

IBM Campaign
Version 9 Release 1
October 25, 2013

Installation Guide



Note

Before using this information and the product it supports, read the information in "Notices" on page 87.

This edition applies to version 9, release 1, modification 0 of IBM Campaign and to all subsequent releases and modifications until otherwise indicated in new editions.

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Contents

Chapter 1. Installation overview 1

Installation roadmap	1
How the installers work	3
Modes of installation	4
Integration of Campaign with eMessage	4
Integration of Campaign with IBM EMM products	6
IBM Campaign documentation roadmap	6

Chapter 2. Planning the Campaign installation 9

Prerequisites	9
Campaign installation worksheet	10
Installation order for IBM EMM products	13
Planning failover configuration of Campaign	14

Chapter 3. Preparing data sources for Campaign 17

Creating database or schema for Campaign system tables	17
Creating ODBC or native connections	17
Configuring the web application server for your JDBC driver	18
Creating JDBC connections in web application server	19
Information for creating JDBC connections	20

Chapter 4. Installing Campaign 23

Installing Campaign by using the GUI mode	23
Creating an EAR file after running the installer	28
Installing Campaign by using the console mode	29
Installing Campaign silently	30
Sample response files	31

Chapter 5. Configuring Campaign before deployment 33

Creating and populating Campaign system tables manually	33
Creating and populating the eMessage system tables manually	34
Registering Campaign manually	35
Registering eMessage manually	36
Setting data source variables in the Campaign startup script (UNIX only)	36
Database and library environment variables	37

Chapter 6. Deploying the Campaign web application 39

Setting the web application session timeout	39
Deploying Campaign on WebSphere Application Server	39
Deploying Campaign on WAS from a WAR file	39
Deploying Campaign on WAS from an EAR file	40
Deploying Campaign on WebLogic	42

Configuring WebLogic to display reports (UNIX)	42
Starting the Campaign server	43
Starting the Campaign server directly	43
Installing the Campaign server as a Windows service	43

Chapter 7. Configuring Campaign after deployment. 45

Verifying that the Campaign listener is running	45
Setting up the Campaign system user	45
Adding data source properties on the Configuration page.	46
Importing data source templates	47
Duplicating a data source template	47
Campaign configuration properties	47
Mapping user tables in Campaign	48
Verifying the Campaign installation	49
Setting properties for integration with IBM EMM products	49

Chapter 8. Configuring multiple partitions for Campaign 51

How multiple partitions work	51
Setting up multiple partitions	52
Partition superuser	53
Configuring data source properties for partitions	53
Setting up system users for Campaign	55
Using IBM Cognos Reports for multiple partitions	55
Assigning roles, permissions, and groups for partitions	55

Chapter 9. Configuring multiple partitions in eMessage 57

Partitions for eMessage: Overview	57
Roadmap for configuring multiple partitions in eMessage	58
Creating a new partition for eMessage	58
Preparing eMessage system tables for the partition	60
Creating and populating the eMessage system tables manually	61
Configuring a system user to access IBM EMM Hosted Services	62
Enabling eMessage in Campaign for the new partition	63
Specifying the Recipient List Uploader location for eMessage	63
Restarting system components after configuring eMessage	64
Testing eMessage partition configuration and connections	64

Chapter 10. Marketing Platform utilities 65

alertConfigTool	66
---------------------------	----

configTool	67
datafilteringScriptTool	71
encryptPasswords	72
partitionTool	73
populateDb	75
restoreAccess	76
scheduler_console_client	78
eMessage Response and Contact Tracker (RCT) script	79
eMessage MKService_rct script	80

Chapter 11. Uninstalling Campaign . . .	83
Before you contact IBM technical support	85
Notices	87
Trademarks	89
Privacy Policy and Terms of Use Considerations . . .	89

Chapter 1. Installation overview

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

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

Installation roadmap

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

You can use Table 1 to scan the tasks that must be completed for installing Campaign. The **Information** column in the following table provides links to the topics that describe the tasks for installing Campaign:

Table 1. Campaign installation roadmap

Chapter	Information
Chapter 1, "Installation overview"	This topic provides the following information: <ul style="list-style-type: none">• "How the installers work" on page 3• "Modes of installation" on page 4• "Integration of Campaign with eMessage" on page 4• "Integration of Campaign with IBM EMM products" on page 6• "IBM Campaign documentation roadmap" on page 6
Chapter 2, "Planning the Campaign installation," on page 9	This topic provides the following information: <ul style="list-style-type: none">• "Prerequisites" on page 9• "Campaign installation worksheet" on page 10• "Installation order for IBM EMM products" on page 13• "Planning failover configuration of Campaign" on page 14
Chapter 3, "Preparing data sources for Campaign," on page 17	This topic provides the following information: <ul style="list-style-type: none">• "Creating database or schema for Campaign system tables" on page 17• "Creating ODBC or native connections" on page 17• "Configuring the web application server for your JDBC driver" on page 18• "Creating JDBC connections in web application server" on page 19

Table 1. Campaign installation roadmap (continued)

Chapter	Information
Chapter 4, "Installing Campaign," on page 23	<p>This topic provides the following information:</p> <ul style="list-style-type: none"> • "Installing Campaign by using the GUI mode" on page 23 • "Installing Campaign by using the console mode" on page 29 • "Installing Campaign silently" on page 30
Chapter 5, "Configuring Campaign before deployment," on page 33	<p>This topic provides the following information:</p> <ul style="list-style-type: none"> • "Creating and populating Campaign system tables manually" on page 33 • "Registering Campaign manually" on page 35 • "Setting data source variables in the Campaign startup script (UNIX only)" on page 36
Chapter 6, "Deploying the Campaign web application," on page 39	<p>This topic provides the following information:</p> <ul style="list-style-type: none"> • "Setting the web application session timeout" on page 39 • "Deploying Campaign on WebSphere Application Server" on page 39 • "Deploying Campaign on WebLogic" on page 42 • "Starting the Campaign server" on page 43
Chapter 7, "Configuring Campaign after deployment," on page 45	<p>This topic provides the following information:</p> <ul style="list-style-type: none"> • "Verifying that the Campaign listener is running" on page 45 • "Setting up the Campaign system user" on page 45 • "Adding data source properties on the Configuration page" on page 46 • "Campaign configuration properties" on page 47 • "Mapping user tables in Campaign" on page 48 • "Verifying the Campaign installation" on page 49 • "Setting properties for integration with IBM EMM products" on page 49
Chapter 8, "Configuring multiple partitions for Campaign," on page 51	<p>This topic provides the following information:</p> <ul style="list-style-type: none"> • "How multiple partitions work" on page 51 • "Setting up multiple partitions" on page 52 • "Assigning roles, permissions, and groups for partitions" on page 55

Table 1. Campaign installation roadmap (continued)

Chapter	Information
Chapter 9, "Configuring multiple partitions in eMessage," on page 57.	<p>This topic provides the following information:</p> <ul style="list-style-type: none"> • "Partitions for eMessage: Overview" on page 57 • "Roadmap for configuring multiple partitions in eMessage" on page 58 • "Creating a new partition for eMessage" on page 58 • "Preparing eMessage system tables for the partition" on page 60 • "Configuring a system user to access IBM EMM Hosted Services" on page 62 • "Enabling eMessage in Campaign for the new partition" on page 63 • "Specifying the Recipient List Uploader location for eMessage" on page 63 • "Restarting system components after configuring eMessage" on page 64 • "Testing eMessage partition configuration and connections" on page 64
"configTool" on page 67	<p>This topic provides the following information:</p> <ul style="list-style-type: none"> • Chapter 10, "Marketing Platform utilities," on page 65 • "eMessage Response and Contact Tracker (RCT) script" on page 79 • "eMessage MKService_rct script" on page 80
Chapter 11, "Uninstalling Campaign," on page 83	<p>This topic provides information about how to uninstall Campaign.</p>

How the installers work

You must use the suite installer and the product installer when you install any IBM® EMM product. For example, for installing Campaign, you must use the IBM EMM suite installer and the IBM Campaign installer.

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

- The suite installer and the product installer must be in the same directory on the computer where you want to install the product. When multiple versions of a product installer are present in the directory with the master installer, the master installer always shows the latest version of the product on the IBM EMM Products screen in the installation wizard.
- If you are planning to install a patch immediately after you install an IBM EMM product, make sure that the patch installer is in the same directory as that of the suite and product installers.
- The default top-level directory for IBM EMM installations is /IBM/EMM for UNIX or C:\IBM\EMM for Windows. However, you can change the directory during installation.

Modes of installation

The IBM EMM suite installer can run in one of the following modes: GUI mode, console mode, or silent mode (also called the unattended mode). Select a mode that suits your requirements when you install Campaign.

GUI mode

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

Console mode

Use the console mode to install Campaign by using the command-line window.

Note: To display the Installer screens correctly in console mode, configure your terminal software to support UTF-8 character encoding. Other character encoding, such as ANSI, will not render the text correctly, and some information will not be readable.

Silent mode

Use the silent or unattended mode to install Campaign multiple times. The silent mode uses response files for installation, and does not require user input during the installation process.

Integration of Campaign with eMessage

When IBM Campaign is integrated with IBM eMessage, you can use eMessage to conduct highly personalized email marketing campaigns. eMessage provides access to the resources that are hosted by IBM. With eMessage you can design, send, and individually monitor customized messages that are based on the information that is stored in your customer data mart.

In Campaign, use flowcharts to create lists of email recipients and select personalization data for each recipient.

In eMessage, use email design, transmission, and delivery resources that are hosted by IBM to conduct email marketing campaigns.

When you install IBM Campaign, the installer automatically includes the files that are required to support IBM eMessage. The following actions are completed for eMessage:

- eMessage is created as a sub-directory in the Campaign directory structure.
- eMessage configuration properties are listed in the IBM Marketing Platform, but the properties are not active.
- eMessage-specific database tables are created in the Campaign schema. However, the database tables contain only initial data.
- Menus and other features that are specific to eMessage do not appear until you enable and configure eMessage.

Before you can send personalized marketing email, you must request a hosted email account from IBM.

When you request an email account, IBM begins a consultation process to familiarize you with eMessage, connect you to hosted email resources, and establish your reputation as a legitimate email marketer among leading Internet Service Providers (ISPs). Establishing a favorable reputation is critical to successfully delivering your marketing message to your customers and prospects.

For more information about how to enable and configure eMessage and prepare your hosted email account, see the *IBM eMessage Startup and Administrator's Guide*.

eMessage components

eMessage requires specialized components called the Recipient List Uploader (RLU) and the Response and Contact Tracker (RCT).

The RLU is a eMessage plugin component that operates with Campaign to upload addresses, personalization data, and metadata that is associated with a list of email recipients to IBM EMM Hosted Services.

The eMessage RCT retrieves link tracking and email delivery notification data from IBM EMM Hosted Services, and stores the data in the eMessage system tables that reside in the Campaign schema.

The eMessage components operate when you enable and configure IBM eMessage. For more information about enabling eMessage and working with the RLU and RCT, see the *IBM eMessage Startup and Administrator's Guide*.

Default component installation locations

The IBM installer places the RLU on the computer where you installed the Campaign J2EE application. The RLU location is recorded in the **Campaign > partitions > partition1 > eMessage > eMessagePluginJarFile** configuration property.

The installer places the RCT on the computer where you installed the Campaign server.

If the J2EE and server components are on separate computers, run the installer on each machine to install the RLU with the J2EE application and the RCT with the Campaign server.

eMessage components in multiple partitions

One RLU exists for the entire eMessage installation. The installer populates the `eMessagePluginJarFile` configuration property only for the default partition. If you are using multiple partitions in your eMessage installation, you must manually configure the location of the RLU for all other partitions. The location specified in the `eMessagePluginJarFile` property is the same for all partitions. For more information, see "Specifying the Recipient List Uploader location for eMessage" on page 63.

Only one RCT exists for the entire eMessage installation. eMessage does not need to specify the location of the RCT in a configuration property. Responses that are received by the RCT automatically specify the appropriate local partition for correct response attribution.

Integration of Campaign with IBM EMM products

You can integrate Campaign with multiple IBM EMM products to customize your campaigns.

Campaign integrates with the following IBM EMM products:

- IBM Marketing Operations
- IBM Digital Analytics
- IBM SPSS® Modeler Marketing Edition

See the documentation for each product for more information. Also, see the *IBM Campaign Installation Guide* for more information about the integration of Campaign with other IBM EMM products.

Important: Integration of Campaign and PredictiveInsight is no longer supported. PredictiveInsight is replaced by IBM SPSS Modeler Advantage Marketing Edition. If your Campaign installation uses PredictiveInsight, installing Campaign version 9.1 prevents further use of the Model and Score processes in your existing flowcharts. You must install IBM SPSS Modeler Advantage Marketing Edition and redefine the processes that you need if you want to continue predictive modeling in Campaign. See *IBM Campaign and IBM SPSS Modeler Advantage Marketing Edition Integration Guide* for more information.

IBM Campaign documentation roadmap

IBM Campaign provides documentation and help for users, administrators, and developers.

