBM application database to create the views or tables.

Configuration checklist: reporting views or tables

The following list provides a high level overview of the steps to perform when configuring the reporting schemas from an IBM Reports Package. Each step is described in detail later in this section.

1. "Step: Load the templates for the Reports SQL Generator"
2. "Step: Generate the view or table creation scripts."
3. "Step: Create the reporting views or tables" on page 51.
4. "Step for tables and materialized views only: Set up data synchronization" on page 55.

Step: Load the templates for the Reports SQL Generator

The reports packages for IBM EMM applications that have reporting schemas contain a SQL script that loads template SQL select statements into the uar_common_sql table. The Reports SQL Generator uses these templates when generating the SQL scripts for creating the reporting views or tables. In this task, you run the script that loads the templates.

1. Navigate to the schema directory under your report pack installation and locate the templates_sql_load.sql script.
2. Run the templates_sql_load.sql script in the Marketing Platform database.

Step: Generate the view or table creation scripts

Complete the following steps.

1. Log in to IBM EMM as the platform_admin user (or another user with access to the Report SQL Generator menu item).
2. **Only if you did not use the default JNDI names for the JDBC data sources you created in an earlier step**, do the following.
   a. Select **Settings > Configuration > Reports > Schemas > *ProductName*** .
   b. Change the default values of the JNDI property to match the JNDI names you gave the JDBC connections in an earlier step.
3. Select **Settings > Reports SQL Generator**.
4. In the **Product** field, select the appropriate IBM application.

5. In the **Schema field**, select one or more reporting schemas.
6. Select the **Database Type**.
7. In the **Generate Type** field, select the appropriate option (views, materialized views, or tables).

   Materialized views are not an option when **Database Type** is set to MS SQL Server.

   If the JNDI data source names are incorrect or have not been configured, the SQL Generator cannot validate the SQL.scripts that create tables.
8. Ensure that **Generate Drop Statement** is set to No.

   The first time you run the view or table creation scripts there are no existing views or tables to drop so there is no need to create drop scripts.
9. (Optional.) To examine the SQL that will be generated, click **Generate**. The SQL Generator creates the script and displays it in the browser window.
10. Click **Download**.

    The SQL Generator creates the script and prompts you to specify where you want to save the file. If you selected a single reporting schema from the **Schema** field, the script name matches the name of schema (eMessage_Mailing_Performance.sql, for example). If you selected more than one reporting schema, the script name uses the product name only (Campaign.sql, for example). For a complete list of names, see "SQL script names and where to run them."
11. Specify the location where you want to save the script. If you change the name of the file, be sure to use something that clearly indicates which schemas you selected. Then click **Save**.
12. Repeat steps 5 through 12 for each script you need to generate.

    Note: The Interact reporting schemas reference more than one data source. Generate a separate SQL script for each data source.

    There may be times when you want to disable script validation. For example, perhaps the Marketing Platform cannot connect to the IBM application database but you want to generate the scripts anyway. To disable validation, clear the data source names from the data source fields (see step 3, above). When you generate the scripts, the SQL Generator displays a warning that it cannot connect to the data source, but it still generates the SQL script.

Step: Create the reporting views or tables

The steps you perform to create views or materialized views are different from those you perform to create reporting tables. In both cases, however, there are extra steps when generating views or tables for Interact.

Complete one or more of the following, as appropropriate for your installation.

Refer to "SQL script names and where to run them" as necessary.
- "Create views or materialized views for Campaign or eMessage" on page 52
- "Create views or materialized views for Interact" on page 52
- "Create and populate reporting tables for Campaign or eMessage" on page 53
- "Create and populate reporting tables for Interact" on page 54

SQL script names and where to run them

This table shows the system table database or databases where each SQL script should be run (for views or materialized views). These are the scripts that you created in a previous step, using the SQL Generator.

Reporting schema	System tables	Script name (default names)
All Campaign reporting schemas	Campaign system tables	`Campaign.sql`, unless you generate separate scripts for each reporting schema. If you do, each script is named after the individual schema. For example, the default name for the SQL file generated for the Campaign Performance schema is **Camapign_CampaignPerformance.sql**.
eMessage Mailing Performance	eMessage tracking tables	`eMessage_Mailing_ Performance.sql`
Interact Deployment History, Interact Performance, and Interact Views	Campaign system tables	`Interact.sql`
Interact Learning	Interact Learning tables	`Interact_Learning.sql`
Interact Run Time	Interact run time database	`Interact_Runtime.sql`

Create views or materialized views for Campaign or eMessage

1. Locate the SQL scripts that you generated and saved previously. Refer to "SQL script names and where to run them" on page 51 if necessary.
2. Use your database administration tools to run the appropriate script against the appropriate application database(s) for the report package you are configuring.

   Note: When you run a script that creates materialized views on a DB2 database, your database may return the error "SQL20059W The materialized query table-name may not be used to optimize the processing of queries." However, the materialized view is successfully created.

3. **For Campaign with a DB2 database only,** increase the DB2 heap size to 10240 or higher. (The default heap size is 2048.) Use the following command:

   `db2 update db cfg for databasename using stmtheap 10240`

   where *databasename* is the name of the Campaign database.

   Increasing the heap size ensures that IBM Cognos does not display SQL error messages if a user selects all the campaigns when running a report like the Financial Summary report.

Create views or materialized views for Interact

1. Verify that the language setting of the client from which you will run the `lookup_create` SQL script is UTF-8.

   For examples of how to do this for Oracle and DB2, see "Setting the language in Oracle and DB2" on page 53.
2. Locate the SQL scripts that you generated and saved previously. Refer to "SQL script names and where to run them" on page 51 if necessary.
3. Use your database administration tools to run the appropriate script against the appropriate application database(s) for the report package you are configuring.

   Note: When you run a script that creates materialized views on a DB2 database, your database may return the error "SQL20059W The materialized query table-name may not be used to optimize the processing of queries." However, the materialized view is successfully created.

4. Locate the `tools` subdirectory in the reports package installation directory and find the `lookup_create` script for your database type. For example, the script for SQL is named `uari_lookup_create_MSSQL.sql`, and so on.

   Run this script on the the Interact design time database. Ensure that the database tool you are using commits the changes. For example, you may need to set the database's auto-commit option to `true`.

5. Locate the `db/calendar` subdirectory in the Marketing Platform installation directory and find the `ReportsCalendarPopulate` script appropriate for the database type. This script creates two more tables: `UA_Calendar` and `UA_Time`.

6. Run this script on the Interact run time database (InteractRTDS).

   For DB2 only, do one of the following:

   - Either run the script from the command line using the command `db2 -td@ -vf ReportsCalendarPopulate_DB2.sql`

   - Or, if you use the DB2 client interface, change the termination character to the `@` character in the `Statement termination character` field.

Setting the language in Oracle and DB2:
Oracle example

For example, for Windows and Oracle:
1. Close any open Oracle sessions.
2. Open the Registry Editor.
3. Navigate to HKEY_LOCAL_MACHINE > SOFTWARE > ORACLE and open the folder for your Oracle Home (ex. KEY_OraDb10g_home1).
4. Search for the NLS_LANG setting.
5. Make sure the last part of the value specified is UTF8. For example: AMERICAN_AMERICA.UTF8.

DB2 example

For example, for DB2, from the machine that is running the script and has the DB2 client installed, run a DB2 command window. Then run the following command:

`db2set`

In the output, look for the following variable/value pair: `DB2CODEPAGE=1208`

If this variable is not set, run the following command

`db2 db2set db2codepage=1208`

Then close the session window so the change can take effect.

Create and populate reporting tables for Campaign or eMessage
1. Create the new reporting database.
2. Locate the SQL scripts that you generated and saved previously. Refer to "SQL script names and where to run them" on page 51 if necessary.
3. Use your database administration tools to run the generated script(s) in the new database.
4. **For Campaign and a DB2 reporting database only,** increase the DB2 heap size to 10240 or higher. (The default heap size is 2048.) Use the following command:
   `db2 update db cfg for databasename using stmtheap 10240`

where *databasename* is the name of the reporting database.

Increasing the heap size ensures that Cognos does not display SQL error messages if a user selects all the campaigns when running a report like the Financial Summary report.

5. Locate the db/calendar subdirectory of the Marketing Platform installation and find the version of the ReportsCalendarPopulate script appropriate for the database type. This script creates two more tables: UA_Calendar and UA_Time.

6. Run the ReportsCalendarPopulate script on the new database that you created with the table creation script.

   For DB2 only, do one of the following:

   - Either run the script from the command line using the command db2 -td@ -vf ReportsCalendarPopulate_DB2.sql
   - Or, if you use the DB2 client interface, change the termination character to the @ character in the Statement termination character field.

7. Use your database administration tools to populate the new tables with the appropriate data from the production system database.

   Note: Note that you must use your own tools for this step. The SQL Generator does not generate this SQL for you.

Create and populate reporting tables for Interact

1. Create the new reporting databases.

2. Locate the SQL scripts that you generated and saved previously. Refer to "SQL script names and where to run them" on page 51 if necessary.

3. Use your database administration tools to run the generated script(s) in the new database.

4. Locate the db/calendar subdirectory in the Marketing Platform installation directory and find the lookup_create script for your database type. For example, the script for SQL Server is named uari_lookup_create_MSSQL.sql, and so on.

   Run this script on the tables that represent the Interact design time database. Ensure that the database tool you are using commits the changes. For example, you may need to set the database's auto-commit option to true.

5. Locate the db/calendar subdirectory in the Marketing Platform installation directory and find the ReportsCalendarPopulate script appropriate for the database type. This script creates two more tables: UA_Calendar and UA_Time.

6. Run this script on **both** the set of tables that represents the Interact design time database and the tables that represent the Interact run time database.

   For DB2 only, do one of the following:

   - Either run the script from the command line using the command db2 -td@ -vf ReportsCalendarPopulate_DB2.sql
   - Or, if you use the DB2 client interface, change the termination character to the @ character in the Statement termination character field.

7. Use your database administration tools to populate the new tables with the appropriate data from the production system database.

   Note: Note that you must use your own tools for this step. The SQL Generator does not generate this SQL for you.

Step for tables and materialized views only: Set up data synchronization

If you created materialized views, be sure to use your database administration tools to schedule regular data synchronization between the production databases of the IBM EMM application and the materialized views.

If you created reporting tables, be sure to use scheduled ETL (Extraction, Transformation and Load) or any custom method to schedule regular data synchronization, between the the production databases of the IBM EMM application and the new reporting tables.

Install and test IBM Cognos BI

If your license agreement with IBM grants you an IBM Cognos BI license, you can download the IBM Cognos BI installation media from the IBM Customer Central website.

IBM Cognos BI, IBM reporting, and domains

Before you begin, determine whether you are installing IBM Cognos BI in the same domain as the IBM EMM suite. As a best practice, you are encouraged to install IBM Cognos and the IBM EMM system in the same domain. If you do not, you must configure both IBM Cognos and IBM EMM to use SSL.

Note: After you install IBM Cognos BI, be sure to use Cognos Configuration to configure the Cognos URLs appropriately. On a Windows system, the default values for these URLs use the machine name "localhost." You must replace the "localhost" placeholder with the fully qualified host name, including domain.

IBM Cognos BI applications

IBM Cognos BI is a collection of several applications, servers, and services, organized in a multi-tiered architecture. When you use IBM Cognos BI with your IBM EMM suite, you use the following subset of Cognos BI applications:

* IBM Cognos BI Server, which provides storage for reports and folders (plus the queries and metadata models), the Content Manager, and so on.
* IBM Cognos Connection, a web application that you use to import, configure, and schedule the reports. This application also provides access to the following additional components:
  – Cognos Viewer: used for displaying reports. Cognos Viewer is the module that displays the reports in your IBM EMM applications.
  – Report Studio: used for customizing reports and creating new ones. When you purchase IBM Cognos BI from IBM you are typically granted a license for one report author only.
  – Cognos Administration: used for configuring data sources, and so on.
* IBM Cognos Framework Manager, the metadata modeling tool that you use to configure and customize the Cognos data model that supports the IBM Cognos BI reports for your IBM EMM application.
* IBM Cognos Configuration, the configuration tool that you use to configure individual Cognos BI components.

