CA Nimsoft® Unified Management Portal

Installation Guide

7.6

Document Revision History

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1.0	June 2014	Initial version for UMP 7.6.

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Chapter 1: Introduction

UMP is available for download from the Nimsoft Support site at
http://support.nimsoft.com.

Note: You must have a login to access the Support site. You can request one by emailing support@nimsoft.com. In addition, access to product documentation, including online help, requires an Internet connection.

You can deploy UMP to any robot under your primary hub--the hub where the CA Nimsoft Monitor Server (NMS) is installed and running. However, the installer must be executed from the machine running the primary hub. It is highly recommended that you install UMP on its own dedicated machine, and *not* on the same robot that hosts NMS.

UMP may be installed under a secondary hub--with services such as nas or discovery_server located on another hub. In such a scenario you are prompted to configure UMP to connect to the service probes on another hub. See the documentation for the dashboard_engine and wasp probes for additional information on how to configure UMP for such an environment.

Note: Only in the case of small installations should you consider installing UMP on the robot that controls the primary hub. For the majority of production installations, UMP should run on its own dedicated host.

The UMP Installation consists of multiple components--wasp, dashboard_engine, dap, a client component, and a JRE:

- You have the option of distributing the wasp, dashboard_engine, and dap service probes to a separate robot under the primary hub.

- The JRE is automatically installed on the robot targeted to run UMP.

- The client component is a Flex client that browsers download from the wasp probe the first time they request access to UMP.

Regardless of where UMP is installed, users can access UMP via any supported web browser.

Chapter 2: Prepare for the Installation

This section describes important information to know and steps to complete before you install UMP.

This section contains the following topics:

Review CA Nimsoft Monitor Server Installation Guide

Review the NMS Pre-installation section of the *CA Nimsoft Monitor Server Installation Guide* (available at docs.nimsoft.com) to confirm your operating system and database are correctly configured. Be sure to pay attention to the special requirements for your situation, such as configuration details for your database and procedures for non-English locales.

The CA Nimsoft Monitor Server (NMS), including Infrastructure Manager, must be installed and licensed before running the UMP installer.

In addition, the following probes *must be installed, active,* and *responsive* when the UMP installer runs:

- ace

- automated_deployment_engine (ade)

- data_engine

- nas

- nis_server

- relationship_services

- sla_engine

An error message will appear if the installer cannot contact these probes. Use Infrastructure Manager to activate, restart, or download and deploy these probes as necessary.

If you used Windows NT authentication during the NMS installation, refer to the section Requirements for Windows NT Authentication in the *NMS Installation Guide* before installing UMP.

Important! Ensure that you obtain the right JVM package (32-bit or 64-bit) for your operating system. If you have a 64-bit operating system, you must use a 64-bit JVM. If you have a 32-bit operating system, you must use a 32-bit JVM.

Set Database Collation

Valid for SQL Server with non-English languages

To use UMP with SQL Server and a non-English language, you must set the database collation to that language before installing NMS and UMP.

Important! If you install NMS before setting the database collation, you must un-install NMS, change the database collation, and then re-install NMS.

After you set the database collation, users can select either the language you specified, or English. If a user selects another language, they may see the question mark character (?) in some portlets in place of text they entered. This is because the database cannot store multi-byte characters in another language, and writes them as question marks instead.

Turn off Oracle Recycle Bin before Installing or Upgrading

Valid for Oracle

If you are installing CA Nimsoft Monitor for the first time, or upgrading from a previous version, the recycle bin must be turned off before you install or upgrade NMS and UMP.

Important! If you are upgrading from 7.5, you *must* also purge the recycle bin, or the upgrade will fail.

Follow these steps:

1. Use a tool such as SQL Developer to connect to the Oracle database.

2. Enter the following commands:
   ```
   ALTER SYSTEM SET recyclebin = OFF DEFERRED;
   ALTER SESSION SET recyclebin = off;
   ```

3. Verify that the recycle bin is off using the following command:
   ```
   show parameter recyclebin;
   ```

After you verify that the recycle bin is off, you can upgrade NMS and then UMP.

