ELEMENTS Web UI 3.3

User Guide 3.3.x

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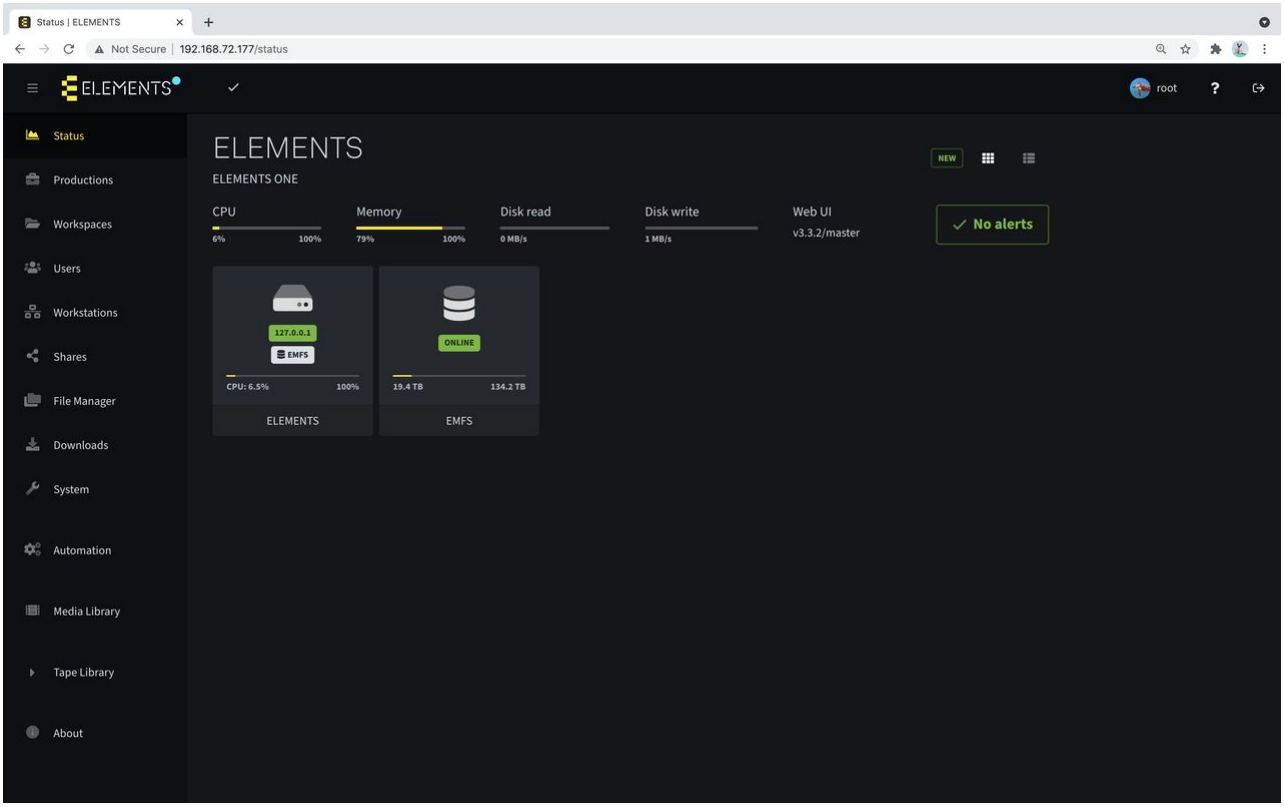
1 ELEMENTS Web UI Overview

This documentation describes the Web UI version 3.3

The ELEMENTS Web UI provides all management features as well as access to the Media Library and can be accessed through any major browser application by entering the systems IP address. Alternatively, if the system is connected to the internet and properly set up, the Web UI can be reached via a URL. The browser-based Web UI does not require any software to be installed.

- Top bar(see page 10)
- Navigation bar(see page 11)
- Watch the video(see page 11)
    - Meet ELEMENTS(see page 11)



1.1 Top bar

- By clicking the menu symbol in the navigation bar, the user can switch the navigation bar display to show either only icons or icons and the names of each section. The icon-only display frees up an additional area of the screen in the Web UI.
- Clicking the company logo (ELEMENTS logo by default) allows to return to the start page, which is set up for the logged in user. The company logo can be swapped at any time in the administration panel.
- With the dropdown list on the right hand side of the logo it is possible to set up the behaviour of the background tasks as well as display a list of all running tasks.

    - "Scan while browsing media" allows the system to scan for new media in the Media Library whilst the user browses the Media Root.
    - If the function "Generate proxies while scanning" is activated, the system can generate proxies whilst at the same time scanning for media.
    - "Run scheduled tasks" allows the user to pause the execution of tasks scheduled in the Automation engine.
    - "See all tasks" will open the Active Tasks tab in the Automation section where a list of all finished and running tasks is displayed.
- A click on the username or profile picture displays a reduced summary of the users account settings. The user has the ability to change the name, the language in which the Web UI is displayed and select a default page from a list of pages for which the user has access to.
- The question mark icon displays a short summary of the current page.
- The logout symbol logs the user out and redirects to the login page.

1.2 Navigation bar

The navigation bar on the left hand side of the Web UI allows the user to switch between the sections of the Web UI. If permissions were missing, those specific sections would not be displayed. If the user has permission to access only one section of the Web UI e.g. only the Media Library section, the navigation bar will not be displayed.

1.3 Watch the video

1.3.1 Meet ELEMENTS

https://youtu.be/nG_GLjxNiNY

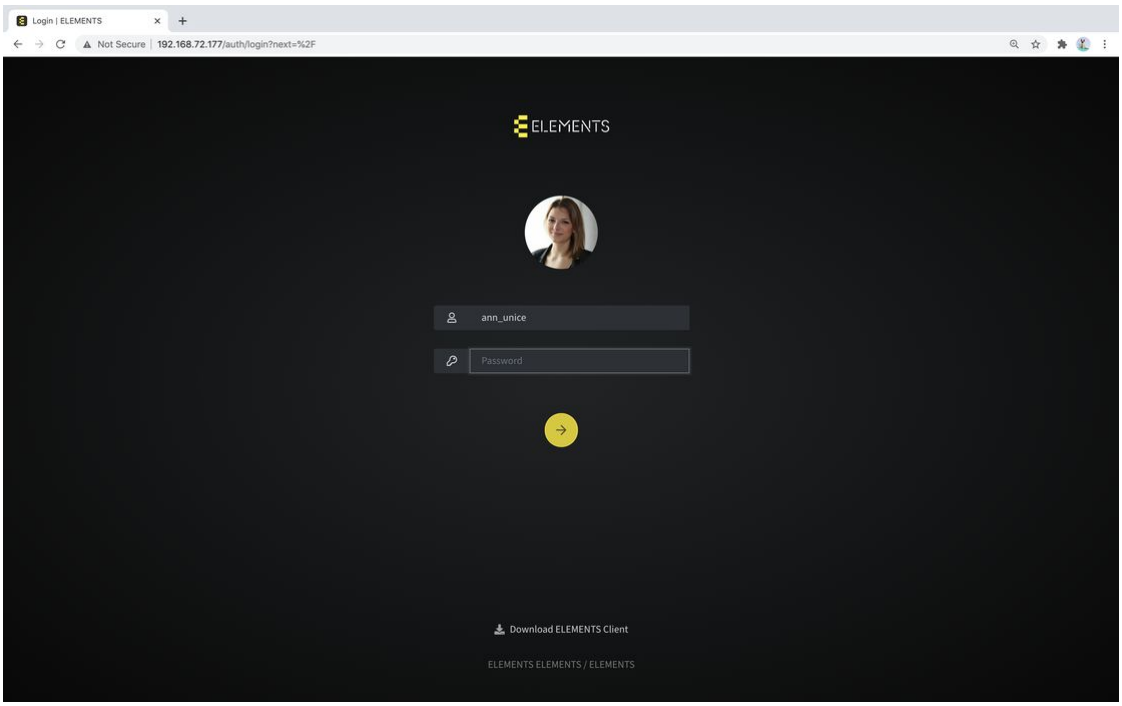
2 Login page

Accessing the ELEMENTS Web UI can be done through a browser of your choice - ELEMENTS recommends Google Chrome. Entering the IP address of the system into the browsers address bar will redirect the user to the login page. IP address unknown? Please contact your administrator.

