Sonnet DX800 and RX1600 pseudo driver installation instructions (Windows XP 32 & 64-bit)

Why does Windows prompt to install driver software every time the Sonnet DX800 or RX1600 SAS Expander is connected to the Sonnet RAID controller? Additionally, the Sonnet SAS Expander appears in the Windows Device Manager under "Other devices" with a question mark embedded within the icon, but the Sonnet enclosure appears to be working, even though the driver install process was canceled and a driver was never installed.

Solution:
Install the Sonnet pseudo driver; however, not installing the driver will still allow the Sonnet SAS link switch to properly work without any loss of functionality.

The Sonnet DX800 and RX1600 use a pseudo (dummy) driver to prevent Windows from prompting to install a device driver every time the enclosure is connected to the Sonnet RAID controller. Additionally, in the Windows Device Manager, installing the pseudo driver will remove the Sonnet SAS Expander from the "Other devices" device type category and place it under the "System devices" device type category. The successful installation of the Sonnet pseudo driver will no longer display the embedded question mark within the device icon under Device Manager.

Note: unlike the Fusion DX800, the Fusion RX1600 contains two SAS expander link switches; this will cause Windows to list two Sonnet SAS Link Switch Devices within the Windows Device Manager. Additionally, each SAS link switch detected by Windows will require that the pseudo driver be installed. For example, the RX1600 will require that the driver be installed twice because it contains two SAS link switches.

Important note: Windows Vista and Windows 7 may automatically install a generic Microsoft pseudo driver. This generic driver provides the same functionality as the Sonnet pseudo driver, but Microsoft's pseudo driver will display a different device name under the "System devices" device type category in the Device Manager. The Microsoft generic pseudo driver can be identified by the name of "Generic SCSI Enclosure". The Sonnet pseudo driver can be identified by the name of "Sonnet SAS (Serial Attached SCSI) Link Switch Pseudo Device". Again, both drivers will provide the same functionality.

INSTRUCTIONS:

There are two drivers: 1) 32-bit driver and a 64-bit driver. Both drivers come .zipped or archived. Please right-click on the .zipped folder and select the "Extract All..." sub-menu. This will launch the "Windows Extraction Wizard". When asked where to extract the files to, click the "Browse" button and select the Windows Desktop. Placing the files onto the Windows Desktop makes it easier to locate the necessary installer files during the installation process.

1.0. When the Found New Hardware Wizard appears, please select the "No, not this time" option.
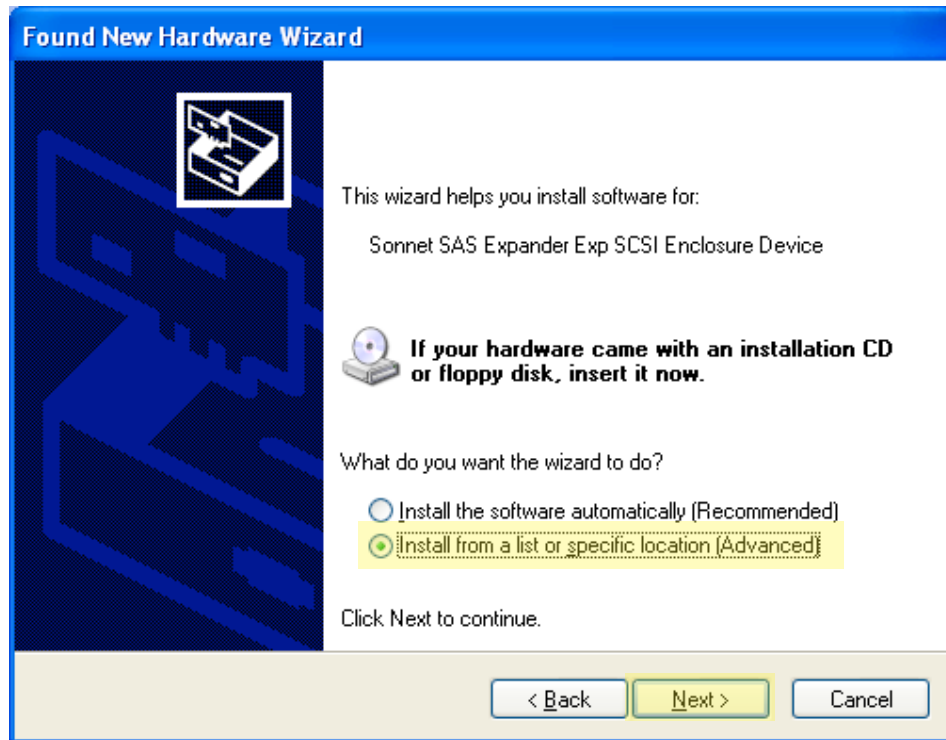1.1. Please click the "Next" button to continue.