IBM Cognos BI installation options and Cognos documentation

Before you install IBM Cognos BI, use the *IBM Cognos BI Architecture and Deployment Guide* to learn about the various components, the installation options, and the configuration approaches recommended by IBM Cognos.

The IBM Cognos documentation uses two general categories to describe installations: installing in a distributed environment versus installing all the components on one computer. For best results, do not install all components on one computer unless it is for a proof of concept or is a demonstration environment.

Installing the subset of IBM Cognos BI applications that IBM reporting uses requires that you use two IBM Cognos installers. One provides the IBM Cognos BI server, the Content Manager, Cognos Configuration, and the Web-based user interfaces. You use a separate installer to install Framework Manager, the metadata modeling tool, because it must be installed on a Windows machine.

If you are installing all components on one computer you can use the *IBM Cognos Quick Start Installation and Configuration Guide*. If you are installing in a distributed environment, use the full installation guide, *IBM Cognos BI Installation and Configuration Guide*.

IBM Cognos BI web applications and the web server

IBM does not provide the web server that hosts Cognos Connection and the other IBM Cognos BI web applications. For Windows, the IBM Cognos documentation assumes that you are using Microsoft IIS (Internet Information Services) but you can also use Apache HTTP.

If you use the Apache HTTP server, take care to set up the web aliases for the Cognos web applications in the `VirtualHost` configuration directive of the Apache `httpd.conf` file correctly: be sure to order the most specific alias first (the script alias) and set directory permissions for each alias.

Example httpd.conf code snippet

The following example is from an Apache installation on a Windows system. The Apache server is running on the default port 80.

```
<VirtualHost *:80>
 ScriptAlias /cognos10/cgi-bin "C:/cognos/cgi-bin"
     <Directory "C:/cognos/cgi-bin">
       Order allow,deny
       Allow from all
     </Directory>
Alias /cognos10 "C:/cognos/webcontent"
     <Directory "C:/cognos/webcontent">
       Order allow,deny
       Allow from all
     </Directory>
</VirtualHost>
```

Note: This `httpd.conf` file snippet is an example only. Be sure to configure your web aliases appropriately for your systems.

IBM Cognos BI and locale

If you plan to install a localized version of your IBM EMMapplication report package (other than English), be sure to set the product locale to match the language of the application report package.

On the system running the Cognos Content Manager, open Configuration Manager, select **Actions > Edit Global Configuration**, and configure the locale for the IBM Cognos BI system. For more information, see the *IBM Cognos Configuration User Guide*, available from the Help menu in Configuration Manager.

Test the IBM Cognos BI installation

Test your IBM Cognos installation using the following guidelines.
* Stop and restart the Cognos BI server and check the `cogserver.log` file for errors. The file is located in the `logs` directory of your Cognos installation.
* Verify that database tables exist in the Cognos content store. There should be approximately 134 tables.

If you have a distributed Cognos environment with components installed on different machines, for example Cognos BI server on a UNIX system and Framework Manager installed on a Windows machine, do the following.
* Verify that you can communicate with the internal and external dispatcher and the Content Manager from the machine where the Gateway is installed. To test components that do not have a user interface, enter the URI of the component in a browser's address field. A Cognos page should appear in the browser.
* Open Framework Manager and start to create a project. This test ensures that you can log in. Check the log file again for errors.

Install IBM EMM integration components and report models on the Cognos system

To integrate the IBM EMM suite with Cognos, you need the following installers.
* The IBM EMM master installer—You always run this installer to launch the other installers
* The Marketing Platform installer—You install the Cognos integration component from this installer
* The reports pack installer or installers for the products for which you want to implement reporting—You install the reports archive containing the models and sample reports from this installer

After you perform the installation, you perform the following configuration steps, as described in the remainder of this section.
* Configure IBM EMM and Cognos reporting properties in the Marketing Platform interface
* Import the report into Cognos Connection
* Configure Cognos to use IBM EMM authentication

Installation checklist: IBM Cognos integration

The following list provides a high level overview of how to install and configure the IBM components and reports on the IBM Cognos system. Each step is described in detail later in this section.

1. "Step: Obtain the JDBC driver for the Marketing Platform system tables."
2. "Step: Install the reporting models and integration component on the IBM Cognos system."
3. "Step: Create the IBM Cognos data sources for the IBM EMM application databases" on page 59.
4. "Optional step: Set up email notification" on page 60.
5. "Step: Configure the IBM Cognos application's firewall" on page 60.
6. "Step: Import the reports folder in Cognos Connection" on page 61.
7. "Step: Configure and publish the data model, if necessary" on page 61.
8. "Step: Enable internal links in the reports" on page 62.
9. "Step: Verify the data source names and publish" on page 62.
10. "Step: Configure Cognos reporting properties in the Marketing Platform" on page 63.
11. "Step: Test your configuration without authentication enabled" on page 63.
12. "Configure IBM Cognos to use IBM EMM authentication" on page 64.
13. "Step: Test your configuration with authentication configured" on page 67.

Step: Obtain the JDBC driver for the Marketing Platform system tables

Obtain the JDBC drivers and any required associated files that you used to configure the JDBC data source for the Marketing Platform's system tables when you set up the IBM EMM system. In a task later in this chapter, you configure Cognos to use IBM EMM authentication. Cognos needs the JDBC driver so it can obtain user information from the Marketing Platform system tables when it uses IBM EMM authentication.

Copy the JDBC driver to the machine where the Cognos Content Manager is installed, to the `webapps\p2pd\WEB-INF\AAA\lib` directory under your Cognos installation.

Step: Install the reporting models and integration component on the IBM Cognos system

If yours is a distributed Cognos installation, determine which machine is running the Cognos Content Manager so you can run the IBM installer on this machine.

1. Stop the IBM Cognos service.
2. On the machine where the Cognos Content Manager is installed, place the following IBM installers in a single directory.
   - IBM master installer
   - Marketing Platform
   - The reports pack installer or installers for the products for which you want to implement reporting
3. Run the IBM master installer, and select the Marketing Platform and Reports packages you want to install.
4. Following the prompts, enter the connection information for the Marketing Platform system table database.
5. When the Marketing Platform installer launches and the **Platform Installation Components** window appears, select the **Reports for IBM** *version* **Cognos BI** option and clear the other options.

6. When the Marketing Platform installer prompts for the path to the JDBC driver, enter the fully qualified path for the JDBC driver you copied to the Cognos system during the task "Step: Obtain the JDBC driver for the Marketing Platform system tables" on page 58.

7. When the Marketing Platform installer prompts for the location of the IBM Cognos installation, enter or browse to the top level of the IBM Cognos installation directory. The default value provided in this field is a static value that is not based on the actual file structure of your IBM Cognos system.

8. When the report pack installer or installers displays installation options, select the **IBM Cognos Package for *Product***, and clear the option for the reporting schemas.

   This option copies the reports archive to the Cognos machine. You import this archive later.

9. Restart the IBM Cognos server.

Step: Create the IBM Cognos data sources for the IBM EMM application databases

The IBM Cognos applications need their own data sources that identify the IBM EMM application databases; that is, the source of the data for the reports. The IBM Cognos data models provided in the IBM EMM reports packages are configured to use the following data source names:

Table 5. Cognos data sources

IBM EMM application	Cognos data source name(s)
Campaign	CampaignDS
eMessage	eMessageTrackDS
Interact	InteractDTDS for the design time database
	InteractRTDS for the runtime database
	InteractLearningDS for the learning database
Marketing Operations	MarketingOperationsDS
Leads	LeadsDS for the data mart tables

Use the following guidelines to create Cognos data sources for the IBM application databases:

- Use the Administration section of Cognos Connection.
- Use the default data source names that are shown in the Cognos data sources table. That way you can avoid having to alter the data model.
- The database type you select must match that of the IBM application database. Use the Cognos documentation and help topics to determine how to fill out database-specific fields.
- Be sure that you identify the IBM EMM application database and not the Cognos content store.
- When you configure the **Signon** section, select the **Password** and **Create a Signon that the Everyone group can use** options.
- In the **Signon** section, specify the user credentials for the IBM EMM application database user.
- Consult the Cognos data sources table and ensure that you create all the data sources required by the data model for the reports you are configuring. For

example, the reporting data for Interact is located in three databases so you must create separate Cognos data sources for each one.

- If the Campaign system has more than one partition, create separate data sources for each partition. For example, if Campaign is configured for multiple partitions, create a separate Campaign data source for each partition.
- Verify that you have configured each data source correctly by using the **Test Connection** feature.

If you have any questions about configuring Cognos data sources, see the *IBM Cognos Administration and Security Guide*, "Chapter 6: Data Sources and Connections" and the Cognos online help.

Optional step: Set up email notification

When an IBM Cognos report is displayed in the IBM EMM interface, the Cognos Viewer toolbar in the window includes an option for sending the report as an attachment in an email. If you want to enable IBM Cognos to send IBM EMM reports as email attachments, configure notification in Cognos Configuration.

Use the following guidelines to set up email notification for the IBM EMM application reports:

- In Cognos Configuration, select **Data Access > Notification**.
- Specify the SMTP mail server using the host name or the IP address plus the port using the format **host:port** or **IPAddress:port**. For example, serverX:25 or 192.168.1.101:25. (The default SMTP port is usually 25.)
- To set the user name and password of the account, click in the **Value** column and click the pencil icon to open the **Value** dialog box.
- Specify the default sender using the pattern `user@company.com`.

If you have any questions about configuring email notification, see the Cognos Connection online help.

Note: When a user selects the email option from the Cognos Viewer toolbar, the email form that appears includes the option to insert a link to the report. When you acquire your IBM Cognos license from IBM EMM, this option is not supported. Users can send the reports as email attachments only.

Step: Configure the IBM Cognos application's firewall

To configure the IBM Cognos firewall, you specify the IBM EMM system as a valid domain or host and disable validation.

1. In Cognos Configuration, select **Security > IBM Cognos Application Firewall**.
2. Set **Enable CAF validation** to `false`.
3. In the valid domains or hosts property, enter the fully qualified machine host name, including the domain and the port, for the system where the Marketing Platform is running.

   Important: If you have a distributed IBM EMM environment, you must do this for every machine on which an IBM EMM product that renders Cognos reports is installed (for example, the Marketing Platform, which has dashboards; Campaign; and Marketing Operations).

   For example:

   `serverXYZ.mycompany.com:7001`
4. Save the configuration.

5. Restart the IBM Cognos service.

Step: Import the reports folder in Cognos Connection

The IBM EMM application reports are in the compressed (.zip) file the report package installer copied to the IBM Cognos machine. Use the guidelines in this procedure to import the compressed file for reports into Cognos Connection.

1. Navigate to the `Cognosnn` directory under your report package installation on the IBM Cognos machine, where *nn* indicates the version number.

2. Copy the compressed reports archive file (for example `IBM EMM Reports for Campaign.zip`) to the directory where your Cognos deployment archives are saved. In a distributed IBM Cognos environment, this is a location on the system running the Content Manager.

    The default location is the deployment directory under your IBM Cognos installation and it is specified in the Cognos Configuration tool installed with the Cognos Content Manager. For example: `cognos\deployment`.

3. Locate the `Cognosnn\ProductNameModel` subdirectory under your report package installation on the Cognos machine.

4. Copy the entire subdirectory to any place on the system running Cognos Framework Manager that Framework Manager has access to.

5. Open Cognos Connection.

6. From the **Welcome** page, click **Administer Cognos Content**.

    If your **Welcome** page is turned off, turn it back on in the Cognos Connection user preferences.

