



Final Cut Server

Administrator Guide

Copyright © 2009 Apple Inc. All rights reserved.

Your rights to the software are governed by the accompanying software license agreement. The owner or authorized user of a valid copy of Final Cut Server software may reproduce this publication for the purpose of learning to use such software. No part of this publication may be reproduced or transmitted for commercial purposes, such as selling copies of this publication or for providing paid for support services.

The Apple logo is a trademark of Apple Inc., registered in the U.S. and other countries. Use of the “keyboard” Apple logo (Shift–Option–K) for commercial purposes without the prior written consent of Apple may constitute trademark infringement and unfair competition in violation of federal and state laws.

Every effort has been made to ensure that the information in this manual is accurate. Apple is not responsible for printing or clerical errors.

Note: Because Apple frequently releases new versions and updates to its system software, applications, and Internet sites, images shown in this manual may be slightly different from what you see on your screen.

Apple
1 Infinite Loop
Cupertino, CA 95014
408–996–1010
www.apple.com

Apple, the Apple logo, Final Cut, Final Cut Pro, Final Cut Studio, FireWire, Leopard, Mac, Macintosh, Mac OS, QuickTime, Tiger, Xsan, and Xserve are trademarks of Apple Inc., registered in the U.S. and other countries.

Finder and Spotlight are trademarks of Apple Inc.

AppleCare is a service mark of Apple Inc., registered in the U.S. and other countries.

PowerPC is a trademark of International Business Machines Corporation, used under license therefrom.

Java and all Java–based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.

UNIX is a registered trademark of The Open Group.

Other company and product names mentioned herein are trademarks of their respective companies. Mention of third–party products is for informational purposes only and constitutes neither an endorsement nor a recommendation. Apple assumes no responsibility with regard to the performance or use of these products.

Ducati and the Ducati logo are registered trademarks of Ducati Motor Holding S.p.A. Used by permission.

Production stills from the film “Koffee House Mayhem” provided courtesy of Jean–Paul Bonjour. “Koffee House Mayhem” © 2004 Jean–Paul Bonjour. All rights reserved.
<http://www.jeanpaulbonjour.com>

Production stills from the film “Les Poupets” provided courtesy of Jean–Paul Bonjour. “Les Poupets” © 2006 Jean–Paul Bonjour. All rights reserved.
<http://www.jeanpaulbonjour.com>

Welcome to Final Cut Server Administration

Final Cut Server is extremely flexible and configurable. It is also designed to become fully functional quickly, allowing you to expand its capabilities as your needs grow.

About Final Cut Server

Final Cut Server is powerful media asset management and workflow automation software. Final Cut Server makes it easy to manage large collections of media files. Its capabilities also extend to tracking job status, orchestrating reviews and approvals, and automating complex sequences of tasks—all in a single product designed to work with Final Cut Pro.

Installing Final Cut Server also installs Compressor. This powerful transcoding application provides Final Cut Server with a large variety of preconfigured transcode settings that you can use when uploading or copying media files to Final Cut Server devices. You can also create custom settings in Compressor that you can add to the Final Cut Server transcode settings list.

About the Final Cut Server Documentation

Final Cut Server comes with various documentation that will help you get started as well as provide detailed information about the application.

- *Final Cut Server Setup Guide*: The printed installation document provided in the Final Cut Server box describes how to install and configure Final Cut Server.
- *Final Cut Server User Manual*: The user manual describes how to use the Final Cut Server client for the day-to-day use of the system, such as browsing assets, managing jobs, and managing productions.
- *Final Cut Server Administrator Guide*: This administrator guide describes how to administer most components of the Final Cut Server system. It does not describe day-to-day use of the system, such as browsing assets and managing jobs, productions, and orders, which are described in the *Final Cut Server User Manual*.

Important: An understanding of the material in the *Final Cut Server User Manual* is assumed in the *Final Cut Server Administrator Guide*.

Additional Resources

Along with the documentation that comes with Final Cut Server, there are a variety of other resources you can use to find out more about Final Cut Server.

Final Cut Server Website

For general information and updates, as well as the latest news on Final Cut Server, go to:

- <http://www.apple.com/finalcutserver>

Apple Service and Support Websites

For software updates and answers to the most frequently asked questions for all Apple products, go to the general Apple Support webpage. You'll also have access to product specifications, reference documentation, and Apple and third-party product technical articles.

- <http://www.apple.com/support>

For software updates, documentation, discussion forums, and answers to the most frequently asked questions for Final Cut Server, go to:

- <http://www.apple.com/support/finalcutserver>

For discussion forums for all Apple products from around the world, where you can search for an answer, post your question, or answer other users' questions, go to:

- <http://discussions.apple.com>

Copyright © 2009 Apple Inc. All rights reserved.

General Settings and Preferences

You use Final Cut Server System Preferences and the client's Administration window to configure Final Cut Server.

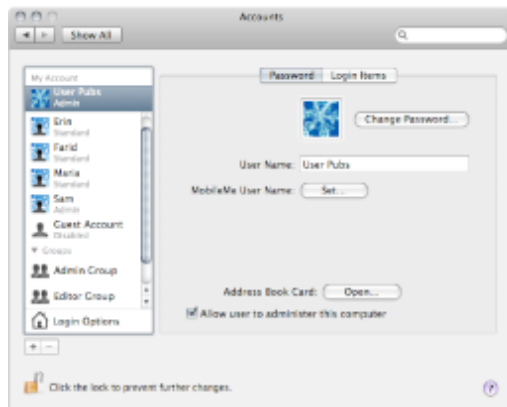
Overview of Final Cut Server Administration

There are three primary areas on your server system that you will use to configure and administer Final Cut Server: the Accounts Pane of System Preferences, Mac OS X Server Settings, and Final Cut Server System Preferences. A brief overview of each of these sections is provided in this chapter, and details about using these areas are provided in the *Final Cut Server Setup Guide*. In addition, you use the Final Cut Server client's Administration window to modify Final Cut Server settings.

Important: This manual assumes that you are familiar with Final Cut Server operations. See the *Final Cut Server User Manual* for detailed information about using Final Cut Server.

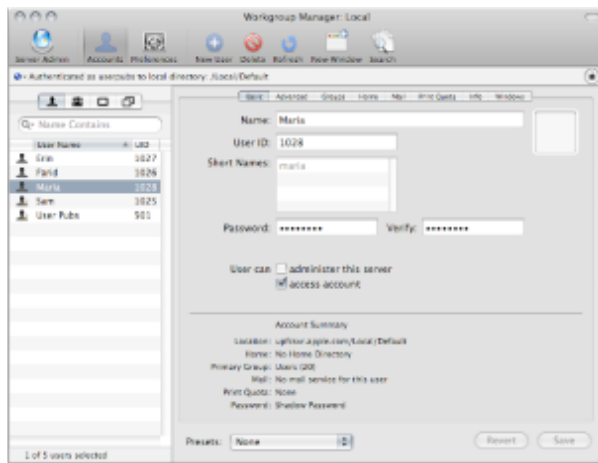
About the Accounts Pane of System Preferences

The Accounts pane of System Preferences on the computer on which you installed Final Cut Server can be used to manage local user accounts and groups. After you have added users and formed groups in the Accounts pane, you can then add the groups to Final Cut Server and assign their permissions using either Final Cut Server System Preferences or the client's Administration window.



About Mac OS X Server Settings

Workgroup Manager in Mac OS X Server is a place where you can manage Final Cut Server user accounts and groups. After you have added users and formed groups with Workgroup Manager, you can then add the groups to Final Cut Server and assign their permissions using either Final Cut Server System Preferences or the client's Administration window.



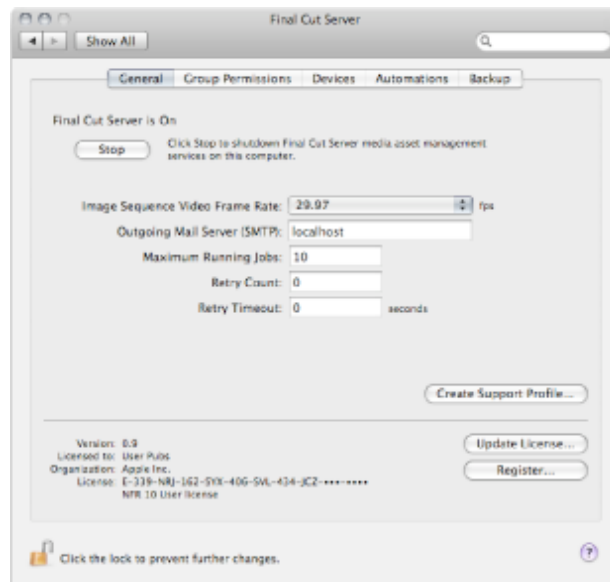
About Final Cut Server System Preferences

Final Cut Server System Preferences is where you configure the most common Final Cut Server settings. Several of the panes include setup assistants to help you add devices and watchers. Instructions for using the setup assistants are provided in the *Final Cut Server Setup Guide*.

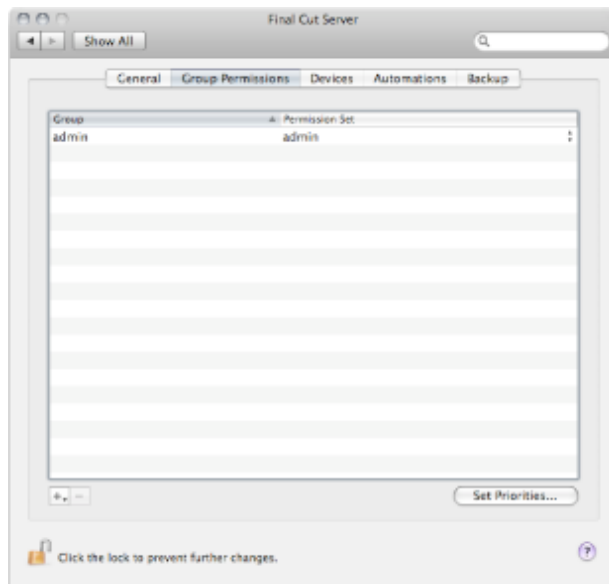
Important: It is strongly recommended that you use the settings in Final Cut Server System Preferences as much as possible for your administration tasks.

Final Cut Server System Preferences contains the following groups of settings:

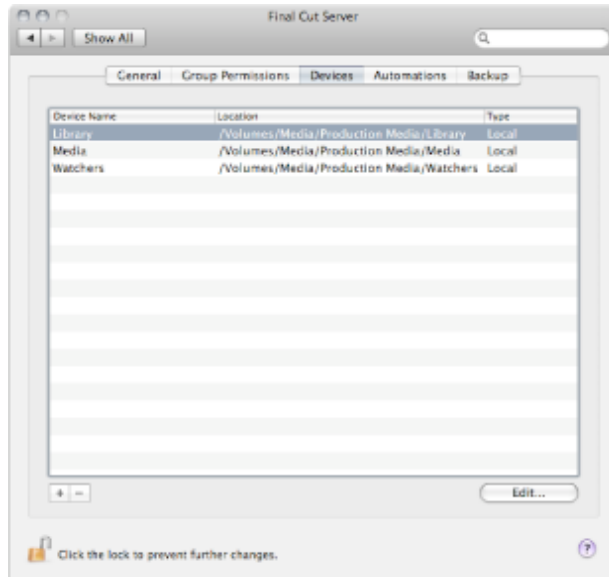
- *General:* The General settings include the Final Cut Server Start/Stop button and other basic settings, most of which are duplicated in the client Administration window.



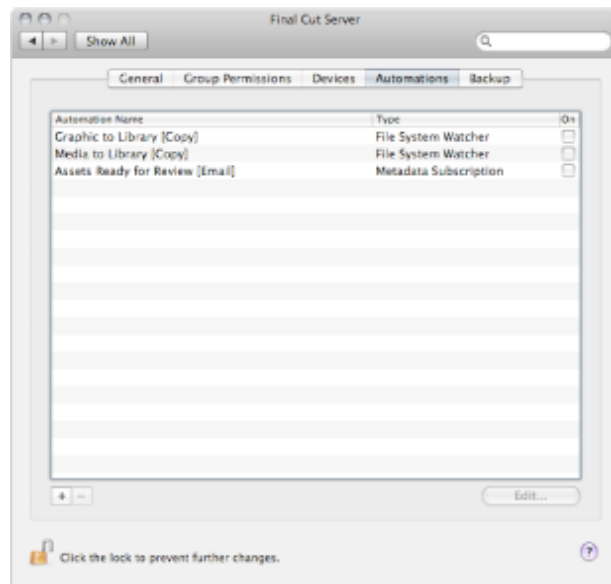
- *Group Permissions:* The Group Permissions settings include the ability to choose which Mac OS X groups Final Cut Server should use. See “Groups and Permissions” for more information.



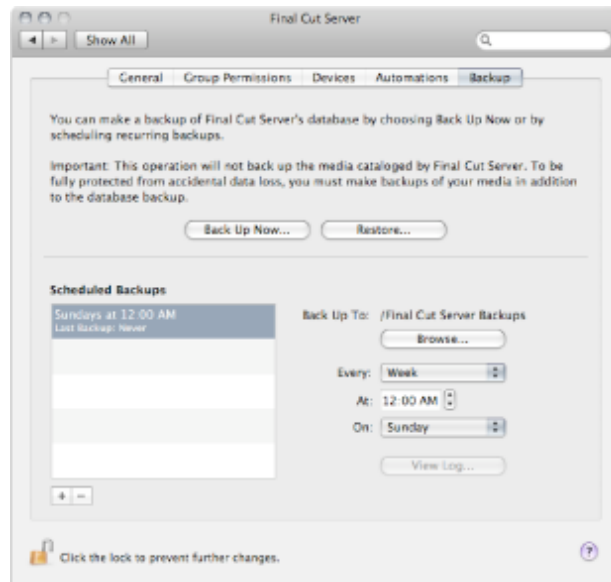
- *Devices*: The Devices settings include the ability to add and configure devices using Device Setup Assistant. See “Managing Devices” for more information.



- *Automations*: The Automations settings include the ability to add and configure watch and respond behaviors using Automation Setup Assistant. See “Managing Automations” for more information.



- *Backup*: The Backup settings include the ability to add and configure automatic backup operations for the Final Cut Server catalog. See “Backing Up Final Cut Server” for more information.



About the Final Cut Server Client Administration Window

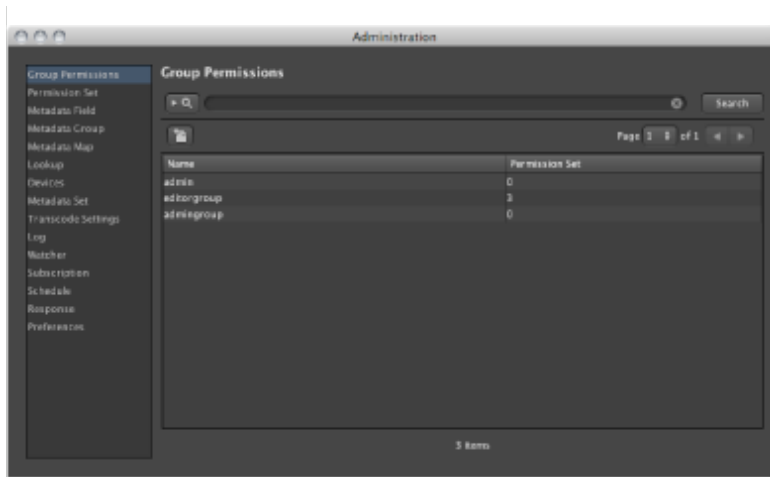
The Administration window of the Final Cut Server client contains extremely detailed settings and configurations covering all aspects of Final Cut Server. You should only need to access this window for advanced configurations.

To open the Final Cut Server Administration window

1. Log in to a Final Cut Server client as a user with administrator privileges.
2. Click the Server button and choose Administration from the pop-up menu.

The Administration window appears, and a warning appears for you to confirm that you want to access the Administration window.

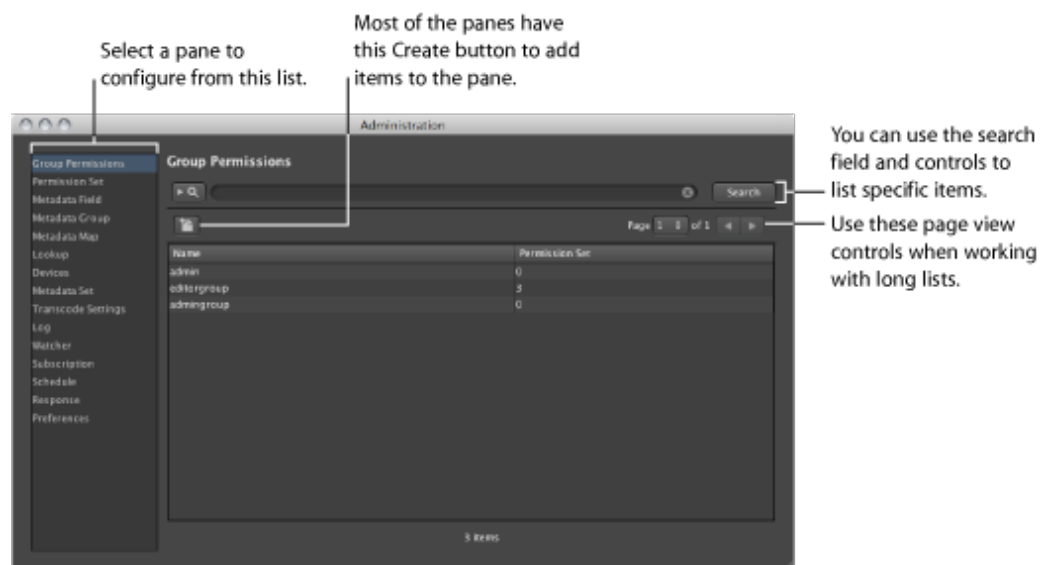
3. Click Continue to view the Administration window.



Working with the Administration Window

The Administration window contains a variety of panes that you can use to configure your Final Cut Server system.

Important: Some changes you make in the Administration window do not immediately appear in the Final Cut Server client. To see the changes, you need to log out and log back in, opening a fresh Final Cut Server client.



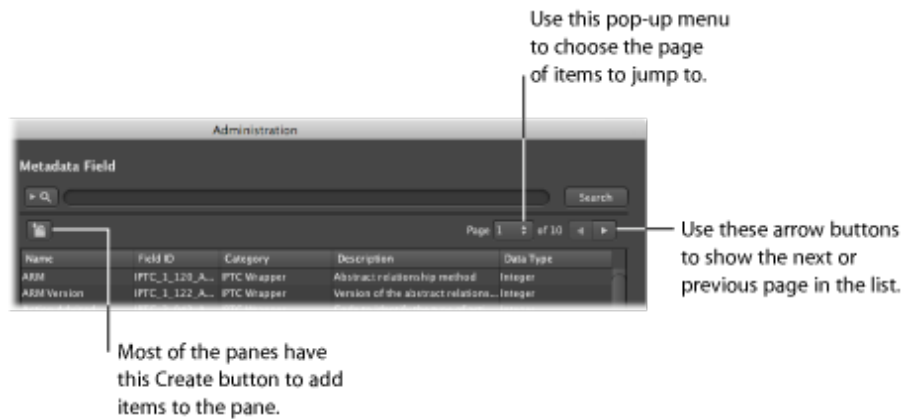
The column on the left contains a list of panes you can access and configure:

- *Group Permissions*: Click to define groups of users and security permissions.
- *Permission Set*: Click to configure permission settings.
- *Metadata Field*: Click to define metadata fields used throughout Final Cut Server.
- *Metadata Group*: Click to define groups of related metadata fields.
- *Metadata Map*: Click to maintain mappings between standard and custom metadata fields.
- *Lookup*: Click to define lists of lookup values that can be used to validate metadata fields.
- *Devices*: Click to define creation, editing, storage, or playout devices connected to Final Cut Server.
- *Metadata Sets*: Click to define different types of metadata sets to apply to assets and

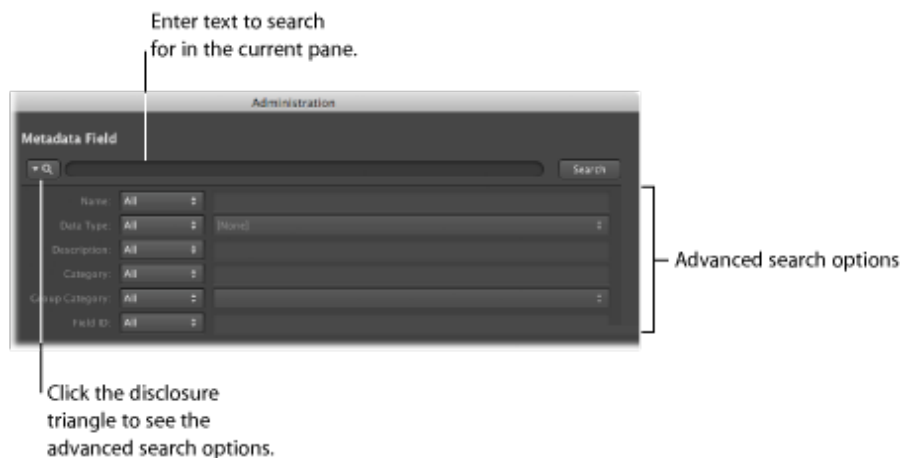
productions.

- *Transcode Settings*: Click to define media copy transcode settings and assign them to devices.
- *Log*: Click to view Final Cut Server logs.
- *Watcher*: Click to define watch folders, used to automate the transfer of media in a facility.
- *Subscription*: Click to define subscription rules, used to tailor the workflow in Final Cut Server.
- *Schedule*: Click to define scheduled events.
- *Response*: Click to define Final Cut Server responses to scheduled events, subscriptions, and watchers.
- *Preferences*: Click to define Final Cut Server administration preference settings.

Although some panes contain only a few items, others have many items. When there are many items, the Administration window separates them into pages and includes buttons for navigating among them. Most of the panes include a Create button you can use to add additional items.



The Administration window also includes a search feature. Searching allows you to quickly find specific items in the list. You can click the disclosure triangle to see advanced search options. These options vary, depending on the pane you are working in.

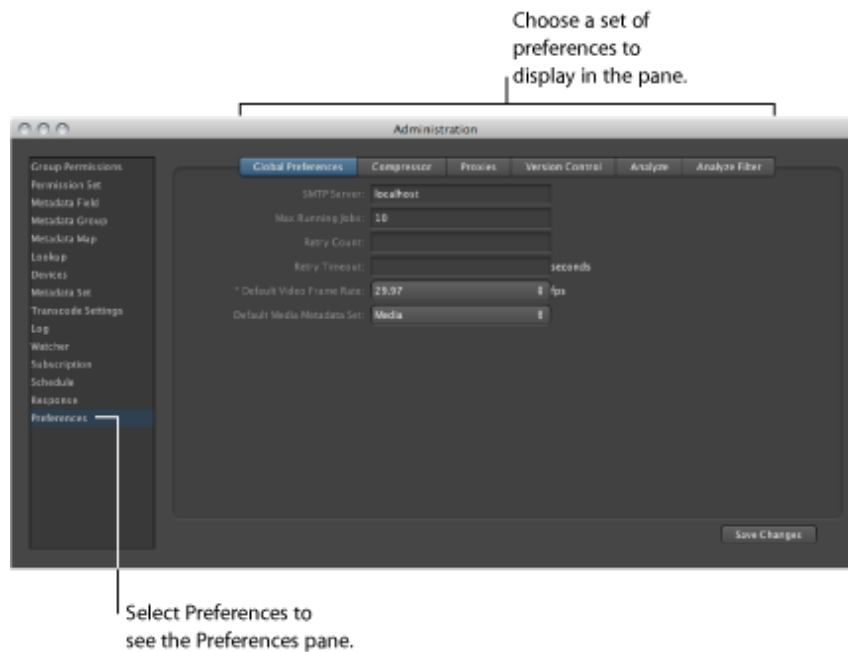


The user preference settings define how many items are found when you perform a search, as well as how many items appear on each page. You can increase these settings to show more items, which is especially useful when working with metadata fields and groups. See “User-Configurable Preference Settings” for more information.

Note: Any items with an asterisk (*) by them are required to be configured.

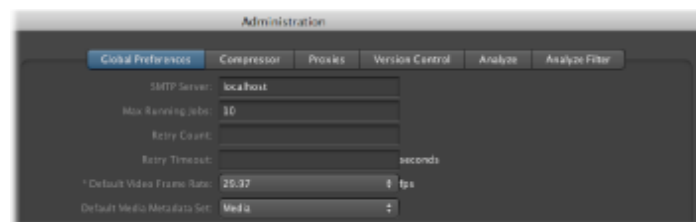
Preference Settings in the Administration Window

The Preferences pane of the Final Cut Server client's Administration window contains most of the settings from the General pane of Final Cut Server System Preferences. It also contains many additional settings.



Global Preferences Settings

The Global Preferences pane contains the most common settings. Many of these are duplicates of the settings in the General pane of Final Cut Server System Preferences.



The following are the Global Preferences pane settings:

- **SMTP Server:** Enter the name of the outgoing SMTP server used to send all emails. This setting is also configured during the Final Cut Server installation process. If this was left blank during installation, this setting defaults to "localhost," which you can use if this computer has Mac OS X Server v10.5 and is configured as an SMTP email server.

Note: Final Cut Server supports only Simple Mail Transfer Protocol (SMTP) servers that do not require authentication.

Final Cut Server can be configured to send email notifications for a variety of reasons, such as a set of assets being ready for review. See "About Email Responses" for more information.

- **Max Running Jobs:** Enter the maximum number of jobs that can run concurrently on Final Cut Server. Most facilities will set this to no more than 20 jobs.
- **Retry Count:** Enter the maximum number of times to retry a failed job.
- **Retry Timeout:** Enter the period in seconds to wait before retrying a failed job.

- **Default Video Frame Rate:** Choose the frame rate to use for assets with undefined or unrecognized timecode and for assembling image sequence proxy videos. Choosing “Auto” will use an automatically generated frame rate gleaned from the media’s metadata. If no frame rate information is available, the default frame rate that is specified in the Global Preferences pane of the Administration window will be used.

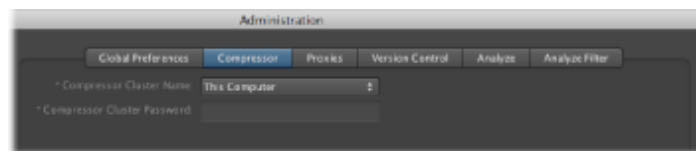
Note: This setting provides a default frame rate for assets that meet one of the following criteria: video files uploaded with no frame rate in their metadata, video files that contain a frame rate that is not recognized by Final Cut Server, or the default clip proxy video that is created for image sequence assets.

- **Default Media Metadata Set:** Choose the default metadata set to apply to Final Cut Pro project media.

Compressor Preference Settings

The Compressor pane contains a pop-up menu that allows you to choose the cluster to use for any transcoding operations. The choices available depend on your Compressor configuration. See the Compressor documentation, available in the Compressor Help menu, for information on configuring clusters. For information on creating a custom QuickCluster for use with Final Cut Server, see the *Final Cut Server Setup Guide*.

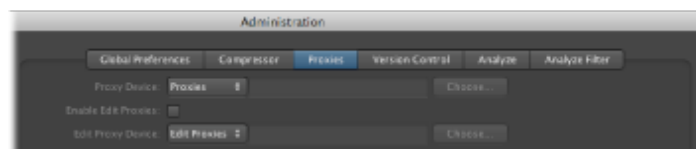
Note: The Compressor Cluster Password field only activates if you choose a password-protected cluster.



Important: In the Compressor Cluster Name pop-up menu, the This Computer item does not actually refer to the computer the Final Cut Server client is using—it refers to the computer Final Cut Server is installed on.

Proxies Preference Settings

The Proxies pane contains pop-up menus that allow you to choose the devices that store your normal proxies and the optional edit proxies.



Each of these devices is actually created during the installation process. See the *Final Cut Server Setup Guide* for more information.

Important: If you change either of the device settings, make sure that the original devices remain accessible or you will have to re-create the proxy files stored on them using the Analyze or Regenerate All Proxies feature. It is recommended that you do not change these devices unless you absolutely must. An alternative is to move the existing Proxies or Edit Proxies device to a new location, for example to a larger hard disk, then modify the device’s Local Directory setting in the Devices pane of the Final Cut Server client’s Administration window. See “Editing a Device Using the Administration Window” for more information.

The following are the Proxies pane settings:

- **Proxy Device:** Choose a device from the pop-up menu for the storage of normal proxy files (Contentbase devices only).

The default Proxy device is named Proxies and is at the location specified with the installer’s Proxy Media Location entry.

Each time you upload an asset to the Final Cut Server catalog, a set of low-resolution files is created. The Proxies device is where the thumbnails, poster frames, and clip proxies are stored. These are used in place of the actual full-resolution assets whenever lower-resolution versions are sufficient. See “Analyze Filter Preferences Settings” for information about configuring proxy formats.

You can use the client’s Administration window to create Contentbase devices in your file system suitable for proxy use. See “About Contentbase” for more information.

- *Enable Edit Proxies:* Select this checkbox to have Final Cut Server automatically create edit proxy files using the Apple ProRes 422 (Proxy) codec (in addition to the normal proxy files) whenever you upload a Final Cut Pro project to the Final Cut Server catalog.

Note: This setting is initially made as part of the Final Cut Server installation process. The default transcode setting for edit proxies is Apple ProRes 422 (Proxy). You can change the transcode setting used for edit proxies in the Analyze pane of the preferences settings. For more information, see “Analyze Filter Preferences Settings.”

- *Edit Proxy Device:* Choose a device from the pop-up menu for the storage of the edit proxy files (Contentbase devices only).

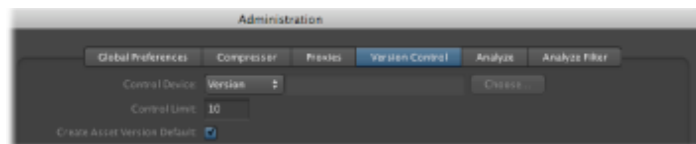
The default Edit Proxy device is named Edit Proxies and is at the location specified with the installer’s Production Media Location entry.

Each time you upload a Final Cut Pro project, you can have Final Cut Server create edit proxy files. This option is controlled by the Enable Edit Proxies checkbox. These edit proxy files are stored in the Edit Proxies device. When you export or check out a Final Cut Pro project from the Final Cut Server catalog that has edit proxy files, you have the choice of downloading the original media files or the edit proxy files.

You can use the client’s Administration window to create Contentbase devices in your file system suitable for edit proxy use. See “About Contentbase” for more information.

Version Control Preference Settings

The Version Control pane contains settings for configuring Final Cut Server to manage versions of assets and productions.



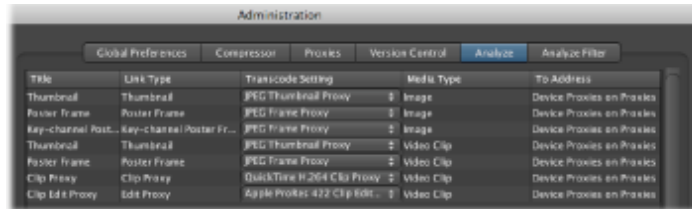
Important: Each version requires an amount of disk space similar to that of the original version. Keeping more than a few versions may require significant disk space, especially when working with large video files.

