



# Final Cut Server 1.5

Product Overview

July 2009



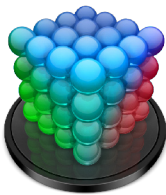
# Contents

<b>Page 4</b>	<b>Final Cut Server</b>
<b>Page 5</b>	<b>New in Final Cut Server 1.5</b>
<b>Page 7</b>	<b>Easy Asset Cataloging</b> Asset Discovery Process Broad Format Support Automatic Proxy and Thumbnail Generation Simultaneous Metadata Capture Drag-and-Drop Uploads Automated Synchronization
<b>Page 11</b>	<b>Blazing-Fast Searches</b> Powerful, Layered Searches Easy-to-Use Metadata Tools Versatile Production “Containers” Personalized Workspaces Time-Saving Previews Optimized Bandwidth Use Robust Access Controls Seamless Archiving and Retrieval
<b>Page 18</b>	<b>Point-and-Click Automation</b> Event-Based Automation Modular Automation Tools Basic and Advanced Automation Options Convenient Workflow Templates Scripts to Control External Systems
<b>Page 21</b>	<b>Seamless Collaboration</b> Check-In/Check-Out Protections Version Management Automated Notifications Integrated Review and Approval Tools Working with ProRes 422 (Proxy) Workflows with Final Cut Pro Workflows with Other Final Cut Studio Applications

<b>Page 25</b>	<b>Multiformat Delivery</b> Pristine Encoding and Frame Conversions Industry-Standard Encoding Batch Processing Time-Saving Templates Distributed Encoding Delivery to External Systems
<b>Page 28</b>	<b>Flexible Configuration</b> Scalable Server Software Cross-Platform Client Software Quick-Start Customer Profiles Easy Setups Advanced Administration Features Automated Backups Extensible Solutions
<b>Page 32</b>	<b>Workflow Examples</b> Radical Media: Expediting a Global, End-to-End Workflow FRONTLINE/World: Streamlining Website Updates
<b>Page 36</b>	<b>Product Details</b>

# Final Cut Server

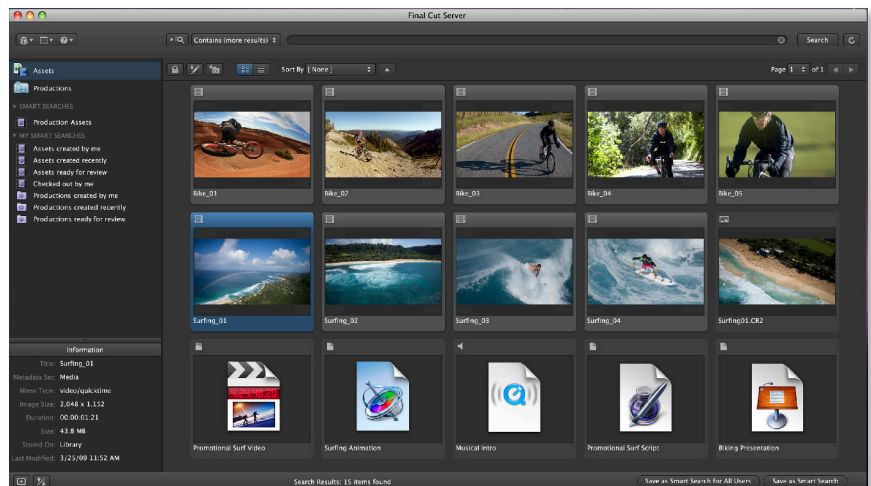
Maximum creativity. Minimum overhead.



Final Cut Server 1.5 frees up even more time for creative work, with new features that make it exceptionally flexible and easy to use. Final Cut Server can manage thousands of assets, execute dozens of routine production tasks, and keep every member of your team in sync—all while you continue working.

Key features of Final Cut Server 1.5 include:

- Easy asset cataloging
- Blazing-fast searches
- Point-and-click automation
- Seamless collaboration
- Multiformat delivery
- Flexible configuration



# New in Final Cut Server 1.5

Final Cut Server 1.5 helps you work faster than ever, with an edit proxy workflow that supports ProRes 422 (Proxy), new flexible Production hierarchies, intelligent image sequence cataloging, and faster searching.

## Robust Edit Proxy Workflow

Final Cut Server can now create edit proxies automatically using the new ProRes 422 (Proxy) format. Because ProRes 422 (Proxy) offers high quality at greatly reduced file sizes, it is ideal for use on notebook computers or over local area networks. Also, the variable frame size of ProRes lets you edit footage from a wide range of source formats, without repositioning text or graphics as you round-trip changes.

After you ingest your footage in Final Cut Pro, save the project to Final Cut Server, which will automatically generate proxy files and link them to the project. So you can either edit with original footage over a high-speed network or choose the smaller proxy files for editing on a notebook or over a slower network.

## Image Sequence Support

Graphics compositing applications and film workflows often use an image sequence format for cross-platform compatibility as well as to keep quality high. Image sequences treat each video or film source frame as a still image, which means that one clip may be converted to hundreds of separate files.

Final Cut Server makes it easy to manage image sequences by cataloging each one as a single asset, with a single video proxy, a thumbnail, and a reference link that gives you direct access to the source files.

## Production Hierarchies

Productions in Final Cut Server allow you and other users to organize the same assets in different ways, without making copies. Final Cut Server 1.5 lets you organize Productions using a folder-style hierarchy, so you can now organize your media the same way you would in the Finder. You can search an entire Production hierarchy, a particular level of the hierarchy, or a specific Production.

## Improved Search Performance

The database architecture of Final Cut Server has been significantly redesigned to reduce search time and optimize performance. In large databases, searching can be up to 10 times faster. Faster searching lets you find the assets you need with minimal interruption to your workflow.

## Selectable Proxy Format for Browsing

When you're cataloging media in Final Cut Server 1.5, you can define different browse proxy formats for different types of source media, with a choice of any of the output settings supported by Compressor. This lets you avoid unnecessary recompression or proxy creation.

## Global Saved Searches

Previously a Saved Search was available only to the individual who created it. Now an administrator can provide consistent access to content across an entire organization by creating Global Saved Searches that are available to everyone.

## Support for Metadata in Audio Files

Final Cut Server now parses and displays metadata from AIFF, WAV, CAF, M4A, SDII, and AAC files. This means you can search for audio files using file metadata such as creator name and descriptive notes.

## Active Directory Support

Final Cut Server 1.5 allows you to assign Final Cut Server permissions to Active Directory as well as Open Directory groups. You can easily set up Active Directory groups to appear in Final Cut Server and assign them directly to permission sets.

## Developer Extensions

The open architecture of Final Cut Server has been extended to offer new options to developers. You can now write a script or program to bring in existing browse proxies and thumbnails at the same time you catalog an asset. This eliminates the need for Final Cut Server to re-create thumbnail or proxy files during cataloging.

You can now import and export annotations along with other asset metadata in the XML file. Write custom programs or scripts to export your asset comments from Final Cut Server to other applications, or bring in annotations such as logging data from external programs.

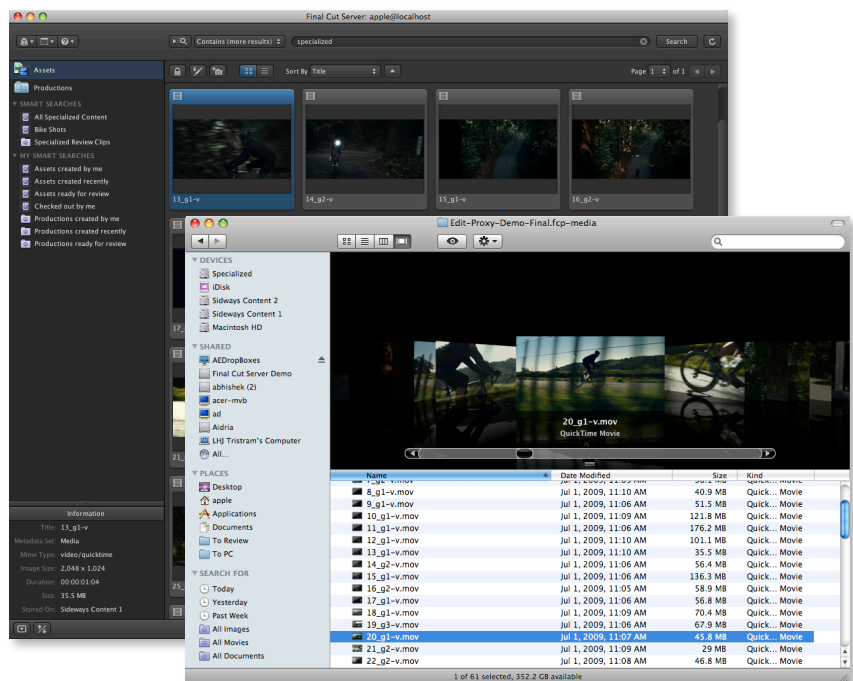
# Easy Asset Cataloging

Final Cut Server continuously scans your network to identify and catalog production assets. It creates the catalog for you, generates “browse” proxies and thumbnails, and keeps the catalog up to date as you work.