Table 2. Get up and running

Task	Documentation
View a list of new features, known issues, and limitations	<i>IBM Campaign Release Notes</i>
Learn about the structure of the Campaign database	<i>IBM Campaign System Tables and Data Dictionary</i>
Install or upgrade Campaign and deploy the Campaign web application	One of the following guides: <ul style="list-style-type: none">• <i>IBM Campaign Installation Guide</i>• <i>IBM Campaign Upgrade Guide</i>
Implement eMessage, if you purchased eMessage	<ul style="list-style-type: none">• The <i>IBM Campaign Installation and Upgrade guides</i> explain how to install and prepare eMessage components in the local environment.• The <i>IBM eMessage Startup and Administrator's Guide</i> explains how to connect to the hosted messaging resources.
Implement the IBM Cognos® reports provided with Campaign	<i>IBM EMM Reports Installation and Configuration Guide</i>

Table 3. Configure and use Campaign

Task	Documentation
<ul style="list-style-type: none">• Adjust configuration and security settings• Prepare Campaign for users• Run utilities and perform maintenance• Integrate Campaign with Digital Analytics	<i>IBM Campaign Administrator's Guide</i>

Table 3. Configure and use Campaign (continued)

Task	Documentation
<ul style="list-style-type: none"> • Create and deploy marketing campaigns • Analyze campaign results 	<i>IBM Campaign User's Guide</i>
Improve flowchart performance	<i>IBM Campaign Tuning Guide</i>
Use Campaign macros	<i>IBM Macros for IBM EMM User's Guide</i>

Table 4. Integrate Campaign with other products

Task	Documentation
Configure eMessage offer integration.	<i>IBM Campaign Administrator's Guide</i>
Integrate and use Campaign with Digital Analytics	<i>IBM Campaign Administrator's Guide</i>
Integrate and use Campaign with IBM SPSS Modeler Advantage Marketing Edition	<i>IBM Campaign and IBM SPSS Modeler Advantage Marketing Edition Integration Guide</i>
Integrate and use Campaign with Marketing Operations	<i>IBM Marketing Operations and IBM Campaign Integration Guide</i>

Table 5. Develop for Campaign

Task	Documentation
Develop custom procedures with the API	<ul style="list-style-type: none"> • <i>IBM Campaign Offer API Specification</i> • JavaDocs in devkits\CampaignServicesAPI
Develop Java™ plug-ins or command-line executables to add validation to Campaign	<ul style="list-style-type: none"> • <i>IBM Campaign Validation PDK Guide</i> • JavaDocs in devkits\validation

Table 6. Get help

Task	Instructions
Open online help	<ol style="list-style-type: none"> 1. Choose Help > Help for this page to open a context-sensitive help topic. 2. Click the Show Navigation icon in the help window to display the full help.
Obtain PDFs	<p>Use either of the following methods:</p> <ul style="list-style-type: none"> • Choose Help > Product Documentation to access Campaign PDFs. • Choose Help > All IBM EMM Suite Documentation to access all available documentation. • Access all documentation during the installation process from the IBM EMM installer.
Get support	Go to http://www.ibm.com/ and click Support & downloads to access the IBM Support Portal.

Chapter 2. Planning the Campaign installation

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

Prerequisites

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

System requirements

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

Network domain requirements

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

JVM requirements

IBM EMM applications within a suite must be deployed on a dedicated Java™ virtual machine (JVM). IBM EMM products customize the JVM that is used by the web application server. If you encounter errors that are related to the JVM, you must create an Oracle WebLogic or WebSphere® domain that is dedicated to the IBM EMM products.

Knowledge requirements

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

Access permissions

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

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

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

The following additional permissions are necessary for UNIX:

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

JAVA_HOME environment variable

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

Make sure that the **JAVA_HOME** environment variable points to JRE 1.6. If the **JAVA_HOME** environment variable points to an incorrect JRE, you must clear the **JAVA_HOME** variable before you run the IBM EMM installers.

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

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

`export JAVA_HOME=` (leave empty)

After the environment variable is cleared, the IBM EMM installers use the JRE that is bundled with the installers. You can reset the environment variable after the installation is complete.

Marketing Platform requirement

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

Campaign installation worksheet

Use the Campaign installation worksheet to gather information about the Campaign database and about other IBM EMM products that are required for the installation of Campaign.

Use the following table to gather information about the database that contains your Campaign system tables:

Table 7. Information about the database

Field	Notes®
Database type	
Database name	
Database account user name	

Table 7. Information about the database (continued)

Field	Notes [®]
Database account password	
JNDI name	UnicaPlatformDS
ODBC name	

If you are installing on UNIX, obtain the information that is given in the following table:

Table 8. Information about the database for UNIX

Database information	Notes
If your database type is one of the following types, record the database installation directory: <ul style="list-style-type: none"> • DB2[®] • Oracle 	
For all database types when Campaign is installed on the Solaris, Linux, or AIX [®] operating systems, record the location of the lib directory in the database installation.	

You can use the information in Table 8 when you edit the `setenv.sh` file during the installation and configuration process.

Checklist for IBM Marketing Platform database

The installation wizards for each IBM EMM product must be able to communicate with the Marketing Platform system table database to register the product. Each time that you run the installer, you must enter the following database connection information for the Marketing Platform system table database:

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

Checklist for IBM Marketing Platform deployment on the web application server

Obtain the following information before deploying Marketing Platform:

- 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, `example.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 mismatch in domain name entries, you might encounter problems when you attempt to use Marketing Platform features or navigate among products. You can change the domain name after the products are deployed by

logging in and changing values of the relevant configuration properties in the product navigation categories on the **Settings > Configuration** page.

Checklist for enabling 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 1.7 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 1.7 version of the Sun JRE.
- JDBC driver class. The installer automatically provides this, based on the database type that you specify in the installer.
- JDBC connection URL. The installer provides the basic syntax, including the host name, database name, and port. You can customize the URL by adding additional parameters.
- JDBC driver classpath on your system.

Information about the web component

Obtain the following information for all IBM EMM products that have a web component, which you deploy on a web application server:

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

IBM Site ID

If you are installing an IBM EMM product in one of the countries listed on the Country for Install screen of your product installer, you must enter your IBM Site ID in the space provided. Your IBM Site ID can be found on one of the following documents:

- IBM Welcome letter
- Tech Support Welcome letter
- Proof of Entitlement letter
- Other communications that are sent when you purchase your software

IBM might use the data that is provided by the installed software to better understand how customers use our products and to improve customer support. The data that is gathered does not include any information that identifies individuals. Complete the following actions if you do not want to have such information to be collected:

1. After Marketing Platform is installed, log on to Marketing Platform as a user with administration privileges.
2. Go to **Settings > Configuration**, and set the **Disable Page Tagging** property under the **Platform** category to True.

Installation order for IBM EMM products

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

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

Table 9. Installation or upgrade order for IBM EMM products

For this product or combination:	Install or upgrade in this order:
Campaign (with or without eMessage)	<ol style="list-style-type: none"> 1. Marketing Platform 2. Campaign <p>Note: eMessage is installed automatically when you install Campaign. However, eMessage is not configured or enabled during the Campaign installation process.</p>
Interact	<ol style="list-style-type: none"> 1. Marketing Platform 2. Campaign 3. Interact Design Time environment 4. Interact Run Time environment 5. Interact Extreme Scale Server <p>If you want to install or upgrade the Interact design time environment only, then install or upgrade the Interact design time environment in the following order:</p> <ol style="list-style-type: none"> 1. Marketing Platform 2. Campaign 3. Interact Design Time environment <p>If you want to install or upgrade the Interact runtime environment only, then install or upgrade the Interact runtime environment in the following order:</p> <ol style="list-style-type: none"> 1. Marketing Platform 2. Interact Run Time environment <p>If you want to install the Interact Extreme Scale Server only, then install the Interact Extreme Scale Server in the following order:</p> <ol style="list-style-type: none"> 1. Marketing Platform 2. Interact Run Time environment 3. Interact Extreme Scale Server
Marketing Operations	<ol style="list-style-type: none"> 1. Marketing Platform 2. Marketing Operations <p>Note: If you are integrating Marketing Operations with Campaign, you must also install Campaign. The order of installation for those two products does not matter.</p>
Distributed Marketing	<ol style="list-style-type: none"> 1. Marketing Platform 2. Campaign 3. Distributed Marketing
Interaction History	<ol style="list-style-type: none"> 1. Marketing Platform 2. Interaction History

Table 9. Installation or upgrade order for IBM EMM products (continued)

For this product or combination:	Install or upgrade in this order:
Attribution Modeler	<ol style="list-style-type: none"> 1. Marketing Platform 2. Interaction History 3. Attribution Modeler
Contact Optimization	<ol style="list-style-type: none"> 1. Marketing Platform 2. Campaign 3. Contact Optimization
Opportunity Detection	<ol style="list-style-type: none"> 1. Marketing Platform 2. Opportunity Detection <p>If Opportunity Detection is integrated with Interact, install the products in the following order:</p> <ol style="list-style-type: none"> 1. Marketing Platform 2. Campaign 3. Interact 4. Opportunity Detection
IBM SPSS Modeler Advantage Marketing Edition	<ol style="list-style-type: none"> 1. IBM SPSS Modeler Advantage Marketing Edition

Planning failover configuration of Campaign

When you install Campaign, you can configure your environment to address any failures of the web application server.

Definition of terms

Component	Installation option	Definition
Campaign web application server	J2EE Application	The web application that provides the Campaign user interface.
Campaign back-end server	Campaign Server	The startup scripts and components that support the design and execution of flowcharts.

Campaign web application server component

The Campaign web application server components do not support a load balanced web application environment. However, environments can be configured with standby servers to address web application server failures. The process for switching to a standby web application server for Campaign is described below.

In Campaign, certain objects, such as offers, are cached in the web application server to improve response times in the user interface. In a load balanced environment, offers created on one web application server might not be immediately available to users whose sessions connect through another server. To avoid this problem, Campaign does not support a load balanced configuration.

The objects that are cached include: offers, offer templates and attributes, campaigns, sessions, folders, attributes, initiatives, and segments. You can

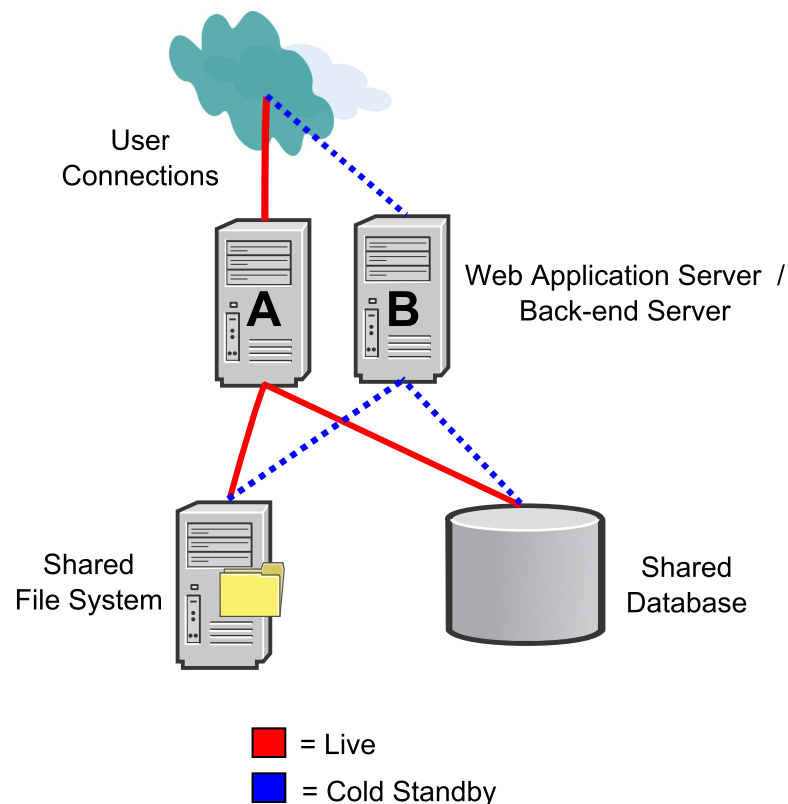
configure how often the cache is refreshed by adjusting the Campaign cache configuration settings, such as `offerTemplateDataTTLSeconds`. However, this adjustment can affect performance. Configuration settings are described in the *IBM Campaign Administrator's Guide*.

A configuration with a standby server can be used to minimize disruptions in application availability in the event of a web application server failure. Because the Campaign system tables are stored in an external database, it is not necessary to replicate data to the standby server. If the primary web application server fails, the Campaign web application must be started on the standby server. When started, the Campaign web application will retrieve all current data from the Campaign system table database.

Campaign back-end server component

The recommended configuration consists of two separate Campaign servers, one "hot," and one "cold." A "hot" server is the one being used, while the "cold" server is the server on standby. Allowing multiple web application servers to access a single back-end server is not recommended because it can affect performance. If you assume that there is a one to one relationship between web application servers and back-end servers (for performance reasons), then putting the servers on separate machines introduces more points of failure. The benefit of having one dedicated server for the web application and one for the back-end server is that both can be tuned appropriately. If the web application server is also used to serve other web applications, consider using a separate back-end server to avoid a performance impact on the web application server by the back-end server. This determination needs to be made on a case by case basis and is often part of the implementation planning.

The following diagram illustrates the recommended configuration:



There are several non-IBM Campaign dependencies inherent in this configuration:

- The file system and databases must be shared and highly available. There are several approaches to achieve this requirement, such as file system appliances, RAID, or database vendor solutions. However, the high availability of those technologies is outside the scope of the IBM Campaign application.
- The shared file system must be mounted onto servers A and B because Campaign requires the root node to be within the specific partition directory structure that it expects.
- To support failover, additional software, either custom or commercial, must do the following things:
 1. Verify that the Campaign back-end server is up and running.
 2. Stop the primary back-end server in the event of a failure (if applicable).
 3. Start the secondary back-end server in the event of a failure.
 4. Redirect Web Tier requests from the primary back-end server to the secondary back-end server.