7. Click the **Configuration** tab.

8. Select **Content Administration**.

9. Click ⬛ (**New Import**) on the toolbar.

10. Follow these guidelines as you step through the **New Import Wizard**:

    a. Select the reports archive that you copied in the previous procedure.

    b. In the Public folders content list, select **all** the options, including the package itself (the blue folder).

    c. If you do not want users to access the package and its entries yet, select **Disable after import**. Make this selection if you want to test the reports before you make them available to the IBM EMM application users.

Step: Configure and publish the data model, if necessary

In "Step: Create the IBM Cognos data sources for the IBM EMM application databases" on page 59, you set up the IBM EMM system tables as a Cognos data source. If the data source login you used is not the owner of the IBM EMM application system tables, perform the step described here. If the data source login you used **does** own the IBM EMM application system tables, then you can skip this step.

1. Locate the `Model` directory under the reports package installation. Copy all of the files in this `Model` directory to anywhere under your Cognos Framework Manager installation directory. These files constitute the application-specific data model.

2. In Framework Manager, open the project file. The project file has a `.cpf` extension and the file name includes the IBM EMM application name (for example, `ProductNameModel.cpf`).

3. Open the data model for the application and do the following.

a. In the Project Viewer, expand **Data Sources**.

b. Click the data source for the application.

c. Update the data source as described in the following table.

Database	Fields
SQL Server	• Catalog: Enter the name of the IBM EMM application database. • Schema: Enter the name of the IBM EMM application database schema. For example, dbo
Oracle	• Schema: Enter the name of the IBM EMM application database schema.
DB2	• Schema: Enter the name of the IBM EMM application database schema.

4. Save and republish the package.

   If you need basic instructions on publishing a package in IBM Cognos, see the *Cognos Framework Manager User Guide*.

Step: Enable internal links in the reports

The IBM EMM application reports have standard links. To enable these links to work properly, you must configure the Cognos firewall as described in "Step: Configure the IBM Cognos application's firewall" on page 60, and you must configure the redirect URL in the Cognos data model (the .cpf file) for the IBM EMM application reports, as follows.

1. From Cognos Framework Manager, browse to the *<productName>*Model subdirectory you copied into the Framework Manager directory structure and select the .cpf file. For example, CampaignModel.cpf.

2. Select **Parameter Maps > Environment**.

3. Right click **Environment** and select **Edit Definition**.

4. In the **Redirect URL** section, select the **Value** field. Edit the server name and port number so they are correct for the IBM EMM system, leaving the rest of the URL intact. By convention, the host name includes the domain name.

   For example, for Campaign:

   ```
   http://serverX.ABCompany.com:7001/Campaign/
   redirectToSummary.do?external=true&
   ```

   For example, for Marketing Operations:

   ```
   http://serverX.ABCompany.com:7001/plan/callback.jsp?
   ```

5. Save the model and publish the package:

   a. From the navigation tree, expand the **Packages** node of the model.

   b. Right click the package instance and select **Publish Package**.

Step: Verify the data source names and publish

When you publish the model from Framework Manager to the Cognos content store, the name specified as the data source for the reports in the model must match the name of the data source you created in Cognos Connection. If you used the default data source names as described in "Step: Create the IBM Cognos data sources for the IBM EMM application databases" on page 59, the data source names match. If they do not, you must change the name of the data source in the model.

1. In Cognos Connection, determine the names of the data sources you created.

2. In Framework Manager, select the **Open a Project** option.

3. Browse to the *<productName>*Model subdirectory you copied into the Framework Manager directory structure and select the .cpf file. For example, CampaignModel.cpf.

4. Expand the **Data Sources** entry and examine the names of the data sources. Verify that they match what you named them in Cognos Connection.

   a. If they match, you are finished with this procedure.

   b. If they do not match, select the data source instance and edit the name in the **Properties** section. Save your changes.

5. Publish the package to the Cognos content store

Step: Configure Cognos reporting properties in the Marketing Platform

There are several sets of properties for configuring reporting in IBM EMM. Some specify parameter values for the reporting components in the Marketing Platform. You have already set these properties, as described in "Step: Generate the view or table creation scripts" on page 50.

Other properties specify URLs and other parameters for the IBM Cognos system. This procedure describes how to set these Cognos properties.

1. Log in to IBM EMM as the platform_admin user or another user with the ReportsSystem role.

2. Select **Settings > Configuration > Reports > Integration > Cognos** *version*

3. Set the value of the **Enabled** property to True.

4. Set the value of the **Domain** property to the name of the company domain on which the IBM Cognos system is running.

   For example, xyzCompany.com.

   If your company uses subdomains, the value in this field should include the company domain and the subdomain.

5. Set the value of the **Portal URL** property, to the URL of the Cognos Connection portal. Use a fully qualified host name, including the domain and any subdomains (specified in the **Domain** property).

   For example: http://MyCognosServer.xyzCompany.com/cognos10/cgi-bin/cognos.cgi

   You can find this URL in the Cognos Configuration utility under **Local Configuration > Environment**.

6. In the **Dispatch URL** field, specify the URL of the primary Cognos Content Manager dispatcher. Use a fully qualified host name, including the domain and any subdomains (specified in the **Domain** property).

   For example: http://MyCognosServer.xyzCompany.com:9300/p2pd/servlet/dispatch

   You can find this URL in the Cognos Configuration utility under **Local Configuration > Environment**.

7. Leave **Authentication mode** set to anonymous for now.

8. Save the settings.

Step: Test your configuration without authentication enabled

After the reports are installed and configured but before you enable authentication, test the setup by running some reports.

1. Verify that IBM EMM is running and that the IBM Cognos BI service is running.
2. Log in to IBM EMM as a user with application access and create some data. (Otherwise the reports have nothing to show.)
3. Open Cognos Connection.
4. Navigate to the report folders you imported and click the link to a basic report. For example, for Campaign, select **Public Folders > Campaign > Campaign > Campaign Summary**.

   If the report fails, verify that you configured the Cognos data source for the IBM EMM application database correctly. See "Step: Create the IBM Cognos data sources for the IBM EMM application databases" on page 59.
5. Click a link in the report.

   If the internal links from the reports do not work, the redirect URL is not configured correctly. See "Step: Enable internal links in the reports" on page 62.
6. Log in to the IBM EMM application as a user with application access and navigate to the **Analysis** page.

   When you specify the URL for the IBM EMM application, be sure to use a fully qualified host name with your company domain (and subdomain, if appropriate). For example:

   `http://serverX.ABCompany.com:7001/unica`
7. Click the link to the same report that you tested in Cognos.

   If you cannot view the report, it is likely that the IBM Cognos firewall isn't configured correctly. See "Step: Configure the IBM Cognos application's firewall" on page 60.
8. Click a link in the report.

   If the internal links from the reports do not work, the redirect URL is not configured correctly. See "Step: Enable internal links in the reports" on page 62.
9. Open an individual item, click the **Analysis** tab, and verify that the report is correct.

Configure IBM Cognos to use IBM EMM authentication

The IBM EMM Authentication Provider enables the Cognos applications to use IBM EMM authentication to communicate with the IBM EMM system as though it were another IBM EMM application in the suite.

Before you begin the procedures in this section, be sure that you know which authentication mode you plan to configure ("authenticated" or "authenticated per user"). If you need more information, see "Step: Determine which authentication mode to configure" on page 49.

Step: Create the reporting system user, if necessary

Note: If you are setting the authentication mode to "authenticated per user" skip this procedure and continue to "Step: Configure the Cognos authentication properties in IBM EMM" on page 65.

When you create the reports system user, you create the user and add data source credentials to the user that holds login information for IBM Cognos BI. In this way, you configure two sets of logins for the same user:

- One for the IBM system: the user name and password specified for the reports system user (cognos_admin)

- One for IBM Cognos BI: the user name and password specified as data source credentials for the reports system user

1. Log in to IBM EMM as the platform_admin user.
2. Select **Settings > Users**.
3. Create an IBM user with the following attributes:
   a. User name: `cognos_admin`
   b. Password: `admin`
4. Create a new data source for the user with the following attributes:
   a. Data Source: `Cognos`
   b. Data Source Logon: `cognos_admin`

      Ensure that the user name in the data source exactly matches the user name of the IBM user you created in step 3.
   c. Data Source Password: `admin`
5. Add the Reports System role to the user.
6. If IBM EMM is configured to expire user passwords, log out and then log back in as the reporting system user (cognos_admin). This step ensures that you interact with the IBM security "change password" challenge and reset the password before you log in to IBM Cognos as this user in a later task.

Step: Configure the Cognos authentication properties in IBM EMM

1. Log in to IBM EMM as the platform_admin user.
2. Select **Settings > Configuration**.
3. Expand **Reports > Integrations > Cognos** *version* .
4. Set the value of the **Authentication Mode** property by selecting either **authenticated** or **authenticatedPerUser**, as appropriate for your system.
5. **For "authenticated" only**. Verify that the values in the **Authentication user name** and **Authentication datasource name** fields match those of the user and data source you created in the previous task, "Step: Create the reporting system user, if necessary" on page 64.
6. Set the value of the **Enable form authentication** property.

   This setting indicates that IBM EMM security uses form-based authentication in place of cookies. You set this property to `True` when either of the following is true.

   - When the IBM EMM is not installed in the same network domain as the Cognos applications.
   - When Cognos is accessed using an IP address (within the same network domain) instead of the Fully Qualified Hostname (which is being used to access the IBM EMM applications), even if both the IBM EMM applications and the Cognos installation are on the same machine.

   However, when the value is `True`, the login process to Cognos Connection passes the login name and password in clear text and therefore is not secure unless Cognos and the IBM EMM are configured to use SSL communication.

   Even with SSL configured, the user name and password appear as clear text in the HTML source code when you "view source" in a displayed report. For this reason, you should install Cognos and IBM EMM in the same network domain.

   Note that when the **Enable form authentication** property is set to `True`, the **Authentication mode** property automatically behaves as though it were set to **authenticated**, and you must perform the step required for this mode, described in "Step: Create the reporting system user, if necessary" on page 64.

7. Save the new settings.
8. **For "authenticatedPeruser" only.** Assign the ReportUser role to the default asm_admin user. You perform this step so that you can test reports: you need a user with access to both the IBM EMM application and report data. The platform_admin user does not have access to the IBM EMM application features.

Step: Configure IBM Cognos to use the IBM EMM Authentication Provider

In this task, you use the Cognos Configuration and Cognos Connection applications to configure the IBM Cognos BI applications to use the IBM EMM Authentication Provider.

1. On the machine running the Cognos Content Manager, open Cognos Configuration
2. Select **Local Configuration > Security > Authentication**.
3. Right-click **Authentication** and select **New resource > Namespace**.
4. Complete the fields as follows, and then click OK:
   a. **Name**: Unica
   b. **Type**: Custom Java Provider.
5. On the **Resource Properties** page, complete the fields as follows and then save your changes:
   a. **NamespaceID**: Unica
   b. **Java class name**:
      com.unica.report.adapter.UnicaAuthenticationProvider
6. Stop and restart the IBM Cognos BI service.

   On a Windows system, sometimes the Cognos interface indicates that the service is stopped when it is not. To ensure that the service has really stopped, use the Windows Administrative tools to stop the service.
7. Under **Local Configuration > Security > Authentication**, right-click **Unica** and select **Test**.

   If Cognos Connection displays an error, examine the cogserver.log file, located in the logs directory of your Cognos installation to determine the problem.
8. Log in to Cognos Connection as follows to verify that the IBM EMM Authentication provider is configured correctly:
   • If you set the Cognos authentication mode in the IBM EMM configuration properties to **authenticated**, log in as the cognos_admin (report system) user.
   • If you set the authentication mode in the IBM EMM configuration properties to **authenticatedPerUser**, log in as the asm_admin user.

