NORTEL NETWORKS

Preside Multiservice Data Manager

MDMWeb

Installation Guide

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MDMWeb

Installation Guide

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Contents

About this document **11**
Who should read this document and why 11
What you need to know 11
How this document is organized 12
What's new in this document 12
Text conventions 12
Mouse button functions 14
Related documents 14

Chapter 1
Introduction **15**
What is MDMWeb? 15
MDMWeb architecture 15
Partitioning 18
Choosing an MDMWeb client installation option 19
About client applications 19
Available options 19
Software requirements 22
Server software requirements 22
Client application 23
Installation overview 24
Server installation overview 25
Client application 25
MDMWeb migration 26
MDMWeb license key 26

Chapter 2
Installing the MDMWeb server 27
MDMWeb server installation procedures 27
Preparing to install MDMWeb server software 28
Partitioning the network 28
Configuring the MDMWeb server 30
Changing the MDMWeb password 31
Starting the MDMWeb server agents 31
Displaying online server agent information 32
Starting the MDMWeb gmdragent 32
Starting the MDMWeb nmagent 33
Starting the MDMWeb rtacagent 34
Starting the MDMWeb mnsdagent 34
Server port numbers 35
Changing Apache port numbers 35

Chapter 3
Installing the MDMWeb client on Solaris 37
Solaris client application installation procedures 37
Preparing to install MDMWeb Solaris client 38
Installing Solaris patches for use with JRE 38
Installing JRE for Solaris 38
Installing MDMWeb Solaris client application 40
Configuring the resource file for MDMWeb Solaris client 41
Configuring the resource file for sound 42
Configuring the resource file to specify the mnsdagent port 43
Configuring the resource file to obtain alarms from RTAC 45
Configuring the resource file to use a custom menu 46
Configuring the resource file to edit CIV commands 47
Adding the server host name to the /etc/hosts file 49
Specifying the installed Netscape path 50
Removing the MDMWeb Solaris client application 51

Chapter 4
Installing the MDMWeb client on Windows 53
Windows client application installation procedures 53
Preparing to install MDMWeb client application software 53
Installing JRE for Windows 54
Installing the MDMWeb Windows client application 54
Configuring the resource file for MDMWeb Windows client 55
Configuring the resource file for sound 56
Configuring the resource file to obtain alarms from RTAC 57
Configuring the resource file to use a custom menu 58
Configuring the resource file to edit CIV commands 60
Removing the MDMWeb Windows client application 62

Appendix A
Engineering Information 65
Resource requirements 65
Communication requirements 66
MDMWeb performance 66

Index 67

About this document

This document describes how to install and configure Nortel Networks Preside Multiservice Data Manager MDMWeb software.

The following topics are discussed in this section:

- "Who should read this document and why" (page 11)
- "What you need to know" (page 11)
- "How this document is organized" (page 12)
- "What's new in this document" (page 12)
- "Text conventions" (page 12)
- "Mouse button functions" (page 14)
- "Related documents" (page 14)

Who should read this document and why

This guide is intended for those who install and use the Nortel Networks MDMWeb software application. This guide contains detailed installation instructions for MDMWeb software.

What you need to know

This document assumes knowledge in the following areas:

- Preside Multiservice Data Manager (MDM) package
- MDM system administration
- Sun Solaris operating system

- the MDMWeb client operating system, for example Windows 2000 or Windows NT
- Java scripts and applications

How this document is organized

The information in this guide is organized as follows:

- "Introduction" (page 15) provides an overview of MDMWeb software and its capabilities.
- "Installing the MDMWeb server" (page 27) details MDMWeb server software installation and configuration procedures.
- "Installing the MDMWeb client on Solaris" (page 37) details MDMWeb Solaris client installation procedures.
- "Installing the MDMWeb client on Windows" (page 53) details MDMWeb Windows client installation procedures.
- "Engineering Information" (page 65) details MDMWeb resource and communication requirements.

What's new in this document

The following feature was added to this document:.

- "MDM Shelf View Enhancements" (page 12)

MDM Shelf View Enhancements

All references to ccagent in this document have been replaced with psvagent. Psvagent has changed to a full-time server and incorporates ccagent functionality.

Text conventions

This document uses the following text conventions:

- `nonproportional spaced plain type`

  Nonproportional spaced plain type represents system generated text or text that appears on your screen.

- **nonproportional spaced bold type**

  Nonproportional spaced bold type represents words that you should type or that you should select on the screen.

- *italics*

  Statements that appear in italics in a procedure explain the results of a particular step and appear immediately following the step.

  Words that appear in italics in text are for naming.

- [optional_parameter]

  Words in square brackets represent optional parameters. The command can be entered with or without the words in the square brackets.

- <general_term>

  Words in angle brackets represent variables which are to be replaced with specific values.

- UPPERCASE, lowercase

  In Preside Multiservice Data Manager (MDM), uppercase and lowercase letters that appear in UNIX commands and parameters must be matched exactly. The system matches upper and lowercase characters differently.

- |

  This symbol separates items from which you may select one; for example, ON|OFF indicates that you may specify ON or OFF. If you do not make a choice, a default ON is assumed.

- ...

  Three dots in a command indicate that the parameter may be repeated more than once in succession.

The term absolute pathname refers to the full specification of a path starting from the root directory. Absolute pathnames always begin with the slash (/) symbol. A relative pathname takes the current directory as its starting point, and starts with any alphanumeric character (other than /).

Mouse button functions

This documentation assumes default mouse button settings. The default functionality and relative position of these buttons are as follows:

- select, or left, mouse button
  Use this button for such tasks as selecting items that will be subject to further action.
- modify, or middle, mouse button
  Use this button for such tasks as drag and drop operations.
- menu, or right, mouse button
  Use this button for such tasks as opening pop-up menus.

Related documents

See the following documents for related information:

- 241-6001-011 *Preside MDM Fault Management User Guide*
- 241-6001-030 *Preside MDMWeb User Guide*
- 241-6001-100 *Preside MDM Installer Guide*

Chapter 1
Introduction

This section provides an overview of the MDMWeb software installation and includes the following topics:

- "What is MDMWeb?" (page 15)
- "MDMWeb architecture" (page 15)
- "Partitioning" (page 18)
- "Choosing an MDMWeb client installation option" (page 19)
- "Software requirements" (page 22)
- "Installation overview" (page 24)
- "MDMWeb license key" (page 26)

What is MDMWeb?

MDMWeb provides fault management capabilities similar to MDM Fault, but uses a common desktop environment. This software application operates as a stand-alone application.