## Asset Discovery Process

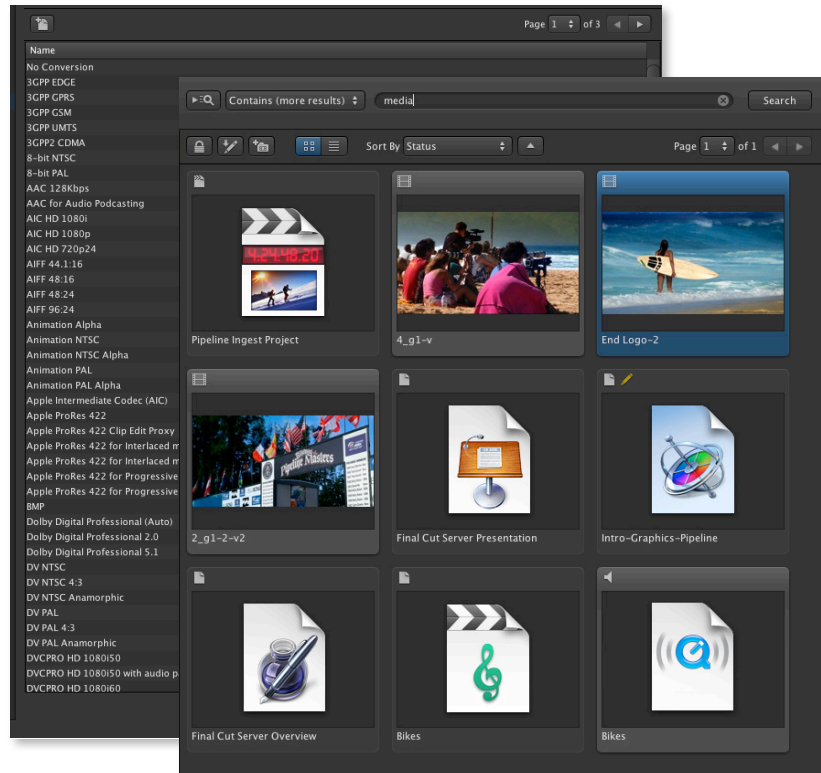
Just identify the folders or directories that contain your assets, then sit back while Final Cut Server automatically identifies asset types, captures metadata, and generates your catalog. When the system discovers a Final Cut Pro project, the catalog lists the project and creates a reference to each asset. It catalogs image sequences as a single video asset, with a reference link that gives you direct access to the source image files.

You can direct Final Cut Server to point to the files on external volumes or a SAN, or you can elect to copy the files into Final Cut Server directly. In either case, all the cataloged files are visible and accessible in the Final Cut Server interface, complete with supported metadata associated with the assets.



## Broad Format Support

Final Cut Server supports a wide range of file formats, file systems, and media storage devices. You can catalog Final Cut Studio project files as well as organize, share, and track all your production documents and media assets. Include proposals, budgets, project plans, scripts, storyboards, shot lists, video and audio clips, images, graphics, and more, to ensure that you can find the correct version of any file you need.

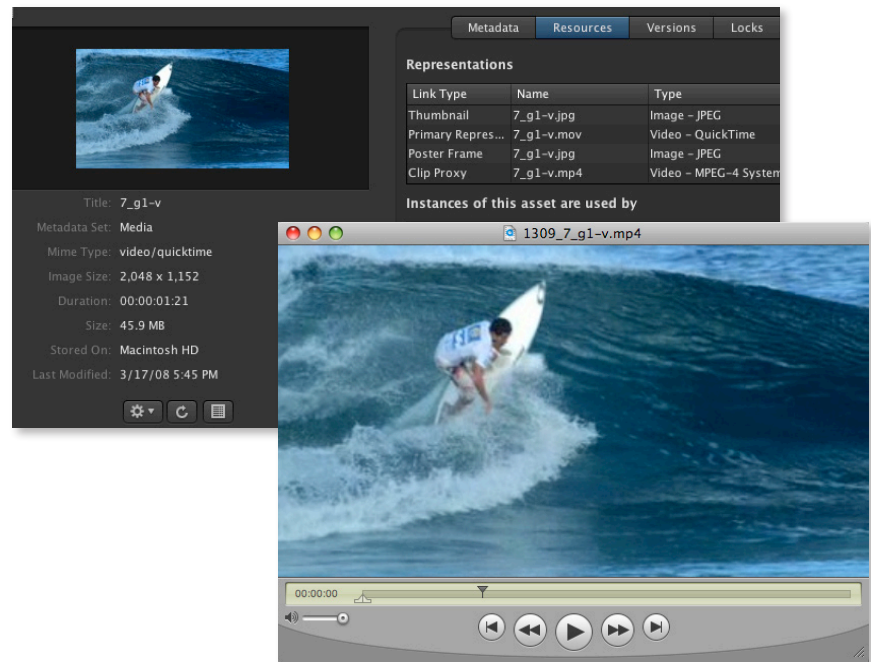




## Automatic Proxy and Thumbnail Generation

When Final Cut Server catalogs video clips, it also generates browse proxies, poster frames, and thumbnails and associates them with the original asset. You can now choose different browse proxy formats for different types of source media, allowing you to avoid unnecessary recompression or proxy creation. If you want, Final Cut Server can simultaneously create edit proxies for clips in Final Cut Pro projects, using the efficient new ProRes 422 (Proxy) format or another format of your choice.

Because Final Cut Server automatically associates proxies and reference images with the original asset, you don't have to worry about managing multiple files for your clips.

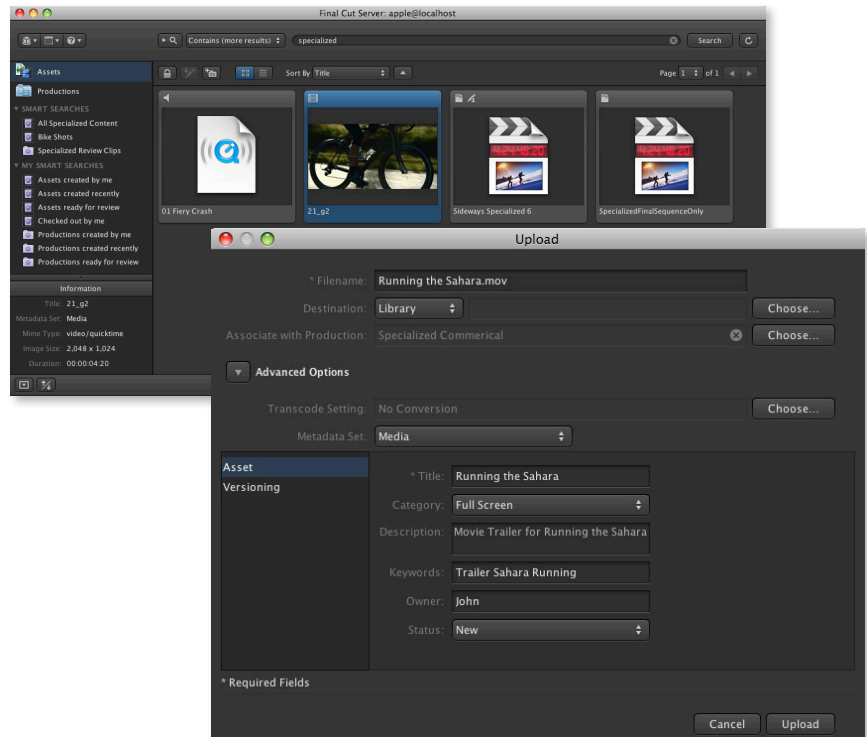


## Simultaneous Metadata Capture

Final Cut Server extracts and captures most forms of industry-standard metadata as it catalogs—including QuickTime, IPTC, XMP, and XML data. It also now parses and displays metadata from standard audio files such as AIFF, WAV, and more. To make information consistent across the catalog, use a simple mapping feature to translate metadata from different formats. You can also add metadata to items in the catalog manually.

## Drag-and-Drop Uploads

Drag files from the Finder to the Assets pane. Drag an asset directly into a Production to add it to the catalog and the Production at the same time. Or use the Upload window to select files to add to the catalog. Final Cut Server begins the cataloging process immediately. When you bring in a Final Cut Pro project, Final Cut Server catalogs only new assets, creating a reference link to assets that are already in the catalog.



## Automated Synchronization

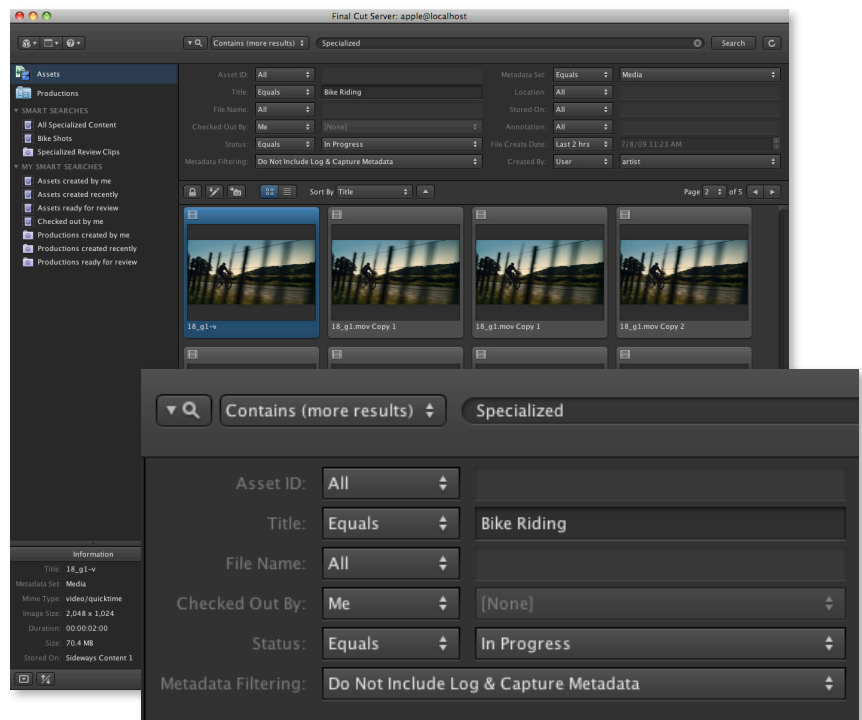
Set up a schedule for scanning folders on your drives and volumes, and Final Cut Server does the rest. When Final Cut Server sees changes to assets in those folders, it updates the catalog. Because the asset catalog references files rather than copying them to a single location, you can organize assets on your drives in any way you want and still enjoy the benefits of Final Cut Server.

# Blazing-Fast Searches

Find, preview, and access the assets you need instantly through powerful search tools, customized metadata, and flexible, personalized shortcuts—now with searches that are up to 10 times faster in large databases.

