

# Product Bulletin 42

<b>Product</b>	StorNext® 3.1.3, 3.5 and 3.5.1
<b>Summary</b>	The procedure for connecting to StorNext for XSan 2 systems has been updated.
<b>Date</b>	November 2009

## Overview

The StorNext Installation Guides for releases 3.1.3, 3.5, and 3.5.1 have been updated with a new procedure for connecting to StorNext using XSan 2. These documents are available on [www.quantum.com](http://www.quantum.com). The updated procedure is also provided in this document.

## Connecting to StorNext Using XSan 2

If you are using Apple Xsan 2.2 or earlier, follow the procedure below to connect to a StorNext network. The procedure consists of mounting the StorNext file system onto the Mac OS X computer, and then creating an automount.plist to enable mounting the StorNext file system whenever the Macintosh is rebooted.

Do not use the procedure if you are using Xsan 1.4.2, which has a slightly different procedure described in the StorNext Installation Guide.

### Mounting SNFS on the Mac OS X Computer

Follow this procedure to mount the StorNext file system.

- 1 Connect the Apple computer to the SAN's metadata Ethernet and Fibre Channel networks.
- 2 Install Xsan 2 software on the Apple computer. (Xsan 2.1.1 is supported only by the Leopard operating system. Snow Leopard operating systems require Xsan 2.2.)

**3 Create the file /etc/systemserialnumbers/xsan using that Macintosh's Xsan serial number.**

You must create the directory /etc/systemserialnumbers if it doesn't already exist. The format of the serial number file is a two-line file:

```
XSAN-020-XXX-XXX-X-XXX-XXX-XXX-XXX-XXX-XXX-X  
registered to|organization
```

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**Note:** The file does not have a trailing return on the last line. Use the following:

```
cat > /etc/systemserialnumbers/xsan and end with  
^D^D (where ^D^D is control-D control-D)
```

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If you are unable to browse to the systemserialnumbers directory, use the cat or echo commands to insert information into the Xsan file under that directory.

**4 Copy from the following template and paste into the file to create the file config.plist in /Library/Filesystems/Xsan/config/.**

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**Note:** Items in red indicate data you should enter which applies to your configuration. Do not enter the literal red text shown in the template.

For example, for <string>My IP Address</string> you would enter the netmask in the format X.Y.Z.0/24 (for example, <string>10.65.182.0/24</string>) not the words "My IP Address."

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```
<?xml version="1.0" encoding="UTF-8"?>  
<!DOCTYPE plist PUBLIC "-//Apple//DTD PLIST 1.0//EN" "http://  
www.apple.com/DTDs/PropertyList-1.0.dtd">  
<plist version="1.0">  
<dict>  
    <key>computers</key>  
    <array/>  
    <key>metadataNetwork</key>  
    <string>My IP Address</string>  
    <key>ownerEmail</key>  
    <string>me@mycompany.com</string>  
    <key>ownerName</key>  
    <string>My Name</string>  
    <key>role</key>  
    <string>CLIENT</string>  
    <key>sanName</key>  
    <string>My SAN name</string>  
    <key>serialNumbers</key>  
    <array>  
        <dict>  
            <key>license</key>  
            <string>xsan client license number</string>  
            <key>organization</key>  
            <string>organization name</string>  
            <key>registeredTo</key>  
            <string>registered to name</string>  
        </dict>  
    </array>  
</dict>
```

</plist>

- 5 Copy from the following template and paste into the file to create an `automount.plist` file located in `/Library/Filesystems/Xsan/config/`.

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**Note:** Items in red indicate data you should enter which applies to your configuration. Do not enter the red text shown in the template.

For example, for `<key>file system</key>` you would enter the name of your file system, not "file system."

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```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple Computer//DTD PLIST 1.0//EN"
"http://www.apple.com/DTDs/PropertyList-1.0.dtd">
<plist version="1.0">
  <dict>
    <key>file system</key>
    <dict>
      <key>AutoMount</key>
      <string>rw</string>
      <key>MountOptions</key>
      <dict/>
    </dict>
  </dict>
</plist>
```

- 6 Navigate to an existing StorNext server on the SAN and copy the `fsnameservers` file to your Macintosh client in `/Library/Filesystems/Xsan/config/`. This file should contain the IP addresses of the name server machines.

