VERSION 2.02

Installing Novell Modular Authentication Service (NMAS) Enterprise Edition

Novell Modular Authentication Service (NMAS**TM**) Enterprise Edition is designed to help you protect information on your network. NMAS brings together additional methods of authenticating to NDS® eDirectory**TM** to help ensure that the people accessing your network resources are who they say they are. Also, you can grant or restrict access to network resources based on how a user authenticates to NDS eDirectory.

Overview

The NMAS installation adds a set of containers, objects, and attributes to the NDS tree to support NMAS. NMAS software is comprised of server software and client software. The server software is installed on NetWare® 5.1 or later, Windows 2000*, Windows NT* 4.0, Linux or Solaris servers. The client software is installed on Windows client workstations. NDS eDirectory must be installed. An NDS eDirectory CD ships with NMAS 2.0. See Minimum Requirements for more details.

The NMAS server software is installed from a Windows client workstation. You must have administrator rights to the [Root] of the NDS tree to install the NMAS server product.

The NMAS client software must be installed on each client workstation where you want to use the NMAS login methods. If you are not using the latest version of the Novell Client**TM** software, you will be prompted to upgrade your software. The latest Novell Client software ships with NMAS 2.0. It is also available for download from the Novell Web site (http://www.novell.com/download).

You can only install one set of components during an installation session. For example, if you choose to install the client components the first time you run the install, you must run the installation program a second time to install the server components.

You must also install the latest version of ConsoleOne**TM** on the NMAS server. ConsoleOne, with a minimum set of snap-ins, is included on the NMAS 2.0 CD.

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Minimum Requirements

SERVER REQUIREMENTS

Before you begin the installation, make sure that your environment meets all of the listed prerequisites.

IMPORTANT: This product will not install on NetWare 5.0 or on an NDS eDirectory version earlier than 8.5.

NetWare 5.1

- NetWare 5.1 with Support Pack 2 or later installed.

- NDS eDirectory 8.5 or later.

- NetWare Server NICI 1.5.7 or later must be installed on the server prior to installing NMAS 2.0 server components. NetWare Server NICI 1.5.7 is included with this product and is located in the NICI\NWSERVER directory.

Windows NT or 2000

- Windows NT server 4.0 with Service Pack 6a or later, or Windows 2000 Server.

- NDS eDirectory 8.5 or later.

Linux

- Linux 2.2 and glibc 2.1.3.

- A minimum of 64 MB RAM (128 MB recommended).

- 56 MB of disk space to install eDirectory Server.

  Additional disk space requirements will depend on the number of objects you will have in eDirectory.

- Novell eDirectory 8.6 or above.

Solaris

- Solaris 2.6 (with patch 105591-07 or later), Solaris 7 (with patch 106327-06 or later for 32-bit systems), Solaris 7 (with patch 106300-07 or later for 64-bit systems), or Solaris 8. All recommended Solaris OS patches are available at the SunSolve* Online Web page (http://sunsolve.sun.com).

- A minimum of 64 MB RAM (128 MB recommended).

- 56 MB of disk space to install eDirectory Server.

  Additional disk space requirements will depend on the number of objects you will have in eDirectory.

- Novell eDirectory 8.6 or above.

NMAS CLIENT WORKSTATION REQUIREMENTS

- Windows 95 SR2B, Windows 98 SE, Windows ME, Windows 2000 Professional or Windows NT 4 with Service Pack 6a or later.

- Novell Client for Windows 3.3 or later, or Novell Client for NT 4.8.0 or later installed. These clients ship with NMAS 2.0 or you can download them from the Novell Web site (http://www.novell.com/download).

- Client or Server NICI 1.5.7 or later.

  If you run ConsoleOne from Windows 95, 98, ME, NT, or 2000, you will need Client NICI 1.5.7 or later. Client NICI 1.5.7 is included with this product in the NICI\WINCLIENT directory.

- ConsoleOne 1.2d1. ConsoleOne 1.2d1 is included with this product in the CONSOLEONE directory.

Installing NMAS Server Software

SERVER INSTALLATION FOR NETWARE AND WINDOWS SERVERS

IMPORTANT: You cannot remotely install the server components to a Windows NT or 2000 server.

1 From a Windows client machine, log in as the administrator to the server that you want to install the server components to.

