



FLOW Control User and Administrator's Guide

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Preface

This guide provides the installation procedures and the information used with EditShare's FLOW Control.

Conventions

The following conventions are used throughout this guide:

Bold text in procedures indicates icons, buttons, links, or menu items that you click on.

Italic text indicates variables.

`Monospace text` indicates text displayed on screen.

Technical Support

For questions not addressed in our documentation, contact EditShare Technical Support. Have the exact version number of your EditShare implementation, as well as your support agreement number.

EditShare strongly recommends that you purchase a support agreement for your system.

Please contact EditShare Technical Support at the following URL:

<http://www.editshare.com/support>

Information about new features and bug fixes are available in the EditShare ReadMe for your server's version, the EditShare update web site <http://updates.editshare.com/> or your server's Status Page.

Chapter 1: Introduction

FLOW System Overview

In this section, “Server” refers to the physical system. “Service” refers to a FLOW function, such as Scan or Database.

This section describes the FLOW system. See the following topics:

- FLOW Components
- Clients

FLOW Components

A typical FLOW setup consists of the following components:

- One or more FLOW Servers.
- One or more compatible storage spaces. See [Support for Storage Environments](#) for more information.
- FLOW Story software to run on your client workstations.
- Chrome Web Browser for using AirFLOW, FLOW Automation, FLOW Control.

Clients

FLOW's suite of client applications are described in the following sections.

FLOW Story

FLOW Story is an editing application that allows you to edit and upload local content or edit content that exists on the storage either locally or remotely. The Story client has functionality to make it easy to collaborate, from review and approval through to remote editing scenarios. Sequences can be published from Story to be viewable in AirFLOW and opened in Avid Media Composer, DaVinci Resolve, and Adobe Premiere.

FLOW Story's features include:

- Proxy workflow for real time remote editing
- Real time collaboration with other FLOW users
- Voice Over recording direct to timeline
- Wide format support up to 4K (Hi-Res and proxy)
- Round trip support for Avid Media Composer and Adobe Premiere sequences
- Support for multiple FLOW Database connections
- Review and Approve workflow
- Advanced real time effects, including Color, Titles, and DVEs
- Local Projects for full standalone operation
- Full screen playback of clips and sequences
- Multi-camera group editing

See the FLOW Story User's Guide for further information.

AirFLOW

AirFLOW is a web-based application that gives you remote access to all your content through a web browser. A web gateway server controls user access and also provides network DMZ capabilities.

AirFLOW allows you to browse and search for media, viewing high quality, low-bit rate streaming proxy files - suitable for handheld devices such as iPad and Android™ tablets. Users can add or update metadata, markers and subclips - collaborating with FLOW Browse users in real time.

With the appropriate permissions, users can organize projects and content within Storage Spaces. They can create new Projects, Folders and Sequences in AirFLOW then drag and drop content from a storage space to any project.

See the *AirFLOW User's Guide* for further information.

FLOW Automation

FLOW Automation is a web client automated workflow tool that performs simple or complex repetitive tasks. The process starts with a template which defines the workflow to be automated, this template then creates jobs within Automation when activated.

Once Workflow Templates are active, they will be triggered as and when the criteria are met. Each time a Template is triggered, a FLOW Automation Job is created. The progress and status of each job can be viewed in the Schedule tab.

See the *FLOW Automation User's Guide* for further information.

FLOW Control

FLOW Control software is web client software for Administrators of the FLOW system, and is used to configure and manage FLOW Ingest, Database and Proxy servers. FLOW Control lets you define:

- User accounts allowed to access the Ingest Server, and which channels they can use.
- High-resolution codecs available for ingest.
- The proxy codec you will use, if any.
- Storage Spaces to be scanned into the FLOW Database.
- Schedules for scanning new media into the FLOW Database.

FLOW Panel

FLOW Panel is used to maximize the use of Adobe Premiere Panel. Specifically, FLOW Panel allows users to browse, search for, and review content from storage spaces that FLOW has access to, without leaving Premiere Panel. The content is available for immediate import into projects created with Premiere Panel.

FLOW Panel also allows users to update the metadata on clips in their storage spaces that FLOW has access to from within Premiere Panel.

FLOW Panel connects to FLOW through the EditShare Gateway Service for small systems that may be running on the FLOW Admin server or on a dedicated server on larger systems. A license is required that covers the number of users that will be running FLOW Panel.

FLOW Logger

FLOW Logger allows you to log live captures quickly. This is particularly useful for sports broadcasts and reality shows, and can also be used in other environments where you need to log live feeds. You can speed up your logging by clicking predefined descriptors of the action or event, instead of typing long comments of what is happening. This also enables you to accurately search your logged footage later without dealing with misspellings or alternative labels.

You can also log multiple captures at once (ganged capture).

You can also log existing, previously ingested media with FLOW Logger, and utilize the same descriptors and templates you use for live logging.

FLOW Browse

For any media file you have permission to see, FLOW Browse can playback its corresponding proxy file (if the proxy was made by FLOW) without the need to mount any media directories. FLOW Browse can also play back high-resolution files if you have mounted the Media Space that contains the desired high-resolution files, and if FLOW supports the codec of the high-resolution file.

From FLOW Browse, you can locate media among hundreds of thousands of clips on EditShare Media Spaces. You can update metadata, log clips, create sequences, and drag-and-drop media to Avid and FCP bins before you begin editing. You can browse, playback, and restore files that you archived on EditShare Ark.

FLOW Application Programming Interface (API)

FLOW has an API to access all of FLOW's Metadata and Services. It is used internally by FLOW and can also be used for Third Party products or as a way to connect systems to FLOW.

FLOW uses RESTful web APIs, exposed over HTTPS and using JSON as the interchange format. Access to the API is authenticated and user permissions are enforced.

Accessing the API

The FLOW API can be accessed from the Documentation area of the FLOW Landing page. Alternatively, you can access the help pages at:

`https://[SERVER_IP]:8006/api/v2/gateway/help`

Where: [SERVER_IP] is the IP Address of the Server on which the Gateway service is configured. This is normally the Server which is the FLOW Admin server.

Usage Examples

Examples of FLOW API commands are as follows:

Search	GET /api/v2/databases/search?q=hello
Get asset metadata	GET /api/v2/database/clips/42
Update asset metadata	PUT /api/v2/database/clips/42
Transcode files	POST /api/v2/ingest/jobs

Scan Storage Spaces	POST /api/v2/scan/storagespace
Move Files	POST /api/v2/transfer/move
Start a FLOW Automation Job	PUT /api/v2/automation/templates/57/trigger

For further details about the FLOW API, please contact flowinfo@editshare.com.

Running FLOW Control

FLOW Control is the administrative system for configuring your EditShare FLOW system, and for maintaining it as your system expands or as changes are made to it.

This Guide assumes that the EditShare FLOW system has been installed and is fully configured and operational.

Signing in to FLOW Control

Note: EditShare recommends that you bookmark the FLOW Control In Page or set it as your Homepage.

Confirm the web address for the FLOW Control web server. By default, the FLOW Control web server runs on Port 8009, and uses the HTTPS secure protocol. If the host name of your FLOW Control server is `airflow.mydomain.com`, enter `https://flowcontrol.mydomain.com` into the location bar of your web browser.

You can use an IP Address, for example `https://192.168.1.193:8009`, to access the login page, however, your browser may display a security warning.

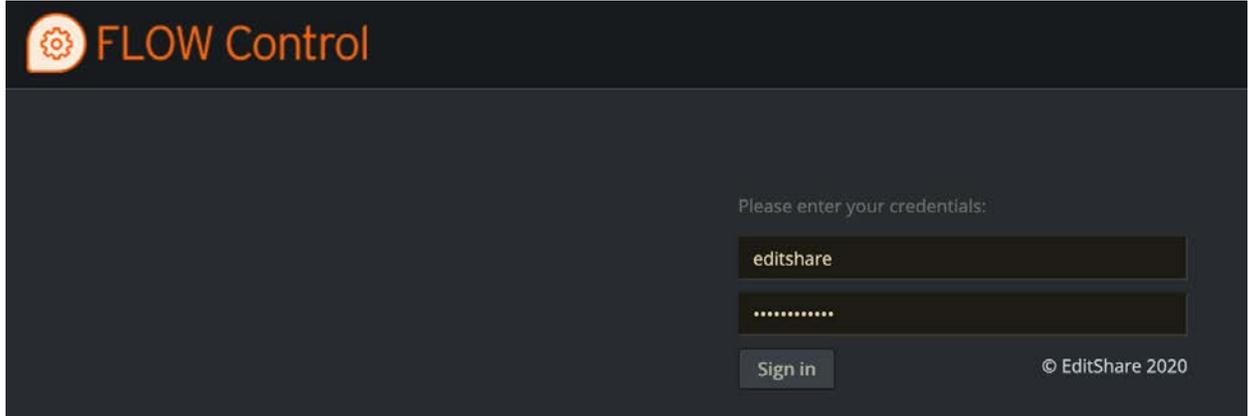
If you are accessing FLOW Control via the Internet, you must use the publicly accessible web address for FLOW Control as configured by your Network Administrator.

Opening FLOW Control

To open FLOW Control:

1. Open FLOW Control by clicking the **Login** button under Control on the FLOW Landing page:
`http://SERVER IP ADDRESS`
2. If a warning displays about the connection not being private:
 - a. Click **Advanced**.
 - b. Click **Proceed to IP ADDRESS**.
 - c. On Mac OS systems you need security rights to accept the certificates.

3. Sign into Control using the default username and password (admin/changeme0479). The Password should be changed upon successful login.



4. Click on the **Sign in** button. FLOW Control opens in the Users tab (see [FLOW Control Desktop](#)). If you receive the message 'Your account is not enabled for use with FLOW Control' when signing in, ask your FLOW Administrator to enable your user account.

Activating a License

Before you can do anything in FLOW Control, you must activate a license.

Welcome to Flow Control

This is the first time you have connected to Control so the Flow Server needs to be licenced in order to continue.

If you have not already registered an EditShare ID please do so now <https://my.editshare.com/register> You will require your registered EditShare ID in order to sign in and activate your Flow Server.

By default, a 14 day trial licence will be applied when signing in. If you have purchased a licence (currently disabled) this will appear and be selectable when signing in.

You can licence your Flow server online by entering your EditShare ID below and clicking "login" If you do not have an internet connection present, please follow the instructions below for activating offline.

Online activation

Enter your EditShare Account details

EditShare ID or email <click to edit>

Password <click to edit>

Offline activation

Download Activation File

1. **Download** an activation file to USB stick (or similar)

Activate Licence

1. Use a workstation with internet access and login at my.editshare.com
2. Follow the instructions on my.editshare.com to upload the Activation File and download a Licence File back onto the USB stick

Upload Licence File

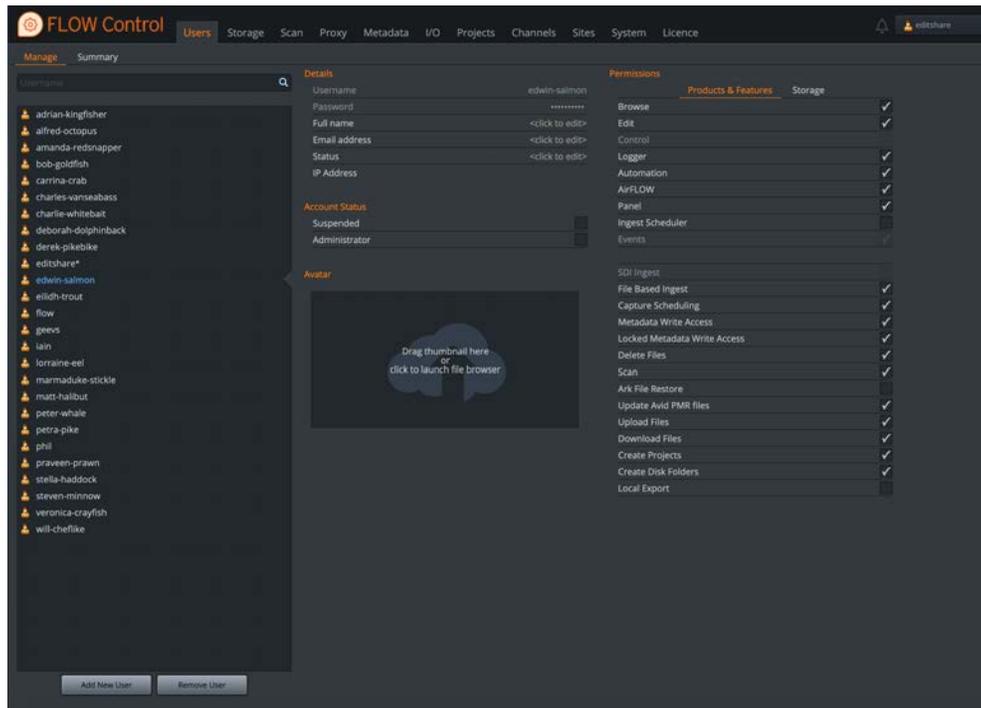
1. **Browse** for the Licence File downloaded from my.editshare.com
2. The licence will be validated and applied to the system

Click [here](#) to go back to the Flow Server landing page.

1. After signing in the Welcome panel displays where you must activate your license. You can either activate the license online if you have an internet connection, or alternatively you can activate the license offline.
2. Follow the on-screen instructions. You cannot close this popup until one of the activations is successful.
3. When you have licensed the server in one of the ways above, the pop up closes and another appears indicating you have successfully activated the license.

FLOW Control

A row of tabs at the top of the screen provides access to the FLOW Control functions:



Tab	Description
User	See Chapter 2: Managing Users .
Storage	See Chapter 3: Storage .
Scan	See Chapter 4: Scan .
Proxy	See Chapter 5: Proxy .
Metadata	See Chapter 6: Metadata .
I/O	See Chapter 7: I/O Ports .
Projects	See Chapter 8: Projects .

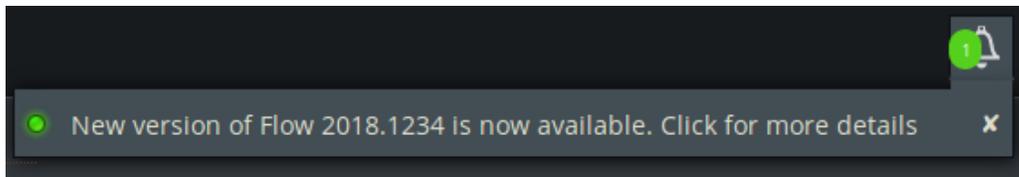
Channels	See Chapter 9: Managing Channels .
Sites	See Chapter 10: Sites .
System	See Chapter 11: System .
Licence	See Chapter 12: License .

System Notifications

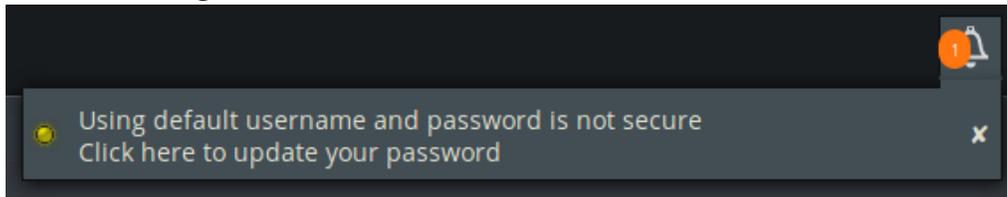
System Notifications are displayed in the top right corner of the desktop.

There are three types of System Notifications:

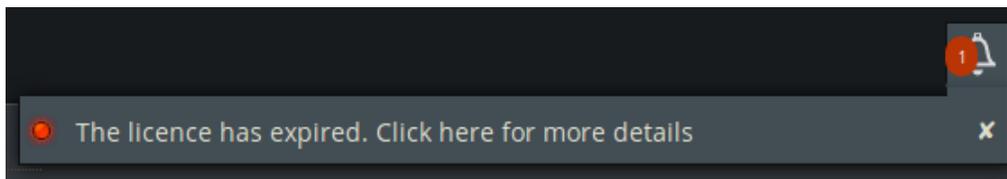
- Green - Notification:



- Amber - Warning:



- Red - Error:

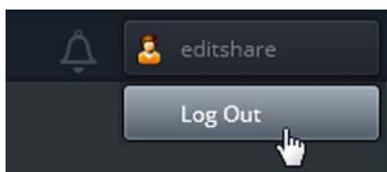


1. Click on the icon to view the System Notification.
2. Click on the Close icon (x) to close the notification.

Exiting FLOW Control

To exit FLOW Control, you can either close the web browser, or perform the following:

1. Click on the User button at the top right corner.



2. Click Log Out.

Chapter 2: Managing Users

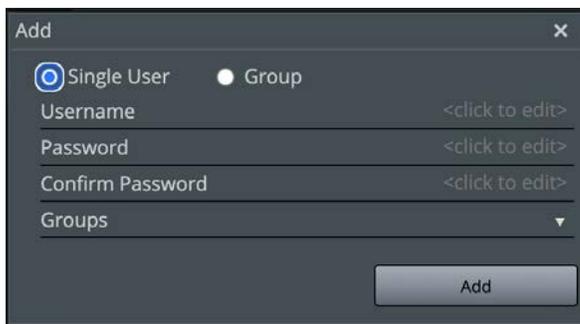
The FLOW Control Users tab allows you to see who is using the FLOW system, add/remove user accounts, and set access privileges for them.

Adding and Removing Users

Adding a New User

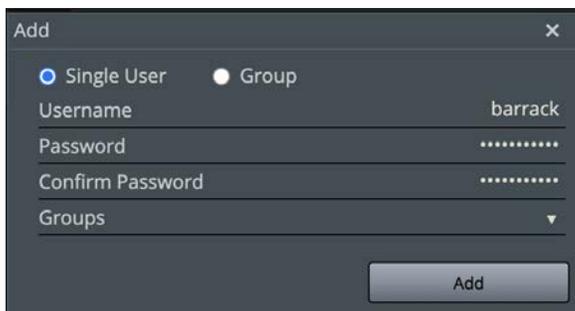
To add a new user:

1. Open FLOW Control to display the Users tab.
2. Click on the **Add New User** button, located below the list of users. The New user dialog box opens.



The screenshot shows a dark-themed dialog box titled "Add" with a close button (X) in the top right corner. At the top, there are two radio buttons: "Single User" (which is selected) and "Group". Below this are four input fields: "Username" with a placeholder "<click to edit>", "Password" with a placeholder "<click to edit>", "Confirm Password" with a placeholder "<click to edit>", and "Groups" with a dropdown arrow. At the bottom right of the dialog is a button labeled "Add".

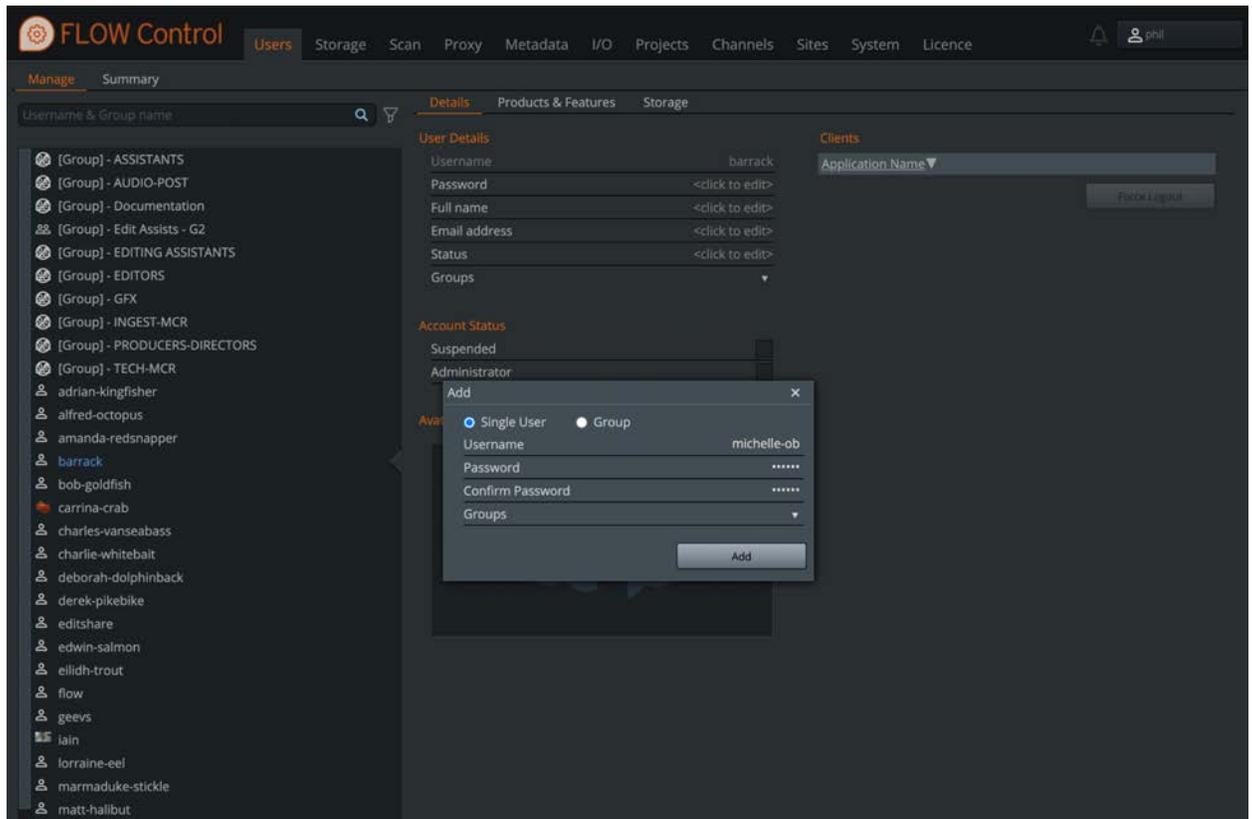
3. Type the name for the new user in the Username text box.
4. Type the password for the user in the Password and Confirm Password text boxes.
5. Add to a Group if required.



The screenshot shows the same "Add" dialog box as above, but now the "Username" field contains the text "barrack". The "Password" and "Confirm Password" fields are filled with a series of dots to indicate they are masked. The "Single User" radio button remains selected, and the "Add" button is still visible at the bottom right.

6. Click the **Add** button.

7. Set the privileges for the new user as described in [Setting User Privileges](#).



When integrated with EditShare Storage, any users created in FLOW are automatically created in EditShare Storage. Similarly, any users created in EditShare Storage will be available in FLOW. For more information about creating user accounts, see the EditShare Storage Administrator's Guide.

Restrictions on Usernames and Passwords

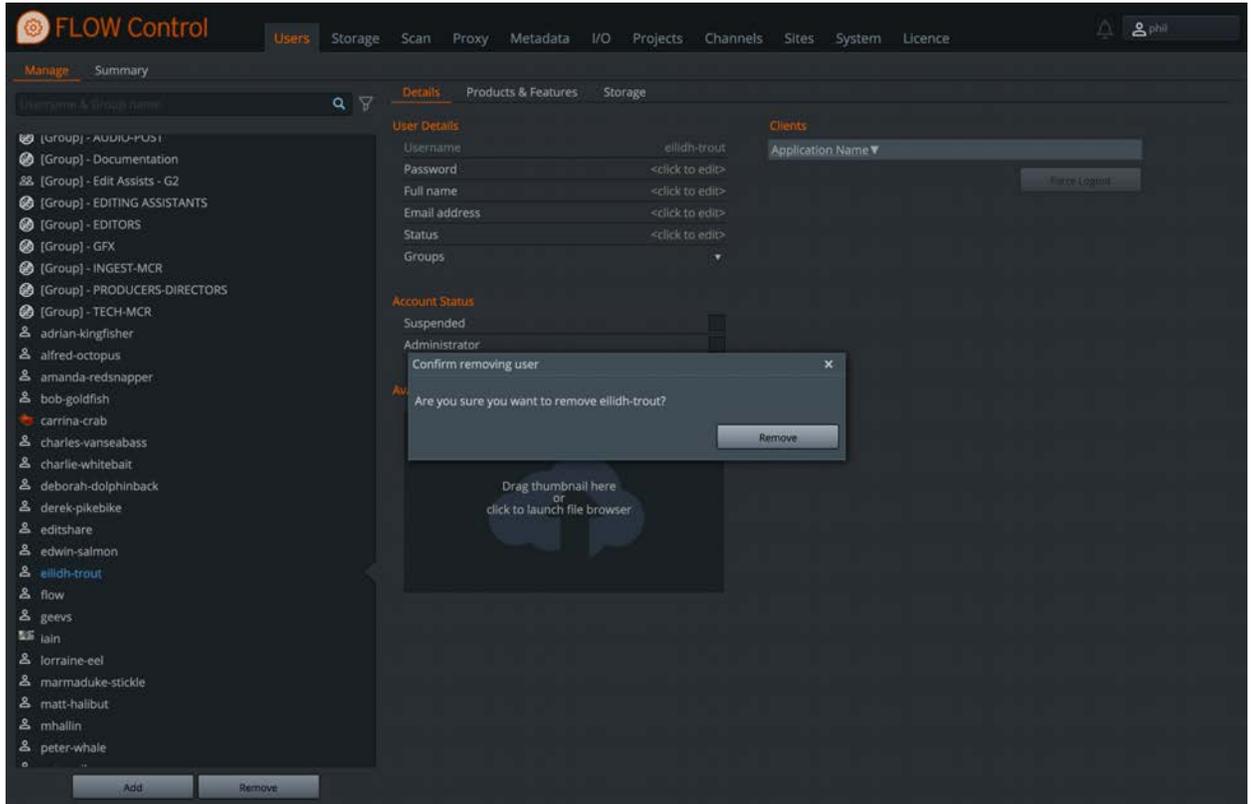
Usernames: must begin with a lowercase letter or number, may only contain letters, numbers, hyphens (-), underscores (_) and full stops (.).

Passwords: must not be the same as the username and a minimum of 6 characters long.

Removing a User

To remove a user:

1. Open FLOW Control to display the Users tab.
2. Click on the user name you want to remove to select it.
3. Click the Remove User button.



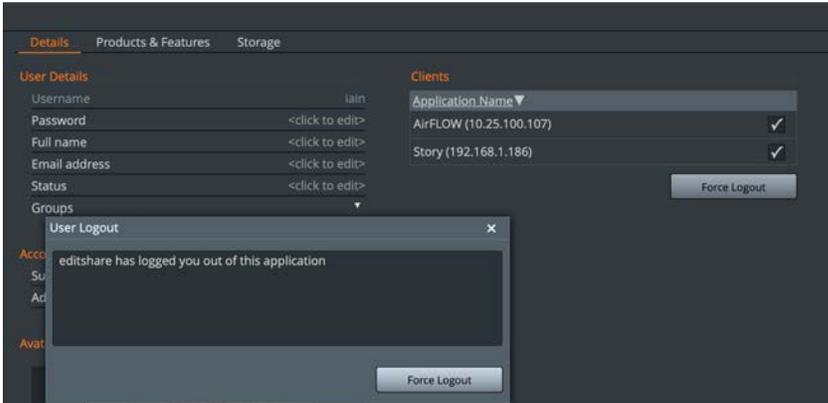
A dialog box opens, asking you to confirm the removal.

4. Click the **Remove User** button to remove the user.

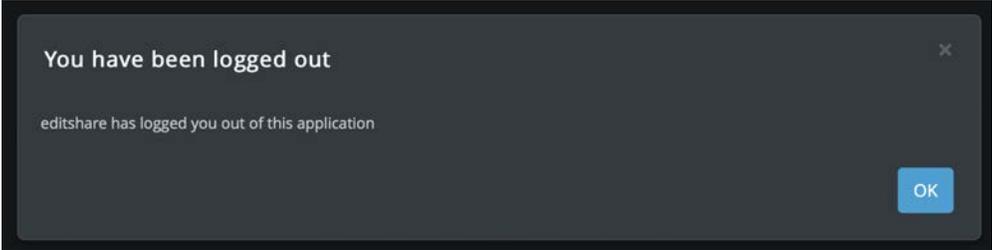
You can also remove a user's access to FLOW without deleting their account by setting the Suspend User option. See [Access to Products and Features](#).

User Force Logout

To Force Logout a user.



1. Select the user from the User table
2. Click on the details tab
3. Tick the application you wish to force the user out of.
4. Click Force Logout
5. Enter a custom message to the user if required.
6. Confirm the Logout
7. The user will be forced out of the client application and the Logout confirmation is displayed.

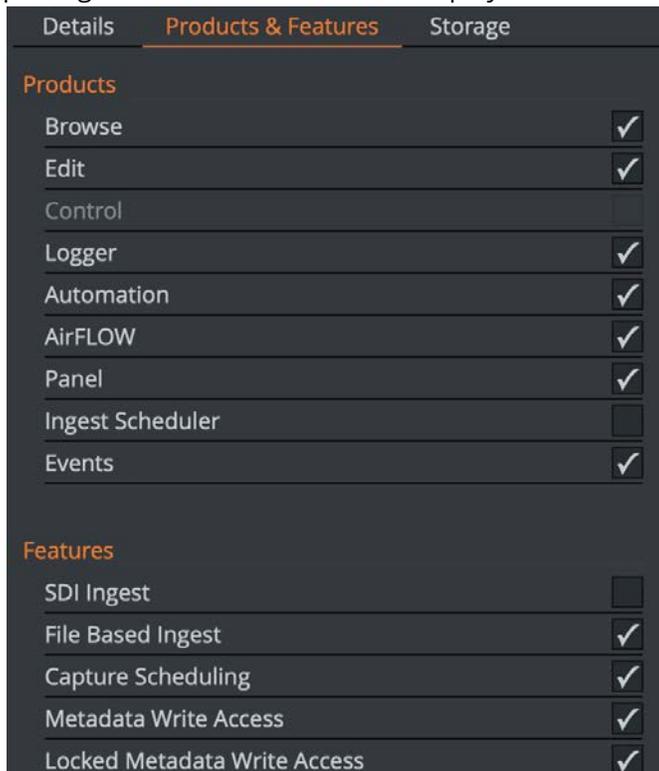


Setting User Privileges

Access to Products and Features

To configure user access to FLOW products and features:

1. Open FLOW Control to display the Users tab. The name of each user displays on the left hand side of the screen.
2. Click on a user name to select it for editing. Details for the currently selected user, including email address and status, display in the center panel.
3. Click on Products and Features in the Permissions area. The current product and feature privileges for the selected user is displayed.



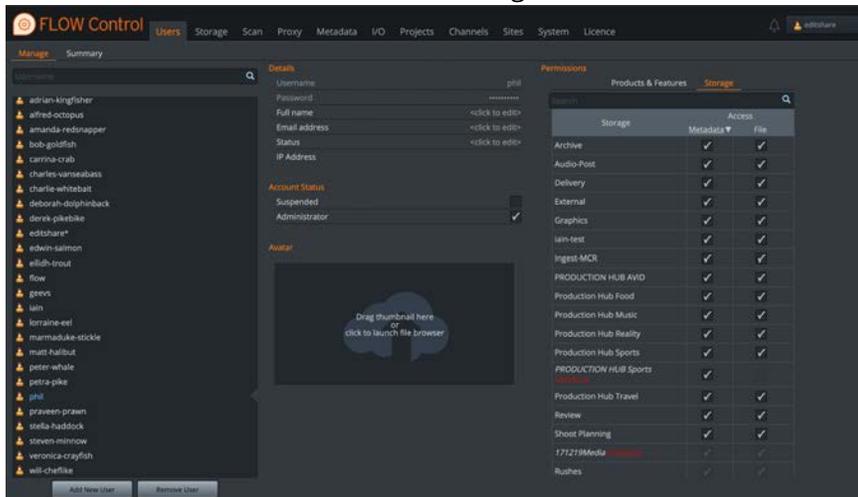
4. Click on a check box to alternatively select or deselect the FLOW product or feature for that user. These options include:
 - Browse - Allows/disallows user access to the browse tab in FLOW Story.
 - Edit - Allows/disallows user access to the edit tab in FLOW Story.
 - Control - Allows/disallows user access to FLOW Control.
 - Logger (Available in Integrated Systems Only) - Allows/disallows user access to FLOW Logger.
 - Automation - Allows/disallows user access to FLOW Automation. Refer to the *FLOW Automation Guide* for further information.
 - AirFLOW - Allows/disallows user access to AirFLOW.
 - Panel - Enables/disables the FLOW Panel for Premiere Pro & DaVinci Resolve.
 - Ingest Scheduler (Available in Integrated Systems Only) - Allows/disallows users to Schedule Ingests.

5. For each user, select or deselect permissions for the following features:
 - SDI Ingest (Available in Integrated Systems Only) - Allows/disallows user access to ingest SDI based signals.
 - File-Based Ingest - Allows/disallows user access to ingest file-based media.
 - Capture Scheduling (Available in Integrated Systems Only) - Allows/disallows users to schedule captures.
 - Metadata Write Access - Allows/disallows users to edit metadata fields. Deselecting this option restricts users to read-only access.
 - Locked Metadata Write Access - Allows/disallows users to edit locked metadata fields.
 - Delete Files - Allows/disallows user access to delete files.
 - Scan - Allows/disallows access to FLOW Scan. When enabled, only the Quick and Normal Scan options are available in FLOW Story. Only users with Administrator privileges are allowed to run Full Scan in FLOW Story.
 - Ark File Restore (Available in Integrated Systems Only) - Allows/disallows users to restore files from Ark archives.
 - Update Avid PMR Files - Allows/disallows FLOW Ingest and Scan to update the user's Avid PMR database files that are used by Avid products to track media assets. When enabled, Avid applications can see newly captured files without an Avid workstation scanning them first.
 - Upload Files - Allows/disallows uploading files to the FLOW server using AirFLOW and Story clients.
 - Download Files - Allows/disallows downloading files from the FLOW server using AirFLOW and Story clients.
 - Create Projects - Allows/disallows creation of FLOW Projects.
 - Create Disk Folders - Allows/disallows creation of Disk Folders.
 - Local Export - Allows/disallows FLOW Story users to publish/export timelines to local disk.
6. (Optional) Suspend the user from all access by selecting that user in the Suspend column.
7. (Optional) Allows/disallows Administrator privileges. Users with Administrator privileges can run the FLOW Control client application.

Access to Storage Spaces

To access storage spaces you must have previously added storage. See [Adding a Storage Connection](#). You can only select the users for the storage if the storage space has the public check-box unselected on the storage tab. See [Adding Users to Storage Spaces](#). To configure user access to FLOW Storage Spaces:

1. Open FLOW Control to display the Users tab. The name of each user is displayed in the left hand side of the screen.
2. Click on a user name to select it for editing.



Details for the currently selected user, including email address and status, display in the center panel.

3. Click on Storage in the Permissions tab. A list of Storage Spaces the selected user can access is displayed.

Permissions

Products & Features Storage

Search

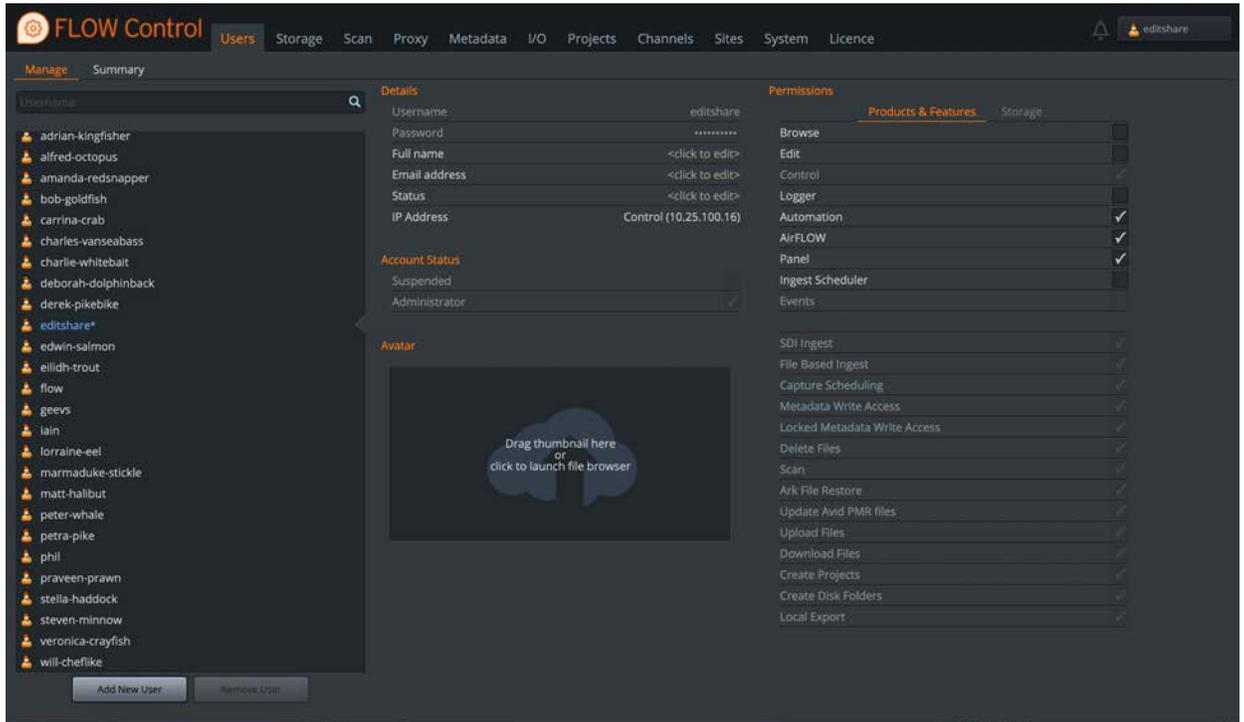
Storage	Access	
	Metadata ▼	File
Archive	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Audio-Post	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Delivery	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
External	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Graphics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
lain-test	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ingest-MCR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRODUCTION HUB AVID	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Production Hub Food	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Production Hub Music	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Production Hub Reality	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Production Hub Sports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<i>PRODUCTION HUB Sports (deleted)</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Production Hub Travel	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Review	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Rushes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Shoot Planning	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<i>171219Media (deleted)</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

- Click on a checkbox to alternatively select or deselect the storage space for that user.

Displaying Logged In Users

To view who is logged in on your FLOW system, and which FLOW applications they are currently using:

1. Open FLOW Control to display the Users tab. The name of each user is displayed in the left hand side of the screen. Your login is identified by an asterisk (*) displayed to the right of your user name.



2. Details for the currently selected user, including email address and status, display in the center panel. If the selected user is logged in, the IP Address of that user displays in the IP Address field. All FLOW applications currently in use by that user display to the left of the IP Address.

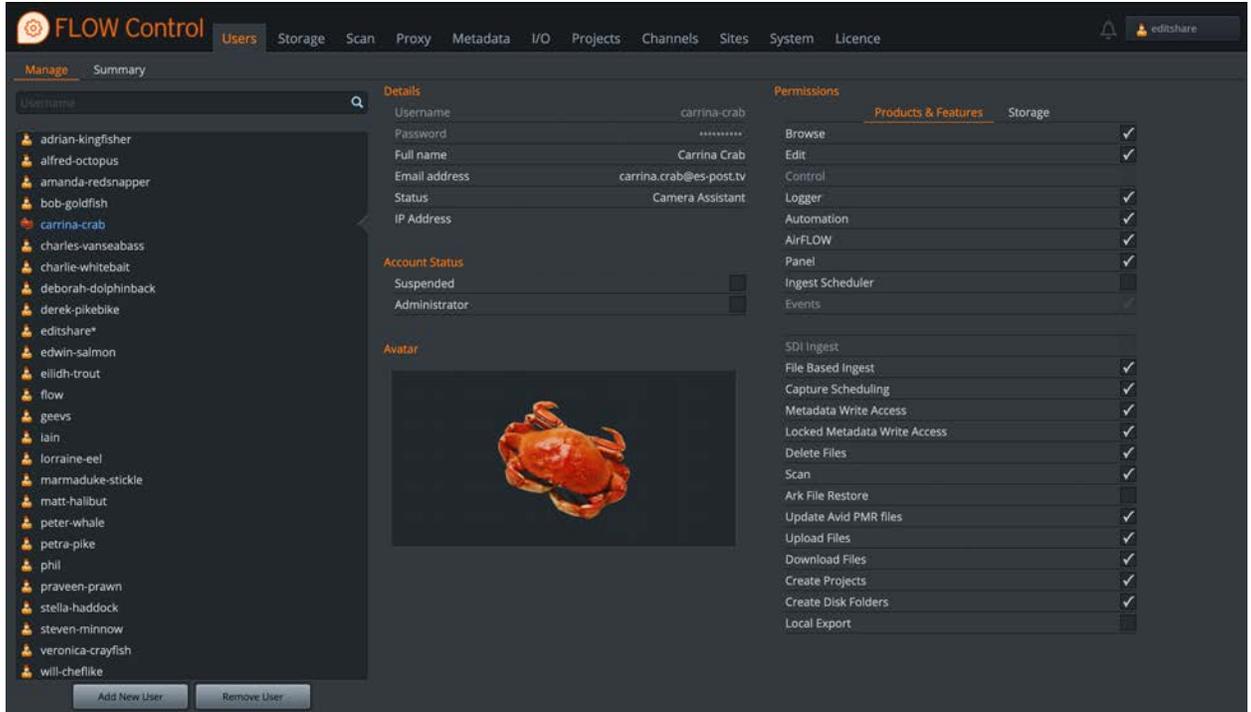
The default Administrator account 'admin' displays as a user.

Setting User Profiles

Each FLOW client displays the name of the logged in user together with an avatar at the bottom of the screen. Users can click on their name or avatar and update their profile, including an alias or nickname, email address, and avatar. They can also add any relevant text, for example, the status of a project they are working on, or when they are on holiday.

As an administrator, you can also modify each user's profile as follows:

1. Open FLOW Control to display the Users tab.



2. Select the user you want to modify by clicking on the user's name in the list box on the left hand side. The User's profile displays in the Details panel.
3. Enter the alias or alternative name you want to use in the 'Full name' text box.
4. Optional: Enter the user's email address in the 'Email address' text box.
5. Optional: Enter the user's status in the Status text box.
6. To change a user's avatar:
 - a. Click inside the cloud icon (or on the avatar if one is already loaded), the File Manager opens. Navigate to the file you want to use and select it. You can use any JPEG file.
 - b. Drag a file from your File Manager onto the cloud icon. The file displays in the Avatar display area.

Filtering the User Display

If you have a large number of users on your system, you can use the built in Filter to find specific users. To do so, click inside the Filter box at the top left corner of the display, and then type all or part of the user's name you require.



Only user names containing the text string you type display. For example, typing ie would return user names containing that string - bernie, charlie, and leslie, but not bernard, charles, and lesley.

Chapter 3: Storage

Note: If you are using EditShare storage, refer to the EditShare Storage Admin Guide to add media space, as adding storage to EditShare Storage is not added in the same manner as in FLOW.

You can add storage locations to FLOW. Once configured, you can use FLOW Scan to catalog and create proxies for the material in the third-party storage location. You can then browse and search the material that has been scanned.