- Entering the IP address redirects the user to the login screen.
- For user authentication purposes, a username, email address or Active Directory record can be used.
- "SSO Azure" allows to log in the actual user via single sign-on if this option is available. This function allows to login to one account and then access all needed tools with this login.

> **Please note**
> The usage of single sign-on is only available through third party services.

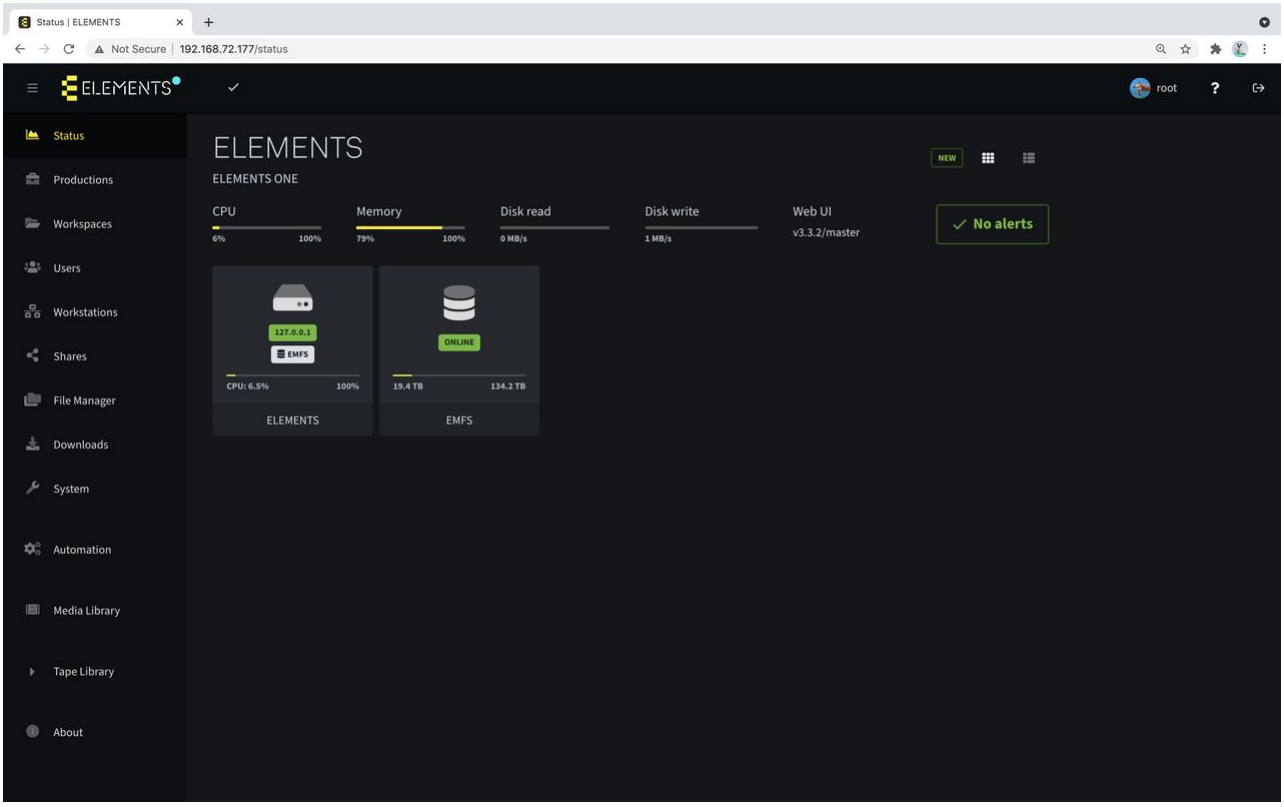
- If two-factor authentication is enabled for the user in question, a one-time token will be required after entering the user credentials.
- After a successful login, the user will be redirected to its preset default page.
- The login page can also be used to download the ELEMENTS Client - a lightweight workspace connection manager, available for Windows, macOS and Linux operating systems.



3 Status

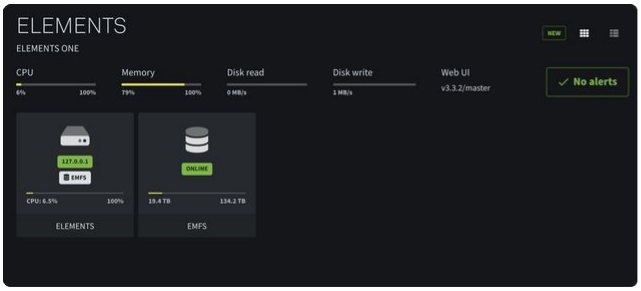
The Status section offers important current information about the system concerning both the hardware and the software. Should the system determine anything out of the ordinary e.g. high partition fill-levels or alarming sensor readings, a warning will be displayed on the status page.

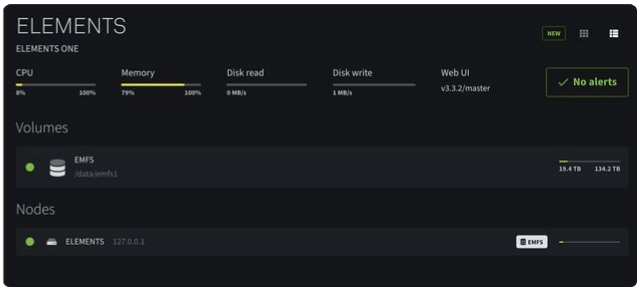
- Quick-overview bar(see page 14)
- System nodes(see page 14)
- System node information(see page 15)
    - Overview tab(see page 15)
    - Graphs tab(see page 17)
    - Services tab(see page 18)
    - RAID tab(see page 19)
    - Sensors tab(see page 20)
    - IPMI tab(see page 21)
- Volume node information(see page 22)
    - General tab(see page 22)
    - StorNext tab(see page 24)
- Stripe group overview(see page 26)
- Release Notes(see page 26)
- Watch the video(see page 27)
    - Status page overview(see page 27)



At the top-left of the Status page the name of the system is displayed (in this case ELEMENTS), followed by the product name (in this case ELEMENTS ONE).

On the top-right side, the system nodes view can be chosen. Choose between the icon view and the list view.