MDMWeb architecture

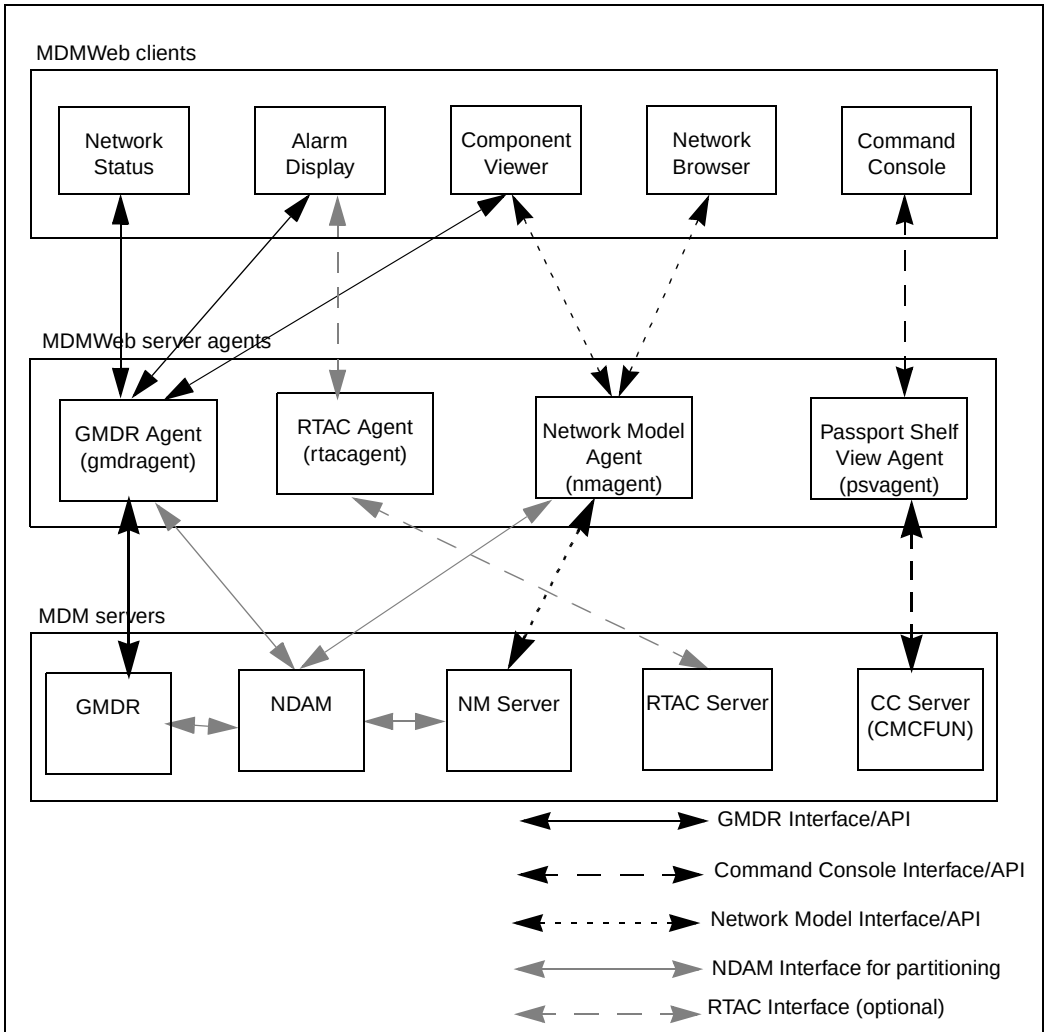
The MDMWeb application uses a client/server architecture. The server runs on a Solaris platform and functions as an intermediary between an MDMWeb client and the Preside Multiservice Data Manager (MDM). The MDMWeb client runs on multiple platforms that include Solaris, Windows 2000, Windows NT, and Windows XP, and functions as the network management user interface.

Within the MDMWeb application are a set of client and server agents built on top of the existing MDM fault management server architecture. MDMWeb clients open sessions with MDMWeb server agents. These server agents, in turn, connect to their corresponding MDM servers. The server agents are as follows:

- general management data router agent (gmdragent)
  The gmdragent collects alarm information, alarm counts, and status counts from the MDM general management data router (GMDR). If MDMWeb is set up to use partitioning, gmdragent collects alarm information from the Network Access Data Mediator (NDAM) rather than from GMDR. The real time alarm collection (rtagent) also collects alarm history information if configured to do so.
- network model agent (nmagent)
  The nmagent collects component and state information from the MDM Network Model (NM) Server. If MDMWeb is set up to use partitioning, nmagent collects state information from NDAM rather than from GMDR.
- passport shelf view agent (psvagent)
  The psvagent authenticates users with groups and sends commands to those groups. Partitioning does not impact the psvagent.
- real time alarm collection (rtacagent)
  The rtacagent gathers archived alarm information from RTAC. You can choose between using GMDR's alarms or RTAC's alarms. The default uses GMDR's alarms.
- multi-nodal name server (mnsdagent)
  The mnsdagent lets MDMWeb agents connect to any available port, instead of a fixed port. Mnsdagent is the only agent with a fixed port. The mnsdagent contains an interface on top of the Multi-nodal Name server (MNSD) that MDM Java applications use. For more information on mnsdagent, see 241-6001-310 *Preside MDM Server Reference Guide*.

The figure "Information flow between MDMWeb clients and MDM servers" (page 17) illustrates the flow of information among the MDMWeb clients, MDMWeb server agents, and MDM servers.

Figure 1
Information flow between MDMWeb clients and MDM servers



* The MDMWeb architecture includes the NDAM interface only if the network is partitioned.

Partitioning

MDMWeb provides an optional feature that lets you partition the network. Partitioning a network makes access to specific network segments available to specific users. Consequently, users can focus on specific network segments rather than the entire network. For example, partitioning a large network by region lets users readily view management information for their specific region.

MDMWeb does not require a separate workstation for every partition. A single MDM workstation manages partitioning.

When MDMWeb is set up with partitioning, the gmdragent and nmagent collect their management data from the Network Data Access Mediator (NDAM) rather than the General Management Data Router (GMDR) and the Network Model (NM) Server. Partitioning does not apply to the command console tool. Consequently, partitioning does not impact the psvagent. With careful planning of groups, however, the command console can mimic partitioning.

The following MDMWeb applications limit their data to the devices within their current partition:

- alarm display
- network browser
- component information viewer

The network status application does not limit its data. This application always displays counts for the entire network. If the alarm display is in alarm history mode and the RTACHISTORY option is enabled, then the data is also limited. The alarm display application always displays the alarm history of the entire network.

Before partitioning a network, plan what the partitions will be and which user IDs to assign to these partitions. After you complete the planning, create an NDAM device filter file for each partition. Next, associate MDMWeb user IDs with the partitions.

Partitioning is achieved through the use of NDAM device filter files. For example, if you partition by the geographic areas north, east, south, and west, you need four NDAM device filter files. Each filter file specifies the devices for the partition. You can specify the contents of the filter file in two ways. You can list the devices to include in the partition or you can combine partitions by listing the names of other existing device filter files.

The speed of filtering is a function of the number of lines in the partition filter file. The NDAM server slows as the number of lines in the filter file increases. When the network has consistent naming schemes for network nodes so that you can use wildcards, filter files are more efficient. For example, if you partition by geographic area and the nodes in the east consist of EM/EAST_1, EM/EAST_2, and EM/EAST_3, the contents of the device set filter file for the east need only contain the single entry
EM EAST*.

For details about implementing partitioning, see “Partitioning the network” (page 28).

Choosing an MDMWeb client installation option

The MDMWeb package consists of server and client software. You must install the MDMWeb server software on a Solaris workstation. However, you have a choice of platforms for the MDMWeb client software. The MDMWeb client runs on Solaris, Windows 2000, Windows NT, and Windows XP platforms.

About client applications

The MDMWeb client application is a standalone, Java-based application.

