IBM Maximo Asset Management Scheduler
Version 7 Release 6

Installation Guide

IBM

Note

Before using this information and the product it supports, read the information in "Notices" on page 17.

This edition applies to version 7, release 6, modification 4 of IBM Maximo Asset Management Scheduler and to all subsequent releases and modifications until otherwise indicated in new editions.

Contents

Installing Maximo Asset Management Scheduler

The installation of Maximo® Asset Management Scheduler involves running an installation program and a configuration program, both of which are started from the launchpad.

Planning to deploy IBM Maximo Asset Management Scheduler

IBM® Maximo Asset Management Scheduler 7.6.4 must be installed with IBM Maximo Asset Management 7.6.0.6. Your environment can also include IBM Maximo Asset Management Multitenancy 7.6.0.6.

System requirements for Maximo Asset Management Scheduler

Before you install Maximo Asset Management Scheduler or Maximo Asset Management Scheduler Plus, your environment must meet all of the hardware and software requirements.

A complete list of hardware and software requirements is available in the System Requirements section of the Maximo Asset Management wiki.

The user who is installing Maximo Asset Management Scheduler or Maximo Asset Management Scheduler Plus must have administrative user rights.

When the installation program is run, it requires access to the middleware servers that are installed with Maximo Asset Management. Ensure that you have the administrative user IDs and passwords for the application server, the database server, and the directory server.

Enterprise system

> You install Maximo Asset Management Scheduler or Maximo Asset Management Scheduler Plus 7.6.4 on the administrative workstation where Maximo Asset Management 7.6.0.6 is installed.

Maximo Asset Management Multitenancy

> Maximo Asset Management Scheduler 7.6.4 can be installed with Maximo Asset Management Multitenancy 7.6.0.6, and Maximo Asset Management Scheduler is enabled for all tenants except the system provider tenant.

Related information:

➠ Maximo Asset Management system requirements wiki

Multitenancy information for Maximo Asset Management Scheduler

Installing Maximo Asset Management Scheduler

You must install Maximo Asset Management Scheduler on the administrative workstation and in the same directory where Maximo Asset Management is installed.

Before you begin

Ensure that IBM Maximo Asset Management 7.6.0.6 is installed on the computer where you are installing Maximo Asset Management Scheduler 7.6.4.

For more information, see the installation topics for Maximo Asset Management 7.6.0 IBM Knowledge Center (www.ibm.com/support/knowledgecenter/ SSLKT6_7.6.0/com.ibm.mam.doc/mam_install/c_ctr_plan_install.html).

For information about upgrading to Maximo Asset Management 7.6.0 from an earlier version of Maximo Asset Management, see the Maximo Upgrade Resources website (www.ibm.com/support/docview.wss?uid=swg21266217).

About this task

The configuration tool is launched automatically when the installation wizard is complete. It is called IBM Tivoli®'s process automation engine configuration tool.

After you are done using the configuration tool, the Maximo Asset Management Scheduler application starts automatically.

Procedure

1. Download the Maximo Asset Management Scheduler product software from IBM Passport Advantage® and extract the installation image to a local directory.
2. Start the launchpad by double-clicking the `launchpad` file.

Option	Description
Windows	`launchpad64.exe`
UNIX or Linux	`launchpad.sh`

3. On the Install IBM Maximo Asset Management Scheduler pane, click **Install**.
4. Depending on the package that you are installing, you might be required to click **Install** or **Update** and click **Next**.
5. After you accept the terms in the license agreement, select the option to use the existing package group **IBM Tivoli's automation suite**.
6. In the package features panel, ensure your product is selected, and then click **Next**.
7. In the package summary panel, review the information for the planned installation, and then click **Install**.
8. In the configuration tool, select **Update the database with the UpdateDB Lite feature**.
9. Verify the application version and current state.
10. To complete the deployment, run both the pre-processing and post-processing options, and click **Finish**.
11. When the installation is complete, verify that the Maximo Asset Management Scheduler component was installed. Log in to Maximo Asset Management Scheduler and view the system information from the **Help** menu.

