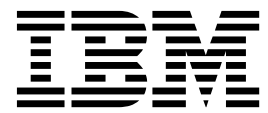


Version 11 Release 1
March 15, 2019

IBM Marketing Operations Upgrade Guide



Note

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

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

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Contents

Chapter 1. Upgrade overview 1

Upgrade roadmap	1
How the installers work	2
Modes of installation	2
Sample response files	3
Correcting the registry file when upgrade installation fails	3
Marketing Operations documentation and help	4

Chapter 2. Planning the Marketing Operations upgrade 7

Prerequisites	8
Upgrade prerequisites for all IBM Marketing Software products	10
Running database query for cleanup	11
Error logs and warning messages	11
Upgrade with existing campaign projects or requests	12
Marketing Operations data source information worksheet	12

Chapter 3. To upgrade Marketing Operations 13

Backing up the system before you upgrade	13
Running the installer and updating the configuration properties	13
Upgrade your database manually	14
Deploying the upgraded web application and running the upgrade processes	15
Verifying the Marketing Operations upgrade	16
Restoring trigger procedures	16
Upgrading Marketing Operations in a clustered environment	17

Chapter 4. Overview 19

Deploying Marketing Operations on Websphere	19
Deploying the WAR or EAR file	21
Defining settings for cookies	22
Defining EAR module settings	22
Deploying Marketing Operations on WebLogic	22
Deploying Marketing Operations on JBoss	24
Deploying Marketing Operations on Apache Tomcat	25
Additional configuration for enhanced security	26
Disabling the X-Powered-By flag	26
Configuring a restrictive cookie path	26

Chapter 5. Uninstalling Marketing Operations 29

Chapter 6. configTool 31

Chapter 7. IBM Marketing Operations configuration properties 35

Marketing Operations	35
--------------------------------	----

Marketing Operations navigation	35
Marketing Operations about	37
Marketing Operations umoConfiguration	38
Marketing Operations umoConfiguration Approvals	43
Marketing Operations umoConfiguration templates	44
Marketing Operations umoConfiguration attachmentFolders	46
Marketing Operations umoConfiguration Email	48
Marketing Operations umoConfiguration markup	49
Marketing Operations umoConfiguration grid	50
Marketing Operations umoConfiguration workflow	51
Marketing Operations umoConfiguration integrationServices	53
Marketing Operations umoConfiguration campaignIntegration	53
Marketing Operations umoConfiguration reports	54
Marketing Operations umoConfiguration invoiceRollup	54
Marketing Operations umoConfiguration database	55
Marketing Operations umoConfiguration listingPages	58
Marketing Operations umoConfiguration objectCodeLocking	59
Marketing Operations umoConfiguration thumbnailGeneration	60
Marketing Operations umoConfiguration Scheduler intraDay	62
Marketing Operations umoConfiguration Scheduler daily	62
Marketing Operations umoConfiguration Notifications	62
Marketing Operations umoConfiguration Notifications Email	64
Marketing Operations umoConfiguration Notifications project	66
Marketing Operations umoConfiguration Notifications projectRequest	68
Marketing Operations umoConfiguration Notifications program	69
Marketing Operations umoConfiguration Notifications marketingObject	69
Marketing Operations umoConfiguration Notifications approval	70
Marketing Operations umoConfiguration Notifications asset	71
Marketing Operations umoConfiguration Notifications invoice	71

Before you contact IBM technical support	73
---	-----------

Notices	75
--------------------------	-----------

Trademarks	77
----------------------	----

Privacy Policy and Terms of Use Considerations . . .	77
--	----

Chapter 1. Upgrade overview

An upgrade of Marketing Operations is complete when you upgrade, configure, and deploy Marketing Operations. The Marketing Operations Upgrade Guide provides detailed information about upgrading, configuring, and deploying Marketing Operations.

Use the *Upgrade roadmap* section to obtain a broad understanding about using the Marketing Operations Upgrade Guide.

Upgrade roadmap

Use the upgrade roadmap to quickly find the information that you need for upgrading Marketing Operations.

You can use the following Table 1 table to scan the tasks that must be completed for upgrading Marketing Operations:

Table 1. Marketing Operations upgrade roadmap

Topic	Information
Chapter 1, "Upgrade overview"	This topic provides the following information: • "How the installers work" on page 2 • "Modes of installation" on page 2 • "Marketing Operations documentation and help" on page 4
Chapter 2, "Planning the Marketing Operations upgrade," on page 7	This topic provides the following information: • "Prerequisites" on page 8 • "Upgrade prerequisites for all IBM Marketing Software products" on page 10 • "Error logs and warning messages" on page 11 • "Marketing Operations data source information worksheet" on page 12
Chapter 3, "To upgrade Marketing Operations," on page 13	This topic provides the following information: • "Backing up the system before you upgrade" on page 13 • "Running the installer and updating the configuration properties" on page 13 • "Upgrade your database manually" on page 14 • "Deploying the upgraded web application and running the upgrade processes" on page 15 • "Verifying the Marketing Operations upgrade" on page 16 • "Restoring trigger procedures" on page 16 • "Upgrade with existing campaign projects or requests" on page 12 • "Upgrading Marketing Operations in a clustered environment" on page 17

Table 1. Marketing Operations upgrade roadmap (continued)

Topic	Information
Chapter 4, “Overview,” on page 19	This topic provides the following information: • “Deploying Marketing Operations on Websphere” on page 19 • “Deploying Marketing Operations on WebLogic” on page 22
Chapter 5, “Uninstalling Marketing Operations,” on page 29	This topic provides the information about how to uninstall Marketing Operations.
The config tool utility	Read more about the Config tool utilities in Marketing Operations.

How the installers work

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

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

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

Modes of installation

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

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

GUI mode

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

Console mode

Use the console mode to install Marketing Operations by using the command line window.

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

Silent mode

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

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

Sample response files

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

The following table provides information about sample response files:

Table 2. Description of sample response files

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

Correcting the registry file when upgrade installation fails

If installation fails because the installer could not detect the base version of your installed product, you can correct the registry file as described here.

The InstallAnywhere Global registry file, named .com.zerog.registry.xml, is created when a IBM Marketing Software product is installed. The registry file tracks all installed IBM Marketing Software products, including their features and components, on that server.

1. Locate the .com.zerog.registry.xml file.

Depending on the server on which you are installing, the .com.zerog.registry.xml file is in one of the following locations.

- On Windows servers, the file is in the Program Files/Zero G Registry folder. Zero G Registry is a hidden directory. You must enable the setting to view hidden files and folders.

- On UNIX systems, the file is in one of the following directories.
 - Root user - /var/
 - Non-root user - \$HOME/
- 2. Make a backup copy of the file.
- 3. Edit the file to change all entries that refer to the version of your installed product.
 For example, this is a section of the file that corresponds to IBM Campaign version 8.6.0.3.

```
<product name="Campaign" id="dd6f88e0-1ef1-11b2-accf-c518be47c366"
version=" 8.6.0.3 " copyright="2013" info_url="" support_url=""
location="<IBM_Unica_Home>\Campaign" last_modified="2013-07-25 15:34:01">
```

 In this case, you would change all entries that refer to version=" 8.6.0.3 " to the base version, which is 8.6.0.0 in this case.

Marketing Operations documentation and help

The following table describes the various tasks in the installation of Marketing Operations.

The **Documentation** column contains names of documents where you can find more information about the tasks.

Table 3. Get up and running

Task	Documentation
View a list of new features, known issues, and workaround	<i>IBM Marketing Operations Release Notes</i>
Install or upgrade Marketing Operations and deploy the Marketing Operations web application	One of the following guides: • <i>IBM Marketing Operations Installation Guide</i> • <i>IBM Marketing Operations Upgrade Guide</i>

The following tables describes administrative tasks in Marketing Operations. The **Documentation** column contains names of documents where you can find more information about the tasks.