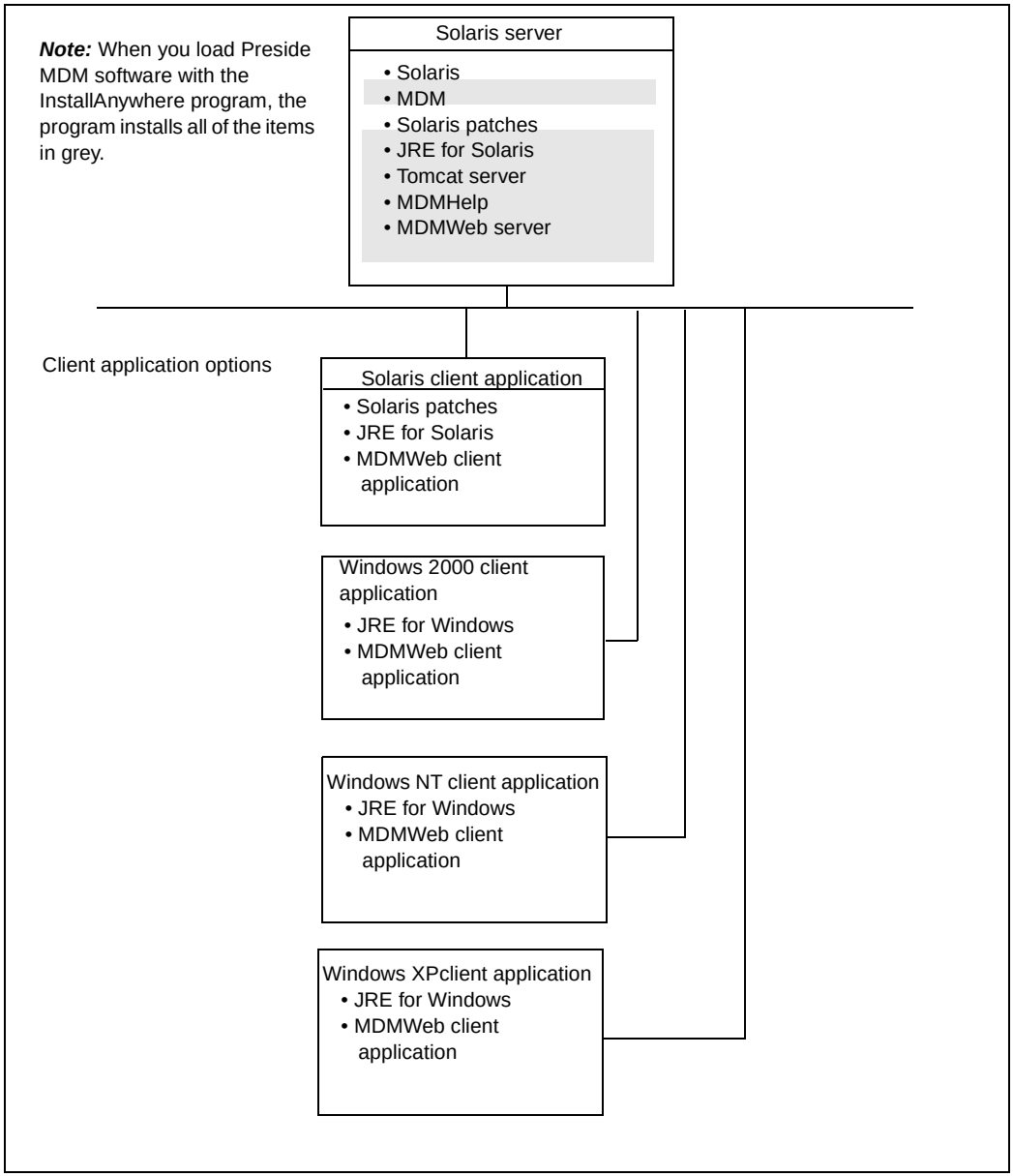
Available options

Since the MDMWeb client supports multiple platforms and deployment options, you can choose from the following list of client installation options:

- Solaris client application
- Windows 2000 client application
- Windows NT client application
- Windows XP client application

For an overview of available installation options, see the figure “MDMWeb supported platforms, deployment options and software requirements” (page 21).

Figure 2
MDMWeb supported platforms, deployment options and software requirements



Software requirements

For MDMWeb, you need to install software packages on both the server and the client. The required packages include both Nortel Networks software and the following third-party products:

- Java Runtime Environment (JRE)
- Solaris patches, and Windows service pack for JRE
- Tomcat Web server
- MDMHelp

See the Preside Multiservice Data Manager (MDM) Release Supplement for details about the supported software versions required for MDMWeb.

Server software requirements

For details about MDMWeb server software requirements, see the table "MDMWeb server software requirements and their availability from the MDM CD-ROM" (page 22).

Table 1
MDMWeb server software requirements and their availability from the MDM CD-ROM

Software requirements	MDM CD-ROM		
	Available on CD-ROM?	Package ID	Package Name or File Name
Solaris	No		
MDM	Yes		
Solaris patches for JRE	Yes		Aux

(Sheet 1 of 2)

Table 1 (continued)
MDMWeb server software requirements and their availability from the MDM CD-ROM

Software requirements	MDM CD-ROM		
	Available on CD-ROM?	**Package ID**	**Package Name or File Name**
JRE for Solaris	Yes	MagJ<JRE version> for example, MagJ140	Sun Java Runtime Environment - <JRE version> for example, Sun Java Runtime Environment - 1.4.0, Standard Edition. ***Note:*** The Java Plug-in is included with the MagJ<release> package.
MDMHelp	Yes	MDMHELP	MDMHelp Document Browser
(Sheet 2 of 2)			

Client application

For details about MDMWeb client application software requirements, see the table "MDMWeb client application software requirements and their availability from the MDM CD-ROM" (page 23).

Table 2
MDMWeb client application software requirements and their availability from the MDM CD-ROM

Software requirements	MDM CD-ROM		
	Available on CD-ROM?	**Package ID**	**Package Name or File Name**
For Solaris only, system software patches	Yes	AUX	<Solaris version>/ <patchid>.tar
(Sheet 1 of 2)			

Table 2 (continued)
MDMWeb client application software requirements and their availability from the MDM CD-ROM

Software requirements	MDM CD-ROM		
	Available on CD-ROM?	**Package ID**	**Package Name or File Name**
One of the following JRE versions that is appropriate for your installation:			
Solaris	Yes	MagJ<JRE version> for example, MagJ140	Sun Java Runtime Environment 1.4.0, Standard Edition
Windows	Yes	AUX	j2re<JRE version label>, for example, j2re 1_4_0_01-windows-i586.exe
One of the following MDMWeb client applications that is appropriate for your installation			
Solaris	Yes	MDMWeb_Install_ Solaris.bin	
Windows	Yes	MDMWeb_Install_ Windows.exe	

(Sheet 2 of 2)

Installation overview

You need to install some of the required software on the Preside Multiservice Data Manager (MDM) workstation and some on an MDMWeb client. For details, see the following:

- “Server installation overview” (page 25)
- “Client application” (page 23)
- “MDMWeb migration” (page 26)

Server installation overview

The following is an overview of the server installation tasks:

1 Install and configure Solaris software. For details, see 241-6001-100 *Preside MDM Installer Guide*.

2 Load Preside MDM with the InstallAnywhere program and configure Preside MDM. For details, see 241-6001-100 *Preside MDM Installer Guide*.

Note: When you follow the instructions contained in 241-6001-100 *Preside MDM Installer Guide*, you manually install the Solaris patches for the Java Runtime Environment (JRE) required for MDM Web, then you use the InstallAnywhere program to load Preside MDM software. The InstallAnywhere program automatically loads all of the software required for the Preside MDMWeb server. This software includes: the JRE for Solaris, the Tomcat web server, MDMHelp, and MDM Web server software.

3 Configure the MDMWeb server.

4 Start the MDMWeb server agents.

5 If required, change ports for multiple versions of Tomcat.

For details, see “Installing the MDMWeb server” (page 27).

Client application

The following is an overview of the client application installation tasks:

1 Install the JRE software.

2 Install and configure the MDMWeb client application software on a Solaris, Windows 2000, Windows NT, or Windows XP platform.

Note: The script sendwebcmd lets you use the invisible desktop, which provides a socket that listens to incoming commands and executes them as though they had been executed from the desktop. The script is packaged with the Solaris client application, and it is automatically installed.

3 Configure the MDMWeb client.

For details, see the section that is applicable to your system software:

- “Solaris client application installation procedures” (page 37)
- “Windows client application installation procedures” (page 53)

MDMWeb migration

If you are migrating from a previous version of MDMWeb, you must complete the following tasks:

- Install the new version of MDMWeb software.
- Start or restart the MDMWeb agents.

MDMWeb license key

Before you can run MDMWeb for the first time, you must have a license key. Nortel Networks provides this information along with the MDM software on the CD-ROM. If, for any reason, you do not have this information, contact your Nortel Networks account representative.

Chapter 2
Installing the MDMWeb server

This section provides detailed procedures for installing and configuring the MDMWeb server software.

- "MDMWeb server installation procedures" (page 27)
- "Starting the MDMWeb server agents" (page 31)
- "Server port numbers" (page 35)

MDMWeb requires

- MDMWeb server software on a Preside Multiservice Data Manager (MDM) network management workstation as described in this chapter.
- a client desktop as described in one of the following sections:
  - "Installing the MDMWeb client on Solaris" (page 37)
  - "Installing the MDMWeb client on Windows" (page 53)

MDMWeb server installation procedures

For MDMWeb, you need to install both Nortel Networks and third-party software from the Preside Multiservice Data Manager (MDM) CD-ROM. Because there are software interdependencies, you must complete the procedures in the following order:

1 "MDMWeb migration" (page 26) (if needed)

2 "Preparing to install MDMWeb server software" (page 28)

3 "Partitioning the network" (page 28)

4 "Configuring the MDMWeb server" (page 30)

5 “Displaying online server agent information” (page 32) (if required)

6 “Starting the MDMWeb gmdragent” (page 32)

7 “Starting the MDMWeb nmagent” (page 33)

8 “Starting the MDMWeb rtacagent” (page 34)

9 “Starting the MDMWeb mnsdagent” (page 34)

10 “Changing Apache port numbers” (page 35) (if required)

Preparing to install MDMWeb server software

Before you install the MDMWeb server software, ensure that you have a Sun workstation to install the MDMWeb server software on. Do the following on the workstation that you are going to use as the MDMWeb server:

1 Install and configure Solaris software. For details, see 241-6001-100 *Preside MDM Installer Guide*.

2 Load Preside MDM with the InstallAnywhere program and configure Preside MDM. For details, see 241-6001-100 *Preside MDM Installer Guide*.