Chapter 3. Preparing data sources for Campaign

Campaign uses data sources to store user and interaction data.

Complete the following steps to prepare data sources for Campaign:

1. Create a database or a database schema for the Campaign system tables.

Note: Campaign requires customer tables, which should already exist.

2. Create a system user account. The system user account must have the following rights: CREATE, DELETE, DROP, INSERT, SELECT, and UPDATE.
3. Create ODBC or native connections.
4. Configure the web application server for your JDBC driver.
5. Create JDBC data sources in the web application server.

Creating database or schema for Campaign system tables

Set up data sources so that Campaign can store user and interaction data. If you have multiple partitions, create data sources for each partition where you want to enable Campaign.

Complete the following steps to create a database or database schema for Campaign system tables:

Note: Campaign requires customer tables, which should already exist.

1. Create a system user account for later in the installation process.

Note: The system user account must have the following rights: CREATE, DELETE, DROP, INSERT, SELECT, and UPDATE.

2. Print the “Campaign installation worksheet” on page 10. Obtain the information about your database or schema and database account, and then note this information in the checklist. Continue to fill in the checklist as you perform the rest of the steps in this section, so that you can use this information later in the installation process.

Note: The IBM eMessage system tables are created in the Campaign schema during the installation. However, eMessage is not enabled.

Creating ODBC or native connections

Create ODBC or native connections so that the Campaign server can access the Campaign database. Create ODBC or native connections on the computer where you installed the Campaign server.

The computer on which the Campaign server is installed must have an ODBC or native connection to the following databases:

- The database or schema that contains the Campaign system tables
- The database or schema that contains the customer tables.

Use the following guidelines to create these ODBC or native connections:

- For databases on UNIX: You create native connections for DB2 and Oracle databases or ODBC connections for other databases, such as SQL Server, Teradata, Netezza®, and so on. The procedure for creating a native data source differs depending on the data source type and the version of UNIX. See the data source and operating system documentation for specific ODBC driver installation and configuration instructions.
- For databases on Windows: You create a new ODBC connection in the Control Panel's **Administrative Tools > Data Sources (ODBC)** section.

Record the ODBC name in the “Campaign installation worksheet” on page 10.

Configuring the web application server for your JDBC driver

The web application server where you plan to deploy Campaign must contain the correct JAR file to support JDBC connections. You must add the location of the JAR file to the class path of the web application server.

Complete the following actions for each database type that Campaign will connect to, so the Campaign Java™ component can access the Campaign system tables.

1. Consult the *Recommended Software Environments and Minimum System Requirements* document to determine the correct JAR file for your database type. The following database drivers are supported:
 - For supported versions of MS SQL Server: sqljdbc4.jar
 - For IBM DB2 9.7: db2jcc.jar
 - For IBM DB2 10.1: db2jcc4.jar
 - For supported versions of Oracle: ojdbc6.jar
2. Obtain the latest vendor-provided Type 4 JDBC driver that is supported by IBM EMM.
 - If the driver does not exist on the machine where you plan to deploy Campaign, copy the driver to any location on that machine. Unpack the driver 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 supported.
3. Include the full path and file name of the driver in the classpath of the web application server where you plan to deploy Campaign.
 - 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.

The driver must be the first entry in the CLASSPATH list of values before any existing values. For example:

UNIX

```
CLASSPATH="/home/oracle/product/<version>/jdbc/lib/odbc6.jar:
${PRE_CLASSPATH}${CLASSPATHSEP}${WEBLOGIC_CLASSPATH}
${CLASSPATHSEP}${POST_CLASSPATH}${CLASSPATHSEP}${WLP_POST_CLASSPATH}"
export CLASSPATH
```

Windows

```
set CLASSPATH=c:\oracle\jdbc\lib\odbc6.jar;%PRE_CLASSPATH%;
%WEBLOGIC_CLASSPATH%;%POST_CLASSPATH%;%WLP_POST_CLASSPATH%
```

- For all supported versions of WebSphere, set the classpath in the Administration console when you set up the JDBC providers for the IBM EMM products.
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.

Creating JDBC connections in web application server

Create JDBC connections on each of the web application servers where Campaign is deployed. Campaign uses the JDBC connections to access the required databases.

Complete the following steps to specify the JDBC provider:

1. Log into the Websphere console
2. Go to **Resources > JDBC > JDBC Providers**.
3. Click **New** to open the Create new JDBC provider window.
4. In the **Database type** field, select one of the following database types:
 - DB2
 - Oracle
 - SQL Server
5. In the **Provider type** field, select a type 4 JDBC driver that is appropriate for your database type.
6. In the **Implementation type** field, select **Connection pool data source**.
7. Click **Next** and enter the required information.
8. Click **Next** to view the summary.
9. Click **Finish** to configure the JDBC provider.

Use the following list to determine which JDBC connections you must create for the Campaign web application. The list includes the suggested and required JNDI names.

- A connection to the database holding the Campaign system tables.
If there is one partition, the suggested JNDI name is `campaignPartition1DS`.
If there are multiple partitions,, a best practice is to use `campaignPartition1DS` for the first connection, `campaignPartition2DS` for the second, and so on.

Note: This practice is provided as an example. You can specify any JNDI names for Campaign system table connections.

- A connection to the database holding the Marketing Platform system tables. Use `UnicaPlatformDS` as the JNDI name.

Important: `UnicaPlatformDS` is the required JNDI name.

If you are deploying Campaign in the same JVM as your Marketing Platform deployment, you have probably already set up this connection.

For more information about creating JDBC connections in your web application server, see the WebLogic or WebSphere documentation.

Note: If you are using WebLogic to configure a data source to an Oracle or DB2 database, you must also specify the database user name in the form `user=<DBUser>` in the Properties section on the Connection Pool tab. For more information, see your WebLogic documentation.

Record all JNDI names in the “Campaign installation worksheet” on page 10

Information for creating JDBC connections

Use default values when you create JDBC connections if specific values are not provided. For more information, see the application server documentation.

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

WebLogic

Use the following values if your application server is WebLogic:

SQLServer

- Database Driver: Microsoft MS SQL Server Driver (Type 4) Versions: 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 11 g

- Driver: Other
- Default port: 1521
- Driver class: `oracle.jdbc.OracleDriver`
- Driver URL:
`jdbc:oracle:thin:@<your_db_host>:<your_db_port>:<your_db_service_name>`
Enter the driver URL by using the format that is shown. IBM EMM applications do not allow the use of Oracle's RAC (Real Application Cluster) format for JDBC connections.
- Properties: Add `user=<your_db_user_name>`

DB2

- Driver: Other
- Default port: 50000
- Driver class: `com.ibm.db2.jcc.DB2Driver`
- Driver URL: `jdbc:db2://<your_db_host>:<your_db_port>/<your_db_name>`
- Properties: Add `user=<your_db_user_name>`

WebSphere

Use the following values if your application server is WebSphere:

SQLServer

- Driver: N/A
- Default port: 1433
- Driver class:
`com.microsoft.sqlserver.jdbc.SQLServerConnectionPoolDataSource`
- Driver URL: 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, modify properties as follows.

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

Add the following custom property:

Name: `webSphereDefaultIsolationLevel`

Value: 1

Datatype: Integer

Oracle 11 and 11 g

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

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

DB2

- Driver: DB2 Universal JDBC Driver Provider
- Default port: 50000
- Driver class: `com.ibm.db2.jcc.DB2Driver`
- Driver URL: `jdbc:db2://<your_db_host>:<your_db_port>/<your_db_name>`

Add the following custom property:

Name: `webSphereDefaultIsolationLevel`

Value: 2

Datatype: Integer

Chapter 4. Installing Campaign

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

Each time that you run the IBM EMM Suite installer, you must first enter database connection information for the Marketing Platform system tables. When the Campaign installer starts, you must enter the required information for Campaign.

After installing Campaign, you can create an EAR file for your product, and you can install the reports package for your product. Creating the EAR file and installing the reports package are not mandatory actions.

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

Installation files

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

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

Table 10. Installation files

Operating system	Installation file
Windows: GUI and console mode	<i>Product_N.N.N.N_win64.exe</i> , where <i>Product</i> is the name of your product, <i>N.N.N.N</i> is the version number of your product, and Windows 64-bit is the operating system on which the file must be installed.
UNIX: X Window System mode	<i>Product_N.N.N.N_solaris64.bin</i> , where <i>Product</i> is the name of your product, and <i>N.N.N.N</i> is the version number of your product.
UNIX: Console mode	<i>Product_N.N.N.N.bin</i> , where <i>Product</i> is the name of your product, and <i>N.N.N.N</i> is the version number of your product. This file can be used for installation on all UNIX operating systems.

Installing Campaign by using the GUI mode

For Windows, use the GUI mode to install Campaign. For UNIX, use the X Window System mode to install Campaign.

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

Make sure that the IBM EMM installer and the Campaign installers are in the same directory on the computer where you want to install Campaign.

Complete the following actions to install Campaign by using the GUI mode:

1. Go to the folder where you have saved the IBM EMM installer and double-click the installer to start it.
2. Click **OK** on the first screen to see the Introduction window.
3. Follow the instructions on the installer, and click **Next**. Use the information in the following table to take the appropriate actions on each window in the EMM installer.

Table 11. IBM EMM installer GUI

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

Table 11. IBM EMM installer GUI (continued)

Window	Description
Installation Directory	<p>In the Specify the installation directory field, click Choose to browse to the directory where you want to install your product.</p> <p>If you want to install the product in the folder where the installers are stored, click Restore Default Folder.</p> <p>Click Next to go to the next window.</p>
Select Application Server	<p>Select one of the following application servers that you configured for Campaign installation:</p> <ul style="list-style-type: none"> • IBM WebSphere • Oracle WebLogic <p>Click Next to go to the next window.</p>
Platform Database Type	<p>Select the appropriate Marketing Platform database type.</p> <p>Click Next to go to the next window.</p>
Platform Database Connection	<p>Enter the following information about your database:</p> <ul style="list-style-type: none"> • Database host name • Database port • Database name or System ID (SID) • Database user name • Database password <p>Click Next to go to the next window.</p>
Platform Database Connection (continued)	<p>Review and confirm the JDBC connection.</p> <p>Click Next to go to the next window. The URL can be customized with additional parameters if needed.</p>
Preinstallation Summary	<p>Review and confirm the values that you added during the installation process.</p> <p>Click Install to start the installation process.</p> <p>The Campaign installer opens.</p>

4. Follow the instructions on the Marketing Platform installer to install or upgrade Marketing Platform. See *IBM EMM Marketing Platform Installation Guide* for more information.
5. In the Installation Complete window, click **Done**. The Marketing Platform installation is complete, and the Campaign installer opens.
6. Use the information in the following table to navigate the Campaign installer. In the Platform Database Connection window, enter all the required information and click **Next** to start the Campaign installer.

Table 12. IBM Campaign installer GUI

Window	Description
Introduction	<p>This is the first window of the Campaign installer. You can open the Campaign installation and upgrade guides from this window.</p> <p>Click Next to go to the next window.</p>
Software Licence Agreement	<p>Carefully read the agreement. Use Print to print the agreement. Click Next after you accept the agreement.</p>
Installation Directory	<p>Click Choose to browse to the directory where you want to install Campaign.</p> <p>Click Next to go to the next window.</p>
Campaign Components	<p>Select the components that you want to install.</p> <p>When you select the components, the installer displays information about the components.</p> <p>Click Next to go to the next window.</p>
Default locale	<p>Select a default locale for your installation. English is selected by default.</p> <p>Click Next to go to the next window.</p>
Campaign Database Setup	<p>Select one of the following options for setting up the Campaign database:</p> <ul style="list-style-type: none"> • Automatic database setup • Manual database setup <p>If you select Automatic database setup, select Run Unicode SQL Script if your system tables are configured for unicode.</p> <p>Click Next to go to the next window.</p>
Campaign Database Type	<p>Select the appropriate database type.</p> <p>Click Next to go to the next window.</p>
Campaign Database Connection	<p>Enter the following details for the Campaign database:</p> <ul style="list-style-type: none"> • Database host name • Database port • Database system ID (SID) • Database user name • Password <p>Important: If IBM EMM products are installed in a distributed environment, you must use the machine name rather than an IP address in the navigation URL for all of the applications in the suite.</p> <p>Click Next to go to the next window.</p>

Table 12. IBM Campaign installer GUI (continued)

Window	Description
JDBC Connection	Review and confirm the JDBC connection. Click Next to go to the next window.
Campaign Connection Settings	Enter the following connection settings: <ul style="list-style-type: none"> • Network domain name Note: When you add the network domain name, you might see the following message: Warning-Server name includes domain name, final URL contains several occurrences of domain name Select Modify to change the domain name, or click Cancel to cancel the message. • Host name • Port number Select the Use secure connection check box if necessary. Click Next to go to the next window.
Platform Utilities Settings	Review and confirm or change following information for connecting to the Marketing Platform database: <ul style="list-style-type: none"> • JDBC driver class • JDBC connection URL • JDBC driver classpath Click Next to validate your entries and to go to the next window.
Preinstallation Summary	Review and confirm the values that you added during the installation process. Click Install to start the installation process. The Campaign installer opens.
Installation Complete	Click Done to close the Marketing Platform installer and go back to the IBM EMM installer.