Support for Storage Environments

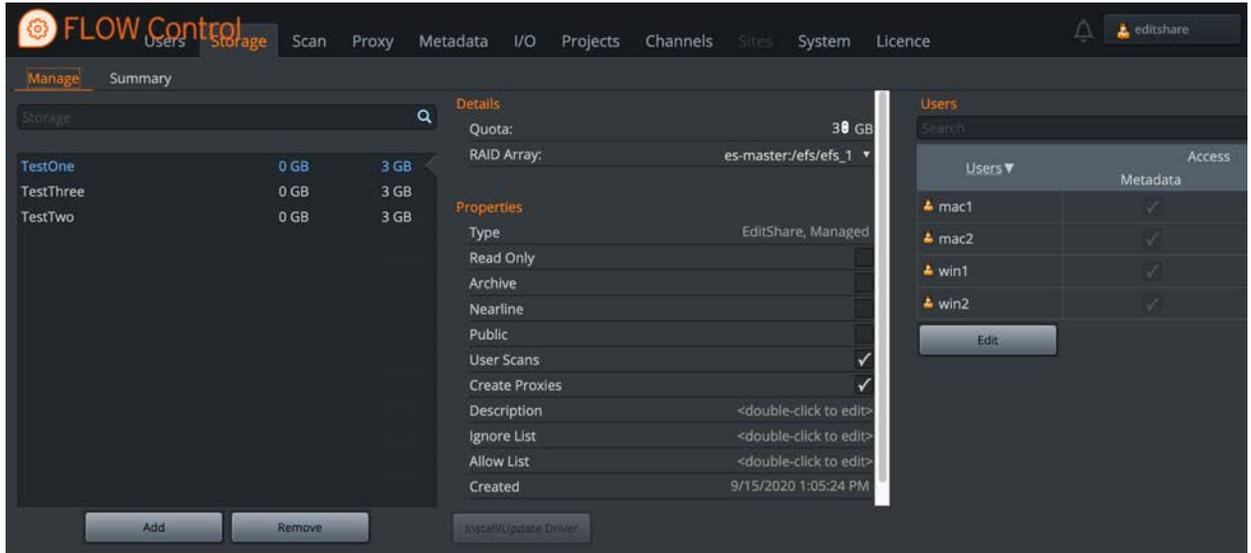
FLOW supports the following storage environments:

- **EditShare** - full integration with EditShare's EFS Storage. New EditShare media spaces can be created from FLOW and any spaces created in EditShare are automatically sync'd with FLOW
- **Amazon Glacier** - Archive to and restore from Amazon Glacier vaults in both FLOW Story and Automation.
- **Amazon S3** - Archive and restore to and from S3 buckets of all storage classes "General Purpose", "Infrequent Access" and "Archive". In addition you can move or copy assets between these buckets and storage classes.
- **Archiware** - Archive and restore to and from a server from a particular point in time.
- **AVID ISIS/NEXIS** - Workspaces can be used natively by FLOW for all the usual operations such as scanning, folder watching, proxy creation, copy/move, transcode to/from etc.
- **Azure Files** - Public cloud file storage that delivers secure, Server Message Block (SMB) based, fully managed cloud file shares that can also be cached on-premises for performance and compatibility.
- **BackBlaze** - A data storage provider that offers two products: B2 Cloud Storage; an object storage service similar to Amazon's S3. Computer Backup; an online backup tool that allows Windows and macOS users to back up their data to offsite data centers.
- **Generic S3** - Archive and restore to and from S3 buckets of all storage classes "General Purpose", "Infrequent Access" and "Archive". In addition, we will be able to move or copy assets between these buckets and storage classes.
- **Masstech FlashNet** - A media object storage application, a content archive, storage and life-cycle management system.
- **Windows/SMB** - Support for any SMB/CIFS share on standard Storage. Including, but not limited to:
 - Isilon
 - Facilis
 - Synology
 - QNAP
 - LumaForge
 - Quadrus
 - Elements

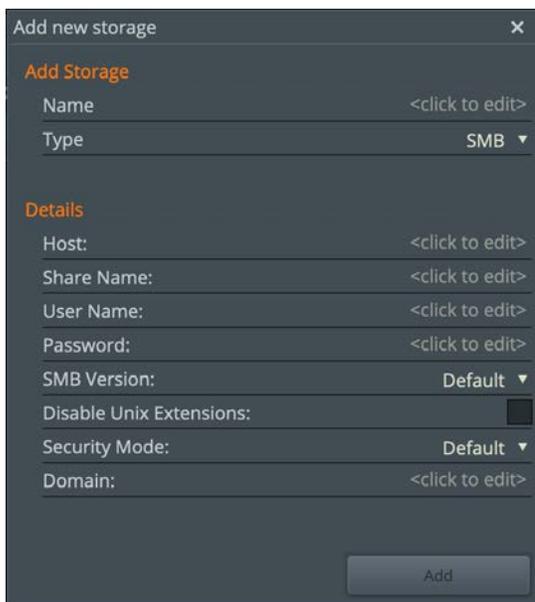
Adding a Storage Connection

The Storage tab is where you add your storage to the system so that FLOW can access it. For information on preparing Avid Storage, see the FLOW Storage Guide.

1. From within FLOW Control, click on the Storage tab.
2. Click the Manage sub tab.



3. Click Add.
4. The Add new storage dialog is displayed.



5. Enter the name of the storage connection.
6. Select the type of storage you are adding.
7. Enter the connection mount details for your storage.
8. Click Add.

Adding Users to Storage Spaces

You can add specific users to storage spaces if the public option for that storage space is not selected.

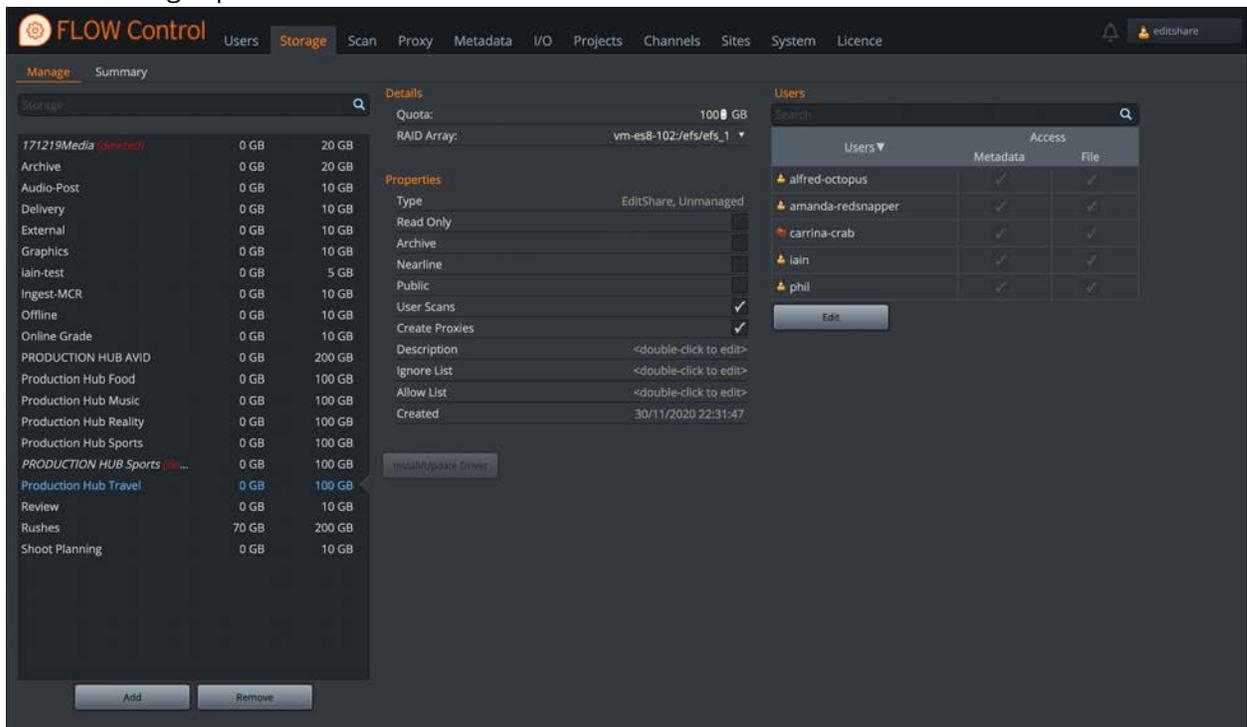
“Metadata” and “File” access provide a method to control the level of access users have to Storage.

- Metadata - users can browse storage, view proxies, and edit metadata.
- File - users have access to the files within the storage.

This allows administrators to allow specific users access to FLOW, while ensuring that they cannot access the Storage. For example:

- To ensure specified users cannot access the original files to make copies or delete them.
- A storage space has been archived to tape, and the original source storage space has been deleted. If a user has been given metadata access they can view the media proxy files and alter metadata and most importantly potentially trigger a restoration of media from archive to a new storage space.

1. From within FLOW Control, click on the Storage tab.
2. Click the Manage sub tab.
3. Select a storage space that does not have the Is Public box selected.



If users have already been added to this storage space, their names are displayed. Alternatively, if no users have been added this list is empty.

Click the Edit button. A full list of users is displayed.



The screenshot shows a dark-themed interface titled "Edit Users". At the top left is a search bar with the text "Search" and a magnifying glass icon. Below the search bar is a table with three columns: "Users" (with a dropdown arrow), "Access", and "File". The "Access" column is further divided into "Metadata" and "File". The table lists 18 users, each with a fish emoji icon and two checkboxes for access. A "Done" button is located at the bottom left of the table.

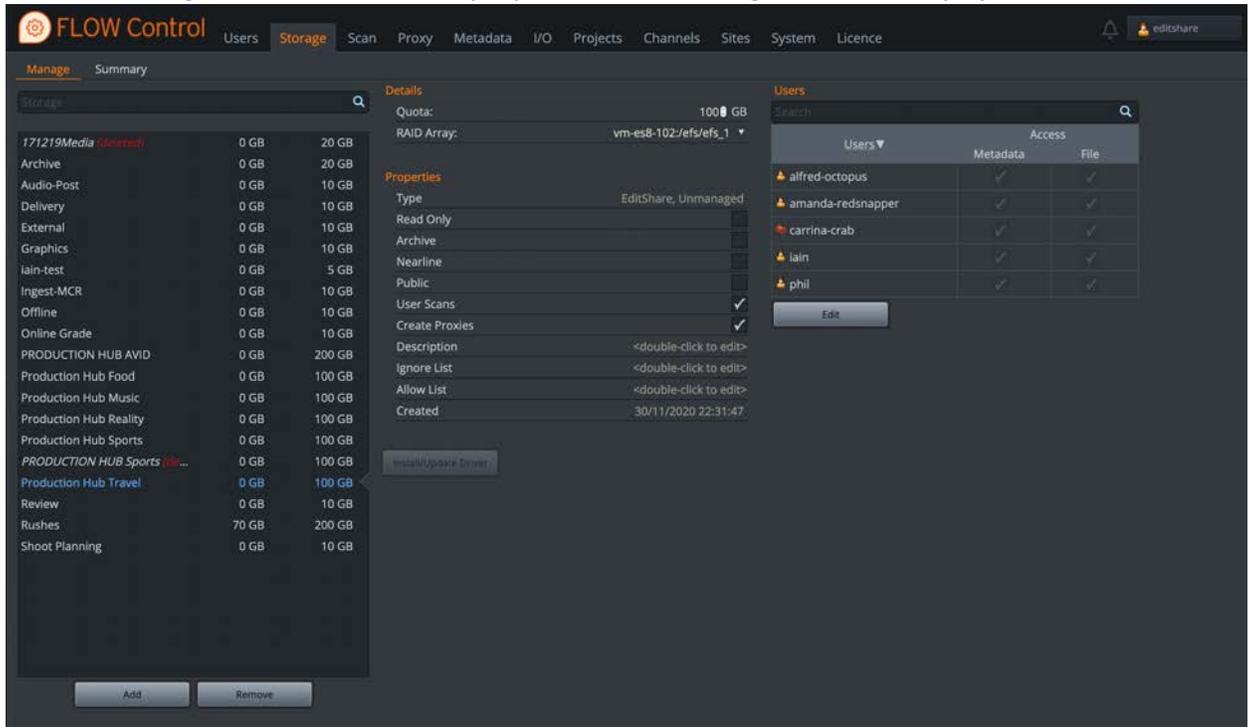
Users ▼	Access	
	Metadata	File
🐟 adrian-kingfisher	<input type="checkbox"/>	<input type="checkbox"/>
🐟 alfred-octopus	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
🐟 amanda-redsnapper	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
🐟 bob-goldfish	<input type="checkbox"/>	<input type="checkbox"/>
🦀 carrina-crab	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
🐟 charles-vanseabass	<input type="checkbox"/>	<input type="checkbox"/>
🐟 charlie-whitebait	<input type="checkbox"/>	<input type="checkbox"/>
🐟 deborah-dolphinback	<input type="checkbox"/>	<input type="checkbox"/>
🐟 derek-pikebike	<input type="checkbox"/>	<input type="checkbox"/>
🐟 edwin-salmon	<input type="checkbox"/>	<input type="checkbox"/>
🐟 eilidh-trout	<input type="checkbox"/>	<input type="checkbox"/>
🐟 flow	<input type="checkbox"/>	<input type="checkbox"/>
🐟 geevs	<input type="checkbox"/>	<input type="checkbox"/>
🐟 iain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
🐟 lorraine-eel	<input type="checkbox"/>	<input type="checkbox"/>
🐟 marmaduke-stickle	<input type="checkbox"/>	<input type="checkbox"/>
🐟 matt-halibut	<input type="checkbox"/>	<input type="checkbox"/>
🐟 peter-whale	<input type="checkbox"/>	<input type="checkbox"/>
🐟 petra-pike	<input type="checkbox"/>	<input type="checkbox"/>

Select the check box that corresponds to the name of the user that you want to select and define their access privilege.

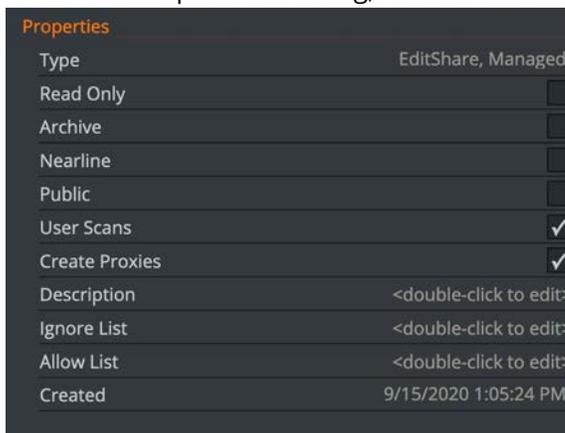
When finished, click the Done. The user name that you just selected is now listed.

Configuring the Storage Connection

1. From within FLOW Control, click on the Storage tab at the top of the page.
2. Click the Manage sub tab. Details and properties of the storage areas are displayed.



3. Under the Properties heading, click the boxes for the options you require:



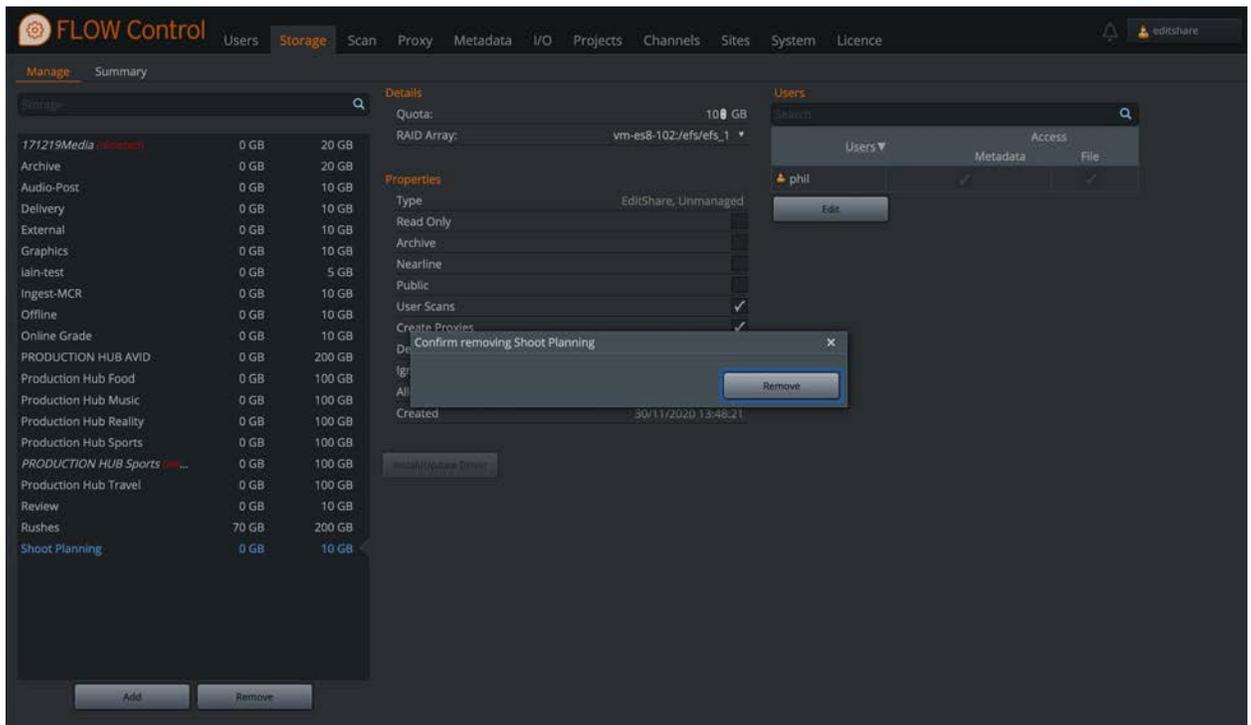
- Type - Managed or unmanaged.
- Read only - The storage contents can be accessed and read, but cannot be changed.
- Archive - Media on the storage device is treated as archived material. Clips and subclips display the 'A' archive icon.
- Nearline - The storage represents a compromise between online storage (supporting frequent, very rapid access to data), and offline storage/archiving (used for backups or long-term storage, with infrequent access to data).
- Public - The storage is available to all FLOW user accounts.
- User Scans - The storage is user scannable.

- Create proxies - Enables proxy creation for media contained within the storage space during FLOW scan.
- Description - additional notes on a storage space
- Ignore List - A list of items to be ignored during FLOW scans. Any files matching the pattern will be ignored.
- Allow List - A list of items to be allowed during FLOW scans. Any files not matching the pattern will be ignored.
- Created - The date the storage space was created in the system

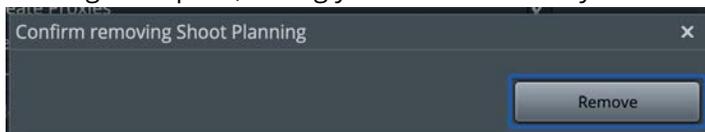
Removing a Storage Connection

To remove a connection to a storage device:

1. From within FLOW Control, click on the Storage tab.
2. Click the Manage sub tab.
3. From the list in the left hand panel, select the storage connection that you want to remove and click Remove at the bottom of the list.



4. A dialog box opens, asking you to confirm that you want to remove the connection.



5. Click the Remove.

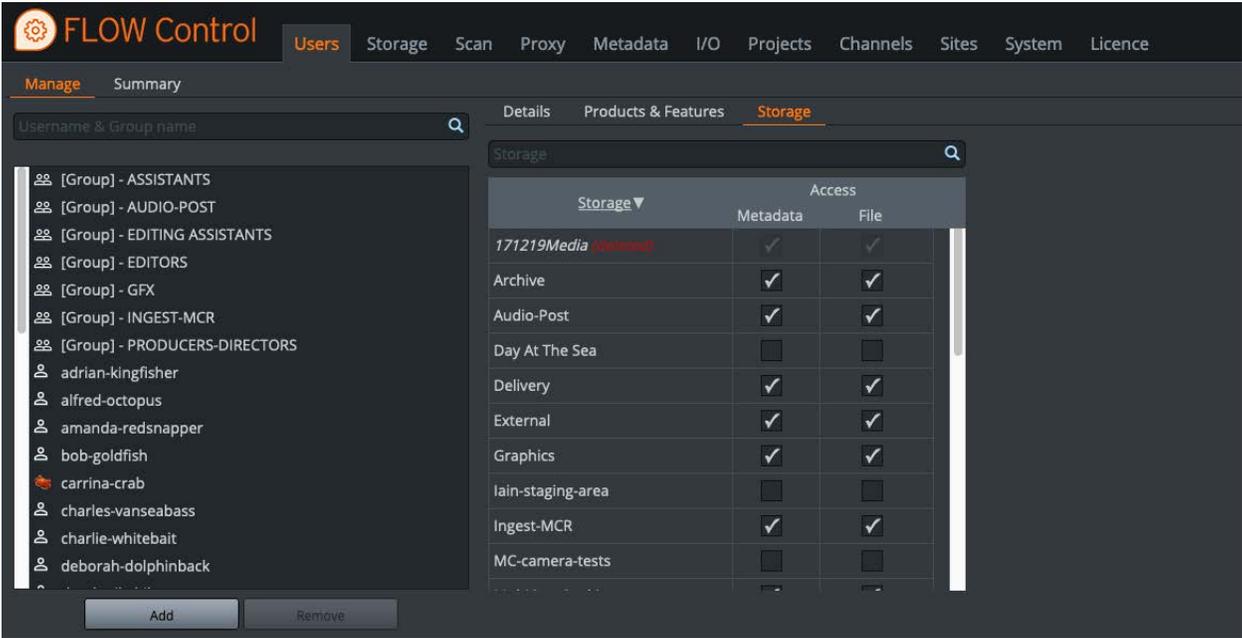
Creating and Configuring User Groups

User Groups, contained within FLOW Control, are available for products, features, permissions, storage, metadata, projects and channels.

Creating a User Group

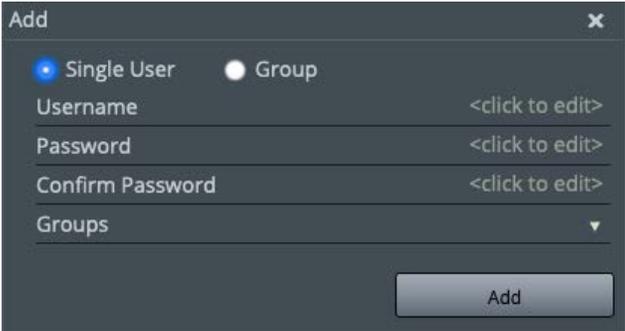
To create and configure a user group:

1. Log into FLOW Control.
2. Navigate to the **Users** tab, **Manage** section.

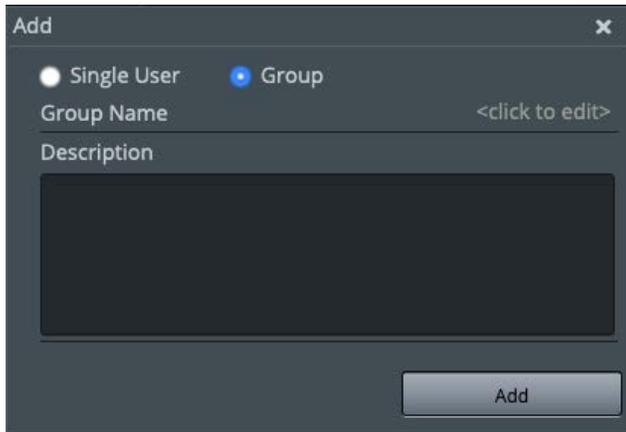


User Groups are designated by the dual-person icon.  A single person icon is associated with a single user.

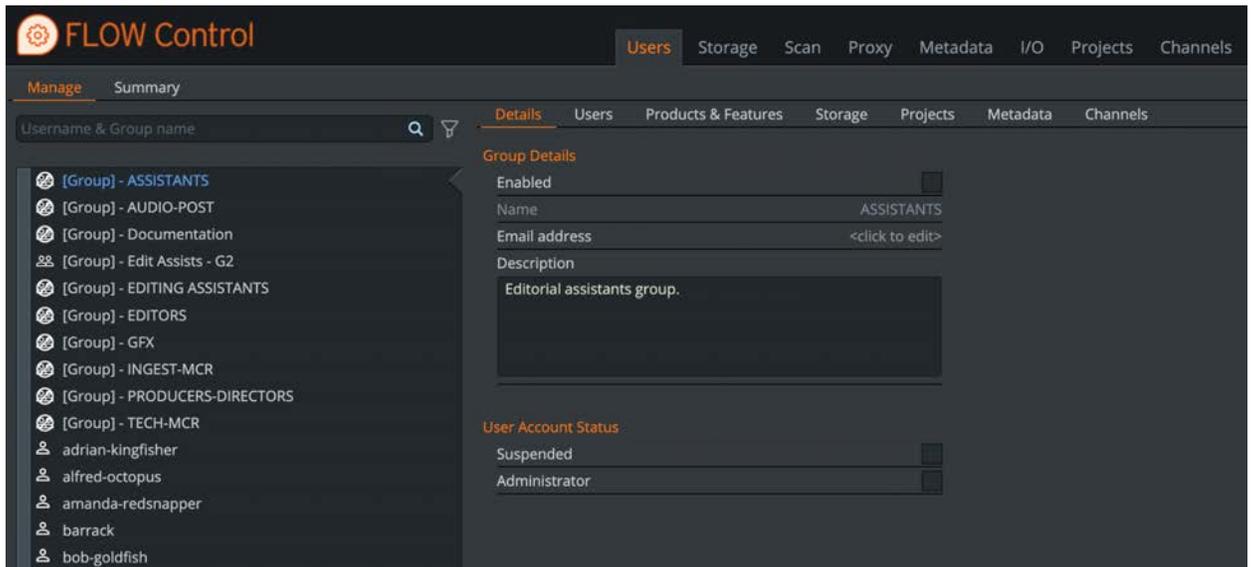
3. To add a new user group, click **Add**. An Add popup box is displayed.



- Click on the Group radio button. The Add popup changes to reflect a new group.



- Enter the desired **Group Name** and optionally a description that defines the group. When finished, click **Add**. The Group Name is added to the Manage list (seen highlighted in blue). For example:

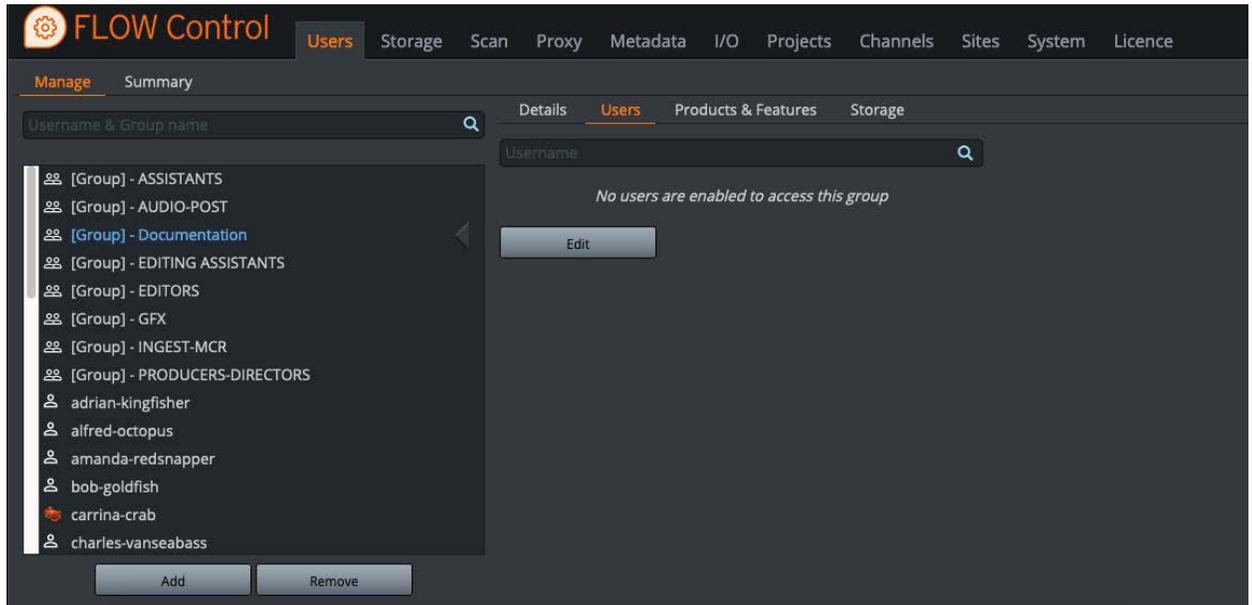


From within this window you can:

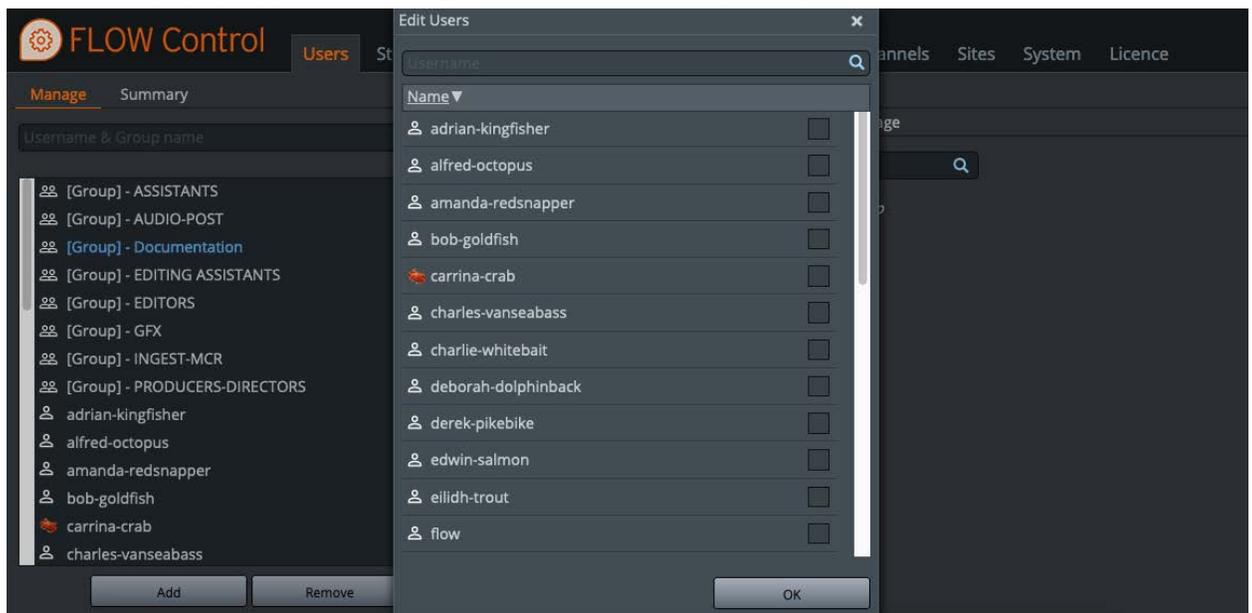
- Enable: enables the group and applies the permissions to group members.
- Enter an email address that will be used for new release notifications.
- Description: add a description of the group.
- User Account Status
 - Suspend: Suspends all user group member accounts through inheritance.
 - Administrator: Makes all user group members administrators through inheritance.

Adding Users to a Group

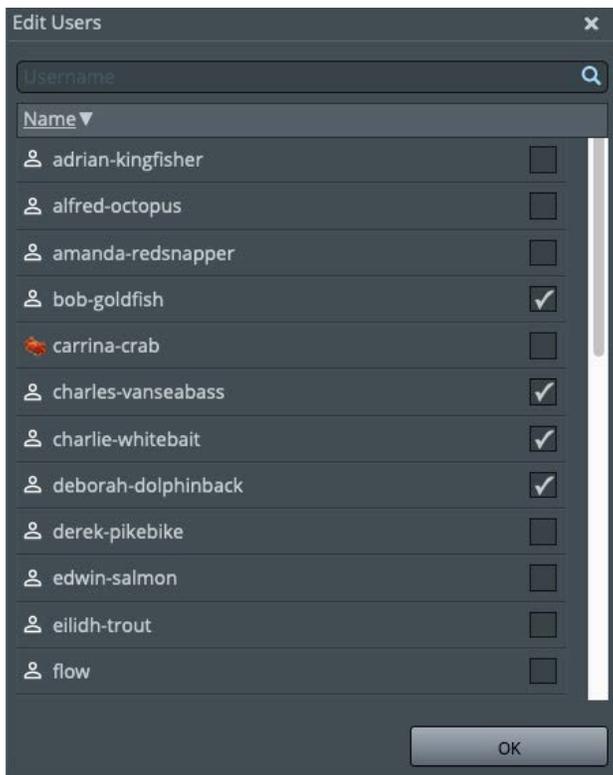
1. To add users to this group, select the Users tab.



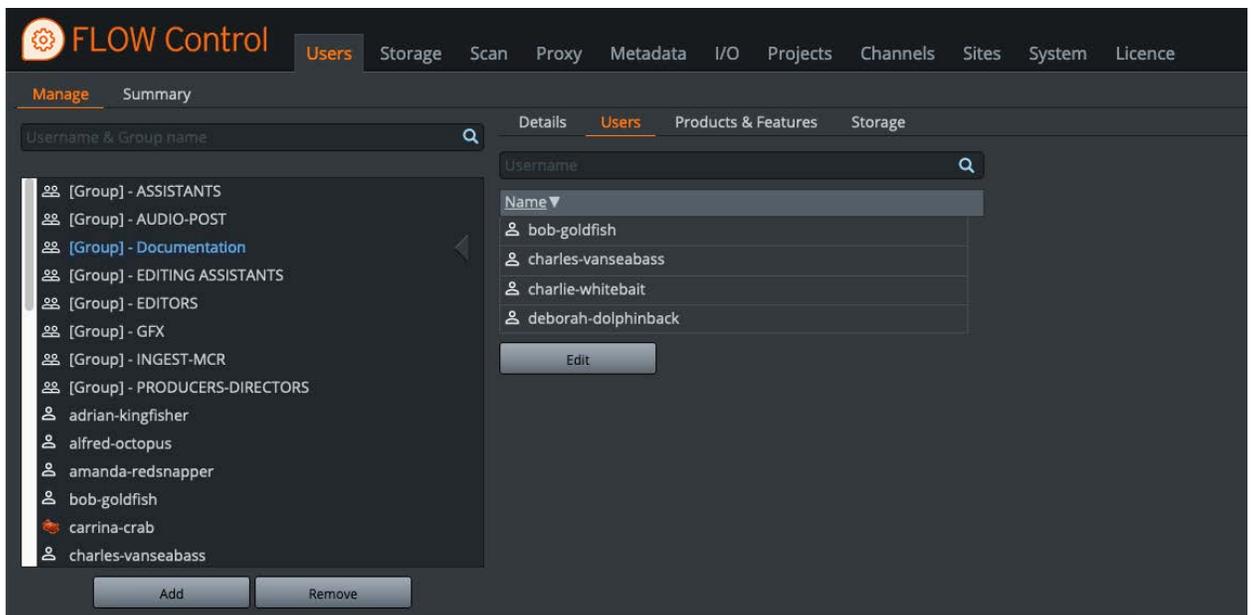
2. Click **Edit**. A popup appears showing all users available on your system.



3. Select the desired users and then click **OK**.



The selected users are added to the group. For example:



To remove a user or add additional users, click **Edit** and make the necessary changes.

Permissions Model

FLOW uses a permissions model based on the ability to 'Allow' access to a resource.

A user can be granted permission using:

1. Inherited permission from a Group membership.
2. Explicit permission on an Individual.

UI Conventions

Within FLOW, we use the following conventions to indicate a user's access

- XXX User has no access:
 - If checked, a user will get explicit permission.
- User has inherited access.
 - If checked, a user will also get explicit permission.
- User has explicit access.
 - If unchecked, the user will no longer have explicit access.
 - If they have inherited access the checkbox will be .
 - If they do not have inherited access, the checkbox will be .

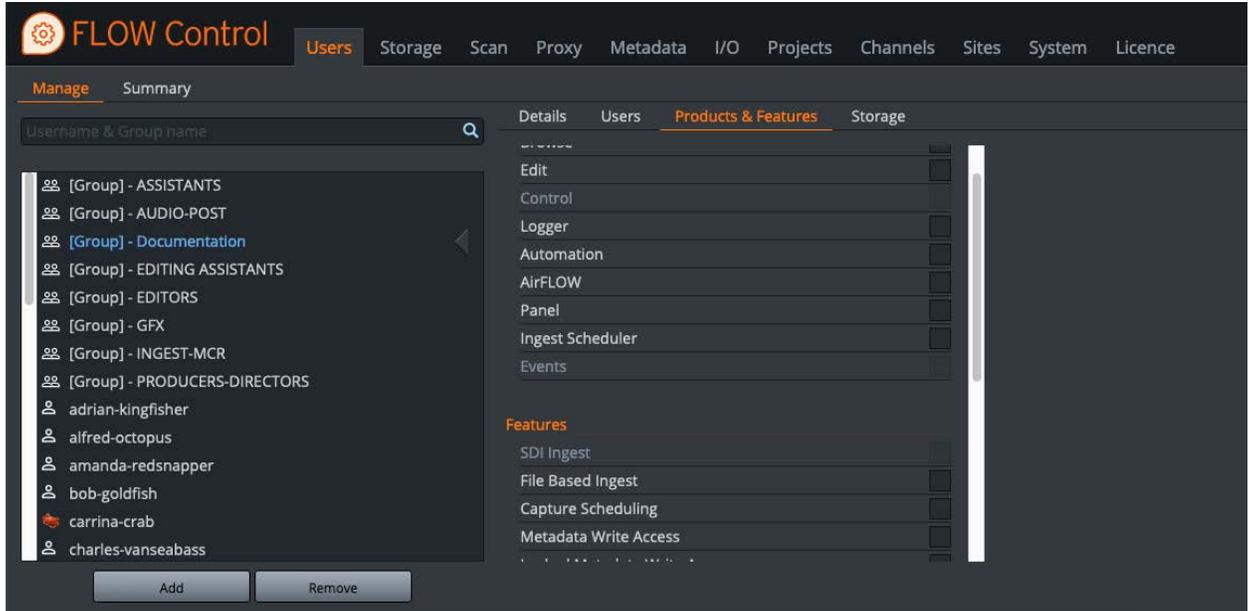
Examples

Example 1: adrian-kingfisher & bob-goldish are members of the Assistants group. The Assistants group has permission for AirFLOW only. When viewing the user Adrian & Bob the 'inherited allowance' permission state is displayed by the box inside the checkbox.

Example 2: An administrator wants to give adrian-kingfisher Explicit Allowance to AirFLOW. The administrator can modify the access from Inherited Allowance to Explicit by checking the box in Adrian's user account. The checkbox will now be checked.

Enabling Inherited Permissions for Products and Features

1. To enable the inherited group permissions for products and features, select the **Products & Features** tab. The available Products and Features are displayed.

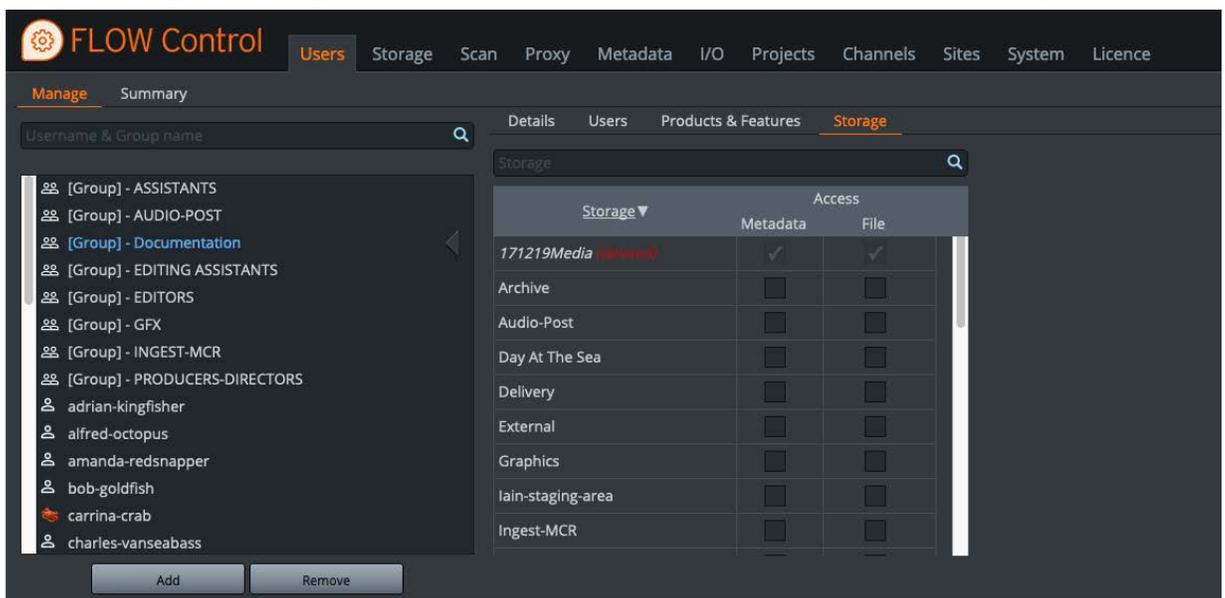


2. Select the desired Products and Features. When selected the Products and Features are enabled and all members of the group have inherited permissions.

Defining Group and Individual Storage Permissions

By using this feature, the group is given inherited storage permissions. Once defined, individual users can be defined to have no permissions, group inherited permissions, or explicit permissions.

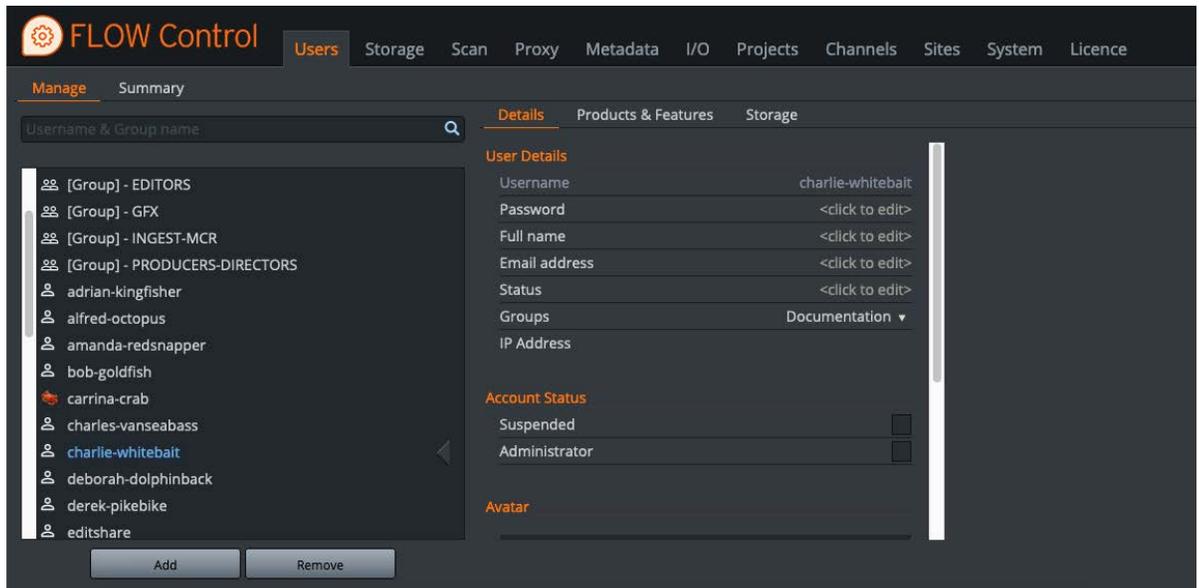
1. To define the group storage access permissions (none or inherited), select the **Storage** tab.



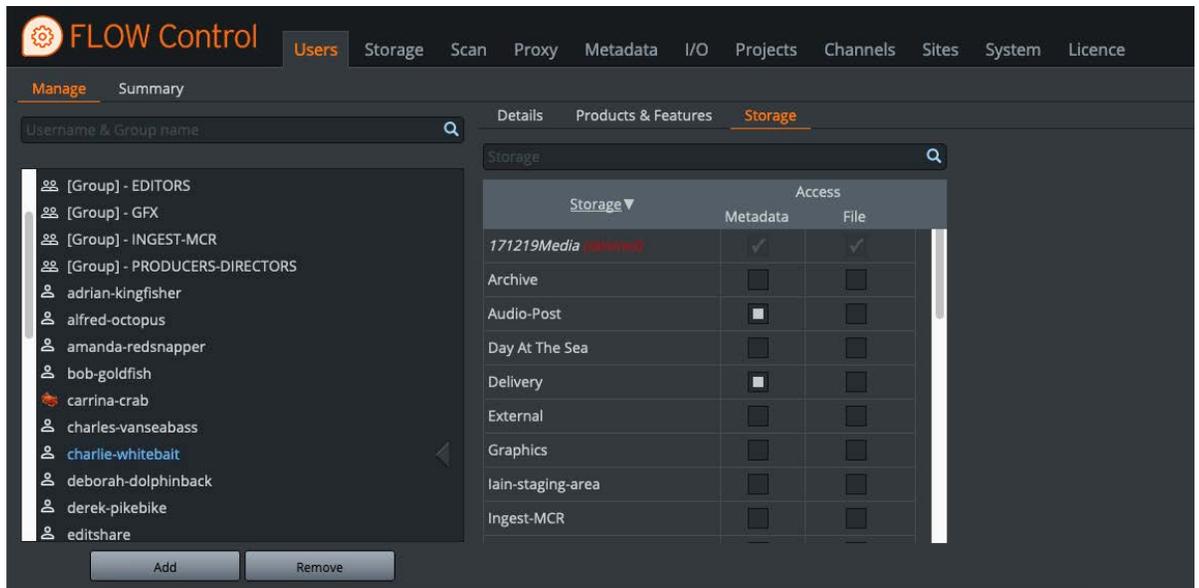
2. Define the group permissions, as follows:
 - No Permissions - Leave box un-selected.
 - Inherited - Check the desired box. This sets the permissions for all users in the group.