The following are the Version Control pane settings:

- *Control Device:* Choose a device from the pop-up menu for the storage of asset backup versions (Contentbase devices only). The Final Cut Server Installer automatically creates a Version device, and that device is automatically selected here. See “Setting Up the Version Device” for more information.
- *Control Limit:* Enter the maximum number of versions that can be associated with an asset. When the limit is reached, the oldest versions are deleted as new versions are added.
- *Create Asset Version Default:* If automatic version control was not turned on during the Final Cut Server installation process (by checking the Enable Version Control checkbox in the Customer Profile Selection pane of the installer), selecting this checkbox will turn version control on or off for Final Cut Pro project and video assets.

Analyze Preference Settings

The Analyze pane is where you configure the various proxy formats created when an asset is added to the catalog.



For each item in the list, you can choose a format to use for that representation of an asset. There are two media types: image and video clip.

Following are the Analyze pane settings:

- *Thumbnails*: These are the small images that appear in the Thumbnails view of the client's main window.
- *Poster Frame*: These are full-resolution images that a user can export from the main window. Poster frames are intended to be a generic file format version, such as a JPEG version, that you can use in place of the original asset. These are especially useful when the original asset is a proprietary format that you want to view on computers that don't support that format.
- *Key-channel Poster Frame*: For images and certain image sequence formats only. These are identical to normal poster frames except that they contain an image's alpha channel.
- *Clip Proxy*: For video clips only. Clip proxies are low-resolution representations of the asset that are used whenever you do not need to use the full-resolution version of the asset. These files are copied to your system when you preview an asset in the client's main window.

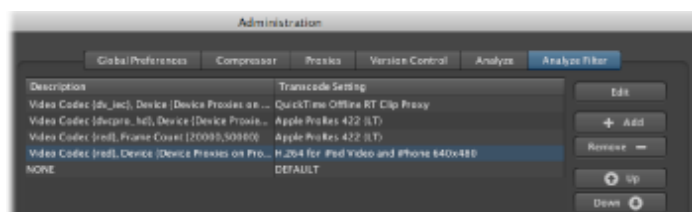
Final Cut Server automatically detects the aspect ratio of the video and adjusts the clip proxy aspect ratio to match.

Note: The options you have for the clip proxy transcoding are determined by the settings you create in Compressor. You can create additional settings in Compressor to customize your transcoding options. See the Compressor documentation, available from the Compressor Help menu, for more information.

- *Clip Edit Proxy*: For video clips that are uploaded with a Final Cut Pro project only. This setting provides a proxy format for use when exporting or checking out a Final Cut Pro project. See "Proxies Preference Settings" for more information.

Analyze Filter Preferences Settings

After installing Final Cut Server, the administrator can create analyze filters that find video files based on file type, bit, and frame rate, as well as other data. These video files are then transcoded to create proxy files. You create and manage analyze filters in the Analyze Filter pane.



The Analyze Filter pane contains the following elements:

- *Add (+) Button*: Click the Add button to create a new analyze filter, and then enter

the analyze filter's parameters in the Proxy Transcode Filter Settings window that appears.

- **Edit Button:** Select an existing analyze filter and click the Edit button to edit it.
- **Delete (–) Button:** Select an existing analyze filter and click the Delete button to delete it.
- **Up:** Use this button to move an existing analyze filter up the list.
- **Down:** Use this button to move a selected analyze filter down the list.
- **List of existing analyze filters:** As you create new analyze filters, each filter appears in this list.

Important: When you create several proxy transcode settings for the same filtering criteria, Final Cut Server will apply the filters from the top down in their listed order. It is suggested that you order multiple proxy transcode settings for the same filtering criteria by complexity, listing the most specific one first, and the more general ones second and third, to optimize the proxy transcode process.

Creating Proxy Transcode Settings

When you create a proxy transcode setting, you describe the files you want to be transcoded using video codec, image size, bit rate, frame count, and device location filters. Then you select a transcode setting for the defined filter. Using one or more filtering criteria, you can create very broad or very specific analyze filters to meet your organization's specific needs.

To create a proxy transcode setting

1. In the Analyze Filter pane, click the Add button.

The Proxy Transcode Filter Settings window appears.



2. Enter one or more types of filtering information.
3. Enter a transcode setting for the filtering information.
4. Click the Apply Changes button.

The new analyze filter appears in the Analyze Filter list.

About Editing Existing Proxy Transcode Settings

When you edit an existing proxy transcode setting, Final Cut Server does not automatically re-create the asset's proxy files. The administrator needs to manually regenerate all of the proxies. For more information, see "Manually Analyzing Assets and Regenerate All Proxies."

To regenerate an asset's proxy files

1. In the Final Cut Server main window, select the asset or assets that you want to regenerate proxy files for.
2. Control-click the asset and choose "Regenerate All Proxies" from the shortcut menu.

The proxy files will be re-created for the assets you selected.

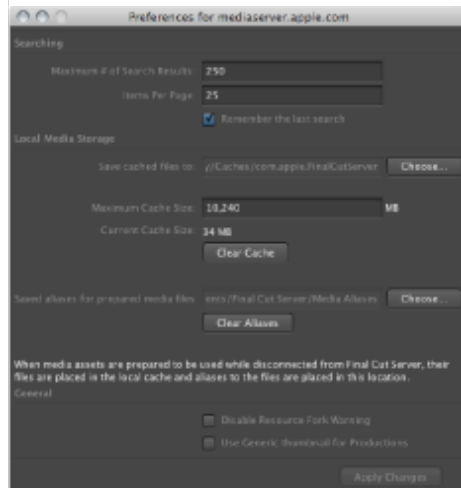
User-Configurable Preference Settings

In addition to Final Cut Server System Preferences and the Preferences pane of the client's Administration window, there is a third set of preferences for users to customize how Final Cut Server works for them. These preferences only affect a user when using a particular client on a particular computer. (If the user logs in to a client on a different computer, the user's preference settings do not follow.)

To open the user preference settings

Do one of the following:

- Choose Final Cut Server > Preferences.
- Choose Preferences from the Server pop-up menu (the pop-up menu in the Final Cut Server main window that appears when you click the Server button).



The user Preferences window contains the following settings:

- *Maximum # of Search Results:* Enter a value that is the maximum number of items that appear after a search.
- *Items Per Page:* Search results are divided into pages to make viewing more efficient. You can enter a value that defines how many items appear on each page.
- *Remember the last search:* Select this checkbox to have Final Cut Server remember and run the last search that you performed the next time you log in.
- *Save cached files to:* Click the Choose button to select a location to use for storing your caches. The default locations are `/username/Library/Caches/` when running the client on a Macintosh computer and the `C:\username\AppData\Roaming\com.apple.FinalCutServer\cache` directory on a Windows computer. In both cases, the cache files are located in a folder at this location with the name of the server computer.

Important: Changing the cache location will result in all current caches becoming unavailable.

- *Maximum Cache Size:* Enter a value to define a maximum cache size.
- *Current Cache Size:* This shows the current size of the cache.
- *Clear Cache:* Click Clear Cache to delete all caches from the cache location.
- *Saved aliases for prepared media files:* Click the Choose button to select a location to use for storing aliases to cache files. This location is used when you choose the Prepare for Disconnected Use option for assets.

Note: Client computer assets that Final Cut Server manages are stored in the location

specified as the Cache Location. This location is intended to only be used by Final Cut Server, and so it can be difficult to locate assets in it. The “Prepare for Disconnected Use” option creates aliases to the assets in the cache, making it much easier to add them to Final Cut Pro projects when you are not connected to Final Cut Server.

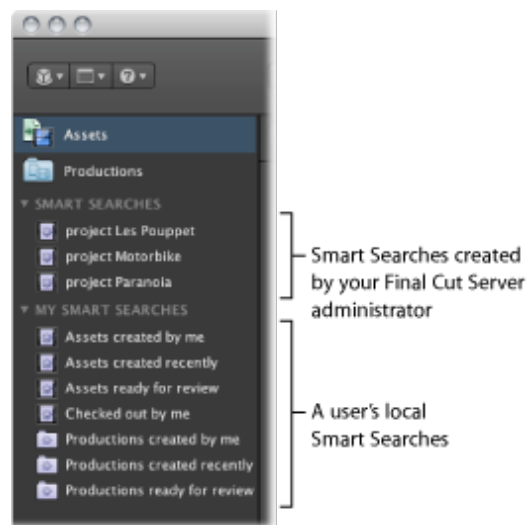
- *Clear Aliases:* Click Clear Aliases to delete all aliases from the alias location.
- *Disable Resource Fork Warning:* Select this checkbox to turn off Disable Resource Fork error messages.
- *Use Generic thumbnail for Productions:* Select this checkbox to display a generic production icon to represent a production. By default, a still image contained in a production is displayed on the production thumbnail and in List view.

Administrator–Only Client Functions

In addition to the Administration window, there are other Final Cut Server client functions that can only be performed by a user logged in with administration privileges.

Configuring Smart Searches

A user logged in with administrator privileges can configure Smart Searches that will work in every Final Cut Server client. After creating a Smart Search, and after the client user’s restart their clients, the new Smart Searches will appear under the Smart Search heading in every Final Cut Server client.



Important: Final Cut Server does not come with any default Smart Searches. The Smart Searches heading will not appear in the main window until a user logged in with administrator privileges creates one or more Smart Searches following the steps below.

To create a Smart Search

1. In the client’s main window, enter the search criteria and click the Search button.
The search results appear.
2. Click the “Save as Smart Search for All Users” button.
The search appears under the Smart Searches heading as “untitled.”
3. To rename the Smart Search you just created, click the search title, then enter a new name in the field that appears.
The new Smart Search appears under the Smart Searches heading in your client.

Important: After creating the Smart Search, you must instruct every client user to quit and restart their Final Cut Server client. After restarting, the new Smart Search will appear in each Final Cut Server client under the Smart Searches heading.

You can delete a Smart Search at any time while logged with administration privileges.

To delete an existing Smart Search

- Select and then control-click a Smart Search. In the pop-up menu that appears, choose Delete.

The Smart Search is no longer listed under the Smart Searches heading.

Important: After deleting a Smart Search, you must instruct every client user to quit and restart their Final Cut Server client.

Manually Analyzing Assets and Regenerate All Proxies

When assets are added to the Final Cut Server catalog, they are automatically analyzed. This process extracts a variety of metadata from the asset and then creates the asset's proxy files. As an administrator, you can also manually analyze assets using one of two commands, depending on your needs.

For example, you may choose to change the transcode setting for Clip Edit Proxies from the default setting, Apple ProRes 422 (Proxy), to Apple ProRes 422 (LT). After making the change in the Administrator window's Analyze Preferences pane, you can manually create any new proxy files for an asset (based on the new transcode setting), or you can manually delete and re-create all the proxy files for an asset.

To manually create missing proxy files for one or more assets

1. In the client's main window, select one or more assets.
2. Control-click the asset or assets and then choose Analyze from the shortcut menu.

The assets are analyzed, and any missing proxy files are created.

To delete and regenerate all of the proxy files for one or more assets

1. In the Final Cut Server main window, select one or more assets that you want to regenerate proxy files for.
2. Control-click the assets and choose Regenerate All Proxies from the shortcut menu.

The asset's proxy files are analyzed and new proxy files are created for the asset.

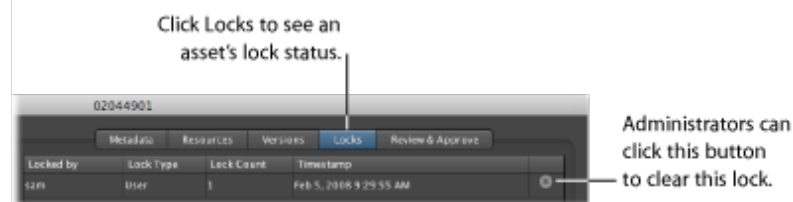
Cancel Any Asset Checkout or Lock

When a user checks out an asset, generally only that user can check the asset back in or cancel the checkout. Similarly, if a user manually locks an asset, only that user can unlock it.

The exception is if the logged-in user has administration privileges; in that case, the user can override the checkout or lock if necessary.

To override a checkout or lock on an asset

1. Double-click the asset to open its detail window.
2. Click the Locks button to show the Locks pane.



3. Click the Cancel button.

About Unicode Support

Final Cut Server can store textual metadata as Unicode using UTF-8 encoding. This means it can support a wide range of multibyte character sets including a range of Chinese, Japanese, and Korean characters. Unicode metadata can be stored, modified, and searched through the Final Cut Server user interface.

Further, the Final Cut Server client can use the local settings of the operating system on which it is installed. In addition to displaying Chinese, Japanese, and Korean characters, the Final Cut Server client uses local settings such as date and number formats when displaying data.

When writing media to storage devices, Final Cut Server is constrained by the capabilities of each device and the application programming interface (API) of each device. At present, Final Cut Server supports Unicode characters on Filesystem and Contentbase devices. See “Device Type Details” for more information on these device types.

From a technical perspective, the Final Cut Server server uses UTF-32 internally to represent all its metadata and converts to UTF-8 when writing to the catalog, transmitting metadata to the client user interface, or to the agents that interact with devices (where the devices support Unicode). When talking to devices, the Final Cut Server server transcodes files to the specified encoding format each time the files are moved to or from the device. Encoding support for devices includes all types of Unicode; the Windows encodings; and the common Chinese, Japanese, and Korean encodings.

Note: It is important to install the native language version of Java on any computer that requires Unicode support in the user interface. It is also important to have operating system support for the language and character set. Refer to Mac Help and the Sun Java websites for further details.

Copyright © 2009 Apple Inc. All rights reserved.

Backing Up Final Cut Server

The Backup pane makes it easy to manually or automatically make backup copies of your Final Cut Server catalog.

Final Cut Server includes a backup feature that allows you to create a backup copy of the Final Cut Server catalog. Being able to restore the catalog from the backup copy can help you get your system running again should you need to reinstall Final Cut Server.

Important: The backup feature only backs up the Final Cut Server catalog and any annotations associated with assets in the catalog—it does not back up any assets or projects stored on any of your devices.

Developing a Backup Strategy

A Final Cut Server system is comprised of a lot of files stored on a variety of computers and devices. Backing up an entire Final Cut Server system can be challenging, especially when you consider the potentially large file sizes you may have to deal with. Things to consider include backing up devices, backing up the Final Cut Server catalog, and restoring the Final Cut Server catalog.

About Backing Up Devices

Backing up assets on your devices is straightforward. You can use any current backup system to make copies of the assets. If you back up your devices, as well as your Final Cut Server catalog, it is a good idea to back them up at the same time. This ensures that the data in the catalog's backup matches the assets in the device backups.

It is especially important to back up your Proxies and Version devices when you back up your Final Cut Server catalog. Both of these devices contain special assets used by Final Cut Server and both use the Contentbase file system. A suggested backup strategy is to back up the Final Cut Server catalog and place its backup file on the same volume as the Proxies and Version devices. As soon as the catalog is backed up, you can then back up it and the two devices at the same time using your normal backup procedures.

About Backing Up the Final Cut Server Catalog

Backing up your Final Cut Server catalog actually entails much more than just a file or two. For that reason, Final Cut Server includes a backup feature that automates the backup process.

The result of backing up your Final Cut Server catalog is a .zip file that contains a snapshot of all aspects of your Final Cut Server catalog. This snapshot includes:

- All groups and their permissions
- All metadata for all assets and projects
- All automations, regardless of whether they were created with Automation Setup Assistant or the client's Administration window
- A list of all devices and their settings, regardless of whether they were created with Device Setup Assistant or the client's Administration window
- All log and job history entries
- All preference settings

The goal of backing up your Final Cut Server catalog is to be able to return to a known state should there be a catastrophic failure, such as a hard disk failure. Following is an example of the steps you could take to recover from a hard disk failure on your server computer.

Stage 1: Reinstalling Mac OS X on the Computer

The first step toward recovering from a hard disk failure is to reinstall the Mac OS X v10.5 Leopard or Mac OS X Server v10.5 Leopard operating system.

Stage 2: Configuring Your Groups as They Were Previously

Once restored, Final Cut Server will expect the same groups to be available that were in use previously.

Stage 3: Restoring Your Proxy and Version Files

If you backed up the proxy and version files at the same time that you last backed up the Final Cut Server catalog (as suggested previously), you need to restore these files. These must appear exactly as they did when you last backed up Final Cut Server, in exactly the same folder location relative to the hard disk's root folder. Final Cut Server automatically reconnects to these files when its catalog is restored.

Stage 4: Installing Final Cut Server

You need to reinstall Final Cut Server from the original installation disc. Any settings you configure during the installation process, such as the location for the proxy server, are changed back to the previously backed up settings when you restore the Final Cut Server catalog.

Important: The backup files are specific to the version of Final Cut Server being used when the files are saved. Before you can restore a backup file, you must make sure that the Final Cut Server version is exactly the same as when the backup file was created. This may mean using Software Update after installing Final Cut Server from your original installation disc.

Be sure to deselect the "Catalog Media device automatically" item in the Final Cut Server Installer's "Settings for Profile" pane to ensure that no automations begin running while you are in the process of restoring your catalog. See the *Final Cut Server Setup Guide* for more information.

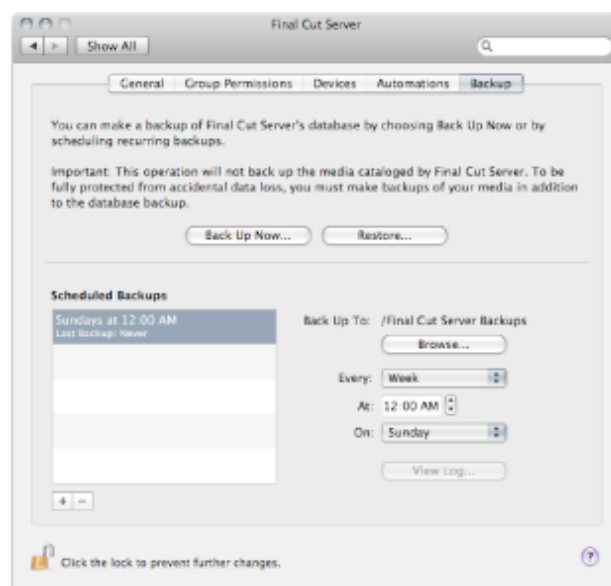
Stage 5: Restoring the Previous Final Cut Server Catalog

When the Final Cut Server installation is finished, you can click the Restore button in the Backup pane of Final Cut Server System Preferences. This configures Final Cut Server to the same state it was in during that backup process.

Note: You may need to reset network passwords for devices that require them.

Backing Up Your Final Cut Server Catalog

The backup feature is accessible through Final Cut Server System Preferences.



You have two options for backing up your Final Cut Server catalog: backing it up immediately or scheduling regular backups.

To back up your Final Cut Server catalog immediately

1. Select the Backup pane of Final Cut Server System Preferences.
2. Click the Back Up Now button.

A dialog appears in which you enter the filename and location for the backup file.

Important: It is strongly recommended that you do not choose a location for the backup file that is on the same drive that Final Cut Server is installed on.

3. Click the Back Up button.

A compressed file with a .zip extension is created and saved at the specified location.

To back up your Final Cut Server catalog using a schedule

1. Select the Backup pane of Final Cut Server System Preferences.
2. Click the Add (+) button.

This adds a scheduled backup using the default settings.

3. Select the backup entry in the Scheduled Backups list and configure the settings as follows:

- Click Browse to open a dialog to choose the location for the backup file.

Important: It is strongly recommended that you do not choose a location for the backup files that is on the same drive that Final Cut Server is installed on.

- Choose either Day (the catalog is backed up every day) or Week (the catalog is backed up once a week) from the Every pop-up menu.
- Enter a time in the At field.
- If you chose to back up once a week, choose the day to back up on from the On pop-up menu.

A compressed file named “Final Cut Server DB Backup on [selected folder] at [date and time].zip” is created and saved at the specified location at the specified day and time.

After a scheduled backup has run, the View Log button on the Backup pane becomes available. You can click it to see a log of past scheduled backups.

About the Backup Files

Because the Final Cut Server backup files do not contain any actual media, they are relatively small files.

It is strongly recommended that you back up the Proxies and Versions devices, along with the Final Cut Server catalog backup file, shortly after you back up the Final Cut Server catalog. These devices use the Contentbase file system format and rely on Final Cut Server having an accurate catalog of their contents. Being able to restore the devices and catalog from files created at the same time results in the Final Cut Server catalog accurately matching up to these devices.

Note: It is also suggested that you back up the assets and projects on your other devices.

Restoring Your Final Cut Server Catalog

Although restoring your Final Cut Server catalog is easy to do, there are a number of things to be aware of.

About Restoring Your Catalog

Restoring the catalog can actually be a destructive process.

- *If you are restoring the catalog on a new Final Cut Server installation:* There is no practical existing catalog, and you can restore with no danger.

- *If you are restoring over an existing catalog:* The existing catalog is completely deleted before the restore begins. If the restore files turn out to not contain what you had hoped or do not work correctly, you can end up in worse shape than when you started. For that reason, you are strongly encouraged to back up your existing Final Cut Server catalog prior to restoring a previous backup file.

Before You Restore Your Catalog

Restoring your catalog may not be all you need to do to get your system working again. If you are using restore to recover from a hard disk failure, you will need to configure a few other areas for Final Cut Server to work correctly.

Users and Groups

You need to configure your computer's users and groups. If your users and groups are configured on a different computer, all you need to do is ensure this computer can access that information. The restore function will attempt to assign the permission sets to the same groups as when the backup file was created.

If your users and groups are configured locally on this computer, you need to reconfigure them as they were when the backup file was created. Any groups that are not available during the restore process will not be available to use Final Cut Server until you manually add them in Final Cut Server System Preferences.

Devices

You should configure your computer to support any internal hard disks, Xsan systems, RAID's, network volumes, and external drives that Final Cut Server uses for its devices. If any of the devices are on volumes that require a password, you will have to manually configure those passwords using Device Setup Assistant after you have restored the Final Cut Server backup file.

Note: Be aware that, after the restore is completed, any devices that have full scan automations configured for them will try to perform those scans at their scheduled time. If the device is not available and configured properly, this could lead to the scan purging assets from the catalog.

Restoring Your Catalog

Restoring your Final Cut Server catalog simply requires you to choose a backup file to restore from.

To restore your catalog

1. Select the Backup pane of Final Cut Server System Preferences.
2. Click the Restore button.
A file selection dialog appears.
3. Select the backup file to restore from and click the Restore button.

Important: After you click the Restore button, you cannot cancel the process.

The Final Cut Server current catalog is deleted and the catalog saved with the backup file is added.

Groups and Permissions

Final Cut Server includes features that allow you to precisely define the catalog access of each group of users.

To be able to use Final Cut Server, you must add at least one group with at least one user. In most cases, you will create several groups, each configured with different permissions, and then add the appropriate users to each group. Final Cut Server can use either local users and groups or groups based on Mac OS X Open Directory or Windows Server Active Directory to validate users. The actual creation of the groups and users is done using either the Accounts pane of System Preferences or Mac OS X Server Workgroup Manager. In Final Cut Server, you choose the groups to use and assign a permission set to each of the groups.

See the *Final Cut Server Setup Guide* for details on using the Accounts pane of System Preferences, Mac OS X Server Workgroup Manager, and using Final Cut Server System Preferences to add groups and assign permission sets to them. Instructions for adding groups based on Windows Server Active Directory are also included in the *Final Cut Server Setup Guide*.

This chapter covers adding groups and assigning permission sets using the Final Cut Server client's Administration window. Generally, it is recommended that you use the Final Cut Server System Preferences as documented in the *Final Cut Server Setup Guide*; however, there will be some situations in which it is more convenient to add groups and assign permissions in the client's Administration window. This chapter also covers creating custom permission sets, allowing you to exactly define each group's access to the Final Cut Server catalog.

Adding Groups to Final Cut Server

After you have finished setting up your groups with Workgroup Manager, you are ready to add the groups to Final Cut Server.

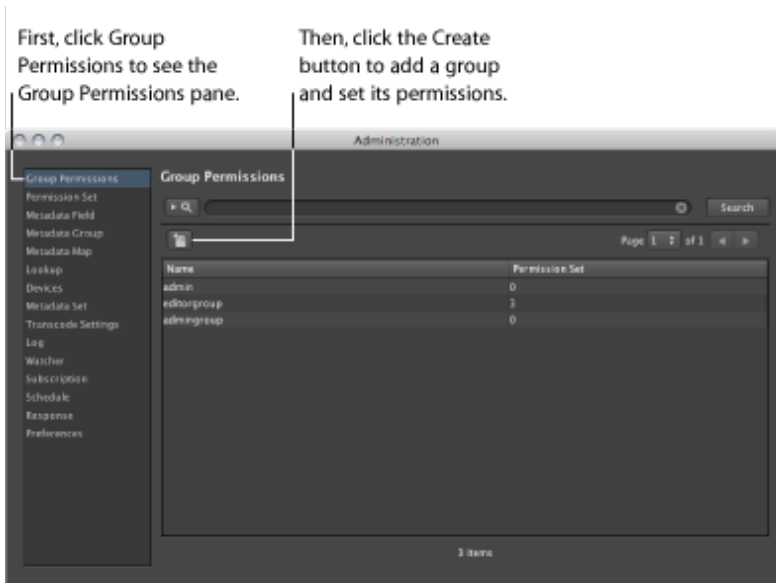
You can add the groups using the server's Final Cut Server System Preferences or you can use the client's Administration window. See the *Final Cut Server Setup Guide* for information on using Final Cut Server System Preferences to add groups to Final Cut Server and assigning permission sets to them.

To add a group to Final Cut Server using the Administration window

1. Open a Final Cut Server client and log in as a user with administrator privileges.
2. Choose Administration from the Server pop-up menu (the pop-up menu in the Final Cut Server main window that appears when you click the Server button).

The Administration window appears.

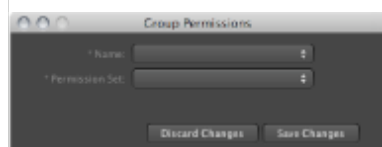
3. Click Group Permissions in the column on the left to open the Group Permissions pane.



The Group Permissions pane lists the current Final Cut Server groups and their assigned permission set's number.

- Click the Create button to add a new group.

The Group Permissions window appears.



- Choose the group to add using the Name pop-up menu.
- Choose a permission set from the Permission Set pop-up menu.
- Click Save Changes.

The Group Permissions window closes. To see the new group in the Group Permissions pane, click the Search button.

Adding and Managing Permission Sets

Each group has a permission set applied to it. A permission set defines a wide variety of permission settings, including asset and production filtering.

Important: The “admin” permission set is the only one that allows access to the client’s Administration window. Even if you duplicate the “admin” permission set, that copy will not have access to the Administration window.

About the Default Permission Sets

Final Cut Server Installer automatically creates six permission sets.

- admin*: This is the only permission set that includes access to the Final Cut Server client’s Administration window. It provides access to all aspects of the Final Cut Server system. It should only be assigned to groups of users that are capable of administering all aspects of the Final Cut Server system.
- artist, manager, and editor*: These permission sets are all identical and provide access to all aspects of the Final Cut Server system except for those that are specific to the admin permission set.

The intention of these three permission sets is to give you a starting point for creating specific permission sets for different groups of users. For example, you might want to modify the artist permission set so that those users are only able to

access specific devices that contain the graphics they work on.

- *reviewer*: This permission set is unable to create, delete, catalog, or edit any of the assets within the Final Cut Server catalog. The reviewer permission set is only able to see assets that have a status of Approved, Ready for Review, Rejected, or Completed.
- *browser*: This permission set is unable to create, delete, catalog, edit, edit details, or copy any of the assets within the Final Cut Server catalog. The browser permission set is only able to see assets that have a status of Approved.

Working with Permission Sets

Permission sets are created and configured from a Final Cut Server client's Administration window.

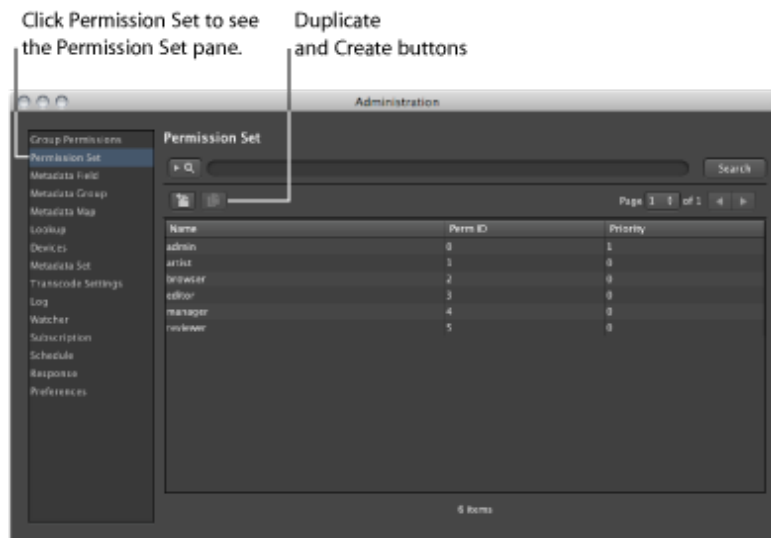
To see the existing permission sets

1. In a Final Cut Server client, choose Administration from the Server pop-up menu to open the Administration window.

Important: You must be logged in as a user with administrator privileges for the Administration item to appear in the Server pop-up menu.

2. Click Permission Set in the column on the left to open the Permission Set pane.

A list of existing permission sets appears. By default there is one called "admin," plus others that the installer created based on the customer profile you selected. See the *Final Cut Server Setup Guide* for more information.



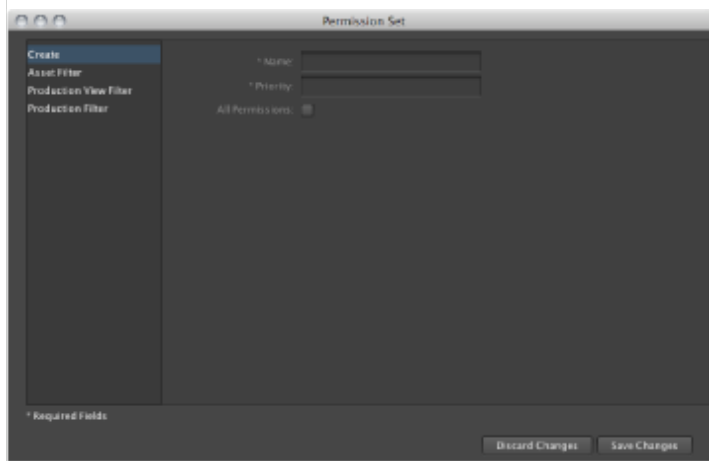
The Permission Set pane contains three columns:

- *Name*: This is the name of the permission set. This is also the name that appears when you are managing groups.
- *Perm ID*: This is a number that Final Cut Server assigns to permission sets, based on the order in which they are created.
- *Priority*: This is a number that defines the priority level of the permission set. Higher values are consulted first to set the permissions for users who are assigned to multiple groups. For example, if a user belongs to a group with a permission set that has a priority of 3 and a second group that has a permission set priority of 4, the second group's permission set (with the priority of 4) is used.