   If IBM Cognos displays the error "The 3rd party provider returned an unrecoverable exception," expand the error message. If it states "invalid credentials," you made an error entering your user credentials. Try again. However, if it states "password expired," IBM EMM expired the password. Log in to IBM EMM application as the reporting system user and reset the password. Then try logging in to Cognos Connection again.

   If you still cannot log in to Cognos Connection, examine the cogserver.log file, located in the logs directory of your Cognos installation, to determine the problem.
9. When you can successfully log in to Cognos Connection, open Cognos Configuration again.

10. Select **Local Configuration > Security > Authentication > Cognos**.
11. Disable anonymous access to IBM Cognos BI by setting **Allow anonymous access?** to `false`.
12. Save your changes.
13. Stop and restart the IBM Cognos service.

    If the IBM Cognos service cannot communicate successfully with the authentication provider, it cannot start. If the IBM Cognos service fails to start, verify your configuration by retracing the steps in this procedure.
14. **Distributed systems only.** If your IBM Cognos system has backup Content Managers configured for failover support, repeat this procedure on all the servers with Content Manager installed.

At this point, anyone logging in to an application on the Cognos system must be authenticated by IBM EMM. Additionally, the authentication namespace **Unica** now appears in the IBM Cognos user interface for logon and security administration tasks.

Configuration required when the IBM Marketing Platform is integrated with an LDAP server or a web access control system

When the IBM Marketing Platform is integrated with an LDAP server, Windows Active Directory (Windows Integrated Login), or a web access control system such as Tivoli® or SiteMinder, you must perform the following additional configurations.

1. In Cognos Configuration, set the flag **Selectable for authentication** to **false** for the Unica authentication namespace.

   When you set this flag to **false**, Cognos Connection and Cognos Administration cannot access the Unica namespace for the purpose of authentication. However, IBM EMM applications can still access the Unica namespace via the Cognos SDK API (for example, when users view Cognos reports from within IBM EMM applications).
2. If you need authenticated access to the Cognos URL, do the following.
   a. In Cognos Configuration, configure a namespace using the appropriate bundled authentication provider.
   b. Set **Selectable for authentication** to **true**.
   c. Use this new namespace for the Cognos URL.

Step: Test your configuration with authentication configured

After configuring IBM Cognos to use IBM EMM authentication, test the system again.

1. Verify that IBM EMM is running and that the IBM Cognos service is running.
2. Open Cognos Connection.
3. Navigate to the report folders you imported and click the link a basic report. For example, for Campaign, select **Public Folders > Campaign > Campaign > Campaign Summary**.

   If the report fails, verify that you configured the IBM Cognos data source for the IBM EMMapplication database correctly. See "Step: Create the IBM Cognos data sources for the IBM EMM application databases" on page 59.
4. Click a link in the report.

   If the internal links from the reports do not work, the redirect URL is not configured correctly. See "Step: Enable internal links in the reports" on page 62.
5. Log in to IBM EMM and navigate to the **Analysis** page.

When you specify the URL for the IBM EMM application, be sure to use a fully qualified host name with your company domain (and subdomain, if appropriate). For example:

`http://serverX.ABCompany.com:7001/unica`

6. Click the link to the same report that you tested in IBM Cognos.

If you see error messages about security, it is likely that the IBM EMM Authentication Provider is not configured correctly. See "Configure IBM Cognos to use IBM EMM authentication" on page 64.

If you are prompted to enter credentials for authentication, it is likely that the domain name is missing from one of your URLs. Log in to IBM EMM as a user with admin privileges. Then select **Settings > Configuration** and ensure that the URLs in the following properties include the domain name and any appropriate subdomain name.

- **Reports > Integration > Cognos > Portal URL** and **Dispatch URL**
- Any URL properties for the IBM EMM applications, for example: **Campaign > navigation > serverURL**

7. Click a link in the report.

If you are prompted to enter credentials for authentication, it is likely that the domain name is missing from one of the URLs.

8. Open an individual item, click the **Analysis** tab, and verify that the report is correct.

If you see error messages about security, it is likely that the IBM EMM Authentication Provider is not configured correctly.

Next steps for reporting

At this point, reporting is working properly and the example reports are in their default state. When you finish configuring the actual data design of your IBM EMM applications - things like campaign codes, custom campaign attributes, response metrics, and so on - you will return to reporting because you may need to customize the reports or reporting schemas.

- If you are using Campaign or Interact, see the "Configuring reporting" chapter in the *Marketing Platform Administrator's Guide.*
- If you are using Marketing Operations, see the "Using Reports" chapter in the *IBM Marketing Operations Administrator's Guide.*
- If you are setting up reporting for eMessage, you are done configuring reporting. You cannot customize the eMessage reporting schemas or the reports.
- If you configured the system to use the "authenticated per user" mode, ensure that the appropriate IBM EMM users can run the reports from the IBM EMM applications. The easiest way to do this is to assign the default ReportsUser role to the appropriate user groups or users, as described in "To configure report folder permissions."

To configure report folder permissions

In addition to controlling access to the **Analytics** menu item and the **Analysis** tabs for object types (campaigns and offers, for example), you can configure permissions for groups of reports based on the folder structure in which they are physically stored on the IBM Cognos system.

1. Log in as a Campaign administrator who has the **ReportSystem** role.
2. Select **Settings > Sync Report Folder Permissions**.

The system retrieves the names the folders located on the IBM Cognos system, for all partitions. (This means that if you decide to configure folder permissions for any partition, you must configure it for all of them.)

3. Select **Settings > User Permissions > Campaign**.
4. Under the **Campaign** node, select the first partition.
5. Select **Add Roles and Assign Permissions**.
6. Select **Save and Edit Permissions**.
7. On the **Permissions** form, expand **Reports.**

   The Reports entry does not exist until after you run the **Sync Report Folder Permissions** option for the first time.
8. Configure the access settings for the report folders appropriately and then save your changes.
9. Repeat steps 4 through 8 for each partition.

Chapter 9. Upgrading reports

In IBM EMM version 8.x, reporting is one of the components provided by the Marketing Platform. That is, IBM EMM reporting is no longer provided in a separate web application as it was in Affinium Reports 7.5.x.

When you upgrade to Marketing Platform version 8.x, the installer and database scripts also upgrade the reporting feature, retaining the configuration settings for the Campaign and Interact reporting schemas. This chapter describes how to upgrade and configure the other reporting components.

About upgrading from version 7.5.1

When you install the IBM Cognos reports archive from the reports package, you run an upgrade script that preserves your customizations to the Cognos data model, but you must replace the 7.5.1 reports with the new reports. Although the majority of the older reports are compatible with the upgraded Cognos models, the 8.x reports packages include new and enhanced reports, and most of the packages also contain Dashboard reports. The only way to obtain the new or enhanced reports is to install the 8.x reports archive, which overwrites the existing reports.

Therefore, you have two options for upgrading your reports.
- Back up the old reports, install the new reports, and then recreate your customizations using the old reports for reference.
- Back up the old reports and install the new reports. Compare the new reports to your old reports and examine your customizations. If you are certain that a customized report will function properly with the new data model, copy the old customized report back into the reports folder.

Note that the 7.5.1 version of the Campaign Performance by Cell reports and the Offer Performance Summary by Campaign reports do not function at all without manual intervention. Additionally, the new versions of many of the old reports include enhancements and minor bug fixes. This chapter includes procedures that describe how to manually fix the old Campaign Performance by Cell reports and the Offer Performance Summary by Campaign reports so they function with the new model. This chapter does not describe how to manually apply the enhancements or minor fixes to the other 7.5.1 reports. To obtain those changes, you must use the new versions of the reports.

Upgrade scenarios

Source version	Upgrade path
Pre-7.5.1	If you are upgrading an IBM EMM application from a pre-7.5.1 version, there is no upgrade path for reporting. Instead, see Chapter 8, "Installing Reports," on page 47.
7.5.1	If you are upgrading an IBM EMM application from the 7.5.1 version, perform the following steps. • "Preparing to upgrade the reporting components" on page 72 • "Upgrading reports from version 7.5.1" on page 73 **Note:** Because there is no upgrade path for eMessage from version 7.5.x to 8.x, there is also no upgrade path for the eMessage reports.

Source version	Upgrade path
8.x	If you are upgrading an IBM EMM application from an 8.x version, perform the steps described in: • "Preparing to upgrade the reporting components" • "Upgrading reports from version 8.x" on page 84

Preparing to upgrade the reporting components

Before you begin upgrading and configuring reporting, complete the preparatory tasks in this section.

Step: Verify that a user with the ReportsSystem role exists

If you are upgrading from version 7.x you must configure an IBM EMM user with appropriate permissions to work with reporting. If you are upgrading from 8.x, this user probably exists already.

If you do need to configure this reporting user, see "Step: Set up a user with the ReportsSystem role, if necessary" on page 47 for instructions.

Confirm that the reporting schemas and reports integrations settings are upgraded on the Marketing Platform

If you have not done so already when you upgraded the Marketing Platform, you must run the IBM EMM master installer with the reports packs installers to upgrade the reporting schemas.

Take the following steps to verify that the upgraded reporting schemas and reports integration configuration properties are on the Marketing Platform.

1. Log in to the IBM EMM system as the **platform_admin** user.
2. Select **Settings > Configuration**.
3. Expand **Reports > Schemas >** *ProductName* .

   If the schema configuration categories for your application were not upgraded, you have not yet installed the report package on this IBM EMM system. Locate the appropriate report package installer, run it now, and select the **IBM EMM** *Product* **Reporting Schemas** installation option.

   Note: If you are upgrading Marketing Operations, skip this step (Marketing Operations does not have reporting schemas).
4. Expand **Reports > Integrations**.

   If the schema configuration categories were upgraded, you will see a new category for Cognos 10 configuration. Your **Cognos 8** category is disabled, but it is retained for reference purposes, to assist you in setting the configuration properties for Cognos 10. After you have fully configured and tested your reporting upgrade, you should use the **Delete Category** link to remove the Cognos 8 configuration category.

Back up the Cognos model and report archive

On the IBM Cognos BI system, complete the following tasks:

• Make a back up copy of the model subdirectory. That is, locate the application model installed by the IBM EMM reports package installers, and copy the entire model subdirectory to create a backup.

- Use the export deployment specification feature in Cognos Connection to create a backup of the application's reports archive. Export the entire content store.

Step: Upgrade IBM Cognos BI, if necessary

If necessary, upgrade your version of IBM Cognos BI to the version supported for the report packs you are installing.

For help with this task, see the IBM Cognos BI documentation.

After you upgrade Cognos, perform the Cognos configuration tasks described in the installation chapter of this guide.

Upgrading reports from version 7.5.1

Follow the steps in this section if you are upgrading an IBM EMM application from version 7.5.1.

Step: Upgrade the reporting schemas and the views or reporting tables

Note: If you are upgrading Marketing Operations, skip this step and continue to "Step: Obtain the JDBC driver for the Marketing Platform system tables" on page 58. (Marketing Operations does not have reporting schemas.)

After you have upgraded Affinium Manager to Marketing Platform (including running the report pack installer with the Marketing Platform installation), complete the following steps:

1. Navigate to the `Unica\[product]ReportsPack\schema` directory and locate the `templates_sql_load.sql` script.
2. Run the script in the Marketing Platform system tables database.
3. Ensure that the Marketing Platform is running.
4. Log in to IBM EMM as a user with administrator privileges.
5. Under **Settings > Users**, give yourself the **ReportsSystem** role. Then log out and log back in.
6. Campaign only. The database schema for adding new campaign attributes changed in Campaign 8.0.0. Therefore, if the reporting schema customizations included additional campaign attributes, do the following:
   a. Use your database management tools to determine the value from each attribute's `AttributeID` column in the `UA_CampAttribute` table.
   b. In IBM EMM, select **Settings > Configuration** and expand **Reports > Schemas > Campaign > Campaign Custom Attributes > Columns > Campaign**.
   c. Delete the existing custom campaign attributes that were added for this installation, but do not delete the standard custom campaign attributes. (The standard custom campaign attributes were upgraded by the installer.)
   d. Re-create the attributes you deleted. Enter the ID of the attribute in the **Attribute ID** field.
7. Follow the steps in the procedure named "Step: Generate the view or table creation scripts" on page 50 to generate the new versions of the scripts.
8. Use the procedures in the section "Step: Create the reporting views or tables" on page 51 to create the new versions of the reporting views or tables.