Deactivate distsrv Forwarding

If you have package forwarding set up for the distsrv probe you must deactivate it before installing UMP.

The distsrv probe can be configured to forward packages to other hubs. By default forwarding is activated but no hubs are specified, so packages are not forwarded.

Do the following steps to determine whether forwarding is active and to deactivate it if necessary.

Deactivate forwarding

1. In Infrastructure Manager, double-click on the distsrv probe to open its configuration window.

2. Click the **Forwarding** tab.

   If any Forwarding records are listed that say **All** in the **Type** column, you must deactivate forwarding. For other types of records (**Specific**, **Update**, or **Licenses**) you do not need to deactivate forwarding.

3. Click the **Setup** tab, then click the **Forwarding** sub-tab.

4. Click the **Forwarding active** check box to deselect it.

5. Install UMP.

6. Click the **Forwarding active** check box to select it.

Verify JRE Package Prior to UMP Installation

Before you install or upgrade UMP, verify that the JRE package for your OS is present in the Archive folder in Admin Console or Infrastructure Manager. For Windows and Linux, this is the java_jre package. For Solaris, this is the jre_solaris package. If necessary, right-click on the package for your OS, and download it before installing UMP.

If the appropriate JRE package for your OS is not present at installation, the UMP installer will prompt you to download it.

Verify cdm Probe Prior to UMP Installation

During the UMP installation, the installer will attempt to launch the cdm probe to gather system specifications for the robot you select. If the cdm probe is not installed or fails to start, a warning message will display. If this occurs, it will not prevent you from proceeding with the UMP installation, but the installer will not inform you if the robot does not meet the minimum recommended specifications for running UMP. Therefore, before you install UMP, it is recommended you verify that the cdm probe is installed, active, and responsive.

Set UMP Server and Database Locales

The locale on the server that hosts UMP must match the locale set on the database (NIS) server. For example, if the database machine locale is set to Spanish, the UMP host machine locale must also be set to Spanish.

Chapter 3: Install UMP

You can deploy UMP to any robot under your primary hub where the CA Nimsoft Monitor Server (NMS) is installed and running. However, the installer must be executed from the system running the primary hub.

Note: The following description is for a first-time installation of UMP. By default, the UMP installer runs as a wizard with a GUI. You can also run the installer in console mode (see page 15).

Follow these steps:

1. Turn off any anti-virus scanners running on your computer. Active anti-virus scanners slow down the installation significantly.

    Note: Remember to turn the anti-virus scanners on again immediately after the installation is completed.

2. Log in to the CA Nimsoft Customer Support Center site.

3. Download the installation package for your OS.

4. Run the installer from the primary hub where NMS is installed.

    ■ Windows: installUMP.exe

    ■ Linux: installUMP_linux.bin

    ■ Solaris: installUMP_solaris.bin

    The InstallAnywhere wizard dialog appears.

5. Select the language to use.

    The Introduction dialog appears.

6. Enter the location where NMS is installed on the system.

7. Enter the user name and password to log into the hub.

    The user name can be any NMS user with administrative rights.

8. Choose the robot where you want to install UMP.

    The Verify Robot panel opens when you click **Next**, and the installer gathers system specifications for the robot you selected.

    Note: If the cdm probe fails to gather system specifications, or if the specifications do not meet requirements, a warning message is displayed. In either case, you can proceed with the installation.

9. Confirm or update the locations of the probes listed.

10. Specify the ports for UMP to use.

    ■ **HTTP/Web port** – The port used by the browser when sending requests to UMP. The default is 80 for new installations.

    ■ **AJP DMZ port** – This port is used by the UMP server to receive requests from the Apache web server in a DMZ implementation. The default is 8009 for new installations. For more information about DMZ implementations with UMP, see the *Unified Management Portal DMZ Guide*, available from the Downloads page at the CA Nimsoft support site.

11. Leave the **Dashboard API** and **Mobile web service** options selected to install these optional web services.

    ■ **Dashboard API -** Allows you to create dashboards through LUA scripting rather than using the Dashboard Designer GUI.