To add a new permission set

1. Click the Create button.

The Permission Set window appears.



2. In the column on the left, click Create, Asset Filter, and Production Filter to open and configure their panes.

See “Settings for Permission Sets” for details on the settings in these panes.

3. Select the All Permissions checkbox to set this permission set to have the same permissions as “admin,” but without access to the Administration window.

This is often the best way to create a permission set. Starting with all settings enabled and then disabling a few specific settings can be easier than starting with a permission set with nothing enabled and then enabling many settings.

Important: The “admin” permission set is the only one that allows access to the Administration window.

4. Click Save Changes.
5. Click the Administration window’s Search button to see the new permission set in the Permission Set pane.

In many cases, it is easier to duplicate an existing permission set and then make changes to it as needed.

To make a duplicate of an existing permission set

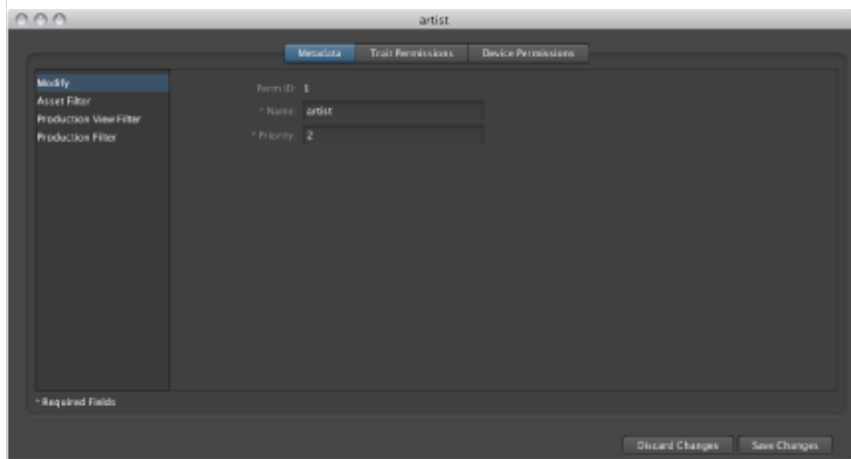
1. Select the permission set that you want to copy.
2. Click the Duplicate button.
3. Click the Administration window’s Search button.

A new permission set, named Clone of [duplicated permission set], is added to the list.

To edit an existing permission set

1. Double-click an existing permission set in the Permission Set pane.

The Permission Set window appears.



2. Click Metadata, Trait Permissions, and Device Permissions to configure each group of settings.

See “Settings for Permission Sets” for details on the settings in these panes.

3. Click Save Changes.

This window closes and the permission set appears in the Permission Set pane with the changes you made.

Settings for Permission Sets

There are three main areas for configuring a permission set:

- Metadata pane
- Trait Permissions pane
- Device Permissions pane

Note: The Trait Permissions and Device Permissions panes are available only when you are editing an existing permission set.

About Metadata Settings

The metadata permissions include the column on the left where you can select the type of metadata to configure.

Modify

This includes the name and priority settings.

The priority setting determines the order in which permission sets are consulted when a user belongs to multiple groups with different permission sets. Higher values are consulted first. For example, if a user belongs to a group with a permission set that has a priority of 3 and a second group that has a permission set priority of 4, the second group’s permission set (with the priority of 4) is used.

Asset Filter

Select Asset Filter to define a metadata filter applied to all asset searches. These metadata filters will be used to perform searches initiated by members of the group. For example, you can create a filter for the Newsroom group so that members of the group only see assets with a Completed status.

Click Asset Filter to configure asset search settings for this permission set.

The screenshot shows a window titled 'artist' with three tabs: 'Metadata', 'Trait Permissions', and 'Device Permissions'. The 'Metadata' tab is active. On the left, a sidebar contains the following options: 'Modify', 'Asset Filter' (highlighted), 'Production View Filter', and 'Production Filter'. The main content area lists various metadata fields, each with a dropdown menu set to 'All':

| | | |
|------------------|-----|-----------------|
| Asset ID | All | |
| Metadata Set | All | [None] |
| Title | All | |
| Location | All | |
| File Name | All | |
| Stored On | All | |
| Checked Out By | All | [None] |
| Annotation | All | |
| Status | All | |
| File Create Date | All | 3/25/09 4:05 PM |
| Created By | All | [None] |

At the bottom left, it says '* Required Fields'. At the bottom right, there are 'Discard Changes' and 'Save Changes' buttons.

Production View Filter

Select Production View Filter to define a metadata filter applied to nested production searches. These metadata filters will be used to perform searches initiated by members of the group.

The screenshot shows the same 'artist' window with the 'Metadata' tab active. In the left sidebar, 'Production View Filter' is now selected. The main content area displays the following metadata fields with dropdown menus:

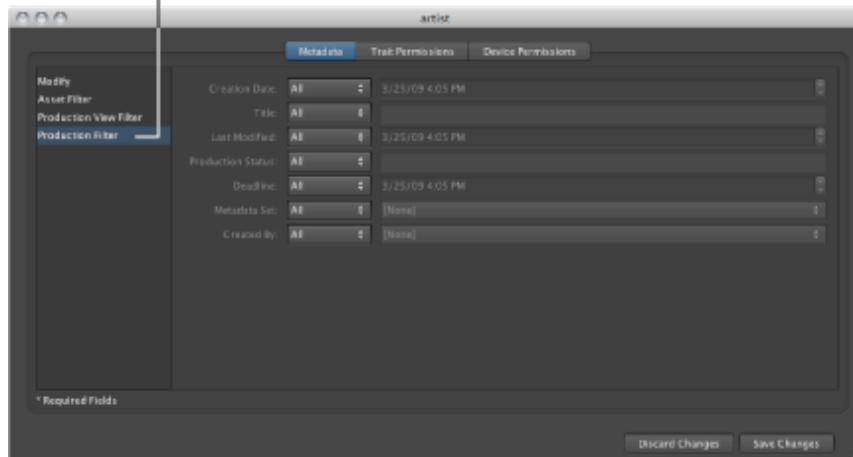
| | | |
|-------------------|-----|-----------------|
| Title | All | |
| Last Modified | All | 3/25/09 4:05 PM |
| Creation Date | All | 3/25/09 4:05 PM |
| Metadata Set | All | [None] |
| Status | All | |
| Metadata Set | All | [None] |
| Production Status | All | |
| Created By | All | [None] |

At the bottom left, it says '* Required Fields'. At the bottom right, there are 'Discard Changes' and 'Save Changes' buttons.

Production Filter

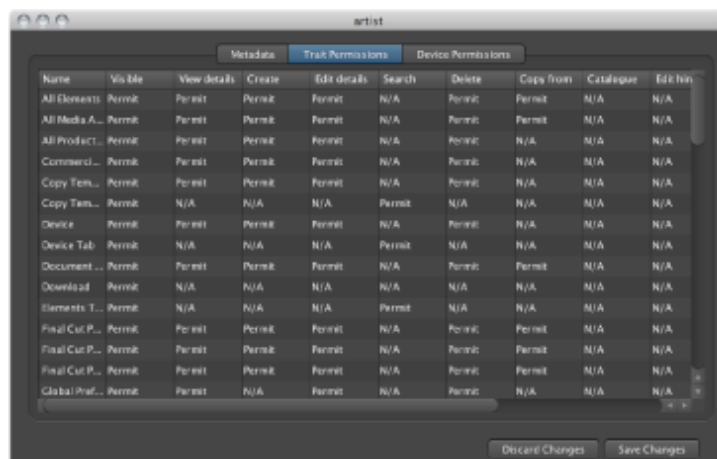
Select Production Filter to define a metadata filter applied to top-level production searches. These metadata filters will be used to perform searches initiated by members of the group.

Click Production Filter to configure production search settings for this permission set.



Trait Permissions Settings

Click the Trait Permissions button to configure access to a variety of areas within Final Cut Server, including assets, productions, jobs, users, and so on. See “Setting Trait and Device Permissions” for more information.



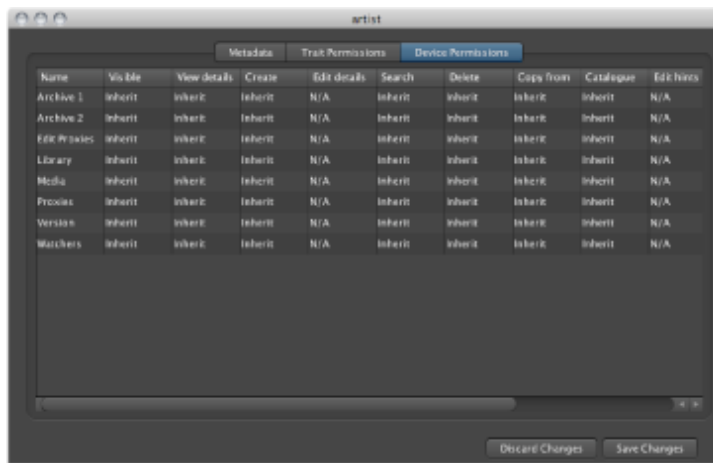
Important: Most of the settings in the Trait Permissions pane are highly specialized and should not be changed unless you have specific needs and are willing to spend time testing the changes to make sure unintended side effects do not occur.

Many of the items listed in the Name column are reserved for internal use by Final Cut Server. Changing these settings does not affect how the permission set actually works. These include all of the items with “Tab” in their names.

The most commonly configured items are the media asset and production metadata sets. These items all have either “(Media Asset)” or “(Production)” immediately after their names. For example, you may want to forbid a group of users from accessing assets that use the Graphic metadata set.

Device Permissions Settings

Click the Device Permissions button to configure a group’s ability to perform an action on the selected device. Permissions applied to the group apply to all group members. See “Setting Trait and Device Permissions” for more information.



Setting Trait and Device Permissions

The Trait Permissions and Device Permissions panes list traits or devices in rows and actions in columns. For each trait or device, click the cell and choose an option from the list to define the security permission:

- *Permit*: Allow the action or actions.
- *Forbid*: Deny the action or actions.
- *Inherit*: For device permissions, inherits the trait permissions for that device. For trait permissions, inherit functions the same as forbid. (Inherit is not intended to be used for any trait permission settings.)

The following table lists all of the action columns and their relationships with trait and device permissions.

| Column | Trait permissions | Device permissions |
|--------------|--|---|
| Visible | Display tabs in the user interface, or control access to certain types of assets or productions. | Select device when searching. |
| View details | View selected item details. | View item details on device. |
| Create | Create items with this trait; for example, users, assets of type Commercial, or productions of type Promotion. | Create or copy items to device. |
| Edit details | Edit selected item details. | n/a |
| Search | Search for items, in traits like All Assets and All Productions. | Search device. |
| Delete | Delete items. | Delete items from device. |
| Copy from | Copy items from a device to anywhere else. | Copy items from a device to anywhere else. |
| Catalogue | n/a | Catalog items on device as Final Cut Server assets. |

| | | |
|------------|--|---|
| Edit hints | Edit field hints. | n/a |
| Start | n/a | n/a |
| Stop | n/a | n/a |
| Edit media | Allow checking out and locking assets. | Edit a Contentbase device's media items directly. |

Copyright © 2009 Apple Inc. All rights reserved.

Managing Metadata

Metadata is the heart of Final Cut Server. Final Cut Server uses metadata for nearly all aspects of managing assets, as well as for configuring many aspects of the client. This chapter begins with a summary of the default metadata sets that were created when Final Cut Server was installed. This is followed by a detailed explanation of how to manage metadata in Final Cut Server.

About the Default Production Metadata

The customer profile that you chose during the Final Cut Server installation process determined the default production metadata sets that were included in your system. The following is an overview of the six possible production metadata sets that the installer can create.

Many of the metadata group names are used multiple times. Be sure you match the metadata group ID (for example, PA_GRP_CUST_PRODUCTION_RIGHTS) to ensure that you are using the correct metadata group name when attempting to match any of these metadata sets.

Package Production Metadata Set

The Package production metadata set is available in all five customer profiles. It includes two metadata groups:

- Production (PA_GRP_CUST_PRODUCTION_PACKAGE)
- Rights (PA_GRP_CUST_PRODUCTION_RIGHTS)

Show Production Metadata Set

The Show production metadata set is available in the Television Station and Video Production customer profiles. It includes two metadata groups:

- Show (PA_GRP_CUST_PRODUCTION_SHOW)
- Rights (PA_GRP_CUST_PRODUCTION_RIGHTS)

Promotion Production Metadata Set

The Promotion production metadata set is used only by the Television Station customer profile. It includes two metadata groups:

- Promotion (PA_GRP_CUST_PRODUCTION_PROMOTION)
- Rights (PA_GRP_CUST_PRODUCTION_RIGHTS)

Commercial Production Metadata Set

The Commercial production metadata set is used by the Television Station, Education, and Other customer profiles. It includes one metadata group:

- Commercial (PA_GRP_CUST_PRODUCTION_COMMERCIAL)

Trailer Production Metadata Set

The Trailer production metadata set is used only by the Film Post Production customer profile. It includes two metadata groups:

- Trailer (PA_GRP_CUST_PRODUCTION_TRAILER)
- Rights (PA_GRP_CUST_PRODUCTION_RIGHTS)

Article Production Metadata Set

The Article production metadata set is used only by the Other customer profile. It includes one metadata group:

- Article (PA_GRP_CUST_PRODUCTION_ARTICLE)

An Introduction to Managing Metadata

Final Cut Server automatically configures the metadata settings based on the profile selected during the installation of Final Cut Server. After the installation, you can customize the metadata settings to enhance your workflows.

Metadata is used to describe, find, use, and repurpose content. Some of the key challenges in managing metadata are:

- Using a metadata group that makes sense for your environment
- Minimizing the number of times metadata needs to be entered
- Ensuring interoperability among different metadata standards

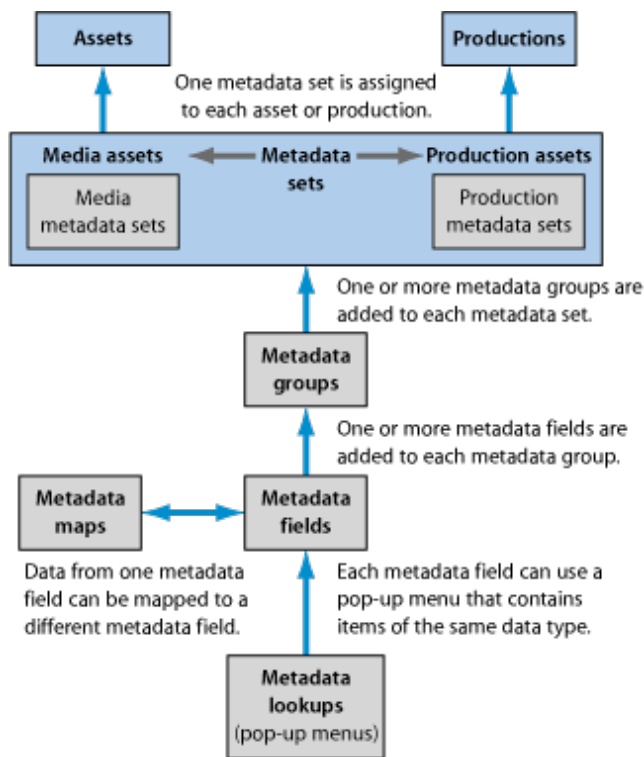
Final Cut Server addresses these challenges by allowing you to:

- *Customize metadata:* You can define, group, and store different metadata for different types of assets and productions in whatever way is most appropriate.
- *Use whatever metadata is available on the connected devices or the supported formats:* You can map metadata between formats like IPTC and the custom metadata you have defined, mapping both ways. (Mapping allows you to copy a metadata field's entry to a different metadata field.)

Final Cut Server includes a set of standard metadata fields, groups, sets, and mappings that can also be easily customized to specific requirements in the following ways:

- Defining the types of assets stored; for example, news graphics, promotions, news items, bumpers, lower thirds, and so on
- Configuring the metadata stored for each type of asset, grouping metadata into tabs, specifying the display order, defining mandatory fields, and providing pop-up menus to ensure high data quality and make it easier to enter information
- Defining different types of productions such as promotions and commercials
- Configuring the metadata for each type of production, using the same flexible framework as assets
- Mapping metadata between formats. Some file formats and devices support their own metadata, such as IPTC metadata. Final Cut Server allows you to use any available metadata by mapping it to Final Cut Server metadata fields that you have defined.
- Customizing views. You can change how the metadata fields are displayed, change the display order, and even provide hints on how you would like fields to be displayed; for example, you can specify that a notes field should be five lines high.

The relationships between the various metadata items for assets and productions are as follows:



Each of these metadata items is configured in its own pane:

- *Metadata Field pane*: This is where you create new metadata fields or edit existing fields. See “About Metadata Fields” for more information.
- *Lookup pane*: This is where you create pop-up menus that can be used by the metadata fields. Using pop-up menus instead of text or number entry fields can make entering metadata easier and more precise. See “Metadata Lookups” for more information.
- *Metadata Group pane*: This is where you create groups of metadata fields. See “About Metadata Groups” for more information.
- *Metadata Map pane*: This is where you can relate one metadata field to another, making it easier to extract metadata information from a wide variety of formats. See “Metadata Mapping” for more information.
- *Metadata Set pane*: This is where you assign metadata groups to metadata sets. When you add assets or productions to Final Cut Server, you choose a metadata set to assign to them, which in turn applies the metadata group and its fields. See “Managing Metadata Sets” for more information.

Note: See “Settings for Permission Sets” for information about configuring the metadata settings for a permission set.

Important: As you use the various panes in managing your metadata, you will find many settings, options, and listings that are intended only for internal Final Cut Server use. Many of these are noted in the following descriptions.

In addition to using metadata to add information to your assets and productions, you can use the same techniques to affect other areas within Final Cut Server. For example, you can add metadata fields to the Thumbnails metadata group to control which fields appear when you are using the Thumbnails view. See “Using Metadata to Configure the User Interface” for more information.

About Metadata Fields

Metadata fields are the individual items of metadata stored with the media items managed by Final Cut Server. There are two types of metadata fields:

- *Required metadata*: Includes fields that are required to describe devices supported by

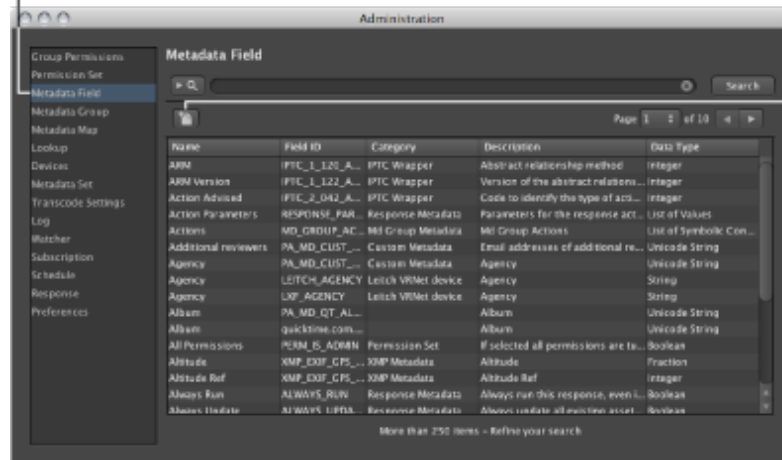
Final Cut Server as well as file format metadata such as IPTC metadata.

- *Custom metadata*: Can be configured by an administrator to any values required by the site or installation.

Note: The same metadata fields can be used in multiple metadata groups.

The Metadata Field pane of the Final Cut Server client's Administration window lists the existing metadata fields.

Click Metadata Field
to see the Metadata
Field pane.



Click the Create button
to add a new field.

The Metadata Field pane shows the following columns:

- *Name*: This is the name entered when the metadata field was created.
- *Field ID*: This is the automatically generated field name. It is for internal use only.
- *Group Category*: This is the automatically assigned metadata field's family. All metadata fields you create are in the Custom Metadata family.

Note: This column is not related to the metadata field's Category setting.

- *Description*: This is the description entered when the metadata field was created.
- *Data Type*: This is the data type selected when the metadata field was created. The data type defines the kind of data that can be entered in a metadata field (such as a date, a timecode number, or a text string).

Note: You cannot change the data type after it has been set.

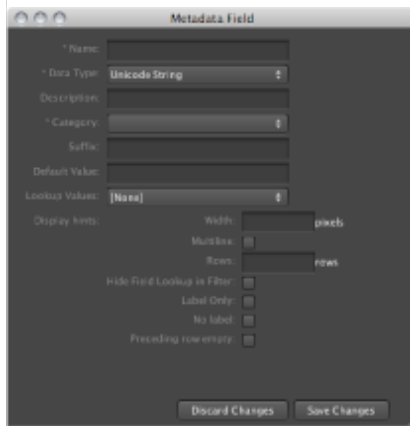
Adding or Editing Metadata Fields

You can add or edit custom metadata fields.

To add a custom metadata field

1. Click the Create button in the Metadata Field pane of the client's Administration window.

The Metadata Field window appears.



2. Configure the settings for the metadata field.
3. Click Save Changes to save the custom metadata field.

For details, see “Settings for Metadata Fields.”

The new metadata field appears in the Metadata Field pane.

You can also open the Metadata Field window and edit existing metadata fields.

Note: You are not allowed to edit the required metadata fields. In general, you can edit only those fields with the Custom Metadata category in the Metadata Field pane (although even some of them are not editable).

To edit an existing metadata field

1. Double-click the metadata field in the Metadata Field pane.

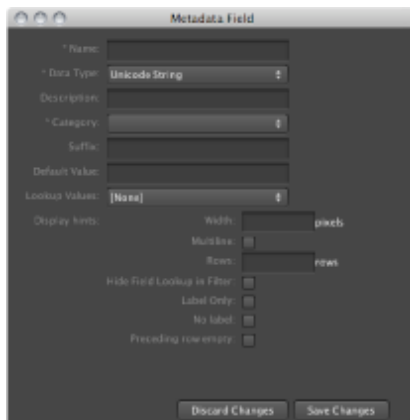
The Metadata Field window appears, showing the settings for that field. For details, see “Settings for Metadata Fields.”

2. Make any necessary changes and click Save Changes.

The Metadata Field window closes.

Settings for Metadata Fields

Each metadata field has a variety of settings. The actual settings a field has are affected by the Data Type setting. The settings are listed below as the common settings (those that are available in all metadata fields) and specialized settings (those that are available only for certain data types).



Common Settings

The following settings apply to all metadata fields:

- *Name*: Enter the name of the metadata field.
- *Data Type*: Choose the type of field from the pop-up menu. The list of settings you can configure for a metadata field varies based on the data type you choose. See “About Data Types for Metadata Fields” for more information about the data types.

Note: You can only set the data type when you are creating a new metadata field. Additionally, if you intend to use a lookup (pop-up menu) with the field, you must use the same data type in both the lookup and the metadata field.

- *Description*: Enter a more detailed description of the metadata field.
- *Category*: Choose the category of the field from the pop-up menu. Choices include:
 - None
 - Name
 - Date
 - Number
 - Filename
 - Filesize
 - TypeSelect
 - Order Attach
 - Restriction

Note: The None setting is used for almost all custom metadata, with the remaining settings reserved for internal use.

- *Suffix*: Enter any suffix that should be displayed after the field. For example, you could enter “per hour.”
- *Display hints*: Enter a width value (in pixels) that defines how wide this field should be.

Specialized Settings

The following settings apply only to certain data types.

- *Default Value*: Enter an optional default value for the field. Depending on the data type, this can be a checkbox or a specialized value entry such as a date, a timecode value, or even two values.
- *Lookup Values*: Choose a lookup from this list to display the metadata field as a pop-up menu with a set of values. Only the lookups with the same data type are displayed. See “Metadata Lookups” for details on creating lookups.
- *Date Only*: This is a checkbox that forces only dates to be entered.
- *Scale Numbers*: This is a checkbox that scales numbers to three digits (999 maximum) with the appropriate suffix. For example, 1000 becomes 1K.
- *Don't Format Numbers*: This is a checkbox that forces the metadata field to use raw numbers without formatting, such as commas separating groups of thousands.
- *Multiline*: This is a checkbox that allows multiple lines of text to be entered in the metadata field.
- *Hide Field Lookup in Filter*: This is a checkbox that suppresses the lookup value when it is displayed in a list. It is actually most often set when setting field properties within a metadata group, since you generally do not want it hidden for all usages. See “Field Properties” for more information.

About Data Types for Metadata Fields

Following is a list of the available data types. The data type defines the type of metadata

information (for example, text, numbers only, or a date) that a user can enter in a metadata field.

For almost all metadata fields you create, you should use the Unicode String data type because it provides good flexibility as well as compatibility with a wide variety of multibyte languages.

- *Boolean*: A true or false value
- *Date*: A date/time field
- *Floating Point Number*: A floating-point number
- *Integer*: An integer field that supports up to 32-bit numbers
- *Large Integer*: An integer field that supports up to 64-bit numbers (not normally required for custom metadata)
- *Timecode*: A video timecode value, in the format hh:mm:ss:ff
- *Unicode String*: An alphanumeric Unicode string

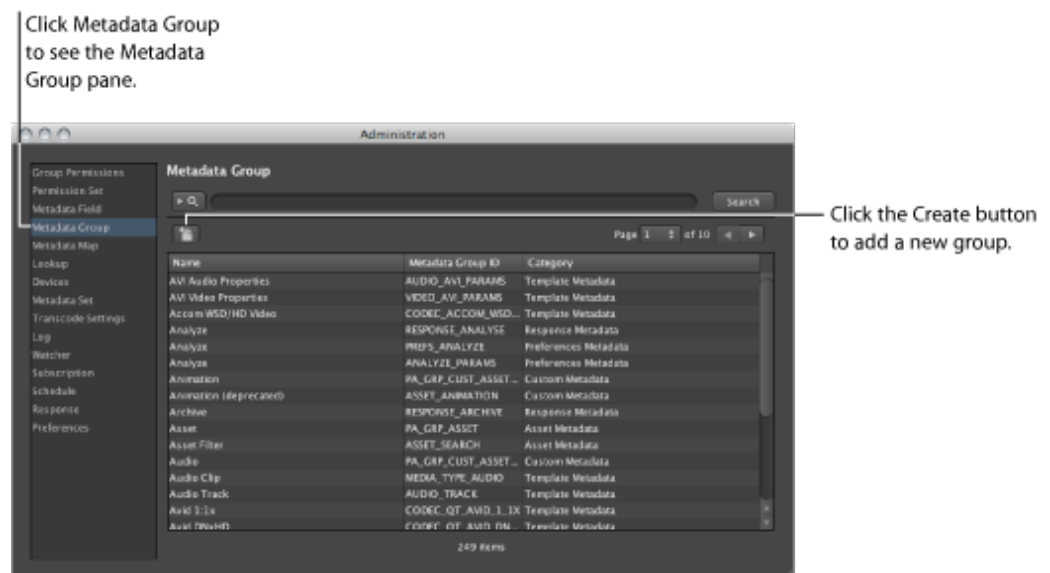
About Metadata Groups

Metadata groups provide a way to organize related metadata fields. Most information displayed in Final Cut Server is based on a metadata group; for example:

- Metadata fields displayed in an asset or production must be part of a group, and that metadata group must be part of the metadata set that you applied to that asset or production.
- All information displayed in Thumbnails or List view search results is defined by metadata groups. Metadata groups also define all of the advanced search options.

The contents of many metadata groups can be configured. For example, to display the MIME type of each asset in the Thumbnails view, add the Mime Type field to the Thumbnails metadata group that applies to assets. To search the annotations added to each Final Cut Pro project element, add the Annotations field to the Element Filter metadata group.

Some groups are required for internal Final Cut Server functions and cannot be edited. However, many of the settings within a group are editable, so you can define the look of the group.



The Metadata Group pane shows the following columns:

- *Name*: This shows the name of the metadata group.
- *Metadata Group ID*: This is an automatically generated name for the group. This is for

internal use only.

- **Category:** This is the automatically assigned metadata group's family. All metadata groups you create are in the Custom Metadata family.

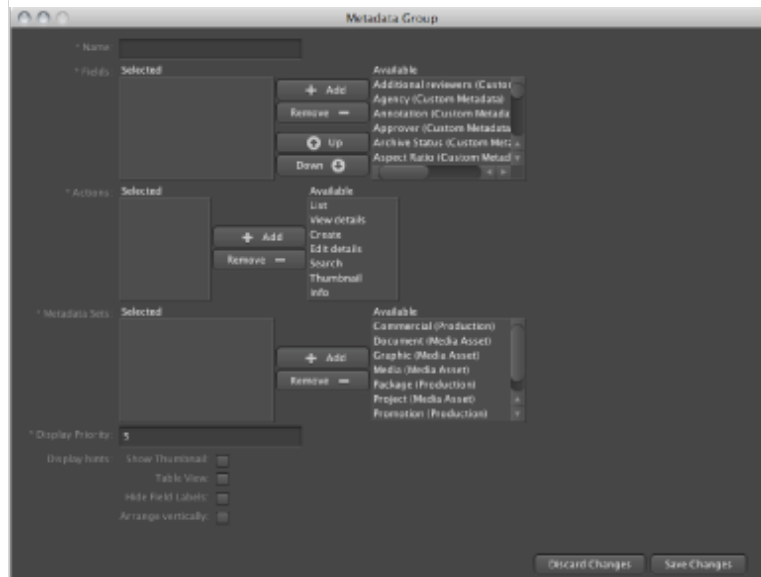
Adding or Editing Metadata Groups

You can add or edit custom metadata groups.

Important: Several metadata groups were added to Final Cut Server since the release of Final Cut Server 1.0. To use these metadata groups, you must manually add them to a new or existing metadata set. For information about groups that have been added, see the Final Cut Server Release Notes.

To add a custom metadata group

1. In the Metadata Group pane of the Administration window, click the Create button.
2. In the Metadata Group window that appears, configure the settings for the metadata group.



See “Settings for Metadata Groups” for more information on the settings.

3. Click Save Changes to save the custom metadata group.

The new metadata group appears in the Metadata Group pane.

You can also open the Metadata Group window and edit existing metadata groups.

Note: You are not allowed to edit the required metadata groups.

To edit an existing metadata group

1. Double-click the metadata group in the Metadata Group pane.

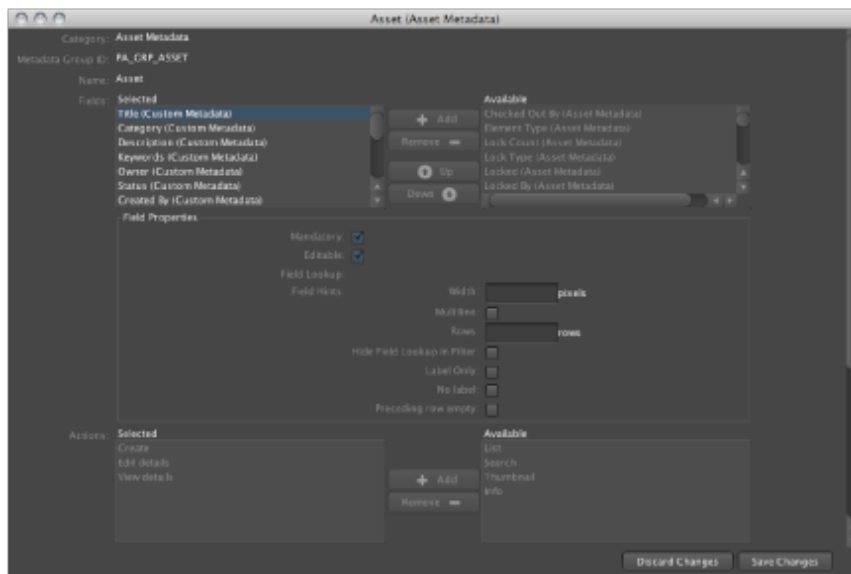
The Metadata Group window appears, showing the settings for that group.