Generate updated SQL scripts for the reporting views or tables

This procedure describes how to generate updated SQL scripts for existing reporting views or tables. If you are configuring views or tables for the first time, do not use this procedure. Instead, see the *IBM Marketing Platform Installation Guide*.

To generate updated SQL scripts, complete the following steps:

1. Select **Settings > Reports SQL Generator**. The SQL Generator page appears.
2. In the **Product** field, select the appropriate IBM application.
3. In the **Schema field**, select one or more reporting schemas. Use the table in "SQL scripts by data source" to determine the appropriate schemas to select.
4. Select the **Database Type**. This option must match the database type of the database for which you are generating the script.
5. In the **Generate Type** field, select the appropriate option (views, materialized views, or tables).

   Materialized views are not an option when **Database Type** is set to MS SQL Server.

   If the JNDI data source names are incorrect or have not been configured, the SQL Generator cannot generate scripts that create tables.
6. Set the value in the **Generate Drop Statement** field to Yes.
7. (Optional.) To examine the SQL, click **Generate**. The SQL Generator creates the script and displays it in the browser window.
8. Click **Download**.

   The SQL Generator creates the script and prompts you to specify where you want to save the file. If you selected a single reporting schema from the **Schema** field, the script name matches the name of schema (eMessage_Mailing_Execution.sql, for example). If you selected more than one reporting schema, the script name uses the product name only (Campaign.sql, for example). For a complete list of names, see "SQL scripts by data source."
9. Specify the location where you want to save the script. If you change the name of the file, be sure to use something that clearly indicates which schemas you selected. Then click **Save**.
10. Repeat steps 7 through 10 but select No in the **Drop Statement** field this time.
11. Repeat steps 3 through 11 for each script you want to generate.

    Note: There might be times when you want to disable script validation. For example, perhaps the Marketing Platform cannot connect to the IBM application database but you want to generate the scripts anyway. To disable validation, clear the values in the data source configuration properties for reporting. When you generate the scripts, the Reports SQL Generator displays a warning that it cannot connect to the data source, but it still generates the SQL script.

SQL scripts by data source: The following table shows which scripts you need to generate for each data source, the resulting script names and, for creating views or materialized views, which script should be run against which IBM application database. Note the following.

- The table lists the default names for the data sources and the generated scripts, which you might have changed.

-

The Interact reporting schemas reference more than one data source. Generate a separate SQL script for each data source.

Reporting schema	Data source (default names)	Script name (default names)
All Campaign reporting schemas	Campaign system tables (campaignPartition1DS)	`Campaign.sql`, unless you generated separate scripts for each reporting schema. If you did, each script is named after the individual schema.
eMessage Mailing Performance	eMessage tracking tables, which are with the Campaign system tables (campaignPartition1DS)	`eMessage_Mailing_ Performance.sql`
Interact Deployment History, Interact Performance, and Interact Views	Interact design time database (campaignPartition1DS)	`Interact.sql`
Interact Learning	Interact Learning tables (InteractLearningDS)	`Interact_Learning.sql`
Interact Run Time	Interact run time database (InteractRTDS)	`Interact_Runtime.sql`

Update the views or reporting tables

Note that this procedure describes updating existing views or reporting tables. If you are creating views or reporting tables for the first time, do not use this procedure. Instead, use the reports chapter in the installation guide for your IBM application.

After you generate and download the SQL scripts that update your views or tables, run them on the application databases.

1. Locate the SQL scripts that you generated and saved. Use the table in "SQL scripts by data source" on page 74 to determine which scripts to run against which database.
2. Use your database administration tools to run the drop scripts.
3. Use your database administration tools to run the creation scripts.
4. **For reporting tables**, use your database administration tools to populate the new tables with the appropriate data from the production system database.
5. **For reporting tables and materialized views**, use your database administration tools to schedule data synchronization processes between the IBM application's production databases and the new reporting tables or materialized views to run regularly.

Note: You must use your own tools for this step. The Reports SQL Generator does not generate this SQL for you.

Step: Obtain the JDBC driver for the Marketing Platform system tables

Obtain the JDBC drivers and any required associated files that you used to configure the JDBC data source for the Marketing Platform's system tables when you set up the IBM EMM system. In a task later in this chapter, you configure

Cognos to use IBM EMM authentication. Cognos needs the JDBC driver so it can obtain user information from the Marketing Platform system tables when it uses IBM EMM authentication.

Copy the JDBC driver to the machine where the Cognos Content Manager is installed, to the `webapps\p2pd\WEB-INF\AAA\lib` directory under your Cognos installation.

Step: Run the installers and upgrade the IBM integration components

If yours is a distributed Cognos installation, determine which machine is running the Cognos Content manager.

1. Stop the IBM Cognos service.
2. On the IBM Cognos BI system that runs the Cognos Content Manager, download or copy the following IBM installers to a single directory:
   - IBM
   - Marketing Platform
   - IBM application report package(s)
3. Run the IBM installer. (It will launch the sub-installers for the Marketing Platform and the report package in order.)
4. In the first **Products** window, ensure that both the Marketing Platform and the report package options are selected.
5. In the **Platform Database Connection** window, provide the necessary information about how to connect to the Marketing Platform system tables.
6. When the installer asks whether you want to upgrade Affinium Manager, specify **No.**
7. When the **Platform Installation Components** window appears, select the **Reports for IBM Cognos** option and clear the other options
8. When the Marketing Platform installer prompts for the path to the JDBC driver, enter the fully qualified path for the JDBC driver you copied to the Cognos system during the task "Step: Obtain the JDBC driver for the Marketing Platform system tables" on page 58.
9. When the Marketing Platform installer prompts for the location of the IBM Cognos installation, enter or browse to the top level of the IBM Cognos installation directory. Note that the default value provided in this field is a static value that is not based on the actual file structure of your IBM Cognos system.
10. When the report package installer takes over and displays its installation options, select the **IBM Cognos package for IBM [product]** option and clear the option for the reporting schemas. This installation option copies the reports archive to the Cognos machine. You import this archive manually later.
11. When the installers are finished, copy the JDBC driver for the Marketing Platform database to the IBM Cognos `webapps\p2pd\WEB-INF\AAA\lib` directory. Be sure to **copy** the driver. Do **not** cut and paste the driver.
12. Restart the IBM Cognos server.

Step: Upgrade the 7.5.1 model and install the new reports

The version 8.x report packages include new and changed reports as well as Dashboard reports for most of the IBM EMM applications. Although the model can be upgraded, your 7.5.1 reports cannot. Instead you must install the new 8.x

reports and then either recreate the reporting customizations you made to the 7.5.1 versions or copy the old reports back into the folder.

1. Verify that you backed up the model and the old reports.
2. Navigate to the *ProductName*ReportsPack\Cognos*N* directory under your IBM EMM product installation.

   The *N* in the path refers to the Cognos version number.
3. Copy the reports archive .zip file (for example `IBM EMM Reports for Campaign.zip`) to the directory where your Cognos deployment archives are saved.

   The default location is the deployment directory under your IBM EMM Cognos installation and it is specified in the Cognos Configuration tool installed with the Cognos Content Manager.

   For example: `cognosN\deployment`.

   The *N* in the path refers to the Cognos version number.

   In a distributed IBM Cognos environment, this is a location on the system running the Content Manager.
4. Only if you did not install your IBM EMM product to the default directory (`C:\Unica` on Windows) you must update some upgrade scripts as described in this step.

   You must update the following scripts.
   - `preUpgrade_86_fromanyversion.xml`

     Required only for Campaign and Interact.
   - `upgrade751to80.xml`
   - `upgrade80to81.xml`
   - `upgrade81to85.xml`
   - `upgrade85to86.xml`

   The scripts are all located in the *ProductName*ReportsPack\cognos*N*\ *ProductName*Model directory under your IBM EMM product installation.

   The *N* in the path refers to the Cognos version number.

   In each script, edit file paths that point to directories where localized language versions of the models are stored to reflect your product install location. Make this change for every language your users need. For example:

   install_directory `\ReportsPackCampaign\cognosN\CampaignModel\ translations\L\translations.txt`

   The *N* in the path refers to the Cognos version number.

   The *L* in the path refers to one of the following language indicators.
   - fr
   - de
   - es
   - it
   - ja
   - ko
   - pt
   - zh
5. Open Cognos Connection.
6. Select **Administer Cognos Content > Configuration > Content Administration**.

7. Click the **New Import** button on the toolbar and import the reports folder.
8. Open Cognos Framework Manager.
9. Select **Project > Run Script**.
10. Run the following scripts.
    - `upgrade751to80.xml`
    - `upgrade80to81.xml`
    - `upgrade81to85.xml`
    - `upgrade85to86.xml`

    The scripts are all located in the *ProductName*ReportsPack\cognos*N*\ *ProductName*Model directory under your IBM EMM product installation.

    The *N* in the path refers to the Cognos version number.
11. Publish the package to the Cognos content store.
12. Run a report to ensure that it works properly.
13. If the 7.5.1 reports were customized, recreate those customizations.

    Alternately, if you can ensure that an old report will work properly with the upgraded model, copy the old report back.

    For information about fixing the old Campaign Performance by Cell reports and the old Offer Performance Summary by Campaign reports so they work with the new data model, continue with the remaining procedures in this section.
14. If you have reports installed for multiple partitions, configure a reports packages for the additional partitions using the instructions in the chapter that describes how to configure multiple partitions.
15. Optional. See "Configure IBM Cognos to use IBM EMM authentication" on page 64 for information about the new authentication mode, "authenticate per user."

Step: Updating the old Campaign Performance by Cell reports

After you upgrade the Campaign model from 7.5.1 to 8.x, the old Campaign Performance by Cell reports do not function properly. If you want to use your old Campaign Performance by Cell reports rather than the new ones, you must manually update them yourself.

How to fix the cross-object Performance by Cell reports

Use this procedure to fix the old versions of the following cross-object reports so they function with the new data model.
- Campaign Performance Summary by Cell
- Campaign Performance Summary by Cell (with Revenue)
- Campaign Performance Summary by Cell by Initiative

Complete the following steps.
1. Open the report in IBM Cognos Report Studio.
2. Click the lock icon on the toolbar to unlock the report.
3. Browse to the **Query Explorer** and open the **Report Query** for a list of all the query items in the report.
4. For all three reports, remap the following query items as follows:

Query item	Mapping
Number of Offers Given	[Campaign Performance Summary].[Campaign Cell CH with Controls Summary].[Number of Offers Given]
Response Transactions	[Campaign Performance Summary].[Campaign Cell RH with Controls Summary].[Response Transactions]
Unique Recipients	[Campaign Performance Summary].[Campaign Cell CH with Controls Summary].[Unique Recipients]
Unique Responders	[Campaign Performance Summary].[Campaign Cell RH with Controls Summary].[Unique Responders]
Unique Recipients Control Group	[Campaign Performance Summary].[Campaign Cell CH with Controls Summary].[Unique Recipients Control Group]
Unique Responders Control Group	[Campaign Performance Summary].[Campaign Cell RH with Controls Summary].[Unique Responders Control Group]

5. For the report with revenue, remap for the **Gross Revenue** item as follows:

   [Campaign Performance Summary].[Campaign Cell RH with Controls Summary].[Gross Revenue]

6. Update the formula for the **Responder Rate Control Group** to be the following:

   ```
   IF(([Unique Responders Control Group]/([Unique Recipients Control Group]
     * 1.00)) is missing)
   THEN (0)
   ELSE(([Unique Responders Control Group]/([Unique Recipients Control Group]
     * 1.00)))
   ```

7. From the **Detail Filter** list, select the first detail filter and edit it so it looks like this:

   [Campaign Performance Summary] . [Campaign] . [Campaign ID] in (?CampaignIds?)