What to do next

When the installation and configuration steps are complete, you can configure Maximo Asset Management Scheduler to meet your business needs.

Installing and configuring IBM Decision Optimization Center (Optional)

After you install Maximo Asset Management Scheduler 7.6.4, you can also configure IBM Decision Optimization Center 3.8.

Before you begin

Maximo Asset Management Scheduler 7.6.4 must be installed before you can configure IBM Decision Optimization Center 3.8, Fix Pack 2.

About this task

IBM Decision Optimization Center 3.8, Fix Pack 2 is an optional component that can analyze proposed activity schedules that are developed in Maximo Asset Management Scheduler, and then produce information for optimizing the schedule.

IBM Decision Optimization Center Server files must be copied from the Maximo Asset Management administrative workstation to the system that is hosting WebSphere® Application Server Network Deployment.

IBM Decision Optimization Center Server must be configured on an application server instance that is independent of the application server instance that is hosting Maximo Asset Management.

Procedure

1. Log on to the Maximo Asset Management administrative workstation.
2. Change directory to *install_home*\solutions\odme. For example, c:\IBM\SMP\solutions\odme. The odme directory contains install files for the IBM Decision Optimization Center Optimization Server and Data Server 3.8 files that are for each supported operating system.
3. Copy the appropriate ODM Enterprise Optimization Server and Data Server install files from the Maximo Asset Management administrative workstation to the system that is hosting WebSphere Application Server Network Deployment that is used for optimization. For example, if WebSphere Application Server Network Deployment is hosted on a Linux system, copy the 3.8.0-WS-DOC-servers-linux-x64.zip and 3.8.0-WS-DOC-servers-linux-x64-fp002.zip files to the WebSphere Application Server Network Deployment server.
4. Install and configure the IBM Decision Optimization Center Optimization Server and Data Server components. For detailed information, refer to the *Manual Decision Optimization Center Optimization Server and Data Server installation for WAS* section of the *IBM Decision Optimization Center Optimization Server and Data Server Installation Guide* (http://www-01.ibm.com/support/knowledgecenter/SSQVNT_3.8.0/ilog.odms.ide.odm.server.help/OptServer_Install/topics/WASTop3Manual.html).
5. Ensure that the optimization server components are protected by requiring users to authenticate. Security can be configured in various ways supported by WebSphere Application Server. For example, it can be configured using an LDAP directory server. For detailed information, refer to the *IBM Decision Optimization Center Security Model Overview* (http://www-01.ibm.com/support/knowledgecenter/SSQVNT_3.8.0/ilog.odms.ide.odm.enterprise.help/ODME/ProductArchi/topics/SecurityOverview.html).

6. In addition to IBM Decision Optimization Center 3.8, you will need to download and install the IBM Decision Optimization Center 3.8 Fix Pack 2 from Fix Central:

   a. Log in to Fix Central and choose IBM Decision Optimization Center 3.8. On the Select Fixes page, select the Fix Pack check box and click Submit to narrow the results.

   b. Download and install the appropriate version of IBM Decision Optimization Center 3.8, Fix Pack 2 based on your operating system.

What to do next

After installing the IBM Decision Optimization Center Optimization Server and Data Server and Fix Pack 2, configure the Maximo administrator username and password to connect to the optimization server (for submitting jobs, deploying optimization applications, etc.). In the Maximo System Properties application, enter your DOC server user name and password in the following system properties:

- mxe.skd.optimization.adminuser
- mxe.skd.optimization.adminpassword

The communication between IBM Decision Optimization Center and Maximo is performed over an SSL-secured https connection. Enable the

WebSphere Application Server used for optimization with a valid server certificate. The certificate must be configured on the Maximo Application Server.

Automatically updating the database and building and deploying the EAR file

In some cases, you might choose to not run the configuration tool immediately after an installation. For example, if you are installing multiple products, you can defer using the configuration tool to run the pre-processing and post-processing options until all products are installed. Once all products are installed, you can use the configuration tool to update the Maximo database and build and deploy the EAR file for all products at one time.