2. Make any necessary changes and click Save Changes.

The Metadata Group window closes.

Settings for Metadata Groups

Each metadata group has a variety of settings in addition to having metadata fields that you assign to the group.



The Metadata Group window contains the following settings:

- **Category:** An automatically generated category for the group. This appears only if you are editing an existing metadata group.
- **Metadata Group ID:** An automatically generated name for the group. This appears only if you are editing an existing metadata group and is for internal use only.
- **Name:** Enter the name of the group. This name is displayed as the title of the button on which the metadata is displayed.
- **Fields:** Choose the metadata fields that this group contains.
 - **Selected:** Lists the metadata fields that are selected for use in the group.
 - **Available:** Lists the metadata fields available to the group. The available fields depend on the category of the group; in most cases, these are custom metadata fields.

Use the Add and Remove buttons to change the fields in the group. Use the Up and Down buttons to change the order in which the fields are displayed in the group.

If you click a field in the Selected list, additional options appear. See “Field Properties” for more information.

- **Actions:** Choose the actions that the metadata group uses.
 - **Selected:** Lists the actions for which this group will be used.
 - **Available:** Lists the available actions.

Use the Add and Remove buttons to change the actions.

For example, you can add the Edit Details action if you want this group’s metadata fields to be editable. You can also add the Create action to this metadata group if you want this group’s metadata fields to be available when creating a new asset. (This requires that this metadata group be part of the metadata set you assign to the asset you are creating.)

New groups normally use the View Details, Edit Details, and Create actions. These actions ensure that this metadata group’s fields are available when creating a new asset and when viewing an asset’s details. Edit Details can also be added to an existing metadata group to make the group’s metadata fields editable.

Important: Be careful when making action changes to other metadata groups. Many of these groups are used internally by Final Cut Server and may cause serious issues if altered.

- **Metadata Sets:** Assigns this metadata group to a metadata set. You must assign a metadata group to a metadata set to access the group's metadata fields when creating or viewing the details of an asset to which the metadata set is assigned.
- **Selected:** Lists the metadata sets to which this group is assigned.
- **Available:** Lists the available metadata sets.

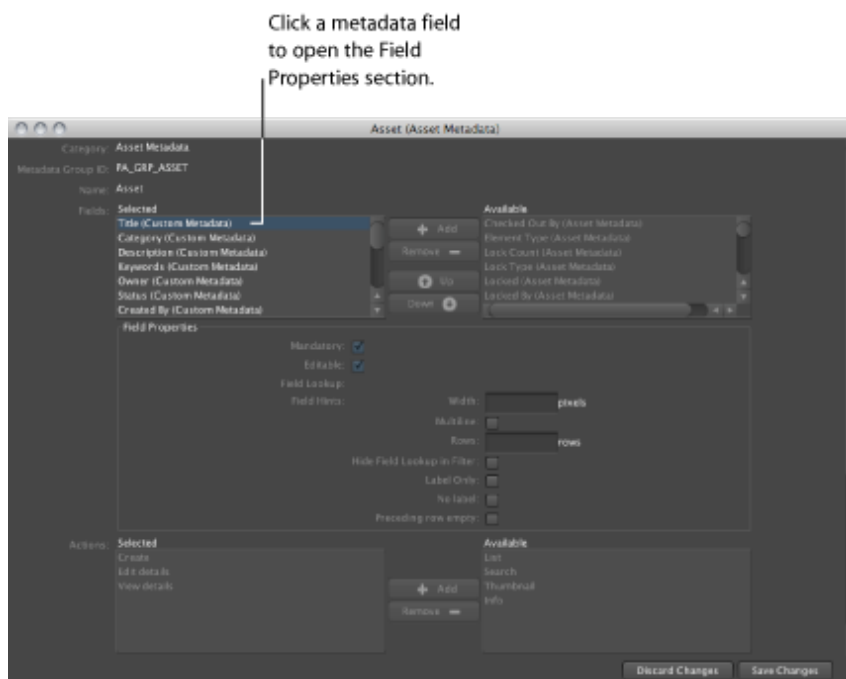
Use the Add and Remove buttons to change the metadata set assignments.

Note: You can also assign a group to a metadata set in the Metadata Set window. See “Settings for Metadata Sets” for more information.

- **Display Priority:** Enter the order in which groups are displayed when part of a metadata set. Smaller numbers appear above larger numbers. The range is normally from 1 to 5 with 1 appearing first.
- **Display hints:** The following settings control how this group is displayed in Final Cut Server. Display hints can also be entered for metadata fields.
 - **Show Thumbnail:** Select this checkbox to display the thumbnails with the group. This is used for list views and edit views (for example, when viewing an asset's details).
 - **Table View:** Select this checkbox to display the group's fields in a table. Most of the groups used for listing content in the Final Cut Server Administration window use a table display.
 - **Hide Field Labels:** Select this checkbox to hide the field labels when displaying a group; for example, with Thumbnails views.
 - **Arrange Vertically:** Select this checkbox to arrange fields in the group vertically rather than using a best fit algorithm; for example, with Thumbnails views.

Field Properties

For each metadata field in the group, you can override the field's data type properties. Click a metadata field in the Selected list to see its properties.



Note: You cannot change the data type assigned to the metadata field, only its settings.

The actual properties that appear vary, depending on the metadata field's data type. The following two settings always appear:

- **Mandatory:** Select this checkbox to indicate that this field must be filled in when used

with this group.

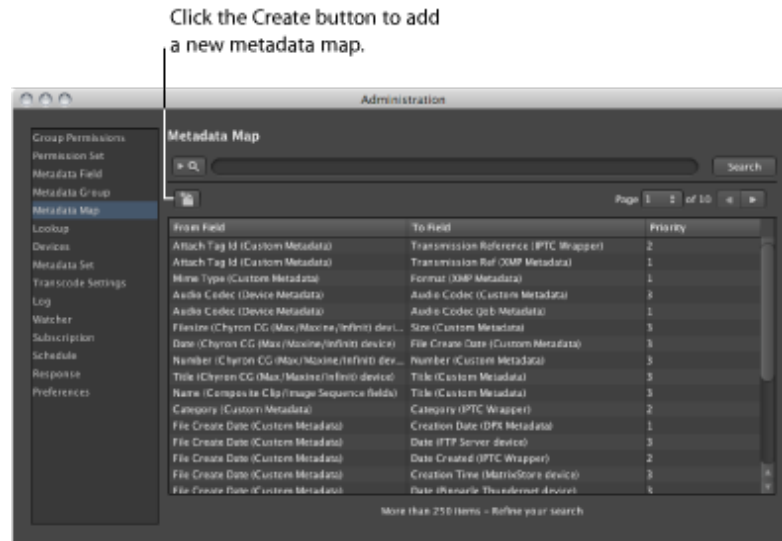
- **Editable:** Select this checkbox to allow this field's data type settings, shown below this checkbox, to be edited when used with this group.

See “Specialized Settings” for information about any other settings that appear.

Metadata Mapping

Metadata mapping simplifies your workflow by copying metadata from one metadata field to another. For example, if you import a set of still images with IPTC metadata fields, you can map the data in one or more of those fields to one or more of your custom metadata fields. Metadata mapping is used to translate metadata between Final Cut Server and devices, file formats, and embedded metadata.

Many standard metadata mappings are included with Final Cut Server. Additional mappings or changes can be defined using the Metadata Map pane.



The Metadata Map pane contains the following columns:

- **From Field:** Shows the metadata field being mapped from.
- **To Field:** Shows the metadata field being mapped to.
- **Priority:** Shows the mapping priority with a range that normally goes from 1 to 3. This is used to resolve conflicts where more than one field maps to the same destination, in which case the larger number has a higher priority, with 1 having the lowest priority.

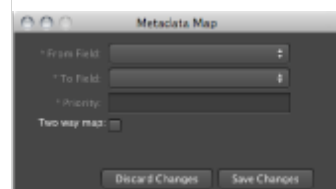
Adding or Editing Metadata Maps

You can add or edit custom metadata maps.

To add a custom metadata map

1. In the Metadata Map pane of the Administration window, click the Create button.

The Metadata Map window appears.



2. Configure the settings for the metadata map.

See “Settings for Metadata Maps” for more information on the settings.

3. Click Save Changes to save the custom metadata map.

The new metadata map appears in the Metadata Map pane.

You can also open the Metadata Map window and edit existing metadata maps.

Note: You are not allowed to edit the required metadata maps.

To edit an existing metadata map

1. Double-click the metadata map in the Metadata Map pane.

The Metadata Map window appears, showing the settings for that map.

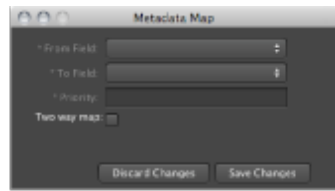
2. Make any necessary changes and click Save Changes.

The Metadata Map window closes.

See “Settings for Metadata Maps” for more information on the settings.

Settings for Metadata Maps

The Metadata Map window provides the controls to edit an existing metadata map or to define a new metadata map.



The Metadata Map window contains the following settings:

- *From Field*: From the list of all metadata fields, choose the field to map from.
- *To Field*: From the list of all metadata fields, choose the field to map to.
- *Priority*: Enter the mapping priority. The range normally goes from 1 to 3. This is used to resolve conflicts where more than one field maps to the same destination, in which case the larger number has a higher priority, with 1 having the lowest priority.
- *Two-way map*: Select the checkbox to create two mirror-image maps. This effectively creates a second metadata map with the from and to metadata fields swapped.

Metadata Lookups

Lookups are pop-up menus with lists of values that a user uses to enter a metadata field's data. Examples include:

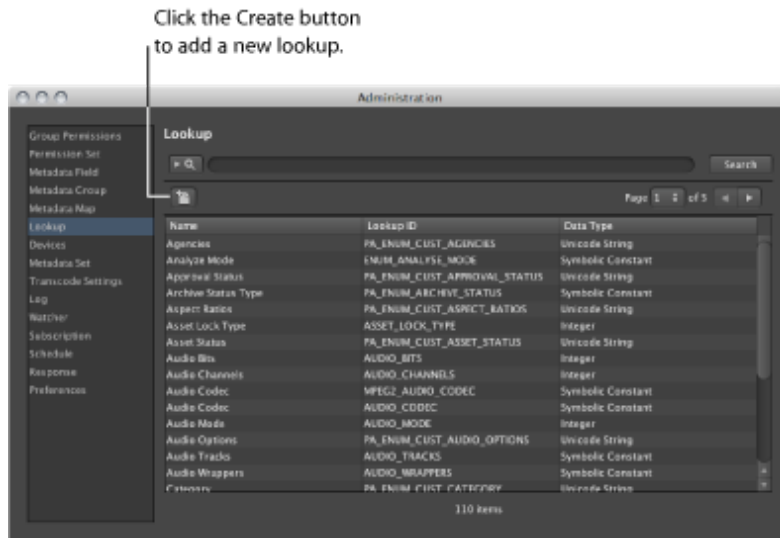
- A list of categories
- A list of production types
- A list of priorities

The values depend on the data type and can include text, dates, numbers, or timecode values. The following chart shows a few examples:

| Lookup name | Data type | Name entry | Value entry |
|-------------------|-----------|--------------------|------------------|
| Audio Sample Rate | Integer | 32 kHz 44.1 kHz | 32,000 44,100 |
| Order Open | Boolean | Open Closed | True False |

| | | | |
|---------------|----------------|--------------------------|---|
| Calendar Year | Date | Year Start Year End | 1/1/2008 00:00 12/31/2008 23:59 |
| Slate | Timecode | Slate In Slate Out | 00:00:25.00 00:00:26.10 |
| Email List | Unicode String | Editor 1 Review Group | edit1@company.com revgrp@company.com |

Many standard metadata lookups are included with Final Cut Server. Additional lookups can be defined using the Lookup pane.



The Lookup pane contains the following columns:

- **Name:** The name of the lookup, as entered when it was created
- **Lookup ID:** An automatically generated name for the lookup that is for internal use only
- **Data Type:** The data type chosen for the lookup

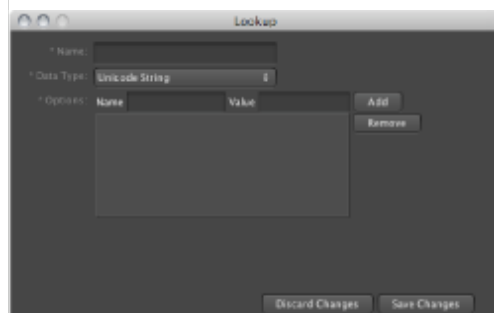
Note: The data type of the lookup must match the data type of the metadata field you want to use it with.

Adding or Editing Lookups

You can add or edit custom lookups.

To add a custom lookup

1. In the Lookup pane of the Administration window, click the Create button.
2. In the Lookup window that appears, configure the settings for the lookup.



See “Settings for Lookups” for more information on the settings.

3. Click Save Changes to save the custom lookup.

The new lookup appears in the Lookup pane.

You can also open the Lookup window and edit existing lookups.

Note: You are not allowed to edit many of the provided lookups.

To edit an existing lookup

1. Double-click the metadata lookup in the Lookup pane.

The Lookup window appears, showing the settings for that lookup.

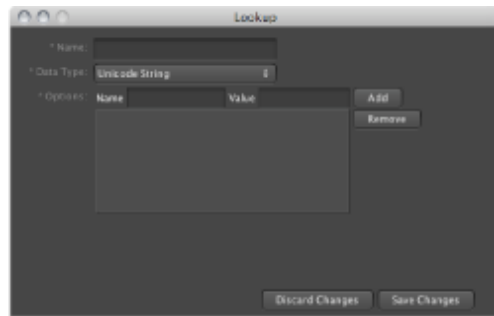
2. Make any necessary changes and click Save Changes.

The Lookup window closes.

See “Settings for Lookups” for more information on the settings.

Settings for Lookups

The Lookup window provides controls to edit an existing lookup or to define a new lookup.



The Lookup window contains the following settings:

- **Name:** Enter the name of the lookup.
- **Data Type:** Choose the type of lookup from the pop-up menu. The type of lookup values you can add to a lookup varies based on the data type you choose. See “Data Types for Lookups” for more information about the data types.
- **Options:** Enter the name and corresponding value for each lookup value.
 - **Name:** The name of the element; for example, 32 kHz. This is what the user sees in the pop-up menu when entering metadata.
 - **Value:** The value of the element; for example, 32,000. This is the metadata value that is stored and used for searches. For text fields (using the Unicode String data type), you will usually want this to be the same as the name.

Click the Add button to add the name/value pair to the lookups, or click a name/value pair and click the Remove button to remove the name/value pair.

Data Types for Lookups

The data type you choose defines the type of values you can enter in a lookup list. The data type list is the same list as used when creating a metadata field. Following is a list of available data types:

- **Boolean:** A true or false value. This data type usually has only two items in its list: one true (with the Value checkbox selected) and one false (with the Value checkbox not selected). For example, you could enter Order Status Open as the name with the Value checkbox selected and Order Status Closed as the name with the Value

checkbox not selected.

- *Date*: A date/time field
- *Floating Point Number*: A floating-point number
- *Integer*: An integer field that supports up to 32-bit numbers
- *Large Integer*: An integer field that supports up to 64-bit numbers (not normally required for custom metadata)
- *Timecode*: A video timecode value in the format hh:mm:ss:ff
- *Unicode String*: An alphanumeric Unicode string

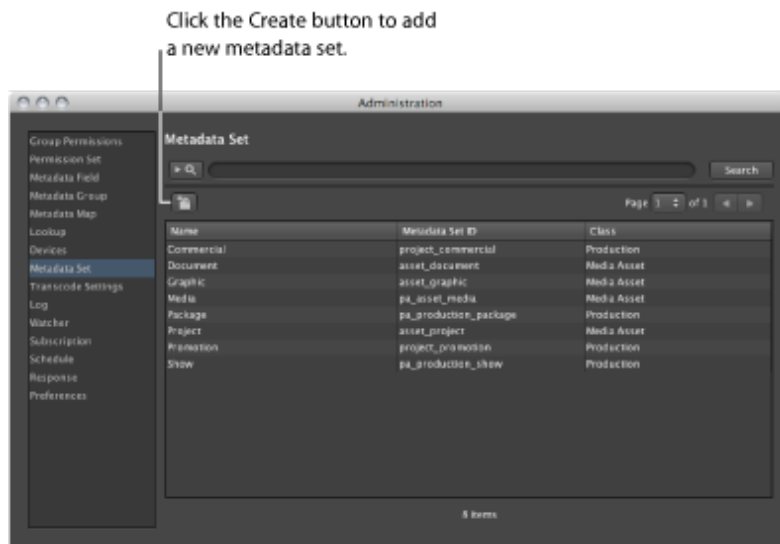
Managing Metadata Sets

There are different types of assets and productions you use with Final Cut Server. Metadata sets (which contain one or more metadata groups, each with its own metadata fields) allow you to assign different metadata groups to each type of asset or production. For example, you may want to store different metadata for still graphics than you would for HD video files, or for promotions and commercials.

Important: When assets are added to the Final Cut Server catalog, whether by manual upload or using an automation such as a scan, they must have a metadata set assigned to them. You cannot later change an asset's assigned metadata set. You can, however, change a metadata set so that it includes new metadata fields and groups. You can also copy an asset within the Final Cut Server catalog and assign a different metadata set to the new copy.

The customer profile you selected when you installed Final Cut Server defined the default metadata sets in your system. See the *Final Cut Server Setup Guide* for more information.

An administrator can define new metadata sets as required and define which metadata groups apply to each set.



The Metadata Set pane contains the following columns:

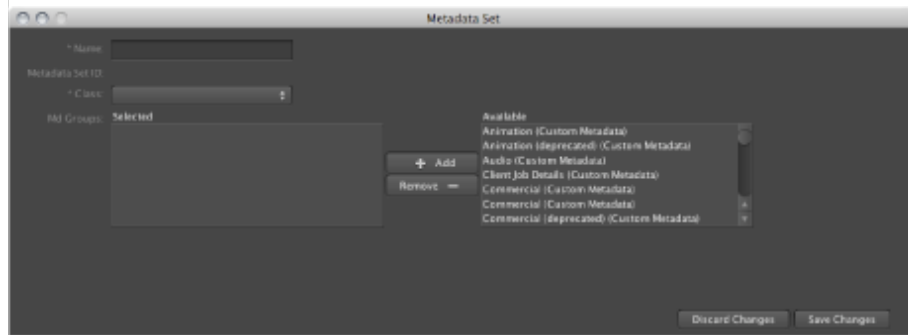
- *Name*: The name of the metadata set, as entered when it was created
- *Metadata Set ID*: An automatically generated name for the metadata set that is for internal use only
- *Class*: The type of items the metadata set can be applied to, either media assets or productions

Adding or Editing Metadata Sets

You can add or edit custom metadata sets.

To add a custom metadata set

1. In the Metadata Set pane of the Administration window, click the Create button.
2. In the Metadata Set window that appears, configure the settings for the metadata set.



See “Settings for Metadata Sets” for more information on the settings.

3. Click Save Changes to save the custom metadata set.

The new metadata set appears in the Metadata Set pane.

You can also open the Metadata Set window and edit existing metadata sets.

To edit an existing metadata set

1. Double-click the metadata set in the Metadata Set pane.

The Metadata Set window appears, showing the settings for that metadata set.

2. Make any necessary changes and click Save Changes.

The Metadata Set window closes.

See “Settings for Metadata Sets” for more information on the settings.

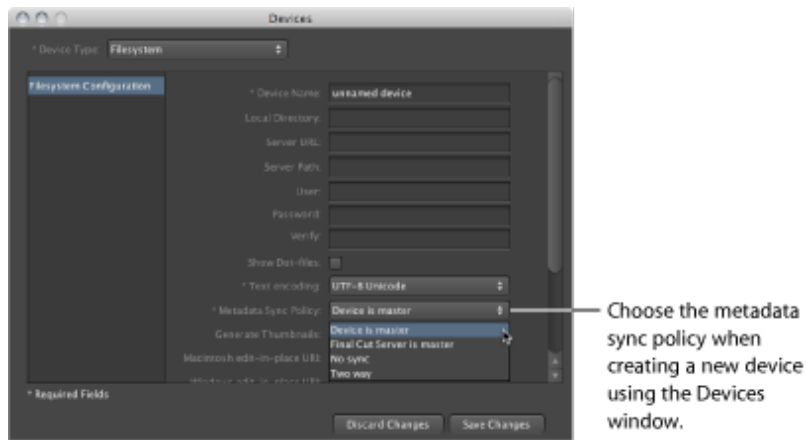
Settings for Metadata Sets

The Metadata Set window contains the following settings:

- *Name*: Enter the name of the metadata set.
- *Metadata Set ID*: This is an automatically generated name for the metadata set that is for internal use only.
- *Class*: Choose either Media Asset or Production from this pop-up menu.
Note: You cannot change this setting when editing an existing metadata set.
- *Md Groups*: You choose the metadata groups that this set contains.
 - *Selected*: Lists the metadata groups in the set.
 - *Available*: Lists the metadata groups available to the set. The available groups depend on the class of the set. Use the Add and Remove buttons to change the groups in the set. Note that the order of the metadata groups in the Selected list does not affect the order they appear in when the metadata set is applied to an asset or production. That order is controlled by each metadata group’s Display Priority setting. See “Settings for Metadata Groups” for more information.

Metadata Synchronization Policy

Metadata is synchronized between Final Cut Server and the device according to one of the following policies chosen from the Metadata Sync Policy pop-up menu when creating a new device in the Devices window.



Choosing the synchronization policy to use generally depends on who is thought of as “owning” or being in charge of the device:

- *If Final Cut Server owns the device:* You should use the “Final Cut Server is master” or “Two way” synchronization policy if Final Cut Server owns the device.
- *If another department owns the device and Final Cut Server is just being granted access to its content:* You should use the “Device is master” synchronization policy if another department owns the device and Final Cut Server is just being granted access to its content.

Device is master

This synchronization policy regards the device as the authority on what the real metadata is.

Device metadata is mapped to custom metadata. Subsequent changes to the metadata on the device are mapped to the custom metadata when they are detected. Custom metadata fields that map to device metadata can be edited but those changes are not mapped to the device.

Note: This is the default choice and is used for all devices created by the Final Cut Server Installer and any devices created using Device Setup Assistant in Final Cut Server System Preferences.

Final Cut Server is master

This synchronization policy regards Final Cut Server as the authority on what the real metadata is.

The first time the asset is cataloged, device metadata is mapped to custom metadata. On any subsequent changes to the custom metadata, custom metadata is mapped and saved to device metadata, overwriting any changes that may have occurred in the device metadata. Any changes to the metadata on the device are not mapped to the custom metadata.

No sync

The first time the asset is cataloged, device metadata is mapped to custom metadata. Any subsequent changes of either custom or device metadata are not mapped and remain different on Final Cut Server and the device.

Two way

The first time the asset is cataloged, device metadata is mapped to custom metadata. Any subsequent changes of either custom or device metadata are mapped and are synchronized between Final Cut Server and the device.

See “Adding a Device Using the Administration Window” for more information on using the Devices window.

Using Metadata to Configure the User Interface

Final Cut Server uses a variety of metadata groups to define many aspects of the Final Cut Server client's user interface. For example, you can add metadata fields to the Thumbnails metadata group to control which fields appear when you are using the Thumbnails view.

Keep the following in mind when you decide to customize the user interface:

- Any changes you make affect all clients connected to the server. In many cases though, you may have to close the client and log in again to see the changes.
- Use care when modifying metadata groups. You will often find multiple metadata groups or fields with the same or similar names. Be sure you choose the correct ones to modify.
- Modifying a metadata group may impact more than one area of the user interface.

See “Customizing Advanced Searches” and “Customizing the Views” for details on the most common areas you may want to customize.

Modifying a Metadata Group

See “About Metadata Groups” for information about modifying any of these metadata groups. The following describes the process with some details specific to groups that affect the user interface.

To modify a metadata group

1. Double-click the metadata group's name in the Administration window's Metadata Group pane.

The metadata group opens in its own window.

Note: It's easier to find the metadata group if you search for it.

2. In the Fields section of the window, note the items in the Selected list and their order, and compare that to the area of the user interface you are intending to change.

They should match. If not, you do not have the correct metadata group selected.

3. Do any of the following as needed:

- Remove an item from the Selected list by selecting it and clicking Remove.
- Add an item to the Selected list by selecting it in the Available list and clicking Add.
- Change an item's location in the Selected list by selecting it and clicking the Up and Down buttons.

4. Click Save Changes.

The window closes and the changes you made are saved.

In many cases, you will need to close the client and log in again to see the changes take effect.

Customizing Advanced Searches

There are several areas in the Final Cut Server client where you can choose to configure advanced search options to fine-tune your search results. By modifying selected metadata groups, you can add and remove metadata fields as well as rearrange the order in which they appear. For example, you might want to add the Required reviewers metadata field to your asset searches.

The commonly modified advanced search metadata groups are:

- *Asset Filter metadata group:* This metadata group defines the advanced search options available for the main window's Assets pane. Additionally, it affects the fields that appear in the Asset Filter pane when you configure an asset subscription and the Asset Filter pane when configuring a permission set.

- *Production Filter metadata group*: This metadata group defines the advanced search options available for the main window's Productions pane. Additionally, it affects the fields that appear in the Production Filter pane when you configure a production subscription and the Production Filter pane when configuring a permission set.
- *Job Filter metadata group*: This metadata group defines the advanced search options available for the Search All Jobs window that appears when you select Search All Jobs from the server menu. Additionally, it affects the fields that appear in the Job Filter pane when you configure a job subscription.

Customizing the Views

Metadata groups define the information that appears in the main window when you choose the Thumbnails, Tile, or List view. It can be useful to customize these views so that they display the information that is important to your situation. For example, you may want to see an asset's MIME type in the Thumbnails view.

It can be challenging to find the correct metadata groups to modify since there are many groups with the same name. You must ensure that you are choosing the group with the correct Metadata Group ID (listed below).

The commonly modified view metadata groups are:

- *Thumbnails metadata group, ASSET_THUMBNAILS_VIEW group ID*: This metadata group defines what fields appear in the Thumbnails view of the main window's Assets pane.
- *Thumbnails metadata group, PROJECT_THUMBNAILS_VIEW group ID*: This metadata group defines what fields appear in the Thumbnails view of the main window's Productions pane.
- *Thumbnails metadata group, ELEMENT_THUMBNAILS_VIEW group ID*: This metadata group defines what fields appear in the Thumbnails view of the info window that appears when you double-click a Final Cut Pro project in the main window.
- *Tiles metadata group, ASSET_INFO_VIEW group ID*: This metadata group defines what fields appear in the main window's Information pane when viewing assets.
- *Tiles metadata group, PROJECT_INFO_VIEW group ID*: This metadata group defines what fields appear in the main window's Information pane when viewing productions.
- *Tiles metadata group, ASSET_TILES_VIEW group ID*: This metadata group defines what fields appear in the info window that appears when you double-click an asset or a Final Cut Pro project in the main window.
- *Tiles metadata group, PROJECT_TILES_VIEW group ID*: This metadata group defines what fields appear in the info window that appears when you double-click a production.
- *Tiles metadata group, ELEMENT_TILES_VIEW group ID*: This metadata group defines what fields appear in the Element Details window that appears when you double-click an element in the info window (the window that appears when you double-click a Final Cut Pro project in the main window).
- *List metadata group, ASSET_LIST_VIEW group ID*: This metadata group defines what fields appear in the List view of the main window's Assets pane.
- *List metadata group, PROJECT_LIST_VIEW group ID*: This metadata group defines what fields appear in the List view of the main window's Productions pane.
- *List metadata group, ELEMENT_LIST_VIEW group ID*: This metadata group defines what fields appear in the List view of the info window that appears when you double-click a Final Cut Pro project in the main window.

About QuickTime Metadata

QuickTime media files can have a wide variety of metadata added to them. As a simple example, you can add annotations, such as title, author, and keywords to a QuickTime media file using the Annotations pane of the QuickTime Player Movie Properties window.

Because a QuickTime media file can contain custom metadata fields, Final Cut Server is unable to map all of the metadata fields to metadata fields that are used in its default groups.

This means that if you use custom metadata fields in your QuickTime movies, you will need to either manually map those fields to fields used in existing metadata groups or add those fields to custom metadata groups. For more information, see “Metadata Mapping” and “Adding or Editing Metadata Groups.”

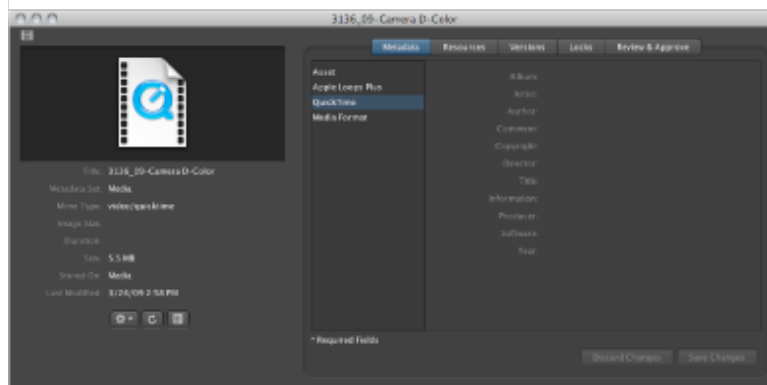
To see a QuickTime movie’s metadata

1. Choose Search Devices from the client’s Server pop-up menu.

The Search Devices window opens.

2. Choose the device that contains the movie from the Device pop-up menu, then click the Search button.
3. Double-click the QuickTime media file that contains the metadata you want to view.

A window opens showing the details of the file.



4. Click QuickTime in the column on the left.

The metadata details for the file are displayed.

Note: You may see some metadata fields that contain duplicate settings. Final Cut Server shows both the older FOURCC (which is limited to four characters for the field’s name) and the newer field identification entries.

Managing Devices

The Administration window makes it possible to create highly customized devices.

About Devices

Final Cut Server uses devices to store and manage your assets and productions. There are also devices used for specialized functions such as storing proxies, archiving, and tracking asset versions.

You can add, remove, and configure devices that Final Cut Server can use while managing your system. Devices can be as simple as a folder on the Final Cut Server computer, an FTP server, or an Apple Xsan volume.

There are two methods you can use to add and edit devices within Final Cut Server: using Device Setup Assistant in Final Cut Server System Preferences and using the Devices pane of the client's Administration window. This chapter explains how to use the Devices pane of the client's Administration window. For information about using Device Setup Assistant in Final Cut Server System Preferences, see the *Final Cut Server Setup Guide*.