You can now define an individual's storage permissions. To do this:

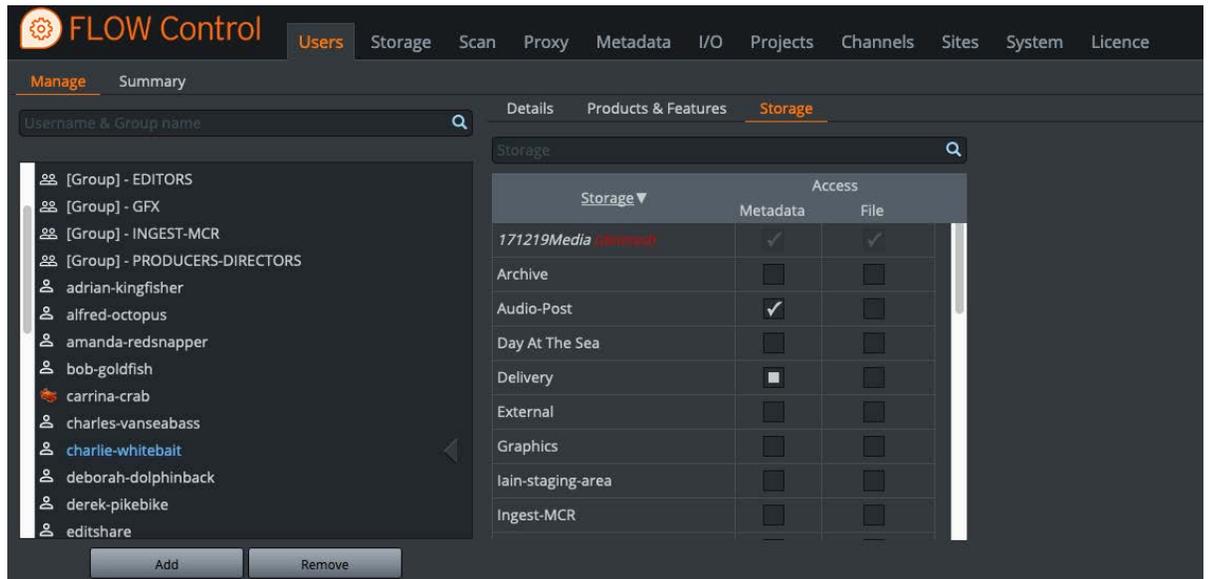
- A. Select the desired user from the group. For example, charlie-whitebait.



- B. Select the Storage tab.



- C. From within this page, this user can be given inherited permissions (designated with a box) or Explicit (designated with a check) .



NOTE: If a user is granted Explicit permission, they maintain that permission, even if the group they belong to is modified or deleted.

Sync with EditShare Group Limitations

In this release there is a difference in group models between ES Storage and FLOW groups, the following are limitations of the User Group feature, regarding EditShare Storage permissions:

- **FLOW's Group Modeling:** Users may have File/Metadata Explicit permission or File/Metadata Inherited permission (from groups it belongs to) on Media Spaces.
- **EditShare Storage's Group Modeling:** Group is a bulk way to apply permissions for a set of users on Media Spaces, which means there is no Inherited definition on EditShare Storage. Creating Explicit permission for a group on a media space also means creating Explicit permission for all users in that group to that media space.

FLOW - ES Storage Space Synchronization Latency

When FLOW is in the Integrated mode with an ES Storage system:

FLOW is dependent on synchronization with ES storage API to apply changes in Users/Groups/Spaces changes on the Storage side. A small delay is expected when creating users/groups on either the ES Storage or FLOW side, as the system synchronizes the changes.

FLOW/ES Storage Group Limitation

There are limitations of the Inherited permission functionality in FLOW when Integrated with ES Storage:

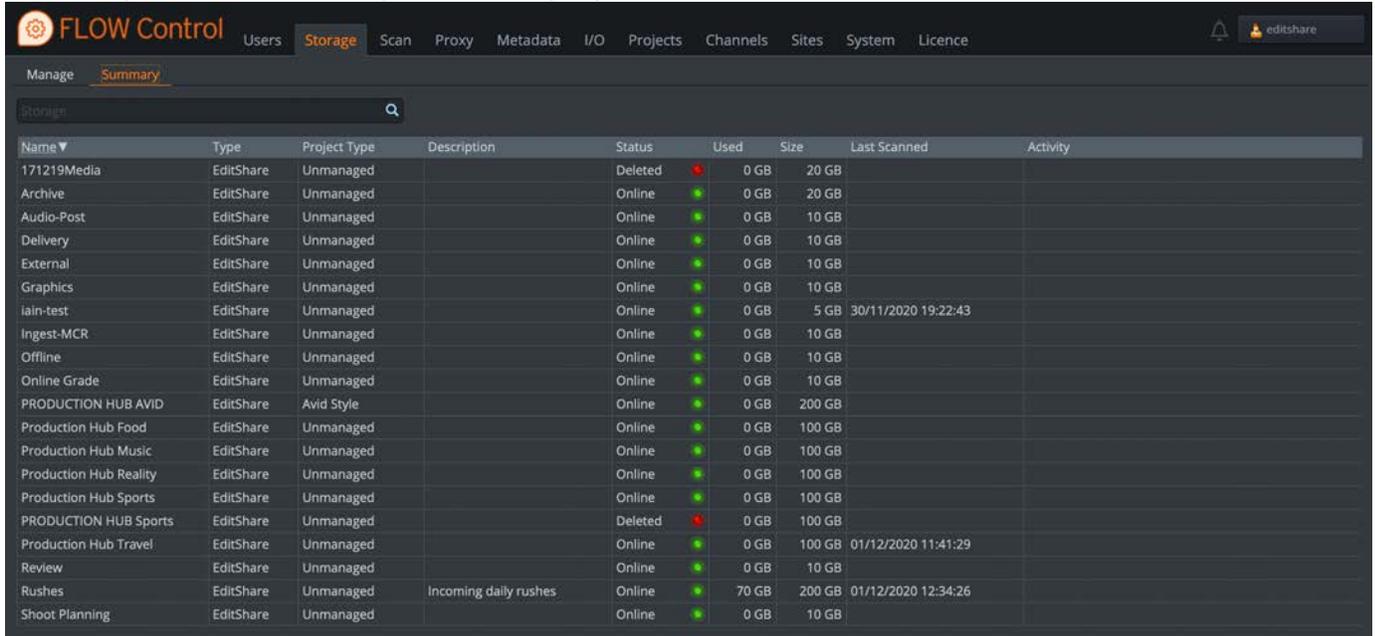
1. In FLOW, users never have File Inherited permission (square box check) with EditShare spaces. In the case that an administrator provides a user with File Inheritance permission with an EditShare space via the FLOW Control Web UI, will be updated to Explicit (checked) when the sync occurs. This is currently a limitation of the Storage API which will be resolved in further releases.

NOTE: METADATA permission on EditShare spaces, Metadata/File permission on 3rd-parties spaces still respect the FLOW User Group model and requirements.

2. In FLOW, removing Group File permission on an EditShare spaces also removes File Inherited permission of all users in that group from the space (an effect of the "bulk apply group model" in ES Storage)
3. On FLOW, deleting a Group that has File permission on an EditShare space also removes File Inherited permission of all users in that group from the space (an effect of the "bulk apply group model" in ES Storage).
4. ES does not have a "suspended" user or group definition, therefore, "suspended" user/group only takes effect on FLOW Clients. However, the following applies to users:
 - A suspended user can mount linked ES spaces using EditShare Connect, which connects to Storage.
 - A user with Inherited permissions with a ES space from a "suspended" group can still mount ES spaces using EditShare Connect.

Summary View

1. From within FLOW Control, click on the Storage tab.
2. Click the Summary sub tab.
3. A global overview listing all the storage spaces and status.



The screenshot shows the FLOW Control interface with the Storage tab selected. The Summary sub-tab is active, displaying a table of storage spaces. The table has columns for Name, Type, Project Type, Description, Status, Used, Size, Last Scanned, and Activity. The status column uses green dots for 'Online' and red dots for 'Deleted'.

Name	Type	Project Type	Description	Status	Used	Size	Last Scanned	Activity
171219Media	EditShare	Unmanaged		Deleted	0 GB	20 GB		
Archive	EditShare	Unmanaged		Online	0 GB	20 GB		
Audio-Post	EditShare	Unmanaged		Online	0 GB	10 GB		
Delivery	EditShare	Unmanaged		Online	0 GB	10 GB		
External	EditShare	Unmanaged		Online	0 GB	10 GB		
Graphics	EditShare	Unmanaged		Online	0 GB	10 GB		
ialn-test	EditShare	Unmanaged		Online	0 GB	5 GB	30/11/2020 19:22:43	
Ingest-MCR	EditShare	Unmanaged		Online	0 GB	10 GB		
Offline	EditShare	Unmanaged		Online	0 GB	10 GB		
Online Grade	EditShare	Unmanaged		Online	0 GB	10 GB		
PRODUCTION HUB AVID	EditShare	Avid Style		Online	0 GB	200 GB		
Production Hub Food	EditShare	Unmanaged		Online	0 GB	100 GB		
Production Hub Music	EditShare	Unmanaged		Online	0 GB	100 GB		
Production Hub Reality	EditShare	Unmanaged		Online	0 GB	100 GB		
Production Hub Sports	EditShare	Unmanaged		Online	0 GB	100 GB		
PRODUCTION HUB Sports	EditShare	Unmanaged		Deleted	0 GB	100 GB		
Production Hub Travel	EditShare	Unmanaged		Online	0 GB	100 GB	01/12/2020 11:41:29	
Review	EditShare	Unmanaged		Online	0 GB	10 GB		
Rushes	EditShare	Unmanaged	Incoming daily rushes	Online	70 GB	200 GB	01/12/2020 12:34:26	
Shoot Planning	EditShare	Unmanaged		Online	0 GB	10 GB		

Linking a Mediaspace to an EFS Managed S3 Bucket

With the target S3 buckets available to EFSv, the S3 buckets can now be linked to mediaspaces for use by applications.

To link the S3 buckets to mediaspaces:

1. Open the FLOW Control Application by pointing a browser at the external IP address of the EFSv Master Storage node (for example, <http://192.168.1.173/home.html>) and select FLOW Control. Typical EditShare credentials will permit access.
2. Select the **Storage** tab and then the **Manage** sub-tab.
3. Click **Add**. A dialog asking you to define your storage is presented. This is where you define the EditShare mediaspace.
4. Within the Add new storage window, configure the following:
 - **Add Storage Section** – enter a name for the mediaspace and select **EditShare** from the Type drop-down menu.
 - **Details Section** – select **Managed** or **Unmanaged** and enter a quota for the mediaspace. If you have previously linked a mediaspace to S3 or you are using the default EFSv bucket, select one of the Object Storage buckets listed in the Bit Bucket drop-down menu.

NOTE: Avid Style mediaspaces do not support S3 storage. If you have previously linked a mediaspace to S3 or if you are using the default EFSv bucket, you can select one of the Object Storage Buckets listed in the drop-down menu. If you have not, select none and provide the details under the Create New Bucket Link.

- **Existing Linked Buckets Section** – If you have previously linked an S3 bucket to a mediaspace (or you are using the default EFSv bucket), you can select the S3 bucket from the drop-down menu next to Object Storage Bucket. If you do not have a previous linked space or a default EFSv bucket, then select none (the default value) from the Object Storage Bucket drop-down menu and then populate the Create New Bucket Link attributes as follows:
 - **Name** - Enter the name of the S3 bucket created earlier. Make sure the name entered is the name of the bucket and not the ARN. For example, “mycustomersbucket” and not “arn:aws:s3:::mycustomersbucket”.
 - **Region** - Enter the location of the EFS bucket in Region code format. The AWS UI displays the Region Name. To convert the Region Name to Region Code, refer to <https://docs.aws.amazon.com/general/latest/gr/rande.html>. For example, use “us-east-1” and not “US East (N. Virginia)”.

NOTE: Failure to deploy EFSv and S3 in the same AWS region will result in no notification of content change from S3 to EFS. This means that content added to your bucket will not be reflected on File Explorer or Finder. Deployment in different regions will also increase costs associated with S3 access performed by EFS.

- **Read Access Role** - Copy and paste the ARN from ReadRoleARN.
 - **Write Access Role** - Copy and paste the ARN from WriteRoleARN.
 - **Notification Access Role** - Copy and paste the ARN from NotificationRoleARN.
 - **Linked Bucket** – (Optional) Add a Bucket Folder. This attribute allows a mediaspace to be associated with a sub area within your S3 bucket. For example, if your S3 bucket contains a folder called hiRes and lowRes, and you only want hiRes content made available to the mediaspace, enter hiRes as a Bucket Folder and only content from under this level will be available in the mounted mediaspace.
5. Click Add to create the mediaspace and synchronize the content from S3.

Chapter 4: Scan

Scan allows you to scan Storage to update the FLOW database with information about the content of the Storage. You can run scans manually or schedule them to run at regular intervals.

You can also set up scheduled scans and combine them with other administrative tasks using FLOW Automation. See the *FLOW Automation User's Guide*.

About Scan

You can use Scan to update your FLOW database with information about clips not captured by FLOW, including:

- Clips that were ingested by, or exported from, an NLE.
- Clips copied from an external source using a Windows or macOS file manager.

Scanning compares the current contents of a storage space with its contents as of the last time it was scanned. Anything that is new is added to the FLOW database. For each new file, FLOW generates a thumbnail and encodes a proxy file. Anything that is no longer in the storage space is marked for removal. FLOW uses unique identifiers for files to allow it to track changes to file names and copies of files. In this way, even if a file is moved to a new location FLOW retains the files metadata and proxies.

At the time of the scan, you can choose to:

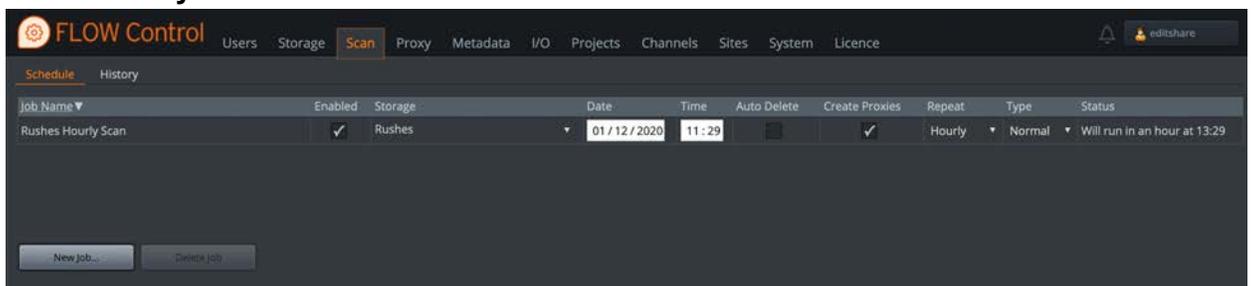
- Automatically delete the proxy files and / or database entries for clips that used to be in the storage space but are no longer there.
- Review and delete these entries manually, one by one.

You can run scans manually, or you can schedule them to run at specific intervals (for example; hourly, daily, weekly). Manual Scanning

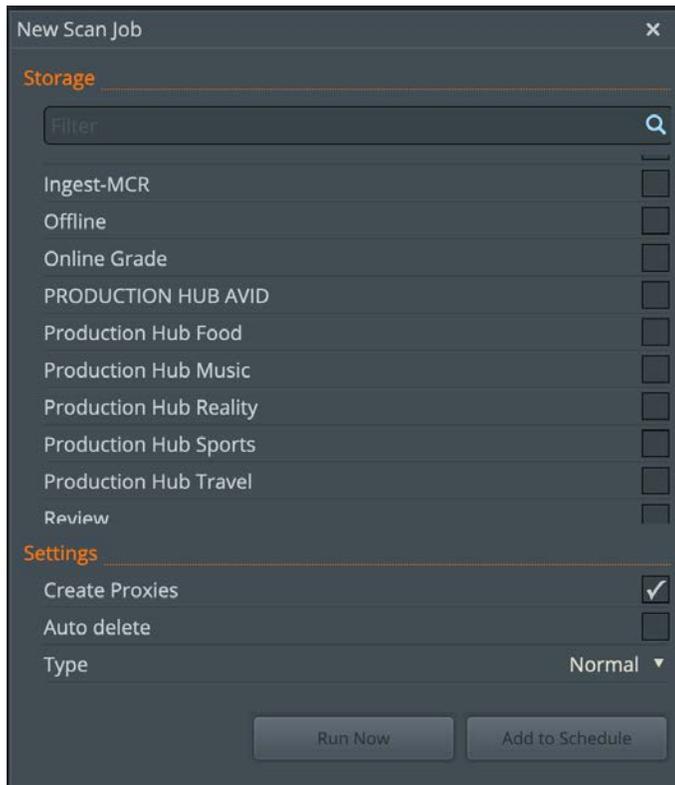
Starting a Manual Scan

To start a manual scan:

1. Login to the FLOW Control Application using your credentials.
2. Click on the **Scan** tab at the top of the page.
3. Make sure the **Schedule** sub tab is selected.
4. Click the **New Job** button.



The New Scan Job dialog box opens.



5. Select the check box for each storage space you want to include in your scan. Use the search filter if there are too many spaces displayed on screen.
6. Click in the **Create Proxies** box to create a tick mark if you want FLOW Scan to create proxy files for your media.
7. Complete one of the following:
 - To automatically delete material that was previously in the storage space but is no longer there, select the **Auto-Delete** option.
 - To delete the files manually, deselect **Auto-Delete**. The option is deselected by default.
8. Select the Scan type you require from the drop down list:
 - **Quick** - New and modified files are scanned and added to the database. Use this option if you only have a few new files to add to the database as it takes the least time to complete.
 - **Normal** - New and modified files, including their metadata, are updated in the database. This option is recommended for day to day work. A Normal scan takes longer to complete than a Quick Scan.
 - **Full** - All files and metadata are checked, with all changes written to the database. Changes to template profiles are included. This option should be used after system updates or when templates have changed. A Full Scan takes the longest time to complete.
9. Click Run Now. The Storage Space is scanned. The progress of the scan displays in the history tab.

Scheduling a Scan

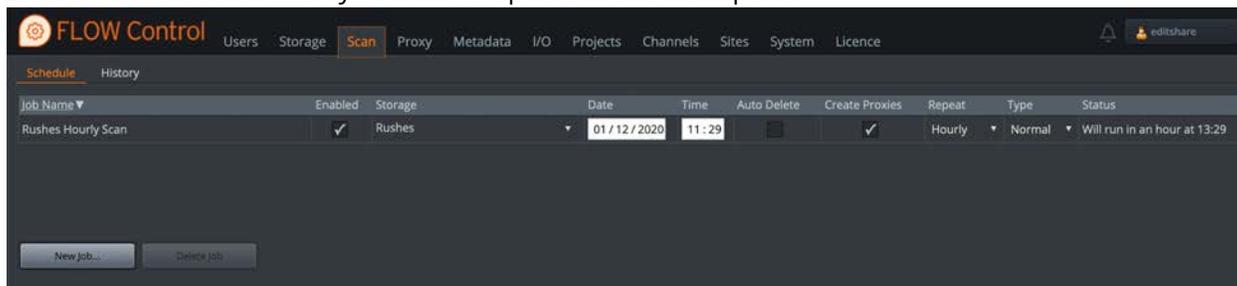
You can schedule scans to run at a later time at the frequency you want (for example, daily, weekly, monthly). You can select more than one storage space to be scanned as part of the same scheduled job.

1. Follow steps 1 to 7 of [Starting a Manual Scan](#).
2. Click the Add to Schedule button. The schedule is created.

Updating a Scheduled Scan

To update a scheduled scan job:

1. Locate the Scheduled Scan you want to update in the main panel.

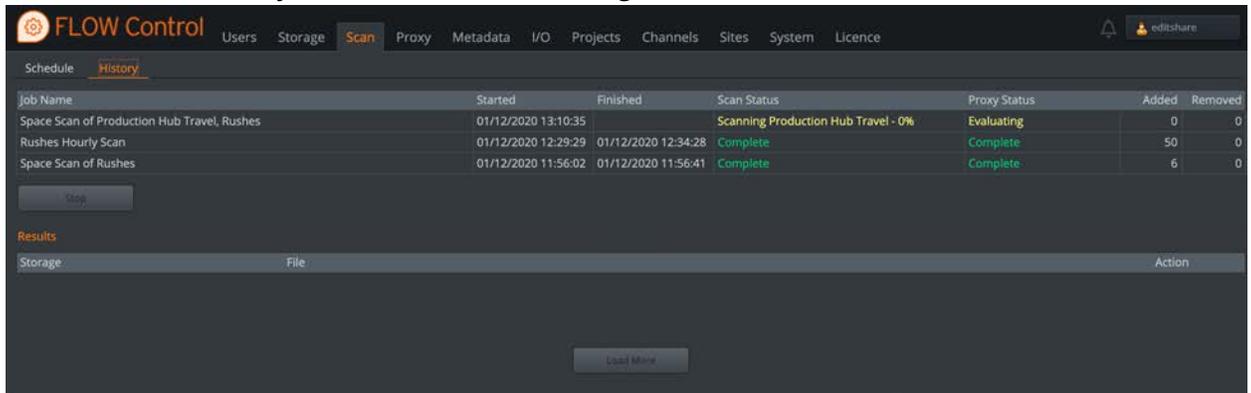


2. Rename the Job by double-clicking the Job Name field and typing the new name.
3. Tick the Enabled box to allow the Job to run on FLOW.
4. Add or remove Storage Spaces from the Job by clicking the drop down arrow next to the Storage Spaces field and click the check box next to the required storage space.
5. Type the date you want the job to start directly into the Date text box.
6. Type the time you want the job to start directly into the Time text box.
7. Complete one of the following:
 - To automatically delete material that was previously in the storage space but is no longer there, select the **Auto-Delete** option.
 - To delete the files manually, deselect **Auto-Delete**. The option is deselected by default.
8. Enable the Create Proxies box if you want FLOW Scan to create proxy files for your media.
9. Select the Scan type you require from the drop down list; Quick, Normal, or Full. For a description of these types of scan, see step 7 of [Starting a Manual Scan](#).
10. When the job starts at the next scheduled time, its progress displays under the Status column.

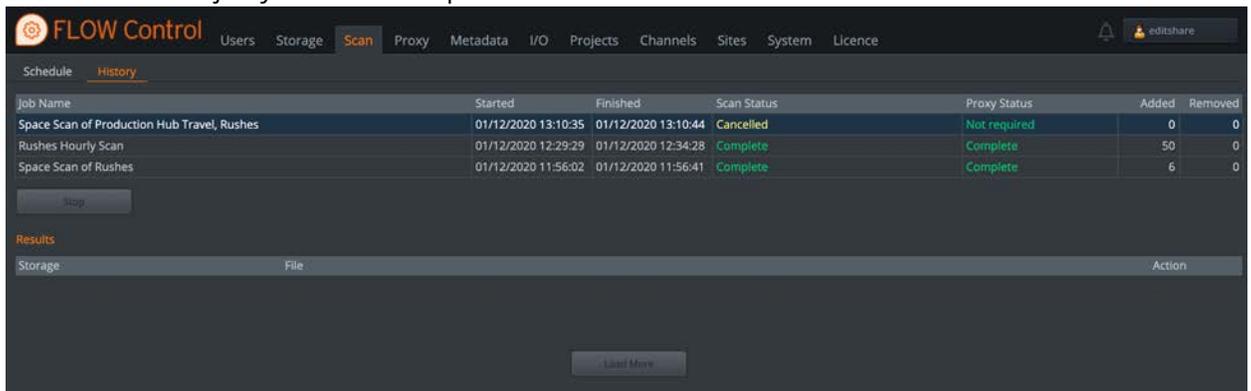
Stopping a Scan

To stop a manual or scheduled job:

1. Locate the Scan History tab whilst a scan is running.



2. Click on the scan job you wish to stop.



Chapter 5: Proxy

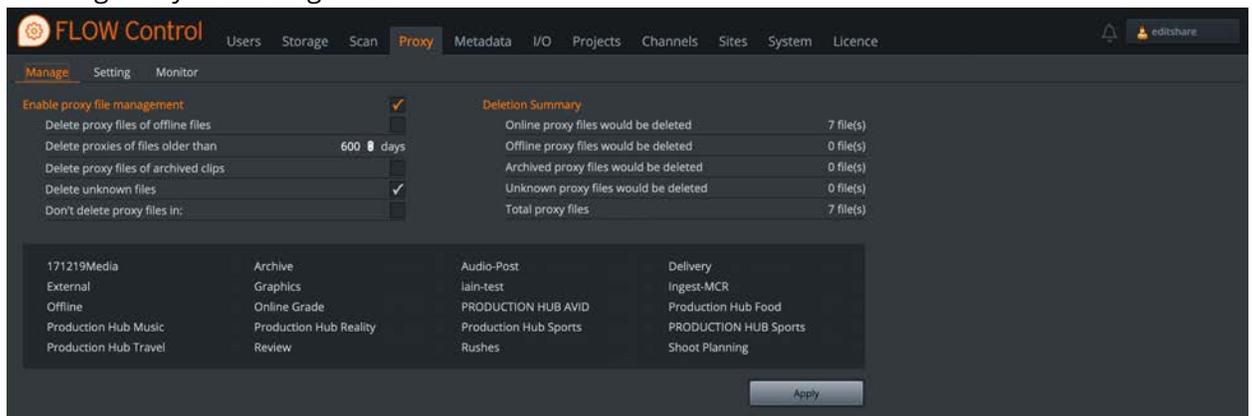
As editing functions are mostly performed on proxy versions of video content, a significant amount of server activity is taken up by making proxy files during FLOW scans. This activity often increases on larger systems and can start to impact overall system performance. Therefore, at some point it may be prudent to employ additional nodes / servers to share some of the processing of proxy media.

- Manage tab - manages the scanning and deletion of proxy files.
- Setting tab - specifies size and quality of proxy files.
- Monitor tab - controls and monitors proxy generation.
- Proxy Worker nodes. See [Chapter 11: System](#).

Manage Tab

The Manage area allows global control of proxy file clean up in the FLOW MAM. Often after productions are complete and have been archived the proxy files are no longer required and can be deleted to free up disk space.

1. Locate the Proxy tab
2. Click on the Manage sub tab
3. Enabling Proxy file management



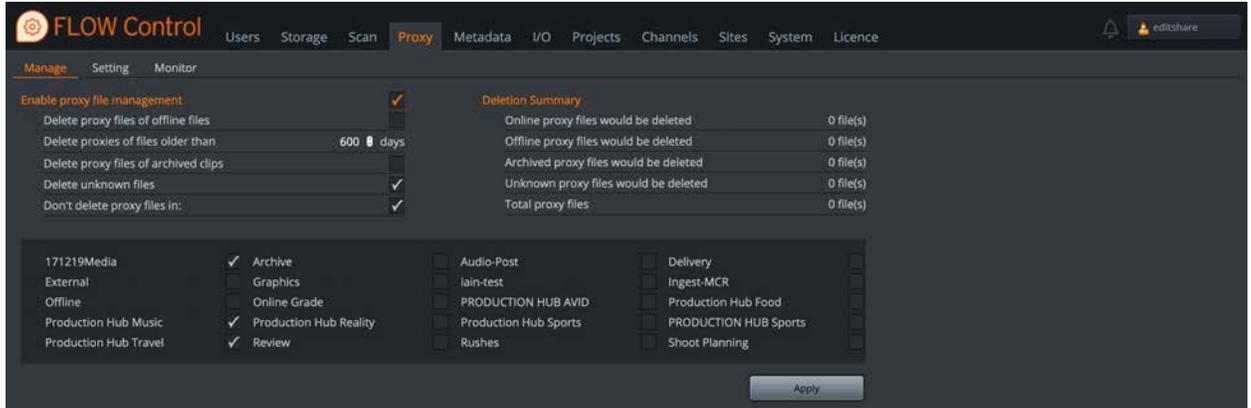
4. Set the relevant options required
 - a. Delete proxy files of offline media
 - b. Delete proxy files older than <specified number of> days
 - c. Delete proxy files of archived clips
 - d. Delete unknown files
5. A summary of the number of files for deletion will be displayed

Deletion Summary	
Online proxy files would be deleted	7 file(s)
Offline proxy files would be deleted	0 file(s)
Archived proxy files would be deleted	0 file(s)
Unknown proxy files would be deleted	0 file(s)
Total proxy files	7 file(s)

Protect proxy files from deletion

To protect proxy files in specific storage spaces from the global rules of proxy management.

1. Enable the Don't delete proxy files in:.
2. Select the storage spaces to protect.

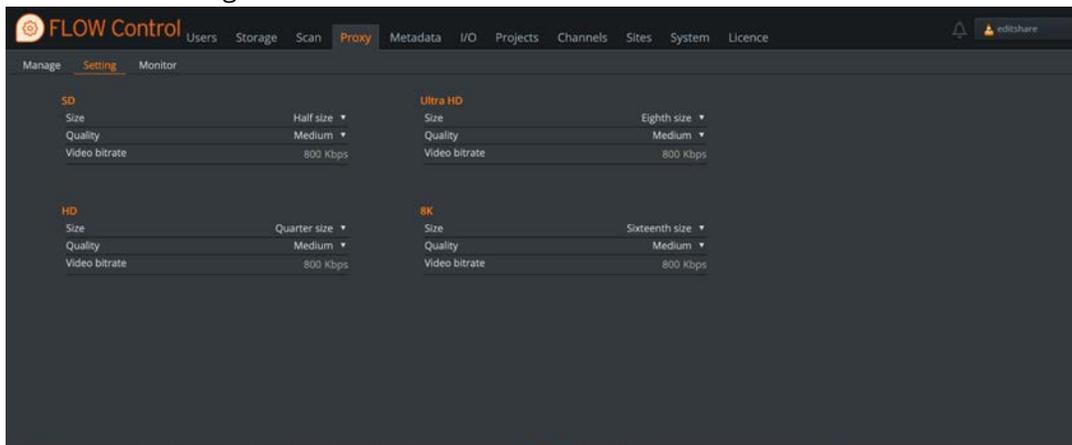


3. Click Apply to accept the changes.

Settings

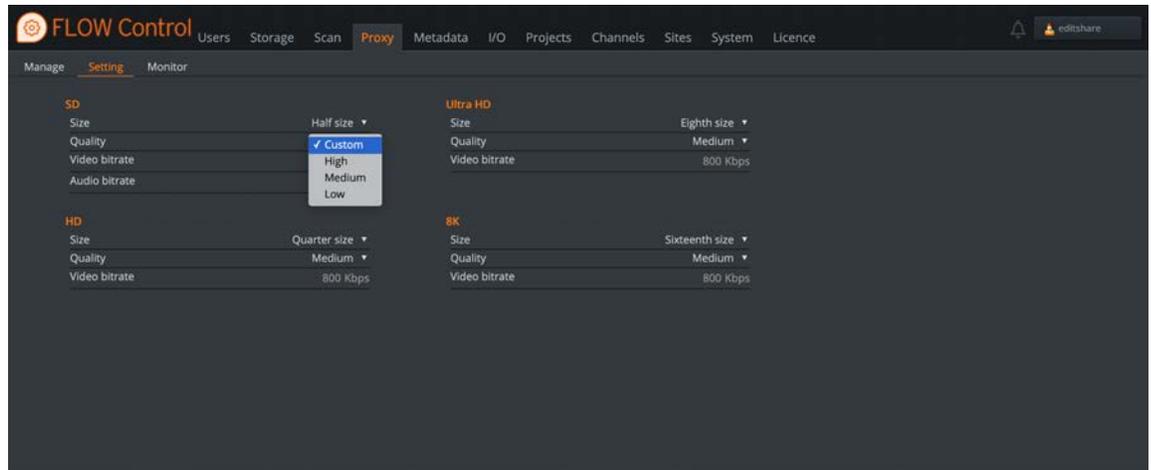
This function determines the size and quality of the proxy files for Standard Definition (SD), High Definition (HD) and Ultra HD (UHD) media that users see in FLOW's media player. Choosing a smaller frame size and lower quality improves the performance of the FLOW system but reduces the quality of the media seen in the player. You should adjust the settings to provide the optimum combination of speed and quality for your users. A Custom field option allows you to specify a bitrate not available from the standard menu options. Changes to the format of your proxy files are not made until all of your media folders are scanned. Do the following:

1. Locate the Proxy tab.
2. Click on the Settings sub tab.



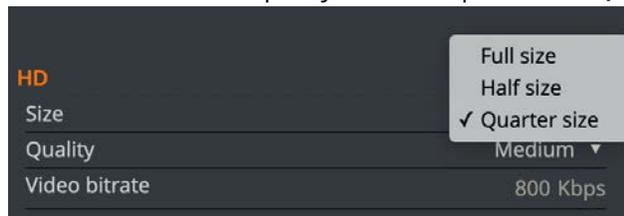
3. In the SD panel:

- a. Select the size of the proxy file. The options are Half Size or Full Size.
- b. Select the quality of the proxy file. The options are Low, Medium, High and Custom.
- c. If you selected Custom, type the bitrate you require directly into the text box, or click on the up / down arrows to adjust to the value you want.

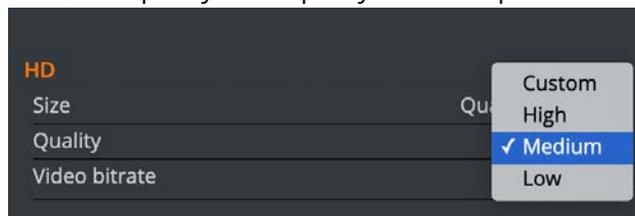


4. In the HD panel:

- a. Select the size of the proxy file. The options are Quarter Size, Half Size or Full Size.

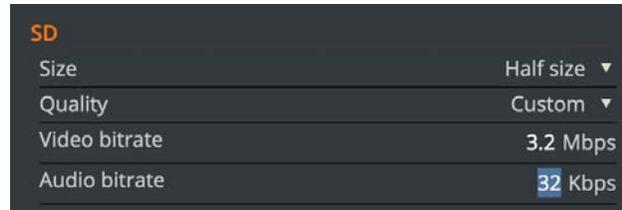


- b. Select the quality of the proxy file. The options are Low, Medium, High and Custom.



- c. If you selected Custom, type the bitrate you require directly into the text box, or click on the up / down arrows to adjust to the value you want.

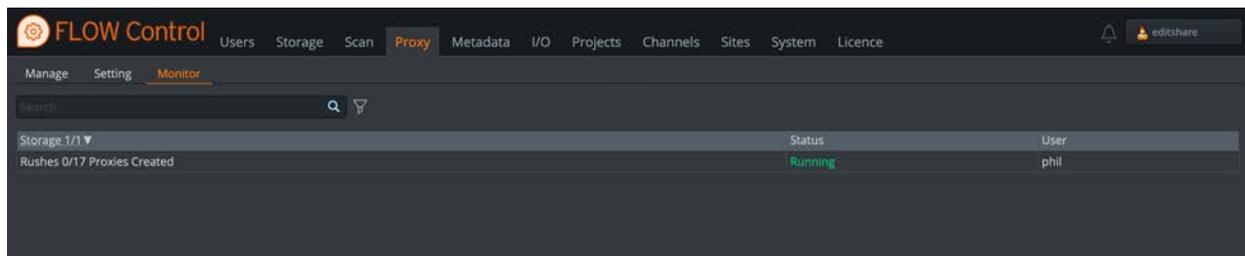
5. In the Ultra HD panel:
 - a. Select the size of the proxy file. The options are Eighth Size, Quarter Size, Half Size or Full Size.
 - b. Select the quality of the proxy file. The options are Low, Medium, High and Custom.
 - c. If you selected Custom, type the bitrate you require directly into the text box, or click on the up / down arrows to adjust to the value you want.



Monitor

To review which media spaces currently have proxy making activities queued or in progress, do the following:

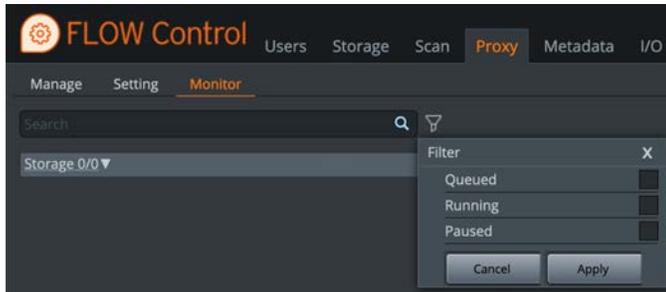
1. Locate the Proxy tab.
2. Click on the Monitor sub tab.
3. Proxy creation jobs are now listed by Storage space, status and the user who triggered the scan and proxy creation.



Filtering

There are two options to filter the list of proxy creation jobs:

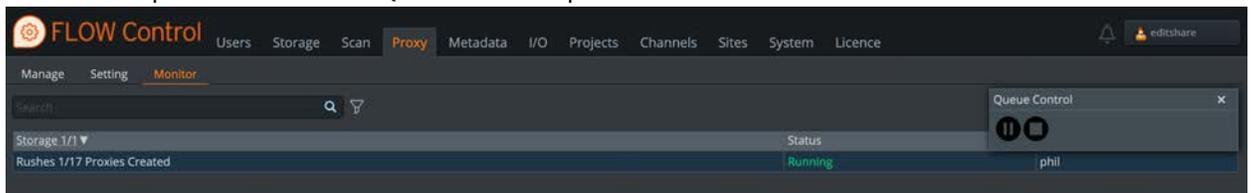
1. Search proxy creation jobs by typing the name of a storage space or user in the quick search field to filter the list.
2. Use the Filter located by the search field:
 - a. Enable Queued, Running, or Paused options
 - b. Click Apply to filter the list as selected.



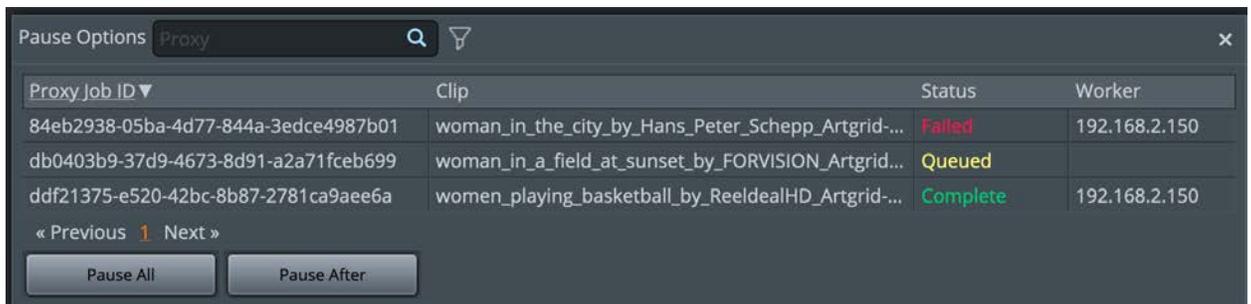
Pausing a proxy creation job

The proxy creation process of a large storage space can take a long time, on occasions it will be beneficial to pause a specific proxy creation job to allow for a higher priority job to take place. To pause a job:

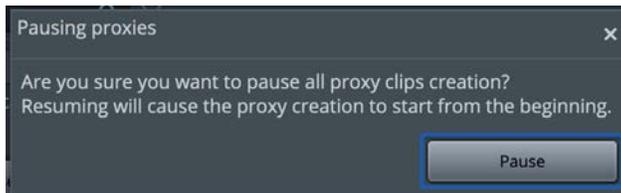
1. Select a proxy creation job.
2. Click on the pause icon on the Queue Control panel.



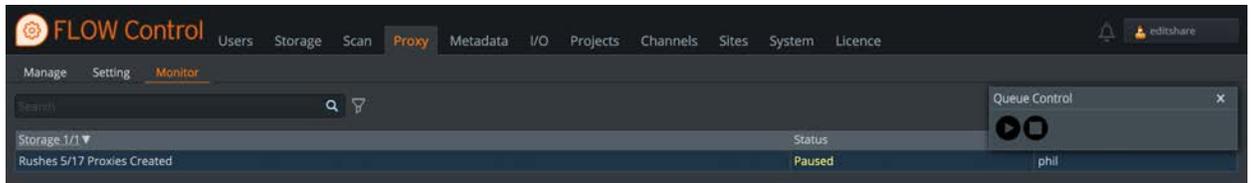
3. The Queue Control panel displays the proxy files currently in queue and their status.
4. Choose from the Pause options
 - a. Pause All - Pauses the selected proxy creation job immediately, and returns the file which was in proxy file creation back to the queue for generation on resumption.
 - b. Pause After - Pause the selected proxy creation job after the current proxy file creation has completed.



5. Click Pause to confirm the choice.



6. The selected proxy creation job is now paused.



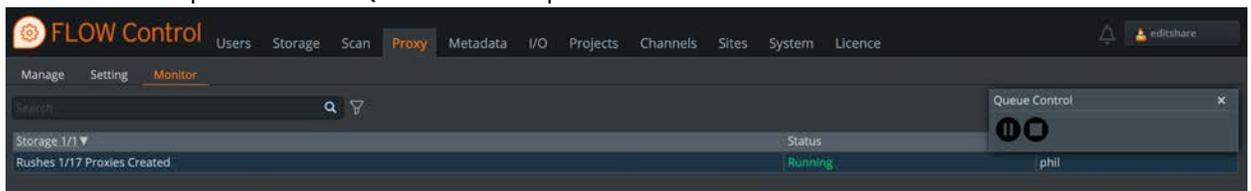
Resuming a proxy creation job

1. Select a paused proxy creation job.
2. Click on the play icon on the Queue Control panel.
3. The proxy creation job will now resume.

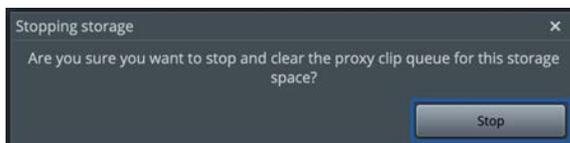
Stopping a Proxy creation job

To stop a proxy creation job and clear from the proxy creation queue:

1. Select a proxy creation job.
2. Click on the stop icon on the Queue Control panel.



3. Click on Stop to confirm the choice.



Chapter 6: Metadata

Metadata is information that describes media and non-media files. You can organize metadata according to its type, for example, video assets could have metadata items Creation Date, Director, Scene, and Take. Another example would be a word processor file having the metadata items Creation Date, Author, Title and Subject.

