IBM Unica Marketing Operations
Version 8 Release 6
May 25, 2012

Installation Guide

IBM

Contents

Chapter 1. Preparing to Install

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

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

Where to install Marketing Operations and the Marketing Platform

The following diagram provides a brief overview of where to install Marketing Operations. It illustrates the most basic functional installation. You may require a more complex, disparate installation to meet your security and performance requirements.
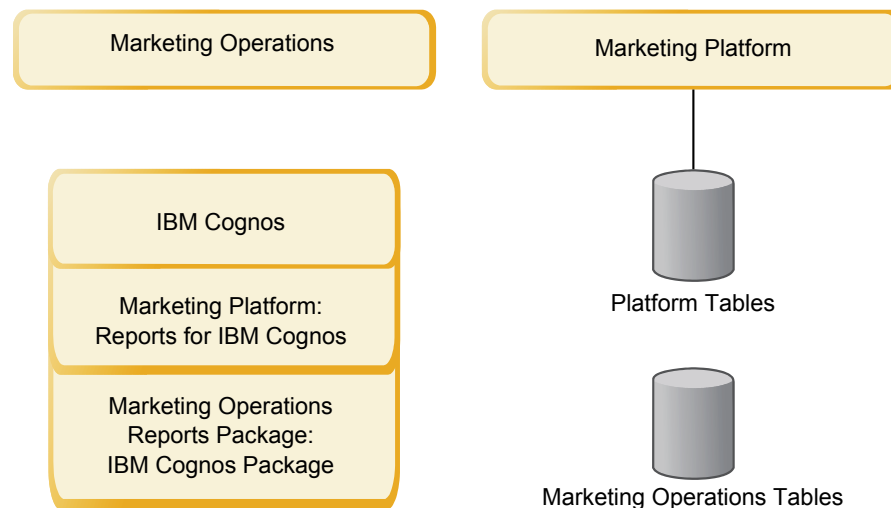
Marketing Operations: For best performance, install Marketing Operations on its own machine, where no other IBM Unica Marketing products are installed, or on a machine that it shares with only the Marketing Platform.

The Marketing Operations system tables should be **on a separate machine**.

Marketing Operations reports package: The reports package for Marketing Operations contains the IBM Cognos® package only. (Other applications also have reporting schemas to configure, but Marketing Operations does not.) Install the reports package on the IBM Cognos system.

Marketing Platform: The Marketing Platform application contains the IBM Unica common navigation, reporting, user administration, security, scheduling, and

configuration management features. For each IBM Unica Marketing environment, you must install and deploy the Marketing Platform once.

Prerequisites

The following are prerequisites for installing IBM Unica Marketing products.

System requirements

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

JVM requirement

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

Network domain requirement

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

Marketing Platform requirement

Before you install any IBM Unica Marketing products, the Marketing Platform must be fully installed and deployed.

Marketing Platform must be running so that:
- The products you install can register their configuration properties and security roles.
- You can set values for configuration properties on the Marketing Platform's Configuration page.

For each group of products that you plan to have work together, you need to install the Marketing Platform only once.

Knowledge requirement

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

Client machines

Client machines should meet the following configuration requirements.
- The browser should not cache pages. In Internet Explorer, select **Tools > Internet Options > Settings** and choose the option that causes the browser to check for a newer version of the page on each visit.
- If pop-up blocker (ad blocker) software is installed on the client machine, Marketing Operations might not function properly. We recommend disabling pop-up blocker software while running Marketing Operations.

Access permissions

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

*   The administrative password for your web application server.
*   Administration access for all necessary databases.
*   Write permission for all files that you must edit.
*   Write permission for all directories where you must save a file, such as the installation directory and the backup directory if you are upgrading.
*   Appropriate read/write/execute permissions to run the installer.
*   The operating system account that you use to run the web application server and IBM Unica Marketing components must have read and write access to the relevant directory and subdirectories.
*   On UNIX, the user account that performs the IBM Unica product installation must be a member of the same group as the user account that installed the web application server on which it will be deployed. This is because the web application server needs access to the product's file system.

    On UNIX, all of the installer files for IBM Unica products must have full execute permissions (for example, `rwxr-xr-x`).

Where to find more information

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

We define a basic installation as follows.

*   All components of the product are installed.
*   A system user is configured, with administrator-level access to the Marketing Operations system tables.

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

Table 1. References available for advanced configurations

Topic	Guide
Customizing Unica reporting schemas and sample reports	The *Marketing Platform Administrator's Guide* and *Marketing Operations Administrator's Guide*
Configuring use of non-ASCII data or non-US locales	*Marketing Operations Administrator's Guide*
Configuring use of multiple languages and locales	*Marketing Operations Administrator's Guide*
Integrating with LDAP and web access control systems	*Marketing Platform Administrator's Guide*
Configuring SSL	*Marketing Platform Administrator's Guide*

If you are upgrading

You should always read and understand the installation process as a whole before performing an installation. In addition, if you are upgrading, you should read and understand the section on preparing to upgrade and the upgrade section for each IBM Unica Marketing product.

Chapter 2. Preparing the IBM Unica Marketing Operations data source

Before you can install IBM Unica Marketing Operations, you must set up the database and the JDBC connection for the Marketing Operations system tables.

Print the "Marketing Operations data source information checklist" on page 8 located at the end of this chapter. Then, as you complete each task in this chapter, fill in the information in your checklist. Having this information written down makes it easier for you to provide the database connection information when you run the IBM Unica installer later in the installation process.

Step: Set up the Marketing Operations database

1. Work with a database administrator to create the required database for Marketing Operations.
2. Have the database administrator create an account for you to specify for a system user later in the installation process.

   This account must have CREATE, SELECT, INSERT, UPDATE, DELETE, and DROP rights. In addition:
   - The database must use UTF-8 encoding.
   - If you are using SQL Server, ensure that TCP/IP is enabled.
   - If you are using DB2®, ensure that the buffer pool for the table space is at least 32K.
3. Print and complete the "Marketing Operations data source information checklist" on page 8. You use this information later in the installation process.

Step: Configure the web application server for your JDBC driver

Use the following procedure to obtain the correct JDBC driver for your installation of Marketing Operations, and to configure your web application server to use it.

Note: If you are installing Marketing Operations on the same machine where you installed Marketing Platform, this task is already complete. Continue to "Step: Create the JDBC connections in the web application server" on page 6

1. Obtain the latest Type 4 JDBC drivers and any required associated files (for example, Oracle requires several associated files) for the database you plan to use.

   You should always use the latest vendor-provided Type 4 driver.
   - If the driver does not exist on the machine where Marketing Operations will be installed, obtain it and copy it to any location on the Marketing Operations machine.
   - If you obtain the driver from a machine where the database client is installed, verify that the version is the latest supplied by the database vendor. See your IBM Unica consultant for a list of supported JDBC drivers.

   The following list provides the driver file name or names for database types supported for IBM Unica Marketing system tables.

Table 2. Supported database types and drivers

Database type	File for jre 1.5	File for jre 1.6
Oracle 11	ojdbc5.jar	N/A
Oracle 11g	ojdbc5.jar	ojdbc6.jar
DB2 9.7	db2jcc.jar db2jcc_license_cu.jar	db2jcc.jar db2jcc_license_cu.jar
SQL Server	sqljdbc.jar with JDBC2	sqljdbc4.jar with JDBC3

2. Include the full path to the driver in the `CLASSPATH` of the web application server where you plan to deploy Marketing Operations, as follows.

   - For all supported versions of WebLogic, add the `jar` files to the `CLASSPATH` variable in `DOMAIN_DIR\bin\setDomainEnv.cmd`. Yours must be the first entry of the `CLASSPATH` values to ensure that the web application server uses the correct driver. For example, if you are using SQL Server you might set the path as follows.

     ```
     set CLASSPATH=c:\SQLDRIVER\sqljdbc.jar;%PRE_CLASSPATH%;
     %WEBLOGIC_CLASSPATH%; %POST_CLASSPATH%;%WLP_POST_CLASSPATH%
     ```

   - For all supported versions of WebSphere, set the `CLASSPATH` in the Administration Console.

Step: Create the JDBC connections in the web application server

The Marketing Operations web application must be able to communicate with both the Marketing Platform system tables and the Marketing Operations system tables. You create these JDBC connections in the web application server where you plan to deploy Marketing Operations.

Important: For the connection to the database holding the Marketing Operations system tables, you must use `plands` as the JNDI name. This value is the required JNDI name.

Important: For the connection to the database holding the Marketing Platform system tables, you must use `UnicaPlatformDS` as the JNDI name. This is the required JNDI name. If you are deploying Marketing Operations and Marketing Platform in the same JVM, this connection should already exist.

If you expect to have many concurrent users in Marketing Operations, you may need to increase the number of connections in your web server. For best results, set your web server to allow 50 connections.

Information for JDBC connections

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

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

WebLogic

Use these values if your application server is WebLogic.

SQLServer
- Driver: Microsoft MS SQL Server Driver (Type 4) Versions: 2008, 2008R2
- Default port: 1433
- Driver class: com.microsoft.sqlserver.jdbc.SQLServerDriver
- Driver URL: `jdbc:sqlserver://`
  `<your_db_host>:<your_db_port>;databaseName=<your_db_name>`
- Properties: Add user=`<your_db_user_name>`

Oracle 11 and 11g
- Driver: Other
- Default port: 1521
- Driver class: oracle.jdbc.OracleDriver
- Driver URL:
  `jdbc:oracle:thin:@<your_db_host>:<your_db_port>:<your_db_service_name>`
- Properties: Add user=`<your_db_user_name>`

DB2
- Driver: Other
- Default port: 50000
- Driver class: com.ibm.db2.jcc.DB2Driver
- Driver URL: `jdbc:db2://<your_db_host>:<your_db_port>/<your_db_name>`
- Properties: Add user=`<your_db_user_name>`

WebSphere

Use these values if your application server is WebSphere.

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

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

After you create the JDBC Provider and Data Source, go to the Custom Properties for the Data Source, and add and modify properties as follows.
- serverName=`<your_SQL_server_name>`
- portNumber =`<SQL_Server_Port_Number>`
- databaseName=`<your_database_name>`
- enable2Phase = false

Oracle 11 and 11g
- Driver: Oracle JDBC Driver
- Default port: 1521

- Driver class: oracle.jdbc.OracleDriver
- Driver URL:
  jdbc:oracle:thin:@*<your_db_host>:<your_db_port>:<your_db_service_name>*

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

Marketing Operations data source information checklist

Table 3. Data source information checklist

Item	Value
Data source type	
Data source name	
Data source account user name	
Data source account password	
JNDI name	plands
Path to the JDBC driver	

Chapter 3. Installing IBM Unica Marketing Operations

After you have prepared the data sources, you are ready to install IBM Unica Marketing Operations. You obtain the installer, obtain the required connection information, and then run the installation wizard. If you are installing Marketing Operations in a cluster, you finish this set of tasks by creating an EAR file.

How the IBM Unica Marketing installers work

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

Single directory requirement for installer files

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

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

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

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

Installing patches

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

Choosing product installation directories

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

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

If the directory you specify does not exist, the installer creates it, assuming that the user performing the installation has appropriate permissions.

The default top-level directory for IBM Unica installations is named `IBM/Unica`. The product installers then install in subdirectories under the `Unica` directory.

Installation types

The IBM Unica installer performs the following types of installation.

- **New installation**: When you run the installer and select a directory where an IBM Unica Marketing product has never been installed, the installer automatically performs a new installation.
- **Upgrade installation**: When you run the installer and select a directory where *an earlier* version of an IBM Unica Marketing product is installed, the installer automatically performs an upgrade installation. For products where installers automatically update the database, upgrade installation adds new tables but does not overwrite data in existing tables.

  For products where installers automatically update the database, errors can occur during an upgrade because the installer does not create tables in the database if they exist. You can safely ignore these errors. See the chapter on Upgrading for details.
- **Reinstallation**: When you run the installer and select a directory where *the same* version of an IBM Unica Marketing product is installed, the installer automatically performs a new installation. For products where installers automatically update the database, reinstallation drops all existing tables and data and then creates new tables and populates them with default data. Reinstallation also overwrites all of the data in your existing installation directory for products where installers automatically update the database. To retain or restore data for a reinstallation:
  - When you run the installer, select the **Manual database setup** option.
  - Use the Marketing Platform configTool utility to export modified configuration settings, such as customized navigation menu items, before you reinstall.

  Typically, reinstallation is not recommended.

Installation modes

The IBM Unica installer can run in the following modes.
- Console (command line) mode

  In console mode, options are presented to you in numbered lists. You supply a number to select the option you want. If you press Enter without entering a number, the installer uses the default option.

  The default option is indicated by one of the following symbols:
  - -->

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

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

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

  See "Example installation prompts" on page 16 for an example of the prompts that display during console mode. You can use this example to help you gather required information before you begin your installation.
- Windows GUI or UNIX X-windows mode
- Unattended, or silent, mode, which allows no user interaction

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

Installing multiple times using unattended mode

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

About the response files

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

You can use either of these options to create response files.

- You can use the sample response file as a template for directly creating your response files. The sample files are included with your product installers in a compressed archive named `ResponseFiles`. The response files are named as follows.
  - IBM Unica installer - `installer.properties`
  - Product installer - `installer_` followed by initials for the product name. For example, the Campaign installer has a response file named `installer_uc.properties`.
  - Product reports packs installer - `installer_` followed by initials for the product name plus rp. For example, the Campaign reports pack installer has a response file named `installer_urpc.properties`.

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

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

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

  The response files have `.properties` extensions, such as `installer_product.properties` and the file for the IBM Unica installer itself, which is named `installer.properties`. The installer creates these files in the directory you indicate.

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

Where the installer looks for response files

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

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

All response files must be in the same directory. You can change the path where response files are read by adding arguments to the command line. For example:

`-DUNICA_REPLAY_READ_DIR="myDirPath" -f myDirPath/`*installer.properties*

Effect of unattended mode when you uninstall

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

Unattended mode and upgrades

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

Creating EAR files for clustered deployments

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

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

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

You can use the IBM Unica installer to create an EAR file of your installed products at any time after your initial installation. See "To create an EAR file after running the installer" on page 15.

IBM Site ID

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

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

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

Step: Obtain the installation archive

The IBM Unica Marketing product installation files are named according to the version of the product and the operating system with which they are meant to be used, except for UNIX files intended to be run in console mode, which are not operating system-specific. For UNIX, different files are used depending on whether the installation mode is X-windows or console. For example:

UNIX X-windows mode: *ProductN.N.N.N_solaris64.bin* is version *N.N.N.N* and is intended for installation on the Solaris 64-bit operating system.

UNIX console mode: *ProductN.N.N.N.sh* is version *N.N.N.N* and is intended for installation on all UNIX operating systems.

Step: Obtain required information

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

Database connection information

The installation wizard must be able to communicate with the Marketing Platform system table database, to register menu items, security information, and configuration properties. Each time you run the installer in a new location, you must enter the following database connection information for the **Marketing Platform system table database**.

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

You obtained this information when you created the database or schema and filled out the Marketing Platform database information checklist.

The installer can create the Marketing Operations system tables during installation. If your company policy permits you to use this feature, you must provide the following connection information for the **Marketing Operations system table database** so the installer can automatically configure the database:

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

You obtained this information when you created the database or schema and filled out the Marketing Operations database information checklist.

