

Nimsoft® Unified Management Portal

Installation Guide

2.6



Document Revision History

Document Version	Date	Changes
1.0	12/5/2011	Beta version for UMP 2.6.0.
1.1	12/15/2011	GA version for UMP 2.6.0. Minor changes.

Legal Notices

Copyright © 2012, Nimsoft Corporation

Warranty

The material contained in this document is provided "as is," and is subject to being changed, without notice, in future editions. Further, to the maximum extent permitted by applicable law, Nimsoft Corporation disclaims all warranties, either express or implied, with regard to this manual and any information contained herein, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. Nimsoft Corporation shall not be liable for errors or for incidental or consequential damages in connection with the furnishing, use, or performance of this document or of any information contained herein. Should Nimsoft Corporation and the user have a separate written agreement with warranty terms covering the material in this document that conflict with these terms, the warranty terms in the separate agreement shall control.

Technology Licenses

The hardware and/or software described in this document are furnished under a license and may be used or copied only in accordance with the terms of such license.

No part of this manual may be reproduced in any form or by any means (including electronic storage and retrieval or translation into a foreign language) without prior agreement and written consent from Nimsoft Corporation as governed by United States and international copyright laws.

Restricted Rights Legend

If software is for use in the performance of a U.S. Government prime contract or subcontract, Software is delivered and licensed as "Commercial computer software" as defined in DFAR 252.227-7014 (June 1995), or as a "commercial item" as defined in FAR 2.101(a) or as "Restricted computer software" as defined in FAR 52.227-19 (June 1987) or any equivalent agency regulation or contract clause. Use, duplication or disclosure of Software is subject to Nimsoft Corporation's standard commercial license terms, and non-DOD Departments and Agencies of the U.S. Government will receive no greater than Restricted Rights as defined in FAR 52.227-19(c)(1-2) (June 1987). U.S. Government users will receive no greater than Limited Rights as defined in FAR 52.227-14 (June 1987) or DFAR 252.227-7015 (b)(2) (November 1995), as applicable in any technical data.

Trademarks

Adobe®, Acrobat®, Acrobat Reader®, and Acrobat Exchange® are registered trademarks of Adobe Systems Incorporated.

Intel® and Pentium® are U.S. registered trademarks of Intel Corporation.

Java(TM) is a U.S. trademark of Sun Microsystems, Inc.

Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation.

Netscape(TM) is a U.S. trademark of Netscape Communications Corporation.

Oracle® is a U.S. registered trademark of Oracle Corporation, Redwood City, California.

UNIX® is a registered trademark of the Open Group.

Contact Nimsoft

For your convenience, Nimsoft provides a single site where you can access information about Nimsoft products.

At <http://support.nimsoft.com/>, you can access the following:

- Online and telephone contact information for technical assistance and customer services
- Information about user communities and forums
- Product and documentation downloads
- Nimsoft Support policies and guidelines
- Other helpful resources appropriate for your product

Provide Feedback

If you have comments or questions about Nimsoft product documentation, you can send a message to support@nimsoft.com.

Contents

Chapter 1: Prepare for Installation	7
Introduction	7
Review the Release Notes	7
Prepare the Database Server	8
Before Installing UMP	8
Install Nimsoft Monitor	8
Deactivate distsrv Forwarding	9
Using SQL Server and Multi-Byte Characters	9
Set Server and Database Locales	10
Installing UMP on its Own Hub	10
Upgrading from a Previous Version?	10
Back Up Your System before Upgrading	11
Clear Browser After Upgrading	11
Have Custom LAR Files?	11
Chapter 2: Installing the Unified Management Portal	15
Install UMP	15
Running the Installer in Console Mode	17
Chapter 3: Troubleshooting UMP Installation	19
Installation Fails Due to java_jre Problem	20
Installation Fails Due to Java JRE Version	21
Installation Fails with Inactive Probes Error Message	22
Installer Password Field is Inactive	22
Installation Fails Due to SSL Option Selected	23
Non-Fatal Installation Error Reported	23

Chapter 1: Prepare for Installation

This section describes important steps to prepare for installing UMP.

This section contains the following topics:

[Introduction](#) (see page 7)

[Review the Release Notes](#) (see page 7)

[Prepare the Database Server](#) (see page 8)

[Before Installing UMP](#) (see page 8)

[Installing UMP on its Own Hub](#) (see page 10)

[Upgrading from a Previous Version?](#) (see page 10)

Introduction

You can download UMP from Nimsoft Support (<http://support.nimsoft.com>).

The UMP Installer is run from the machine where Nimsoft Server is installed (the Primary Hub). It is highly recommended that UMP be installed to a robot under the Primary Hub that is hosted *separately* from the Server--on its own dedicated machine.

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.

UMP Installation consists of multiple components (WASP, Dashboard Engine, DAP, Client, and JRE). You have the option to distribute the WASP, dashboard engine, and DAP service probes to different robots (hosted on separate servers) under the Hub. The JRE is automatically installed on any robot which is targeted to run part of UMP. The Client component is part of the WASP probe (it is a Flex client which is downloaded by the browser from the WASP the first time the browser requests access to UMP).