8. From the **Detail Filter** list, delete the second detail filter – the one that looks like this:

   [Campaign Performance Summary].[Responder Rate Control Group at Cell Level].[Campaign ID] in (?CampaignIds?)

9. Lock the report.

10. Do the following in Report Studio for each report.

    a. Go to File > Report Package.

    b. Select "IBM Campaign Package" and click **OK**.

    c. Fill in prompts on the report as necessary.

    d. After the report is validated, click **Close** in the Validation Response window.

11. Save and run the report.

How to fix the object-specific Performance by Cell reports

Use this procedure to fix the old versions of the following object specific reports to function with the new data model.

- Campaign Performance Summary by Cell
- Campaign Performance Summary by Cell (with Revenue)

Complete the following steps.

1. Open the report in IBM Cognos Report Studio.

2. Click the lock icon on the toolbar to unlock the report.

3. Browse to the **Query Explorer** and open the **Report Query** for a list of all the query items in the report.

4. For both reports, remap the following query items as follows:

Query item	Mapping
Number of Offers Given	`[Campaign Performance Summary].[Campaign Cell CH with Controls Summary].[Number of Offers Given]`
Response Transactions	`[Campaign Performance Summary].[Campaign Cell RH with Controls Summary].[Response Transactions`
Unique Recipients	`[Campaign Performance Summary].[Campaign Cell CH with Controls Summary].[Unique Recipients]`
Unique Responders	`[Campaign Performance Summary].[Campaign Cell RH with Controls Summary].[Unique Responders]`
Unique Recipients Control Group	`[Campaign Performance Summary].[Campaign Cell CH with Controls Summary].[Unique Recipients Control Group]`
Unique Responders Control Group	`[Campaign Performance Summary].[Campaign Cell RH with Controls Summary].[Unique Responders Control Group]`

5. For the report with revenue, remap the **Gross Revenue** query item as follows:

   `[Campaign Performance Summary].[Campaign Cell RH with Controls Summary].[Gross Revenue]`

6. Update the formula for the Responder Rate Control Group to be the following:

```
IF(([Unique Responders Control Group]/([Unique Recipients Control Group]
 * 1.00)) is missing)
THEN (0)
ELSE(([Unique Responders Control Group]/([Unique Recipients Control Group]
 * 1.00)))
```

7. From the **Detail Filter** list, select the first detail filter and edit it so it looks like this:

   `[Campaign Performance Summary].[Campaign].[Campaign ID] in (?CampaignIds?)`

8. Delete the second detail filter – the one that looks like this:

   `[Campaign Performance Summary].[Responder Rate Control Group at Cell Level].[Campaign ID] in (?CampaignIds?)`

9. Lock the report.

10. Do the following in Report Studio for each report.

    a. Go to File > Report Package.

    b. Select "IBM Campaign Package" and click **OK**.

    c. Fill in prompts on the report as necessary.

    d. After the report is validated, click **Close** in the Validation Response window.

11. Save and run the report.

Step: Updating the old Offer Performance Summary by Campaign reports

After upgrading the Campaign model from 7.5.1 to 8.x, the old Offer Performance Summary by Campaign reports do not function properly. If you want to use your old Offer Performance Summary by Campaign reports rather than the new ones, you must update them manually.

How to fix the Offer Performance Summary by Campaign cross-object report

Use this procedure to fix the old version of the cross-object Offer Performance Summary by Campaign report so it functions with the new data model.

1. Open the report in IBM Cognos Report Studio.
2. Browse to the **Query Explorer** and open the **Report Query** for a list of all the query items in the report.
3. Configure the aggregation as follows for the following Campaign Level Counts query items:

Query item	Aggregate Function	Rollup Aggregate Function
Number of Offers Given	None	Automatic
Response Transactions	None	Automatic
Unique Recipients	None	Automatic
Unique Responders	None	Automatic
Not Contacted Responders	None	Automatic
Responses after Expiration	None	Automatic
Unique Recipients Control Group	None	Automatic
Unique Responders Control Group	None	Automatic

4. Configure the aggregation as follows for the following Campaign Level Counts query items:

Query item	Aggregate Function	Rollup Aggregate Function
Response Rate	Automatic	Automatic
Responder Rate	Automatic	Automatic
Responder Rate Control Group	Automatic	Automatic
Best Offer Lift Over This	Automatic	Automatic
Lift Over Worst Offer	Automatic	Automatic
Lift Over Control Group	Automatic	Automatic

5. Configure the aggregation as follows for the following Offer Level Counts query items:

Query item	Aggregate Function	Rollup Aggregate Function
Number of Offers Given-Offer	None	Automatic
Unique Responders-Offer	None	Automatic
Not Contacted Responders-Offer	None	Automatic
Responses after Expiration-Offer	None	Automatic
Unique Responders Control Group-Offer	None	Automatic

6. Change the expression for the **Response Transactions-Offer** query item to be the following:

```
[Offer Performance Summary].[Offer Response History Summary].
 [Response Transactions] / count([Campaign Name] for [Offer ID])
```

7. Configure the aggregation as follows for the following Offer Level Counts query items:

Query item	Aggregate Function	Rollup Aggregate Function
Response Transactions - Offer	Total	Automatic
Unique Recipients - Offer	Total	Automatic
Unique Recipients Control Group - Offer	Total	Automatic

8. Configure the aggregation as follows for the following Offer Level Counts query items:

Query item	Aggregate Function	Rollup Aggregate Function
Response Rate - Offer	Automatic	Automatic
Responder Rate - Offer	Automatic	Automatic
Responder Rate Control Group - Offer	Automatic	Automatic
Lift Over Control Group - Offer	Automatic	Automatic

9. For the Report Total level counts, change the expression for **Total Response Transactions** to be:

   `total ([Response Transactions-Offer])`

10. Also for **Total Response Transactions**, confirm that **Aggregate Function** is set to `Automatic` and that **Rollup Aggregate Function** is set to `Automatic`.

11. Lock the report.

12. Do the following in Report Studio for each report.

    a. Go to File > Report Package

    b. Select "IBM Campaign Package" and click **OK**.

    c. Fill in prompts on the report as necessary.

    d. After the report is validated, click **Close** in the Validation Response window.

13. Save and run the report.

How to fix the single object Offer Performance Summary by Campaign report

Use this procedure to fix the old version of the single object Offer Performance Summary by Campaign report so it functions with the new data model.

1. Open the report in IBM Cognos Report Studio.

2. Browse to the **Query Explorer** and open the **Report Query** for a list of all the query items in the report.

3. Configure the aggregation as follows for the following Campaign Level Counts query items:

Query item	Aggregate Function	Rollup Aggregate Function
Number of Offers Given	None	Automatic
Response Transactions	None	Automatic
Unique Recipients	None	Automatic
Unique Responders	None	Automatic

Query item	Aggregate Function	Rollup Aggregate Function
Not Contacted Responders	None	Automatic
Responses after Expiration	None	Automatic
Unique Recipients Control Group	None	Automatic
Unique Responders Control Group	None	Automatic

4. Configure the aggregation as follows for the following Campaign Level Counts query items:

Query item	Aggregate Function	Rollup Aggregate Function
Response Rate	Automatic	Automatic
Responder Rate	Automatic	Automatic
Responder Rate Control Group	Automatic	Automatic
Best Offer Lift Over This	Automatic	Automatic
Lift Over Worst Offer	Automatic	Automatic
Lift Over Control Group	Automatic	Automatic

5. Configure the aggregation as follows for the following Offer Level Counts query items:

Query item	Aggregate Function	Rollup Aggregate Function
Number of Offers Given-Offer	None	Automatic
Unique Responders-Offer	None	Automatic
Not Contacted Responders-Offer	None	Automatic
Responses after Expiration-Offer	None	Automatic
Unique Responders Control Group-Offer	None	Automatic

6. Change the expression for the **Response Transactions-Offer** query item to be the following:

```
[Offer Performance Summary].[Offer Response History Summary].
 [Response Transactions] / count([Campaign Name] for [Offer ID])
```

7. Configure the aggregation as follows for the following Offer Level Counts query items:

Query item	Aggregate Function	Rollup Aggregate Function
Response Transactions - Offer	Total	Automatic
Unique Recipients - Offer	Total	Automatic
Unique Recipients Control Group - Offer	Total	Automatic

8. Configure the aggregation as follows for the following Offer Level Counts query items:

Query item	Aggregate Function	Rollup Aggregate Function
Response Rate - Offer	Automatic	Automatic

Query item	Aggregate Function	Rollup Aggregate Function
Responder Rate - Offer	Automatic	Automatic
Responder Rate Control Group - Offer	Automatic	Automatic
Lift Over Control Group - Offer	Automatic	Automatic

9. Lock the report.
10. Do the following in Report Studio for each report.
    a. Go to File > Report Package
    b. Select "IBM Campaign Package" and click **OK**.
    c. Fill in prompts on the report as necessary.
    d. After the report is validated, click **Close** in the Validation Response window.
11. Save and run the report.

Upgrading reports from version 8.x

Follow the steps in this section if you are upgrading an IBM EMM application from version 8.x.

Step: Upgrade the 8.x model and install the new reports

1. Navigate to the *ProductName*ReportsPack\Cognos*N* directory under your IBM product installation.

   The *N* in the path refers to the Cognos version number.

2. Copy the reports archive .zip file (for example `IBM EMM Reports for Campaign.zip`) to the directory where your Cognos deployment archives are saved.

   The default location is the deployment directory under your Cognos installation and it is specified in the Cognos Configuration tool installed with the Cognos Content Manager. For example: `cognos\deployment`

   In a distributed Cognos environment, this is a location on the system running the Content Manager.

3. Only if you did not install your IBM product to the default directory (`C:\Unica` on Windows) you must update some upgrade scripts as described in this step.

   You must update the following scripts.
   - `preUpgrade_86_fromanyversion.xml`

     Required only for Campaign and Interact.
   - `upgrade80to81.xml`
   - `upgrade81to85.xml`
   - `upgrade85to86.xml`

   The scripts are all located in the *ProductName*ReportsPack\cognos*N**ProductName*Model directory under your IBM product installation.

   The *N* in the path refers to the Cognos version number.

   In each script, edit file paths that point to directories where localized language versions of the models are stored to reflect your product install location. Make this change for every language your users need. For example:

   install_directory `\ReportsPackCampaign\cognosN\CampaignModel\translations\L\translations.txt`

The *N* in the path refers to the Cognos version number.

The *L* in the path refers to one of the following language indicators.

- fr
- de
- es
- it
- ja
- ko
- pt
- zh

4. Open Cognos Connection.

5. Select **Administer Cognos Content > Configuration > Content Administration**.

6. Click the **New Import** button on the toolbar and import the reports folder.

7. Open Cognos Framework Manager.

8. Select **Project > Run Script**.

9. Run the following scripts.

- `upgrade80to81.xml`
- `upgrade81to85.xml`
- `upgrade85to86.xml`

The scripts are all located in the *ProductName*ReportsPack\cognos*N*\ *ProductName*Model directory under your IBM product installation.

The *N* in the path refers to the Cognos version number.

10. Publish the package to the Cognos content store.

11. Do the following in Cognos Report Studio for each cross-object Performance by Cell and object-specific Performance by Cell report.

a. Go to **File > Report Package**.

b. Select "IBM Campaign Package" and click **OK**.

c. Fill in prompts on the report as necessary.

d. After the report is validated, click **Close** in the Validation Response window.

Appendix A. About Marketing Platform utilities

This section provides an overview of the Marketing Platform utilities, including some details that apply to all of the utilities and which are not included in the individual utility descriptions.