    ■ **Mobile web service** - Installs the server component of CA Nimsoft Mobile, which allows mobile devices to access NMS. CA Nimsoft Mobile also requires a client application to be downloaded to the mobile device. For iOS devices, the client application is available from the iTunes App Store; for Android devices, the client application is available from the Downloads page at the CA Nimsoft support site. After installing the CA Nimsoft Mobile web service and the client application, you should be able to log in using the client application, provided the mobile device can access the network. If the mobile device cannot access the network, you may need to use the built-in VPN on the mobile device to access the NMS. Logged events for CA Nimsoft Mobile are written to the wasp.log file.

12. Indicate whether you want to overwrite your Dynamic Views.

13. (Windows only) Choose where you want shortcuts to be created.

14. Click **Next** on the Database Connection panel to verify your database connectivity.

    This screen automatically displays information about your database connection. When you click **Next**, it verifies that the system can connect to the database.

    Note: If you used Windows NT authentication during the NMS installation, refer to the section Requirements for Windows NT Authentication in the *NMS Installation Guide* before installing UMP.

15. Verify the information in the Summary panel.

16. Click **Install**.

    The installer updates the archive (copies the files to the system) and installs UMP. While it installs UMP, a status bar displays progress for each phase. Each phase is validated before the installer continues. If there are errors, you can choose to try that phase again, ignore the errors and continue, or cancel the installation.

17. Click **Done** to exit the installer.

    Important! Remember to turn any anti-virus scanners back on.

Run the Installer in Console Mode

The installer asks for the same information in console mode as in GUI mode.

From a command line or terminal, issue the following command:

`-i console`

For example, the Linux command is:

`./installUMP_linux.bin -i console`

Chapter 4: Upgrade UMP from a Previous Version

Do the following before you upgrade:

- Ensure that you follow the supported upgrade path described in the CA Nimsoft Support Compatibility Matrix.

- Review the *Unified Management Portal Release Notes*, available online at docs.nimsoft.com.

- Ensure that you follow the steps in the topics Back up the System before Upgrading (see page 17), and Import Custom LAR Files before Upgrading (see page 18).

- If Oracle is your DB provider, see the topic Turn off Oracle Recycle Bin before Installing or Upgrading (see page 11).

Upgrading from a previous version of UMP is the same process as installing a new instance of UMP. The Select UMP Robot panel of the installer provides the option to Upgrade to UMP <x.x.x.x.>. The installer retains any settings, such as port numbers, that you changed from the default.

Note: If Infrastructure Manager is installed on a separate machine from the NMS server, remember to upgrade Infrastructure Manager when upgrading UMP versions.

This section contains the following topics:

Back up the System before Upgrading

Important! Back up your system and database before upgrading. UMP 7.5 and later use a new version of Liferay that modifies the database during the upgrade. **After the upgrade, the only way to revert to your previous system is to restore a backup.**

If you cancel the installation during the upgrade due to errors that occur, your current system may no longer be operational. In this case, the only option is to restore a backup.

Import Custom LAR Files before Upgrading

You can create custom pages in UMP and arrange portlets on the pages as desired. You can export custom pages as LAR files to share them with other users.

Important! UMP 7.5 and later use a new version of Liferay. If you exported custom pages as LAR files, you must manually import the custom LAR files before upgrading from a version before UMP 7.5.

If you created custom pages, you do not need to migrate them unless you exported them to LAR files. Pages and users are automatically migrated; LAR files are not.

The following steps make use of the fact that users are automatically migrated when you upgrade. Before upgrading, you create users with only the content that matches the LAR files. After upgrading, you log in as the users you created to complete the steps.

Follow these steps:

1. In UMP or in Infrastructure Manager, add a user for each LAR file.

2. Log into UMP as the user associated with the LAR file.

3. Remove all portlets from the Home page.

4. Delete all pages except the Home page.

5. Import the LAR file to the user's private pages:

   a. Click Go to > Control Panel on the menu bar.

   b. Click My Pages.

   c. Click Private Pages.

   d. Click Export/Import, then click Import.

   e. Click Browse to select the LAR file.

   f. Leave the default options selected and click Import.