Before you begin

Ensure that the installation of Maximo Asset Management Scheduler is complete.

About this task

If you do not want to use the graphical interface, you can use the command line tool to perform the same operations.

Procedure

1. Start the configuration tool by double-clicking the `ConfigUI` file in the *install_home*/`ConfigTool` directory.
2. On the home screen of IBM Tivoli's process automation engine configuration tool, select **Update the database with the UpdateDB Lite feature**.
3. Complete the screens in the configuration tool.

Manually building and deploying the EAR files

If you do not use the configuration program, you must manually update the Maximo database and build and deploy the EAR file. The manual process is required for environments that use Oracle WebLogic Server.

Updating the database and building the EAR file

To deploy the product, you must update the Maximo database and build and deploy the Maximo EAR file.

Procedure

1. Change to the *install_home*\maximo\tools\maximo directory and run the **updatedb** command.
2. If languages other than English are installed on the system, run the following command:

   install_home\maximo\tools\maximo\TDToolkit.bat -pmpupdateacm
    -useexpander
3. Change to the *install_home*\maximo\deployment directory and run one of the following commands:

Option	Description
WebSphere Application Server	`buildmaximoearwas8`
Oracle WebLogic Server	`buildmaximoear`

Deploying the EAR file on WebSphere Application Server

Deployment of the Maximo EAR file is required before you can use the product on WebSphere Application Server.

Before you begin

Ensure that you updated the Maximo database and built the EAR files.

About this task

The Maximo EAR files are installed on WebSphere Application Server during the Maximo Asset Management installation.

Replace the parameters in the command syntax with the values in your deployment. For more information, see "Command syntax for deploying EAR files on WebSphere Application Server."

Procedure

Deploy the Maximo EAR file by opening a command prompt and running the following command:

websphere_home\jacl\solutions\DeployApplication.[bat|sh] *WASAdminUserName*
WASAdminPassword "MAXIMO" *WASNodeName* *WASApplicationServerName*
"*install_home*\maximo\deployment\default\maximo.ear" *WASVirtualHost*
WASWebServerName

Command syntax for deploying EAR files on WebSphere Application Server:

You use parameters in the command syntax when you manually deploy the EAR files on WebSphere Application Server.

Parameters

WASAdminUserName
    A WebSphere Application Server Network Deployment account that has deployment privileges.

WASAdminPassword
    The password of the user who is specified in the *WASAdminUserName* parameter.

WASNodeName
    The name of the WebSphere Application Server Network Deployment node.

WASApplicationServerName
    The name of the WebSphere Application Server Network Deployment application server.

WASVirtualHost
    The name of the WebSphere Application Server Network Deployment virtual host.

WASWebServerName
    The name of the WebSphere Application Server Network Deployment web server.

Deploying the EAR files on Oracle WebLogic Server

Deployment of the Maximo EAR files is required before you can use the product on Oracle WebLogic Server.

Before you begin

Ensure that you have updated the Maximo database and built the EAR file.

About this task

The Maximo EAR file is installed on WebLogic Server during the Maximo Asset Management installation.

Deploying the EAR file starts the application server.

Procedure

1. Open a command prompt and change to the following directory:

Operating system	Location
Windows	*weblogic_home*\user_projects\domain\mydomain
UNIX	*weblogic_home*/mxadmin/oracle/user_projects/domains/mydomain

2. Start WebLogic Server.

Option	Command
Windows	startWebLogic.cmd
UNIX or Linux	./startWebLogic.sh

3. Specify the WebLogic Server user name and password.
4. Log in to the WebLogic Server console at http://hostname:7001/console

5. In the WebLogic Server console, follow the instructions to deploy the `maximo.ear` file.

What to do next

The configuration tool does not deploy the EAR file on Oracle WebLogic Server. You must manually deploy the EAR file.

