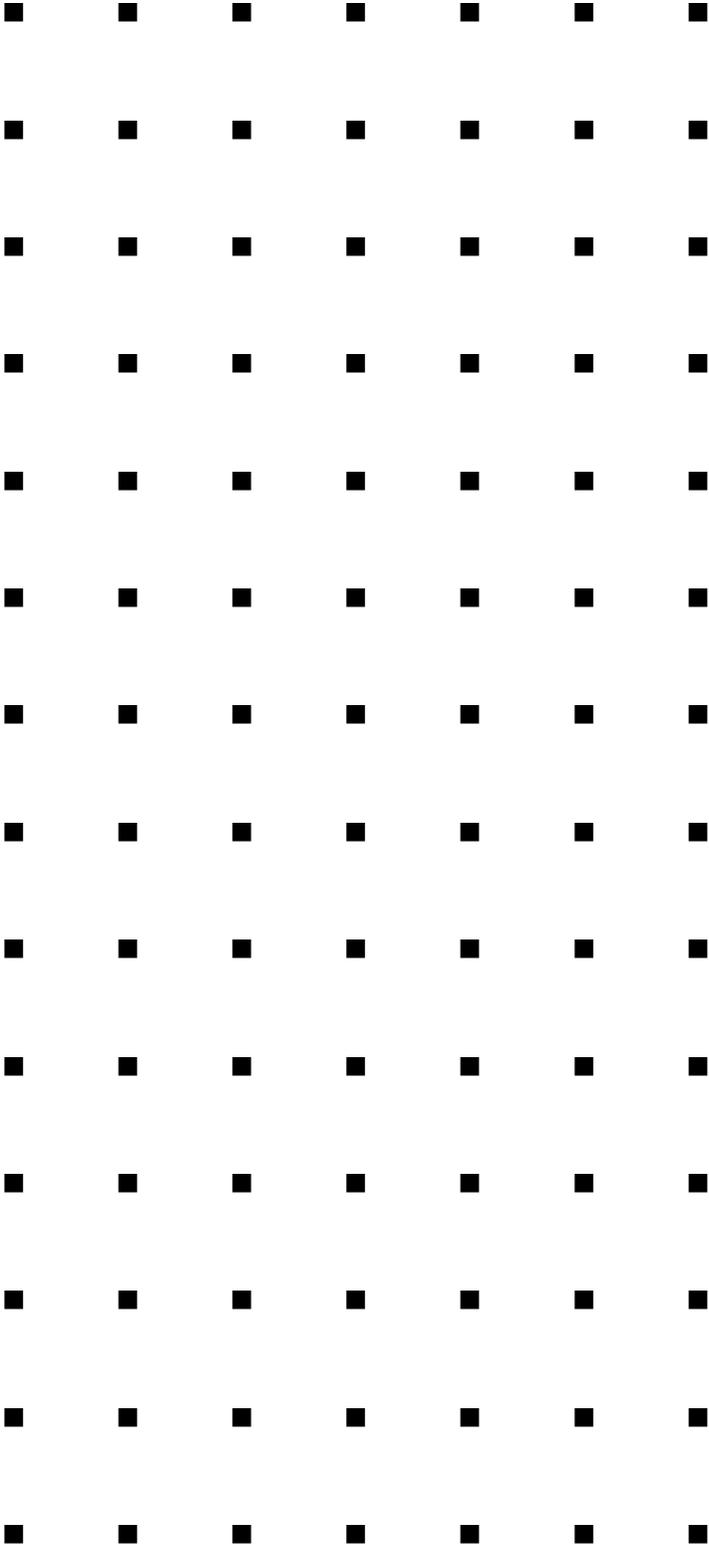


Promise SuperTrak EX4650
Disk Array Controller (SAS)



Supplementary Setup Procedure

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Contents

Chapter 1	Notes	7
Chapter 2	Installation Procedures	8
2.1	Installation Flow	8
Chapter 3	Installing a Windows 2000 Driver	10
3.1	Manual Setup.....	10
Chapter 4	Installing a Windows Server 2003 Driver	12
4.1	Express Setup	12
4.2	Manual Setup.....	13
Chapter 5	Installing Windows Server 2003 x64 Editions Driver	15
5.1	Manual Setup.....	15
Chapter 6	Installing NEC ESM PRO Manager, Agent ESMDiskArray.....	17
Chapter 7	Installing Web-based Promise Array Management Professional	19
Chapter 8	Updating WebPAM PRO SNMP Module.....	20

Preface

Thank you very much for purchasing our product.