6. Delete the Home page if it is still empty.

   Note: If the Home page is empty, the LAR file did not contain a Home page. By deleting it, the user's content is the same as what the LAR file contained.

7. Repeat the previous steps for each LAR file.

8. Upgrade UMP.

9. Log in as the user associated with the LAR file.

10. Export the private pages for the user:

    a. Click Go to > Control Panel on the menu bar.

    b. Click My Pages.

    c. Click Private Pages.

    d. Click Export/Import.

    e. If the Export tab is not selected, click the Export link.

    f. Enter a name for the LAR file.

    g. Leave the default options selected and click Export.

    The pages are exported and saved to a LAR file.

11. Replace the existing LAR file with the LAR file you just exported.

Clear Browser After Upgrading

If you upgraded from a previous UMP version, clear your browser completely to remove older versions of components that may be cached.

To clear your browser

1. Log out of UMP.

2. Clear the browser cookies and cache.

3. Exit all browser windows.

4. Log into UMP.

Chapter 5: UMP--Troubleshoot the UMP Installation

This section contains the following topics:

Installer Reports Error While Distributing Packages

Valid on systems using Windows Authentication for database access

Symptom:

The installer displays a message that there was an error distributing packages.

Solution:

This error is commonly caused by a problem with the java_jre, and may occur on systems where all of the following is true:

- Windows Authentication is used for database access

- The robot where UMP is being installed already has a java_jre package installed

- The robot where UMP is being installed has java probes running during the installation

The UMP installer distributes a java_jre package to the robot. If a java_jre package is already installed and java-based probes are running on the robot, the installer cannot distribute the java_jre package and produces an error message.

To determine whether this is the cause of the error, do the following:

1. In Infrastructure Manager, choose the **Tools**, **Distribution** menu option.

2. Double-click on the job named UMP-packages-13########### to open it.

3. Double-click on the task with java_jre as the Package and a Status of error.

4. Check the text for Result String.

   If it says permission denied, this issue is the cause of the installation error.

To resolve this, do the following:

1. Identify java-based probes running on the robot:

   a. Open Infrastructure Manager.

   b. Click on the robot where UMP is being installed.

      You see the list of probes installed on the robot.

   c. Look in the **Command** column to see if it contains the word java.

      If it says java in the **Command** column, it is a java-based probe.

2. Run the UMP installer.

3. Click **Next** in the **Verify Probes** screen.

   The installer verifies that certain probes are active on the robot. You must click past this screen, so that the probes are verified, before doing the next step. If you do the next step (deactivating your java-based probes) before navigating past the **Verify Probes** screen, the installer will not be able to verify the probes and you will not be able to proceed with the installation.

4. Deactivate all java-based probes on the robot where you are installing UMP.

5. Complete the installation.

Installer Freezes in Verify Database Panel

Symptom:

The installer freezes when I click **Next** in the Verify Database window.

Solution:

This occurs if Java 6 Update 29 is installed as the system JRE.

There are two solutions to this problem. You can uninstall Java 6 Update 29 and install a newer version. Or, you can use the version of Java provided by Nimsoft. A version of Java is installed with UMP but is not used by the UMP installer by default.

To have the UMP installer use the version of Java provided with UMP, do the following:

1. Uninstall all versions of Java.

2. Add the path to the Nimsoft version of Java to the system path on both the primary hub and the system where UMP is being installed.

   The Nimsoft version of Java is located under the Nimsoft directory at Nimsoft\jre\jre<*x.y.z_uu*>\bin. For example, C:\Program Files (x86)\Nimsoft\jre\<*x.y.z_uu*>\bin.

3. Verify that the Nimsoft version of Java is the active version by opening a command prompt and executing **java -version** on both systems (the primary hub and the system where UMP is being installed).

   The version should be <*x.y.z_uu*>.

4. Run the UMP installer again.

Installer Password Field is Inactive

This is valid for Linux operating systems

Symptom:

I cannot enter text in the password field of the UMP installer.