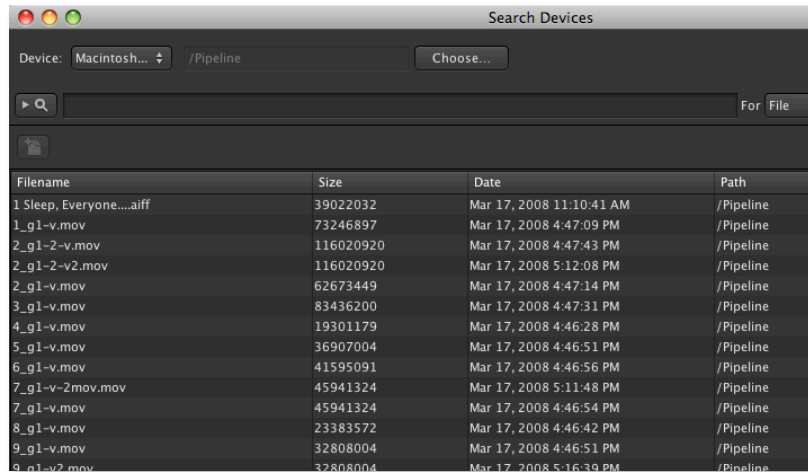
## Powerful, Layered Searches

For a basic search, type text into a Spotlight-style search field. For greater precision, the advanced search option allows you to use pop-up menus to choose search filters based on metadata fields. You can search the entire asset catalog or a specific Production. Your Final Cut Server administrator can customize these filters, so all the options you need will be at your fingertips as you search for assets.



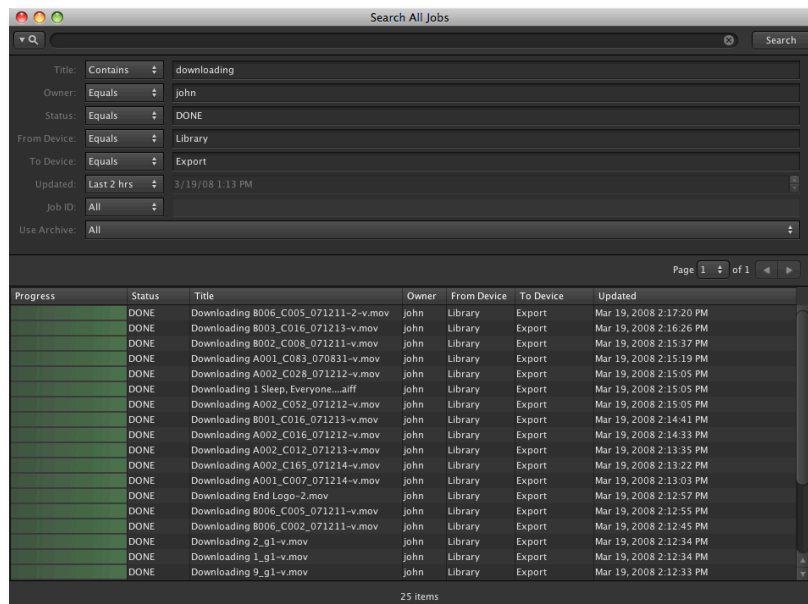
### Search Devices

The Search Devices window allows you to go outside of the Final Cut Server asset catalog to search directly on an attached device. This type of search is particularly useful in cases where the Final Cut Server catalog has access to a drive that a user may not be able to view directly in the desktop file system. You can use the Search Devices list to select assets and add them to the catalog.



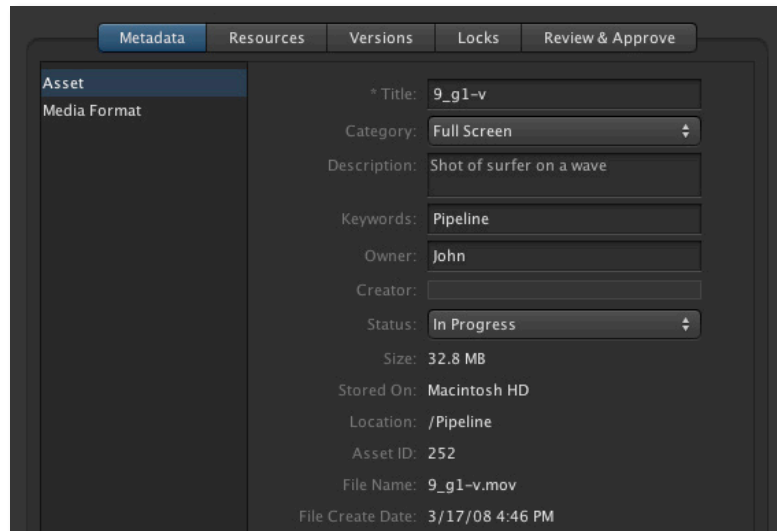
### Search All Jobs

The Search All Jobs window allows you to search automated production jobs for key metadata tags such as Client or Status. You can use Search All Jobs to check the status of a file transfer or a wide range of other operations, including archiving.



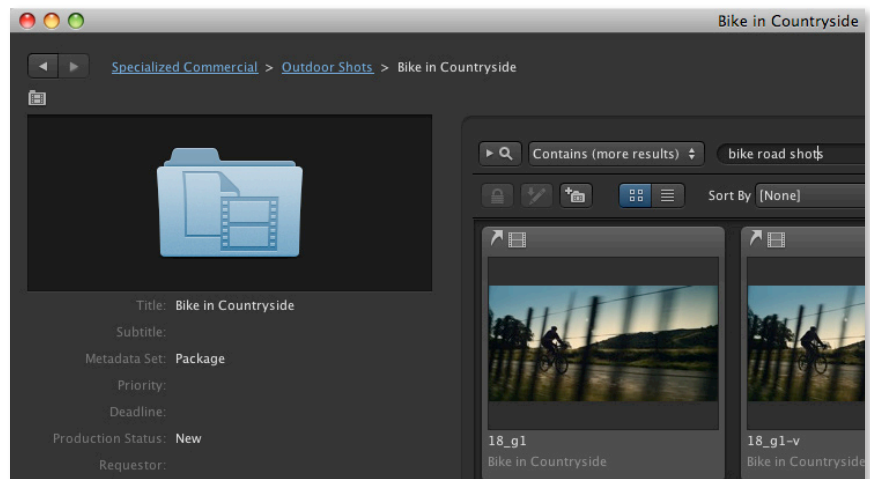
## Easy-to-Use Metadata Tools

Final Cut Server helps you find assets fast by searching metadata tags. Quickly choose from hundreds of predefined tags or create your own custom fields. You can also group fields in tabbed arrangements to fit your workflow. Production team members can easily add or update tags by making selections from pop-up menus or entering information in the text fields.



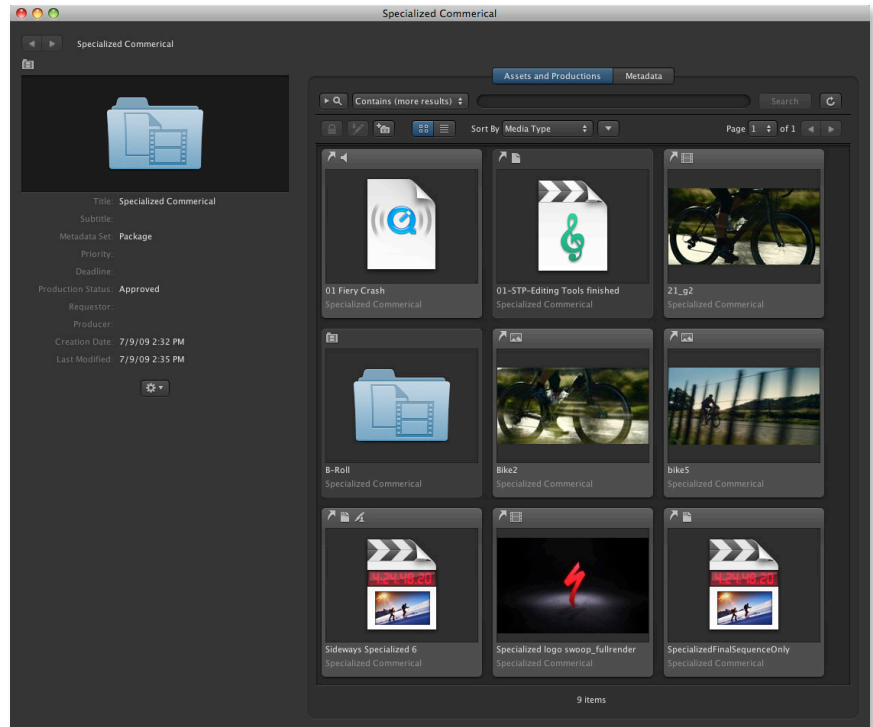
## Versatile Production “Containers”

Final Cut Server Productions are virtual containers you can create to group related assets. Productions make it easy to track status, manage project files, and link associated media for the entire production process. You can include proposals, scripts, budgets, and other documents as well as media files.



### Flexible asset use

Productions let you organize assets without copying them, so you can include the same assets in any number of Productions—with no increase in storage requirements. You can now organize Productions in a folder-style hierarchy for even more flexibility.



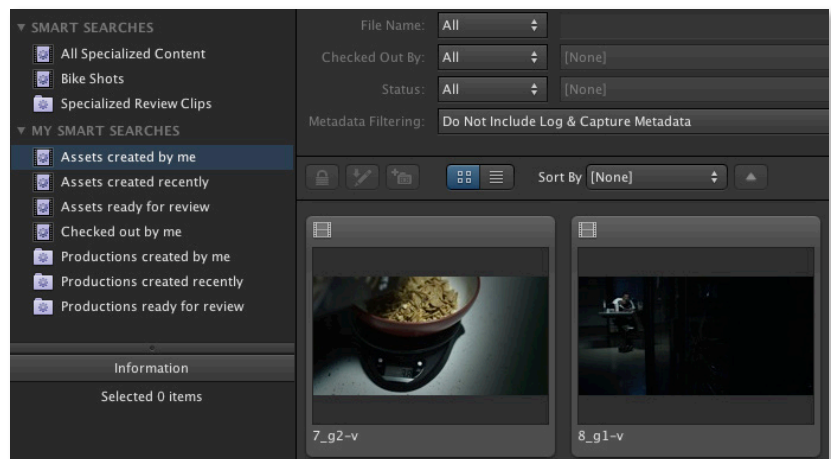
### Production metadata

Each Production has its own set of metadata. Use Production-level metadata to track job status, usage rights, exposure details, and other information that you want to apply to all assets in the Production. You can assign custom status fields to the Production to track your project as it moves from preparation, to production, to post-production, to review and approval, and finally to delivery and archiving.