Note: When you follow the instructions contained in 241-6001-100 *Preside MDM Installer Guide*, you manually install the Solaris patches for the Java Runtime Environment (JRE) required for MDMWeb, then you use the InstallAnywhere program to load Preside MDM software. The InstallAnywhere program automatically loads all of the software required for the Preside MDMWeb server. This software includes: the JRE for Solaris, the Apache web server, MDMHelp, and MDMWeb server software.

3 Verify that the MDM servers and applications are operational. If you are going to use partitioning, ensure that you verify that NDAM is also operational.

4 If required, set up partitions for the network. For details, see “Partitioning the network” (page 28).

Partitioning the network

Partitioning the network is optional. For an overview of partitioning, see “Partitioning” (page 18). If you use partitioning, verify that the NDAM server is set up and running. For details about setting up and starting NDAM, see 241-6001-310 *Preside MDM Server Reference Guide*.

Preparing for partitioning

1. Determine the partitions to use. For example, you might want to partition by city or by region.
2. Name each partition.
3. Determine the devices to include in each partition.

Partitioning

You can create partition files by defining the devices to include in the partition. If required, you can also create new partition files by combining existing partition files.

1. Using an editor such as vi, create an NDAM device filter for every partition using the name /opt/MagellanNMS/cfg/NDAM_<partition name>.dev

   For example, if you partition the network by the geographic areas north, east, south, and west, you need four device filter files. The partition names might be as follows:

   NDAM_NORTH.dev
   NDAM_EAST.dev
   NDAM_SOUTH.dev
   NDAM_WEST.dev

2. Add the following information to each device filter file:

   - a list of network model organization nodes (that is, any regions and any site) that precede the partition in the network hierarchy
     For example, if a node for country precedes the geographic area partition examples shown in the previous step, include the country node in the file.
   - the command Default*
     This command ensures devices under the nodes Default_Region and Default_Site are visible in the network browser
   - a list of devices to include in the partition
     Use wiildcards wherever possible for greater efficiency.

3. If needed, you can also create new partitions by combining existing device filter files. For example, to create a new partition for the northeast region, include the existing filter file names for the north and east:
   #include NDAM_EAST.dev
   #include NDAM_NORTH.dev

4 Using an editor such as vi, edit the MDMWeb server configuration file /opt/MagellanNMS/cfg/private/MDMWebUsers.cfg. For every MDMWeb user, add a line using the following format:

`<user ID>:<password>:[<partition name>]`

5 Restart the NDAM server.

6 Restart the gmdragent server.

7 Restart the MDMWeb servers.

Variable definitions

Variable	Definition
`partition name`	is the name assigned to the partition
`userid`	is a valid MDMWeb user ID
`password`	is a valid password for the MDMWeb user ID.
`partition name`	is the name assigned when you create the partition. If you omit the partition name and the entry line contains only the user ID and password, no partition is assigned to that user ID. The user, therefore, can view the entire network

Configuring the MDMWeb server

1 Using an editor such as vi, open the file /opt/MagellanNMS/cfg/private/MDMWebUsers.cfg.

2 Add the user ID names and passwords to the file:

`<userid>:<password>`

3 Save the changes and close the file.

Note: For more information on passwords, see 241-6001-040 *Preside MDM Security User Guide*.

Variable definitions

Variable	Definition
`userid`	is the name of the user ID
`password`	is the password associated with the user ID

Changing the MDMWeb password

Change the MDMWeb password to ensure network security.

Procedure steps

1. Using an editor such as vi, open the file /opt/MagellanNMS/cfg/private/MDMWebUsers.cfg.
2. Locate the userID that owns the password that you want to change.
3. On the line that contains the userID, type the new password between the first and second colon (:).
4. Save and close the file.

Variable definitions

Variable	Definition
`userid`	is the name of the user ID
`password`	is the password associated with the user ID

Starting the MDMWeb server agents

After you complete the MDMWeb server software installation, start the MDMWeb server agents. You need an account that is set up to use the Preside Multiservice Data Manager (MDM) Server Administration tool (SVMADM) to start the following:

- Passport shelf view agent (psvagent)
  Although psvagent behaves as an agent in MDMWeb, it is actually a fulltime server and is installed and started through the installation of base MDM software. If the server has been stopped and you need to start it, see the Passport Shelf View Server Agent (PSVAGENT) section in 241-6001-310 *Preside MDM Server Reference Guide*.

- general management data router agent (gmdragent)
- network model agent (nmagent)
- real time alarm collection (rtacagent)
- multi-nodal name server agent (mnsdagent)

Displaying online server agent information

This optional procedure lets you display online help information for the server agent command line.

1. Change paths to /opt/MagellanNMS/bin.
2. Type the following:

   <agent name> -h

Variable definitions

Variable	Definition
agent name	is one of psvagent, gmdragent, or nmagent
-h	is a command option to display online help information

Starting the MDMWeb gmdragent

1. From the Server Administration **Security** menu, select **Enable Editing**.

   The **SVM Enter Edit Password** dialog opens and prompts for a password.

2. If required, type a valid password and click **OK**.

   The **Server Administration** dialog to edit servers opens.

3. From the **Edit** menu, select **New**.
4. In the **Descriptive name** field, type the following information:

   MDMWeb GMDR Agent

5. In the **Startup command** field, type one of the following commands:

   /opt/MagellanNMS/bin/gmdragent

   /opt/MagellanNMS/bin/gmdragent -l

Note: The -l option turns logging on. The log file can be found in the directory /opt/MagellanNMS/data/log/MDMAgents.

6 Enable the **Automatic startup at reboot time** option.

7 Click **Save and Start**.

The data you entered is stored and the server is started.

8 From the **File** menu, select **Refresh server list**.

An updated server list is displayed, including the gmdragent.

Starting the MDMWeb nmagent

1 From the Server Administration **Security** menu, select **Enable Editing**.

The **SVM Enter Edit Password** dialog opens and prompts for a password.

2 If required, type a valid password and click **OK**.

The **Server Administration** dialog to edit servers opens.

3 From the **Edit** menu, select **New**.

4 In the **Descriptive name** field, type the following information:

```
MDMWeb NM Agent
```

5 In the **Startup command** field, type one of the following commands:

```
/opt/MagellanNMS/bin/nmagent
```

```
/opt/MagellanNMS/bin/nmagent -l
```

Note: The -l option turns logging on. The log file can be found in the directory /opt/MagellanNMS/data/log/MDMAgents.

6 Enable the **Automatic startup at reboot time** option.

7 Click **Save and Start**.

The data you entered is stored and the server is started.

8 From the **File** menu, select **Refresh server list**.

An updated server list is displayed, including the nmagent.

The MDMWeb server installation is now complete. Next, install the MDMWeb client. For details, refer to the installation instructions that are specific to your client platform:

- “Installing the MDMWeb client on Solaris” (page 37)

- "Installing the MDMWeb client on Windows" (page 53)

Starting the MDMWeb rtacagent

1. Ensure the real time alarm collection tool (rtaccol) is running. If rtaccol is not running there will be no rtac data for the agent to send. For more information on rtaccol, see i241-6001-310 *Preside MDM Server Reference Guide*.
2. From the Server Administration **Security** menu, select **Enable Editing**.

   The **SVM Enter Edit Password** dialog opens and prompts for a password.
3. If required, type a valid password and click **OK**.

   The **Server Administration** dialog to edit servers opens.
4. From the **Edit** menu, select **New**.
5. In the **Descriptive name field**, type the following information:

   `MDMWeb RTAC Agent`
6. In the **Startup command field**, type the following information:

   `/opt/MagellanNMS/bin/rtacagent`
7. Enable the **Automatic startup at reboot time** option.
8. Click **Save and Start**.

   The data you entered is stored and the server is started.
9. From the **File** menu, choose **Refresh server list**.

   An updated server list is displayed, including the rtacagent.

Starting the MDMWeb mnsdagent

1. From the Server Administration **Security** menu, select **Enable Editing**.

   The **SVM Enter Edit Password** dialog opens and prompts for a password.
2. If required, type a valid password and click **OK**.