Installing Maximo Asset Management Scheduler silently

A silent installation is useful for installing Maximo Asset Management Scheduler on any computers that are configured in the same way. Instead of using the installation programs, you run commands by using a generated response file that was created during the initial installation of Maximo Asset Management Scheduler.

Before you begin

To create a response file during the installation of Maximo Asset Management Scheduler, open a command prompt and set the **record** environment variable to *true*. Then, start the Maximo Asset Management Scheduler launchpad. The response file is generated in the home directory of the user ID that started the program.

Alternatively, you can modify one of the sample response files that are provided in the installation image.

Ensure that the values in the response file are valid for the target system. If you update the value for the `installLocation` parameter, you must also provide a new value for the `profile id` parameter.

Procedure
1. Copy the response file and the compressed installation image to the target computer.
2. On the target computer, open a command prompt and change directory to the location of the Installation Manager program.

Option	Description
Windows	`cd C:\SMP\IBM\InstallationManager\` `eclipse\tools\`
Linux and UNIX	`cd /opt/IBM/InstallationManager/eclipse/` `tools/`

3. Silently start Installation Manager by running the following command:
   ```
   imcl -input responsefilename
   -log logfilename-acceptLicense
   ```

   The **-input** parameter determines the path to the response file and the **-log** parameter determines the path to where the log files are written. The **-acceptLicense** parameter is used to accept the license automatically. For example, on Windows, run the following command:
   ```
   imcl -silent -input C:\tmp\ResponseFile_Scheduler_Install_Windows.xml
   -log C:\tmp\silent_install_log.xml -acceptLicense
   ```
4. After Maximo Asset Management Scheduler is installed, update the Maximo Asset Management configuration and then rebuild and redeploy the application EAR file from the command line.

Option	Description

WebSphere Application Server	Run the **reconfigurePae** command.
	
	`reconfigurePae -action updateApplication`
	`[-updatedb]`
	`[-deploymaximoear]`
	`[-deployhelpear]`
	`[-wasuser userid]`
	`[-waspwd password]`

WebLogic Server	1. Run the **reconfigurePae** command.
	
	   `reconfigurePae`
	   `-action updateApplication`
	   `[-updatedb]`
	
	2. Build the application EAR files.
	
	   `cd install_home\maximo\deployment`
	   `buildmaximoear // build Maximo EAR`
	   `buildhelpear // build Maximo help EAR`
	
	3. Deploy the application EAR files manually to the application server.

Optimization server configuration

Additional information must be configured before you can run optimization. Configure the information in the Configure Optimization Server window, available from the Action menu in the Graphical Scheduling and Graphical Assignment applications.

You must enter the following information:
- The details for your optimization server
- The URL of the optimization server
- The optimization model repository information

Each optimization model that is listed must have its own user name and password in the optimization model. You must create one new user in the database for each optimization model. The user and its associated schema cannot be used for any other purpose.

Installing Maximo Asset Management Scheduler Plus

You must install Maximo Asset Management Scheduler Plus on the administrative workstation and in the same directory where Maximo Asset Management and Maximo Asset Management Scheduler are installed.

Before you begin

Ensure that IBM Maximo Asset Management 7.6.0.6 and Maximo Asset Management Scheduler 7.6.4 are installed on the computer where you are installing Maximo Asset Management Scheduler Plus 7.6.4.

About this task

The configuration tool is launched automatically when the installation wizard is complete. It is called IBM Tivoli's process automation engine configuration tool.

After you are done using the configuration tool, the Maximo Asset Management Scheduler Plus application starts automatically.

Procedure

1. Download the Maximo Asset Management Scheduler Plus product software from IBM Passport Advantage and extract the installation image to a local directory.
2. Start the launchpad by double-clicking the `launchpad` file.

