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*IBM Marketing Platform Installation
Guide*

IBM

Note

Before using this information and the product it supports, read the information in "Notices" on page 75.

This edition applies to version 11, release 1, modification 0 of IBM Marketing Platform and to all subsequent releases and modifications until otherwise indicated in new editions.

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Chapter 1. Installation overview

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

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

Installation roadmap

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

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

Table 1. Marketing Platform installation roadmap

Topic	Information
Chapter 1, "Installation overview"	This chapter provides the following information: <ul style="list-style-type: none">• "How the installers work" on page 3• "Modes of installation" on page 3• "Marketing Platform documentation and help" on page 4
Chapter 2, "Planning the Marketing Platform installation," on page 5	This topic provides the following information: <ul style="list-style-type: none">• "Prerequisites" on page 5• "Marketing Platform installation worksheet" on page 7• "Installation order for IBM Marketing Software products" on page 9
Chapter 3, "Creating the Marketing Platform data sources," on page 11	This topic provides the following information: <ul style="list-style-type: none">• "Creating the JDBC connection in the web application server" on page 11• "Configuring the web application server for your JDBC driver" on page 12

Table 1. Marketing Platform installation roadmap (continued)

Topic	Information
Chapter 4, "Installing Marketing Platform," on page 19	<p>This topic provides the following information:</p> <ul style="list-style-type: none"> • "Installing Marketing Platform using the GUI mode" on page 20 • "Installing Marketing Platform using the console mode" on page 25 • "Installing Marketing Platform silently" on page 26 • "Marketing Platform components" on page 28 • "Creating and populating the Marketing Platform system tables manually" on page 28
Chapter 5, "Deploying Marketing Platform," on page 31	<p>This topic provides the following information:</p> <ul style="list-style-type: none"> • "Guidelines for deploying Marketing Platform on WebLogic" on page 31 • "Guidelines for deploying Marketing Platform on WebSphere" on page 32 • "Verifying your Marketing Platform installation" on page 34
Chapter 6, "Configuring Marketing Platform after deployment," on page 37	<p>This topic provides the following information:</p> <ul style="list-style-type: none"> • "Default password settings" on page 37
Chapter 8, "Marketing Platform utilities," on page 49	<p>This topic provides the following information:</p> <ul style="list-style-type: none"> • "Setting up Marketing Platform utilities on additional machines" on page 51 • "alertConfigTool" on page 51 • "configTool" on page 52 • "datafilteringScriptTool" on page 56 • "encryptPasswords" on page 57 • "partitionTool" on page 59 • "populateDb" on page 61 • "restoreAccess" on page 61 • "scheduler_console_client" on page 63
Chapter 9, "Marketing Platform SQL scripts," on page 67	<p>This topic provides the following information:</p> <ul style="list-style-type: none"> • "ManagerSchema_DeleteAll.sql" on page 67 • "ManagerSchema_PurgeDataFiltering.sql" on page 67 • "SQL scripts for creating system tables" on page 68 • "ManagerSchema_DropAll.sql" on page 69.
Chapter 10, "Uninstalling Marketing Platform," on page 71	<p>This topic provides information about how to uninstall Marketing Platform.</p>

How the installers work

You must use the suite installer and the product installer when you install or upgrade any IBM® Marketing Software product. For example, for installing Marketing Platform, you must use the IBM Marketing Software suite installer and the IBM Marketing Platform installer.

Make sure that you use the following guidelines before you use the IBM Marketing Software 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 Marketing Software Products screen in the installation wizard.
- If you are planning to install a patch immediately after you install an IBM Marketing Software 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 Marketing Software installations is /IBM/IMS for UNIX or C:\IBM\IMS for Windows. However, you can change the directory during installation.

Modes of installation

The IBM Marketing Software 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 Marketing Platform.

For upgrades, you use the installer to perform many of the same tasks that you perform during the initial installation.

GUI mode

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

Console mode

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

Note: Silent mode is not supported for upgrade installations in clustered web application or clustered listener environments.

Marketing Platform documentation and help

IBM Marketing Platform 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 workarounds	<i>IBM Marketing Platform Release Notes</i>
Learn about the structure of the Marketing Platform database	<i>IBM Marketing Platform System Tables</i>
Install or upgrade Marketing Platform and deploy the Marketing Platform web application	One of the following guides: <ul style="list-style-type: none"> • <i>IBM Marketing Platform Installation Guide</i> • <i>IBM Marketing Platform Upgrade Guide</i>
Implement the IBM Cognos® reports provided with IBM Marketing Software	<i>IBM Marketing Software Reports Installation and Configuration Guide</i>

Table 3. Configure and use Marketing Platform

Task	Documentation
<ul style="list-style-type: none"> • Adjust configuration and security settings for IBM products • Integrate with external systems such as LDAP and web access control • Implement single sign-on with diverse applications using SAML 2.0-based federated authentication or single sign-on • Run utilities to perform maintenance on IBM products • Configure and use audit event tracking • Schedule runs of IBM Marketing Software objects 	<i>IBM Marketing Platform Administrator's Guide</i>

Table 4. Get help

Task	Instructions
Open online help	<ol style="list-style-type: none"> 1. To open a context-sensitive help topic, choose Help > Help for this page. 2. To view complete online help, choose Help > Product documentation and click the IBM Marketing Platform in Knowledge Center link. <p>You must have web access to view context-sensitive online help. Contact IBM Support for more information about accessing and installing IBM Knowledge Center locally for offline documentation.</p>
Obtain PDFs	<p>Use either of the following methods:</p> <ul style="list-style-type: none"> • Choose Help > Product documentation to access Marketing Platform PDFs and help. • Choose Help > All IBM Marketing Software Documentation to access documentation for all products.
IBM Knowledge Center	To access the IBM Knowledge Center, choose Help > Support for this product .
Get support	Go to http://www.ibm.com/support to access the IBM Support Portal.

Chapter 2. Planning the Marketing Platform installation

When you plan your Marketing Platform 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 Marketing Software product, you must ensure that your computer complies with all of the prerequisite software and hardware.

System requirements

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

Network domain requirements

The IBM Marketing Software 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 Marketing Software applications within a suite must be deployed on a dedicated Java™ virtual machine (JVM). IBM Marketing Software 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 Marketing Software products.

Knowledge requirements

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

Internet browser settings

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

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

Access permissions

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

- Administration access for all necessary databases
- 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 Marketing Software components

- Write permission for all files that you must edit
- Write permission for all directories where you must save a file, such as the installation directory and backup directory if you are upgrading
- Appropriate read, write, and execute permissions to run the installer

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

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

Note: If you are installing version 11.1 with non-root user permissions and you plan to install IBM Campaign using those non-root user credentials, then you must add that user into the Sudo list so that the GSKIT components are installed successfully. Refer to the IBM Campaign Installation Guide for more information.

Points to consider before you install Campaign

For Campaign installation you are required to consider the points underneath before beginning the installation. IBM Campaign 10.0 and subsequent versions install IBM GSKIT with the Campaign installation. IBM GSKIT requires "root" credentials for the installation, based on this requirement, before proceeding with IBM Campaign installation you are required to consider / follow the steps underneath:

Note: If you are installing IBM Campaign or other products in the IBM Marketing Software product suite as "root" / "administrator" users these considerations are not applicable. If you are installing IBM Campaign or other products in the IBM Marketing Software suite then the following points should be considered:

Linux / Unix Installations:

Installing IBM Campaign with non root user:

1. You can add the installation user (operating system user) in sudoers list – As a result, during the IBM Campaign installation you will be prompted for the sudo password. After entering this password IBM GSKIT gets installed.

Note: In this case IBM Campaign cannot be installed in silent mode.

2. You can add the installation user (operating system user) in sudoers list and disable the password prompt. (for example rbhagat is the operating system user for the installation, this user when added in the sudoers list with the sudo password prompt disabled then IBM Campaign installation will get successful along with IBM GSKIT installation successfully.

Note: In this case you can install IBM Campaign in silent mode.

Windows:

In Windows, the IBM Campaign user should be added in the administrators group.

JAVA_HOME environment variable

If a **JAVA_HOME** environment variable is defined on the computer where you install an IBM Marketing Software product, verify that the variable points to a supported

version of JRE. For information about system requirements, see the *IBM Marketing Software Recommended Software Environments and Minimum System Requirements* guide.

If the **JAVA_HOME** environment variable points to an incorrect JRE, you must clear the **JAVA_HOME** variable before you run the IBM Marketing Software 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**.

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

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

Marketing Platform installation worksheet

Use the Marketing Platform installation worksheet to gather information about the Marketing Platform database and about other IBM Marketing Software products that are required for the installation of Marketing Platform.