Marketing Operations deployment information

Obtain the following information about your planned Marketing Operations deployment.

- Protocol: HTTP or HTTPS if SSL is implemented in the web application server.
- Host: The name of the machine on which Marketing Operations will be deployed.
- Port: The port on which the web application server listens.
- Domain name: The company domain of each machine where IBM Unica products are installed. For example, `mycompany.com`. All IBM Unica products must be installed in the same company domain, and you must enter the domain name in all lower-case letters. If there is a mis-match in domain name entries, you may encounter problems when you attempt to use Marketing Operations features or navigate among products. You can change the domain name after the products are deployed by logging in and changing values of the relevant configuration properties in the product navigation categories on the **Settings > Configuration** page.

Check for a JAVA_HOME environment variable

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

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

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

- Windows: In a command window, enter

  `set JAVA_HOME=leave empty and press return key`
- *NIX-type systems: In the terminal, enter

  `export JAVA_HOME=leave empty and press return key`

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

You can reset the environment variable when installation is complete.

Step: Run the IBM Unica installer

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

- You downloaded the IBM Unica installer and products you plan to install, and you put both the IBM Unica installer and the product installers in the same directory.
- You gathered the information described in "Step: Obtain required information" on page 13 and have it available. To help you gather required information, see "Example installation prompts" on page 16.

Run the IBM Unica installer as described here, and follow the instructions to complete the prompts.

- See the other topics in this section for details about the information you provide during installation.

- An annotated example of the installation prompts, using console mode on a UNIX server, follows if you need help entering information during the installation.

Note: Do not run the product installer directly. IBM Unica does not support installations performed in this way.

- **Console mode**

  Open a command prompt and from the directory where you downloaded the IBM Unica software, run the `Unica_Installer` executable file as follows.

  – On Windows, run the `Unica_installer` executable file with `-i console`. For example:

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

  – On UNIX, run the `Unica_installer_N.N.N.N.sh` file with no switch.

- **Windows GUI or UNIX X-windows mode**

  Run the `Unica_Installer` file. On UNIX, use the `.bin` file.

- **Unattended mode**

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

  – To specify a response file located in the same directory as the installer. For example:

    `Unica_Installer_N.N.N.N_OS -i silent`

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

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

  For more information about unattended mode, see "Installing multiple times using unattended mode" on page 11.

To create an EAR file after running the installer

To create an EAR file (typically for use in a cluster installation), you run the installer in console mode, from the command line. For Marketing Operations cluster installations, typically you create an EAR that includes the unica.war, the dashboard.war, and the plan.war. Then you deploy the EAR on each of the machines in your cluster.

1. Put the WAR files in a single directory.
2. 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.

   These files are located in the same directory where you have placed the IBM Unica product installers. They are named `installer_product.properties`, except for the file for the IBM Unica installer itself, which is named `installer.properties`.

   This backup step is especially important when you run the installer in unattended mode and you need to make more than one EAR. When the installer runs in unattended mode, it clears these files. To create an EAR file, you need the information that the installer writes in the `.properties` files during the initial install.
3. Open a command window and change directories to the directory that contains the installer.

4. 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.

5. Follow the instructions in the wizard.

6. If you need to create additional EAR files, overwrite the `.properties` file or files with the backup(s) you created before you ran the installer in console mode for the first time.

Example installation prompts

For reference, an example of the prompts that display during installation on a UNIX server using console mode follows. Be sure to read and follow the instructions that display during your actual installation.

After you enter information, most prompts display your response and require a yes or no (Y/N) confirmation before you continue. These prompts give you the opportunity to make corrections when needed.

Use this example to help you gather required information before you begin your installation, and for reference during your installation.

Table 4. Example installation prompts and responses

Prompt	Response
`-bash-4.0S`	Initial prompt. Supply the name of the master installer file and any variables for the database setup utility that you want to use for the installation.
`Choose Locale`	Supply a number to choose one of the listed languages. To use the default locale, `2- English`, press Enter.
`Introduction`	If a previous version of the product is installed, an upgrade is performed. See the chapter on Upgrading. If the same version of the product is installed, proceeding drops all tables and data.
`Response Files Generation`	Supply a number to choose whether to generate response files for use in an unattended installation. If you generate response files, you can supply a destination path.

`Choose Product Features`	A numbered list of features displays. Features with a check mark [X] are selected for installation, features with no check mark [ ] are not selected. To change the selections, supply numbers to switch from selected to cleared (or vice versa) using a comma-separated list, then press Enter.
	
	For example, you see this list of features:
	`1- [X] IBM Unica Marketing Platform`
	`2- [X] IBM Unica Marketing Operations`
	
	To install Marketing Platform *only*, supply 2 and press Enter.

Master (Marketing Platform) installation	
`Installation Directory`	
`Select Application Server`	

Table 4. Example installation prompts and responses (continued)

Prompt	Response
Platform Database Type	Supply information for the Marketing Platform system table database.
Platform Database Host Name	
Platform Database Port	
Platform Database Name/System ID (SID)	
Platform Database User Name	
Platform Database Password	
JDBC Connection	
JDBC Driver Classpath	
Product-specific (Marketing Operations) installation	
Introduction	For each product feature you chose to install, the specific product name displays followed by the reinstallation warning.
Installation Directory	
Marketing Operations Database Setup	Supply a number to choose automatic or manual. • Automatic setup uses the same information for this feature that you supplied for the master installation. • Manual setup prompts you for each database and JDBC characteristic separately to accommodate any feature-specific differences.
Marketing Operations Server/Host	
Marketing Operations Server Port	
Marketing Operations Domain Name	Supply the same company domain, in all lowercase, for every feature you install.
Supported Locales	Supply a number to choose a language. You can also supply a comma-separated list to select multiple options.
Deployment EAR File	Supply a number to choose whether to create an enterprise archive (EAR) file.

Chapter 4. Configuring IBM Unica Marketing Operations before deployment

Whether you need to perform any of the tasks in this chapter depends on your installation. For example, if your company policy allowed you to use the installer to automatically configure your system tables, you do not need to do so manually.

Review the tasks in this chapter and complete any that are required for your installation before you deploy the IBM Unica Marketing Operations web application

Step: Create and populate the Marketing Operations system tables with the umodbsetup utility, if necessary

The IBM Unica installer can create the Marketing Operations system tables during installation, but if your company policy does not permit you to create database tables in this way, you must manually run the database setup utility, `umodbsetup`.

The `umodbsetup` utility does one of the following.
- Option 1: Creates the required system tables in the Marketing Operations database and populates the tables with required default data.
- Option 2: Outputs the database creation and population scripts to a file that you or your DBA can then run in your own database client.

Configure environment variables

Before you run the `umodbsetup` utility, complete the following steps to configure the environment variables properly:
1. From the `UNICA_HOME\MarketingOperations\tools\bin` directory, locate and open the `setenv` file in a text editor.
2. Verify that the JAVA_HOME variable indicates the correct directory for your installation of Java, and that the JDBC drivers are the first entry for the DBDRIVER_CLASSPATH variable. For more information about setting this environment variable, see "Check for a JAVA_HOME environment variable" on page 14.
3. Save and close the file.
4. From the `UNICA_HOME\MarketingOperations\tools\bin` directory, locate and open the `umo_jdbc.properties` file.
5. Set values for the following parameters. (See comments in the file for examples.)
   - umo_driver.classname
   - umo_data_source.url
   - umo_data_source.login
   - umo_data_source.password
6. Save and close the file.

Run the database setup utility

From a command prompt or UNIX shell, navigate to the `UNICA_HOME\`
`MarketingOperations\tools\bin` directory. Run the `umodbsetup` utility and provide
appropriate input for the parameters required for your situation.

For example, the following command runs a full database installation (rather than
an upgrade), sets the locale to en_US, and sets the logging level to high:

`./umodbsetup.sh -t Full -L en_US -l high`

Following is a description of all the possible variables for the utility:

Table 5. Variables for the `umodbsetup.sh` utility

Variable	Description
-h	Provides help for the utility.
-l	Records the output from the actions that the `umodbsetup` utility performs in the `umo-tools.log` file. This file is located in the `UNICA_HOME\MarketingOperations\tools\logs` directory. This variable specifies the logging level. You can set the logging level to `high`, `medium`, or `low`.
-L	Sets the default Locale for the installation. For example, use `-L de_DE` for a German installation. The valid entries for locales include de_DE, en_GB, en_US, es_ES, fr_FR, it_IT, ja_JP, ko_KR, pt_BR, ru_RU, and zh_CN.
-m	Outputs the scripts to a file in the `UNICA_HOME\MarketingOperations\tools` directory, which you can then run manually. Use this option if there is a reason you need to run scripts from your own database client application. When you use this variable, the `umodbsetup` tool does not run the script.
-t	Type of database installation. Valid values are `Full` and `upgrade`. For example, `-t Full`
-v	Verbose.
-b	For upgrades only. Identifies the base version of the database that you are attempting to upgrade. By default, the utility detects the version of the database you are upgrading. However, if an earlier attempt to upgrade the database failed in some way, the version may have been updated even though the upgrade failed. When you have corrected the problem and run the utility again, you use this variable with the `-f` variable to specify the correct base version. For example, `-f -b 8.5.0.0.21`
-f	For upgrades only. Instructs the utility to use the base version specified by the `-b` variable, overriding the base version it may detect in the database. See the description of the `-b` variable.

Run the database scripts manually, if necessary

If you used the `-m` variable to output the scripts so you can run them from your
own database client application, run the scripts now.

Do not deploy the `plan.war` file before you create and populate the system tables.

Step: Register Marketing Operations manually, if necessary

If the Marketing Operations installer cannot connect to the Marketing Platform database to register the product, it displays an error message that notifies you of this failure. The installation process will proceed, but in this case you must import the product information into the Marketing Platform system tables manually.

The `configTool` utility mentioned in this procedure is located in the `tools/bin` directory under your Marketing Platform installation. For detailed instructions on using the `configTool` utility, see Appendix B, "The configTool utility," on page 63.

1. Set an environment variable named `NAVIGATION_DIR` to the Marketing Operationsconf directory.
2. Run the `configTool` utility, using the following example commands as guidelines.

   This imports configuration properties and menu items. Note that you run the utility as many times as there are files.

   ```
   configTool.bat -v -i -p "Affinium" -f "%NAVIGATION_DIR%\
   plan_registration.xml"
   ```

   ```
   configTool.bat -v -i -p "Affinium|suite|uiNavigation|mainMenu" -f
   "%NAVIGATION_DIR%\plan_navigation_operations.xml"
   ```

   ```
   configTool.bat -v -i -p "Affinium|suite|uiNavigation|mainMenu" -f
   "%NAVIGATION_DIR%\plan_navigation_financials.xml"
   ```

   ```
   configTool.bat -v -i -p "Affinium|suite|uiNavigation|mainMenu|Analytics"
   -f "%NAVIGATION_DIR%\plan_navigation_analytics.xml"
   ```

   ```
   configTool.bat -v -i -p "Affinium|suite|uiNavigation|settingsMenu" -f
   "%NAVIGATION_DIR%\plan_navigation_settings.xml"
   ```

   ```
   configTool.bat -v -i -p "Affinium|suite|uiNavigation|alerts" -f
   "%NAVIGATION_DIR%\plan_alerts_registration.xml"
   ```

Step: Set environment variables (WebLogic/Windows only)

Perform this task only if you are planning to deploy Marketing Operations on a WebLogic web application server installed on a Windows machine.

On the machine where WebLogic is installed, add the following to the value of the `Path` System environment variable.

- Full path to the `bin` directory where the Sun JDK is installed.
- Full path to the `server\bin` directory where WebLogic is installed.

Chapter 5. Deploying IBM Unica Marketing Operations

This chapter provides general guidelines for deploying Marketing Operations on WebSphere and WebLogic. If you created an EAR file after running the installer and your EAR file includes any other IBM Unica products, you must follow all the deployment guidelines detailed in the individual install guides for the products included in the EAR file in addition to those listed in this chapter.

It is assumed that you know how to work with your web application server. Consult your web application server documentation for details about things like how to use the Administration console.

Guidelines for deploying Marketing Operations on WebSphere

Prerequisites

Be sure that your version of WebSphere Application Server meets the requirements described in the *IBM Unica Enterprise Products Recommended Software Environments and Minimum System Requirements* document, including any necessary fix packs or upgrades.

You use the WebSphere Integrated Solutions Console to configure your WebSphere application server. The steps that follow provide guidance for setting specific controls.

Note: Different WebSphere versions present user interface controls in varying sequences and with alternative labels.

Set up the environment

1. Define a custom property: On the **Application servers > <server> > Web container > Custom properties** form, click **New** and enter:

   Name: com.ibm.ws.webcontainer.invokefilterscompatibility

   Value: true

2. Create the JDBC provider: On the **Resources > JDBC > JDBC providers** form, click **New**. Complete the **Create a new JDBC provider** wizard, including the following.

   - For **Implementation type** select Connection pool data source.
   - Specify the location of the ojdbc6.jar file on your server.
   - Specify the **Native library path** on your server.

3. Create the data source: On the **Resources > JDBC > Data sources** form, click **New**. Complete the **Create a data source** wizard, including the following.

   - Specify a **Data source name**.
   - For **JNDI name**, enter plands.
   - Select the **JDBC provider** that you created in step 2.
   - Specify the **Database name** and **Server name**.
   - For **Mapping-configuration alias** select WSLogin.

4. Define custom properties for the data source: On the **JDBC providers > <database provider> > Data sources > <plan> > Custom properties** form, click **New** to add two properties:

- **Name**: User
- **Value**: *<user name>*
- **Name**: Password
- **Value**: *<password>*

If your Marketing Operations system tables are in DB2, locate the **resultSetHoldability** property and set its value to 1. If this property does not exist, add it.

5. Configure the JVM: On the **Application servers > *<server>* > Process definition > Java Virtual Machine** form, identify the **Classpath** then add all of the following entries as **Generic JVM arguments**, separated by spaces:

- `-Dplan.home=`*<Unica_home>*`/`*<Marketing_Operations>*

   where *<Unica_home>* is the path to the top-level IBM Unica directory and *<Marketing_Operations>* is the path to the directory where you installed Marketing Operations. Typically this path is `Unica/MarketingOperations`.

- `-Dclient.encoding.override=UTF-8`
- `-Xms128m`
- `-Xmx512m`
- `-XX:MaxPermSize=256m`

Deploy the WAR or EAR file

When you deploy a new enterprise application, the WebSphere Integrated Solutions Console presents a series of forms. The steps that follow provide guidance for setting specific controls on these forms. Different versions of WebSphere can present controls in another sequence or with other labels.

1. Select **Applications > New Application > New Enterprise Application**.
2. On the initial form, select **Remote file system** and then **Browse** to the `plan.war` file or your EAR file.
3. On the next **Preparing for the application installation** form:
   - Select **Detailed**.
   - Select **Generate Default Bindings**.
   - Select **Override existing bindings**.
4. On the **Select installation options** form:
   - Select **Precompile JavaServer Pages files**.
   - For **Application name**, enter `plan`.
   - Select **Override class reloading settings for Web and EJB modules**.
   - For **Reload interval in seconds**, enter an integer such as 4.
5. On the **Map modules to servers** form, select the **Module**. If you deployed an EAR, select every WAR file.
6. On the **Provide options to compile JSPs** form, select the **Web module**. If you deployed an EAR, select every WAR file.
   - If you are using WebSphere 7.5, set the **JDK Source Level** to 15.
   - If you are using WebSphere 8, set the **JDK Source Level** to 16.

