6.1-Services CIFS/SMB (SAMBA)

Using the Drop Down Navigation Menu on the top of the page, below the XigmaNAS logo, click "SERVICES", then select "CIFS/SMB". On this page you can enable or disable the CIFS/SMB service, configure CIFS/SMB, and manage CIFS/SMB shares.

Common Internet File System

The Common Internet File System (CIFS/SMB) is the standard way in which files are accessed on a remote Windows® computer. Developed and maintained by Microsoft for use on their Windows® Platform, it has also been implemented on most major Operating Systems including OS X® and Linux using third party software, the most popular of which is Samba.

Samba is included in the XigmaNAS OS.

The abilities of CIFS are actually larger than just accessing files. CIFS is used to share mounted file systems on the XigmaNAS server and make them available to other computers that understand the CIFS protocol. Windows®, Linux, and OS X® machines are all capable of accessing files on the NAS4Free server via the CIFS/SMB protocol.
Services CIFS/SMB Settings

**Authentication**: Choices are:

- **Local User** - Credentials are required of all clients. User Names and Passwords are authenticated against the XigmaNAS servers' local users and groups database. A User Name and Password are necessary to access any shared resource. Clients needing access must use a previously created User account. See SUG Section 7.1-User Management. Clients will have access only to files owned or accessible by the User account used to login.

- **Active Directory** - Credentials are required of all clients. User Names and Passwords are authenticated against a Windows Active Directory® database maintained by a Windows Domain Server®. You must configure and enable Active Directory before selecting this setting, see SUG Section 7.2-Active Directory. Prior to configuring Active Directory per Section 7.2 you must have an AD Domain and know how it is administered.

**NetBIOS Name**: NetBIOS name is the name that the XigmaNAS server will have on the Windows Network. When you want to access the CIFS Server you will use this name instead of the IP address.

**Workgroup**: All Windows machines belong to either a Workgroup (Homegroup in Windows 7®) or a Domain. You are responsible for knowing which you have and what it is called. You should enter your Workgroup or Domain Name here, clients and servers in different Workgroups or Domains will have difficulty seeing each other. The Default setting is “WORKGROUP”, which is commonly, though not
always, the Default Windows® Workgroup.

**Description:** This is the server description. Including a description may be useful.

**DOS Charset:** The character set XigmaNAS uses when communicating with Windows Clients. Default is CP437.

**Unix Charset:** The character set used internally by XigmaNAS. Default is UTF-8.

**Log Level:** Sets the amount of log/debug messages that are sent to the log file. Default is “Minimum”, keep it this way for best performance unless more information is needed for troubleshooting.

**Local Master Browser:** Allows XigmaNAS to try and become a local Master Browser. On most networks where you have a Windows Workgroup there should be 1 and only 1 Master Browser and it should be your server. An improper setting will result in erratic discovery of shared resources, i.e., your stuff will magically appear and disappear from the network from time to time making your head spin. If you have a large or complicated network, you built it, you ought to know how to properly set this.

**Time Server:** If your server has an accurate clock, you can instruct XigmaNAS to advertise itself as an SMB time server to Windows Clients. You can then have the server update it's clock using NTP over the Internet and have your clients update their clocks locally against the server. This reduces wasted bandwidth.

**CIFS/SMB Advanced Settings**
### Advanced Settings

**Guest Account:** Use this option to change the Local Account whose credentials will be used by this service when “**Authentication**” is set to “**Anonymous**”. Default is ftp.

**Create Mask:** Use this option to override the file creation permissions. Default is 0666.

**Directory Mask:** Use this option to override the directory creation permissions. Default is 0777.

**Send Buffer Size:** Size of the send buffer. Default is 16384. For Win 98 use 8192.

**Receive Buffer Size:** Size of the receive buffer. Default is 16384. For Win 98 use 8192.

**Large Read/Write:** Use the new 64K streaming Read/Write variant SMB requests introduced with Windows 2000. Default is Enabled.

**Use Sendfile:** Activates SAMBA –with-sendfile-support switch, enhancing performance in most systems.

*note: On all current releases Sendfile has been disabled for SMB2/SMB3 because of crashes samba. NT1 can use Sendfile.

**EA Support:** Extended attribute support. Allows clients to attempt to store OS/2 style extended attributes on a share. Default is Disabled.
Store DOS Attributes: When enabled, SAMBA attempts to read DOS attributes from a filesystem extended attribute before mapping DOS attributes to UNIX permissions. Default is Enabled.

Null Passwords: Allow clients to access accounts that have null passwords. Default is Disabled.

Asynchronous I/O (AIO): Enables Asynchronous I/O (AIO) support enhancing performance.

Auxiliary Parameters: Please see SMB.conf Documentation for details about parameters that may be used here.

Starting the CIFS/SMB Service

1. Click the “ENABLE” checkbox.
2. Click the “SAVE & RESTART” Button to write your changes to the XigmaNAS configuration file & start the service.

Important - Even though you may have started the CIFS/SMB Service you still have not shared any resources or files, SAMBA is running and you will see the server on your network, but you have yet to have it serve anything. The server is not very useful until you share some files.

Sharing Files

Click the “SHARES” Tab to create, manage and delete shared files, see SUG Section 6.1.1-Services CIFS/SMB Shares.