Regardless of where UMP is installed, users can access it using a web browser.

Review the Release Notes

Review the UMP release notes carefully before beginning installation.

The release notes contain important information about version requirements and known issues with the product.

Prepare the Database Server

Review the pre-installation section of the *Nimsoft Server Installation Guide* 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.

Important! Be sure you get 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.

Before Installing UMP

Do the tasks described in this section before you install UMP.

Install Nimsoft Monitor

Nimsoft Monitor, including Infrastructure Manager, must be installed and licensed before running the UMP installer.

Also, the following probes must be installed, active, and responsive when the UMP installer runs:

- ace
- data_engine
- nas
- nis_server
- relationship_services
- sla_engine

If the installer cannot contact these probes, you see an error message. Use Infrastructure Manager to activate, restart, or download and deploy these probes as necessary.

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.

Using SQL Server and Multi-Byte Characters

If you are using SQL Server, in order to use UMP in a language other than English you must set the database collation to that language *before* installing Nimsoft Monitor and UMP.

UMP supports Chinese, Japanese, Brazilian Portuguese, and Spanish, all of which use multi-byte characters. Set the database collation to the language you want to use. This must be done before installing the Nimsoft Monitor (NM) server software. If you have already installed the NM server, you must uninstall, change the database collation, then re-install NM server.

After setting the database collation, users will be able to use 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.

Set 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.

Installing UMP on its Own Hub

Typically UMP is installed on a robot under the main hub (the hub running the nas, data_engine, discovery_server etc.).

However, 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 documentation for the dashboard_engine and wasp probes for additional information on how to configure UMP for such an environment.

Upgrading from a Previous Version?

Upgrading from a previous version of UMP is the same process as installing a new instance of UMP. On the Select UMP Robot screen of the installation wizard, choose Upgrade to UMP <x.x.x.x.>.

The installer will retain any settings (such as port numbers) that you changed from the default.

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

Back Up Your System before Upgrading

While it is always a good practice to back up your system before upgrading versions, when you upgrade from UMP 2.1.x or earlier to UMP 2.6.x it is particularly important to do so. Newer versions of UMP (starting with UMP 2.5) use an updated version of third-party software (Liferay 6) that changes your database when installed. When UMP 2.6.x is installed, un-installing the new version of UMP and reinstalling the previous version will not restore your previous database. The only way to restore your previous system is to back it up before upgrading, and then restore the backup.

Also, if installation errors occur while upgrading and the installation is aborted, your current system may no longer be operational. To restore it, restore your backup.

Important! You must back up your system before upgrading from UMP 2.1.x or earlier to UMP 2.6.x (or any version after UMP 2.1.x). Otherwise, there is no way to revert to your current system.

Clear Browser After Upgrading

After upgrading, clear your browser completely to get rid of 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.

Have Custom LAR Files?

If you created custom LAR files in UMP 2.1.x or earlier and are upgrading to UMP 2.6, you must manually upgrade the custom LAR files.

You can create pages and arrange portlets on the pages to create custom layouts in UMP. The LAR file provides a way to share your custom layout with other users. You have custom LAR files if you created custom layouts and then exported them to LAR files.

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

To migrate the custom LAR files, you will make use of the fact that users are automatically migrated. You will create users with only the content that matches the LAR files so that content can be migrated.

To migrate custom LAR files

Important! Start this procedure **before** upgrading to UMP 2.6.

1. Add a user for each LAR file you have.
This can be done in UMP or in NM Infrastructure Manager.
2. Log in to UMP as the user associated with a 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 Manage, 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.
If the Home page is empty, it means 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 steps above for each LAR file.
8. Upgrade to UMP 2.6.
9. Log in as the user associated with a LAR file.

10. Export the private pages for the user:
 - a. Click Manage, 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 old LAR file with the file you just exported.

Chapter 2: Installing the Unified Management Portal

This section describes how to install UMP.

This section contains the following topics:

[Install UMP](#) (see page 15)

[Running the Installer in Console Mode](#) (see page 17)

Install UMP

You can install UMP on any robot under your main hub (where the Nimsoft Monitor server is installed and running), but the installer must be run on the machine running the main hub.

Note: The following description is for a first-time installation of UMP.

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 [Nimsoft Customer Support Center](#) site.
3. Download the UMP Install Package for your Nimsoft Monitor Server OS type.
4. Run the installer.

Windows: installUMP.exe

Linux: installUMP_linux.bin

Solaris: installUMP_solaris.bin

The InstallAnywhere wizard dialog appears.

5. Select the language you want the InstallAnywhere wizard to use and click **OK**.

The **Introduction** dialog appears.

6. Click **Next**.
7. Enter the location where Nimsoft Monitor is installed on the system.
8. Enter the user name and password to use to log into the hub.
This can be any Nimsoft Monitor user with administrative rights.
9. Choose the Nimsoft Monitor robot where you want to install UMP.

