IBM Maximo Health, Safety and Environment Manager 7.6
Version 7 Release 6

Installation Guide
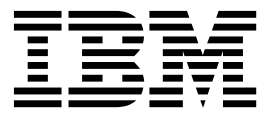
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This edition applies to version 7, release 6 of IBM Maximo Health, Safety and Environment Manager and to all subsequent releases and modifications until otherwise indicated in new editions.

Contents

Chapter 1. System requirements for Maximo Health, Safety and Environment Manager

Before you install Maximo® Health, Safety and Environment Manager, your environment must meet all of the hardware and software requirements.

Administrative user rights are required for the installation of Maximo Health, Safety and Environment Manager.

The installation program requires access to the middleware servers that are installed with Maximo Asset Management to complete the installation. You need the administrative user IDs and passwords for the application server, database server, and directory server.

Enterprise system

> You install Maximo Health, Safety and Environment Manager 7.6 on the administrative workstation where Maximo Asset Management 7.6.0.2 is installed.

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

Chapter 2. Installing Maximo Health, Safety and Environment Manager

You must install Maximo Health, Safety and Environment Manager on the administrative workstation and in the same directory where Maximo Asset Management is installed.

Before you begin

- Ensure the installed version of Maximo Asset Management is 7.6.0.2 or a later version. For information about updating to Maximo Asset Management 7.6.0.2 from version 7.6, see the Maximo Asset Management 7.6.0.2 feature pack ⤷ download document.
- Back up the middleware servers and the administrative workstation.
- If you intend to perform a silent installation of the product later, see the information about installing silently.

About this task

The launchpad prompts you to install the product in the same directory as Maximo Asset Management. The Maximo Asset Management installation directory information is saved in the `Maximo_install.locations` file, which is stored in the `\Users\Administrator` directory on Windows systems and in the `/root` directory on UNIX or Linux systems.

Procedure

1. Prepare the application server for the installation:

Application server	Task
WebSphere® Application Server	Ensure that the application server is started. The installation program connects to the application server by using the login information that you specify.
Oracle WebLogic Server	Ensure that the application server (MAXIMOSERVER) is stopped. If the application server is running, stop the server and wait a few minutes before you start the installation program. If the application server is not stopped, the installation process cannot proceed.

2. Download the Maximo Health, Safety and Environment Manager 7.6 product software from IBM® Passport Advantage® and extract the installation image to a local directory.

3. Start the launchpad by double-clicking the `launchpad` file. If your computer is a Windows system, use the `launchpad64.exe` file. If your computer is a UNIX or Linux system, use the `launchpad.sh` file.

4. On the Install IBM Maximo Health, Safety and Environment Manager pane, click **Install**.

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. Complete the installation program.
7. Select **IBM Tivoli process automation engine configuration utility**, and click **Finish** to start the Maximo Asset Management configuration program.
8. In the configuration program, select **Update Database and Build and Deploy Application EAR Files**.
9. From the Apply Deployment Operations panel, select the options appropriate for your environment, and then click **Finish**

Option	Description
WebSphere Application Server	Select the options for applying changes to the database, and automatically building and deploying application EAR files.
WebLogic Server	Select the options for applying changes to the database and automatically building the application EAR files. You cannot deploy application EAR files to WebLogic Server by using the Maximo Asset Management configuration program.

10. Complete the configuration program.
11. When the installation and configuration processes are complete, log in to Maximo Asset Management and verify that the latest version of Maximo Health, Safety and Environment Manager is listed in the system information window. To view the system information, click the **Help** menu.

Automatically building and deploying the EAR files

If you deferred the configuration process during installation, you can update the Maximo database and build and deploy the EAR files by using the configuration program.

Before you begin

The installation of Maximo Health, Safety and Environment Manager must be complete.

Procedure
1. Start the configuration program by double-clicking the `ConfigUI` file in the *install_home*/`ConfigTool` directory.
2. On the home screen, select **Update Database and Build and Deploy Application EAR Files**.
3. Complete the configuration program.

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 files. The manual process is required for environments that use Oracle WebLogic Server.

Building the EAR files

Deployment of the product involves updating the Maximo database and rebuilding the Maximo EAR file and the Maximo help system EAR file.