This setup procedure explains how to install and update the following software related to the Promise SuperTrak EX4650 disk array controller.

- Driver
- Standby/Hibernation Lock
- Web-based Promise Array Management Professional (WebPAM PRO)

Scope of the installation guide:

Version of EXPRESSBUILDER	Scope
Version 4.157x*-N or earlier *x is Arbitrary alphabet	Install the related software according to the setup procedures in this installation guide
Version 4.158a-N or later	Install the OS and related software according to the "User's Guide" provided with the server.

Be sure to confirm the version of the EXPRESSBUILDER CD-ROM before attempting the installation according to the installation guide.

The setup procedure explains the software compatible with the products below.

The following abbreviation is used unless otherwise specified:

Abbreviation	Product name
Windows 2000	Microsoft® Windows® 2000 Server Microsoft® Windows® 2000 Advanced Server
Windows Server 2003	Microsoft® Windows® Server 2003 Standard Edition Microsoft® Windows® Server 2003 Enterprise Edition Microsoft® Windows™ Server 2003 R2, Standard Edition Microsoft® Windows™ Server 2003 R2, Enterprise Edition
Windows 2003 x64 Editions	Microsoft® Windows™ Server 2003 R2, Standard x64 Edition Microsoft® Windows™ Server 2003 R2, Enterprise x64 Edition

Chapter 1 Notes

Be sure to read these notes thoroughly before attempting the installation.

- Standby and Hibernation

A computer in which a Promise SuperTrak EX4650 Disk array controller is installed cannot use the Standby and Hibernation modes.

- Regular Redundancy Check and Media Patrol

We strongly recommend using the Media Patrol or Redundancy Check routinely for all the logical drives and HDDs to be connected. Use one or the other depending on the environment of your system.

Environment in which your system is always subject to load.	Redundancy Check
Environment in which your system is subject to a comparatively small load during a period of time (including the night)	Media patrol

These features allow subsequent defects of HDDs to be found and repaired as soon as possible (Media Patrol only detects subsequent defects). To schedule a Redundancy Check or Media Patrol, see the “Web-based Promise Array Manager Pro User’s Guide.” Note that a media patrol task is scheduled on AM0:00 every Wednesday by default. Please change the date and time of the setting depending on your system operation.

- Disk array monitoring function by using ESMPRO/ServerManager and ServerAgent

WebPAM PRO that is stored in the “SAS Array Management Software” CD-ROM includes a feature that sends alert messages to the ESMPRO/ServerManager when a failure occurs in a Promise SuperTrak EX4650 Disk array controller, using the event logging notification function of ESMPRO/ServerManager and ServerAgent. You can check the range of the messages in the AlertViewer. ESMPRO disk array monitoring functions (color indication that changes the color of the server image on the ESMPRO/ServerManager operation window and disk array information display on the DataViewer) are also supported.

