Appendix A: ASM Pro quick installation guide

This appendix shows you how to set up ASM Pro and its agent software.

Installing ASM Pro

System requirements

ASM Console

- Intel Pentium or higher processor
- 64MB of RAM (128MB recommended)
- 20MB free hard disk space
- Microsoft Windows 95, Windows 98, Windows NT, or Windows 2000 operating system
- Ethernet card
- Modem

ASM Server and Desktop agents

- Intel Pentium or higher processor
- 64MB of RAM (128MB recommended)
- 20MB free hard disk space
- Novell NetWare, SCO OpenServer, SCO UnixWare, Linux RedHat, Microsoft Windows NT, or Windows 2000 operating system
- Ethernet card
- Modem (optional for RAS/OOB*)

System setup

Make sure that your computer meets the system requirements before proceeding. You may also want to change your screen to 800 x 600 resolution or higher for optimum viewing.

* RAS (Remote Access Services) and OOB (Out-of-Band)

Installing ASM Console

To install ASM Console:

1. Insert the Resource CD into the CD-ROM drive on your system.
2. Click on the Startup icon.
3. Click on Software Installer, and select ASM Console.
4. Follow the Installation Wizard.
5. Click Finish to complete the installation.

Note: Remember to remove all diskettes or CDs from the drives before rebooting the system.

Installing ASM Server Agent

ASM Server Agent can be installed on four different operating systems. The installation diskette contains the installation files for the following operating systems:

- Novell NetWare 5.x, 4.11
- SCO OpenServer 5.0
- SCO Unixware 7.x
- Microsoft Windows NT 4.0 Server
- Linux RedHat 6.2
- Microsoft Windows 2000 (Server and Advanced Server)

Installing the Novell NetWare Server Agent

Note: Make sure the SNMP (Simple Network Management Protocol) is configured properly.

ASM Server Agent requires SNMP.NLM running with *Control Community set to 'public'*; to allow ASM Console to communicate with ASM Server Agent.

ASMAGENT.NCF is the script file that loads all related modules of ASM Server Agent. To load the SNMP use the following command:

load snmp control=public

If you load SNMP.NLM before ASM Server Agent, make sure that the Control Community has been set up properly. For more information, please refer to related documents about the SNMP Agent for NetWare (NetWare SNMP).

Check AUTOEXEC.NCF to see if you have loaded SNMP. Notice that because of the auto loading feature of NLM, you can not directly find where SNMP is loaded. The most common module is TCPIP.NLM which auto loads SNMP.NLM. If you are using TCP/IP, load SNMP by using the command line *load snmp control=public* before loading TCPIP.

For NetWare 4.x and Netware 5.x users, if you are using INETCFG.NLM to configure the network, be sure to configure SNMP and make sure that the SNMP.NLM is running with *Control Community set to 'public'*.

To install the Novell NetWare Server Agent:

1. Use the diskette maker utility on the Startup Resource CD to create your NetWare installation diskette.
2. Insert the diskette into the NetWare server's drive.
3. At the NetWare server console, type:

   Load A: setup
4. You are asked if you want to install the ASM Server Agent on your system. Select Yes to install.

   The setup program detects the NetWare version and the model of the server. It copies related NLM files into the SYS: SYSTEM directory and C: of your NetWare server, and some needed command lines are added into AUTOEXEC.NCF in SYS: SYSTEM.
5. If the Mylex GAM driver and GAM service is installed in your NetWare system, the setup program asks you to install the Bbp agent.
6. Press any key to continue. The ASM Server Agent Configuration Utility is launched.
7. The Password option is highlighted. Set up a password, and exit the utility.

Note: A password is required when using the ASM Console to remotely change or set any values for the agent, such as threshold values and any trap handling method. If the password is disabled, there is no security protection for the agent when the Console tries to change or set these values.

8. Reboot the system to activate the ASM drivers.

Note: ASM Server Agent automatically starts after the server is restarted and running.

