

FUSION™ FIBRE-FOR-4

Fusion RX1600 Fibre Storage System + Fibre Channel Adapters
+ Fiber Optic Cables + 4-Seat metaSAN License

Mac® User's Quick Start Guide



 metaSAN

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Overview

This quick start guide is not intended to replace any other documentation. Instead, we hope it will enable you to proceed from removing the products from their boxes, to setting up a simple shared storage network.

- **Because this quick start guide only references the setup of the Fibre-for-4 package in an all-Mac environment, information on incorporating the system into a Windows®, Linux, or mixed OS environment is not included here.** Although much of the information listed in this guide is applicable to Windows, Linux, and mixed environments, it is best to refer to the other available documentation.

- Please refer to the manual on the software CD included with each Fibre Channel host adapter card for detailed installation instructions.
- Please refer to the printed Sonnet Web Management Tool User's Guide included in the package for detailed information on configuring, monitoring, and maintaining the Fusion RX1600Fibre storage system.
- Please refer to the metaSAN 4 License PO email sent to you from Tiger Technology for information on how to download the metaSAN software and the latest documentation from Tiger's Website.
- Please refer to the metaSAN software documentation you downloaded for more detailed information on setting up a small SAN workgroup, as well information on how to integrate it into a larger SAN environment.
- For questions regarding technical support and service for the Fusion RX1600Fibre storage system and the included Fibre Channel host adapters, please contact Sonnet Technologies or your local reseller. (See the back of the Sonnet Web Management Tool User's Guide for contact information.)
- For questions regarding support for metaSAN, please contact Tiger Technology.

Requirements – Mac Only Setup

- Mac Pro; Power Mac®, or Xserve® with PCI Express® (PCIe) x8 slot
- Mac OS® X or Mac OS X Server v10.5 or later
- Two Gigabit Ethernet ports on each computer
- One public network Ethernet switch (with access to the Internet) and one private network Ethernet switch

Warnings

- Handle fiber optic cables with care; although they are flexible, they will break if bent too far
- When installing the Fusion RX1600Fibre chassis into the equipment rack, be sure to do so without drives installed.

Setup

Workgroup Computers' Preparation

Before creating the SAN (storage area network), you need to prepare the workgroup and storage system. This preparation will include the installation of the included Fibre Channel (FC) host adapter cards and their software, connection of the workgroup computers to both a public and private network Gigabit Ethernet switches for testing, and the connection of the Fusion RX1600Fibre storage system to a single computer for reconfiguration (if necessary) and testing.

1. Install the FC cards' software from the included software CD on the workgroup computers; download the latest driver, firmware, and Configuration Tool software from www.sonnettech.com/support/kb/kb.php if necessary.
2. Install the FC adapters into the workgroup computers.
3. Connect the workgroup computers to the dedicated private network Gigabit Ethernet switch (for metadata communications), and to a public network's Gigabit Ethernet switch for Internet access (required for metaSAN license activation). Refer to Mac OS X Help (Apple Menu > Help > Mac Help) for basic information.
4. Manually assign a static IP address to each computer's dedicated private network Ethernet port. A listing of valid private IP address ranges may be found at: support.apple.com/kb/TA25227?viewlocale=en_US
5. Write down the public and private network IP addresses for each computer in the workgroup for reference during setup.
6. Verify each computer can see each other on both the public and private networks (ping each other), and verify each computer can access the Internet.



Support Note: To "ping" another computer, both computers and the Ethernet switches must be turned on. Open the Terminal application and type "ping" and the IP address of the other computer (for example: "ping 192.166.1.5"). If the ping command is successful, repeated 64-byte transfers will occur. If the ping command is unsuccessful, repeated timeout requests will occur. Enter control+C to stop the ping command.

7. For now, choose a computer to be designated as the Metadata Master, and then **shut down all the computers in the workgroup except for that one.**
8. Connect the RX1600Fibre unit to a single computer via a fiber optic cable, and then turn on the storage system.



Support Note: Connecting the RX1600Fibre unit to the public network Ethernet switch is necessary in order to access the system through a Web GUI to configure the storage pool (RAID level assignment, formatting, etc.), and monitor system health.

9. Verify the storage system mounts and operates, copying files to and from the it; don't install metaSAN yet.
10. Run QuickNAV and access the RX1600Fibre storage system through the Web GUI. Refer to page 1 of the Web Management Tool manual.
11. Assign a static IP address the RX1600Fibre storage system. Refer to IPAddress on page x, Appendix A of the Web Management Tool manual.
12. Modify the storage system if desired (change from one RAID 6 group to two RAID 5 groups, change from Mac OS Extended to NTFS, etc.). Refer to the Web Management Tool manual, chapter 1.8 Modify Storage for more information.
13. Run Disk Utility to verify the volume is sound.