Solution:

This is caused by a bug in the 64-bit version of openJDK, often installed on 64-bit Red Hat Linux systems.

If you are installing the English, Spanish, or Brazilian Portuguese version of UMP, set the following environment variable:

```
export LC_ALL=en_US
```

Then run the installer.

If you are installing the Chinese or Japanese version of UMP, execute the following from the command line to run the installer in console mode:

```
installUMP_linux.bin -i console
```

Installer Reports Error in Authentication Panel

Symptom:

The installer asks for user credentials, but when I enter them I see the error message **This is not a valid user name or password is wrong**.

Solution:

This occurs if the setting **SSL only** is selected in the hub.

To resolve this, do the following:

1. In Infrastructure Manager, right-click the hub probe and then click **Configure.**

2. Under the **Advanced** heading, click **Settings**.

3. In the **Hub Advanced Settings** window, click the **SSL** tab.

4. Click **Compatibility Mode,** then click **OK**.

The installation proceeds after the **SSL only** setting is changed.

Installer Reports Non-Fatal Installation Errors

Valid on All Systems

Symptom:

At the end of the installation I was informed that the install encountered NonFatal errors.

Solution:

NonFatal installation errors can happen if the installer meets network or system delays while configuring certain probes. Most likely the probes are correctly installed, but need further configuration to permit UMP to function correctly.

In the event of an UMP installation where NonFatal errors are reported, you should review the following installation log file, which is located in the Nimsoft installation directory:
`UMP_InstallLog.log`

Examine the file to see if the following Custom Action is present near the end of the file:
`com.nimsoft.install.custom.code.ump.InstallConfig`

If that Custom Action exists and reports there was an error writing configuration values, you can use the following table of configuration key/value pairs to manually configure the probes exactly as the installer *would* have, if it had been able to.

To edit a probe configuration:

1. Locate the probe in Infrastructure Manager.

2. Hold the Shift key down, and right-click the probe.

3. A menu pops up.

4. Click **Raw Configure** in the menu.

Important! Take care when using the "Raw Configure" tool. It is similar to the MS-Windows registry editor and has **no** error checking. Be sure that any changes you make are valid before you continue.

5. Use the information in the table to configure the values as needed.

    Note: Text in italics—for example *domain*, or *port_number*—must be replaced with the actual values for your system. All other text is exactly as shown.

Probe	Configuration Section	Configuration Key	Configuration Value
wasp	setup	data_engine	/*domain*/*hub*/*robot*/data_engine
wasp	setup	dashboard_engine	dashboard_engine

wasp	setup	http_port	80
wasp	setup	ajp_port	8009
wasp	startup/opt	max_perm_size	-XX:MaxPermSize=512m [1]
wasp	ump_common	ace	*/domain/hub/robot/*ace
wasp	ump_common	automated_deployment_engine	*/domain/hub/robot/*automated_deployment_engine
wasp	ump_common	dap	dap
wasp	ump_common	nas	*/domain/hub/robot/*nas
wasp	ump_common	nis_server	*/domain/hub/robot/*nis_server
wasp	ump_common	sla_engine	*/domain/hub/robot/*sla_engine
wasp	webapps/relationshipviewer/custom/uncrypted	GraphServiceHost	*ip_address* [2]
wasp	webapps/relationshipviewer/custom/uncrypted	GraphServicePort	*port_number* [2]
wasp	webapps/sdp	load_on_startup	false [3]
nas	setup	nis_bridge	yes
nas	setup	nis_trans_details	yes
dap	setup	data_engine	*/domain/hub/robot/*data_engine [4]
dashboard_engine	nimbus	data_engine_address	*/domain/hub/robot/*data_engine [4]
dashboard_engine	nimbus	nas_address	*/domain/hub/robot/*nas [4]

[1] Only if existing MaxPermSize is set to less than 512m.

[2] Only if relationship_services exists; determine actual value from relationship_services probe, again using the Raw Configure tool.

[3] Only if robot has SDP (Service Delivery Portal).

[4] Only if UMP is installed to separate robot.