Location of utilities

Marketing Platform utilities are located in the `tools/bin` directory under your Marketing Platform installation.

List and descriptions of utilities

The Marketing Platform provides the following utilities.
- "The configTool utility" on page 89 - imports, exports, and deletes configuration settings, including product registrations
- "The datafilteringScriptTool utility" on page 93 - creates data filters
- "The encryptPasswords utility" on page 94 - encrypts and stores passwords
- "The partitionTool utility" on page 95 - creates database entries for partitions
- "The populateDb utility" on page 97 - populates the Marketing Platform database
- "The restoreAccess utility" on page 98 - restores a user with the platformAdminRole role
- "The scheduler_console_client utility" on page 100 - lists or kicks off IBM Scheduler jobs configured to listen for a trigger

Prerequisites for running Marketing Platform utilities

The following are prerequisites for running all Marketing Platform utilities.
- Run all utilities from the directory where they are located (by default, the `tools/bin` directory under your Marketing Platform installation).
- On UNIX, the best practice is to run the utilities with the same user account that runs the application server on which Marketing Platform is deployed. If you run a utility with a different user account, adjust the permissions on the `platform.log` file to allow that user account to write to it. If you do not adjust permissions, the utility is not able to write to the log file and you might see some error messages, although the tool should still function correctly.

Troubleshooting connection issues

If a Marketing Platform utility fails to complete its task successfully, you can use the following information to help you resolve the issue.
- All of the Marketing Platform utilities except `encryptPasswords` interact with the Marketing Platform system tables. To connect to the system table database, these utilities use the following connection information, which is set by the installer using information provided when the Marketing Platform was installed.
  - JDBC driver name
  - JDBC connection URL (which includes the host, port, and database name)
  - Data source login
  - Data source password (encrypted)

This information is stored in the `jdbc.properties` file, located in the `tools/bin` directory under your Marketing Platform installation. Check the values in this file to ensure they are correct for your environment.

- In addition, Marketing Platform utilities rely on the `JAVA_HOME` environment variable, set either in the `setenv` script located in the `tools/bin` directory of your Marketing Platform installation, or on the command line.

  The Marketing Platform installer should have set this variable automatically in the `setenv` script, but it is a good practice to verify that the `JAVA_HOME` variable is set if you have a problem running a utility. The JDK must be the Sun version (not, for example, the JRockit JDK available with WebLogic).

  Wherever it is set, the `JAVA_HOME` environment variable must point to the 1.6 version of the Sun JRE.

  If your `JAVA_HOME` environment variable points to an incorrect JRE, then you must unset the `JAVA_HOME` variable before you run the IBM installers. You can do this as follows.

  – Windows: In a command window, enter

    `set JAVA_HOME=`*leave empty and press return key*

  – *NIX-type systems: In the terminal, enter

    `export JAVA_HOME=`*leave empty and press return key*

  Do this before you invoke the Marketing Platform utility you want to run.

Special characters

Characters that are designated as reserved characters in the operating system must be escaped. Consult your operating system documentation for a list of reserved characters and how to escape them.

Standard options in Marketing Platform utilities

The following options are available in all Marketing Platform utilities.

`-l logLevel`

Set the level of log information displayed in the console. Options are `high`, `medium`, and `low`. The default is `low`.

`-L`

Set the locale for console messages. The default locale is en_US. The available option values are determined by the languages into which the Marketing Platform has been translated. Specify the locale using the ICU locale ID according to ISO 639-1 and ISO 3166.

`-h`

Display a brief usage message in the console.

`-m`

Display the manual page for this utility in the console.

`-v`

Display more execution details in the console.

Running Marketing Platform utilities on additional machines

On the machine where the Marketing Platform is installed, you can run the Marketing Platform utilities without any additional configuration. However, you might want to run the utilities from another machine on the network. This procedure describes the steps required to do this.

To set up Marketing Platform utilities on additional machines

1. Ensure that the machine on which you perform this procedure meets the following prerequisites.
   - The correct JDBC driver must exist on the machine or be accessible from it.
   - The machine must have network access to the Marketing Platform system tables.
   - The Java runtime environment must be installed on the machine or be accessible from it.
2. Gather the following information about the Marketing Platform system tables.
   - The fully qualified path for the JDBC driver file or files on your system.
   - The fully qualified path to an installation of the Java runtime environment.

     The default value in the installer is the path to the JRE that the installer places under your IBM installation directory. You can accept this default or specify a different path.
   - Database type
   - Database host
   - Database port
   - Database name/system ID
   - Database user name
   - Database password
3. Run the IBM installer and install the Marketing Platform.

   Enter the database connection information that you gathered for the Marketing Platform system tables. If you are not familiar with the IBM installer, see the Campaign or Marketing Operations installation guide.

   You do not have to deploy the Marketing Platform web application.

Reference: Marketing Platform utilities

This section describes the Marketing Platform utilities, with functional details, syntax, and examples.

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
```

The datafilteringScriptTool utility

The `datafilteringScriptTool` utility reads an XML file to populate the data filtering tables in the Marketing Platform system table database.

Depending on how you write the XML, you can use this utility in two ways.

- Using one set of XML elements, you can auto-generate data filters based on unique combinations of field values (one data filter for each unique combination).
- Using a slightly different set of XML elements, you can specify each data filter that the utility creates.

See *IBM Marketing Platform the Administrator's Guide* for information about creating the XML.

When to use datafilteringScriptTool

You must use `datafilteringScriptTool` when you create new data filters.

Prerequisites

The Marketing Platform must be deployed and running.

Using datafilteringScriptTool with SSL

When the Marketing Platform is deployed using one-way SSL you must modify the datafilteringScriptTool script to add the SSL options that perform handshaking. To modify the script, you must have the following information.

- Truststore file name and path
- Truststore password

In a text editor, open the datafilteringScriptTool script (`.bat` or `.sh`) and find the lines that look like this (examples are Windows version).

```
:callexec
```

```
"%JAVA_HOME%\bin\java" -DUNICA_PLATFORM_HOME="%UNICA_PLATFORM_HOME%"
```

```
com.unica.management.client.datafiltering.tool.DataFilteringScriptTool %*
```

Edit these lines to look like this (new text is in **bold**). Substitute your truststore path and file name and truststore password for `myTrustStore.jks` and `myPassword`.

```
:callexec
```

SET SSL_OPTIONS=-Djavax.net.ssl.keyStoreType="JKS"

-Djavax.net.ssl.trustStore="C:\security\myTrustStore.jks"

-Djavax.net.ssl.trustStorePassword=myPassword

```
"%JAVA_HOME%\bin\java" -DUNICA_PLATFORM_HOME="%UNICA_PLATFORM_HOME%"
```
%SSL_OPTIONS%

```
com.unica.management.client.datafiltering.tool.DataFilteringScriptTool %*
```

Syntax

```
datafilteringScriptTool -r pathfile
```

Commands

-r *path*_file

Import data filter specifications from a specified XML file. If the file is not located in the `tools/bin` directory under your installation, provide a path and enclose the *path*_file parameter in double quotation marks.

Example
* Use a file named `collaborateDataFilters.xml`, located in the `C:\unica\xml` directory, to populate the data filter system tables.

  ```
  datafilteringScriptTool -r "C:\unica\xml\collaborateDataFilters.xml"
  ```

The encryptPasswords utility

The `encryptPasswords` utility is used to encrypt and store either of two passwords that the Marketing Platform uses, as follows.
* The password that the Marketing Platform uses to access its system tables. The utility replaces an existing encrypted password (stored in the `jdbc,properties` file, located in the `tools\bin` directory under your Marketing Platform installation) with a new one.
* The keystore password used by the Marketing Platform when it is configured to use SSL with a certificate other than the default one supplied with the Marketing Platform or the web application server. The certificate can be either a self-signed certificate or a certificate from a certificate authority.

When to use encryptPasswords

Use `encryptPasswords` as for the following reasons.
* When you change the password of the account used to access your Marketing Platform system table database.

- When you have created a self-signed certificate or have obtained one from a certificate authority.

Prerequisites

- Before running `encryptPasswords` to encrypt and store a new database password, make a backup copy of the `jdbc.properties` file, located in the `tools/bin` directory under your Marketing Platform installation.
- Before running `encryptPasswords` to encrypt and store the keystore password, you must have created or obtained a digital certificate and know the keystore password.

See Appendix A, "About Marketing Platform utilities," on page 87 for additional prerequisites.

Syntax

`encryptPasswords -d` *databasePassword*

`encryptPasswords -k` *keystorePassword*

Commands

-d *databasePassword*

Encrypt the database password.

-k *keystorePassword*

Encrypt the keystore password and store it in a file named `pfile`.

Examples

- When the Marketing Platformwas installed, the login for the system table database account was set to `myLogin`. Now, some time after installation, you have changed the password for this account to `newPassword`. Run `encryptPasswords` as follows to encrypt and store the database password.

  `encryptPasswords -d newPassword`
- You are configuring an IBM EMM application to use SSL and have created or obtained a digital certificate. Run `encryptPasswords` as follows to encrypt and store the keystore password.

  `encryptPasswords -k myPassword`

The partitionTool utility

Partitions are associated with Campaign policies and roles. These policies and roles and their partition associations are stored in the Marketing Platform system tables. The `partitionTool` utility seeds the Marketing Platform system tables with basic policy and role information for partitions.

When to use partitionTool

For each partition you create, you must use `partitionTool` to seed the Marketing Platform system tables with basic policy and role information.

See the installation guide appropriate for your version of Campaign for detailed instructions on setting up multiple partitions in Campaign.

Special characters and spaces

Any partition description or user, group, or partition name that contains spaces must be enclosed in double quotation marks.

See Appendix A, "About Marketing Platform utilities," on page 87 for additional restrictions.

Syntax