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

Table 13. EMM installer GUI

Window	Description
Deployment EAR file	Specify whether you want to create an enterprise archive (EAR) file to deploy your IBM EMM products. Click Next to go to the next window.
Package EAR file	You can see this window if you select Create an EAR file for deployment in the Deployment EAR file window. Select the applications that you want to package in the EAR file.
EAR file details	Enter the following information for your EAR file: <ul style="list-style-type: none"> • Enterprise application identifier • Display name • Description • EAR file path
EAR file details (continued)	Select Yes or No to create an additional EAR file. If you select Yes , you must enter the details for the new EAR file. Click Next to complete the installation of your product.
Deployment EAR file	Specify whether you want to create another EAR file to deploy your IBM EMM products. Click Next to go to the next window.
Installation Complete	This window provides the locations of the log files that are created during installation. Click Previous if you want to change any installation details. Click Done to close the IBM EMM installer.

Creating an EAR file after running the installer

You create EAR files after you install IBM EMM products. You might do this to have a different combination of products in EAR file.

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

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

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

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

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

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

Installing Campaign by using the console mode

Use the console mode to install Campaign by using the command-line window. You can select various options in the command-line window to complete tasks such as selecting the products to install, or selecting the home directory for the installation.

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

- An application server profile
- A database schema.

To display the Installer screens correctly in console mode, configure your terminal software to support UTF-8 character encoding. Other character encoding, such as ANSI, will not render the text correctly, and some information will not be readable.

Complete the following actions to install Campaign by using the command-line window:

1. Open a command-line prompt window and navigate to the directory where you have saved the IBM EMM installer and the Campaign installer.
2. Complete one of the following actions:
 - For Windows, enter the following command:
`ibm_emm_installer_full_name -i console`
For example, **`IBM_EMM_Installer_9.1.0.0 -i console`**
 - For Unix, invoke the `ibm_emm_installer_full_name.sh` file.
For example: **`IBM_EMM_Installer_9.1.0.0.sh`**
3. Follow the directions that are displayed in the command-line prompt. Use the following guidelines when you have to select an option in the command-line prompt:
 - The default options are defined by the symbol [X].
 - To select or clear an option, type the number that is defined for the option, and then press Enter.

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

- 1 [X] Marketing Platform
- 2 [X] Campaign

3 Contact Optimization

4 Interaction History

If you want to install Interaction History, and do not want to install Campaign, enter the following command: **2,4**

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

1 [X] Marketing Platform

2 Campaign

3 Contact Optimization

4 [X] Interaction History

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

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

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

Installing Campaign silently

Use the unattended or silent mode to install Campaign multiple times.

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

- An application server profile
- A database schema

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

- Using the sample response files as a template for creating your response files. The sample response files are included with your product installers in the ResponseFiles compressed archive. For more information about sample response files, see “Sample response files” on page 31.
- Running the product installers in the GUI (Windows) or X Window System (UNIX) mode or the console mode before you install the product in the silent mode. One response file is created for the IBM EMM suite installer, and one or more response files are created for your product installer. The files are created in the directory that you specify.

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

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

- In the directory where the IBM EMM installer is saved.
- In the home directory of the user who installs the product

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

Use the following command for Windows:

- **IBM_EMM_installer_full_name -i silent**

For example:

IBM_EMM_Installer_9.1.0.0_win.exe -i silent

Use the following command for Unix or Linux:

- **IBM_EMM_installer_full_name_operating_system.bin -i silent**

For example:

IBM_EMM_Installer_9.1.0_unix.bin -i silent

Sample response files

You must create response files to set up a silent installation of Campaign. You can use sample response files to create your response files. The sample response files are included with the installers in the ResponseFiles compressed archive.

The following table provides information about sample response files:

Table 14. Description of sample response files

Sample response file	Description
installer.properties	The sample response file for the IBM EMM master installer.
installer_product initials and product version number.properties	The sample response file for the Campaign installer. For example, installer_ucn.n.n.n.properties is the response file of the Campaign installer, where n.n.n.n is the version number.
installer_report pack initials, product initials, and version number.properties	The sample response file for the reports pack installer. For example, installer_urpc.properties is the response file of the Campaign reports pack installer.

Chapter 5. Configuring Campaign before deployment

Before you deploy Campaign, create and populate the Campaign and eMessage system tables and register Campaign and eMessage manually.

Creating and populating Campaign system tables manually

By default, the Campaign installer automatically creates and populates system tables. However, if the system tables are not created and populated automatically during the installation, you must populate the system tables manually. Use your database client to run the Campaign SQL scripts against the appropriate database to create and populate the Campaign system tables.

Note: If you plan to enable eMessage, you must also manually create and populate the eMessage system tables if the installer did not do so automatically. For details, see “Creating and populating the eMessage system tables manually” on page 34.

If you selected the **Campaign System Table DDL Files** option on the Campaign Components page during installation, the IBM installer installs a collection of SQL scripts that you can use to create and populate the Campaign system tables. The SQL scripts are installed in the `ddl` directory under your installation of the Campaign server. If your system tables are configured for Unicode, the appropriate scripts are in the `ddl/unicode` directory under your Campaign installation.

To use the SQL scripts, run your database client to apply the scripts to the database or schema that holds the Campaign system tables. See the documentation for your database software for instructions on running SQL scripts.

The following tables list the SQL scripts that are provided for you to use to create and populate the Campaign system tables manually.

Table 15. Scripts for creating Campaign system tables

Data source type	Script name
IBM DB2	<code>ac_systab_db2.sql</code>
Microsoft SQL Server	<code>ac_systab_sqlsvr.sql</code>
Oracle	<code>ac_systab_ora.sql</code>

Table 16. Scripts for populating Campaign system tables

Data source type	Script name
IBM DB2	<code>ac_populate_tables_db2.sql</code>
Microsoft SQL Server	<code>ac_populate_tables_sqlsvr.sql</code>
Oracle	<code>ac_populate_tables_ora.sql</code>

Creating and populating the eMessage system tables manually

For eMessage, you must create additional system tables in the Campaign schema and then populate the tables with initial data. The Campaign installer automatically creates and populates the eMessage system tables in the Campaign schema if you select the option to create system tables automatically. However, if you do not select the option, you must create and populate the eMessage system tables manually.

Use your database client to run the appropriate script against the Campaign database.

Note: The eMessage installation directory is a subfolder within the Campaign directory.

Scripts for creating eMessage tables

IBM provides the `ace_op_systab` scripts for creating eMessage tables in your local environment.

If your Campaign system tables are configured for Unicode, find the appropriate script in the `ddl/unicode` directory under your eMessage installation.

If your Campaign system tables are not configured for Unicode, use the non-Unicode scripts in the `ddl` directory under your eMessage installation. Use the following table to see the scripts that you must use:

Table 17. Scripts for creating eMessage tables

Data source type	Script name
IBM DB2	<code>ace_op_systab_db2.sql</code> The user tablespace and system temporary tablespace where the system tables reside must each have a page size of 16K or greater.
Microsoft SQL Server	<code>ace_op_systab_sqlsvr.sql</code>
Oracle	<code>ace_op_systab_ora.sql</code>

Scripts for populating eMessage tables

IBM provides the `ace_op_populate_systab` scripts for populating the eMessage tables in your local environment.

The populate scripts are stored in the `ddl` directory of your eMessage installation. IBM provides only one version of the populate scripts because you can use them for either Unicode or non-Unicode tables.

Note: The eMessage installation directory is a subfolder within the Campaign directory.

Use the following table to see the scripts that you must use:

Table 18. Scripts for populating eMessage tables

Data source type	Script name
IBM DB2	ace_op_populate_systab_db2.sql
Microsoft SQL Server	ace_op_populate_systab_sqlsvr.sql
Oracle	ace_op_populate_systab_ora.sql

Registering Campaign manually

During the installation process, if the Campaign installer cannot access the Marketing Platform system tables, you must run the **configTool** utility to register it manually.

You can use the **configTool** and **populateDb** utilities to import and populate the Campaign information in the Marketing Platform system tables.

1. Run the **populateDb** utility by using the following example command as a guideline.

```
populateDb.bat -n Campaign
```

The command imports security roles and permissions into the default partition.

2. If you are upgrading Campaign, unregister Campaign by using the following command:

```
configTool -x -p "Affinium|Campaign|about" -f exportedAbout.xml
```

The command exports the Campaign **About** node to the exportedAbout.xml file.

3. Run the configTool utility by using the following example commands as guidelines:

- **configTool -r Campaign -f "full_path_to_Campaign_installation_directory\conf\campaign_configuration.xml"**
- **configTool -v -i -p "Affinium|suite|uiNavigation|settingsMenu" -f "full_path_to_Campaign_installation_directory\conf\campaign_setup_navigation.xml"**
- **configTool -v -i -p "Affinium|suite|uiNavigation|mainMenu" -f "full_path_to_Campaign_installation_directory\conf\campaign_navigation.xml"**
- **configTool -v -i -p "Affinium|suite|uiNavigation|mainMenu|Analytics" -f "full_path_to_Campaign_installation_directory\conf\campaign_analysis_navigation.xml"**
- **configTool -v -i -p "Affinium|suite|uiNavigation|alerts" -f "full_path_to_Campaign_installation_directory\conf\campaign_alerts.xml"**

The commands import configuration properties and menu items. You must run the utility as many times as there are files.

4. Run the following command after you register Campaign:

```
configtool -i -p "Affinium|Campaign" -f exportedAbout.xml
```

The command imports the Campaign **About** node to the exportedAbout.xml file.

Registering eMessage manually

During the installation process, if the eMessage installer cannot access the Marketing Platform system tables, you must run the **configTool** utility to register it manually.

By default, the Campaign installer automatically registers eMessage with the Marketing Platform system tables without enabling eMessage. In some situations, the Campaign installer does not connect with the Marketing Platform system tables to automatically register eMessage.

If the installer does not register eMessage automatically, you must register eMessage manually with the **configTool** utility that is provided with the IBM EMM installation. The **configTool** utility is in the `tools\bin` directory under your Marketing Platform installation.

To register eMessage manually, use the following command to run the **configTool** utility:

```
configTool -r eMessage -f "full_path_to_eMessage_installation_directory\  
conf\emessage_configuration.xml"
```

The eMessage installation directory is a subdirectory of the Campaign installation directory.

For more information about registering and configuring eMessage, see the *IBM eMessage Startup and Administrator's Guide*.

Setting data source variables in the Campaign startup script (UNIX only)

Data source variables are automatically set by the installer during installation of Campaign. You can change these settings in `setenv.sh` file. You must restart the server every time you modify `setenv.sh` file.

During Campaign installation, the IBM Installer collects database information from you and uses that information to automatically configure the database and environment variables that are required to create and use the Campaign system tables. Those settings are stored in the `setenv.sh` file in the `bin` directory under your Campaign server installation.

For access to data sources (such as Campaign customer tables) that do not use the same type of database as the system tables, you must manually configure the `setenv.sh` file to add the database and library environment variables that are described in "Database and library environment variables" on page 37.

Note that if you modify this file when the Campaign server is already running, you must restart the server before changes to the `setenv` file are recognized. See "Starting the Campaign server" on page 43 for more details.

See Distributed Marketing database information worksheet for the required information to add to the `setenv` file.

Database and library environment variables

Set database and library environment variables that are required for your databases (customer tables and system tables, if you chose Manual Database Setup during installation) and operating system. You can set the database and library variables in the `setenv.sh` file.

Following table describes database names with their syntax and descriptions.

Table 19. Database environment variables

Database	Syntax and Description
DB2	<p><code>DB2DIR=full_dir_path</code></p> <p><code>export DB2DIR</code></p> <p>DB2 installation directory (for example, <code>/usr/lpp/db2_06_01</code>)</p> <p><code>. full_path_to_db2profile</code></p> <p>Sources the database configuration for DB2 users (e.g. <code>/home/db2inst1/sqllib/db2profile</code>).</p> <p>Note the ". " (period and then a space).</p>
Netezza	<p><code>NZ_ODBC_INI_PATH=full_dir_path</code></p> <p><code>export NZ_ODBC_INI_PATH</code></p> <p>Directory location of the <code>odbc.ini</code> file</p> <p>(e.g. <code>/opt/odbc64v51</code>)</p> <p><code>ODBCINI=full_path_and_file_name</code></p> <p><code>export ODBCINI</code></p> <p>Full path to the <code>odbc.ini</code> file</p>
Oracle	<p><code>ORACLE_BASE=full_dir_path</code></p> <p><code>export ORACLE_BASE</code></p> <p>Oracle installation directory</p> <p><code>ORACLE_HOME=full_dir_path</code></p> <p><code>export ORACLE_HOME</code></p> <p>Oracle's home directory (e.g. <code>/home/oracle/OraHome1</code>).</p>
Teradata	<p><code>ODBCINI=full_path_and_file_name</code></p> <p><code>export ODBCINI</code></p> <p>Full path to the <code>odbc.ini</code> file</p>

Define the library environment variable as mentioned in the following table, depending on your UNIX operating system.

