



# **FLOW Automation User's Guide**

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# Contents

<b>Chapter 1: Introduction</b>	<b>7</b>
System Requirements	8
Workflow Design Process	9
Technical Support	10
<b>Chapter 2: Getting Started</b>	<b>11</b>
Starting FLOW Automation	11
FLOW Automation Views	12
Automation Design View	12
Automation Monitor View	14
Arranging the Desktop	15
Resizing the Desktop	15
Scrolling and Zooming the Design Window	15
Setting the Language in Your User Profile	16
Workflow Settings Menu	16
Exiting FLOW Automation	16
<b>Chapter 3: Workflow Template Designer</b>	<b>17</b>
About the Workflow Template Palette	17
Triggers	17
Inputs	17
Filters	18
Tasks	18
Joining Elements	19
Method 1 (Quick Method)	19
Method 2	20
<b>Creating a Simple Workflow Template</b>	<b>21</b>

Adding an External Trigger Element	21
<b>Adding a Task Element</b>	<b>23</b>
Testing the Workflow Template	25
Completing the Automation Template	25
Activating the Automation Template	<b>27</b>
Accessing Automation within FLOW Story	<b>28</b>
Extending Workflow Template Functionality	<b>28</b>
Using Decision Filters	<b>29</b>
Creating a Template with a Watch Folder Trigger	29
Adding a Metadata Filter Element	30
Adding a Notification Task	31
Adding a Task to the Second Metadata Filter Output	32
Element Colors and Notes	<b>32</b>
Changing Element Colors	32
Renaming Elements	33
Adding Notes to Workflow Templates	33
Workflow Template Management	<b>33</b>
Setting Concurrent Jobs	33
Locking and Unlocking a Template	34
Activating and Deactivating a Workflow Template	35
Copying Workflow Templates	35
Deleting Workflow Templates	36
Creating Log Files for Templates	36
Exporting and Importing Workflow Templates	<b>37</b>
Exporting Workflow Templates	37
Importing Workflow Templates	38
<b>Chapter 4: Element Library</b>	<b>39</b>

Introduction	<b>39</b>
Considerations for System Resources	39
Default Automation Account	39
Masstech FlashNet Storage Login	39
Using Automation	40
Caveats	40
Masstech MassStore Integration	40
FLOW Integration	40
MassStore Server Configuration	41
FLOW Media Space Configuration	41
Ranged Markers	42
Trigger Elements	<b>43</b>
External Trigger	43
Interval Trigger	44
Manual Trigger	44
Metadata Trigger	45
Time Trigger	45
Watch Folder Trigger	46
Input Elements	<b>48</b>
Storage Space Input	48
Search Input	<b>50</b>
Search Input	<b>50</b>
<b>Filter Elements</b>	<b>51</b>
Baton QC Filter	51
Metadata Filter	52
QScan QC Filter	53
VidChecker QC Filter	55

<b>Task Elements</b>	<b>56</b>
Fields with Combined Input Values	56
Aspera Task	57
Copy Task	59
Copy with Passthrough Task	60
Delay Task	61
Delete Task	61
FTP Task	62
Metadata Export Task	65
Metadata Task	66
Mobius Video Analysis Task	67
Notification Task	69
Project Task	70
Scan Task	71
Script Runner Task	72
Task Outputs	73
Send To FLOW Site Task	74
Send to Amazon S3 Task	75
Transcode Task	77
Transcode with Passthrough Task	80
<b>Conditional Operators</b>	<b>81</b>
Boolean	81
Text	81
Numeric	82
Date/Time	82
Color	83
Example 2	84

Example 3	85
<b>Chapter 5: Automation Monitoring</b>	<b>86</b>
Activated Jobs	87
Activating Automation Event Triggering	87
Queued Jobs Viewer	88
Running Jobs Queue	89
Completed Jobs	90
Informational Tools	90
Summary Box	91
Context Menu	91
<b>Chapter 6: Troubleshooting</b>	<b>93</b>
Network	93
Cannot Connect to FLOW Server	93
Cannot Log In	93
No Network Folders or Storage Spaces Visible	93
<b>Workflow Template Designer</b>	<b>94</b>
Test Failed	94
Workflow Template does not Run	94
Cannot Open Workflow Template for Editing	94

# Chapter 1: Introduction

This chapter provides an overall description of EditShare FLOW Automation, an automated workflow tool that performs repetitive jobs on items such as; folders, files metadata, and video formats.

This User Guide assumes that:

- The EditShare FLOW Automation system has been installed and fully configured.
- You have been given access rights to use FLOW Automation.

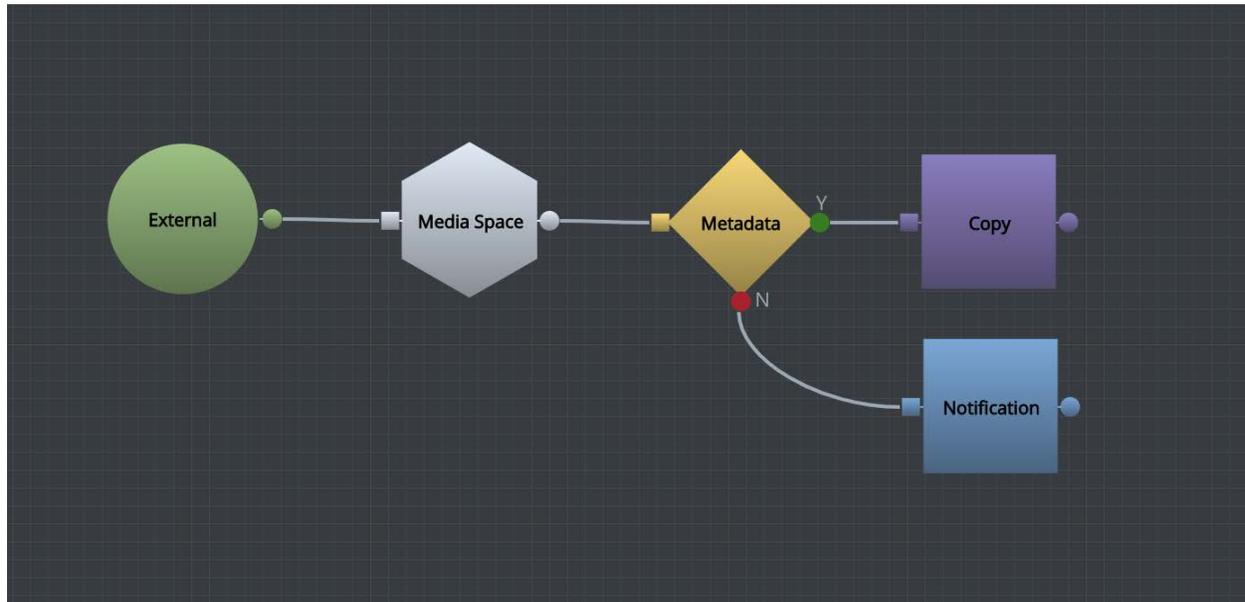
If either of the previous requirements have not been met, refer to the FLOW Administrator's Guide for details.

FLOW Automation consists of a Workflow Connector and a Jobs Manager. The Workflow Connector allows the user to create both simple and complex workflow templates using Triggers, Inputs, Tasks and Filters.

Triggers define how a workflow is started, for example, a specific time or a change of metadata. Tasks are the jobs that are carried out on the results of a filter. One or more of the following tasks can be included in a workflow template, in any combination:

- Copy or move files from one folder to another.
- Delete media, metadata or archives.
- Assign a property to a metadata field.
- Export metadata to XML formats.
- Add or remove Projects.
- Quick, normal or full scans of storage spaces with optional auto-delete and proxy generation.
- Transcode media to a specified format and save to a nominated location.
- Insert a delay into a workflow.
- Send an email notification.
- Upload files to an FTP server or cloud storage.

The power of FLOW Automation's workflow templates are enhanced by adding customized, decision-making filters, based on true/false tests or search matches, to inputs and tasks. Workflow templates are built graphically on screen in the style of a process flowchart.



Once active, workflow templates are triggered when their defined criteria are met. Each time a template is triggered, a FLOW Automation Job is created. You can review the progress and status of each job in the FLOW Automation Job Queue.

In common with other EditShare applications in the FLOW suite, dockable windows are employed, allowing users to adjust the screen layout to suit their preferences.

## System Requirements

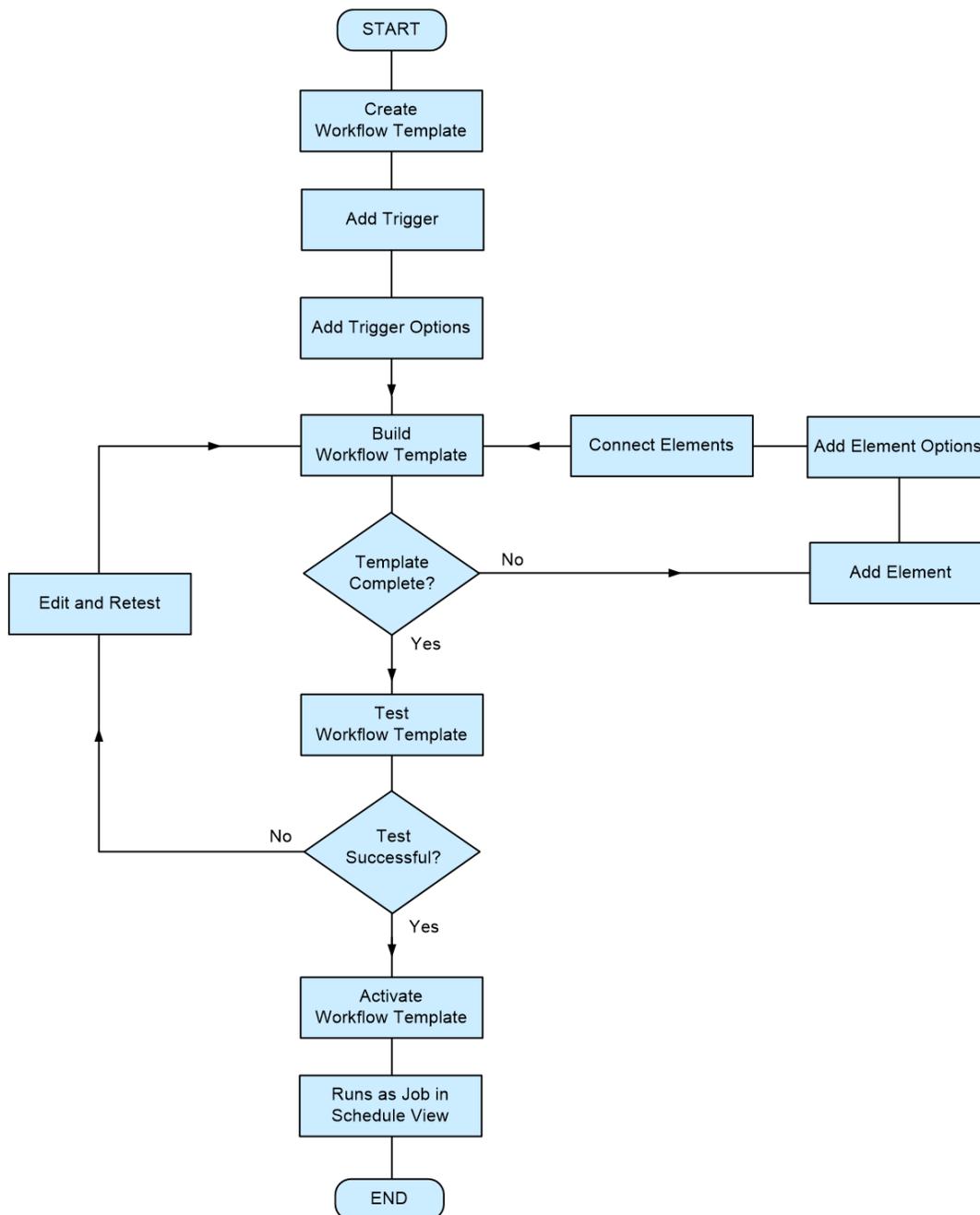
You can use FLOW Automation on most web browsers for Windows, OS X, iOS, Linux and Android workstations, and handheld devices but EditShare recommends the use of Google Chrome. You must keep your web browser up to date, to take advantage of the full functionality of FLOW Automation's advanced features. We recommend that the Flash plug-in is not installed.

# Workflow Design Process

Workflow templates are built by adding elements in the sequence required to function as intended. All workflow templates must start with a Trigger element type, but the remaining element types may be added in any order.

Workflows can be tested before they are activated, and their progress monitored when they are in the job queue.

The process for creating and using FLOW Automation's workflow templates is summarized below.



# Technical Support

For questions not addressed in our documentation, contact EditShare Technical Support. Have the exact version number of your FLOW implementation ready.

EditShare strongly recommends that you purchase a support agreement. If you do not have a support agreement, a per-incident rate may be available.

Please contact EditShare Technical Support at the following URL:

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

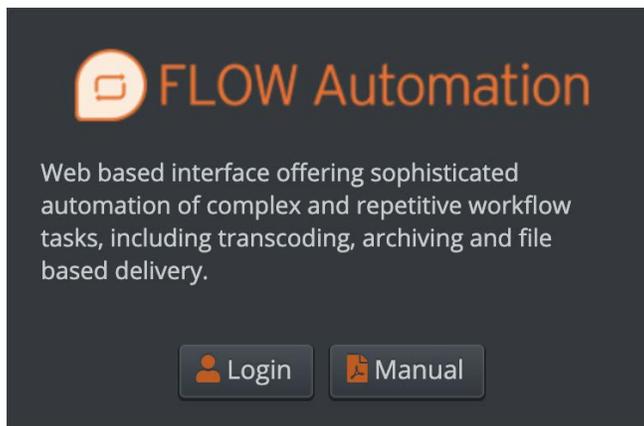
# Chapter 2: Getting Started

This chapter describes starting FLOW Automation and its basic functions.

## Starting FLOW Automation

To start FLOW Automation:

1. Click on the Login button on the FLOW Landing page.



The login screen opens.



2. Enter your FLOW username and password into the named fields, and click Log In.
3. Click the Remember Login box, if your browser prompts you, to keep your login details for the next log in.
4. Click OK.

# FLOW Automation Views

FLOW Automation is divided into two main views: Design and Monitor views.

## Automation Design View

FLOW Automation opens in Design view, which is divided into the following areas:

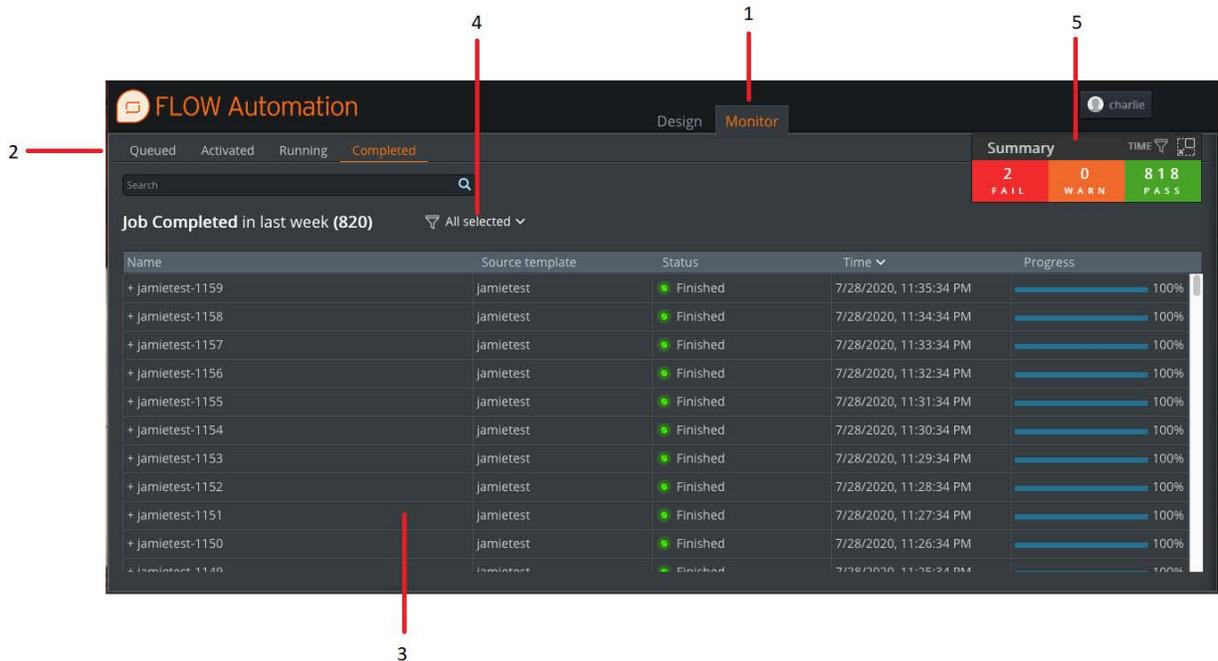
Item	Description
1	Template list.
2	Palette containing Triggers, Inputs, Filters, and Tasks used with this template.
3	Workflow design window.
4	Workflow design tab.
5	Workflow monitor tab.
6	Template settings.
7	Template components.



Item	Description
1	Add a new template icon.
2	Delete template icon.
3	Export template icon.
4	Activate template icon.
5	Duplicate template icon.
6	Import template icon.
7	Test template icon.

# Automation Monitor View

The Automation Monitor view displays the jobs that are queued, activated, being processed, and those that have completed. The view is accessed by clicking the Monitor tab.



Item	Description
1	Monitor tab
2	Job actions
3	Job history
4	Job filter
5	Job history summary

# Arranging the Desktop

The desktop can be resized, and can be scrolled and zoomed.

## Resizing the Desktop

You can resize the desktop or individual panels by dragging with your mouse. Note that there are limits to the amount that you can resize the desktop or its panels.

	Position your mouse between panel frames so that it changes to a double-arrow, then, with the left button held down, drag your mouse to move the panel frames left or right.
	Likewise, you can move panel frames up and down.

## Scrolling and Zooming the Design Window

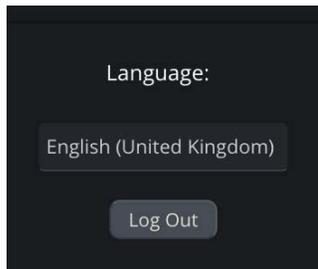
If you are building complex Workflow Templates, you can extend the Design Window to accommodate your designs, using one of the following:

1. Making the Automation window full screen by clicking on the Maximize button on your Windows or Mac.
2. Use your mouse scroll wheel to scroll up and down within the Design Window.
3. Hold down the Ctrl key (Windows) or Cmd key (Mac) while using your mouse scroll wheel to zoom in or out of the Design Window.

# Setting the Language in Your User Profile

By default, your FLOW user name displays at the top of the desktop. By clicking on your user name you can change the language used within FLOW or you can logout of FLOW Automation.

1. Click on your user name, located at the top right of the page. The Settings window opens.



2. To change the Language presented, click on the actual language and select the desired language. The language is changed to the specified language.
3. You can continue to work on your workflow or click Log out, to exit.

## Workflow Settings Menu

The Settings Menu is accessed from the Settings button. The menu sets the maximum number of jobs that Automation runs at a time, as well as the maximum number of jobs Automation holds in its queue. You can change the settings to optimize system performance or to reduce activity for diagnostic purposes.

## Exiting FLOW Automation

To exit the FLOW Automation application, click on your username and then click **Log out**.

# Chapter 3: Workflow Template Designer

Workflow templates are built within the Design tab of FLOW Automation and defines the workflow to be automated. Within the Design tab you can create new blank templates, save existing ones, or save as different templates.

*Note: All Elements and parameters are listed in "Chapter 4: Element Library" on page 37.*

## About the Workflow Template Palette

All workflow templates have elements, which can be connected together to form a template. These palette elements include the following:

- Triggers
- Input
- Filters
- Tasks

### Triggers

Triggers are elements that are used to start workflow templates. A trigger can be a time of day, an interval of time, or a change in a watched folder or file. A Manual trigger is provided for On Demand templates, and is also useful for testing templates during the design stage. All workflow templates MUST start with a trigger.

For a complete list and description of trigger elements, see [Trigger Elements](#).

### Inputs

There are two types of input, those specific to a storage space and those for search filtering.

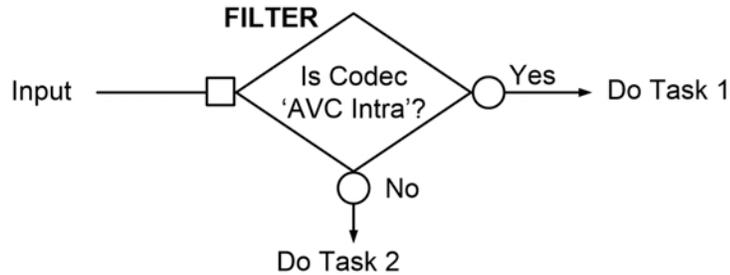
- Media Space - Sets a specific location from where files are processed by other downstream elements.
- Project - Points to an already existing project within FLOWStory or AirFLOW.
- Search - Applies a search criteria on files which are processed by other downstream elements. Complex search expressions can be built by combining parameters.

For a complete list and description of input elements, see [Input Elements](#).

## Filters

Filters provide more specific inputs to template elements. A Filter element differs from search input elements in that it provides two possible outputs: one where the filter condition is true, and the other where the condition is false.

For example, a filter can be defined to check if a file video codec is AVC Intra 100Mb 1080i or not:



- If true, content of this type can be copied to a specific location
- If false, the content can be transcoded to this format

For a detailed description of filter elements, see [Filter Elements](#).

## Tasks

Tasks are the jobs that are carried out on the results of a filter or trigger. Tasks can include transcoding media, scanning, copying or moving files and folders to storage spaces, or uploading files to FTP sites or cloud services. You can also send email reports of tasks that Automation has performed.

For a complete list and description of task elements, see [Task Elements](#).