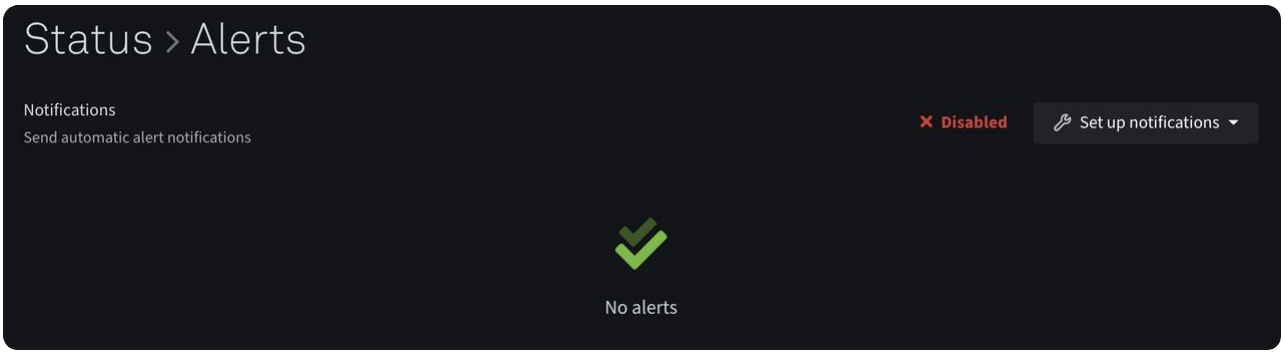




3.1 Quick-overview bar

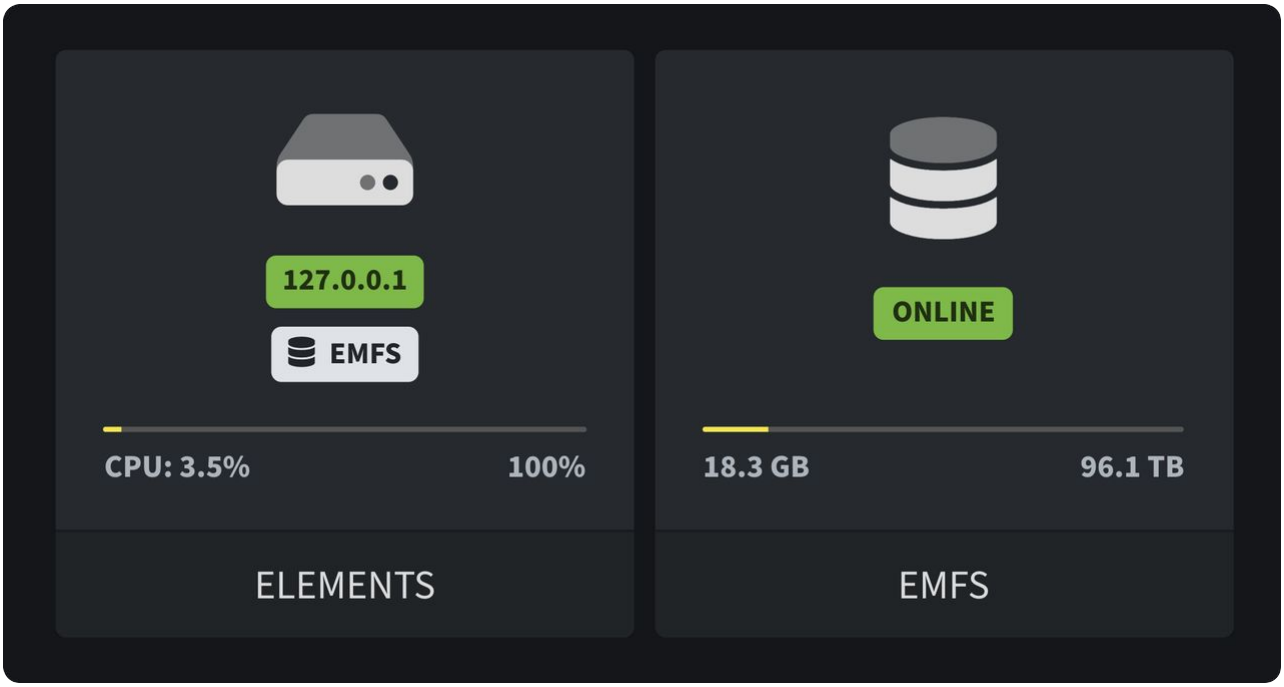
The Status page provides a quick-overview of the systems most important metrics. Information provided in the quick overview includes:

- Current CPU and Memory usage.
- Current disk read and write load.
- The currently running software version. A click on the Web UI version link opens the release notes for the running version, as well as the previous versions.
- The alerts tab provides crucial information about the systems condition. Clicking the alerts display opens up a list of all current and past alerts. Here, notifications via Slack or email can be set up, and the system can automatically keep the selected users informed, should any issues be detected.



3.2 System nodes

On the Status page all nodes and volumes of the ELEMENTS environment are listed. If the user selects a node, a popup window appears showing detailed information about the selected node.

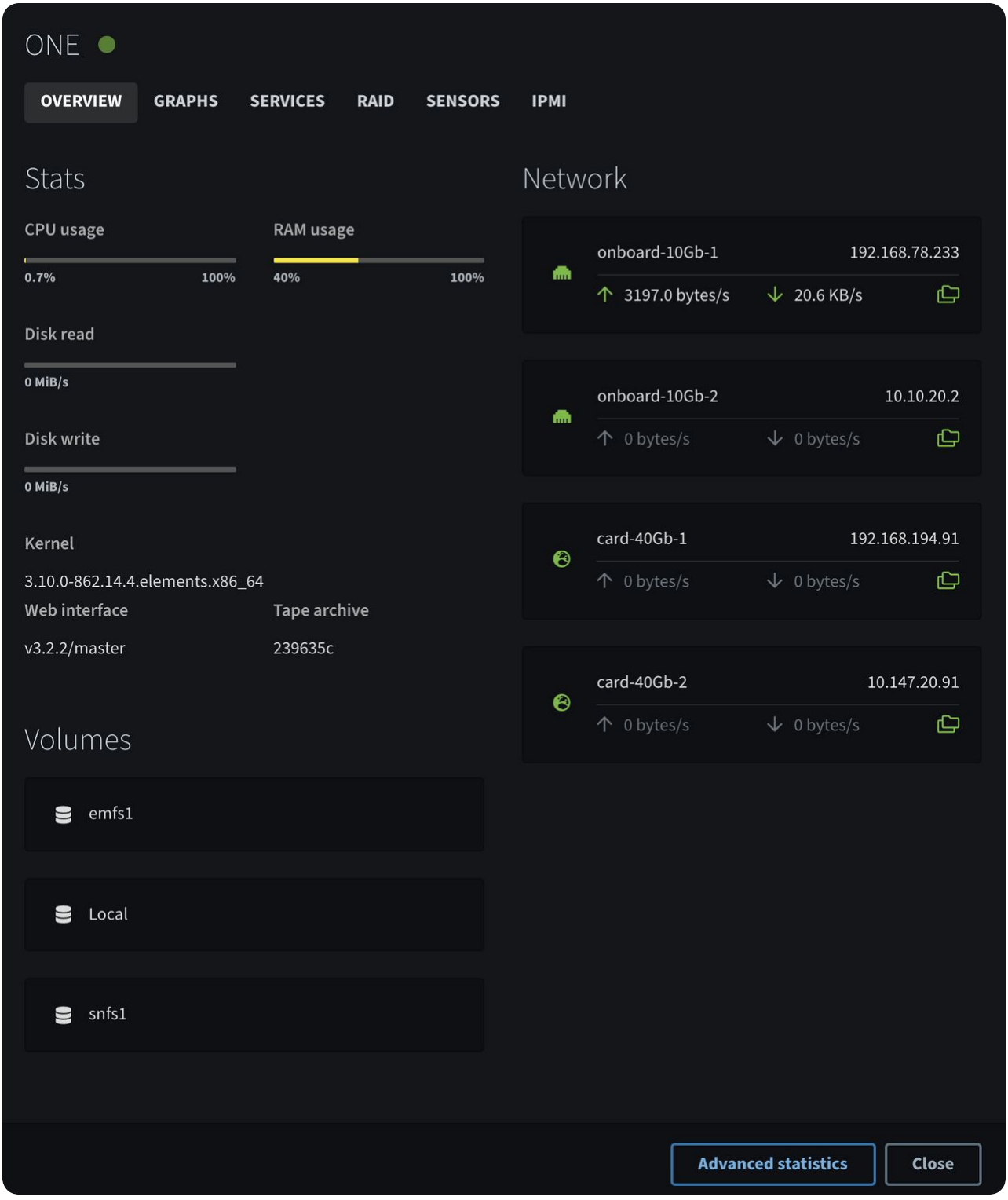


3.3 System node information

3.3.1 Overview tab

The Overview tab displays detailed information about the selected node.