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

Table 5. Information about the database

Field	Notes®
Database type	
Database name	
Database account user name	
Database account password	
JNDI name	UnicaPlatformDS
ODBC name	

Checklist for Marketing Platform database

The installation wizards for each IBM Marketing Software 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:

- Database type
- 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, `mycompany.com`. All IBM products must be installed in the same company domain, and you must enter the domain name in all lower-case letters.

If there is a mis-match in domain name entries, you may encounter problems when you attempt to use Marketing 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 or 1.8 version of the Sun JRE.
- JDBC driver class. The installer automatically provides this, based on the database type 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 Marketing Software 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 Marketing Software 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 Marketing Software 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 Marketing Software products

When you install or upgrade multiple IBM Marketing Software 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 Marketing Software products.

Table 6. Installation or upgrade order for IBM Marketing Software 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>

Table 6. Installation or upgrade order for IBM Marketing Software products (continued)

For this product or combination:	Install or upgrade in this order:
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
Contact Optimization	<ol style="list-style-type: none"> 1. Marketing Platform 2. Campaign 3. Contact Optimization
Opportunity Detect	<ol style="list-style-type: none"> 1. Marketing Platform 2. Opportunity Detect
Interact Advanced Patterns	<ol style="list-style-type: none"> 1. Marketing Platform 2. Campaign 3. Interact 4. Interact Advanced Patterns
IBM SPSS® Modeler Advantage Enterprise Marketing Management Edition	<ol style="list-style-type: none"> 1. IBM SPSS Modeler Advantage Enterprise Marketing Management Edition

Chapter 3. Creating the Marketing Platform data sources

You must create Marketing Platform data sources before you can install Marketing Platform.

Complete the following steps to prepare the data sources for Marketing Platform:

1. Create a database or a database schema for the Marketing Platform system tables. The following table provides information about vendor-specific guidelines for creating a database or a database schema for the Marketing Platform system tables.

Table 7. Guidelines for creating data sources

Database vendor	Guideline
Oracle	Enable the auto commit feature for the environment open. See the Oracle documentation for instructions.
DB2®	Set the database page size to at least 16k (32k if you need to support Unicode). See the DB2 documentation for instructions.
SQL Server	Use either SQL Server authentication only, or both SQL Server and Windows authentication, because the Marketing Platform requires SQL Server authentication. If necessary, change the database configuration so that your database authentication includes SQL Server. Also be sure that TCP/IP is enabled in your SQL Server.

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

2. Create a system user account. The system user account must have the following rights:
 - CREATE TABLES
 - CREATE VIEWS (for reporting)
 - CREATE SEQUENCE (Oracle only)
 - CREATE INDICES
 - ALTER TABLE
 - INSERT
 - UPDATE
 - DELETE
3. Configure the web application server for your JDBC driver.
4. Create JDBC connections in the web application server.

Creating the JDBC connection in the web application server

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

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

You can allow the installer to create this data source when you install Marketing Platform. To enable automatic data source creation during installation, on the Datasource Creation panel, select the **Create Marketing Platform Datasource** check box and supply information about your application server.

- The installer creates the data source using `UnicaPlatformDS` as the JNDI name.
- Note that, if you are using WebLogic, you must add the JDBC driver to your classpath manually even if you allow the installer to create the data source. The installer does this automatically for WebSphere.
- Also, if you are using Tomcat, you must add the JDBC driver to your classpath manually even if you allow the installer to create the data source.
- Automatic data source creation during installation is not supported for the JBoss Application Server.

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

- In WebSphere, set the classpath for your database driver during this process.
- When the Marketing Platform system tables are created in a different schema from the default schema of the database login user, you must specify that non-default schema name in the JDBC connection used to access the system tables.
- In Tomcat, set the classpath for your database driver during this process.
- In JBOSS, set the classpath for your database driver by adding the module for the JDBC driver and register the SQL JDBC driver.
- You must use `UnicaPlatformDS` as the JNDI name. This name is required, and is noted in the “Marketing Platform installation worksheet” on page 7.

Configuring the web application server for your JDBC driver

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

If you are using WebSphere, and if you allow the installer to create the data source when you install the product, you can skip the step in this procedure about setting the classpath. To enable automatic data source creation during installation, on the Datasource Creation panel, select the **Create Marketing Platform Datasource** check box and supply information about your application server. If you do not want to allow the installer to create the data source, then perform this entire procedure.

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

1. Obtain the latest vendor-provided Type 4 JDBC driver for your system table database that is supported by IBM Marketing Software, as described in the *Recommended Software Environments and Minimum System Requirements* guide. Use the following guidelines after you obtain the JDBC driver.
 - If the driver does not exist on the server where you plan to deploy Marketing Platform, obtain it and unpack it on the server. Unpack the drivers in a path that does not include spaces.
 - If you obtain the driver from a server where the data source client is installed, verify that the version is the latest supported by Marketing Platform.

2. Add the full path to the driver, including the file name, to the class path of the web application server where you plan to deploy Marketing Platform.

Use the following guidelines.

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

UNIX

```
CLASSPATH="/opt/drivers/ojdbc8.jar":
${PRE_CLASSPATH}${CLASSPATHSEP}${WEBLOGIC_CLASSPATH}
${CLASSPATHSEP}${POST_CLASSPATH}${CLASSPATHSEP}${WLP_POST_CLASSPATH}"
export CLASSPATH
```

```
product="Campaign DAOP DistMkt eMessage Interact Leads MktOps
Optimize Platform AttribMod IntHist"> Windows
```

```
set CLASSPATH=c:\oracle\jdbc\lib\ojdbc8.jar;%PRE_CLASSPATH%;
%WEBLOGIC_CLASSPATH%;%POST_CLASSPATH%;%WLP_POST_CLASSPATH%
```

- For all supported versions of WebSphere, set the class path when you set up the JDBC providers for Marketing Platform.
3. Make a note of the database driver class path in the Marketing Platform installation worksheet, as you must enter the path when you run the installer.
 4. Restart the web application server so that your changes take effect.

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

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

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

Use the following guidelines after you obtain the JDBC driver.

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

Use the following guidelines.

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

```
For example for SQL Server:module add
--name=com.microsoft.sqlserver.jdbc
--resources=<JDBC_Driver_Location>\sqljdbc4.jar
--dependencies=javax.api,javax.transaction.api
```

- Register this SQL JDBC Driver using the following guidelines: For example:
 - /subsystem=datasources/jdbc-driver=sql:add(driver-module-name=com.microsoft.sqlserver.jdbc,driver-name=sql,driver-xa-datasource-class-name=com.microsoft.sqlserver.jdbc.SQLServerXADataSource)
 - /subsystem=datasources/jdbc-driver=sql:read-resource

- /subsystem=ee/service=default-bindings:write-attribute(name=datasource, value=undefined)
3. Make a note of the database driver class path in the Marketing Platform installation worksheet, as you must enter the path when you run the installer.
 4. Restart the web application server so that your changes take effect.
During startup, monitor the console log to confirm that the class path contains the path to the database driver.
- If you are using Apache Tomcat, you must perform this entire procedure.
1. Obtain the latest vendor-provided Type 4 JDBC driver for your system table database that is supported by IBM Marketing Software, as described in the *Recommended Software Environments and Minimum System Requirements* guide.
Use the following guidelines after you obtain the JDBC driver.
 - If the driver does not exist on the server where you plan to deploy Marketing Platform, obtain it and unpack it on the server. Unpack the drivers in a path that does not include spaces.
 - If you obtain the driver from a server where the data source client is installed, verify that the version is the latest supported by Marketing Platform.
 2. Add the full path to the driver, including the file name, to the class path of the (<Tomcat_Installed Location>/lib) web application server where you plan to deploy Marketing Platform.
 3. Make a note of the database driver class path in the Marketing Platform installation worksheet, as you must enter the path when you run the installer.
 4. Restart the web application server so that your changes take effect.
During startup, monitor the console log to confirm that the class path contains the path to the database driver.

Information for creating JDBC connections

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

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

WebLogic

Use the following values if your application server is WebLogic:

SQLServer

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

Oracle

- Driver: Other
- Default port: 1521
- Driver class: oracle.jdbc.OracleDriver

- Driver URL:
jdbc:oracle:thin:@<your_db_host>:<your_db_port>:<your_db_service_name>
Enter the driver URL by using the format that is shown. IBM Marketing Software 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: jdbc:sqlserver://<DBhostName>:1433;databaseName=<DBName>

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

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

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

Add the following custom property:

Name: webSphereDefaultIsolationLevel

Value: 1

Datatype: Integer

Oracle

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

DB2

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

Add the following custom property:

Name: `webSphereDefaultIsolationLevel`

Value: 2

Datatype: Integer

JBoss

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

Use the following values if your application server is JBoss:

SQLServer

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

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

Oracle

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

For example

DB2

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

Tomcat

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

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

Use the following values if your application server is Tomcat:

SQLServer

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

Oracle

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

DB2

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

Chapter 4. Installing Marketing Platform

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

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

After installing Marketing Platform, 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 Marketing Platform, make sure that the available temporary space on the computer where you install Marketing Platform is more than three times the size of the Marketing Platform 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:

Note: For Suse Linux operating system use the corresponding product Linux build except for Campaign and Contact Optimization.