Option	Description
Windows	`launchpad64.exe`
UNIX or Linux	`launchpad.sh`

3. On the Install IBM Maximo Asset Management Scheduler Plus pane, click **Install**.
4. Depending on the package that you are installing, you might be required to click **Install** or **Update** and click **Next**.
5. After you accept the terms in the license agreement, select the option to use the existing package group **IBM Tivoli's automation suite**.
6. In the package features panel, ensure your product is selected, and then click **Next**.
7. In the package summary panel, review the information for the planned installation, and then click **Install**.
8. In the configuration tool, select **Update the database with the UpdateDB Lite feature**.
9. Verify the application version and current state.
10. To complete the deployment, run both the pre-processing and post-processing options, and click **Finish**.
11. When the installation is complete, verify that the Maximo Asset Management Scheduler Plus component was installed. Log in to Maximo Asset Management Scheduler Plus and view the system information from the **Help** menu.

What to do next

When the installation and configuration steps are complete, you can configure Maximo Asset Management Scheduler Plus to meet your business needs.

Weather data configuration for Maximo Asset Management Scheduler Plus

Configure Maximo Asset Management Scheduler Plus to access weather data from Weather.com.

If you have a subscription to Weather.com, you can display weather data in Maximo Asset Management Scheduler Plus. From the Maximo Asset Management User application, enter the locale code for a user ID that has access to weather data. The weather for that location is then displayed in the Weather KPI. Enable the correct `mxe.weather.locale.(your language code)` property in the System Properties application to determine the units of measure for your weather data.

You must configure the Maximo Asset Management application server to trust server certificates that are issued from api.weather.com. The api.weather.com server

uses SSL for secure communication. Server certificates must be configured to be trusted to access weather information between the Maximo Asset Management application server and the api.weather.com server. You can export certificates from https://api.weather.com to your system and then import them into your Maximo Asset Management application server. The process of importing certificates into the Maximo Asset Management application server JVM is platform-specific. Refer to your application server's documentation for details. You might be required to restart your server after configuration updates.

If you use IBM WebSphere Application Server, you must import the certificate into a Cell or Node default truststore. WebSphere also provides an option to retrieve certificates from the weather server and import them into the truststore by using the retrieve from port feature (**SSL certificate and key management** > **Key stores and certificates** > **CellDefaultTrustStore** > **Signer certificates** > **retrieve from port**).

If you use Oracle WebLogic Server, you can import certificates into the truststore by using the `keytool` command that is provided by the JVM. After you import the certificates, you must configure support for wildcard certificates by specifying **weblogic.security.utils.SSLWLSWildcardHostnameVerifier** as a custom host name verifier.

After configuring the Maximo Asset Management application server to trust server certificates from api.weather.com, use the Maximo Asset Management System Properties application to set the `weatherapi.apikey` property with the API Key value you retrieved from Weather.com.

Installing Maximo Asset Management Scheduler Plus silently

A silent installation is useful for installing Maximo Asset Management Scheduler Plus on any computers that are configured in the same way. Instead of using the installation programs, you run commands by using a generated response file that was created during the initial installation of Maximo Asset Management Scheduler Plus.

Before you begin

To create a response file during the installation of Maximo Asset Management Scheduler Plus, open a command prompt and set the **record** environment variable to *true*. Then, start the Maximo Asset Management Scheduler Plus launchpad. The response file is generated in the home directory of the user ID that started the program.

Alternatively, you can modify one of the sample response files that are provided in the installation image.

Ensure that the values in the response file are valid for the target system. If you update the value for the `installLocation` parameter, you must also provide a new value for the `profile id` parameter.

Procedure
1. Copy the response file and the compressed installation image to the target computer.
2. On the target computer, open a command prompt and change directory to the location of the Installation Manager program.

Option	Description
Windows	`cd C:\SMP\IBM\InstallationManager\` `eclipse\tools\`
Linux and UNIX	`cd /opt/IBM/InstallationManager/eclipse/` `tools/`

3. Silently start Installation Manager by running the following command:

   ```
   imcl -input responsefilename
   -log logfilename-acceptLicense
   ```

   The **-input** parameter determines the path to the response file and the **-log** parameter determines the path to where the log files are written. The **-acceptLicense** parameter is used to accept the license automatically. For example, on Windows, run the following command:

   ```
   imcl -silent -input C:\tmp\SchedulerPlus_Silent_ResponseFile.xml
   -log C:\tmp\silent_install_log.xml -acceptLicense
   ```

4. After Maximo Asset Management Scheduler Plus is installed, update the Maximo Asset Management Plus configuration and then rebuild and redeploy the application EAR file from the command line.