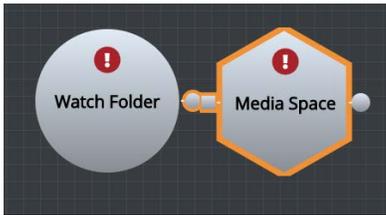
# Joining Elements

There are two methods for joining elements:

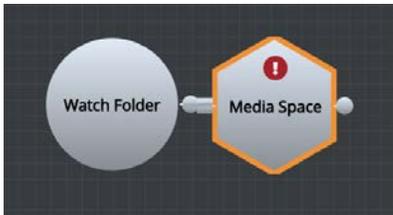
## Method 1 (Quick Method)

Use this method to add an element to the Design window and connect it to another element at the same time:

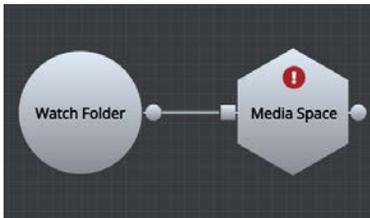
1. While holding down the left mouse button, drag the new element from the template menu and position it over an existing element so that the connectors you want to join are highlighted ('A').



2. Release the left mouse button. The elements are now connected.



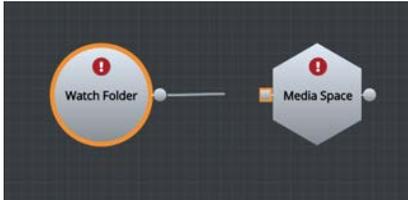
3. Hold down the left mouse button to drag either element into the position you require.



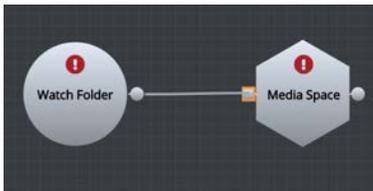
## Method 2

Use this method when the elements are already in the Design window but have not been connected, or have inputs or outputs that are not connected:

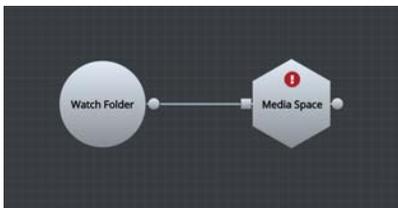
1. Hold down the left mouse button over the connector of the first element and then drag across to the connector of the second element.



2. Release the mouse button.



3. The two elements are connected.



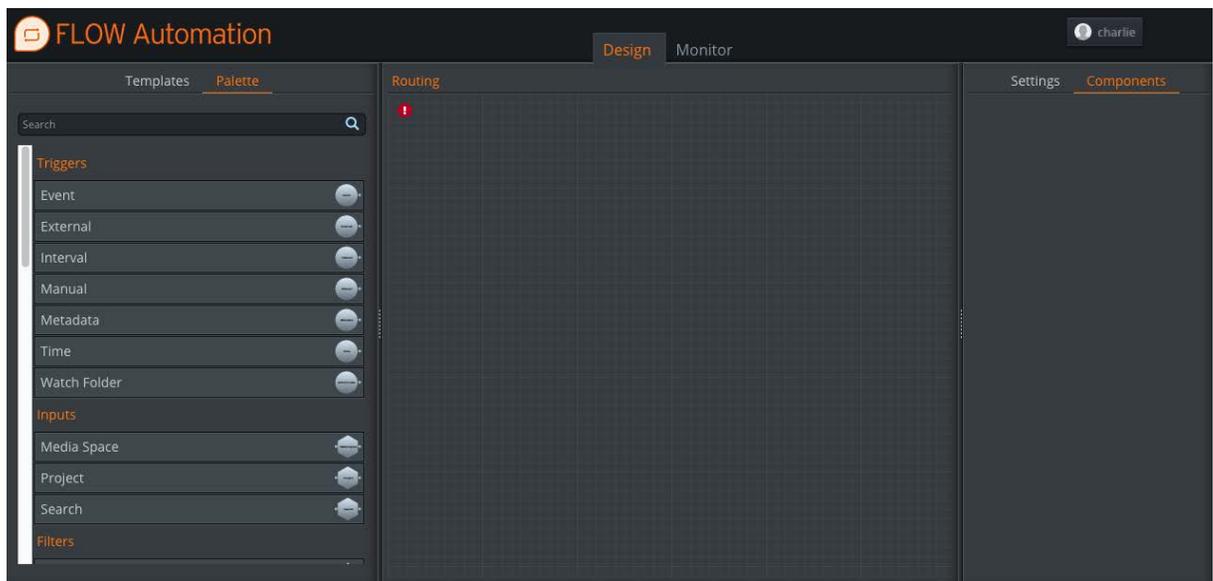
# Creating a Simple Workflow Template

In the following example we will create a workflow template that scans and converts media from one format to another that you trigger on a clip in the FLOW Story client application. When this has been done, a project is created in FLOW Story and the resulting clips are added to it.

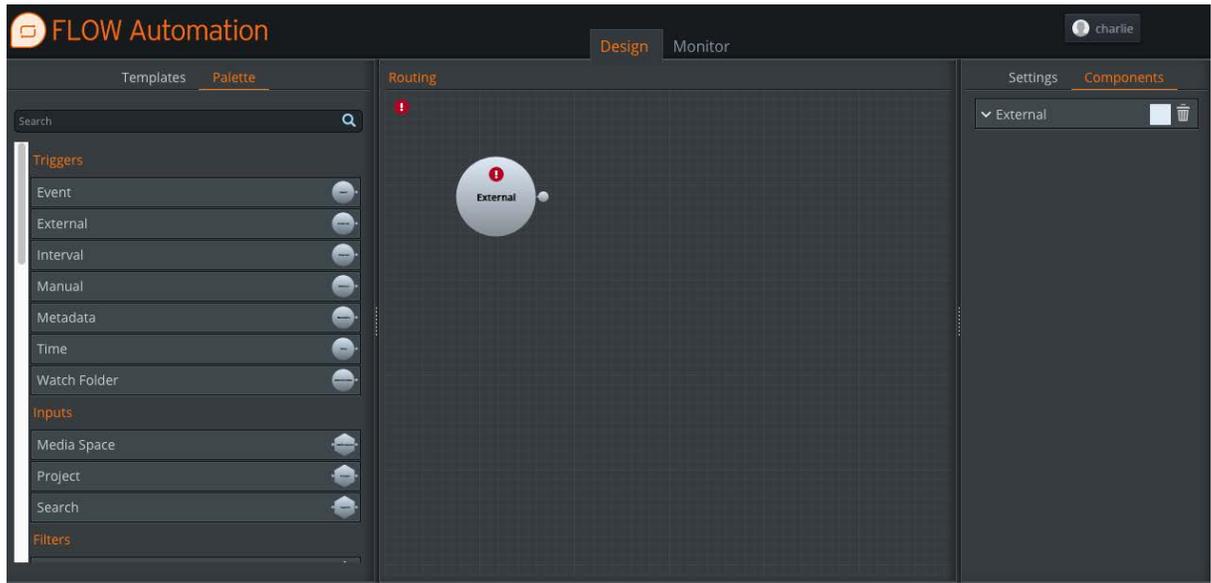
## Adding an External Trigger Element

Triggers are elements that initiate a workflow. You must start every template with a Trigger. An external trigger is initiated in an external application, for example in FLOW Story. To add an external Trigger:

1. Click on the Palette tab.



2. Left-click, hold, and drag the desired trigger on to the work area of the Designer. In this example, we want to run the template in FLOW Story so we select the External Trigger.



3. A full size version of the Trigger displays on screen. Drag with the mouse to position the item to where exactly on the screen you want it.

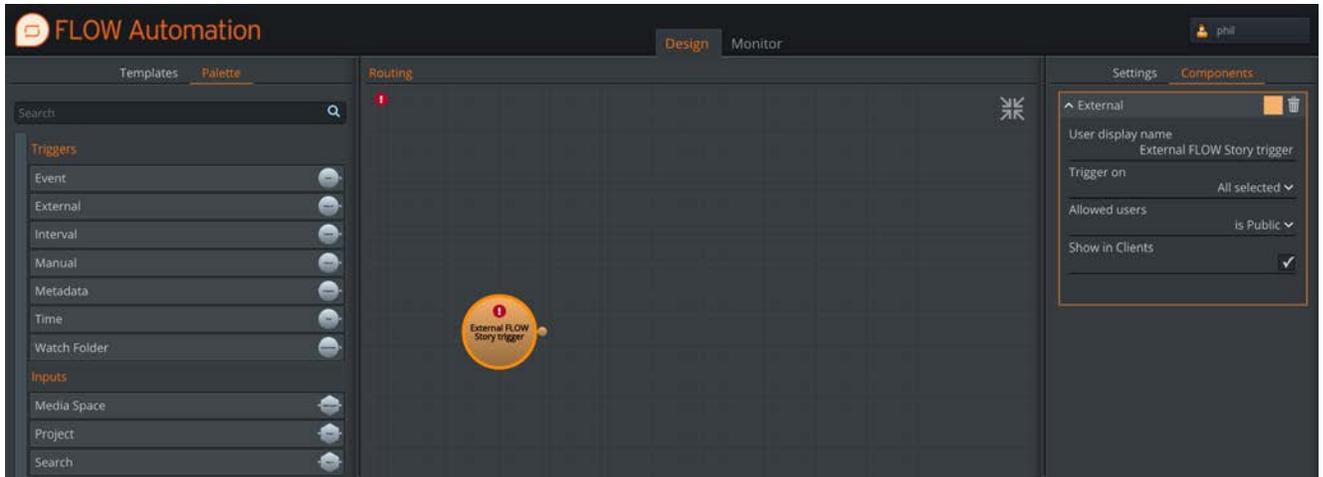
*Note: An exclamation mark on a red background displays on the trigger element, indicating that some of the necessary details have not been specified for this trigger.*

4. Optional: Type a name for the Trigger element in the Components tab. The name displays on the trigger element in the Design area.
5. Optional: Select a color for the Trigger display by clicking the white square and selecting a color from the palette.
6. Select what item in the Workflow you want to run the template from. In this example, we select clips from the drop-down list which indicates that this template is run from a clip within FLOW Story.
7. Select which users can run the template.
8. Select whether this template is shown in the client applications.

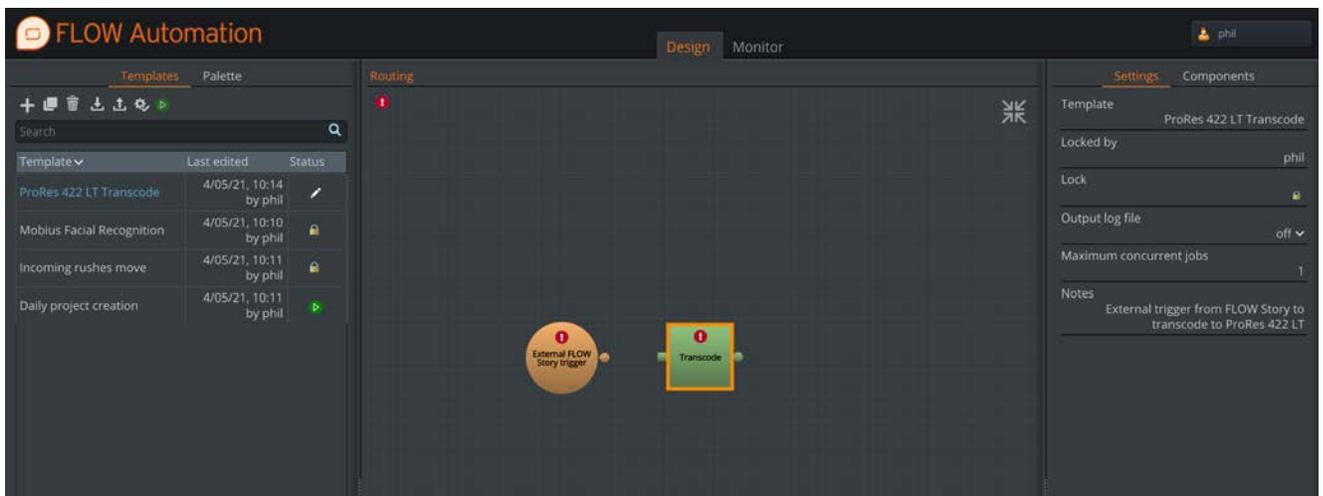
# Adding a Task Element

The Task element is the part that does the function we have asked Automation to do. The Task element allows us to configure options, such as the transcode option for the wrapper and the encoding method.

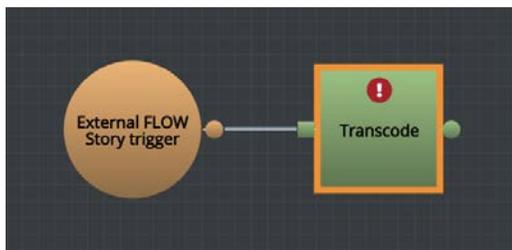
1. Click on the Palette tab.
2. Scroll down to Tasks and select the desired task from the Task list. In this example, we want to transform media from one format to another, so we shall select Transcode.



3. Drag the selected task on to the work area of the Designer. A full size version of the task displays on screen.
4. Drag the task with the mouse to position the item to the right of the Time Trigger element created earlier. An exclamation mark on a red background displays on the Task element.



5. On the Components tab, select the task and enter the following:
  - User display name - Enter a name for the Task element or you can leave this as the default name. The name displays on the task element in the Design area.
  - Clip Name - Enter the clip name for the output name.
  - Destination Media Space - From the drop down list, select the storage space where you want the transcoded media saved.
  - Destination Folder - Enter the name of the destination output folder.
  - Preserve Path - Click to preserve the folder path of the source.
  - Wrapper - Select the wrapper type from the drop-down list.
  - Encoding - Select the Encoding method to be used from the drop-down list.
  - Channel - Select the channel or channels FLOW uses for transcoding.
  - User - Leave this blank to use FLOW Control setup "automation" user or \$USER\$ to use the user that activates this template or any other FLOW user.
  - Password - Enter a password for this task element.
  - Maintain Source Metadata - Select to copy metadata from the source file to the output file.
  - Maintain Markers - Select to copy markers from the source file to the output file.
  - Skip if output exists - Select to skip the output if the output matching the codec and wrapper exist.
  - Update Avid PMR - Select update Avid PMR file. This is only valid if Avid destination media space is used.
  - Preserve Data Tracks - Select to preserve data tracks in the output file, if it is present in the source file.
  - Start Handle - add a handle to the start of transcoded clips, when transcoding markers.
  - End Handle - add a handle to the end of transcoded clips, when transcoding markers.
  - Consolidated Sequences - Select to consolidate sequences and consolidate into one output clip. If this is not selected, each sequence entry will be individually transcoded to a new clip.
6. Connect the two elements by holding down the left mouse button over the External trigger connector and then dragging it across to the input connector of the task element.



## Testing the Workflow Template

Before deploying your workflow template on FLOW Automation, you should ensure the elements are connected correctly and then test the template. To test the template:

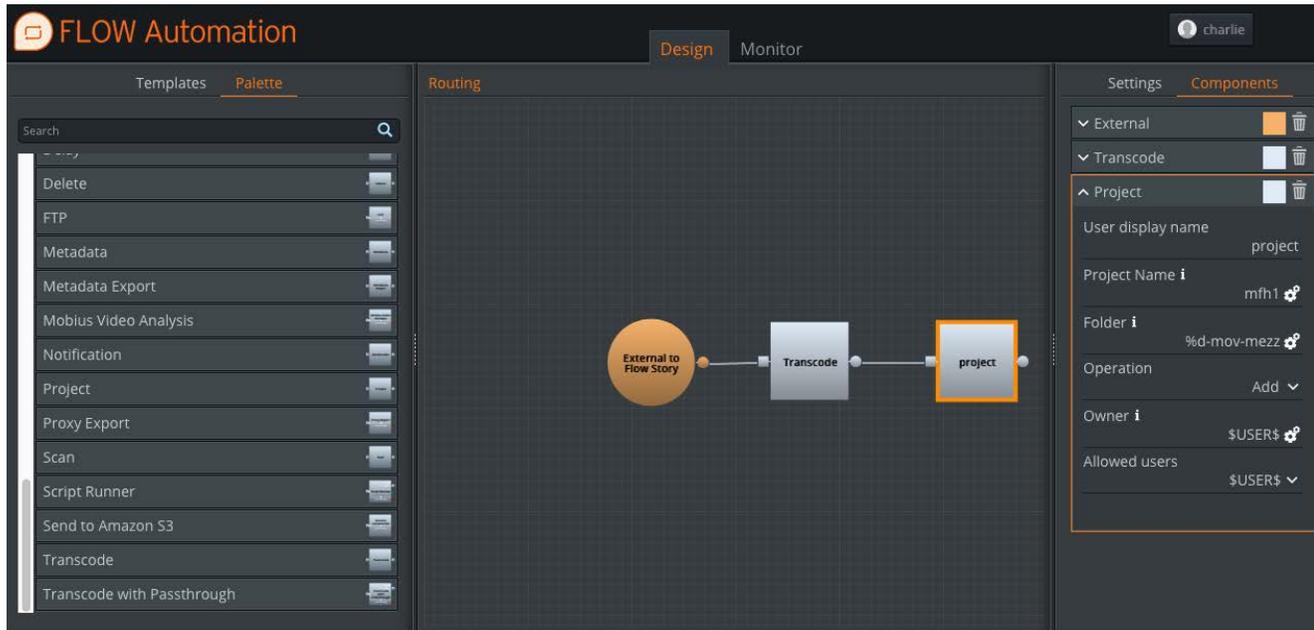
1. Click on the Test Template icon.
2. In the template list, an activity icon displays to the right of the template.
3. The Automation Test Run window opens.
4. The Test Run window displays the principle parameters set for your template and each completed stage of your template. If the test failed to run at any point, an error message displays. Click OK to close the window.
5. To view more details about the test run, click Show Details.
6. The Test Run window opens a second display area with more detailed information.
7. Click OK to close the window.
8. If there is a major error in your template, rectify the reported error and retest your template. If your template is running as intended, you can activate it on the FLOW system. See [Activating and Deactivating a Workflow Template](#).

## Completing the Automation Template

With the storage space needing to be scanned specified, you need to specify what occurs when this completes. To do this, use this notification task to specify the project that is created in FLOW Story, and the files that are added to it.

1. Click on the Palette tab and scroll down to the Tasks section.
2. Select the Task you require from the List and drag the Notification task on to the work area of the Designer. In this example, we want to create a project in FLOW Story so we will select the Project task.
3. A full size version of the Trigger displays on screen. Drag with the mouse to position the item to the right of the Time Trigger element created earlier. An exclamation mark on a red background displays on the Task element.

4. Connect the two elements by holding down the left mouse button over the Transcode Task connector and drag it across to the input connector of the Project Task element.



5. From the Components tab, under Project, enter a name for the project, for example mfh1.
6. Specify a folder name. In this example the name used is %d-mov-mezz. This uses the current date appended by the text -mov-mezz.
7. Specify an operation that occurs when this task is run. This case we specify add which creates a project in FLOW Story.
8. Specify who owns the task.
9. Select the Allowed users check box to allow any user on the system to run this automation task.

# Activating the Automation Template

You must activate an automation template before it can run as a scheduled task. Activating a template locks it down so no one else can use or make changes to it.

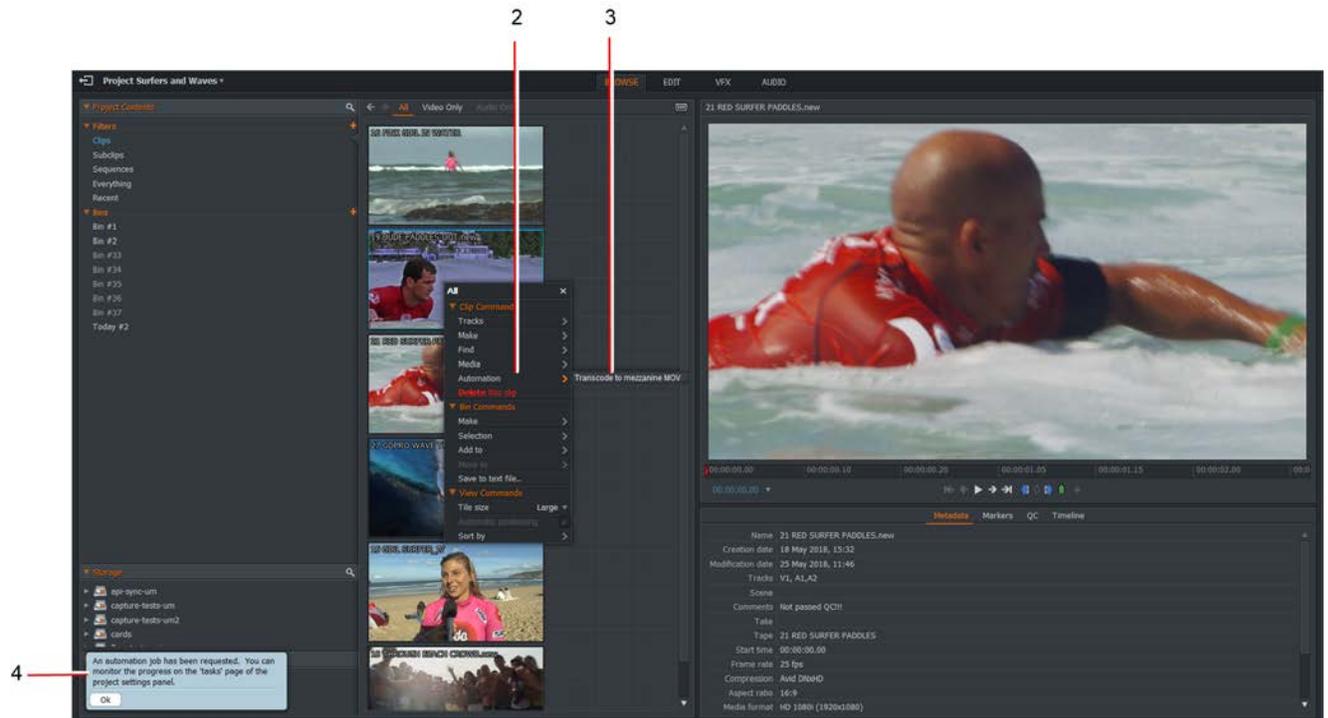


1. In the Design view, click on the Templates tab.
2. Click on the desired workflow template to be activated. The selected template displays in the Design window.
3. Click the Activate button. 
4. The Activate button changes to a Deactivate button and the template now displays as a Job in the Automation Schedule.
5. The Edit icon and User name display are removed from the template and replaced by an animated, green Activated icon.

# Accessing Automation within FLOW Story

Now that you have created an external automation template, you can access and run the template in the FLOW Story Client.