Note: : EAR deployments are not supported on Tomcat application server

Table 8. Installation files

Operating system	Installation file
Windows: GUI and console mode	<i>Product_N.N.N.N_win.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_linux.bin</i> , where <i>Product</i> is the name of your product, and <i>N.N.N.N</i> is the version number of your product.
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 Marketing Platform using the GUI mode

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

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

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

Complete the following actions to install Marketing Platform by using the GUI mode:

1. Go to the folder where you have saved the IBM Marketing Software 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 IBM Marketing Software installer.

Table 9. IBM Marketing Software installer GUI

Window	Description
Introduction	<p>This is the first window of the IBM Marketing Software installer. You can open the Marketing Platform 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 Marketing Software 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>
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>

Table 9. IBM Marketing Software installer GUI (continued)

Window	Description
Select Application Server	Select one of the following application servers for the installation: <ul style="list-style-type: none"> • IBM WebSphere • Oracle WebLogic • JBoss • Apache Tomcat Click Next to go to the next window.
Platform Database Type	Select the appropriate Marketing Platform database type. Click Next to go to the next window.
Platform Database Connection	Enter the following information about your database: <ul style="list-style-type: none"> • Database host name • Database port • Database name or System ID (SID) • Database user name • Database password Click Next to go to the next window.
Platform Database Connection (continued)	Review and confirm the JDBC connection. Click Next to go to the next window. The URL can be customized with additional parameters if needed.
Preinstallation Summary	Review and confirm the values that you added during the installation process. Click Install to start the installation process. The Marketing Platform installer opens.

4. Use the information in the following table to navigate the Marketing Platform installer.

Table 10. IBM Marketing Platform installer GUI

Window	Description
Introduction	This is the first window of the Marketing Platform installer. You can open the Marketing Platform installation and upgrade guides from this window. Click Next to go to the next window.
Software Licence Agreement	Carefully read the agreement. Use Print to print the agreement. Click Next after you accept the agreement.
Country for Install	If you are installing Marketing Platform in one of the countries that are listed in this window, click Yes . If you are installing Marketing Platform in one of the countries that are not listed in this window, click No . Click Next to go to the next window.
IBM Page Tagging	You can see this window if you selected Yes in the Country for Install window. Select your preferences for page tagging and click Next .
IBM Site ID	You can see this window if you have selected No in the Country for Install window. Enter your IBM site ID and click Next .

Table 10. IBM Marketing Platform installer GUI (continued)

Window	Description
Installation Directory	<p>Click Choose to browse to the directory where you want to install your product, or accept the default value.</p> <p>Click Next to go to the next window.</p>
Platform Components	<p>In the Install Set list, select Custom to select the components that you want to install.</p> <p>In the Install Set area, you can see all the Marketing Platform components.</p> <p>You can select the following components:</p> <ul style="list-style-type: none"> • IBM Marketing Platform utilities • IBM Marketing Platform web application • Reports for IBM Cognos 11 BI <p>If you are using Cognos reports, you must select this option for a new or upgrade installation. This option installs authentication-related files and the latest GlobalStyleSheet.css file for Cognos reports.</p> <p>Install Reports for IBM Cognos 11 BI in the same location where IBM Cognos 11 BI is installed.</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>
Platform Connection Settings	<p>Select one of the following connections types:</p> <ul style="list-style-type: none"> • HTTP • HTTPS <p>Enter the following information:</p> <ul style="list-style-type: none"> • Network domain name, such as example.com • Host name • Port number <p>Important: If IBM Marketing Software 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>
Platform Database Setup	<p>Select one of the following options for setting up the Marketing Platform database:</p> <ul style="list-style-type: none"> • Automatic database setup • Manual database setup <p>If you select Manual database setup, use the Run Platform Configuration check box if you want to run the Marketing Platform configuration.</p> <p>If you select Manual database setup, you must populate the Marketing Platform system tables after the installation is complete.</p> <p>Click Next to go to the next window.</p>

Table 10. IBM Marketing Platform installer GUI (continued)

Window	Description
Platform Utilities Settings	<p>Enter the following information if you plan to use the Marketing Platform command-line tools:</p> <ul style="list-style-type: none"> • JDBC driver class • JDBC connection URL • JDBC driver classpath <p>Click Next to go to the next window.</p>
Platform Utilities Settings (continued)	<p>Click Choose to specify the directory where Java is installed.</p> <p>Click Next to go to the next window.</p>
Datasource creation	<p>The installer can create the JDBC data source in your web application server (WebSphere, WebLogic, JBoss or Tomcat). This data source is required to enable the Marketing Platform web application to connect to the Marketing Platform system tables. You have the option to skip this step in the installer and create the data source in the administration console of your web application server after installation is complete.</p> <p>If you select the Create Marketing Platform Datasource check box, the installer creates the data source using information you provide..</p> <ul style="list-style-type: none"> • Your application server must be running. • Enter any name for the datasource. The installer creates the JNDI name automatically (UnicaPlatformDS). • Enter the directory in which the application server is installed. For WebSphere, this is the directory that contains the profiles directory. You must restart WebSphere after the installer finishes and before you use this data source. For WebLogic, this is the directory that contains the common directory. <p>Click Next to go to the next window.</p>
Application server information (WebSphere)	<p>Applies only if your application server is WebSphere.</p> <ul style="list-style-type: none"> • Enter the application server profile where you plan to deploy Marketing Platform. • Enter the name of the server in the profile. • If security is enabled in WebSphere, enter the administrator user ID and password. <p>Click Next to go to the next window.</p>
Application server information (WebLogic)	<p>Applies only if your application server is WebLogic.</p> <p>Enter the domain server name and the administrator user ID and password. If SSL is enabled, enter the HTTP port for the domain.</p> <p>Note that you must add the database driver classpath to WebLogic in the WebLogic administration console.</p> <p>Click Next to go to the next window.</p>
Application server information (Tomcat)	<p>Applies only if your application server is Tomcat</p> <p>Enter the Tomcat installation and Tomcat instance path.</p> <p>Click Next to go 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>

Table 10. IBM Marketing Platform installer GUI (continued)

Window	Description
IBM Cognos 11 BI Location	<p>You can see this window if you selected to install the Cognos reports in the Platform Components window.</p> <p>Click Choose to specify the directory where IBM Cognos 11 BI is installed.</p> <p>Click Next to go to the next window.</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 Marketing Platform installer opens.</p>
Installation Complete	<p>Click Done to close the Marketing Platform installer and go back to the suite installer.</p>

- Follow the instructions on the IBM Marketing Software installer to finish installing Marketing Platform. Use the information in the following table to take the appropriate actions on each window in the IBM Marketing Software installer.

Table 11. IBM Marketing Software installer GUI

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

Creating an EAR file after running the installer

You can create an EAR file after you install IBM Marketing Software products. You might do this to create an EAR file with a desired combination of products.

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 Marketing Software 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_<product initials><product version number>.properties` files and the file for the IBM installer itself, which is named `installer.properties`.
For example, the properties files for Marketing Platform `installer_ump11.1.0.0.properties` and the properties file for Optimize `installer_uo11.1.0.0.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.
Please note EAR is not supported for Tomcat application server.

Installing Marketing Platform using the console mode

The console mode allows you to install Marketing Platform 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 Marketing Platform, ensure that you have configured the following.

- An application server profile
- A database schema

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

1. Open a command-line prompt window and navigate to the directory where you have saved the IBM Marketing Software installer and the Marketing Platform installer.
2. Complete one of the following actions to run the IBM Marketing Software installer.

- For Windows, enter the following command:
ibm_ims_installer_full_name -i console
For example, **IBM_Marketing_Software_Installer_11.1.0.0_win.exe -i console**
 - For UNIX, invoke the *ibm_ims_installer_full_name.sh* file.
For example: **IBM_Marketing_Software_Installer_11.1.0.0.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 that the following list displays the components that you can install:

- 1 [X] Marketing Platform
- 2 [X] Campaign
- 3 [] Contact Optimization
- 4 [] Distributed Marketing

If you want to install Distributed Marketing, 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] Distributed Marketing

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

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

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

Installing Marketing Platform silently

Use the unattended or silent mode to install Marketing Platform multiple times.