## Personalized Workspaces

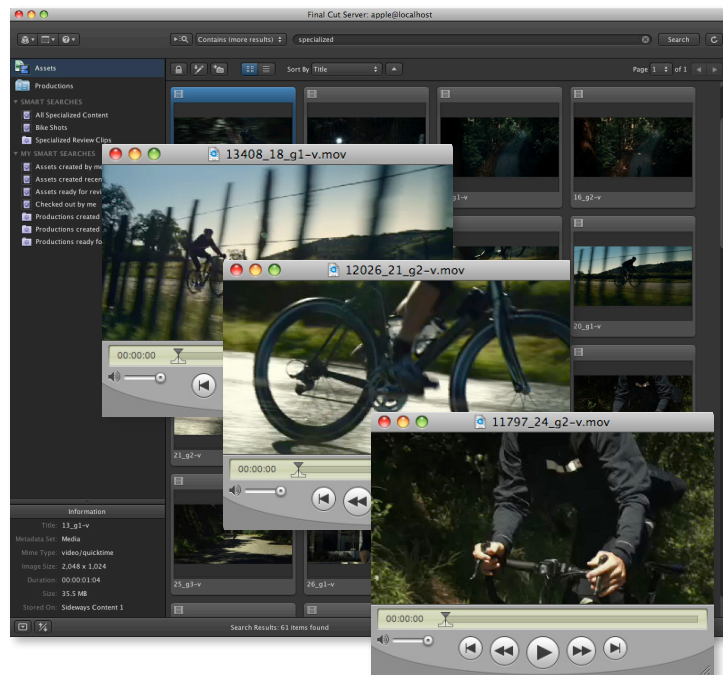
Final Cut Server offers several ways to personalize your workspace so that the items you use most are available at your fingertips:

- **Productions.** Create any number of Productions for your personal use or share them with just your team. With the new Final Cut Server, administrators can now also create Global Saved Searches to provide consistent access to content across an entire organization.
- **Smart Search.** Save common or repeated searches as Smart Searches in your personal workspace and see the results with a single click. You can save both simple and advanced searches that are targeted at assets or Productions.



## Time-Saving Previews

Because Final Cut Server creates low-resolution browse proxies during cataloging, you can screen proxies right from the catalog as you evaluate assets. Viewing a low-resolution proxy is significantly faster than opening and playing a large, high-resolution HD video file.



## Optimized Bandwidth Use

Final Cut Server seamlessly adjusts to the bandwidth of your network configuration when delivering files for editing.

### Caching files

If you are editing over a LAN or WAN, Final Cut Server copies all the referenced assets to a cache on the client workstation as a Final Cut Pro project is checked out. Caching allows editors to work at maximum speed when there is not enough bandwidth to work in real time over the network.

### Edit in place

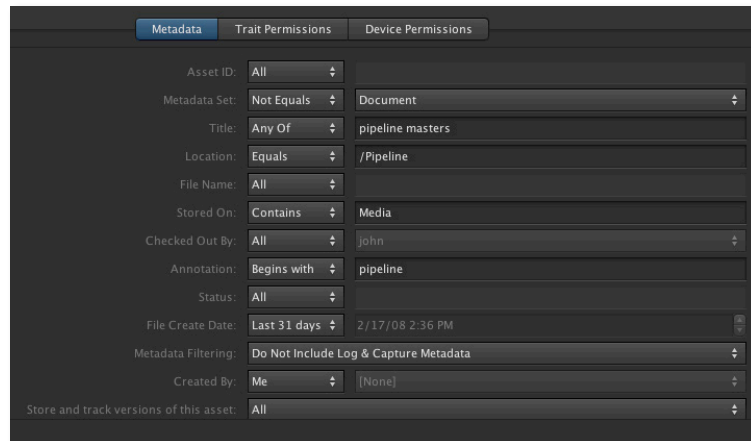
For creative professionals editing on a high-bandwidth network powered by Xsan, the system allows you to begin working immediately with the files in their original locations, without copying them to your workstation.

## Robust Access Controls

Key to any collaborative production environment are the access controls, which provide two important benefits:

- **Faster browsing**, by displaying only the materials that are relevant to your work
- **Protection from unauthorized use**, by allowing only the right people to see the right assets at the right times

Final Cut Server makes it easy to define a highly specific set of access permissions based on asset or Production. Use access controls to limit client access to just the relevant versions or content types, or to restrict access to content for confidential projects. Administrators can now assign permissions to Active Directory as well as Open Directory groups.



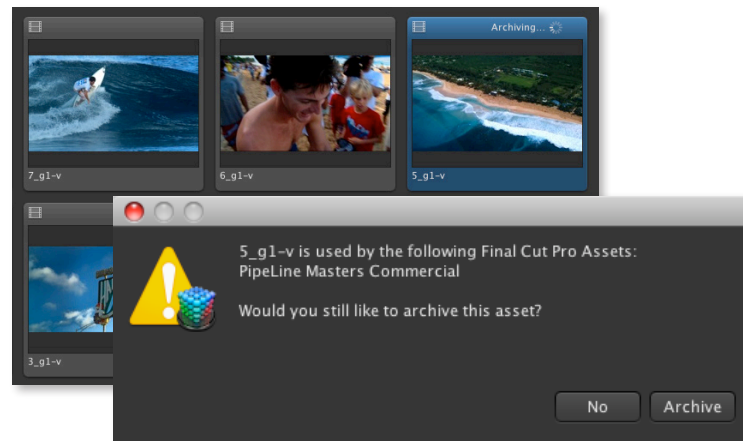


## Seamless Archiving and Retrieval

Archiving an asset makes it possible to take the asset offline but still retain a link to it, so the asset can be retrieved in the future. This feature is useful when you have large video files that are not currently being used but are taking up disk space on a device. You can archive assets to anything from a FireWire drive to a large hard disk that you can take offline. Final Cut Server helps you safely archive assets and quickly retrieve them when they are needed.

### Archiving protections

To protect against archiving an asset that is still in use, Final Cut Server shows a warning message that lists all the Final Cut Pro projects that link to that asset.



### Searching and restoring archived assets

After an asset is archived, its associated thumbnails, poster frames, proxies, and metadata are retained and fully searchable in the catalog. Metadata fields are used to indicate the name of the drive and its physical location.

Restoring the asset is simple—just connect the archive device and click Restore.

# Point-and-Click Automation

Facilities of any size can free up valuable time with workflow automation. Final Cut Server makes it easy to set up automated tasks—for a single activity, your entire workflow, or anything in between—using intuitive, modular tools.

## Event-Based Automation

The basic building block of automation in Final Cut Server is a “watch and respond” sequence. The system “watches” for an event—a change in a specified metadata field, a new file in a watched folder, or a specified time—then responds with an action or series of actions.

For example, you can direct Final Cut Server to watch an asset’s status metadata field. As soon as the field is changed to “Publish,” the system can make copies, move old content to a backup location, or convert media to an output format and push it to a broadcast server.

### Types of watched events

Final Cut Server monitors three types of events: file system, metadata, and time.

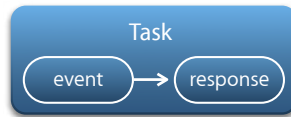
<b>File system</b>	Identifies changes on connected drives and volumes Example: Files are added to a folder.
<b>Metadata</b>	Identifies changes in designated metadata fields Example: A Status field changes to “Ready for Review.”
<b>Time</b>	Schedules tasks at specific times or intervals Example: Scans every five minutes to update the asset catalog.

## Modular Automation Tools

Final Cut Server automations are completely modular, making it easy to automate anything from a single task to an entire workflow.

### Automating a task

To automate a task, simply specify the watched event, then indicate what actions should occur in response.



### Automating workflows

To automate a workflow, just define a sequence of automated tasks. Large-scale, facilitywide workflows can be constructed by chaining together these basic elements.



## Basic and Advanced Automation Options

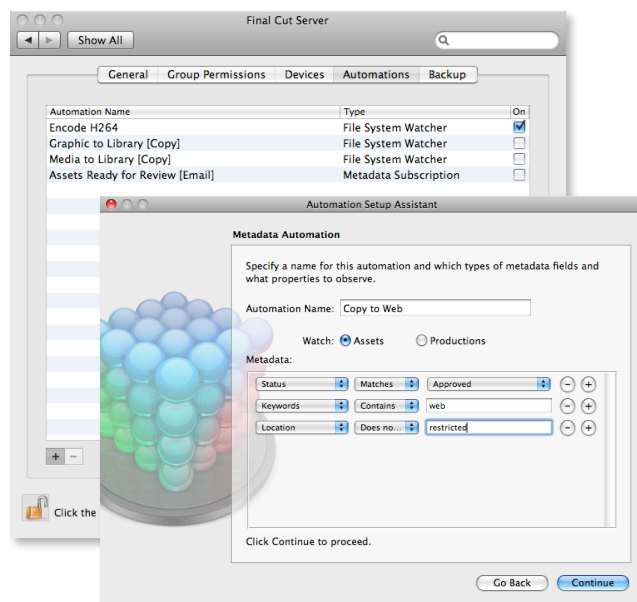
Final Cut Server makes it easy to pair events and responses by providing choices from a set of simple menus. Quickly set up a single response—or a chain of responses—for any watched event and modify your choices anytime you want.

When you're ready for additional power, an expanded range of options is available through an intuitive set of menus in the Administration window.

No matter which type of automated sequence you create, you can save your settings for reuse on future projects.

### Automation Setup Assistant

The Automation Setup Assistant offers a wide range of options that can be used for everything from tracking projects as they move through the production pipeline to automating complex sequences of repetitive tasks.