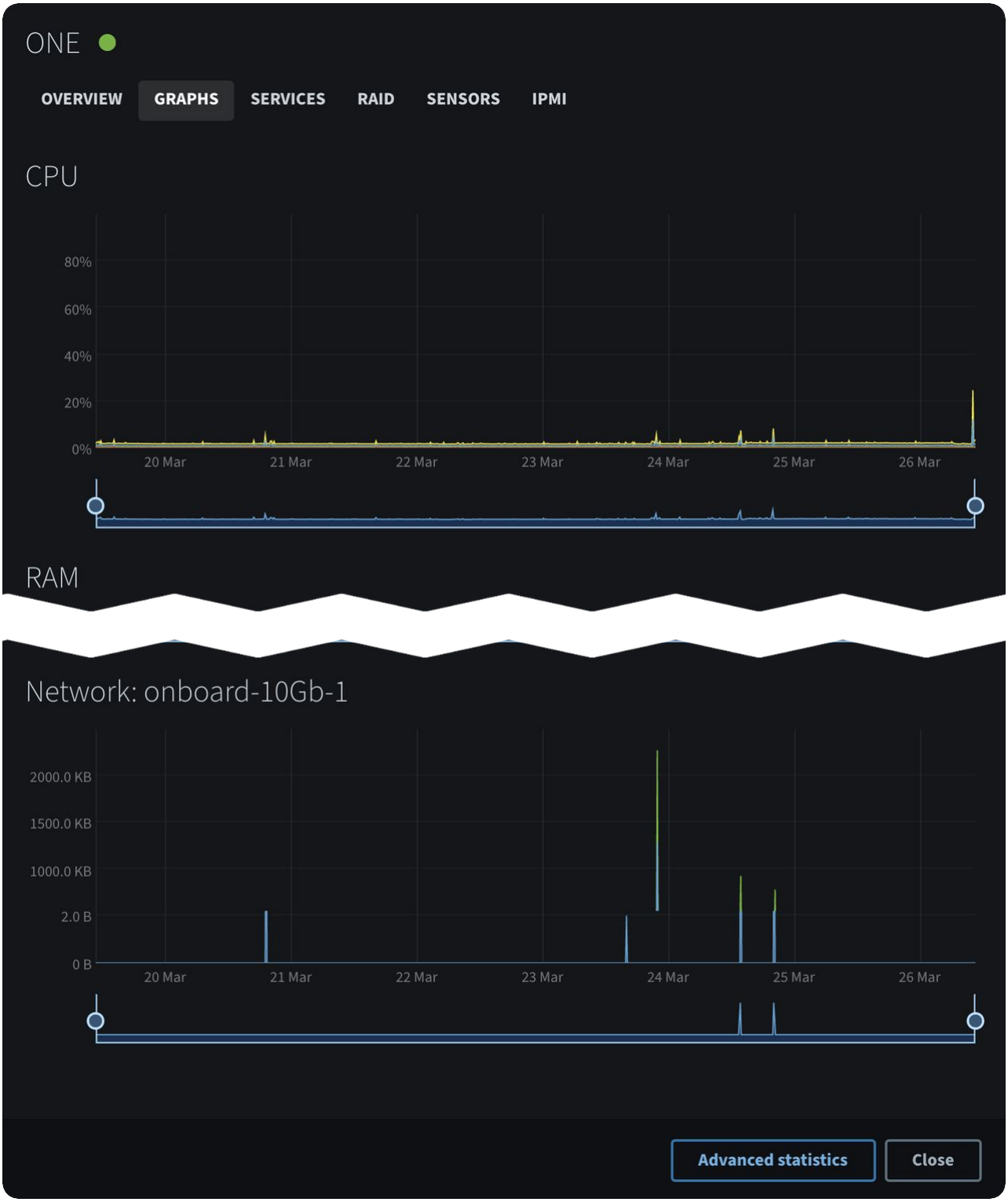
- On the left hand side of the window, information about the selected node such as CPU, RAM usage, the used kernel version etc. is shown. On the right hand side of the window information about the network interfaces, such as the IP addresses and traffic load can be found.


ONE
OVERVIEW
GRAPHS
SERVICES
RAID
SENSORS
IPMI
Stats
CPU usage
0.7%
100%
RAM usage
40%
100%
Disk read
0 MiB/s
Disk write
0 MiB/s
Kernel
3.10.0-862.14.4.elements.x86_64
Web interface
v3.2.2/master
Tape archive
239635c
Volumes
emfs1
Local
snfs1
Network
onboard-10Gb-1
192.168.78.233
3197.0 bytes/s
20.6 KB/s
onboard-10Gb-2
10.10.20.2
0 bytes/s
0 bytes/s
card-40Gb-1
192.168.194.91
0 bytes/s
0 bytes/s
card-40Gb-2
10.147.20.91
0 bytes/s
0 bytes/s
Advanced statistics
Close

3.3.2 Graphs tab

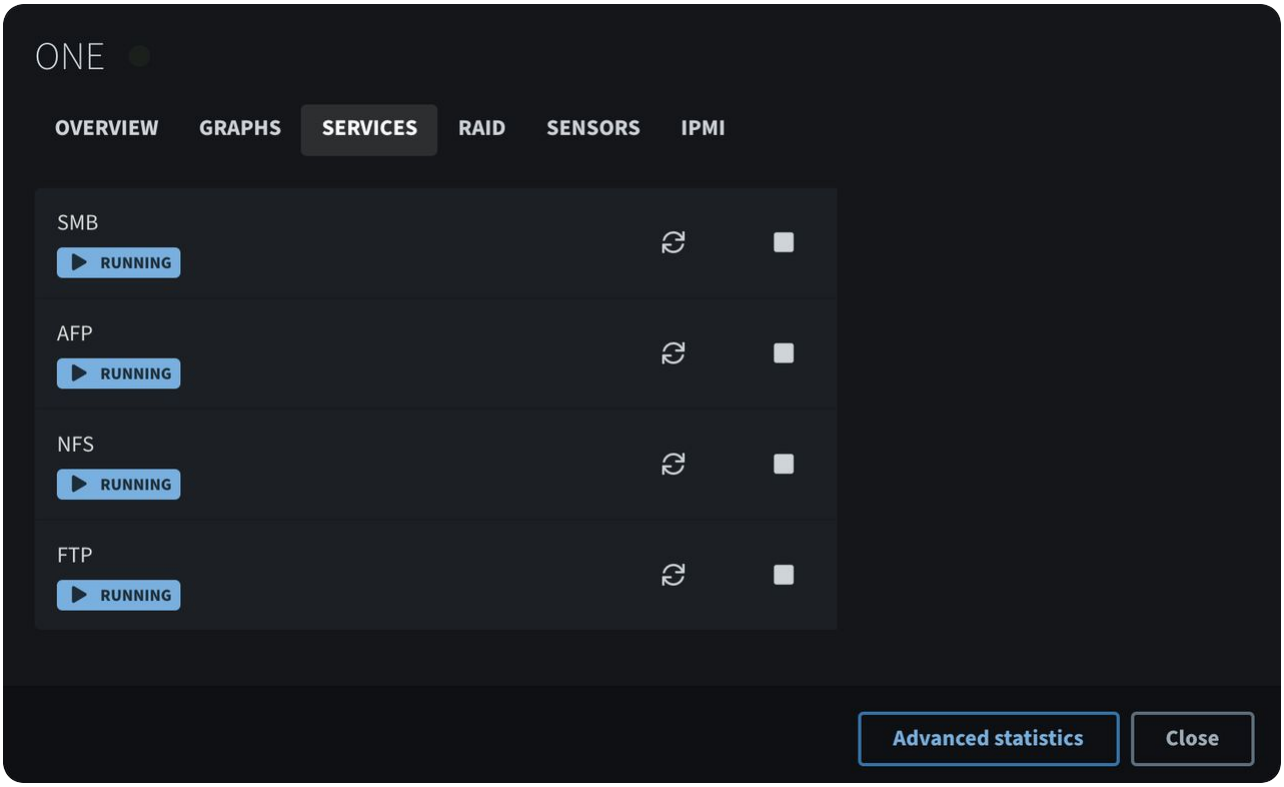
In the Graph tab information about the systems CPU, RAM and interface load is displayed in form of interactive graphs. Sliders underneath the graph allow the user to zoom into any position on the graph.