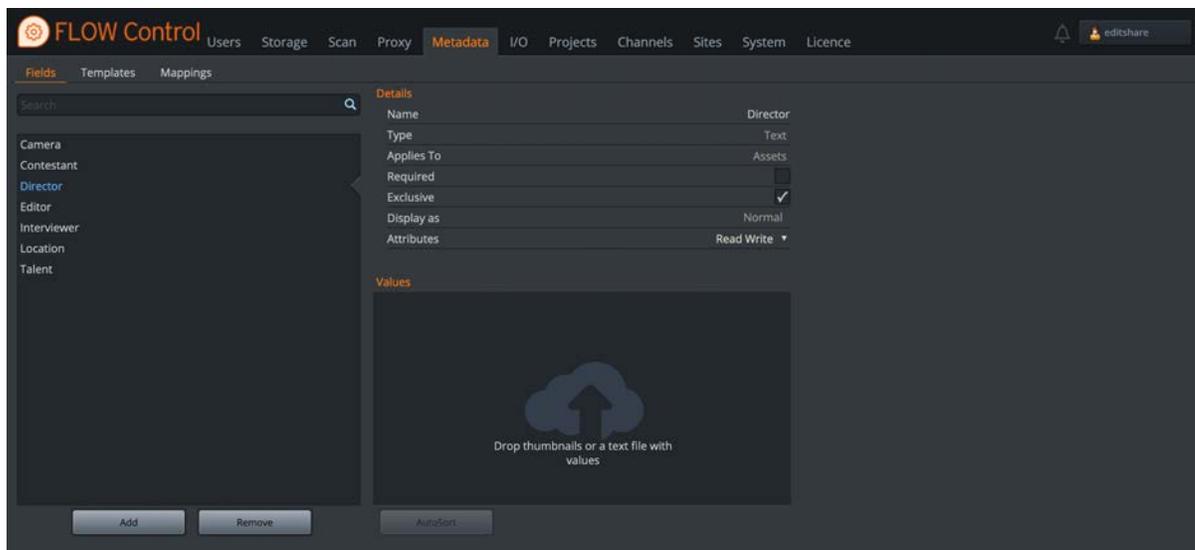
You can use FLOW Control to maintain a database of all of your assets, whether they are media or non-media files. You can also set up descriptive categories and groups as metadata, and create templates that use them to log events in your media, for example for sporting events or reality shows.

Adding a Metadata Field

If you discover that a file format uses a metadata property that you want to use in FLOW, you can create that item within the metadata tab of Control. The new FLOW Asset will be available in all FLOW clients.

You can set a metadata field to require different input values. For example, a metadata item called Title could allow any text to be added as the title, while another metadata item called Approved could allow a 'True / False' value to be set. The following input types can be set for each metadata item. To add a metadata field:

1. Select the Metadata tab.
2. Select the Fields sub tab.

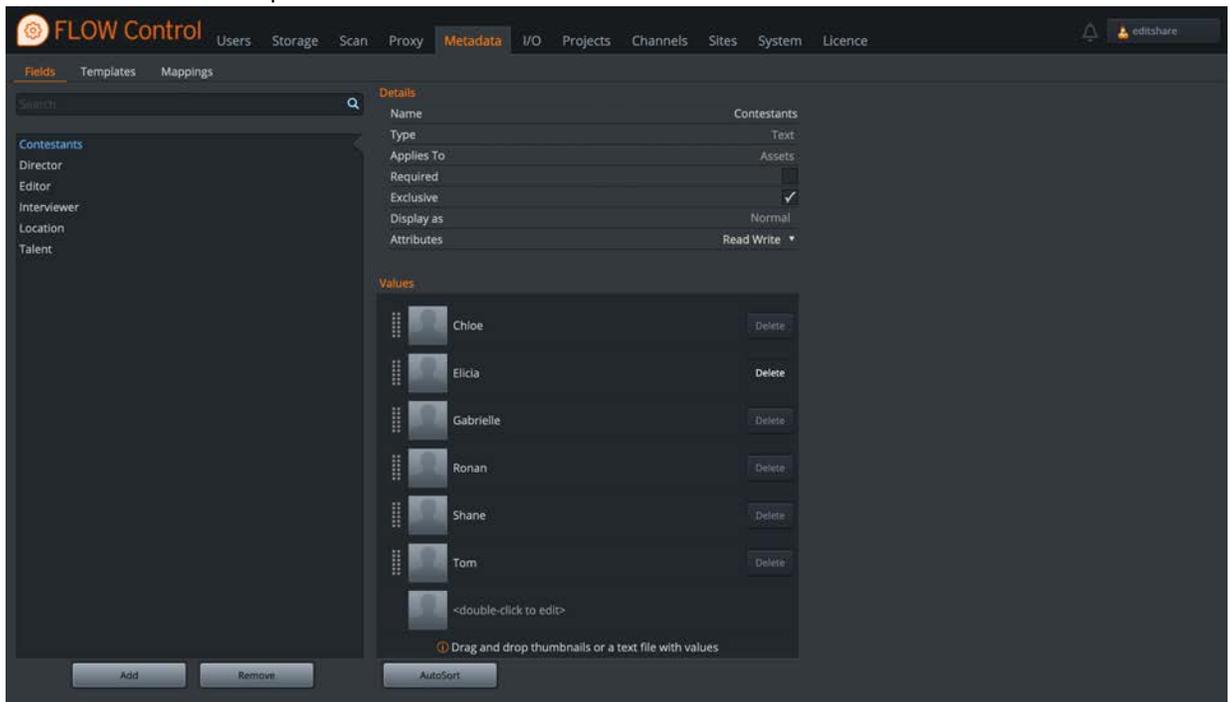


3. Click the **Add** button.



The 'Add Field' dialog box is a dark-themed window with a close button (X) in the top right corner. It contains three input fields: 'Name' with the placeholder text 'enter a name', 'Type' with a dropdown menu showing 'Text', and 'Applies To' with a dropdown menu showing 'Assets'. At the bottom center, there is an 'Add' button.

4. Type the name of the new field in the Name text box.
5. Select the field type that best describes your item. Asset level metadata can be set to require different input values. For example, a metadata item called Title could allow free-form text to be entered while another metadata item called Approved could allow a 'True / False' input to be set. The following input types can be set for each metadata item:
 - Text
 - True / False
 - Number - integer
 - Number - real
 - Date
 - Time
 - Date / Time
 - Table
 - Web Link
6. Select whether the type value applies to assets or markers.
7. Click Add. The new metadata item is added to FLOW and displays. Fields created here can then be added to templates.

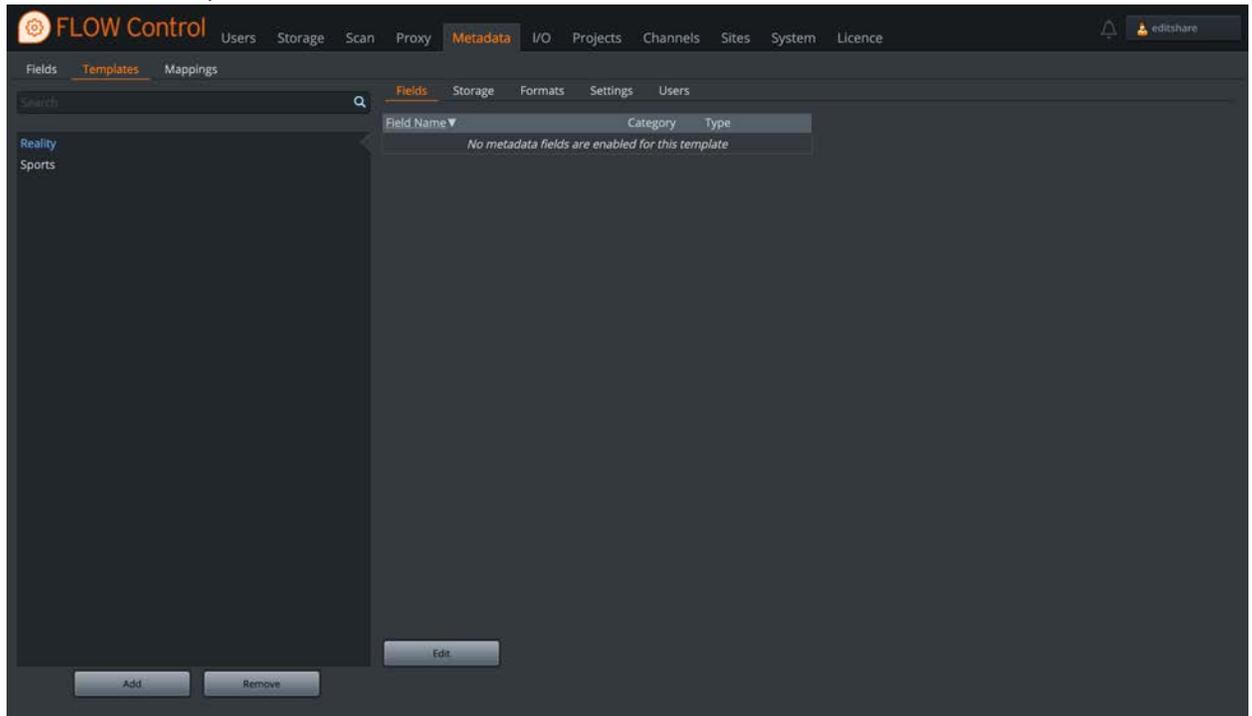


The screenshot shows the FLOW Control software interface. The top navigation bar includes 'Users', 'Storage', 'Scan', 'Proxy', 'Metadata', 'I/O', 'Projects', 'Channels', 'Sites', 'System', and 'Licence'. The 'Metadata' tab is active. On the left, there is a sidebar with a search bar and a list of categories: 'Contestants', 'Director', 'Editor', 'Interviewer', 'Location', and 'Talent'. The main area is divided into 'Details' and 'Values' sections. The 'Details' section shows a form for a metadata item named 'Contestants' with fields for 'Name', 'Type' (set to 'Text'), 'Applies To' (set to 'Assets'), 'Required', 'Exclusive' (checked), 'Display as' (set to 'Normal'), and 'Attributes' (set to 'Read Write'). The 'Values' section displays a list of names: 'Chloe', 'Elicia', 'Gabrielle', 'Ronan', 'Shane', and 'Tom', each with a 'Delete' button. At the bottom, there are 'Add', 'Remove', and 'AutoSort' buttons.

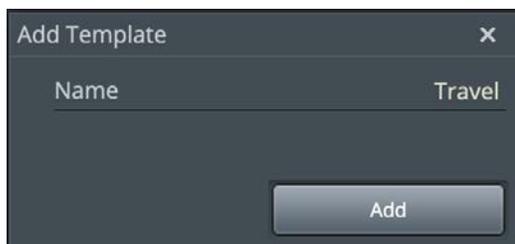
Adding a Template

A template contains fields that you have created that users can use in other applications such as AirFLOW and FLOW Story. To add a template:

1. Click on the Metadata tab.
2. Click on the Templates sub tab.



3. Click the **Add** button.
4. The Add Template dialog box is displayed.

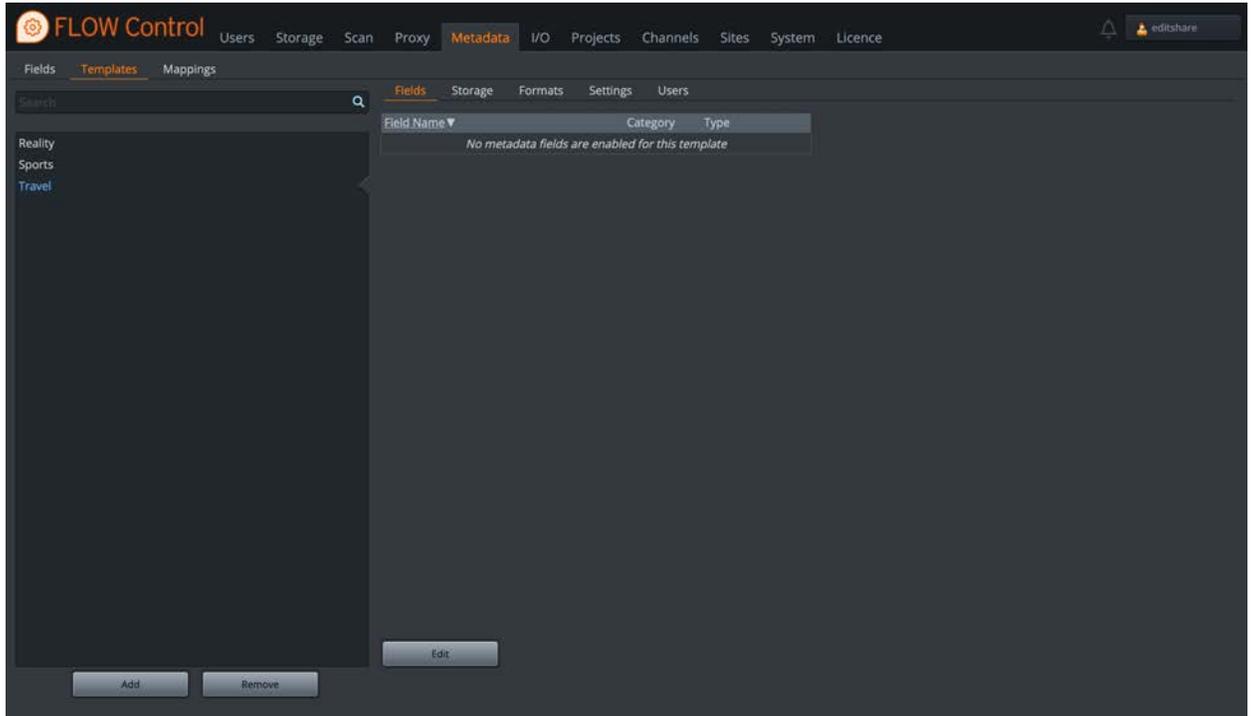


5. Type a name for your template.
6. Click **Add**. The template is added to the list.

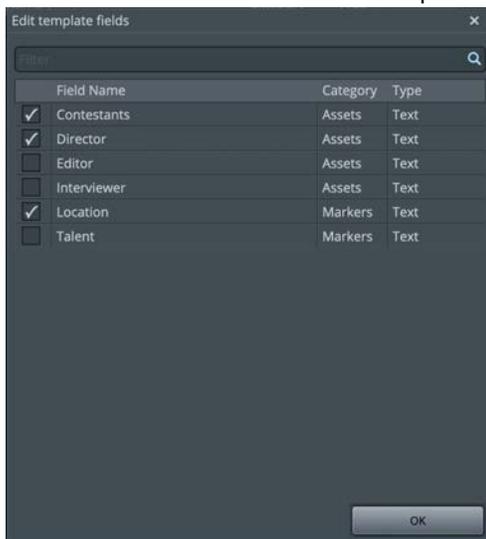
Adding a Field to a Template

To add a field to a template:

1. Click on the Metadata tab.
2. Click on the Templates sub tab.
3. Click on the template you want to edit.



4. Click the Edit button. The Edit template fields dialog box opens.

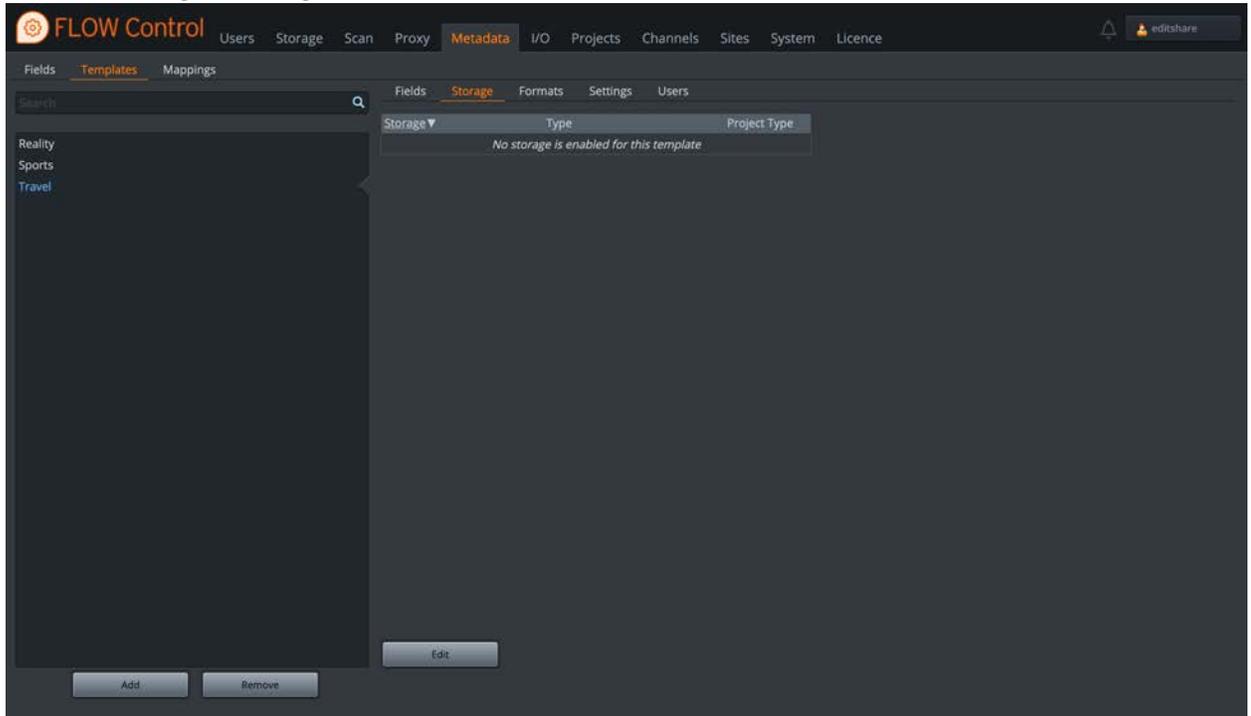


5. Select the field(s) that you want to add from the list.
6. After selecting each of the storage spaces you want included in the template, click OK.

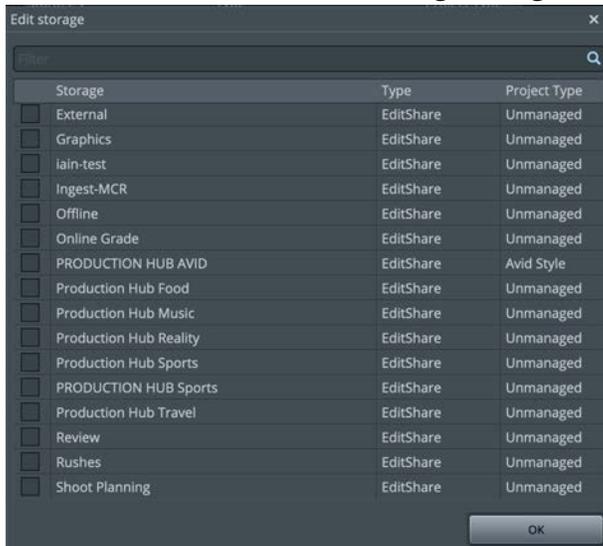
Adding Storage to a Template

To add a storage space to a template you must have a mounted storage space that you can successfully connect to. See [Adding a Storage Connection](#).

1. Click on the Metadata tab.
2. Click on the Templates sub tab.
3. Click on the template you want to edit.
4. Click the Storage heading.



5. Click the Edit button. The Edit storage dialog box opens.

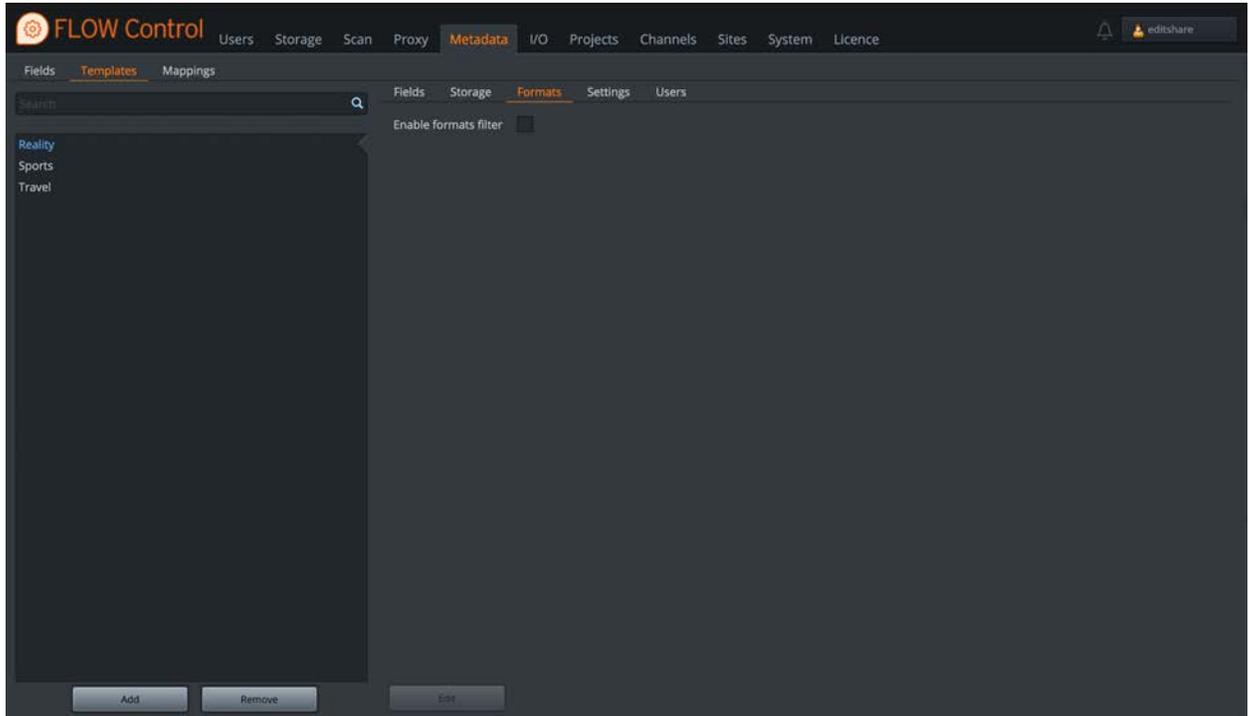


6. Select the storage space that you want to add from the list.
7. After selecting each of the storage spaces you want included in the template, click OK.

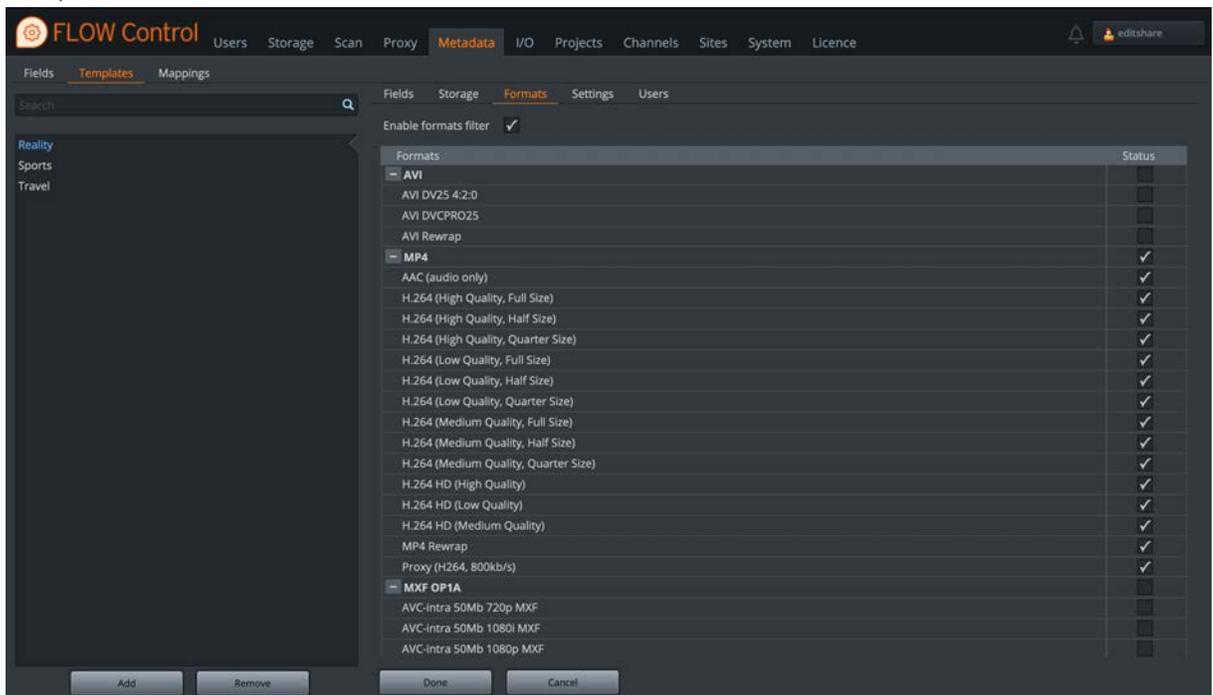
Enabling Format Filter for a Template

To enable ingest format filtering for a template:

1. Click on the Metadata tab.
2. Click on the Templates sub tab and then Formats.



3. Click on the template you want to enable, then click the checkbox next to Enable formats filter, and then click Edit.

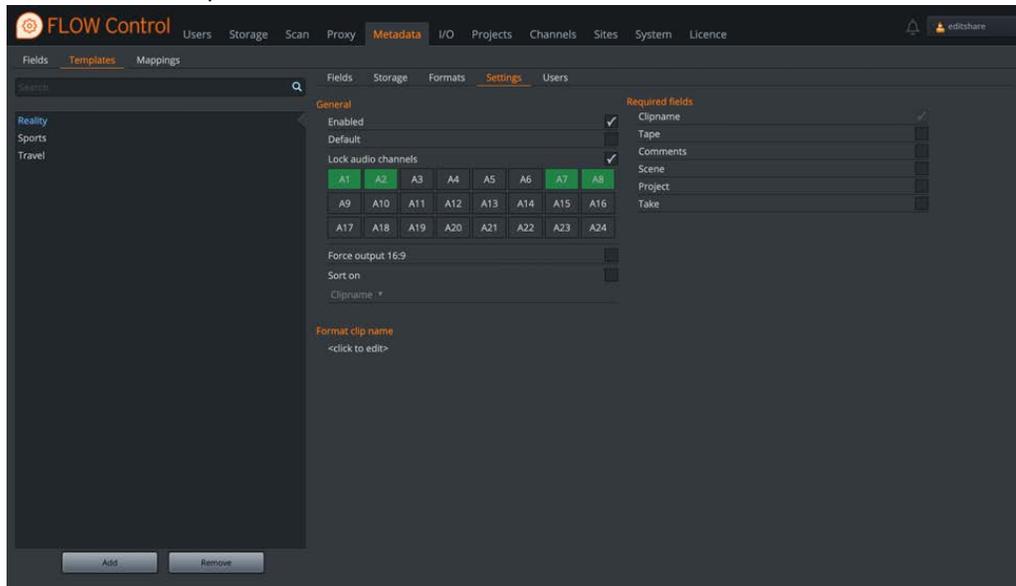


4. Check the Status checkbox next to the formats to filter.
5. Click Done.

Changing Template Settings

To change the setting in a template:

1. Click on the Metadata tab.
2. Click on the Templates sub tab.

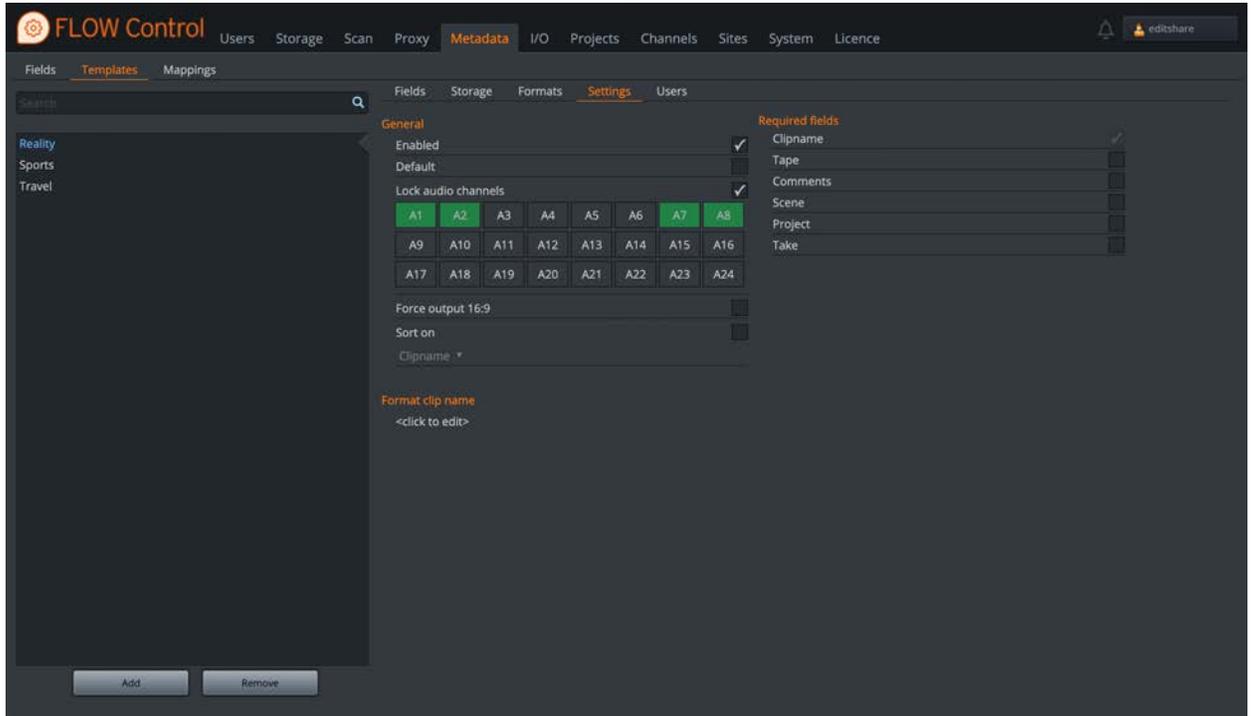


3. Click on the template you want to edit.
4. Click the Settings tab.
5. There are two settings that can be selected for a template:
 - Enabled - the template will be available to users but not pre selected.
 - Default - the template will always be selected when opening FLOW Story or AirFLOW.
 - Click in each of the check boxes to select and deselect as necessary.

Ingest Options for Metadata Templates

You can set ingest options that allow you to lock down the codecs that are available for ingest.

1. Click on the Metadata tab.
2. Click on the Templates sub tab and then the Settings tab.

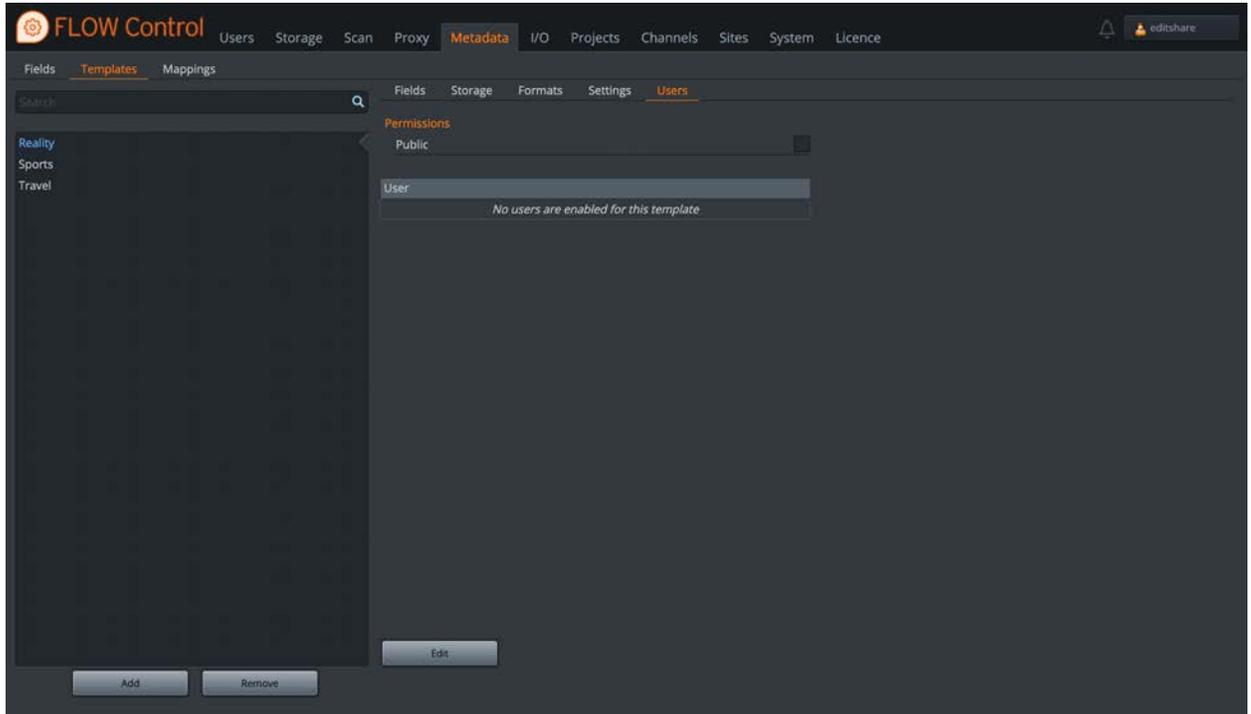


3. From within this page you can set:
 - Lock audio channels - ensures the selected channels are always included in ingests.
 - Force output 16:9 - Forces ingest capture to 16:9 ratio
 - Sort on
 - Format clip name - Forces ingest users to a specific clip name format.
 - Required field - Forces users to fill out the specified fields before ingest.

Adding Template User Access

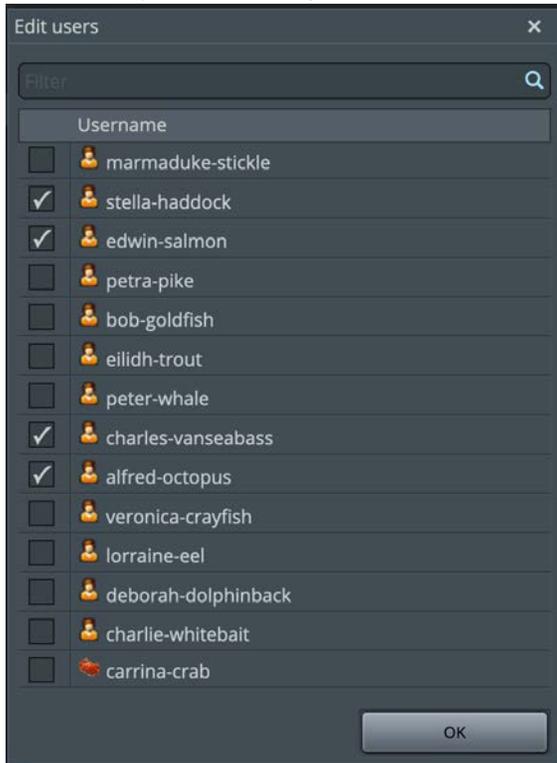
To specify which users can access a template:

1. Click on the Metadata tab.
2. Click on the Templates sub tab.

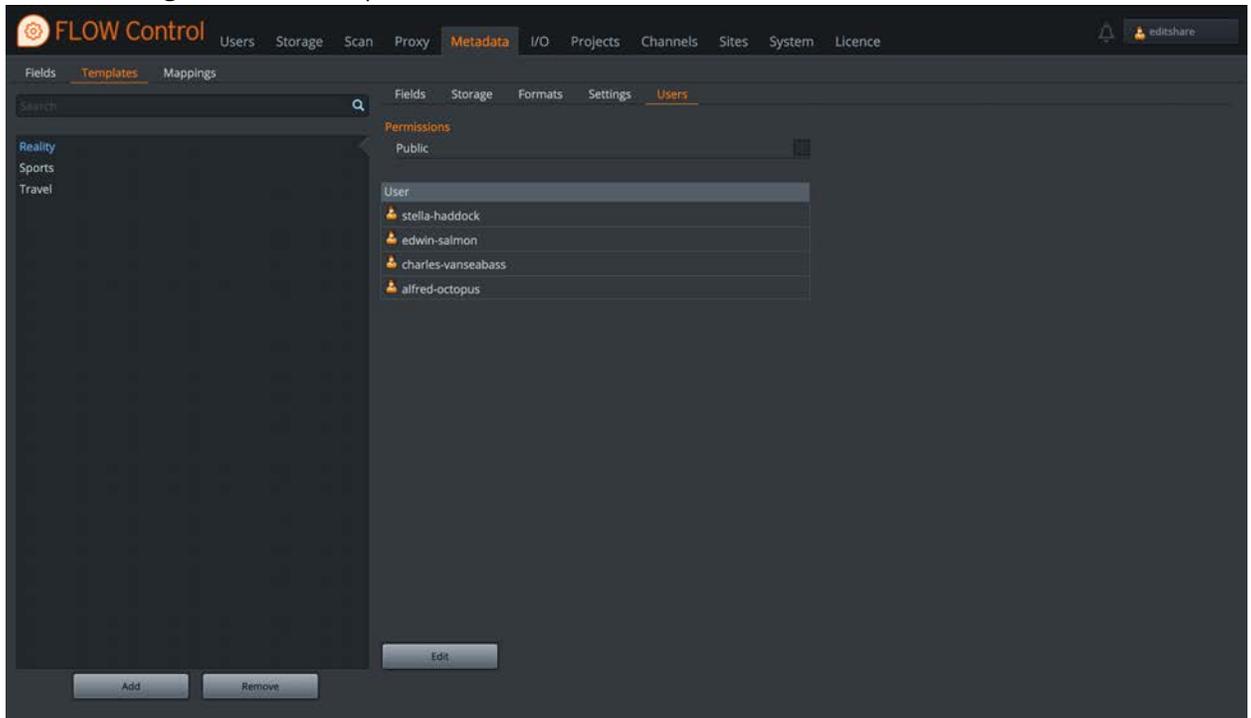


3. Click on the template you want to edit.
4. Click the Users heading.
5. To allow all users to have permission to access this template, click the Public checkbox.

- Click Edit if you have the public checkbox deselected. The Edit users dialog box opens.



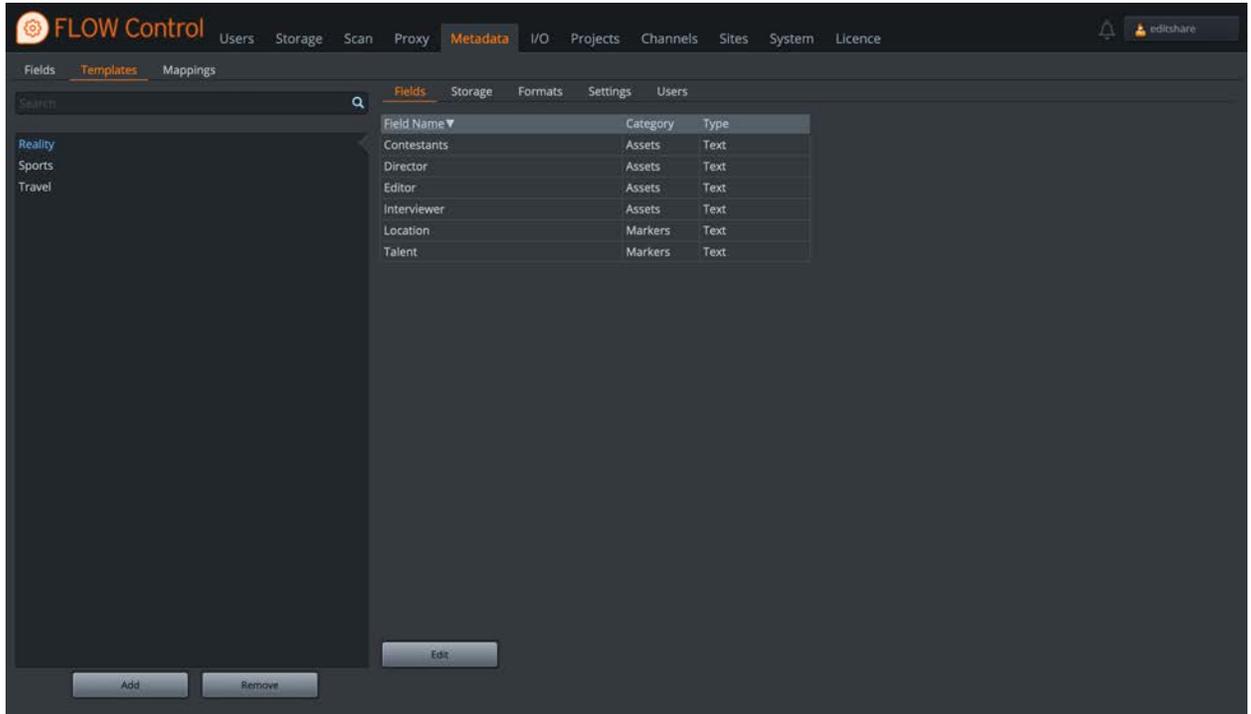
- Select the user name that you want to have access to the template from the list.
- After selecting each of the required fields, click OK.



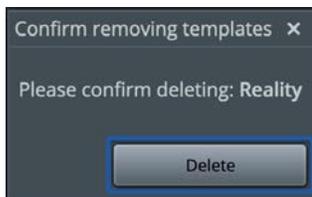
Deleting a Template

To delete a template, do the following:

1. Click on the Metadata tab.
2. Click on the Templates sub tab.



3. Click on the template you want to delete.
4. Click the Remove button. A dialog box opens, asking you to confirm the deletion.



5. Click Delete to confirm the deletion.

Metadata Mappings

Metadata Mappings support the importing of metadata from known formats (device metadata, container metadata, sidecar files) as well as allowing users to define their own rules for custom metadata formats.

Mappings can be configured by importing a sample file and selecting which fields should be imported.

The following formats are supported:

Sidecar Metadata	Devices
FCP	P2
EVS	XDCAM
CatDV	GFCAM
Sports Code	MXF
FLOW XML	R3D
Any standard XML file	

Formats for Metadata Mappings

The following tables describe the formats that you can use for Metadata Mappings.

Expression	Output
d	The day as a number without a leading zero (1 to 31).
dd	The day as a number with a leading zero (01 to 31).
ddd	The abbreviated localized day name (for example: 'Mon' to 'Sun').
dddd	The long localized day name (for example: 'Monday' to 'Sunday').
M	The month as a number without a leading zero (1-12).
MM	The month as a number with a leading zero (01-12).
MMM	The abbreviated localized month name (for example: 'Jan' to 'Dec').
MMMM	The long localized month name (for example: 'January' to 'December').
yy	The year as a two digit number (00-99).

yyyy	The year as a four digit number.
------	----------------------------------

The following expressions can be used for the time:

Expression	Output
h	The hour without a leading zero (0 to 23 or 1 to 12 if AM/PM display).
hh	The hour with a leading zero (00 to 23 or 01 to 12 if AM/PM display).
H	The hour without a leading zero (0 to 23, even with AM/PM display).
HH	The hour with a leading zero (00 to 23, even with AM/PM display).
m	The minute without a leading zero (0 to 59).
mm	The minute with a leading zero (00 to 59).
s	The whole second without a leading zero (0 to 59).
ss	The whole second with a leading zero where applicable (00 to 59).
z	The fractional part of the second, to go after a decimal point, without trailing zeroes (0 to 999). Therefore, "s.z" reports the seconds to full available (millisecond) precision without trailing zeroes.
zzz	The fractional part of the second, to millisecond precision, including trailing zeroes where applicable (000 to 999).
AP or A	Use AM/PM display. A/AP will be replaced by either "AM" or "PM".
ap or a	Use AM/PM display. a/ap will be replaced by either "am" or "pm".
t	The timezone (for example "CEST").

All other input characters will be ignored. Any sequence of characters that are enclosed in single quotes will be treated as text and not be used as an expression. Two consecutive single quotes (""") are replaced by a single quote in the output. Formats without separators (e.g. "HHmm") are currently not supported.