Installing the SCO OpenServer Agent

Note: Make sure the SNMP (Simple Network Management Protocol) is configured properly.

ASM Server Agent requires SNMP running with *community set to 'public'*. The IP address of ASM Console should be in */etc/snmpd.trap* so that ASM Console can communicate with ASM Server Agent.

Follow these steps to install the SCO Server Agent:

If the ASM installation diskette is already available, go to Step 2. Otherwise, perform Steps 1 to make the ASM installation diskette from the diskette image file on the ASM package CD-ROM.

1. Use the Diskette Maker utility on the Startup Resource CD to create your SCO OpenServer installation diskette.
2. If you are in the desktop window, click on the Software Manager icon. If you are at the UNIX shell prompt, type “custom” and press Enter.
3. From Software Manager or the custom program, select Software and then Install New.
4. The “Begin Installation” screen appears. Follow the onscreen instructions. Click on Continue to accept the defaults.
5. When the Select Media screen appears, highlight Floppy Disk Drive 0 and select Continue.
6. At the Install Preferences menu, select Full. The asmconfig screen appears.

Note: If the SCO Server Agent has been installed, the program asks if you want to preserve the existing config file. Choose Reinstall to overwrite the previously installed SCO Server Agent, or choose Upgrade if you know the existing password.

7. A password is required for a new installation. The system prompts you to enter a new password, and after you have entered it once, prompts you to reenter it.
8. After you set up the password, select the SNMP_Config option, and enter the IP address of the ASM Console system. (You can run asmconfig at a later time to add or change the ASM Console IP address. See the ASM Server Agent Utilities chapter in the ASM Pro manual for information about running asmconfig.)

Note: If the SCO Server Agent has been installed, target IP addresses appear on this screen.

The installation process adds the ASM agent driver to the SCO operating system, and the following message appears before the kernel relinks.

Adding device to system configuration files. . .

When the installation is complete, the following message appears:

Installation Complete.

9. Exit Software Manager or the custom program, and reboot the system.

Configuring ASM Server Agent for SCO OpenServer

You may disable the password if you are installing ASM Server Agent to use only UPS (Uninterruptible Power Supply) or RDM functions.

You can use the asmconfig utility to set up a password for the agent. A password is required when you are using ASM Console to remotely change or set any values for the agent.

Refer to the ASM Server Agent Utilities chapter in the ASM Pro manual for instructions on how to use the asmconfig utility.

Installing the SCO UnixWare Server Agent

Note: All of the following procedures require root permission.

To install the SCO UnixWare Server Agent:

1. Make the ASM installation diskette from the DD file on the ASM package CD-ROM.
2. Mount the CD-ROM drive. For example, mount the CD-ROM to /mnt.
3. Insert an empty 1.44MB diskette into your floppy drive and execute the command:

   # dd if={PATH}/asmuw.dd of=/dev/rdsk/f03ht

   Here, {PATH} denotes the directory where asmuw.dd is located. For example, /mnt/UnixWare.

4. Insert the ASM installation diskette into your floppy drive and, at the shell prompt, execute this command to begin ASM installation:

   # pkgadd -d diskette1 asm

The installation process copies the ASM Server Agent package into the /usr/asm directory, and automatically makes changes to the following system configuration files:

/etc/netmgt/snmpd.comm

/etc/netmgt/snmpd.peers

/etc/inittab

After the installation is complete, ASM Server Agent can be manually started by executing the command:

/usr/asm/asmsmuxd

or it will automatically be started on the next system reboot.

Note: Before starting ASM SMUX Agent asmsmuxd, execute the ASM Agent Configuration Utility asmcfg to configure at least "SNMP", "ASM_Password" and other parameters. Refer to “Chapter 4 - ASM Server Agent Utilities” in the ASM Pro manual for detailed instructions on using the ASM Configuration Utility.

Installing the Microsoft Windows NT Server Agent

Note: Before installing the ASM software, make sure that the TCP/IP and its related SNMP service are installed on the server.