   The **Server Administration** dialog to edit servers opens.
3. From the **Edit** menu, select **New**.
4. In the **Descriptive name** field, type the following information:

   `MDMWeb MNSD Agent`

5 In the **Startup command** field, type the following command:

```
/opt/MagellanNMS/bin/mnsdagent
```

6 Enable the **Automatic startup at reboot time** option.

7 Click **Save and Start**.

The data you entered is stored and the server is started.

8 From the **File** menu, choose **Refresh server list**.

An updated server list is displayed, including the rtacagent.

Server port numbers

MDMWeb agents can connect to any available port instead of being fixed to a specific port. A new agent, multi-nodal name server (mnsdagent) is the only agent with a fixed port. When an MDMWeb client makes a connection to an agent, the client contacts mnsdagent to look up the agent's current port. The mnsdagent communicates with the mnsd server, which stores the port communication.

You can customize the mnsdagent port (such as for firewalls) using the -p startup option. For example, mnsdagent -p 5432 starts the mnsdagent on port 5432. If the option -p <port value> is not specified, the default port is 5934. If the mnsdagent on the MDM server is started with a customized port number, the port number in the resources file on the MDMWeb client machine must be matched. See "Configuring the resource file to specify the mnsdagent port" (page 43).

Changing Apache port numbers

1 While logged on as root, change paths to the Apache directory:

```
cd /opt/MagellanContrib/apache/conf
```

2 Using an editor such as vi, open the file httpd.conf.

3 Replace the port value of 8080 with a new port value.

4 Save the changes and close the file httpd.conf.

5 Change paths to /etc/init.d/.

6 Execute the Apache control script to establish a command line interface connection to Apache:

```
apachectl<ApacheVersion> stop
apachectl<ApacheVersion> start
```

7 Change the Context Server configuration of the port variable to new port value by logging in to the MDM server and completing the following steps:

a. Source the MDM environment file:

```
csh
source /opt/MagellanNMS/bin/nmsch
```

b. Check the current configuration of the port variable:

```
ctxcmd -s WEBUNIHELPHOST
```

Notice the return value of the port. For example, “value is: 47.135.225.32:8080”.

c. Change the port number:

```
ctxcmd -pw WEBUNIHELPHOST <serverIP:portnumber>
```

The port number is successfully changed when you see the message, “successful context operation.”

d. Check the port number changed:

```
ctxcmd -s WEBUNIHELPHOST
```

Verify that the port value returned from the ctxcmd -s command shows the new port value.

Variable definitions

Variable	Definition
`ApacheVersion`	is the Apache software version, without the decimals, provided on the CD-ROM. For example, if the Apache version is 1.3.9, use the value 139 for the Apache version variable. The control script is then apachect1139 start.
`serverIP:portnumber`	serverIP is the IP address of the context server; portnumber is the new port value.

Chapter 3
Installing the MDMWeb client on Solaris

This section provides procedures for installing and configuring the MDMWeb client software on a Solaris platform and contains the following topics:

- “Solaris client application installation procedures” (page 37)
- “Removing the MDMWeb Solaris client application” (page 51)

Solaris client application installation procedures

To install the Solaris client application, perform the following procedures:

1 “Preparing to install MDMWeb Solaris client” (page 38)

2 “Installing Solaris patches for use with JRE” (page 38)

3 “Installing JRE for Solaris” (page 38)

4 “Installing MDMWeb Solaris client application” (page 40)

5 “Configuring the resource file for MDMWeb Solaris client” (page 41)

6 “Configuring the resource file for sound” (page 42) (if required)

7 “Configuring the resource file to specify the mnsdagent port” (page 43)

8 “Configuring the resource file to use a custom menu” (page 46)

9 “Configuring the resource file to edit CIV commands” (page 47)

10 “Adding the server host name to the /etc/hosts file” (page 49)

Preparing to install MDMWeb Solaris client

Before you install the MDMWeb client software, ensure that the MDMWeb server software has been installed. For details, see “Installing the MDMWeb server” (page 27)

Installing Solaris patches for use with JRE

You need to install Solaris patches before installing the Java Runtime Environment (JRE). You can obtain these patches from the following locations:

- MDM CD-ROM
- Sun Solaris web site

MDM CD-ROM

The MDM CD-ROM contains the Solaris patches for JRE in the directory Aux/5.7 or Aux/5.8. This file is a tar file of tar files. When you untar the file, you create various patch directories. Each patch directory includes a specific patch and README file that contains patch installation instructions. Read all README files before proceeding with the patch installation.

Sun Solaris web site

You can download Solaris patches for JRE from the Solaris web site at URL http://www.sun.com/Solaris/jre. This site contains the most recent patches.

Some patch installations can fail. If so, it is possible that your workstation already has the patches installed. Check the output from the install script for messages.

Installing JRE for Solaris

The JRE plug-in is included with the JRE software. When you install the MagJ<release> package, both the JRE software and the JRE plug-in are installed.

1. Log on as root.
2. Insert the MDM CD-ROM into the Solaris client desktop CD-ROM disk drive, pattern side up.
3. Open a UNIX window using the CDE window manager.

4 Start the Sun admintool by typing the following command in the UNIX window:

```
/usr/bin/admintool &
```

The **Admintool: Users** window opens.

5 On the **Browse** menu, click **Software**.

The **Admintool: Software** window opens and lists all software installed on the workstation.

6 From the **Edit** menu, click **Add**.

The **Admintool: Set Source Media** dialog opens.

7 From the S**oftware Location list** box, select **CD with Volume Management**.

8 Type the correct path name of the source media:

```
/cdrom/cdrom0
```

9 Click **OK**.

The **Admintool: Add Software** dialog opens and lists the software on the CD-ROM.

10 From the list of software, select the version of Sun Java Runtime Environment provided on the CD-ROM, for example Sun Java Runtime Environment 1.4.0.

11 Click Add.

12 Verify that the JRE software for Solaris installation is successful. Check for the existence of the JRE directories:

```
cd /opt/MagellanContrib/JRE/
Solaris_JRE_<VersionNumber>
ls -l
```

Variable definitions

Variable	Definition
`VersionNumber`	is the version number of the JRE software provided on the CD-ROM. For example, if you use JRE version 1.4.0, the directory name is Solaris_JRE_1.4.0 and the full pathname is /opt/MagellanContrib/JRE/Solaris_JRE_1.4.0.

Installing MDMWeb Solaris client application

1 With the MDM CD-ROM in the CD-ROM drive, type the following command in a UNIX window:

```
cd /cdrom/cdrom0
```

CAUTION

Maintain resource file backup if you already have the MDMWeb client package installed. The backup file is only for reference. The resource file may change with a new release.

Before you run the installAnywhere program, ensure that you have a backup copy of the most recent version of the MDMWeb resource file <install path>/MDMWeb/cfg/WebNmsRes.txt. The installAnywhere program will delete the existing resource file.

2 Run the InstallAnywhere program. This program guides you through the installation process with a series of prompts. Start the program by entering the following command:

```
NMSWeb_Install_Solaris.bin
```

When all prompts have been answered and the InstallAnywhere program is finished, the **Install Complete** window displays.

a. The **Choose Install Folder** window prompts you to identify the location for the files about to be installed. It is recommended that you install the files in the directory /opt/Nortel.

It is recommended that users who will be using the client install it in their local directory under their own userID. If this package is being installed by root, change the permissions on the files webnmsc and webnmsi to make them executable by all users.

If you are going to use the invisible desktop, you need to execute the script sendwebcmd. The script is packaged with the Solaris client application, and it is automatically installed.

b. The **Choose Link Location** window prompts you about whether or not you want to create links. If you choose to create links to the MDMWeb executable programs, the link location can be in your home directory or another directory in the file system.

c. The **Choose Java Virtual Machine** window prompts you to identify a Java Virtual Machine. From the list of virtual machines already

installed, select the Java Virtual Machine under the directory /opt/MagellanContrib/JRE/current/bin.

d. If it is not listed under the selection window, click the mouse on the **Choose another action** button. In the dialog that opens, do the following:

In the **Enter path or folder name** text box, type /opt/MagellanContrib/JRE/current/bin.

Then in the **Enter file name** text box, type java.

e. Click **OK**.

3 To exit InstallAnywhere, click **Done**.

Note: The InstallAnywhere program also lets you remove, or uninstall, the MDMWeb client application.