About Creating Devices Using Device Setup Assistant

Device Setup Assistant in Final Cut Server System Preferences is simple to use and includes additional features, such as a scan and transcode settings configuration ability. Manually configuring similar features would require you to use multiple Administration window panes.

Device Setup Assistant also makes it much easier to install certain kinds of devices, such as network devices and Xsan volumes, by simplifying the number of settings. Additionally, Device Setup Assistant verifies all settings you make before allowing you to continue to the next step. (Devices created with the Administration window are not verified until you actually use them.)

The drawbacks of using Device Setup Assistant are that you do not have access to some of the more esoteric settings and that you cannot configure several device types, such as a Contentbase file system or an edit-in-place device that does not use an Xsan volume.

About Creating Devices Using the Administration Window

The Devices pane of the Administration window gives you access to many more device settings than Device Setup Assistant. Most users, however, do not require these settings, although they can be useful in some situations. The Administration window is the only place that you can configure devices using the Contentbase file system or an edit-in-place device that does not use an Xsan volume.

Although you can configure network devices with the Administration window, it is more difficult with its variety of settings.

Adding a Device Using the Administration Window

You can manually add a device in the client's Administration window. Adding a device with the Administration window is a bit different from adding a device with System Preferences:

- You must manually configure the device because there is no Device Setup Assistant as with System Preferences.
- You do not directly add transcode settings to the device in the Devices pane. You instead assign devices to the transcode settings in the Administration window's Transcode Settings pane. See "Managing Transcode Settings" for more information.
- You do not directly add scan settings to the device in the Devices pane. You instead must create the scan settings by using the Response and Schedule panes. See

“Managing Automations” for more information.

- You have many more options and settings. Manually configuring a device allows you more flexibility.
- You are not able to easily add some device types, such as Xsan, NFS, or SMB/CIFS. These are much easier to add with Device Setup Assistant.
- When you add a device using the Administration window, Final Cut Server does not verify the settings until the first time you use it. Be sure to try any new devices you create to ensure they work correctly. A good way to verify a device is to use the Search Devices option. See “Searching Devices” for more information.

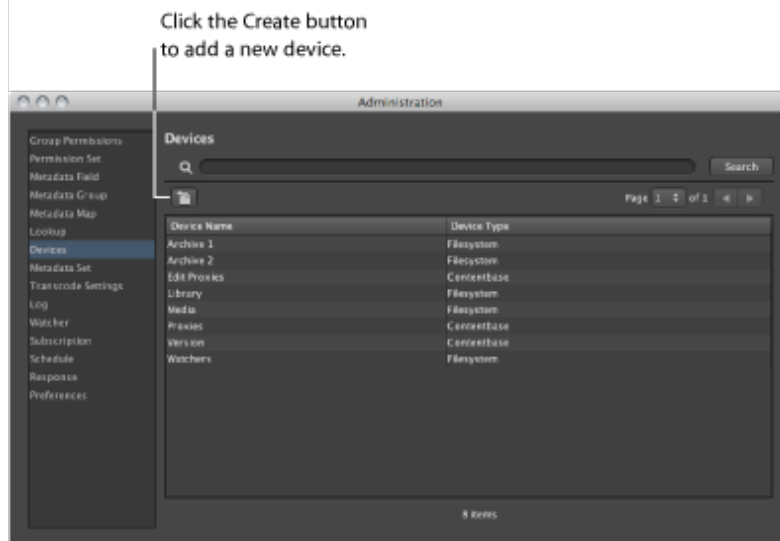
Note: It is strongly suggested that you do not create any devices on the server computer’s startup disk. Devices contain large media files and can use all of the available disk space of their hard disk, which causes serious issues if that hard disk is also the startup disk.

To add a device using the Administration window

1. Open a Final Cut Server client and log in as a user with administrator privileges.
2. Choose Administration from the Server pop-up menu (the pop-up menu in the Final Cut Server main window that appears when you click the Server button).

The Administration window appears.

3. Click Devices in the column on the left to open the Devices pane.



4. Click the Create button to add a new device.

The Devices window appears.

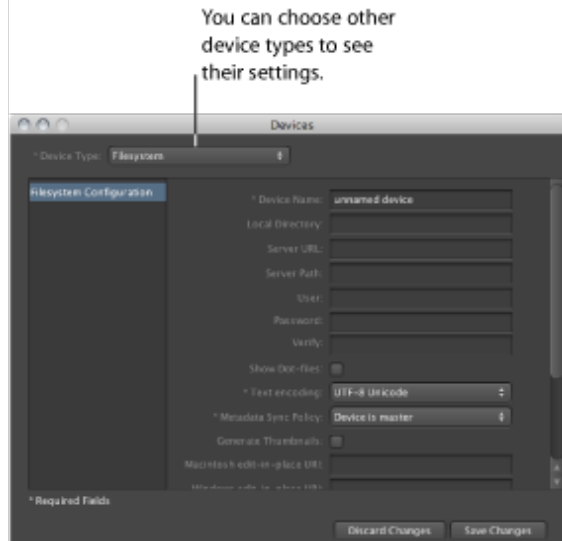


5. Choose the device type to add from the Device Type pop-up menu:
 - *Contentbase*: A file system unique to Final Cut Server that renames each asset and places it in a folder that also contains a file with the original name. An advantage of Contentbase is that you can add files to it without any chance of a filename conflict (which can be useful when you have many graphics files that share filenames). The disadvantages are that you cannot create a folder structure and the renamed files can be difficult to work with outside of Final Cut Server.

Important: The Proxies, Edit Proxies, and Version devices must use the Contentbase file system. Additionally, Contentbase devices cannot be watched by a watcher automation.

- *FTP Server:* This device type uses FTP to transfer media to and from it.
- *Filesystem:* This is the traditional file system used by most computers. It supports subfolders and normal filenames.

The Devices window changes to reflect the device type you chose. You can choose a different device type if necessary.



6. Configure the device type's settings, then click Save Changes.

Editing a Device Using the Administration Window

The Administration window can only edit devices created using the Administration Window or Device Setup Assistant.

To edit a device's settings using the Administration window

1. Double-click the device in the Devices pane.

The Devices window appears with that device's current settings showing.

2. Edit the settings as needed, then click Save Changes.

The Devices window closes and the device is updated to the new settings. See "Device Type Details" for more information about the device settings.

Deleting an Existing Device Using the Administration Window

You can delete any of the existing devices from the Devices pane.

To delete an existing device using the Administration window

1. Select the device in the Devices pane.
2. Control-click the device, then choose Delete from the shortcut menu.

A confirmation dialog appears.

3. Click Delete.

The device is removed from the device list.

Some things to keep in mind when deleting a device:

- You cannot undo a device deletion.
- Deleting a device removes it and all of its assets from the Final Cut Server catalog. This includes removing all proxy files from the Proxy device and versions from the Version device.
- Deleting a device does not affect the actual contents of the device's volume. Contentbase devices are an exception; deleting a Contentbase device deletes all of its media as well.
- If a job is in progress when you delete the device, that job must be completed before the device is actually deleted. (All other pending jobs are canceled.) If you do not want to wait for the current job to finish, you can cancel it in the client's Search All Jobs window.
- Any responses or watchers that depend on the device you are deleting are also deleted. Any schedules or other automations that used those responses are not deleted. You must manually delete these items.

About Specialized Devices

There are a number of specialized devices that Final Cut Server can use. Some of these, such as the Proxies and Version devices, are configured during the Final Cut Server installation. Others, such as archive and image sequence devices, are configured manually.

Setting Up the Proxies Device

Each Final Cut Server installation has one Proxies device. Each time you upload an asset to the Final Cut Server catalog, a set of low-resolution files is created. The Proxies device is where the thumbnails, poster frames, and clip proxies are stored. These are used in place of the actual full-resolution assets whenever lower-resolution versions are sufficient. See "Analyze Filter Preferences Settings" for information about configuring proxy formats.

The Proxies device is a Contentbase device type. It is created at the location you specify when you install Final Cut Server. See the *Final Cut Server Setup Guide* for more information.

Setting Up the Edit Proxies Device

Each Final Cut Server installation has one Edit Proxies device. Each time you upload a Final Cut Pro project to the Final Cut Server catalog, you can create a set edit proxy files created with the Apple ProRes 422 (Proxy) codec (default) or other available codec of your choice. These edit proxies are created in addition to the set of low-resolution files stored on the Proxies device. The edit proxy files can be used in place of the original assets when you export or check out a Final Cut Pro project.

The Edit Proxies device is created at the location you specify when you install Final Cut Server. See the *Final Cut Server Setup Guide* for more information. See "Proxies Preference Settings" for information on choosing an edit proxy device.

The Edit Proxies device is a Contentbase device type.

Setting Up the Version Device

When working with Final Cut Server assets, you may find that you need to track multiple versions of the same asset. For example, you may have several versions of a graphic that use different font settings. Final Cut Server includes a version-tracking feature, making it easy to work with multiple versions of an asset.

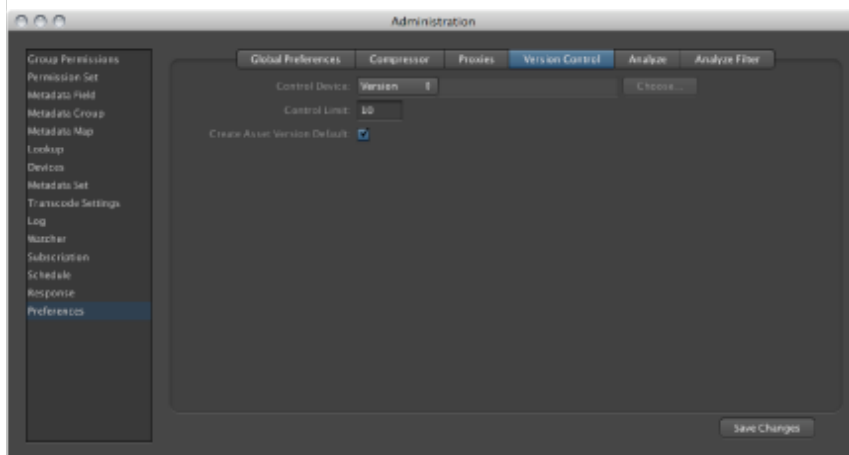
The Final Cut Server Installer automatically creates a Version device at the location specified for production media. For most installations, this device works well for storing your asset and production versions. You may find, however, that you need to create a device with more space to store your versions, especially if you choose to retain more than three or four versions of your assets and those assets are large video files.

If you need to manually create a Version device, the device must use the Contentbase device type. It also should not be used for any other purposes.

You specify the device used for storing the different asset and production versions in the Administration window's Preferences pane.

To choose the version device

1. In the Administration window's Preferences pane, click Version Control to see the version preferences.



2. Choose a device from the Version Control Device pop-up menu.
Note: Because the device used to store versions must use the Contentbase device type, the Choose button is not available. See “About Contentbase” for more information.
3. Enter the maximum number of versions that can be associated with an asset in the Version Control Limit field. When the limit is reached, the oldest versions are deleted as new versions are added.
4. Click Save Changes.

See “Preference Settings in the Administration Window” for information about the preference settings in the other areas of the Preferences pane.

Setting Up an Archive Device

Archiving an asset using the Archive response makes it possible to take the asset offline but still retain a link to it if required later. When you archive an asset, its original media is archived; note that proxies and thumbnail images for the asset will still be available in the Final Cut Server catalog. Archive Devices are most useful when you have large video files that are not currently being used but are taking up disk space on a device.

Archiving the asset allows you to copy it to a different device; for example, a FireWire drive or a large but slow hard disk that you can take offline. Final Cut Server keeps a link to the asset and makes it easy to restore the asset when it is needed later.

Important: The archive operation does not archive the versions that an asset might have. Only the current version is archived.

Final Cut Server supports multiple archive devices, and most devices can be set as an archive device. The following things should be considered when creating an Archive device:

- Archive devices can use the Contentbase or Filesystem Final Cut Server device type.
- Assets on a Contentbase device type cannot be archived unless the archive device is also a Contentbase device type. If you create one or more Contentbase device types to store assets, be sure to create an archive device that also uses a Contentbase device.
- Archive devices are not available for regular, everyday asset storage. They are used exclusively with the Archive response.

To make a device an archive device

1. Double-click the device in the Devices pane of the Administration window.
The device opens in its own window.
2. Select the Archive Device checkbox.
3. Click Save Changes.

This device will now appear in the list of archive devices in the main window's shortcut menu. See the *Final Cut Server User Manual* for more information.

Setting Up an Image Sequence Device

It is recommended that one or more unique devices be set up to hold image sequences. An image sequence device with one or more scan or production scans will help to prevent scan conflicts that may occur if a scan configured to process image sequences is paired with a file scan.

Important: A device set up to hold image sequences must be a Filesystem device.

An image sequence is a movie exported as a series of numbered image files, stored in a folder. When a folder of image files is uploaded and the user chooses to upload it as an image sequence, the user can specify the frame rate for the image sequence and a proxy video is created for the asset. When a folder of images is scanned, the user is not able to determine the frame rate for the image sequence. A scan response is required to define the frame rate of the image sequences.

For instructions on creating a device in the Preferences pane of the Final Cut Server Administration window, see "Adding a Device Using the Administration Window." You can also create the device using the Device Setup Assistant. For more information, see the *Final Cut Server Setup Guide*.

After creating the device, it is recommended that you set up a scan to process image sequences, although that is not required. A scan that processes image sequences should be set up in the Preferences pane of the Final Cut Server Administration window. For information about setting up scans, see "About Scan Responses."

Important: Be sure to inform the Final Cut Server users about where and how to upload image sequences.

About the Export Device

A user can choose to export an asset from the Final Cut Server catalog to his or her local computer. When the user Control-clicks an asset in a Final Cut Server client, an Export option appears in the shortcut menu. Choosing the Export option opens the Export dialog where the user sets the filename, destination, and optionally chooses a transcode setting, allowing the conversion of the asset to a different codec as it downloads.

Final Cut Server creates a hidden device named Export to store the transcode settings a user can choose from when using the Export option. By default, the Export device has only a few commonly used transcode settings. You can add transcode settings to the Export device in the Administration window's Transcode Settings pane. See "Assigning Transcode Settings to Devices" for more information.

There are no other device settings for the Export device.

About Edit-in-Place Devices

Depending on your system configuration, you may be able to take advantage of the Final Cut Server edit-in-place feature, making using assets from the catalog easier and faster.

Why Edit-in-Place?

In most cases when using a Final Cut Server client, you must have a local copy of any assets you would like to work with on the client computer. For example, if you want to add one of the Final Cut Server assets to a Final Cut Pro project you have on the client's

computer, you need to create a copy of that asset from its device to your computer before you can add it to the project.

Using Add to Local Cache in the main window makes a copy of the asset and places it in the computer's cache location (as specified in the Preferences window—see “User-Configurable Preference Settings”). In Thumbnails view, the asset's thumbnail frame changes to a lighter color (or, in List view, the asset gets a dot next to it) after the asset has been cached. You can then drag the asset from the main window to your Final Cut Pro project, desktop, or to any other location you want to use it in.

In some cases, however, the computer you are running Final Cut Server client on may have direct access to the device that has the asset you want. In that case, you can configure the device so that you are able to directly use its assets without having to make local copies of them first. A device that can be directly accessed by a Final Cut Server client is an edit-in-place device.

Does Your System Support Edit-in-Place?

There are two common system configurations where edit-in-place devices work especially well: when the client computer is connected to an Xsan using a Fibre Channel network, and when the device is actually a hard disk directly connected to the client computer. In both cases, you should have sufficient bandwidth to be able to work in real time on the assets with no dropped frames or other low-bandwidth issues.

Important: In general, devices connected to the client's computer using standard Ethernet or wireless connections are not suitable for use as edit-in-place devices since they may not have sufficient bandwidth to support working directly on video files. Additionally, you should never configure the startup disk of the computer you installed Final Cut Server on as an edit-in-place device.

Creating Edit-in-Place Devices

There are two methods you can use to add devices to your Final Cut Server system: using Device Setup Assistant and using the Final Cut Server client's Administration window.

Most devices created with Device Setup Assistant do not have their edit-in-place settings configured. The exception is the Xsan device, which automatically configures its edit-in-place settings.

See the *Final Cut Server Setup Guide* for more information about Xsan volumes.

The only way to manually create an edit-in-place device is to create the device in the Administration window. When you create a device using the Administration window, you can configure several settings related to edit-in-place.

- **Macintosh edit-in-place URI:** Enter the Uniform Resource Identifier (URI) for editing media from a Macintosh client directly on the device, instead of downloading and editing it on the client. The device must also be accessible as a mounted file system from the client. The format is:

- file:///Volumes/*volumename*/*optionalsubfolder*/

After you enter the URI, the path will be changed to:

- file://[localhost]/[volumename]/[optional subfolder]

An example is:

- file:///Volumes/MediaServer/Images/

After entering the example above, you will see:

- file://localhost/Volumes/MediaServer/Images

- **Windows edit-in-place URI:** Enter the URI for editing media from a Windows client directly on the device, instead of downloading and editing it on the client. The device must also be accessible as a network share from the client. The format is:

- file:///hostname/*path*/

An example is:

- file:///MediaServer/Images/

Device Type Details

Devices supported by Final Cut Server are listed and described below:

- *Contentbase*: See “About Contentbase” for more information.
- *FTP Server*: See “About FTP Server” for more information.
- *Filesystem (including local, Xsan, NFS, AFP, and SMB/CIFS)*: See “About Filesystem” for more information.

About Contentbase

Contentbase is a Final Cut Server–managed file storage system on or connected to the Final Cut Server server itself. Media is stored on a file system such as network–attached storage (NAS) or storage area network (SAN) storage.

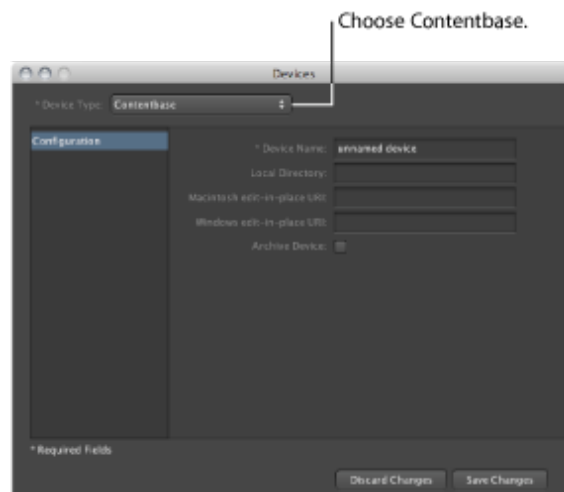
Contentbase is a file system unique to Final Cut Server that places each asset in a unique folder. An advantage of Contentbase is that you can add files to it without any chance of a filename conflict (which can be useful when you have many graphics files that share filenames). The disadvantages are that you cannot create a subfolder structure and the files can be difficult to work with outside of Final Cut Server.

Note: The Proxies, Edit Proxies, and Version devices must use the Contentbase file system.

Important: Devices using the Contentbase device type cannot be used by a file system watcher.

To access the Contentbase device settings

1. Click the Create button in the Administration window’s Devices pane to create a new device.
2. Choose Contentbase from the Device Type pop-up menu.



The Configuration pane for a Contentbase device type contains the following items:

- *Device Name*: Enter a descriptive name for the device.
- *Local Directory*: Enter the root path for this device as it appears to the Final Cut Server server. For example: /Volumes/Macintosh HD/Final Cut Server/Contentbase Device/.
- *Macintosh edit-in-place URI*: Enter the Uniform Resource Identifier (URI) for editing media from a Macintosh client directly on the device, instead of downloading and editing it on the client. The device must also be accessible as a mounted file system

from the client. The format is:

- file:///Volumes/*volumename*/*optionalsubfolder*/

After you enter the URI, the path will be changed to:

- file://[localhost]/[volumename]/[optional subfolder]

An example is:

- file:///Volumes/MediaServer/Images/

After entering the example above, you will see:

- file://localhost/Volumes/MediaServer/Images

Note: See “About Edit-in-Place Devices” for more information about edit-in-place devices.

- *Windows edit-in-place URI:* Enter the URI for editing media from a Windows client directly on the device, instead of downloading and editing it on the client. The device must also be accessible as a network share from the client. The format is:

- file:///hostname/*path*/

An example is:

- file:///MediaServer/Images/

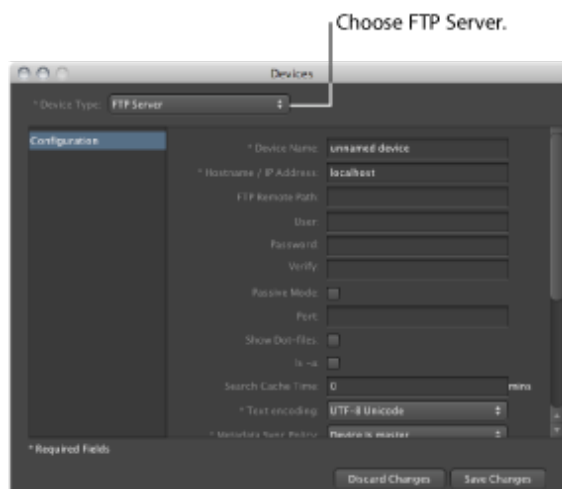
- *Archive Device:* Select this checkbox to add this device to the list of archive locations a user can choose from.

About FTP Server

Final Cut Server supports access to any server running standard File Transfer Protocol (FTP) such as a Microsoft Windows, Macintosh, or UNIX host. Other devices can be set up in this way; for example, Macintosh file server, Windows NT or Windows 2000 file server, and UNIX file server.

To access the FTP Server device settings

1. Click the Create button in the Administration window’s Devices pane to create a new device.
2. Choose FTP Server from the Device Type pop-up menu.



The Configuration pane for an FTP Server device type contains the following items:

- *Device Name:* Enter a descriptive name for the device.
- *Hostname / IP Address:* This is either a DNS host name (for example, ftp.bigtv.com) or the IP address of the server (for example, 10.1.101.7).

- *FTP Root Path*: Enter the default path for files on the server (for example, /public/images/). If this path starts with a forward slash (/), it is relative to the root folder of the server. If this path does not start with a forward slash, it is relative to the default folder of the server the user uses to log in (usually the user's home folder).
- *User*: Enter your user name in this field to log in automatically to the server on every attempted FTP server access, such as searching and copying.
- *Password*: Enter the password that goes with the above User entry. Leave this field blank if the FTP server does not require a password.
- *Verify*: Retype the password entered above.
- *Passive Mode*: Select this checkbox to use passive mode FTP transfers.
- *Port*: Leave blank to use the default port number, or enter a different port number.
- *Show Dot-files*: Select this checkbox to display all files beginning with a dot or period (.) on directory listings and searches. Otherwise these files are not visible.

Important: Do not select this option unless specifically required.

- *Is -a*: Select this checkbox to include files whose names start with a period when listing the server's files.

Important: Do not select this option unless specifically required.

- *Search Cache Time*: The time in minutes for which search results are cached in Final Cut Server. The range is from 0 (not cached) to 7 (results cached for 7 minutes).

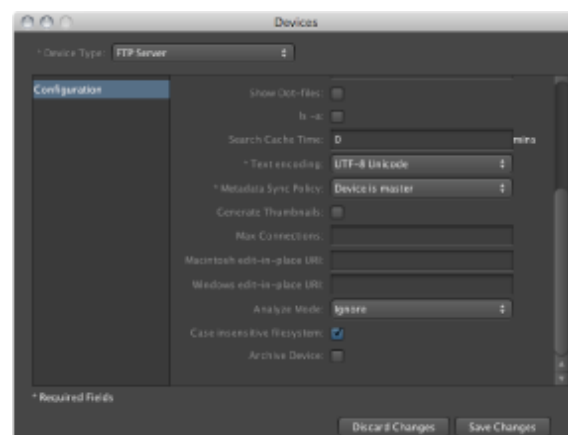
The Final Cut Server cache is searched until the specified period has elapsed, after which the device is polled again. This improves performance for the user but means results may be out of date by the specified period. Caching the search results for several minutes is useful when connecting to a slow server or slow network link.

- *Text encoding*: Choose the type of text encoding used on the device from this pop-up menu. Final Cut Server supports a wide range of text encodings, including many of the common Chinese, Korean, and Japanese encodings. The default is UTF-8 Unicode, which is used with current versions of Mac OS X.

If you are unsure about which text encoding to use, you can choose a setting and use the Search Devices window (explained in "Searching Devices") to see if the filenames appear as expected. If not, you can choose a different setting and test again.

Important: After a device's assets have been added to the Final Cut Server catalog, changing this setting will not affect them. Be sure to perform the above tests prior to scanning the device.

See "About Unicode Support" for more information.



- *Metadata Sync Policy*: From this pop-up menu, choose the policy by which metadata

is synchronized between Final Cut Server and the device. See “Metadata Synchronization Policy” for more information.

- *Generate Thumbnails*: Select this checkbox to generate thumbnails of images when using Search Devices from the Server pop-up menu (the pop-up menu in the Final Cut Server main window that appears when you click the Server button). The thumbnail images appear when you view an image’s details, by either double-clicking its filename or Control-clicking the filename and choosing View Details from the shortcut menu. This allows you to see the image without having to create an asset for it in the Final Cut Server catalog. See “Searching Devices” for more information on using the Search Devices feature.
- *Max Connections*: Enter the maximum number of connections from Final Cut Server to the device. Leave this field at the default setting of zero (0) or blank, permitting unlimited connections, unless there is a particular reason to restrict connections.
- *Macintosh edit-in-place URI*: Enter the Uniform Resource Identifier (URI) for editing media from a Macintosh client directly on the device, instead of downloading and editing it on the client. The device must also be accessible as a mounted file system from the client. The format is:

- file:///Volumes/*volumename*/*optionalsubfolder*/

After you enter the URI, the path will be changed to:

- file://[localhost]/[volumename]/[optional subfolder]

An example is:

- file:///Volumes/MediaServer/Images/

After entering the example above, you will see:

- file://localhost/Volumes/MediaServer/Images

Note: See “About Edit-in-Place Devices” for more information about edit-in-place devices.

- *Windows edit-in-place URI*: Enter the URI for editing media from a Windows client directly on the device, instead of downloading and editing it on the client. The device must also be accessible as a network share from the client. The format is:

- file:///hostname/*path*/

An example is:

- file:///MediaServer/Images/

- *Analyze Mode*: Analysis creates different proxies for still and clip files. Choose an option from the pop-up menu to determine how Final Cut Server handles files that are not known to be still images or movie clips; for example, files missing extensions.
 - *[None]*: Do not analyze files or create proxies for files with missing or unknown file extensions. Guess the file type by its extension (default).
 - *Assume Stills*: Assume files with missing or unknown file extensions are still images.
 - *Ignore*: Do not analyze files or create proxies for files with missing or unknown file extensions. Guess the file type by the file’s extension.
- *Case insensitive filesystem*: Select this checkbox for FTP devices that do not recognize case differences (for example, they see FILE.mov and file.mov as being the same file).
- *Archive Device*: Select this checkbox to add this device to the list of archive locations a user can choose from.

About Filesystem

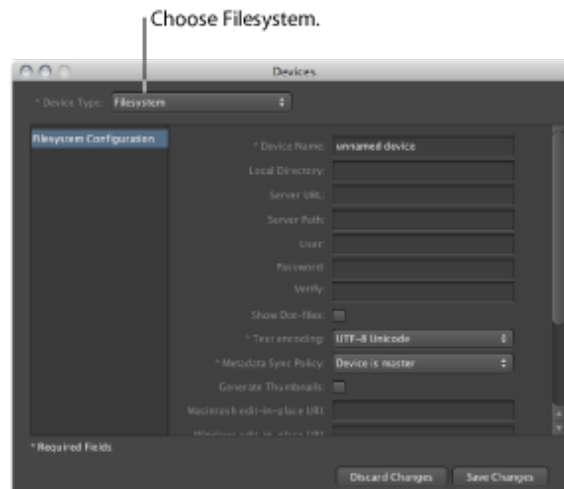
This type of device is used for any storage that is on the Final Cut Server server or can

be mounted from it. This is used for AFP, Xsan, NFS, and SMB/CIFS file systems.

Note: Although all of the fields appear, the file system determines which fields are actually used.

To access the Filesystem device settings

1. Click the Create button in the Administration window's Devices pane to create a new device.
2. Choose Filesystem from the Device Type pop-up menu.



The Filesystem Configuration pane for a Filesystem device type contains the following items:

- *Device Name:* Enter a descriptive name for the device.
- *Local Directory:* Enter the root path for this device as it appears to the Final Cut Server server. This path is seen as the relative root (/) when copying to the device and all files under it will be accessible (for example: /Volumes/Macintosh HD/Final Cut Server/shared/).
- *Server URL:* Enter the URL of the server. This applies only to nonlocal devices.

Important: Enter information into either the Local Directory field or the Server URL field, never into both fields.

For Windows SMB/CIFS devices, enter the Uniform Naming Convention (UNC) root path that includes the workgroup and user using the format: `smb://workgroup;user@servername/shared`. You must also enter the user name in the User field.

Note: Device Setup Assistant from the Final Cut Server System Preferences pane includes a workgroup entry. You may find it easier to use Device Setup Assistant to configure SMB/CIFS devices.

- *Server Path:* Enter the path that the server exports for use as the root path. This applies only to nonlocal devices.
- *User:* Enter your user name in this field to log in automatically to the server on every attempted server access, such as searching and copying.
- *Password:* Enter the password that goes with the above User entry. Leave this field blank if the User field is blank.
- *Verify:* Retype the password entered above.
- *Show Dot-files:* Select this checkbox to display all files beginning with a dot or period (.) on directory listings and searches. Otherwise these files are not visible.

Important: Do not select this option unless specifically required.

- *Text encoding:* Choose the type of text encoding used on the device from this pop-up menu. Final Cut Server supports a wide range of text encodings, including many of the common Chinese, Korean, and Japanese encodings. See “About Unicode Support” for more information.
- *Metadata Sync Policy:* From this pop-up menu, choose the policy by which metadata is synchronized between Final Cut Server and the device. See “Metadata Synchronization Policy” for more information.
- *Generate Thumbnails:* Select this checkbox to generate thumbnails of images when using Search Devices from the Server pop-up menu (the pop-up menu in the Final Cut Server main window that appears when you click the Server button). The thumbnail images appear when you view an image’s details, by either double-clicking its filename or Control-clicking the filename and choosing View Details from the shortcut menu. This allows you to see the image without having to create an asset for it in the Final Cut Server catalog. See “Searching Devices” for more information on using the Search Devices feature.
- *Macintosh edit-in-place URI:* Enter the Uniform Resource Identifier (URI) for editing media from a Macintosh client directly on the device, instead of downloading and editing it on the client. The device must also be accessible as a mounted file system from the client. The format is:

- file:///Volumes/*volumename*/*optionalsubfolder*/

After you enter the URI, the path will be changed to:

- file://[localhost]/[volumename]/[optional subfolder]

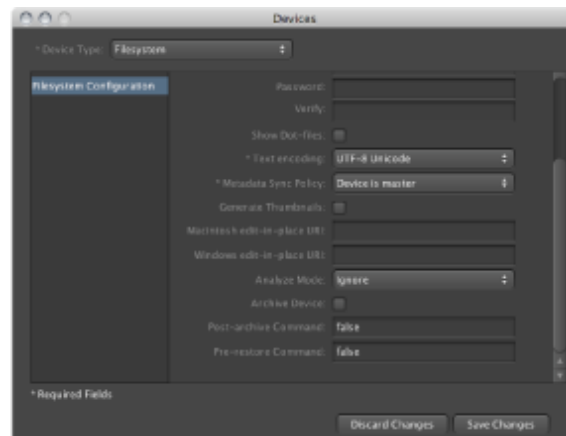
An example is:

- file:///Volumes/MediaServer/Images/

After entering the example above, you will see:

- file://localhost/Volumes/MediaServer/Images

Note: See “About Edit-in-Place Devices” for more information about edit-in-place devices.