Follow these steps to install the Windows NT agent:

1. Insert the installation CD-ROM into your drive after booting NT and logging in as the system administrator.
2. Click on the Start button and select Run. A dialog box appears that allows you to specify the setup program in the NT directory of the installation CD.
3. Verify the path and click OK. The Welcome screen appears.
4. Click Next. You are asked to stop SNMP service.

5. Click Yes. You are prompted to choose a destination directory. If you only want to install ASM SNMP agent and Remote Console, you can choose Typical. If you want to choose more components, click Custom. There are five components in ASM agent:
   - SNMP agent
   - DMI

     ASM Pro agent defines a proprietary ASM.MIF that supports the same items as the SNMP agent.
   - Server Mif

     The server.mif that defined by DMTF will be installed.
   - Remote Console

     The Remote Console Server is installed which can be remote control by Remote Console Client
   - MMC

     This component is only supported on Windows 2000. And it is integrated with Microsoft Mangement Console.
6. Click Next, for the default directory, or click on Browse to find your own destination directory. Check any components you want to install, and click OK.

   The asmcfg utility launches automatically.

   You may skip steps 7 through 11 if you are installing ASM Server Agent solely for the purpose of utilizing UPS and/or RDM functions.
7. Enter a password and click OK. A password is required when using the ASM Console to remotely change or set any value for the NT Agent. If the password is disabled, there is no security protection for the agent when the ASM Console tries to change or set these values.
8. Enter the IP address of the ASM Console system, then click ADD to add trap destinations. Click OK to end the asmcfg utility. This IP address tells the Agent where to report (trap).
9. Click Yes to save your changes. The view readme file dialog box appears.
10. Click Yes to view, No to continue.
11. Click Finish to exit setup.

Installing RDM

This section gives step-by-step instructions on how to install the RDM module, the RDM function in agent side and console side of ASM Pro software.

System requirements

Before you begin the installation, make sure that you have the following:

RDM server requirements

Hardware

- External modem
- RDM module
- RDM LED indicator
- Pager

Software

- Novell NetWare v4.1 or later, and/or
- SCO OpenServer 5.0 or later, and/or
- Microsoft Windows NT 4.0 or later, and/or
- SCO UnixWare 7.0 or later
- ASM (Advanced System Manager) agent
- RDM v4.3 package

RDM Manager Station requirements

Hardware

- Pentium or faster PC
- At least 16-MB RAM
- At least 5-MB free hard disk space
- Modem

Software

- Microsoft Windows 95/98, Microsoft NT Workstation 4.0, or Windows 2000
- ASM Console 4.3 Console

RDM server setup

This section describes how to set up the RDM server.

Installing RDM module

Note: The RDM module is installed at the Acer factory. The following RDM module instructions is provided in the event you need to reinstall the RDM module.

ESD precautions

Electrostatic discharge (ESD) can damage your processor, disk drives, expansion boards, and other components. Always observe the following precautions before you install a system component.

- Do not remove a component from its protective packaging until you are ready to install it.
- Wear a wrist grounding strap and attach it to a metal part of the system unit before handling components. If a wrist strap is not available, maintain contact with the system requiring ESD protection at all times.

Preinstallation instructions

Always observe the following before you install a system component:

- Turn off and unplug the system and all the peripherals connected to the unit before opening it.
- Open the system housing.
- Follow the ESD precautions listed above before handling a system component.
- Remove any expansion boards or peripherals that block access to the desired system board slot or connectors.

- See the following sections for specific instructions on the component you wish to install.

Installing the RDM module

1. Open the system housing.
2. Align the module connectors with their corresponding connectors on the system board.
3. Gently insert the module. Make sure not to bend the pins and that the module is properly seated.
4. Replace the housing cover.
5. Enter BIOS Setup to set the desired RDM Work Mode.

Connecting communication peripherals

Modem

The RDM server and the RDM manager station communicate via modem protocol. Therefore, you need to connect an external modem with a baud rate of not less than 9600 bps to both systems. To connect an external modem, connect the RS232C serial cable to the modem data port and the appropriate COM port of the system.