4 If you installed the script sendwebcmd, check the file permissions to ensure that it is accessible by all users.

Configuring the resource file for MDMWeb Solaris client

To configure the MDMWeb Solaris client, edit the resource file, making the appropriate changes in the SYSTEM block.

CAUTION
Maintain resource file backup
Before you change the resource file, ensure that you have a backup copy of the most recent version. An error in the resource file can cause problems for the client.

1 While logged on as root, open the resource file <install path>/MDMWeb/cfg/WebNmsRes.txt

2 Set the SERVERHOST parameter. Specify the MDMWeb server host name or the MDMWeb server host IP address:

```
SERVERHOST = <host name>|<"ip address">
```

3 Save the changes and close the file.

Variable definitions

Variable	Definition
`install path`	is the path to the MDMWeb file system identified during the MDMWeb client installation. For example, /opt/Nortel/MDMWeb/cfg/WebNmsRes.txt.
`host name`	is the name of the MDMWeb server host
`"ip address"`	is the IP address of the MDMWeb server host

Configuring the resource file for sound

The alarm display application provides an option to play a sound when alarms arrive in the alarm display. This lets you associate a particular sound with a particular alarm severity. For example, a beep occurs each time the alarm display receives a critical alarm.

If your hardware supports sound and you want to use the sound option, make the following changes to the resource file.

CAUTION
Maintain resource file backup
Before you change the resource file, ensure that you have a backup copy of the most recent version. An error in the resource file can cause problems for the client.

1 While logged on as root, open the resource file <install path>\MDMWeb\cfg\WebNmsRes.txt

2 For every sound resource you want to use, add the following commands:

```
SOUND <soundname>
BEGIN
  SOUNDURL = file:/C:\\WINNT\Media\\notify.wav
END
```

3 Add the following commands to define sounds for each alarm severity:

```
SOUNDSCHEME
BEGIN
 CRITICALSOUND = <critical soundname>
```

```
  MAJORSOUND = <major soundname>
  MINORSOUND = <minor soundname>
  WARNINGSOUND = <warning soundname>
END
```

Variable definitions

Variable	Definition
`install path`	is the path to the MDMWeb file system identified during the MDMWeb client installation. For example, /opt/Nortel/MDMWeb/cfg/WebNmsRes.txt.
`soundname`	is the name of the sound resource
`soundurl`	is the location of the sound resource file
`critical soundname`	is the name of the critical sound resource
`major soundname`	is the name of the major sound resource
`minor soundname`	is the name of the minor sound resource
`warning soundname`	is the name of the warning sound resource

If your system does not have sound resources defined, you can use the default system beep. For example, to play a beep sound when a critical alarm occurs, use the variable SYSTEMBEEP in the sound definition command:

```
CRITICALSOUND = SYSTEMBEEP
```

Configuring the resource file to specify the mnsdagent port

MDMWeb agents can connect to any available ports instead of to one specific port. The mnsdagent is the only agent with a fixed port. When an MDMWeb client makes a connection to an agent, the client contacts the mnsdagent to look up the agent's current port. The resource file maintains a list of service names, which are the names the mnsdagent uses to look up port numbers.

You can modify the resource file to specify the port the mnsdagent uses. If you do not specify the port, you must specify the servicename.

CAUTION

Maintain resource file backup

Before you change the resource file, ensure that you have a backup copy of the most recent version. An error in the resource file can cause problems for the client.

1 While logged on as root, open the resource file <install path>/MDMWeb/cfg/WebNmsRes.txt

2 In the service block of the resource file, specify the port number that the mnsdagent will listen on.

```
SERVER MNSDAGENT
BEGIN
  PORT = <port number>

END
```

Note: If you do not specify the port number, you must specify the servicename. In the example, the MDMWeb client uses mnsdagent to look up the specific port associated with gmdragent.

Example:

```
SERVER GMDRAGENT
BEGIN
  SERVICENAME = “gmdragent”

END
```

3 Save the changes and close the file.

Variable definitions

Variable	Definition
`install path`	is the path to the MDMWeb file system identified during the MDMWeb client installation. For example, /opt/Nortel/MDMWeb/cfg/WebNmsRes.txt.
`port number`	is the port number the mnsdagent listens on

Configuring the resource file to obtain alarms from RTAC

The alarm display application gathers its alarm history information from a general management data router (GMDR) server. The GMDR server has limited storage for alarm history.

You can configure the resource file to obtain alarm history information from the real time alarm collection (RTAC) tool. You do this by changing the RTACHISTORY tag in the alarm display block of the resource file. Alarm history information will be delivered to MDMWeb by the rtacagent server.

CAUTION

Maintain resource file backup

Before you change the resource file, ensure that you have a backup copy of the most recent version. An error in the resource file can cause problems for the client.

1 While logged on as root, open the resource file <install path>/MDMWeb/cfg/WebNmsRes.txt

2 Change the RTACHISTORY tag to true in the alarm display block of the resource file.

```
APP ALARMBROWSER
BEGIN
  /* Alarm browser fields */
  RTACHISTORY = TRUE

END
```

Note: If the RTACHISTORY tag is set to false, the alarm history will be gathered by GMDR.

3 Save the changes and close the file.

Variable definitions

Variable	Definition
`install path`	is the path to the MDMWeb file system identified during the MDMWeb client installation. For example, /opt/Nortel/MDMWeb/cfg/WebNmsRes.txt.

Configuring the resource file to use a custom menu

You can integrate your own tools within MDMWeb by using a custom menu. These tools can then be launched from within MDMWeb's launch pad.

You define the commands that appear in the custom menu by specifying the MENUNAME and COMMAND fields in the EXTERNALCOMMAND block in the resource file.

The MENUNAME specifies the string that appears for the command in the custom menu. The COMMAND field specifies the string that executes the command.

CAUTION
Maintain resource file backup
Before you change the resource file, ensure that you have a backup copy of the most recent version. An error in the resource file can cause problems for the client.

1 While logged on as root, open the resource file <install path>/MDMWeb/cfg/WebNmsRes.txt

2 In the EXTERNALCOMMAND block of the resource file, specify a custom menu.

```
EXTERNALCOMMAND <command name>
BEGIN
 MENUNAME = <"menu_display_string">
 COMMAND = <"command_to_execute">

END
```

The example sets up a custom menu command which creates a telnet session to the host, hostx.

Example:

```
EXTERNALCOMMAND TelnetHostX
BEGIN
 MENUNAME = "Telnet to hostx"
 COMMAND = "telnet hostx"

END
```

3 Save the changes and close the file.

Variable definitions

Variable	Definition
`install path`	is the path to the MDMWeb file system identified during the MDMWeb client installation. For example, /opt/Nortel/MDMWeb/cfg/WebNmsRes.txt.
`menu_display_string`	is the name that appears in the Custom menu
`command_to_execute`	is the executable command

Configuring the resource file to edit CIV commands

The Command menu of the component information viewer (CIV) contains diagnostic commands that you can use to diagnose network problems. These commands are displayed by default. For a listing of the CIV default commands, see 241-6001-011 *Preside MDM Fault Management User Guide*.

In some cases, you may wish to add your own commands to the Command menu. You can do this by configuring the DIAGNOSTIC_COMMAND block in the resource file.

The DIAGNOSTIC_COMMAND block contains three fields that you need to edit:

- The DISPLAY field is the string that appears on the menu for the command.
- The COMMAND field is the actual command which is executed on the device.
- The DEVICE field is determines which devices this command is applies to. This field may also contain parts of the subcomponent hierarchy if the command is only valid for specific subcomponents.

CAUTION

Maintain resource file backup

Before you change the resource file, ensure that you have a backup copy of the most recent version. An error in the resource file can cause problems for the client.

1 While logged on as root, open the resource file <install path>/MDMWeb/cfg/WebNmsRes.txt

2 In the DIAGNOSTIC_COMMAND block, create the commands you wish to display in the Command menu.

```
DIAGNOSTIC_COMMAND <command name>
BEGIN
 DISPLAY = <“display_name”>
 COMMAND = <“command_to_execute”>
 DEVICE = <device>

END
```

Note: For multiple devices, separate each by the | symbol.

In the example, the Display Software command for Passport devices is created.