   If you deployed an EAR, set the **JDK Source Level** for each WAR file.
7. On the **JSP reloading options for Web modules** form, select **JSP enable class reloading** and for **JSP reload interval in seconds** enter 5.
8. On the **Map shared libraries** form, select the **Application** and the **Module**.

9. On the **Map shared library relationships** form, select the **Application** and the **Module**.

10. On the **Map resource references to resources** form, for **Target Resource JNDI Name** enter `plands`.

11. On the **Map context roots for Web modules** form, for **Context Root** enter `/plan`.

12. Review and save your settings.

Define the class loader policy

1. On the **Enterprise Applications > plan > Class loader** form, select **Override class reloading settings for Web and EJB modules**.

2. For **Class loader order**, select **Classes loaded with local class loader first (parent last)**.

3. For **WAR class loader policy**, select **Single class loader for application**.

4. Click **Apply**.

Define settings for cookies

1. Go to the **Enterprise Applications > *plan* > Session management** form.

2. Select **Override session management**.

3. Select **Enable cookies**.

4. Click **Apply**, then go to the **Enterprise Applications > *plan* > Session management > Cookies** form.

5. Change the Marketing Operations **Cookie name** from `JSESSIONID` to `UMOSESSIONID`.

6. Click **Apply**.

Define EAR module settings (optional)

If you deployed an EAR, you must define settings for the individual WAR files contained by the EAR.

1. Go to **Enterprise Applications** and select the EAR file.

2. On the **Manage Modules** form, select one of the WAR files; for example, `Campaign.war`.

3. On the **Enterprise Applications > *EAR* > Manage Modules > *WAR*** form:
   - Set **Starting weight** to `10000`.
   - For **Class loader order**, select **Classes loaded with application class loader first**.

4. On the **Enterprise Applications > *EAR* > Manage Modules > *WAR* > Session management** form, select **Enable cookies**.

5. On the **Enterprise Applications > *EAR* > Manage Modules > *WAR* > Session management > Cookies** form:
   - Set the **Cookie name** to `CMPJSESSIONID`.
   - For the **Cookie maximum age**, select **Current browser session**.

6. On the **Enterprise Applications > *EAR* > Manage Modules > *WAR* > Session management** form:
   - Select **Allow overflow**.
   - For **Maximum in-memory sessions**, enter `1000`.
   - For **Session timeout**, select **Set timeout** and enter `30`.

7. Define the same settings for each of the other WAR files, including `dashboard.war`, `platform.war`, and `umo.war`.

Guidelines for deploying Marketing Operations on WebLogic

Before you begin, note the following:

- IBM Unica Marketing products customize the JVM used by WebLogic. You may need to create a WebLogic instance dedicated to IBM Unica Marketing products if you encounter JVM-related errors.
- Do not install more than one Marketing Operations application under the same WebLogic domain.
- Verify that the SDK selected for the WebLogic domain you are using is the Sun SDK by looking in the startup script (`startWebLogic.cmd`) for the JAVA_VENDOR variable. It should be set to `JAVA_VENDOR=Sun`. If it is set to `JAVA_VENDOR=BEA`, JRockit has been selected. JRockit is not supported. To change the selected SDK, refer to the WebLogic documentation.

Complete the following steps.

1. AIX® only. If your operating system is AIX, extract the Marketing Operations WAR file, delete the `xercesImpl.jar` file from `WEB_INF/lib` directory, and recreate the WAR file.

   If the installer combined products in an EAR file, you must first extract that file to obtain the WAR file, and you must recreate the EAR file.

2. If you are configuring WebLogic to use the IIS plug-in, review the WebLogic documentation to determine whether you have additional requirements.

3. From the `bin` directory under your WebLogic domain directory, locate and open the `setDomainEnv` script in a text editor.

   Scroll to the JAVA_OPTIONS property, and add the following entries. Use a space to separate entries.

   - `-Dplan.home=Unica_home\Marketing_Operations`

     Where *Unica_home* is the path to the top-level IBM Unica directory and *Marketing_Operations* is the path to the directory where you installed Marketing Operations. Typically this directory is `Unica/MarketingOperations`.

   - `-Dfile.encoding=UTF-8`

4. 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`

5. Save and close the file.

6. Restart WebLogic.

7. Deploy Marketing Operations as a web application module.

8. Start the deployed web application.

Chapter 6. Configuring IBM Unica Marketing Operations after deployment

After you deploy and start the Marketing Operations application, you can log in and verify the installation. This chapter describes some basic configuration steps (configuring the system user and a test user, setting up email and markup) but there are additional system setup tasks in the *Marketing Operations Administrator's Guide*.

In addition, if you are using the IBM Unica Marketing reporting feature, you must perform the tasks described in Chapter 7, "Installing reports," on page 31.

Step: Verify your installation

1. Access the IBM Unica Marketing URL using Internet Explorer.

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

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

2. Log in using the default administrator login, which is `asm_admin`. You should have already changed this user's password when you verified your Platform installation.

   The first time you log in, the default value of this user's password is `password`. You are asked to change the password. You can enter the existing password, but you should choose a new one.

   The default home page is the Dashboard, which is a blank page until dashboards are set up. If you see a "404 page not found" message, it means that the Dashboard's WAR file has not been deployed properly. See the *Marketing Platform Installation Guide* for instructions about deploying the Dashboard WAR file.

3. Select **Settings** > **Configuration** and verify that Marketing Operations appears in the list on the left. Then expand the Marketing Operations section and verify that the **umoConfiguration** category appears in the list.

4. Optional. Make this page your "home" page until you configure the dashboard. That way you will not see a blank page each time you log in.

Step: Give the asm_admin user access to Marketing Operations

While the default admin user asm_admin has access to the Marketing Operations configuration properties automatically, there are no default users with access to the Marketing Operations application until you configure them.

1. Create a group. For example, Default-MarketOps-Group.
2. Add the PlanAdmin and PlanUser roles to the group.
3. Add the asm_admin user to the group.
4. Restart the application server.
5. Log back in as asm_admin.
6. Verify that you have access to the Marketing Operations options on the **Operations** menu by selecting **Operations > Plans**.

Step: Configure the markup option, if necessary

Marketing Operations provides markup tools for making comments on attachments. When Marketing Operations users send approvals for review, approvers can place their comments directly in the electronic file, where they can be viewed by other users.

Marketing Operations provides two types of markup tools.

- Native Marketing Operations markup: The native markup option provides various markup functions that can be applied to files in PDF, HTML, JPG, PNG, GIF, and BMP format. Users can mark up whole websites if a URL is supplied. The comments can then be saved in Marketing Operations. Native markup is the default option. It does not require Acrobat to be installed on client machines.
- Adobe Acrobat markup: This markup tool requires the installation of Adobe Acrobat on each client machine. Users can apply all Acrobat commenting features, and then save the edited PDF in Marketing Operations.

The markup option is a global setting. (You cannot enable different markup options for different groups of users.)

Optional. Configure the Adobe markup option

When you deploy Marketing Operations, the system is configured to use the native markup option by default. If you want to use the Adobe markup option instead, in Marketing Operations select **Settings > Configuration > Marketing Operations > umoConfiguration > markup**. Then configure the markup properties with the following values:

- Set **markupServerType** to `SOAP`.
- Set **markupServerURL** to the URL of the Marketing Operations host server, including the fully qualified host name and the port where the web application server listens. Use the path format shown here, with your values substituted for *<server>* and *<port>*.

  `http://<server>:<port>/plan/services/collabService?wsdl`
- Set **useCustomMarkup** to `True`.

These configuration settings enable Adobe markup for all users.

Optional. Install and configure Adobe on client machines

For users to effectively use Adobe markup, you must install Adobe Acrobat on each client machine used to access IBM Unica Marketing Operations.

After each installation on a Microsoft Windows platform, you must copy the customized `UMO_Markup_Collaboration.js` file, located in `UMO_HOME\tools` under the Marketing Operations installation directory, to the client machine. Copy this file to the JavaScripts subdirectory of the directory where you installed Adobe Acrobat. For example:

```
C:\Program files\Adobe\Acrobat 6.0\Acrobat\Javascripts\
UMO_Markup_Collaboration.js
```

If an `sdkSOAPCollabSample.js` file exists in this directory, delete it. This file is replaced by the `UMO_Markup_Collaboration.js` file.

Note the following.

- If a user cannot view comments by other approvers, the UMO_Markup_Collaboration.js file is likely to be missing or incorrect.
- If you run Acrobat before you copy this file, you must reboot the computer for the markup capability to be used.

In addition, users who use the Internet Explorer browser to access IBM Unica Marketing Operations must set Internet Explorer preferences to display PDFs in the browser.

Step: Configure the email settings

Marketing Operations workflows rely heavily on notification emails so it is a good idea to identify your SMTP server during installation.

1. Select **Settings > Configuration > Marketing Operations > umoConfiguration > email.**
2. Click **Edit Settings**.
3. Set the value of the notifyEMailMonitorJavaMailHost property to the machine name or IP address of your organization's SMTP server.
4. Specify a valid email address for the notifyDefaultSenderEmailAddress property. The system uses this address to send emails when there is no valid email address available to send a notification email to.
5. Save your changes.

Step: Configure the integration with Campaign, if necessary

Marketing Operations optionally integrates with IBM Unica Campaign. When Marketing Operations and Campaign are integrated, you can use the marketing resource management features in Marketing Operations to create, plan, and approve campaigns.

When Campaign integration is enabled, you also have the option to enable offer integration so that you can perform offer lifecycle management tasks in Marketing Operations.

To enable your integration with Campaign, log in to Marketing Operations and set the following properties on the **Settings > Configuration** page:

- **Unica > Platform**:
  - IBM Unica Marketing Operations - Campaign integration (MO_UC_integration must be enabled)
  - IBM Unica Marketing Operations - Offer integration (optional, if Campaign integration is enabled)
- **Unica > Campaign > partitions > partition[n] > server > internal**:
  - MO_UC_integration (Set this option to Yes if you plan to enable any of the following three optional settings)
  - MO_UC_BottomUpTargetCells
  - Legacy_campaigns
  - IBM Unica Marketing Operations - Offer integration
- **Unica > Marketing Operations > umoConfiguration > campaignIntegration**:
  - defaultCampaignPartition

– webServiceTimeoutInMilliseconds

For more information, see the *Marketing Operations and Campaign Integration Guide*.

Step: Configure DB2 database for integrated systems

If your installation uses a DB2 database, integrates IBM Unica Marketing Operations with Campaign, and has offer integration enabled, you must configure timing parameters for the database.

1. Use the DB2 admin utility (`get db cfg`) to review the settings for the **LOCKTIMEOUT** and **DLCHKTIME** parameters.
2. Set the lock timeout period to 10 seconds as follows:

   `update db cfg LOCKTIMEOUT 10`
3. Set the deadlock check time to 15,000 milliseconds as follows:

   `update db cfg DLCHECKTIME 15000`

These settings prevent deadlock conditions from occurring when multiple users access database tables simultaneously.

Chapter 7. Installing reports

For its reporting feature, Marketing Operations integrates with IBM Cognos, a separate business intelligence application. Reporting relies on the following components:

- An IBM Cognos installation that meets the requirements specified in *IBM Unica Enterprise Products Recommended Software Environments and Minimum System Requirements*.
- A set of IBM Unica Marketing components that integrate the IBM Unica system with the IBM Cognos installation.
- The example reports for the Marketing Operations application, built with IBM Cognos Report Studio.

Marketing Platform provides the IBM Unica side of the reporting integration. To finish installing reporting, you run all of the following report package installers on the IBM Cognos system:

- IBM Unica
- IBM Unica Marketing Platform
- IBM Unica Marketing Operations

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

Install reporting components

Installing and configuring IBM Unica product report packages is a multi-step process. Perform the tasks in this section to perform the installation.

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

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

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

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

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

1. Click **Settings > Users**.

   The Users page displays.

2. Click the name of the user account that you want to work with.

   The user detail page displays a list of the user's attributes, roles, groups, and data sources.

3. Click **Edit Roles**.

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

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

   The selected role name is highlighted.

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

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

   A window displays the message, Save Successful.

7. Click **OK**.

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

Step: Determine which authentication mode to configure

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

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

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

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

Optional step: Obtain email server information

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

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

Install and test IBM Cognos BI

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

IBM Cognos BI, IBM Unica reporting, and domains

Before you begin, determine whether you are installing IBM Cognos BI in the same domain as the IBM Unica Marketing suite. As a best practice, you are encouraged

to install IBM Cognos and the IBM Unica Marketing system in the same domain. If you do not, you must configure both IBM Cognos and IBM Unica Marketing to use SSL.

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

IBM Cognos BI applications

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

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

IBM Cognos BI installation options and Cognos documentation

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

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

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

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

IBM Cognos BI web applications and the web server

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

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

Example httpd.conf code snippet

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

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

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

IBM Cognos BI and locale

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

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

Test the IBM Cognos BI installation

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

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

- Open Framework Manager and start to create a project. This test ensures that you can log in. Check the log file again for errors.

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

To integrate the IBM Unica Marketing suite with Cognos, you need the following installers.

- The IBM Unica master installer—You always run this installer to launch the other installers
- The Marketing Platform installer—You install the Cognos integration component from this installer
- The reports pack installer or installers for the products for which you want to implement reporting—You install the reports archive containing the models and sample reports from this installer

After you perform the installation, you perform the following configuration steps, as described in the remainder of this section.

- Configure IBM Unica and Cognos reporting properties in the Marketing Platform interface
- Import the report into Cognos Connection
- Configure Cognos to use IBM Unica authentication

Installation checklist: IBM Cognos integration

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

1. "Step: Obtain the JDBC driver for the Marketing Platform system tables."
2. "Step: Install the reporting models and integration component on the IBM Cognos system" on page 36.
3. "Step: Create the IBM Cognos data sources for the IBM Unica application databases" on page 36.
4. "Optional step: Set up email notification" on page 37.
5. "Step: Configure the IBM Cognos application's firewall" on page 38.
6. "Step: Import the reports folder in Cognos Connection" on page 38.
7. "Step: Configure and publish the data model, if necessary" on page 39.
8. "Step: Enable internal links in the reports" on page 40.
9. "Step: Verify the data source names and publish" on page 40.
10. "Step: Configure the reporting properties in IBM Unica Marketing" on page 41.
11. "Step: Test your configuration without authentication enabled" on page 41.
12. "Configure IBM Cognos to use IBM Unica authentication" on page 42.
13. "Step: Test your configuration with authentication configured" on page 45.

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

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

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

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

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

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

1. Stop the IBM Cognos service.
2. On the machine where the Cognos Content Manager is installed, place the following IBM Unica installers in a single directory.
   - IBM Unica master installer
   - Marketing Platform
   - The reports pack installer or installers for the products for which you want to implement reporting
3. Run the IBM Unica master installer, and select the Marketing Platform and Reports packages you want to install.
4. Following the prompts, enter the connection information for the Marketing Platform system table database.
5. When the Marketing Platform installer launches and the **Platform Installation Components** window appears, select the **Reports for IBM** *version* **Cognos BI** option and clear the other options.
6. When the Marketing Platform installer prompts for the path to the JDBC driver, enter the fully qualified path for the JDBC driver you copied to the Cognos system during the task "Step: Obtain the JDBC driver for the Marketing Platform system tables" on page 35.
7. When the Marketing Platform installer prompts for the location of the IBM Cognos installation, enter or browse to the top level of the IBM Cognos installation directory. The default value provided in this field is a static value that is not based on the actual file structure of your IBM Cognos system.
8. When the report pack installer or installers displays installation options, select the **IBM Cognos Package for** *Product*, and clear the option for the reporting schemas.