Table 4. Configure and use Marketing Operations

Task	Documentation
• Set up and configure the system for users • Adjust security settings • Map tables, define offer templates and custom attributes • Run utilities and perform maintenance	<i>IBM Marketing Operations Administrator's Guide</i>
• Create and deploy marketing campaigns • Analyze campaign results	<i>IBM Marketing Operations User's Guide</i>

The following tables contains information about Online Help and obtaining PDFs for Marketing Operations. The **Instructions** column describes how to open Online Help and access documentation for the Marketing Operations.

Table 5. Getting help

Task	Instructions
Open online help	1. Choose Help > Help for this page to open a context-sensitive help topic. 2. Click the Show Navigation icon in the help window to display the full help. You must have web access to view context-sensitive online help. Contact IBM Support for more information about accessing and installing IBM Knowledge Center locally for offline documentation.
Obtain PDFs	Use either of the following methods: • Choose Help > Product Documentation to access Marketing Operations PDFs. • Choose Help > All IBM Marketing Software Suite Documentation to access all available documentation.
To access the IBM Knowledge Center, choose Help > Support for this product .	To access the IBM Knowledge Center, choose Help > Support for this product .
Get support	Go to http://www.ibm.com/support and click Support & downloads to access the IBM Support Portal.

Chapter 2. Planning the Marketing Operations upgrade

For upgrading to Marketing Operations 11.1 version, you must check from which version you are upgrading. Upgrade scenarios are based on the current version of the Marketing Operations.

Use the following guidelines for upgrading Marketing Operations.

Table 6. Supported upgrade paths for Marketing Operations 11.1

Source version	Upgrade path
7.x and pre-8.6.x	Complete the following steps to upgrade to version 11.1: 1. Upgrade your installation to Marketing Operations version 8.6.0. For information about upgrading to version 8.6.0, see the <i>IBM Marketing Operations 8.6 Installation Guide</i>. 2. Upgrade to Marketing Operations version 10.0. For information about upgrading to version 10.0, see the <i>IBM Marketing Operations 10.0 Upgrade Guide</i>. 3. Upgrade to Marketing Operations version 10.1. For information about upgrading to version 10.1, see the <i>IBM Marketing Operations 10.1 Upgrade Guide</i>. 4. Upgrade to Marketing Operations version 11.0.1 by following the instructions in this guide. For information about upgrading to version 11.0.1, see the <i>IBM Marketing Operations 11.0.1 Upgrade Guide</i>. 5. Upgrade to Marketing Operations version 11.1 by following the instructions in this guide.
8.6.x and 9.x.x versions	Complete the following steps to upgrade to version 11.1: 1. Upgrade to Marketing Operations version 10.0. For information about upgrading to version 10.0, see the <i>IBM Marketing Operations 10.0 Upgrade Guide</i>. 2. Upgrade to Marketing Operations version 10.1. For information about upgrading to version 10.1, see the <i>IBM Marketing Operations 10.1 Upgrade Guide</i>. 3. Upgrade to Marketing Operations version 11.0.1. For information about upgrading to version 11.0.1, see the <i>IBM Marketing Operations 11.0.1 Upgrade Guide</i>. 4. Upgrade to Marketing Operations version 11.1 by following the instructions in this guide.
10.0.x.x versions	Complete the following steps to upgrade to version 11.1: 1. Upgrade to Marketing Operations version 10.1. For information about upgrading to version 10.1, see the <i>IBM Marketing Operations 10.1 Upgrade Guide</i>. 2. Upgrade to Marketing Operations version 11.0.1. For information about upgrading to version 11.0.1, see the <i>IBM Marketing Operations 11.0.1 Upgrade Guide</i>. 3. Upgrade to Marketing Operations version 11.1 by following the instructions in this guide.

Table 6. Supported upgrade paths for Marketing Operations 11.1 (continued)

Source version	Upgrade path
10.1.0.x versions	Complete the following steps to upgrade to version 11.1: 1. Upgrade to Marketing Operations version 11.0.1. For information about upgrading to version 11.0.1, see the <i>IBM Marketing Operations 11.0.1 Upgrade Guide</i>. 2. Upgrade to Marketing Operations version 11.1 by following the instructions in this guide.
11.0	1. FastUpgrade your installation to 11.0.1 Version. 2. You can upgrade directly to 11.1 by following the instructions in this guide.
11.0.1.x version	Upgrade to Marketing Operations version 11.1 by following the instructions in this guide.

Prerequisites

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

System requirements

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

Network domain requirements

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

JVM requirements

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

Knowledge requirements

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

Internet browser settings

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

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

Access permissions

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

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

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

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

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

Points to consider before you install Campaign

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

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

Linux / Unix Installations:

Installing IBM Campaign with non root user:

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

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

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

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

Windows:

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

JAVA_HOME environment variable

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

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

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

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

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

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

Marketing Platform requirement

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

Upgrade prerequisites for all IBM Marketing Software products

Meet all requirements for permissions, operating system, and knowledge correctly before you upgrade Marketing Operations to ensure a seamless upgrade experience.

Removing response files generated by previous installations

If you are upgrading from a version before 8.6.0, you must delete the response files that are generated by previous Marketing Operations installations. Old response files are not compatible with the 8.6.0 and later installers.

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 IBM response file is named `installer.properties`.

The response files for each product are named `installer_productversion.properties`.

The installer creates response files in the directory that you specify during installation. The default location is the home directory of the user.

User account requirement for UNIX

On UNIX, the user account that installed the product must complete the upgrade, otherwise the installer fails to detect a previous installation.

32-bit to 64-bit version upgrades

If you are moving from a 32-bit to a 64-bit version of Marketing Operations, ensure that you complete the following tasks:

- Ensure that the database client libraries for your product data sources are 64-bit.
- Ensure that all relevant library paths, for example startup or environment scripts, correctly reference the 64-bit versions of your database drivers.

Running database query for cleanup

Before you upgrade Marketing Operations, run the database query to remove duplicate project request ids, if any.

Run the query in your database to find and remove all duplicate results returned by this query to ensure the successful upgrade of Marketing Operations.

Complete the following steps to run the database query:

1. Open your database console that has Marketing Operations system tables.
2. Enter the following query:

```
SELECT proj_request_id, count(proj_request_id) num
FROM uap_projects
WHERE proj_request_id in (SELECT project_id FROM uap_projects WHERE
state_code = 'ACCEPTED')
group by proj_request_id
having count(proj_request_id) > 1"
```
3. The query returns project request ids that are duplicate. Analyze the results to determine which of the duplicate rows you use and which can be deleted. You can look in the `uap_projects_last_mod_date` table or view the data in the reference tables to determine which records to delete. To delete the rows, run the delete query on the database. If the duplicate rows are not deleted, the upgrade may fail.

Error logs and warning messages

When you upgrade, the system logs the messages that are produced during the process. View the log files to see any informational or error messages that occurred during upgrade.

For reference, you can find the log files with these messages in the following files and database tables.

- `<IBM_IMS_Home>/IBM_IMS_Installer_Install<date_time>.log`
- `<MarketingOperations_Home>/MarketingOperations_Install_<date_time>.log`

- <Platform_Home>/Platform_Install<date_time>.log
- <USER_HOME>/IBM_IMS_Installer_stdout.log
- <USER_HOME>/IBM_IMS_Installer_stderr.log
- <USER_HOME>/Platform_stdout.log
- <USER_HOME>/Platform_stderr.log
- <USER_HOME>/MarketingOperations_stdout.log
- <USER_HOME>/MarketingOperations_stderr.log

Upgrade with existing campaign projects or requests

If you upgrade Marketing Operations system that is integrated with Campaign and you have existing campaign projects without 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 the requests after the system is upgraded, the campaigns are not linked properly to the Marketing Operations projects.

Marketing Operations data source information worksheet

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

Table 7. Data source information worksheet

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. To upgrade Marketing Operations

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

Note that older versions of Marketing Operations were named Affinium Plan. All versions are now referred to as Marketing Operations in this guide.

Backing up the system before you upgrade

Take a back up of your system before you start the upgrade process. If the upgrade fails, you can restore the last version of Marketing Operations.