Example:

```
DIAGNOSTICCOMMAND DisplaySoftwareCommand
BEGIN
 DISPLAY = “Display Software”
 COMMAND = “display -p sw”
 DEVICE = EM

END
```

3 To display the command name in the Command menu, modify the DIAGNOSTIC_COMMAND_MENU list. Enter the command display names that you created in step 2.

```
LIST DIAGNOSTIC_COMMAND_MENU
BEGIN
 <command>
 <command>
```

```
<command>

END
```

4 Save the changes and close the file.

Variable definitions

Variable	Definition
`display_name`	is the command name that is displayed in the Command menu
`command_to_execute`	is the executable command. For example, display -p sw
`device`	is the device the command applies to. For example, EM.
`commands`	is the name of the command that will display in the Command menu. You can add as many commands as you wish.

Adding the server host name to the /etc/hosts file

1 While logged on as root, display the contents of the file /etc/hosts:

```
more /etc/hosts
```

2 Check that the file /etc/hosts contains an entry for the IP address and host name of the Solaris MDMWeb client. If the entry is missing, add the entry using an editor such as vi.

```
<ip address> <host name>
```

Variable definitions

Variable	Definition
`ip address`	is the IP address of the Solaris MDMWeb server
`host name`	is the name of the Solaris MDMWeb server

Specifying the installed Netscape path

MDMWeb uses Netscape to view online documentation. You must set the environment variable path to include the Netscape installed directory for the help to work. If multiple users are using the system, you must set the environment variables in each user's environment in one of the following locations:

- at the command line
- in a .cshrc file
- in a .profile file

1 Perform one of the following procedures substeps:

a. If you are using C shell (csh), enter the following command to append the path to the existing PATH variable:

```
% set path = ($path <full_Netscape_installed_path>)
```

b. If you are using Bourne shell (sh) or Korn shell (ksh), enter the following commands:

```
% PATH=<full_Netscape_installed_path>:$PATH
% export PATH
```

Variable definitions

Variable	Definition
`full_Netscape_installed_path`	is the full pathname for the installed Netscape

Removing the MDMWeb Solaris client application

If you need to, you can remove (or uninstall) the MDMWeb client application.

CAUTION

Maintain resource file backup if you already have the MDMWeb client package installed. The backup file is only for reference. The resource file may change with a new release.

Before you run the uninstall program, ensure that you have a backup copy of the most recent version of the MDMWeb resource file <install path>/MDMWeb/cfg/WebNmsRes.txt. The uninstall program will delete the existing resource file.

1. Start the uninstall program by entering the following command:

   `<install path>/MDMWeb/UninstallerData/Uninstall_MDMWebSolaris`

2. Answer all prompts.

3. When the uninstall program completes, click **Exit**.

Variable definitions

Variable	Definition
`install path`	is the path to the MDMWeb file system identified during the MDMWeb client installation. For example, /opt/Nortel/MDMWeb/cfg/WebNmsRes.txt.

Chapter 4
Installing the MDMWeb client on Windows

This section provides detailed procedures for installing and configuring the MDMWeb client software on Windows platforms and contains the following topics:

- “Windows client application installation procedures” (page 53)
- “Removing the MDMWeb Windows client application” (page 62)

Windows client application installation procedures

To install the Windows client, perform the following procedures:

1 “Preparing to install MDMWeb client application software” (page 53)

2 “Installing JRE for Windows” (page 54)

3 “Installing the MDMWeb Windows client application” (page 54)

4 “Configuring the resource file for MDMWeb Windows client” (page 55)

5 “Configuring the resource file for sound” (page 56) (if needed)

6 “Configuring the resource file to obtain alarms from RTAC” (page 57)

7 “Configuring the resource file to use a custom menu” (page 58)

8 “Configuring the resource file to edit CIV commands” (page 60)

Preparing to install MDMWeb client application software

1 Before you install the MDMWeb client application software, ensure that the MDMWeb server software is installed. For details, see “Installing the MDMWeb server” (page 27).

Installing JRE for Windows

The JRE plug-in is included with the JRE software. When you install the MagJ<release> package, both the JRE software and the JRE plug-in are installed.

1. Insert the MDM CD-ROM into the CD-ROM drive, pattern side up.
2. Display the list of files on the MDM CD-ROM using Windows Explorer and locate the JRE win.exe file. The file name has the following format:

   jre<Version>-win.exe
3. Copy the JRE win.exe file onto the hard disk by double-clicking its file icon.

   The JRE win.exe file installs on the hard drive with the path C:\Program Files\JavaSoft\Jre.

Variable definitions

Variable	Definition
`Version`	is the JRE software version provided on the CD-ROM. For example, if the JRE version is 1.4.0_01, then the file name is j2re-1_4_0_01-windows-i586.exe

Installing the MDMWeb Windows client application

1. Start Windows Explorer.
2. Click the icon that represents the CD-ROM drive.

   The contents of the MDM CD-ROM display on the right.

CAUTION

Maintain resource file backup if you already have the MDMWeb client package installed. The backup file is only for reference. The resource file may change with a new release.

Before you run the installAnywhere program, ensure that you have a backup copy of the most recent version of the MDMWeb resource file <install path>/MDMWeb/cfg/WMSWinRes.txt. The installAnywhere program will delete the existing resource file.

3 Start the InstallAnywhere script. This program guides you through the installation process with a series of prompts. To start this program, double-click the MDMWeb_Install_Windows.exe icon.

When all prompts have been answered and the InstallAnywhere program is finished, the Install Complete window displays.

a. The Choose Install Folder window prompts you to identify the location for the files about to be installed. It is recommended that you install the files in the directory \C:\Program Files\.

4 To exit InstallAnywhere, click **Done**.

Configuring the resource file for MDMWeb Windows client

Configure the MDMWeb server host name information in the resource file, making the appropriate changes in the SYSTEM block.

CAUTION

Maintain resource file backup

Before you change the resource file, ensure that you have a backup copy of the most recent version. An error in the resource file can cause problems for the client.

1 Open the file C:\<install path>\MDMWeb\cfg\WMSWinRes.txt

Example:

```
<install path>\MDMWeb\cfg\WMSWinRes.txt.
```

2 Set the SERVERHOST parameter to the MDMWeb server host name; or, set the SERVERHOST parameter to the MDMWeb server host IP address:

```
SERVERHOST = <host name>|<“ip address”>
```

3 Save the changes and close the file.

Variable definitions

Variable	Definition
`install path`	is the path to the MDMWeb file system identified during the MDMWeb client installation
`host name`	is the name of the MDMWeb server host
`ip address`	is the IP address of the MDMWeb server host

Configuring the resource file for sound

The alarm display application provides an option to play a sound when alarms arrive in the alarm display. This lets you associate a particular sound with a particular alarm severity. For example, a beep occurs each time the alarm display receives a critical alarm.

If your hardware supports sound and you want to use the sound option, make the following changes to the resource file.

CAUTION
Maintain resource file backup
Before you change the resource file, ensure that you have a backup copy of the most recent version. An error in the resource file can cause problems for the client.

1 While logged on as root, open the resource file <install path>\MDMWeb\cfg\WMSWinRes.txt.

2 For every sound resource you want to use, add the following commands:

```
SOUND <soundname>
BEGIN
  SOUNDURL = file:/C:\\WINNT\\Media\\notify.wav
END
```

3 Add the following commands to define sounds for each alarm severity:

```
SOUNDSCHEME
BEGIN
  CRITICALSOUND = <critical soundname>
  MAJORSOUND = <major soundname>
  MINORSOUND = <minor soundname>
  WARNINGSOUND = <warning soundname>
END
```

Variable definitions

Variable	Definition
`install path`	is the path to the MDMWeb file system identified during the MDMWeb client installation. For example, /opt/Nortel/MDMWeb/cfg/WMSWinRes.txt.
`soundname`	is the name of the sound resource
`soundurl`	is the location of the sound resource file
`critical soundname`	is the name of the critical sound resource
`major soundname`	is the name of the major sound resource
`minor soundname`	is the name of the minor sound resource
`warning soundname`	is the name of the warning sound resource

If your system does not have sound resources defined, you can use the default system beep. For example, to play a beep sound when a critical alarm occurs, use the variable SYSTEMBEEP in the sound definition command:

```
CRITICALSOUND = SYSTEMBEEP
```

Configuring the resource file to obtain alarms from RTAC

The alarm display application gathers its alarm history information from a general management data router (GMDR) server. The GMDR server has limited storage for alarm history.