- The CPU graph displays the CPU load over the past seven days. The overall CPU load consists of three categories (each represented by a differently coloured graph): CPU load caused by the users, CPU load caused by the system and the CPU load caused by the IOWait. Precise information at any position in the graph is displayed when hovering over it. Sliders underneath the graph allow the user to zoom into any position on the graph.
- The RAM graph displays a graphical depiction of the 7-day history of RAM usage. Three values are displayed: used RAM, buffered RAM and the cached RAM. Sliders underneath the graph allow the user to zoom into any position on the graph.
- The IO graph displays a line chart with the read and write load of the past 7 days.
- The Network graphs display the load of each configured and connected network interface.



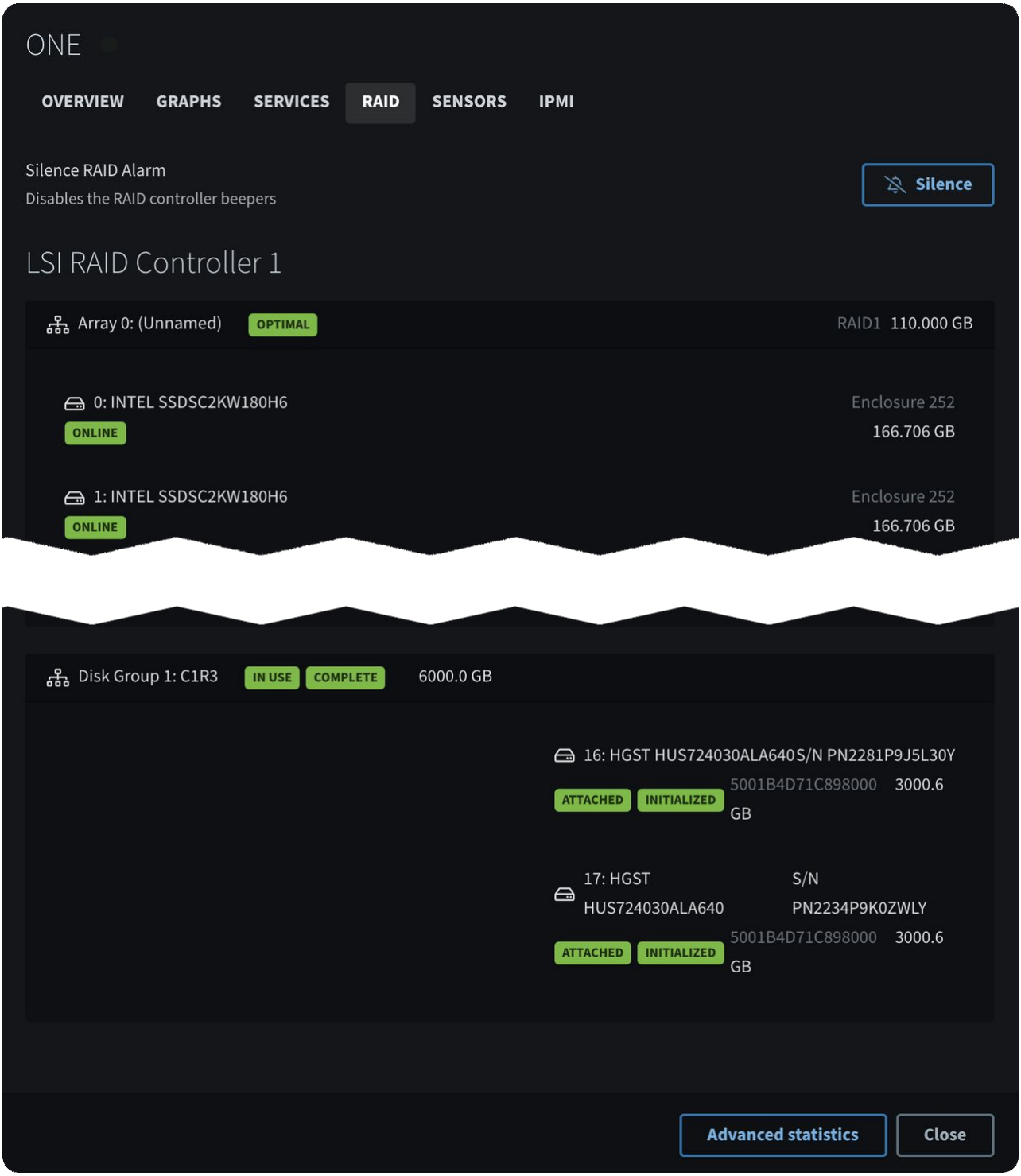
3.3.3 Services tab

With the Services tab it is possible to see and manage all running protocol services.