Complete the following steps to back up the system:

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.

Running the installer and updating 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.

Complete the following steps to run the installer and update configuration properties:

1. Run the IBM installer and specify your existing installation directory as the installation directory to use. For more information, see “How the installers work” on page 2.

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

2. Follow the instructions in the installation wizard.

Note: 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.

Upgrade your database manually

The IBM installer can upgrade the Marketing Operations database during the upgrade process. Use the database setup utility, `umodbsetup`, to upgrade the tables manually if your company policy doesn't allow you to upgrade the database.

The `umodbsetup` utility does one of the following actions:

- 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 database administrator can then run in your own database client.

Configuring environment variables

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

1. From the `<IBM_IMS_Home>\<MarketingOperations_Home>\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 the environment variable, see the *Marketing Operations Installation Guide*.
3. Save and close the file.
4. From the `<IBM_IMS_Home>\<MarketingOperations_Home>\tools\bin` directory, locate and open the `umo_jdbc.properties` file.
5. Set values for the following parameters:
 - `umo_driver.classname`
 - `umo_data_source.url`
 - `umo_data_source.login`
 - `umo_data_source.password`
6. Save and close the file.

Database setup utility

From a command prompt or UNIX shell, navigate to the `<IBM_IMS_Home>\<MarketingOperations_Home>\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
```

The following is the description of all the possible variables for the utility:

Table 8. 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 <code>-f</code> variable to specify the correct base version. For example, <code>-f -b 11.1.0.0</code>
-f	For upgrades only. Instructs the utility to use the base version specified by the <code>-b</code> variable, overriding the base version it may detect in the database. See the description of the <code>-b</code> variable.
-h	Provides help for the utility.
-l	Records the output from the actions that the <code>umodbsetup</code> utility performs in the <code>umo-tools.log</code> file. This file is located in the <code><IBM_IMS_Home>\<MarketingOperations_Home>\tools\logs</code> 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 <code>-L de_DE</code> for a German installation. The valid entries for locales include <code>de_DE</code> , <code>en_GB</code> , <code>en_US</code> , <code>es_ES</code> , <code>fr_FR</code> , <code>it_IT</code> , <code>ja_JP</code> , <code>ko_KR</code> , <code>pt_BR</code> , <code>ru_RU</code> , and <code>zh_CN</code> .
-m	Outputs the scripts to a file in the <code><IBM_IMS_Home>\<MarketingOperations_Home>\tools</code> 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 <code>umodbsetup</code> tool does not run the script.
-t	Type of database installation. Valid values are <code>full</code> and <code>upgrade</code> . For example, <code>-t full</code>
-v	Verbose.

Running 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.

Deploying the upgraded web application and running the upgrade processes

You must deploy the upgraded web applications to the web application server. After you deploy the web applications, you can start the upgrade process.

Note: If your Marketing Operations is integrated with Campaign, verify that Campaign is upgraded and running before you proceed.

1. Deploy Marketing Operations in your web application server as described in Chapter 4, “Overview,” on page 19.
2. Restart the application server.

3. When the application is running, log in and verify that the upgrade worked properly. Select **Settings > Configuration** and verify that **Marketing Operations** is in the list on the left. Then expand the **Marketing Operations** section and verify that the **umoConfiguration** category is in the list.
4. Select **Settings > Marketing Operations Settings**.
5. Scroll down and click **Marketing Operations Upgrade**. A list of upgrade processes displays. These processes change the configuration of the application by upgrading database tables and the files that store site-specific customizations.
For information about an upgrade process, click **Help** next to that process.
6. To run the selected processes, click **Upgrade**.

Verifying the Marketing Operations upgrade

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

Complete the following steps to verify the upgrade:

1. Review the log files in the `WAS_Profile_Home/logs/server1` directory for error messages. The message "UAPContext Init failed" indicates that the upgrade did not complete successfully.
2. Use Internet Explorer or another supported browser to access the IBM Marketing Software URL.
3. Navigate to different Marketing Operations features, including the asset file.
4. Create instances of different Marketing Operations objects, including plans, programs, projects, and your own custom marketing object types.
5. Select **Settings > Marketing Operations Settings > Template Configuration** and then click **Validate Templates**.
6. If your installation customizes Marketing Operations with the application programming interface, verify that your customizations are not affected by compatibility issues.
7. If you use trigger procedures, restore them.

Restoring trigger procedures

You can restore trigger procedures after you upgrade the Marketing Operations application.

Complete the following steps to restore the trigger procedures:

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:
`<IBM_IMS_Home>\<MarketingOperations_Home>\devkits\integration\examples\src\procedure`
2. If necessary, rebuild the integration services procedures using the build file located in the `<IBM_IMS_Home>\<MarketingOperations_Home>\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 `<IBM_IMS_Home>\<MarketingOperations_Home>\graphicalrefimages`

- Set **templateImageDir** to <IBM_IMS_Home>\<MarketingOperations_Home>\images
- Set **recentDataDir** to <IBM_IMS_Home>\<MarketingOperations_Home>\recentdata
- Set **workingAreaDir** to <IBM_IMS_Home>\<MarketingOperations_Home>\umotemp

Upgrading Marketing Operations in a clustered environment

Use the following guidelines when you upgrade multiple instances of Marketing Operations in 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.

See the *IBM Marketing Operations Installation Guide* for considerations if you install Marketing Operations in a clustered environment.

Chapter 4. Overview

There are 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 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.

Deploying Marketing Operations on Websphere

You can deploy the Marketing Operations application from a WAR file or an EAR file on the WebSphere Application Server (WAS).

Consider the following points before you deploy Marketing Operations on Websphere:

- Verify that your version of WebSphere meets the requirements that are described in the *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 versions of WebSphere Application Server present user interface controls in varying sequences and with alternative labels.

Complete the following steps to set up the environment for deploying Marketing Operations:

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

Datasource creation in the web app server can be skipped if you configure through the installer.

 - a. For **Implementation type**, select **Connection pool** data source.
 - b. Specify the native library path of the database driver JAR file on your server. For example, db2jcc4.jar/ojdbc6.jar/sqljdbc4.jar.
3. Create the data source: On the **Resources > JDBC > Data sources** form, click **New**. Complete the Create a data source wizard by completing the following actions:

Datasource creation in the web app server can be skipped if you configure through the installer.

- a. Specify a data source name.
 - b. For JNDI name, enter plans.
 - c. Select the JDBC provider that you created in step 2.
 - d. Specify the database name and server name.
 - e. For **Mapping-configuration** alias select **WSLogin**.
4. Define custom properties for the data source: On the **JDBC providers > <database provider> > Data sources > 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 the following entries as Generic JVM arguments, separated by a space:
 - -Dplan.home=<IBM_IMS_Home>\<MarketingOperations_Home>
where <IBM_IMS_Home> is the path to the top-level IBM directory and <MarketingOperations_Home> is the path to the directory where you installed Marketing Operations. Typically this path is IBM_IMS/MarketingOperations.
 - -Dclient.encoding.override=UTF-8
 - Make sure that the following JVM parameters are present. If not add them:
 -
 - Dlog4j2.contextSelector=org.apache.logging.log4j.core.async.AsyncLoggerContextSelector
 - -Dlog4j2.configurationFile=file:///<Plan_home>\conf\plan_log4j_11.1.0.0.xml
 - -Dlog4j.configuration=file:/// <Plan_home>\conf\plan_log4j_1x.xml

Note:

- In case of upgrade and fast upgrade, if there is a plan_log4j_11.1.0.0.xml file apart from the plan_log4j.xml, use the plan_log4j_11.1.0.0.xml.
 - In the -Dlog4j2.configurationFile=file:///<Plan_home>\conf\plan_log4j_11.1.0.0.xml setting, if you have customized the plan_log4j.xml and made some changes to suit your organization, then ensure that you make those settings in the plan_log4j_11.1.0.0.xml specified here as per the -Dlog4j2.configurationFile that we have deployed to you now. If you have used the plan_log4j_11.1.0.0.xml file, make your changes in that file. Any customization present in the file plan_log4j.xml prior to upgrade needs to be done in plan_log4j_11.1.0.0.xml as per new log4j2 syntax. For this, you will need to refer the log4j2 documentation for details by referring to the link: <https://logging.apache.org/log4j/2.0/manual/configuration.html>
 - In Windows, the file path contains a back slash. Whereas, in UNIX, it must contain a forward slash.
 - The path separator in the log4j configuration file name should be set as Windows style() or UNIX (/) style based on the underlying operating system.
6. Set the JSP Compilation level in the WebSphere application server to 18.

Deploying 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.

Complete the following steps to deploy the WAR or EAR file:

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 window:
 - Select **Detailed**.
 - Select **Generate Default Bindings**.
 - Select **Override existing bindings**.
4. On the Select Installation Options window, complete the following actions:
 - 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 window, select the **Module**. If you deployed an EAR, select every WAR file.