10. Confirm or update the locations of the listed Nimsoft Monitor probes.
11. Specify the ports to be opened 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 [Nimsoft support site](#).

If you are upgrading, this screen shows you the ports used in your existing installation.
12. Click **Dashboard API** or **Mobile web service** if you want to install either of 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 NimsoftMobile, which allows mobile devices to access the Nimsoft Monitor server. NimsoftMobile 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 [Nimsoft support site](#). After installing the NimsoftMobile server 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 Nimsoft Monitor server. Logged events for NimsoftMobile are written to the wasp.log file.
13. Indicate whether you want to overwrite your Dynamic Views.

UMP comes with automatically generated dashboards called Dynamic Views. Most users will want the Dynamic Views to be overwritten so they are updated with any changes. However, if you have customized the Dynamic Views, you may not want to overwrite them.

We recommend that you overwrite unless you have changed the Dynamic View templates.
14. Choose where you want shortcuts to be created (Windows only).
15. Click **Next** on the Database Connection screen 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.
16. Verify the information in the Pre-Installation Summary.

If you need to make changes, click the **Previous** button to return to the appropriate screen.

17. Click **Install**.

The installer updates the archive (copies the files to the system) and deploys UMP. While it deploys 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.

When the installation is complete, you see the Install Complete screen.

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

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

Running the Installer in Console Mode

By default, the UMP installer runs as a wizard with a graphical user interface (GUI). You can also run the installer in console mode. The installer asks for the same information in console mode as in GUI mode. Refer to [Install UMP](#) (see page 15) for more information about the installer prompts.

To run the installer in console mode:

Run the installer from the command line and include the following in the command:

```
-i console
```

For example, the Linux command is:

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


Chapter 3: Troubleshooting UMP Installation

This section contains the following topics:

[Installation Fails Due to java_jre Problem](#) (see page 20)

[Installation Fails Due to Java JRE Version](#) (see page 21)

[Installation Fails with Inactive Probes Error Message](#) (see page 22)

[Installer Password Field is Inactive](#) (see page 22)

[Installation Fails Due to SSL Option Selected](#) (see page 23)

[Non-Fatal Installation Error Reported](#) (see page 23)

Installation Fails Due to java_jre Problem

Valid on systems using Windows Authentication for database access

Symptom:

Installation fails and reports a FatalInstallException.

Solution:

This may occur on systems where all of the following are 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 the installation fails.

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.

Installation Fails Due to Java JRE Version

Symptom:

When installing UMP, the installer locks up after clicking **Next** in the Verify Database window.

Solution:

This occurs if Java 6 Update 29 is installed.

There are two solutions to this problem. You can uninstall Java 6 Update 29 and install a previous version (such as Java 6 Update 26). 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.

Note: UMP 2.6 installs Java version 1.6.0_24. Older versions of UMP install Java version 1.6.0_17.

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

1. Uninstall all versions of Java.
2. Disable IP validation:
 - a. In Infrastructure Manager, double-click on the primary hub to open the Hub window.
 - b. In the **General** tab, click the **Disable IP validation** check box.
3. 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\jre1.6.0_24\bin. For example, C:\Program Files (x86)\Nimsoft\jre\jre1.6.0_24\bin.

4. 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 1.6.0_24.

5. Run the UMP installer again.

Installation Fails with Inactive Probes Error Message

Symptom:

When installing UMP, I see the following error message:

Some of the probes specified were not responsive. Ensure that the probe locations are correct and the probes are active.

Solution:

This may occur if Nimsoft Monitor is not licensed before installing UMP. Use Infrastructure Manager to make sure Nimsoft Monitor has a valid license before installing UMP.

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
```

Installation Fails Due to SSL Option Selected

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.

Non-Fatal Installation Error Reported

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	<i>/domain/hub/robot/data_engine</i>
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	<i>/domain/hub/robot/ace</i>
wasp	ump_common	dap	dap
wasp	ump_common	nas	<i>/domain/hub/robot/nas</i>
wasp	ump_common	nis_server	<i>/domain/hub/robot/nis_server</i>
wasp	ump_common	sla_engine	<i>/domain/hub/robot/sla_engine</i>
wasp	webapps/relationshipviewer/ custom/uncrypted	GraphServiceHost	<i>ip_address</i> ²
wasp	webapps/relationshipviewer/ custom/uncrypted	GraphServicePort	<i>port_number</i> ²
wasp	webapps/sdp	load_on_startup	false ³
nas	setup	nis_bridge	yes
nas	setup	nis_trans_details	yes
dap	setup	data_engine	<i>/domain/hub/robot/data_engine</i> ⁴
dashboard_engine	nimbus	data_engine_address	<i>/domain/hub/robot/data_engine</i> ⁴
dashboard_engine	nimbus	nas_address	<i>/domain/hub/robot/nas</i> 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.