2.0. A new dialog window will appear, please select the "Install from a list or specific location (Advanced)" from the available options.
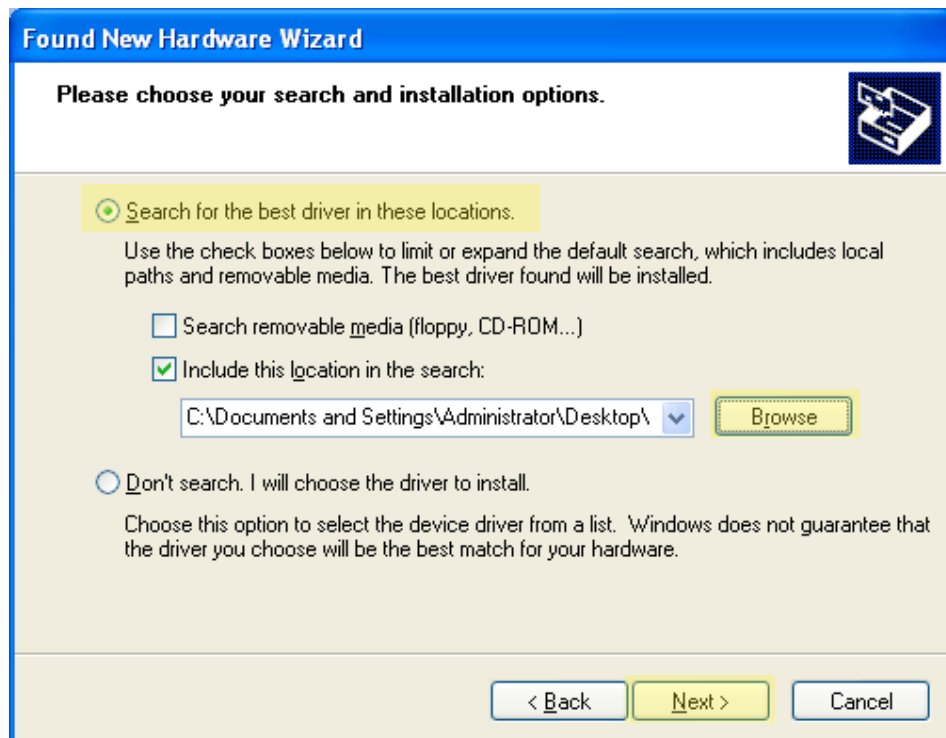2.1. Please click the "Next" button to continue.