Table 20. Library environment variable

Operating System	Value
SunOS and Linux	<p>LD_LIBRARY_PATH</p> <p>For example:</p> <pre>LD_LIBRARY_PATH=<Campaign_Home>/bin:<path to DB lib directory>:\$LD_LIBRARY_PATH</pre> <p>export LD_LIBRARY_PATH</p> <p>Note: If LD_LIBRARY_PATH_64 (for 64-bit linking) is set, remove it. The LD_LIBRARY_PATH variable will be ignored if LD_LIBRARY_PATH_64 is set.</p>
AIX®	<p>LIBPATH</p> <p>For example: LIBPATH=<Campaign_Home>/bin:<path to DB lib directory>:/usr/lib:\$ORACLE_HOME/lib32:\$ORACLE_HOME/lib</p>
HP-UX	<p>SHLIB_PATH</p> <p>For example: SHLIB_PATH=<Campaign_Home>/bin:<path to DB lib directory>:/usr/lib:\$ORACLE_HOME/lib32:\$ORACLE_HOME/lib</p>

Library directories for Oracle databases

Different versions of Oracle have different naming conventions for their lib directories. Older versions used lib for 32-bit and lib64 for 64-bit. Newer versions use lib32 for 32-bit and lib for 64-bit.

If you install 32-bit Campaign, you must include either \$ORACLE_HOME/lib32 or \$ORACLE_HOME/lib , whichever one contains the 32-bit Oracle libraries.

If you install 64-bit Campaign, you must include either \$ORACLE_HOME/lib or \$ORACLE_HOME/lib64, whichever one contains the 64-bit Oracle libraries.

Note: Do not include paths to both the 32- and 64-bit libraries; include only the path to the library you are using for your version of Campaign.

Chapter 6. Deploying the Campaign web application

You can deploy the Campaign web application by using an EAR file or you can deploy the individual WAR files.

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

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

You must know how to work with your web application server. Consult your web application server documentation for details such as navigation in the Administration console.

Setting the web application session timeout

Session timeout determines how long an inactive HTTP session can remain open before the session expires. If required, you can set the web application session timeout for Campaign by using the WebSphere console or the WebLogic console to adjust the value of session timeout in seconds or minutes.

Set the session timeout on your web application server:

- WebSphere: Use the IBM WebSphere Application Server Administrative Console to set the Session timeout in minutes. You can adjust this setting at the server and Enterprise Application levels. See your WebSphere documentation for details.
- WebLogic: Use the WebLogic console to set the Session Timeout in seconds, or adjust the **TimeoutSecs** parameter value for the **session-descriptor** element in the `weblogic.xml` file.

Deploying Campaign on WebSphere Application Server

You can deploy Campaign runtime environment on supported versions of WebSphere Application Server (WAS) from a WAR file or EAR file.

Note: Make sure that multiple language encoding is enabled in WAS.

Deploying Campaign on WAS from a WAR file

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

Complete the following tasks before you deploy Campaign:

- Confirm that your version of WebSphere meets the requirements in the *Recommended Software Environments and Minimum System Requirements* document, including any necessary fix packs or upgrades.
- Confirm that you created the data sources and database provider in WebSphere.

To deploy the Campaign application WAR file on WAS, complete the following steps:

1. Go to the WebSphere Integrated Solutions Console.
2. Complete the following steps if your system tables are in DB2:
 - a. Click the data source that you created. Go to the Custom Properties for the data source.
 - b. Select the Custom properties link.
 - c. Set the value for the **resultSetHoldability** property to 1.
If you do not see the **resultSetHoldability** property, create the **resultSetHoldability** property and set its value to 1.
3. Go to **Applications > Application Types > WebSphere enterprise applications** and click **Install**.
4. In the Preparing for the application installation window, select the **Detailed - Show all options and parameters** check box and click **Next**.
5. Click **Continue** to see the Install New Application wizard.
6. Accept the default settings on the windows of the Install New Application wizard except the following windows:
 - In step 1 of the Install New Application wizard, select the **Precompile JavaServer Pages files** check box.
 - In step 3 of the installation wizard, set the **JDK Source Level** to 16.
 - In step 8 of the installation wizard, set the **Context Root** to /Campaign.
7. In the left navigation panel of WebSphere Integrated Solutions Console, navigate to **Applications > Application Types > WebSphere enterprise applications**.
8. In the Enterprise Applications window, click the Campaign.war file.
9. In the **Web Module Properties** section, click **Session Management** and select the following check boxes:
 - **Override session management**
 - **Enable Cookies**
10. Click **Enable Cookies**, and in the **Cookie name** field, enter a unique cookie name.
11. If you are using version 8 of WebSphere Application Server, select **Servers > WebSphere application server > server 1 > Session management > Enable Cookies** and clear the check box for **Set session cookies to HTTPOnly to help prevent cross-site scripting attacks**.
12. In the **Applications > Enterprise Applications** section of the server, select the WAR file that you deployed.
13. In the **Detail Properties** section, select **Class loading and update detection**.
14. In the **Class loader order** section, select the **Classes loaded with local class loader first (parent last)** option.
15. For **WAR class loader policy**, select **Single class loader for application**.
16. Start your deployment.

Deploying Campaign on WAS from an EAR file

You can deploy the Campaign application on WAS when Campaign is a module within an EAR file.

You can deploy Campaign by using an EAR file if you included Campaign in an EAR file when you ran the IBM EMM installer.

Before you deploy Campaign:

- Confirm that your version of WebSphere meets the requirements in the *Recommended Software Environments and Minimum System Requirements* document, including any necessary fix packs or upgrades.
- Confirm that you created the data sources and database provider in WebSphere.

To deploy Campaign from an EAR file onto WebSphere Application Server, complete the following steps:

1. Go to the WebSphere Integrated Solutions Console.
2. If your system tables are in DB2, click the data source that you created. go to the Custom Properties for the data source. .
3. Select the Custom properties link.
4. Set the value for the **resultSetHoldability** property to 1.
If you do not see the **resultSetHoldability** property, create the **resultSetHoldability** property and set its value to 1.
5. Go to **Applications > Application Types > WebSphere enterprise applications** and click **Install**.
6. In the Preparing for the application installation window, select the **Detailed - Show all options and parameters** check box and click **Next**.
7. Click **Continue** to see the Install New Application wizard.
8. Accept the default settings on the windows of the Install New Application wizard except the following windows:
 - In step 1 of the Install New Application wizard, select the **Precompile JavaServer Pages files** check box.
 - In step 3 of the installation wizard, set the **JDK Source Level** to 16.
 - In step 8 of the installation wizard, set the **Context Root** to /Campaign.
9. In the left navigation panel of WebSphere Integrated Solutions Console, navigate to **Applications > Application Types > WebSphere enterprise applications**.
10. In the Enterprise Applications window, select the EAR file that you want to deploy.
11. In the **Web Module Properties** section, click **Session Management** and select the following check boxes:
 - **Override session management**
 - **Enable Cookies**
12. Click **Enable Cookies**, and in the **Cookie name** field, enter a unique cookie name.
13. If you are using version 8 of WebSphere Application Server, select **Servers > WebSphere application server > server 1 > Session management > Enable Cookies** and clear the check box for **Set session cookies to HTTPOnly to help prevent cross-site scripting attacks**.
14. In the **Detail Properties** section, select **Class loading and update detection**.
15. In the **Class loader order** section, select the **Classes loaded with local class loader first (parent last)** option.
16. For **WAR class loader policy**, select **Single class loader for application**.
17. Start your deployment.

For more information about WebSphere Application Server version 8, see Welcome to the WebSphere Application Server information center.

Deploying Campaign on WebLogic

You can deploy IBM EMM products on WebLogic.

Use the following guidelines when you deploy Campaign on WebLogic:

- IBM EMM products customize the JVM used by WebLogic. You might need to create a WebLogic instance dedicated to IBM EMM products if you encounter JVM-related errors.
- Verify that the SDK selected for the WebLogic domain you are using is the Sun SDK by looking in the startup script (`startWebLogic.cmd`) for the `JAVA_VENDOR` variable. It should be set to: `JAVA_VENDOR=Sun`. If it is set to `JAVA_VENDOR=BEA`, JRockit has been selected. JRockit is not supported. To change the selected SDK, refer to the WebLogic documentation.
- Deploy the IBM EMM products as web application modules.
- On UNIX systems, you must start WebLogic from the console to allow correct rendering of graphical charts. The console is usually the machine on which the server is running. In some cases, however, the web application server is set up differently.

If a console is not accessible or does not exist, you can emulate a console using Exceed. You must configure Exceed so that your local Xserver process connects to the UNIX machine in root window or single window mode. If you start the web application server using Exceed, you must keep Exceed running in the background to allow the web application server to continue running. Please contact IBM Technical Support for detailed instructions if you encounter problems with chart rendering.

Connecting to the UNIX machine via telnet or SSH always causes problems rendering charts.

- If you are configuring WebLogic to use the IIS plug-in, review the WebLogic documentation.
- If deploying in a production environment, set the JVM memory heap size parameters to 1024 by adding the following line to the `setDomainEnv` script: `Set MEM_ARGS=-Xms1024m -Xmx1024m -XX:MaxPermSize=256m`

For WebLogic 11g, make the following changes to the `campaign.war` file:

1. If you also use AIX 7.1 with WL11g, remove the `xercesImpl.jar` file from the unpackaged `WEB_INF/lib` directory.
2. Build the `campaign.war` file to include the changes that you made before deploying the war file.

Configuring WebLogic to display reports (UNIX)

If you install Campaign with Contact Optimization on a UNIX system, you must enable the `java.awt.headless` JVM property so that the WebLogic web application server can display the graphs in Contact Optimization reports.

To enable graph display in Optimize reports in the WebLogic JVM:

1. Shut down the WebLogic server if it is already running.
2. Locate and open the startup script for your WebLogic server (`startWebLogic.sh`) in any text editor.
3. Modify the `JAVA_OPTIONS` parameter to add the following value:
`-Djava.awt.headless=true`
4. Save the startup script, then restart the WebLogic server.

Starting the Campaign server

Make sure that Marketing Platform and Campaign web application are deployed and running when you start the Campaign server.

You can start the Campaign server directly, or install it as a service.

Starting the Campaign server directly

Start the Campaign server by running the `cmpServer.bat` file for Windows, or the `rc.unica_ac` for UNIX. The Campaign server processes and computes data.

Follow the instructions appropriate for your operating system.

Windows

Start the Campaign server by running the `cmpServer.bat` file in the `bin` directory under your Campaign installation. When the `unica_ac1snr.exe` process appears on the Windows Task Manager Processes tab, the server has started successfully.

UNIX

Start the Campaign server by executing the `rc.unica_ac` program with a `start` argument. You must run this command as root. For example:

```
./rc.unica_ac start
```

To determine whether the `unica_ac1snr` process has started successfully, enter this command:

```
ps -ef | grep unica_ac1snr
```

To determine the process ID for the server you started, view the `unica_ac1snr.pid` file located in the `conf` directory under your Campaign installation.

Installing the Campaign server as a Windows service

You can install the Campaign server as a Windows service so that it starts automatically whenever you start Windows. The Campaign server computes and processes data.

Complete the following steps to install the Campaign server as a Windows service:

1. Add the `bin` directory under the Campaign installation directory to the user `PATH` environment variable. If the `PATH` environment variable does not exist for the user, create it.

Make sure that you add this path to the user `PATH` variable, not the system `PATH` variable.

If the Campaign `bin` directory exists in the system `PATH` environment variable, remove it. You do not need it in the system `PATH` environment variable to install the Campaign server as a service.

2. If you are upgrading from a previous version of Campaign that had the server installed as a service, stop the service.
3. Open a command window and change directories to the `bin` directory under your Campaign installation.

4. Run the following command to create the Campaign server service:
`unica_ac1snr -i`
The service is created.

Note: Make sure `CAMPAIGN_HOME` has been created as a system environment variable before starting the Campaign server service.

5. Open the Unica Campaign Listener Service properties dialog box. Click **Log On** tab.
6. Select **This account**.
7. Enter the user name (system user) and password, and start the services.

Chapter 7. Configuring Campaign after deployment

After you deploy Campaign, you must verify that the Campaign listener is running, set up the Campaign system user, set Campaign configuration properties, and verify the Campaign installation.

If you are using the IBM EMM reporting feature, you must complete the tasks that are described in the *IBM EMM Reports Installation and Configuration Guide*.

Note: If you plan to enable IBM eMessage for hosted email, you must use the IBM EMM reporting feature to view standard eMessage performance reports.

Verifying that the Campaign listener is running

The Campaign listener must be running before users can work with any Campaign features. The listener automatically creates a separate `unica_acsvr` process for each login and each active flowchart. For example, if one user logs in and then opens a flowchart, the listener creates two instances of `unica_acsvr.exe`.

Use the following procedure to verify that the Campaign listener is running.

1. Use the appropriate procedure for your operating system:

In Windows, look for `unica_aclsnr.exe` on the **Processes** tab of the Windows Task Manager.

In UNIX, use the `ps` command to look for the Campaign server, as in the following example: `ps -ef | grep unica_aclsnr`.

2. If the listener is not running, restart it:

In Windows, run the `cmpServer.bat` script that is in the `bin` directory under your Campaign installation.

In UNIX, enter the following command at the system prompt: **`rc.unica_ac start`**

For important details about running the listener, including how to start it automatically, see the *IBM Campaign Administrator's Guide*.

Setting up the Campaign system user

Set up the Campaign system user to directly access databases. For multiple partitions in Campaign, create a system user for each partition.