- *Windows edit-in-place URI:* Enter the URI for editing media from a Windows client directly on the device, instead of downloading and editing it on the client. The device must also be accessible as a network share from the client. The format is:

- file:///hostname/*path*/

An example is:

- file:///MediaServer/Images/

- *Analyze Mode:* Analysis creates different proxies for still and clip files. Choose an

option from the pop-up menu to determine how Final Cut Server handles files that are not known to be still images or movie clips; for example, files missing extensions.

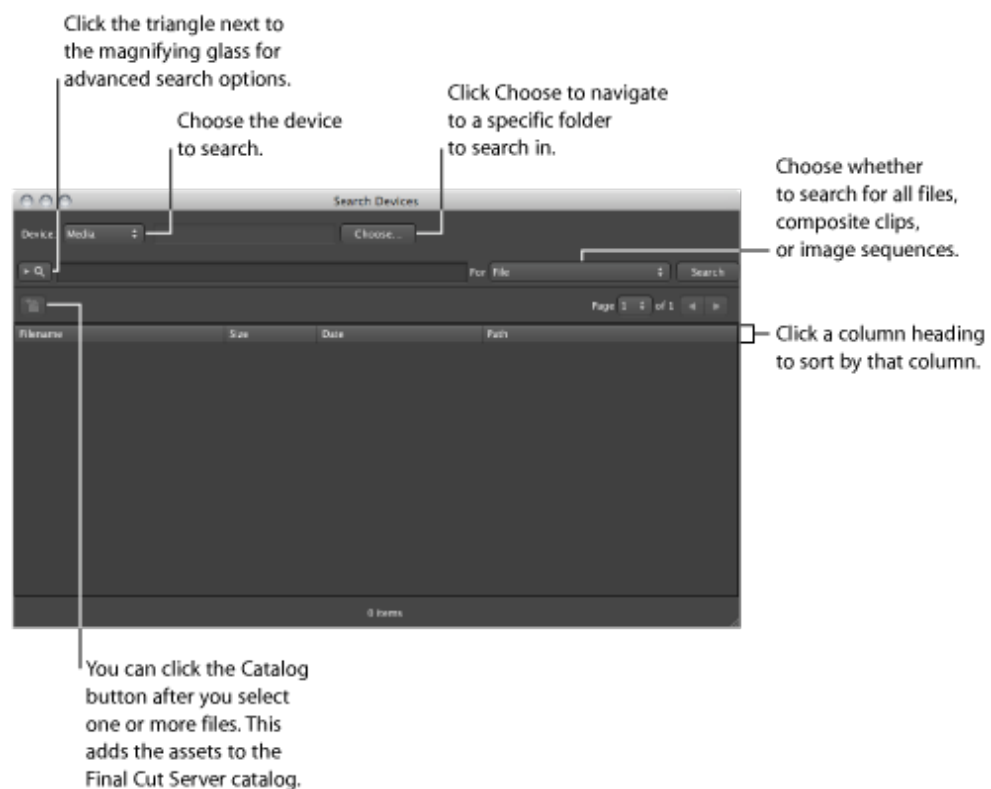
- *[None]*: Do not analyze files or create proxies for files with missing or unknown file extensions. Guess the file type by its extension (default).
- *Assume Stills*: Assume files with missing or unknown file extensions are still images.
- *Ignore*: Do not analyze files or create proxies for files with missing or unknown file extensions. Guess the file type by the file's extension.
- *Archive Device*: Select this checkbox to add this device to the list of archive locations a user can choose from.
- *Post-archive Command*: This only applies if Archive Device is selected. Enter the path and name of the script or other executable file that should run after an asset is archived. This can enable integration with other external archiving systems. The script is given the complete path to the file as its first argument on the command line.
- *Pre-restore Command*: This only applies if Archive Device is selected. Enter the path and name of the script or other executable file that should run before an asset is restored. This can enable integration with other external archiving systems. The script is given the complete path to the file as its first argument on the command line.

Searching Devices

Final Cut Server includes the ability to search any connected device. This allows you to examine the contents of a device, including items that have not been added to the Final Cut Server catalog.

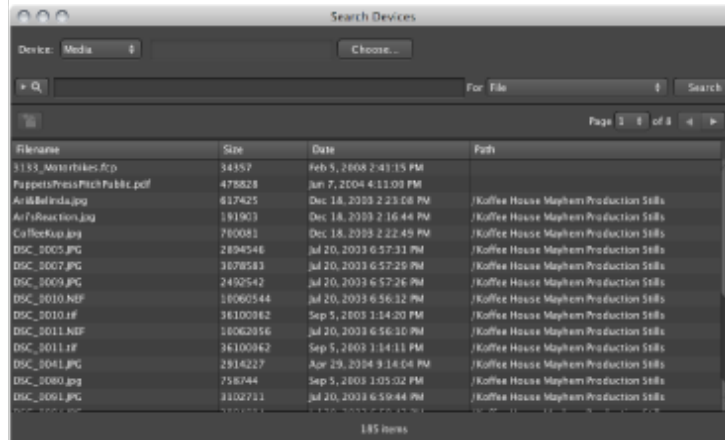
To open the Search Devices window

- Choose Search Devices from the Server pop-up menu (the pop-up menu in the Final Cut Server main window that appears when you click the Server button).



To search a device's contents

1. Choose the device to search from the Device pop-up menu.
2. Click Search.

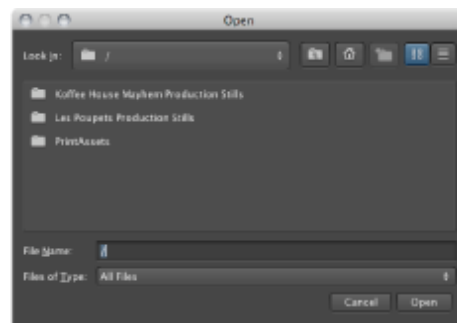


By default, clicking the Search button searches from the device's root level. You can enter text to search for in the search field.

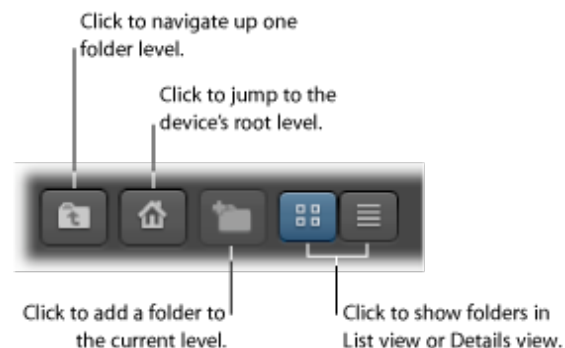
Important: Be sure to enter entire words in the search field. Unlike the search field in the Final Cut Server main window, the Search Devices search field does not return full words if you search for a partial word. For example, if you want to find all assets that contain the word “frame,” you must search for the entire word. Searching for “fra” will only find assets with the word “fra” and the word “frame” will not be found.

Other Ways to Search Devices

After opening the Search Devices window, you can click Choose to open a window that allows you to specify a folder to search. This window allows you to browse the contents of the device.



You can double-click a folder to show its contents, or you can use the buttons along the top edge to manage this dialog.



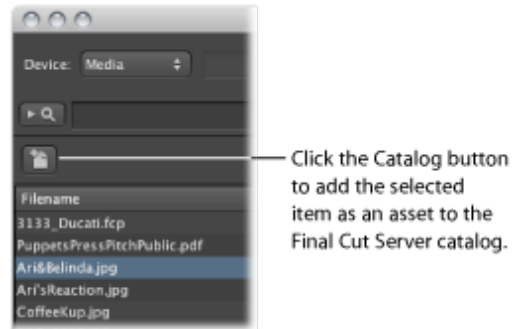
Once you are showing the folder you want to search, click Open to close this dialog and return to the Search Devices window.

Managing Device Items

The Search Devices window provides several ways to work with the items that it lists. These include the Catalog button and a shortcut menu that appears when you Control-click an item.

About the Catalog Button

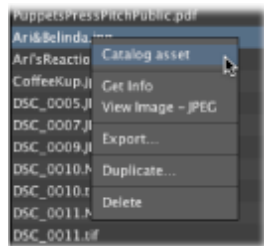
When you select one or more items in the Search Devices window, the Catalog button becomes active. Clicking the Catalog button allows you to add the asset to the Final Cut Server catalog.



Note: It is possible that the selected item is already an asset in the Final Cut Server catalog. You can determine whether the item is in the catalog by either searching for it in the Assets pane or by using the shortcut menu (described next) to try and delete it. When you choose Delete from the shortcut menu, a dialog appears that lists what you are about to delete, including whether it is being removed from the catalog.

About the Shortcut Menu

You can Control-click an item to open a shortcut menu with several options. Although many of these options look similar to the options you see when you Control-click an asset in the Assets pane, they can function differently.



- **Catalog asset:** This adds the item to the Final Cut Server catalog, exactly as the Catalog button does.
- **Get Info:** This opens a window that lists information about the selected item. This includes some metadata items that do not appear when you look at the asset within the Assets pane. See “About QuickTime Metadata” for more information.
- **View Image:** This opens a window in the item’s default application to view it. Unlike the View item in the Assets pane shortcut menu, you are not able to choose to view the proxy files and instead always view the original images. For large video files, this may take some time because the original media files must be copied from the device to your local cache before you can view them.
- **Export:** You can use Export to make a local copy of the selected item. You are able to choose the location and a transcode setting to use (if applicable) for the export

process.

- *Duplicate*: You can use Duplicate to make a copy of the selected item onto any of the Final Cut Server devices. The copied version of the item is not added to the Final Cut Server catalog, regardless of whether the original item is in the catalog.
- *Delete*: You can use Delete to remove the selected item from the device. This actually deletes the file. When you choose Delete, a dialog appears that lists the items that will be deleted, including assets from the Final Cut Server catalog if this item was a part of it.

Note: It can be useful to use Delete to determine whether an item is in the Final Cut Server catalog or not—just be careful to not accidentally delete an item.

Copyright © 2009 Apple Inc. All rights reserved.

Managing Transcode Settings

Transcode settings streamline copying media between different systems by hiding complex audio and video codec details from most users.

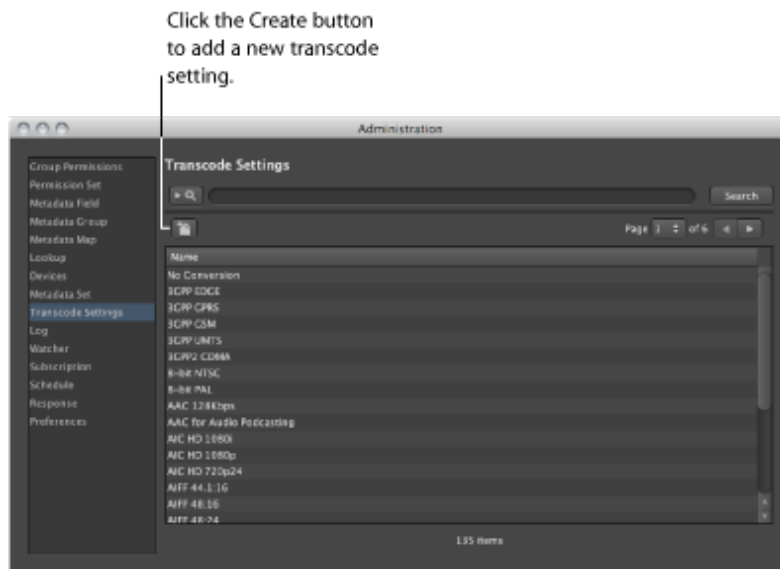
About Transcode Settings

Transcode settings can be helpful in many ways. For example, if you have a device that you use for reviewing assets or productions, you can assign transcode settings to the device, and those settings can be used to convert the video to formats that are best suited for playback. Transcode settings are assigned to devices so that when you upload or copy media to a device, you can choose a transcode setting to use from a pop-up menu.

Note: If a device has no transcode settings assigned to it, you cannot perform any conversions when you upload or copy assets to that device.

Final Cut Server ships with a number of preconfigured transcode settings based on Compressor and internal Final Cut Server settings. You can also create custom settings in Compressor that can be made into Final Cut Server transcode settings. Anyone configuring settings must have a good knowledge of specific video and audio format issues. See the Compressor documentation, available from the Compressor Help menu, for more information.

The Transcode Settings pane of the Final Cut Server client's Administration window lists the current transcode settings.



Adding Transcode Settings

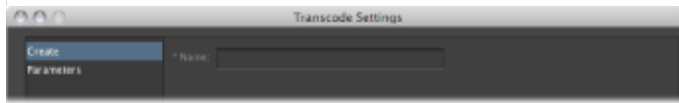
Final Cut Server includes a large variety of transcode settings. All clip transcode settings are based on Compressor settings, and most image transcode settings are based on internal Final Cut Server settings. If you need to add additional, custom settings, you first need to create custom settings in Compressor. See the Compressor documentation, available from the Compressor Help menu, for details on creating custom settings.

Once you have created a custom setting in Compressor, you can add it to Final Cut Server.

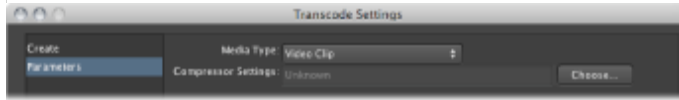
To add a new transcode setting

1. Click the Create button in the Transcode Settings pane.

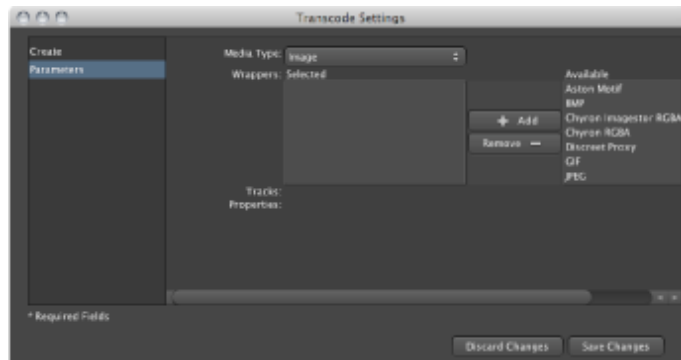
The Transcode Settings window appears.



2. Enter a name for the transcode setting in the Name field.
3. Click Parameters in the column on the left.



4. Choose the type of transcode setting to create from the Media Type pop-up menu.
This setting controls the items available in the Compressor Settings pop-up menu.
 - *If you choose Video Clip:* Only video-related items appear in the Compressor Settings pop-up menu.
 - *If you choose Audio Clip:* Only audio-related items appear in the Compressor Settings pop-up menu.
 - *If you choose Image:* The window changes to include a variety of still-image formats.



5. Choose your custom setting from the Compressor Settings pop-up menu, or, for images, click items in the Available list and then click the Add button to move them to the Selected list.
6. Click Save Changes.

The new transcode setting is added to the Transcode Settings pane.

Assigning Transcode Settings to Devices

There are two methods you can use to assign transcode settings to a device: using Device Setup Assistant in Final Cut Server System Preferences, or using the Transcode Settings window.

You can use either method; however, the most efficient method to use depends on what you are trying to do:

- If you want to add multiple transcode settings to a single device, it is faster to edit the device using Device Setup Assistant. Device Setup Assistant contains a full list of all transcode settings with checkboxes next to each. See the *Final Cut Server Setup Guide* for more information.

Note: Contentbase devices cannot be modified using Device Setup Assistant.

- If you want to add a single transcode setting to multiple devices, it is faster to use the Transcode Settings pane of the client's Administration window using the method described next.

Additionally, you can use the Transcode Settings pane to manage the transcode settings of the Export device. This device provides the list of transcode settings to choose from when using the Export option of the shortcut menu that appears when you Control-click an asset in the client. The Export device that appears first in the list of available devices (described next) is the device used for these download operations. See “About the Export Device” for more information.

To assign a transcode setting to a device

1. In the Transcode Settings pane of the Administration window, double-click the transcode setting that you want to assign to one or more devices.

The Transcode Settings window appears.



2. Click Modify in the column on the left.

The Available column lists all the available devices. The Selected column lists the devices that have this transcode setting assigned to them.

3. Select devices in the Available list and click the Add button to move them to the Selected list.
4. Enter a number in the Priority field to control the order in which the transcode settings appear in the pop-up menu when assigning them to a device's asset.

Smaller numbers appear above larger numbers. The range is normally from 1 to 5, with 1 appearing first.

5. Click Parameters in the column on the left if you want to change the Compressor setting that is assigned to this transcode setting.
6. Click Save Changes to save the transcode setting assignments.

Managing Automations

Final Cut Server includes several methods you can use to automate your workflow. Each method is completely configurable and extremely powerful.

About Final Cut Server Automation

Configuring the Final Cut Server automation features can help your workflow in many ways. Just two of these ways are sending emails when specified events occur, such as a change in an asset's status or a job failing, and automatically copying assets to specified devices.

Final Cut Server provides two methods for configuring automations for your system: using Automation Setup Assistant in Final Cut Server System Preferences or using a group of panes in the Final Cut Server client's Administration window. This chapter explains how to use the panes in the Final Cut Server client's Administration window. For information about using the Automation Setup Assistant in Final Cut Server System Preferences, see the *Final Cut Server Setup Guide*.

Using the automation panes of the Administration window provides you the greatest flexibility and the most power when setting up your automations. This flexibility and power does add to the complexity of the process though. In many cases, you will find that using Automation Setup Assistant is easier and provides the types of automation you need.

Automation Operations

All of the automations you set up are based on one of the three following operations, with the goal of each being to issue responses at the appropriate times:

- *Watchers*: File system watchers monitor a device for specific changes, based on an interval you configure. When the specified change happens—for example, a new set of still images is added to a folder on the device—the watcher issues one or more responses. The responses can perform a variety of functions. In the example with a new set of still images, the responses can transcode the still images to a different format, copy them to a second device, and send an email to the editor listing the images.
- *Schedules*: Schedules issue responses at predetermined intervals. Most often they are used to scan a device to detect changes to respond to. For example, you can have a schedule that every day at 2 a.m. clears the items from the Log pane, providing a fresh start each day.
- *Subscriptions*: Metadata subscriptions issue responses based on specific actions. Unlike watchers and schedules, subscriptions do not run based on predetermined intervals, but react directly to Final Cut Server events. For example, a subscription can monitor the Search All Jobs window and send an email response if a job fails.

Each of the above automation types has its own pane in the Administration window. There is also a Response pane for configuring the responses used by these automation types. Responses are not able to run as a standalone automation—responses are what watchers, schedules, and subscriptions use to accomplish their automation tasks. There are a wide variety of types of responses, from copying, transcoding, and deleting assets to sending emails and scanning specific devices.

General Automation Tips

The automations you can configure for Final Cut Server can be very simple or very complex. In either case, there are situations you should be aware of that could lead to unexpected results.

About Reference QuickTime Files

Reference QuickTime files are media files that do not actually contain all of the media

and instead include references to the actual media files.

If you manually upload a reference QuickTime file, a dialog appears asking if you want Final Cut Server to flatten the file (converting it to a self-contained QuickTime file) before uploading it to the catalog.

Scan and copy responses do not have this option, and instead, just upload the reference file without its externally referenced files. For that reason, you should manually flatten reference QuickTime files before using an automation to add them to the Final Cut Server catalog.

An exception is when you and everyone who might want to access a reference QuickTime file are on a SAN, such as an Xsan system. In this case, when a user checks out or exports a reference media file, the file will have access to the media files that the reference file needs.

About Final Cut Pro Projects

Final Cut Pro project files include the file paths to the project's media. Final Cut Server locates the project's media using the file paths stored in the Final Cut Pro project file.

An issue can occur if the Final Cut Pro project and its media have been moved from their original location to a device that has a scan or copy response configured to automatically upload new files to the Final Cut Server catalog. In this case, the file paths stored in the Final Cut Pro project no longer match where the media actually is located. You can correct this by opening the project in Final Cut Pro after it has been moved, reconnecting the media files (this may not be necessary; in some cases Final Cut Pro may be able to resolve the file paths on its own), and saving the project before using an automation to add the files to the Final Cut Server catalog.

About Uploading Folders

When you manually upload a folder containing media files to the Final Cut Server catalog, you are given three options for how Final Cut Server should treat the folder:

- *Upload the folder as a bundle:* This means the folder and all of its contents are treated as a single asset, and you do not have access to the individual assets within the folder.
- *Upload the folder's contents as individual assets:* This means that each of the media files within the folder are uploaded as individual assets, and the fact that they were all in a folder when uploaded is not tracked.
- *Upload the folder's contents as an image sequence:* This means that the images will be identified as an image sequence, and a proxy video will be created at either the default frame rate or the frame rate provided at upload.

If you choose to upload the folder and its contents as a bundle or an image sequence asset onto a device that has an automation, such as a scan response, configured to watch for new media files, the folder's media files can end up being added to the Final Cut Server catalog as both a bundle or image sequence asset and as individual assets.

If you do not want the individual media files to be added to the catalog, be sure to upload the bundle or image sequence to a device that is not automatically being scanned for new assets. It is recommended that one or more unique devices be created to hold image sequences, and that any scans associated with those devices be image sequence-specific scans.

About Media Files with No File Extension

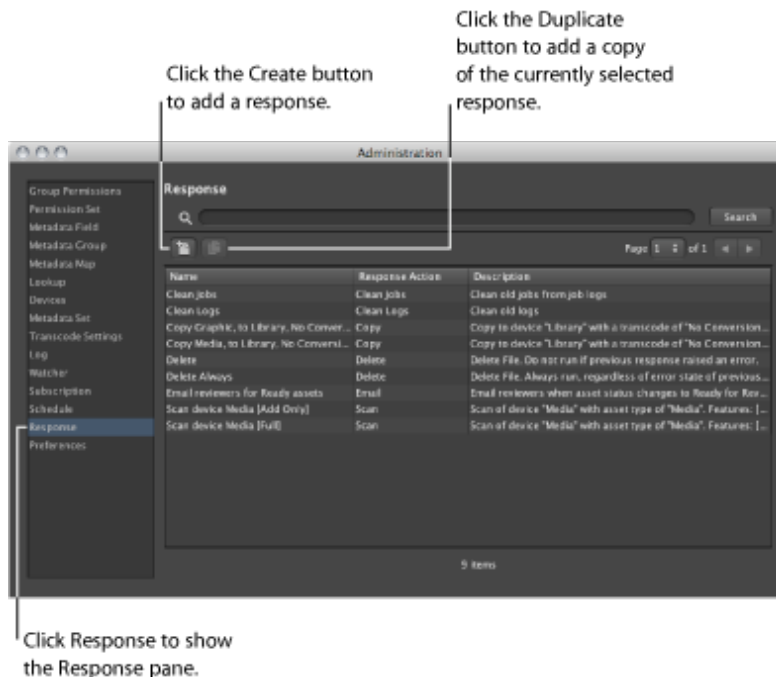
In some cases, Final Cut Server automations can correctly recognize, upload, and process media files that do not have a file extension. To ensure that all files upload and are processed correctly, be sure all media files have an extension. This is especially true if the files are being uploaded to an FTP device.

Files without file extensions that are not correctly recognized will upload and be added to the Final Cut Server catalog as assets, but they will not have thumbnail or proxy files generated for them.

Response Pane and Window

The Response pane contains the settings for creating a wide variety of preconfigured actions. These responses are what the watchers, subscriptions, and schedules use when they detect that an action needs to be performed. Responses are configured separately from watchers, subscriptions, and schedules because the same response may be required in several situations.

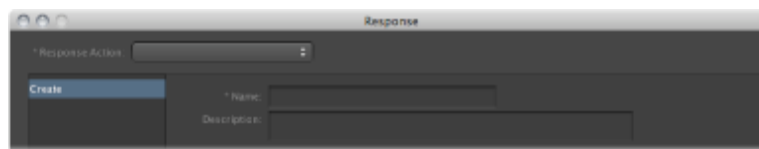
The Response pane lists the existing responses.



The Response pane includes the following columns:

- *Name*: The name of the response as entered when it was created
- *Response Action*: The basic action that the response performs
- *Description*: A description entered when the response was created

The Response window appears when you click the Create button.



The settings that appear in the window, along with the items that appear in the area on the left, depend on the action you choose from the Response Action pop-up menu.

Note: If you edit an existing response by double-clicking it in the Response pane, you cannot change its Response Action setting.

Response Actions

What you choose from the Response Action pop-up menu defines the response's basic purpose. Some response actions have additional settings that can be configured in a second pane that gets added to the column on the left.

| Response action | Triggered by | Description |
|---|--------------|--|
| Check the disk space of the database volume | Schedule | Defines the minimum disk space before a warning is issued that the database is about to run out of |

| | | |
|-----------------------------------|--|---|
| | | room. |
| Clean Jobs | Schedule | Defines periods at which jobs are archived and deleted. For more information, see “About Clearing Jobs and Logs from the Final Cut Server Database.” |
| Clean Logs | Schedule | Defines periods at which logs are archived and deleted. For more information, see “About Clearing Jobs and Logs from the Final Cut Server Database.” |
| Copy | Poll watcher or asset subscription | Copies media to any connected Final Cut Server device with or without transcoding. Optionally, creates a new asset in Final Cut Server and allows you to set that asset's metadata. |
| Delete | Poll watcher or asset subscription | Deletes the item. You can choose to have this response run even if other responses in the list fail. |
| Email | Poll watcher or asset, production, or job subscription | Sends an email. You configure the email settings (to, sender, subject, and message). |
| Log | Asset, production, or job subscription | No additional options. Adds an entry to the log. |
| Measure database size | Schedule | No additional options. You can use this to find the disk space used by the catalog's database (the results are shown in the Log pane). This action measures only the database—it does not include the actual assets the catalog refers to. |
| Monitor Scan | Poll watcher | Scans for specific metadata settings. |
| Move to Archive | Asset subscription | No additional options. Moves the media to the selected archive device. |
| Purge Subscriptions | Schedule | Deletes subscriptions that have not been active for a specified number of days. |
| Read XML | Poll watcher | No additional options. Reads XML data from an external system. It is used in conjunction with the Write XML response action. |
| Restore from Archive | Asset subscription | No additional options. Restores items from an archive device. |
| Run an external script or command | Poll watcher or asset, production, or job subscription | Executes a script or other external command. You can also define special parameters to apply to the script or command. |
| Scan | Schedule | Scans a specified Final Cut Server device. The purpose of a scan is to synchronize the contents of the Final Cut Server catalog with the media that exists on a device. This is necessary if you intend to change the media on the device directly without using Final Cut Server. You can choose the device and a folder in that device to scan, as well as specify metadata settings. You can also specify other scan details, such as whether to purge (remove) items from the catalog if they are removed from the device, or specify a frame rate if you are scanning image sequences. |
| Scan Productions | Schedule | Scans a specified Final Cut Server device for |

| | | |
|-------------------------|----------------------------------|--|
| | | productions. Similar to the Scan response action, but with added production metadata settings that create a new production with the assets. |
| Search Expired | Schedule | Searches for expired items. It creates events based on a timestamp field (such as Last Accessed) and a value defining the number of past days to look for. This can be used to identify items to archive. |
| Set Asset Metadata | Asset subscription | Enters data in specified metadata fields. You choose the asset metadata set with the fields to change. |
| Set Production Metadata | Production subscription | Enters data in specified metadata fields. You choose the production metadata set with the fields to change. |
| Write XML | Asset or production subscription | Creates an XML file based on the asset's metadata. This allows someone using an external system to modify the metadata; for example, to add review comments or annotations, which can be read back in and applied to the asset using the Read XML response action. |

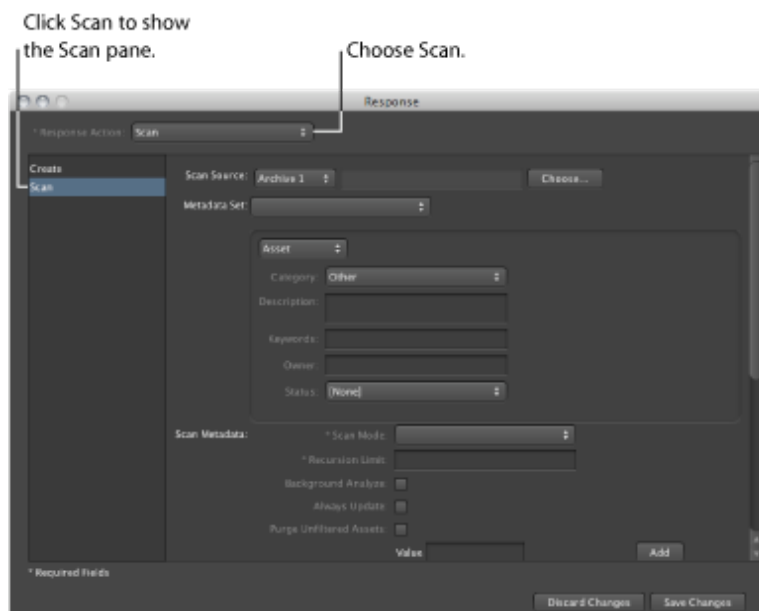
About Scan Responses

Scan responses are one of the most commonly used custom responses.

To access the scan response settings

1. Click the Create button in the Administration window's Responses pane to create a new response.
2. Choose Scan from the Response Action pop-up menu.
3. Click Scan to view the scan settings.

The Scan pane of the Response window contains settings that define what is being scanned, the metadata that is applied to the items found by the scan, and the actual scan mode and settings.



Scan Source Section

- *Scan Source*: Choose the device to scan from the pop-up menu. You can also use the Choose button to choose a specific folder within that device to scan.

Metadata Set Section

- *Metadata Set*: This is where you choose the metadata set to apply to any new assets found by the scan. The settings below the Metadata Set pop-up menu allow you to enter default descriptions, keywords, and so on to apply to the new assets.

Note: Scan responses created using the client's Administration window have version control set based on how the Final Cut Server Installer was configured. However, all scan responses created using Device Setup Assistant have version control disabled, regardless of how the Final Cut Server Installer was configured. This means that all assets and Final Cut Pro projects added to the Final Cut Server catalog by a scan response will, by default, not track versions. You can verify and change version control for a scan response by choosing the Versioning metadata group (in the pop-up menu just below the Metadata Set pop-up menu) and selecting the Version checkbox. See "Version Control Preference Settings" for more information about the installer's version control setting.