   This option copies the reports archive to the Cognos machine. You import this archive later.
9. Restart the IBM Cognos server.

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

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

Table 6. Cognos data sources

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

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

- Use the Administration section of Cognos Connection.
- Use the default data source names that are shown in the Cognos data sources table. That way you can avoid altering the data model.
- The database type you select must match that of the IBM application database. Use the Cognos documentation and help topics to determine how to fill out database-specific fields.
- Be sure that you identify the IBM Unica application database and not the Cognos content store.
- When you configure the **Signon** section, select the **Password** and **Create a Signon that the Everyone group can use** options.
- In the **Signon** section, specify the user credentials for the IBM Unica application database user.
- Consult the Cognos data sources table and ensure that you create all the data sources required by the data model for the reports you are configuring. For example, the reporting data for Interact is located in three databases so you must create separate Cognos data sources for each one.
- If the Campaign system has more than one partition, create separate data sources for each partition. For example, if Campaign is configured for multiple partitions, create a separate Campaign data source for each partition.
- Verify that you have configured each data source correctly by using the **Test Connection** feature.

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

Optional step: Set up email notification

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

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

- In Cognos Configuration, select **Data Access > Notification**.

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

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

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

Step: Configure the IBM Cognos application's firewall

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

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

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

   For example:

   `serverXYZ.mycompany.com:7001`
4. Save the configuration.
5. Restart the IBM Cognos service.

Step: Import the reports folder in Cognos Connection

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

1. Navigate to the `Cognosnn` directory under your report package installation on the IBM Cognos machine, where *nn* indicates the version number.
2. Copy the compressed reports archive file (for example `Unica Reports for Campaign.zip`) to the directory where your Cognos deployment archives are saved. In a distributed IBM Cognos environment, this is a location on the system running the Content Manager.

   The default location is the deployment directory under your IBM Cognos installation and it is specified in the Cognos Configuration tool installed with the Cognos Content Manager. For example: `cognos\deployment`.
3. Locate the `Cognosnn\ProductNameModel` subdirectory under your report package installation on the Cognos machine.
4. Copy the entire subdirectory to any place on the system running Cognos Framework Manager that Framework Manager has access to.

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

    If your **Welcome** page is turned off, turn it back on in the Cognos Connection user preferences.
7. Click the **Configuration** tab.
8. Select **Content Administration**.
9. Click (**New Import**) on the toolbar.
10. Follow these guidelines as you step through the **New Import Wizard**:
    a. Select the reports archive that you copied in the previous procedure.
    b. In the Public folders content list, select **all** the options, including the package itself (the blue folder).
    c. If you do not want users to access the package and its entries yet, select **Disable after import**. Make this selection if you want to test the reports before you make them available to the IBM Unica application users.

Step: Configure and publish the data model, if necessary

In "Step: Create the IBM Cognos data sources for the IBM Unica application databases" on page 36, you set up the IBM Unica system tables as a Cognos data source. If the data source login you used is not the owner of the IBM Unica application system tables, perform the step described here. If the data source login you used **does** own the IBM Unica application system tables, then you can skip this step.

1. Locate the Model directory under the reports package installation. Copy all of the files in this Model directory to anywhere under your Cognos Framework Manager installation directory. These files constitute the application-specific data model.
2. In Framework Manager, open the project file. The project file has a .cpf extension and the file name includes the IBM application name (for example, *ProductName*Model.cpf).
3. Open the application's data model and do the following.
    a. In the Project Viewer, expand Data Sources.
    b. Click the Application's data source.
    c. Update the data source as described in the following table.

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

4. Save and republish the package.

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

Step: Enable internal links in the reports

The IBM Unica application reports have standard links. To enable these links to work properly, you must configure the Cognos firewall as described in "Step: Configure the IBM Cognos application's firewall" on page 38, and you must configure the redirect URL in the Cognos data model (the .cpf file) for the IBM Unica application reports, as follows.

1. From Cognos Framework Manager, browse to the *<productName>*Model subdirectory you copied into the Framework Manager directory structure and select the .cpf file. For example, `CampaignModel.cpf`.
2. Select **Parameter Maps > Environment**.
3. Right click **Environment** and select **Edit Definition**.
4. In the **Redirect URL** section, select the **Value** field. Edit the server name and port number so they are correct for the IBM Marketing system, leaving the rest of the URL intact. By convention, the host name includes the domain name.

   For example, for Campaign:

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

   For example, for Marketing Operations:

   `http://serverX.ABCompany.com:7001/plan/callback.jsp?`
5. Save the model and publish the package:
   a. From the navigation tree, expand the **Packages** node of the model.
   b. Right click the package instance and select **Publish Package**.

Step: Verify the data source names and publish

When you publish the model from Framework Manager to the Cognos content store, the name specified as the data source for the reports in the model must match the name of the data source you created in Cognos Connection. If you used the default data source names as described in "Step: Create the IBM Cognos data sources for the IBM Unica application databases" on page 36, the data source names match. If they do not, you must change the name of the data source in the model.

1. In Cognos Connection, determine the names of the data sources you created.
2. In Framework Manager, select the **Open a Project** option.
3. Browse to the *<productName>*Model subdirectory you copied into the Framework Manager directory structure and select the .cpf file. For example, `CampaignModel.cpf`.
4. Expand the **Data Sources** entry and examine the names of the data sources. Verify that they match what you named them in Cognos Connection.
   a. If they match, you are finished with this procedure.
   b. If they do not match, select the data source instance and edit the name in the **Properties** section. Save your changes.
5. Publish the package to the Cognos content store

Step: Configure the reporting properties in IBM Unica Marketing

There are several sets of properties for configuring reporting in IBM Unica Marketing. Some specify parameter values for the reporting components in the Marketing Platform and some specify URLs and other parameters for the IBM Cognos BI system.

1. Log in to IBM Unica Marketing as the platform_admin user or another user with the ReportsSystem role.
2. Select **Settings > Configuration > Reports > Integration > Cognos** *version*
3. Set the value of the **Enabled** property to True.
4. Set the value of the **Domain** property to the name of the company domain on which the IBM Cognos system is running.

   For example, xyzCompany.com.

   If your company uses subdomains, the value in this field should include the company domain and the subdomain.
5. Set the value of the **Portal URL** property, to the URL of the Cognos Connection portal. Use a fully qualified host name, including the domain and any subdomains (specified in the **Domain** property).

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

   You can find this URL in the Cognos Configuration utility under **Local Configuration > Environment**.
6. In the **Dispatch URL** field, specify the URL of the primary Cognos Content Manager dispatcher. Use a fully qualified host name, including the domain and any subdomains (specified in the **Domain** property).

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

   You can find this URL in the Cognos Configuration utility under **Local Configuration > Environment**.
7. Leave **Authentication mode** set to anonymous for now.
8. Save the settings.

Step: Test your configuration without authentication enabled

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

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

   If the report fails, verify that you configured the Cognos data source for the IBM Unica application database correctly. See "Step: Create the IBM Cognos data sources for the IBM Unica application databases" on page 36.
5. Click a link in the report.

If the internal links from the reports do not work, the redirect URL is not configured correctly. See "Step: Enable internal links in the reports" on page 40.

6. Log in to the IBM Unica application as a user with application access and navigate to the **Analysis** page.

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

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

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

If you cannot view the report, it is likely that the IBM Cognos firewall isn't configured correctly. See "Step: Configure the IBM Cognos application's firewall" on page 38.

8. Click a link in the report.

If the internal links from the reports do not work, the redirect URL is not configured correctly. See "Step: Enable internal links in the reports" on page 40.

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

Configure IBM Cognos to use IBM Unica authentication

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

Before you begin the procedures in this section, be sure that you know which authentication mode you plan to configure ("authenticated" or "authenticated per user"). If you need more information, see "Step: Determine which authentication mode to configure" on page 32.

Step: Create the reporting system user, if necessary

Note: If you are setting the authentication mode to "authenticated per user" skip this procedure and continue to "Step: Configure the Cognos authentication properties in IBM Unica Marketing" on page 43.

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

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

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

Ensure that the user name in the data source exactly matches the user name of the IBM Unica user you created in step 3.

   c. Data Source Password: `admin`

5. Add the Reports System role to the user.

6. If IBM Unica Marketing is configured to expire user passwords, log out and then log back in as the reporting system user (cognos_admin). This step ensures that you interact with the IBM Unica security "change password" challenge and reset the password before you log in to IBM Cognos as this user in a later task.

Step: Configure the Cognos authentication properties in IBM Unica Marketing

1. Log in to IBM Unica Marketing as the platform_admin user.

2. Select **Settings > Configuration**.

3. Expand **Reports > Integrations > Cognos** *version*.

4. Set the value of the **Authentication Mode** property by selecting either **authenticated** or **authenticatedPerUser**, as appropriate for your system.

5. **For "authenticated" only**. Verify that the values in the **Authentication user name** and **Authentication datasource name** fields match those of the user and data source you created in the previous task, "Step: Create the reporting system user, if necessary" on page 42.

6. Set the value of the **Enable form authentication** property.

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

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

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

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

   Note that when the **Enable form authentication** property is set to `True`, the **Authentication mode** property automatically behaves as though it were set to **authenticated**, and you must perform the step required for this mode, described in "Step: Create the reporting system user, if necessary" on page 42.

7. Save the new settings.

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

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

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

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

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

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

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

   If you still cannot log in to Cognos Connection, examine the cogserver.log file, located in the logs directory of your Cognos installation, to determine the problem.
9. When you can successfully log in to Cognos Connection, open Cognos Configuration again.
10. Select **Local Configuration > Security > Authentication > Cognos**.
11. Disable anonymous access to IBM Cognos BI by setting **Allow anonymous access?** to false.
12. Save your changes.
13. Stop and restart the IBM Cognos service.

If the IBM Cognos service cannot communicate successfully with the authentication provider, it cannot start. If the IBM Cognos service fails to start, verify your configuration by retracing the steps in this procedure.

14. **Distributed systems only.** If your IBM Cognos system has backup Content Managers configured for failover support, repeat this procedure on all the servers with Content Manager installed.

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

Step: Test your configuration with authentication configured

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

1. Verify that IBM Unica Marketing is running and that the IBM Cognos service is running.

2. Open Cognos Connection.

3. Navigate to the report folders you imported and click the link a basic report. For example, for Campaign, select **Public Folders > Campaign > Campaign > Campaign Summary**.

    If the report fails, verify that you configured the IBM Cognos data source for the IBM Unica application database correctly. See "Step: Create the IBM Cognos data sources for the IBM Unica application databases" on page 36.

4. Click a link in the report.

    If the internal links from the reports do not work, the redirect URL is not configured correctly. See "Step: Enable internal links in the reports" on page 40.

5. Log in to IBM Unica Marketing and navigate to the **Analysis** page.

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

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

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

    If you see error messages about security, it is likely that the IBM Unica Authentication Provider is not configured correctly. See "Configure IBM Cognos to use IBM Unica authentication" on page 42.

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

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

7. Click a link in the report.

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

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

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

Next steps for reporting

At this point, reporting is working properly and the example reports are in their default state.

- If you configured the system to use the "authenticated per user" mode, ensure that the appropriate IBM Unica users can run the reports from the IBM Unica applications. The easiest way to do this is to assign the default ReportsUser role to the appropriate user groups or users.
- For general information about the Framework Manager data models and Report Studio reports, see the chapter named "Configuring Reporting" in the *IBM Unica Marketing Platform Administrator's Guide*. For information about configuring and customizing the Marketing Operations reports, see the chapter on reports in the *IBM Unica Marketing Operations Administration Guide*.
- To use the Cognos dashboard reports in your dashboards, see the chapter on Dashboards in the *IBM Unica Marketing Platform Administrator's Guide*.

Chapter 8. Installing IBM Unica Marketing Operations in a cluster

To install IBM Unica Marketing Operations in a cluster, follow the instructions from chapters 2 through 7 and supplement those instructions with information from this chapter.

When you install Marketing Operations in a cluster, there are many ways to configure the installation. However, the basic process follows.

1. Run the installers on one system: typically, the administration server (or whatever the equivalent is for your application server type).
2. Create and share a file directory to hold the upload files for all the Marketing Operations installations.
3. Create the EAR file, and then deploy it on each machine in the cluster.
4. Configure each system to share the same Marketing Platform system tables and the same Marketing Operations system tables.
5. Configure each system to use the shared file directory.
6. Determine which machine in the cluster should send notifications. Then suppress the notification process on all the other machines.
7. Enable the UMOSESSIONID cookie for all servers in the cluster.
8. Configure `plan_ehcache.xml` for distributed caching of templates and offer folders.

Installing on a cluster in WebLogic

If you are installing Marketing Operations on a cluster in WebLogic, use the following changes and additions when completing the tasks in chapters 2 through 7.

Preparing to install

Before you begin, you must create a WebLogic domain for the cluster. For help with this step, see the WebLogic documentation.

Preparing the data sources

The data source chapter instructs you to create a database for Marketing Operations and then configure a JDBC data source for it in your application server. When you complete these tasks for a cluster, note the following additional instructions:

- You must configure the web application servers to use the correct JDBC driver on all machines in the cluster.
- Create the data source for the Marketing Platform system tables (UnicaPlatformDS) on both the administration server and the cluster members.
- When you create the data source for the Marketing Operations system tables (plands), deploy it to the cluster, and not to the administration server. Select **All servers in the cluster**.

Installing the products

When you run the installer, be sure that you install Marketing Platform and Marketing Operations once on the machine designated as the administration server for the cluster. You do not need to install the software on each cluster member. Instead, you install it once (on the administration server), create the EAR, and then deploy the EAR file on each cluster member.

Additional pre-deployment steps

Before you deploy Marketing Operations, complete the following tasks in addition to the ones specified in the pre-deployment configuration chapter:

* Share the top-level directory in which Marketing Operations is installed. For example, say that if Marketing Operations is installed in the following directory: `C:\UMOCluster\Unica\MarketingOperations`. In this case, you would share the entire `UMOCluster` directory.
* Create and share a folder on the administration server to contain the upload files for Marketing Operations. This folder is known as the `Shared_UMO_Artifacts` folder. All cluster members must have full control (read, write, change, and delete) of this folder. Placing this folder below the IBM Unica home directory in the local file system hierarchy is optional.

Deploying the applications on WebLogic

In addition to the instructions in the deployment chapter, note the following additions and one exception.

1. Set Source accessibility option

When you deploy the EAR on the administration server, set the **Source accessibility** option to **Use the defaults defined by the deployment's targets**.

2. Additional instructions for setting the JAVA_OPTIONS

Remember to configure the JAVA_OPTIONS property in the `setenv` file **on each machine** in the cluster.

The path you specify in the `plan.home` property must point to the **shared installation directory**.

There are two additional parameters to set for clusters:

* `-DPLAN_CONFIG_GUID=Plan`
* On the machines that should not send notifications, set the "suppress notifications" parameter as follows:

    `-Dplan.suppressNotifications=true`

    Set this property on every node except one: the one you want to send notifications.