Example format strings (assumed that the time is 21 May 2001 14:13:09.120):

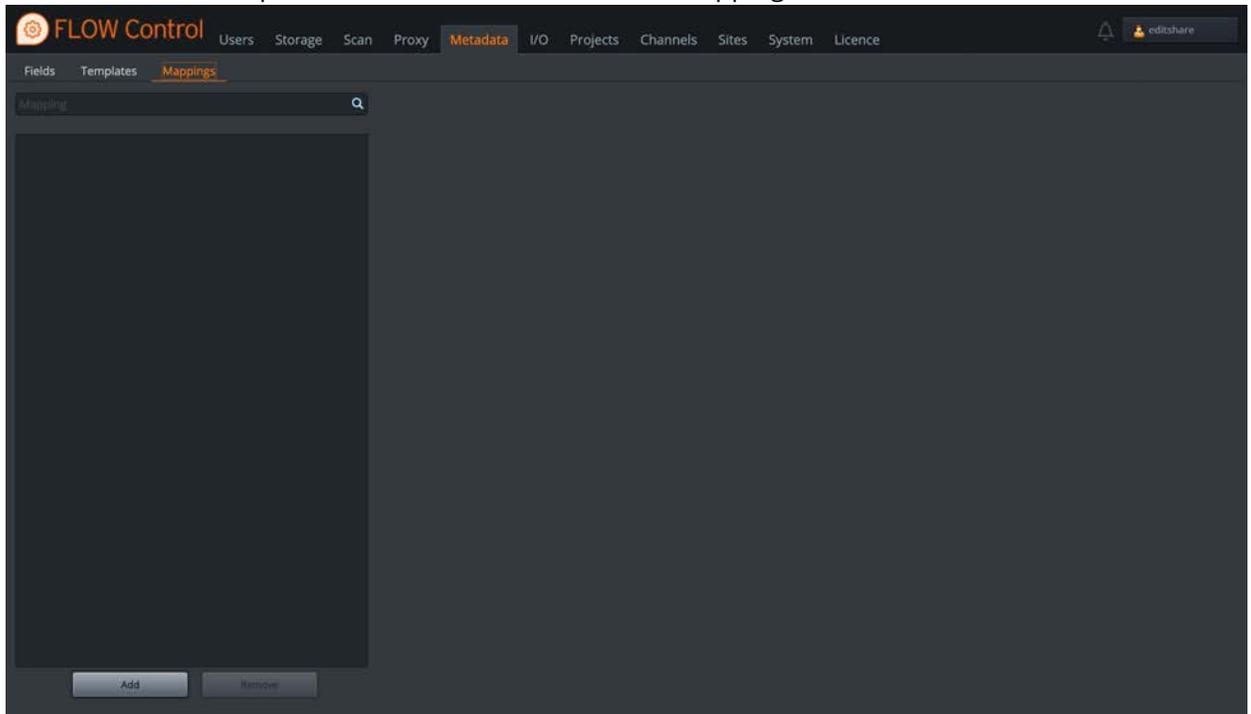
Format	Result
dd.MM.yyyy	21.05.2001
ddd MMMM d yy	Tue May 21 01
hh:mm:ss.zzz	14:13:09.120
hh:mm:ss.z	14:13:09.12
h:m:s ap	2:13:9 pm

If the datetime is invalid, an empty string will be returned.

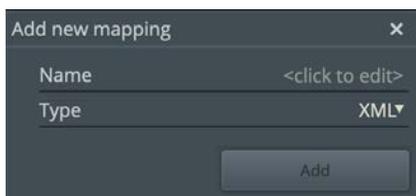
Creating a New Mapping

To create a new mapping:

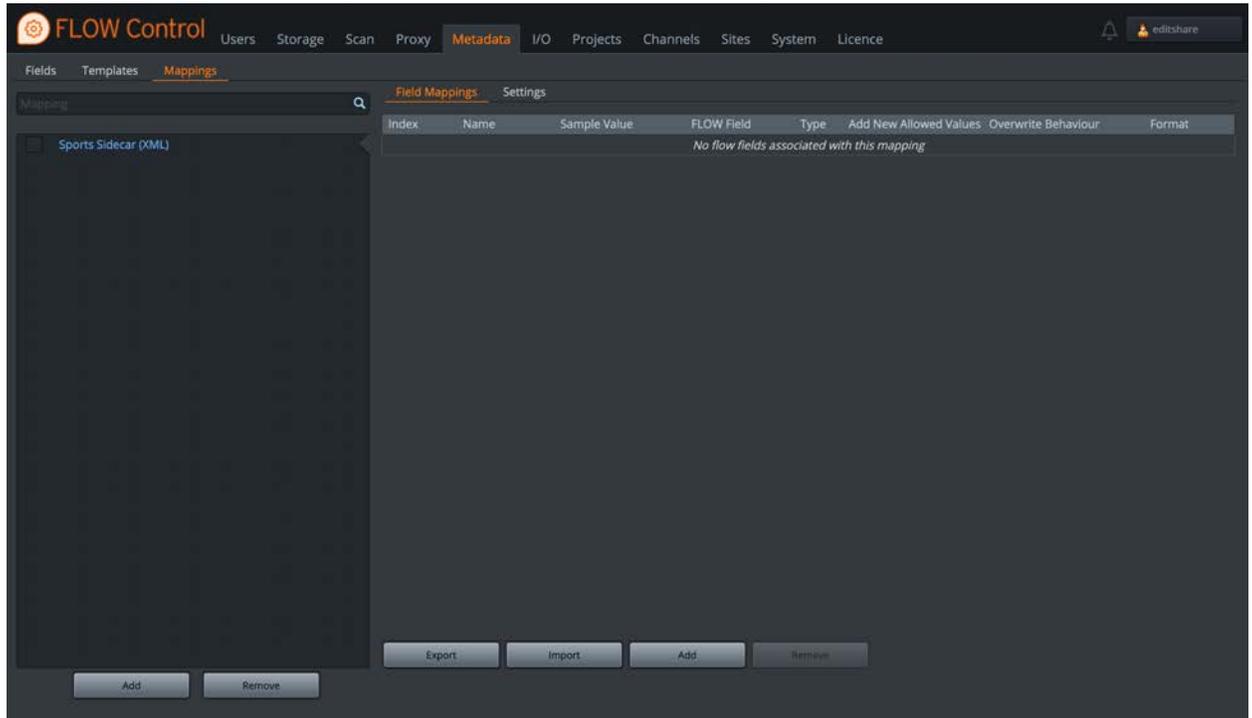
1. With FLOW Control open in the Metadata tab, click the Mappings tab.



2. Click the Add button. The Add new mapping dialog box opens.



3. Enter a name for your mapping item in the text box.
4. Select mapping option you require from the drop down list.
5. Click Add. The new mapping displays in the Available Mappings list.



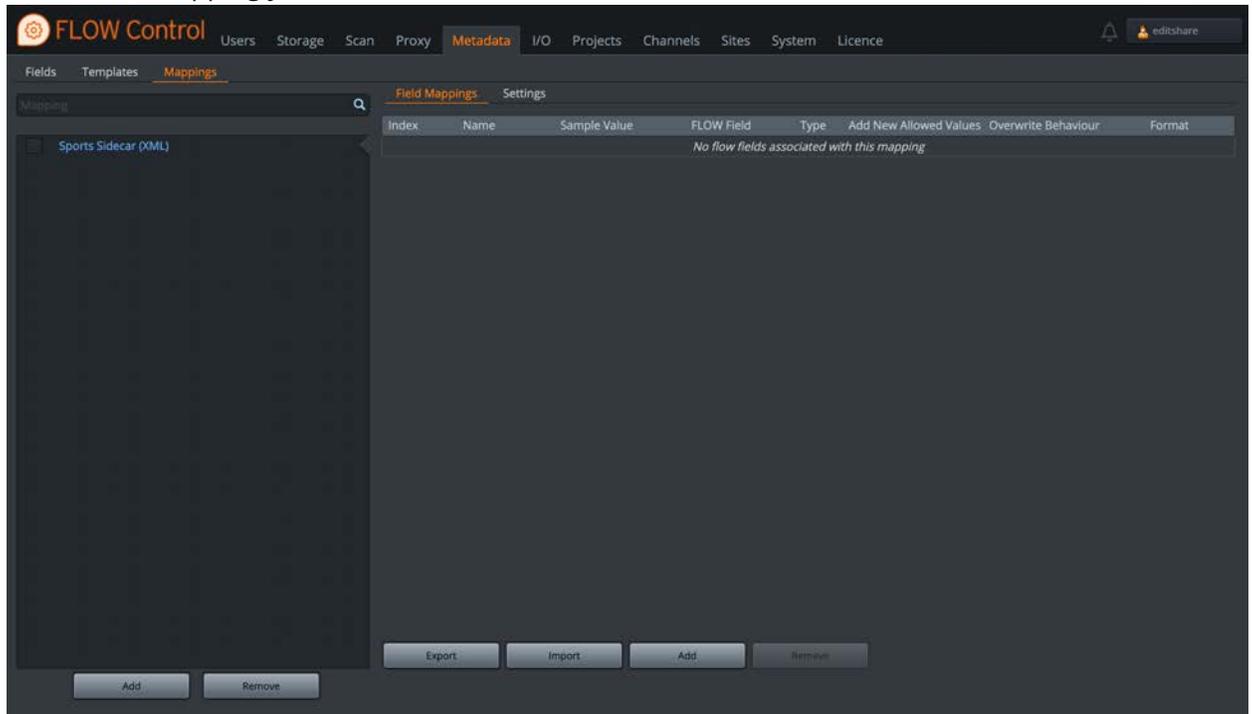
6. To configure the mapping, proceed to the "Mapping Metadata from Files" section.

Mapping Metadata from Files

To complete the metadata mapping, you must provide a sample metadata file. FLOW Control then analyzes the file and, in the case of well known formats such as FCPXML, CatDV, attempts to map the file's metadata to FLOW's asset level metadata set.

Whether FLOW is able to provide a match or not, you can modify the metadata mapping to suit your specific requirements.

1. With FLOW Control open in the Metadata tab, click the Mappings tab.
2. Click on the Mapping you want to edit.



3. Click the Import button. Depending on your operating system, Windows Explorer or Mac Finder opens. Select the sample file you want to import and click OK.
4. FLOW analyzes the selected file and displays the metadata items it finds. If the Import function succeeds in mapping all metadata, the FLOW asset name displays in the FLOW Field column.
 - If the Import function fails to map to a FLOW metadata name, its FLOW Field column displays 'None'.
 - If you want to change an incorrect mapping, or modify a mapping to suit your requirements, follow steps 5 to 8. Otherwise proceed to step 9.
5. Click on the metadata item you want to map to select it for editing.
6. Click on the FLOW Field column and, from the drop down list that opens, select the FLOW metadata name you want to map the imported item to.
7. The string type displays in the Type column.
8. Click the checkbox to allow the imported item to be added to FLOW asset metadata.
9. Select the overwrite method - Append, Overwrite or Ignore - for the imported item. (If the string type in step 8 is numeric, the Append option is unavailable).

Removing a Metadata Item

To remove a metadata item from the Mapping Contents panel:

1. With FLOW Control open in the Metadata tab, click the Mappings tab.
2. Select the mapping item row that you want to remove.
3. Click the Remove button. A message box opens, asking you to confirm the removal of the metadata item. The item is removed from the Mapping list.

Renaming a Metadata Mapping

To rename a metadata mapping:

1. With FLOW Control open in the Metadata tab, click the Mappings tab.
2. Double-click the mapping item row that you want to rename.
3. The name changes to be editable. Type the new name you require and press Enter. The mapping is renamed.

Deleting a Metadata Mapping

To delete a metadata mapping and all of its metadata items:

1. Make sure the Mappings tab is selected.
2. Highlight the mapping you want to delete from the list.
3. Click the Remove button at the bottom of the mappings list. A message box opens, asking you to confirm the deletion.
4. Click Yes to delete the mapping.

Mapping Paths to Metadata Fields

You can use path information for your files and map them to FLOW metadata fields. For example, if your system stores assets in folder structures based on customer names, project names, shoot day, etc., FLOW can import this information without you having to type the metadata for each item into the database.

You can create your mapping by following the instructions for creating a new Metadata Mapping and selecting 'File Path'.

Once created, you can add mappings for different levels of the folder structure.

Syntax:

* match on any character that isn't '/'

~ wildcard match on any character

? placeholder for the value you want to match

Examples

Given the following folder structure:

[ROOT OF SPACE]

```
Project 1
  Director A
    0001.mp4
    0002.mp4
  Director B
    0003.mp4
    0004.mp4
Project 2
  Director A
    0005.mp4
    0005.mp4
  Director B
    0007.mp4
    0008.mp4
```

Map the file name to a metadata field:

```
~/?.mp4
```

Map the file extension to a metadata field:

```
~/*.*
```

Map the top level folder folder to a metadata field:

```
/?/*/*.mp4 - if matching for specific files
```

```
/?/~ - if matching on any files and any folder depth
```

Map the second level folder folder to a metadata field:

```
/*/?/*.mp4 - if matching for specific files
```

```
/*/?/~ - if matching on any files and any folder depth
```

Using a Sample File

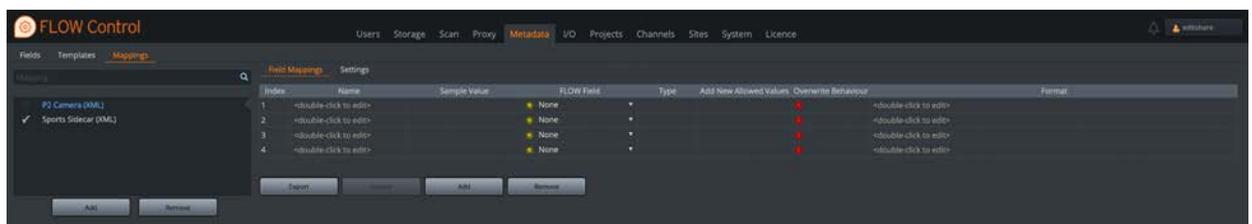
The simplest way to create a mapping profile is to import a sample file of the material you want to import.

1. Create a new mapping as described in "Creating a New Mapping".
2. The Mapping displays in the list on the left hand side.
3. To import a sample media file, do the following:
 - Click the Import button.
 - A file browser opens. Navigate to the folder containing the media you want to map, and select a sample file, ensuring that it is of the same media type you want to map.
 - Click OK.
 - Mapping filters containing basic information about your sample file are added to the main panel. The number of mapping filters vary according to the depth of the sample file path.
4. Refine the path name credentials for the first mapping filter, using wildcards as necessary. You can only use the ? and * wildcards once. For example:
 - /folder1/folder2/*/? .mov is allowed.
 - /folder1/*/*/? .mov is allowed.
 - /folder1/*/?/? .mov is NOT allowed.
5. Double-click on the FLOW Field column for that entry and, from the menu that opens, select the field item you want to map to from the drop down list.
6. Repeat steps 4 and 5 for each mapping filter you want to use.
7. Click the Add button to add extra mapping filters as required.
8. To Remove a mapping filter, click to select it and then click the Remove button. A message box opens, asking you to confirm the deletion. Click Yes.

Manual Method

To create a mapping profile manually:

1. Create a new mapping as described in [Creating a New Mapping](#), selecting 'File Path' from the drop down list. The Mapping displays in the list on the left hand side.
2. Click the Add button. A blank mapping filter is added to the main panel.
3. Type the path name that will select your source files, using wildcards as necessary. You can only use the ? and * wildcards once. For example:
 - /*/*/? .mov (this maps the filename)
 - /?/~ (this maps the folder name on the 1st level)
 - /*/?/~ (this maps the folder name on the 2nd level)
 - /*/*/?/~ (this maps the folder name on the 3rd level)
 - /*/*/*/?/~ (this maps the folder name on the 4th level)

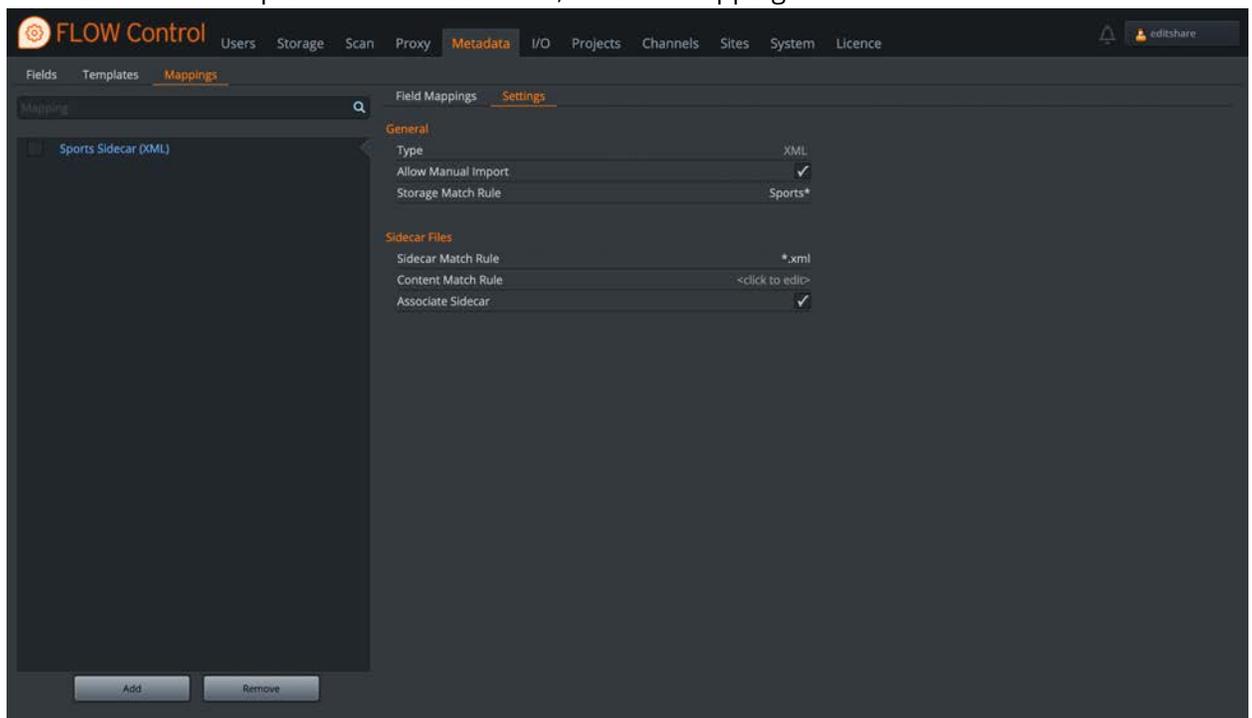


4. Double-click on the FLOW Field column for that entry and, from the menu that opens, select the field item you want to map to from the drop down list.
5. Add new filters by repeating steps 2 to 4.
6. To Remove a mapping filter, click to select it and then click the Remove button. A message box opens, asking you to confirm the deletion. Click Yes.

Creating Custom Rules for Mappings

You can create rules for matching external metadata files to your Mapping templates, and specify rules for sidecar files and storage spaces. Observe that the content displayed in the Settings tab varies according to the file format you have chosen: for example, P2 cards do not have sidecar files.

1. With FLOW Control open in the Metadata tab, click the Mappings tab.



2. Click on the Mapping you want to edit.
3. Click on the Settings tab to reveal the panel for editing metadata rules.
4. Optional: Add allowed storage spaces into the Storage Space Match text box. Use asterisks (*) as wildcards, and commas (,) to add lists, for example:
 - * to specify all storage spaces
 - Avid* to specify storage spaces whose name starts with Avid
 - *News to specify storage spaces whose name ends with News
 - News*, Features* to specify storage spaces whose names start with News or Features

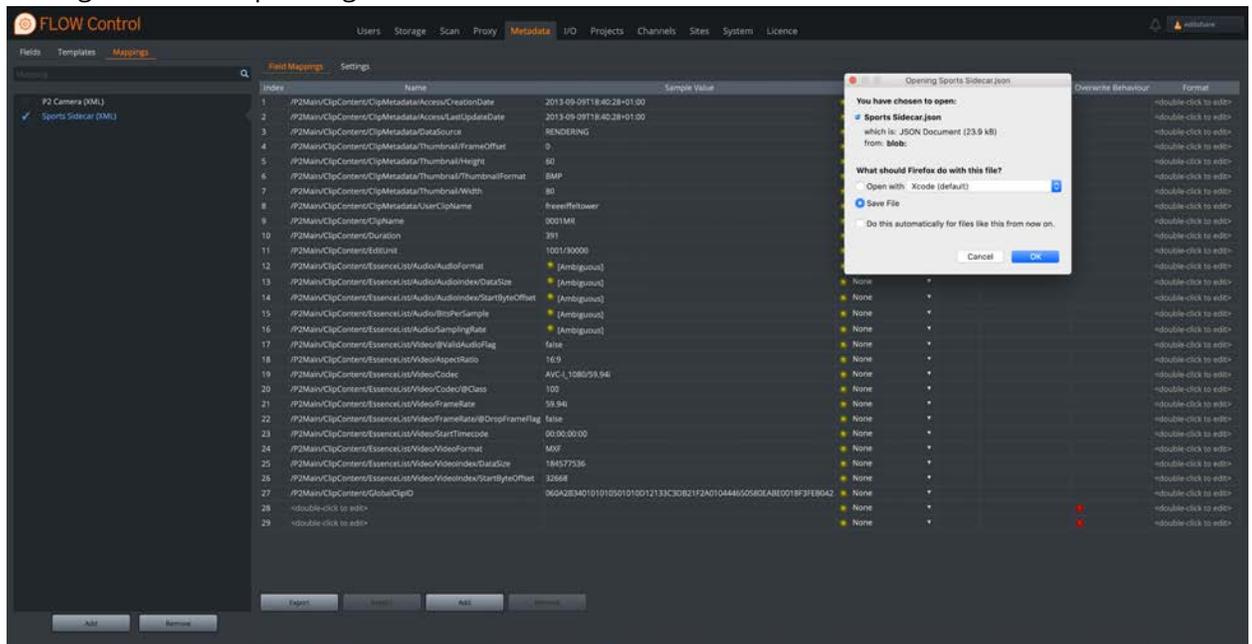
Spaces are permissible in Storage Spaces names, for example, RealityShows is not the same as Reality Shows.

- Optional: Type the rule to specify files containing valid sidecar data into the Sidecar Match Rule text box, for example:
 - *.xml to specify all XML files
 - CATDV_*.xml to specify XML files that start with CATDV_
- Optional: Type the name of an identifying tag or attribute for the selected format into the Content Match Rule text box. For CATDV XML files this would be CATDV.
- Click the 'Allow Manual Import' box if you want the rule to apply to manual imports in FLOW Browse.
- Click the 'Associate Sidecar' box if you want clip and sidecar file associations displayed in FLOW Browse the next time a scan is run.

Exporting Metadata Mappings

If you want to copy or transfer a metadata mapping to another FLOW system, you can export the mapping as a JSON file to a local drive and then transfer it to the target system.

- With FLOW Control open in the Metadata tab, click the Mappings tab.
- Select the Mapping you want to export from the list of mappings in the left hand panel by clicking in the corresponding checkbox.



- Click the Export button. An Explorer or Finder 'Save as' dialog box opens. Type a name for your export file and save it to a local drive.
- Transfer the file to the target FLOW system and import as described in [Creating a New Mapping](#).

Manual Metadata Mapping from MXF & R3D Files

MXF & R3D files contain metadata within the file. It is possible to map these internal 'import settings' metadata to FLOW fields during the scan of media.

Example: `_IMPORTDISKLAB`

```
"import-settings": {  
  "_IMPORTDISKLAB": "CAM CARD 001",  
  "_IMPORTSETTING": "__AttributeList",  
  "_PJ": "MORE AVID"
```

To create a manual mapping of this file metadata:

1. Create a new mapping as described in "Creating a New Mapping" and select MXF or R3D.
2. The Mapping displays in the list on the left hand side.
3. Click the Add button to add a field.
4. Double click in the name column for the created field.
5. Add the text `_IMPORTDISKLAB`
6. Click on the FLOW field to select the field you want to map to.
7. Enable the mapping via the checkbox in the Mappings list table.\

Chapter 7: I/O Ports

The I/O Ports tab allows you to review and configure real time input signals on each FLOW ingest input. Its functions include:

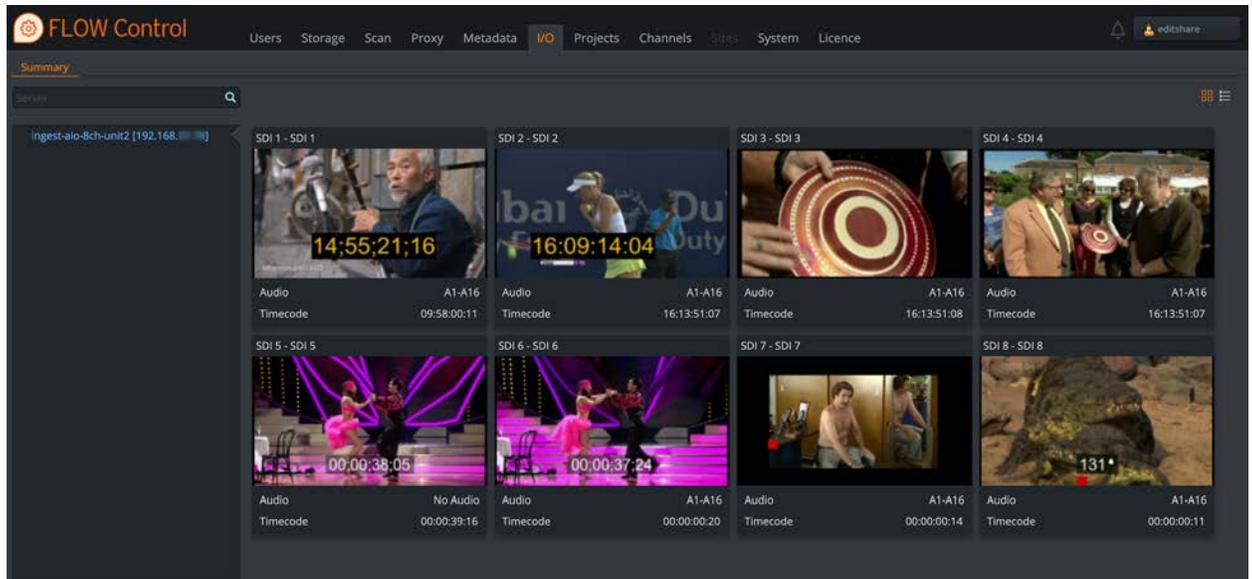
- Name inputs
- Select whether an input has VTR control or is live
- Select the source of timecode and audio
- Select timecode options
- Configure timecode behavior
- Decide if you want to autorecover dropped frames
- See which users are capturing sources
- Listen to incoming audio

Accessing the FLOW I/O Ports

To review the ingest inputs on FLOW:

1. Click on the I/O tab.
2. Click to select a source server from the server list on the left.
3. Click on the icons in the top right corner to switch between Preview & Detailed view.

Simple View



Detailed View

The screenshot shows the FLOW Control interface with a 'Detailed View' of four SDI inputs. The top navigation bar includes 'Users', 'Storage', 'Scan', 'Proxy', 'Metadata', 'I/O', 'Projects', 'Channels', 'Sites', 'System', and 'Licence'. The main panel is titled 'Summary' and shows a server selection dropdown set to 'Ingest-alo-8ch-unit2 [192.168...]'.

Four input cards are displayed, each with a video preview and a configuration table:

SDI 1 - SDI 1	SDI 2 - SDI 2	SDI 3 - SDI 3	SDI 4 - SDI 4
Audio: A1-A16	Audio: A1-A16	Audio: A1-A16	Audio: A1-A16
Timecode: 09:58:00:01	Timecode: 16:22:07:05	Timecode: 16:22:07:06	Timecode: 16:22:07:06
Source name: SDI 1	Source name: SDI 2	Source name: SDI 3	Source name: SDI 4
Frame format: 1080I29.97	Frame format: 1080I25	Frame format: 1080I25	Frame format: 1080I25
Audio source: SDI Embedded			
Timecode source: RS-422	Timecode source: Server's "Time of ..."	Timecode source: Server's "Time of ..."	Timecode source: Server's "Time of ..."
Check for:	Check for:	Check for:	Check for:
Timecode crossing midnight: <input checked="" type="checkbox"/>			
Loss of signal: <input type="checkbox"/>	Loss of signal: <input checked="" type="checkbox"/>	Loss of signal: <input checked="" type="checkbox"/>	Loss of signal: <input checked="" type="checkbox"/>
Timecode breaks: <input checked="" type="checkbox"/>			
Timecode repeats: <input type="checkbox"/>	Timecode repeats: <input checked="" type="checkbox"/>	Timecode repeats: <input checked="" type="checkbox"/>	Timecode repeats: <input checked="" type="checkbox"/>
Framerate change: <input checked="" type="checkbox"/>			
Frame synchronizer mode: Drop/repeat vide...			
Reset the card if there is no video signal: <input checked="" type="checkbox"/>	Reset the card if there is no video signal: <input checked="" type="checkbox"/>	Reset the card if there is no video signal: <input checked="" type="checkbox"/>	Reset the card if there is no video signal: <input checked="" type="checkbox"/>
Transport control: <input type="checkbox"/>			
RS422 port: Port 1	RS422 port: Port 4	RS422 port: Port 3	RS422 port: Port 1

4. If no channels are displayed, you may not have an ingest server selected. You may also have more than one ingest server. In either case, select the ingest server you require from the Select Server drop down list. The Ingest inputs associated with the server display in the main panel.
5. Review or configure the inputs as described in [Reviewing and Configuring Inputs](#).

Reviewing and Configuring Inputs

Parameters are either read-only or user configurable.

Read-Only Parameters

The following parameters cannot be changed by the user:



- If video is present on the input, it is displayed in the viewer.
 - If audio is present, the audio channels are listed under the viewer.
 - If the input is recording, the clip timecode is displayed above the viewer.
1. If video is present on the input, FLOW detects the video standard and displays it in the Standard field, for example:
 - a. HD - 1920x1080
 - b. SD - 720x576
 2. If video is present on the input, FLOW detects the video format and displays it in the Format field, for example:
 - a. Progressive
 - b. Interlaced (Top Field First)

User Configurable Parameters

Note: Not all parameters can be changed while the input is ingesting.

Review and configure the remaining I/O Port parameters as follows:

1. Enter a custom name for each input in the Source name field, for example; HDCAM 1, DVCAM 1. The text you enter is displayed as the channel header 'A'.



2. Set the audio source for each input from the Audio Source drop-down list as described below:
 - SDI Embedded - Audio is embedded in the video signal.
 - AES/EBU * - Audio is separate digital audio.

* AES requires a separate license. For further information, contact your local EditShare reseller.

Note: All audio is recorded as 16-bit audio, even if it comes in as 24-bit.

You cannot mix AES/EBU and embedded audio for a given video input. You can capture in only one type of audio at a time.

3. Select the timecode source for each input from the 'Timecode source' drop-down list. The options are:
 - Embedded VITC - Video is stamped with embedded VITC timecode from the tape.
 - RS 422 - Video is stamped with RS-422 timecode from the tape.
 - External "House" Timecode - Video is stamped with external LTC (house) timecode.
 - Server's "Time of Day" Timecode - Video is stamped with time-of-day timecode that corresponds to the clock on the server.
4. To govern capture behavior depending on timecode events, select options in the 'Check For' area as described in the following table.

Check For	Capture Stops	Auto-Chunk	Capture Resumes
Timecode crossing midnight			
Loss of signal	After 5 seconds of loss is detected.	Yes	When the signal resumes.
Timecode breaks	When non-sequential timecodes are detected.	Yes	When timecode stability resumes.
Repeated timecodes	60 frames after repeat is detected.	No	When the next frame is detected.
Frame rate changes	Capture stops if frame rate changes		

5. To recover dropped frames automatically, select the Auto recover option. If you are using VTR control and there is a problem with the signal, you can choose to automatically rewind the deck and recapture dropped frames.
6. Set the frame synchronization from the Frame Synchronizer mode drop down list:
 - None - No time base correction is applied. The input stream gives access to all the frames obtained from the input connectors. Best results are achieved when the card is genlocked to the input source.
 - Drop/repeat video & audio - Time base correction is applied to the input stream by repeating or dropping appropriate video and audio frames (default).
 - Drop/repeat video, resample audio - Time base correction is applied to the input stream by repeating or dropping the appropriate video frames and resampling the audio. Resampling prevents audio dropping/repeating.
7. Reset the card channel if there is no video signal, resets the channel to attempt a re-sync to a signal.
8. Set the required control option for each input from the Control drop-down list:
 - a. VTR: FLOW controls the video source via the RS422 serial interface for that input.
 - b. Live: The RS422 connection for that input is not active. This is often used for satellite or camera feeds.

Listening to Incoming Audio

Note: Audio listening is currently not supported via the FLOW Control web browser software. Please use the FLOW Control classic client if you require this feature.

Audio is set to OFF by default. To listen to incoming audio:

1. Audio is off by default. To listen to incoming audio, click the speaker icon under the Preview window.



2. To turn audio off, click the speaker icon again.

Adding/Deleting NDI Sources (Beta)

NDI capability is at beta stage and is limited to working with auto discoverable devices on the same subnet as the FLOW Ingest server.

1. Add NDI groups - to filter the devices that will be recognised.

The screenshot shows the 'Components' tab in the FLOW Control interface. A table lists various services and their status. The 'FLOW Ingest' service is highlighted. To the right, the 'Settings' for 'FLOW Ingest' are shown, including 'NDI groups' which is currently empty. A callout box provides instructions for this setting.

Service	Status	Logging
FLOW Automation App	Running	● ●
FLOW Control App	Running	● ●
FLOW Daemon	Running	●
FLOW Database	Running	●
FLOW File HTTP Server	Running	●
FLOW File SMB Server	Running	●
FLOW File Transfer	Running	● ●
FLOW Ingest	Running	● ●
FLOW Message Queue	Running	●
FLOW Metadata	Running	● ●
FLOW RMP	Running	● ●

Settings

STATUS: ● FLOW Ingest is online and connected.

Settings:

- Add clip to project on ingest:
- Channels: 4
- File Based Ingest:
- IP Ingest:
- NDI groups: <click to edit>
- SDI Ingest:

Names of the groups of NDI sources (separate by commas) that are accessible to the service; if empty, then all are accessible. Must restart the service for changes to take effect

2. Navigate to the I/O manage tab.

The screenshot shows the 'I/O' tab in the FLOW Control interface. The 'Add Source' dialog box is open, showing the following fields:

- Type: STREAM
- Source name: PTZ-CAM-1
- Expected frame format: 1080i@25

The 'Add' button is visible at the bottom of the dialog box.

3. Click 'Add Source'
4. Enter the exact name of the NDI source
5. Set an expected frame format

6. Click 'Add'
7. The device will be added to the Ingest server sources & will be visible for ingest through FLOW Browse.

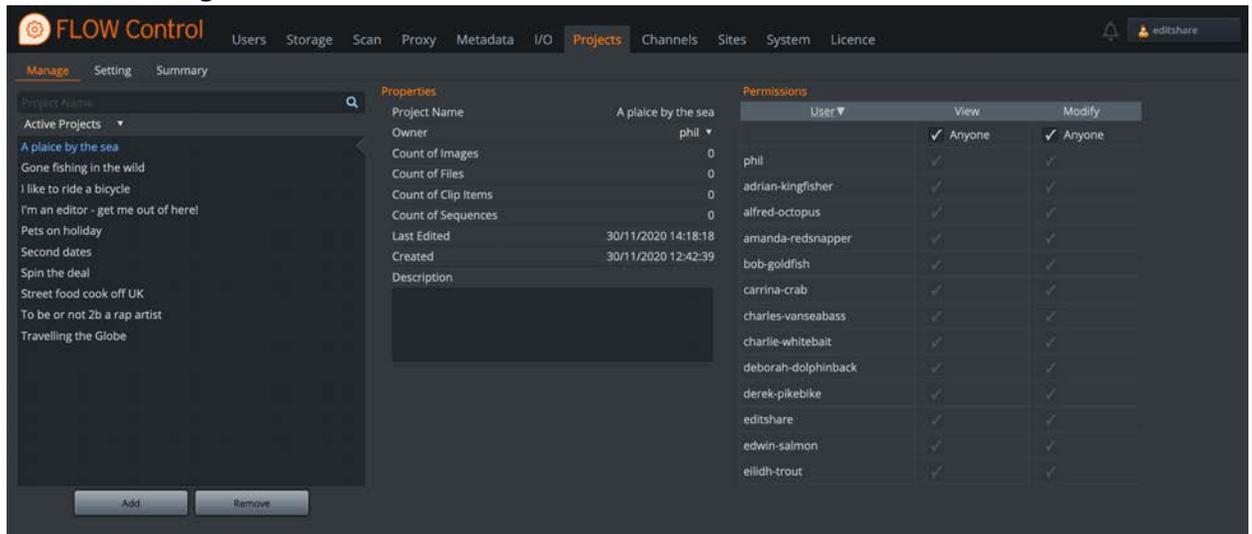
Chapter 8: Projects

Projects can be managed and maintained within FLOW Control. As an administrator, you can manage all the Projects within FLOW. You can create new projects, remove projects, restore deleted projects and manage user permissions.

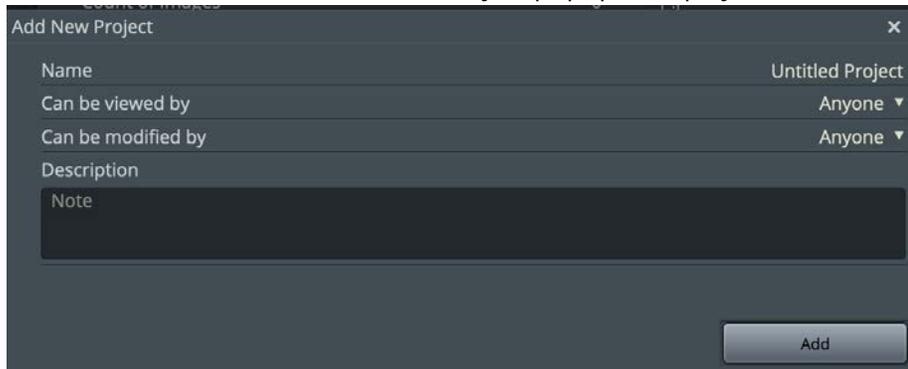
Adding a Project

To add a project:

1. Select the Projects tab.
2. Select the Manage sub tab.



3. Click the **Add** button. The Add New Project popup is displayed.



4. Enter the desired project name.

- Specify who is able to view and modify the project by using the Selected Users dropdown menus.

Add New Project

Name: Vocal Champ

Can be viewed by: Selected Users

Can be modified by: Selected Users

User	View	Modify
adrian-kingfisher	<input type="checkbox"/>	<input type="checkbox"/>
alfred-octopus	<input type="checkbox"/>	<input type="checkbox"/>
amanda-redsnapper	<input type="checkbox"/>	<input type="checkbox"/>
bob-goldfish	<input type="checkbox"/>	<input type="checkbox"/>
carrina-crab	<input type="checkbox"/>	<input type="checkbox"/>

Description: 2021 season of Vocal Champ

Add

- Optionally add a description for this project.
- When finished, click Add.

FLOW Control

Users Storage Scan Proxy Metadata I/O Projects Channels Sites System Licence

Manage Setting Summary

Project Name: Vocal Champ

Active Projects

- A plaice by the sea
- Gone fishing in the wild
- I like to ride a bicycle
- I'm an editor - get me out of here!
- Pets on holiday
- Second dates
- Spin the deal
- Street food cook off UK
- To be or not 2b a rap artist
- Travelling the Globe
- Vocal Champ

Properties

Project Name: Vocal Champ

Owner: editshare

Count of Images: 0

Count of Files: 0

Count of Clip Items: 0

Count of Sequences: 0

Last Edited: 01/12/2020 17:11:38

Created: 01/12/2020 17:11:38

Description: 2021 season of Vocal Champ

Permissions

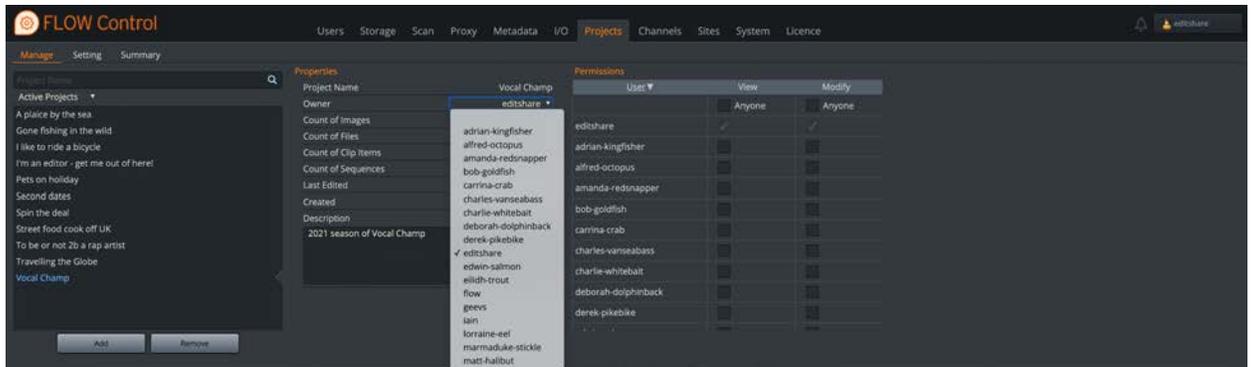
User	View	Modify
editshare	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
adrian-kingfisher	<input type="checkbox"/>	<input type="checkbox"/>
alfred-octopus	<input type="checkbox"/>	<input type="checkbox"/>
amanda-redsnapper	<input type="checkbox"/>	<input type="checkbox"/>
bob-goldfish	<input type="checkbox"/>	<input type="checkbox"/>
carrina-crab	<input type="checkbox"/>	<input type="checkbox"/>
charles-vanseabass	<input type="checkbox"/>	<input type="checkbox"/>
charlie-whitebait	<input type="checkbox"/>	<input type="checkbox"/>
deborah-dolphinback	<input type="checkbox"/>	<input type="checkbox"/>
derek-pikebike	<input type="checkbox"/>	<input type="checkbox"/>
edwin-salmon	<input type="checkbox"/>	<input type="checkbox"/>
ellidh-trout	<input type="checkbox"/>	<input type="checkbox"/>
flow	<input type="checkbox"/>	<input type="checkbox"/>

Add Remove

Changing Project Owner

To change the owner of a project:

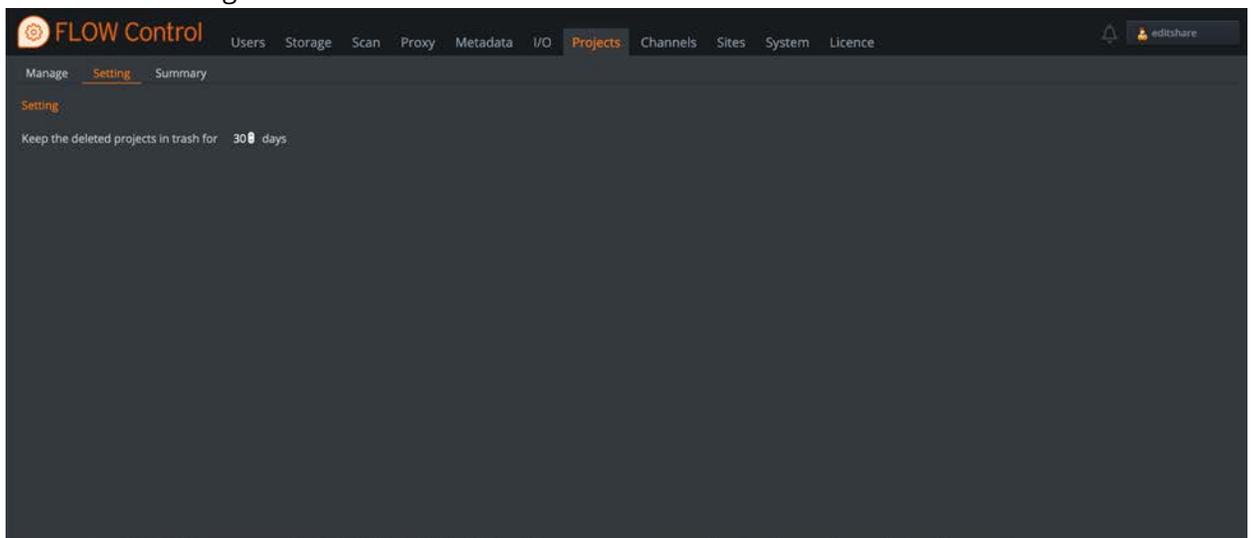
1. Select the Projects tab.
2. Select the Manage sub tab.
3. Select a project from the projects list.
4. Click on the Owner dropdown in the centre pane.