Scan Metadata Section

- *Scan Mode*: Choose the type of scan operation to perform.
 - *Add Only*: This performs a scan that locates only new and changed files with a created or modified date between the last time this scan ran and the current time (it will not see new files with created or modified dates older than when this scan last ran; for example, files that you dragged to the device from the Finder). The Add Only mode is generally used on scans scheduled to run often, such as every 5 to 15 minutes.
 - *Full*: This performs a full scan that, in addition to adding new assets to the catalog, removes assets from the catalog if they are no longer on the device. The Full mode is generally used only on scans scheduled to run once a day or less frequently because these scans are the most thorough and require the most time to perform.
 - *Purge Only*: This performs a full scan, but only removes assets from the catalog if they are no longer on the device—it does not add any new assets to the catalog.

Important: You should only schedule add only scan responses to devices that also have a full scan response scheduled. Additionally, be sure that all settings for the add only and full scan responses are identical.

- *Entity Type*: Choose the type of entity to scan for:
 - *File*: This is the default setting. It sets the scan to look for all files except image sequences.
 - *Image Sequence*: This sets the scan to look for a folder containing a series of numbered image files.
- *Video Frame Rate*: This defines the number of frames per second that will be used to produce an image sequence asset's proxy video.
 - *[Auto]*: Choose Auto to use an automatically generated frame rate gleaned from the media's metadata. If no frame rate information is available, the default frame rate that is specified in the Global Preferences pane of the Administration window will be used.
 - *Listed Frame Rates*: The frame rates provided in this pop-up menu are supplied by Compressor. Choose one of the provided frame rates to define the frame rate that will be used to create the proxy video for every scanned image sequence.
- *Recursion Limit*: This defines the number of folder levels the scan will include. A value of 0 means unlimited subfolders are scanned. A value of 1 means that only the folder specified by the Scan Source pop-up menu is scanned.

- *Background Analyze*: Creates the proxy items for the assets as a background task. Normally, assets are analyzed as a foreground task, one at a time. Analyzing in the background allows multiple tasks to run concurrently, which may be useful but also may result in resource issues with your computer. In general, it is recommended that you do not select this option unless you are comfortable with monitoring your computer's resources.
- *Always Update*: This sets the scan to continuously attempt to make proxy files for assets that do not currently have proxy files. This should not be selected unless you had a known issue with a device and want to generate proxy files from its assets.
- *Purge Unfiltered Assets*: This sets the scan to purge assets from the catalog that don't match the Wildcard Include Filter and Wildcard Exclude Filter settings.
- *Wildcard Include Filter*: You can use this to define the types of files that the scan processes. The default filter is the asterisk (*), which is the wildcard indication. A single asterisk indicates that all files are processed. If you want the scan to process only JPEG and QuickTime movie files, you can replace the asterisk with two items: *.jpg and *.mov (which indicate that all files with .jpg and .mov file extensions are processed).
- *Wildcard Exclude Filter*: You can use this to define types of files that the scan should not process. For example, if the folder that the scan is processing includes PDF documents that you do not want to have processed and added as assets, you can enter *.pdf (which indicates that all files with a .pdf extension are not processed).

Scan Responses Created by Device Setup Assistant

One or two scan responses are created when you configure the scan settings for a device with Device Setup Assistant in Final Cut Server System Preferences:

- *Device Scan [Full Scan]*: This is created when you configure a full scan in Device Setup Assistant. This response uses the Purge setting from the Scan Mode pop-up menu with a Recursion Limit setting of 0 (unlimited subfolder access).
- *Device Scan [Add Only]*: This is created when you configure an add only scan in Device Setup Assistant. This response uses the Add Only setting from the Scan Mode pop-up menu with a Recursion Limit setting of 0.

About Scan Productions

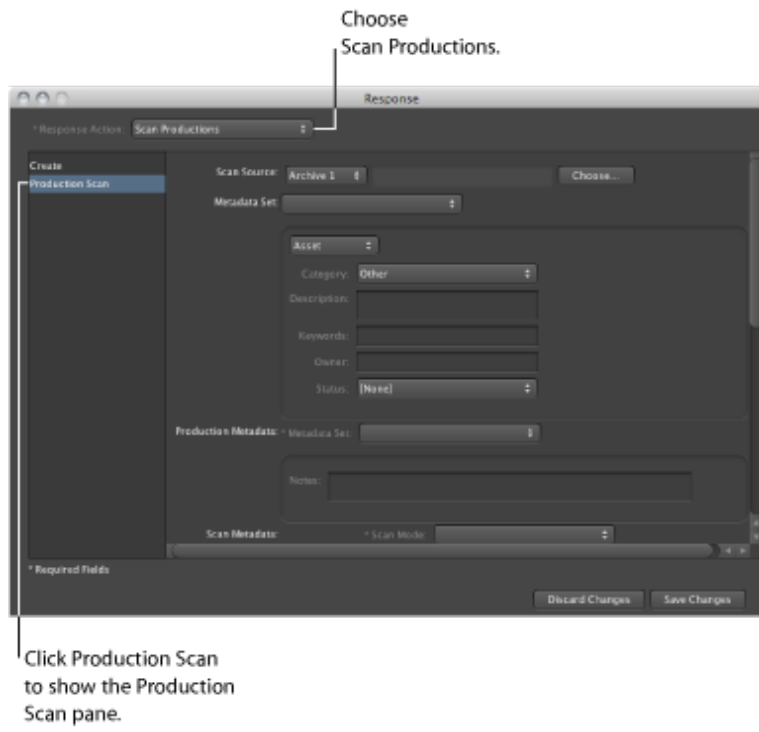
The scan productions response allows you to automate more of your workflow process for adding assets and productions to the Final Cut Server catalog.

Most of the settings for a scan production response are the same as for a scan response. The difference is a section that allows you to specify production settings.

To access the scan production response settings

1. Click the Create button in the Administration window's Responses pane to create a new response.
2. Choose Scan Productions from the Response Action pop-up menu.
3. Click Production Scan to view the Scan Productions settings.

The Production Scan pane of the Response window contains settings that define what is being scanned, the metadata that is applied to the items found by the scan, production metadata settings, and the actual scan mode and settings.



Scan Source Section

- *Scan Source:* Choose the device to scan from the pop-up menu. You can also use the Choose button to choose a specific folder within that device to scan.

Metadata Set Section

- *Metadata Set:* This is where you choose the metadata set to apply to any new assets found by the scan. The settings below the Metadata Set pop-up menu allow you to enter default descriptions, keywords, and so on to apply to the new assets.

Note: By default, all scan production responses have version control set based on how the Final Cut Server Installer was configured. You can verify and change version control for a scan production response by choosing the Versioning metadata group (in the pop-up menu just below the Metadata Set pop-up menu) and selecting the Version checkbox. See “Version Control Preference Settings” for more information about the installer’s version control setting.

Production Metadata Section

- *Metadata Set:* This is where you choose the metadata set to apply to the production. The settings below the Metadata Set pop-up menu allow you to enter default descriptions, keywords, and so on to apply to the productions.

The Title metadata setting that is part of the metadata set you choose can be used two different ways:

- *To enter a specific name for the production to use:* You can enter the name of a production to use. If the production already exists, the new assets are added to it. If the production does not exist, it is created and the assets are added to it.
- *To use the scanned folder’s name as the production name:* You can use the folder’s name as the production’s name. By entering [0] in the Title field, a new production is created whenever a new subfolder is found in the folder being scanned, and that new production uses the name of the folder as its name. For example, you might create a folder named Productions in a device and use a schedule automation to have a scan productions response monitor that folder. Each time a new Final Cut Server production needs to be created and assets added to it, a user only has to add a subfolder to the watched folder, using the name of the new production, and copy all of the assets for that production into that new

subfolder. The scan productions response will create a new Final Cut Server production, using the folder name, and add all of the assets in that subfolder to that new production.

Scan Metadata Section

- *Scan Mode*: Choose the type of scan operation to perform.
 - *Add Only*: This performs a scan that adds new assets to the catalog and updates the catalog if there are modified assets. The Add Only mode is generally used on scans scheduled to run often, such as every 15 minutes.
 - *Full*: This performs a full scan that, in addition to adding new assets to the catalog, removes assets from the catalog if they are no longer on the device. The Full mode is generally used only on scans scheduled to run once a day or less frequently because these scans are the most thorough and require the most time to perform.
 - *Purge Only*: This performs a full scan, but only removes assets from the catalog if they are no longer on the device—it does not add any new assets to the catalog.
- *Entity Type*: Choose the type of entity to scan for:
 - *File*: This is the default setting. It sets the scan to look for all files except image sequences.
 - *Image Sequence*: This sets the scan to look for a folder containing a series of numbered image files.
- *Video Frame Rate*: This defines the number of frames per second that will be used to produce an image sequence asset's proxy video.
 - *[None]*: Choose Auto to use an automatically generated frame rate gleaned from the media's metadata. If no frame rate information is available, the default frame rate that is specified in the Global Preferences pane of the Administration window will be used.
 - *Listed Frame Rates*: The frame rates provided in this pop-up menu are supplied by Compressor. Choosing one of these defines the frame rate that will be used to create the proxy video for every scanned image sequence.
- *Production Depth*: This defines the depth of the subfolders that are made into productions. A value of 0 means to use the first level of subfolders, while a value of 1 means to use the second level of subfolders.
- *Reset Production Metadata*: Click this checkbox to replace an existing production's metadata with the new metadata generated from this scan production response.
- *Recursion Limit*: This defines the number of folder levels the scan will include when looking for assets. A value of 0 means unlimited subfolders are scanned. A value of 1 means that only the folder specified by the Scan Source pop-up menu is scanned.
- *Background Analyze*: Creates the proxy items for the assets as a background task. Normally, assets are analyzed as a foreground task, one at a time. Analyzing in the background allows multiple tasks to run concurrently, which may be useful but also may result in resource issues with your computer. In general, it is recommended that you do not select this option unless you are comfortable with monitoring your computer's resources.
- *Always Update*: This sets the scan to continuously attempt to make proxy files for assets that do not currently have proxy files. This should not be selected unless you had a known issue with a device and want to generate proxy files from its assets.
- *Purge Unfiltered Assets*: This sets the scan to purge assets from the catalog that don't match the Wildcard Include Filter and Wildcard Exclude Filter settings.
- *Wildcard Include Filter*: You can use this to define the types of files that the scan processes. The default filter is the asterisk (*), which is the wildcard indication. A single asterisk indicates that all files are processed. If you want the scan to process

only JPEG and QuickTime movie files, you can replace the asterisk with two items: *.jpg and *.mov (which indicate that all files with .jpg and .mov file extensions are processed).

- **Wildcard Exclude Filter:** You can use this to define types of files that the scan should not process. For example, if the folder that the scan is processing includes PDF documents that you do not want to have processed and added as assets, you can enter *.pdf (which indicates that all files with a .pdf extension are not processed).

About Copy Responses

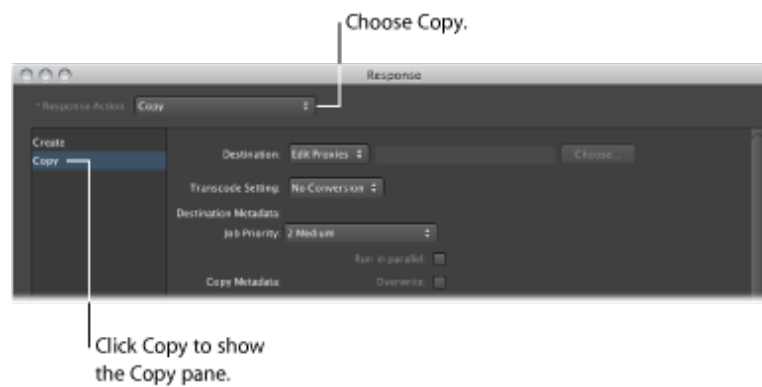
Copy responses are one of the most commonly used custom responses.

Important: If the destination device already contains a file with the same name as the one being copied, copy responses by default will not overwrite that file, and instead, will add a numbered extension to the new file's name. You can optionally use the Overwrite setting to overwrite an existing file with the same name. An exception to this is copying to ContentBase devices, where each file is placed in a unique folder.

To access the copy response settings

1. Click the Create button in the Administration window's Responses pane to create a new response.
2. Choose Copy from the Response Action pop-up menu.
3. Click Copy to view the Copy settings.

The Copy pane of the Response window contains the destination, transcode, and destination metadata settings.



Destination Settings

- **Destination:** You choose the device to copy assets to with the Destination pop-up menu. You can also enter or choose a subfolder to copy the asset to.

Transcode Setting

- **Transcode Setting:** You can choose any of the transcode settings assigned to the device you chose as the destination. This is useful if you want to make sure all assets on this device use the same codec.

Destination Metadata Settings

- **Job Priority:** Choose the priority of the copy job from the pop-up menu.
- **Copy Metadata:** Select the “Run in parallel” checkbox to allow this response to run at the same time as other copy responses in a watcher or subscription. When this is not selected, the response runs serially, based on its order in the watcher or subscription. Select the Overwrite checkbox to overwrite an existing destination file if it has the same filename as the file being copied.

Note: Delete responses always run serially and after the copy responses.

- **Create Asset:** Select this checkbox to have the copied asset added to the Final Cut Server catalog. Selecting this checkbox activates the Metadata Set and Production selection settings.
- **Metadata Set:** This is where you choose the metadata set to apply to any new assets found by the scan. The settings below the Metadata Set pop-up menu allow you to enter default descriptions, keywords, and so on to apply to the new assets.
- **Production:** Enter a name to create a new production that the asset aliases are added to. Alternatively, click Choose to search for an existing production to add the asset aliases to.
- **Overwrite:** Select this checkbox to have the copied asset replace an existing file if it has the same filename.

About Email Responses

Email responses are commonly used with metadata watchers that look for an asset's status to change to a specific state, such as Ready for Review.

To access the email response settings

1. Click the Create button in the Administration window's Responses pane to create a new response.
2. Choose Email from the Response Action pop-up menu.
3. Click Email to view the Email settings.

The Email pane of the Response window contains the settings for configuring the email. See the *Final Cut Server Setup Guide* for information about email response details, including codes you can enter to add automated data to the email, shown above as the text in brackets ([]).



The Email pane contains the following settings:

- **To:** Enter the email addresses that should receive the email. Use a comma (with no space after it) to separate addresses; for example, rev1@apple.com,rev2@apple.com.
- **Sender:** Enter the email address to send the email from. This is the “reply to” address that the email recipient can send an email to if necessary. If left empty, the sender address defaults to “finalcutserver@servername.”
- **Subject:** Enter the email subject. You can enter codes to automatically add specific information to the email's subject.
- **Message:** Enter the email's main text. You can enter codes to automatically add specific information to the email.

About Read XML and Write XML Responses

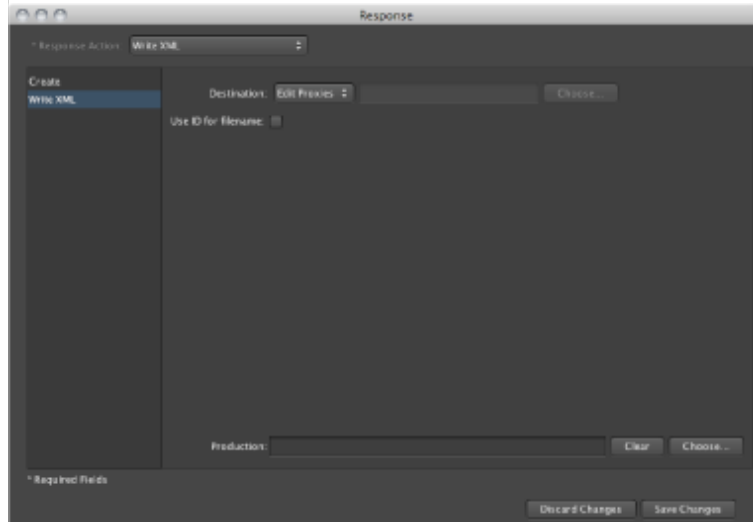
The Read XML and Write XML responses can be used together to exchange XML metadata between Final Cut Server and other applications. For example, you could create a Read XML Response that reads annotations metadata from an XML file that was

exported from a Final Cut Pro project and displays that annotations metadata in the matching Final Cut Pro project asset in Final Cut Server.

The Read XML and Write XML settings are similar, therefore, only the Write XML settings are explained in this manual.

To access the Write XML response settings

1. Click the Create button in the Administration window's Responses pane to create a new response.
2. Choose Write XML from the Response Action pop-up menu.
3. Click Write XML to view the Write XML settings.



The Write XML pane contains the following settings:

- *Destination*: You choose the device to copy assets to with the Destination pop-up menu. You can also enter or choose a subfolder to copy the asset to.
- *Use ID for Filename*: Select this checkbox to change an asset's filename to a unique Final Cut Server asset or production ID number. This change will only apply to assets modified using a Read XML or Write XML response.
- *Production*: Enter a name to create a new production that the asset aliases are added to. Alternatively, click Choose to search for an existing production to add the asset aliases to.

About Running External Scripts and Commands Responses

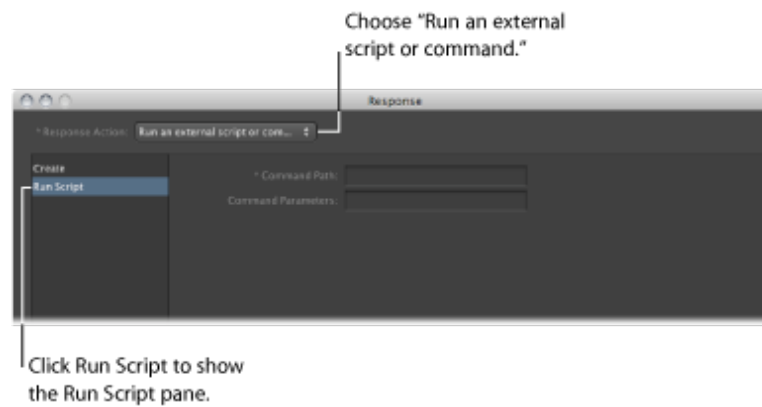
External scripts and commands responses are useful when you need to have a response that performs actions beyond those that Final Cut Server provides. For example, you could create a script that adds a new folder to a device whenever a new production is created. You could even specify parameters that would name the folder the same as the title of the production.

You can use this response to run more than just scripts—you can use it to run just about any executable file.

To access the “run an external script or command” response settings

1. Click the Create button in the Administration window's Responses pane to create a new response.
2. Choose “Run an external script or command” from the Response Action pop-up menu.
3. Click Run Script to view the Run Script settings.

The Run Script pane of the Response window contains the settings for configuring the script to run.



The Run Script pane contains the following settings:

- *Command Path*: Enter the path and name of the script or other executable file this response runs.
- *Command Parameters*: Enter special parameters that can be used to customize the script that runs. For example, you can specify codes, such as [Title], that the script can use; this is similar to how they are used with email responses.

Important: If you are running a script interpreter such as `osascript` and you want to pass the script itself as an argument, put the path to the script interpreter in the command path and put the script's path in the command arguments. Otherwise if the script itself is executable, it can be run directly via the command path.

About Check the Disk Space of the Database Volume Responses

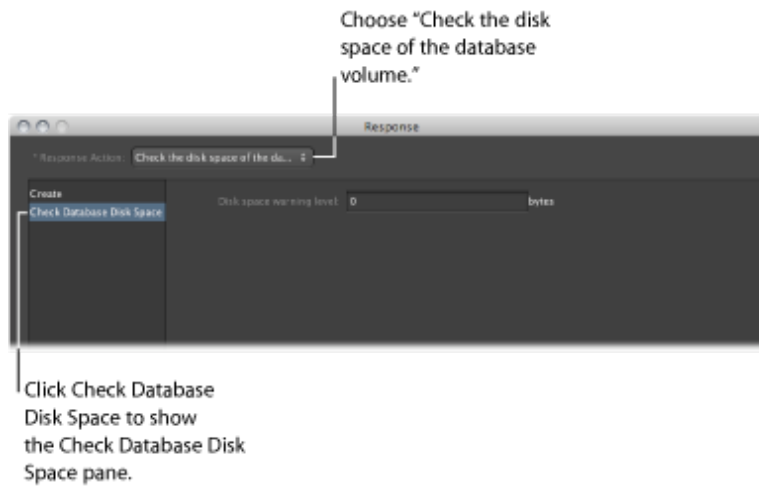
Check the disk space of the database volume responses are useful to make sure that you are warned if your Final Cut Server catalog database is in danger of running out of disk space.

Important: This only applies to the catalog's database file and does not apply to the assets stored on the various devices.

The typical use of this response would be to create a daily schedule that uses this response to check the amount of free disk space available for the database. The response writes a value to the log showing the amount of free disk space. If that value is lower than the warning level you entered in the response, a warning is issued, with the idea being that you could have a subscription that emails you when this warning occurs.

To access the "Check the disk space of the database volume" response settings

1. Click the Create button in the Administration window's Responses pane to create a new response.
2. Choose "Check the disk space of the database volume" from the Response Action pop-up menu.
3. Click Check Database Disk Space to view the Check Database Disk Space settings.



The Check Database Disk Space pane of the Response window contains the following setting:

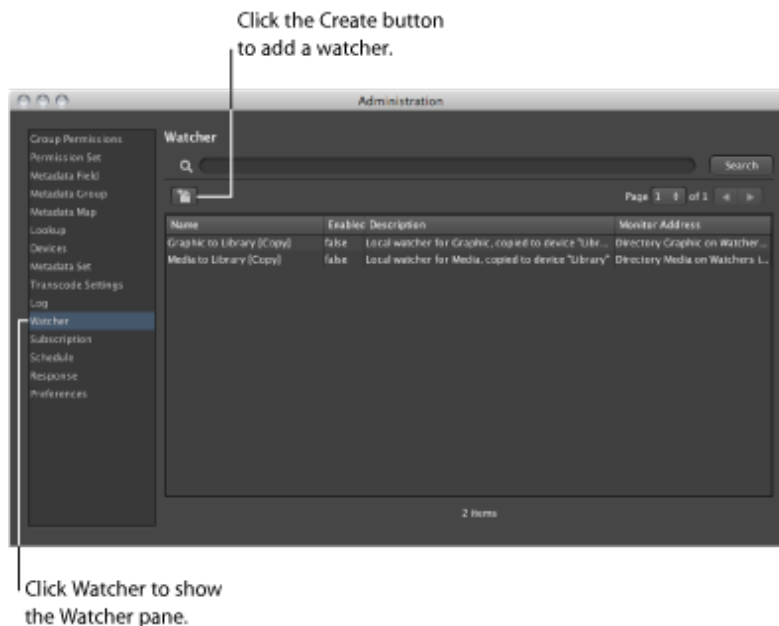
- *Disk space warning level:* Enter a value (in bytes) that defines the minimum threshold for disk space availability for the Final Cut Server catalog's database. If you do not enter a value, a default setting of 500 MB is used (shown as a value of 0). For example, to set the minimum threshold to 50 MB, enter the value 50000000.

Watcher Pane and Window

Final Cut Server provides a watch folder infrastructure that detects and processes new content according to configured rules.

The most common response types to use with watchers are copy, delete, email, and read XML.

The Watcher pane lists the existing watchers.

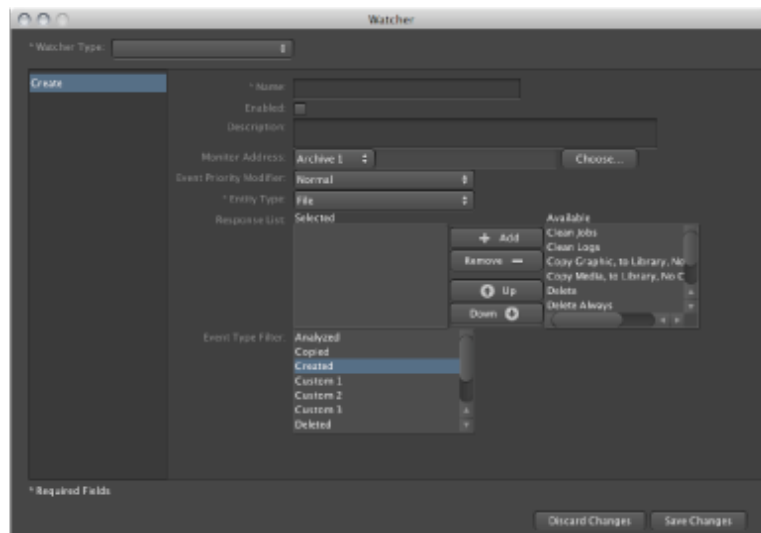


The Watcher pane includes the following columns:

- *Name:* This is the name of the watcher as entered when it was created.
- *Enabled:* Shows either true (if the watcher is running) or false (if the watcher is stopped).
- *Description:* This is a description entered when the watcher was created.

- *Monitor Address:* When applicable, lists the device being watched.

The Watcher window appears if you click the Create button.

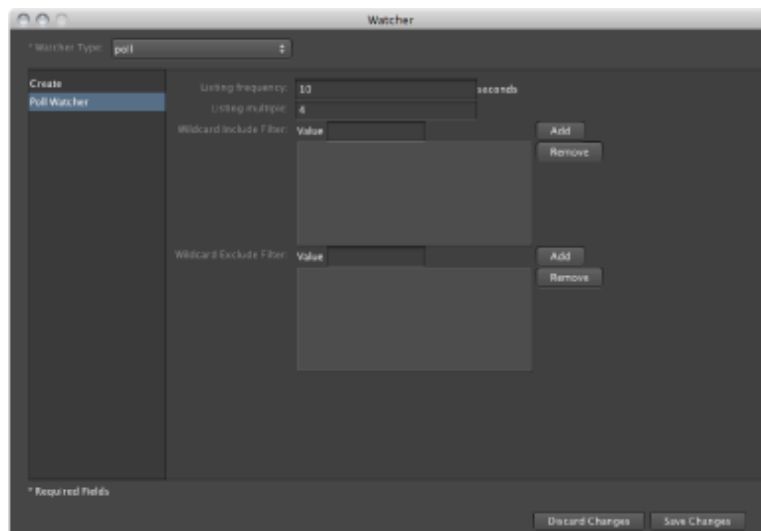


The items that appear in the area on the left depend on the Watcher Type you choose. The choices include poll and subscription.

- *Poll:* A poll watcher checks the device at timed intervals. This is the most common type of watcher.
- *Subscription:* A subscription watcher is for internal usage only.

Note: If you edit an existing watcher by double-clicking it in the Watcher pane, you cannot change its Watcher Type setting.

When you choose the poll watcher type, a Poll Watcher item appears in the column on the left side of the window. Click Poll Watcher to access the poll settings.



The settings include the following items:

- *Listing frequency:* Enter a time, in seconds, at which the folder is watched.
- *Listing multiple:* Enter the number of times a file must be detected with the same timestamp and file size before being considered a new file ready to be acted on. This is to prevent processing a file that is still in the process of being copied.
- *Wildcard Include Filter:* You can use this to define the types of files that the watcher monitors. The default filter is the asterisk (*), which is the wildcard indication. A

single asterisk indicates that all files are monitored. If you want the watcher to monitor only JPEG and QuickTime movie files, you can replace the asterisk with two items: *.jpg and *.mov (which indicate that all files with .jpg and .mov file extensions are monitored).

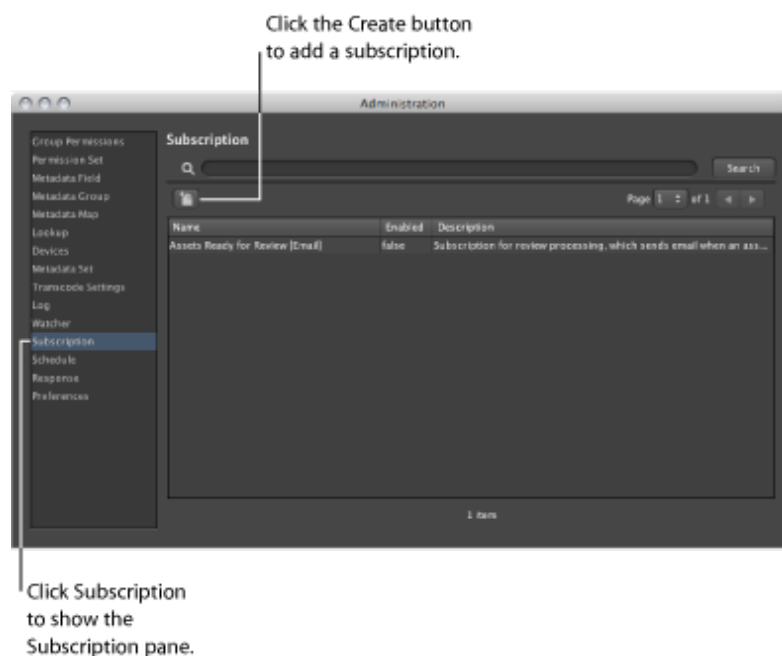
- *Wildcard Exclude Filter:* You can use this to define types of files that the watcher should not monitor. For example, if the folder that the watcher is processing includes PDF documents that you do not want to have monitored, you can enter *.pdf (which indicates that all files with a .pdf extension are not monitored).

Subscription Pane and Window

Final Cut Server has a powerful engine for modifying behavior to suit the individual needs of customers. Administrators can create and modify subscription rules. A subscription rule consists of an event, such as an asset's status changing, and one or more responses that are run as a result of that event.

The most common response types to use with subscriptions are the copy, delete, email, log, move to archive, restore from archive, set metadata, and write XML responses.

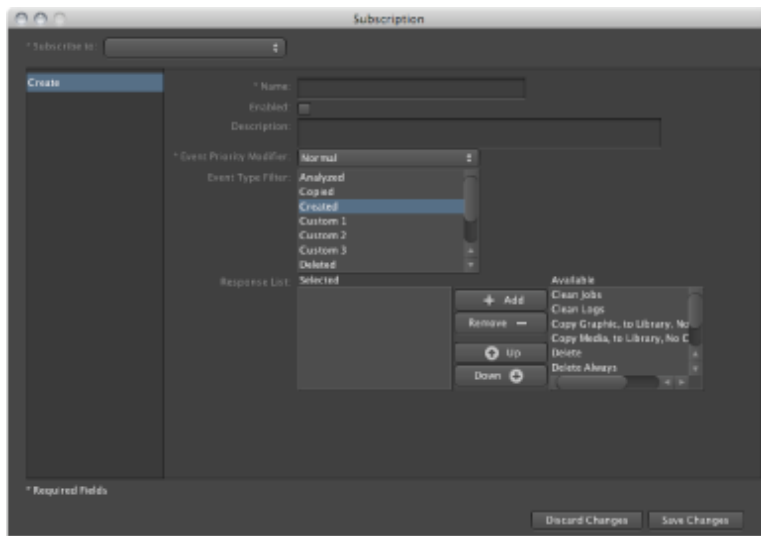
The Subscription pane lists the existing subscriptions.



The Subscription pane includes the following columns:

- *Name:* This is the name of the subscription as entered when it was created.
- *Enabled:* This shows either true (if the subscription is active) or false (if the subscription is inactive).
- *Description:* This is a description entered when the subscription was created.

The Subscription window appears if you click the Create button.