3. Define an alternate ehcache file

The `plan_ehcache.xml` file defined in the `CONF` directory is used for every node in the cluster. To override this default file on a node, edit `startWeblogic.cmd`

(Windows) or `startWeblogic.sh` (UNIX) on that node to configure the
JAVA_OPTIONS property: add the `-plan_ehcache` parameter to specify the location
of another `plan_ehcache.xml` file.

4. Set the MEM_ARGs

The memory setting is **different** for clusters than it is for a non-clustered
installation. Use the following setting:

```
Xms256m -Xmx512m -XX:MaxPermSize=512m
```

Configure session management cookie

To define the name of the session management cookie used by servers in the
cluster, you edit the `plan.war` file that is created by the installer and deployed on
your application server.
1. Open a Command Prompt and verify that the Java version is the same as the
   JRE used by Marketing Operations: type `java -version`.
2. Copy `plan.war` into a temporary folder and rename the original `plan.war` file.
3. Unpack the contents of the new, temporary `plan.war` archive: type `jar -xvf`
   `plan.war`.
4. Delete the unpacked `plan.war`: type `rm plan.war`.
5. Change to the `WEB-INF` directory: type `cd WEB-INF`.
6. Edit the `web.xml` file to add this tag to override the cookie name:
   ```
   <init-param>
       <param-name>CookieName</param_name>
       <param-value>UMOSESSIONID</param-value>
   </init-param>
   ```
7. Repack the `plan.war`: type `cd ..` then `jar -cvf * plan.war`.
8. Copy the updated `plan.war` back to its original location on the server.
9. Deploy the updated `plan.war`.

Additional post-deployment steps

If you are using a plug-in for load balancing, you must perform the following
configuration steps.
• For IBM Unica Marketing Operations to work effectively in a clustered
  environment, users must remain on a single node for their entire session. This
  option for session management and load balancing is known as sticky sessions
  or sticky load balancing. For more information about configuring your
  installation to use this option, see the documentation for your application server.

  Note: When a node fails on a system that uses this configuration option, every
  user session on that node also fails. The load balancer does not, and should not,
  switch users to another available node, as user authentication applies only to a
  single node in Marketing Operations. Users are prompted to log in again, and in
  some cases an unexpected error and corresponding data loss can occur.
• Log in to Marketing Operations and select **Settings > Configuration**. Configure
  the following URL parameters so that all references to the Marketing Operations
  server use the proxy host and port:
  – Marketing Operations | navigation | serverURL
  – Marketing Operations | umoConfiguration | markup | markupServerURL

– Marketing Operations | umoConfiguration | notifications | notifyPlanBaseURL

Installing on a cluster in WebSphere

If you are installing Marketing Operations on a cluster in WebSphere, use the following changes and additions when completing the tasks in chapters 2 through 7.

Preparing the data sources

The data source chapter instructs you to create a database for Marketing Operations and then configure a JDBC data source for it in your application server. When you complete these tasks for a cluster on WebSphere, note the following additional instructions:

- The Marketing Operations database must be on a machine that is accessible to all machines in the cluster, but it does not need to be on a machine in the cluster.
- When configuring the JDBC provider, specify the cluster as the scope.

Installing the products

When you follow the instructions for running the installer, be sure that you install Marketing Platform and Marketing Operations once, on a machine that is accessible to all machines in the Marketing Operations cluster.

You do not need to install the software on each cluster member. Instead, you install it once, create the EAR, and then deploy the EAR file on each cluster member.

Additional pre-deployment steps

Before you deploy Marketing Operations, complete the following tasks in addition to the ones specified in the pre-deployment configuration chapter:

- Share the top-level directory in which Marketing Operations is installed. For example, say that Marketing Operations is installed in `C:\UMOCluster\Unica\MarketingOperations`. In this case, you would share the entire `UMOCluster` directory.
- Create and share a folder on the administration server to contain the upload files for Marketing Operations. This folder is known as the `Shared_UMO_Artifacts` folder. All cluster members must have full control (read, write, change, and delete) of this folder. Placing this folder below the IBM Unica home directory in the local file system hierarchy is optional.

Additional deployment steps

In addition to the instructions in the deployment chapter, note the following additions

1. Map modules to servers

When you set the options in the **Select Installation Options** wizard for WebSphere, select the cluster and the web server when mapping modules to servers.

2. Additional instructions for the Generic JVM property

Remember to configure the Generic JVM property on **each machine** in the cluster.

The path you specify in the plan.home and other properties must point to the **shared installation directory**.

You set the following additional parameters for clusters:
- -DPLAN_CONFIG_GUID=Plan
- -Dplan.log.config=*umoMachine**SharedUnicaHome*\MarketingOperations\conf\ plan_log4j_client.xml
- -Dplan.local.log.dir=*local_log_dir* (where *local_log_dir* is the writeable folder on the physical machine where Marketing Operations creates logs)
- On the machines that should not send notifications, set the "suppress notifications" parameter as follows:

  -Dplan.suppressNotifications=true

  Set this property on every node except one: the one you want to send notifications.
- To use a different plan_ehcache.xml file in place of the default file defined in the CONF directory for a node, set the -plan_ehcache parameter for that node to specify the location of the file.

Configure session management cookie

You must define the name of the session management cookie used by servers in the cluster. To configure the session management cookie:

1. In the WebSphere console, access the properties for a server in the cluster. Navigate to the web container settings and open the session management configuration.
2. Enable cookies and specify UMOSESSIONID as the cookie name.
3. Save the settings and repeat this procedure for all servers in the cluster.

Additional post-deployment steps

If you are using a plug-in for load balancing, you must perform the following configuration steps.
- For IBM Unica Marketing Operations to work effectively in a clustered environment, users must remain on a single node for their entire session. This option for session management and load balancing is known as session affinity. For more information on configuring your installation to use session affinity, refer to the documentation for your application server.

  Note: When a node fails on a system that uses this configuration option, every user session on that node also fails. The load balancer does not, and should not, switch users to another available node, as user authentication applies only to a single node in Marketing Operations. Users are prompted to log in again, and in some cases an unexpected error and corresponding data loss can occur.
- Log in to Marketing Operations, select **Settings > Configuration**, and configure the following URL parameters so that all references to the Marketing Operations server use the proxy host and port.
  - Marketing Operations | navigation | serverURL
  - Marketing Operations | umoConfiguration | markup | markupServerURL
  - Marketing Operations | umoConfiguration | notifications | notifyPlanBaseURL

Configure the shared folder properties

Before you deployed the Marketing Operations application, you created a folder known as the `Shared_UMO_Artifacts` folder. Now you need to set the values of the properties that specify the folder for various upload files to point to that location.

1. Log in and select **Settings > Configuration**.
2. Select **Marketing Operations > umoConfiguration > templates**.
3. Click **Edit Settings** and then update the value for the `templatesDir` property to point to a subfolder in the `Shared_UMO_Artifacts` folder.
4. Save your changes
5. Select **Marketing Operations > umoConfiguration > attachmentFolders**.
6. Click **Edit Settings** and then update the values for all the properties in this category to point to subfolders in the `Shared_UMO_Artifacts` folder.
7. Save your changes.

Configuring ehcache

Ehcache is an open source Java distributed cache for general-purpose caching, Java EE, and light-weight containers. Every node in the cluster can use the same `plan_ehcache.xml` file, or you can indicate a different `plan_ehcache.xml` file for each node.

For installations in a cluster, you can edit the `plan_ehcache.xml` file so that changes to templates or offer folders do not require a system restart. Select one of the procedures that follow based on whether you are using RMI or multicast for cache replication.

Important: If your installation is upgraded from a previous version, some or all of the sections in the `plan_ehcache.xml` file may not be present. In that case, add and edit the file as shown in the sections that follow.

To configure ehcache with RMI

Marketing Operations systems that have the following topography typically use RMI:
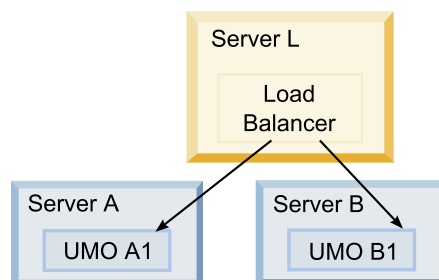
Clustered topography 1:
Configure ehcache with RMI

Navigate to the `UNICA_HOME\MarketingOperations\conf` directory and open the `plan_ehcache.xml` file in a text editor. Then make the following edits:
- Uncomment the following section of the file.

You must customize the items shown in bold (machineA, machineB, and port) to reflect your environment. Provide a pipe-separated list of all machines in the cluster, using fully qualified host names.

```
<!--
<cacheManagerPeerProviderFactory
class="net.sf.ehcache.distribution.RMICacheManagerPeerProviderFactory"
properties="peerDiscovery=manual,
rmiUrls=//<machineA>:40000/planApplicationCache|//<machineB>:
40000/planApplicationCache"/>

<cacheManagerPeerListenerFactory
class="net.sf.ehcache.distribution.RMICacheManagerPeerListenerFactory"
properties="port=40000, socketTimeoutMillis=20000"/>
-->
```

- Uncomment the following section of the file.

```
<!--
<cacheEventListenerFactory
class="net.sf.ehcache.distribution.RMICacheReplicatorFactory"
properties="replicateAsynchronously=true, replicatePuts=true,
replicateUpdates=true, replicateUpdatesViaCopy=true,
replicateRemovals=true"/>
<cacheEventListenerFactory
class="com.unicacorp.uap.common.cache.PlanCacheEventListenerFactory
"net.sf.ehcache.distribution.RMIBootstrapCacheLoaderFactory" />
-->
```

- If the following lines are present in the file, remove them.

```
<bootstrapCacheLoaderFactory class=net.sf.ehcache.distribution.
RMIBootstrapCacheLoaderFactory"/>
```

To configure ehcache with multicast

Marketing Operations systems that have the following topography typically use multicast:
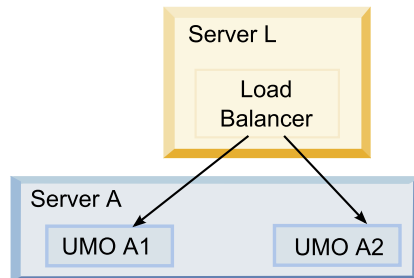
Clustered topography 2:
Configure ehcache with Multicast

Navigate to the UNICA_HOME\MarketingOperations\conf directory and open the plan_ehcache.xml file in a text editor. Then make the following edits:

- Uncomment the following section of the file.

  You must customize the items shown in bold (multicastGroupAddress and multicastGroupPort) to reflect the multicast group and port in your environment.

```
<!--<cacheManagerPeerProviderFactory
class="net.sf.ehcache.distribution.RMICacheManagerPeerProviderFactory"
properties="peerDiscovery=automatic, multicastGroupAddress=230.0.0.1,
multicastGroupPort=4446, timeToLive=32"/>
```

```
<cacheManagerPeerListenerFactory
class="net.sf.ehcache.distribution.RMICacheManagerPeerListenerFactory"/>
-->
```

* Uncomment the following section of the file.

```
<!--
<cacheEventListenerFactory
class="net.sf.ehcache.distribution.RMICacheReplicatorFactory"
properties="replicateAsynchronously=true, replicatePuts=true,
replicateUpdates=true, replicateUpdatesViaCopy=true,
replicateRemovals=true"/>
<cacheEventListenerFactory
class="com.unicacorp.uap.common.cache.PlanCacheEventListenerFactory" />
-->
```

* Also, if the following lines are present in the file, remove them.

```
<bootstrapCacheLoaderFactory
class="net.sf.ehcache.distribution.RMIBootstrapCacheLoaderFactory"/>
```

Chapter 9. Upgrading IBM Unica Marketing Operations

Before you upgrade from an earlier version of Marketing Operations, be sure to read all of the topics in this section to ensure a successful upgrade process.

Upgrade prerequisites for all IBM Unica Marketing products

To upgrade any IBM Unica Marketing product, you must meet all of the prerequisites listed under "Prerequisites" on page 2 in the "Preparing to Install" chapter.

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

Remove response files generated by previous installations

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

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

Failure to remove old response files can result in having incorrect data pre-filled in installer fields when the installer is run, or in the installer failing to install some files or skipping configuration steps.

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

User account requirement (UNIX only)

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

32-bit to 64-bit version upgrades

If you are moving from a 32-bit to a 64-bit version of an IBM Unica Marketing product, ensure that the following conditions are met.
- The database client libraries for your product data sources are also 64-bit
- All relevant library paths (for example, startup or environment scripts) correctly reference the 64-bit versions of your database drivers

Knowledge requirements

These instructions assume that the person performing the upgrade has an understanding of the following.
- The basic function of the IBM Unica installer, as described in "How the IBM Unica Marketing installers work" on page 9
- General IBM Unica Marketing product functionality and components, including the structure of the file system

- The installation and configuration process for the source product version and for the new version
- Maintaining configuration properties in your source and target systems
- The installation and configuration process for reports, if you are using these reports

About upgrading with existing campaign projects or requests

If you are upgrading a Marketing Operations system that is integrated with Campaign and you have existing campaign projects for which you have not created the corresponding linked campaigns, create the linked campaigns before you upgrade to Marketing Operations. Likewise, if you have existing project requests for campaign projects, accept or reject the requests before you upgrade to Marketing Operations.

If you do not link them before you upgrade, then when you attempt to create the campaigns for these projects or accept these requests after the system is upgraded, the campaigns will not be linked properly to the Marketing Operations projects.

Marketing Operations upgrade scenarios

Only systems with Marketing Operations version 8.5.0 installed can be upgraded to version 8.6.0. If you are running any other version of Marketing Operations or Affinium Plan, you must upgrade to Marketing Operations 8.5.0 first. For information about upgrading to version 8.5.0, see the *IBM Unica Marketing Operations 8.5 Installation Guide*.

To upgrade Marketing Operations

To upgrade to this version of Marketing Operations, you must be running Marketing Operations version 8.5.0. For information about upgrading to version 8.5.0, see the *IBM Unica Marketing Operations 8.5 Installation Guide*.

To upgrade Marketing Operations, you back up your existing installation, ensure that the platform is upgraded and running, run the installer, restore any trigger procedures, deploy the upgraded applications, and then run some post-deployment processes.

Step: Back up the system before you begin the upgrade

Before you begin your upgrade process, complete the steps in this task to ensure that you have properly backed up everything in your current installation.

1. Undeploy your existing version of Marketing Operations.
2. Back up all files and directories in your existing installation folder.

   Note: If you have modified the sample trigger procedures or the `procedure_plugins.xml` file, you must restore files from the backup after upgrading, to avoid losing trigger procedures. The files you must restore are in the `/devkits/integration/examples/src/procedure` folder.
3. Back up the database that holds your Marketing Operations system tables.

Step: Verify that the Marketing Platform has been upgraded

You must upgrade and deploy the Marketing Platform before you upgrade Marketing Operations.

Verify that the Marketing Platform was successfully upgraded and deployed before you continue.

Step: Run the installer and update the configuration properties

Before you run the installer, ensure that you have the appropriate database connection information for both the Marketing Platform database and the Marketing Operations database.

1. Run the IBM Unica installer and specify your existing installation directory as the installation directory to use. For more information, see "Step: Run the IBM Unica installer" on page 14.

   The installer detects that you have an earlier version installed and runs in upgrade mode.