Option	Description

WebSphere Application Server	Run the **reconfigurePae** command.
	
	`reconfigurePae -action updateApplication`
	`[-updatedb]`
	`[-deploymaximoear]`
	`[-deployhelpear]`
	`[-wasuser userid]`
	`[-waspwd password]`

WebLogic Server	1. Run the **reconfigurePae** command.
	   `reconfigurePae`
	   `-action updateApplication`
	   `[-updatedb]`
	2. Build the application EAR files.
	   `cd install_home\maximo\deployment`
	   `buildmaximoear // build Maximo EAR`
	   `buildhelpear // build Maximo help EAR`
	3. Deploy the application EAR files manually to the application server.

Installing help locally

Product help for Maximo Asset Management Scheduler is provided online in IBM Knowledge Center. If you want to install help locally, you can download IBM Knowledge Center and help packages from Fix Central.

Installing help

You can download help packages from Fix Central that contain the same documentation packages that are available online in IBM Knowledge Center. You add the help packages and configuration files to a local installation of IBM Knowledge Center

Procedure

1. To download a locally-installable version of IBM Knowledge Center and help packages from Fix Central, follow the instructions at http://www-01.ibm.com/support/docview.wss?uid=swg24041962.

2. Extract the IBM Knowledge Center package to the location where you want to install it. No configuration is required.

3. Extract a help package to a temporary location. The extracted files include one or more plugin folders, a properties file and a taxonomy file.

4. Copy all com.ibm.*prod*.doc plugin folders from the help package to the `install_home`/KnowledgeCenter/usr/content/KCXhtml directory.

5. Copy the properties file to the configuration directory, for example to `install_home`/KnowledgeCenter/usr/conf/SSLKT6_7.6.0.5.properties.

6. Replace the `install_home`/KnowledgeCenter/usr/taxonomy/KC_taxonomy.ditamap with the version of the KC_taxonomy.ditamap file that is included in the help package.

7. In the `install_home`/KnowledgeCenter/bin directory, click **startKC.bat** on Windows or **startKC.sh** on Linux or AIX to start IBM Knowledge Center.

8. In a browser, open `http://127.0.0.0:9090` to view the product help. If you changed the default host or port values for your IBM Knowledge Center installation, change the URL accordingly.

9. In Maximo Asset Management Scheduler, redirect the application help links to point to your local installation of IBM Knowledge Center:

   a. In the System Properties application, filter for mxe.help properties.

   b. Change the mxe.help.host and mxe.help.port properties to the host and port values for your local installation of IBM Knowledge Center, such as the default host value of 127.0.0.0 and default port value of 9090.

   c. Save the changes and click **Live Refresh** to update the values in the product database.

10. To stop IBM Knowledge Center, in the `install_home`/KnowledgeCenter/bin directory, click **stopKC.bat** on Windows or **stopKC.sh** on Linux or AIX.

IBM Knowledge Center configuration

IBM Knowledge Center requires minimal configuration to run help packages for IBM products in your local environment. You can also configure it to provide different content in separate instances of IBM Knowledge Center or to run existing Eclipse help plugins in IBM Knowledge Center.

Changing the IBM Knowledge Center URL

If you install IBM Knowledge Center on your local computer, when you start the server, the help is available in a browser at the default URL of `http://localhost:9090/kc`. The host value changes, depending on where you install IBM Knowledge Center. If the default port is already in use, you can change the port value in the `kc_ant.properties` file in the `etc` directory.

If you want to provide different help to different audiences or if you want to host help for product versions that are not compatible with each other, you can install multiple instances of IBM Knowledge Center on the same computer . You rename the additional instances to unique directory names, such as KnowledgeCenter2 and KnowledgeCenter3, and you configure the `kc_ant.properties` file in the `etc` directory so that each instance runs on a different port.