*Note: You must have permission rights to view and run Automation Templates. Ask your administrator if you are unsure.*



1. Log in to FLOW Story with the appropriate permissions.
2. Right-click a clip in and select Automation.
3. Select the name of the Automation template that you have created.
4. The automation job is requested and the Transcode task is started. The project is created and the outputted files are added to it.

## Extending Workflow Template Functionality

You are not limited to the Filter example shown here. You can keep adding Input, Filter and Task elements in any combination to create more complex and powerful workflow templates. Refer to "Chapter 4: Element Library".

You can also combine expressions to produce more refined selections in your templates. See [Combining Expressions](#).

# Using Decision Filters

Filters are one of the more powerful features of Automation as they provide two conditional outputs - true or false. In the following example, we shall create a workflow template that watches a storage space and sends an email notification when a .mov or .mpeg file is added to that space.

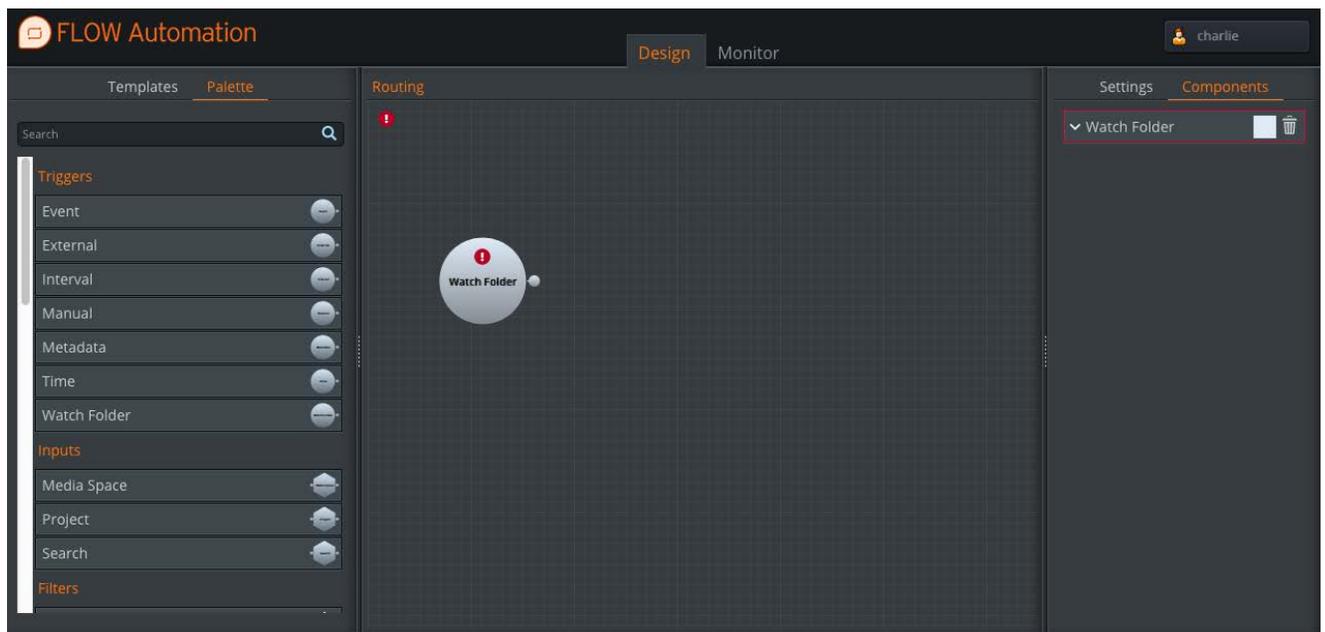
The process is divided into the following stages:

- [Creating a Template with a Watch Folder Trigger](#)
- [Adding a Metadata Filter Element](#)
- [Adding a Notification Task](#)
- [Adding a Task to the Second Metadata Filter Output](#)

## Creating a Template with a Watch Folder Trigger

To create a workflow template and add a Watch Folder trigger:

1. Click on the Templates tab and create a new workflow template called 'Watch Folder Demo'. See [Creating a Simple Workflow Template](#).



2. Click on the Palette tab and scroll down to the Triggers section.
3. Click and add a Watch Folder trigger.
4. Click on the Components tab and configure the Watch Folder with the following parameters:
  - a. Media Space: A valid storage space that you have access to.
  - b. Folder: A valid folder in the storage space that you have access to.
  - c. Watch For: Select Items Added.

- d. File Names: \*.mov; \*.mpg (use a semicolon to separate entries).
- e. Ignore: Leave blank.
- f. Scan Type: Leave as Asset to refer to individual files.
- g. Min File Size: Leave as is.

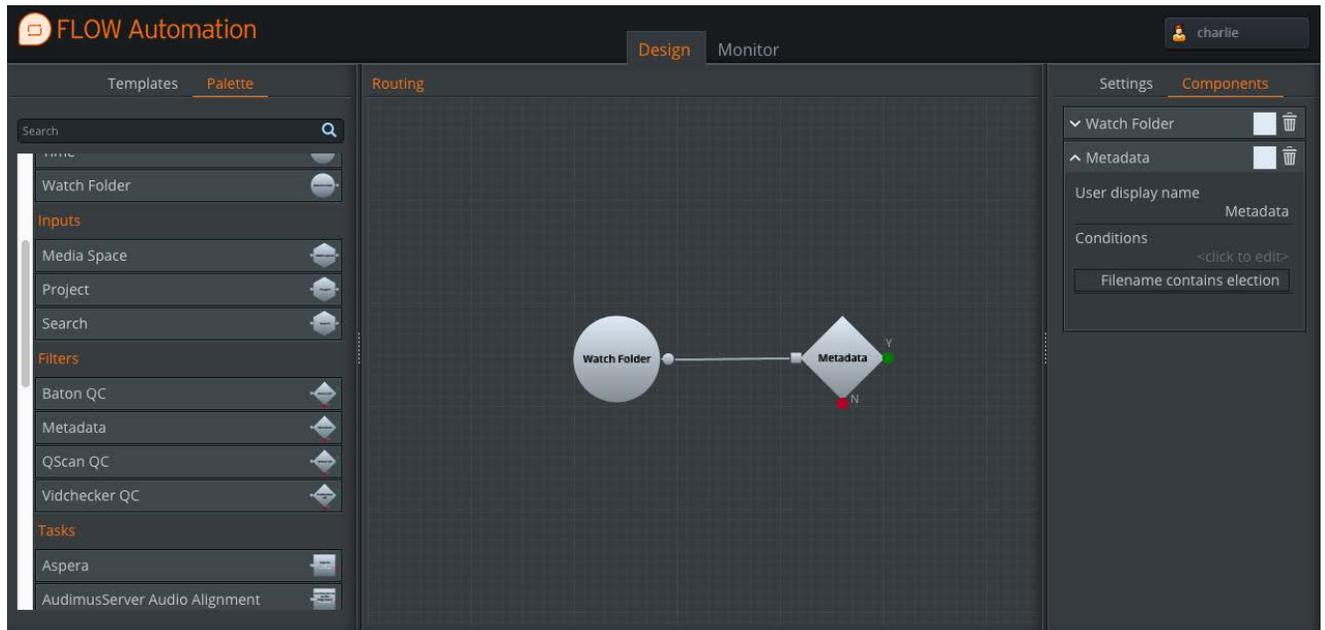
See "Adding an External Trigger Element" on page 20.

- 5. You can now proceed to [Adding a Metadata Filter Element](#).

## Adding a Metadata Filter Element

In this example, the Metadata Filter element is used to search for files with the text string **election** in them. To add the Filter element:

1. Click on the Filters section of the Palette tab.
2. Left-click on the Metadata Filter to select it.
3. Drag the selected trigger on to the work area of the Designer.
4. A full size version of the Filter displays on screen. Drag with the mouse to position the item to the right of the Task element. An exclamation mark on a red background displays on the filter element.
5. Select Filename from the first Condition drop down list.



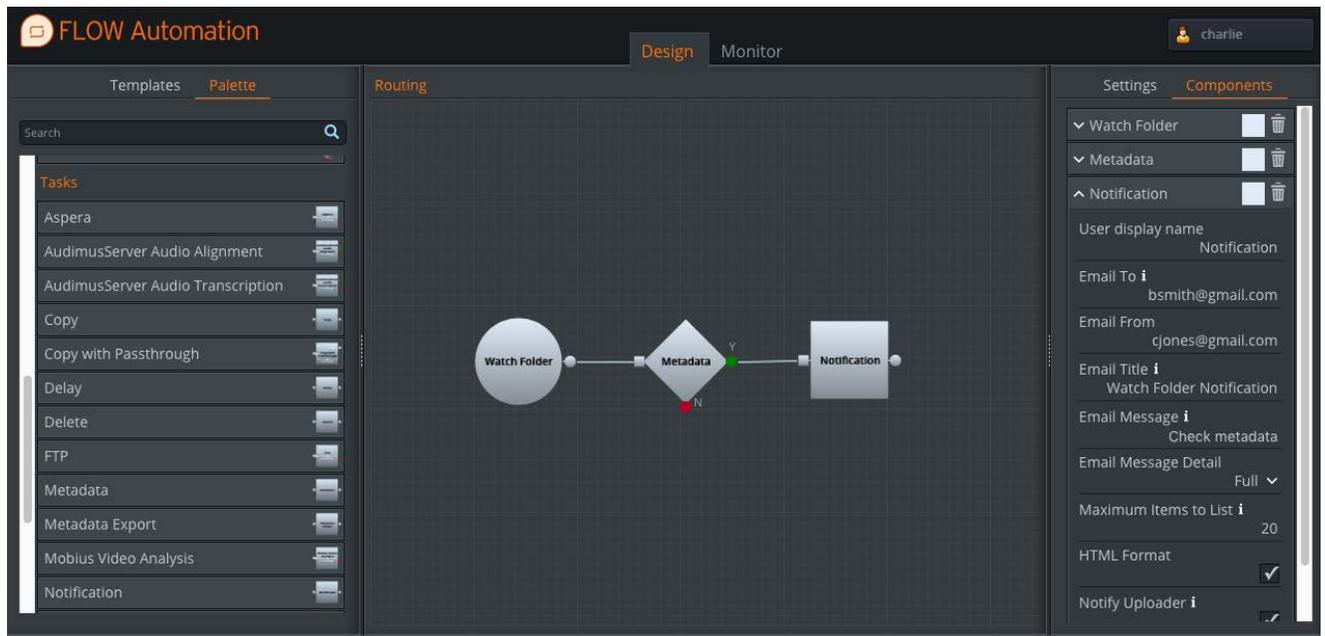
6. Select the condition **contains** from the second drop down list.
7. Type the word election into the text box.
8. Using the mouse, drag the Scan Task output connector onto the Metadata Filter input connector to connect the two elements together. The exclamation marks on the Watch Folder and Metadata elements are removed.

9. You can now add other elements to the Y and N outputs of the filter element. To add a Notification task, see [Adding a Notification Task](#).

## Adding a Notification Task

The Notification task sends an email notification to a nominated recipient. To add the Notification task to the Watch Folder template:

1. Click on the Palette tab and scroll down to Tasks and select Notification.



2. Left-click on the Notification task and drag the element on to the work area of Design. A full size version of the Task element displays on screen.
3. Set the Notification parameters with the following values:
  - a. Email To: Your email address
  - b. Email From: A return email address
  - c. Email Title: The subject title for your email
  - d. Email Message: The text of your Email message
  - e. Email Message Detail: Select Full or Summary from the drop down list
  - f. Maximum Items to List: Maximum items to include in this list.
  - g. HTML Format: Specify whether or not to use HTML format for this notification.
4. Notify uploader - This option when selected will send an email to the user that performed the upload task in Story or AirFLOW that the upload was completed.
5. Using the mouse, drag the Metadata Filter 'Y' output connector onto the Notification Task input connector to connect the two elements together. The exclamation mark on the Notification element is removed.

6. Save and test the workflow template as described in [Testing the Workflow Template](#).
7. When the test has started, upload or save a .mov or .mpeg file to the target directory, in order to initiate the Watch Folder.

## Adding a Task to the Second Metadata Filter Output

To make the most use of the Filter element's capability, you can add a second task to the 'N' output to carry out a task for when the Filter condition is false. You can choose any task that suits your requirements. The procedure is the same as described in [Adding a Notification Task](#). A list of available tasks and their parameters is given in "Chapter 4: Element Library".

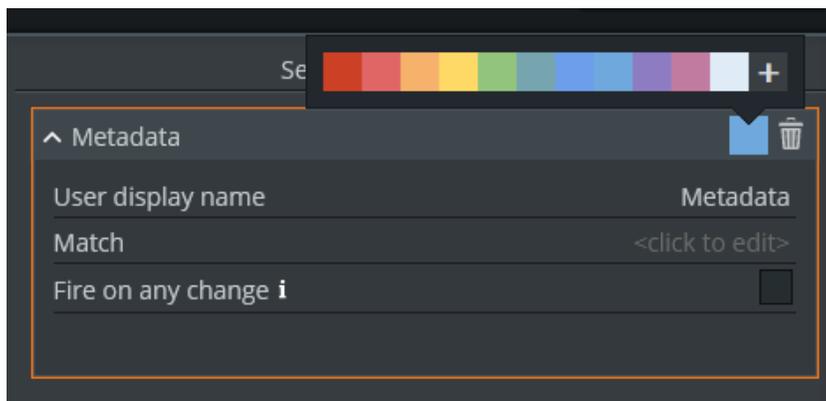
## Element Colors and Notes

To improve the readability, you can color code the elements you place inside your workflow templates, and add notes to those elements and templates.

### Changing Element Colors

By default, all elements are colored silver. You can change the color of individual elements to assist in identifying element types or those assigned to specific tasks, etc.

1. When you have added the element to the work area, click on the element you want to change. The current color of the element displays as a box in the Properties area.



2. Click on the box.
3. The color palette opens.
4. Click on the color you require.
5. The element changes to the color you selected.
6. To change the color again, repeat steps 1 to 3, or click the Undo button to return to the default (gray) color.

## Renaming Elements

You can rename individual elements so that it is easier to identify their purpose when you or other users edit them in the future.

1. With the template open in Design view, click on the element that you want to rename. The properties for the selected element display below the Components tab.
2. Click on the User display name and change the name, as desired. The name entered displays inside the element in the Design window.

## Adding Notes to Workflow Templates

You can add a note to workflow templates to describe their function for when you or other users update them in the future.

1. With the template open in Design view, double-click the text below the Note label. The text area changes to a text box.
2. Type the text you want displayed into the text box and then press Enter on the keyboard.

## Workflow Template Management

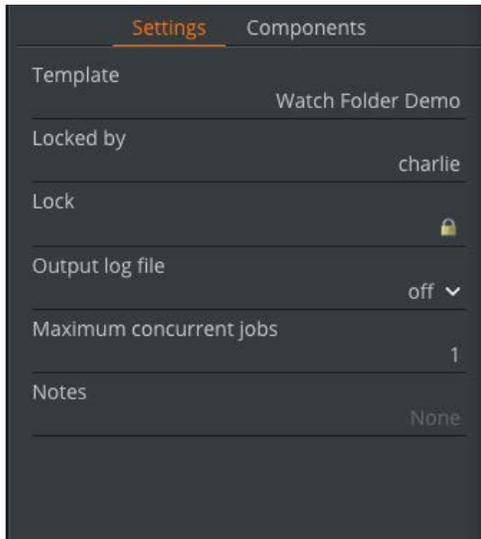
### Setting Concurrent Jobs

You may want to run two or more jobs at the same time from the same workflow template. For example, you may want to configure the transcode task to use four separate channels, allowing four clips to be transcoded at the same time, maximizing the use of the available channels.

You can set up to ten concurrent jobs in a template, but be aware that setting too many jobs can impact on the performance of other workflow templates.

The Concurrent Jobs setting should not be confused with the number of jobs that are allowed to run in the Jobs Queue.

1. Type the number of concurrent jobs required directly into the text box.



2. The concurrent jobs are set.

## Locking and Unlocking a Template

A padlock icon displays against each item in the workflow template List to indicate whether the template is locked or not. The padlock icon has two states as shown below:

	Locked	Template can only be edited by the owner.
	Unlocked	Template can be edited by anyone.

The name of the current owner displays to the right of the padlock icon, and the name of the currently selected template displays below the Design window.

When you lock a template in Design View, you are preventing other users from making changes to it. A template locked this way cannot be activated. To lock a template in Design View:

1. Click on the Design tab and select the template you want to lock.
2. Click on the Lock next to the desired template. The padlock icon in the Templates panel 'closes' and changes from unlocked to locked.
3. To unlock the template, click on the Lock again.

A template is locked automatically when you activate it. See [Activating and Deactivating a Workflow Template](#).

## Activating and Deactivating a Workflow Template

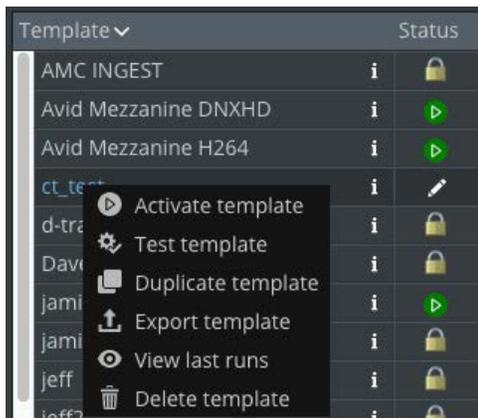
You must activate a workflow template before it can run as a scheduled task.

1. In Design View, click on the Template tab.
2. Click on the workflow template you want to activate.
3. The selected template displays in the Design window.
4. Click the Activate button. 
5. The Activate button changes to a Deactivate button and the template now displays as a Job in Automation Schedule. See "Chapter 5: Automation Monitoring".
6. The Edit icon and User name display are removed from the template and replaced by an animated, green Activated icon.
7. To deactivate the template, return to the Design view and click on the Deactivate button.

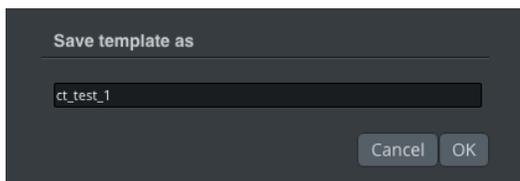
## Copying Workflow Templates

To save time, you may want to create a new template based on an existing workflow template, in which case you start by making a copy of the original.

1. In Design View, click on the Templates tab.
2. Click on the template you want to copy, and then right-click and select Duplicate template. The Save template as a dialog box is displayed.



3. In the dialog box, enter the name for the template copy, and then click OK. (The name must be unique.) A copy of your template is created.



## Deleting Workflow Templates

If you have workflow templates which you no longer need, you can delete them so they do not clutter up the Template list in Design View.

If you have templates which you may want to use at a later date, you can always save them as JSON files and retrieve them when you do need them. See [Exporting Workflow Templates](#).

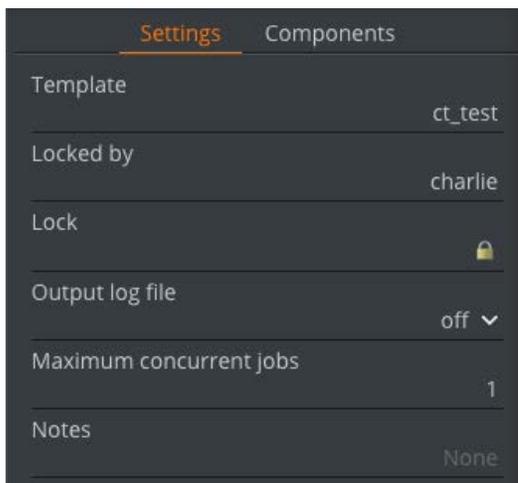
1. In Design View, click on the Templates tab.
2. Click on the Template you want to delete, and then click the Delete icon. 
3. The template is deleted. (Automation does not give any warning that your template is about to be deleted.)

## Creating Log Files for Templates

You can start a log file for each workflow template you create in Automation. Although Automation uses its own naming system for log files, you can choose which storage space you want the log files to reside.

You must have a user account enabled for Automation, which has read and write access to the storage space where you want the log files saved. The Administrator for your FLOW system can create this account for you. See [Default Automation Account](#).

1. In Design View, select the Template that you want to create a log file for.
2. Select the Output log file field.



3. From the Output Log File in drop down list, select the storage space where you want the log file saved. Make sure you have read and write access to the storage space you select.
4. Log files are written in text (.txt) format to the location you specify. Automation creates a name for the log file based on the job name displayed in the Automation Job Queue.

# Exporting and Importing Workflow Templates

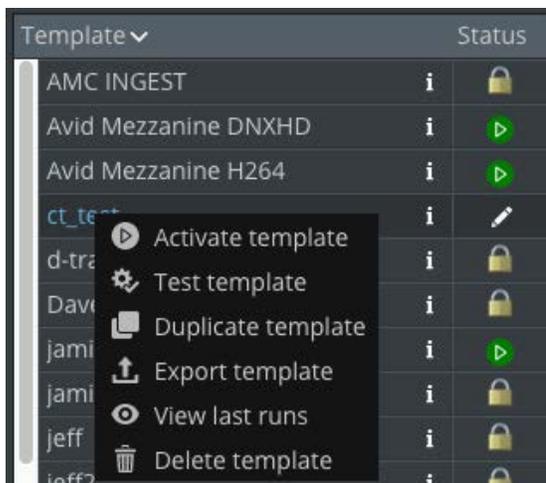
You can move workflow templates from one Automation system to another using the Export and Import buttons in Design View. Workflow templates are converted to JavaScript Object Notation (JSON) format, and preserve the locations, connections and properties of your elements, including element colors and notes.

You can also save a copy of workflow diagrams from the Design window as a Portable Network Graphics (PNG) file. This is useful when you need to provide supporting documentation for templates you are designing for customers and other users.

## Exporting Workflow Templates

To export a workflow template:

1. In Design View, click on the Templates tab.
2. Right-click on the template you wish to export.



3. Click on the Export template item.
4. In the Explorer or Finder dialog box that opens:
  - a. Navigate to the folder where you want to save the exported file
  - b. Select the file type you want from the Explorer or Finder drop down list (JSON or PNG).
  - c. Type the name of the export file.
  - d. Click OK to save the file.