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

- An application server profile
- A database schema

When you install Marketing Platform 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.”
- 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 Marketing Software 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 Marketing Software 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_ims_installer_full_name -i silent`

For example:

`IBM_Marketing_Software_Installer_11.1.0.0_win.exe -i silent`

Use the following command for Linux:

- `ibm_ims_installer_full_name_operating_system .bin -i silent`

For example:

`IBM_Marketing_Software_Installer_11.1.0.0_linux.bin -i silent`

Sample response files

You must create response files to set up a silent installation of Marketing Platform. 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 12. Description of sample response files

Sample response file	Description
installer.properties	The sample response file for the IBM Marketing Software master installer.

Table 12. Description of sample response files (continued)

Sample response file	Description
installer_product initials and product version number.properties	The sample response file for the Marketing Platform installer. For example, installer_umpn.n.n.n.properties is the response file of the Marketing Platform 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_urpcn.n.n.n.properties is the response file of the Campaign reports pack installer, where n.n.n.n is the version number

Marketing Platform components

The Marketing Platform application contains the IBM common navigation, reporting, user administration, security, scheduling, and configuration management features. For each IBM Marketing Software environment, you must install and deploy the Marketing Platform once.

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

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

Table 13. Marketing Platform components

Component	Description
Marketing Platform utilities	Command line tools that allow you to work with the Marketing Platform system table database from the command line to import and export configurations, create partitions and data filters, and restore the platform_admin user. Install this on every machine where you want to be able to use Marketing Platform utilities.
Marketing Platform web application	The web application that supplies the common user interface, security, and configuration management for IBM Marketing Software. Install this on the machine where you plan to deploy the Marketing Platform.
Reports for IBM Cognos BI	Reports integration components for IBM Cognos. Install this component only on the Cognos system.

Creating and populating the Marketing Platform system tables manually

When you install Marketing Platform, you can select the option where the installer creates the Marketing Platform system tables automatically. Alternatively, you can manually create the system tables.

Complete the following tasks to create and populate the system tables manually:

1. Run the IBM installer as described in “Installing Marketing Platform using the GUI mode” on page 20, but with the following differences in your choices when it launches the Marketing Platform installer.
 - Select **Manual database setup**.
 - Deselect the **Run Platform configuration** checkbox.
2. After the installer finishes, create the system tables manually by running the following SQL scripts appropriate for your database type against your Marketing Platform system table database, as described in “SQL scripts for creating system tables” on page 68.

Run the scripts in this order.

 - `ManagerSchema_DBType.sql`

If you plan to support multi-byte characters (for example, Chinese, Japanese, or Korean) and your database is DB2, use the `ManagerSchema_DB2_unicode.sql` script.
 - `ManagerSchema__DBType_CeateFKConstraints.sql`
 - `active_portlets.sql`
 - `quartz__DBType.sql`
3. Run the `populateDB` utility to populate the system tables with default users and roles.

Use this command:

```
populateDb -n Manager
```

See “`populateDb`” on page 61 for complete details on using this utility.
4. Run the IBM installer again, making the following selections when it launches the Marketing Platform installer.
 - Select **Manual database setup**.
 - Select the **Run Platform configuration** checkbox.

This adds default configuration properties to the system tables.

Chapter 5. Deploying Marketing Platform

You must follow a set of guidelines when you deploy Marketing Platform in your web application server. There is a different set of guidelines for deploying Marketing Platform on WebLogic and on WebSphere.

When you ran the IBM installer, you completed one of the following actions:

- You included Marketing Platform in an EAR file.
- You created the WAR file of Marketing Platform (`unica.war`).

If you included other products in an EAR file, you must follow the deployment guidelines that are provided in the individual installation guides for the products that are included in the EAR file.

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

Guidelines for deploying Marketing Platform on WebLogic

You must follow a set of guidelines when you deploy Marketing Platform on the WebLogic application.

Use the following guidelines when you deploy the Marketing Platform products on any supported version of WebLogic:

- IBM Marketing Software products customize the Java virtual machine (JVM) that is used by WebLogic. If you encounter errors related to JVM, you can create a WebLogic instance that is dedicated to IBM Marketing Software products.
- Open the `startWebLogic.cmd` file and verify that the SDK that is selected for the WebLogic domain that you are using is the Sun SDK for the **JAVA_VENDOR** variable.

The **JAVA_VENDOR** variable must be set to Sun (**JAVA_VENDOR=Sun**). If the **JAVA_VENDOR** variable is set to **JAVA_VENDOR**, it means that JRockit is selected. You must change the selected SDK, because JRockit is not supported. Refer to the BEA WebLogic documentation to change the selected SDK.

- Deploy Marketing Platform as a web application.
- If you are configuring WebLogic to use the IIS plug-in, review the BEA WebLogic documentation.
- Complete the following tasks if your installation must support non-ASCII characters, for example for Portuguese or for locales that require multi-byte characters:
 1. Edit the `setDomainEnv` script in the `bin` directory under your WebLogic domain directory to add `-Dfile.encoding=UTF-8` to **JAVA_VENDOR**.
 2. In the WebLogic console, click the **Domain** link on the home page.
 3. In the **Web Applications** tab, select the **Archived Real Path Enabled** check box.
 4. Restart WebLogic.
 5. Deploy and start the EAR file or the `unica.war` file.
- 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

Guidelines for deploying Marketing Platform on WebSphere

You must follow a set of guidelines when you deploy Marketing Platform on Websphere.

Make sure that the version of WebSphere meets the requirements that are described in the *IBM Enterprise Products Recommended Software Environments and Minimum System Requirements* document, including any necessary fix packs. Use the following guidelines when you deploy Marketing Platform on WebSphere:

- Specify the following custom property in the server:
 - Name: com.ibm.ws.webcontainer.invokefilterscompatibility
 - Value: true
- See <http://www-01.ibm.com/support/docview.wss?uid=swg21284395> for instructions on setting a custom property in WebSphere.
- Deploy the IBM EAR file or unica.war file as an enterprise application. When you deploy the EAR file or the unica.war file, ensure that the JDK source level of the JSP compiler is set to Java 17 for SDK 1.7 and 18 for SDK 1.8, and that JSP pages are precompiled according to the following information:
 - In the form where you browse to and select the WAR file, select **Show me all installation options and parameters** so the **Select Installation Options** wizard runs.
 - In step 1 of the **Select Installation Options** wizard, select **Precompile JavaServer Pages files**.
 - In step 3 of the **Select Installation Options** wizard, ensure that the **JDK Source Level** is set to 17 for SDK 1.7 and set to 18 for SDK 1.8.
If you deployed an EAR, set the JDK Source Level for each WAR file.
 - In step 8 of the **Select Installation Options** wizard, select **UnicaPlatformDS** as the matching Target Resource.
 - In step 10 of the **Select Installation Options** wizard, the context root must be set to /unica, all lower case.
- In the **Web Container Settings > Web Container > Session Management** section of the server, enable cookies. Specify a different session cookie name for each application that is deployed. Use one of the following procedures to specify a cookie name:
 - Select the **Override session management** check box under **Session Management**.
If you deployed separate WAR files for your IBM Marketing Software products, in the WebSphere console, in the **Applications > Enterprise Applications > [deployed_application] > Session Management > Enable Cookies > Cookie Name** section of the server, specify a unique session cookie name.
If you deployed EAR files for your IBM Marketing Software products, in the WebSphere console, in the **Applications > Enterprise Applications > [deployed_application] > Module Management > [deployed_module] > Session Management > Enable Cookies > Cookie Name** section of the server, specify a unique session cookie name.
 - If your installation must support non-ASCII characters, for example for Portuguese or for locales that require multi-byte characters, add the following arguments to **Generic JVM Arguments** at the server level:
-Dfile.encoding=UTF-8

-Dclient.encoding.override=UTF-8

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

- In the **Applications > Enterprise Applications** section of the server, select the EAR file or WAR file that you deployed, then select **Class loading and update detection** and specify the following properties.
 - If you are deploying a WAR file:
 - For **Class loader order**, select **Classes loaded with local class loader first (parent last)**.
 - For **WAR class loader policy**, select **Single class loader for application**.
 - If you are deploying an EAR file:
 - For **Class loader order**, select **Classes loaded with local class loader first (parent last)**.
 - For **WAR class loader policy**, select **Class loader for each WAR file in application**.
- Start your deployment. If your instance of WebSphere is configured to use a JVM version 1.7 or newer, complete the following steps to work around an issue with the time zone database.
 1. Stop WebSphere.
 2. Download the IBM Time Zone Update Utility for Java (JTZU) from the IBM web site:
<http://www.ibm.com/developerworks/java/jdk/dst/index.html>
 3. Follow the steps provided by the IBM (JTZU) to update the time zone data in your JVM.
 4. Restart WebSphere.
- In Websphere Enterprise Applications, select **Your Application > Manage Modules > Your Application > Class Loader Order > Classes loaded with local class loader first (parent last)**.
- The recommended minimum heap size for the basic functioning of the application is 512, and the recommended maximum heap size is 1024. Complete the following tasks to specify the heap size:
 1. In WebSphere Enterprise Applications, select **Servers > WebSphere application servers > server1 > Server Infrastructure > Java and Process Management > Process definition > Java Virtual Machine**.
 2. Set the initial heap size to 512.
 3. Set the maximum heap size to 1024See the WebSphere documentation for more information about sizing.