Note: The modem at the RDM server side must be connected to the COM2 port, while the modem at the RDM manager station side can be connected to either the COM1 or COM2 port. Use only modems that are purchased locally to ensure compatibility with your telephone system. The modem must have a transfer rate of at least 28.8K.

When the modem is turned ON, the CD/DCD (Carrier Detect/Data Carrier Detect) signal light on the front panel must be OFF for RDM to function properly. If this is not the case, refer to the modem's user's guide and check the section on DIP switches for information on how to adjust the CD/DCD light. If your modem does not have a DIP switch, then we recommend that you replace it with another model that supports such switches.

Telephone

To connect the modem to a telephone outlet, plug in the telephone connector to the telephone outlet. Then, insert the telephone line connector to the modem line port.

Pager

The pager is necessary for notification purposes only.

Post-installation instructions

Observe the following after installing a system component:

- Make sure that the components are installed according to the step-by-step instructions in their respective sections.
- Replace any expansion boards or peripherals that you removed earlier.
- Replace the system cover.
- Connect the necessary cables.
- Turn on the system and the peripherals connected to it.

Installing RDM agent software

You must do the following to ensure successful installation of the RDM agent software:

1. Create a hidden RDM partition.

   The hidden RDM partition is a DOS partition on the hard disk that allows you to run preinstalled diagnostic tools when necessary, without using a diskette or a CD. It also allows you to access your system from a remote RDM manager station.

   To create a hidden RDM partition, do the following:

   - Prepare a "clean" hard disk, i.e., a hard disk without any operating system installed on it.
   - Insert a DOS bootable floppy diskette into the diskette drive.
   - After booting from the floppy diskette drive, use the DOS FDISK command to create a DOS partition. The minimum partition size is 33 MB.
   - Activate the partition and exit FDISK; then reboot the system.
   - Format the DOS partition. When formatting is completed, label the partition as RDM for easy identification.
   - Install (or transfer) the DOS operating system to the partition.
   - Run \agent\install.bat* to install the RDM driver and hide the RDM partition. These settings will take effect only after you reboot the system.

After you create the hidden partition, you can now install other operating systems on the same hard disk. But before doing so, make sure that the Hidden Partition parameter in the RDM BIOS is set to Disabled. For more information on RDM BIOS, refer to RDM BIOS chapter of the ASM Pro manual.

Important! If you are using an IDE hard disk with a capacity less than 540 MB, make sure that you disable the LBA mode. Otherwise, you will be required to use the LBA mode that you set for the other operating systems when you create the hidden RDM partition.

Note: When you boot the system to the hidden partition, you cannot use other utilities (e.g., FDISK.EXE) to change the hidden partition settings.

Deleting the hidden partition

Important! You cannot recreate the RDM hidden partition once you delete it. Before proceeding, make sure that you will not need to create a hidden partition in the future.

Follow these steps to delete the hidden partition:

- Insert a bootable diskette into the diskette drive.
- Enter the BIOS Setup and set the Hidden Partition parameter in the RDM BIOS to Enabled.
- After the system boots from the diskette drive, use FDISK to delete the RDM hidden partition. Do not delete other partitions or change or reformat the active partition.
- Exit FDISK and reboot the system.
- Enter the BIOS Setup and set the Hidden Partition parameter in the RDM BIOS to Disabled.

2. Install an operating system.

   RDM supports the following operating systems:

   - Novell NetWare
   - Microsoft Windows NT and Windows 2000
   - SCO OpenServer

- SCO UnixWare

You can install any or all of the operating systems. For the installation instructions, refer to the documentation that came with the OS package.

3. Install the RDM Agent Driver.

Note: Before you proceed, make sure that you have installed the necessary components and peripherals, for both the RDM server and RDM station.