2. Follow the instructions in the installation wizard. Note that the installer can upgrade the database automatically. If your company policy does not permit you to use this feature, select the **Manual database setup** option and then run the scripts manually after installing the software and before deploying the web application.

3. When the installer finishes, log in to the upgraded Marketing Platform application. Select **Settings > Configuration**. Review the properties in the Marketing Operations categories and set or change any parameters that are new for the current version of Marketing Operations.

Step: Upgrade your database manually, if necessary

The IBM Unica installer can upgrade the Marketing Operations database during the upgrade, but if your company policy does not permit you to upgrade the database in this way, you must use the database setup utility, `umodbsetup`, to upgrade the tables manually.

The `umodbsetup` utility does one of the following.
- Option 1: Upgrades the system tables in the Marketing Operations database and populates the tables with required default data.
- Option 2: Outputs the database upgrade and population scripts to a file that you or your DBA can then run in your own database client.

Configure environment variables

Before you run the `umodbsetup`, complete the following steps to configure the environment variables properly:

1. From the `UNICA_HOME\MarketingOperations\tools\bin` directory, locate and open the `setenv` file in a text editor.

2. Verify that the JAVA_HOME variable indicates the correct directory for your installation of Java, and that the JDBC drivers are the first entry for the DBDRIVER_CLASSPATH variable. For more information about setting this environment variable, see "Check for a JAVA_HOME environment variable" on page 14.

3. Save and close the file.
4. From the `UNICA_HOME\MarketingOperations\tools\bin` directory, locate and open the `umo_jdbc.properties` file.
5. Set values for the following parameters. (See comments in the file for examples.)
   - `umo_driver.classname`
   - `umo_data_source.url`
   - `umo_data_source.login`
   - `umo_data_source.password`
6. Save and close the file.

Run the database setup utility

From a command prompt or UNIX shell, navigate to the `UNICA_HOME\MarketingOperations\tools\bin` directory. Run the `umodbsetup` utility and provide appropriate input for the parameters required for your situation.

For example, the following command runs an upgrade, sets the locale to en_US, and sets the logging level to medium:

`./umodbsetup.sh -t upgrade -L en_US -l medium`

Following is a description of all the possible variables for the utility:

Table 7. Variables for the `umodbsetup.sh` utility

Variable	Description
-b	For upgrades only. Identifies the base version of the database that you are attempting to upgrade.
	By default, the utility detects the version of the database you are upgrading. However, if an earlier attempt to upgrade the database failed in some way, the version may have been updated even though the upgrade failed. When you have corrected the problem and run the utility again, you use this variable with the `-f` variable to specify the correct base version.
	For example, `-f -b 8.5.0.0.21`
-f	For upgrades only. Instructs the utility to use the base version specified by the `-b` variable, overriding the base version it may detect in the database. See the description of the `-b` variable.
-h	Provides help for the utility.
-l	Records the output from the actions that the `umodbsetup` utility performs in the `umo-tools.log` file. This file is located in the `UNICA_HOME\MarketingOperations\tools\logs` directory. This variable specifies the logging level.
	You can set the logging level to `high`, `medium`, or `low`.
-L	Sets the default Locale for the installation. For example, use `-L de_DE` for a German installation.
	The valid entries for locales include de_DE, en_GB, en_US, es_ES, fr_FR, it_IT, ja_JP, ko_KR, pt_BR, ru_RU, and zh_CN.

Table 7. Variables for the `umodbsetup.sh` *utility (continued)*

Variable	Description
-m	Outputs the scripts to a file in the `UNICA_HOME\MarketingOperations\tools` directory, which you can then run manually. Use this option if there is a reason you need to run scripts from your own database client application. When you use this variable, the `umodbsetup` tool does not run the script.
-t	Type of database installation. Valid values are `Full` and `upgrade`. For example, `-t Full`
-v	Verbose.

Run the database scripts manually, if necessary

If you used the `-m` variable to output the scripts so you can run them from your own database client application, run the scripts now.

Do not deploy the `plan.war` file before you upgrade and populate the system tables.

Step: Deploy the upgraded web application and run the upgrade processes

1. Deploy Marketing Operations in your web application server as described in Chapter 5, "Deploying IBM Unica Marketing Operations," on page 23.
2. Restart the application server.
3. When the application is running, log in and verify that the upgrade worked properly. Select **Setting > Configuration** and verify that Marketing Operations appears in the list on the left. Then expand the Marketing Operations section and verify that the **umoConfiguration** category appears in the list.
4. Select **Settings > Marketing Operations Settings**.
5. Scroll to the bottom of the page and then click **Marketing Operations Upgrade** to display the list of process that upgrades things like forms, alerts, and metrics.
6. Run each of the upgrade processes.
   Click **Help** for descriptions of each process and details about how they work.

Step: Restore trigger procedures, if necessary

If you were using triggers, complete the steps in this task to restore them.

1. Restore the procedures and the `procedure_plugins.xml` file from the backup you made earlier. Put them in the default location for the files:
   `UNICA_HOME\MarketingOperations\devkits\integration\examples\src\procedure.`
2. If necessary, rebuild the integration services procedures using the `build` file located in the `UNICA_HOME\MarketingOperations\devkits\integration\examples\build` directory under your Marketing Operations installation.
3. Update the following parameters on the **Settings > Configuration > Marketing Operations > umoConfiguration > attachmentFolders** page. Set the values to point to the directories you created in the previous step.
   - Set `graphicalRefUploadDir` to `UNICA_HOME\MarketingOperations\graphicalrefimages`

- Set `templateImageDir` to `UNICA_HOME\MarketingOperations\images`
- Set `recentDataDir` to `UNICA_HOME\MarketingOperations\recentdata`
- Set `workingAreaDir` to `UNICA_HOME\MarketingOperations\umotemp`

Step: Upgrade reporting

In this version of IBM Unica Marketing, the reporting component is provided by the Marketing Platform. Upgrade steps specific to the reporting component are no longer required.

(Prior to version 8.5.0, IBM Unica reporting was provided in a separate web application and required additional upgrade steps.)

Upgrading Marketing Operations in a clustered environment

Use the following guidelines when you upgrade multiple instances of Marketing Operationsin a clustered environment.

- Undeploy all of the instances of Marketing Operations.
- Follow the directions in this chapter to upgrade.
- Use your web application server's automatic deployment features to deploy the EAR file in your cluster.

Appendix A. Uninstalling IBM Unica products

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

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

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

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

To uninstall IBM Unica products

Follow these instructions to properly remove IBM Unica products from your system.

Note: On UNIX, the same user account that installed IBM Unica Marketing must run the uninstaller.

1. Undeploy the IBM Unica Marketing product web application from WebSphere or WebLogic.
2. Shut down WebSphere or WebLogic.
3. Stop any running processes that are related to the product you are uninstalling. For example, stopping the Campaign or Optimize Listener services before uninstalling those products.
4. Run the IBM Unica Marketing uninstaller and follow the directions in the wizard.

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

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

Appendix B. The configTool utility

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

When to use configTool

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

- To import partition and data source templates supplied with Campaign, which you can then modify and/or duplicate using the Configuration page.
- To register (import configuration properties for) IBM Unica Marketing 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 Unica Marketing.
- To delete categories that do not have the **Delete Category** link. You do this by using `configTool` to export your configuration, then manually deleting the XML that creates the category, and using `configTool` to import the edited XML.

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

Valid product names

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

Product name	Name used in configTool
Marketing Platform	`Manager`
Campaign	`Campaign`
Distributed Marketing	`Collaborate`
eMessage	`emessage`
Interact	`interact`
Optimize	`Optimize`
Marketing Operations	`Plan`
CustomerInsight	`Insight`
NetInsight	`NetInsight`
PredictiveInsight	`Model`
Leads	`Leads`

Syntax

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

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

configTool -x -p "elementPath" -f exportFile

configTool -r productName -f registrationFile [-o]

configTool -u productName
```

Commands

-d -p "*elementPath*"

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

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

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

-i -p "*parentElementPath*" -f *importFile*

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

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

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

The parent element path must use the internal names of categories and properties, which you can obtain by going to the Configuration page, selecting the desired category or property, and looking at the path displayed in parentheses in the right pane. Delimit a path in the configuration property hierarchy using the | character, and surround the path with double quotes.

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

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

-x -p "*elementPath*" -f *exportFile*

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

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

The element path must use the internal names of categories and properties, which you can obtain by going to the Configuration page, selecting the wanted category or property, and looking at the path displayed in parenthesis in the right pane. Delimit a path in the configuration property hierarchy using the | character, and surround the path with double quotes.

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

-r *productName* -f *registrationFile*

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

Note the following.
* When you use the -r option, the registration file must have <application> as the first tag in the XML.

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

-u *productName*

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

Options

-o

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

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

Examples

- Import configuration settings from a file named Product_config.xml located in the conf directory under the Marketing Platform installation.

  configTool -i -p "Affinium" -f Product_config.xml

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

  configTool -i -p "Affinium|Campaign|partitions|partition1|dataSources" -f OracleTemplate.xml

- Export all configuration settings to a file named myConfig.xml located in the D:\backups directory.

  configTool -x -f D:\backups\myConfig.xml

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

  configTool -x -p "Affinium|Campaign|partitions|partition1" -f partitionTemplate.xml

- Manually register an application named productName, using a file named app_config.xml located in the default tools/bin directory under the Marketing Platform installation, and force it to overwrite an existing registration of this application.

  configTool -r product Name -f app_config.xml -o

- Unregister an application named productName.

  configTool -u productName

Appendix C. Marketing Operations configuration properties

This section describes the IBM Unica Marketing Operations configuration properties on the Configuration page.

Note: Properties in the **Marketing Operations > about** category are for internal use only; you should not edit these values.

Marketing Operations

supportedLocales

Description

> Specifies the locales available in your installation of IBM Unica Marketing Operations. List only the locales that you are actually using. Each locale you list uses memory on the server. The amount of memory used depends on the size and number of templates.

> If you add locales after the initial installation or upgrade, you must run the upgrade servlets again. See upgrade documentation for details.

> If you change this value, you must stop and restart your Marketing Operations deployment before the change takes effect.

Default value

> en_US

defaultLocale

Description

> Specifies the supported locale in which you want IBM Unica Marketing Operations to display for all users, unless explicitly overridden for specific users by Marketing Operations administrators.

> If you change this value, you must stop and restart your Marketing Operations deployment before the change takes effect.

Default value

> en_US

Marketing Operations | Navigation

welcomePageURI

Description

> The Uniform Resource Identifier of the IBM Unica Marketing Operations index page. This value is used internally by IBM Unica Marketing applications. You should not change this value.

Default value

> affiniumPlan.jsp?cat=projectlist

projectDetailpageURI

Description

The Uniform Resource Identifier of the IBM Unica Marketing Operations detail page. This value is used internally by IBM Unica Marketing applications. You should not change this value.

Default value

blank

seedName

Description

Used internally by IBM Unica Marketing applications. You should not change this value.

Default value

Plan

type

Description

Used internally by IBM Unica Marketing applications. You should not change this value.

Default value

Plan

httpPort

Description

The port number used by the application server for connections to the IBM Unica Marketing Operations application.

Default value

7001

httpsPort

Description

The port number used by the application server for secure connections to the IBM Unica Marketing Operations application.

Default value

7001

serverURL

Description

The URL of the IBM Unica Marketing Operations installation.

Default value

http://*servername:port*/plan

logoutURL

Description

Used internally. You should not change this value.

IBM Unica Marketing Platform uses this value to call the logout handler of each registered application if the user clicks the logout link in suite.

Default value

```
/uapsysservlet?cat=sysmodules&func=logout
```

displayName

Description

Used internally.

Default value

```
Plan
```

Marketing Operations | About

The **Marketing Operations > About** configuration properties list information about your IBM Unica Marketing Operations installation. You cannot edit these properties.

displayName

Description

The display name of the product.

Default value

IBM Unica Marketing Operations

releaseNumber

Description

The currently installed release.

Default value

8.6.0.x.x

copyright

Description

The copyright year.

Default value

2011

os

Description

The operating system on which IBM Unica Marketing Operations is installed.

Default value

java

Description

The current version of Java.

Default value

support

Description

> Read documentation and contact support at https:// customercentral.unica.com.

Default value

> `https://customercental.unica.com`

appServer

Description

Default value

> blank

otherString

Description

Default value

> blank

Marketing Operations | umoConfiguration

serverType

Description

> Application Server Type. Used for Calendar export.

Default value

> `WEBLOGIC`

Valid Values

> `WEBLOGIC` or `WEBSPHERE`

usermanagerSyncTime

Description

> Time in milliseconds to between scheduled synchronizations with IBM Unica Marketing Platform.

Default value

> 10800000 milliseconds (3 hours)

firstMonthInFiscalYear

Description

> Set to the month that you would like your account fiscal year to begin. The Summary tab for the account contains a view-only table which lists budget information by month for the fiscal years of the account. The first month in this table is determined by this parameter.

> January is represented by 0. To have your fiscal year to begin in April, set **`firstMonthInFiscalYear`** to 3.

Default value

> 0

Valid Values

> Integers 0 to 11

maximumItemsToBeRetainedInRecentVisits

Description

> The maximum number of items to save in recent list.

Default value

> 10

maxLimitForTitleString

Description

> The maximum number of characters that can display in a page title. If
> titles are longer than the specified number, IBM Unica Marketing
> Operations clips them.

Default value

> 40

maximumLimitForBulkUploadItems

Description

> The maximum number of attachments you can upload at the same time.

Default value

> 5

workingDaysCalculation

Description

> Controls how IBM Unica Marketing Operations calculates durations.

Default value

> all

Valid Values

> - Business days only: includes working days only. Does not include
>   weekends and days off.
> - Business days + Weekends: includes working days and weekends. Does
>   not include days off.
> - Business days + Days off: includes all working days and days off. Does
>   not include weekends.
> - all: includes all days in the calendar.

validateAllWizardSteps

Description

> When creating a program, project, or request with the wizard, IBM Unica
> Marketing Operations automatically validates that the required fields on

the current page have values. This parameter controls whether Marketing
Operations validates the required fields on all pages (tabs) when a user
clicks **Finish**.

Default value

> true

Valid Values

- `true`: Marketing Operations checks the required fields on pages that the
  user did not visit (except workflow, tracking, and attachments). If a
  required field is blank, the wizard opens that page and displays an error
  message.
- `false`: Marketing Operations does not check validate required fields on
  pages the user did not visit.

enableRevisionHistoryPrompt

Description

> Ensures that users are prompted to add change comments when saving a
> project/request or approval.

Default value

> false

Valid Values

> true | false

useForecastDatesInTaskCalendar

Description

> Specifies the type of dates used when displaying tasks in calendar view.

Default value

> false

Valid Values

- `true`: uses forecast and actual dates to display tasks.
- `false`: uses target dates to display tasks.

copyRequestProjectCode

Description

> Controls whether you want to carry the Project Code (PID) over from a
> request to a project. If you set this parameter to `false`, the project and the
> request use different codes.

Default value

> true

Valid Values

> true | false

projectTemplateMonthlyView

Description

Controls whether the monthly view is allowed in the workflow for a project template.

Default value

> false

Valid Values

> true | false

disableAssignmentForUnassignedReviewers

Description

> Specifies how work is assigned by role for approvals. The **disableAssignmentForUnassignedReviewers** parameter controls the behavior of **Assign work by Role** on the People tab for assignment of approvers in workflow approvals.

Default value

> false

Valid Values

> - true: unassigned reviewers in the People tab are not added to the approval as new steps.
>   - Append option: The existing, owner-assigned approvers without an assigned role do not change. New approver steps are not added even if the People tab has reviewers with the role "unassigned."
>   - Replace option: The existing owner assigned approvers without a role are replaced with a blank. New approver steps would not be added even if the people tab has reviewers with the role "unassigned."
> - false: unassigned reviewers are added to the approval.
>   - Append option: All reviewers without a role are appended to the approval as reviewers if the approval has owner assigned steps without defined roles.
>   - Replace Option: The existing approvers of approvals are replaced with the unassigned approvers in the People tab.

enableApplicationLevelCaching

Description

> Indicates whether application-level caching is enabled or not. For best results in a clustered environment on which multicasting of caching messages is not enabled, consider turning off application level caching for Marketing Operations.

Default value

> true

Valid Values

> true | false

customAccessLevelEnabled

Description

> Determines whether you use custom access levels (project roles) in IBM Unica Marketing Operations.

Default value

> true

Valid Values

- true: user access to projects and requests is evaluated according to Object Access Levels and Custom Access Levels (project roles), and tab security is enabled for custom tabs.
- false: user access to projects and requests is evaluated only according to Object Access Levels (object implicit roles), and tab security is turned off for custom tabs.

enableUniqueIdsAcrossTemplatizableObjects

Description

> Determines whether you use unique internal id's across objects created from templates such as programs, projects, plans, and invoices.

Default value

> true

Valid Values

- true enables unique internal id's across all objects created from templates. This way you can use the same table for two different object types to simplify cross object reporting.
- false disables unique internal id's across all objects created from templates.

FMEnabled

Description

> Enables and disables the Financial Management Module, which determines whether the Accounts, Invoices, and Budget tabs appear in the product.

Default value

> false

Valid Values

> true | false

FMProjVendorEnabled

Description

> Parameter used to show/hide vendor column for project line items.

Default value

> false

Valid Values

> true | false

FMPrgmVendorEnabled

Description

> Parameter used to show/hide vendor column for program line items.

Default value