## Importing Workflow Templates

Importing a template file overwrites any existing content that you may have in the destination template.

To import a workflow template:

1. In Design View, click on the Templates tab.
2. Open an existing or blank template into which you want to import your template data. Make sure that it is unlocked (a green padlock icon displays to the right of the template).
3. Click on the Import button.
4. In the Explorer or Finder dialog box that opens:
  - a. Navigate to the folder where the template file is located
  - b. Click OK to select the file for import.
5. The file is imported into your template.
6. Click on Save to save the contents of your new template.

# Chapter 4: Element Library

This chapter describes the elements available in FLOW Automation and the properties that can be set.

*Note: The color and name property fields of each Element description in this chapter have been removed as they are common to all Elements in FLOW Automation.*

*See Changing Element Colors and Renaming Elements.*

## Introduction

### Considerations for System Resources

To avoid disruption to your users, you should use Time Triggers to schedule workflow templates that are resource hungry, e.g. file system backups, to run when network activity is at its lowest. For example, if your organization works between 9am and 6pm, with occasional evening shifts ending at 9pm, schedule your template to run between 10pm and 7am. See Time Trigger.

If you run a number of templates at 'off-peak' times, you should spread the start of times of these over the off-peak period. Do not schedule all of your templates to start at the same time.

### Default Automation Account

You can create a user account for scheduled jobs where a user has not been specified for a particular Automation job. Should you wish to create such an account, it must have read /write access to all the storage spaces on which Automation jobs are to be performed. If you do not want this user account to be used for any of the FLOW client applications, you can disable the relevant privileges in FLOW Control.

See the FLOW Control Guide for information about creating user accounts and setting user privileges in FLOW.

### Masstech FlashNet Storage Login

Flashnet requires a reverse SMB mount to operate; therefore you must provide the correct authorized user credentials to the storage system (Editshare or 3rd party), so Flashnet can access the storage. It is recommended that the SMB login is the Flashnet default name sglsvc and the password Flashnet1. In the case of EditShare storage this should be setup for the required spaces using the EditShare storage manager, in the case of 3rd party storage it's user control manager should be used to add the default Flashnet user.

## Using Automation

FLOW can transfer files to and from FlashNet using FLOW Automation's Copy Task. The storage spaces to be read or written to by FlashNet must be made Public or assigned to the user account that will be running FLOW Automation jobs.

1. In FLOW Automation, create the required workflow, including the Copy task to carry out the copy to or from the storage space that you have created for the FlashNet storage group.
2. The Copy task works the same way as any other Automation Copy task between spaces.
  - To backup files to FlashNet, specify the storage space for the FlashNet group in the To space parameter of the Automation task.
  - To restore files and partial files from Flashnet, locate the files using either a Search or storage space input to the Copy task.

## Caveats

The following limits should be noted:

- User and password must be specified in the Copy task and must have access to the FlashNet space
- When moving files with the Remove Original parameter, deletion on the source location does not occur immediately as this operation is scheduled by the Flashnet system.
- Masstech FlashNet does not support folders. If you specify a folder in an Automation field, FlashNet ignores it.

## Masstech MassStore Integration

Masstech MassStore is a storage and archive system. The MassStore system contains a disk based cache store and a workflow system that transfers files to and from various archive storage backends including LTO8 tape. It automatically creates proxies for files that are copied to it. Remote access is via an XML based API called MMP.

## FLOW Integration

The MassStore system is presented as a media space type and accessed via copy and delete operations in the transfer service, which in turn can be driven by FLOW Story, FLOW Automation, or the FLOW REST API.

This operates similar to the existing integration with FlashNet, although there is no partial file restoration support. Files may be exchanged with media spaces that are accessible via SMB. MassStore pulls and pushes files from locations specified to it with UNC paths.

## MassStore Server Configuration

MassStore is hosted on Windows 2016 server.

A user must be configured for FLOW to use when accessing the MMP API. There also needs to be a MassStore location of type MMP for FLOW to use as a target for transfer. Information required for the setup from MassStore to ES FLOW Control includes:

- MassStore host (name or address, must be resolvable by the EditShare host).
- MassStore Storage location.
- MassStore Username.
- MassStore Password.

The EditShare storage location must be configured to allow overwrite, or there will be problems with file restoration.

MassStore provides UNC paths to access files in FLOW media spaces. The credentials to access these spaces are stored in the Windows Credential Manager.

For Editshare storage this user needs access to individual spaces using the Editshare Manager tools. The following setup is recommended:

1. Create a user profile to handle MassStore transfers in EditShare systems and grant it access to all storage spaces.
2. Add the user above to the Windows Credential Management tool on the MassStore Host. Make sure the EditShare host can be resolved by the MassStore Host and add an entry to the file <Windows>/system32/etc/hosts.
3. Copy operations can be performed via Automation Copy tasks or via FLOW Story by right clicking Menu -> Archive.

## FLOW Media Space Configuration

Configure the FLOW media space as follows:

1. Ensure that MassTech MassStore storage is licensed. A media space of type MassTech MassStore will be added using the FLOW Control Storage Management tab.
2. Specify the IP address, the port should be the default value of 16888. The storage location, username, and password are as configured on the MassStore system, as mentioned above.
3. Use the Test button to ensure that FLOW is able to sign in to the MassStore API.

## Ranged Markers

Ranged Markers can be used as inputs, triggers and filters, and are entered in the FLOW Story and AirFLOW panels. Ranged markers can be used in Automation elements as follows:

Metadata Item	Data Type	Operators
Marker Comments	Text	is, is not, contains, does not contain, starts with, ends with
Marker Time	Time (hh:mm:ss)	is, is not, later than, later than or equal to, earlier than, earlier than or equal to
Marker Name	Text	is, is not, contains, does not contain, starts with, ends with
Marker Time	Time (hh:mm:ss)	is, is not, later than, later than or equal to, earlier than, earlier than or equal to
Marker Rating	Integer (1 to 5)	is, is not, less than, greater than

Ranged Markers can be applied to the following:

- Metadata (Trigger)
- Metadata (Filter)
- Search (Input)
- Transcode (Task)

You can use these metadata items to filter out ranged marker entries that you may not want to use, or to make other decisions based on their values. For example, if you use a Metadata trigger to start a Transcode task, you could filter out clips or captures containing ranged markers based on their Rating (1 to 5) - or filter media based on their properties.

The Transcode task has the option to preserve log entries from the source material, allowing Automation to perform further actions on those metadata items in subsequent stages of your workflow project.

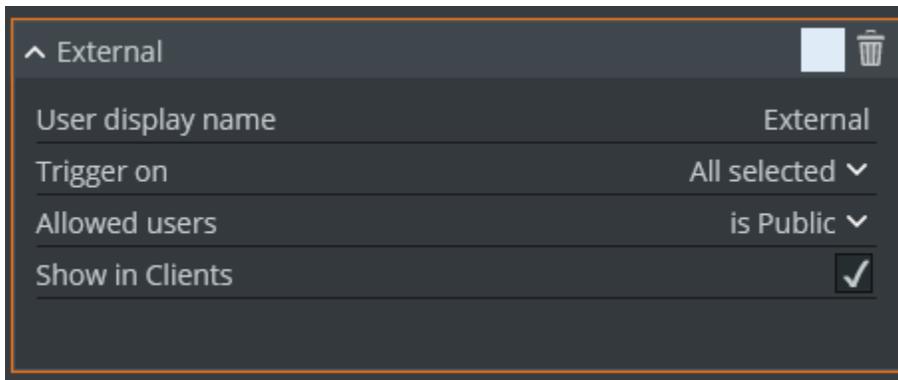
# Trigger Elements

All workflow templates must start with a Trigger element. With the exception of the Manual Trigger, Trigger elements start templates when a specified condition is met, e.g. time of day, metadata change. A Manual trigger can only be started by user intervention. All other trigger elements can also be started manually, if required.

## External Trigger

You can use External Triggers to activate automation templates from client applications. For an Automation template to be available to a user in a client it must adhere to the following guidelines:

- The template must be active.
- The user must be one of the allowed users (or the template must be set to Public so anyone can access it).
- The selected asset must be of the correct type.

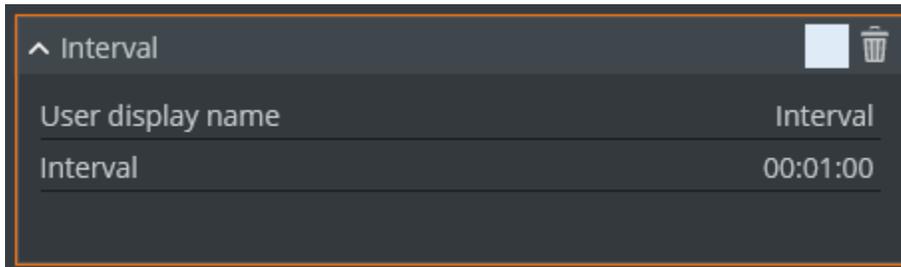


### PARAMETERS:

Trigger on	Specifies which asset type(s) the automation template applies to. For example, if a template only triggers on Clips it will be available for clips only; not any other asset type.
Allowed users	Controls who is allowed to activate the template. When set to Is Public anyone can activate the template. Alternatively you can select specific users.
Show in Clients	Whether the template is shown in client applications (set this to false if you only want it to be available to trigger via FLOW's API and it is not intended to be shown in client applications).

## Interval Trigger

An Interval Trigger is used to start a template at a regular interval. An Interval Trigger has only one parameter.



### PARAMETERS:

- Interval: Interval in hours, minutes, seconds, up to a maximum of 23 hours, 59 minutes, 59 seconds.

Set the longest interval that is acceptable for your template. Setting a shorter interval of a few minutes or seconds may take up more resources on your FLOW system, resulting in poor performance for your users.

The maximum interval you can set is 23 hours, 59 minutes and 59 seconds. If you want to run a template once per day, you must use the Time Trigger element.

## Manual Trigger

A Manual Trigger provides an 'On Demand' or manual start where no other definable condition can be used to start a template.

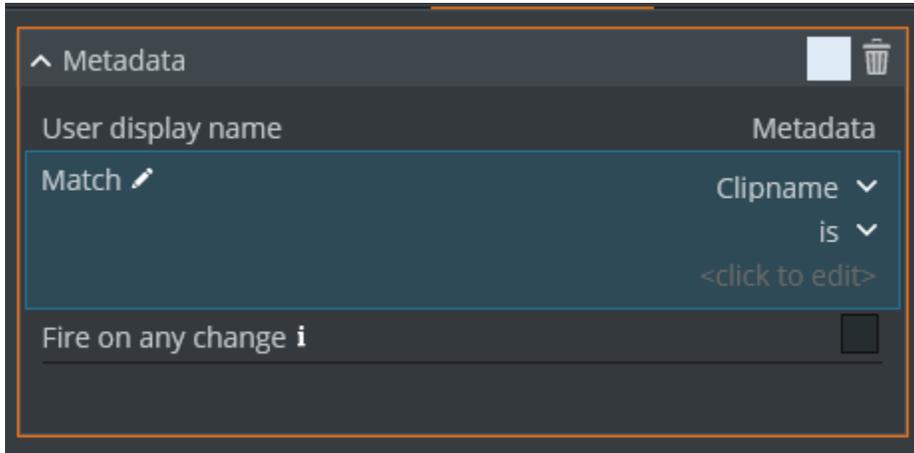
**PARAMETERS:** None

To start a manual trigger:

1. In Automation, click the Design tab and then click the Template tab.
2. Click on the Template you want to run.
3. Click the Activate button.

## Metadata Trigger

A Metadata Trigger is used to start templates when any or a specific metadata property is changed to a given value.



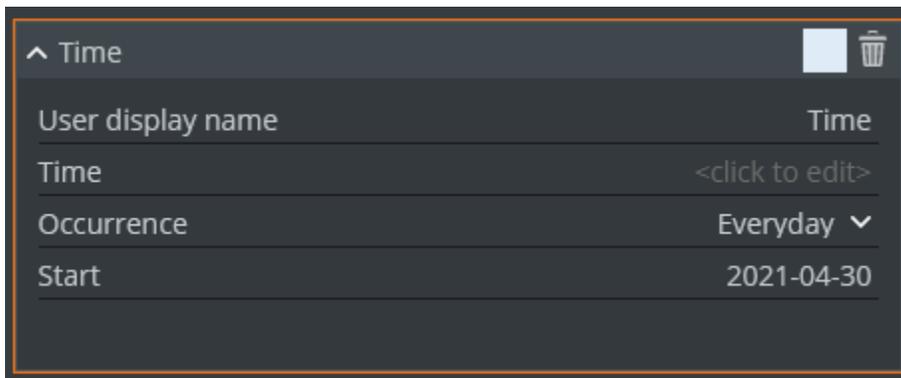
### PARAMETERS:

Fire on any change	Select the box to start the template when any metadata property has been changed.
Match	Sets the criteria to be matched before the template can be started. The criteria is in three parts.

- Select metadata from the drop down list
- Select the operator (is, is not, contains, etc.)
- Enter the free form text the criteria is applied to The Fire on any change box must be un-selected.

## Time Trigger

A Time Trigger is used to start templates at a specific time of day, week, or month.



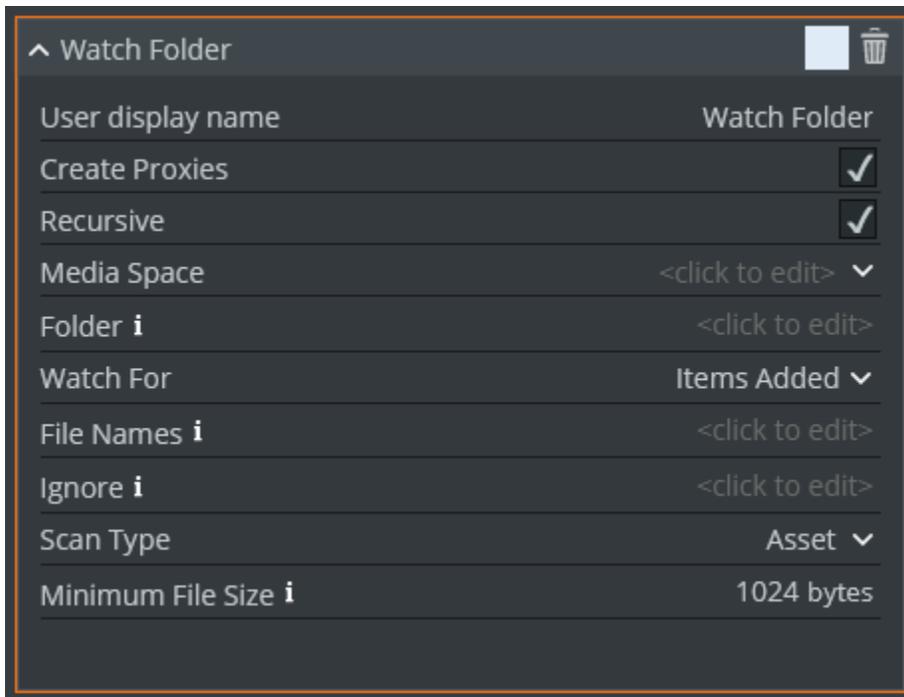
**PARAMETERS:**

Day	Day of the week to start, range Monday to Sunday.
Occurrence	Sets the interval. The options are: Every day, Every week, Every month, Once. Selecting 'Once' creates a one-time timed event for the Template.
Start	Sets the start date.
Time	Sets the start time.

If your template uses a significant amount of network resources, you should schedule these to run when they will cause the least disruption to your users. See Considerations for System Resources.

## Watch Folder Trigger

A Watch Folder Trigger starts a template when files are added to, or removed from, a user specified storage space folder. In addition to monitoring file size, the modification time of files are checked to make sure that triggers are not initiated on files that are still changing.



## PARAMETERS

Create Proxies	Select the box if you want proxies created when new clips are placed in the watched storage space or folder.
Recursive	Select to display all of the files and directories under the storage space folder.
Storage Space	Select the required storage space from the drop down list.
Folder	If you want to select a folder within a storage space, type the name of the folder in this field. You can specify multiple folders by separating each folder name with a comma (,).
Watch For	Select 'Items Added' or 'Items Removed' from the drop down list.
File Type	<p>Type the extension of the file type you want watched. You can specify a range of file types by using wildcards:</p> <p>? - Replace the wildcard with a valid single character, for example:</p> <p>.mp? allows .mp3. and .mp4 file types</p> <p>* - Replace the wildcard with any number of valid characters, for example:</p> <p>.m* allows .mp3, .mp4, .mov, .mpg, .mpeg file types, and so on.</p> <p>You can also specify multiple file types by separating each type with a semicolon, for example:</p> <p>.avi; .mp4; .wmv</p> <p>File types are case insensitive - for example: MXF is the same as mxf.</p>
Ignore	<p>If you specified a range of file types to watch in the previous field, you can specify a file extension you do not want watched. You can also use wildcards to specify a range of file types to ignore.</p> <p>? - Replace the wildcard with a valid single character, for example:</p> <p>.mp? allows .mp3. and .mp4 file types</p> <p>* - Replace the wildcard with any number of valid characters, for example:</p> <p>.m* allows .mp3, .mp4, .mov, .mpg, .mpeg file types, and so on.</p>

	<p>You can also specify multiple file types by separating each type with a semicolon, for example:</p> <p>.avi; .mp4; .wmv</p>
Scan	<p>Specifies the type of scan performed. Asset refers to individual files, while Quick, Normal and Full are the Scan Types described in the FLOW Browse User Guide and the FLOW Administrator’s Guide. Select Asset, Quick, Normal or Full from the drop down list.</p>
Minimum File Size	<p>Type the minimum file size, in bytes, that will trigger the Watch Folder task. The default is 1024 bytes.</p>

You can run the Watch Folder trigger without other elements connected to it. This is useful if you just want to scan new content arriving in a folder without scanning the whole storage space.

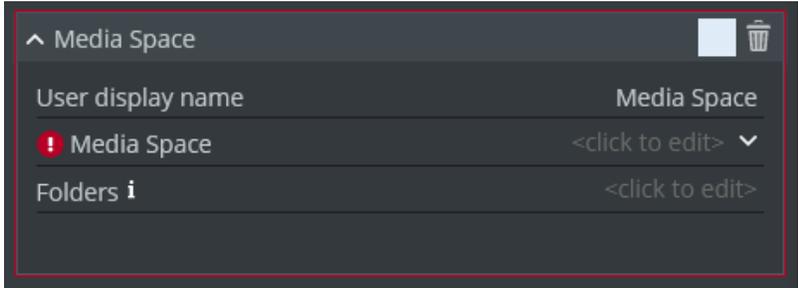
A scan of the storage space is started when a change in a watched folder is detected - there is no need to follow this trigger with a Scan task.

## Input Elements

Input elements apply specific user-defined criteria which are processed by downstream elements. There are two types of input element, storage space and Search.

### Storage Space Input

A Storage Space Input sets a specific location from where files are processed by other downstream elements.



**PARAMETERS:**

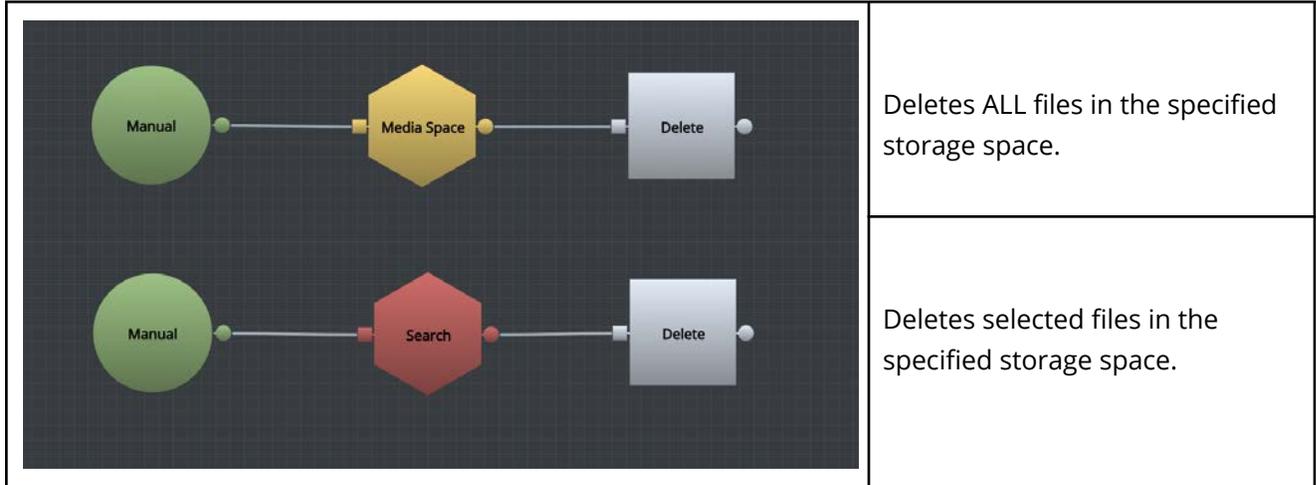
Folders	If you want to select a folder within a storage space, type the name of the folder in this field. You can specify multiple folders by separating each folder name with a comma (,).
Storage Space	Select the storage space from the drop down list.



***This element applies the same action on all files in the specified storage space. If you associate a Delete Task with this element, all files in the storage space you specify will be deleted.***

***If you want to delete selected files in a storage space, use the Search Input element instead.***

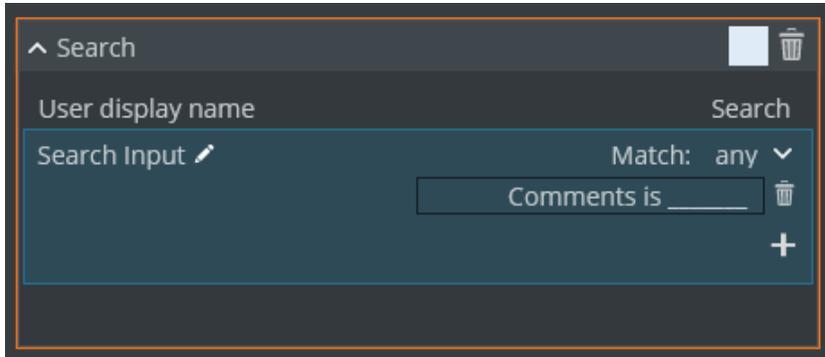
See the following diagram:



If you want to delete files in one folder of a storage space but not in other folders, then you need to use the storage space input element, specify the folder, and then insert a Search input element between that and the Delete Task.