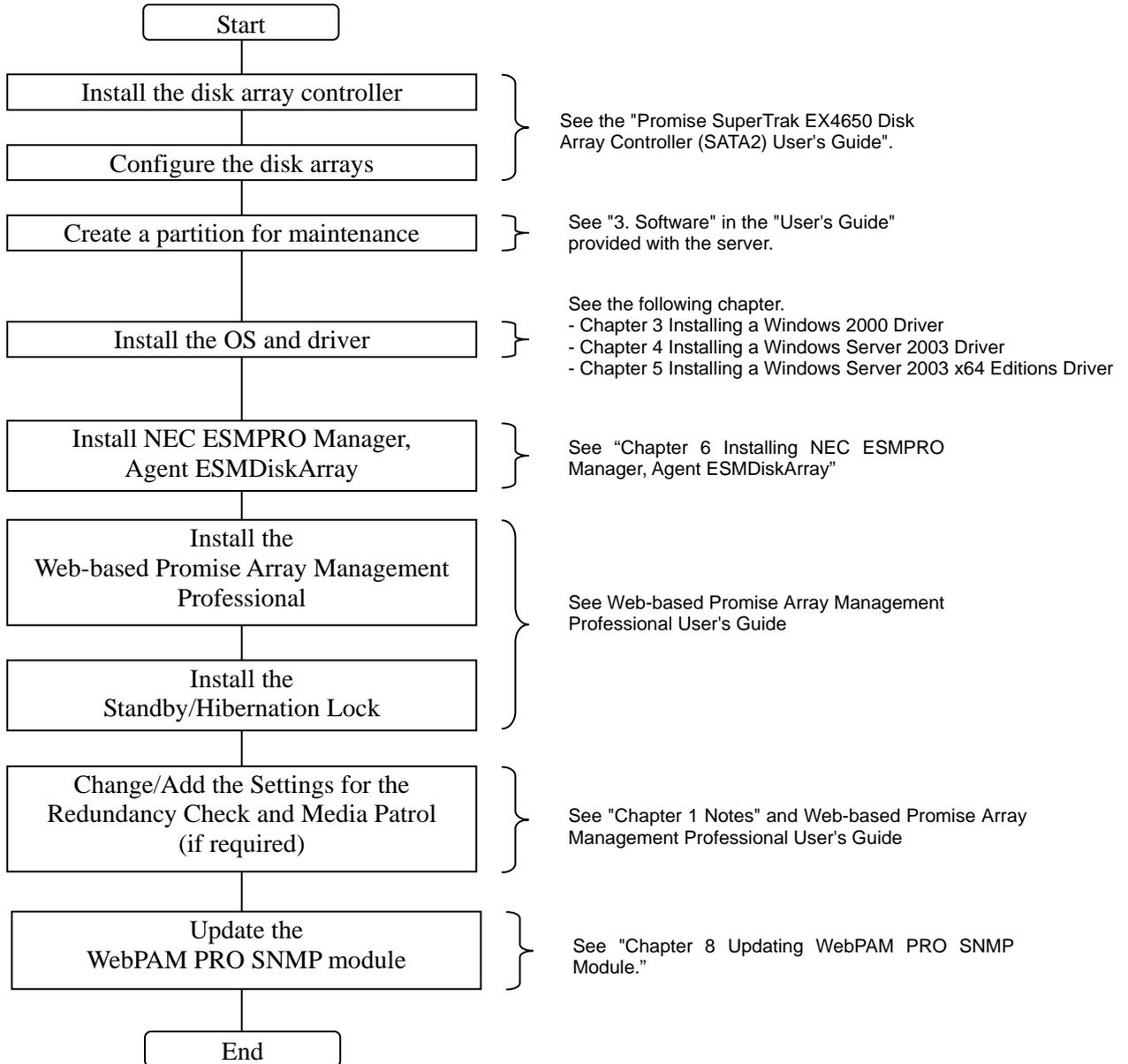
To monitor the Disk Array Controller (SAS) [Promise SuperTrak EX4650], NEC ESMPRO ESMDiskArray must be installed and the WebPAM PRO SNMP update module must be updated. Both are supplied in “SAS Array Management Software” CD-ROM. For more information, see “Chapter 6 Installing NEC ESMPRO Manager, Agent ESMDiskArray” and “Chapter 8 Updating WebPAM PRO SNMP Module.”

Chapter 2 Installation Procedures

This document explains how to install the driver for the Promise SuperTrak EX4650. Be sure to read "Chapter 1 Notes" before attempting this installation.

2.1 Installation Flow

When selecting Express Setup, you need to install the following software to use Promise SuperTrak EX4650 disk array controller. Perform the following procedure to install the software:



NOTE: To create a maintenance partition, open the "User's Guide" provided with the server, and select [3. Software] → [EXPRESSBUILDER Top Menu] → [Tools Menu] → [Maintenance Partition Setting].

NOTE: To install the OS, refer to the "User's guide" and to this document. The "User's guide" is provided in PDF format. Adobe Acrobat Reader (Version 4.0 or later) is necessary for displaying the "User's Guide." Preinstall Adobe Acrobat Reader, for instance, through the master control menu.

Chapter 3 Installing a Windows 2000 Driver

This chapter explains how to install a driver for the Promise SuperTrak EX4650 disk array controller. Create a floppy disk using the Promise Documentation and Driver CD interface, and label it as written below:

“Promise DSK Driver Windows x86”

3.1 Manual Setup

Follow the steps below. You can also refer to the system User Guide for additional information.