WARNING: After metaSAN is installed, you can't run Disk Utility on the RX1600Fibre volumes without first uninstalling metaSAN. Refer to Dealing with Disk Corruption section of chapter 6 in the metaSAN User's Guide.

Install metaSAN on the Metadata Master and Create the SAN Definition

Install metaSAN and connect the RX1600Fibre storage system to each computer in the specific order listed. Otherwise, you may lose data or have to reformat the drives.

1. Refer to the metaSAN 4 License PO email to prepare the workgroup's computers for metaSAN installation.
2. Download the metaSAN documentation (Quick Start Guide, User's Guide, Best Practices Guide, etc.) and the metaSAN software following the directions from the metaSAN 4 License PO email.
3. Double-click the metaSAN software disk image, and then double-click the metaSAN install icon to launch the installer.
4. When the *Welcome* window appears, click Next.
5. When the next window appears, click Authorize, and then enter the administrator's name (if necessary) and password.
6. When the *License agreement* window appears, click the Accept checkbox, and then click next; the software is installed, and then the installer quits.
7. When the *Configuration Wizard* appears, click Next.
8. When the next window appears, select the computer's private network IP address, and then click Next.
9. When the next window appears, select the volume and the Create SAN definition(a) radio button, and then click Next.

Setup

Install metaSAN on the Metadata Master and Create the SAN Definition (continued)

10. When the next window appears, enter a name for the SAN definition, select the checkbox next to the RX1600Fibre storage system's volume name, and then click Next.
11. When the *Select SAN Failover Type* window appears, select the radio button next to Create Dedicated Metadata Master, and then click Next.
12. When the next window appears, click next; a generic Fibre Channel storage volume icon will disappear from the desktop.
13. When the *Installation Wizard Complete* window appears, click Finish; the computer restarts. *Note that the RX1600Fibre volume will not appear on the desktop until metaSAN is activated.*
14. Open System Preferences, locate and then click the metaSAN control panel icon in the Others category at the bottom of the window.
15. In the metaSAN preferences window, verify the About button is selected, and then click the lock icon in the bottom left corner of the window to make changes.
16. When the security pop-up appears, enter the administrator's name (if necessary) and password, and then click OK.
17. Back in the metaSAN preferences window, click Activate metaSAN.
18. When the *Activation method* pop-up appears, select Automatic activation, and then click OK.
19. When the *metaSAN activation* pop-up appears, enter the Sales Order number and Password from the metaSAN License PO email, and then click Activate; metaSAN is activated, and the metaSAN volume appears on the desktop.
5. When the *Welcome* window appears, click Next.
6. When the next window appears, click Authorize, and then enter the administrator's name (if necessary) and password.
7. When the *License agreement* window appears, click the Accept checkbox, and then click next; the software is installed, and then the installer quits.
8. When the *Configuration Wizard* appears, click Next.
9. When the next window appears, select the private network IP address of the computer you're installing the software, and then click Next.
10. When the next window appears, click Join existing SAN definition(s), and then click Next.
11. When the next window appears, click Join/Search.
12. When the next window appears, enter the Metadata Master computer's private network IP address, and then click Test.
13. When the *SAN Remote machine is up and running* pop-up appears, click OK.
14. Back in the main window, click next.
15. When the next window appears, click the "No, I will restart my computer later" radio button, and then click Finish.
16. Shut down the computer.
17. Connect a fiber optic cable between the Fusion RX1600Fibre and the computer on which you've been working, and then boot the computer.
18. Open System Preferences, locate and then click the metaSAN control panel icon in the Others category at the bottom of the window.

Install metaSAN on Other Computers in the Workgroup and Join the SAN

1. Move over to the next computer in the workgroup, and verify only the Ethernet network cables are connected; *do not connect a fiber optic cable to this computer yet!*
2. Boot the computer.
3. Copy the metaSAN software disk image from the Metadata Master computer to the one on which you're currently working, or download the software again. Refer to the metaSAN 4 License PO email.
4. Double-click the metaSAN software disk image, and then double-click the metaSAN install icon to launch the installer.
19. In the metaSAN preferences window, verify the About button is selected, and then click the lock icon in the bottom left corner of the window to make changes.
20. When the security pop-up appears, enter the administrator's name (if necessary) and password, and then click OK.
21. When the *Activation method* pop-up appears, select Automatic activation, and then click OK.
22. When the *metaSAN activation* window appears, enter the Sales Order number and Password from the metaSAN License PO email, and then click Activate; metaSAN is activated, and the metaSAN volume appears on the desktop.

Setup

Install metaSAN on Other Computers in the Workgroup and Join the SAN (continued)

23. Go back to the master computer, open System Preferences, and then open the metaSAN control panel.
24. Click the SAN Management button, and then click Refresh; the second computer's private network IP address appears in the Members field.
25. Repeat the steps in this section with the remaining computers in the workgroup.
26. Refer to metaSAN documentation for information on how to specify the Metadata Master for the group, managing SAN volumes and members, and advanced settings.



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