

Oracle® Enterprise Manager

Application Management Pack for Oracle Utilities Network Management System

Installation Guide

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Application Management Pack for Oracle Utilities Network Management System extends Oracle Enterprise Manager Cloud Control to allow monitoring and management of Oracle Utilities Network Management System on remote servers.

When Application Management Pack for Oracle Utilities Network Management System is deployed, the following features and capabilities are available:

- Product discovery
- Target monitoring of status, system load, and activity
- Alerts triggered on monitored thresholds
- Starting and stopping NMS Services
- Sending Action commands to enable/disable debug
- Isis Snapshots
- Associated targets

This document describes the requirements and tasks related to deploying, configuring, and undeploying Application Management Pack for Oracle Utilities Network Management System.

Related Documentation and Resources

The **Help** menu provides links to **Enterprise Manager Help**, **Oracle Online Documentation**, **Oracle Online Forums**, and the **Oracle Technology Network (OTN)**, where the complete documentation for Oracle Enterprise Manager 13c is available.

This document and other Application Management Pack for Oracle Utilities Network Management System-specific documentation are available on the Oracle Utilities Information Portal Documentation page (http://docs.oracle.com/cd/E72219_01/documentation.html).

NOTE: Oracle Utilities Network Management System documentation is also available on the Oracle Utilities Information Portal Documentation page.

Additional information on Oracle Enterprise Manager-specific features and functionality relating to this product is available in the [Enterprise Manager Cloud Control Documentation](http://docs.oracle.com/en/enterprise-manager/) (<http://docs.oracle.com/en/enterprise-manager/>).

NOTE: The documentation that accompanies this product is subject to revision and updating. Additional information that may relate to the functionality and features in this product may be found on My Oracle Support (MOS) at <https://support.oracle.com> (sign-in required). To find all articles relating to this product, enter the search term "Application Management Pack for Oracle Utilities Network Management System".

Supported Product Versions

This release of Application Management Pack for Oracle Utilities Network Management System supports the following Oracle products:

Table 1: Product Support

Product	Version
Oracle Enterprise Manager (OEM)	13.2.0.0.0
Oracle Utilities Network Management System	2.3.0.0.1

Requirements

The following are the operating system and software requirements for the Application Management Pack for Oracle Utilities Network Management System plug-in.

Oracle Enterprise Manager Requirements with the Application Management Pack for Oracle Utilities Network Management System Plug-in

Supported Operating Systems/OS Server Architecture

- Oracle Solaris 11/SPARC 64-bit
- IBM AIX 7.2/POWER 64-bit
- Oracle Enterprise Linux 6 and 7/x86 64-bit

EM Repository Database Server and Web Application Servers (Supported Combinations)

This requirement is specific to Oracle Enterprise Manager. Refer to the proposed install version of OEM for the current list of supported combinations.

- Oracle WebLogic Server 12.1.3
- Oracle Database 12gR1 12.1.0.2.0

Supported Browsers

- Internet Explorer 10 and 11
- Firefox ESR 38

Oracle Utilities Network Management System Requirements

The plug-in is designed to manage and monitor Oracle Utilities Network Management System versions 2.3.0.0.* on any of the operating systems and server architectures listed in the OEM requirements table shown above.

Platform requirements for Oracle Utilities Network Management System are contained in the *Oracle Utilities Network Management System Quick Install Guide*.

Downloading and Importing Application Management Pack for Oracle Utilities Network Management System

Checking for Application Management Pack for Oracle Utilities Network Management System Availability

Enterprise Manager makes functional updates available by publishing them to the Enterprise Manager Store, an external site that is periodically checked by Cloud Control to obtain information about available updates. Through this facility, Application Management Pack for Oracle Utilities Network Management System may be available for immediate deployment on Enterprise Manager.

To check for the availability of Application Management Pack for Oracle Utilities Network Management System, follow the instructions in the "Checking the Availability of Plug-ins" topic in the *Enterprise Manager Cloud Control Administrator's Guide* documentation.