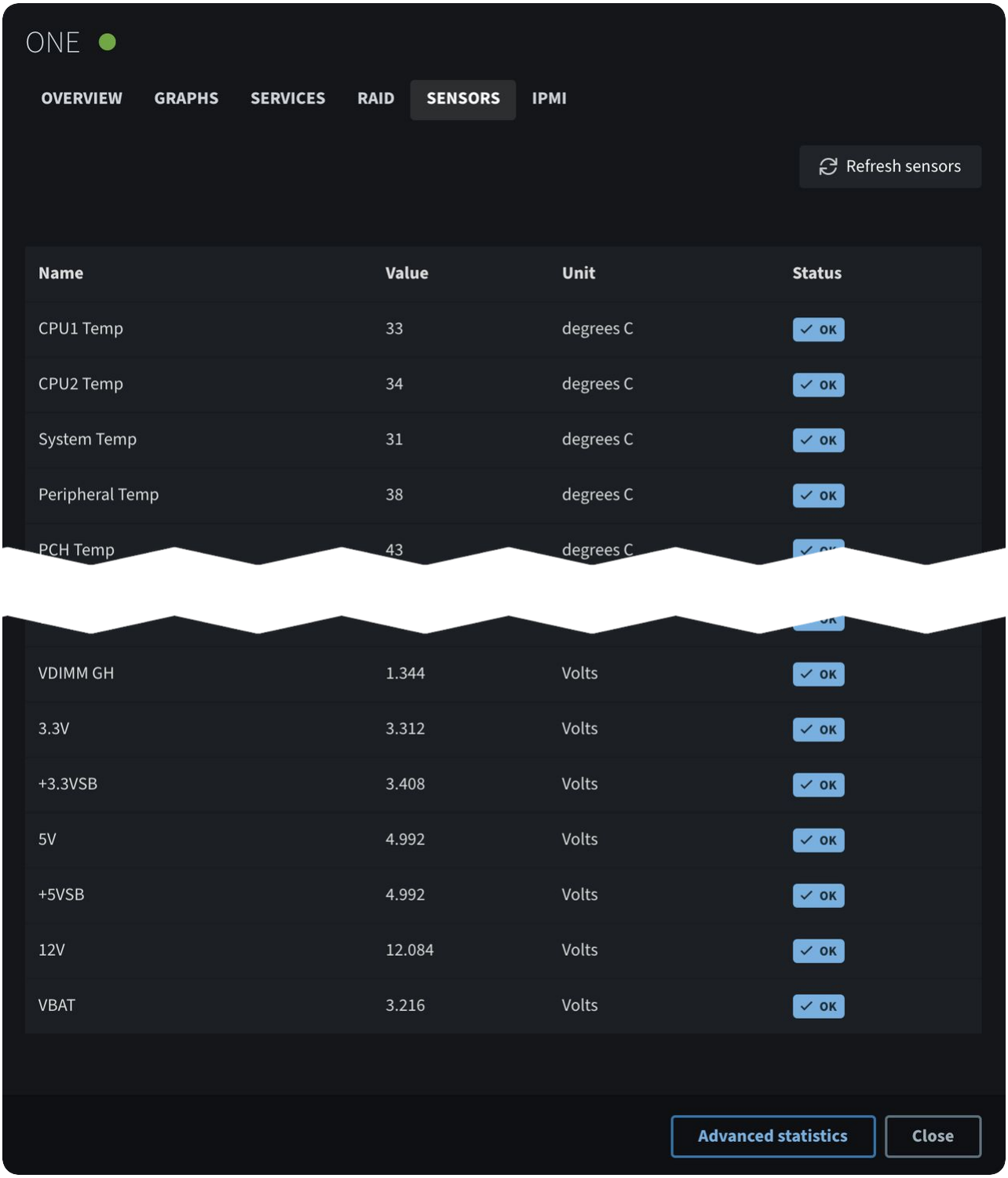
3.3.4 RAID tab

The RAID tab lists all existing RAIDs found on the system. For each RAID the condition of the system will be displayed as well as the status of the related hard drives. The button "Silence" allows the user to silence the alarms of the RAID controllers.



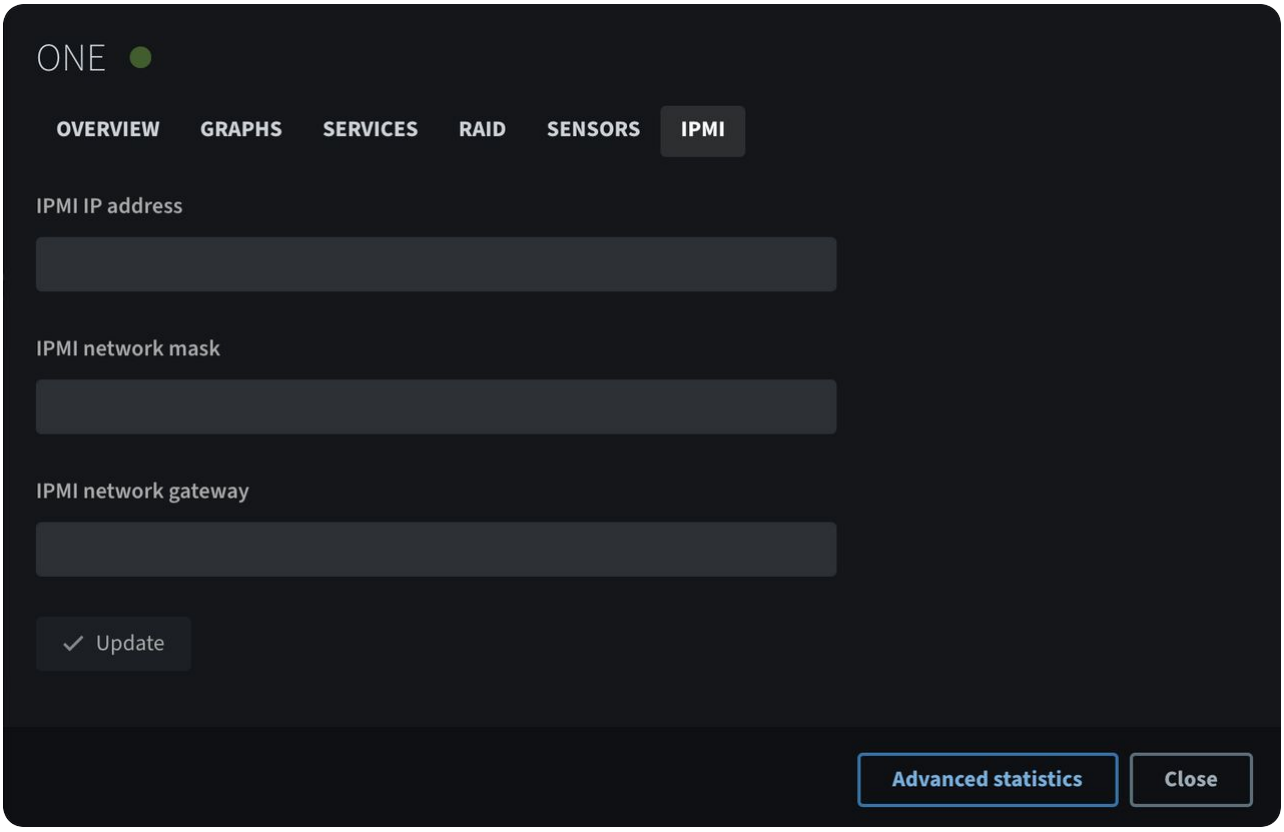
3.3.5 Sensors tab

The Sensors tab shows all sensors and their measurements. With the "Refresh sensors" button it is possible to get the latest measurements of the displayed sensors.



3.3.6 IPMI tab

The IPMI tab allows the user to manage the IP address settings for the IPMI interface. The IPMI IP address can be accessed for support purposes, even when the system is powered off.