Maintaining taxonomy files

Each product version in the IBM software catalog has a unique taxonomy value that forms part of the URL for the product help on www.ibm.com. For example, the taxonomy value for Maximo Asset Management, version 7.6.0.5, is SSLKT6_7.6.0.5, and the URL for the product welcome page is `http://www.ibm.com/support/knowledgecenter/SSLKT6_7.6.0.5/com.ibm.mam.doc/welcome.html`. The *taxonomy*`.properties` file and the `KC_taxonomy.ditamap` file control the taxonomy values in IBM Knowledge Center.

Each help package includes a *taxonomy*`.properties` file that is specific to the product version. You must add this file to the `usr/conf` directory in IBM Knowledge Center. If you add help packages for multiple products to IBM Knowledge Center, the `usr/conf` directory must contain a separate *taxonomy*`.properties` file for each help package.

The `KC_taxonomy.ditamap` file lists each product version in the IBM software catalog, and the file is frequently updated as new products and new versions of products are released. A basic version of the `KC_taxonomy.ditamap` file is provided as a placeholder in the `usr/taxonomy` directory in IBM Knowledge Center but it does not contain a comprehensive list of product taxonomy values. You must replace this placeholder file with the version of the `KC_taxonomy.ditamap` that is included in the help package.

When you add multiple help packages to IBM Knowledge Center, each help package includes a `KC_taxonomy.ditamap` file. Because of the dynamic nature of this file, the included `KC_taxonomy.ditamap` files might be at different versions. Always use the most recent version of the file because taxonomy values are added to the file incrementally.

Troubleshooting

When you start IBM Knowledge Center after adding a new help package, index and cache files are created to enable faster search and retrieval of help topics. If the new help topics do not show in a browser, check if subdirectories were created for the product version in the `runtime/diskcache` and `runtime/index` directories. If these subdirectories were not created, check that the *taxonomy*`.properties` file exists in the `usr/conf` directory and that it contains the correct path to the main help plugin in the `usr/content/KCXhtml` directory. If the *taxonomy*`.properties` is in the correct location and contains the correct path to the help plugin, it is likely that you forgot to add the latest version of the `KC_taxonomy.ditamap` to the `usr/taxonomy` directory.

After troubleshooting, before you start IBM Knowledge Center, you can delete the product version subdirectories in the `runtime/diskcache` and `runtime/index` directories, to ensure that the content is fully refreshed.

Help components

Help components include a locally-installable version of IBM Knowledge Center and help packages that contain content plugins for product versions. You can download a locally-installable version of IBM Knowledge Center to deploy help packages in your local environment.

IBM Knowledge Center
> A standalone help system that includes a WebSphere Application Server Liberty, version 8.5.5.x, embedded server. IBM Knowledge Center is

distributed to Maximo customers on https://www-933.ibm.com/support/fixcentral/. IBM Knowledge Center is available for Windows, Linux, or AIX platforms and you can run IBM Knowledge Center on a local computer, server, or read-only media.

After you extract the IBM Knowledge Center package, you add product help packages to it to deploy help in your local environment. You can use IBM Knowledge Center to host help packages for several products at the same time, if the products are on compatible release versions. If you want to host help packages that are not compatible with one another, you can run additional instances of IBM Knowledge Center that you configure to run on different ports.

Help packages
Contain the same documentation that is available on http://www.ibm.com/support/knowledgecenter and include one or more content plugins that contain topics in their appropriate directories and the navigation files that control the table of contents for the topics. Help packages also include the following files that are required by IBM Knowledge Center:

- A *taxonomy*.properties file contains the taxonomy value for the product version and the path to the main *toc*.ditamap file for the plugin or plugins in the help package.
- The KC_taxonomy.ditamap file lists the taxonomy values for all products in the IBM software catalog. A basic version of this file is included in IBM Knowledge Center but this version of the file is not up-to-date. The KC_taxonomy.ditamap file that is included in the help package is the current version of the file when the help package is created.