If present, Application Management Pack for Oracle Utilities Network Management System is already available for deployment, allowing you to bypass the installation procedures described in this section and immediately proceed to the deployment task described in [Deploying Application Management Pack for Oracle Utilities Network Management System on OMS](#).

After deploying Application Management Pack for Oracle Utilities Network Management System, target environment instances must be added for central monitoring and management.

Installation Procedures If the Management Pack is Not Present

If Application Management Pack for Oracle Utilities Network Management System is not available for immediate deployment, it must be downloaded and imported using the instructions provided in the [Downloading Plug-ins](#) topic in the *Enterprise Manager Cloud Control Administrator's Guide* documentation.

After downloading and importing Application Management Pack for Oracle Utilities Network Management System, the plug-in must be deployed on Management Servers and Management Agents.

After deploying Application Management Pack for Oracle Utilities Network Management System, target environment instances must be added for central monitoring and management.

Positioning the Installation File

NOTE: This procedure is not required if Application Management Pack for Oracle Utilities Network Management System is available for immediate deployment as described earlier in the topic, *Downloading and Importing Application Management Pack for Oracle Utilities Network Management System*.

The installation file for Application Management Pack for Oracle Utilities Network Management System (13.2.1.1.0_oracle.tugbu.onms_2000_0.opar) is available on the Oracle Software Delivery Cloud site. The opar can be installed using the Enterprise Manager Command Line (EMCLI) utility on either Linux/UNIX or Windows platforms.

To download and position Application Management Pack for Oracle Utilities Network Management System for installation:

1. Log in to the Oracle Software Delivery Cloud at <https://edelivery.oracle.com>, and click the boxes on the **Terms and Restrictions** page to access the **Media Pack Search** page.
2. Select **Application Management Pack for Oracle Utilities Network Management System** from the product drop-down list, a platform from the **Platform** list, and click **Continue** to list downloadable media packs.
3. Locate and click the Application Management Pack for Oracle Utilities Network Management System item to advance to the **Download** page.
4. Click the **Download** button and save the file to a temporary location (e.g., c:\mediapacks).
5. Extract the opar files from the downloaded file

Configuring the Software Library

NOTE: This procedure is *not* required if you configured the software library during Enterprise Manager installation.

To configure the software library, follow the instructions in the *Configuring an OMS Shared Filesystem Location* topic in the *Enterprise Manager Cloud Control Administrator's Guide* documentation.

Setting Up the EMCLI Utility

NOTE: This procedure is not required if Application Management Pack for Oracle Utilities Network Management System is available for immediate deployment as described earlier in the topic, *Downloading and Importing Application Management Pack for Oracle Utilities Network Management System*.

The Enterprise Manager Command Line (EMCLI) utility is required to import the plug-in archive for deployment to Enterprise Manager.

To set up EMCLI for Application Management Pack for Oracle Utilities Network Management System, follow the instructions in the *Setting Up the EM CLI Utility* topic in the *Enterprise Manager Cloud Control Extensibility Programmer's Reference* documentation.

Importing Application Management Pack for Oracle Utilities Network Management System

NOTE: This procedure is not required if Application Management Pack for Oracle Utilities Network Management System is available for immediate deployment as described in [Downloading and Importing Application Management Pack for Oracle Utilities Network Management System](#).

Application Management Pack for Oracle Utilities Network Management System must be imported into Enterprise Manager Cloud Control using the `emcli import_update` command.

To perform the import for Application Management Pack for Oracle Utilities Network Management System, follow the instructions in the *Importing the Plug-in Archive* topic in the *Enterprise Manager Cloud Control Extensibility Programmer's Reference* documentation.

Deploying Application Management Pack for Oracle Utilities Network Management System on Oracle Management Service

As with other plug-ins, Application Management Pack for Oracle Utilities Network Management System must be deployed on Oracle Management Service (OMS) and Management Agents before it can be used to monitor targets.