A system user is a IBM EMM user account that is configured for use by IBM applications.

To avoid presenting users with repeated prompts for login credentials you can associate a system user with one or more data sources. Each data source specifies a user name and password. This allows you to provide a user name and password to access a database or other protected resource by referencing the data source. By adding multiple data sources to the configuration of the system user account, you can allow the system user to access multiple databases.

In Campaign, the system user holds login credentials for accessing system tables and other data sources.

Use an existing or new IBM EMM user account to save credentials for the data sources described here.

You set up IBM EMM users and assign user data sources in the **Settings > Users** area of IBM EMM. See the online help in that section for instructions on how to do this.

Set up a user account to hold credentials for the following data sources.

- Campaign system tables (UA_SYSTEM_TABLES)
- All customer (user) tables

On UNIX, for the **Alternate Login** attribute of the system user, enter the UNIX account of a user in a group that shares privileges with the UNIX users of Campaign.

Note: If you have multiple partitions, each partition must have its own system user. The system user cannot be the same across partitions.

Adding data source properties on the Configuration page

Use the appropriate data source template to add data source properties on the Configuration page for each Campaign data source.

The Campaign installer imports the template for the database type that you specified for the Marketing Platform database when you ran the IBM installer.

If you need other data source templates for additional database types, you must import them manually using the Marketing Platform configTool utility. You can import as many templates as you need, to correspond to each different type of database you have.

For example, suppose your installation of Marketing Platform and Campaign used the following databases:

- Oracle - system tables
- DB2 - customer (user) tables
- DB2 - additional customer (user) tables

In this case, you would import the DB2Template.xml template for the two sets of customer (user) tables.

If your Marketing Platform and Campaign system tables databases are of the same database type, the installer automatically imports the template that is used for the system tables; in this example, it imports the Oracle template.

For instructions, see “Importing data source templates” on page 47.

You create a new category from the template, which creates a new set of data source configuration properties. Create as many new categories as needed, one for each data source of that type. In the example above, you would use the Oracle template to create one new category and the DB2 template to create two new categories. See “Duplicating a data source template” on page 47.

After you add the data source properties, set the data source configuration properties in the categories you created from the templates.

For instructions, see “Data source properties.”

Importing data source templates

The Campaign system tables data source (UA_SYSTEM_TABLES) is supported only on Oracle, DB2, and SQLServer. Import the data source templates for the user tables by using the **configTool** utility to support the database types that are not supported for the Campaign system tables.

The Campaign data source templates are located in the conf directory under your Campaign installation.

To import and export templates, you use the Marketing Platform configTool utility, located in the tools/bin directory under your Marketing Platform installation. If you are not familiar with configTool, see “configTool” on page 67 for details on performing this task.

Here is an example of the command you would use to import the Oracle template into the default partition (Windows environment).

```
configTool -i -p "Campaign|partitions|partition1|dataSources" -f
full_path_to_directory_containing_your_Oracle_template\OracleTemplate.xml
```

Duplicating a data source template

Duplicate the data source templates to create a new set of configuration properties in the data source category.

1. On the Configuration page, navigate to the data source template you want to duplicate.

Unlike other categories, template category labels are in italics and enclosed in parentheses.

2. Click the data source template.

The Create category from Template page displays.

3. Enter a name in the **New category name** field (required).

Note: The data source category name for Campaign's system tables **MUST** be UA_SYSTEM_TABLES.

4. If desired, edit properties within the new category. You can also do this later.
5. Click **Save and Finish** to save the new configuration.

The new category appears in the navigation tree.

Campaign configuration properties

You must specify configuration properties on the Configuration page for a basic installation of Campaign. Additionally, you can use the Configuration page to specify the properties that perform important functions that you can optionally adjust.

Data source properties

The following table provides information about the properties that you must specify for each Campaign data source:

Table 21. Properties for each Campaign data source

Property name	Description
ASMUserForDBCredentials	This property must be the same user you already created as the Campaign system user in “Setting up the Campaign system user” on page 45.
DSN	For SQL server, set this property to the DSN (data source name) you created. For Oracle and DB2, set this property to the database name or the SID (service) name.
JndiName	Set this property to the JNDI you created in your application server to connect to this specific data source.
SystemTableSchema	Not required for SQL server. For other data sources, set this property to the user of the database to which you are trying to connect.
OwnerForTableDisplay	Not required for SQL server. For other data sources, set this property to the user of the database to which you are trying to connect.

The data sources are the Campaign system table database and any customer (user) databases you plan to use with Campaign.

Note: The data source category name for the Campaign system tables **must** be UA_SYSTEM_TABLES.

For details on setting the values, see the context help for these properties or the *IBM Marketing Platform Administrator’s Guide*.

In addition to creating and setting data source properties, you must set the following properties on the Configuration page for a basic installation of Campaign.

- Campaign > unicaACLlistener > serverHost
- Campaign > unicaACLlistener > serverPort
- For the default partition, set values as desired in the categories under Campaign > partitions > partition1.

When you change a property, you must restart the Campaign listener for the changes to take effect.

Mapping user tables in Campaign

Mapping user tables is the process of making external data sources accessible in Campaign. A typical user table contains information about your company’s customers, prospects, or products. The data source can be a database table or ASCII flat file. You must map any data sources that you configured to make that data accessible to processes in flowcharts.

For instructions on how to map user tables, see the *Campaign Administrator’s Guide*.

Note: User tables are different from system tables. Most Campaign system tables are mapped automatically during initial installation and configuration if you use

the system table data source name UA_SYSTEM_TABLES. If a connection issue forces you to map system tables manually, you must log out of Campaign and log in again after you map the tables.

Verifying the Campaign installation

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

If you have not already done so, log in to IBM EMM as a user that exists in the Campaign Administrators role (such as asm_admin). In **Settings > Users**, assign at least one security role (for example, Global Policy/Admin) to the new user. After the new user is assigned the role, you can log in to Campaign as that new user.

Use the following procedure to verify the installation.

1. Log in to IBM EMM.
2. Verify that all system tables exist in the **Settings > Campaign Settings > Manage Table Mappings** window.
3. Create a campaign and create a flowchart in that campaign.

Setting properties for integration with IBM EMM products

Campaign integrates with various IBM applications. If required, you can specify configuration properties to set up an integration between Campaign and other IBM products.

See “IBM Campaign documentation roadmap” on page 6 to view the list of documents that provide information about the integration of Campaign with other IBM products.

Chapter 8. Configuring multiple partitions for Campaign

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

How multiple partitions work

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

Partition benefits

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

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

Partition user assignment

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

With the exception of the partition superuser (`platform_admin`), each IBM user can belong to one partition. A user who requires access to multiple partitions must have a separate IBM user account for each partition.

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

Partition data access

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

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

Setting up multiple partitions

Configure multiple partitions in Campaign to isolate and secure data for different groups of Campaign users. As each partition has its own set of configuration properties, you can customize Campaign for each group of users.

Before you configure additional partitions in Campaign, complete the following tasks for each partition that you are configuring:

1. Create database or schema for the Campaign system tables
2. Create ODBC or native connections
3. Create JDBC connections in the web application server

Complete the following tasks to set up multiple partitions for Campaign:

1. Create the system tables database and any other data sources required for your partitions. Then configure the JDBC and ODBC or native connections required to access your data sources.
2. For each partition, create a different schema in your database to hold the system tables. Use the database-specific scripts packaged with Campaign to create and populate the system tables.
3. Complete the following tasks to create a directory structure for each additional partition:

Note: Save a clean copy of the original partition1 directory to serve as a backup.

- a. In the partitions directory under your Campaign installation, create a duplicate of the default partition1 directory for each partition that you are adding, ensuring that you include all subdirectories.
 - b. Name each partition directory with a unique name. Use these exact same names for the partitions when you later create their configuration trees on the Configurations page. If you want to create a second partition and created the directory named Campaign/partitions/partition2, when you create the configuration tree on the Configurations page, you must use the name "partition2" to identify this partition.
 - c. Delete any files that exist in the duplicate partition subdirectories.
4. Complete the following tasks to use the **partitionTool** utility with the **-s** option to clone the default partition:

Note: If you decide not to use this option, you must stop the web application server where Marketing Platform is deployed before performing this procedure.

- a. Set the JAVA_HOME environment variable, either in the setenv script located in the tools/bin directory of your Marketing Platform installation, or in the command line window in which you run the partitionTool utility.
- b. Open a command line window and run the utility from the tools/bin directory under your Marketing Platform installation. Use the appropriate command and options (as described in the *Marketing Platform Administrator's Guide*) to achieve your desired results. **partitionTool -c -s partition1 -n partition2**
- c. Repeat this procedure for each new partition you need to create.
- d. When you are finished, stop and restart the application server where Marketing Platform is deployed to see the groups that were created.

Note: For complete information on using this utility, see “partitionTool” on page 73.

5. Complete the following tasks to create the partition structure on the Configuration page by using the New partitionTemplate for each new partition:

- a. On the Configuration page, navigate to **Campaign > partitions** and click (*partitionTemplate*).

If you do not see the (*partitionTemplate*) property in the list, use the configTool utility to import the partition template, using a command similar to the following:

```
configTool -i -p "Affinium|Campaign|partitions"  
-f <CAMPAIGN_HOME>/conf/partitionTemplate.xml
```

Replace *CAMPAIGN_HOME* with the actual path to your Campaign installation.

The configTool utility is found in the tools directory under your IBM Marketing Platform installation. See the *IBM Marketing Platform Administrator's Guide* for information on using this utility. In the right pane, you see the partitionTemplate pane with an empty **New category name** field.

- b. Enter the name for the new partition, using the same name that you used when creating the partition's directory structure in the file system in “Setting up multiple partitions” on page 52.
- c. Click **Save Changes**. You see the new partition structure, with the same categories and properties as in the partition template.

Partition superuser

To administer security across all users of Marketing Platform, a user account must exist that has access to all security settings and user accounts in the system.

By default, this user account is platform_admin. This user account does not belong to any one partition; instead, it has access to all user accounts in all partitions.

The IBM administrator can create additional users with the same level of access. To be a partition superuser, an account must have Admin access to the Marketing Platform and have full access to the Users, User Groups, and User Permissions pages. The partition superuser does not require access to product-specific security pages, such as Campaign security pages.

Configuring data source properties for partitions

You must configure data source properties for each partition that you create. Use the appropriate data source template to create data source properties.

The Campaign installer imports the template for the database type that you specified for the Marketing Platform database when you ran the IBM installer.

If you need other data source templates for additional database types, you must import them manually using the Marketing Platform **configTool** utility. You can import as many templates as you need to correspond to each different type of database you have.

For example, suppose your installation of Marketing Platform and Campaign used the following databases:

- Oracle - system tables
- DB2 - customer (user) tables

- DB2 - additional customer (user) tables

In this case, you would import the `DB2Template.xml` template for the two sets of customer (user) tables.

If your Marketing Platform and Campaign system tables databases are of the same database type, the installer automatically imports the template used for the system tables; in this example, it imports the Oracle template.

Note: When you create a new partition, you must use the **configTool** utility to import the data source templates for the system tables and user tables.

For instructions, see “Importing data source templates” on page 47.

You create a new category from the template, which creates a new set of data source configuration properties. Create as many new categories as needed, one for each data source of that type. In the example above, you would use the Oracle template to create one new category and the DB2 template to create two new categories. See “Duplicating a data source template” on page 47.

After you add the data source properties, set the data source configuration properties in the categories you created from the templates.

For instructions, see “Campaign configuration properties” on page 47.

Complete the following tasks to configure data source properties for each partition:

1. Add data source configuration properties to the Configuration page for each Campaign data source by using the appropriate data source template. The Campaign installer imports the template for the database type that you specified for the Marketing Platform database when you ran the IBM installer. If you need other data source templates for additional database types, you must import them manually using the Marketing Platform **configTool** utility. You can import as many templates as you need, to correspond to each different type of database you have. For example, suppose your installation of Marketing Platform and Campaign used the following databases:
 - Oracle - system tables
 - DB2 - customer (user) tables
 - DB2 - additional customer (user) tables

In this case, you would import the `DB2Template.xml` template for the two sets of customer (user) tables. If your Marketing Platform and Campaign system tables databases are of the same database type, the installer automatically imports the template used for the system tables; in this example, it imports the Oracle template. For instructions, see “Importing data source templates” on page 47.

2. Create a new category from the template, which creates a new set of data source configuration properties. Create as many new categories as needed, one for each data source of that type. In the example above, you would use the Oracle template to create one new category and the DB2 template to create two new categories. See “Duplicating a data source template” on page 47.
3. Set the data source configuration properties for each Campaign data source. See “Campaign configuration properties” on page 47 for more information.

Setting up system users for Campaign

You can associate a system user with one or more Marketing Platform data sources to avoid presenting users with repeated prompts for login credentials. Each data source specifies a user name and password. You can provide a user name and password to access a database or other protected resources by referencing the data source. By adding multiple data sources to the configuration of the system user account, you can allow the system user to access multiple databases.

IBM EMM applications might require a system user account configured with the following attributes:

- Login credentials for accessing system tables or other data sources.
- Specific permissions to create, modify, and delete objects within the system.

For more information about setting up a new user and assigning a data source to a user, see the *IBM Marketing Platform Administrator's Guide*.