# Search Input

A Search Input applies a search criteria on files which are processed by other downstream elements. This uses the same search functionality used in other members of the FLOW applications suite.



## PARAMETERS:

Search Input	<p>Sets the criteria to be matched before the template can be started. The criteria is in three parts.</p> <ul style="list-style-type: none"><li>• Select metadata from the drop down list</li><li>• Select the operator (is, is not, contains, etc.)</li></ul> <p>Enter the free form text that the search criteria is to be applied to</p>
Match	<p>Choose between match Any or All of the words.</p>

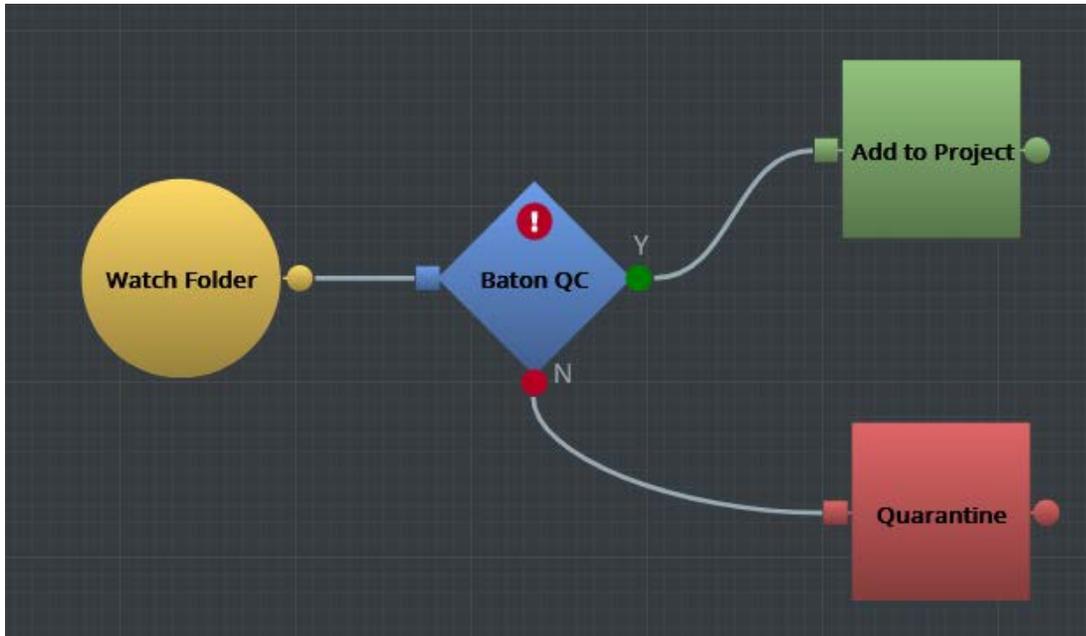
Complex search expressions can be built by clicking on the + button to create additional parameters.

# Filter Elements

A Filter element differs from search input elements in that it provides two possible outputs: one where the filter condition is true, and the other where the condition is false.

## Baton QC Filter

Baton™ by Interra Systems is a Quality Control (QC) solution for checking file-based systems. You will require a Baton QC server connected to the same network as FLOW.



^ Baton QC 🗑️

User display name	Baton QC
! User <b>i</b>	<click to edit>
Password	<click to edit>
! Host IP <b>i</b>	<click to edit>
! Template <b>i</b>	<click to edit> <span>⌵</span> <span>🔄</span>
Priority	Normal <span>⌵</span>

**PARAMETERS:**

Host IP Address	The IP Address of the Baton QC server.
Template	Set the hostname of the Baton QC server.
User	The username to log in to the Baton QC server.
Password	Password for the Baton QC account.
Priority	Set the priority level from the drop down list. The priority levels are: <ul style="list-style-type: none"> <li>• Immediate</li> <li>• Urgent</li> <li>• High</li> <li>• Normal</li> <li>• Low</li> </ul>

**COMPATIBILITY:**

This task has been tested with Version 6.4 of Baton QC.

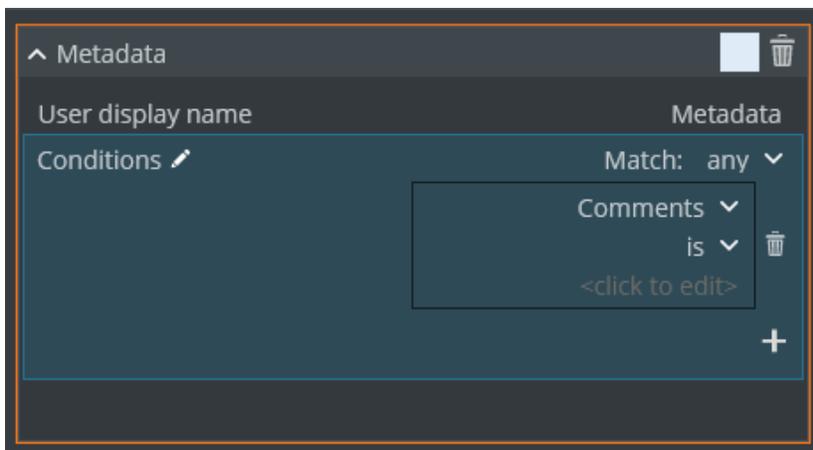
**WEBSITE:**

<http://www.interrasystems.com/>

## Metadata Filter

The Metadata Filter tests the condition and, if it is true, the input is passed to the element or task connected to the 'Y' output. If the condition is false, the input is passed to the element or task connected to the 'N' output.

The Conditions drop down list contains a wide selection of system and customized parameter options. You can even filter on whether a clip is in a sequence or has asset associations.



## PARAMETERS:

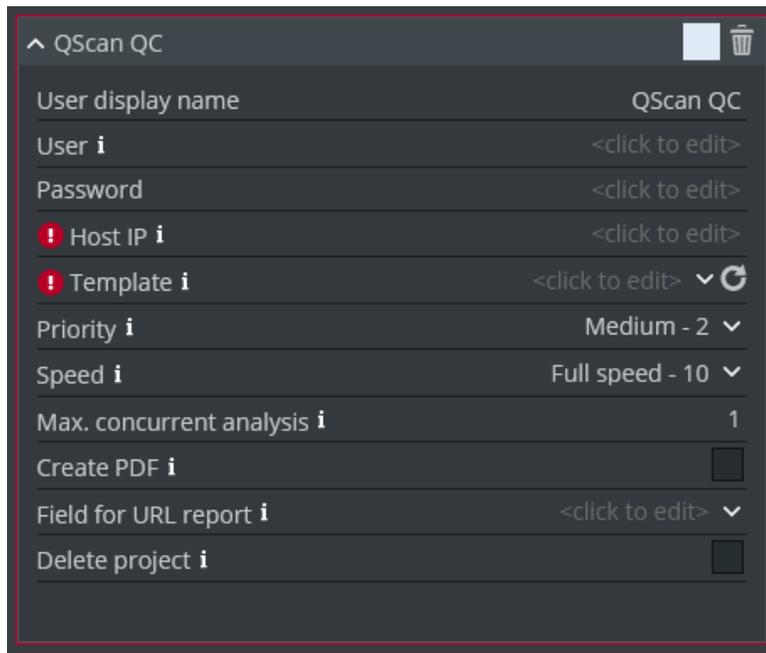
Conditions *	Sets the criteria to be matched before the template can be started. The criteria is in three parts. <ul style="list-style-type: none"><li>• Select metadata from the drop down list</li><li>• Select the operator (is, is not, contains, etc.)</li></ul> Enter the free form text that the search criteria is to be applied to
Match	Choose between match Any or All of the words.

\* Functionality can be extended by using the features described in Fields with Combined Input Values.

Complex search expressions can be built by clicking on the + button to create additional parameters.

## QScan QC Filter

QScan QC is a fully featured, comprehensive video and audio QC system used to check the integrity of your media files. The earlier any issues are found with your media, the easier and quicker it is to rectify them. A QScan QC Filter analyzes media files arriving into your facility and automatically performs a series of automated tests on both the audio and video signals, confirming the files meet channel specifications.



**PARAMETERS:**

User	The user IP address to access the QScan system (for example, admin).
Password	Password for the user.
Host IP Address	The host IP address where the QScan service runs.
Template	Allows you to choose which QScan QC template to use. This drop-down list is filled only if Automation can login to the QScan system, and therefore, only works if the user, password and IP are correct.
Priority	1: low, 2: medium, or 3: high.
Speed	1: for slow 5: for medium, 10: for full speed, 15: for very-high.
Maximum Concurrent Analysis	The maximum number of files of the QScan project that will be simultaneously analyzed.
Create PDF	If this option is checked, at the end of each analysis, the PDF report will be retrieved and associated with the clip, stored in the same storage space, and they will be associated.
Field for URL report	Allows you to choose a custom metadata field to set the URL to directly access the QC report in HTML format; this field must be a valid URL link.
Delete Project	If checked, the QScan Project will be deleted once the analysis has been completed. This field is disabled by default because if the Project is deleted, all the analysis results are also deleted in QScan (but will remain in FLOW as Log Entries and a PDF report).

**COMPATIBILITY:**

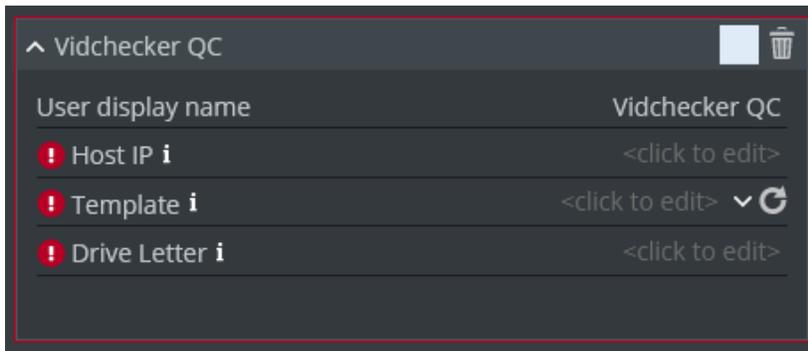
This task has been tested with Version 3.1.255.38 of QScan QC.

**WEBSITE:**

<https://qscan.editshare.com/>

## VidChecker QC Filter

VidChecker QC is a file-based Quality Control (QC) solution for automatically checking and correcting video and audio in file-based digital video. You will require a VidChecker QC server connected to the same network as FLOW.



### PARAMETERS:

Host IP Address	The IP Address of the VidChecker QC server.
Template	The Host Name of the VidChecker QC server.
Drive Letter	The drive letter of the storage space.

### COMPATIBILITY:

This task has been tested with Version v6.5.10 of Vidchecker QC.

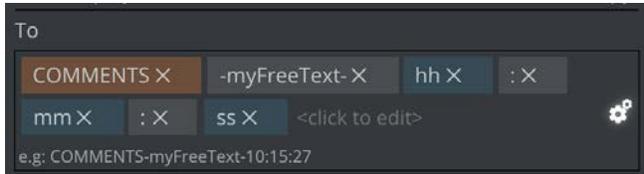
### WEBSITE:

<http://www.vidcheck.com/>

# Task Elements

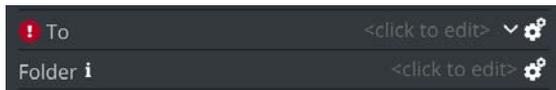
The Task elements carry out the actual function or functions you set for each template. Some tasks have fields where you can incorporate a combination of free text, time of day and metadata types. See Fields with Combined Input Values.

## Fields with Combined Input Values

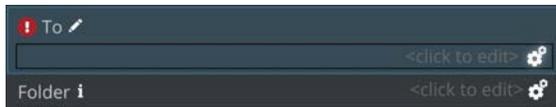


Note: Task fields with a  button have extended functionality, see text below:

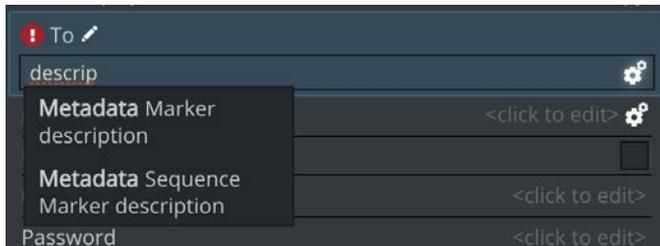
Some tasks, such as Copy and Transcode, have fields where you are not limited to one input type, such as typing a value in a text box or selecting an option from a list. Such fields are identified by a button with a Cogs icon. You can use the default input type as usual, or add a combination of input types as follows:



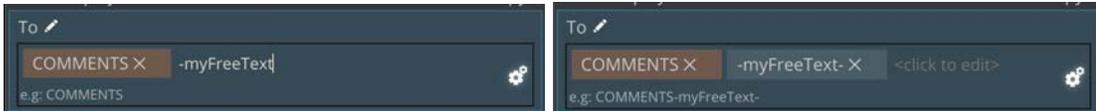
1. Click on the Cogs icon to highlight the field to add combined values. The field will display a small pencil icon to denote combined input mode..



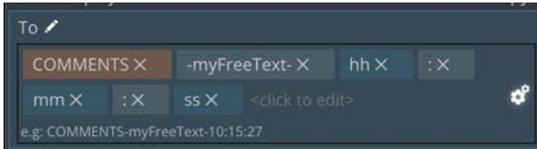
2. To add a metadata field either type the name of the required field or 'metadata'e.



3. A drop down list displays. Choose the metadata option you want to use. Free text is displayed in grey.



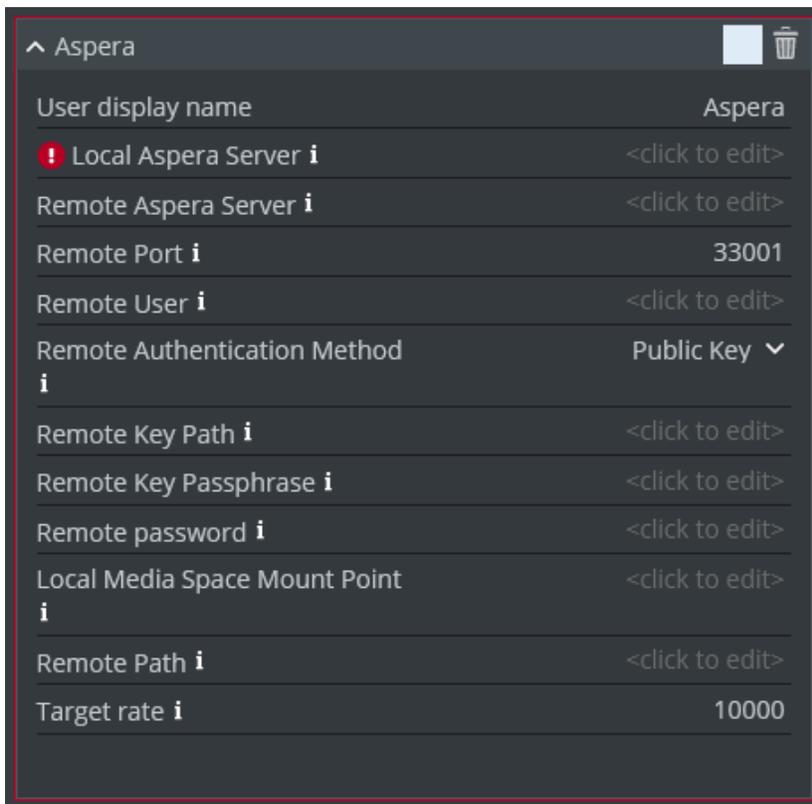
- To add a time field: type time and choose from the dropdown options to build the time format required. Time fields are displayed in blue.



## Aspera Task

Organizations that have Aspera high-speed file transfer products at their sites can use FLOW Automation to accelerate the transfer of media across their sites using accelerated Aspera links. Progress of transfers is reported from Aspera back to the FLOW Automation task so the Automation job does not report completion until the file has been delivered to the specified remote location.

You will require two Aspera servers, one connected to the local FLOW network and one to the destination (remote) FLOW network.

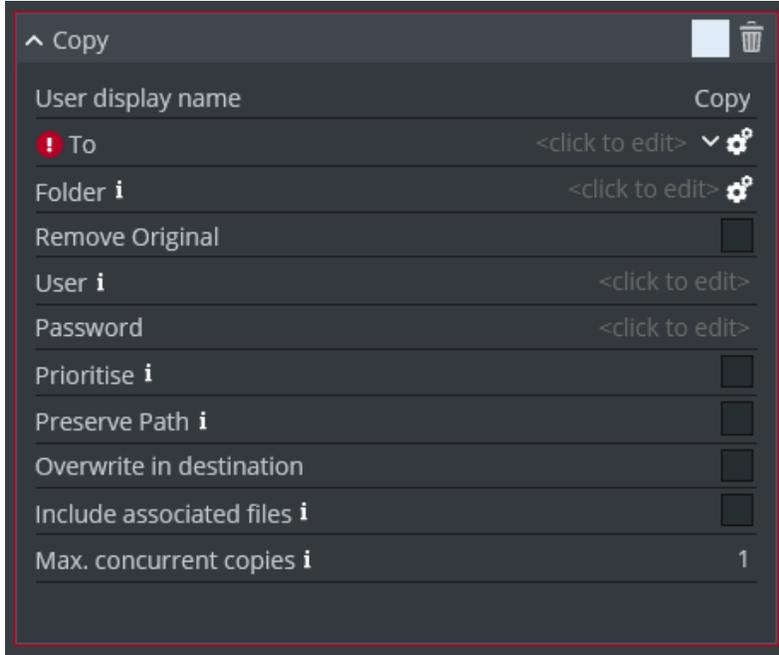


**PARAMETERS:**

Local Aspera Server	Type the IP Address of the local Aspera server.
Remote Aspera Server	Type the IP Address of the remote Aspera server.
Remote Port	Service access port on the remote Aspera server. The default is 33001.
Remote User	The name of the Aspera user on the remote Aspera node.
Authentication Method	Type the remote authentication method - Password or Public Key.
Remote Key Path	Path on local Aspera node to private key when using Public Key Authentication.
Remote Key Passphrase	Passphrase for local key on local Aspera node when using Public Key Authentication.
Remote Password	Type the password for the remote Aspera node when using password authentication.
Local Storage Space: Mount Point	Enter the mount point of the EditShare local Aspera node.
Remote Path	Enter the path to the uploaded files if no EditShare server is present.
Target Rate	Type the target transfer rate for the Aspera in kbps. This setting can be overridden by the Administrator of the Aspera server.

# Copy Task

This task is used to copy or move content to a folder within a storage space. To specify the input source, precede the task with a storage space Input element.



## PARAMETERS:

To	Select the destination storage space from the drop down list.
Folder	If you want to copy media to a folder within a storage space, type the name of the folder in this field. You can use the following identifiers: %d - Inserts the current date %t - Inserts the current time %dt - Inserts the current date and time
Remove Original	Select the box if you want to delete the original file.
User	Type the name of a valid user account that can log in to the storage spaces being used. Alternatively, leave blank to select the default Automation† account, or \$USER\$ to select the user account that activated the template. † See Default Automation Account.
Password	The password for the user account that is used to run the template. Type \$PASSWORD\$ if you entered \$USER\$ in the User field.

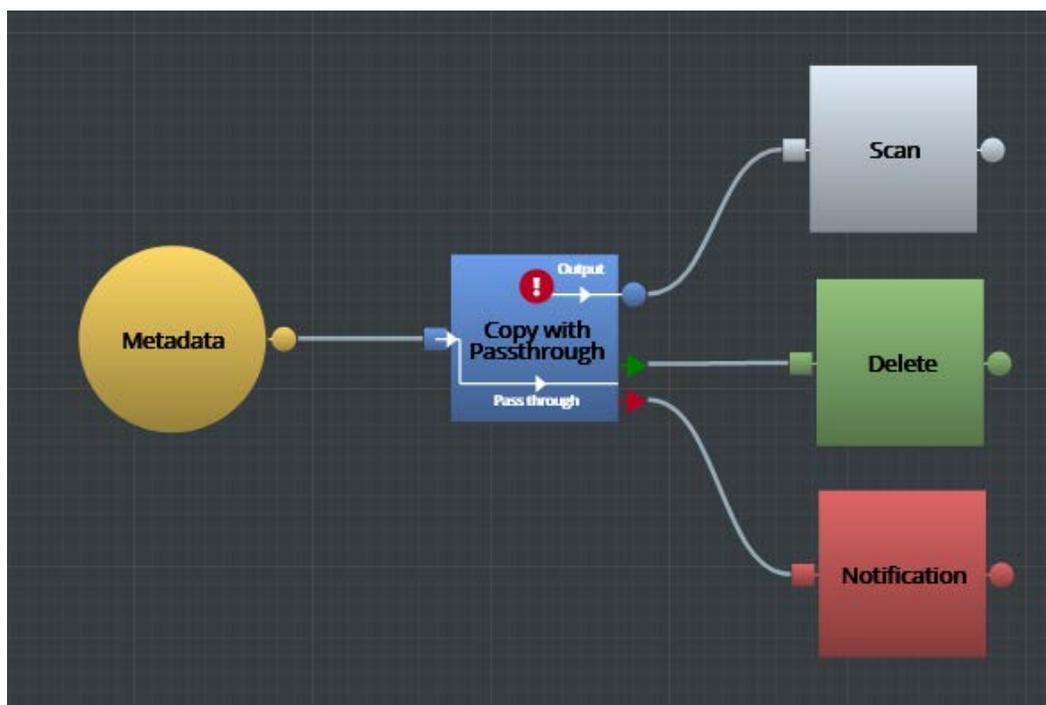
Prioritize	Select the box to grant this task higher priority than non- prioritized tasks. Prioritized tasks do not receive any priority over ingests or EditShare QoS streams.
Preserve Path	Preserve the folder path structure when copying or moving files.
Include associated files	Copy associated files, such as sidecar files.

*Note: 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.*

## Copy with Passthrough Task

This task is used to copy or move content to a folder within a storage space. The task has multiple outputs:

- Output (Normal) - processes files that have been copied.
- Success Output (Green) - processes the original file if the copy task is successful.
- Failure Output (Red) - processes the original file if the copy task fails.