To deploy Application Management Pack for Oracle Utilities Network Management System on the management servers Application Management Pack for Oracle Utilities Network Management System, follow the instructions in the *Deploying Plug-ins to Oracle Management Service* topic in the *Enterprise Manager Cloud Control Administrator's Guide* documentation.

Important Notes Regarding Deployment and Undeployment

- To avoid permission issues, we recommend that the host agent be deployed on a user that is a member of the same group as the `nmsadmin` user. The agent user must have read permission on `/etc/nmstab`. In each monitored NMS environment, the agent user must have read permission on:
 - `$NMS_ROOT/nms/inventory/nms-version.xml`
 - `$NMS_HOME/etc/system.dat`
 - `$NMS_HOME/java/working/config/version.xml`as well as read and execute permission on:
 - `$NMS_HOME/.nmsrc`

- \$CES_HOME/bin/oem_util
- \$CES_HOME/bin/ces_maps_to_build.ces
- \$CES_HOME/bin/Action
- \$CES_HOME/bin/smsReport
- \$CES_HOME/bin/sms_start.ces
- \$CES_HOME/bin/sms_stop.ces
- \$CES_HOME/lib/*.so

Note that the `/etc/nmstab` file must exist. This is part of the installation process for Oracle Utilities Network Management System. See the *Oracle Utilities Network Management System Installation Guide* for more information.

- You can import multiple versions of the same plug-in. Versions can be selected from a list if you are using Cloud Control to deploy the plug-in, or can be specified on the command line if using EMCLI.
- However, only one version can be deployed on the Oracle Management Service (OMS) at any given time. If a later version has been deployed previously, it cannot be downgraded to an earlier version. If you want to deploy a later version, the earlier version must be undeployed from all agents on which it has been deployed, as well as from OMS.
- It is required that OMS and the agent have the same version of the plug-in.
- Available updates are listed on the **Plug-ins** page.

Adding Instances for Monitoring

After successfully deploying the plug-in, add target instances for central monitoring and management.

Environment Discovery

In order for a target to be monitored, it must first be discovered and promoted. Discovery is the process of making a target instance known to OEM. Once this has been done, the target needs to be promoted from an unmanaged to a managed state.

To discover Network Management System target environments:

1. Log in to Enterprise Manager.
2. Choose **Setup > Add Target > Add Targets Manually**. Click **Add Using Guided Process**
3. Choose the **Oracle Utilities Network Management System** from **Add Using Guided Process** dialog.
4. Click **Add...**
5. Select the agents on which to run discovery and click **Next**.
6. Select a target and click **Properties...**
7. Populate credentials for monitoring the NMS database and click **OK**.
8. Optional: Select a target and click **Associations...**

9. Optional: Select the database and one or more WebLogic Servers to be associated with this NMS Environment and click **OK**.

Associations can only be added to database and/or WebLogic Server if it is already managed as a target in Enterprise Manager. These associations can be added, removed, or changed later on the **Configuration Associations** page.

10. Optional: Set Properties and Associations for any additional NMS Environments you wish to manage.

The Properties column for the target in the table list will have the value of **Set** when that target's properties have been set.

11. Select all of the targets to be managed and click **Next**.

12. Wait for added targets to appear in the Summary. Each NMS Environment will have two targets: one of type Oracle Utilities NMS and one of type NMS Services.

13. Click **Exit** to finish the operation.

Undeploying Application Management Pack for Oracle Utilities Network Management System

To undeploy Application Management Pack for Oracle Utilities Network Management System, you must undeploy from both Management Agents and Management Servers.

To undeploy Application Management Pack for Oracle Utilities Network Management System from Management Agents, follow the instructions in the *Undeploying Plugins from Oracle Management Agent* topic in the *Enterprise Manager Cloud Control Administrator's Guide* documentation.

To undeploy Application Management Pack for Oracle Utilities Network Management System from Management Servers, follow the instructions in the *Undeploying Plugins from Oracle Management Service* topic in the *Enterprise Manager Cloud Control Administrator's Guide* documentation.

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