Guidelines for deploying Marketing Platform on JBoss

You must follow a set of guidelines when you deploy Marketing Platform on JBoss.

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

Use the following guidelines when you deploy the Marketing Platform products on any supported version of JBoss:

1. Deploy the IBM EAR file or the unica.war file as an enterprise application.
For example: `deploy <Platform_Install>\unica.war`
See <https://docs.jboss.org/jbossweb/3.0.x/deployer-howto.html> for instructions on Deploying Web Server Application in JBoss.
2. Complete the following tasks if your installation must support non-ASCII characters, for example for Portuguese or for locales that require multi-byte characters:
 - a. Edit the standalone.conf script in the bin directory under your JBOSS /bin directory to add `-Dfile.encoding=UTF-8 -Dclient.encoding.override=UTF-8` to `JAVA_VENDOR`.
 - b. Restart JBoss server.

Guidelines for deploying Marketing Platform on Apache Tomcat

You must follow a set of guidelines when you deploy Marketing Platform on Apache Tomcat.

Make sure that the version of Apache Tomcat meets the requirements that are described in the *IBM Enterprise Products Recommended Software Environments and Minimum System Requirements* document. Use the following guidelines when you deploy Marketing Platform on Apache Tomcat:

1. Deploy the IBM unica.war file as an enterprise application on Tomcat Apache server.

Note: Deployment of IBM EAR file is not supported in Tomcat.

2. Complete the following tasks if your installation must support non-ASCII characters, for example for Portuguese or for locales that require multi-byte characters:
 - a. Edit the setenv.sh file for the respective product instances script in the bin directory under your tomcat instances directory to add `-Dfile.encoding=UTF-8 -Dclient.encoding.override=UTF-8` to `JAVA_VENDOR`.
 - b. Restart Tomcat.
3. If deploying in a production environment, you can add JVM heap setting for that tomcat instance in `app-one/bin/setenv.sh` file respectively for all the instances.

Verifying your Marketing Platform installation

After you install and deploy Marketing Platform, you must verify that there are no errors in your Marketing Platform installation and deployment. You can configure your Marketing Platform installation after the verification.

Complete the following tasks to verify your Marketing Platform installation:

1. Access the IBM Marketing Software URL in a supported web browser.
If you entered a domain when you installed Marketing Platform, the URL is the following, where *host* is the machine where Marketing Platform is installed, *domain.com* is the domain in which the host machine resides, and *port* is the port number on which the web application server listens.
`http://host.domain.com:port/unica`

2. Log in using the default administrator login, which is `asm_admin` with password as the password.
You will be asked to change the password. You can enter the existing password, but for good security you should choose a new one.
The default home page is the dashboard, which you will configure later.
3. Under the **Settings** menu, check the Users, User Groups, and User Permissions pages to verify that the pre-configured users, groups, roles, and permissions are present, as described in the *Marketing Platform Administrator's Guide*.
4. Add a new user and group and verify that data is entered into the Marketing Platform system table database.
5. Under the **Settings** menu, check the Configuration page to verify that the Marketing Platform configuration properties exist.

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

Chapter 6. Configuring Marketing Platform after deployment

For a basic installation of Marketing Platform, you must configure Marketing Platform after deployment if you use the IBM Marketing Software reporting feature, or if you want to use a password policy.

If you use the IBM Marketing Software reporting feature, see the *IBM Marketing Software Reports Installation and Configuration Guide*. If you want to use a password policy in mind, see “Default password settings” to determine whether you must change the default password settings.

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

Default password settings

IBM Marketing Software provides default settings for using passwords. However, you can use the **General > Password settings** category on the IBM Marketing Software Configuration page to change the default settings, and create your password policies.

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

The following settings are the default password settings that IBM Marketing Software:

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

See the online help for descriptions of the default settings.

Set the web application session timeout (optional)

The session timeout determines how long an inactive HTTP session can remain open before it expires.

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.

Additional configuration for enhanced security

The procedures in this section describe some additional configurations in the web application server. They are optional, but you might want to perform them for enhanced security.

Disabling the X-Powered-By flag

If your organization is concerned that the X-Powered-By flag in the header variable is a security risk, you can disable it using this procedure.

1. If you are using WebLogic, in the administration console, under *domainName* > **Configuration** > **Web Application**, set **X-Powered-By Header** to **X-Powered-By Header will not be sent**.
2. If you are using WebSphere, perform the following steps.
 - a. In the WebSphere administration console, navigate to **Servers** > **Server Types** > **WebSphere application servers** > *server_name* > **Web Container Settings** > **Web container**.
 - b. Under **Additional Properties** select **Custom Properties**.
 - c. On the Custom Properties page, click **New**.
 - d. On the Settings page, create a custom property named `com.ibm.ws.webcontainer.disableXPoweredBy` and set the value to `false`.
 - e. Click **Apply** or **OK**.
 - f. Click **Save** on the console task bar to save your configuration changes.
 - g. Restart the server.

Configuring a restrictive cookie path

In your web application server, you can restrict cookie access to a specific application for enhanced security. If not restricted, cookies are valid across all the deployed applications.

1. If you are using WebLogic, perform the following steps.
 - a. Extract the weblogic.xml file from the WAR or EAR package where you want to add the restrictive cookie path.
 - b. Add the following to the weblogic.xml file, where *context-path* is the context path for the deployed application. For IBM Marketing Software applications the context path is typically `/unica`.


```
<session-descriptor>
  <session-param>
    <param-name>CookiePath</param-name>
    <param-value>/context-path</param-value>
  </session-param>
</session-descriptor>
```
 - c. Rebuild the WAR or EAR file.
2. If you are using WebSphere, perform the following steps.
 - a. In the WebSphere administration console, navigate to the **Session Manager** > **Cookie** tab.

- b. Set the **Cookie Path** to the context path of your application.
For IBM Marketing Software applications the context path is typically /unica.

Disabling caching of Campaign and Marketing Platform configuration property values

If you encounter an issue where configuration properties are not being picked up by Campaign or Marketing Platform, you can disable caching as described in this procedure.

Set generic JVM arguments in the web application server where Marketing Platform is deployed, as described in the following steps.

1. Set the following JVM argument, which disables the Hibernate L2 cache.
`-DUNICA_PLATFORM_CACHE_ENABLED=false`
By default, this value is set to true, which provides the best performance.
2. Set the following JVM argument, which enables local caching. This improves performance when the Hibernate cache is disabled.
`-DUNICA_PLATFORM_LOCAL_CACHE_ENABLED=true`
When this local caching mechanism is enabled, configurations are updated at 60 minute intervals. If you want configuration changes to be picked up immediately, you must restart the application server.

Enabling single-user logging

You can enable single-user logging by configuring logging to use the XML file and then editing the XML file.

Logging is configured using one of two files: `log4j.properties` or `log4j.xml`. By default, the `log4j.properties` file is used.

You can enable per-user logging by configuring logging to use the XML file and then editing the XML file. If Marketing Platform is configured in a cluster deployment, copy the XML file to each node.

Note: With XML logging enabled, a thread is created that periodically checks if the XML configuration file has been created or modified. If a change or file creation is detected, then the XML file is read to configure log4j. The polling interval is 60 seconds.

1. Configure logging to use `log4j.xml` by setting the following JVM parameter.
`-DENABLE_PLATFORM_LOG4J_XML_LOGGING=true`
The value must be set to true to enable per-user logging.
If Marketing Platform is configured in a cluster deployment, set this JVM parameter in each node of the cluster.
2. To specify the user account to be logged in per-user logging, edit the `log4j.xml` file and add the users in the filter tag. The logs for the users that are added in the filter tag are saved in the file that is mentioned. You can also create an appender without the filter tag.
 - You can add multiple tags in the `log4j.xml` file to create separate log files for specific users. You must add a new appender for each new user specific log file.