Defining Project Settings

Deleted projects can be saved in trash for a desired period of time. The default value is 30 days. To change this setting:

1. Click on the Project tab.
2. Click on the Settings sub tab.

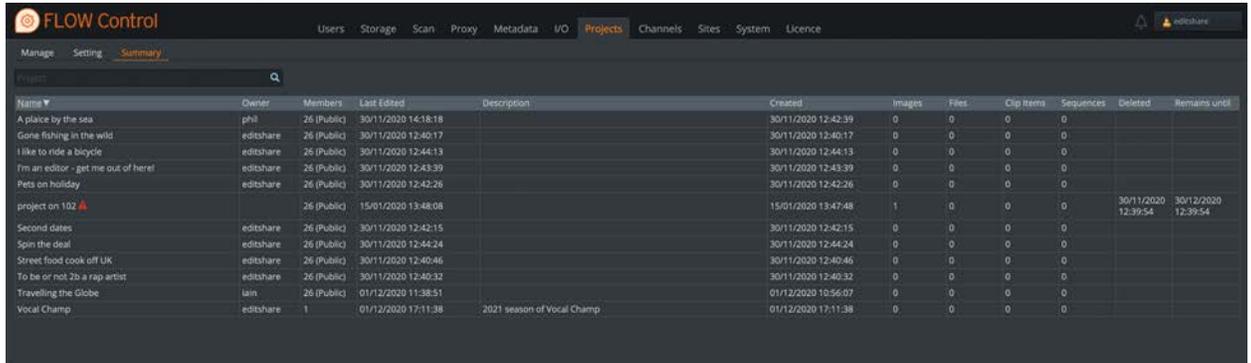


3. Toggle up or down to select the desired length of time to save the project in trash. You can also click on the value and define the value.

Viewing Projects Summary

To view a project's summary:

1. Click on the Project tab.
2. Click on the Summary sub tab.



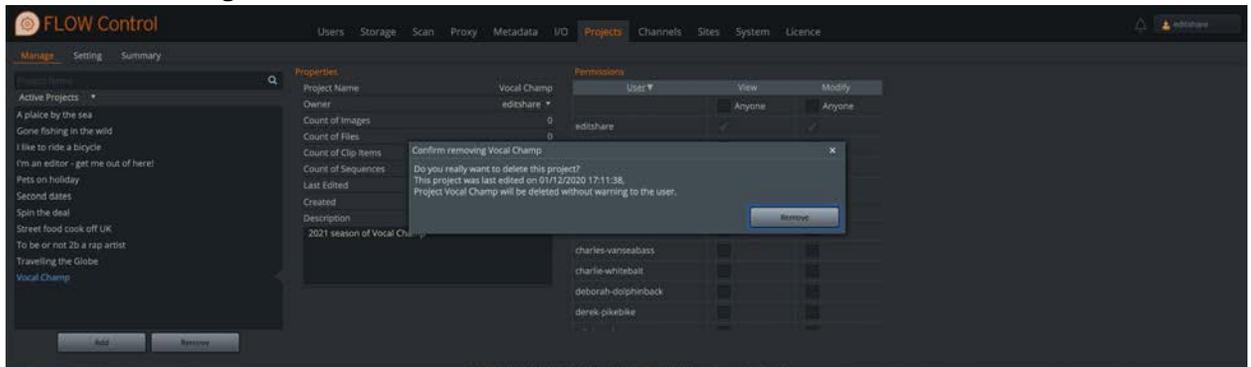
The screenshot shows the FLOW Control interface with the 'Projects' tab selected. The 'Summary' sub-tab is active, displaying a table of projects. The table has columns for Name, Owner, Members, Last Edited, Description, Created, Images, Files, Clip Items, Sequences, Deleted, and Remains until.

Name	Owner	Members	Last Edited	Description	Created	Images	Files	Clip Items	Sequences	Deleted	Remains until
A place by the sea	phl	26 (Public)	30/11/2020 14:18:18		30/11/2020 12:42:39	0	0	0	0		
Gone fishing in the wild	editshare	26 (Public)	30/11/2020 12:40:17		30/11/2020 12:40:17	0	0	0	0		
I like to ride a bicycle	editshare	26 (Public)	30/11/2020 12:44:13		30/11/2020 12:44:13	0	0	0	0		
I'm an editor - get me out of here!	editshare	26 (Public)	30/11/2020 12:43:39		30/11/2020 12:43:39	0	0	0	0		
Pets on holiday	editshare	26 (Public)	30/11/2020 12:42:26		30/11/2020 12:42:26	0	0	0	0		
project on 102		26 (Public)	15/01/2020 13:48:08		15/01/2020 13:47:48	1	0	0	0	30/11/2020 12:39:54	30/12/2020 12:39:54
Second dates	editshare	26 (Public)	30/11/2020 12:42:15		30/11/2020 12:42:15	0	0	0	0		
Spin the deal	editshare	26 (Public)	30/11/2020 12:44:24		30/11/2020 12:44:24	0	0	0	0		
Street food cook off UK	editshare	26 (Public)	30/11/2020 12:40:46		30/11/2020 12:40:46	0	0	0	0		
To be or not 2b a rap artist	editshare	26 (Public)	30/11/2020 12:40:32		30/11/2020 12:40:32	0	0	0	0		
Travelling the Globe	lain	26 (Public)	01/12/2020 11:38:51		01/12/2020 10:56:07	0	0	0	0		
Vocal Champ	editshare	1	01/12/2020 17:11:38	2021 season of Vocal Champ	01/12/2020 17:11:38	0	0	0	0		

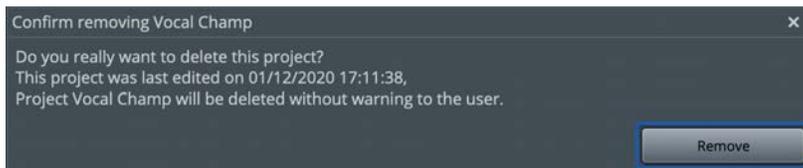
Deleting a Project

To delete a project:

1. Click on the Projects tab.
2. Click on the Manage sub tab.



3. Click on the project to be deleted.
4. Click the Remove button. A dialog box opens, asking you to confirm the deletion.

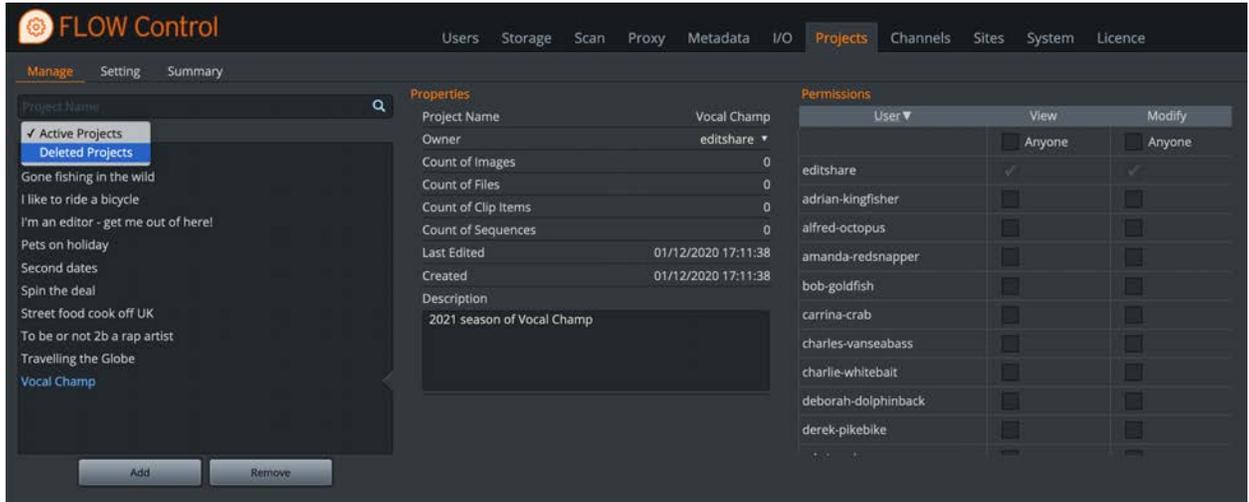


5. Click Remove to confirm the deletion.

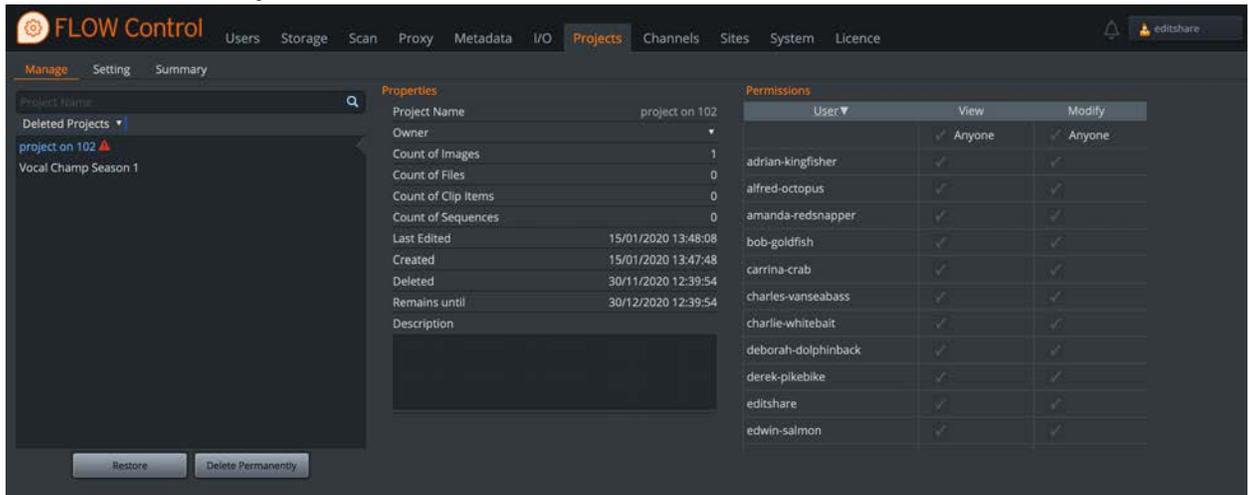
Viewing Deleted Projects

To view temporary deleted projects

1. Click on the Projects tab.
2. Click on the Manage sub tab.
3. Click on the Active / Deleted Projects dropdown below the quick search box



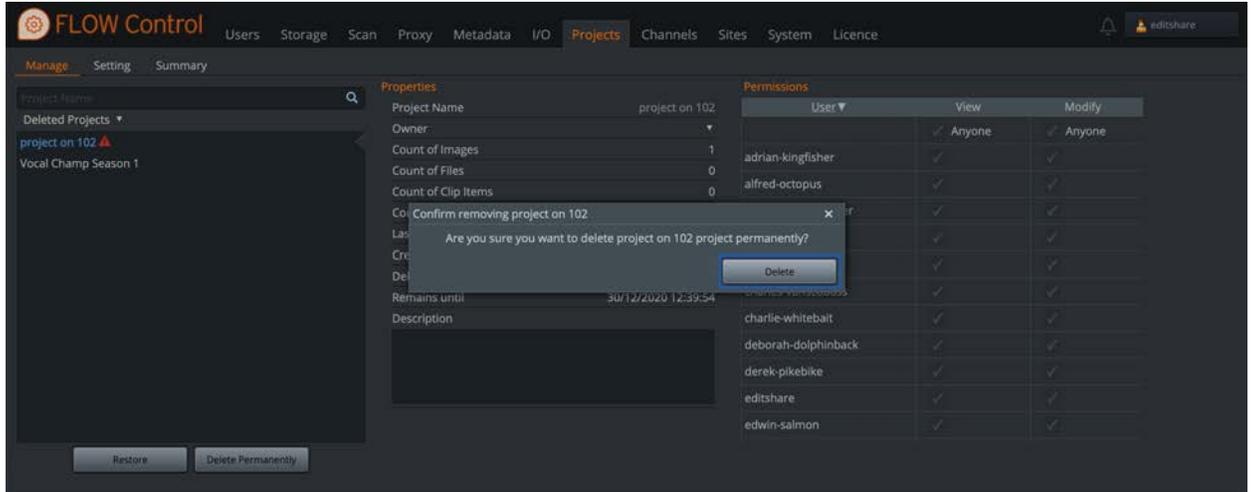
4. Selected Deleted Projects



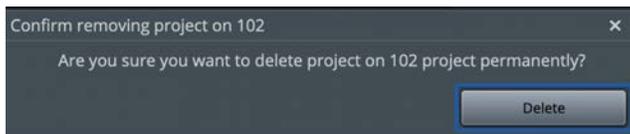
Permanently Deleting Projects

To permanently delete a project

1. Select a temporary deleted project from the list.
2. Click on Delete Permanently.



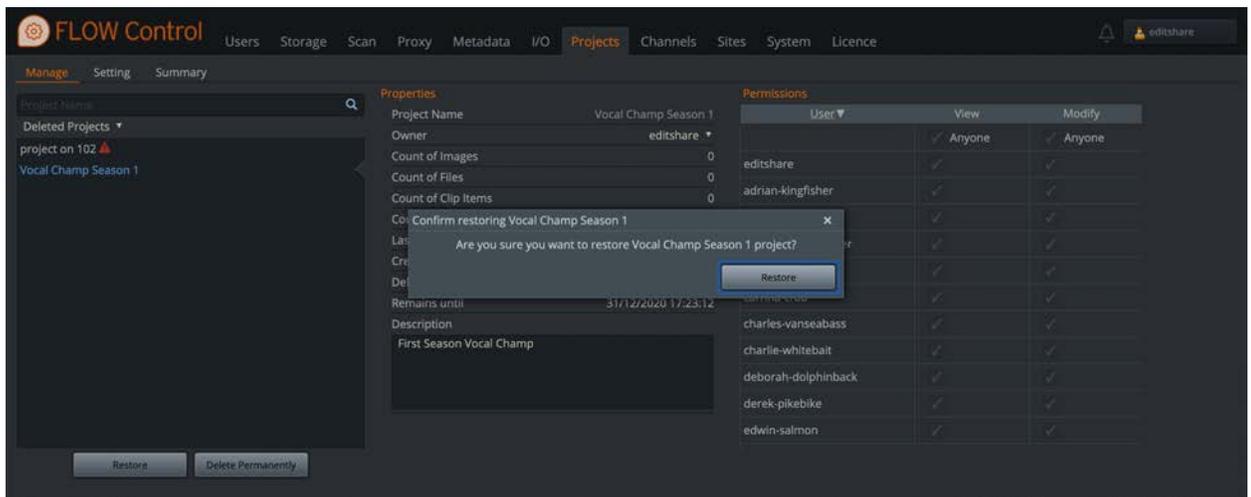
3. Confirm the permanent deletion by clicking Delete



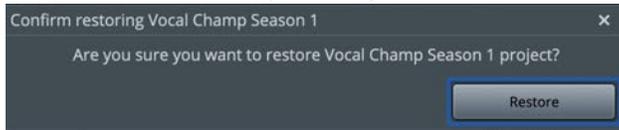
Restoring Deleted Projects

To restore a temporary deleted project

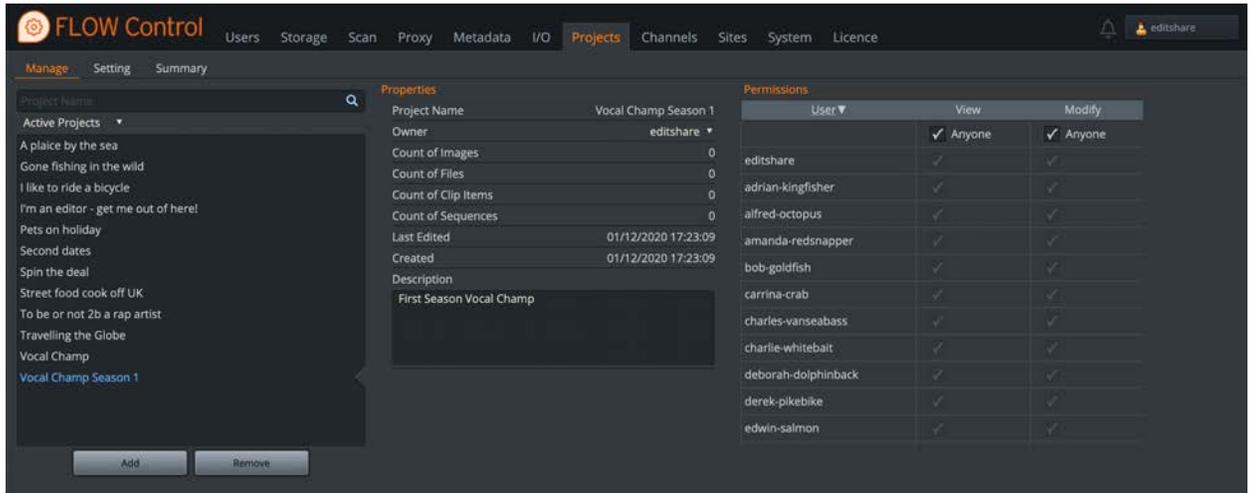
1. Select a temporary deleted project from the list.
2. Click Restore



3. Confirm restoration by clicking Restore



4. The restored project will now be visible as the project list refreshes back to Active Projects.



Chapter 9: Managing Channels

This chapter describes how to configure the input sources to your FLOW Ingest server.

About Input Sources and Channels

Input sources are the physical connections on the back of your FLOW Ingest server where video feeds are connected. Channels can be viewed as virtual slots for ingest and transcoding activity. You can assign input sources to channels, but not the reverse. You can also assign more than one source to a given channel.

While input sources must be configured for certain physical attributes – for example, if they are operated with deck control, or if they use external timecode – you must configure channels with encoding and user-access choices. To capture video through FLOW, you need access to one or more channels. You can also specify which codecs are available on each channel, and what kinds of proxy files are created when a recording takes place on that channel.

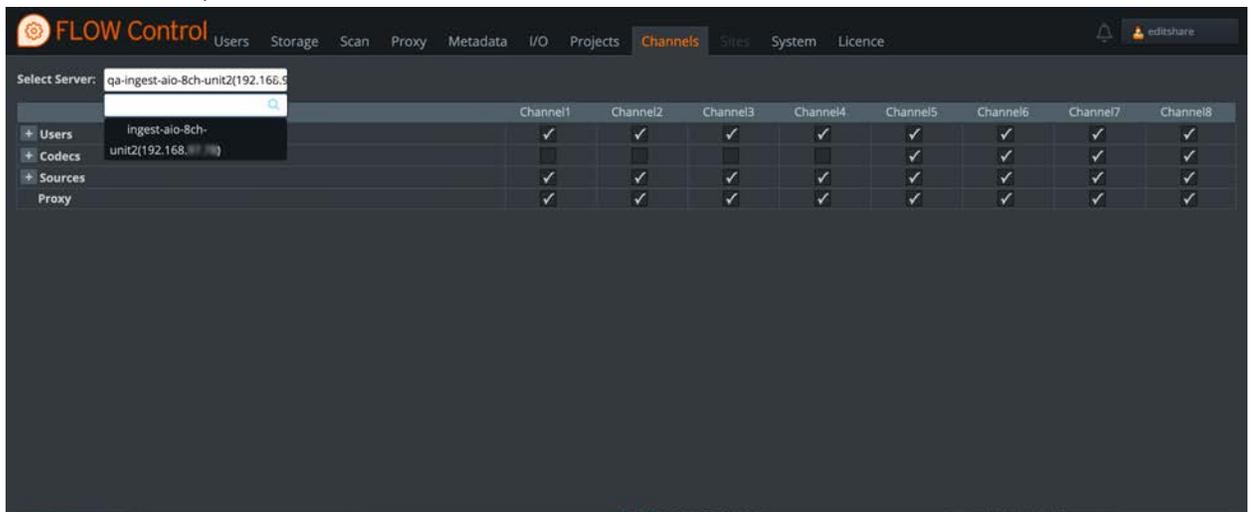
The Channels tab includes four sections:

- Users
- Proxy
- Codecs
- Sources

Selecting an Ingest Server

If you have more than one ingest server, complete the following:

1. In FLOW Control, click on the Channel tab.



2. From the Server drop down list, select the ingest server running the channels you want to configure.
3. The channels for the selected server display with the current assignments for users, proxies, codecs, and sources.

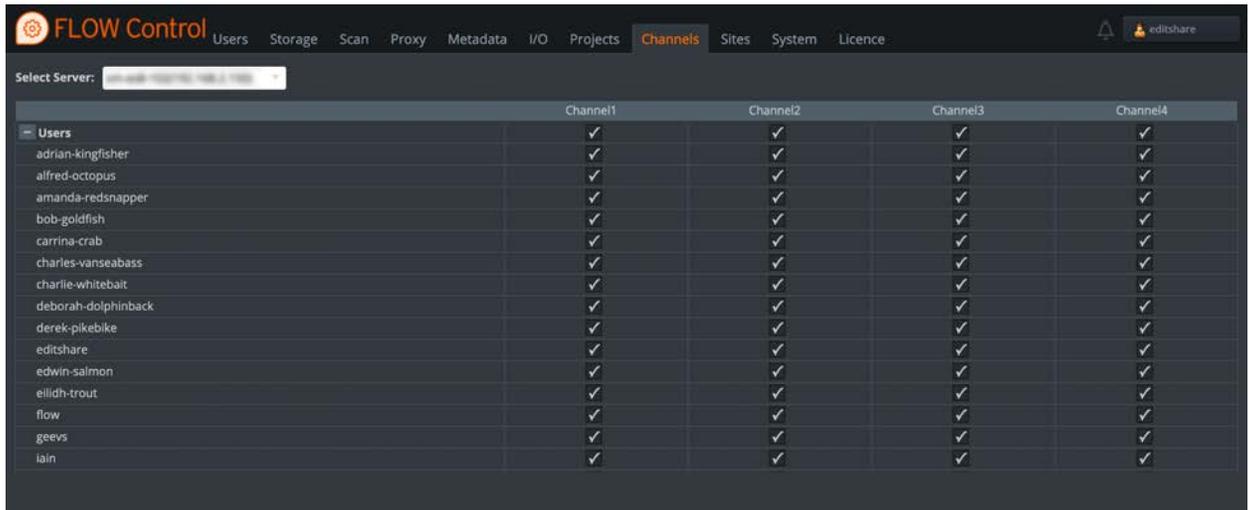
Enabling Ingest from Channels

Note: It is not necessary to give every user the authority to use every channel. EditShare recommends spreading the user allocation evenly across the available number of channels, with heavier users having access to a greater number of channels.

If you use FLOW Automation in your organization, it should have a channel reserved specifically for it.

To enable users to ingest material from the channel input sources:

1. Open the Channels tab and select the server you want to configure. See [Selecting an Ingest Server](#).
2. Expand the Users section to see a list of all users on your EditShare Storage Server. By default, all user names are selected.



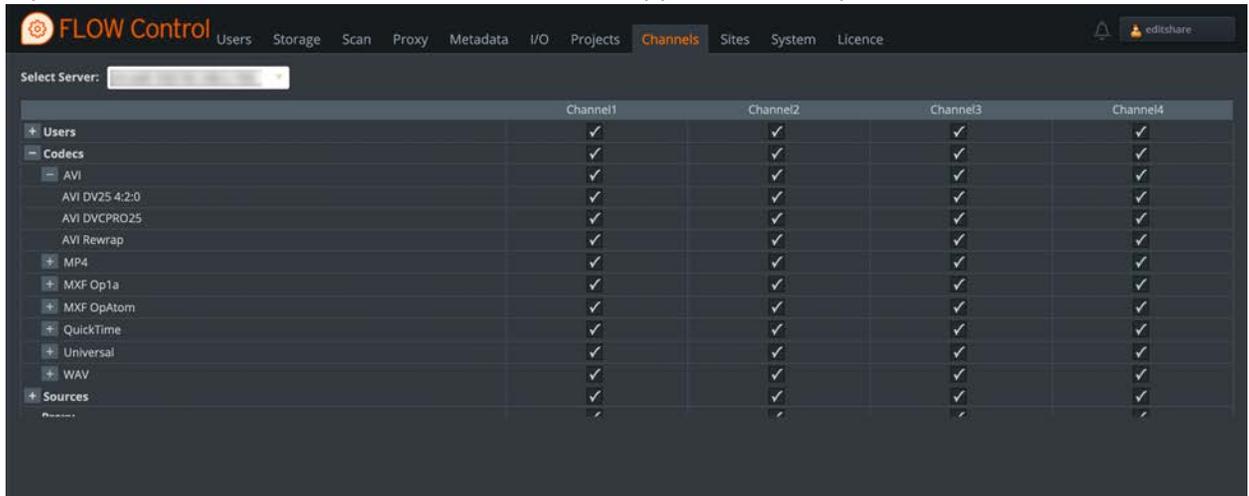
3. (Optional) Click the Down arrow under the channel name to toggle between selecting all users and deselecting all users for that channel.
4. Click on the channel marker for an individual user to toggle between selecting and deselecting that user.

Selecting Codecs

By default, all available codecs are enabled for all channels. See the FLOW Supported Formats User's Reference for a list of codecs supported by FLOW.

To review which codecs are enabled:

1. Open the Channels tab and select the server you want to configure. See [Selecting an Ingest Server](#).
2. Expand the Codecs section to view the available wrappers, for example; AVI, QuickTime, Universal.



3. Expand the Wrapper section to view the available codecs and to see which ones are enabled.
4. (Optional) Click the Codecs Down arrow to select or deselect all wrappers and codecs for a given channel.
5. (Optional) Click the Wrapper Down arrow to select or deselect all codecs within that wrapper for a given channel.
6. (Option) Click the marker for individual codecs to select or deselect that codec for a given channel.
 - You must select at least one codec per channel in order to ingest video.
 - Select only the specific codecs you work with so you don't accidentally capture using the wrong codecs.
 - The Frame rate is detected automatically on ingest.

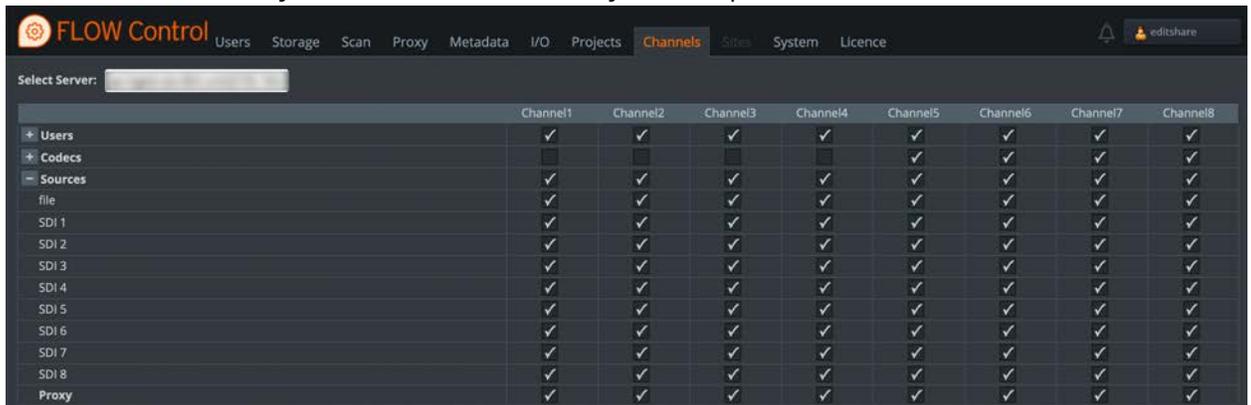
Enabling Proxy Files

Note: EditShare strongly discourages disabling proxy creation. If you disable proxy creation, you may not be able to playback captured clips in FLOW.

You can enable and disable the creation of proxy files on a per channel basis.

To enable or disable proxy creation:

1. Open the Channels tab and select the server you want to configure. See [Selecting an Ingest Server](#).
2. Click to select the Proxy marker for each channel you want proxies enabled.



3. Click again to deselect the Proxy marker.

You can set the size and quality of proxy files in the Proxy tab of FLOW Control.

About Source Mapping

In most cases, EditShare recommends mapping each physical input to just one channel, for example, SDI1 to Channel 1 and SDI2 to Channel 2. Each physical input on your server is then available on only one channel. When you change the channel inside the Ingest Client, the input automatically changes.

There are scenarios in which you might want to map physical devices differently. For example, consider the following situation: a post house has two customers, one named “Big Ad Agency” and the other named “Cheap Productions”. Big Ad Agency is renting an HDCAM deck that is connected to SDI input 1, but might also want to use the Betacam SP deck connected to SDI input 2. As for Cheap Productions, you don’t want to give them access to the HDCAM deck because they’re not paying for it, but you do want them to be able use the Beta deck. One solution might be to do the following:

- Map the HDCAM deck on SDI 1 to Channel 1 only.
- Map the Beta deck on SDI 2 to both Channels 1 and 2.
- Enable Big Ad Agency’s editors to access Channel 1 only.
- Enable Cheap Productions’ editors to access Channel 2 only.

Another solution would be to do the following:

- Map the HDCAM deck on SDI 1 to Channel 1.
- Map the Beta deck on SDI 2 to Channel 2.
- Enable Big Ad Agency's editors to access BOTH Channels 1 and 2.
- Enable Cheap Productions' editors to access Channel 2 only.

In the first example, "Big Ad Agency" (which is enabled only for Channel 1) can use only one source at a time. In the second example, "Big Ad Agency" can use both sources simultaneously. The way you enable users to access channels and the way you map sources to channels gives you control over who can use which resources. For example, mapping more than one input to a given channel allows you to make ganged recordings.

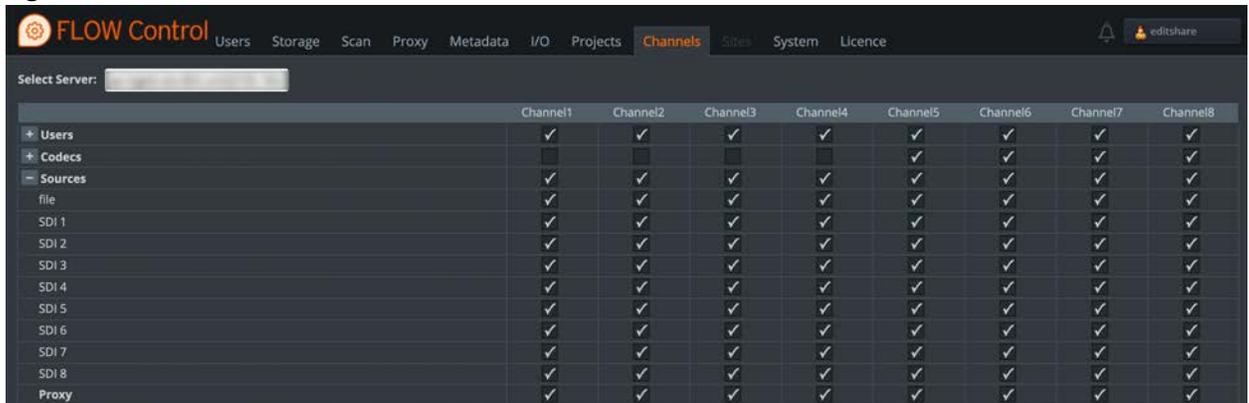
Also, in the first example, you could configure Channel 1 to use only one kind of proxy file and one particular set of codecs (those that "Big Ad Agency" wanted) while configuring Channel 2 to use a different kind of proxy file and a different set of codecs (those that "Cheap Productions" wanted to use). Both organizations might have access to the Betacam deck, but perhaps you would let "Big Ad Agency" work in 1:1 uncompressed SD while "Cheap Productions" would be limited to DV 25.

Mapping Sources to Channels

Each source is a physical input on the back of the FLOW ingest server. By default, all sources are selected. The name of each source is set in the I/O Ports tab of FLOW control. See [Chapter 7: I/O Ports](#).

To change the sources to channels mapping:

1. Open the Channels tab and select the server you want to configure. See [Selecting an Ingest Server](#).
2. Expand the Source section to review which sources are mapped to which channels of the Ingest server.



Select Server:	Channel1	Channel2	Channel3	Channel4	Channel5	Channel6	Channel7	Channel8
+ Users	✓	✓	✓	✓	✓	✓	✓	✓
+ Codecs	✓	✓	✓	✓	✓	✓	✓	✓
- Sources								
file	✓	✓	✓	✓	✓	✓	✓	✓
SDI 1	✓	✓	✓	✓	✓	✓	✓	✓
SDI 2	✓	✓	✓	✓	✓	✓	✓	✓
SDI 3	✓	✓	✓	✓	✓	✓	✓	✓
SDI 4	✓	✓	✓	✓	✓	✓	✓	✓
SDI 5	✓	✓	✓	✓	✓	✓	✓	✓
SDI 6	✓	✓	✓	✓	✓	✓	✓	✓
SDI 7	✓	✓	✓	✓	✓	✓	✓	✓
SDI 8	✓	✓	✓	✓	✓	✓	✓	✓
Proxy	✓	✓	✓	✓	✓	✓	✓	✓

3. (Optional) Click on the row channel header to toggle between selecting and deselecting all sources for that channel.
4. (Optional) Click on the row source name to toggle between selecting and deselecting all channels for the source.
5. Click on the channel marker for an individual source to toggle between selecting and deselecting that source.

Chapter 10: Sites

If you have multiple EditShare FLOW systems (either at the same site or at different geographical locations) you can use FLOW Automation's 'Send To' task to transfer high resolution media, proxy files, and/or FLOW metadata between FLOW systems. Automation uses the list of sites created in the Sites Tab of FLOW Control.

Prerequisites

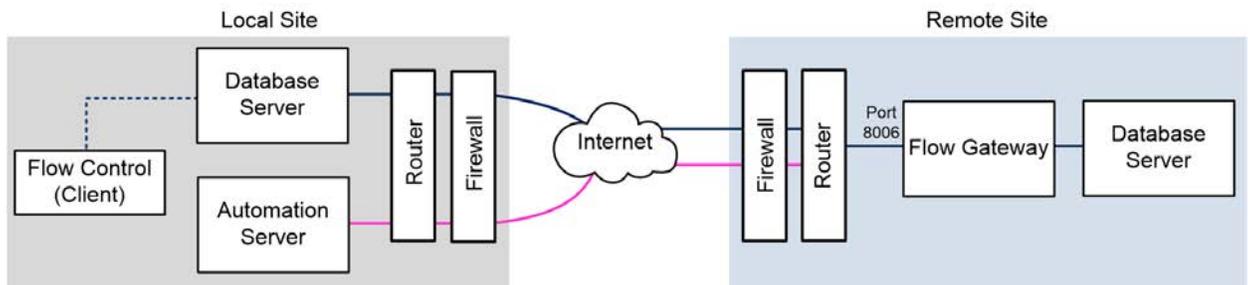
Note: Before adding a Site, confirm that there is a valid route to the remote site. Connectivity is required between the FLOW Gateway and FLOW Database (API) server - and not the FLOW Control client.

Make sure the connection to the remote site is active when adding it, because FLOW Control needs to fetch information from the site. Note that:

- The credentials used to connect to the remote site are those used when logging in to FLOW Control.

Note: With an integrated system, it is not necessary to reconfigure FLOW when the EditShare password is changed. This is only required when running FLOW in Sidecar Mode to integrate with a separate EditShare system.

- There must be a TCP/IP route from the local FLOW Database server to the remote Site hostname or IP Address. The remote site may need port forwarding on Port 8006 if the remote gateway is behind a Router.

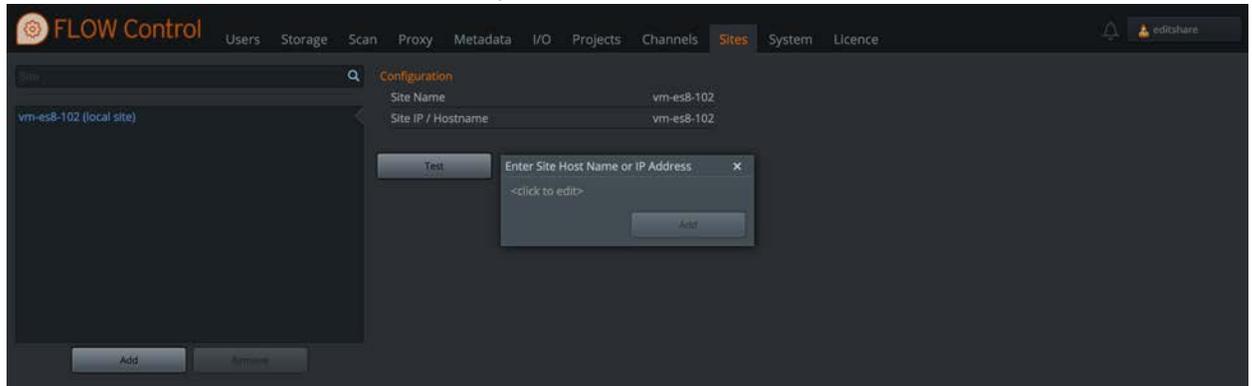


- To use the site from FLOW Automation, a route must also exist from the local FLOW Automation server to the remote site.

Adding a Site

To add a remote FLOW site:

1. Click on the **Sites** tab to reveal the Sites panel.

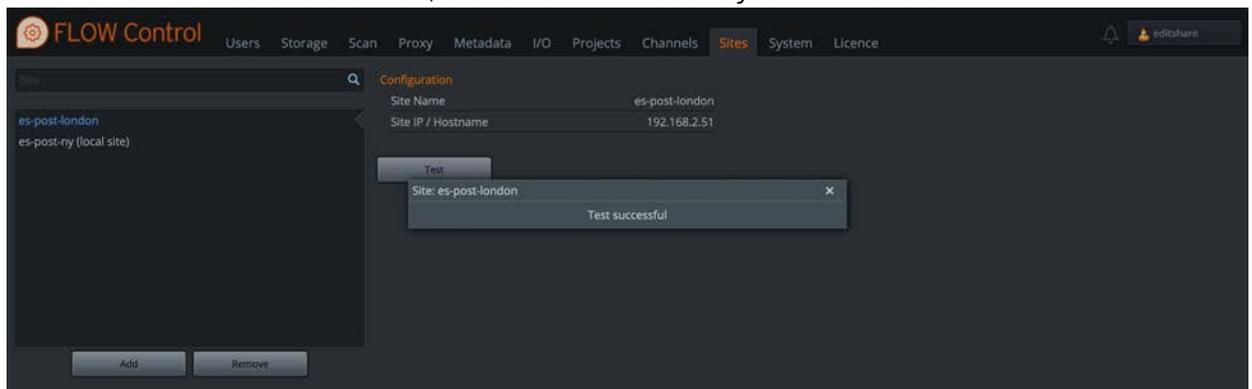


2. Click on the **Add** button.
3. When the Add Site dialog box opens, type the hostname or IP Address of the remote site you want to add and click **Add**.
4. FLOW looks up the DNS for the remote site you specified. If the lookup succeeds, it adds it to the list in the left hand side pane.
5. If FLOW fails to find a DNS record for the specified site, it displays an error message. Confirm the site details are valid and that it is accessible from your domain, and try again.

Testing a Site Connection

To test a connection to a remote site:

1. Confirm there is a valid connection route to the remote site, as described in [Prerequisites](#).
2. Click on the **Sites** tab to reveal the Sites panel.
3. On the left hand side of the screen, click on the remote site you want to test.

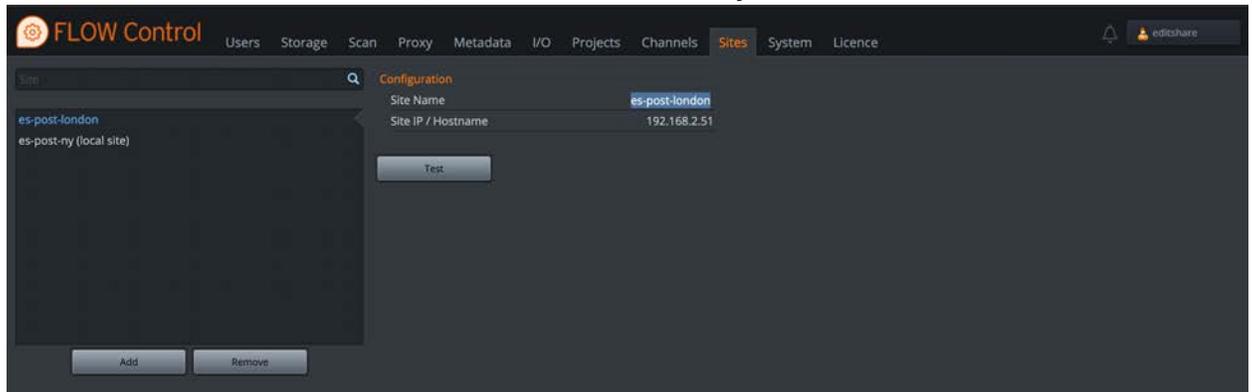


4. Click the **Test** button.
5. After a short delay, a message confirming the status of the connection displays to the right of the Test button.

Renaming a Site

To rename a site:

1. Click on the **Sites** tab to reveal the Sites panel.
2. On the left hand side of the screen, click on the remote site you want to rename.

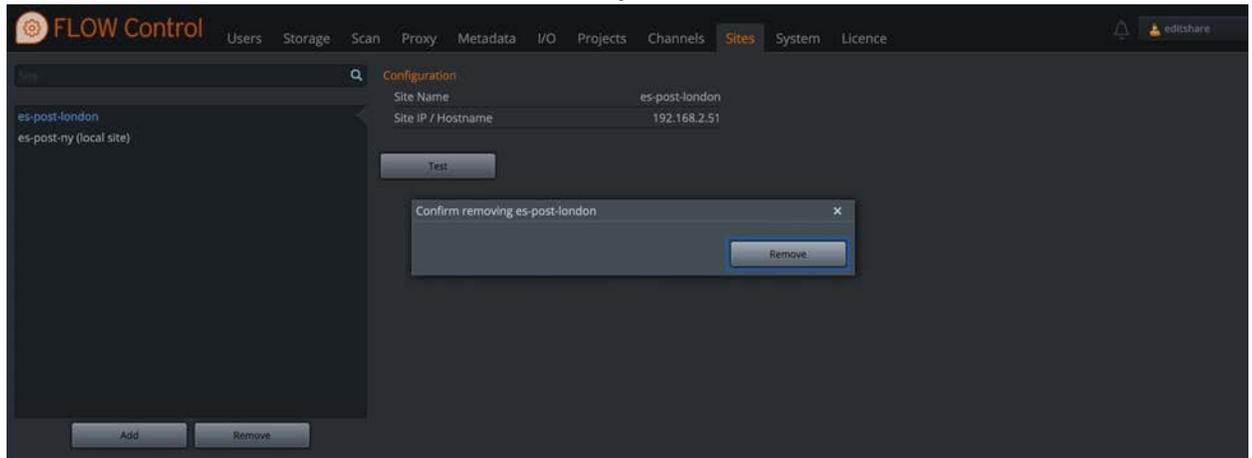


3. The text becomes editable (indicated in blue).
4. Delete the existing text, type the new site name, and press **Enter**, or left click in the list.
5. The site details are updated.

Removing a Site

To remove a site:

1. Click on the **Sites** tab to reveal the Sites panel.
2. On the left hand side of the screen, select the site you want to remove.



3. Click the **Remove** button.
4. Confirm the deletion by clicking the **Remove** button in the dialog.

Chapter 11: System

The System tab displays information about servers that are connected to the FLOW network. You can review the status of Services, check server specifications and review installed components.