6. On the Provide Options to Compile JSPs window, select the **Web module**. If you deployed an EAR, select every WAR file.
7. Set the **JDK Source Level** to 18.
8. On the JSP reloading options for Web modules form, select **JSP enable class reloading** and for **JSP reload interval in seconds** enter 5.
9. On the Map shared libraries window, select the **Application** and the **Module**.
10. On the Map shared library relationships window, select the **Application** and the **Module**.
11. On the Map resource references to resources window, select the module and for **Target Resource JNDI Name** enter `plands`.
12. On the Map context roots for Web modules window, for **Context Root** enter `/plan`.
13. Review and save your settings.

Defining class loader policy

Class loader policy defines how the application is configured on WAS. You must change some of the default settings on WAS before you deploy Marketing Operations.

Complete the following steps to define the class loader policy:

1. On the **Enterprise Applications > plan > Class loader**, 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** and **Save Settings**.

Defining settings for cookies

You must define and set settings for cookies by using **Session Management** option on the **Websphere Enterprise Applications**.

Complete the following steps to define the settings for cookies:

1. Go to the **Enterprise Applications > plan > Session management**.
2. Select **Override session management**.
3. Select **Enable cookies**.
4. Click **Apply**, then go to the **Enterprise Applications > plan > Session management > Cookies**.
5. Change the Marketing Operations **Cookie name** from JSESSIONID to UMOSESSIONID.
6. Click **Apply** and **Save Settings**.

Defining EAR module settings

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

Complete the following steps to define EAR file module settings:

1. Go to **Enterprise Applications** and select the EAR file.
2. On the **Manage Modules** form, select one of the WAR files; for example, MktOps.war.
3. On the **Enterprise Applications > EAR > Manage Modules > WAR** form, complete the following substeps:
 - a. Set **Starting weight** to 10000.
 - b. For **Class loader order**, select **Classes loaded with application class loader first**.
4. On the **Enterprise Applications > EAR > Manage Modules > WAR > Session management**, select **Enable cookies**.
5. On the **Enterprise Applications > EAR > Manage Modules > WAR > Session Management > Cookies**, complete the following steps:
 - a. Set the **Cookie name** to CMPJSESSIONID.
 - b. For the **Cookie maximum age**, select **Current browser session**.
6. On the **Enterprise Applications > EAR > Manage Modules > WAR > Session management**, enter the following information:
 - a. Select **Allow overflow**.
 - b. For **Maximum in-memory sessions**, enter 1000.
 - c. For **Session timeout**, select **Set timeout** and enter 30.
7. Define the same settings for each of the other WAR files, including unica.war and plan.war.

Note: If the Campaign.war file also exists in the EAR file and you plan to integrate Marketing Operations with Campaign, define the same settings for the Campaign.war file.

Deploying Marketing Operations on WebLogic

Use the following guidelines for deploying Marketing Operations on WebLogic.

- IBM Marketing Software products customize the JVM used by WebLogic. You might create a WebLogic instance dedicated to IBM Marketing Software products if you encounter JVM-related errors.
- Do not install more than one Marketing Operations application under the same WebLogic domain.
- Verify that the Software Development Kit (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 to deploy Marketing Operations to WebLogic:

1. 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=<IBM_IMS_Home>\<MarketingOperations_Home>
Where <IBM_IMS_Home> is the path to the top-level IBM directory and <MarketingOperations_Home> is the path to the directory where you installed Marketing Operations. Typically this directory is IBM_IMS/MarketingOperations.
 - -Dfile.encoding=UTF-8
 - Make sure that the following JVM parameters are present. If not add them:
 - -Dlog4j2.contextSelector=org.apache.logging.log4j.core.async.AsyncLoggerContextSelector
 - -Dlog4j2.configurationFile=file:///<Plan_home>\conf\plan_log4j_11.1.xml
 - -Dlog4j.configuration=file:/// <Plan_home>\conf\plan_log4j_1x.xml
- Note:**
- In case of upgrade and fast upgrade, if there is a plan_log4j_11.1.0.0.xml file apart from the plan_log4j.xml, use the plan_log4j_11.1.0.0.xml.
 - In the -Dlog4j2.configurationFile=file:///<Plan_home>\conf\plan_log4j_11.1.xml setting, if you have customized the plan_log4j.xml and made some changes to suit your organization, then ensure that you make those settings in the plan_log4j.xml specified here as per the -Dlog4j2.configurationFile that we have deployed to you now. If you have used the plan_log4j_11.1.0.0.xml file, make your changes in that file.
 - In Windows, the file path contains a back slash. Whereas, in UNIX, it must contain a forward slash.
 - The path separator in the log4j configuration file name should be set as Windows style() or UNIX (/) style based on the underlying operating system.
4. Save and close the file.
 5. Restart WebLogic.
 6. Deploy Marketing Operations as a web application module: select plan.war.

7. Start the deployed web application.

Deploying Marketing Operations on JBoss

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

1. Existing customers who want to upgrade to JBOSS + 11.1, must perform the following steps:
 - Clear the recent items for all the users. Note: Administrator: Please communicate to all the users to clear their respective recent items prior to the migration to JBOSS.
 - Clear the directory `<plan_home>/recentdata`.
 - Migrate to JBOSS + 11.1.
2. No change is needed to be done by new customers who are installing JBOSS + 11.1. This is because recent items will not be present in their case.
3. No change is needed to be done by new customers who are installing JBOSS + 11.1. This is because recent items will not be present in their case.

From the bin directory under your JBoss installation directory, locate and open the `standalone.conf` or `standalone.conf.bat` script appropriate for your operating system in a text editor. Scroll to the `JAVA_OPTIONS` property, and add the following entries. Use a space to separate entries.

- `-Dplan.home=<IBM_IMS_Home>\<MarketingOperations_Home>`
Where `<IBM_IMS_Home>` is the path to the top-level IBM directory and `<MarketingOperations_Home>` is the path to the directory where you installed Marketing Operations. Typically this directory is `IBM_IMS/MarketingOperations`.
- `-Dfile.encoding=UTF-8`
- Make sure that the following JVM parameters are present. If not add them:
 - `-Dlog4j2.contextSelector=org.apache.logging.log4j.core.async.AsyncLoggerContextSelector`
 - `-Dlog4j2.configurationFile=file:/// <Plan_home>\conf\plan_log4j_11.1.xml`
 - `-Dlog4j.configuration=file:/// <Plan_home>\conf\plan_log4j_1x.xml`

Note:

- In case of upgrade and fast upgrade, if there is a `plan_log4j_11.1.0.0.xml` file apart from the `plan_log4j.xml`, use the `plan_log4j_11.1.0.0.xml`.
- In the `-Dlog4j2.configurationFile=file:/// <Plan_home>\conf\plan_log4j_11.1.xml` setting, if you have customized the `plan_log4j.xml` and made some changes to suit your organization, then ensure that you make those settings in the `plan_log4j.xml` specified here as per the `-Dlog4j2.configurationFile` that we have deployed to you now. If you have used the `plan_log4j_11.1.0.0.xml` file, make your changes in that file.
- In Windows, the file path contains a back slash. Whereas, in UNIX, it must contain a forward slash.
- The path separator in the log4j configuration file name should be set as Windows style() or UNIX (/) style based on the underlying operating system.

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

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

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

Deploying Marketing Operations on Apache Tomcat

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

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

From the bin directory under your Apache Tomcat installation directory, locate or create the `setenv.sh` or `setenv.bat` script appropriate for your operating system in a text editor, and add or modify `JAVA_OPTIONS` property, and add the following entries. Use a space to separate entries.

- `-Dplan.home=<IBM_IMS_Home>\<MarketingOperations_Home>`
Where `<IBM_IMS_Home>` is the path to the top-level IBM directory and `<MarketingOperations_Home>` is the path to the directory where you installed Marketing Operations. Typically this directory is `IBM_IMS/MarketingOperations`.
- `-Dfile.encoding=UTF-8`
- Make sure that the following JVM parameters are present. If not add them:
 - `-Dlog4j2.contextSelector=org.apache.logging.log4j.core.async.AsyncLoggerContextSelector`
 - `-Dlog4j2.configurationFile=file:/// <Plan_home>\conf\plan_log4j_11.1.xml`
 - `-Dlog4j.configuration=file:/// <Plan_home>\conf\plan_log4j_1x.xml`

Note:

- In case of upgrade and fast upgrade, if there is a `plan_log4j_11.1.0.0.xml` file apart from the `plan_log4j.xml`, use the `plan_log4j_11.1.0.0.xml`.
- In the `-Dlog4j2.configurationFile=file:/// <Plan_home>\conf\plan_log4j_11.1.xml` setting, if you have customized the `plan_log4j.xml` and made some changes to suit your organization, then ensure that you make those settings in the `plan_log4j.xml` specified here as per the `-Dlog4j2.configurationFile` that we have deployed to you now. If you have used the `plan_log4j_11.1.0.0.xml` file, make your changes in that file.
- In Windows, the file path contains a back slash. Whereas, in UNIX, it must contain a forward slash.

- The path separator in the log4j configuration file name should be set as Windows style() or UNIX (/) style based on the underlying operating system.
- 1. Deploy the IBM plan.war file as an enterprise application on Tomcat Apache server.

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

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

Additional configuration for enhanced security

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

Disabling the X-Powered-By flag

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

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

Configuring a restrictive cookie path

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

1. If you are using WebLogic, perform the following steps.
 - a. Extract the `weblogic.xml` file from the WAR or EAR package where you want to add the restrictive cookie path.

- b. Add the following to the `weblogic.xml` file, where *context-path* is the context path for the deployed application. For IBM Marketing Software applications the context path is typically `/unica`.