1. Turn on the system.
2. Insert the Windows 2000 CD-ROM in the CD-ROM drive of the server.

After that, reset the system (press **Ctrl + Alt + Delete** together), or restart the server by turning the power off and then turning it on. If a bootable OS is installed on the hard disk, press **Enter** while the message "Press any key to boot from CD..." is displayed at the upper part of the screen. This operation is not necessary if no bootable OS is installed.

The system starts up through the CD-ROM and the Windows setup screen appears.

If the screen does not appear, **Enter** has not been pressed at the right time. In this case, turn off the system, turn it on again, and then restart the operation.

3. Press **F6** while the message "Setup is inspecting your computer's hardware configuration..." is displayed at the upper part of the screen.
4. When the following message is displayed, press **S**.

Setup could not determine the type of one or more mass storage devices installed in your system, or you have chosen to manually specify an adapter. Currently, Setup will load support for the following mass storage devices(s)

5. The following message is displayed:

Please insert the disk labeled
manufacturer- supplied hardware support disk
into Drive A:
* Press ENTER when ready.

6. Insert the driver FD " Promise DSK Driver Windows x86 " into the floppy disk drive, and press **Enter**. The SCSI adapter list is displayed.

7. Select as below, and press **Enter**.

[Promise SuperTrak EX8650 series Controller-Intel x86 platform]

Follow the on-screen messages to finish setup.

Chapter 4 Installing a Windows Server 2003 Driver

This chapter explains how to install a driver for the Promise SuperTrak EX4650 disk array controller. Create a floppy disk using the Promise Documentation and Driver CD interface, and label it as written below:

“Promise DSK Driver Windows x86”

4.1 Express Setup

If the EXPRESSBUILDER provided with the server is Version 4.157x*-N or earlier, install via Express Setup according to the procedure below.

*x is Arbitrary alphabet

If the EXPRESSBUILDER is Version 4.158a-N or later, install it according to the "User's Guide" provided with the server.

1. Install Express Setup according to the "User's Guide" provided with the server.
2. Select [Apply OEM-FD for mass storage devices] in [Applications] when entering/confirming setup information.
3. Change the setting of [Apply OEM-FD for mass storage devices] from [No] to [Yes]. Carry out the installation according to the instructions displayed on the screen.
4. A dialog box appears displaying the message, "Insert the "OEM-FD for mass storage devices" in the floppy disk drive."

Insert "Promise DSK Driver Windows x86" into the floppy disk drive, and select [OK].

Follow the instructions in the "User Guide" provided with the server to finish setup.

4.2 Manual Setup

Follow the steps below. You can also refer to the system User Guide for additional information.

1. Turn on the system power.
2. Insert the Windows Server 2003 CD-ROM into the DVD-ROM drive.
3. Press **Ctrl + Alt + Delete** to reset the system.

After a bootable operating system has been installed on the hard disk, press **Enter** while the message "Press any key to boot from CD..." is displayed at the top of the screen.

If no bootable operating system exists on the hard disk, this step is unnecessary.

The Windows Server 2003 setup screen will appear.

If the screen is not displayed, **Enter** was not pressed properly.

Begin after turning on the system power again.

4. If the RAID controller (including LSI Logic Embedded MegaRAID(tm) feature) is installed in the system, press **F6** in a few seconds when the window is in either of the following states.

"Setup is inspecting your computer's hardware configuration ..." is displayed.

A screen with a solid blue background is displayed.

IMPORTANT: There is no visible indication on screen when **F6** has been pressed.

5. When the following message is displayed, press **S**.

Setup could not determine the type of one or more mass storage devices installed in your system, or you have chosen to manually specify an adapter. Currently, Setup will load support for the following mass storage devices.

The following message is displayed.

Please insert the disk labeled
manufacturer-supplied hardware support disk
into Drive A:
*Press ENTER when ready.

6. Insert the driver FD "Promise DSK Driver Windows x86" into the floppy disk drive, and press **Enter**. The adapter list is displayed.
7. Select as below, and press **Enter**.
[Promise SuperTrak EX8650 Controller-Intel x86 platform]
8. When prompted to do so, press **Enter** to start "Welcome to Setup".
9. When the installation of Windows Server 2003 has finished, the system reboots automatically.
 - Windows Server 2003 has installed: Go on the step 13.

- Windows Server 2003 R2 has installed: Go on the step 10.
10. When Windows Server 2003 R2 has been installed, the [Windows Setup] screen will be displayed after logged on to the system.