The RDM agent driver or the server driver is contained in the Advanced System Manager Pro (ASM Pro) software package. Therefore, to install the RDM agent driver, you need to install the ASM agent software. For information on how to install the ASM software, refer to the documentation that comes with the ASM package.

4. Enable the driver.

After installing the ASM Agent driver, the system automatically enables the RDM driver. You do not need to enable the RDM driver manually unless you have previously disabled it for some reason.

Note: We strongly recommend that you do NOT disable the RDM driver. If you disable the RDM driver, RDM manager station will not be able to establish remote access to the server in the event of a system failure.

NetWare

To enable the RDM driver in a Netware environment, type:

```
# LOAD MAGENT
```

To disable the driver, type:

```
# UNLOAD MAGENT
```

Windows NT

To enable the RDM driver in a Windows NT environment, open a command prompt and type:

```
STARTRDM.EXE
```

To disable the RDM driver in a Windows NT environment, open a command prompt and type:

CANCEL.EXE

SCO OpenServer

To enable the RDM drivers in an SCO OpenServer environment, type:

#/XSNMPD/RDMTESTTART

where #/XSNMPD is the directory that contains the RDM drivers.

To disable, type:

#/XSNMPD/RDMTEST CANCEL

SCO UnixWare

To enable the RDM drivers in an SCO Unixware environment, type:

#/USR/ASM/RDMTEST START

To disable, type:

#/USR/ASM/RDMTEST CANCEL

Installing AWM and Microsoft IIS

System requirements

- Intel 486 or higher processor
- 64MB of RAM
- 10MB free hard disk space
- Windows NT Server 4.0 or Windows 2000 with the following:
  - Microsoft Internet Information Server 2.0 or later (4.0 is recommended)
  - Microsoft Active Server Pages (ASP)
  - SNMP Service
- Ethernet card
- Modem

Installing AWM

To install AWM:

1. Insert the Resource CD into the CD-ROM drive on your system.
2. Click on the Startup icon.
3. Click on Software Installer, and select AWM.
4. Follow the Installation Wizard.
5. Click Finish to complete the installation.

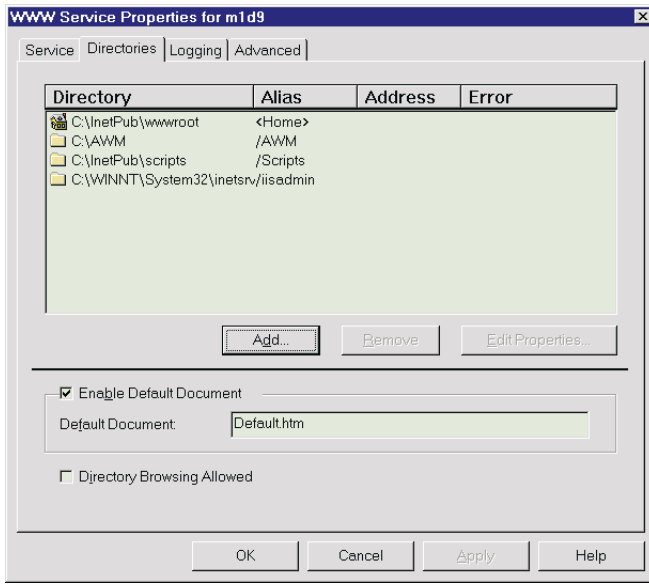
Note: For Windows NT 4.0, AWM will automatically install WbEM core or WbEM SNMP Provider if not installed. For Windows 2000, the WbEM core is built-in. AWM will only install the WbEM SNMP Provider if it is not yet installed. After installing either of these components, the system needs to reboot.

Setting up Microsoft IIS

Note: If you have IIS version 4.0 or later the directory is automatically added.

To set up Microsoft IIS:

1. Open your IIS configuration program and check the virtual directory setting.
2. Check the virtual directory. If there is no virtual directory for AWM, create one and name it AWM. Point it to the directory where the AWM main files are installed (e.g. C:/AWM).



3. After adding the virtual directory, click the Execute checkbox and then click OK to save changes and exit.