Ultimately, how a share point is configured for access, combined with the access settings for each file-sharing service, determines whether users are able to log in via a file-sharing protocol, and if so, what share points they are able to see upon login.

Using Apple Filing Protocol

Apple Filing Protocol (AFP), has been the default sharing protocol for Mac OS X and its predecessors for quite some time. As Apple moves forward with an ever-widening set of options when dealing with permissions, it is important to understand the basics of POSIX permissions and their role in Mac OS X and Mac OS X Server.

Understanding AFP Share Points-POSIX Permissions vs. Inheritance

When determining how to set inheritance with a share point, you should first consider whether you will be using ACLs to set access permissions. If so, you should use the inheritance that is associated with ACLs. If you will be using traditional POSIX file permissions rather than ACLs to determine access to your share point, you should consider the specific options available for either the AFP or SMB sharing protocol.

For example, when configuring a share point with Server Admin, if AFP is chosen in the Protocol Options pane, you have the ability to use standard POSIX behavior or to inherit permissions from the parent folder for your AFP server. Historically, the inherited model was the only model available in AFP 2.1 and 3.0 (used in AppleShare IP 5.0 through Mac OS X v10.1). In this model, whenever you create a folder on a share point, the new folder inherits the owner, group, and permissions of the parent folder. This is also true if you are copying folders to a mounted server volume or duplicating files on a mounted server volume. However, when you create or copy files on a mounted volume set to use inherited permissions, the group and permissions are inherited from the parent folder, but the owner of the file is the user who created or copied the file.

TIP The inherited permissions model applies only to items when they are created on the mounted volume. If you move an item from one folder to another folder on the same mounted volume, the item's permissions and ownership do not automatically change.

Note: Mac OS X Server v10.5.4 no longer provides an option for choosing between POSIX permissions and inheritance.

252 Using File Services

000	Server Admin:s	erver17.pr	etendco.com:l	ile Sharin	g			
▼ SERVERS			10	Confine	50	2		
Available Servers	• ш	(x)	61	₩ Q	200	5		
🔻 🕄 server17.pretendco.com	Overview Logs Graphs	File Sharing	Server Updates	Certificates	Setting	gs		
AFP	Volumes Share Poin	ts List	Browse			New Folder	Share	
O FTP	Macintosh HD		Applications		⊳	Apple File Services	•	
NFS	/Volumes/Macintosh H	D	🔤 Groups		⊳	Project Phantom	×.	Þ
⊖ SMB		0	🗿 home		⊳	Public		⊳
		0	Library		⊳			
		1	mach_kernel	.ctfsys				
		1	👜 net		⊳			
			Shared Items		⊳			
		6	System		⊳			
			Users		⊳			
								•

6 Click the Share button in the upper-right corner, then click Save.

This item is now shared. By default, Mac OS X Server items over AFP, SMB, and FTP. Because you want this item to be viewable only by your Macintosh clients, you'll modify the default setting so that the item is shared only via AFP.

- 7 Click the Protocol Options button in the Share Point pane at the bottom of the window, and under AFP make sure that "Share this item using AFP" is enabled (it should be enabled by default).
- 8 Make sure the "Allow AFP guest access" checkbox is selected.

This allows users to connect anonymously, provided the AFP service is configured to allow guest users.

9 Change the AFP name to *Corporate AFP Server*.

This is the name that will be given to the volume when client computers connect to it, while preserving the original folder name when viewed from the server. On your server, you'll want to be sure to choose names for the shares that correlate to their use. You may also want to just retain the original folder name as the AFP name to avoid confusion between the name of the folder when viewed from the server versus when remotely connected from a client computer.

10 Select the option to "Inherit permissions from parent."

Note: This step is no longer an option as Mac OS X Server v10.5.4.



[This screen should be replaced with p253_AFP.tif. The default permissions options have been removed.]

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Click the SMB tab next, and deselect the "Share this item using SMB" checkbox.

A	FP SMB FTP	NFS	
Share this item using SM	ИB		
Allow SMB guest acce	ess		
Custom SMB name: Ap	ple File Services		
Fnable oplocks	-		
Enable strict locking			
Default permissions for new	files and folders		
• Inherit permissions f	rom parent		
O Assign as follows: Ov	wner Read & Write	\$	
G	roup Read Only	÷	
Even	one Read Only	•	

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Click the FTP tab next, and deselect the "Share this item using FTP" checkbox. Click OK to dismiss the pop-up window, then click Save in the main Server Admin window.

0.0	AFP SMB FTP NFS	
☐ Share this item usin	g FTP	
Custom FTP name:	Apple File Services	

Now your shared folder named Apple File Services is visible only to Mac clients using AFP. No action needed to be taken in the NFS pane because share points are not exported as NFS shares by default.



	AFP	SMB	FTP	NFS	
Share this item usin	g FTP				
Allow FTP guest	access				
Custom FTP name:	Window	ws Servi	ces		

- 5 In the Protocol Options dialog, choose SMB, and be sure the "Share this item using SMB" option is selected.
- 6 Select "Allow SMB guest access."

This allows SMB connections to be made to this share point without providing a user name if the SMB service has been configured to allow guest access.

7 In the "Custom SMB name" field, type *Windows*.

This is the name that clients see when they browse for and connect to the share point using SMB.

- 8 Select "Enable oplocks" and "Enable strict locking."
- 9 Change the permissions model to "Assign as follows:"
 - ▶ Owner: Read & Write
 - Group: Read & Write
 - Everyone: Read Only