```
<session-descriptor>
  <session-param>
    <param-name>CookiePath</param-name>
    <param-value>/context-path< /param-value>
  </session-param>
</session-descriptor>
```
 - c. Rebuild the WAR or EAR file.
2. If you are using WebSphere, perform the following steps.
- a. In the WebSphere administration console, navigate to the **Session Manager** > **Cookie** tab.
 - b. Set the **Cookie Path** to the context path of your application.
For IBM Marketing Software applications the context path is typically `/unica`.

Chapter 5. Uninstalling Marketing Operations

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

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

If you manually remove the files in your installation directory instead of running the uninstaller, the result might be an incomplete installation if you later reinstall an IBM product in the same location. After uninstalling a product, its database is not removed. The uninstaller only removes default files that are created during installation. Any file that is created or generated after installation is not removed.

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

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

Uninstall_Product -i console

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

Uninstall_Product -i silent

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

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

Chapter 6. configTool

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

When to use configTool

You might want to use configTool for the following reasons.

- To import partition and data source templates that are supplied with Campaign, which you can then modify and duplicate by using the Configuration page.
- To register (import configuration properties for) IBM Marketing Software products, if the product installer is unable to add the properties to the database automatically.
- To export an XML version of configuration settings for backup or to import into a different installation of IBM Marketing Software.
- To delete categories that do not have the **Delete Category** link. You do this by using configTool to export your configuration, then manually deleting the XML that creates the category, and by using configTool to import the edited XML.

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

Syntax

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

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

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

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

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

Commands

-d -p "elementPath" [o]

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

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

Note the following.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

`-r productName -f registrationFile`

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

Note the following.

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

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

Table 9. Product names for configTool registration and unregistration

Product name	Name used in configTool
Marketing Platform	Manager
Campaign	Campaign
Distributed Marketing	Collaborate
eMessage	emessage
Interact	interact
Contact Optimization	Optimize
Marketing Operations	Plan

Table 9. Product names for configTool registration and unregistration (continued)

Product name	Name used in configTool
Opportunity Detect	Detect
IBM SPSS® Modeler Advantage Enterprise Marketing Management Edition	SPSS
Digital Analytics	Coremetrics

-u *productName*

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

Options

-o

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

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

Examples

- Import configuration settings from a file named Product_config.xml in the conf directory under the Marketing Platform installation.
`configTool -i -p "Affinium" -f Product_config.xml`
- Export an existing Campaign partition (complete with data source entries), save it to a file named partitionTemplate.xml, and store it in the default tools/bin directory under the Marketing Platform installation.
`configTool -x -p "Affinium|Campaign|partitions|partition1" -f partitionTemplate.xml`
- Manually register an application named productName, by using a file named app_config.xml in the default tools/bin directory under the Marketing Platform installation, and force it to overwrite an existing registration of this application.
`configTool -r product Name -f app_config.xml -o`
- Unregister an application named productName.
`configTool -u productName`
- Run the following command to enable encodeCSV feature:
`configTool -vp -p "Affinium|Plan|umoConfiguration" -f MarketingOperations_Home\conf\Plan_encodeProperty_11.1.xml`

Chapter 7. IBM Marketing Operations configuration properties

This section describes the IBM Marketing Operations configuration properties on the **Settings > Configuration** page.

Marketing Operations

Properties in this category specify the default and supported locales for your installation of IBM Marketing Operations.

supportedLocales

Description

Specifies the locales available in your installation of IBM Marketing Operations. List only the locales that you are using. Each locale you list uses memory on the server. The amount of memory that is 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 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

The properties in this category specify options for navigation, such as Uniform Resource Identifiers, URLs, and ports.

welcomePageURI

Description

The Uniform Resource Identifier of the IBM Marketing Operations index page. This value is used internally by IBM Marketing Software applications. Changes to this value are not recommended.

Default value

affiniumPlan.jsp?cat=projectlist

projectDetailpageURI

Description

The Uniform Resource Identifier of the IBM Marketing Operations detail page. This value is used internally by IBM Marketing Software applications. Changes to this value are not recommended.

Default value

blank

seedName

Description

Used internally by IBM Marketing Software applications. Changes to this value are not recommended.

Default value

Plan

type

Description

Used internally by IBM Marketing Software applications. Changes to this value are not recommended.

Default value

Plan

httpPort

Description

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

Default value

7001

httpsPort

Description

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

Default value

7001

serverURL

Description

The URL of the IBM Marketing Operations installation. Accepts locators with either the HTTP or HTTPS protocol.

If users access Marketing Operations with the Chrome browser, use the fully qualified domain name (FQDN) in the URL. If the FQDN is not used, the Chrome browser cannot access the product URLs.

Default value

`http://<server>:<port>/plan`

Note: <server> must be lowercase.

logoutURL

Description

Used internally. Changes to this value are not recommended.

IBM 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

Marketing Operations

Marketing Operations | about

The configuration properties in this section list information about your IBM Marketing Operations installation. You cannot edit these properties.

displayName

Description

The display name of the product.

Value

IBM Marketing Operations

releaseNumber

Description

The currently installed release.

Value

`<version>.<release>.<modification>`

copyright

Description

The copyright year.

Value

`<year>`

os

Description

The operating system on which IBM Marketing Operations is installed.

Value *<operating system and version>*

java

Description

The current version of Java.

Value *<version>*

support

Description

Read documentation and place service requests.

Value

http://www-947.ibm.com/support/entry/portal/open_service_request

appServer

Description

The address of the application server on which IBM Marketing Operations is installed.

Value

<IP address>

otherString

Description

Value

blank

Marketing Operations | umoConfiguration

These properties specify information about the basic configuration of IBM Marketing Operations.

serverType

Description

Application Server Type. Used for Calendar export.

Valid values

WEBLOGIC or WEBSPHERE

Default value

<server type>

userManagerSyncTime

Description

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

Default value

10800000 (milliseconds: 3 hours)

encodeCSV

Description

When the value of this setting is true, when the TCS grid in a Campaign integrated project is exported, the values of strings in cells are enclosed in quotes. When such data is imported and if there is a formula in a string, it is prevented from running when user visits the TCS grid page

Valid values

True | False

Default value

False

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.

Valid values

Integers 0 to 11

Default value

0

maximumItemsToBeRetainedInRecentVisits

Description

The maximum number of links to recently viewed pages to display on the **Recent** menu.

Default value

10 (links)

maxLimitForTitleString

Description

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

Default value

40 (characters)

maximumLimitForBulkUploadItems

Description

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

Default value

5 (attachments)

workingDaysCalculation

Description

Controls how IBM Marketing Operations calculates durations.

Valid values

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

Default value

all

validateAllWizardSteps

Description

When users create a program, project, or request with the wizard, IBM 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**.

Valid values

- **True**: Marketing Operations checks the required fields on pages that the user did not view (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 validate required fields on pages the user did not view.

Default value

True

enableRevisionHistoryPrompt

Description

Ensures that users are prompted to add change comments when they save a project, request, or approval.

Valid values

True | False

Default value

False

useForecastDatesInTaskCalendar

Description

Specifies the type of dates that are used when tasks display in calendar view.