- By default, the log file is created in the Platform_Home /Platform/logs folder and is named as platform.log. You can specify a different valid path and file name. You must specify the absolute or complete path to generate the log files in the respective folders.
 - If both user specific logs and logs for all users are required, add an appender tag with a new name and without the filter tag defined. The appender must have a unique name.
 - Add a corresponding entry under the root tag for this new appender.
3. If Marketing Platform is configured in a cluster deployment, copy the edited XML file to each node of the cluster.

You can use a command like the one shown in the following example.

```
-DPLATFORM_LOG4J_XML_FILE=log4j_node1.xml
```

The log4j_node1.xml file is a copy of the log4j.xml file. You can use any name for the copied file.

Consider the following example where the logs are collected for the user asm_admin and also for all other users.

```
<appender name="Console" class="org.apache.log4j.ConsoleAppender">
  <param name="ImmediateFlush" value="true"/>
  <layout class="org.apache.log4j.PatternLayout">
    <param name="ConversionPattern" value="%-5p %c - %m%n"/>
  </layout>
  <filter class="com.unica.manager.logger.UserMatchFilter">
    <param name="StringToMatch" value="asm_admin" />
  </filter>
</appender>

<!-- The following section is for user specific logs for the user asm_admin -->
<appender name="System" class="org.apache.log4j.RollingFileAppender">
  <param name="File" value="{UNICA_PLATFORM_LOG_FILE}"/>
  <!-- <param name="Encoding" value="utf-8"/>
  <param name="Append" value="true"/>
  <param name="ImmediateFlush" value="false"/>
  -->
  <param name="MaxBackupIndex" value="1"/>
  <param name="MaxFileSize" value="10MB"/>
  <layout class="org.apache.log4j.PatternLayout">
    <param name="ConversionPattern" value="%d{DATE} - %-5p - %m%n"/>
  </layout>
  <filter class="com.unica.manager.logger.UserMatchFilter">
    <param name="StringToMatch" value="asm_admin" />
  </filter>
</appender>

<!-- The following section is for logs for all the users -->
<appender name="SystemAllUsers" class="org.apache.log4j.RollingFileAppender">
  <param name="File" value="<LOG_FILE_PATH>"/><!--the absolute path for the log file-->
  <!-- <param name="Encoding" value="utf-8"/>
  <param name="Append" value="true"/>
  <param name="ImmediateFlush" value="false"/>
  -->
  <param name="MaxBackupIndex" value="1"/>
  <param name="MaxFileSize" value="10MB"/>
  <layout class="org.apache.log4j.PatternLayout">
    <param name="ConversionPattern" value="%d{DATE} - %-5p - %m%n"/>
  </layout>
</appender>

<!-- <logger name="com.unica.manager.configuration.ConfigurationManager">
  <level value="TRACE"/>
</logger>
<logger name="com.unica.suite.scheduler.server.manager.TaskManager">
```

```

    <level value="DEBUG"/>
  </logger>
  <logger name="org.hibernate.util.JDBCExceptionReporter">
    <level value="ERROR"/>
  </logger>
-->
<root>
  <level value="WARN"/>
  <appender-ref ref="System"/>
  <appender-ref ref="Console"/>
  <appender-ref ref="SystemAllUsers"/>
</root>

```

Collecting installations logs

When you install any Marketing Software product, the installation logs for that particular installation are bundled and exported. Use the Installer utility to collect the logs for any of the Marketing Software product that are installed.

Note: When you install any Marketing Software product, the installation logs are bundled and exported to the `Installer_logs` folder in the installation directory.

The installer utility

To collect the installation logs for any of the installed Marketing Software products, complete the following steps:

1. Update the `Logs_properties.xml` file with the installation directory of the products for which you want to collect installation logs.
2. Run the installer from the command line with the following command line argument: `-DUNICA_EXPORT_LOGS=1 -DUSER_INSTALL_DIR=<<Suite Installation Dir>>`
3. In the Zip Installation logs pane, select **Yes** to zip the installation logs.
4. Select the products for which the log files are to be exported.

The installation logs are bundled and saved in the `Installer_Logs` folder in the User Installation directory. [`Logs<<timestamp>>` , `Logs<<timestamp>>.zip`]

Chapter 7. Installing Marketing Platform in a cluster

Marketing Platform supports an IBM WebSphere Application Server cluster deployment. Clustering is not supported on WebLogic.

Process overview

The following steps are an overview of the process for setting up a Marketing Platform cluster deployment.

1. Set up WebSphere clusters on two or more servers.
2. Create a profile for the primary node in WebSphere.
3. Create WebSphere cluster nodes.
4. Create a WebSphere cluster
5. Add existing nodes to the cluster (optional)
6. Start the nodes, web server, and cluster
7. Create JDBC providers
8. Install and deploy IBM Marketing Software products
9. Configure the IBM HTTP Server as a load balancer
10. Configure Marketing Platform logs.

Prerequisites

The following are prerequisites that must be met before you perform the procedures described in this section.

- The IBM HTTP Server and the IBM HTTP Server plugins must be installed on the server machine on which you plan to create the WebSphere Deployment Manager profile is being created. The IBM HTTP Server is included with WebSphere at no charge.
- The IBM HTTP Server is up and running.

Creating a WebSphere profile for the primary node of a cluster

Follow these guidelines to create a WebSphere profile for the primary node of a Marketing Platform cluster.

Perform the following steps in the WebSphere profile creation wizard.

See the following video for a demonstration: https://www.youtube.com/watch?v=RREp9n2Yy_o

1. Select **Cell (Deployment manager and a federated application server)** as the type.
2. On the Web Server Definition Part 1 screen, do the following.
 - a. Select **Create a Web Server definition**.
 - b. Select **IBM HTTP Server** as the web server type.
 - c. Enter the web server name.
In a later step you create a web server in the cluster using this name. Examples in this guide use `IMPWebServer` as the web server name.
 - d. Enter the web server host and port.

3. On the Web Server Definition Part 2 screen, do the following.
 - a. Web server installation directory path
 - b. Web server plug-in installation directory path

Creating profiles for additional nodes

Follow these guidelines to create additional nodes for a Marketing Platform cluster.

Create WebSphere nodes on multiple servers. You can create the node profiles using the Profile Management tool or the `manageprofile` command.

Adding existing nodes to the cluster nodes

Optionally, you can add your existing WebSphere profiles as nodes in the cluster environment.

Follow these guidelines to add existing nodes to the cluster.

1. Start the Websphere Deployment Manager as follows.
 - a. Log in to the server where the WebSphere Deployment Manager is installed.
 - b. Navigate to the Deployment Manager profile location
Example location: `/data/webservers/IBM/WASND85/profiles/Dmgr01/bin`
 - c. Execute the `startmanager` script.
2. Add the WebSphere profile node to the cluster as follows.
 - a. Log in to server where the WebSphere profile is created.
 - b. Navigate to the WebSphere profile location.
Example location: `/data/webservers/IBM/WASND85/profiles/AppSrv01/bin`
 - c. Execute command: `./addNode.sh DEPLOYMENT_MANAGER_HOST DEPLOYMENT_MANAGER_SOAP_PORT`
For example: `./addNode.sh example.com 8879`
You can obtain the SOAP Port can be from the Deployment Manager – `AboutThisProfile.txt`.

Creating a WebSphere cluster

Use the WebSphere Deployment Manager profile to create the cluster.

For information, see the following video: <https://www.youtube.com/watch?v=wK06h2kVq5w>

Creating the web server in the cluster

The IBM HTTP Server can be configured to connect with the nodes in the cluster and serve as a load balancer.

Use the WebSphere Deployment Manager profile to create the web server in the cluster.

For information, see the following video: <https://www.youtube.com/watch?v=rfOFBRX7Kjc>

Give your web server the name you used in the step "Creating a WebSphere profile for the primary node of a cluster." Examples in this guide use IMPWebServer as the web server name.

Starting the nodes, web server, and cluster

Start the nodes, IBM HTTP Server, and cluster, in that order.

Before you start the WebSphere cluster from WebSphere console, start all of the nodes you created in previous steps, and start the IBM HTTP Server. The IBM HTTP Server is included with WebSphere at no charge.

1. Start the nodes on each server by navigating to the appropriate profile under `data/webservers/IBM/WASND85/profiles` under your WebSphere installation and executing the `startNode` script.
2. Start the IBM HTTP Server as follows.
 - a. Open the IBM HTTP Server conf file and verify that the IBM HTTP Server listen port is 80.
The conf file is located in the `conf` directory under your IBM HTTP Server installation. The typical install location is `data/webservers/IBM/IHS`.
Look for `Listen 80` in the file.
 - b. To start the server, navigate to the `data/webservers/IBM/IHS/bin` directory under your IBM HTTP Server installation and execute this command:
`./apachectl start`.
 - a. Verify that the IBM HTTP Server is started successfully by launching the URL of the server.
3. Start the cluster from WebSphere Deployment Manager as follows.
 - a. Navigate to **Servers > Clusters > WebSphere application server cluster**.
 - b. Select your cluster and click **Start**.
If the cluster does not start, do the following. :
 - Verify that your cluster nodes are running on each server.
 - Verify that the application servers are started. You can navigate to cluster members and start each application server manually.