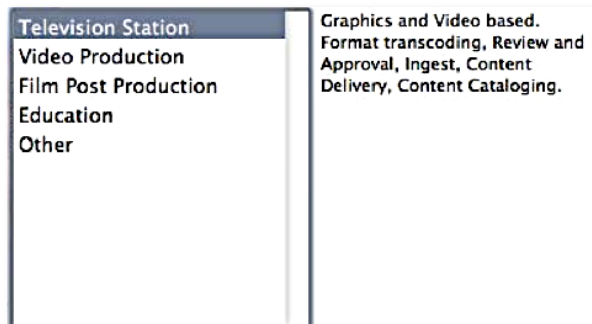
### Advanced automation features

For additional levels of control, an advanced view lets you use a panel of menus to set up flexible combinations of watched events and responses (actions).

Name	Response Action	Description
Clean Logs	Clean Logs	Clean old logs
Copy Graphic, to Library, No Conversion	Copy	Copy to device "Library" with a transcode of "No Conversion" and a...
Copy Media, to Library, No Conversion	Copy	Copy to device "Library" with a transcode of "No Conversion" and a...
Copy Response for Encode H264	Copy	H.264 LAN Copy to Ducati Content as Media
Delete	Delete	Delete File. Do not run if previous response raised an error.
Delete Always	Delete	Delete File. Always runs, regardless of error state of previous respo...
Ducati Scan - Add Only	Scan	
Ducati Scan - Full	Scan	
Email reviewers for Ready assets	Email	Email reviewers when asset status changes to Ready for Review
Scan device Media [Add Only]	Scan	Scan of device "Media" with asset type of "Media". Features: [Add O...
Scan device Media [Full]	Scan	Scan of device "Media" with asset type of "Media". Features: [Full]. C...
Scan device NAB Demo [Add Only]	Scan	Add Only Scan created in the Pref. Pane
Scan device NAB Demo [Full Scan]	Scan	Full Scan created in the Pref. Pane
Scan Pipeline	Scan	
Tradeshaw Content Scan - Add only	Scan Productions	

### Convenient Workflow Templates

Workflow templates configured for your type of facility can help you get up and running within minutes. Choose from preconfigured setups including Television Station, Video Production, Film Post Production, and Education, or choose Other for general cataloging.



Each template defines a set of users, permissions, asset and production types, review and approval notifications, and publishing rules. Metadata sets used for media production workflows—such as Show, Promotion, Commercial, Trailer, and Package—are associated with each template. Easily customize the templates over time to create exactly the workflow you need.

### Scripts to Control External Systems

Task and workflow automation tools offer complete freedom for managing actions within Final Cut Server. A special response option lets you send scripts and commands to external systems such as web servers, broadcast servers, and archive systems.

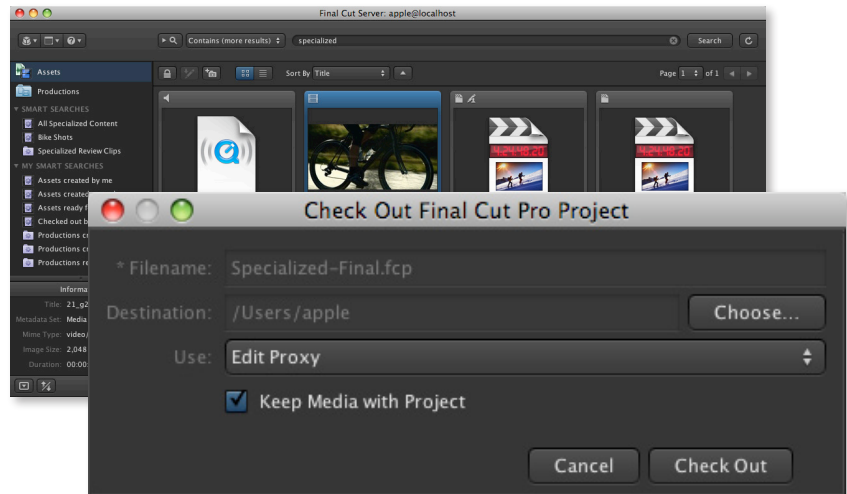
This feature can be used for anything from simple utility scripts—for example, creating and naming a new folder on a device whenever a new Production is created—all the way up to integration with complex applications such as broadcast traffic systems.

# Seamless Collaboration

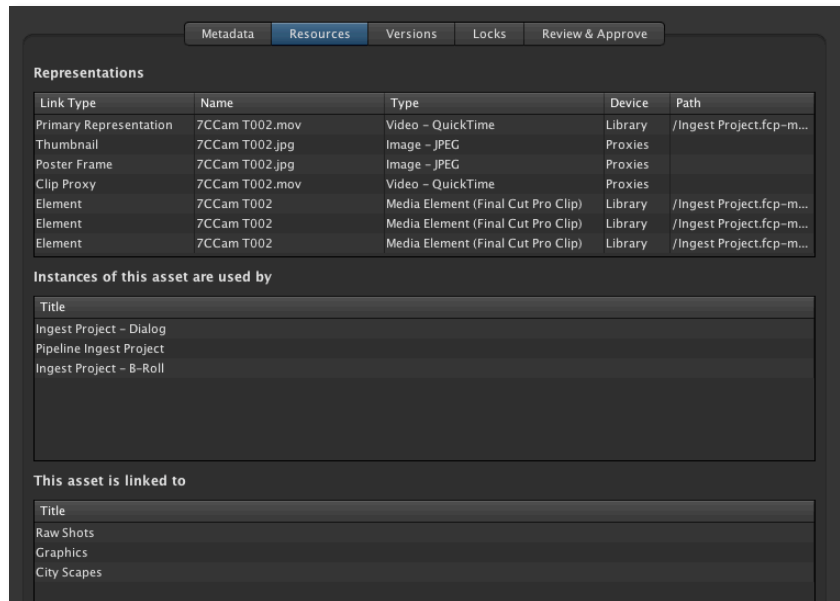
With Final Cut Server, team members can share assets at every stage of the workflow and enjoy seamless handoffs from one task to the next. Intelligent asset and version controls and automatic status notifications make it easy.

## Check-In/Check-Out Protections

When a Final Cut Pro project is checked out, the project is restricted with a Check Out lock. In addition to the Check Out lock, each of the media assets associated with the project is secured with a Reference lock, which prevents other users from changing or deleting an asset that is needed for your project. The catalog entries for the project and all associated assets are updated instantly when the project is checked back into Final Cut Server.



You can also check out individual assets. The Resources pane lists all the projects that use each asset, so you can avoid inadvertently changing an asset that is used in multiple projects.

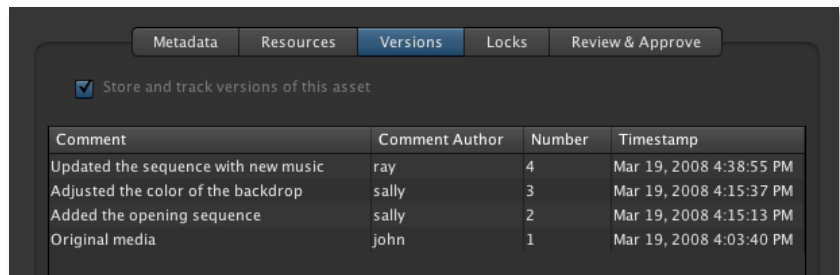


## Version Management

Final Cut Server can track changes made to an asset from one version to the next. You can specify how many versions you would like it to keep. For each version, it captures the name of the person who made the change, the time the project was checked back in, and any comments made for that session.

The Versions pane lets you view a listing of every version of the asset except the current one. When you check in an updated version of the asset, the previous version is added to the list.

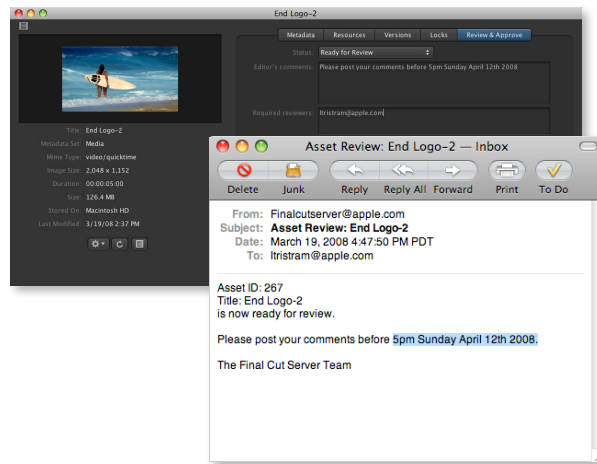
You can use the list to revert to a selected version. You can also create a new asset from a version, with the option of copying it to another device. The Comment field makes it easy to identify the significant differences among the various copies.



## Automated Notifications

Tracking every part of a production and letting relevant people in the workflow know when assets are ready for the next step can be an overwhelming job. Final Cut Server lets you automate email notification, so status updates can be sent to team members instantly. You can trigger email notifications based on metadata (for example, a change to a status field), a watched folder, the status of an automated job, or a scheduled event.

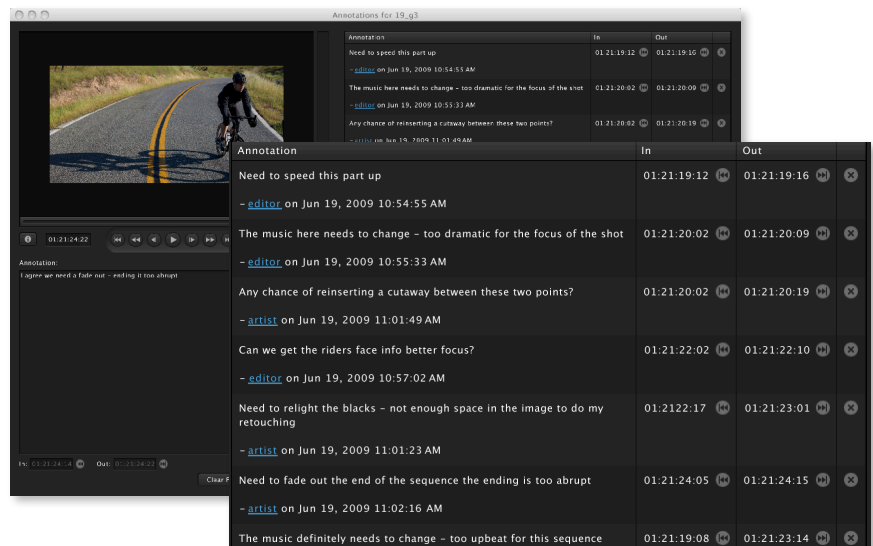
Set up Final Cut Server to notify the motion graphics department whenever a Final Cut Pro editor sends a project to Motion. Configure an automation to send a manager or producer an email at 5:00 p.m. every Monday through Friday that includes a listing of the status of all jobs. Easily configure any set of notifications for your workflow and change them whenever you want.