In the example shown above, the file is copied to the specified storage space and initiates a scan of the destination folder or space. If the copy task was successful, the original file is passed to the green output and is deleted. If the copy task was unsuccessful, the original file is passed to the red output, which initiates an email notification.

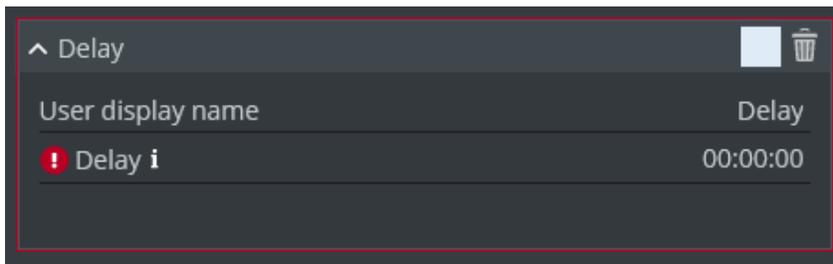
To specify the input source, precede the task with a storage space Input element.

**PARAMETERS:**

This task has the same parameters as the Copy Task described on Copy Task.

## Delay Task

Inserts a user-defined delay into the workflow. When the delay interval has passed, the next task in the workflow is processed. This is useful if you need to insert a delay to allow for one process to complete before your template initiates the next task or action.



**PARAMETERS:**

Delay - Type the delay you require (hh:mm:ss)

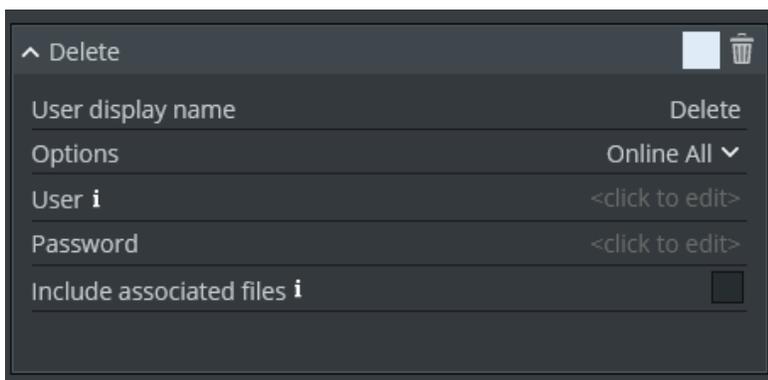
## Delete Task



**CAUTION:** Use with caution, especially with the storage space input element, because this element applies the same action on all files in the specified storage space. If you associate a Delete Task with this element, all files in the storage space you specify will be deleted.

See [Storage Space Input](#).

Select the type of deletion you want from the Options drop down list:



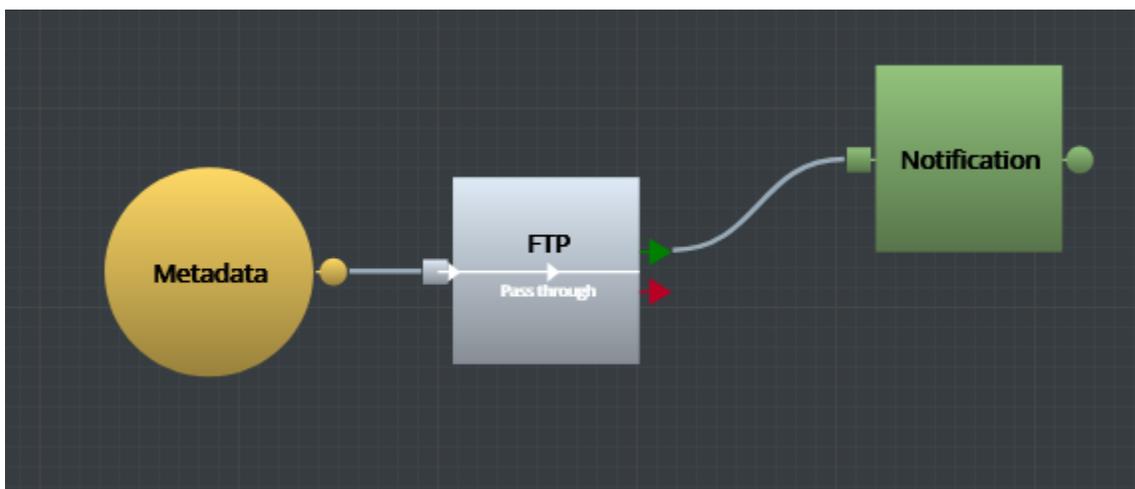
## PARAMETERS:

Options	Select the type of deletion you want from the drop down list. <ul style="list-style-type: none"><li>• Archive - Removes the archive instances of the files on Ark Disk or Tape for 3rd party storage.</li><li>• Metadata - Removes all metadata relating to the files.</li><li>• Nearline - Removes low-speed disk based storage.</li><li>• Online All - Removes all online instances of clips.</li><li>• Online Trigger - Removes only the online files defined by either storage space, search results or filter upstream in the template.</li><li>• Proxy - Removes the proxy of the selected files.</li></ul>
User	Type the name of a valid user account that can log in to the storage spaces being used. Alternatively, leave blank to select the default Automation† account, or \$USER\$ to select the user account that activated the template. † See Default Automation Account.
Password	The password for the user account that is used to run the template. Type \$PASSWORD\$ if you entered \$USER\$ in the User field.
Include associated files	Delete associated files, such as sidecar files.

## FTP Task

Uploads files to a designated FTP server. The task has multiple outputs:

- Success Output (Green) - processes the original file if the FTP task is successful.
- Failure Output (Red) - processes the original file if the FTP task fails.



In the example shown above, an email notification is initiated when files are transferred successfully. To specify the input source, precede the task with a storage space Input element.

## PARAMETERS

Host	Type the IP Address of the FTP server you want to upload to.
Path	Type the path name to be used on the FTP server. If left blank, a path will be created.
User	Type the name of a valid user account that can log in to the storage spaces being used. Alternatively, leave blank to select the default Automation† account, or \$USER\$ to select the user account that activated the template. † See Default Automation Account.
Password	The password for the user account that is used to run the template. Type \$PASSWORD\$ if you entered \$USER\$ in the User field.
Port	Type the port number for FTP access into the text box. The most common port number for FTP servers is 21.

File Exists	<p>Select the action to be taken if the file to be uploaded has an identical name to a file that already exists on the FTP server.</p> <ul style="list-style-type: none"> <li>● Overwrite - The file on the FTP server is overwritten by the uploaded file</li> <li>● Next Unique - A new name is created for the file when it is uploaded to the FTP server.</li> <li>● Error - Treats the upload request as an error and notifies the user.</li> <li>● Ignore - Ignores the upload request. An error message is not sent to the user.</li> </ul>
Log	Log - Select the box if you want FTP transfers to be logged.
Log User	<p>Required only when the Log box is selected. Type the name of a valid user account that can log in to the storage spaces being used. Alternatively, leave blank to select the default Automation† account, or \$USER\$ to select the user account that activated the template.</p> <p>† See Default Automation Account.</p>
Log Password	<p>Required only when the Log box is selected. The password for the user account that is used to run the template. Type \$PASSWORD\$ if you entered \$USER\$ in the User field.</p>
Preserve Path	Preserve the folder path structure when copying or moving files.
Include associated files:	Copy associated files, such as sidecar files.

## Metadata Export Task

Outputs all the metadata that FLOW holds for a clip in its database (including logs and markers) to a single file. The metadata is exported to XML format and is saved in the storage space you specify.

This template requires a valid login to the destination storage space.

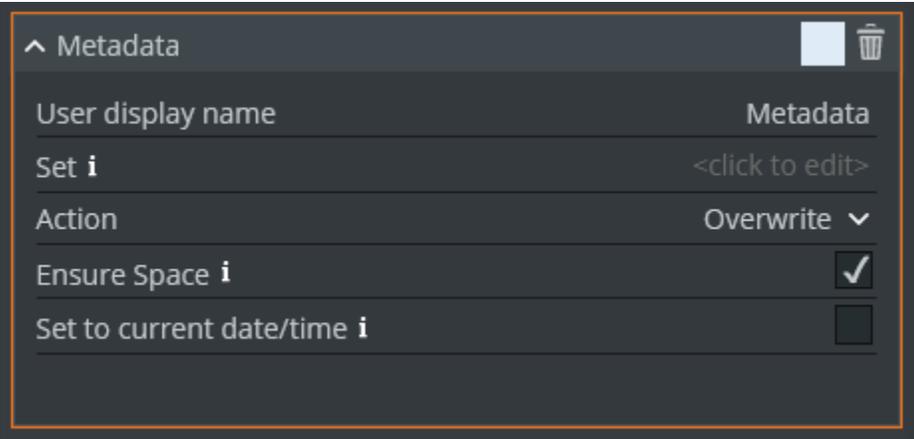
### PARAMETERS:

Filename	Type the filename of the exported metadata here. You can use the following identifiers: <ul style="list-style-type: none"> <li>• %f - Inserts the source filename.</li> <li>• %c - Inserts the source clip name.</li> <li>• %d - Inserts the current date.</li> <li>• %t - Inserts the current time.</li> <li>• %dt - Inserts the current date and time.</li> </ul>
Overwrite	Select this box to allow Automation to overwrite any existing file with the same name as the output file.
Storage Space	The storage space where the metadata is to be exported. Double-click to open a drop down list of available storage spaces.
Folder	The name of the folder, if any, below the storage space where the file is to reside. You can use the following identifiers:

	<ul style="list-style-type: none"> <li>• %d - Inserts the current date.</li> <li>• %t - Inserts the current time.</li> <li>• %dt - Inserts the current date and time.</li> </ul>
User	Type the name of a valid user account that can log in to the storage spaces being used. Alternatively, leave blank to select the default Automation† account, or \$USER\$ to select the user account that activated the template. † See Default Automation Account.
Password	The password for the user account that is used to run the template. Type \$PASSWORD\$ if you entered \$USER\$ in the User field.
Log Entries	Select this box to include Log Entries in exports.
Markers	Select this box to include Markers in exports.
Consolidate	Select this box to consolidate all exported metadata into a single file. Note, you must specify the storage space and filename destinations.

### Metadata Task

Sets the selected metadata item to a text value specified by the user.



**PARAMETERS:**

Set	Select the metadata item you want to modify from the drop down list.
Text	In the text box to the right of the drop down list, type the text you want assigned to the metadata you selected. You can use the following identifiers: <ul style="list-style-type: none"> <li>• %d - Inserts the current date.</li> <li>• %t - Inserts the current time.</li> <li>• %dt - Inserts the current date and time.</li> </ul>

Action	Select how you want the text to be positioned relative to any current text from the drop down list: <ul style="list-style-type: none"> <li>• Overwrite (default) - Replace any existing text.</li> <li>• Append - Add text to the end of existing text.</li> <li>• Prepend - Add text to the start of existing text.</li> </ul>
Ensure Space (default)	The Ensure Space check box is used with the Action drop down list. This check box is selected as default, which means that a space character is added between any existing text and any new text. When the checkbox is deselected no space character is added.

Metadata is information about each file on your FLOW system. It is stored in the FLOW database. Some metadata, e.g. file creation date, is built in to FLOW whereas other metadata is user defined. Refer to the FLOW Administrator's Guide for further information about metadata and templates.

## Mobius Video Analysis Task

Sets the parameters to integrate with Mobius Video Analysis AI server.

^ Mobius Video Analysis
☰

---

User display name
Mobius Video Analysis

---

! Host IP i
<click to edit>

---

! User i
<click to edit>

---

! Password i
<click to edit>

---

Analysis frame rate i
3

---

Keyword threshold i
0.5

---

Keyword limit i
50

---

Prefix for segment marker i
Mobius Segment names

---

Prefix for segment face marker i
Mobius Faces Segment marker

---

Prefix for highlight marker i
Mobius Highlight names

---

Face recognition i

---

Field for face ids i
<click to edit> ▾

---

Field for asset metadata i
<click to edit> ▾

---

Use proxies i

---

Delete job i

**PARAMETERS:**

User display name	Name of the task block displayed in the workspace
Host IP	IP address of the Mobius Video Analysis server.
User	Username for Mobius server
Password	Password for the Mobius server user
Analysis frame rate	Number of frames per second that Mobius will analyze a video file. The default is 3. Note: this is not the video frame rate but the sample rate.
Keyword threshold	Confidence threshold of the analysis. Range from 0.1 - 1.0. Default is 0.5, therefore only data returned from Mobius with a confidence value greater than 0.5 is added to markers.
Keyword limit	Limits the number of keywords received from the Mobius server per marker type. The default value is 50.
Prefix for segment markers name	Sets the prefix for naming Mobius segment markers which will be added to the video analysis in FLOW. For example, <code>Mobius Segment Marker 10</code>
Prefix for segment face markers name	Sets the prefix for naming Mobius face markers which will be added to the video analysis in FLOW. For example, <code>Mobius Face Marker 22</code>
Prefix for segment highlight markers name	Sets the prefix for naming Mobius face markers which will be added to the video analysis in FLOW. For example, <code>Mobius Highlight Marker 4</code>
Face Recognition	Enable task to use Mobius facial recognition if available
Field for face ids	Allows users to decide where to add the Mobius facial recognition data. Users can choose from the default marker description field or custom marker fields which have been added through FLOW Control.
Field for asset metadata	Allows users to decide where to add asset level metadata returned from the Mobius server. Users can choose from the default asset metadata fields or custom asset fields which have been added through FLOW Control.
Use proxies	Proxy files will be sent to Mobius server for analysis (rather than hi-res originals).

Delete job	Deletes the analysis job and data immediately after analysis has been completed.
------------	--

To update your Mobius Facial Recognition database, please contact EditShare Support.

## Notification Task

### PARAMETERS:

Email To	Type the email address of the recipient. To send a notification to multiple recipients, separate each recipient by a comma (,). For example, user1@acme.com, user2@acme.com, user3@acme.com.
Email From	Type the email address from where the notification is to originate, e.g. notifications@mycompany.com.
Email Title	Type the text you want in the Subject field of the email. You can use the following identifiers: <ul style="list-style-type: none"> <li>• %d - Inserts the current date.</li> <li>• %t - Inserts the current time.</li> <li>• %dt - Inserts the current date and time.</li> </ul>
Email Message	Type the text you want to appear before the message text that Automation generates. You can use the following identifiers: <ul style="list-style-type: none"> <li>• %d - Inserts the current date.</li> <li>• %t - Inserts the current time.</li> <li>• %dt - Inserts the current date and time.</li> </ul>

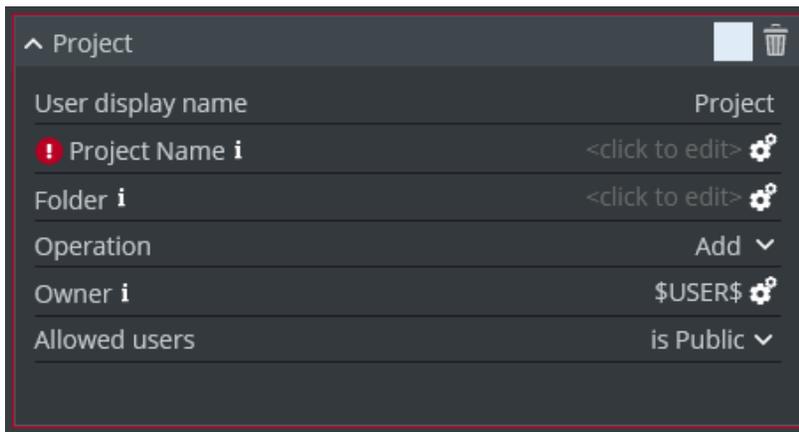
Email Message Detail	Select the format of the email message from the drop down list. The options are Summary and Full.
----------------------	---

See the example in [Adding a Notification Task](#).

## Project Task

Creates or removes a FLOW Project or a folder within a project.

Projects are used to organize media such as video clips, subclips and sequences into folders.



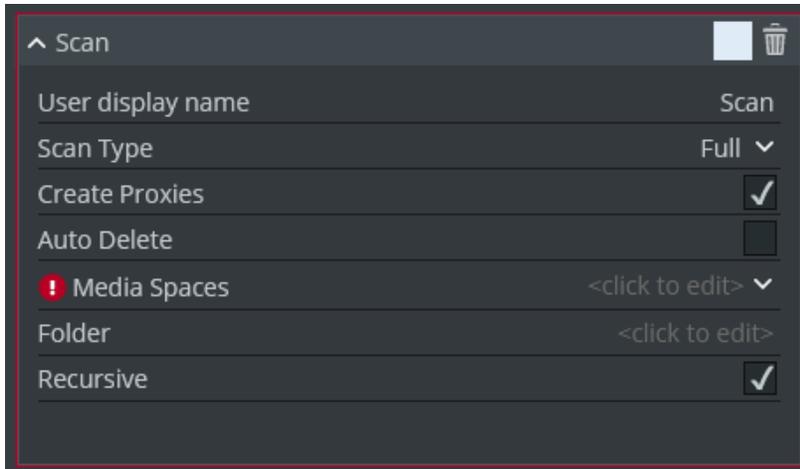
### PARAMETERS:

Project Name	Type the name of the project to be added, removed or modified. You can use the following identifiers: <ul style="list-style-type: none"> <li>• %d - Inserts the current date.</li> <li>• %t - Inserts the current time.</li> <li>• %dt - Inserts the current date and time.</li> </ul>
Folder	If you want to add or remove a folder within a project, type the name of the folder here. If this field is left blank, it is the project, not the folder that is deleted. You can use the following identifiers: <ul style="list-style-type: none"> <li>• %d - Inserts the current date.</li> <li>• %t - Inserts the current time.</li> <li>• %dt - Inserts the current date and time.</li> </ul> You can specify sub folders using the forward slash character (/). For example: grandparent/parent/child. The forward slash character '/' is used as the delimiter between folders.
Operation	Select Add or Remove from the drop down list.

Owner	Type the name of the owner of the project. The default value is \$USER\$, which assigns ownership to the user who activates the template, i.e. clicks the Activate button in Design View.
-------	--

## Scan Task

Initiates a Full, Normal or Quick scan of the selected storage spaces.



### PARAMETERS:

Scan Type	Select the type scan you require from the drop down box: <ul style="list-style-type: none"> <li>• Quick: Looks only for new or modified files based on the file path and time stamp. Of the three Scan options, this method uses the least system resources.</li> <li>• Normal: Checks file IDs and incrementally scans new and modified files.</li> <li>• Full: Rescans all files even if they have not changed. This option takes the most time and system resources to complete.</li> </ul>
Create Proxies	Select the box to create proxies for newly added media.
Auto Delete	Select this box to delete material that has been moved from the storage space.
Media Spaces	Select the storage space you want to scan from the drop down list. You can add multiple storage spaces if required.
Folder	Select a specific folder to Scan. Use this if you don't want to scan the whole space but would rather scan one folder.
Recursive	Used in combination with 'Folder' to specify if subfolders should also be scanned.

## Script Runner Task

The Script Runner task allows running custom scripts that can be written by third parties. The scripts must live in the following directory on the server that runs the FLOW Automation service:

```
/var/flow/automation/scripts
```

Example Input:

The example.py script can be found in the location above and it explains how the example below works:

Example Input

```
{
  "inputs":
  [
    {
      "asset_files": [
"/mnt/flow/mhallin/myfiles/rushes77.mov"
      ],
      "asset_id": 65
    }
  ],

  "output_dir": "/mnt/flow/outputsms",
  "output_name": "clipname",
  "output_subdir": "dir/",
  "flow_password": "changeme",
  "flow_user": "matt",
  "automation_server" : "192.168.1.30",
  "admin_server" : "192.168.1.31",
  "overwrite": False,
  "extra_args" : "hello"
}
```

Example Output

```
[[BEGIN]]
{
  "outputs": [
    {
      "asset_files": ["/mnt/flow/outputsms/mydir/testoutput.mp4"],
"scan": true
    }
  ],

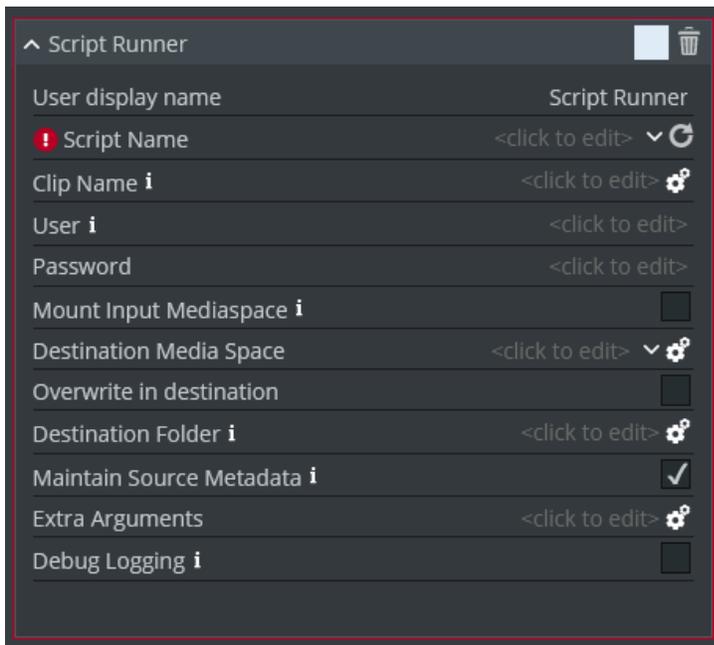
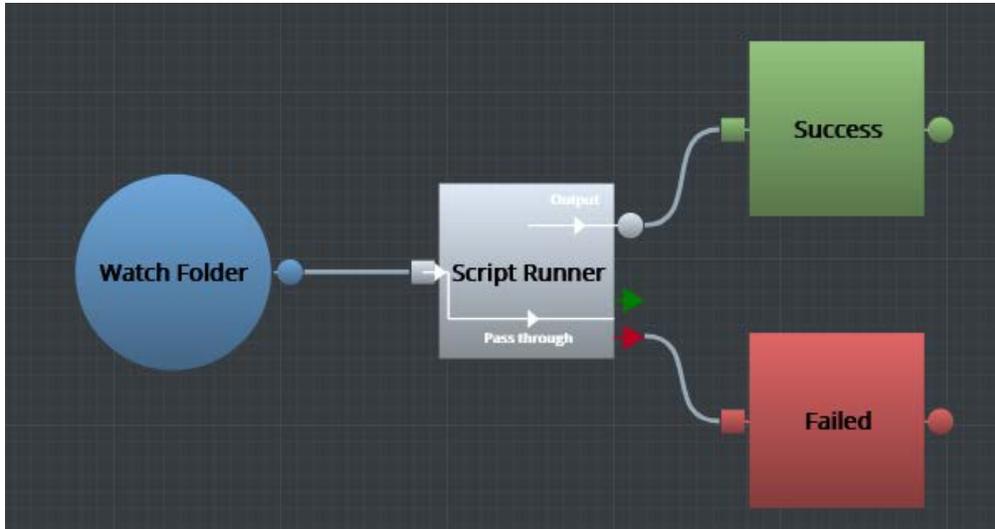
  "success": true, "associate_with_asset_id" : 22,
  "project_id" : 23,
  "project_folder_id" : 25
}
[[END]]
```

*NOTE: This script is installed by FLOW and will be overwritten by any updates. If modifying for your own workflow please make a copy.*

## Task Outputs

The Task has multiple outputs:

- Success Output (Green) - processes the original file if the task is successful.
- Failure Output (Red) - processes the original file if the task fails.