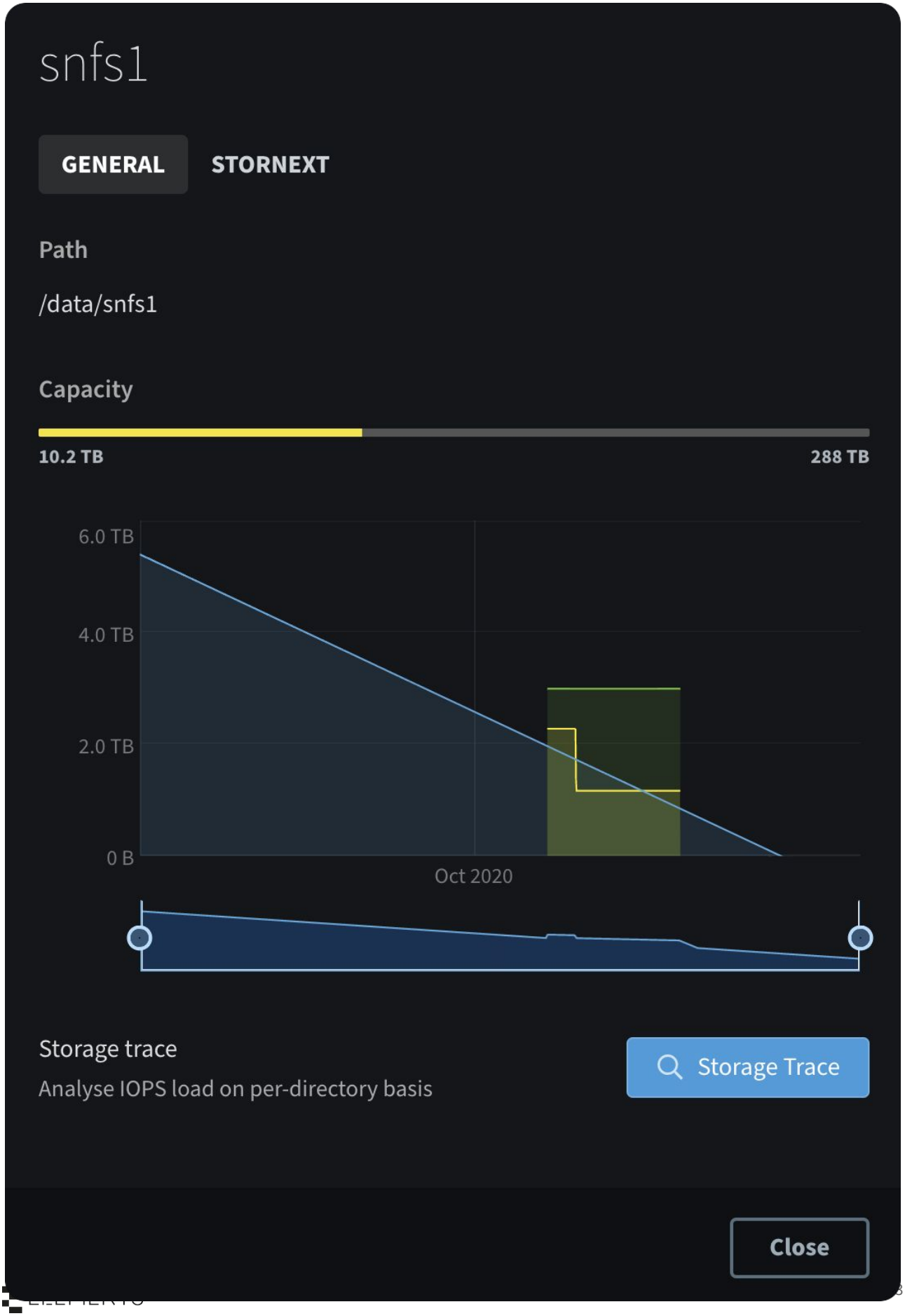
- The field "IPMI IP address" allows the user to change the IP address of the interface.
- With the field "IPMI network mask" the network mask for the IP address of the IPMI can be set.
- With the field "IPMI network gateway" the IP address of the network gateway can be set.
- "Update" will accept all new changes and apply them.

3.4 Volume node information

If a volume is selected the user will be presented with the relevant detailed view of the selected volume node.

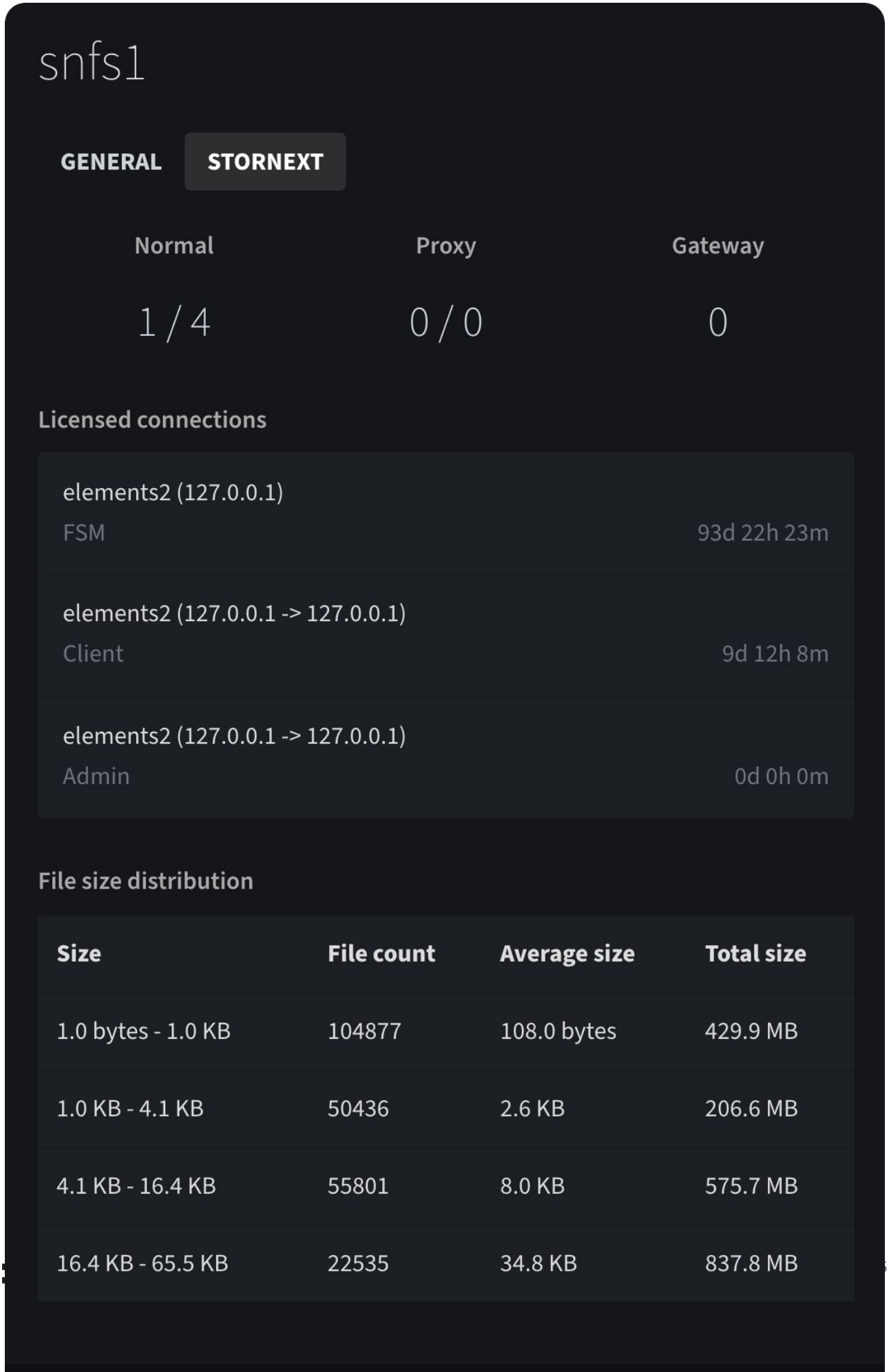
3.4.1 General tab

The General tab displays the path of the volume and the used capacity as well as a graphical depiction of the volume usage. The timeline of the graph can be adjusted using the sliders below. With the button "Storage Trace" it is possible to view the running read and write processes for the selected period (3, 5, 10 or 30 second periods are available). This function helps to monitor data traffic and potentially identify sources of high network traffic.