Creating JDBC providers in a cluster

Creating JDBC providers is slightly different in a clustered environment than in a non-clustered environment.

See the following video for information: <https://www.youtube.com/watch?v=fGYgwNvSC7c>

Installing IBM Marketing Software products in a cluster

Follow the installation guide for your IBM Marketing Software product to install and deploy the product, with the additional configuration described in this procedure.

- Install your product on the primary node, following the instructions in the product Installation Guide.
- During the installation, provide the port of the cluster manager machine as the HTTP port for the application.

If you do not provide this port, you must change the value of the product's navigation URL configuration property on the **Settings > Configuration** page.

- Share or mount the product installation directory from the primary machine to all of the node machines. For AIX/Linux you can mount the installation drive.
- Deploy the product web application on the WebSphere cluster.

Configuring the IBM HTTP Server as a load balancer

Follow these steps to configure the IBM HTTP Server as a load balancer with Marketing Platform.

1. In the WebSphere administrative console, navigate to **Servers > Server Types > Web Servers**.
2. Select the server name and click **Generate Plug-in**. Then select the server name and click **Propagate Plug-in**.

Verify that the `plugin-cfg.xml` file is generated. Note the path of this file.

Open the file and verify that it contains the correct URIGroups and cluster server information. If the information is not correct, modify the file and then repeat the steps in this procedure.

3. Open the IBM HTTP Server conf file and add the following two lines to the bottom of the file.

The conf file is located in the `conf` directory under your IBM HTTP Server installation. The typical install location is `data/webservers/IBM/IHS`.

```
LoadModule was_ap22_module
    IBM_HTTP_SERVER_HOME/Plugins/bin/64bits/mod_was_ap22_http.so
WebSpherePluginConfig
    IBM_HTTP_SERVER_HOME/config/vmw009113022209/plugin-cfg.xml
```

4. Restart the cluster.

Configure property to control the Scheduler in a clustered environment

In a clustered environment, the various instances of the IBM EMM Scheduler provided by Marketing Platform all run scheduling tasks, which can result in conflicts. To prevent the conflict, disable the Scheduler on all nodes except one.

In the WebSphere administration console, set the `DISABLE_SCHEDULER_CLIENT_ON_CURRENT_NODE JVM` parameter with the `-D` option in all the nodes except one. This disables the Scheduler on the application server clustered node.

For example: `-DDISABLE_SCHEDULER_CLIENT_ON_CURRENT_NODE=true`.

When you configure this JVM parameter on all nodes except one, then all the scheduled jobs are run on the application server cluster node where this parameter is not set.

Important: If the node where the Scheduler is enabled goes down, no scheduled tasks run.

Configuring Marketing Platform logs in a cluster

You can generate logs for each node where you deploy Marketing Platform. You can specify different logging levels for each node in your cluster.

You have two options for generating Marketing Platform logs for each node in the cluster:

- Sharing the location where Marketing Platform is installed
- Setting Marketing Platform home in a Java parameter.

Both methods are described in this section.

Sharing the location where Marketing Platform is installed

Use this procedure to share the Marketing Platform installation location on all nodes of the cluster.

To share the location, you must install Marketing Platform on a shared drive that is accessible from all nodes.

1. In the WebSphere administration console, add the `-DPLATFORM_LOG4J_PROPERTIES_FILE` Java parameter in each node.
For example: `-DPLATFORM_LOG4J_PROPERTIES_FILE=log4j_node1.properties` where `log4j_node1.properties` is a copy of the `log4j.properties` file.

Note: If XML logging is configured, then in the WebSphere administration console, add the `-DPLATFORM_LOG4J_XML_FILE` Java parameter in each node.

For example: `-DPLATFORM_LOG4J_XML_FILE=log4j_node1.xml` where `log4j_node1.xml` is a copy of the `log4j.xml` file.

2. Use the following command to set the log file name in each node. Ensure that the log file names are different so that it is easy to identify the file that is generated from each node.

In the WebSphere administration console, add `-Dlog4j.appender.System.File=Log_File_Name`

For example: `-Dlog4j.appender.System.File=platform_node1.log`.

Note: This property can be used in case of XML logging or properties file logging.

3. Restart the cluster.
All the log files are created in the `Platform/logs` directory under your Marketing Platform installation.

Setting Marketing Platform home in a Java parameter

Use this procedure to set the Marketing Platform home directory in a Java parameter that points to the location where the logs are generated.

1. Use the following command to specify the Java parameter in the WebSphere administration console.

`-DUNICA_PLATFORM_HOME=path_where_log_files_are_placed`

For example: `UNICA_PLATFORM_HOME=/opt/Platform`

2. Create the following directories at the location you specified above: `conf` and `logs`
3. Provide the write permission to the `logs` directory.
4. Copy the `log4j.properties` file to the `conf` directory.

The `log4j.properties` is located in the `conf` directory under the Marketing Platform installation directory.

5. Replicate the Marketing Platform installation directory structure on all nodes of the cluster, as follows.

- a. Create a same directory structure on each node as far as the *PLATFORM_HOME/Platform/conf* directory.
 - b. Create the logs directory in the *PLATFORM_HOME/Platform* directory, and provide write permission to the logs directory.
 - c. Copy the *log4j.properties* file in the conf directory.
6. Restart the cluster.

Chapter 8. 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 51 - registers alerts and configurations for IBM Marketing Software products
- “`configTool`” on page 52 - imports, exports, and deletes configuration settings, including product registrations
- “`datafilteringScriptTool`” on page 56 - creates data filters
- “`encryptPasswords`” on page 57 - encrypts and stores passwords
- “`encryptTomcatDBPasswords`” on page 58 - encrypt the database passwords that the Tomcat Application server uses internally
- “`partitionTool`” on page 59 - creates database entries for partitions
- “`populateDb`” on page 61 - populates the Marketing Platform database
- “`restoreAccess`” on page 61 - restores a user with the `platformAdminRole` role
- “`scheduler_console_client`” on page 63 - lists or starts IBM Marketing Software 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.

Authentication of utilities

Utilities such as `configTool` and other IBM Marketing Software back end utilities are designed to be used by system administrators and require physical access to the host servers for them to be invoked. For this reason, authentication for these utilities has been designed to be independent of the UI authentication mechanism. Access to these utilities is available to users with Marketing Platform administrator privileges. Access to these utilities is expected to be locally defined in Marketing Platform and authenticated against the same.

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.

Setting up Marketing Platform utilities on additional machines

On the machine where the Marketing Platform is installed, you can run the Marketing Platform utilities without any additional configuration. However, you might want to run the utilities from another machine on the network. This procedure describes the steps required to do this.

Ensure that the machine on which you perform this procedure meets the following prerequisites.

- The correct JDBC driver must exist on the machine or be accessible from it.
 - The machine must have network access to the Marketing Platform system tables.
 - The Java runtime environment must be installed on the machine or be accessible from it.
1. Gather the following information about the Marketing Platform system tables.
 - The fully qualified path for the JDBC driver file or files on your system.
 - The fully qualified path to an installation of the Java runtime environment.
The default value in the installer is the path to the supported version of the JRE that the installer places under your IBM Marketing Software installation directory. You can accept this default or specify a different path.
 - Database type
 - Database host
 - Database port
 - Database name/system ID
 - Database user name
 - Database password
 2. Run the IBM Marketing Software installer and install the Marketing Platform.
Enter the database connection information that you gathered for the Marketing Platform system tables. If you are not familiar with the IBM Marketing Software installer, see the Campaign or Marketing Operations installation guide.
You do not have to deploy the Marketing Platform web application if you are installing the utilities only.

Marketing Platform utilities

This section describes the Marketing Platform utilities, with functional details, syntax, and examples.

alertConfigTool

Notification types are specific to the various IBM Marketing Software 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 Marketing Platform system tables. You can use the `configTool` utility to import and export configuration settings to and from the system tables.