## Integrated Review and Approval Tools

Final Cut Server helps move productions through the pipeline faster with built-in review and approval tools. Set up the system to automatically notify reviewers via email when a project is ready to review.

Reviewers can add clip annotations on low-resolution proxies through the Final Cut Server annotation interface, so editors can see comments displayed shot by shot. Small proxy file sizes support review and approval even over a low-bandwidth connection.

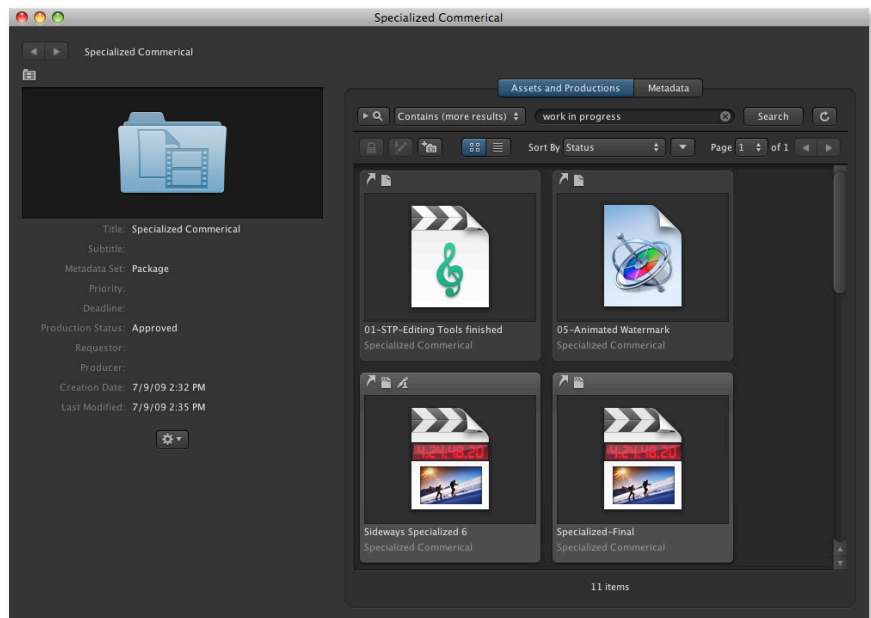


## Working with ProRes 422 (Proxy)

Final Cut Server can automatically generate edit proxies using Apple's new ProRes 422 (Proxy) format. ProRes 422 (Proxy) scales to match the source for accurate round-tripping. Check out the proxy version of the project to edit high-quality video quickly on a notebook computer in the field; when you check the project back in, Final Cut Server instantly relinks it to the full-resolution source files for finishing and output.

## Workflows with Final Cut Pro

Multiple Final Cut Pro editors can work on different sections of a film or video production at the same time through Final Cut Server. Just create a separate project for each segment of the production. These projects share the same referenced assets, with no need for additional copies or storage. When the sequences are finished, the projects can be assembled into a single master project for further editing and delivery. Version management makes it easy to revert to a previous version for each defined section of the program.



## Workflows with Other Final Cut Studio Applications

The "Send to" option in Final Cut Pro has additional advantages for parallel work when the destination is a folder that is regularly scanned by Final Cut Server. When Soundtrack Pro audio file projects or Motion projects are checked back into Final Cut Server, the assets update instantly in your Final Cut Pro Timeline, just as they would if all the work were being done on a single workstation. You can also use Final Cut Server to catalog XML files created by Color, so you can import the graded files into your Final Cut Pro project as soon as they are ready.



# Multiformat Delivery

When your projects are ready for delivery, let Final Cut Server do the work for you. Final Cut Server automates Compressor to execute a variety of encoding, resizing, and retiming tasks simultaneously—all at pristine quality.

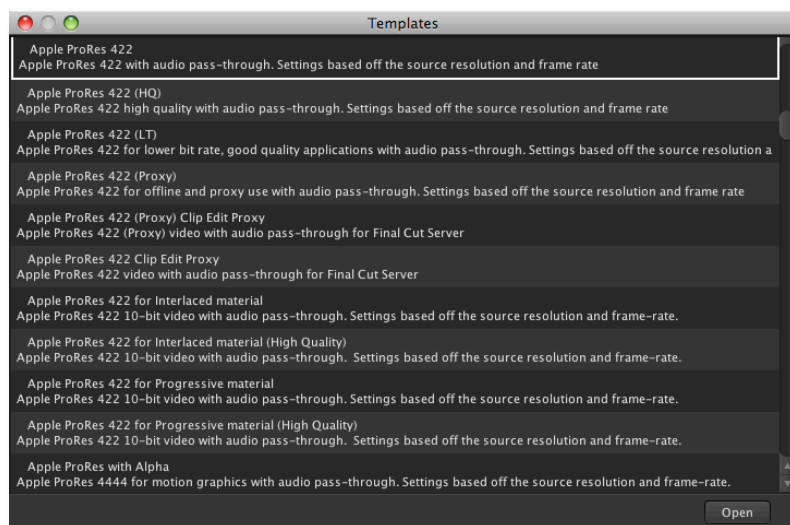
## Pristine Encoding and Frame Conversions

Compressor, Apple's encoding application, is included with Final Cut Server. Compressor uses optical flow technology to analyze media on a frame-by-frame basis and algorithmically produce conversions at astonishing quality.

Choose from a wide range of encoding and transformation options in Compressor and then access those settings through Final Cut Server. You can use Final Cut Server to automate format conversions; retiming; scaling, cropping, and padding; video filters, including animated overlays; and metadata integration.

## Industry-Standard Encoding

Final Cut Server uses the Compressor engine to encode MPEG-2 and H.264 files, as well as various QuickTime formats—including the Apple ProRes 422 codec family and formats for iPod and Apple TV. For even more options, you can add the Episode Pro plug-in from Telestream to encode to VC-1, WMV, GXF, and FLV formats, along with High Profile H.264 and a number of third-party proprietary broadcast server formats.



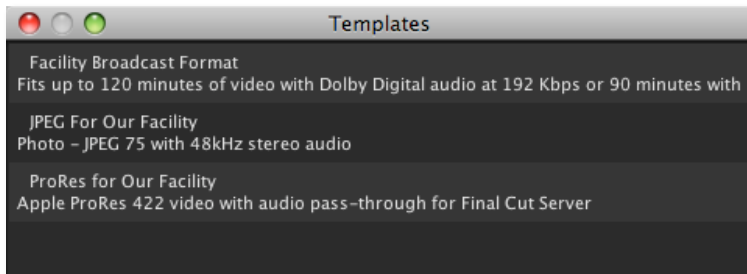
## Batch Processing

The automation tools in Final Cut Server allow you to simultaneously encode multiple formats from the same source file or even from multiple source files. For example, when a project's status is changed to "Publish," Final Cut Server can launch encoding for web delivery and broadcast formats at the same time.

Progress	Status	Title
	WAIT	Creating Clip Proxy for asset: A002_C052_071212-v
	WAIT	Creating Clip Proxy for asset: 2_g1-2-v
Transcoding clip	RUN	Creating Clip Proxy for asset: A002_C165_071214-v
Transcoding clip	RUN	Creating Clip Proxy for asset: B006_C005_071211-2-v
Transcoding clip	RUN	Creating Clip Proxy for asset: A002_C012_071213-v
Transcoding clip	RUN	Creating Clip Proxy for asset: 2_g1-2-v2
Transcoding clip	RUN	Creating Clip Proxy for asset: A001_C083_070831-v
Transcoding clip	RUN	Creating Clip Proxy for asset: A001_C092_070831-v
Transcoding clip	RUN	Creating Clip Proxy for asset: B002_C008_071211-v
Transcoding clip	RUN	Creating Clip Proxy for asset: A001_C007_071214-v
	DONE	Creating Poster Frame for asset: A002_C052_071212-v
Transcoding clip	RUN	Creating Clip Proxy for asset: B003_C016_071213-v
Transcoding clip	RUN	Creating Clip Proxy for asset: End Logo-2
	DONE	Creating Poster Frame for asset: 2_g1-2-v
	DONE	Creating Poster Frame for asset: A002_C165_071214-v
	DONE	Creating Poster Frame for asset: A001_C092_070831-v
	DONE	Creating Poster Frame for asset: A001_C083_070831-v

## Time-Saving Templates

You can use Compressor to configure sequences of encoding and conversion steps, then save the sequences as Final Cut Server templates with easy-to-understand names such as "Web Delivery." By representing complicated format conversions as a single menu item, templates make it easier to offload operational work to nontechnical users.



## Distributed Encoding

The Apple Qmaster distributed encoding application included in Compressor allows you to use multiple computers and even multiple processors in each computer to optimize computing resources during encoding.

With the QuickCluster feature in Apple Qmaster, you can quickly define clusters, then use Final Cut Server to direct specific jobs to the cluster or clusters you select. You can schedule processing-intensive work to occur during off-hours or even use processors in individual workstations on an opt-in basis.



## Delivery to External Systems

Use scripted responses in Final Cut Server to automate delivery to external systems, such as web servers, broadcast servers, or archive systems. You can easily export metadata to meet the requirements of special-purpose workflows such as broadcast traffic systems.

# Flexible Configuration

Whether you work in a production boutique, a post-production house, or a global news network, you can easily shape Final Cut Server to fit the needs of your facility. You can modify built-in profiles and preferences to get started, and take advantage of new developer extensions for even greater customization.