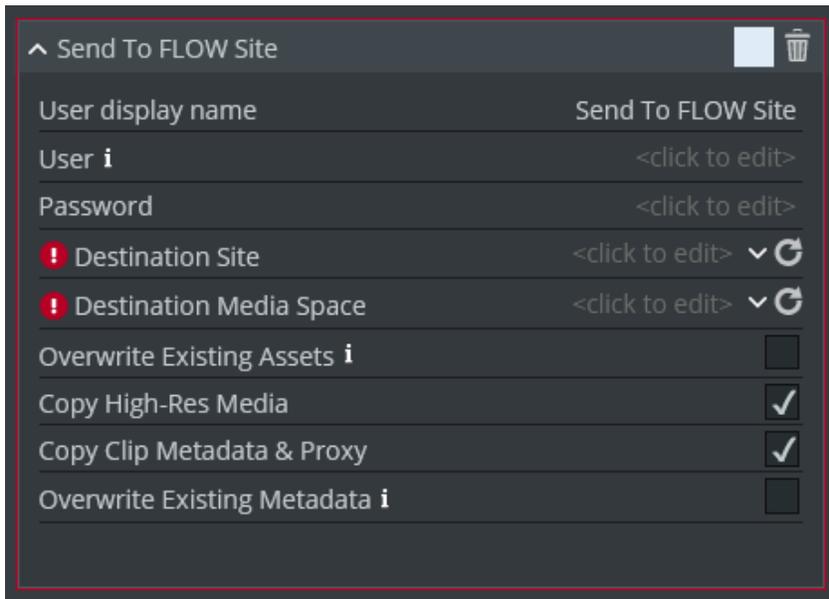


**PARAMETERS:**

Script Name	Select the name of the script that you want to run, for example a script written in Python.
Clip Name	Type the name of the clip that you want to use to trigger the script.
User	The user name used to run the task, if left blank then the automation user will be used.
Password	The password for the above user can be left blank if the automation user is used.

## Send To FLOW Site Task

Transfers high resolution media, proxy files, and/or FLOW metadata to other EditShare FLOW systems, whether they are on the same site or are separated geographically. This feature requires the destination site to be listed in the Sites tab of FLOW Control (see the FLOW Administrator's Guide for details).



The following There are few extra conditions for the Send To FLOW Site task regarding users:

- The Editshare Administrator login credentials must be the same on both sites.
- The user account has to be present on both sites with the same login credentials.

**PARAMETERS:**

User	The user name for both local and destination logon, please make sure this user has automation rights.
Password	The password for the above user.

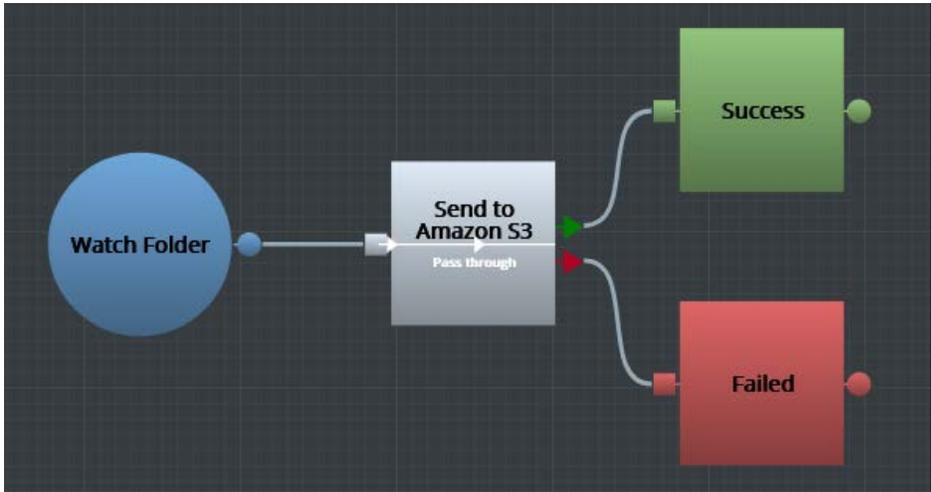
Destination Site	Select the name of the destination site from the drop down list. Sites are predefined in FLOW Control.
Destination Storage Space	Select the name of the storage space from the drop down list. Sites and their storage spaces are predefined in FLOW Control.
Overwrite Existing Data	Select the box to allow existing data to be overwritten.
Copy High-Res Media	Select the box to allow high resolution media to be uploaded. Do not select the box if the site has restricted disk space or there are bandwidth issues.
Copy Clip Metadata & Proxy	Select the box to include metadata and proxy files with the original clip.

### Send to Amazon S3 Task

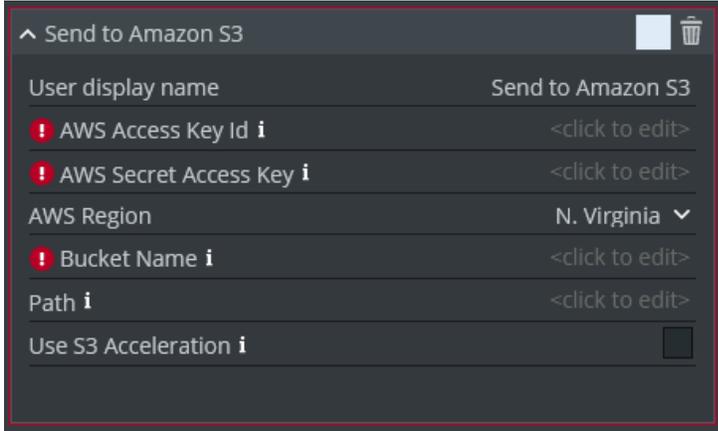
Sends media and other file types to an Amazon S3 Simple Storage Service. You must have registered an Amazon Web Service (AWS) account before you can use Automation with this service, and create Buckets for the items you wish to store.

The Task has multiple outputs:

- Success Output (Green) - processes the original file if the task is successful.
- Failure Output (Red) - processes the original file if the task fails.



To specify the input source, precede the task with a storage space Input element.



**PARAMETERS:**

AWS Access Key Id	Type the AWS Access Key Id for your account in the text box. This can be found in the AWS Management console.
AWS Secret Access Key	Type the AWS Secret Access Key for your account in the text box. This can be found in the AWS Management console.
AWS Region	Select the AWS Region you want to use from the drop down list.
Bucket Name	Type the name of the Bucket you want data uploaded to. Make sure that you have created a Bucket with the same name in your AWS account.
Path	Type the path name for the folder containing the files you want to send. The path in the Bucket will be created if it does not exist.
Use S3 acceleration	Tick to use the S3 acceleration feature. Acceleration must also be enabled in the Bucket, and usage may incur additional charges by Amazon.

## Transcode Task

*NOTE: Automation does not validate the combination of wrappers and codecs you select for this feature. Before setting these parameters in your template, refer to the FLOW Supported Formats User's Reference to verify that the selected formats are valid.*

Transcodes media to the selected format.

^ Transcode 	
User display name	Transcode
 Clip Name <b>i</b>	<click to edit> 
 Destination Media Space	<click to edit> v 
Destination Folder <b>i</b>	<click to edit> 
Preserve Path <b>i</b>	<input type="checkbox"/>
 Wrapper	<click to edit> v 
 Encoding	<click to edit> v 
Channel(s)	1
User <b>i</b>	<click to edit>
Password	<click to edit>
Maintain Source Metadata <b>i</b>	<input checked="" type="checkbox"/>
Maintain Markers <b>i</b>	<input checked="" type="checkbox"/>
Skip if output exists <b>i</b>	<input checked="" type="checkbox"/>
Update Avid PMR <b>i</b>	<input type="checkbox"/>
Preserve Data Tracks <b>i</b>	<input checked="" type="checkbox"/>
Start Handle <b>i</b>	0 s
End Handle <b>i</b>	0 s
Consolidate sequences <b>i</b>	<input checked="" type="checkbox"/>

**PARAMETERS:**

Clip Name: †	Type the clip name for the output name. You can add the following identifiers: <ul style="list-style-type: none"><li>• %c - Inserts the original clip name.</li><li>• %f - Inserts the original file name.</li><li>• %d - Inserts the current date.</li><li>• %t - Inserts the current time.</li><li>• %dt - Inserts the current date and time.</li></ul>
Destination Storage Space: †	From the drop-down list, select the storage space where you want the transcoded media saved.
Destination Folder: †	Type the name of the output folder in the text box. You can add the following identifiers: <ul style="list-style-type: none"><li>• %d - Inserts the current date.</li><li>• %t - Inserts the current time.</li><li>• %dt - Inserts the current date and time.</li></ul>
Wrapper: †	Select the wrapper to be used from the drop-down list.
Encoding: †	Select the encoding method to be used from the drop-down list.
Channel:	Select the channel or channels FLOW uses for transcoding. You can choose more than one channel, allowing FLOW to distribute tasks across the specified channels for optimal system efficiency. Use the following notation to select one or more channels: 1 - Automation uses Channel 1. 2 - Automation uses Channel 2. 1-3 - Automation uses Channels 1, 2, and 3. 1, 4 - Automation uses Channels 1 and 4. Channels can be viewed as virtual slots for ingest and transcoding activity. Input sources can be assigned to channels, but channels cannot be assigned to inputs. More than one source can be assigned to a channel. To prevent contention issues with other users, it is recommended that you reserve at least one FLOW channel specifically for Automation. See the FLOW Administrator's Guide for further information about channel allocation in FLOW.
User	Type the name of a valid user account that can log in to the storage spaces being used. Alternatively, leave blank to select the default

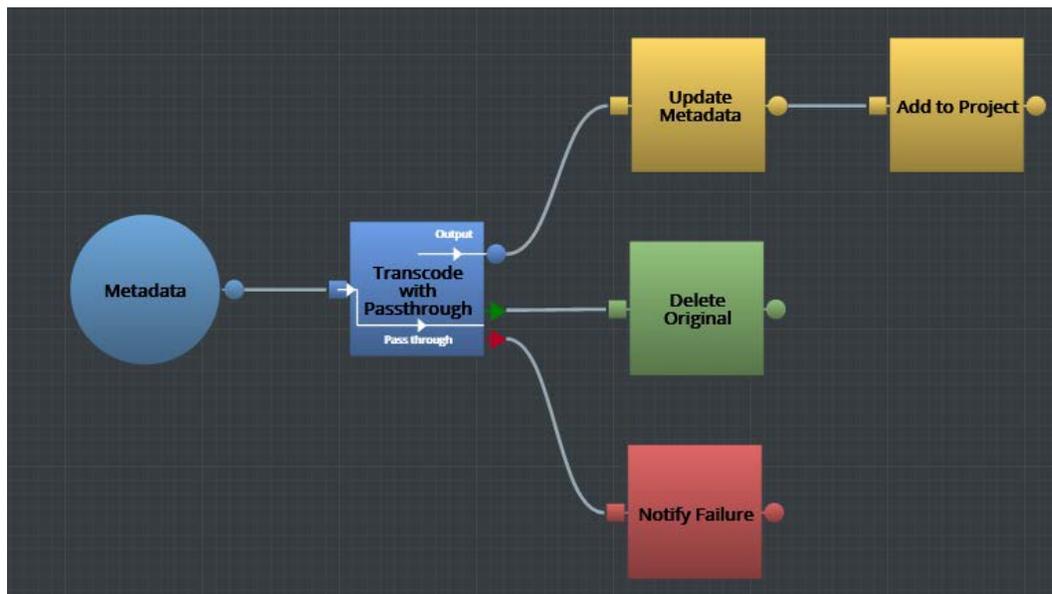
	Automation† account, or \$USER\$ to select the user account that activated the template. ‡ See Default Automation Account.
Password	The password for the user account that is used to run the template. Type \$PASSWORD\$ if you entered \$USER\$ in the User field.
Maintain Source Metadata	When enabled, any metadata from the source clip is copied to the transcoded clip. All associated metadata, including custom metadata, is preserved.
Maintain Log Entries	When enabled, any Log entries from the source clip are copied to the transcoded clip. All associated metadata, including custom metadata, are preserved.
Maintain Markers	When enabled, any Markers from the source clip are copied to the transcoded clip. All associated metadata, including custom metadata, are preserved.
Skip if output exists	When enabled, skips transcoding if the clip has already been transcoded with the same destination and codec selection from this task.
Update Avid PMR	Click to include the Avid PMR file. This setting is valid only when the Destination storage space is AvidStyle or AvidMXF. † Functionality can be extended by using the features described in Fields with Combined Input Values.
Preserve Data Tracks	Unclick if you do not want to preserve data tracks when transcoding.
Start Handle	The value, in seconds, that the task uses to start.
End Handle	The value, in seconds, that the task uses to end.
Consolidate sequences	When transcoding sequences, consolidate to a single output clip. If not selected, each sequence entry will be individually transcoded to a new clip.

## Transcode with Passthrough Task

*NOTE: Automation does not validate the combination of wrappers and codecs you select for this feature. Before setting these parameters in your template, refer to the FLOW Supported Formats User's Reference to verify that the selected formats are valid.*

Transcodes media to the selected format. The task has multiple outputs:

- Output (Normal) - processes files that have been transcoded.
- Success Output (Green) - processes the original file if the transcode task is successful.
- Failure Output (Red) - processes the original file if the transcode task fails.



In the example shown above, the file is transcoded to the specified format and the new clip is added to a Project. If the transcode task was successful, the original file is passed to the green output and is deleted. If the transcode task was unsuccessful, the original file is passed to the red output, which initiates an email notification.

### PARAMETERS:

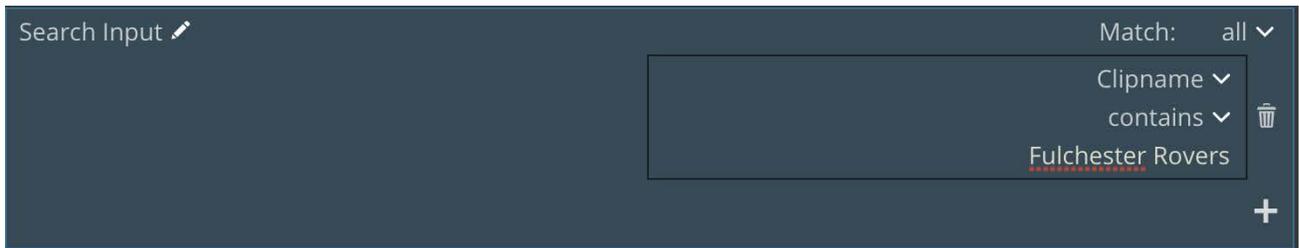
The parameters available for this task are the same as for the [Transcode Task](#).

# Conditional Operators

Many elements in FLOW Automation have parameters which test for expressions using conditional operators such as 'is', 'is not', 'begins with'. The conditions tested are dependent on the parameter type, i.e. boolean, text, numerical or date.

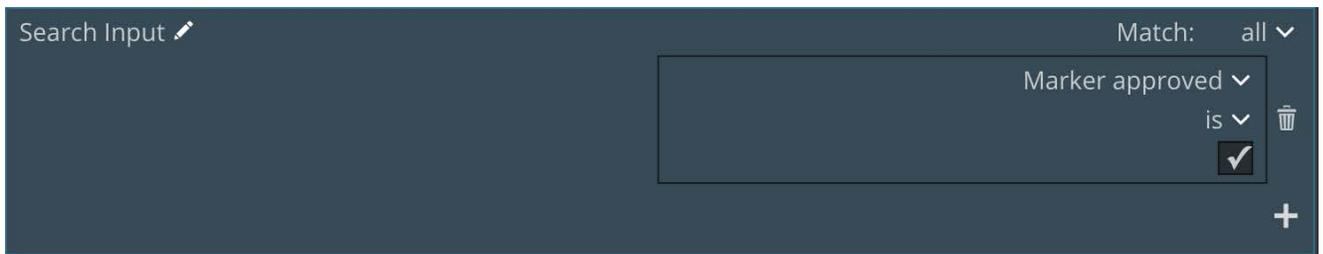
Expressions are in the format: <parameter> <operator> <user-defined value>

For example, the following expression looks for media whose name (recorded by the Clipname metadata field) contains the phrase 'Fulchester Rovers'.



In this example, the phrase can exist anywhere in the clip name. If we want to search for clip names that start with 'Fulchester Rovers' but exclude all other instances of the phrase, we could change the operator from 'contains' to 'begins with'. Therefore the clip name 'Fulchester Rovers beats Oldbury Rangers' would be accepted (true) but 'Oldbury defeated by Fulchester Rovers' would not be accepted (false).

## Boolean



This is a simple Yes / No test. The user-defined value in this case is a check box. The operators are as follows:

- is - The condition is true.
- is not - The condition is false (not true).

The parameter is tested against metadata with a boolean value, for example to denote when a clip has been approved or signed off.

## Text

The screenshot shows a dark-themed configuration panel for a search filter. On the left, there is a 'Search Input' field with a pencil icon. On the right, there are several controls: a 'Match:' dropdown set to 'all', a 'Comments' dropdown, an 'is' dropdown, a trash icon, and a '<click to edit>' text. A plus sign is located at the bottom right corner of the panel.

This applies the following tests to alphanumeric text strings:

- is - The metadata matches the search text entered.
- is not - The metadata does not match the search text entered.
- contains - The metadata contains the search text entered.
- begins with - The metadata starts with the search text entered.
- ends with - The metadata ends with the search text entered.

The parameter is tested against text based metadata, for example a clip name, a storage space, a codec, or a user-defined parameter where the user fills in a text box.

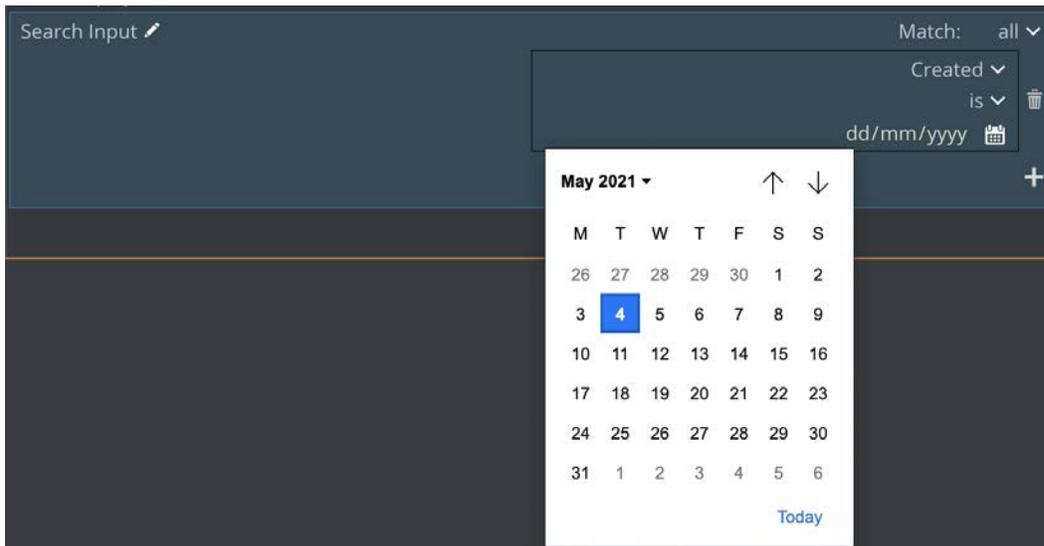
## Numeric

The screenshot shows a dark-themed configuration panel for a search filter. On the left, there is a 'Search Input' field with a pencil icon. On the right, there are several controls: a 'Match:' dropdown set to 'all', a 'Marker rating' dropdown, an 'is not' dropdown, another dropdown, a trash icon, and a plus sign at the bottom right corner.

This applies the following tests to numerical string values:

- is - The metadata matches the value entered.
- is not - The metadata does not match the value entered.
- less than - The metadata less than the value entered.
- greater than - The metadata greater than the value entered. The parameter is tested against a numeric value, e.g. a user rating.

## Date/Time



This applies the following tests to a date and or time value:

- is - The date/time matches the value entered.
- is not - The date/time does not match the value entered.
- later than - The date/time is later than the value entered.
- earlier than or equal to - The date / time is earlier than or the same as the value entered.
- earlier than - The date / time is earlier than the value entered.
- earlier than or equal to - The date / time is earlier than or the same as the value entered.

The parameter is tested against a date and / or time based value, e.g. the Creation date of a clip.

# Color



This compares the Marker color in a clip to the color palette selection. To open the palette, and select a color from it, click on the marker displayed to the right of the operator drop down list.



- is - The marker matches the color selected from the palette.
  - is not - The marker does not match the color selected from the palette. The color selection is added to the mark displayed to the right of the operator drop down list.
1. Click on the Add button.
  2. A new Expression pro-forma displays below the first expression.



3. Create a new expression that looks for the metadata item called Approved:
  - a. Select Approved from the Metadata drop down list.
  - b. Select is from the operator drop down list.
  - c. Click the box to the right.
4. From the Match drop down list, select All.
5. Add further expressions, if required, by clicking on the Add button.
6. Remove expressions, if required, by clicking on the Remove button. 
7. Complete the template, as required, making sure there is a Trigger element at the start of your template, and that it is connected to the Input element created in step 1.