You can configure the resource file to obtain alarm history information from the real time alarm collection (RTAC) tool. You do this by changing the RTACHISTORY tag in the alarm display block of the resource file. Alarm history information will be delivered to MDMWeb by the rtacagent server.

CAUTION

Maintain resource file backup

Before you change the resource file, ensure that you have a backup copy of the most recent version. An error in the resource file can cause problems for the client.

1 While logged on as root, open the resource file <install path>\MDMWeb\cfg\WebNmsRes.txt

2 Change the RTACHISTORY tag to true in the alarm display block of the resource file.

```
APP ALARMBROWSER
BEGIN
  /* Alarm browser fields */
  RTACHISTORY = TRUE

END
```

Note: If the RTACHISTORY tag is set to false, the alarm history will be gathered by GMDR.

3 Save the changes and close the file.

Variable definitions

Variable	Definition
`install path`	is the path to the MDMWeb file system identified during the MDMWeb client installation. For example, /opt/Nortel/MDMWeb/cfg/WMSWinRes.txt.

Configuring the resource file to use a custom menu

You can integrate your own tools within MDMWeb by using a custom menu. These tools can then be launched from within MDMWeb's launch pad.

You define the commands that appear in the custom menu by specifying the MENUNAME and COMMAND fields in the EXTERNALCOMMAND block in the resource file.

The MENUNAME specifies the string that appears for the command in the custom menu. The COMMAND field specifies the string that executes the command.

CAUTION

Maintain resource file backup

Before you change the resource file, ensure that you have a backup copy of the most recent version. An error in the resource file can cause problems for the client.

1 While logged on as root, open the resource file <install path> \MDMWeb\cfg\WMSWinRes.txt.

2 In the EXTERNALCOMMAND block of the resource file, specify a custom menu.

```
EXTERNALCOMMAND <command name>
BEGIN
 MENUNAME = <“menu_display_string”>
 COMMAND = <“command_to_execute”>

END
```

The example sets up a custom menu command which creates a telnet session to the host, hostx.

Example:

```
EXTERNALCOMMAND TelnetHostX
BEGIN
 MENUNAME = “Telnet to hostx”
 COMMAND = “telnet hostx”

END
```

3 Save the changes and close the file.

Variable definitions

Variable	Definition
`install path`	is the path to the MDMWeb file system identified during the MDMWeb client installation. For example, /opt/Nortel/MDMWeb/cfg/WMSWinRes.txt.
`menu_display_string`	is the name that appears in the Custom menu
`command_to_execute`	is the executable command

Configuring the resource file to edit CIV commands

The Command menu of the component information viewer (CIV) contains diagnostic commands that you can use to diagnose network problems. These commands are displayed by default. For a listing of the CIV default commands, see 241-6001-011 *Preside MDM Fault Management User Guide*.

In some cases, you may wish to add your own commands to the Command menu. You can do this by configuring the DIAGNOSTIC_COMMAND block in the resource file.

The DIAGNOSTIC_COMMAND block contains three fields that you need to edit:

- The DISPLAY field is the string that appears on the menu for the command.
- The COMMAND field is the actual command which is executed on the device.
- The DEVICE field is determines which devices this command is applies to. This field may also contain parts of the subcomponent hierarchy if the command is only valid for specific subcomponents.

CAUTION

Maintain resource file backup

Before you change the resource file, ensure that you have a backup copy of the most recent version. An error in the resource file can cause problems for the client.

1. While logged on as root, open the resource file <install path>\MDMWeb\cfg\WMSWinRes.txt.

2. In the DIAGNOSTIC_COMMAND block, create the commands you wish to display in the Command menu.

```
DIAGNOSTIC_COMMAND <command name>
BEGIN
 DISPLAY = <“display_name”>
 COMMAND = <“command_to_execute”>
 DEVICE = <device>

END
```

   Note: For multiple devices, separate each by the | symbol.

   In the example, the Display Software command for Passport devices is created.

Example:

```
EXTERNALCOMMAND DisplaySoftwareCommand
BEGIN
 DISPLAY = “Display Software”
 COMMAND = “display -p sw”
 DEVICE = EM

END
```

3. To display the command name in the Command menu, modify the DIAGNOSTIC_COMMAND_MENU list. Enter the command display names that you created in step 2.

```
LIST DIAGNOSTIC_COMMAND_MENU
BEGIN
 <command>
 <command>
 <command>

END
```

4. Save the changes and close the file.

Variable definitions

Variable	Definition
`display_name`	is the command name that is displayed in the Command menu
`command_to_execute`	is the executable command. For example, display -p sw
`device`	is the device the command applies to. For example, EM.
`commands`	is the name of the command that will display in the Command menu. You can add as many commands as you wish.

Removing the MDMWeb Windows client application

If you need, you can remove (or uninstall) the MDMWeb client application.

CAUTION

Maintain resource file backup if you already have the MDMWeb client package installed. The backup file is only for reference. The resource file may change with a new release.

Before you run the uninstall program, ensure that you have a backup copy of the most recent version of the MDMWeb resource file <install path>/MDMWeb/cfg/WMSWinRes.txt. The uninstall program will delete the existing resource file.

1 Start the uninstall program by entering the following command:

`<install path>\MDMWeb\UninstallerData\Uninstall MDMWebWindows.exe`

Example:

```
C:\Program Files\MDMWeb\UnistallerData\Uninstall
MDMWeb.exe
```

The uninstall program starts and displays the uninstall window.

2 Answer all prompts.

3 When the uninstall program completes, click **Exit**.

Variable definitions

Variable	Definition
`install path`	is the path to the MDMWeb file system identified during the MDMWeb client installation. For example, /opt/Nortel/MDMWeb/cfg/WMSWinRes.txt.

Appendix A
Engineering Information

This section provides engineering information for MDMWeb and contains the following topics:

- "Resource requirements" (page 65)
- "Communication requirements" (page 66)
- "MDMWeb performance" (page 66)

Resource requirements

Resource requirements are as follows:

- MDMWeb server supports a maximum of 10 clients.
- MDMWeb server minimum requirements are as follows:
  - a Sun Ultra 10 Workstation
  - 128 Mbyte RAM
  - 2 Gbyte hard disk
- MDMWeb client minimum requirements are as follows:
  - for Solaris, Sun Ultra 1 or Ultra 10 workstation with 256 Mbyte RAM
  - for Windows 2000, 128 Mbyte RAM
  - for Windows NT, 128 Mbyte RAM
  - for Windows XP, 128 Mbyte RAM

Communication requirements

The communication requirements are as follows:

- TCP/IP based socket communication between MDMWeb server and MDMWeb client
- TCP/IP based IPI protocol between MDMWeb server and MDM server

MDMWeb performance

MDMWeb clients are expected to have similar performance to current Xterm-based clients from the MDM server workstation.

Index

A

Apache
  changing port numbers 35

C

client application 19
  installing on Solaris 37–??
  installing on Windows 53–61
client installation options 19
communication requirements 66

D

device filters 18

G

general management data router agent. See gmdragent
general management data router. See GMDR
GMDR 18
gmdragent 16, 32
  starting 32

I

installation
  overview 24
installing
  JRE for Solaris 38
  Solaris client application 37–??
  Solaris patches for client
    Solaris patches for client installing 38
  Windows client application 53–61

J

JRE for Solaris
  installing 38

M

MDMWeb
  architecture 15
  client software 19
  description 15
  server software 19
  supported platforms 15
mnsdagent 16, 32
  starting 34
multi-nodal name server agent. See mnsdagent

N

NDAM 16, 18
network data access mediator. See NDAM
network model agent. See nmagent
nmagent 16, 32
  starting 33

P

partitioning 16, 28–30
Passport shelf view agent. See psvagent.
port numbers
  Apache 35

port numbers, server 35
psvagent 16, 31

R

real time alarm collection agent. See rtacagent
removing
  Solaris client application 51
  Windows client application 62
resource requirements 65
rtacagent 16, 32
  starting 34

S

sendwebcmd script 25
server
  configuring 30
server agents
  gmdragent 16
  mnsdagent 16
  nmagent 16
  psvagent 16
  rtacagent 16
  starting 31
server port numbers 35
software requirements
  client application 23
  server 22
Solaris 15
Solaris client application
  removing 51
  sendwebcmd script 25

W

Windows 2000 15
Windows client application
  removing 62
Windows NT 15
Windows XP 15

Preside Multiservice Data Manager

MDMWeb

Installation Guide

Release R14.3

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