## Scalable Server Software

The server software for Final Cut Server can run on a MacBook Pro for use on location, on a Mac Pro in the studio, or on a full Xserve configuration for larger-scale facilities.

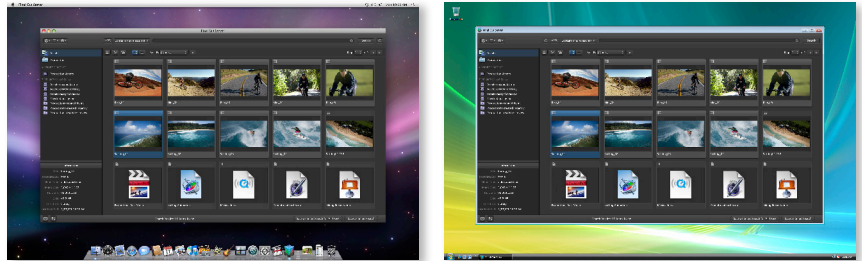


Final Cut Server can support one user up to hundreds of concurrent users on an appropriate network. You can easily add or remove devices as your network configuration changes. The system you install today can easily grow as your business grows, with no need to replace the Final Cut Server software.

## Cross-Platform Client Software

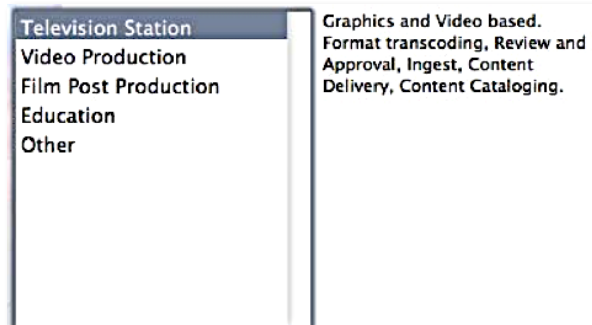
Final Cut Server supports clients on both Mac and Windows-based workstations. You can use Final Cut Server on mixed-platform networks or allow someone to log in from a PC even if everyone in your shop uses a Mac.

A single software update to the server automatically updates the client software the next time a user logs in. There is no need to push updates or distribute software patches to client computers.



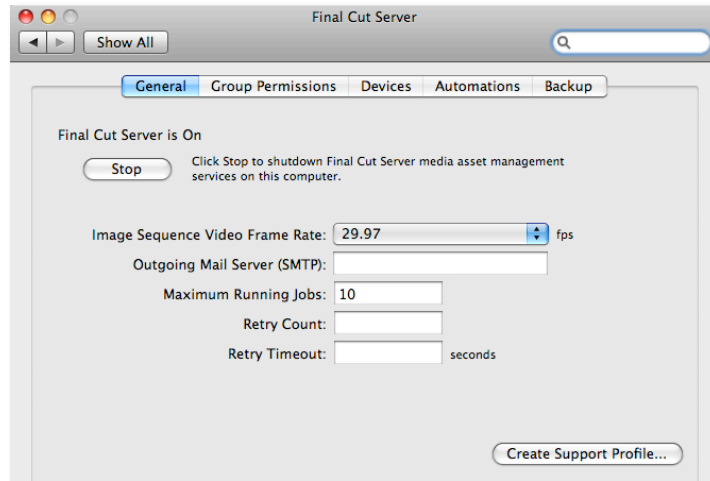
## Quick-Start Customer Profiles

When you install Final Cut Server, you're asked to select a customer profile that best describes your facility: Television Station, Video Production, Film Post Production, Education, or Other. The profile begins to customize your system by adding items such as metadata sets, permission sets, and automations that you are likely to need, while eliminating those you don't need.



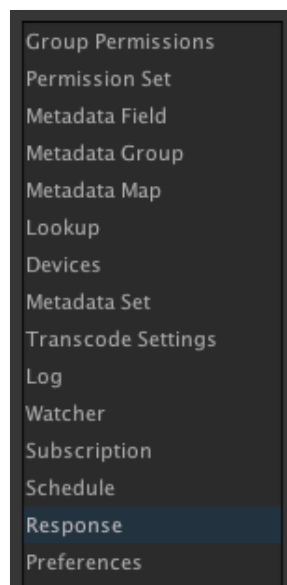
## Easy Setups

You can use Final Cut Server System Preferences—accessed through Mac OS X System Preferences—for easy, basic configuration of items such as group permissions, devices, and backup. The Automations pane includes an Automation Setup Assistant that lets you quickly create basic sequences of tasks by making simple menu selections.



## Advanced Administration Features

The Administration window of the Final Cut Server client contains detailed settings and configurations covering all aspects of Final Cut Server. Use the Administration window for advanced features related to setting Active Directory and Open Directory groups and security permissions; devices; metadata, including custom metadata and mapping; transcode settings; and automations.

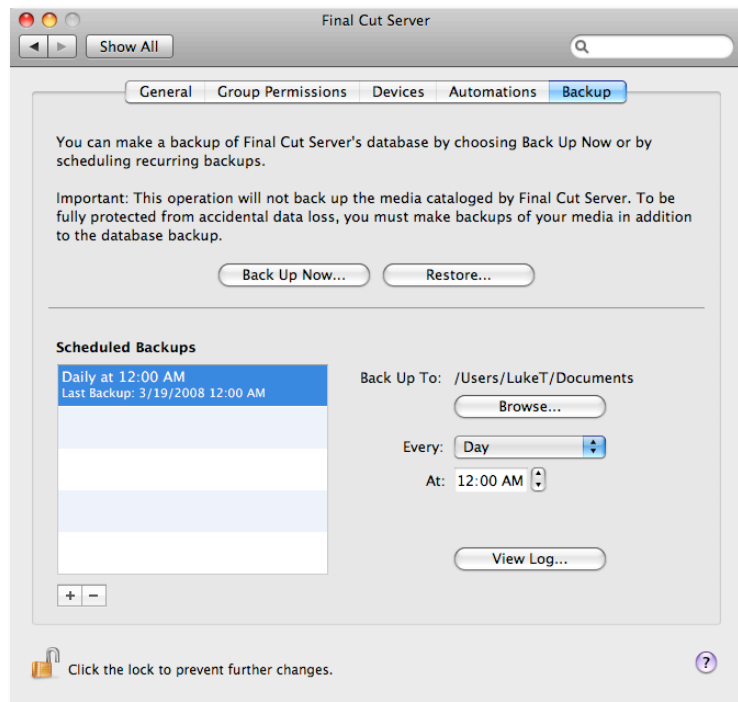


## Automated Backups

You don't have to abandon your existing backup systems when you install Final Cut Server. Any assets stored on your drives or volumes will continue to be protected by your standard backup practices.

The only additional step is to back up the Final Cut Server catalog, as well as the Final Cut Server proxies and versions. The proxies and versions may already be stored on volumes you back up, or you can add them to your backup setup.

Final Cut Server automatically creates a backup of the catalog database, capturing all the necessary files in various locations. Some shops save the catalog backup on the same volume that stores the proxies and versions, so all three components can be scanned as part of a regular backup routine.



## Extensible Solutions

The open architecture of Final Cut Server has been extended to offer new options to developers. You can now write a script or program to bring in existing browse proxies and thumbnails at the same time you catalog an asset. You can also import and export annotations along with other asset metadata in the XML file.

# Workflow Examples

No matter how small or large the production, the work is likely to include repetitive tasks and time-sensitive handoffs among team members. The following real-world examples demonstrate just a few of the many ways that Final Cut Server can be used to save time and coordinate effort—for a single task, a single workflow, or an entire pipeline.



## Radical Media: Expediting a Global, End-to-End Workflow

One of the key challenges for any production is ensuring the smooth flow of media from one team to another. Each group has to deliver material to the next step in the production chain, without delays or errors. Radical Media, a multidisciplinary integrated media company, has the additional challenge of coordinating this type of workflow with teams around the world.

### The production challenge

To celebrate the 2008 Summer Olympics in Beijing, Radical Media set out to produce a series of broadcast programs. Sponsored by Nike, the programs portray athletic activities and related scenes shot in China. Hundreds of hours of material were ingested in China, then sent to New York for editing by non-Chinese speakers.

Every clip had to be translated and subtitled to make it possible for the editors to work without an interpreter in the room. Under normal circumstances, Radical Media would have spent hundreds of hours per program coordinating the work of all the different teams.

### The Radical Media workflow

With Final Cut Server, Radical Media could automate asset cataloging, file delivery, status notifications, and even review and approval. This allowed the teams to work at maximum efficiency in every step of the production pipeline—with a fraction of the coordination effort that would be typical for a project of this type. Following is the workflow for the Radical Media project:

#### 1. Ingest the video

Almost all of the footage is shot in China, with on-camera interviews and other audio in Mandarin. Teams in China ingest the footage from each DV tape, bring it into Final Cut Pro, and place it into a sequence.

The Final Cut Pro projects are saved on a FireWire drive. Each drive has a specified file structure, with folder names coded to indicate the shoot date. At the end of each day, the drives are express-shipped to New York for editorial work.



## 2. Catalog the clips

Once the drives arrive in New York, assistants copy the files and folders to an Xsan volume. Final Cut Server scans the volume and catalogs the Final Cut Pro projects, along with their associated assets. Radical Media set up Final Cut Server to create H.264 browse proxies, poster frames, and thumbnails for each clip.

## 3. Organize the assets

As it creates the catalog entries, Final Cut Server organizes the projects and their referenced assets into Productions. As part of this process, Final Cut Server captures the original folder names as metadata indicating the shoot date.

Assistants then review the assets to add other metadata, such as the city and the names of coaches and players. Editors can later use this metadata to search for specific assets as they work.

Finally, Final Cut Server sets the status field to “Ready for Transcription” and sends an email message to the transcription team listing the names and locations of the new projects.

## 4. Translate the soundtracks

Mandarin-speaking transcriptionists are standing by to translate the soundtracks into English. Depending on the workload, as many as 10 transcriptionists could be available to begin a new project.

The engineers at Radical Media created a custom metadata field to indicate the priority of each project. Transcriptionists use this field when they call up a list of available projects, so they can choose the most urgent projects first.