3.0. A new dialog window will appear, please select "Search for the best driver in these locations." option.
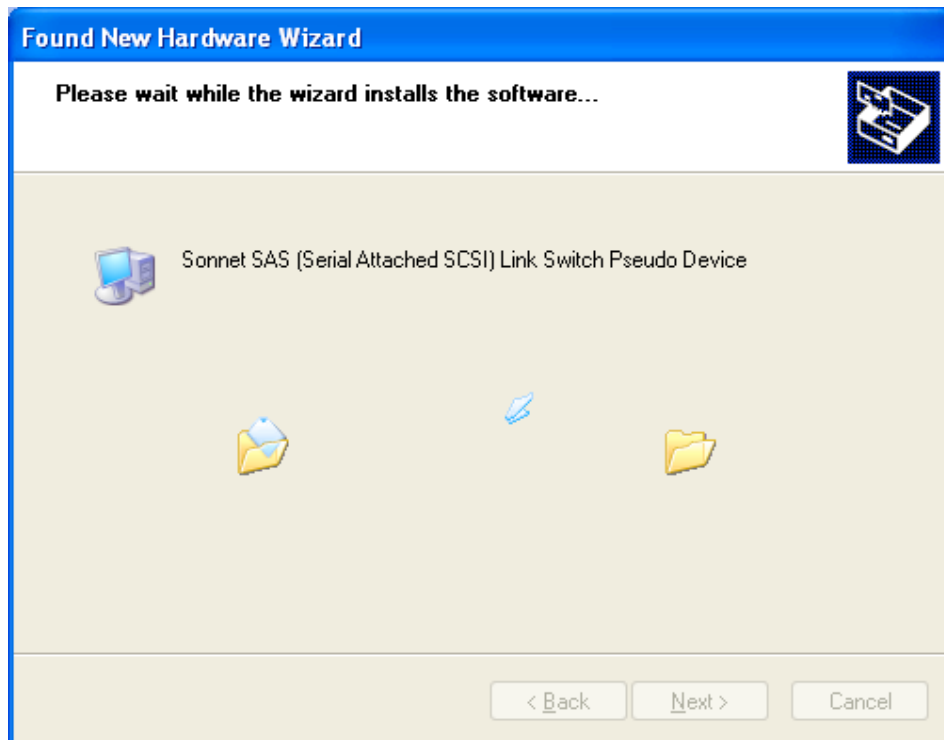3.1. Please click the "Browse" button and locate the Sonnet pseudo driver. Please select either the 32-bit or 64-bit driver depending on the Windows version the driver will be installed on.
3.2. After the driver has been selected, please click the "Next" button to continue.
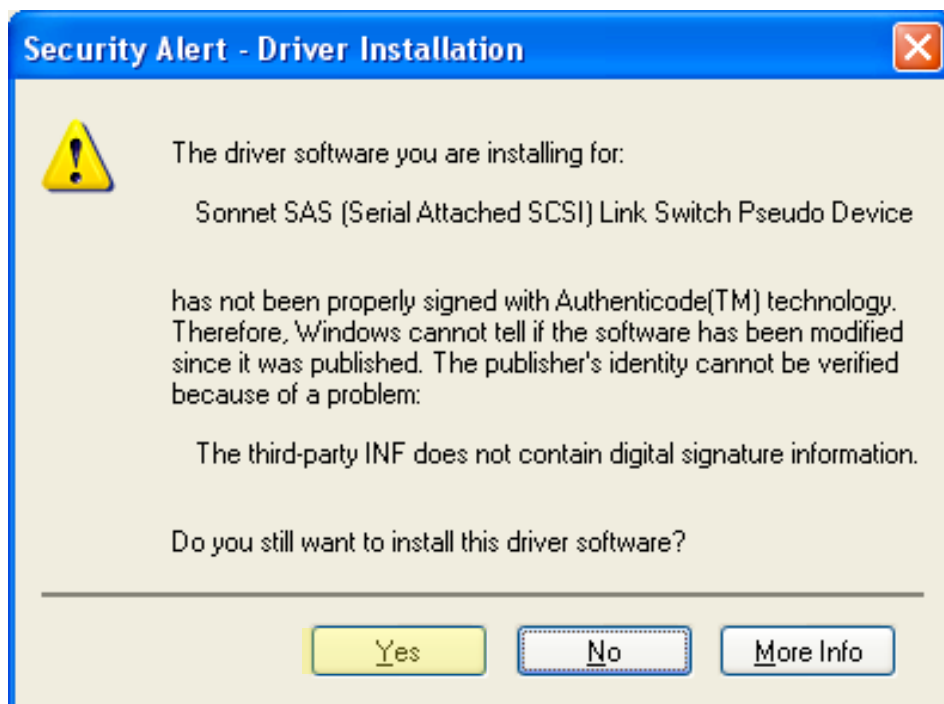
4.0. The driver install process will start. Please wait a few moments for the process to complete.

Found New Hardware Wizard

Please wait while the wizard installs the software...