Help packages include instructions for where to add the plugins and the additional files to IBM Knowledge Center.

IBM Knowledge Center versions
The locally-installable versions of IBM Knowledge Center are based on IBM Knowledge Center, version 1.5. This version has a different look and feel to IBM Knowledge Center, version 2.0, which is on http://www.ibm.com/support/knowledgecenter. The functionality is similar but there are some differences in navigation and search. PDF creation is not supported on the locally-installable version.

When a locally-installable IBM Knowledge Center, version 2.0, is available, it will be distributed to customers who want to update their local version.

Maximo Asset Management documentation library

The help packages in the documentation library mirror the product catalog and installation environment. Either the Maximo Asset Management help package or the Maximo Asset Management Multitenancy help package must be installed in the same IBM Knowledge Center environment where you install help packages for industry solutions and add-on products.

The Maximo Asset Management and Maximo Asset Management Multitenancy help packages contain multiple plug-ins. Help packages for industry solutions and add-on products contain one or more plug-ins. When a help package contains multiple plug-ins, one plug-in acts as the navigation plug-in. A navigation plug-in contains the main *toc*.ditamap file that controls the table of contents for all plug-ins in the help package. The *taxonomy*.properties file that is included in the help package specifies the path to the main *toc*.ditamap file.

Maximo Asset Management and Maximo Asset Management Multitenancy help packages include reuse plug-ins. These plug-ins contain topics only. Consuming plug-ins control the table of contents and metadata for the reused topics. The content is used extensively by other help plug-ins and you must install reuse plug-ins in IBM Knowledge Center to provide coherent content and ensure that links resolve.

Maximo Asset Management help package

This help package includes the following plug-ins:

com.ibm.mam.doc
> Navigation plug-in, containing the welcome page and product overview, and help for planning, getting started, and managing financial processes.

com.ibm.mam.inswas.doc
> Help for installing Maximo Asset Management on WebSphere Application Server.

com.ibm.mam.inswl.doc
> Help for installing Maximo Asset Management on Oracle WebLogic Server.

com.ibm.mbs.doc
> Reuse plug-in, containing help for administering Maximo Asset Management, application design, workflow design, working with Migration Manager, implementing high availability, and application help.

com.ibm.mif.doc
> Reuse plug-in, containing help for integrating Maximo Asset Management data with external applications.

com.ibm.support.mbs.doc
> Reuse plug-in, containing troubleshooting and support information for Maximo Asset Management and for industry solutions and add-on products. Troubleshooting topics for industry solutions and add-on products are visible only if that help plug-in is installed in IBM Knowledge Center.

Maximo Asset Management Multitenancy help package

This help package contains a subset of the plug-ins in the Maximo Asset Management help package and the content is aimed at tenants in a multitenancy environment. You cannot install Maximo Asset Management plug-ins and Maximo Asset Management Multitenancy plug-ins in the same instance of IBM Knowledge Center environment. If you want to support both libraries, you must configure separate instances of IBM Knowledge Center to support them.

This help package includes the following plug-ins:

com.ibm.mt.doc
> Navigation plug-in, containing the welcome page and product overview, and help topics for planning, getting started, and managing financial processes. Content also includes topics that are specific to a tenant in a multitenancy environment.

com.ibm.mbs.doc
> Reuse plug-in. Topics are filtered to exclude information that is not relevant to tenants in a multitenancy environment.

com.ibm.mif.doc
> Reuse plug-in. Topics are filtered to exclude information that is not relevant to tenants in a multitenancy environment.

Industry solution and add-on help packages

The help packages for industry solutions and add-on products are intended for use with the associated version of the Maximo Asset Management help package. You can check which version of Maximo Asset Management or Maximo Asset Management is a prerequisite for an industry solution or add-on product version at https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/IBM%20Maximo%20Asset%20Management/page/Other%20Maximo%20products%20system%20requirements. You can install non-recommended versions of help packages together but some links might not resolve or some of the features that are described in topics might not be available to users.

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