Complete the following actions to set up system users for Campaign:

1. Use an existing or a new user account to save credentials for the following data sources:
 - Campaign system tables
 - All customer (user) tables
2. On UNIX, for the **Alternate Login** attribute of the system user, enter the UNIX name for a user in a group that shares privileges with the UNIX users of Campaign.

Note: If you have multiple partitions, you must create a system user for each partition.

Using IBM Cognos Reports for multiple partitions

If you want to use IBM Cognos Reports for multiple partitions in Campaign, eMessage, or Interact, you must configure IBM Cognos reports packages for each partition.

For instructions, see the *IBM EMM Reports Installation and Configuration Guide*.

Assigning roles, permissions, and groups for partitions

Before you can use the partitions that you have configured for Campaign, you must assign roles to the user with administrator role in each partition. You must also assign a group to each partition.

Use the **partitionTool** utility to create a default admin user for each partition that you create.

Assign roles to each partition Admin user - The **partitionTool** utility creates a default Admin user for each partition you create. On the Users page, assign at least one security role (for example, Global Policy/Admin) to your new user. Once the new user has been assigned the role, you can log into the Campaign partition as that new user.

If you plan to enable IBM eMessage in multiple Campaign partitions, you must configure a corresponding eMessage partition for each Campaign partition. For

more information about creating additional partitions for eMessage, see Chapter 9, "Configuring multiple partitions in eMessage," on page 57.

Chapter 9. Configuring multiple partitions in eMessage

Configure multiple partitions in eMessage to isolate and secure data for different groups of eMessage users. As each partition has its own set of configuration properties, you can customize eMessage for each group of users.

Installing eMessage creates a default partition for eMessage in the Marketing Platform. You can configure more partitions for eMessage. Each partition that you create for eMessage operates in conjunction with a partition created for Campaign.

Note: To configure multiple partitions in eMessage you must configure corresponding partitions in Campaign. Adding new partitions for eMessage requires making changes in the Marketing Platform configurations for eMessage and Campaign.

Important: After you change the eMessage and Campaign configurations, you must restart the web application server that hosts Campaign and restart the Response and Contact Tracker (RCT). You might also need to restart the Campaign listener.

Be sure to back up your existing configurations before you make changes.

Partitions for eMessage: Overview

Creating partitions for eMessage allows you to isolate and secure data for different groups of users. Each partition appears to users as a separate instance of eMessage, with no indication that other partitions exist on the same system. Because each partition has its own set of configuration properties, you can customize eMessage for each group of users.

Users within each partition can access only those functions, data, and customer tables configured for the partition. For example, if you create partitions named `partition1` and `partition2`, eMessage users working in `partition1` can select email recipients from customer tables configured in `partition1`, but not in `partition2`. IBM does not recommend creating multiple partitions if users need to share data.

When you work with multiple partitions, you should understand characteristics that are unique to partitions for eMessage and how partitions for eMessage relate to partitions for Campaign. You should also be familiar with the workflow for creating and configuring multiple partitions for eMessage.

Characteristics of partitions for eMessage

Note the following when you create and configure new partitions for eMessage.

- You create partitions for eMessage differently than you do for Campaign. You create new partitions for eMessage using a partition template available in the eMessage configuration properties in Marketing Platform.
- The name of each eMessage partition must exactly match the name of its corresponding Campaign partition.
- Each partition that you create for eMessage must be able to connect to IBM EMM Hosted Services.

You must request a separate IBM EMM Hosted Services account for each partition. IBM will provide a user name and password connected to the account. You must configure a Marketing Platform data source that can provide these access credentials automatically when eMessage connects to IBM EMM Hosted Services.

For more information about how to request an account, see the *IBM eMessage Startup and Administrator's Guide*.

Relationship to partitions in Campaign

Each partition in eMessage operates in conjunction with a specific partition created in the Marketing Platform for Campaign. The Campaign partition provides the following.

- Campaign schema that contains the eMessage system tables
- File structure for Campaign in the partition, including directories used by eMessage to create and process recipient lists
- Configuration properties associated with creating recipient lists and enabling eMessage within the partition

Because eMessage operates with Campaign within a specific partition, the eMessage and Campaign partition structures must specify the same name. The partition names must match exactly.

Roadmap for configuring multiple partitions in eMessage

To create a partition in eMessage, use the exact same name as the partition in Campaign that exists in the Marketing Platform configurations.

Before you create a new partition for eMessage, confirm that you have satisfied all the eMessage prerequisites for the partition in Campaign and eMessage.

Complete the following steps to create a new partition for eMessage.

1. "Creating a new partition for eMessage"
2. "Preparing eMessage system tables for the partition" on page 60
3. "Configuring a system user to access IBM EMM Hosted Services" on page 62
4. "Enabling eMessage in Campaign for the new partition" on page 63
5. "Specifying the Recipient List Uploader location for eMessage" on page 63
6. "Restarting system components after configuring eMessage" on page 64
7. "Testing eMessage partition configuration and connections" on page 64

Creating a new partition for eMessage

Installing eMessage creates a default partition for eMessage in Marketing Platform. You can create multiple partitions for eMessage to isolate and secure data for different groups of users.

Before you create and configure partitions for eMessage, you must meet the following requirements for eMessage and Campaign:

- Before you create multiple partitions in eMessage, complete the following tasks for eMessage:

- Contact IBM Support to request an account and credentials for each partition. Each partition requires a separate IBM EMM Hosted Services account and access credentials. For more information, see the *IBM Startup and Administrator's Guide*.
- Create a system user that can access the eMessage system tables that you will create in the Campaign schema for the partition.
You can update the system user that you created for the Campaign partition so that it can also access the eMessage system tables.
- Before you create multiple partitions in eMessage, complete the following tasks in Campaign:
 - Create a partition in Campaign to operate with the partition that you are creating for eMessage. Note the name of the partition.
 - Create Campaign system tables in the Campaign partition.
 - Configure a system user to access the system tables in the partition.
If you have multiple partitions, each partition must have its own system user. The system user cannot be the same across partitions.

The IBM installer registers the eMessage configuration properties and a default partition during initial installation. The default partition includes a template that you can copy to create additional partitions.

Complete the following actions to create a new partition for eMessage:

1. Navigate to eMessage > partitions > (*partition*) and duplicate the partition template.
2. Name the new partition.

Note: eMessage does not support deleting a partition after you have created it.

Identifying the partition template

The Configuration page displays the eMessage partition template in the navigation tree for the default partition. You can identify the partition template in the tree because its label is in italics and enclosed in parentheses.

Naming the new partition

The following restrictions apply when you name a new partition.

- The name must be unique among categories that are siblings in the tree (that is, among categories that share the same parent category).
- The partition name may not start with a period. Also, the following characters are not allowed in partition names.

!	^
"	<
,	>
#	=
\$?
%	@
&	[
(]
)	{
*	}
+	\
:	/
;	
'	`
	~

Note: Because eMessage operates with Campaign within a specific partition, the partitions for eMessage and Campaign must specify the same partition name.

Preparing eMessage system tables for the partition

For each partition that you create for eMessage, you must create, populate and configure the eMessage system tables that are used by the partition in the Campaign schema.

Complete the following actions to prepare the eMessage system tables for a partition:

1. Create the eMessage system tables. In your database client, run the SQL scripts for *creating* system tables against the Campaign database.
2. Populate the tables that you created. Use the database client to run the scripts for *populating* tables against the Campaign database. For more information about the SQL scripts, see the reference table for script names and locations at “Creating and populating the eMessage system tables manually” on page 34.
3. Set the following configuration properties in the eMessage configuration for the partition, specifying the user name and platform data source that you configured for the partition's Campaign system user:
 - eMessage > partitions > partition [n] < dataSources > systemTables > asmUserForDBCredentials
 - eMessage > partitions > partition [n] < dataSources > systemTables > amDataSourceForDBCredentials

eMessage accesses the partition's system tables through a system user configured in Marketing Platform. A Marketing Platform data source added to the system user provides the required access credentials. Because the eMessage

system tables exist in the Campaign schema for the partition, you can use the system user that you created to access the Campaign schema to access the partition's eMessage system tables.

4. Update the following properties in the partition's configuration properties:
 - eMessage > partitions > partition [n] < dataSources > systemTables > type
 - eMessage > partitions > partition [n] < dataSources > systemTables > schemaName
 - eMessage > partitions > partition [n] < dataSources > systemTables > jdbcBatchSize
 - eMessage > partitions > partition [n] < dataSources > systemTables > jdbcClassName
 - eMessage > partitions > partition [n] < dataSources > systemTables > jdbcURI

See the Marketing Platform online help for each property to learn more about setting the configuration properties. For additional information about these configuration properties and configuring eMessage, see the *IBM eMessage Startup and Administrator's Guide*.

Creating and populating the eMessage system tables manually

For eMessage, you must create additional system tables in the Campaign schema and then populate the tables with initial data. The Campaign installer automatically creates and populates the eMessage system tables in the Campaign schema if you select the option to create system tables automatically. However, if you do not select the option, you must create and populate the eMessage system tables manually.

Use your database client to run the appropriate script against the Campaign database.

Note: The eMessage installation directory is a subfolder within the Campaign directory.

Scripts for creating eMessage tables

IBM provides the ace_op_systab scripts for creating eMessage tables in your local environment.

If your Campaign system tables are configured for Unicode, find the appropriate script in the ddl/unicode directory under your eMessage installation.

If your Campaign system tables are not configured for Unicode, use the non-Unicode scripts in the ddl directory under your eMessage installation. Use the following table to see the scripts that you must use:

Table 22. Scripts for creating eMessage tables

Data source type	Script name
IBM DB2	<p>ace_op_systab_db2.sql</p> <p>The user tablespace and system temporary tablespace where the system tables reside must each have a page size of 16K or greater.</p>

Table 22. Scripts for creating eMessage tables (continued)

Data source type	Script name
Microsoft SQL Server	ace_op_systab_sqlsvr.sql
Oracle	ace_op_systab_ora.sql

Scripts for populating eMessage tables

IBM provides the ace_op_populate_systab scripts for populating the eMessage tables in your local environment.

The populate scripts are stored in the ddl directory of your eMessage installation. IBM provides only one version of the populate scripts because you can use them for either Unicode or non-Unicode tables.

Note: The eMessage installation directory is a subfolder within the Campaign directory.

Use the following table to see the scripts that you must use:

Table 23. Scripts for populating eMessage tables

Data source type	Script name
IBM DB2	ace_op_populate_systab_db2.sql
Microsoft SQL Server	ace_op_populate_systab_sqlsvr.sql
Oracle	ace_op_populate_systab_ora.sql

Configuring a system user to access IBM EMM Hosted Services

eMessage components must be able to access the IBM EMM Hosted Services without requiring manual entry of login credentials. To establish automatic login, define a system user in Marketing Platform that can provide the required access credentials.

To simplify user administration and troubleshooting, you can modify an existing system user to access hosted services and local system tables. You can configure a single system user to provide credentials for multiple systems. For example, modifying the configuration of the Campaign system user creates a single user that can automatically access IBM EMM Hosted Services and the eMessage system tables in the Campaign schema.

The credentials required to access IBM EMM Hosted Services are the user name and password that IBM provides for your hosted messaging account. The credentials that you use depend on whether you are connecting to IBM's US data center or the data center that IBM maintains in the United Kingdom. Consult with IBM to determine which data center you use.

For specific information about how to configure a system user to communicate with IBM EMM Hosted Services, see the *IBM eMessage Startup and Administrator's Guide*.

For general information about how to create system users and data sources, see the *IBM Marketing Platform Administrator's Guide*.

Configuring partition access to IBM EMM Hosted Services

IBM eMessage components in the partition must be allowed to automatically provide valid login credentials when attempting to communicate with IBM EMM Hosted Services. To do this, you must add the IBM EMM Hosted Services login credentials to a Marketing Platform user. This user becomes the eMessage system user.

You can add the platform data source containing the IBM EMM Hosted Services credentials to the eMessage system user. This user can be the same system user that accesses the Campaign system tables in the partition.

The steps for configuring system users for a partition are the same as those followed during the initial eMessage installation, which created the first partition. For details about how to add IBM EMM Hosted Services login credentials to a system user, see the *IBM eMessage Startup and Administrator's Guide*.

The credentials required to access IBM EMM Hosted Services are the user name and password that IBM provided during the initial startup process.

Important: For each additional partition, you must request a separate user name and password from IBM.

Enabling eMessage in Campaign for the new partition

To allow users of the new eMessage partition to access the eMessage features in Campaign, enable eMessage in the Campaign partition by updating the `eMessageInstalled` configuration property for the corresponding Campaign partition.

For example, the eMessage mailing tab does not appear in the Campaign interface until you enable eMessage in the Campaign configuration.

You enable eMessage in the partition by updating the `eMessageInstalled` configuration property for the corresponding Campaign partition.

In the Marketing Platform configurations, navigate to **Campaign | partitions | partition[n] | server | internal** and set the `eMessageInstalled` property to **yes**.

Specifying the Recipient List Uploader location for eMessage

For each partition where you enable eMessage, specify the location of the Recipient List Uploader (RLU). The RLU uploads the output list tables data and associated metadata to the remote services hosted by IBM.

During initial installation, the IBM installer automatically adds the location of the RLU to the configuration for default partition (`partition1`). However, when you add new partitions to your environment, you must manually configure all new partitions to reference the correct location. Because there is only one RLU for each eMessage installation, all partitions access the same plugin file in the local file system of the machine that hosts the Campaign web application.