A transcriptionist begins by checking out a Final Cut Pro project. The Check Out and Reference locks protect the project assets and prevent other translators from duplicating effort. Because the workstations are connected to shared Xsan storage, Final Cut Server allows the transcriptionist to begin work without waiting for files to copy.

## 5. Create subtitles

After the Final Cut Pro project is checked out, Final Cut Server exports the project assets as separate clips. The transcriptionist drags the clips into a third-party logging tool used for creating English subtitles linked to timecode.

When the subtitles are finished, the transcriptionist exports them as XML files that are saved to a specified folder on an Xsan volume. Final Cut Server periodically scans the volume to identify and catalog the new XML files, adding them to the same Production as the original Final Cut Pro project.

## 6. Bring the subtitles into Final Cut Pro

Next, the transcriptionist imports the XML data into the checked-out Final Cut Pro project. The English subtitles appear as multiple text generators on video track 2. After the transcriptionist checks the Final Cut Pro project back into Final Cut Server, the system generates a status email and sends it to the proofreading team.

## 7. Proofread the subtitles

In the next step, proofreaders check out the finished Final Cut Pro projects and verify that each subtitle is properly translated and timed. They correct any errors directly in Final Cut Pro. When they check the projects back into Final Cut Server, the system automatically tags those projects as “Subtitled.”

“In this case, we let Final Cut Server manage an incredibly complicated workflow with ease. It acts as a traffic cop—letting each department know what is ready instantly at the critical stages in our workflow. Ultimately, it is managing the movement of media throughout the entire process.”

— **Randy Main, chief engineer**

*Radical Media and Outpost Digital*

## 8. Edit the video

Assistant editors check out the subtitled projects and compile multiple sequences into composite projects. Then they check the projects back into Final Cut Server and tag them as “Ready for Edit.”

Next, an editor finds the composite projects by using the “Ready to Edit” status field to sort the Production assets. The editor checks out a composite project and cuts the footage. Because each sequence contains two tracks—one video track and one subtitle track—the editors can load a sequence into the Viewer, read the subtitles, and edit normally in the Timeline. Finally, the editor exports the completed project as a self-contained QuickTime file that is saved to a folder watched by Final Cut Server.

## 9. Internal review and approval

When Final Cut Server detects a new QuickTime file, it catalogs the asset and sends an email to story producers to let them know that the finished show is ready for review. Producers use the Review and Approve window in Final Cut Server to play the QuickTime file and add shot-by-shot annotations. The review process cycles between the editor and producer until the final version is approved.

## 10. Client review

At this point the project is ready for client review. When Final Cut Server detects this status change, it compresses the QuickTime file and executes a script that moves it to Radical Media’s proprietary web-based review and approval system.



## FRONTLINE/World: Streamlining Website Updates

In small workgroups, freeing up time for even one contributor can make an enormous difference in the overall productivity of the shop. When the production team at FRONTLINE/World began using Final Cut Server to automate a major production task, they freed a web producer to spend more time on creative work.

### The production challenge

Every week, FRONTLINE/World posts video clips for its web series “Rough Cuts” to its website: [www.pbs.org/frontlineworld](http://www.pbs.org/frontlineworld). The program files arrive from offsite producers in a variety of aspect ratios, but the clips for the web need to be presented in a 16:9 aspect ratio. Previously, a web producer had to manually convert clips before the files could be posted to the web, and there was always the risk of human error.

### The FRONTLINE/World workflow

Now, FRONTLINE/World uses Final Cut Server along with a custom AppleScript to automate clip management and file conversion. This streamlines the production workflow and frees the web producer from spending time on manual file processing tasks. Following is the FRONTLINE/World workflow:

#### 1. Catalog the content

When a program is delivered, a team member copies the files onto a local drive. Final Cut Server regularly scans the drive for new content and adds any new assets to the catalog. The files are labeled with a naming convention that designates the aspect ratio, the story number, and the country profiled in the story. All this information is captured as metadata when Final Cut Server catalogs the files.

#### 2. Create clips for web playback

The FRONTLINE/World video player is designed to play clips that are about 12 minutes long, so stories longer than that must be divided into chapters. An editor has to view each program and mark the in- and out-points for each chapter. Final Cut Server streamlines this editorial process through a scripted response.

The asset information window for each program file includes a checkbox labeled "Prepare for Web." When the box is checked, Final Cut Server calls a custom AppleScript designed by FRONTLINE/World producer David Ritscher.

The script opens the file in QuickTime Pro. After the editor has finished marking in- and out-points, the script automatically generates separate files for each clip and adds a designation in the filename to mark first or last chapters. These are saved to a folder watched by Final Cut Server, where they are cataloged instantly.

### **3. Convert and encode for the web**

FRONTLINE/World uses a third-party application for final packaging and encoding. The software is set up to watch a collection of folders and perform the necessary conversion steps.

Final Cut Server automatically exports the finished clips to folders that are named to indicate the aspect ratio of the clip as well as the type of video content—First (for the first chapter), Body, or Last (for the final chapter). This automated export process eliminates hours of dragging and dropping, as well as potential errors from manual transfers to folders.

The encoding application then converts the aspect ratio of the clips to 16:9 as needed and encodes the files to MPEG-4 for Flash. At the same time, it adds a series intro to every first clip and a series closing sequence to every final clip. It saves the converted clips to a folder that is watched by Final Cut Server.

### **4. Deliver files to the web designer**

Finally, Final Cut Server scans the watch folder and catalogs the clips. The web designer, who works offsite, receives an automatic email notification after the files have been cataloged. By using a saved Smart Search, the designer can then access all the new, compressed files with a single click.

# Product Details

## Pricing and Availability

The U.S. retail price of Final Cut Server 1.5 is \$999\* for an unlimited number of concurrent clients. An upgrade from the previous version (10-client or unlimited client) of Final Cut Server is available for \$299. Contact your authorized Apple representative for education pricing.

Final Cut Server is available worldwide in English, with support for metadata in any language. A version of the documentation is also available in French. Final Cut Server can be purchased from the Apple Online Store ([www.apple.com/store](http://www.apple.com/store)), Apple Retail Stores, and Apple Authorized Resellers.

## System Requirements

### Server

- Mac computer with an Intel processor
- 2GB of RAM (4GB recommended)
- ATI or NVIDIA graphics card (integrated Intel graphics processors not supported)
- Mac OS X v10.5.6 or later
- QuickTime 7.6 or later
- DVD drive for installation
- 1.5GB of disk space

### Mac client

- Mac computer with a PowerPC G5 or Intel processor
- 1GB of RAM
- A display with 1024-by-768 resolution or higher
- Mac OS X v10.4.11 or later, or Mac OS X v10.5.6 or later
- Java for Mac OS X v10.4, Release 6 or later
- QuickTime 7.6 or later
- 20MB of disk space
- Final Cut Pro 7.0 or later for Final Cut Pro integration

### Windows-based client

- PC computer with Windows XP (SP2) or Windows Vista
- 1GB of RAM
- A display with 1024-by-768 resolution or higher
- QuickTime 7.6 or later
- Java SE Runtime Environment (JRE) 6, Update 4 or later
- 20MB of disk space

Note: Requirements are subject to change. Visit [www.apple.com/finalcutserver](http://www.apple.com/finalcutserver) for detailed requirements.

## Support

Final Cut Server comes with 90 days of toll-free telephone support for installation, launch, and basic troubleshooting. For information about service and support products available from Apple, visit [www.apple.com/support/products](http://www.apple.com/support/products).

## Tutorials

Whether you're new to Final Cut Server or just looking to pick up some tips, get up to speed quickly by viewing free online tutorials produced by leading video training developers.

View a selection of Getting Started tutorials at [lynda.com](http://lynda.com); explore workflows at the Mac Pro Video site; learn about What's New at Ripple Training; and see demonstrations of time-saving Tips at Magnet Media. There are 120 topics covering all six Final Cut Studio applications—plus tips for Final Cut Server. That makes a total of more than four hours of video instruction available for viewing wherever you go.

In addition, Peachpit Press provides free online access to selected chapters of its Final Cut Studio and Final Cut Server books. One chapter is available for each book in the Apple Pro Training Series.

To access the tutorials and book chapters, visit [www.apple.com/finalcutserver/resources](http://www.apple.com/finalcutserver/resources).

## Training

The Apple Pro Training Program is designed to keep you at the forefront of Apple's digital media technology while giving you a competitive edge.

### **Take instructor-led classes at an Apple Authorized Training Center**

There are more than 500 Apple Authorized Training Centers worldwide. For more information, visit [www.apple.com/software/pro/training](http://www.apple.com/software/pro/training).

### **Use self-study courses from the Apple Pro Training Series**

The official Apple Pro Training Series courseware is published by Peachpit Press. For more information, visit [www.apple.com/software/pro/training](http://www.apple.com/software/pro/training).

### **Become an Apple Certified Pro**

On completion of the course material, you can become an Apple Certified Pro by taking the certification exam at an Apple Authorized Training Center. For details, visit [www.apple.com/software/pro/training](http://www.apple.com/software/pro/training).

## For More Information

For more information about Final Cut Server, visit [www.apple.com/finalcutserver](http://www.apple.com/finalcutserver).

\*Prices are Apple Store prices as of July 23, 2009, do not include taxes or shipping, are subject to change, and are listed in U.S. dollars.

© 2009 Apple Inc. All rights reserved. Apple, the Apple logo, AppleScript, Apple TV, Final Cut, Final Cut Pro, Final Cut Studio, FireWire, iPod, Mac, MacBook, Mac OS, QuickTime, Soundtrack, Spotlight, Xsan, and Xserve are trademarks of Apple Inc., registered in the U.S. and other countries. Finder is a trademark of Apple Inc. AppleCare and Apple Store are service marks of Apple Inc., registered in the U.S. and other countries. Intel is a trademark of Intel Corp. in the U.S. and other countries. Java and all Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries. PowerPC is a trademark of International Business Machines Corporation, used under license therefrom. Other company and product names mentioned herein may be trademarks of their respective companies. Product specifications are subject to change without notice. This material is provided for information purposes only; Apple assumes no liability related to its use. July 2009 L413397A