IMPORTANT:

- In this case, the [Windows setup] screen may not be displayed. Be sure to install Microsoft Windows Server 2003 R2 DISC 2 according to the following procedures.
 - You can install Microsoft Windows Server 2003 R2 DISC 2 after the application of "System update". Be sure to install Microsoft Windows Server 2003 R2 DISC 2. In this case, note that the [Windows setup] screen is not displayed.
-

Chapter 5 Installing Windows Server 2003 x64 Editions Driver

This chapter explains how to install a driver for the Promise SuperTrak EX4650 disk array controller. Create a floppy disk using the Promise Documentation and Driver CD interface, and label it as written below:

“Promise DSK Driver Windows x64”

5.1 Manual Setup

Follow the steps below. You can also refer to the system User Guide for additional information.

11. Turn on the system power.
12. Insert the Windows Server 2003 x64 Edition DISC 1 CD-ROM into the DVD-ROM drive.
13. Press **Ctrl + Alt + Delete** to reset the system.

After a bootable operating system has been installed on the hard disk, press **Enter** while the message "Press any key to boot from CD..." is displayed at the top of the screen.

If no bootable operating system exists on the hard disk, this step is unnecessary.

The Windows Server 2003 x64 Editions setup screen will appear.

If the screen is not displayed, **Enter** was not pressed properly.

Begin after turning on the system power again.

14. If the RAID controller (including LSI Logic Embedded MegaRAID(tm) feature) is installed in the system, press **F6** in a few seconds when the window is in either of the following states.

"Setup is inspecting your computer's hardware configuration ..." is displayed.

A screen with a solid blue background is displayed.

IMPORTANT: There is no visible indication on screen when **F6** has been pressed.

15. When the following message is displayed, press **S**.

Setup could not determine the type of one or more mass storage devices installed in your system, or you have chosen to manually specify an adapter. Currently, Setup will load support for the following mass storage devices.

The following message is displayed.

Please insert the disk labeled
manufacturer-supplied hardware support disk
into Drive A:
*Press ENTER when ready.

16. Insert the Windows Server 2003 x64 Edition OEM-DISK for NEC EXPRESSBUILDER into the floppy disk drive, and press **Enter**.
A list of mass storage devices is displayed.
17. Select the proper Adapter and press **Enter**.
Continue performing tasks according to the subsequent messages that appear.
18. When the following message is shown, press Enter to start "Welcome to Setup".
19. When the installation of Windows Server 2003 x64 Edition has finished, the system reboots automatically.
 - Windows Server 2003 x64 Editions has installed: Go on the step 13.
 - Windows Server 2003 R2 x64 Edition has installed: Go on the step 10.
20. The [Windows Setup] screen will be displayed after logged on to the system.



21. Insert Microsoft Windows Server 2003 R2 x64 Edition DISC 2 CD-ROM into the DVD-ROM drive.
Confirm the parameters and click [OK].
22. When the installation has completed, remove Microsoft Windows Server 2003 R2 x64 Edition DISC 2 CD-ROM from the DVD-ROM drive, and restart the system.
23. When the installation has completed, be sure to execute the tasks described in "Driver Installation and Advanced Settings" and "Updating the System" of manual.
24. Insert the driver FD "**Promise SuperTrak EX Series Controller-x64 platform**" into the floppy disk drive, and press **Enter**. The adapter list is displayed.
25. Select as below, and press **Enter**.

Follow the on-screen messages to finish setup.

Chapter 6 Installing NEC ESMPRO Manager, Agent ESMDiskArray

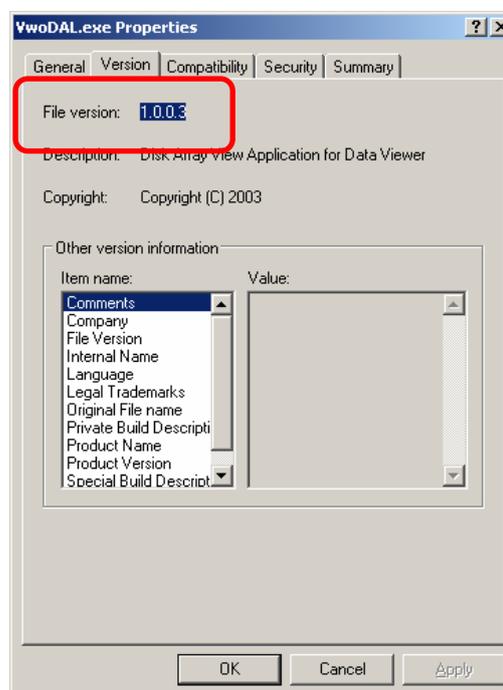
This chapter explains the procedure to follow in order to install NEC ESMPRO Manager, Agent ESMDiskArray.