1. In the configuration for **partition1** in your Campaign installation, navigate to **Campaign > partitions > partition1 > eMessage > eMessagePluginJarFile**.

The value for this property is the full path to the plugin file (emessageplugin.jar) that operates as the RLU.

For example: C:\IBM\Unica\eMessage\plugin\emessageplugin.jar

2. Copy the value for the eMessagePluginJarFile property.
3. Navigate to the eMessagePluginJarFile for the new partition and enter the path you copied from **partition1**.

All partitions must use the same location for the RLU.

Restarting system components after configuring eMessage

After you change the eMessage and Campaign configurations, you must restart the Campaign web application server, the Response and Contact Tracker (RCT), and the Campaign listener.

1. Restart the web application server for Campaign.

For instructions, see the documentation for your web application server.

To verify that the server has started, log in to your IBM EMM installation, access Campaign, and confirm that you can open an existing mailing.

2. Restart the Response and Contact Tracker (RCT).

To restart the RCT manually, run the rct script in the bin directory under your eMessage installation, as follows: rct start

If RCT is configured to run as a service, restart the RCT service. The first time that you restart the RCT as a service, you must manually restart the RCT afterward.

For more information, see “eMessage Response and Contact Tracker (RCT) script” on page 79.

3. Restart the Campaign listener:

- On Windows, run the cmpServer.bat file in the bin directory under your Campaign installation.
- On UNIX, run the following command as root: ./rc.unica_ac start

Testing eMessage partition configuration and connections

Use the scripts that are provided by eMessage to verify the partition configuration and its connection to IBM EMM Hosted Services. You must also confirm if you can access the mailing interface from the partition.

Important: Before you begin, if you have changed the Campaign or eMessage configurations, confirm that you have restarted the web application server that hosts Campaign and that you have restarted the Response and Contact Tracker.

For more information on how to test the partition, see the *IBM eMessage Startup and Administrator's Guide*.

Chapter 10. 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.

- “`alertConfigTool`” on page 66 - registers alerts and configurations for IBM EMM products
- “`configTool`” on page 67 - imports, exports, and deletes configuration settings, including product registrations
- “`datafilteringScriptTool`” on page 71 - creates data filters
- “`encryptPasswords`” on page 72 - encrypts and stores passwords
- “`partitionTool`” on page 73 - creates database entries for partitions
- “`populateDb`” on page 75 - populates the Marketing Platform database
- “`restoreAccess`” on page 76 - restores a user with the `platformAdminRole` role
- “`scheduler_console_client`” on page 78 - lists or starts IBM EMM Scheduler jobs that are 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

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. This information is stored in the `jdbc.properties` file, located in the `tools/bin` directory under your Marketing Platform installation.

- JDBC driver name
- JDBC connection URL (which includes the host, port, and database name)
- Data source login

- Data source password (encrypted)

In addition, these 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).

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.

alertConfigTool

Notification types are specific to the various IBM EMM products. Use the `alertConfigTool` utility to register the notification types when the installer has not done this automatically during installation or upgrade.

Syntax

```
alertConfigTool -i -f importFile
```

Commands

-i -f *importFile*

Import alert and notification types from a specified XML file.

Example

- Import alert and notification types from a file named `Platform_alerts_configuration.xml` located in the `tools\bin` directory under the Marketing Platform installation.

```
alertConfigTool -i -f Platform_alerts_configuration.xml
```

configTool

The properties and values on the Configuration page are stored in the system tables. You can use the `configTool` utility to import and export configuration settings to and from the system tables.

When to use configTool

You might want to use `configTool` for the following reasons.

- To import partition and data source templates that are supplied with Campaign, which you can then modify and duplicate by 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 by 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 contains the configuration properties and their values. For best results, either create backup copies of these tables, or export your existing configurations by using `configTool` and back up the resulting file so you have a way to restore your configuration if you make an error when you use `configTool` to import.

Syntax

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

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

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

```
configTool -vp -p "elementPath" -f importFile [-d]
```

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

Commands

-d -p "*elementPath*" [o]

Delete configuration properties and their settings, specifying a path in the configuration property hierarchy.

The element path must use the internal names of categories and properties. You can obtain them by going to the Configuration page, selecting the wanted category or property, and looking at the path that is displayed in parentheses in the right pane. Delimit a path in the configuration property hierarchy by using the | character, and surround the path with double quotation marks.

Note the following.

- Only categories and properties within an application can be deleted by using this command, not whole applications. Use the -u command to unregister a whole application.
- To delete categories that do not have the **Delete Category** link on the Configuration page, use the -o option.

When you use -d with the -vp command, the configTool deletes any child nodes in the path you specify if those nodes are not included in the XML file you specify.

-i -p "parentElementPath" -f importFile [o]

Import configuration properties and their settings from a specified XML file.

To import, you specify a path to the parent element under which you want to import your categories. The configTool utility imports properties under the category you specify in the path.

You can add categories at any level below the top level, but you cannot add a category at same level as the top category.

The parent element path must use the internal names of categories and properties. You can obtain them by going to the Configuration page, selecting the required category or property, and looking at the path that is displayed in parentheses in the right pane. Delimit a path in the configuration property hierarchy by using the | character, and surround the path with double quotation marks.

You can specify an import file location relative to the tools/bin directory or you can specify a full directory path. If you specify a relative path or no path, configTool first looks for the file relative to the tools/bin directory.

By default, this command does not overwrite an existing category, but you can use the -o option to force an overwrite.

-x -p "elementPath" -f exportFile

Export configuration properties and their settings to an XML file with a specified name.

You can export all configuration properties or limit the export to a specific category by specifying a path in the configuration property hierarchy.

The element path must use the internal names of categories and properties, which you can obtain by going to the Configuration page, selecting the wanted category or property, and looking at the path that is displayed in parentheses in the right

pane. Delimit a path in the configuration property hierarchy by using the | character, and surround the path with double quotation marks.

You can specify an export file location relative to the current directory or you can specify a full directory path. If the file specification does not contain a separator (/ on UNIX, / or \ on Windows), configTool writes the file to the tools/bin directory under your Marketing Platform installation. If you do not provide the xml extension, configTool adds it.

-vp -p "elementPath" -f importFile [-d]

This command is used mainly in manual upgrades, to import configuration properties. If you applied a fix pack that contains a new configuration property, and you then upgrade, importing a configuration file as part of a manual upgrade process can override values that were set when the fix pack was applied. The -vp command ensures that the import does not override previously set configuration values.

Important: After you use the configTool utility with the -vp option, you must restart the web application server on which Marketing Platform is deployed so the changes are applied.

When you use -d with the -vp command, the configTool deletes any child nodes in the path you specify if those nodes are not included in the XML file you specify.

-r productName -f registrationFile

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

Note the following.

- When you use the -r command, the registration file must have <application> as the first tag in the XML.
Other files can be provided with your product that you can use to insert configuration properties into the Marketing Platform database. For these files, use the -i command. Only the file that has the <application> tag as the first tag can be used with the -r command.
- The registration file for the 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 re-register products other than the Marketing Platform, use configTool with the -r command and -o to overwrite the existing properties.

The configTool utility uses product names as parameters with the commands that register and unregister products. With the 8.5.0 release of IBM EMM, many product names changed. However, the names that are recognized by configTool did not change. The valid product names for use with configTool are listed below, along with the current names of the products.

Table 24. Product names for configTool registration and unregistration

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
Opportunity Detection	Detect
Leads	Leads
Interaction History	InteractionHistory
Attribution Modeler	AttributionModeler
IBM SPSS Modeler Advantage Enterprise Marketing Management Edition	SPSS
Digital Analytics	Coremetrics

-u *productName*

Unregister an application that is specified by *productName*. You do not have to include a path to the product category; the product name is sufficient, and it is required. The process removes all properties and configuration settings for the product.

Options

-o

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

When used with `-d`, you can delete a category (node) that does not have the **Delete Category** link on the Configuration page.

Examples

- Import configuration settings from a file named `Product_config.xml` in the `conf` directory under the 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` 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`, by using a file named `app_config.xml` 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
```

datafilteringScriptTool

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).

```
:call exec
```

```
"%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`.

```
:call exec
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"
```

encryptPasswords

The `encryptPasswords` utility is used to encrypt and store either of two passwords that Marketing Platform uses internally.

The two passwords that the utility can encrypt are 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.

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 Platform was 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
```

partitionTool

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.

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 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 Marketing Platform.

If not defined, the name defaults to `partitionNameAdminUser`.

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"
```

populateDb

The `populateDb` utility inserts default (seed) data in the Marketing Platform system tables.

The IBM EMM installer can populate the Marketing Platform system tables with default data for 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 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 Marketing Platform) and Campaign (for Campaign).

Examples

- Insert Marketing Platform default data manually.

```
populateDb -n Manager
```
- Insert Campaign default data manually.

```
populateDb -n Campaign
```

restoreAccess

The restoreAccess utility allows you to restore access to 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 Marketing Platform might 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 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 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 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 Platform | 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 *loginName*

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 IBM 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

scheduler_console_client

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.
- Open the tools/bin/schedulerconsoleclient file in a text editor and add the following properties. These differ depending on the web application server on which Marketing Platform is deployed.
 - For WebSphere, add these properties to the file.
 - Djavax.net.ssl.keyStoreType=JKS
 - Djavax.net.ssl.keyStore="Path to your key store JKS file"
 - Djavax.net.ssl.keyStorePassword="Your key store password"
 - Djavax.net.ssl.trustStore="Path to your trust store JKS file"
 - Djavax.net.ssl.trustStorePassword="Your trust store password"
 - DisUseIBMSSLSocketFactory=false
 - For WebLogic, add these properties to the file.
 - Djavax.net.ssl.keyStoreType="JKS"
 - Djavax.net.ssl.trustStore="Path to your trust store JKS file"
 - Djavax.net.ssl.trustStorePassword="Your trust store password"

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

Send 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
```

eMessage Response and Contact Tracker (RCT) script

Use this script to run and check the status of the Response and Contact Tracker (RCT).

This script is located in the `bin` directory under your eMessage installation. The eMessage directory is a sub-directory in the Campaign directory.

In UNIX or Linux environments run the script as `rct.sh`.

In Windows, run the script from the command line as `rct.bat`.

Syntax

```
rct [ start | stop | check ]
```

Commands

start

Start the RCT

stop

Stop the RCT

Options

check

Check the status of the connection between the RCT and IBM EMM Hosted Services.

Examples

- To start the RCT on Windows.

```
rct.bat start
```

- To stop the RCT on Windows.

```
rct.bat stop
```

- In a Linux environment, to determine if the RCT is connected to IBM EMM Hosted Services.

```
rct.sh check
```

Depending on the status of your system, the output of this command might look like this:

```
C:\<EMM_HOME>\Campaign\eMessage\bin>rct check
Testing config and connectivity for partition partition1
Succeeded | Partition: partition1 - Hosted Services Account ID: asm_admin
```

eMessage MKService_rct script

The MKService_rct script adds or removes the Response and Contact Tracker (RCT) as a service. Adding the RCT as a service restarts the RCT every time you restart the computer where you have installed the RCT. Removing the RCT as a service prevents the RCT from restarting automatically.

This script is located in the bin directory under your eMessage installation.

In UNIX or Linux environments run MKService_rct.sh. with a user that has root permissions or permissions to create daemon processes.

In Windows, run the script from the command line as MKService_rct.bat.

Syntax

```
MKService_rct -install
```

```
MKService_rct -remove
```

Commands

-install

Add the RCT as a service

-remove

Remove the RCT service

Examples

- To add the RCT as a Windows service.
MKService_rct.bat -install
- To remove the RCT service on UNIX or Linux.
MKService_rct.sh -remove

Chapter 11. Uninstalling Campaign

Run the Campaign uninstaller to uninstall Campaign. When you run the Campaign uninstaller, the files that were created during the installation process are removed. For example, files such as configuration files, installer registry information, and user data are removed from the computer.

When you install 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.

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 are created during installation. Any file that is created or generated after installation is not removed.

Note: On UNIX, the same user account that installed Campaign must run the uninstaller.

Complete the following tasks to uninstall Campaign:

1. If you have deployed the Campaign web application, undeploy the web application from WebSphere or WebLogic.
2. Stop the Campaign listener.
3. Shut down WebSphere or WebLogic.
4. Stop the processes that are related to Campaign.
5. If the `ddl` directory exists in the product installation directory, run the scripts that are provided in the `ddl` directory to drop tables from the system table database.
6. Complete one of the following steps to uninstall Campaign:
 - Double-click the Campaign uninstaller that exists in the `Uninstall_Product` directory. The uninstaller runs in the mode in which you installed Campaign.
 - In a command-line window, navigate to the directory where the uninstaller exists, and run the following command to uninstall Campaign by using the console mode:

```
Uninstall_Product -i console
```

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

```
Uninstall_Product -i silent
```

When you uninstall Campaign by using the silent mode, the uninstallation process does not present any dialogs for user interaction.

Note: If you do not specify an option for uninstalling Campaign, the Campaign uninstaller runs in the mode in which Campaign is installed.

Before you contact 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 these guidelines 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.

Note: Technical Support does not write or create API scripts. For assistance in implementing our API offerings, contact IBM Professional Services.

Information to gather

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

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

System information

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

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

You can access the About page by selecting **Help > About**. If the About page is not accessible, check for a `version.txt` file that is located under the installation directory for your application.

Contact information for IBM technical support

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

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

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