Viewing the Status of Services

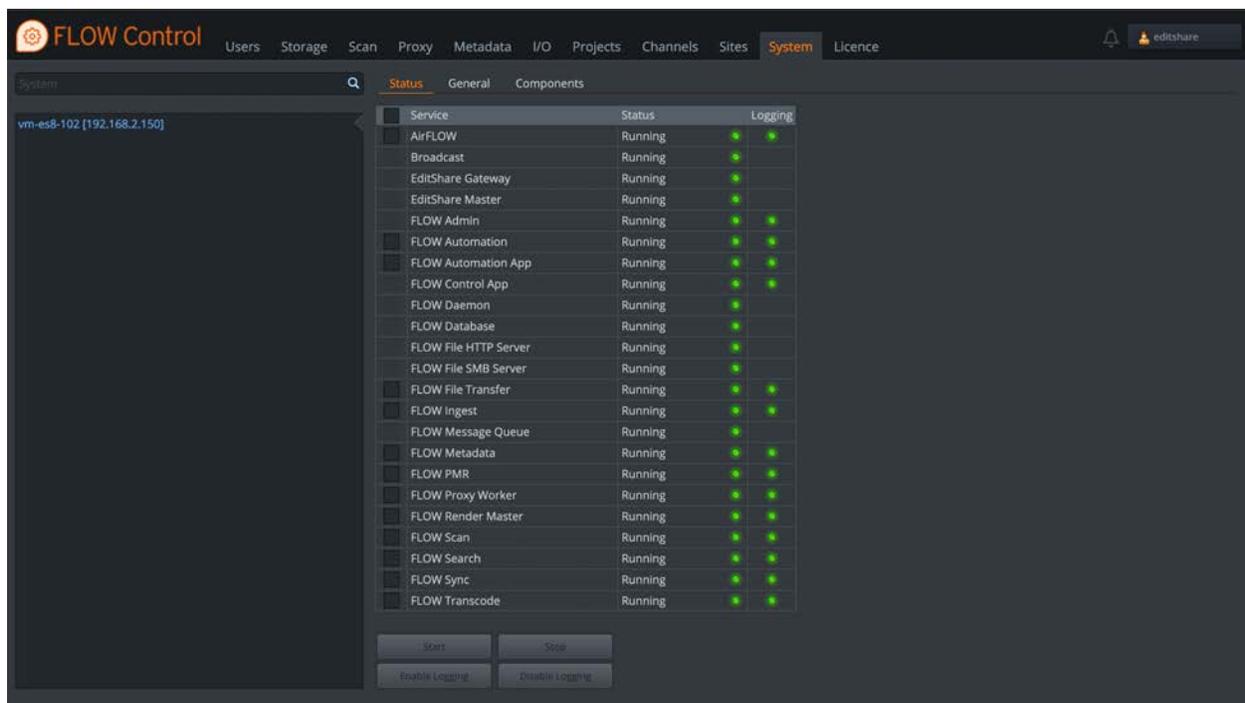
The Status menu within the System tab displays the status for the services on a server. The services are a combined list of FLOW Services and Supporting Services that FLOW uses.

From the Status tab you can start and stop services and apply configuration changes.

Reviewing the FLOW Services

To review the FLOW services:

1. Select the System tab.
2. Select the Status sub tab.
3. The services and their current status are listed.

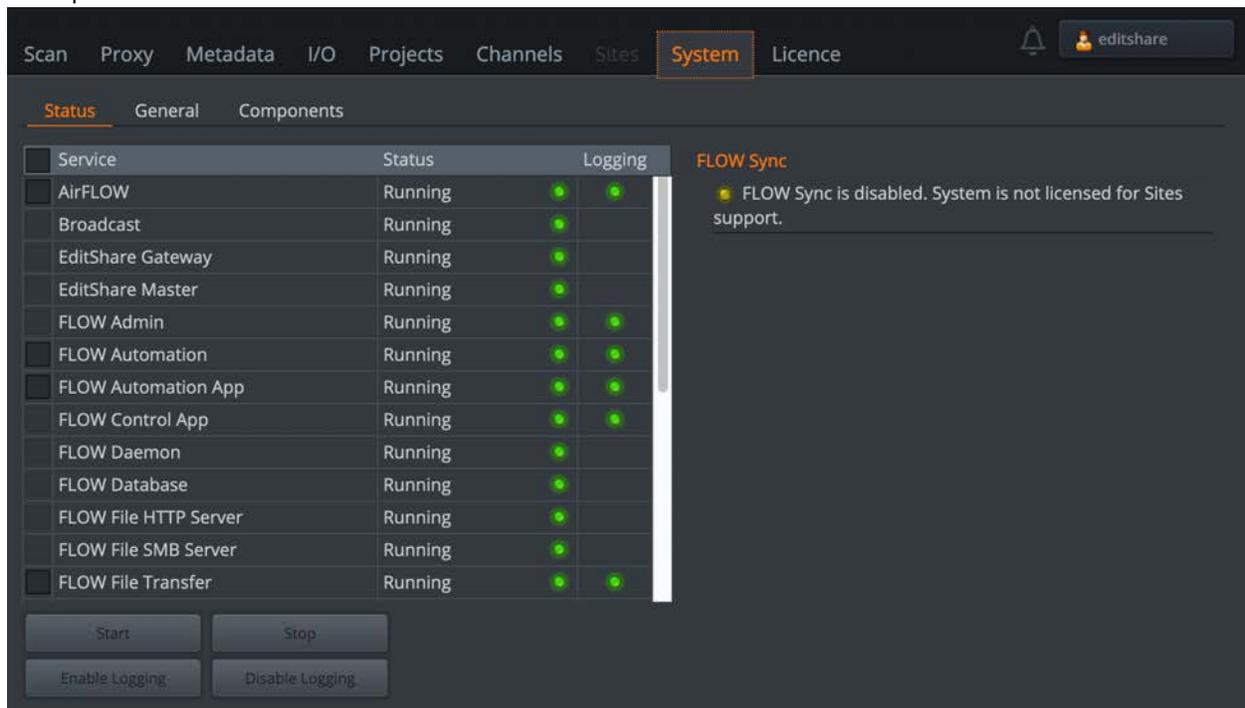


If the Logging indicator by a service is green, that service is being logged.

If the service is operating, the status message 'running' displays next to a green indicator. An orange icon indicates there are service warnings and a red icon indicated errors.

Service Warnings

Not all system services/functions are available if the "Sites" License option is not purchased, for example the "Send To" function:



The screenshot shows the 'System' tab in the EditShare interface. The 'Status' sub-tab is active, displaying a table of services. The 'FLOW Sync' service is highlighted with a yellow warning icon and a message: 'FLOW Sync is disabled. System is not licensed for Sites support.' The 'Sites' tab in the top navigation is grayed out. Below the table are buttons for 'Start', 'Stop', 'Enable Logging', and 'Disable Logging'.

Service	Status	Logging
AirFLOW	Running	●
Broadcast	Running	●
EditShare Gateway	Running	●
EditShare Master	Running	●
FLOW Admin	Running	●
FLOW Automation	Running	●
FLOW Automation App	Running	●
FLOW Control App	Running	●
FLOW Daemon	Running	●
FLOW Database	Running	●
FLOW File HTTP Server	Running	●
FLOW File SMB Server	Running	●
FLOW File Transfer	Running	●

Example of status reporting when 'Sites' is not licensed:

1. "Sites" tab grayed out
2. "FLOW Sync" service is running but disabled because there is no "Sites" license, so no sites can be setup for the sync service to connect to

Stopping a FLOW Service



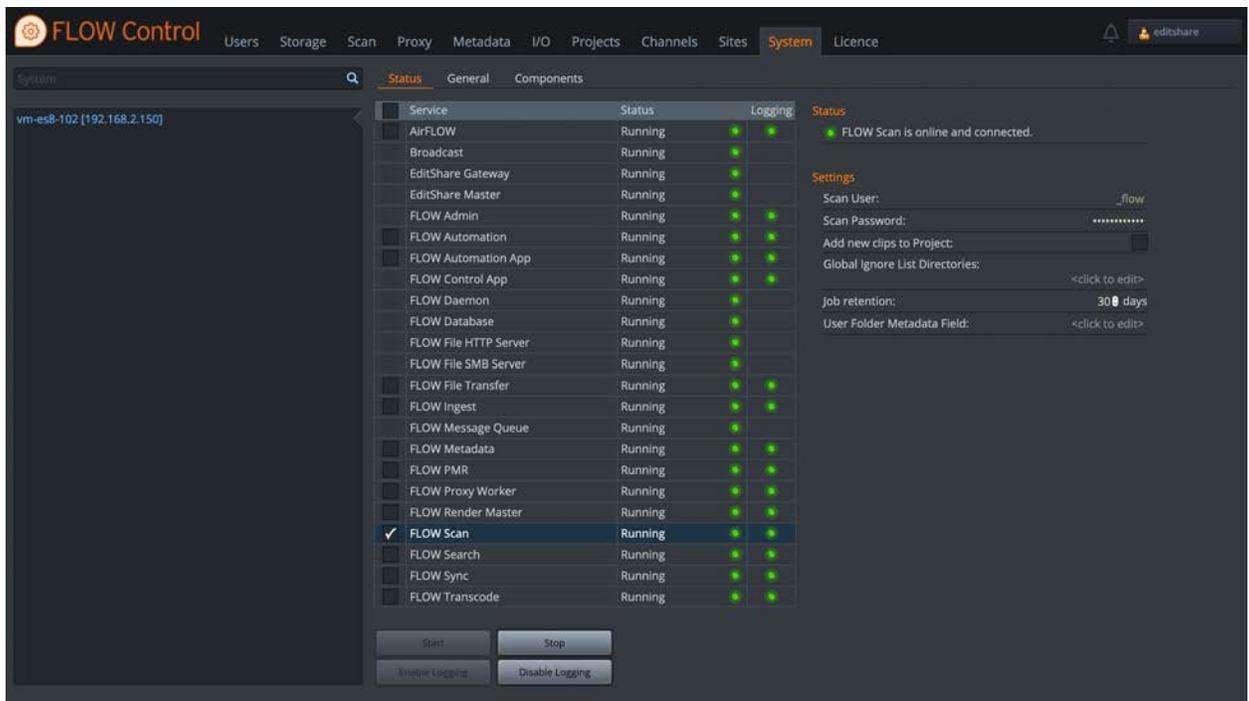
Caution - Stopping a Service can be disruptive.

Warn all users to save their work and log out before you stop a Service.

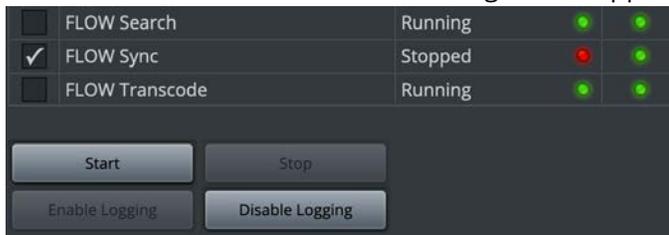
If there is a problem on an Ingest channel, try resetting the channels before stopping and starting a FLOW service, as releasing channels is less disruptive to FLOW users.

To stop a FLOW service:

1. Select the **System** tab.
2. Select the **Status** sub tab.
3. The services and their current status are listed.



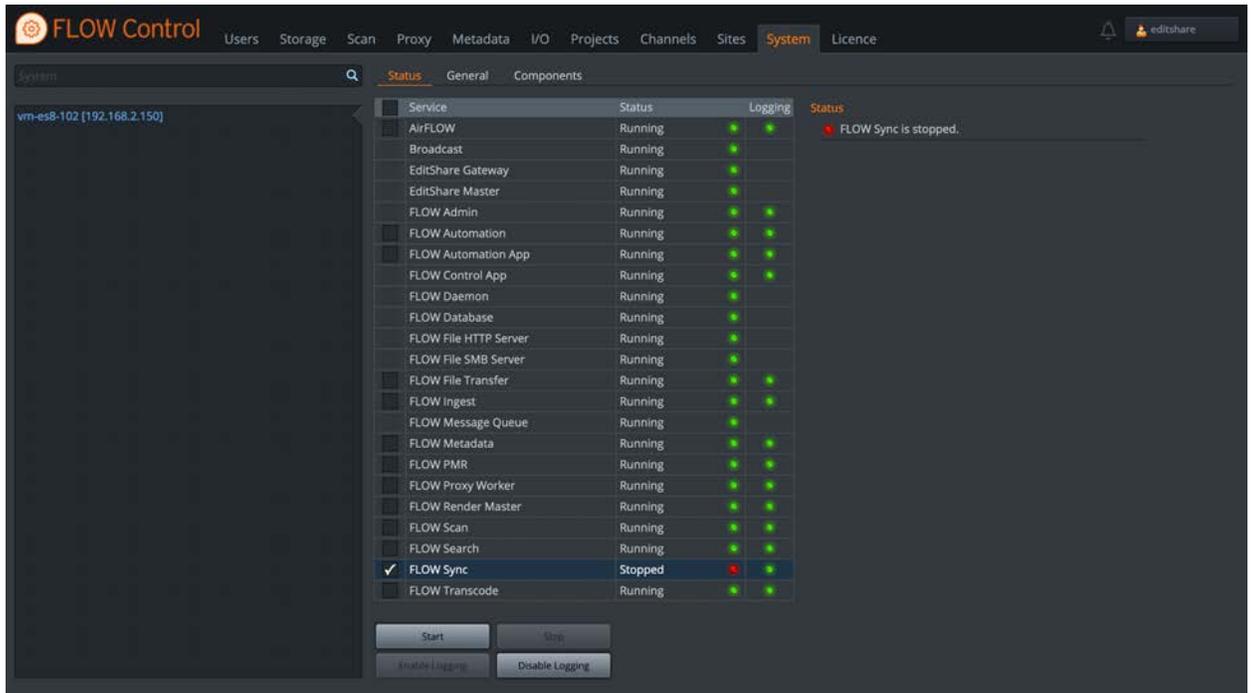
4. Click the checkbox that corresponds to the service that you want to stop. Its current status will display 'running' with a green indicator.
5. Click the **Stop** button. You are prompted to confirm that you want to stop the service.
6. Click **OK**. The status of the service changes to 'Stopped' and the indicator changes to red.



Starting a FLOW Service

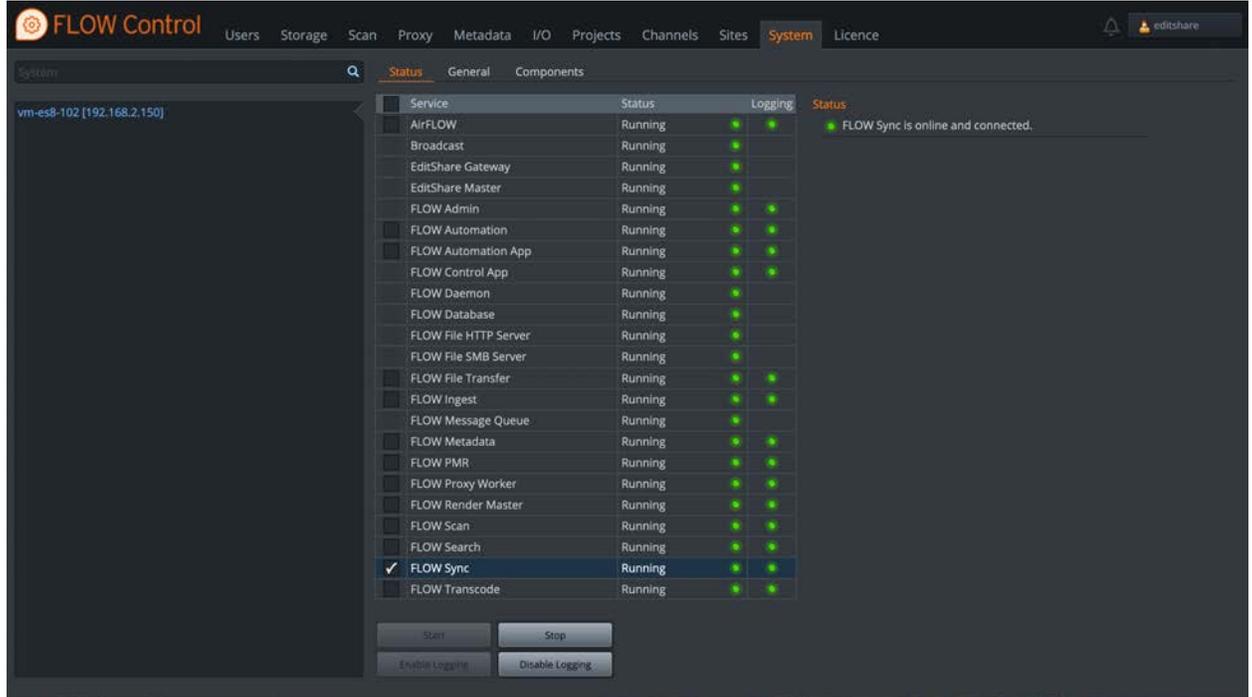
To start a FLOW service:

1. Select the **System** tab.
2. Select the **Status** sub tab.
3. The services and their current status are listed.



4. Select the checkbox that corresponds to the service that you want to start. Its current status will display 'stopped' with a red indicator.

5. Click the **Start** button. The status of the service changes to 'Running' and the indicator changes to green.

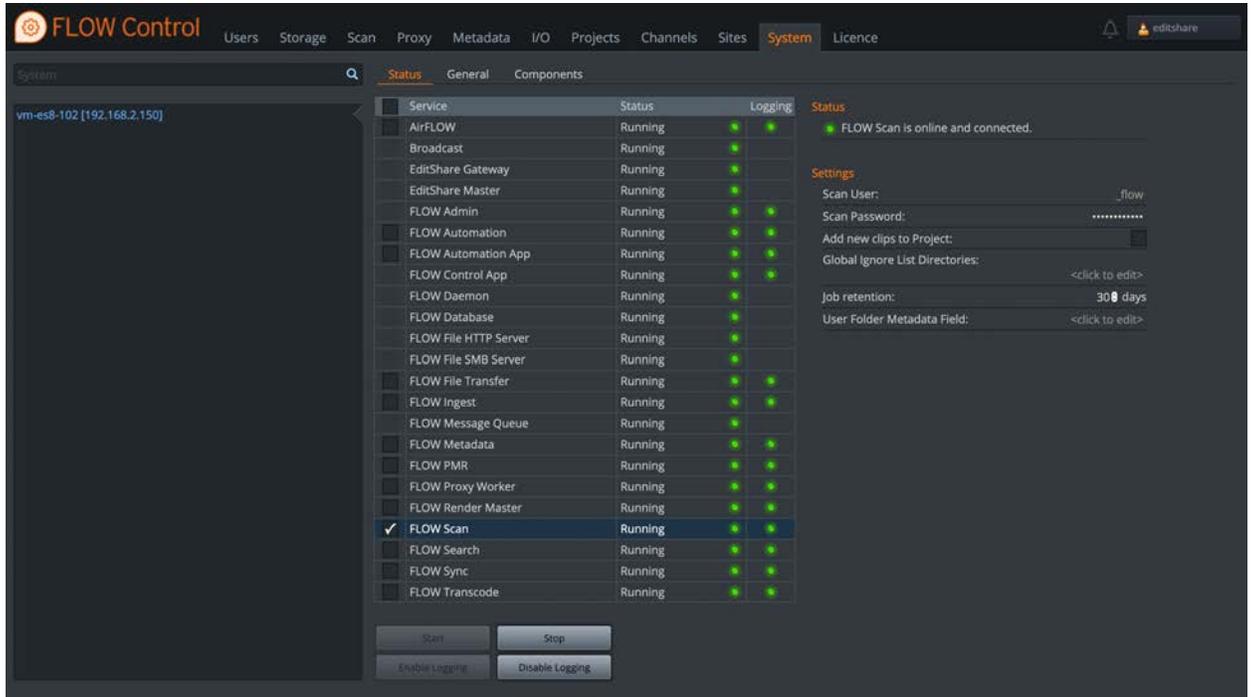


Enabling Global Ignore List Directories

The Global Ignore List Directories allows you to control a global ignore list across all media spaces. Once enabled, when FLOW scan is used on any folders in the global ignore list directories, these files are hidden.

To enable Global Ignore List Directories:

1. Select the **System** tab.
2. Select the **Status** sub tab.

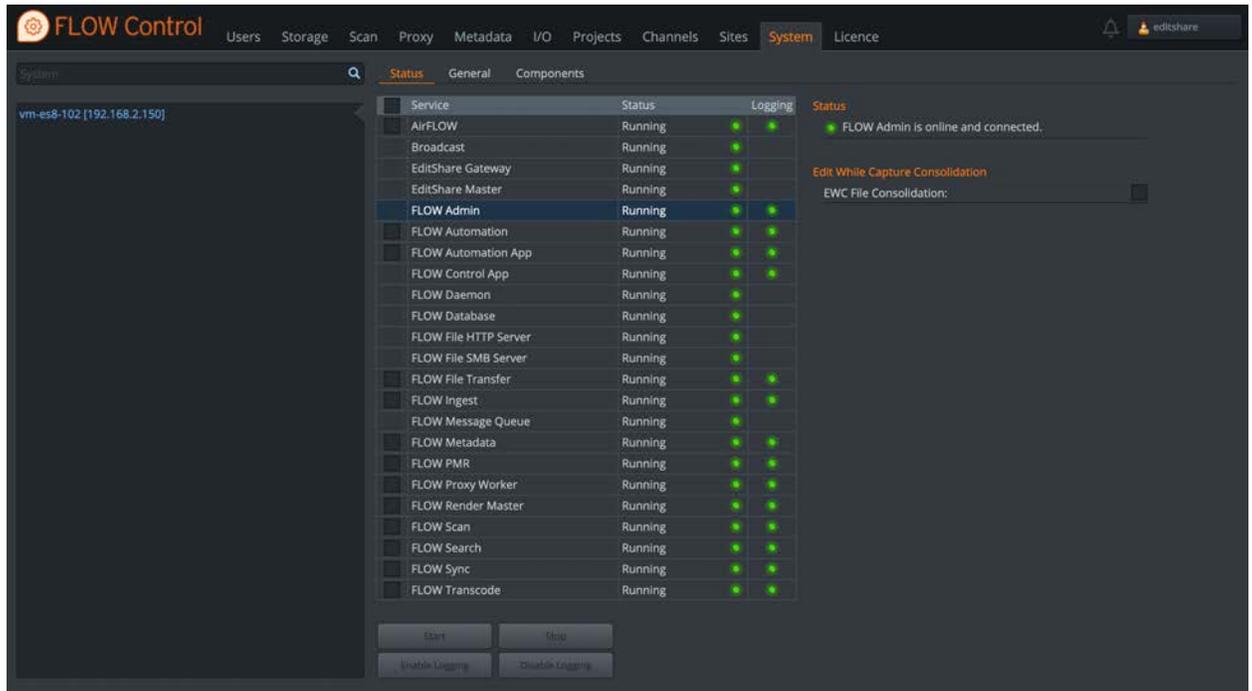


3. Select the FLOW Scan service.
4. Click within the Global Ignore List Directories and define the ignore lists across all media spaces. This can be multiple values, each value separated by a comma.

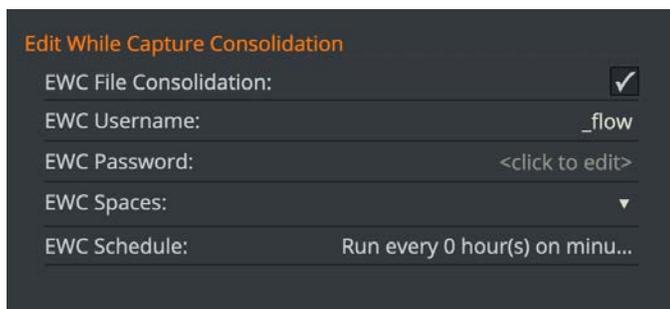
Enabling Edit While Capture Consolidation

To enable the EWC consolidation tool:

1. Select the **System** tab.
2. Select the **Status** sub tab.
3. Select FLOW Admin service from the list.



4. Click to enable EWC consolidation.



5. Add the username and password credentials that apply to the storage space(s) EWC consolidation will apply to.

6. Select the storage spaces for EWC consolidation.



Edit While Capture Consolidation

EWC File Consolidation:

EWC Username: _flow

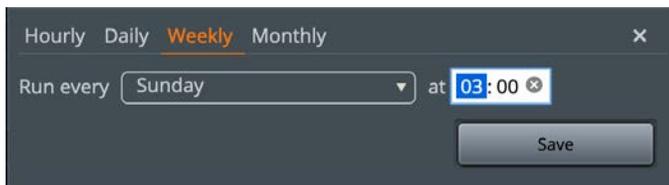
EWC Password: <click to edit>

EWC Spaces: Ingest-MCR ▾

EWC Schedule:

Ingest-MCR

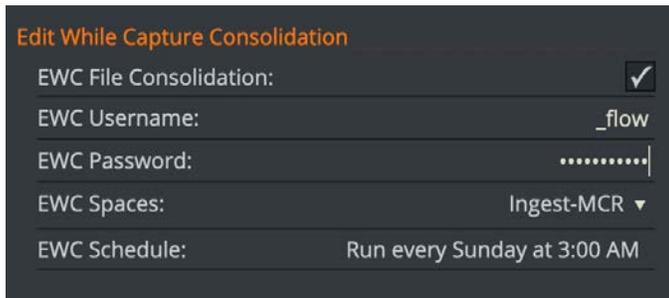
7. Click on Schedule.
8. Select the schedule type option:
 - a. Hourly
 - b. Daily
 - c. Weekly
 - d. Monthly



Hourly Daily **Weekly** Monthly ×

Run every Sunday ▾ at 03:00 ×

9. Click Save
10. A summary is displayed.



Edit While Capture Consolidation

EWC File Consolidation:

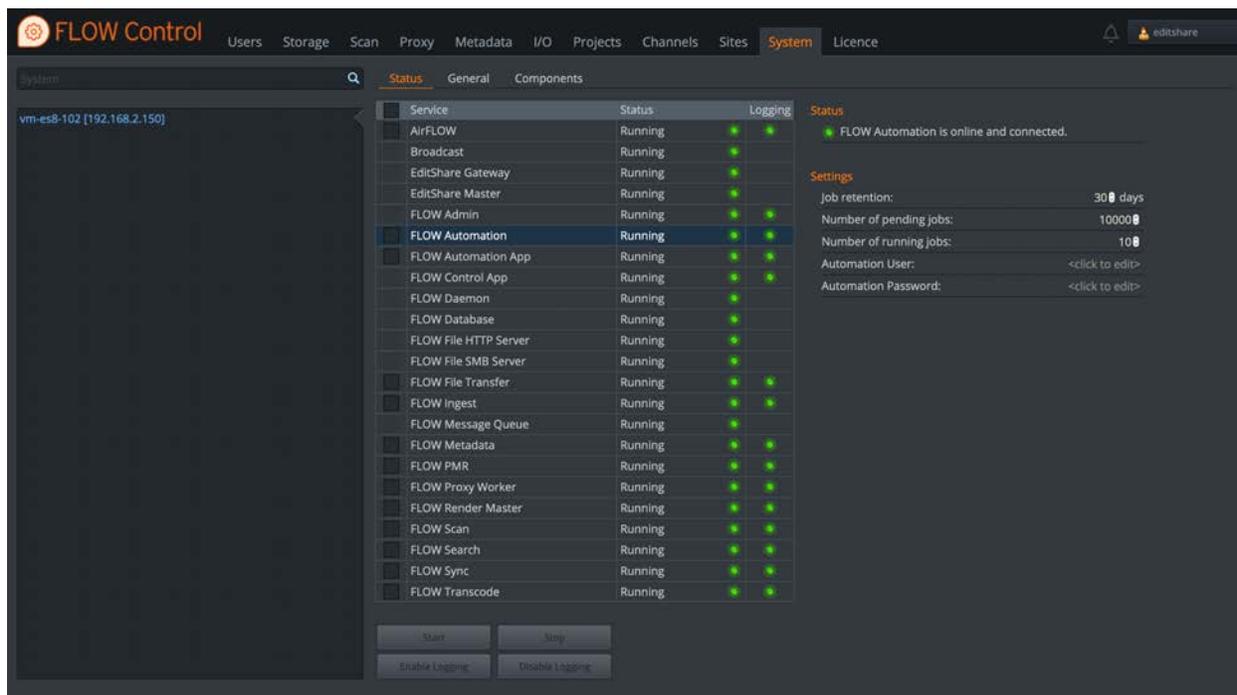
EWC Username: _flow

EWC Password:

EWC Spaces: Ingest-MCR ▾

EWC Schedule: Run every Sunday at 3:00 AM

Automation Service Settings

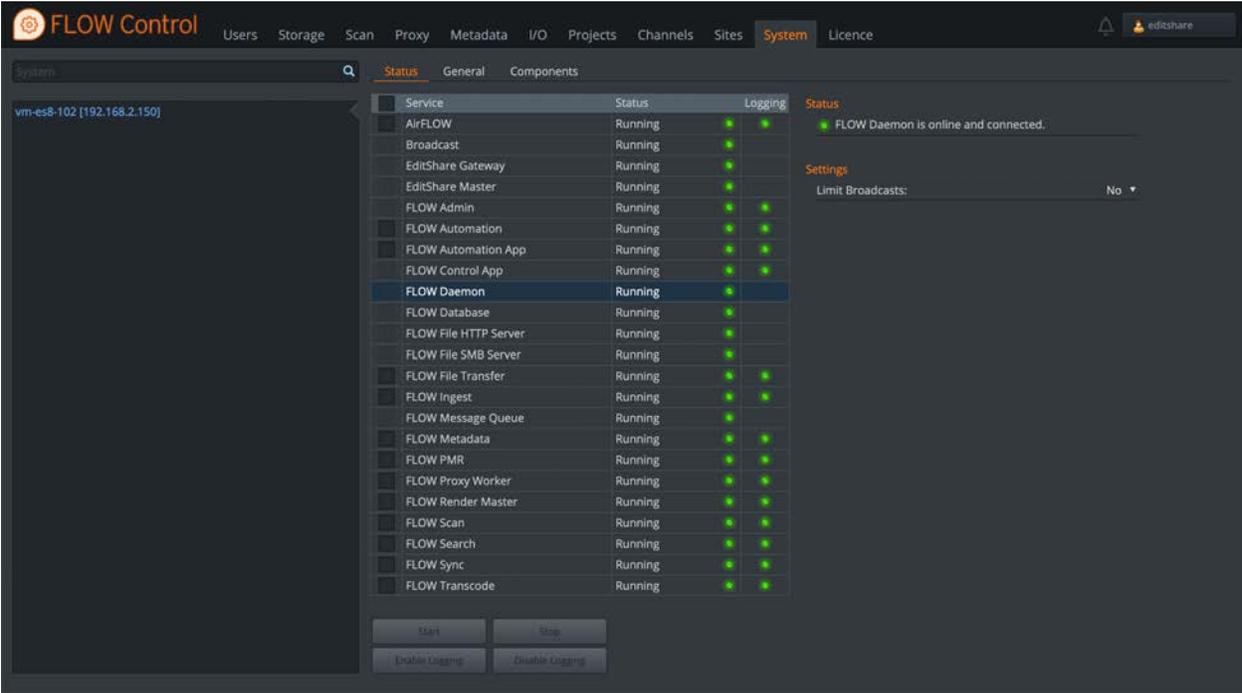


- Job retention: Set the limit for how long completed jobs are retained by FLOW before they are deleted.
- Number of pending jobs: Set the limit on the maximum number of jobs that can be queued by Automation.
- Number of running jobs: Set the limit on the maximum number of jobs that Automation can run at once.
- Automation User: Specify a default user to use for Automation jobs. When automation tasks that require user credentials (e.g. copying files) do not have a specific user configured automation will use the Automation default user.
- Automation Password: Password for the named Automation user.

Limit Broadcasts

When a system has multiple network interfaces it can be useful to limit the Service Discovery broadcasts to a specific network interface. This ensures that FLOW clients prefer this interface for connecting to the system.

On systems with a single network interface this option is disabled.



File SMB Server Settings

FLOW stores static files, such as thumbnail images, on the "File SMB Server".

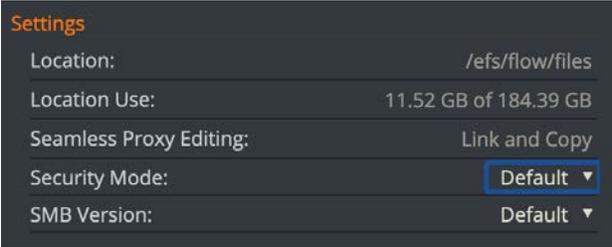
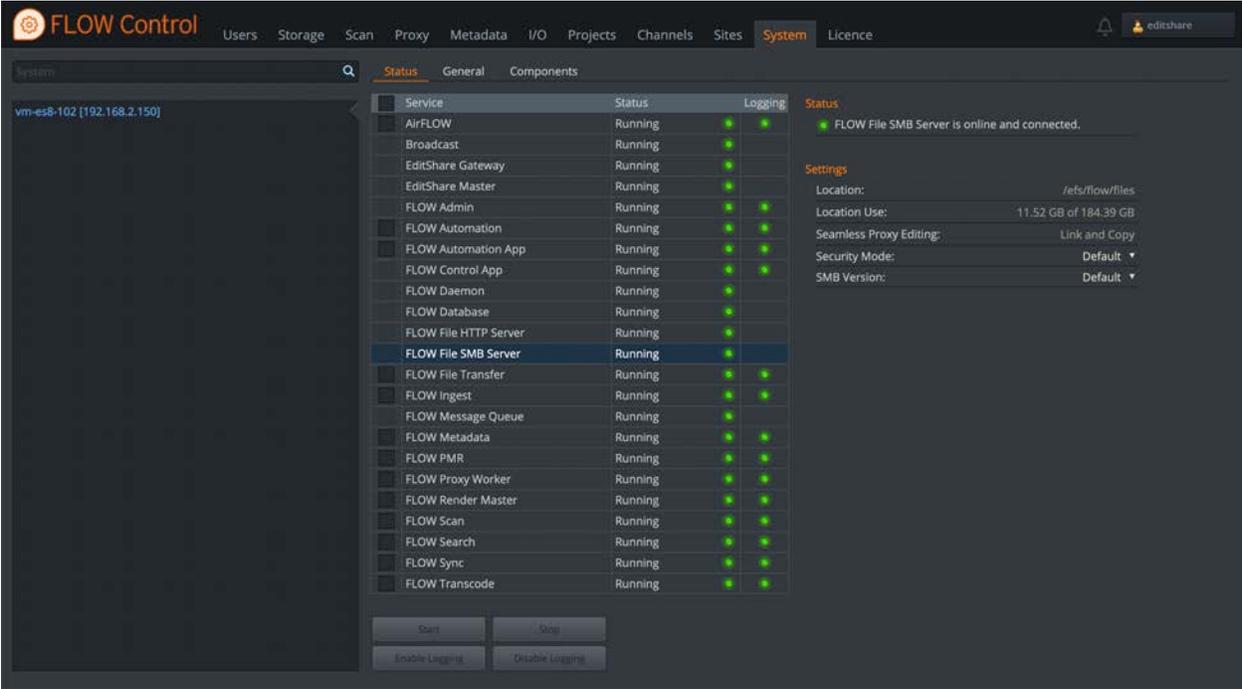
Location: this shows the location within EFS where the files are stored.

Location Use: Shows the amount of storage used and available.

Seamless Proxy Editing: Shows "Link and Copy" means proxies can be "linked to", this is instant as it does not require the proxies to be downloaded, "Copy" means the proxies can also be downloaded. When using a non-EFS server to store files the option will be "Copy Only"

Security Mode: Allows setting the SMB security mode. Used when using external SMB shares.

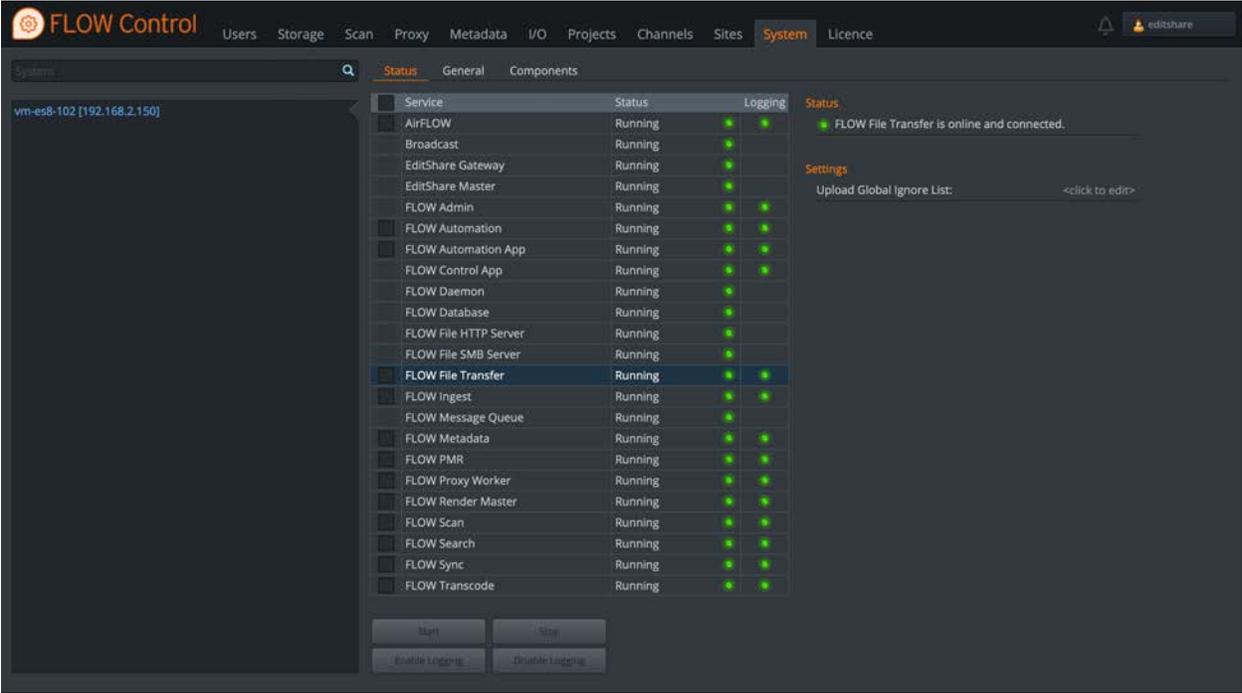
SMB Version: Allows setting the SMB version. Used when using external SMB shares.



File Transfer Upload Global Ignore List

Using AirFLOW and other clients users can upload files directly into Storage. Administrators can limit the allowed file types using the 'Global Ignore List'.

For example, to ignore all .exe and .bin files: *.exe,*.bin



Ingest Service



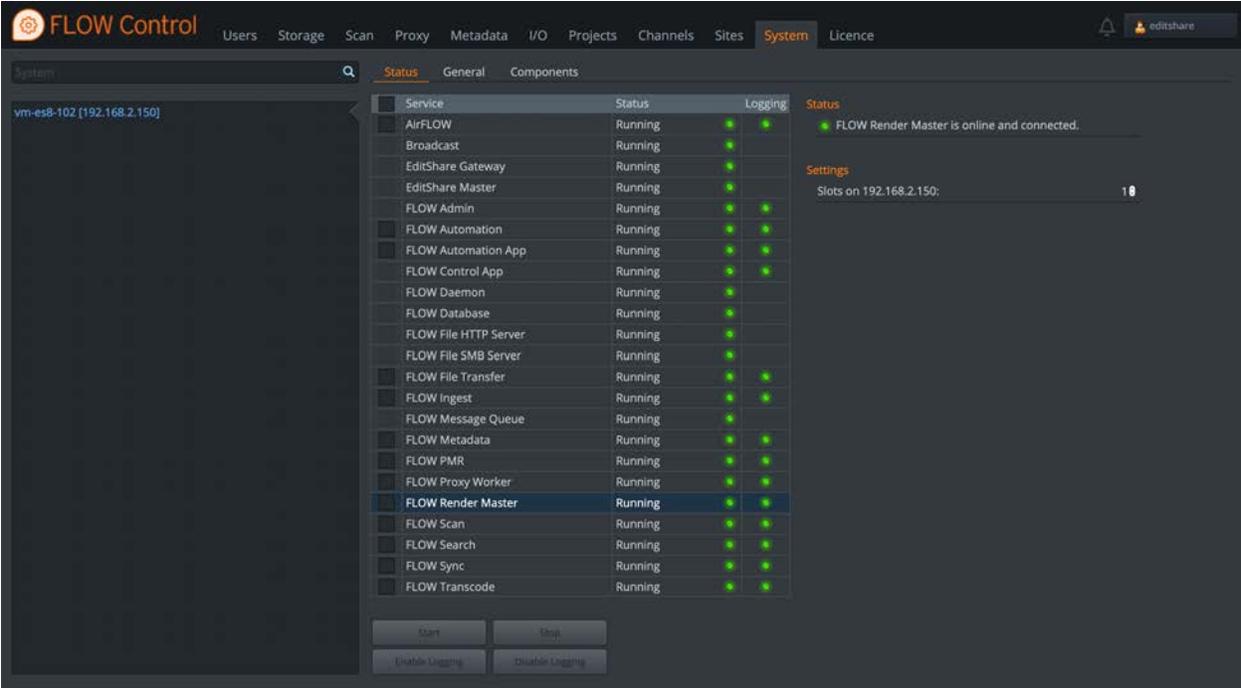
FLOW Ingest service settings:

1. Add clip to project on ingest: Enable to add clips ingested directly into a specified project. Add the project name into the metadata field during ingest in FLOW Browse.
2. Channels: Sets the number of ingest channels available on the server. Suggested max number equals the number of SDI sources configured on live ingest servers. N.b. remember your server has finite resources, therefore increasing this value too far can impact the servers performance and stability.
3. File Based Ingest: Enable file based ingest. N.b it is not recommended to mix SDI & file based ingest processes on the same server.
4. IP Ingest: Enabled by default.
5. NDI groups: Allows filtering of auto-discovered sources by group name as configured on the NDI source set up..
6. SDI Ingest: This functionality is enabled by default when the system has an EditShare qualified and pre-configured SDI ingest card installed.

Render Master Settings

The Render Master settings allow you to configure the 'slot count' on each FLOW Proxy Worker service. The slot count controls how many proxies are created at once on a server. By increasing the slot count you can increase the speed of proxy creation.

Important note: proxy creation is a resource intensive process. It is recommended that you leave the slot count at the default value of 1. Only increase the value on dedicated FLOW Worker Nodes.



The screenshot displays the FLOW Control System interface. The top navigation bar includes 'Users', 'Storage', 'Scan', 'Proxy', 'Metadata', 'I/O', 'Projects', 'Channels', 'Sites', 'System', and 'Licence'. The 'System' tab is active, showing a table of services and their status. The 'FLOW Render Master' service is highlighted in blue. The 'Settings' panel on the right indicates 'Slots on 192.168.2.150: 10'.

Service	Status	Logging
AirFLOW	Running	Running
Broadcast	Running	Running
EditShare Gateway	Running	Running
EditShare Master	Running	Running
FLOW Admin	Running	Running
FLOW Automation	Running	Running
FLOW Automation App	Running	Running
FLOW Control App	Running	Running
FLOW Daemon	Running	Running
FLOW Database	Running	Running
FLOW File HTTP Server	Running	Running
FLOW File SMB Server	Running	Running
FLOW File Transfer	Running	Running
FLOW Ingest	Running	Running
FLOW Message Queue	Running	Running
FLOW Metadata	Running	Running
FLOW PMR	Running	Running
FLOW Proxy Worker	Running	Running
FLOW Render Master	Running	Running
FLOW Scan	Running	Running
FLOW Search	Running	Running
FLOW Sync	Running	Running
FLOW Transcode	Running	Running

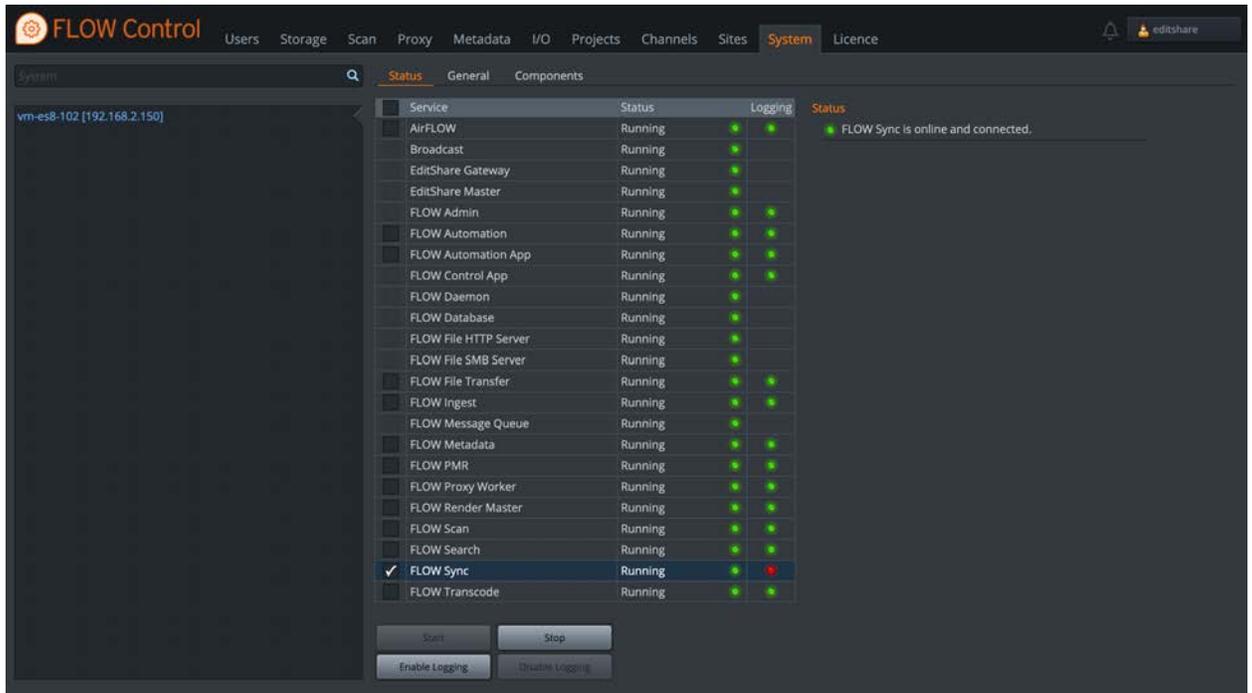
Logging

By default, FLOW's services write log files to the server. These are enabled by default and are useful for troubleshooting any issues that require assistance from Support.