```
partitionTool -c -s sourcePartition -n newPartitionName [-u
admin_user_name] [-d partitionDescription] [-g groupName]
```

Commands

The following commands are available in the partitionTool utility.

-c

Replicates (clones) the policies and roles for an existing partition specified using the -s option, and uses the name specified using the -n option. Both of these options are required with c. This command does the following.

- Creates a new IBM EMM user with the Admin role in both the Administrative Roles policy and the global policy in Campaign. The partition name you specify is automatically set as this user's password.
- Creates a new Marketing Platform group and makes the new Admin user a member of that group.
- Creates a new partition object.
- Replicates all the policies associated with the source partition and associates them with the new partition.
- For each replicated policy, replicates all roles associated with the policy.
- For each replicated role, maps all functions in the same way that they were mapped in the source role.
- Assigns the new Marketing Platform group to the last system-defined Admin role created during role replication. If you are cloning the default partition, partition1, this role is the default Administrative Role (Admin).

Options

-d partitionDescription

Optional, used with -c only. Specifies a description that appears in the output from the -list command. Must be 256 characters or less. Enclose in double quotation marks if the description contains spaces.

-g groupName

Optional, used with -c only. Specifies the name of the Marketing Platform Admin group that the utility creates. The name must be unique within this instance of the Marketing Platform

If not defined, the name defaults to partition_nameAdminGroup.

-n partitionName

Optional with `-list`, required with `-c`. Must be 32 characters or less.

When used with `-list`, specifies the partition whose information is listed.

When used with `-c`, specifies the name of the new partition, and the partition name you specify is used as the password for the Admin user. The partition name must match the name you gave the partition in when you configured it (using the partition template on the Configuration page).

-s *sourcePartition*

Required, used with `-c` only. The name of the source partition to be replicated.

-u *adminUserName*

Optional, used with `-c` only. Specifies the user name of the Admin user for the replicated partition. The name must be unique within this instance of the Marketing Platform.

If not defined, the name defaults to *partitionName*`AdminUser`.

The partition name is automatically set as this user's password.

Examples
- Create a partition with the following characteristics.
  - Cloned from partition1
  - Partition name is `myPartition`
  - Uses the default user name (`myPartitionAdminUser`) and password (`myPartition`)
  - Uses the default group name (`myPartitionAdminGroup`)
  - Description is "ClonedFromPartition1"

  `partitionTool -c -s partition1 -n myPartition -d "ClonedFromPartition1"`
- Create a partition with the following characteristics.
  - Cloned from partition1
  - Partition name is `partition2`
  - Specifies user name of `customerA` with the automatically assigned password of `partition2`
  - Specifies group name of `customerAGroup`
  - Description is "PartitionForCustomerAGroup"

  `partitionTool -c -s partition1 -n partition2 -u customerA -g`
  `customerAGroup -d "PartitionForCustomerAGroup"`

The populateDb utility

The `populateDb` utility inserts default (seed) data in the Marketing Platform system tables.

The IBM installer can populate the Marketing Platform system tables with default data for the Marketing Platform and for Campaign. However, if your company policy does not permit the installer to change the database, or if the installer is unable to connect with the Marketing Platform system tables, you must insert default data in the Marketing Platform system tables using this utility.

For Campaign, this data includes security roles and permissions for the default partition. For the Marketing Platform, this data includes default users and groups, and security roles and permissions for the default partition.

Syntax

populateDb -n *productName*

Commands

-n *productName*

Insert default data into the Marketing Platform system tables. Valid product names are Manager (for the Marketing Platform) and Campaign (for Campaign).

Examples

-
  Insert Marketing Platform default data manually.

  populateDb -n Manager

-
  Insert Campaign default data manually.

  populateDb -n Campaign

The restoreAccess utility

The restoreAccess utility allows you to restore access to the Marketing Platform if all users with PlatformAdminRole privileges have been inadvertently locked out or if all ability to log in to the Marketing Platform has been lost.

When to use restoreAccess

You might want to use restoreAccess under the two circumstances described in this section.

PlatformAdminRole users disabled

It is possible that all users with PlatformAdminRole privileges in the Marketing Platformmight become disabled in the system. Here is an example of how the platform_admin user account might become disabled. Suppose you have only one user with PlatformAdminRole privileges (the platform_admin user). Assume the Maximum failed login attempts allowed property property in the **General | Password settings** category on the Configuration page is set to 3. Then suppose someone who is attempting to log in as platform_admin enters an incorrect password three times in a row. These failed login attempts cause the platform_admin account to become disabled in the system.

In that case, you can use restoreAccess to add a user with PlatformAdminRole privileges to the Marketing Platform system tables without accessing the web interface.

When you run restoreAccess in this way, the utility creates a user with the login name and password you specify, and with PlatformAdminRole privileges.

If the user login name you specify exists in the Marketing Platform as an internal user, that user's password is changed.

Only a user with the login name of PlatformAdmin and with PlatformAdminRole privileges can universally administer all dashboards. So if the platform_admin user is disabled and you create a user with `restoreAccess`, you should create a user with a login of platform_admin.

Improper configuration of Active Directory integration

If you implement Windows Active Directory integration with improper configuration and can no longer log in, use `restoreAccess` to restore the ability to log in.

When you run `restoreAccess` in this way, the utility changes the value of the `Platform | Security | Login method` property from `Windows integrated login` to `Marketing Platform`. This change allows you to log in with any user account that existed before you were locked out. You can optionally specify a new login name and password as well. You must restart the web application server on which the Marketing Platform is deployed if you use the `restoreAccess` utility in this way.

Password considerations

Note the following about passwords when you use `restoreAccess`.
- The `restoreAccess` utility does not support blank passwords, and does not enforce password rules.
- If you specify a user name that is in use, the utility resets the password for that user.

Syntax

`restoreAccess -u` *loginName* `-p` *password*

`restoreAccess -r`

Commands

`-r`

When used without the `-u` *loginName* option, reset the value of the `Unica | Security | Login method` property to `Marketing Platform`. Requires restart of the web application server to take effect.

When used with the `-u` *loginName* option, create a PlatformAdminRole user.

Options

`-u` *loginNname*

Create a user with PlatformAdminRole privileges with the specified login name. Must be used with the `-p` option.

`-p` *password*

Specify the password for the user being created. Required with `-u`.

Examples

- Create a user with PlatformAdminRole privileges. The login name is `tempUser` and the password is `tempPassword`.

  `restoreAccess -u tempUser -p tempPassword`

- Change the value of the login method to `Unica Marketing Platform` and create a user with PlatformAdminRole privileges. The login name is `tempUser` and the password is `tempPassword`.

  `restoreAccess -r -u tempUser -p tempPassword`

The scheduler_console_client utility

Jobs configured in the IBM EMM Scheduler can be listed and kicked off by this utility, if they are set up to listen for a trigger.

What to do if SSL is enabled

When the Marketing Platform web application is configured to use SSL, the JVM used by the `scheduler_console_client` utility must use the same SSL certificate that is used by the web application server on which the Marketing Platform is deployed.

Take the following steps to import the SSL certificate

- Determine the location of the JRE used by the `scheduler_console_client`.
    - If `JAVA_HOME` is set as a system environment variable, the JRE it points to is the one used by the `scheduler_console_client` utility.
    - If `JAVA_HOME` is not set as a system environment variable, the `scheduler_console_client` utility uses the JRE set either in the `setenv` script located in the `tools/bin` directory of your Marketing Platform installation, or on the command line.
- Import the SSL certificate used by the web application server on which the Marketing Platform is deployed to the JRE used by `scheduler_console_client`.

  The Sun JDK includes a program called `keytool` that you can use to import the certificate. Consult the Java documentation for complete details on using this program, or access the help by entering `-help` when you run the program.

If the certificates do not match, the Marketing Platform log file contains an error such as the following.

```
Caused by: sun.security.provider.certpath.SunCertPathBuilderException:
unable to find valid certification path to requested target
```

Prerequisites

The Marketing Platform must be installed, deployed, and running.

Syntax

`scheduler_console_client -v -t trigger_name user_name`

`scheduler_console_client -s -t trigger_name user_name`

Commands

-v

List the Scheduler jobs configured to listen for the specified trigger.

Must be used with the -t option.

-s

Execute the Scheduler jobs configured to listen for the specified trigger.

Must be used with the -t option.

Options

-t *trigger_name*

The name of the trigger, as configured in the Scheduler.

Example
- List jobs configured to listen for a trigger named trigger1.
  scheduler_console_client -v -t trigger1
- Execute jobs configured to listen for a trigger named trigger1.
  scheduler_console_client -s -t trigger1

About Marketing Platform SQL scripts

This section describes the SQL scripts provided with the Marketing Platform to perform various tasks relating to the Marketing Platform system tables. They are designed to be run against the Marketing Platform system tables.

The Marketing Platform SQL scripts are located in the db directory under your Marketing Platform installation.

You must use the database client to run the SQL against the Marketing Platform system tables.

Reference: Marketing Platform SQL scripts

This section describes the Marketing Platform SQL scripts.

Removing all data (ManagerSchema_DeleteAll.sql)

The Manager_Schema_DeleteAll.sql script removes all data from the Marketing Platform system tables without removing the tables themselves. This script removes all users, groups, security credentials, data filters, and configuration settings from the Marketing Platform.

When to use ManagerSchema_DeleteAll.sql

You might want to use ManagerSchema_DeleteAll.sql if corrupted data prevents you from using an instance of the Marketing Platform.

Additional requirements

To make the Marketing Platform operational after running
`ManagerSchema_DeleteAll.sql` , you must perform the following steps.

- Run the `populateDB` utility as described in "The populateDb utility" on page 97.
  The `populateDB` utility restores the default configuration properties, users, roles,
  and groups, but does not restore any users, roles, and groups you have created
  or imported after initial installation.
- Use the configTool utility with the `config_navigation.xml` file to import menu
  items, as described in "The configTool utility" on page 89.
- If you have performed any post-installation configuration, such as creating data
  filters or integrating with an LDAP server or web access control platform, you
  must perform these configurations again.
- If you want to restore previously existing data filters, run the
  `datafilteringScriptTool` utility using the XML originally created to specify the
  data filters.

Removing data filters only (ManagerSchema_PurgeDataFiltering.sql)

The `ManagerSchema_PurgeDataFiltering.sql` script removes all data filtering data
from the Marketing Platform system tables without removing the data filter tables
themselves. This script removes all data filters, data filter configurations,
audiences, and data filter assignments from the Marketing Platform.

When to use ManagerSchema_PurgeDataFiltering.sql

You might want to use `ManagerSchema_PurgeDataFiltering.sql` if you need to
remove all data filters without removing other data in the Marketing Platform
system tables.

Important: The `ManagerSchema_PurgeDataFiltering.sql` script does not reset the
values of the two data filter properties, `Default table name` and `Default audience
name`. If these values are no longer valid for the data filters you want to use, you
must set the values manually on the Configuration page.

Removing system tables (ManagerSchema_DropAll.sql)

The `ManagerSchema_DropAll.sql` script removes all Marketing Platform system
tables from a database. This script removes all tables, users, groups, security
credentials, and configuration settings from the Marketing Platform.

Note: If you run this script against a database containing an earlier version of the
Marketing Platform system tables, you might receive error messages in your
database client stating that constraints do not exist. Youcan safely ignore these
messages.

When to use ManagerSchema_DropAll.sql

You might want to use `ManagerSchema_DropAll.sql` if you have uninstalled an
instance of the Marketing Platform where the system tables are in a database that
contains other tables you want to continue using.

Additional requirements

To make the Marketing Platform operational after running this script, you must perform the following steps.

- Run the appropriate SQL script to re-create the system tables, as described in "Creating system tables."
- Run the populateDB utility as described in "The populateDb utility" on page 97. Running the populateDB utility restores the default configuration properties, users, roles, and groups, but does not restore any users, roles, and groups you have created or imported after initial installation.
- Use the configTool utility with the config_navigation.xml file to import menu items, as described in "The configTool utility" on page 89.
- If you have performed any post-installation configuration, such as creating data filters or integrating with an LDAP server or web access control platform, you must perform these configurations again.

Creating system tables

Use the scripts described in the following table to create Marketing Platform system tables manually, when your company policy does not allow you to use the installer to create them automatically. The scripts are shown in the order in which you must run them.

Datasource Type	Script Names
IBM DB2	• ManagerSchema_DB2.sql If you plan to support multi-byte characters (for example, Chinese, Japanese, or Korean), use the ManagerSchema_DB2_unicode.sql script. • ManagerSchema__DB2_CeateFKConstraints.sql • active_portlets.sql
Microsoft SQL Server	• ManagerSchema_SqlServer.sql • ManagerSchema__SqlServer_CeateFKConstraints.sql • active_portlets.sql
Oracle	• ManagerSchema_Oracle.sql • ManagerSchema__Oracle_CeateFKConstraints.sql • active_portlets.sql

If you plan to use the Scheduler feature that enables you to configure a flowchart to run at predefined intervals, you must also create the tables that support this feature. To create the Scheduler tables, run the appropriate script, as described in the following table.

Data Source Type	Script Name
IBM DB2	quartz_db2.sql
Microsoft SQL Server	quartz_sqlServer.sql
Oracle	quartz_oracle.sql

When to use the create system tables scripts

You must use these scripts when you install or upgrade the Marketing Platform if you have not allowed the installer to create the system tables automatically, or if you have used `ManagerSchema_DropAll.sql` to delete all Marketing Platform system tables from your database.

Appendix B. 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 IBM products

Follow these instructions to properly remove IBM products from your system.

Note: On UNIX, the same user account that installed IBM EMM must run the uninstaller.

1. Undeploy the IBM EMM product web application from WebSphere or WebLogic.
2. Shut down WebSphere or WebLogic.
3. Stop any running processes that are related to the product you are uninstalling. For example, stopping the Campaign or Contact Optimization Listener services before uninstalling those products.
4. 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).

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. Use the information in this section to ensure that your problem is resolved efficiently and successfully.

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 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 installed 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 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.unica.com/about/product-technical-support.htm).

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