To monitor the Disk Array Controller (SAS) [Promise SuperTrak EX4650], install NEC ESMPRO ESMDiskArray according to the "NEC ESMPRO Manager, Agent ESMDiskArray Installation Guide".

In some cases, NEC ESMPRO ESMDiskArray may have been factory-installed on your computer. Confirm whether it is the case according to the method below.

• NEC ESMPRO Manager

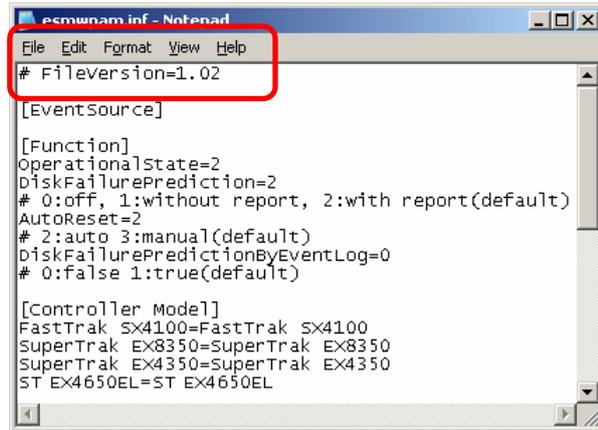
1. Check the file version in the properties of the below file.
%SystemDrive%\Program Files\ESMPRO\ESMMNG\bin\VwoDAL.exe
2. If there is no file, or if the file version is older than 1.0.0.3, install NEC ESMPRO Manager ESMDiskArray.
If the file version is 1.0.0.3. or newer than 1.0.0.3, do not install it. You can monitor Disk Array Controller (SAS) [Promise SuperTrak EX4650].



• **NEC ESMPRO Agent**

1. Open the below file using notepad or a text editor.
 %EsmDir%\esmda\inf\esmpam.inf
2. If there is no file, or if the file version is 1.00 or 1.01, install NEC ESMPRO Agent ESMDiskArray to monitor the Disk Array Controller [Promise SuperTrak EX4650].

If the file version is 1.02, do not install NEC ESMPRO Agent ESMDiskArray. You can monitor Disk Array Controller (SAS) [Promise SuperTrak EX4650].



Chapter 7 Installing Web-based Promise Array Management Professional

This chapter explains how to install the Web-based Promise Array Management Professional software application.

Use the CD-ROM “**SAS Array Management Software**” provided with the Promise SuperTrak EX4650 Disk Array Controller, and refer to the “Web-based Promise Array Management Professional User Guide” for more information.

Chapter 8 Updating WebPAM PRO SNMP Module

This chapter explains how to update the Web-based Promise Array Management Professional SNMP module.

Before performing the update, please close the WebPAM PRO screen.

1. Insert the “SAS Array Management Software” CD-ROM into the CD-ROM drive of your computer.
2. Click “Run...” in the Start menu.
3. Input “Q:\WPPUPDATE\WPPUpdate.VBS” and click OK.
(Note: Q indicates the drive letter of the CD-ROM drive.)
4. When prompted for confirmation, click OK.
5. If one of the following messages is displayed, refer to the recommendations in the “Measure” column.

Message	Meaning	Measure
WebPAM PRO not installed.	WebPAM PRO is not installed in your system.	Read the “Web-based Promise Array Manager Professional User’s Guide” included in the “SAS Array Management Software” CD-ROM. Try this update again afterwards.
Setup cannot update WebPAM PRO because processor architecture is unknown	The processor architecture is unknown. The WebPAM PRO SNMP module cannot be updated.	You do not need to update the module.
Update canceled	The update process has been cancelled.	If you clicked the “Cancel” button by mistake, try again from Step 3.

6. Once the update is successfully finished, the following message is displayed.
“An update of WebPAM PRO has finished”
Click OK.

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