2 Insert the *NMAS Enterprise Edition* CD.

  NOTE: If you receive an error message stating that you need to update the Novell Client software, remove the *NMAS Enterprise Edition* CD and insert the *Novell Client* CD included in the NMAS Enterprise Edition box. Install the Novell Client software and reboot your machine.

  For more Novell Client information, refer to the Novell Client documentation Web site (http://www.novell.com/documentation/lg/noclienu/docui/index.html).

  Also, you may be prompted to upgrade to eDirectory 8.5. If so, insert the NDS eDirectory CD that is included with NMAS 2.0 to perform the upgrade.

3 From the root of the CD, run NMASINSTALL.EXE.

4 Check the box next to NMAS Server Components.

5 Click OK > follow the on-screen instructions.

6 Reboot the server upon completion.

SERVER INSTALLATION FOR LINUX/SOLARIS SERVERS

1 Log in as root to the server where you want to install the server components.

2 Insert the Novell eDirectory CD.

3 Go to the Solaris/Linux directory, as required.

4 Enter the following command:

```
nds-install
```

5 When prompted, accept the license agreement.

The installation program displays a list of eDirectory components that you can install.

6 Select Novell Modular Authentication Service (NMAS) as one of the components to be installed.

NOTE: Make sure that you select Novell eDirectory 8.6 server components or have already upgraded to Novell eDirectory 8.6 server.

7 Configure NMAS using the nmasconfig utility.

You must configure eDirectory with ndsconfig before you configure NMAS.

```
nmasconfig config [-t treename] [-h hostname [:port] -c -a adminname
```

NOTE: Make sure that you have adminstrative rights on the tree.

8 Restart eDirectory server after completion.

Installing NMAS Client Software

CLIENT INSTALLATION PROCEDURES

1 From a Windows client workstation, insert the *NMAS Enterprise Edition* CD.

NOTE: If you receive an error message that you need to update the Novell Client software, remove the *NMAS Enterprise Edition* CD and insert the *Novell Client* CD included in the NMAS Enterprise Edition product package. Install the Novell Client software and reboot your machine.

For more Novell Client information, refer to the Novell Client documentation Web site (http://www.novell.com/documentation/lg/noclienu/docui/index.html).

2 From the root of the CD, run NMASINSTALL.EXE.

3 Check the check box next to NMAS Client Components. Optionally, you can check the check boxes next to NICI and NMAS RADIUS Client if you want to install these components.

4 Click OK. Follow the on-screen instructions.

5 Reboot the client workstation upon completion.

IMPORTANT: The NMAS client software must be installed on each client workstation where you want to use the NMAS login methods.

RADIUS

RADIUS is now integrated and ships with NMAS. This product allows users to access the network remotely, using the same authentication methods provided by NMAS.

The RADIUS server and client components can be installed during the NMAS installation. To configure RADIUS for use, you will need to follow the procedures outlined in the RADIUS Administration Guide (RADIUS.PDF) located in the \DOCUMENTATION\ENGLISH\NMAS\DOC directory of the eDirectory CD or on the Novell Documentation Web site (http://www.novell.com/documentation) under the NMAS section of the Novell eDirectory 8.6 documentation.

Next Steps

 To set up login methods and sequences on NetWare and Windows, see the *Novell Modular Authentication Service Administration Guide* (NMAS_ADMIN.PDF) Chapter 2, "Setting Up Login and Post-Login Methods and Sequences" located on the NMAS CD or on the Novell Documentation Web site (http://www.novell.com/documentation) under the NMAS section of the Novell eDirectory 8.6 documentation.

 To set up graded authentication, see the *Novell Modular Authentication Service Administration Guide* (NMAS_ADMIN.PDF) Chapter 3, "Using Graded Authentication" located in the \DOCUMENTATION\ENGLISH\NMAS\DOC directory of the eDirectory CD or on the Novell Documentation Web site (http://www.novell.com/documentation) under the NMAS section of the Novell eDirectory 8.6 documentation.

 To administer NMAS on UNIX, see the *Novell Modular Authentication Service Administration Guide* (NMAS_ADMIN.PDF) Chapter 5, "Configuring and Managing NMAS on UNIX located in the \DOCUMENTATION\ENGLISH\NMAS\DOC directory of the eDirectory CD or on the Novell Documentation Web site (http://www.novell.com/documentation) under the NMAS section of the Novell eDirectory 8.6 documentation.