Valid values

- True: uses forecast and actual dates to display tasks.
- False: uses target dates to display tasks.

Default value

False

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.

Valid values

True | False

Default value

True

projectTemplateMonthlyView

Description

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

Valid values

True | False

Default value

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.

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.

Default value

False

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.

Valid values

True | False

Default value

True

customAccessLevelEnabled

Description

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

Valid values

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

Default value

True

enableUniqueIdsAcrossTemplatizableObjects

Description

Determines whether you use unique internal IDs for all of the objects that are created from templates, including programs, projects, plans, and invoices.

Valid values

- True enables unique internal IDs across all objects that are created from templates. This configuration simplifies cross-object reporting by allowing the system to use the same table for different object types.
- False disables unique internal IDs across all objects that are created from templates.

Default value

True

FMEabled

Description

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

Valid values

True | False

Default value

False

FMProjVendorEnabled

Description

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

Valid values

True | False

Default value

False

FMPrgmVendorEnabled

Description

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

Valid values

True | False

Default value

False

Marketing Operations | umoConfiguration | Approvals

These properties specify options for approvals.

specifyDenyReasons

Description

Enables a customizable list of reasons for denying an approval. When enabled, administrators populate the Approval Deny Reasons list with options, then associate deny reasons with each workflow template and each project template that defines a workflow. Users who deny an approval, or an item within an approval, are required to select one of these predefined reasons.

Valid values

True | False

Default value

False

approveWithChanges

Description

Enables the **Approve with changes** option for an approval. When enabled, The **Allow approvers to approve with changes** option is selected by default when a user sets up approvals in a project template, project, or a standalone approval. The **Allow approvers to approve with changes** option can be edited if the **overrideApproveWithChanges** property is set to True.

An approver can approve a task by selecting the **Approve with changes** option if the **Allow approvers to approve with changes** option is selected when the approval is set up.

Valid values

True | False

Default value

True

overrideApproveWithChanges

Description

Set to True to allow a user to edit the default setting for the **Allow approvers to approve with changes** option when a user sets up approvals in a project template, project, or a standalone approval. The default setting is determined by the **approveWithChanges** property.

Valid values

True | False

Default value

True

Marketing Operations | umoConfiguration | templates

These properties specify information about templates in IBM Marketing Operations. For best results, do not change the default values of these parameters.

templatesDir

Description

Identifies the directory that contains all of your project template definitions, which are stored in XML files.

Use a fully qualified path.

Default value

`<IBM_IMS_Home>/<MarketingOperations_Home>/templates`

assetTemplatesFile

Description

The XML file that defines the templates for assets. This file must be in the directory that is specified by **templatesDir**.

Default value

asset_templates.xml

planTemplatesFile

Description

The XML file that defines the templates for plans. This file must be in the directory that is specified by **templatesDir**.

Default value

plan_templates.xml

programTemplatesFile

Description

The XML file that defines the templates for programs. This file must be in the directory that is specified by **templatesDir**.

Default value

program_templates.xml

projectTemplatesFile

Description

The XML file that defines the templates for projects. This file must be in the directory that is specified by **templatesDir**.

Default value

project_templates.xml

invoiceTemplatesFile

Description

The XML file that defines the templates for invoices. This file must be in the directory that is specified by **templatesDir**.

Default value

invoice_templates.xml

componentTemplatesFile

Description

The XML file that defines the templates for custom marketing object types. This file must be in the directory that is specified by **templatesDir**.

Default value

component_templates.xml

metricsTemplateFile

Description

The XML file that defines the templates for metrics. This file must be in the directory that is specified by **templatesDir**.

Default value

metric_definition.xml

teamTemplatesFile

Description

The XML file that defines the templates for teams. This file must be in the directory that is specified by **templatesDir**.

Default value

team_templates.xml

offerTemplatesFile

Description

The XML file that defines the templates for offers. This file must be in the directory that is specified by **templatesDir**.

Default value

uap_sys_default_offer_comp_type_templates.xml

Marketing Operations | umoConfiguration | attachmentFolders

These properties specify directories to upload and store attachments.

uploadDir

Description

The upload directory where attachments for projects are stored.

Default value

<MarketingOperations_Home>/projectattachments

planUploadDir

Description

The upload directory where attachments for plans are stored.

Default value

<MarketingOperations_Home>/planattachments

programUploadDir

Description

The upload directory where attachments for programs are stored.

Default value

<MarketingOperations_Home>/programattachments

componentUploadDir

Description

The upload directory where attachments for marketing objects are stored.

Default value

<MarketingOperations_Home>/componentattachments

taskUploadDir

Description

The upload directory where attachments for tasks are stored.

Default value

<MarketingOperations_Home>/taskattachments

approvalUploadDir

Description

The upload directory where approval items are stored.

Default value

<MarketingOperations_Home>/approvalitems

assetUploadDir

Description

The upload directory where assets are stored.

Default value

<MarketingOperations_Home>/assets

accountUploadDir

Description

The upload directory where attachments for accounts are stored.

Default value

<MarketingOperations_Home>/accountattachments

invoiceUploadDir

Description

The upload directory where attachments for invoices are stored.

Default value

<MarketingOperations_Home>/invoiceattachments

graphicalRefUploadDir

Description

The upload directory where attribute images are stored.

Default value

<MarketingOperations_Home>/graphicalrefimages

templateImageDir

Description

The upload directory where template images are stored.

Default value

<MarketingOperations_Home>/images

recentDataDir

Description

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

Default value

<MarketingOperations_Home>/recentdata

workingAreaDir

Description

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

Default value

<MarketingOperations_Home>/umotemp

managedListDir

Description

The upload directory where managed list definitions are stored.

Default value

<MarketingOperations_Home>/managedList

Marketing Operations | umoConfiguration | Email

These properties specify information for sending email notifications in IBM Marketing Operations.

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 SMTP server.

This parameter is necessary if you did not provide IBM Marketing Operations with an existing JavaMail session that uses the session parameter and the delegate is marked "Complete."

Default value

[CHANGE-ME]

notifyDefaultSenderEmailAddress

Description

Set to a valid email address. The system sends email messages to this address when there is no valid email address available to send the notification email messages.

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

These properties specify markup options. IBM 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.

Valid values

- SOAP enables users to edit and view markups in PDF documents. Adobe Acrobat Professional is required for markups. If specified, users cannot view markups that were made previously in a web browser with the native Marketing Operations method.
If you specify SOAP, you must also configure the **markupServerURL** parameter.
If you specify SOAP, you must delete the customized UMO_Markup_Collaboration.js that was copied in the JavaScripts subdirectory of the directory where Adobe Acrobat is installed. For example: C:\Program files (x86)\Adobe\Acrobat 10.0\Acrobat\Javascripts\UMO_Markup_Collaboration.js. This file is no longer required.
- 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 were made previously in a PDF with Adobe Acrobat.
- If blank, the markup function is disabled and the **View/Add Markup** link does not appear.

Default value

MCM

markupServerURL

Description

Dependent on **markupServerType** = SOAP.

Set to the URL for the computer that hosts 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.

Accepts locators with either the HTTP or HTTPS protocol.

Default value

`http://<server>:<port>/plan/services/collabService?wsdl`

instantMarkupFileConversion

Description

If True, IBM 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.

Valid values

True | False

Default value

False

Marketing Operations | umoConfiguration | grid

These properties specify options for grids.

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 that indicates whether the grid validation plug-in needs to be reloaded or not.

Valid values

True | False

Default value

True

gridDataValidationClass

Description

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

Default value

blank

tvcDataImportFieldDelimiterCSV