When to use configTool

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

- To import partition and data source templates that are supplied with Campaign, which you can then modify and duplicate by using the Configuration page.
- To register (import configuration properties for) IBM Marketing Software 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 Marketing Software.
- 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 Marketing Software, 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 14. 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
Opportunity Detect	Detect
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`
- Run the following command to enable `encodeCSV` feature:
`configTool -vp -p "Affinium | Plan | umoConfiguration" -f MarketingOperations_Home\conf\Plan_encodeProperty_11.1.xml`

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).

```
:callexec

"%JAVA_HOME%\bin\java" -DUNICA_PLATFORM_HOME="%UNICA_PLATFORM_HOME%"

com.unica.management.client.datafiltering.tool.DataFilteringScriptTool %*
```

Edit these lines to look like this (new text is in **bold**). Substitute your truststore path and file name and truststore password for `myTrustStore.jks` and `myPassword`.

```
:callexec
```

```

SET SSL_OPTIONS=-Djavax.net.ssl.keyStoreType="JKS"

-Djavax.net.ssl.trustStore="C:\security\myTrustStore.jks"

-Djavax.net.ssl.trustStorePassword=myPassword

"%JAVA_HOME%\bin\java" -DUNICA_PLATFORM_HOME="%UNICA_PLATFORM_HOME%"
%SSL_OPTIONS%

com.unica.management.client.datafiltering.tool.DataFilteringScriptTool %*

```

Syntax

```
datafilteringScriptTool -r pathfile
```

Commands

-r *path_file*

Import data filter specifications from a specified XML file. If the file is not located in the `tools/bin` directory under your installation, provide a path and enclose the `path_file` parameter in double quotation marks.

Example

- Use a file named `collaborateDataFilters.xml`, located in the `C:\unica\xml` directory, to populate the data filter system tables.

```
datafilteringScriptTool -r "C:\unica\xml\collaborateDataFilters.xml"
```

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 Marketing Software 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
```

encryptTomcatDBPasswords

The `encryptTomcatDBPasswords` utility is used to encrypt the database passwords that the Tomcat Application server uses internally. It is used to encrypt database passwords used in `Campaign.xml` and `unica.xml`. This utility can encrypt the Unica application database password. The utility prints the encrypted password in the command line.

When to use encryptTomcatDBPasswords

Use `encryptTomcatDBPasswords` utility when you want to use encrypted password under Tomcat configurations. It can be used when the Campaign or Unica System DB password has expired or changed. You can use this utility and encrypt the password and this will be get replaced in `Campaign.xml`, `unica.xml` and `plan.xml` located at `<instanceHome>\conf\Catalina\localhost`.

Syntax

```
encryptTomcatDBPasswords -d databasePassword
```

Commands

-d *databasePassword*

Encrypt the database password.

Note:

This utility is available only when the user selects Tomcat as the application server while installing Marketing Platform.

This utility can be used only in case when the user wants use encrypted passwords instead of plain text passwords, under Tomcat configurations.

Please refer the Tomcat documentation at <https://wiki.apache.org/tomcat/FAQ/Password> which explains more on the security.

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 Marketing Software 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 Marketing Software 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 NTLMv2 authentication

If you implement NTLMv2 authentication 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 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 Marketing Software 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"
 - DisUseIBMSocketFactory=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 myLogin
- Execute jobs configured to listen for a trigger named trigger1.
scheduler_console_client -s -t trigger1 myLogin

Chapter 9. Marketing Platform SQL scripts

This section describes the SQL scripts provided with Marketing Platform to perform various tasks relating to the Marketing Platform system tables.

The Marketing Platform SQL scripts are located in the db directory under your Marketing Platform installation.

The scripts are designed to be run against the Marketing Platform system tables, using the database client.

ManagerSchema_DeleteAll.sql

The `Manager_Schema_DeleteAll.sql` script removes all data from the Marketing Platform system tables without removing the tables themselves. This script removes all users, groups, security credentials, data filters, and configuration settings from Marketing Platform.

When to use ManagerSchema_DeleteAll.sql

You might want to use `ManagerSchema_DeleteAll.sql` if corrupted data prevents you from using an instance of Marketing Platform.

Additional requirements

To make Marketing Platform operational after running `ManagerSchema_DeleteAll.sql`, you must perform the following steps.

- Run the `populateDB` utility. The `populateDB` utility restores the default configuration properties, users, roles, and groups, but does not restore any users, roles, and groups you have created or imported after initial installation.
- Use the `configTool` utility with the `config_navigation.xml` file to import menu items.
- If you have performed any post-installation configuration, such as creating data filters or integrating with an LDAP server or web access control platform, you must perform these configurations again.
- If you want to restore previously existing data filters, run the `datafilteringScriptTool` utility using the XML originally created to specify the data filters.

ManagerSchema_PurgeDataFiltering.sql

The `ManagerSchema_PurgeDataFiltering.sql` script removes all data filtering data from the Marketing Platform system tables without removing the data filter tables themselves. This script removes all data filters, data filter configurations, audiences, and data filter assignments from Marketing Platform.

When to use ManagerSchema_PurgeDataFiltering.sql

You might want to use `ManagerSchema_PurgeDataFiltering.sql` if you need to remove all data filters without removing other data in the Marketing Platform system tables.

Important: The ManagerSchema_PurgeDataFiltering.sql script does not reset the values of the two data filter properties, Default table name and Default audience name. If these values are no longer valid for the data filters you want to use, you must set the values manually on the Configuration page.

SQL scripts for creating system tables

Use the scripts described in the following table to create Marketing Platform system tables manually, when your company policy does not allow you to use the installer to create them automatically.

The scripts are shown in the order in which you must run them.

Table 15. Scripts for creating system tables

Datasource Type	Script Names
IBM DB2	<ul style="list-style-type: none"> • ManagerSchema_DB2.sql If you plan to support multi-byte characters (for example, Chinese, Japanese, or Korean), use the ManagerSchema_DB2_unicode.sql script. • ManagerSchema__DB2_CeateFKConstraints.sql • active_portlets.sql
Microsoft SQL Server	<ul style="list-style-type: none"> • ManagerSchema_SqlServer.sql • ManagerSchema__SqlServer_CeateFKConstraints.sql • active_portlets.sql
Oracle	<ul style="list-style-type: none"> • ManagerSchema_Oracle.sql • ManagerSchema__Oracle_CeateFKConstraints.sql • active_portlets.sql

If you plan to use the scheduler feature that enables you to configure a flowchart to run at predefined intervals, you must also create the tables that support this feature. To create the scheduler tables, run the appropriate script, as described in the following table.

Table 16. Scripts for enabling the IBM Marketing Software Scheduler

Data Source Type	Script Name
IBM DB2	quartz_db2.sql
Microsoft SQL Server	quartz_sqlServer.sql
Oracle	quartz_oracle.sql

When to use the create system tables scripts

You must use these scripts when you install or upgrade Marketing Platform if you have not allowed the installer to create the system tables automatically, or if you have used ManagerSchema_DropAll.sql to delete all Marketing Platform system tables from your database.

ManagerSchema_DropAll.sql

The ManagerSchema_DropAll.sql script removes all Marketing Platform system tables from a database. This script removes all tables, users, groups, security credentials, and configuration settings from Marketing Platform.

Note: If you run this script against a database containing an earlier version of the Marketing Platform system tables, you might receive error messages in your database client stating that constraints do not exist. You can safely ignore these messages.

When to use ManagerSchema_DropAll.sql

You might want to use ManagerSchema_DropAll.sql if you have uninstalled an instance of Marketing Platform where the system tables are in a database that contains other tables you want to continue using.

Additional requirements

To make the Marketing Platform operational after running this script, you must perform the following steps.

- Run the appropriate SQL script to re-create the system tables.
- Run the populateDB utility. Running the populateDB utility restores the default configuration properties, users, roles, and groups, but does not restore any users, roles, and groups you have created or imported after initial installation.
- Use the configTool utility with the config_navigation.xml file to import menu items.
- If you have performed any post-installation configuration, such as creating data filters or integrating with an LDAP server or web access control platform, you must perform these configurations again.

Chapter 10. Uninstalling Marketing Platform

Run the Marketing Platform uninstaller to uninstall Marketing Platform. When you run the Marketing Platform 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 Marketing Software 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 Marketing Platform must run the uninstaller.

1. If you have deployed the Marketing Platform web application, undeploy the web application from WebSphere or WebLogic.
2. Shut down WebSphere or WebLogic.
3. Stop the processes that are related to Marketing Platform.
4. 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.
5. Complete one of the following steps to uninstall Marketing Platform:
 - Click the Marketing Platform uninstaller that exists in the `Uninstall_Product` directory. The uninstaller runs in the mode in which you installed Marketing Platform.
 - In a command-line window, navigate to the directory where the uninstaller exists, and run the following command to uninstall Marketing Platform 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 Marketing Platform by using the silent mode:

Uninstall_Product -i silent

When you uninstall Marketing Platform 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 Marketing Platform, the Marketing Platform uninstaller runs in the mode in which Marketing Platform 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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