On Unix: the `fsnameservers` file is located at `/usr/cvfs/config/`.

On Windows: the `fsnameservers` file is located at `\%cvfsroot%\config\` (where `%cvfsroot%` is the directory where the StorNext software is installed). This directory is usually located in `C:\Program Files\Stornext\config\`.

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**Note:** If the content of the `fsnameservers` file specifies a fully qualified domain name (FQDN), you must convert this to the metadata controller's IP address by using the command `host <FQDN>`.

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- 7 Run `RegisterSeRV` in Terminal to ensure that the serial number is recognized. Text will be returned if the serial number is not recognized. (No messages are displayed if the serial number is successfully registered.)
- 8 Run the following in Terminal to update Xsan with the new file system information:

```
launchctl unload /System/Library/LaunchDaemons/
com.apple.xsan.plist

launchctl load /System/Library/LaunchDaemons/
com.apple.xsan.plist
```

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**Note:** Unload will fail if `plist` is not loaded.

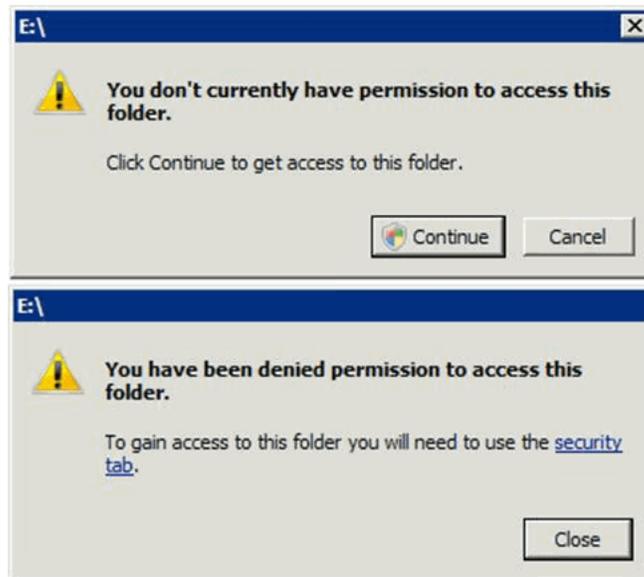
---

If the file system does not mount automatically, manually mount the StorNext file system. In the Terminal type `xsanctl mount <fsname>` Where `<fsname>`

is the file system name displayed in cvadmin. The SNFS file system should now be mounted on the Mac OS X computer.

### Setting ACLs on the Macintosh

If you set ACLs on the Macintosh and do not specify access privileges for everyone, Windows users will receive the following error messages when they try to mount SNFS on a Windows machine:



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**Note:** The second message appears after pressing **Continue** in response to the first message.

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To prevent this error, enter the following command on the Macintosh at the root of the file system (/Volumes/<fs>):

```
sudo chmod +a "everyone allow  
list,search,readattr,readextattr,readsecurity"
```

Running this command ensures that Windows users can double click on the mount point for the SAN volume. StorNext administrators can add more permissive options (such as write) if desired, but the above are the minimum ACLs that must be set on a directory (including the root directory) to ensure that Windows users are able to open a directory (including the root directory).

You don't need to set these permissions if no ACLs are set on the root. You can use the "ls -lea" command to verify that "." does or does not have any ACLs set on it.

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### Contacting Quantum

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More information about StorNext is available on the Quantum Service and Support website at [www.quantum.com/ServiceandSupport](http://www.quantum.com/ServiceandSupport). The Quantum Service and Support website contains a collection of information, including answers to frequently asked questions (FAQs). You can also access software, firmware, and drivers through this site.

For further assistance, contact the Quantum Technical Assistance Center:

<b>North America</b>	+1 800-284-5101 Option 5
<b>EMEA</b>	00800 9999 3822
<b>Online Service and Support</b>	<a href="http://www.quantum.com/OSR">www.quantum.com/OSR</a>
<b>World Wide Web</b>	<a href="http://www.quantum.com/ServiceandSupport">www.quantum.com/ServiceandSupport</a>

(Local numbers for specific countries are listed on the Quantum Service and Support Website.)