Description

Delimiter to use to parse data imported into 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

Specifies the number of rows to display per page in grid view.

Valid values

positive integers

Default value

100

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

These properties specify options for the workflow in IBM Marketing Operations.

hideDetailedDateTime

Description

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

Valid values

True | False

Default value

False

daysInPastRecentTask**Description**

This parameter determines how long tasks are considered "recent." If the task is "active" and started less than this number of days ago, or the Target End Date of the task is between today and this number of days in the past, the task displays as a recent task.

Valid values

positive integers

Default value

14 (days)

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.

Valid values

positive integers

Default value

14 (days)

beginningOfDay**Description**

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

Valid values

integers from 0 to 12

Default value

9 (9 AM)

numberOfHoursPerDay**Description**

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

Valid values

integers from 1 to 24

Default value

8 (hours)

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

These properties specify information about IBM Marketing Operations Integration Services module. The Integration Services module extends the function of Marketing Operations with web services and triggers.

enableIntegrationServices

Description

Enables and disables the Integration Services module.

Valid values

True | False

Default value

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 class path for custom procedures.

Default value

`file:/// [plan-home]/devkits/integration/examples/classes/`

Marketing Operations | umoConfiguration | campaignIntegration

The properties in this category specify options for the Campaign integration.

defaultCampaignPartition

Description

When IBM Marketing Operations is integrated with IBM 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

These properties specify information about reports that are used by IBM Marketing Operations.

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 caching of a list of reports on object instance's analysis page.

Valid values

True | False

Default value

False

Marketing Operations | umoConfiguration | invoiceRollup

The properties in this category specify options for invoice rollups.

invoiceRollupMode

Description

Specifies how rollups occur. Acceptable values follow.

Valid values

- immediate: rollups occur every time that 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`

Default value

`immediate`

invoiceRollupScheduledStartTime

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

`11:00 pm`

invoiceRollupScheduledPollPeriod

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)`

Marketing Operations | umoConfiguration | database

These properties specify information about the database that is used for IBM Marketing Operations.

fileName

Description

Path to file for loading data sources using JNDI lookup.

Default value

`plan_datasources.xml`

sqlServerSchemaName

Description

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

Default value

`dbo`

db2ServerSchemaName

Important: Changes to the default value supplied for this parameter are not recommended.

Description

Used internally by IBM Marketing Software applications.

Default value

blank

thresholdForUseOfSubSelects

Description

Specifies the number of records beyond which a subquery must 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 Marketing Operations installations that have a large application data set. As a best practice, do not change this value unless you encounter performance issues. If this parameter is missing or commented out, the database behaves as if the threshold is set to a large value.

Default value

3000 (records)

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 to configure ALL IBM Marketing Operations List Handlers. Use another **useDBSortFor<module>List** parameter to override the paging behavior of a particular list.

Valid values

- True: get one page of list data from the database at a time.
- False: cache all list data.

Default value

True

useDBSortForPlanList

Description

This parameter is used to configure the Plan List Handler.

Valid values

- True: get one page of list data from the database at a time.
- False: cache all list data.

Default value

True

useDBSortForProjectList

Description

This parameter is used to configure the Project List Handler.

Valid values

- True: get one page of list data from the database at a time.
- False: cache all list data.

Default value

True

useDBSortForTaskList

Description

This parameter is used to configure the Task List Handler.

Valid values

- True: get one page of list data from the database at a time.
- False: cache all list data.

Default value

True

useDBSortForProgramList

Description

This parameter is used to configure the Program List Handler.

Valid values

- True: get one page of list data from the database at a time.
- False: cache all list data.

Default value

True

useDBSortForApprovalList

Description

This parameter is used to configure the Approval List Handler.

Valid values

- True: get one page of list data from the database at a time.
- False: cache all list data.

Default value

True

useDBSortForInvoiceList**Description**

This parameter is used to configure the Invoice List Handler.

Valid values

- True: get one page of list data from the database at a time.
- False: cache all list data.

Default value

True

useDBSortForAlerts**Description**

This parameter is used to configure the Alerts List Handler.

Valid values

- True: get one page of list data from the database at a time.
- False: cache all list data.

Default value

True

Marketing Operations | umoConfiguration | listingPages

These properties specify information about listing items, such as marketing objects or projects, on pages in IBM Marketing Operations.

listItemsPerPage**Description**

Specifies how many items (rows) are displayed in one list page. This value must 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 must 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 limit the number of objects that display when users select the calendar view. 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

These properties specify information about object locks for plans, programs, projects, assets, and marketing objects in IBM Marketing Operations.

enablePersistentObjectLock

Description

This parameter must be set to True if IBM Marketing Operations is deployed in a clustered environment. The object lock information is persistent in the database.

Valid values

True | False

Default value

False

lockProjectCode

Description

Determines whether users can edit the Project Code or PID on the Summary tab of a project.

Valid values

- True: enables locking.
- False: disables locking.

Default value

True

lockProgramCode

Description

Determines whether users can edit the Program Code or PID on the Summary tab of a program.

Valid values

- True: enables locking.
- False: disables locking.

Default value

True

lockPlanCode**Description**

Determines whether users can edit the Plan Code or PID on the Plan Summary tab for a plan.

Valid values

- True: enables locking.
- False: disables locking.

Default value

True

lockMarketingObjectCode**Description**

Determines whether users can edit the Marketing Object Code or PID on the Summary tab of a marketing object.

Valid values

- True: enables locking.
- False: disables locking.

Default value

True

lockAssetCode**Description**

Determines whether users can edit the Asset Code or PID on the Summary tab of an asset.

Valid values

- True: enables locking.
- False: disables locking.

Default value

True

Marketing Operations | umoConfiguration | thumbnailGeneration

These properties specify information about how and when IBM Marketing Operations generates thumbnails.

trueTypeFontDir**Description**

Specifies the directory where the True Type fonts are located. This parameter is required for thumbnail generation on operating systems other than Windows that use Aspose. For Windows installations, this parameter is optional.

Default value

blank

coreThreadPoolSize

Description

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

Default value

5

maxThreadPoolSize

Description

Specifies the maximum number of threads that are 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

disableThumbnailGeneration

Description

Determines whether thumbnail images are generated for uploaded documents. A value of True enables thumbnail generation.

Default value

False

Valid values

True | False

markupImgQuality

Description

Magnification or zoom factor to apply to the rendered page.

Default value

1

Marketing Operations | umoConfiguration | Scheduler | intraDay

This property specifies how frequently the scheduler runs during the day.

schedulerPollPeriod

Description

Defines how frequently, in seconds, a batch job to calculate project health status runs each day.

Note: Only the daily batch job updates the project health status history, which is used by reports.

Default value

60 (seconds)

Marketing Operations | umoConfiguration | Scheduler | daily

This property specifies what time the scheduler starts each day.

schedulerStartTime

Description

Defines the start time for a batch job that calculates project health status. This job also:

- Updates the project health status history that is used by reports.
- Initiates distribution of email notifications to users who subscribe to them.

Note: The system initiates this batch job only if the calculation is not already running. Define this parameter so that the job starts at a different time than the **intraDay** parameter, and at a time when users are not likely to request this calculation manually.

Default value

11:00 pm

Marketing Operations | umoConfiguration | Notifications

These properties specify information about notifications in IBM Marketing Operations, including information about the event monitor.

notifyPlanBaseURL

Description