```
                         false
```

Valid Values

```
                         true | false
```

Marketing Operations | umoConfiguration | templates

templatesDir

Description

Set to the directory that you want to contain all your project template definitions, which are stored in XML files.

Use a fully-qualified path.

Default value

```
templates
```

assetTemplatesFile

Description

The XML file that defines the templates for assets. This file must be located in the directory specified by the `templatesDir` property.

Default value

```
asset_templates.xml
```

planTemplatesFile

Description

The XML file that defines the templates for plans. This file must be located in the directory specified by the `templatesDir` property.

Default value

```
plan_templates.xml
```

programTemplatesFile

Description

The XML file that defines the templates for programs. This file must be located in the directory specified by the `templatesDir` property.

Default value

```
program_templates.xml
```

projectTemplatesFile

Description

The XML file that defines the templates for projects. This file must be located in the directory specified by the `templatesDir` property.

Default value

```
project_templates.xml
```

invoiceTemplatesFile

Description

The XML file that defines the templates for invoices. This file must be located in the directory specified by the `templatesDir` property.

Default value

> `invoice_templates.xml`

componentTemplatesFile

Description

> The XML file that defines the templates for marketing objects templates. This file must be located in the directory specified by the `templatesDir` property.

Default value

> `component_templates.xml`

metricsTemplateFile

Description

> The XML file that defines the templates for metrics. This file must be located in the directory specified by the `templatesDir` property.

Default value

> `metric_definition.xml`

teamTemplatesFile

Description

> The XML file that defines the templates for teams. This file must be located in the directory specified by the `templatesDir` property.

Default value

> `team_templates.xml`

offerTemplatesFile

Description

> The XML file that defines the templates for offers. This file must be located in the directory specified by the `templatesDir` property.

Default value

> `uap_sys_default_offer_comp_type_templates.xml`

Marketing Operations | umoConfiguration | attachmentFolders

uploadDir

Description

> The upload directory where attachments for projects are stored.

Default value

> `projectattachments`

planUploadDir

Description

The upload directory where attachments for plans are stored.

Default value

planattachments

programUploadDir

Description

The upload directory where attachments for programs are stored.

Default value

programattachments

componentUploadDir

Description

The upload directory where attachments for marketing objects are stored.

Default value

componentattachments

taskUploadDir

Description

The upload directory where attachments for tasks are stored.

Default value

taskattachments

approvalUploadDir

Description

The upload directory where approval items are stored.

Default value

approvalitems

assetUploadDir

Description

The upload directory where assets are stored.

Default value

assets

accountUploadDir

Description

The upload directory where attachments for accounts are stored.

Default value

accountattachments

invoiceUploadDir

Description

The upload directory where attachments for invoices are stored.

Default value

invoiceattachments

graphicalRefUploadDir

Description

The upload directory where attribute images are stored.

Default value

graphicalrefimages

templateImageDir

Description

The upload directory where template images are stored.

Default value

images

recentDataDir

Description

The temporary directory that stores the recent data (serialized) for each
user.

Default value

recentdata

workingAreaDir

Description

The temporary directory that stores CSV files that are uploaded during
grid imports.

Default value

umotemp

managedListDir

Description

The upload directory where managed list definitions are stored.

Default value

managedList

Marketing Operations | umoConfiguration| email

notifyEMailMonitorJavaMailHost

Description

Optional string that specifies either the DNS host name of the email notifications mail server or its dot-formatted IP address; set to the machine name or IP address of your organization's SMTP server.

This parameter is necessary if you have not provided IBM Unica Marketing Operations with an existing JavaMail session that uses the session paramter above and the delegate is marked "Complete."

Default value

> `[CHANGE-ME]`

notifyDefaultSenderEmailAddress

Description

> Set to a valid email address. The system uses this address to send emails when there is no valid email address available to send the notification emails.

Default value

> `[CHANGE-ME]`

notifySenderAddressOverride

Description

> Use this parameter to specify a standard value for the REPLY-TO and FROM email addresses for notifications. By default, these addresses are populated with the email address of the event owner.

Default value

> blank

Marketing Operations | umoConfiguration | markup

IBM Unica Marketing Operations provides markup tools for making comments on attachments. You can use either Adobe Acrobat markup or native Marketing Operations markup. Use the properties in this category to configure which option to use.

markupServerType

Description

> Determines which markup option to use.

Default value

> `MCM`

Valid Values

> - `SOAP` enables users to edit and view markups in PDF documents. Adobe Acrobat Standard or Professional are required for markups. If specified, users cannot view markups made in a web browser with the native Marketing Operations method.
>
>   If you specify `SOAP`, you must also configure the `markupServerURL` and `useCustomMarkup` parameters.

- `MCM` enables the native Marketing Operations markup method that allows users to edit and view markups in a web browser. If specified, users cannot edit or view markups that made previously in PDF using Adobe Acrobat.
- If blank, the markup function is disabled and the **View/Add** Markup link does not appear.

markupServerURL

Description

Dependent on `markupServerType = SOAP`.

Set to the URL for the computer hosting the markup server, including the number of the port the web application server uses for listening. The URL must contain the fully qualified host name.

Default value

`http://[SERVER]:[PORT]/plan/services/collabService?wsdl`

useCustomMarkup

Description

Determines whether Windows users can send and receive markup comments using the **Acrobat Send Receive Comments** button.

Default value

`True`

Valid Values

- `true`: Windows users can use only the **Acrobat Send Receive Comments** button to send and receive markup comments. The `UMO_Markup_Collaboration.js` file must be available in the javascripts folder of the client-side Acrobat installation.

  Dependent on `markupServerType = SOAP`.
- `false`: Windows users can use only the Marketing Operations custom **Send Comments** button to send and receive markup comments. They cannot use the Acrobat button and must configure Acrobat to enable the IBM Unica Marketing Operations**Comments** toolbar. For more information about reviewing PDF files, see the *IBM Unica Marketing Operations User's Guide*.

instantMarkupFileConversion

Description

If `true`, IBM Unica Marketing Operations converts PDF attachments to images as soon as they are uploaded, rather than doing this conversion the first time a user opens the item for markup.

Default value

`false`

Valid Values

`true | false`

Marketing Operations | umoConfigurations | grid

gridmaxrow

Description

An optional integer to define the maximum number of rows to be retrieved in grids. The default, -1, retrieves all rows.

Default value

-1

reloadRuleFile

Description

An optional boolean parameter indicating whether the grid validation plug-in needs to be reloaded or not.

Default value

true

Valid Values

true | false

gridDataValidationClass

Description

An optional parameter to specify custom grid data validation class. If not specified, the default, built in plug-in is used for grid data validation.

Default value

blank

tvcDataImportFieldDelimiterCSV

Description

Delimiter to be used to parse data while importing in a grid. Default is comma (,).

Default value

, (comma)

maximumFileSizeToImportCSVFile

Description

Represents the maximum file size in MB that can be uploaded while importing comma-separated data for TVC.

Default value

0 (unlimited)

maximumRowsToBeDisplayedPerPageInGridView

Description

Integer parameter specifying number of rows to be displayed per page in grid view.

Default value

> 100

Valid Values

> positive integers

griddataxsd

Description

> Name of Grid Data XSD file.

Default value

> griddataschema.xsd

gridpluginxsd

Description

> Name of Grid plug-ins XSD file.

Default value

> gridplugin.xsd

gridrulesxsd

Description

> Name of Grid Rules XSD file.

Default value

> gridrules.xsd

Marketing Operations | umoConfiguration | workflow

hideDetailedDateTime

Description

> Optional show/hide parameter for detailed date time in the tasks page.

Default value

> false

Valid Values

> true | false

daysInPastRecentTask

Description

> This parameter determines for how long tasks should be considered "recent." If the task is "active," and started less than X days ago or the task's Target End Date is between today and X days in the past, the task displays as a recent task.

Default value

> 14

Valid Values

positive integers

daysInFutureUpcomingTasks

Description

This parameter determines how many days in the future to look for upcoming tasks. If the task starts in the next `daysInFutureUpcomingTasks` or does not end before the current date, it is an upcoming task.

Default value

14

Valid Values

positive integers

beginningOfDay

Description

Begin hour of the working day. This parameter is used to calculate the datetimes in workflow using fractional durations.

Default value

9 (9 AM)

Valid Values

integers `0` to `12`

numberOfHoursPerDay

Description

Number of hours per day. This parameter is used to calculate the datetimes in workflow using fractional durations.

Default value

8

Valid Values

integers `1` to `24`

mileStoneRowBGColor

Description

Defines the background color for workflow tasks. To specify the value, insert the # character before the six-character Hex code for the color. For example, #0099CC.

Default value

`#DDDDDD`

Marketing Operations | umoConfiguration | integrationServices

enableIntegrationServices

Description

Enables and disables the Integration Services module that can be used by third party users to access IBM Unica Marketing Operations functionality using web services and triggers.

Default value

> `false`

Valid Values

> `true | false`

integrationProcedureDefinitionPath

Description

> Optional full file path to the custom procedure definition XML file.

Default value

> `[PLAN_HOME]/devkits/integration/examples/src/procedure/procedure-plugins.xml`

integrationProcedureClasspathURL

Description

> URL to the classpath for custom procedures.

Default value

> `file://[PLAN_HOME]/devkits/integration/examples/classes/`

Marketing Operations | umoConfiguration | campaignIntegration

defaultCampaignPartition

Description

> When IBM Unica Marketing Operations is integrated with IBM Unica Campaign, this parameter specifies the default Campaign partition if the campaign-partition-id is not defined in the project template.

Default value

> `partition1`

webServiceTimeoutInMilliseconds

Description

> Added for Web Service integration API calls. This parameter is used as a timeout for web services API calls.

Default value

> 1800000 milliseconds (30 minutes)

Marketing Operations | umoConfiguration | reports

reportsAnalysisSectionHome

Description

> Indicates the home directory for the Analysis Section reports.

Default value

```
/content/folder[@name='Affinium Plan']
```

reportsAnalysisTabHome

Description

Indicates the home directory for the Analysis Tab reports.

Default value

```
/content/folder[@name='Affinium Plan - Object Specific Reports']
```

cacheListOfReports

Description

This parameter enables/disables caching of list of reports on object instance's analysis page.

Default value

```
false
```

Valid Values

```
true | false
```

Marketing Operations | umoConfiguration | invoiceRollup

invoiceRollupMode

Description

Specifies how rollups occur. Acceptable values are the following.

Default value

