



ATTO Technology, Inc.

Application Note

Using DataCore SANmelody™ with ATTO XtendSAN iSCSI initiator for Mac OS X.

Versions Supported

- ✓ ATTO XtendSAN version 2.0 or later
- ✓ SANmelody version 2.0.1 update 2 or later

Overview

SANmelody™ software converts PC servers into cost-effective expansion disk servers. Their added capacity appears as additional internal drives to disk-starved servers on LANs or SANs.

The ATTO Xtend SAN iSCSI initiator package for Macintosh OS X enables block storage access via existing Ethernet networks using standard network interface cards (NICs).

This application note reviews one method of configuring SANmelody to allow Macintosh computers to log in and share virtual storage over an iSCSI SAN.

Preliminary Information

Consult the SANmelody Configuration Guide and XtendSAN Help (included at the end of this document) for additional information. In order to configure SANmelody to work with XtendSAN, you must manually determine the iqn name for the system running XtendSAN and hand edit the Device Name in the SANmelody software so SANmelody will be able to allow XtendSAN to log in.

To determine the iqn on XtendSAN, launch and configure XtendSAN on a Mac, as described in XtendSAN Help. Using the mouse, move the pointer to hover over the Mac computer name in the left panel. Write down the name exactly as displayed, including all punctuation. Eg: iqn.1995-12.com.attotech:macinitiator:g851199sqpr.

Note: "iqn.1995-12.com.attotech" is common to all copies of XtendSAN. "macinitiator" has been replaced by "xtendsan" in version 2.0 or later releases. "g851199sqpr" is the Mac serial number, found on the computer name plate.

If the SANmelody server is already running, go ahead and configure XtendSAN to discover the SANmelody server IP address and make it visible.

Configuration Details

To configure SANmelody to allow the Mac to log in:

- 1) Open Computer Management on the SANmelody server. Expand Storage and DataCore SANmelody.
- 2) Click Application Servers. Click New Application Server. Fill in the server name and type fields. For the type, field, choose MAC_OS. Click OK.
- 3) Right click the new server pane and select Add Channel.
- 4) In the Channel Name box, enter a name for the channel, such as Beast_1. In the Device Name box, enter the iqn exactly as obtained from XtendSAN above.
- 5) Apply the changes.
- 6) Assign one or more virtual volumes to the new application server. Apply the changes.
- 7) Now check the newly assigned virtual volumes for a LUN 0. OS X requires sequential LUN's starting with LUN 0 to allow iSCSI log-in. Click the application server in the top right pane. In the lower right pane for each virtual volume assigned, right click the volume name and select Properties, then Mapping Properties. The assigned LUN and other information will be displayed. One and only one of the virtual volumes assigned to the application server should be at LUN 0.
- 8) Now, you can try to log in on the Mac. Launch XtendSAN: From the OS X Desktop menu, click Go, Applications. Scroll down in the Applications window to the Xtend SAN directory, and then click XtendSAN. In XtendSAN, click the computer name in the left pane, then select the name for the SANmelody server. Click Login. If the status changes to "Connected", you are ready to go. Use OS X Disk Utility to partition and format the Virtual Volume(s). The drives will then mount to the desktop whenever you log in to SANmelody.



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XtendSAN Help

Welcome

The ATTO iSCSI initiator package for Macintosh OSX consists of an iSCSI device driver, an initiator service manager, and a management interface. The iSCSI Device Driver is responsible for moving data from the storage stack over to the network stack, from where it can be passed to and from the outside world using a standard Gigabit Ethernet network. The iSCSI initiator service monitors and controls the iSCSI configuration for the initiator. The management interface is designed to allow you the ability to configure specific protocol options and manage target devices through a graphical user interface.

To Add a Target

You must first add a target in order to manage and access it.

- 1) From the Discovery menu, click IP Address
- 2) Enter the IP address of the target you wish to add.
Note: The default Port Number is 3260
- 3) Click Discover.
- 4) Choose the target you wish to add and click Add.
Note: Click Clear to reset the target search.

To Manage Targets

After you have added targets, you can now manage them.

- 1) Click Workgroup in the left panel. The Manage Targets panel will be displayed. All added targets are shown. If the target has an alias associated with it, it will also be displayed.
- 2) Highlight the Network Node in order to manage it.
- 3) You can now choose whether you want the target to be visible. If you want it to be visible, chose Yes from the Visible dropdown.
- 4) You can also choose whether you want the target to automatically be logged into on reboot. If you want the target automatically logged into, choose Yes from the AutoLogin dropdown.
- 5) Click Save to save your changes.

To Manage Additional Parameters

- 1) While in the Manage Targets area, highlight the Network Node, and click Params.
- 2) The Login Parameters dialog is displayed.
- 3) You can modify the following parameters from here:

Transfer Size:

FirstBurstLength — Sets the buffer size of the transfers.

MaxBurstLength — Sets the buffer size of the transfers.

Transfer Control:

DataPDUIInOrder — Used for flow control of PDUs.

DataSequenceInOrder — Used for flow control of PDUs.

ImmediateData — Used for flow control of PDUs.

InitialR2T — Used for flow control of PDUs.

MaxOutstandingR2T — Used for flow control of PDUs.

MaxRecvDataSegmentLength: Initiator — How much the initiator can receive in one PDU.

Note: You cannot change the parameters in Connection Control, Digest, or Error Recovery.

- 4) Click Save to save your edits.

To See Visible Targets

- 1) Click the name of the initiator node in the left panel. The Target Status panel is displayed and all visible targets are displayed.
- 2) Highlight the Network Name and click Login. The status will turn green in the left panel on a successful login.
- 3) Click the LUNs button to see all the LUNs on all targets which have been logged into.
- 4) Highlight the Network Name and click the Params button to see a read-only view of the Negotiated Parameters.
- 5) Click Close to close the Negotiated Parameters dialog.

To Logout of a Target

- 1) Click the name of the initiator node in the left panel. The Target Status panel is displayed and all visible targets are displayed.



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- 2) Highlight the Network Name and click Logout. The status will turn red in the left panel.

Contacting ATTO Technology

While we do our best to provide you all the information you will need to use our products, we recognize that additional assistance is sometime required. If you have questions about installing, using or obtaining any of our products, you may contact us at:

ATTO Technology, Inc. 155 CrossPoint Parkway
Amherst, NY 14068

The information you need to answer your questions may be available 24-hours a day on our web site (<http://www.attotech.com>). You may also contact our support departments at the following e-mail addresses:

Sales Support: sls@attotech.com

Technical Support: techsupp@attotech.com

Corporate Info

ATTO Technology, Inc., is a global leader in Fibre Channel and SCSI storage-infrastructure solutions for Content Creation and Enterprise environments. Since its founding in 1988, ATTO has been designing, manufacturing and marketing award-winning solutions specifically for data-intensive applications. ATTO distributes its products worldwide through original equipment manufacturers (OEMs), distributors, VARs and system integrators.

Corporate Headquarters:

155 CrossPoint Parkway
Amherst, New York, 14068

phone: 716.691.1999
fax: 716.691.9353