The URL for your IBM 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 Marketing Operations server are running on same server.

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.unicacorp.afc.service.IServiceImpl` interface. Defaults to a local implementation if not specified.

Default value

blank

notifyIsDelegateComplete

Description

Optional Boolean string that indicates whether the delegate implementation is complete. Defaults to True if not specified.

Default value

True

Valid Values

True | False

notifyEventMonitorStartTime

Description

Specifies when the event notification monitor process begins for the first time after IBM Marketing Operations starts. 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

Blank (Immediately after Marketing Operations is started.)

notifyEventMonitorPollPeriod

Description

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

Default value

5 (seconds)

notifyEventMonitorRemoveSize

Description

Specifies the number of events to remove from the queue in one shot. The event monitor removes events from the event queue in the increments that are specified by this value until none are left.

Note: You can set this value to a number other than 1 to increase event processing performance. However, if the service host goes down before removed events are processed, there is a risk of event loss.

Default value

10

alertCountRefreshPeriodInSeconds

Description

Specifies, in seconds, the system-wide alert count refresh period for the alerts count. This count displays near the top of the navigation bar after a user logs in.

Note: Changing the refresh period to poll faster can have performance implications in a multi-user environment.

Default value

180 (3 minutes)

Marketing Operations | umoConfiguration | Notifications | Email

These properties specify information about email notifications in IBM Marketing Operations.

notifyEMailMonitorStartTime

Description

Specifies when the email monitor process runs for the first time after IBM Marketing Operations starts. 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

Blank (Immediately after IBM Marketing Operations starts.)

notifyEMailMonitorPollPeriod

Description

Defines the approximate time, in seconds, for the email monitor to sleep between polls.

Note: As with events, email messages accumulate in the queue between polling periods; shorter polling times send email messages sooner, but can increase system overhead.

Default value

60 (seconds)

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 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 email messages to remove from queue at one time. The email monitor continues to remove messages from the email queue incrementally until none remain.

Note: You can set this value to a number other than 1 to increase email processing performance. However, if the service host goes down before removed email messages are processed, there is a risk of message loss.

Default value

10 (messages)

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 into the queue until it reaches the maximum number of attempts that are allowed by this parameter.

For example, **notifyEMailMonitorPollPeriod** is set to poll every 60 seconds. Setting the **notifyEMailMonitorMaximumResends** property to 60 attempts causes the email monitor to resend a failed message one time in each poll (every minute), for up to 1 hour. A value of 1440 (24x60) causes the email monitor to try every minute for up to 24 hours.

Default value

1 (attempt)

showUserNameInEmailNotificationTitle

Description

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

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

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

Default value

False

notifyEMailMonitorJavaMailDebug

Description

Specifies whether JavaMail debug mode is set.

Valid values

- True: enables JavaMail debug.
- False: disables debug tracing.

Default value

False

Marketing Operations | umoConfiguration | Notifications | project

These properties specify information about project alarms in IBM Marketing Operations.

notifyProjectAlarmMonitorStartTime

Description

Specifies when the project alarm monitors run for the first time after IBM Marketing Operations starts. 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

Blank (60 seconds)

notifyProjectAlarmMonitorScheduledStartCondition

Description

Defines the number of days before the start date of a project for IBM Marketing Operations to send notifications to users.

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

Default value

1 (day)

notifyProjectAlarmMonitorScheduledEndCondition

Description

Defines the number of days before the end date of a project for IBM Marketing Operations to send end notifications to users.

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

Default value

3 (days)

notifyProjectAlarmMonitorTaskScheduledStartCondition

Description

Defines the number of days before the start date of a task for IBM Marketing Operations to send start notifications to users.

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

Default value

1 (day)

notifyProjectAlarmMonitorTaskScheduledEndCondition

Description

Defines the number of days before the end date of a task for IBM Marketing Operations to send end notifications to users.

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

Default value

3 (days)

notifyProjectAlarmMonitorTaskLateCondition

Description

Defines the number of days after the start date of a task for IBM Marketing Operations to send users notification that a task did not start.

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

Default value

3 (days)

notifyProjectAlarmMonitorTaskOverdueCondition

Description

Defines the number of days after the end date of a task for IBM Marketing Operations to send users notification that a task did not finish.

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

Default value

3 (days)

notifyProjectAlarmMonitorTaskScheduledMilestoneCondition

Description

Defines the number of days before the start date of a milestone task for IBM Marketing Operations to send notifications.

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

Default value

1 (day)

Marketing Operations | umoConfiguration | Notifications | projectRequest

These properties specify information about project request alarms in IBM Marketing Operations.

notifyRequestAlarmMonitorLateCondition

Description

Defines the number of days for IBM Marketing Operations to 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 (days)

notifyRequestAlarmMonitorScheduledEndCondition

Description

Defines the number of days before the end date of a request for IBM Marketing Operations to send end notifications to users.

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

Default value

1 (day)

Marketing Operations | umoConfiguration | Notifications | program

The properties in this category specify options for program notification schedules.

notifyProgramAlarmMonitorScheduledStartCondition

Description

Defines the number of days before the start date of a program that IBM Marketing Operations sends start notifications to users.

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

Default value

1 (day)

notifyProgramAlarmMonitorScheduledEndCondition

Description

Defines the number of days before the end date of a program that IBM Marketing Operations sends end notifications to users.

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

Default value

3 (days)

Marketing Operations | umoConfiguration | Notifications | marketingObject

These properties specify information about marketing object alarms in IBM Marketing Operations.

notifyComponentAlarmMonitorScheduledStartCondition

Description

Specifies the number of days before the start date of a marketing object for IBM Marketing Operations to send start notifications to users.

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

Default value

1 (day)

notifyComponentAlarmMonitorScheduledEndCondition

Description

Specifies the number of days before the end date of a marketing object for IBM Marketing Operations to send end notifications to users.

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

Default value

3 (days)

Marketing Operations | umoConfiguration | Notifications | approval

These properties specify information about approval alarms in IBM Marketing Operations.

notifyApprovalAlarmMonitorStartTime

Description

Specifies when the approval alarm monitor begins processing for the first time after IBM Marketing Operations starts. 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

Blank (60 seconds)

notifyApprovalAlarmMonitorLateCondition

Description

Specifies the number of days after the start date of an approval for the system to 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 (days)

notifyApprovalAlarmMonitorScheduledEndCondition

Description

Specifies the number of days before the end date of an approval for the system to begin sending end notifications to users.

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

Default value

1 (day)

Marketing Operations | umoConfiguration | Notifications | asset

These properties specify information about asset alarms in IBM Marketing Operations.

notifyAssetAlarmMonitorStartTime

Description

Specifies when the asset alarm monitor process runs for the first time after IBM Marketing Operations starts. 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

Blank (60 seconds)

notifyAssetAlarmMonitorExpirationCondition

Description

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

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

Default value

5 (days)

Marketing Operations | umoConfiguration | Notifications | invoice

These properties specify information about invoice alarms in IBM Marketing Operations.

notifyInvoiceAlarmMonitorStartTime

Description

Specifies when the invoice alarm monitor process runs for the first time after IBM Marketing Operations starts. 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 before the due date for IBM Marketing Operations to notify users that an invoice is due.

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

Default value

5 (days)

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- 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

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