The items that appear in the area on the left depend on the “Subscribe to” setting. The options include:

- *Asset*: This allows you to define a subscription that detects one or more metadata fields associated with an asset. For example, you can configure the Asset Filter pane (which appears if you choose Asset from the “Subscribe to” pop-up menu) to activate this subscription if the current status changes to Ready for Review on any asset on a specific device.
- *Job*: This allows you to define a subscription that detects one or more fields associated with a job. For example, you can set the Job Filter pane (which appears if you choose Job from the “Subscribe to” pop-up menu) to activate this subscription if the status changes to FAIL on any job.
- *Production*: This allows you to define a subscription that detects one or more metadata fields associated with a production. For example, you can configure the Production Filter pane (which appears if you choose Production from the “Subscribe to” pop-up menu) to activate this subscription if the status changes to Approved on any production.

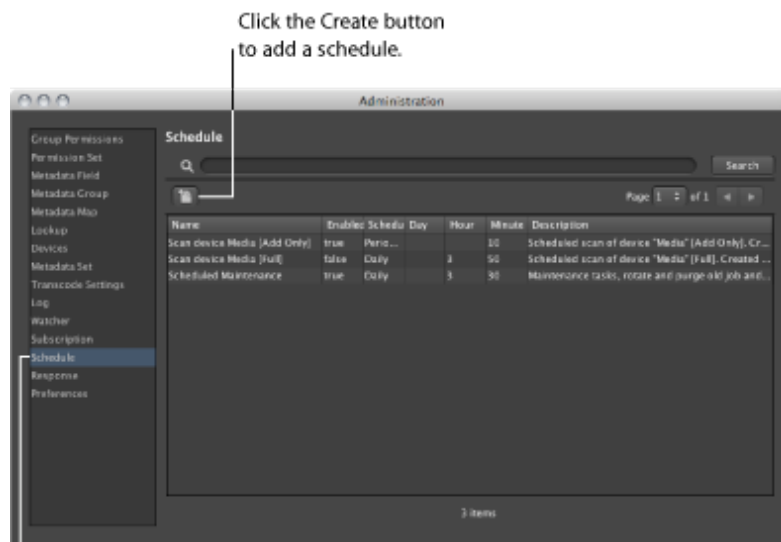
Note: If you edit an existing subscription by double-clicking it in the Subscription pane, you cannot change its “Subscribe to” setting.

Schedule Pane and Window

Events can be scheduled; for example, scanning the still store in a control room every 5 minutes to ensure that the Final Cut Server catalog is up to date. A schedule is normally used to scan or catalog a device.

The most common responses to use with a schedule are clean jobs, clean logs, measure catalog size, purge subscriptions, scan (all types), and search expired.

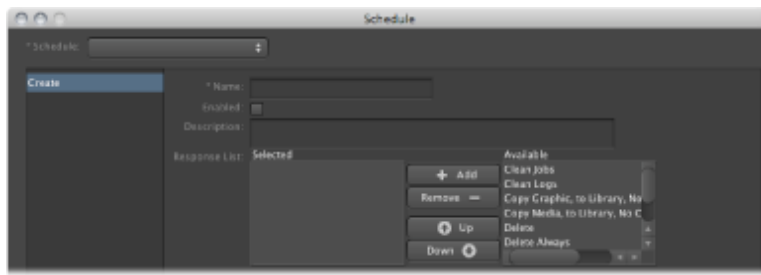
The Schedule pane lists the existing schedules.



The Schedule pane contains the following columns:

- **Name:** This is the name of the schedule as entered when it was created.
- **Enabled:** Shows either true (if the schedule is running) or false (if the schedule is stopped).
- **Schedule:** This is the basic unit of time that the schedule is based on. There are four options:
 - **Weekly:** You define when the schedule runs by specifying a day of the week, an hour of that day, and a minute of that hour to run on.
 - **Daily:** You define when the schedule runs by specifying an hour of the day (based on a 24-hour clock) and a minute of that hour to run on.
 - **Hourly:** You define when the schedule runs by specifying the minute of each hour to run on.
 - **Periodically:** You define when the schedule runs by specifying the number of minutes between each time the schedule runs.
- **Day:** This is the day of the week the schedule runs on when using the weekly period. For example, Monday in the Day column means the response executes every Monday.
- **Hour:** This is the hour of the day (using a 24-hour clock) the schedule runs on when using the hourly or daily periods. For example, 15 in the Hour column means the response executes at 3 p.m.
- **Minute:** The meaning of this number depends on the schedule's period selection:
 - For weekly, daily, and hourly periods, this is the minute of the hour the schedule runs on. For example, 30 in the Minute column means the response runs on the 30th minute of the hour.
 - For the periodically period, this is the number of minutes between each time the schedule runs. For example, 30 in the Minute column means the response executes every 30 minutes.
- **Description:** This is a description entered when the schedule was created.

The Schedule window appears if you click the Create button.



The items that appear in the column on the left depend on the item you choose from the Period pop-up menu. The choices are weekly, daily, hourly, and periodically.

Note: If you edit an existing schedule by double-clicking it in the Schedule pane, you cannot change its Period setting.

Copyright © 2009 Apple Inc. All rights reserved.

About Jobs and Logs

Each time Final Cut Server performs an action, it is considered a job. Final Cut Server logs jobs and other significant events that administrators and support staff can use to diagnose problems and monitor usage.

Viewing Final Cut Server Status

Final Cut Server includes two ways to see its status as it performs tasks: the Search All Jobs window and the Log pane.

- *Search All Jobs window:* This window is accessible by all users from the Server pop-up menu in the Final Cut Server main window. It shows a list of jobs that Final Cut Server has or is performing. It also includes the ability to retry failed jobs and to see a job's details.
- *Log pane:* This pane is accessible only by administrators from the Administration window. The Log pane shows all of the jobs shown in the Search All Jobs window along with other items, such as when a user logs in.

Both of these can be very helpful when you are testing new automations or need to verify the system's overall status.

About Jobs and the Search All Jobs Window

Final Cut Server runs jobs for every task it performs. The number of jobs that run depends on the type of operation being performed. Some examples of jobs include:

- Copying a file from one location to another runs one job.
- Creating a new asset runs jobs to perform the initial copy; create the asset with metadata; and then create thumbnail, poster frame, and clip proxies.
- Analyzing runs several jobs to create the thumbnail, poster frame, and browse proxies.

Each job also creates multiple log entries for each step of the operation. If you want to monitor what Final Cut Server is working on, simply open the Search All Jobs window. In it, you can search for specific jobs and then see a job's details. You can set up a subscription that sends you an email whenever a job submitted by you fails.

Important: Final Cut Server includes a schedule, named [Scheduled Maintenance](#), that clears the Search All Jobs window once each day. You can modify that schedule as needed to better fit your needs. For more information, see [“About Clearing Jobs and Logs from the Final Cut Server Database.”](#)

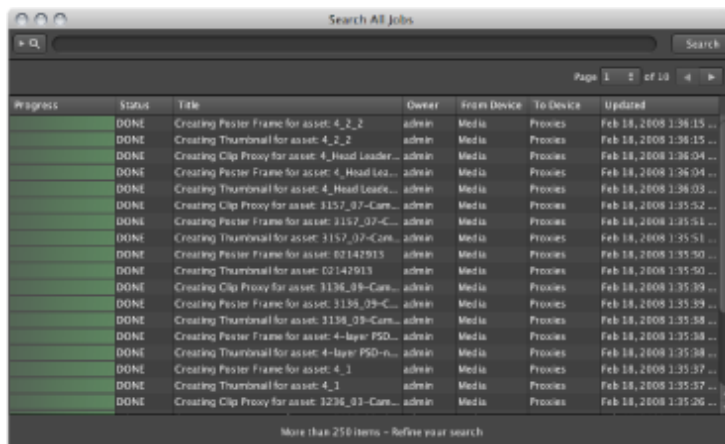
Opening the Search All Jobs Window

The Search All Jobs window contains a detailed history of the jobs Final Cut Server has performed.

To view a history of the jobs that have been run (to the present)

- Choose Search All Jobs from the Server pop-up menu (the pop-up menu in the Final Cut Server main window that appears when you click the Server button).

The Search All Jobs window appears.



Following are the possible Progress and Status definitions:

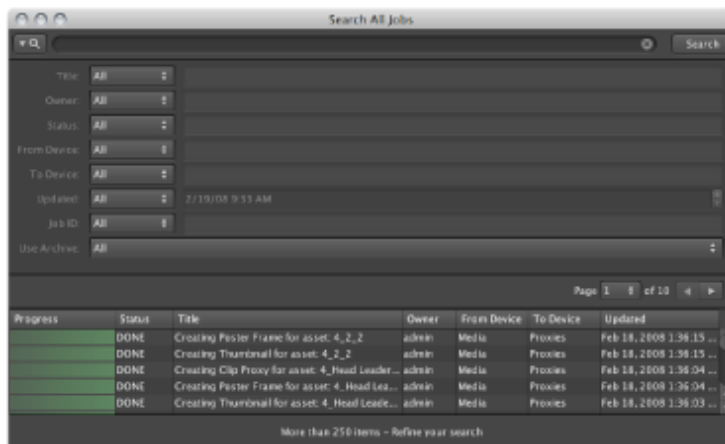
| Progress | Status | Description |
|----------------------|--------|---|
| Full-width green bar | DONE | Job is successfully completed (note that some completed jobs are made of several steps; for example, uploading multiple files). |
| Expanding green bar | RUN | Job is in progress. |
| Blank field or text | RUN | Job is in progress. |
| Blank field | WAIT | Job is waiting for user input or for a turn in the job queue. |
| Full-width red bar | FAIL | Job failed because of an error. |

Other fields in the Search All Jobs window include:

- *Title*: Details of the job.
- *Owner*: Name of the user who performed the job.
- *From Device*: For a copy, the source device.
- *To Device*: For a copy, the destination device.
- *Updated*: The time and date the status was last updated.
- *Job Type*: Copy is the only job type shown in the Search All Jobs window.

Searching for Jobs

The search function in the Search All Jobs window works similarly to the other search functions in Final Cut Server: you can search by name, or you can open the disclosure triangle and search by the advanced search parameters.



Some examples of common searches are:

- *Your own jobs*: A simple search for your user name or an advanced search for your user name using the Owner pop-up menu and field
- *Failed jobs*: A simple search for “fail” or an advanced search for “fail” using the Status pop-up menu and field
- *Jobs to or from particular device*: An advanced search using the From Device and To Device pop-up menus and fields

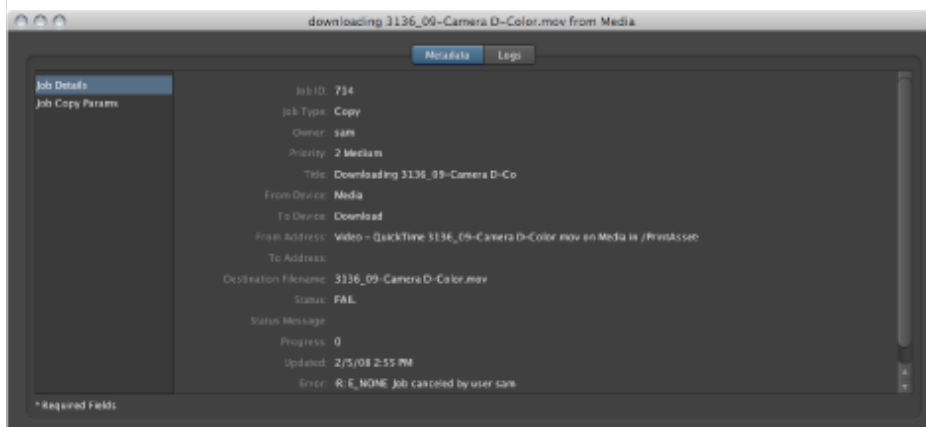
Using the Search All Jobs Window to Diagnose Problems

Besides using the Search All Jobs window to track jobs being performed by Final Cut Server, you can use the Search All Jobs window to view details of each step in a job and diagnose problems.

To diagnose a problem using the Search All Jobs window

1. Double-click the failed or idle job that you want to diagnose in the Search All Jobs window.

In the window that opens, you can choose to show job metadata (in two panes, Job Details and Job Copy Params) or to see the job as it appears in the Log pane of the Administration window.



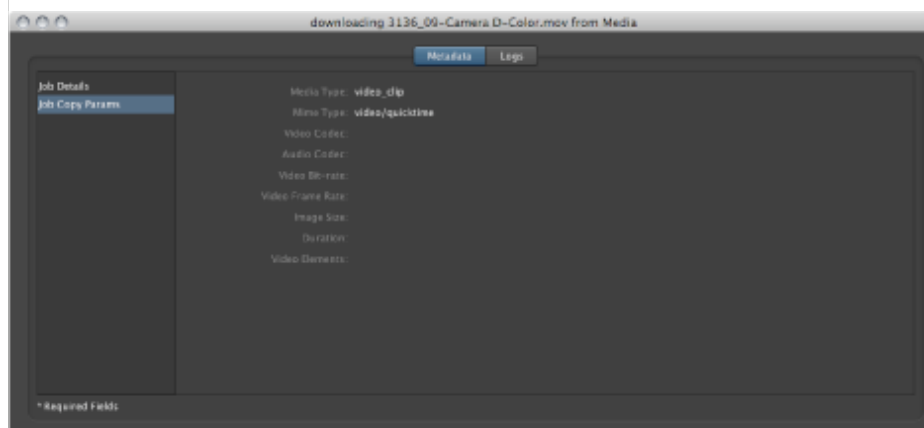
2. Click Metadata (along the top of the window) and Job Details in the column on the left to see the Job Details pane.

The Job Details pane displays details of the job as a whole, including a unique Job ID (identifier), the job type, and specific job instructions. The last item displays the message associated with this job.

3. Click Job Copy Params in the column on the left.

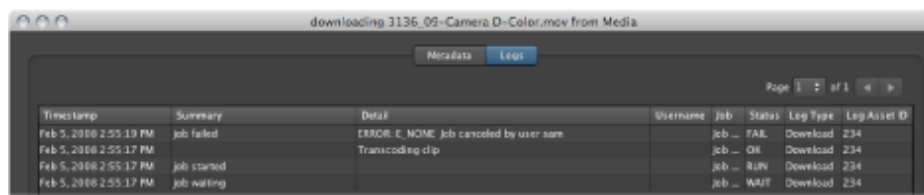
The Job Copy Params pane displays parameters specific to copying.

Note: No parameters are listed if the job was a copy without any transcoding.

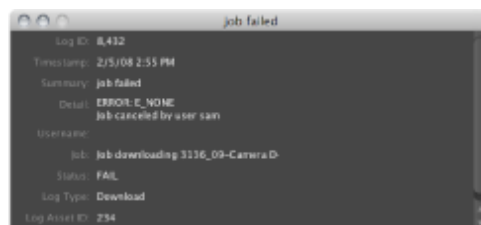


4. Click Logs along the top of the window.

The Logs pane displays details of each step in the job, exactly as step details appear in the Log pane of the Administration window.



The ERROR message in the Detail column explains why the job failed. Using this information, you can correct the problem and then reprocess the job. You can double-click an entry to open it in its own window, which can make it easier to see the details.



Jobs can fail for reasons such as a corrupt source file, network problems or device unavailability, or problems on the source or target device such as resource limitations or an unsupported codec.

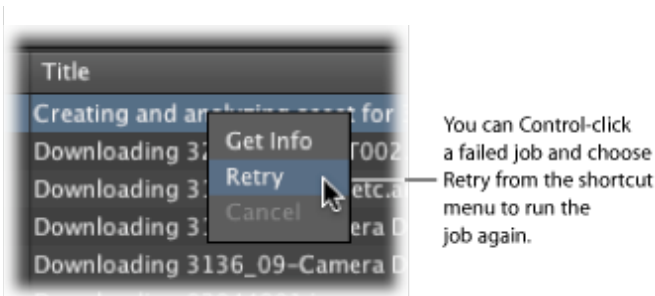
Retrying Failed Jobs

When a job fails for a reason that is not permanent, it is automatically retried. You can define how many times a failed job is retried and how long to wait between retries in the General pane of Final Cut Server System Preferences and in the Preferences pane of the Administration window. See “Preference Settings in the Administration Window” for more information.

You can also manually retry the job.

To retry a failed job

- Control-click the job, then choose Retry from the shortcut menu.



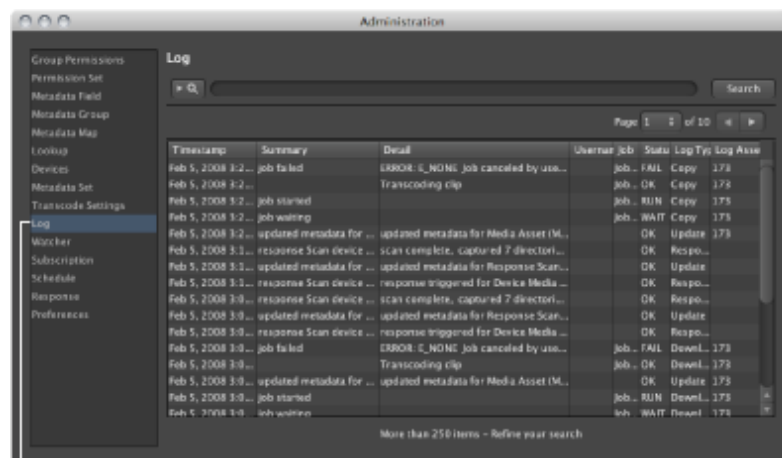
Important: Only the person who originated a job or the administrator can retry a job. Additionally, you cannot retry jobs with permanent failures.

About the Log Pane

The Log pane of the Administration window lists Final Cut Server events and can be useful when you are trying to verify that automations are working correctly or that users are logging in.

Because the log usually contains a lot of entries, it is very helpful to use the search feature to find the information you are after. For example, you can enter a user's name to see everything that user has done.

Important: Final Cut Server includes a schedule, named Scheduled Maintenance, that clears the Log pane once each day. You can modify that schedule as needed to better fit your needs.



Click Log to view the Log pane.

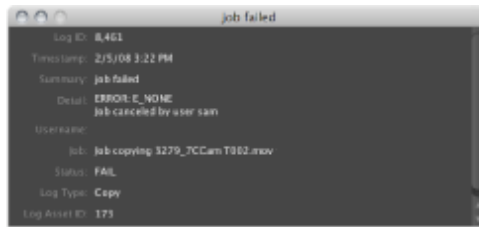
The Log pane contains the following columns:

- *Timestamp*: Shows the date and time that the entry was logged.
- *Summary*: Shows a summary of the log entry.
- *Detail*: Shows the details of the log entry.
- *Username*: Shows the user logged in when the entry was created.
- *Job*: If the log entry arose as a result of a job, this shows the Job identifier. You can find further information on the issue by searching the job details.
- *Status*: Shows the status of the log entry, normally the status of the related job at the time the entry was made.
- *Log Type*: Shows the type of operation being logged.
- *Log Asset ID*: Shows the globally unique identifier (GUID) or ID of any asset

associated with the event.

About the Log Window

You can double-click any items listed in the Log pane to see more details in the Log window.



About Clearing Jobs and Logs from the Final Cut Server Database

When Final Cut Server is installed, a default Scheduled Maintenance schedule automation that runs the Clean Jobs and Clean Logs responses is set up to run daily at 3:30 am. When it runs, the Clean Jobs and Clean Logs responses archive jobs and logs that are 7 days old, and purge jobs and logs that are 14 days old from the archive.

Important: Be sure to turn off any sleep settings on the system running Final Cut Server. If the computer goes to sleep, scheduled automations will not run.

For the average organization, the default Scheduled Maintenance schedule automation will adequately clean your Final Cut Server system. However, if your Final Cut Server system uses an abundance of scans or scans filesystems containing many directories, it may be overloaded with jobs and logs. You can optimize the scheduled maintenance responses to more frequently archive and purge jobs and logs by doing one or both of the following:

- *Decrease the Archive Age for the Clean Jobs and Clean Logs responses:* The Archive Age defines how many days that jobs and logs are stored in the Final Cut Server Jobs and Logs windows.

Note: You can set the Archive Age to zero; if you do, the jobs and logs are not archived and deleted immediately.

- *Decrease the Purge Age for the Clean Jobs and Clean Logs responses:* The Purge Age defines how many days that jobs and logs are stored in the Job and Log archive tables (these tables are for internal use only, and are not available to be viewed by the Final Cut Server administrator or other users).

Copyright © 2009 Apple Inc. All rights reserved.

Solving Problems

This appendix provides information to help you solve problems you may encounter while using Final Cut Server.

Resources for Solving Problems

If you run into problems while working with Final Cut Server, there are several resources you can use to find a solution.

- **Release Notes:** This document, available via the Final Cut Server Help menu, provides last-minute information that didn't make it into the user manual. Be sure to consult this help page as soon as you install or upgrade Final Cut Server.
- **AppleCare Knowledge Base:** AppleCare Support maintains a database of common support issues that is updated and expanded to include new issues as they arise. This is an excellent, free resource for Final Cut Server users. To access the AppleCare Knowledge Base, go to the AppleCare support page at <http://www.apple.com/support>.
- **AppleCare Support:** A variety of support options are available to Final Cut Server customers. For more information, see the *Apple Professional Software Service & Support Guide* that comes with your Final Cut Server documentation.

Contacting AppleCare Support

Information about the support options available from Apple is included in your Final Cut Server box. Several levels of support are available.

Whatever your issue, it's a good idea to have the following information immediately available when you contact Apple for support. The more of this information you have to give to the support agents, the faster they will be able to address your issue.

- The Final Cut Server Support ID number found on the back of the *Final Cut Server Setup Guide*.
Note: The 11-digit Support ID number is different from the product serial number used to install Final Cut Server.
- The version of Leopard or Leopard Server you have installed. To find the version, choose Apple menu > About This Mac.
- The version of Final Cut Server you have installed that you have a question about. To find the version of Final Cut Server on your computer, choose Final Cut Server > About Final Cut Server.
- The model of computer you are using.
- The amount of RAM installed in your computer. You can determine this by choosing Apple menu > About This Mac.
- What other third-party hardware is connected to or installed in the computer, and who the manufacturers are. Include hard drives, graphics cards, and so on.

To access AppleCare Support for Final Cut Server, go to <http://www.apple.com/support/finalcutserver>.

There is also an item in each Final Cut Server client's Help menu that will take you directly to the AppleCare website.

To go to the AppleCare website from within a Final Cut Server client

- Choose Help > Final Cut Server Support.

Glossary

Administration window The Administration window, available in the Final Cut Server client to users with admin permissions, provides access to a wide variety of aspects of your Final Cut Server system. It includes panes that allow you to configure preference, automation, device, and metadata settings. You can also use the metadata settings in the Administration window to customize the options and information your users see when using Final Cut Server.

alias file An alias file is a small reference file that links to the master or original file. Final Cut Server uses aliases to represent assets in productions and creates aliases when preparing assets for disconnected use.

analyze Final Cut Server analyzes assets to create proxies and extract metadata from them. See also [edit proxy](#), [proxy](#).

Apple filing protocol (AFP) AFP is a network protocol supported by Macintosh computers.

Apple ProRes 422 (Proxy) codec Edit proxy files created with the Apple ProRes 422 (Proxy) codec provide high quality, seamless offline editing during checkout, including on notebook computers, and are especially useful when your original media is uncompressed video. See also [edit proxy](#).

archive After a project or production is finished, you can use an Archive response to move the assets from their current device to an archive device, which can be a FireWire drive, a large slower drive, or another volume where disk space is not an issue. The assets remain in the Final Cut Server catalog in an inactive state. They can be restored whenever they are needed later.

asset Every item in a Final Cut Server catalog, whether it is a media file, PDF document, or folder saved as a bundle, is an asset. All assets are stored on Final Cut Server devices and can be part of Final Cut Server productions. Final Cut Server includes the ability to add a wide variety of metadata to each asset. See also [device](#), [metadata](#), [production](#).

automation Final Cut Server supports a wide variety of automation features, making it possible to configure Final Cut Server to automatically perform many tasks. There are three types of automations: watchers, subscriptions, and schedules. Each of these automations issues responses when an event occurs. See also [response](#), [schedule](#), [subscription](#), [watcher](#).

Automation Setup Assistant Final Cut Server System Preferences include an Automation pane for managing the most common automations you will use. This pane uses Automation Setup Assistant to create new and edit existing automations. In general, it is easier to create automations with Automation Setup Assistant than with the client's Administration window. The Administration window, however, allows you to create highly customized automations with settings not available with Automation Setup Assistant. See also [Administration window](#), [automation](#).

cache To use an asset from the Final Cut Server catalog on a client's computer, the computer must have a local copy of the asset. Final Cut Server maintains a cache area on the client computer to store the local copies of the assets. You can define the location and size of the cache in the client's Preferences window.

client A user interacts with the Final Cut Server catalog by using a Final Cut Server client. Final Cut Server clients are Java-based applications that can run on computers using Mac OS X, Windows XP, and Windows Vista operating systems. A Final Cut Server system can support multiple clients running simultaneously, with licenses supporting ten clients and unlimited clients available.

Contentbase Contentbase is a Final Cut Server-managed file storage system that places

each asset in a unique folder. The advantage is that there are no issues with identical filenames overwriting each other. Final Cut Server requires the Proxies and Version devices to use Contentbase file storage.

device Devices in Final Cut Server are storage locations that you define and configure. They can be folders in a local volume on the server computer, network volumes, or folders from an Xsan volume.

Device Setup Assistant Final Cut Server System Preferences include a Devices pane for managing the most common device types you will use. This pane uses Device Setup Assistant to create new and edit existing devices. In general, it is easier to create devices with Device Setup Assistant than with the client's Administration window, especially since you are also able to configure scan responses at the same time. The Administration window, however, allows you to create highly customized devices with settings not available with Device Setup Assistant. See also [Administration window](#), [device](#).

edit-in-place Generally, in order to use an asset from the Final Cut Server catalog on a client's computer, the computer must have a local copy of the asset. An exception is if the device that contains the asset is configured as an edit-in-place device and the client computer has it mounted as a volume. The most common example of this is an Xsan system since they support a high enough data bandwidth for video data to be transferred in real time. See also [storage area network \(SAN\)](#), [Xsan](#).

edit proxy The assets linked to an uploaded Final Cut Pro project can optionally (based on a preference setting) have special Edit Proxy files created while they are being analyzed. These Edit Proxy files use the Apple ProRes 422 (Proxy) codec by default; however, you can change the transcode setting for Edit Proxies to be any available codec. When you check out or export the project, you can choose to export it with these Edit Proxy files or the original media. See also [analyze](#), [Apple ProRes 422 \(Proxy\) codec](#), [proxy](#).

elements Final Cut Pro projects contain a list of elements. The elements list shows the connections the project file maintains with its linked media assets. Final Cut Pro elements can include media files and Final Cut Pro sequences.

Filesystem The most common file system used for any devices that are local to the server computer of Final Cut Server or are mounted by it. These can include AFP, Xsan, NFS, and SMB file systems. See also [Apple filing protocol \(AFP\)](#), [network file system \(NFS\)](#), [server message block \(SMB\)](#), [Xsan](#).

file transfer protocol (FTP) FTP is a protocol for exchanging files over networks that support the TCP/IP protocol.

groups To access the Final Cut Server catalog, users must belong to a group that has a Final Cut Server permission set assigned to it. Groups can be locally created on the server or can be from an Open Directory list. See also [permission sets](#), [users](#).

image sequence A movie exported as a series of numbered image files, stored in a folder. Each image file contains one frame of video. The Targa and TIFF file formats are commonly used to export image sequences for file interchange among different film compositing workstations.

jobs Any action that Final Cut Server performs on an asset is a job. These actions can include uploading, downloading, copying, and transcoding an asset.

lookup Metadata fields can use a variety of data input methods. A lookup is a pop-up menu that requires a user to select the data to enter from a provided list of items.

metadata Every file contains at least some metadata, such as its file type, size, name, and creation date. As you add files to the Final Cut Server catalog, you will soon find that it would be useful to have additional metadata fields to use for sorting or locating specific assets. The heart of Final Cut Server is its ability to work with metadata. It provides many opportunities for you to add metadata to your assets, using either the metadata fields it provides or custom metadata fields that you create for your specific requirements. These include items such as keywords, status settings, and descriptions. Each asset or production is assigned a metadata set, which is comprised of one or more

metadata groups, each of which contain one or more metadata fields. See also [asset](#), [production](#).

network file system (NFS) NFS is a file system protocol commonly used to allow a client to access files across a network.

permission sets Permission sets are used to define how a group of users are allowed to interact with the Final Cut Server catalog. For example, you can create a group of users that review assets and apply a permission set that prevents them from deleting any assets.

primary representation This is the original media file that was uploaded to Final Cut Server.

production To help organize the assets in your Final Cut Server catalog, you can create productions. Productions can be nested within each other to create production hierarchies, and productions can contain asset aliases. See also [asset](#), [metadata](#).

proxy Still images and video files can be very large and difficult to work with. Final Cut Server automatically creates lower resolution proxy files during the analyze process when you add assets to its catalog. These proxy files are much smaller and easier to work with and can be used in place of the actual files for editing and review purposes. See also [analyze](#), [edit proxy](#).

response All Final Cut Server automations execute responses when their criteria are met. There are a variety of responses that you can configure, including scanning a device, emailing a user, or copying an asset to a device. See also [automation](#).

schedule A schedule is a type of Final Cut Server automation that runs at predetermined times, executing one or more responses. An example is a schedule that scans a device once a day to update its entries in the catalog. See also [automation](#), [response](#), [subscription](#), [watcher](#).

server message block (SMB) SMB is a network protocol mainly used by Windows computers. It is often referred to as Microsoft Windows Network.

storage area network (SAN) A SAN allows multiple computers to connect to a storage device as if it was a locally connected device, allowing you to use the media on the storage device as if it was on a local hard disk. See also [edit-in-place](#), [Xsan](#).

subscription A subscription is a type of Final Cut Server automation that runs when a specific metadata change occurs. An example is a subscription that executes an email response when an asset's status changes to Ready or Review. See also [automation](#), [response](#), [schedule](#), [watcher](#).

transcode settings Final Cut Server uses transcode settings to convert an asset from its current codec to a different one. Most often you use transcode settings to convert an asset into one that is smaller or easier to play. The transcode settings for video and audio assets are from Compressor (which is installed on the server computer). The transcode settings for images are internal to Final Cut Server.

users To log in to the Final Cut Server catalog, a person has to have a user account on the server computer. That user account also has to be part of a group that has a Final Cut Server permission set assigned to it. See also [groups](#), [permission sets](#).

version Final Cut Server can be configured to retain previous versions of selected assets, making it possible to restore an earlier version if needed. If you check out an asset from the Final Cut Server catalog, make a change to it, and check it back in, Final Cut Server first copies the current version to the Version device and then copies the new version to where the current version was.

watcher A watcher is a type of Final Cut Server automation that continuously monitors a specified device and executes a response once an asset appears. An example is to watch a folder to which the graphics department adds new images. Once a new image appears, the watcher copies it to a device, adds it to the Final Cut Server catalog, and sends an email to the editor. See also [automation](#), [response](#), [schedule](#), [subscription](#).

Windows See [client](#).

Xsan An Apple Xsan storage area network (SAN) is a device that provides fast access to media files. Xsan devices support edit-in-place when you are connected using a Fibre Channel network. See also [edit-in-place](#).

Copyright © 2009 Apple Inc. All rights reserved.