```
immediate
```

Valid Values

- `immediate`: rollups occur every time an invoice is marked PAID
- `schedule`: rollups occur on a scheduled basis

  If this parameter is set to `schedule`, the system uses the following parameters to determine when rollups occur.
  - `invoiceRollupScheduledStartTime`
  - `invoiceRollupScheduledPollPeriod`

invoiceRollupScheduledStartTime

Description

If `invoiceRollupMode` is `schedule`, this parameter specifies the poll period in seconds for rollup to occur.

If `invoiceRollupMode` is `immediate`, this parameter is not used.

Default value

3600 (1 hour)

invoiceRollupScheduledPollPeriod

Description

If `invoiceRollupMode` is `schedule`, this parameter is used as follows.

- If this parameter contains a value (for example, 11:00 pm), that value is the start time for the schedule to start.
- If this parameter is undefined, the rollup schedule starts when the server starts.

If `invoiceRollupMode` is `immediate`, this parameter is not used.

Default value

Marketing Operations | umoConfiguration | database

fileName

Description

Path to file for loading datasources using JNDI lookup.

Default value

`plan_datasources.xml`

sqlServerSchemaName

Description

Specifies the database schema to use. This parameter only applies if you are using SQL Server for your IBM Unica Marketing Operations database.

Default value

`dbo`

thresholdForUseOfSubSelects

Description

Specifies the number of records beyond which a subquery should be used in the IN clause of SQL (for listing pages) instead of the actual entity IDs in the IN clause. Setting this parameter improves performance for IBM Unica Marketing Operations installations that have a lot of application data. As a best practice, do not change this value unless you encounter performance issues. If the parameter is missing or commented out, the database behaves as if the threshold was set to a very large value.

Default value

`3000`

commonDataAccessLayerFetchSize

Description

This parameter specifies resultset fetch size for certain performance sensitive, critical queries.

Default value

`0`

commonDataAccessLayerMaxResultSetSize

Description

This parameter specifies maximum resultset size for certain performance sensitive, critical queries.

Default value

> -1

useDBSortForAllList

Description

> This parameter is used when configuring ALL IBM Unica Marketing Operations List Handlers. Use USE_DB_SORT_FOR_[MODULE]_LIST to override particular list's paging behavior.

Default value

> true

Valid Values

- true : get one page of list data from database at a time.
- false : cache all list data.

useDBSortForPlanList

Description

> This parameter is used to configure the Plan List Handler.

Default value

> true

Valid Values

- true : get one page of list data from database at a time.
- false : cache all list data.

useDBSortForProjectList

Description

> This parameter is used to configure the Project List Handler.

Default value

> true

Valid Values

- true : get one page of list data from database at a time.
- false : cache all list data.

useDBSortForTaskList

Description

> This parameter is used to configure the Task List Handler.

Default value

> true

Valid Values

- true : get one page of list data from database at a time.
- false : cache all list data.

useDBSortForProgramList

Description

This parameter is used to configure the Program List Handler.

Default value

true

Valid Values

- true : get one page of list data from database at a time.
- false : cache all list data.

useDBSortForApprovalList

Description

This parameter is used to configure the Approval List Handler.

Default value

true

Valid Values

- true : get one page of list data from database at a time.
- false : cache all list data.

useDBSortForInvoiceList

Description

This parameter is used to configure the Invoice List Handler.

Default value

true

Valid Values

- true : get one page of list data from database at a time.
- false : cache all list data.

useDBSortForAlerts

Description

This parameter is used to configure the Alerts List Handler.

Default value

true

Valid Values

- true : get one page of list data from database at a time.
- false : cache all list data.

Marketing Operations | umoConfiguration | listingPages

listItemsPerPage

Description

Specifies how many items (rows) are displayed in one list page. This value should be greater than 0.

Default value

> 10

listPageGroupSize

Description

> Specifies the size of visible page numbers in the list navigator in the list page. For example, pages 1-5 is a page group. This value should be greater than 0.

Default value

> 5

maximumItemsToBeDisplayedInCalendar

Description

> The maximum number of objects (plans, programs, projects, or tasks) the system displays on calendars. Use this parameter to restrict a user's view of calendars to a specific number of objects. The number 0 indicates that there is no restriction.

Default value

> 0

listDisplayShowAll

Description

> Display "Show All" link on listing pages.

Default value

> false

Valid Values

> true | false

Marketing Operations | umoConfiguration | objectCodeLocking

enablePersistentObjectLock

Description

> enablePersistentObjectLock must be set to true if IBM Unica Marketing Operations is deployed in a clustered environment. The object lock information will be persistent in database.

Default value

> false

Valid Values

> true | false

lockProjectCode

Description

> Determines whether users can edit the Project Code or PID on the **Project Summary Edit** tab.

Default value

> true

Valid Values

- true: enables locking
- false: disables locking

lockProgramCode

Description

> Determines whether users can edit the Program Code or PID on the **Program Summary Edit** tab.

Default value

> true

Valid Values

- true: enables locking
- false: disables locking

lockPlanCode

Description

> Determines whether users can edit the Plan Code or PID on the **Plan Summary Edit** tab.

Default value

> true

Valid Values

- true: enables locking
- false: disables locking

lockMarketingObjectCode

Description

> Determines whether users can edit the Marketing Object Code or PID on the **Marketing Object Summary Edit** tab.

Default value

> true

Valid Values

- true: enables locking
- false: disables locking

lockAssetCode

Description

> Determines whether users can edit the Asset Code or PID on the **Asset Summary Edit** tab.

Default value

> true

Valid Values

- `true`: enables locking
- `false`: disables locking

Marketing Operations | umoConfiguration | thumbnailGeneration

trueTypeFontDir

Description

Specifies the directory where the True Type fonts are located. This parameter is required for thumbnail generation on non-Windows platforms using Aspose. For Windows installations, this parameter is optional.

Default value

blank

coreThreadPoolSize

Description

Specifies the number of persistent threads kept in the thread pool for thumbnail generator threads.

Default value

5

maxThreadPoolSize

Description

Specifies the maximum number of threads allowed in the thread pool for thumbnail generator threads.

Default value

10

threadKeepAliveTime

Description

Parameter to configure the keep-alive time for thumbnail generator threads.

Default value

60

threadQueueSize

Description

Parameter to configure the thread queue size for thumbnail generator threads.

Default value

20

Marketing Operations | umoConfiguration | notifications

notifyPlanBaseURL

Description

The URL for your IBM Unica Marketing Operations deployment, including the host name and port number. Marketing Operations includes this URL in notifications that contain links to other information in Marketing Operations .

Note: Do not use "localhost" as a server name unless your mail client and IBM Unica Marketing Operations server are running on same machine.

Default value

> `http://[SERVER]:[PORT]/plan/affiniumplan.jsp`

notifyDelegateClassName

Description

> The fully-qualified Java class name of the delegate implementation to be instantiated by the service. This class must implement the `com.unicapcorp.afc.service.IServiceImpl` interface. Will default to a local implementation if not specified.

Default value

> blank

notifyIsDelegateComplete

Description

> Optional boolean string indicating if the delegate implementation is complete. Defaults to "true" if not specified.

Default value

> `true`

Valid Values

> `true | false`

notifyEventMonitorStartTime

Description

> Specifies when the Notify Monitor should begin processing for the first time after the IBM Unica Marketing Operations product is started. Format the value according to the short version of the `java.text.DateFormat` class for the current locale. For example, in US English locale, a valid string might be `11:45 PM`.

Default value

> Immediately after Marketing Operations is started.

notifyEventMonitorPollPeriod

Description

> Defines the approximate time, in seconds, for the event monitor to sleep between polls. Events will be accumulated in the event queue between polling periods; shorter times will process notifications sooner, but may impose more system overhead. If you erase the default and leave the value blank, the poll period defaults to some short period of time, usually under a minute.

Default value

> 5

notifyEventMonitorRemoveSize

Description

> Specfies the number of events to remove from queue in one shot. The event monitor will continue removing events from the event queue in increments specified by this value until none are left.
>
> **Note:** Setting this value to something other than 1 may increase event processing performance, but risks losing events if the service host goes down before all the removed events can be processed.

Default value

> 10

alertCountRefreshPeriodInSeconds

Description

> Specifies, in seconds, the system-wide alert count refresh period for the alerts count. This count appears near the top of the navigation bar after a user logs in.
>
> **Note:** Changing the refresh period to poll faster may have performance implications in a multi-user environment.

Default value

> 180 (3 minutes)

Marketing Operations | umoConfiguration | notifications | email

notifyEMailMonitorStartTime

Description

> Specifies when the Email Monitor should begin processing for the first time after the IBM Unica Marketing Operations product is started. Format the value according to the short version of the `java.text.DateFormat` class for the current locale. For example, in US English locale, a valid string might be `11:59 PM`.

Default value

> Immediately after IBM Unica Marketing Operations is started.

notifyEMailMonitorPollPeriod

Description

> Defines the approximate time, in seconds, for the email monitor to sleep between polls.
>
> **Note:** As with events, emails will accumulate in the queue between polling periods; shorter polling times will send emails sooner, but may increase system overhead.

Default value

```
60
```

notifyEMailMonitorJavaMailSession

Description

> JNDI name of an existing, initialized JavaMail Session to use for email notifications. If not specified and the delegate is marked `Complete`, then the JavaMail host parameter must be supplied so IBM Unica Marketing Operations can create a session.

Default value

> blank

notifyEMailMonitorJavaMailProtocol

Description

> Specifies the mail server transport protocol to use for email notifications.

Default value

> smtp

notifyEMailMonitorRemoveSize

Description

> Specifies the number of emails to remove from queue at one time. The email monitor will continue incrementally removing emails from the email queue until none remain.

> **Note:** Setting a value other than 1 may increase email processing performance, but you risk losing emails if the service host goes down before all the removed emails are processed.

Default value

> 10

notifyEMailMonitorMaximumResends

Description

> Specifies the maximum number of times the system attempts to send an email message that failed in the first attempt to send it. When a send fails, the email is put back on the queue unless it has already reached the maximum attempts allowed by this parameter.

> For example, if the email monitor is set to poll every 60 seconds, then setting `maximumResend` to 60 will cause the email monitor to retry every minute, once in each poll, for up to an hour. A value of 1440 (24x60) will cause retry every minute for up to 24 hours.

Default value

> 1440

showUserNameInEmailNotificationTitle

Description

Specifies whether the IBM Unica Marketing Operations notification and alert systems includes the user name in the **From** field of email notifications.

Note: This setting is applicable only to emails sent by the notification and alert systems in IBM Unica Marketing Operations.

Default value

> false

Valid Values

- true : Marketing Operations appends the user name to the title of the message and displays both in the **From** field of the email
- false : Marketing Operations displays only the message title in the **From** field

notifyEMailMonitorJavaMailDebug

Description

> Specifies if JavaMail debug mode should be set.

Default value

> false

Valid Values

- true : enables JavaMail debug.
- false : disables debug tracing.

Marketing Operations | umoConfiguration | notifications | project

notifyProjectAlarmMonitorStartTime

Description

> Specifies when the project alarm monitorsr should begin processing for the first time after the IBM Unica Marketing Operations product is started. Format the value according to the short version of the java.text.DateFormat class for the current locale. For example, in US English locale, a valid string might be 11:59 PM. If you erase the default and leave the value blank, this monitor starts immediately after you create it.

Default value

> 10:00 PM

notifyProjectAlarmMonitorPollPeriod

Description

> Defines the approximate time, in seconds, for the project and program alarm monitors to sleep between polls.

Default value

> 60

notifyProjectAlarmMonitorScheduledStartCondition

Description

Defines the number of days before a project's start date that IBM Unica
Marketing Operations should start sending start notifications to users.

Note: If this value is -1, then Marketing Operations does not send these
notifications.

Default value

> 1

notifyProjectAlarmMonitorScheduledEndCondition

Description

Defines the number of days before a project's end date when IBM Unica
Marketing Operations should start sending end notifications to users.

Note: If this value is -1, then Marketing Operations does not send these
notifications.

Default value

> 3

notifyProjectAlarmMonitorTaskScheduledStartCondition

Description

Defines the number of days before a task's start date that IBM Unica
Marketing Operations should start sending start notifications to users.

Note: If this value is -1, then Marketing Operations does not send these
notifications.

Default value

> 1

notifyProjectAlarmMonitorTaskScheduledEndCondition

Description

Defines the number of days before a task's end date when IBM Unica
Marketing Operations should start sending end notifications to users.

Note: If this value is -1, then Marketing Operations does not send these
notifications.

Default value

> 3

notifyProjectAlarmMonitorTaskLateCondition

Description

Defines the number of days after a task's start date when IBM Unica
Marketing Operations should begin notifying users that a task did not
start.

Note: If this value is -1, then Marketing Operations does not send these
notifications.

Default value

3

notifyProjectAlarmMonitorTaskOverdueCondition

Description

Defines the number of days after a task's end date when IBM Unica
Marketing Operations should begin notifying users that a task did not
finish.

Note: If this value is **-1**, then Marketing Operations does not send these
notifications.

Default value

3

notifyProjectAlarmMonitorTaskScheduledMilestoneCondition

Description

Defines the number of days after a task milestone's start date when IBM
Unica Marketing Operations should start sending notifications.

Note: If this value is **-1**, then Marketing Operations does not send these
notifications.

Default value

1

Marketing Operations | umoConfiguration | notifications | projectRequest

notifyRequestAlarmMonitorLateCondition

Description

Defines the number of days before IBM Unica Marketing Operations
should send a notification that the request is late.

Note: If this value is **-1**, then Marketing Operations does not send these
notifications.

Default value

3

notifyRequestAlarmMonitorScheduledEndCondition

Description

Defines the number of days before a request's end date when IBM Unica
Marketing Operations should start sending end notifications to users.

Note: If this value is **-1**, then Marketing Operations does not send these
notifications.

Default value

1

Marketing Operations | umoConfiguration | notifications | program

notifyProgramAlarmMonitorScheduledStartCondition

Description

Defines the number of days before a program's start date when IBM Unica Marketing Operations should start sending notifications to users.

Note: If this value is -1, then Marketing Operations does not send these notifications.

Default value

1

notifyProgramAlarmMonitorScheduledEndCondition

Description

Defines the number of days before a program's end date when IBM Unica Marketing Operations should start sending end notifications to users.

Note: If this value is -1, then Marketing Operations does not send these notifications.

Default value

3

Marketing Operations | umoConfiguration | notifications | marketingObject

notifyComponentAlarmMonitorScheduledStartCondition

Description

Specifies the number of days before a marketing object's start date when IBM Unica Marketing Operations should start sending notifications to users.

Note: If this value is -1, then Marketing Operations does not send these notifications.

Default value

1

notifyComponentAlarmMonitorScheduledEndCondition

Description

Specifies the number of days before a marketing object's end date when IBM Unica Marketing Operations should start sending end notifications to users.

Note: If this value is -1, then Marketing Operations does not send these notifications.

Default value

3

Marketing Operations | umoConfiguration | notifications | approval

notifyApprovalAlarmMonitorStartTime

Description

Specifies when the approval alarm monitor should begin processing for the first time after the IBM Unica Marketing Operations product is started. Format the value according to the short version of the `java.text.DateFormat` class for the current locale. For example, in US English locale, a valid string might be `11:59 PM`. If you delete the default and leave this value blank, the monitor starts immediately after it is created.

Note: For best results, configure the alarm monitors to start during off-peak hours and stagger their start times to spread out the data processing load.

Default value

`9:00 PM`

notifyApprovalAlarmMonitorPollPeriod

Description

Specifies the approximate time, in seconds, for the approval alarm monitor to sleep between polls.

Default value

`60`

notifyApprovalAlarmMonitorLateCondition

Description

Specifies the number of days after an approval's start date when IBM Unica Marketing Operations should begin notifying users that the approval is late.

Note: If this value is `-1`, then Marketing Operations does not send these notifications.

Default value

`3`

notifyApprovalAlarmMonitorScheduledEndCondition

Description

Specifies the number of days before an approval's end date when IBM Unica Marketing Operations should begin sending end notifications to users.

Note: If this value is `-1`, then Marketing Operations does not send these notifications.

Default value

`3`

Marketing Operations | umoConfiguration | notifications | asset

notifyAssetAlarmMonitorStartTime

Description

Specifies when the Asset Alarm Monitor should begin processing for the first time after the IBM Unica Marketing Operations product is started. Format the value according to the short version of the `java.text.DateFormat` class for the current locale. For example, in US English locale, a valid string might be 11:59 PM. If you delete the default and leave this value blank, the monitor starts immediately after it is created.

Note: For best results, configure the alarm monitors to start during off-peak hours and stagger their start times to spread out the data processing load.

Default value

11:00 PM

notifyAssetAlarmMonitorPollPeriod

Description

Specifies the time, in seconds, for the asset alarm monitor to sleep between polls.

Default value

60

notifyAssetAlarmMonitorExpirationCondition

Description

Specifies the number of days before an asset is going to expire when IBM Unica Marketing Operations should notify users that the asset is about to expire.

Note: If this value is -1, Marketing Operations does not check for expiration.

Default value

3

Marketing Operations | umoConfiguration | notifications | invoice

notifyInvoiceAlarmMonitorStartTime

Description

Specifies when the invoice alarm monitor should begin processing for the first time after the IBM Unica Marketing Operations product is started. Format the value according to the short version of the `java.text.DateFormat` class for the current locale. For example, in US English locale, a valid string might be 11:59 PM. If you delete the default and leave the value blank, the monitor starts immediately after you create it.

> **Note:** For best results, configure the alarm monitors to start during off-peak hours and to stagger their start times to spread out the data processing load.

Default value

> `9:00 PM`

notifyInvoiceAlarmMonitorDueCondition

Description

> Specifies the number of days when IBM Unica Marketing Operations should start notifying users that an invoice is becoming due.
>
> **Note:** If this value is **-1**, then Marketing Operations does not send these notifications.

Default value

> `5`

Contacting IBM Unica 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 Unica technical support. Use the information in this section to ensure that your problem is resolved efficiently and successfully.

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

Information to gather

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

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

System information

When you call IBM Unica 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 Unica applications.

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

Contact information for IBM Unica technical support

For ways to contact IBM Unica technical support, see the IBM Unica Product Technical Support website: (http://www.unica.com/about/product-technical-support.htm).

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