Sonnet SAS (Serial Attached SCSI) Link Switch Pseudo Device
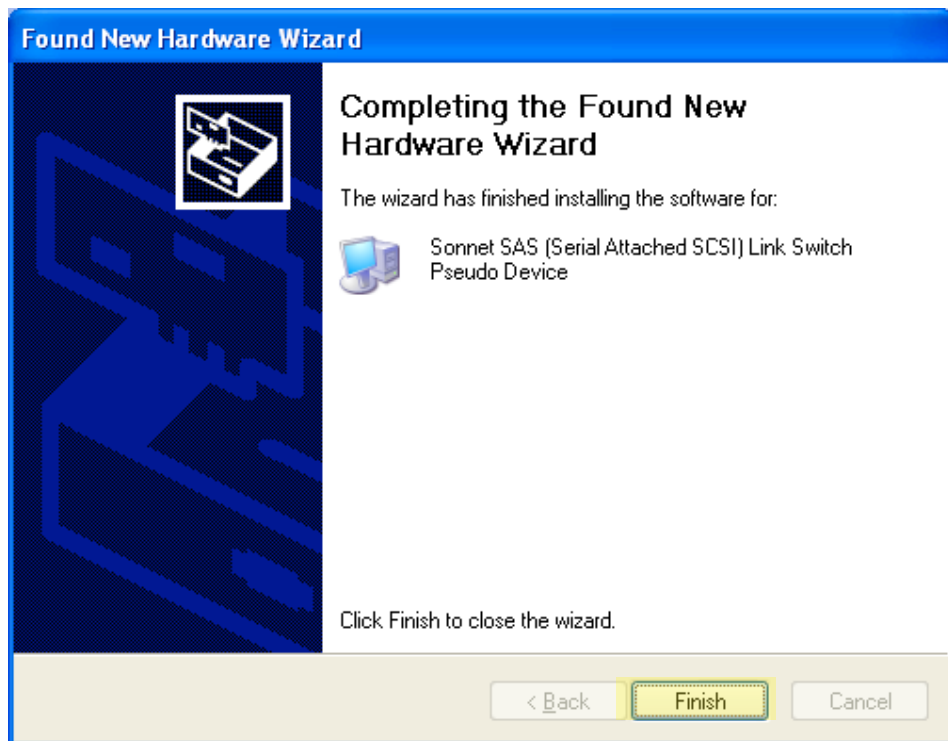
< Back   Next >   Cancel

4.1. Note: if installing the driver under Windows XP Pro 64-bit, the following Security Alert dialog window will appear. Please click "Yes" to continue.

Security Alert - Driver Installation

The driver software you are installing for:

Sonnet SAS (Serial Attached SCSI) Link Switch Pseudo Device

has not been properly signed with Authenticode(TM) technology. Therefore, Windows cannot tell if the software has been modified since it was published. The publisher's identity cannot be verified because of a problem:

The third-party INF does not contain digital signature information.

Do you still want to install this driver software?

Yes   No   More Info

5.0. Once the driver has been successfully installed, a new dialog window will appear. Please click the "Finish" button to close the window. The Device driver install process is now complete, the device is ready for use.

Note: the RX1600 contains two SAS link switches, this means that a second "Found New Hardware Wizard" dialog will appear after clicking the "Finish" button. Please repeat the steps listed in this guide to install the necessary pseudo driver for the second link switch.

Uninstalling the Sonnet driver (advanced users only):
Unfortunately, right-clicking on the "Sonnet SAS (Serial Attached SCSI) Link Switch Pseudo Device" within the Windows Device Manager will only temporally remove the driver. On the next reboot of the computer, Windows XP will automatically install a copy of the previously uninstalled driver. To completely uninstall the driver and to prevent Windows XP from automatically installing the driver in the future, one must right-click and uninstall the driver, plus remove a oemxx.inf and oemxx.PNF file found in the invisible directory "C:\WINDOWS\inf" (It will be necessary to make the directory visible before accessing it). The xx represents a sequential number given to different generic drivers for other devices that have been installed. The easiest method to identify which files to delete is to sort by "Date Modified" and then double-click each of the .inf files (you CAN'T open the .PNF files). The file will then open in Notepad.exe. The .inf file(s) that contain the text

";##
; Sonnet Technologies SAS Expander Psuedo .inf File
;##"

at the top of the file will identify that this file needs to be deleted. Once located, delete both the OEMxx.inf and OEMxx.PNF with the xx representing the same number.

Note: there is no real driver, but only a .inf and a .PNF file.

Reference:
http://support.microsoft.com/kb/813449

.inf = Setup Information file (setup scripts)
.pnf = Setup Precompiled Information File
.cab = Cabinet file (can compress all required installation files into a single archive file with a .cab extension. This single .cab file can then be digitally signed to prevent unauthorized changes).