## Example 2

Example 2 looks for clips that contain 'Fulchester Rovers' and 'Oldbury Rangers'. Clips that contain only one of the two phrases in their name will be ignored by Automation.

1. Create an expression which looks for the phrase 'Fulchester Rovers' in the clip name, as described in steps 1 to 4 as described in Example 1.
2. Create an expression which looks for the phrase 'Oldbury Rangers' in the clip name:
  - a. Select Clipname from the Metadata drop down list.
  - b. Select contains from the operator drop down list.
  - c. Enter Oldbury Rangers into the text box.
3. From the Match drop down list, select All.
4. Complete the template, as required, making sure there is a Trigger element at the start of your template, and that it is connected to the Input element.

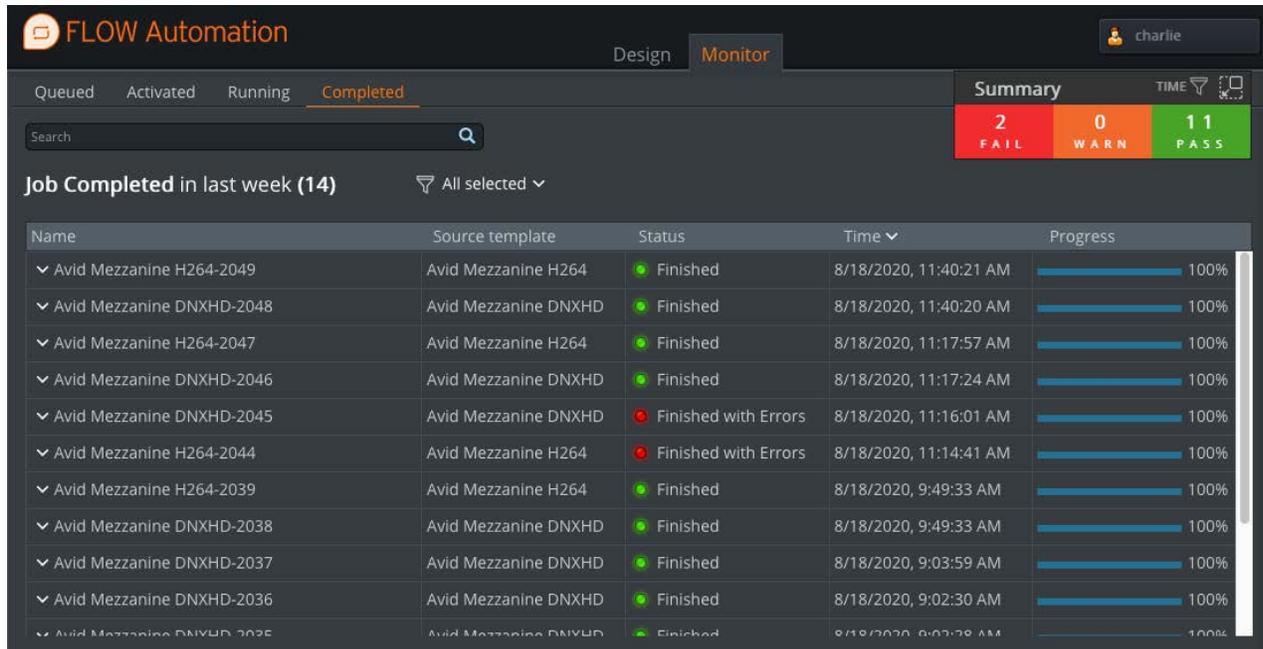
## Example 3

Example 3 looks for clips that contain 'Fulchester Rovers' or 'Oldbury Rangers'. Automation will accept clips containing only one or both of the phrases in the clip name.

1. Create an expression which looks for the phrase 'Fulchester Rovers' in the clip name, as described in steps 1 to 4 as described in Example 1.
2. Create an expression which looks for the phrase 'Oldbury Rangers' in the clip name:
  - a. Select Clipname from the Metadata drop down list.
  - b. Select contains from the operator drop down list.
  - c. Enter Oldbury Rangers into the text box.
3. From the Match drop down list, select Any.
4. Complete the template, as required, making sure there is a Trigger element at the start of your template, and that it is connected to the Input element.

# Chapter 5: Automation Monitoring

This chapter describes the operation of the Monitor function in FLOW Automation.



The screenshot displays the FLOW Automation Monitor interface. At the top, there are tabs for 'Design' and 'Monitor', with 'Monitor' selected. Below the tabs, there are filters for 'Queued', 'Activated', 'Running', and 'Completed', with 'Completed' selected. A search bar is present. On the right, a 'Summary' box shows 2 FAIL, 0 WARN, and 11 PASS. Below this, it says 'Job Completed in last week (14)' and 'All selected'. A table lists the jobs with columns for Name, Source template, Status, Time, and Progress.

Name	Source template	Status	Time	Progress
▼ Avid Mezzanine H264-2049	Avid Mezzanine H264	● Finished	8/18/2020, 11:40:21 AM	100%
▼ Avid Mezzanine DNXHD-2048	Avid Mezzanine DNXHD	● Finished	8/18/2020, 11:40:20 AM	100%
▼ Avid Mezzanine H264-2047	Avid Mezzanine H264	● Finished	8/18/2020, 11:17:57 AM	100%
▼ Avid Mezzanine DNXHD-2046	Avid Mezzanine DNXHD	● Finished	8/18/2020, 11:17:24 AM	100%
▼ Avid Mezzanine DNXHD-2045	Avid Mezzanine DNXHD	● Finished with Errors	8/18/2020, 11:16:01 AM	100%
▼ Avid Mezzanine H264-2044	Avid Mezzanine H264	● Finished with Errors	8/18/2020, 11:14:41 AM	100%
▼ Avid Mezzanine H264-2039	Avid Mezzanine H264	● Finished	8/18/2020, 9:49:33 AM	100%
▼ Avid Mezzanine DNXHD-2038	Avid Mezzanine DNXHD	● Finished	8/18/2020, 9:49:33 AM	100%
▼ Avid Mezzanine DNXHD-2037	Avid Mezzanine DNXHD	● Finished	8/18/2020, 9:03:59 AM	100%
▼ Avid Mezzanine DNXHD-2036	Avid Mezzanine DNXHD	● Finished	8/18/2020, 9:02:30 AM	100%
▼ Avid Mezzanine DNXHD-2025	Avid Mezzanine DNXHD	● Finished	8/18/2020, 9:02:28 AM	100%

Clicking on the Monitor tab opens the Automation Schedule, which is divided into the following panes.

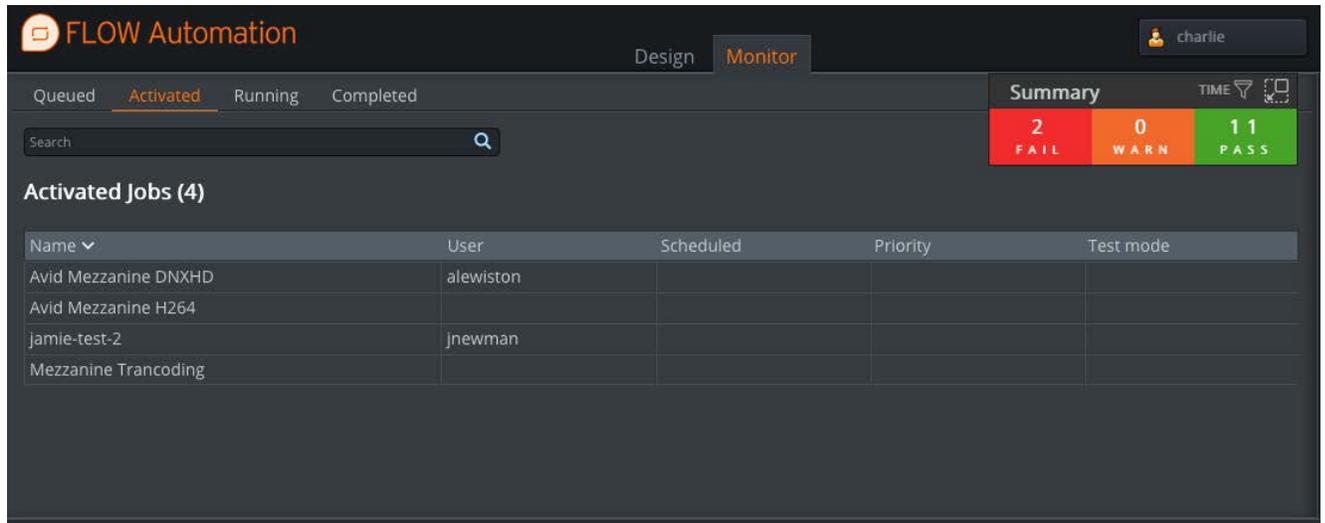
- [Activated Jobs](#)
- [Queued Jobs Viewer](#)
- [Running Jobs Queue](#)
- [Completed Jobs](#)

The Jobs Queue is configured through the Settings menu.

# Activated Jobs

The Activated jobs section of the Monitor viewer displays the Jobs that have been activated in the Design view. Refer to "Activating and Deactivating a Workflow Template" on page 33. Any Job displayed in this viewer may be started manually, even if it has a start time or condition trigger. When a Job is deactivated, it is removed from the Activated Jobs Viewer.

To view the active jobs, select the Monitor tab and then the Activated tab.



# Activating Automation Event Triggering

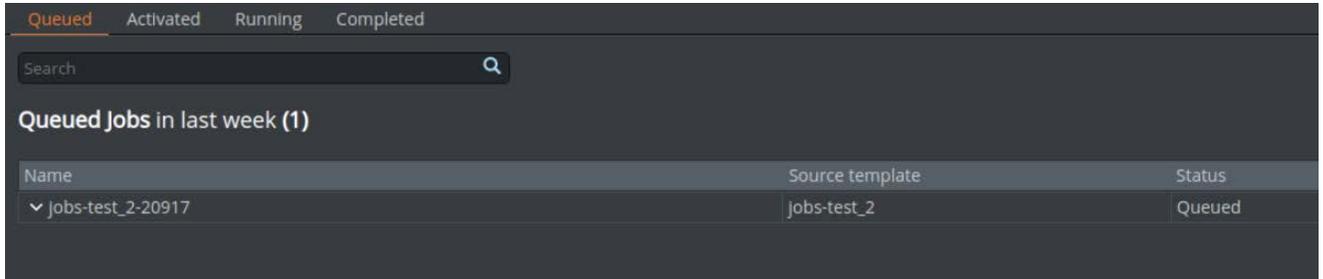
The Event allows triggering (starting) automation jobs on events that happen within FLOW.

"Triggers on" shows the list of available events, an example is "Upload" so when someone uploads an asset into FLOW, this event is fired and can be used to trigger a job.

You can limit events by media space. In the upload example, this means the trigger would only fire when someone uploads an asset to the selected media spaces.

# Queued Jobs Viewer

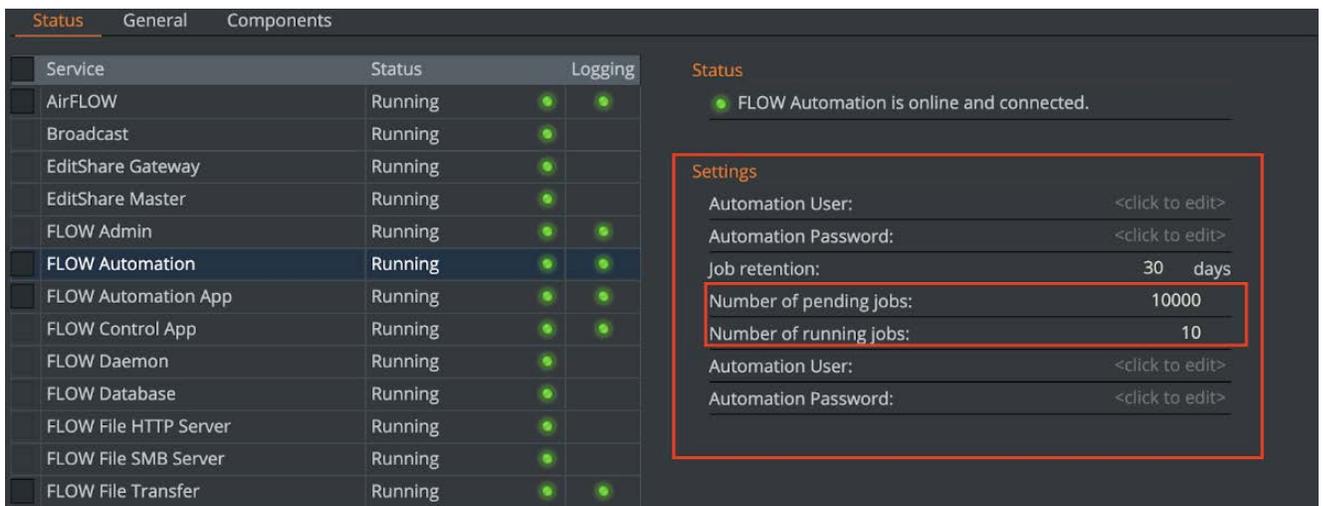
The Queued Jobs Viewer displays all the scheduled jobs queued for processing by Automation. From within this page, the job can be paused, restarted, or removed from the queue.



Each job contains the following information:

- Job Name
- Source Template
- Status
- Date and Time started
- Queue Position

1. Click the Name, Status, Time or Queue Position column header to sort the job order on the selected column. If you click on the same column header again, the view toggles between ascending and descending order.



2. You can also change the order of jobs by holding down the left mouse button on an item and dragging it into the position you require.
3. Click on the desired queued item to pause, resume, or remove the item. Hold down the Ctrl or Shift key with the mouse button to make multiple selections.
4. Click on the + button against a job to display individual stages within the job. Click the - button to collapse the listing to a single line entry.

5. To pause selected jobs, click on the Pause button.
6. To resume the selected jobs, click on the Resume button.
7. To pause all jobs in the queue, click on the Pause All button.
8. To resume all jobs in the queue, click on the Resume All button.
9. To remove selected jobs from the queue, click on the Remove button. A message box prompts you to confirm the removal. Click Yes to confirm removal, or No to cancel the operation.
10. To remove all jobs in the queue, click on the Remove All button. A message box prompts you to confirm the removal. Click Yes.

## Running Jobs Queue

The Running Jobs queue displays the progress of jobs currently being processed by FLOW Automation. From here you can stop jobs or view individual steps within a job.

Name	Source template	Status
Jobs-test_1_1-20916	Jobs-test_1_1_1	Running
Jobs-test_1_1-20915	Jobs-test_1_1	Running

Each job is listed with the following information:

- Job Name
- Source template
- Status
- Date and Time started
- Progress

To review or manage jobs in the Running Jobs Queue:

1. The progress of each job is indicated by a horizontal green bar, together with a numerical display of the actual percentage completed.
2. Click on the + button against a job to expand the listing to display the progress of individual steps within that job. Click the - button to collapse the listing to a single line entry.
3. To stop a job that is in progress:
  - a. Click on the job to select it.
  - b. Click on the Stop button. A message displays asking you to confirm that the job will be removed from the list and that it cannot be recovered.
  - c. Click Yes to remove the job or No to cancel the operation.

# Completed Jobs

The Completed job history Log displays jobs that have been processed and reports whether they were successful or not. Each job is listed with the following information.

Name	Source template	Status	Time	Progress
+ Transcoded-26	Transcoded	Finished	05/08/2020, 10:01:35	100%
+ Transcoded-25	Transcoded	Finished	05/08/2020, 10:01:35	100%
+ Transcoded-24	Transcoded	Finished	05/08/2020, 10:01:34	100%
+ Transcoded-23	Transcoded	Finished	05/08/2020, 10:01:34	100%
+ Transcoded-22	Transcoded	Finished	05/08/2020, 10:01:34	100%
+ Transcoded-21	Transcoded	Finished	05/08/2020, 10:01:34	100%

- Job Name
- Source template
- Status
- Date and Time started
- Progress

Both the Status and Progress fields are color coded as follows:

- Completed: Blue
- Test: Orange
- Failed: Red

If Automation issues a warning with a job, it highlights the job with a yellow border.

# Informational Tools

Within the Monitor function the informational tools provide means to use the monitor panel.

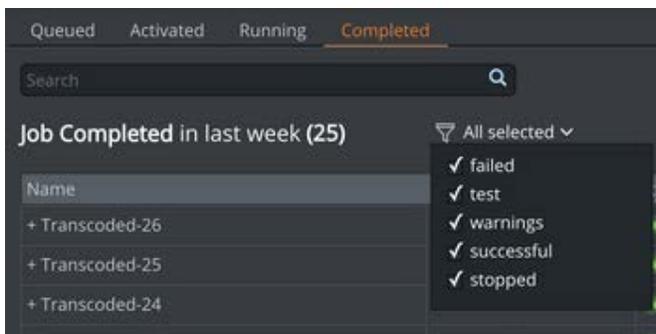
- Summary Box
- Context Menu

## Summary Box

The Summary box provides a glance at the jobs completed and whether they were a Pass, Fail, or had a Warning.

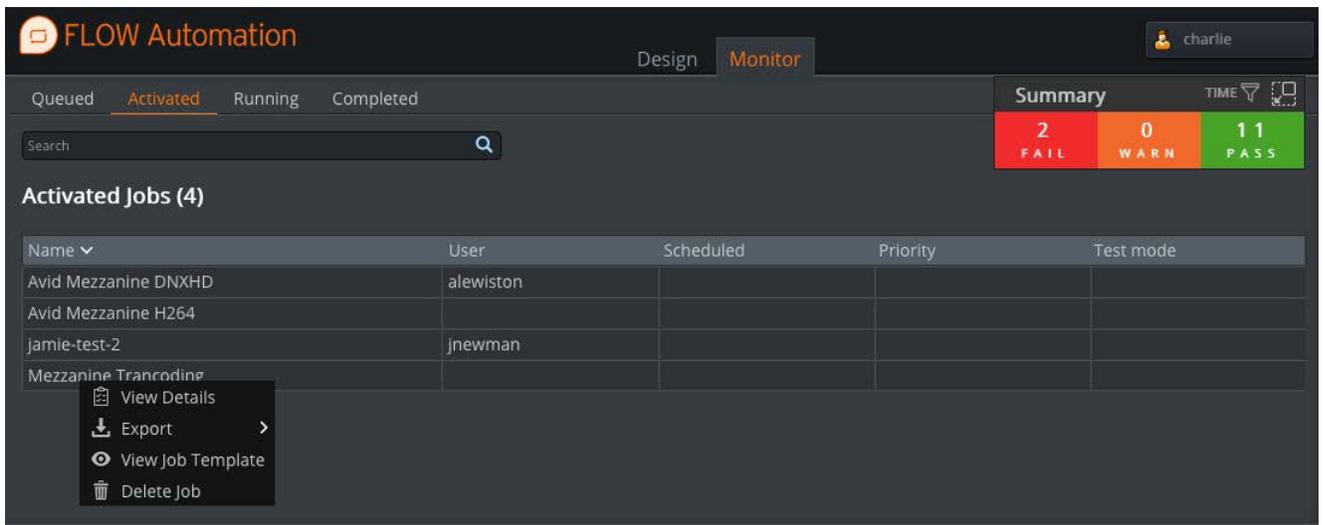


The following is an extended version of the Summary box provided in drop-down showing job status of jobs completed.



## Context Menu

To view the context menu, right-click on the desired job.



From here you can:

- View Details – Displays job messages, errors, warning, time started and finished.

The screenshot shows a 'Job details' window with a dark background. It contains a 'Main info' section with a table of job details, a 'Progress' bar at 100%, and a 'Messages' section with a list of log entries and two filter checkboxes for 'only warnings' and 'only errors'.

Main info:	
Name:	dcopy-1778
Source Template:	dcopy
Status:	● Finished
Started by:	apitest
Started:	8/18/2020, 6:43:10 PM
Finished:	8/18/2020, 6:43:10 PM
Progress:	<div style="width: 100%;"><div style="width: 100%;"></div></div> 100%

Messages:  only warnings  only errors

8/18/2020, 6:43:10 PM	Created Job: dcopy-1778
8/18/2020, 6:43:10 PM	***** 0 Inputs
8/18/2020, 6:43:10 PM	Description Type: SearchInput Property( name = "Search Input", value = {"group":"SEARCH_ALL_FIELDS","search":{"combine":"MATCH_ANY","filters":{"field":{"fixed_field":"CLIPNAME","group":"SEARCH_FILES","type":"QString"},"match":"EQUAL_TO","search":"croc-abc"}}})
8/18/2020, 6:43:10 PM	

- Export – Exports details in CSV format.
- View Job Template – Returns you back to the Design Grid with the template in question.
- Delete Job – Removes job from the monitor tab.

# Chapter 6: Troubleshooting

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

## Network

### Cannot Connect to FLOW Server

If you cannot connect to FLOW Automation server:

1. Check the address of FLOW Automation. You can follow the links on the EditShare Landing Page to confirm the address
2. Verify your connection to the FLOW Automationserver as follows:
  - a. Open a command line prompt and type `ping <server name>` where `ping <server name>` is the hostname or IP Address of the Automation server.
  - b. If no packets are returned, or the message `destination host unreachable` displays, check the network cable connection to the LAN port on your workstation.
3. If you still have no connection, contact the administrator for your FLOW system.

### Cannot Log In

Verify that you are using the correct username and password. Passwords are case sensitive, so ensure the Caps Lock key is OFF.

### No Network Folders or Storage Spaces Visible

Check the following:

- Verify that the server you are trying to access is online and connected to the network.

# Workflow Template Designer

## Test Failed

If there is a major error in your workflow template, for example you have not connected all the elements together, or you have set an element property incorrectly, an error message box displays.

Click OK to close the window. Rectify the reported error in your workflow template and then retest it.

## Workflow Template does not Run

The Test Run window confirms the template is working but it will not run as a Job in Automation Schedule.

- Verify that the template has been activated.
- Ensure that storage space and folder names are valid and that they are accessible to the assigned user account, for example the Automation user account.
- Verify that the number of running and pending jobs allowed in Automation Settings is not preventing jobs from running.

## Cannot Open Workflow Template for Editing

You cannot open a Workflow Template for editing if it has been locked by another user.

- Verify that the template is unlocked (green padlock icon displays).
- Locked padlock icons are colored red. If you cannot unlock the template, it may have been locked by another user. The name of the user that locked the template displays next to the padlock icon.