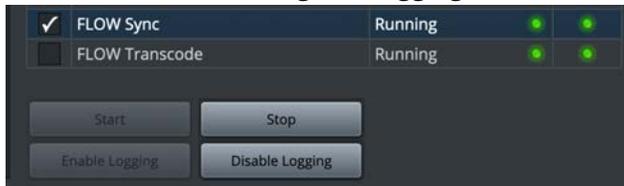
Enabling Logging for a Service

To enable logging for a service:

1. Select the **System** tab.
2. Select the **Status** sub tab.
3. The services and their current status are listed.



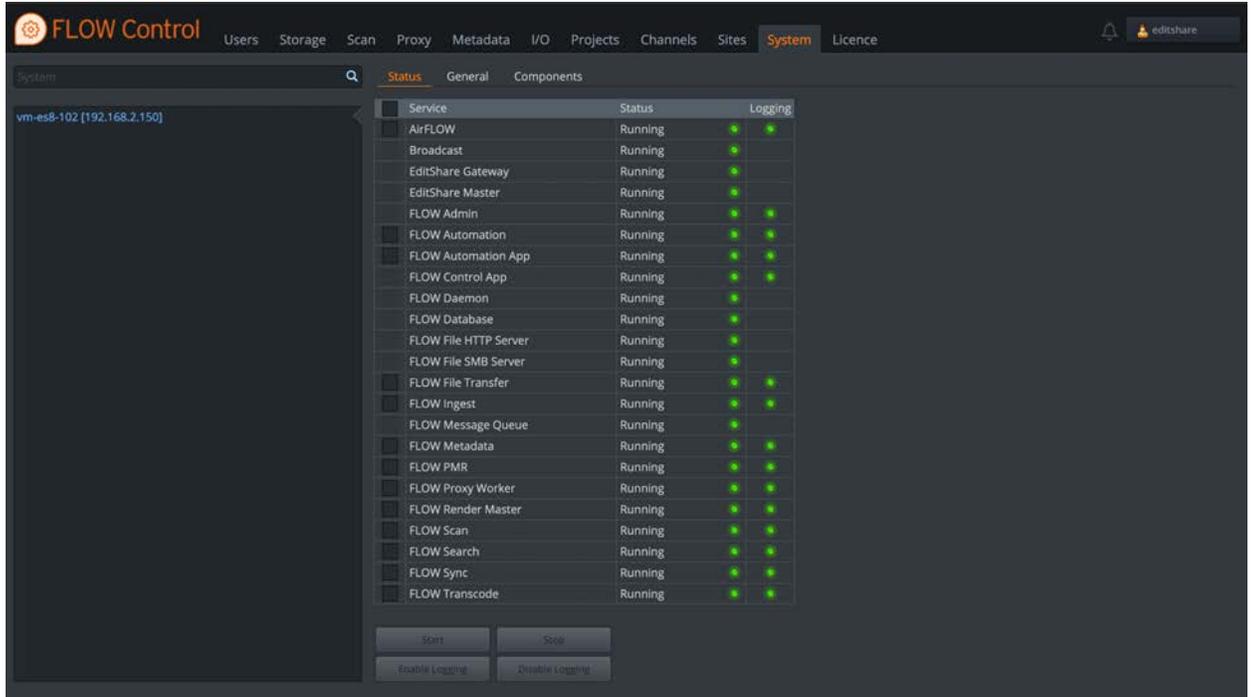
4. Select the checkbox that corresponds to the service that you want to enable logging for. Its logging indicator should be red, indicating that logging is currently disabled for this service.
5. Click the **Enable Logging** button. A green indicator now appears under the Logging heading for the service, indicating that logging is now enabled for this service.



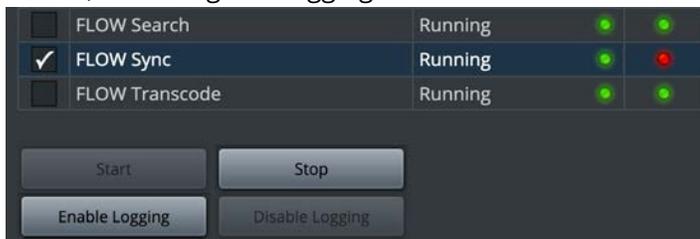
Disabling Logging for a Service

To disable logging for a service:

1. Select the **System** tab.
2. Select the **Status** sub tab. The services and their current status are listed.



3. Select the checkbox that corresponds to the service that you want to disable logging for. Its logging indicator should be green, indicating that logging is currently enabled for this service.
4. Click the Disable Logging button. A red indicator appears under the Logging heading for the service, indicating that logging is now disabled for this service:



General System Information

The General tab contains information about the database server, and displays how much storage space is left on the system.

Viewing System Information

To view system information:

1. Select the **System** tab.
2. Select the **General** sub tab.
3. Information about the system is displayed. The values displayed are for informational purposes only, you cannot edit them.
4. The amount of storage space that you are currently using is displayed.

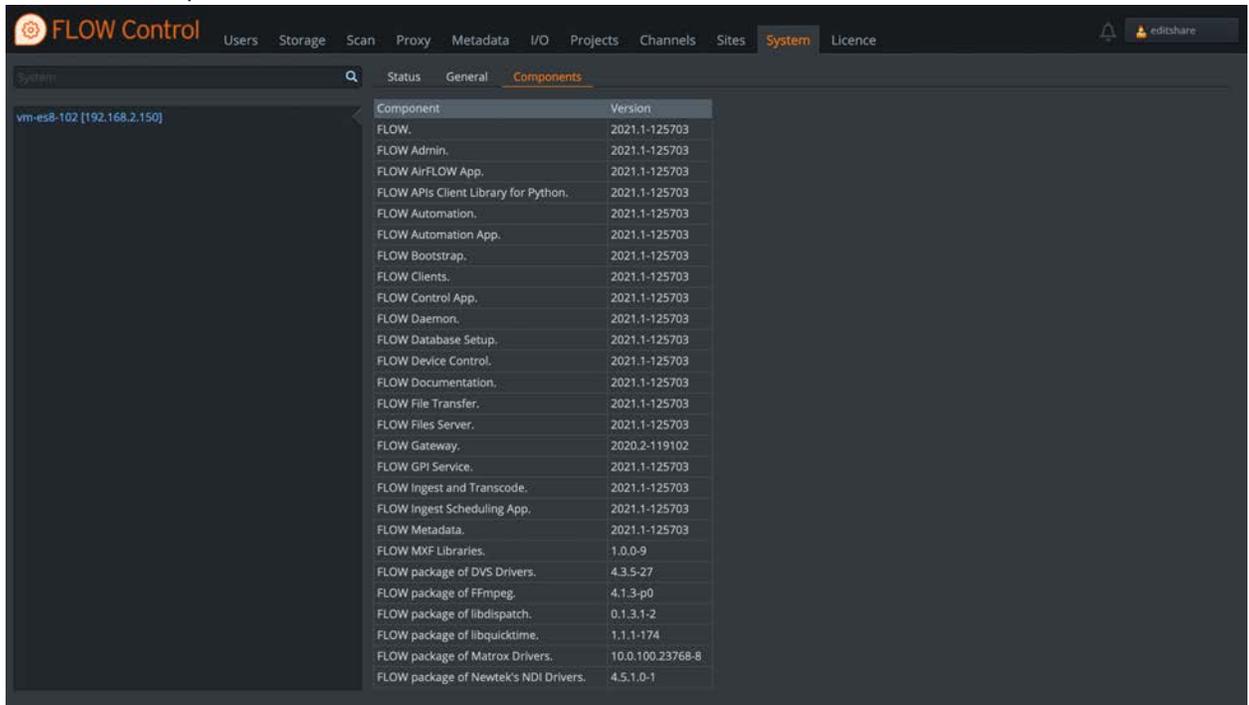
Component Information

The Components tab displays the components that make up your FLOW system.

Viewing Component Information

To view component information:

1. Select the System tab.
2. Select the Components sub tab.



Component	Version
FLOW.	2021.1-125703
FLOW Admin.	2021.1-125703
FLOW AirFLOW App.	2021.1-125703
FLOW APIs Client Library for Python.	2021.1-125703
FLOW Automation.	2021.1-125703
FLOW Automation App.	2021.1-125703
FLOW Bootstrap.	2021.1-125703
FLOW Clients.	2021.1-125703
FLOW Control App.	2021.1-125703
FLOW Daemon.	2021.1-125703
FLOW Database Setup.	2021.1-125703
FLOW Device Control.	2021.1-125703
FLOW Documentation.	2021.1-125703
FLOW File Transfer.	2021.1-125703
FLOW Files Server.	2021.1-125703
FLOW Gateway.	2020.2-119102
FLOW GPI Service.	2021.1-125703
FLOW Ingest and Transcode.	2021.1-125703
FLOW Ingest Scheduling App.	2021.1-125703
FLOW Metadata.	2021.1-125703
FLOW MXF Libraries.	1.0.0-9
FLOW package of DVS Drivers.	4.3.5-27
FLOW package of FFmpeg.	4.1.3-p0
FLOW package of libdispatch.	0.1.3.1-2
FLOW package of libquicktime.	1.1.1-174
FLOW package of Matrox Drivers.	10.0.100.23768-8
FLOW package of Newtek's NDI Drivers.	4.5.1.0-1

3. The components that make up your FLOW Control system are displayed.
4. The values displayed are for informational purposes only, you cannot edit them.

Chapter 12: License

The license tab shows you what license you currently have enabled. You can activate a license online or offline.

The screenshot shows the 'FLOW Control' web interface with the 'Licence' tab selected. The interface is dark-themed and contains several sections for license management:

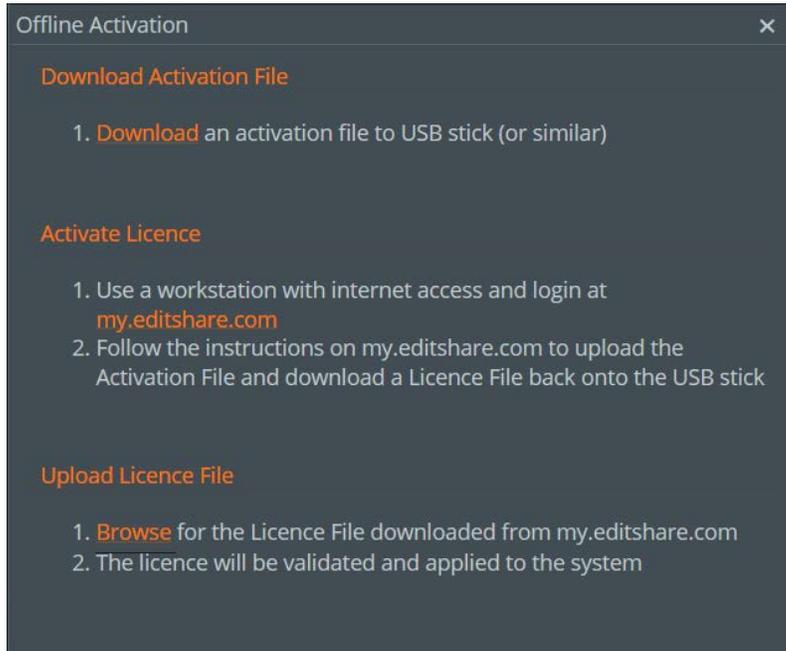
- Account:** EditShare ID, Licence ID, Licence Type (FLOW Enterprise), Support.
- Configuration:** Licence Source (EditShare Account), Expires (Unlimited), Version (Any), Users (20).
- Products:** Browse, Edit, Logger, Automation, AirFLOW, Panel, Scheduler, Event View.
- Features:** SDI Ingest, File Ingest, Worker Nodes (5), Proxy Storage, Sites (Unlimited).
- Licensed storage:** A list of storage providers with checkboxes for activation: EditShare, SMB, Isilon (SMB), Facilis (SMB), Synology (SMB), QNAP (SMB), LumaForge (SMB), Quadrus (SMB), ELEMENTS (SMB), NFS, Avid, Local Directory, Amazon S3, Amazon Glacier, Masstech FlashNet, Quantum StorNext, Generic S3, Cloudian (Generic S3), Wasabi (Generic S3), BackBlaze (Generic S3), Huawei (Generic S3), Object Matrix, XenData, BlackPearl, Archiware, Azure Files, BackBlaze, Generic SAN, Masstech MassStore, Harmonic MediaGrid, Intellique StoriQ One.

At the bottom left, there are two buttons: 'Activate Offline' and 'Activate Online'.

Activating an Offline License

You can activate an offline license when your Internet browser has no Internet connection. Note that you must have already registered an EditShare Account. See the Installation guide for more information.

1. Select the **License** tab.
2. Click the **Activate Offline** button. The Offline Activation screen displays:

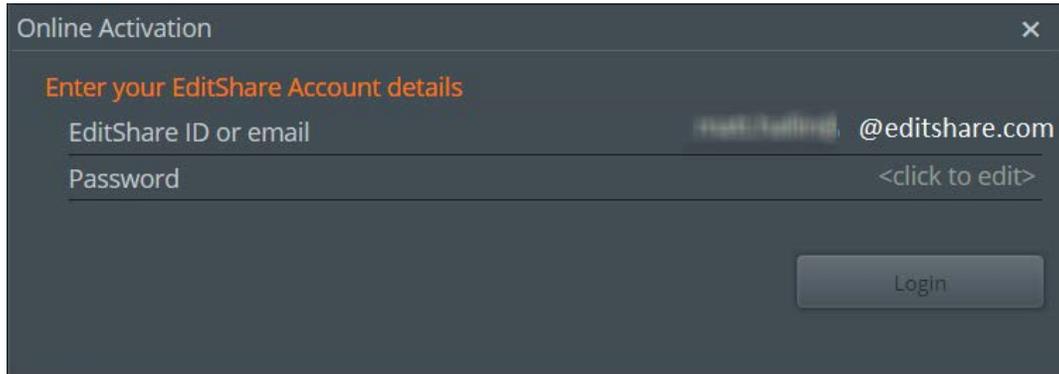


3. Follow the onscreen instructions. The process consists of the following steps:
 - a. Download an activation file to a USB stick.
 - b. Activate the license using a workstation with Internet access.
 - c. Upload the activation file and download a license file back onto the USB stick.
 - d. Upload the license file.

Activating an Online License

You can activate an online license when your Internet browser has an active Internet connection. Note that you must have already registered an EditShare Account. See the Installation guide for more information.

1. Select the **License** tab.
2. Click the **Activate Online** button. The Online Activation screen displays:



The screenshot shows a dark-themed dialog box titled "Online Activation" with a close button (X) in the top right corner. Below the title, the text "Enter your EditShare Account details" is displayed in orange. There are two input fields: "EditShare ID or email" and "Password". The "EditShare ID or email" field contains the text "1111-1111" followed by "@editshare.com". The "Password" field contains the text "<click to edit>". A "Login" button is located at the bottom right of the dialog box.

3. Enter your EditShare ID or email.
4. Enter your EditShare password.
5. Click the **Login** button.

Chapter 13: Troubleshooting

If you are having problems with your FLOW system, see the following topics before you contact your local EditShare Technical Support office:

- Network
- Access
- Mounting

Where you have an issue with a specific FLOW application other than FLOW Control, refer to the User Guide for that application.

Network

Cannot Connect to FLOW Server

If you cannot connect to the FLOW Admin server, complete the following:

1. If the IP Address text box displays in the login screen, check that the correct IP address or server name is entered in the box.
2. Check your connection to the FLOW Admin server. Do the following:
 - a. Open a command line prompt and type ping <server name> where ping <server name> is the hostname or IP Address of the AirFLOW server.
 - b. If no packets are returned, or the message destination host unreachable displays, check the network cable connection to the LAN port of your workstation.
 - c. Check that your workstation is connected to the FLOW network. Check you have a network cable connected and that the LAN port LED is flashing.
3. If you use Wi-Fi for working away from your organization, or for AirFLOW, ensure that Wi-Fi is switched OFF when you are using a cable network connection for FLOW Browse, FLOW Logger, Automation or FLOW Control.
4. If you still have no connection, contact the network administrator or IT department for your organization.

User Cannot Log In

Check the following:

- Confirm that the user has the correct username and password.
- Passwords are case sensitive, advise the user to check the Caps Lock key is OFF.
- Confirm the user has an entry in the Users tab of FLOW Control.

No Network Folders or Storage Spaces are Visible

Check the following:

- Check the server you are trying to access is online and connected to the network.
- You have to be a member of a storage space in order to view or use it. See [One or More Storage Spaces are not Visible](#).

One or More Storage Spaces are not Visible

You cannot access a storage space if you have not been designated a member of it. If you are a FLOW Administrator, you can add users to storage spaces and also remove them.

Amazon S3 Region Settings

If there are two Amazon S3 spaces that have the same setting for Region it is possible to copy between the two spaces using the Automation Copy task. However, if the region settings are different, attempts to copy between the two spaces will fail.

Access

Client Functions are Unavailable

Some of the functions described in this guide may not be available.

Not all users have access to all the functions in FLOW, especially administrative functions. You can change the level of access users have to FLOW, see [Chapter 2: Managing Users](#).

Some of the features documented in this guide may not be available as standard but may be ordered as an option, or require additional licensing. Contact your local EditShare reseller for details.

Cannot Access Storage

Check the following:

- You have entered the storage mount details (server IP address, share name, username and password) correctly.
- You have selected or deselected the appropriate property options (read only, archive and browsable).

See [Chapter 3: Storage](#) .

Mounting

Cannot Mount Storage

If your storage spaces are not being mounted, do the following:

- Go into the storage device in Control (storage tab).
- Select the storage and on the mount details change the 'SMB Version' option to 'SMB 2.0'

Retrieving Logs from the FLOW system

It is often helpful to send us logs that provide us with useful information about what was happening when you encounter any issues. To retrieve logs from the FLOW system:

1. Connect to your FLOW Server system.
2. Enter: flow-diagnostics
3. The flow-diagnostics output is created. For example:

```
Compressing diagnostics files to  
/usr/share/flow/web/diagnostics/flow_logs_20180530_152458.tar.gz
```

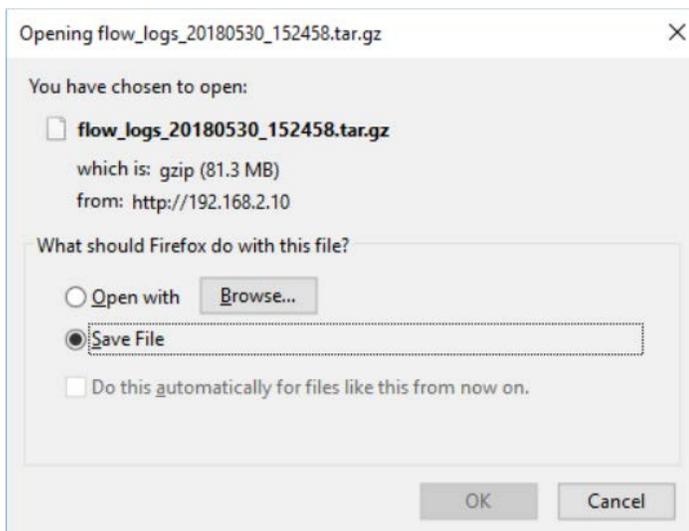
```
-rw-rw-r-- 1 editshare editshare 82M May 30 15:25  
/usr/share/flow/web/diagnostics/flow_logs_20180530_152458.tar.gz
```

```
Diagnostics available from  
http://[IP_OF_THIS_SERVER]/diagnostics/flow_logs_20180530_152458.tar.gz
```

4. Open your web browser.
5. In the address bar type the output location:

```
http://[IP_OF_THIS_SERVER]/diagnostics/flow_logs_NAME_OF_LOG_CREATED_ABOVE.tar.gz
```

A dialog box opens:



6. Select **Save File**.
7. Click **OK**.

Third-party SMB Space Created with FLOW Shown as Unmounted by FLOW Story

A third-party SMB space has been created with FLOW but the space is shown as unmounted by FLOW Story.

FLOW Story uses the .flow.id file in the root of the third-party media space to match locally mounted storage with media spaces in FLOW. If the space has been mounted locally, but is still shown as unmounted, it may be a result of the .flow.id file being missing or out of date. This can occur if the media space is read-only and FLOW is unable to write the storage id file. Note that this may be either because the space has been marked read-only in FLOW Control or because FLOW does not have permission to write to the underlying SMB storage.

If this occurs:

1. Grant write permission to FLOW on the SMB storage.
2. Ensure that the **Read only** check-box, located within the FLOW Control App storage management tab, for the affected space is unchecked.
3. Press the **Test** button at the bottom of the tab and wait for the test to complete successfully.
4. Return the storage to read-only.

FLOW Storage StorIQ One Integration

FLOW Control Storage Page Test Fails

1. Confirm that you can ping the StorIQ One server from a terminal on the FLOW server using the hostname/ip-address supplied.
2. Confirm that you can log into the StorIQ One web UI with the username and password supplied.
3. Confirm that the API Key value is correct.
4. See the flow-transfer.log for more information.

Archive/Restore Fails

Reasons for failure should be propagated to the FLOW Story and FLOW Automation UI, but the level of detail in error messages received from StorIQ One may be limited.

1. See the flow-transfer.log for context to the error messages.
2. In the archive case, log in to the StorIQ One web UI and check for sufficient space in the chosen Pool.
3. Log into the StorIQ ONE web UI and check the operation logs.
4. Log into the StorIQ ONE server and verify that the FLOW storage space used in the operation is mounted on the expected path, and that files within the space can be seen from the StorIQ system.

Appendix A: Matrox DSX LE4 FH Card

Later versions of FLOW Servers use two variants of the Matrox DSX LE4 FH I/O cards in three standard configurations:

Configuration		Card
1.	Four Inputs	4-Port Matrox Card
2.	Four Inputs	8-Port Matrox Card
3.	Eight Inputs	

Outputs are E-E connections for monitors only. See the following sections:

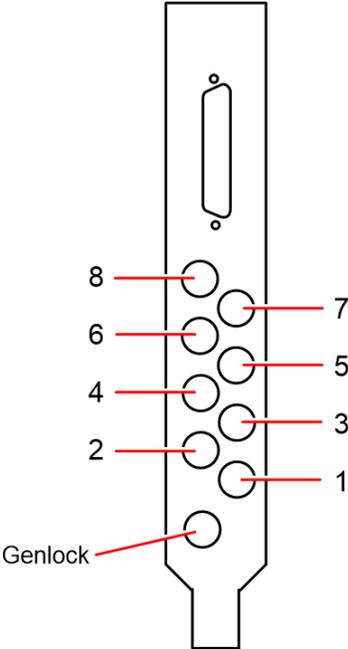
- Card Connections
- Role Assistant
- Frame Rates
- Frame Synchronizer Mode
- LTC and Audio Plug-Ins

Card Connections

4-Port Matrox Card Connections

The connections to the 4-Port Card are as follows:

Port	4-Input Card
8	N/C
7	Input 4
6	N/C
5	Input 3
4	N/C
3	Input 2
2	N/C
1	Input 1

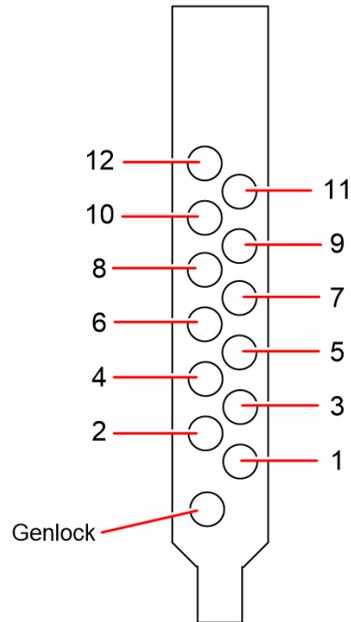


8-Port Matrox Card Connections

Note: Do not attempt to connect the card as an 8-input system if it is configured as a 4-input / 4 output card, or vice-versa.

The connections to the 8-Port Card are as follows:

Port	4-Input + E-E Looping	8-Input Card
12	N/C	Input 8
11	N/C	Input 7
10	N/C	Input 6
9	N/C	Input 5
8	Output 4	N/C
7	Input 4	Input 4
6	Output 3	N/C
5	Input 3	Input 3
4	Output 2	N/C
3	Input 2	Input 2
2	Output 1	N/C
1	Input 1	Input 1



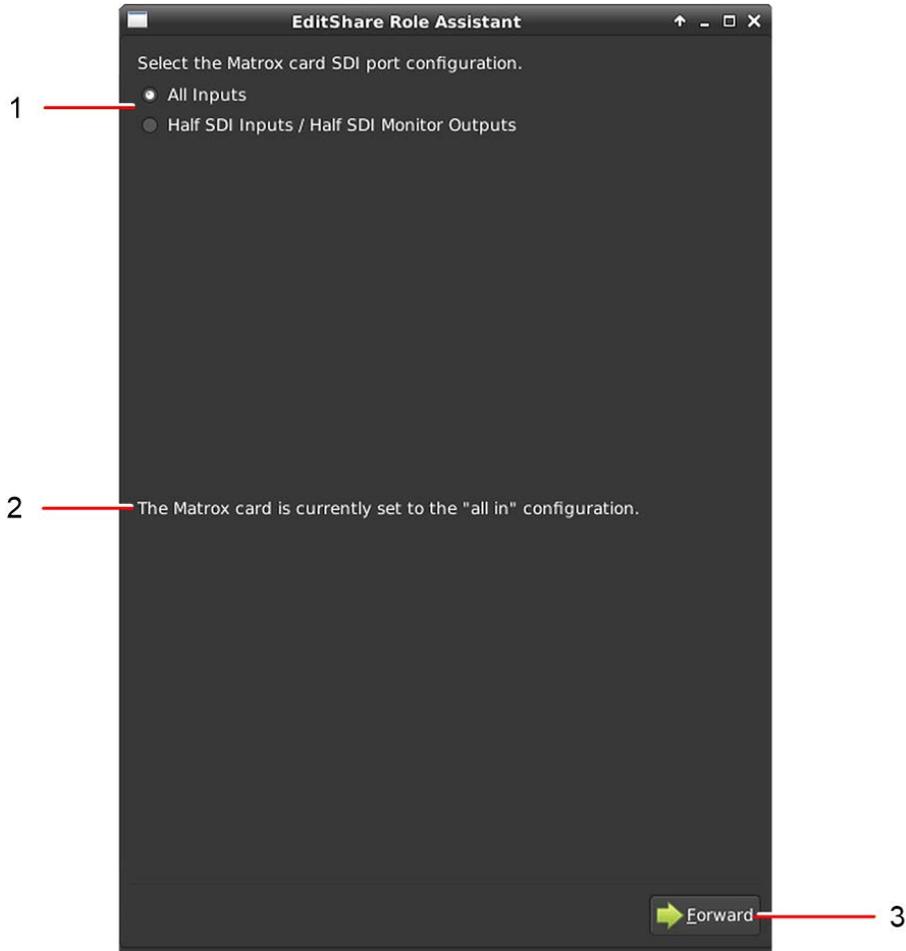
Role Assistant

Before using the Matrox card, you must configure it in the EditShare Role Assistant:

1. In the Role Assistant, select the port configuration for your Matrox card, shown in the table below:

Configuration	Card	Select
Four Inputs	4-Port Matrox Card	All Inputs
Four Inputs Four Outputs	8-Port Matrox Card	Half SDI Inputs/Half Monitor Outputs
Eight Inputs	8-Port Matrox Card	All Inputs

Note: This setting must be consistent with the configuration of your card, otherwise your card will run slowly or not at all.



2. The current setting of the card displays in the dialog box.
3. Click **Forward** to proceed to the next step of the Role Assistant.

Frame Rates

Allowed Frame Rates

Each port can run only at the same frame rate or at a multiple of the frame rate, as the other ports. The frame rate of ports is determined by the first video source connected to the card. For example, if the first connection made to the card is 29.97 fps, you can only run 29.97 fps or 59.94 fps frame rates on any of the ports.

Select one option from the following permissible frame rate combinations:

- PAL / 1080i25 / 720p50
- NTSC / 1080i29.97 / 720p59.94
- 1080i30
- 1080p23.98
- 1080p24
- 1080p50

- 1080p59.94
- 1080p60

1080i30, 1080p24, 1080p50, 1080p59.94, and 1080p60 are not accepted in the listed groups, but do work on their own.

Changing a System's Frame Rate

It is possible to change the combination of frame rates you run on your ingest server, although the same restrictions will apply as before.

1. After making sure that no ingest channels are in use, disconnect all input/output connections to the Matrox card.
2. In FLOW Control, restart the ingest server.
3. Once the server has restarted, connect a video source that is running at the new, required frame rate.

Frame Synchronizer Mode

The Frame Synchronizer mode of these cards can be set from FLOW Control, as described in [User Configurable Parameters](#).

LTC and Audio Plug-Ins

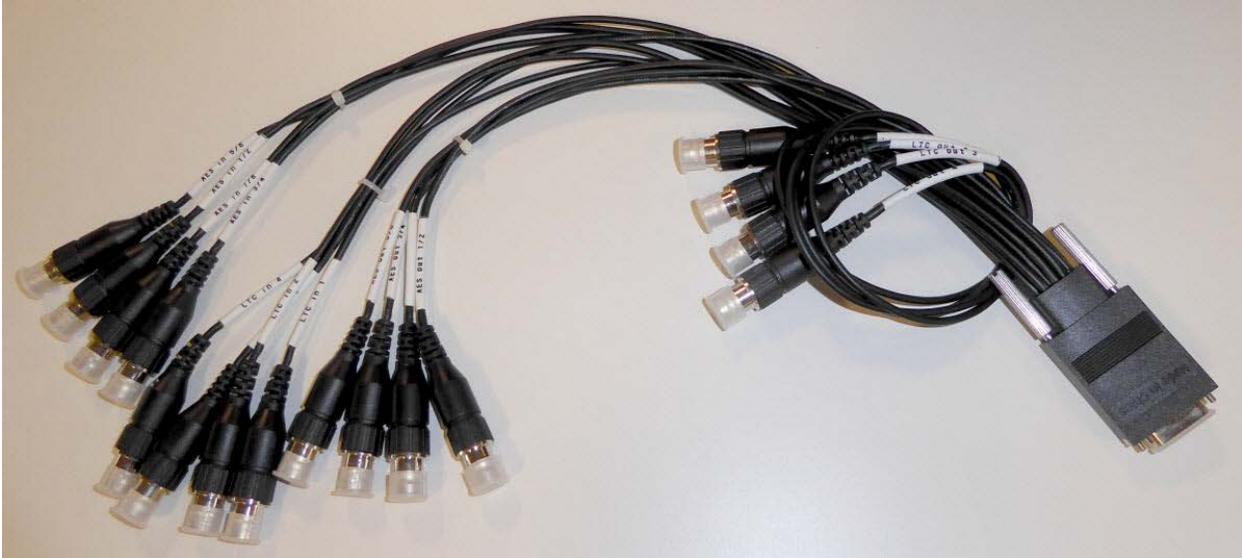
Overview

Note: You may select one input only for your external LTC source.

The Matrox DSXLE4 FH card can provide an analog Linear Time Code (LTC) input from one of the LTC input sources. An internal Plug-in allows you to select the external timecode source you require by reading a configuration file on the FLOW Ingest Server.

A second Plug-in is used to route AES/EBU audio to and from nominated video inputs and outputs.

LTC, AES/EBU Audio In and Audio Out connections to the Matrox card are provided by a Breakout Cable (see below):

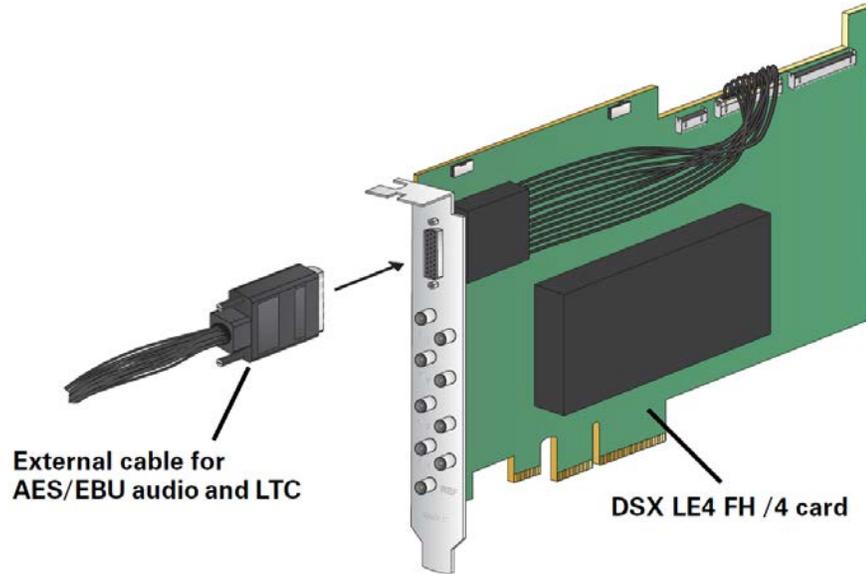


Each audio lead in the Breakout cable carries two audio channels, Audio 1+Audio 2, Audio 3+Audio 4, and so on. The 8-Port Matrox card requires two Breakout cables.

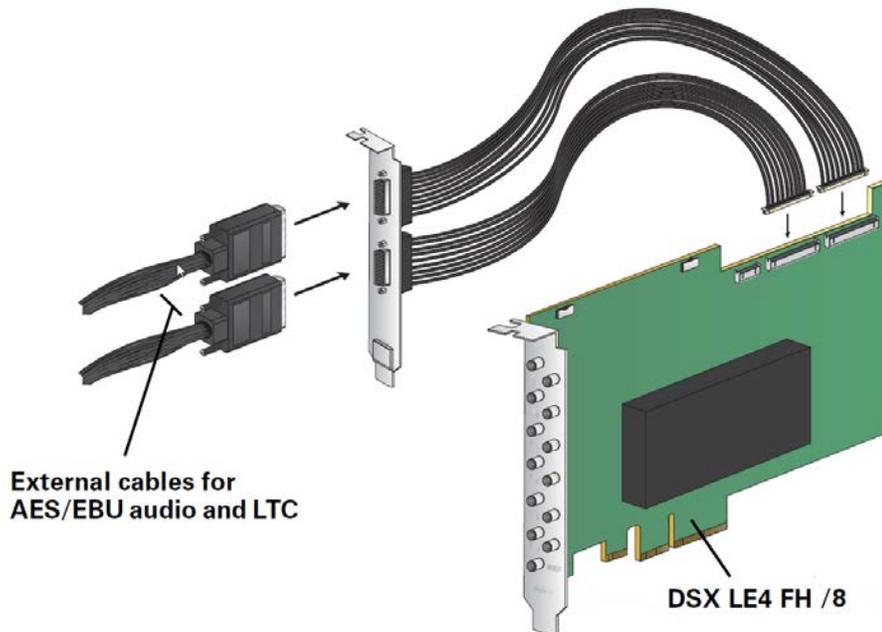
LTC and AES/EBU Audio Connections

To add LTC and AES/EBU Audio connections from your equipment:

1. 4-Port cards only: connect one Breakout cable to the D-Type connector on the card's panel.



2. 8-Port cards only:
 - a. Two D-Type connectors for the Breakout cables are carried on a separate bracket next to the Matrox card.
 - b. Connect the two Breakout cables to the bracket as shown below.



3. Connect the LTC, AES/EBU Audio In and Audio Out leads to the corresponding connectors on your equipment. Each lead on the Breakout cable is identified by a label.
4. 8-Port cards only: On the second Breakout cable, which is the lower of the two cable connections, add 4 to the LTC input label number and add 8 to the Audio In/Out label number. For example:
 - LTC 1 becomes LTC 5, LTC 2 becomes LTC 6, and so on.
 - Audio In 1/2 becomes Audio In 9/10, Audio 3/4 becomes Audio 11/12.

Configuring the Plug-Ins

To configure the plug-ins: open the file `/etc/flow/FlowIngestServer.conf` in a text editor, and locate the section labeled `[matrox]`:

1. Open the file `/etc/flow/FlowIngestServer.conf` in a text editor such as Notepad.
2. Locate the section labeled `[matrox]`.
3. Complete the sections for [LTC Plug-In](#) and [AES/EBU Audio Plug-In](#), as required.

LTC Plug-In

To configure LTC options:

1. To set the timecode source as external for each input, amend the text for the relevant line:

```
source-{value}\timecode-source=external
```

where {value} is the input number:

```
source-0\ selects the first input
```

```
source-1\ selects the second input
```

```
source-2\ selects the third Input, and so on.
```

2. Set the genlock source to the required mode:
 - For bi-level mode, amend the line to read: `sync-flag=MV_SYNC_BILEVEL`
 - For tri-level mode, amend the line to read: `sync-flag=MV_SYNC_TRILEVEL`
 - For SDI channel reference mode, amend the line to read: `sync-flag=MV_SYNC_EXTERNAL`
 - For internal Matrox clock reference mode, amend the line to read: `sync-flag=MV_SYNC_INTERNAL`

Note: Each Input set to 'External' will not be kept in sync with any other inputs, even if they are also set to 'External'.

Setting inputs to the internal Matrox clock reference mode synchronizes them to the master clock - frames may be dropped or inserted in order to main sync. Therefore the frame count could be more or less than the frame count of the input source.

3. If you have more than one Matrox card, select the card source you want to use. Cards are numbered from '0' upwards. For example, to specify the second card, add the following line:

```
ltc-card=1
```

4. Specify the input for the specified card. The first input is numbered '0', the second '1', and so on. For example, to specify the third input, add the following line:

```
ltc-input=2
```

5. Select which clock is used for analog LTC sampling. Add the line:

```
ltc-clock={value}
```

where *{value}* is one of the following:

MV_CLOCK_GENLOCK: Uses the Genlock clock (default option). If the card reference is Black Burst (either bi-level or tri-level), the LTC input should be set to the Genlock clock:

```
sync-flag=MV_SYNC_BILEVEL
```

```
ltc-clock=MV_CLOCK_GENLOCK
```

MV_CLOCK_INPUT: Uses the clock of the SDI input associated with the LTC input. If the card is referenced by the SDI input, use the clock of the same SDI input:

```
sync-flag=MV_SYNC_EXTERNAL
```

```
ltc-clock=MV_CLOCK_INPUT
```

6. Complete the AES/EBU audio configuration as described in [AES/EBU Audio Plug-In](#), before proceeding to [Conclusion](#).

AES/EBU Audio Plug-In

To configure the AES/EBU Audio Input / Output options:

1. To enable AES/EBU audio on input N, type:

```
source-N\audio-source=AES/EBU
```

where:

N = 0 - First Input

N = 1 - Second Input

N = 2 - Third Input, and so on.

2. Set the number of audio channels for each video input. The command is in the following format:

```
aesebu=2/2/2/2
```

The example above shows a four video input system with four audio channels assigned to video inputs 1, 2 and 4, with two audio channels assigned to Input 3.

- Separate each video input by the forward slash character '/'.
 - If you do not want audio channels assigned to a video input, type '0' (zero).
 - Audio channels are assigned in numerical order, therefore the Audio 1/ 2 are always assigned first, then Audio 3/4, and so on.
 - Audio channels must be assigned in pairs - you cannot have an odd number of audio channels assigned to an input.
3. Proceed to "Conclusion".

Conclusion

When you have completed the configuration:

1. Save the text file. Any changes you made to FlowIngestServer.conf are implemented.
2. Restart the FLOW Ingest service.

Sample Configuration File

A typical FlowIngestServer.conf configuration file may look like this:

```
[matrox]

source-0\timecode-source=external
source-1\timecode-source=external
source-2\timecode-source=external
source-3\timecode-source=external

source-0\audio-source=AES/EBU
source-1\audio-source=AES/EBU
source-2\audio-source=AES/EBU
source-3\audio-source=AES/EBU

aesebu=2/2/2/2

sync-flag=MV_SYNC_EXTERNAL

ltc-clock=MV_CLOCK_INPUT

ltc-card=0
```

```
ltc-input=0
```

LTC Configuration Examples

Some configuration file examples covering common scenarios of LTC source, blackburst and Genlock requirements are given below:

- "External LTC, External Blackburst Reference"
- "External LTC, No External Blackburst Ref, Genlock Reference = SDI1"
- "No External LTC, External Blackburst Reference"
- "No External LTC, no External Blackburst Reference"

External LTC, External Blackburst Reference

Connections:

Matrox Card Ref In: Blackburst Generator

Matrox LTC1: External TC Generator

Configuration:

```
[matrox]
ltc-card=0
ltc-input=0
sync-flag=MV_SYNC_BILEVEL // (BILEVEL sync source)
ltc-clock=MV_CLOCK_GENLOCK // (uses Blackburst for sync)
source-0\timecode-source=external // (SDI1 uses external LTC)
```

External LTC, No External Blackburst Ref, Genlock Reference = SDI1

Connections:

Matrox LTC1: External TC Generator

Configuration:

```
[matrox]
ltc-card=0
ltc-input=0
ltc-clock=MV_CLOCK_INPUT (Uses SDI1 for Reference)
sync-flag=MV_SYNC_EXTERNAL // (SDI1 uses external LTC)
```

No External LTC, External Blackburst Reference

Connections:

Matrox Card Ref In: Blackburst Generator

Configuration:

```
[matrox]
sync-flag=MV_SYNC_BILEVEL // (Uses Blackburst Gen for ref)
```

No External LTC, no External Blackburst Reference

Configuration:

```
[matrox]
sync-flag=MV_SYNC_EXTERNAL //
```

Each input uses its video input as a reference.

Appendix B: TCP/IP Ports

The following table provides a list of TCP/IP ports used by FLOW and Storage.

Apps	
Name	Port
AirFLOW	8005
Gateway/Story	8006
Ingest	8007
Scheduler	8008
Control	8009
Event View	8010
Automation	8012
Clients	
Name	Port
Browse (File Ingest)	18181
Story (API)	61070
EditShare	
Name	Port
Ark (HTTPS)	8000
EditShare Master (HTTP, RPC)	8080
EditShare Master (HTTPS, REST)	8083
EditShare Master (HTTPS, RPC)	8084
EditShare Master (HTTP, DBD)	9010
Services	
Name	Port
Admin	12104

Ingest	12114
Daemon	12124
Scan	12134
Automation	12144
Metadata	12154
Proxyworker	12164
Transcode	12184
Transfer	12194
GPI	12204
Sync	12254
PMR	12264
Device	12284
Licensing	12294
Services (QRPC)	
Name	Port
Admin	12100
Ingest	12110
Scan	12130
Transcode	12180
System	
Name	Port
MySQL	3306
AMQP	5672
Broadcast	10101
Files	12010

Outputs are E-E connections for monitors only.