Procedure

1. Change to the *install_home*\maximo\tools\maximo directory and run the **updatedb** command.

2. Change to the *install_home*\maximo\deployment directory and running one of the following commands:

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

3. Change to the *install_home*\maximo\deployment directory and run the **buildmxiehsear** command.

Deploying the EAR files on WebSphere Application Server

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

Before you begin

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

About this task

The 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

1. 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*

2. Deploy the Maximo help system EAR file by opening a command prompt and running the following command:

   websphere_home\jacl\solutions\DeployApplication.[bat|sh] *WASAdminUserName WASAdminPassword* "MAXIMOIEHS" *WASNodeName WASApplicationServerName* "*websphere_home*\maximo\deployment\default\maximoiehs.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 with 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 files.
- On Windows: If the MAXIMOSERVER server is not running, start it from a
  command prompt.
- On UNIX: Ensure that the WebLogic Server daemon is running.

To view the WebLogic Server console, a Java™ virtual machine must be installed.

About this task

The Maximo EAR files are installed on Oracle WebLogic Server during the Maximo
Asset Management installation.

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 by running the following command:

Operating system	Command
Windows	startWebLogic.cmd
UNIX	./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 and the maximoiehs.ear file.

Installing Maximo Health, Safety and Environment Manager silently

A silent installation is useful for installing Maximo Health, Safety and Environment Manager 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 from the initial installation of Maximo Health, Safety and Environment Manager.

Before you begin

To create a response file during the installation of Maximo Health, Safety and Environment Manager, open a command prompt and set the **record** environment variable to *true*. Then, start the Maximo Health, Safety and Environment Manager 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. The **installLocation** parameter and the **profile id** parameter must correspond with the existing Maximo Asset Management instance.

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\HSE_Silent_ResponseFile.xml
-log C:\tmp\silent_install_log.xml -acceptLicense
```

4. After Maximo Health, Safety and Environment Manager 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.

Results

The installation proceeds silently with the values that you provided in the response file. By using different response files as input, you can silently install middleware on separate systems.

Enabling the features of Maximo Spatial Asset Management

If a license for Maximo Spatial Asset Management is installed and enabled, you must modify the `oilandgas.xml` file to use the spatial features.

About this task

Modify the `oilandgas.xml` file to add the **Map (Spatial)** tab to the following applications:

- Assets (Oil)
- Locations (Oil)
- Service Requests (Oil)
- Work Order Tracking (Oil)

Procedure

1. Edit the `oilandgas.xml` file to remove the comment tags (`<!--` and `-->`)) from each of the following elements:

   `<extendpresentation app='PLUSGWO' baseapp='WOTRACK' product='spatial'>`

   `<extendpresentation app='PLUSGSR' baseapp='SR' product='spatial'>`

   `<extendpresentation app='PLUSGASS' baseapp='ASSET' product='spatial'>`

   `<extendpresentation app='PLUSGLOC' baseapp='LOCATION' product='spatial'>`

   The `oilandgas.xml` file is in the `install_home\maximo\applications\maximo\properties\product` directory.
2. Run the following command: **updatedb**
3. Build the EAR files.

4. Deploy the EAR files for your application server:
   - Deploy the EAR files on WebLogic Server.
   - Deploy the EAR files on WebSphere Application Server
5. Grant access to the Maximo Spatial Asset Management options.

Granting access to Maximo Spatial Asset Management options

Before you begin

Maximo Health, Safety and Environment Manager and Maximo Spatial Asset Management must be installed. Additionally, the features of Maximo Spatial Asset Management must be enabled.

Procedure

1. Log in to Maximo Asset Management, and access the **Security** > **Security Groups**.
2. In the **Find** field, type the **MAXADMIN** user group. The Group tab displays along with the group information.
3. Click the **Applications** tab.
4. Filter on the Assets (HSE) application and grant access for the following options:
   a. Master Work Order And One Work Order for Each Record
   b. Service Request With All Records
   c. Spatial Edit Tool
   d. Spatial Link Tool
   e. Work Order for Each Record
   f. Work Order for All Records
5. Save the record.
6. Filter on the Locations (HSE) application and grant access for the following options:
   a. Master Work Order And One Work Order for Each Record
   b. Service Request With All Records
   c. Spatial Edit Tool
   d. Spatial Link Tool
   e. Work Order for Each Record
   f. Work Order for All Records
7. Save the record.
8. Filter on the Work Order Tracking (HSE) application and grant access for the following options:
   a. Auto-Create WO (Spatial)
   b. Spatial Edit Tool
   c. Spatial Link Tool
9. Save the record.
10. Sign out of the Maximo Asset Management session and log in again.

Results

The Maximo Spatial Asset Management options display in the Assets (HSE), Locations (HSE) , Service Requests (HSE) , and Work Order Tracking (HSE)

applications.

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