snfs1
GENERAL
STORNEXT
Path
/data/snfs1
Capacity
10.2 TB
288 TB
6.0 TB
4.0 TB
2.0 TB
0 B
Oct 2020
Storage trace
Analyse IOPS load on per-directory basis
Storage Trace
Close

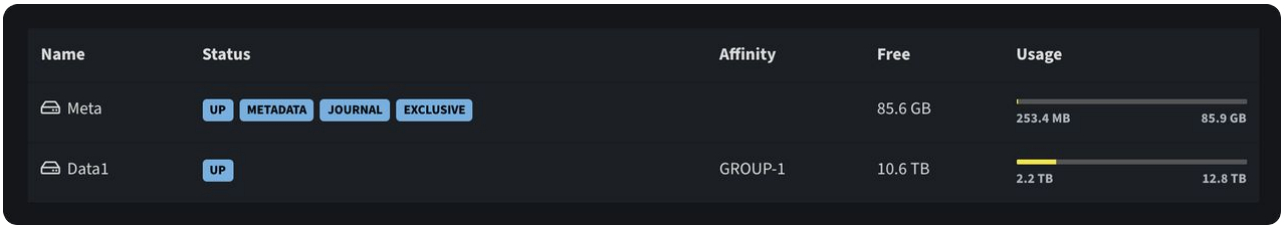
3.4.2 StorNext tab

If the system is running a StorNext filesystem, an additional StorNext tab is displayed, showing relevant information about the selected volume, as well as the file size distribution on the file system.


snfs1
GENERAL
STORNEXT
Normal
Proxy
Gateway
1 / 4
0 / 0
0
Licensed connections
elements2 (127.0.0.1)
FSM
93d 22h 23m
elements2 (127.0.0.1 -> 127.0.0.1)
Client
9d 12h 8m
elements2 (127.0.0.1 -> 127.0.0.1)
Admin
0d 0h 0m
File size distribution
Size
File count
Average size
Total size
1.0 bytes - 1.0 KB
104877
108.0 bytes
429.9 MB
1.0 KB - 4.1 KB
50436
2.6 KB
206.6 MB
4.1 KB - 16.4 KB
55801
8.0 KB
575.7 MB
16.4 KB - 65.5 KB
22535
34.8 KB
837.8 MB

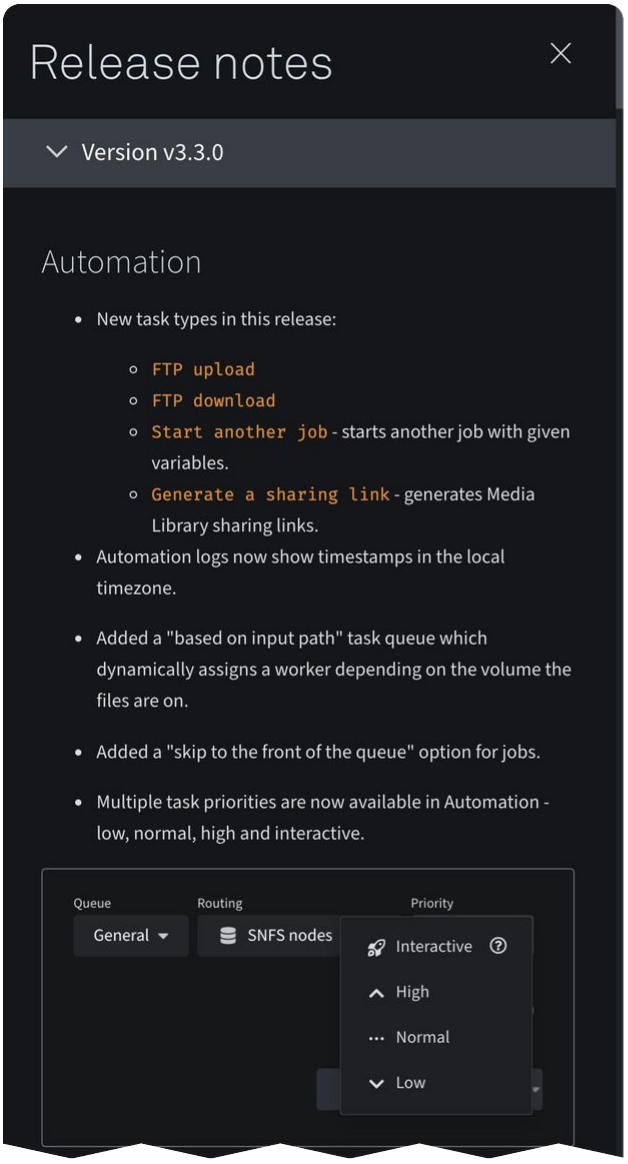
3.5 Stripe group overview

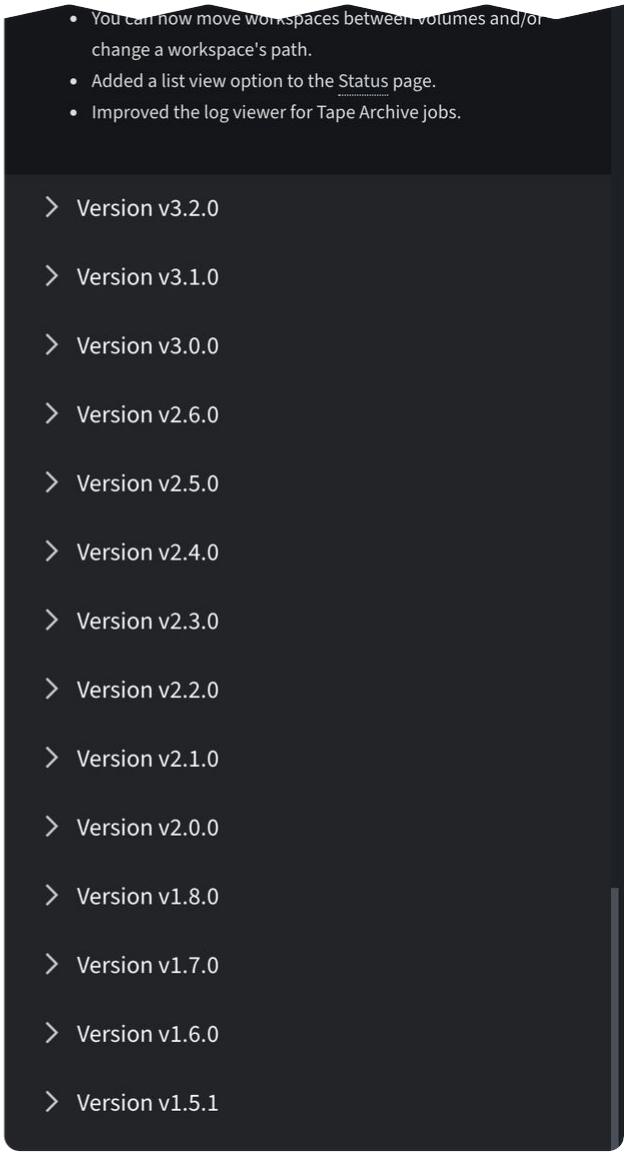
The Status page also provides information about the stripe groups making up the filesystem. Names of the individual stripe groups are displayed as well as their status and capacity usage.



3.6 Release Notes

- Open the release notes by clicking the Web UI version link.
- Release notes appear in a sidebar on the right hand side of the screen and inform the user about new features and important changes in the new version, as well as previous versions of the Web UI.
- By scrolling down and clicking on an older version the user can view older release notes.





3.7 Watch the video

3.7.1 Status page overview

https://youtu.be/60Y-aBXJ_EU

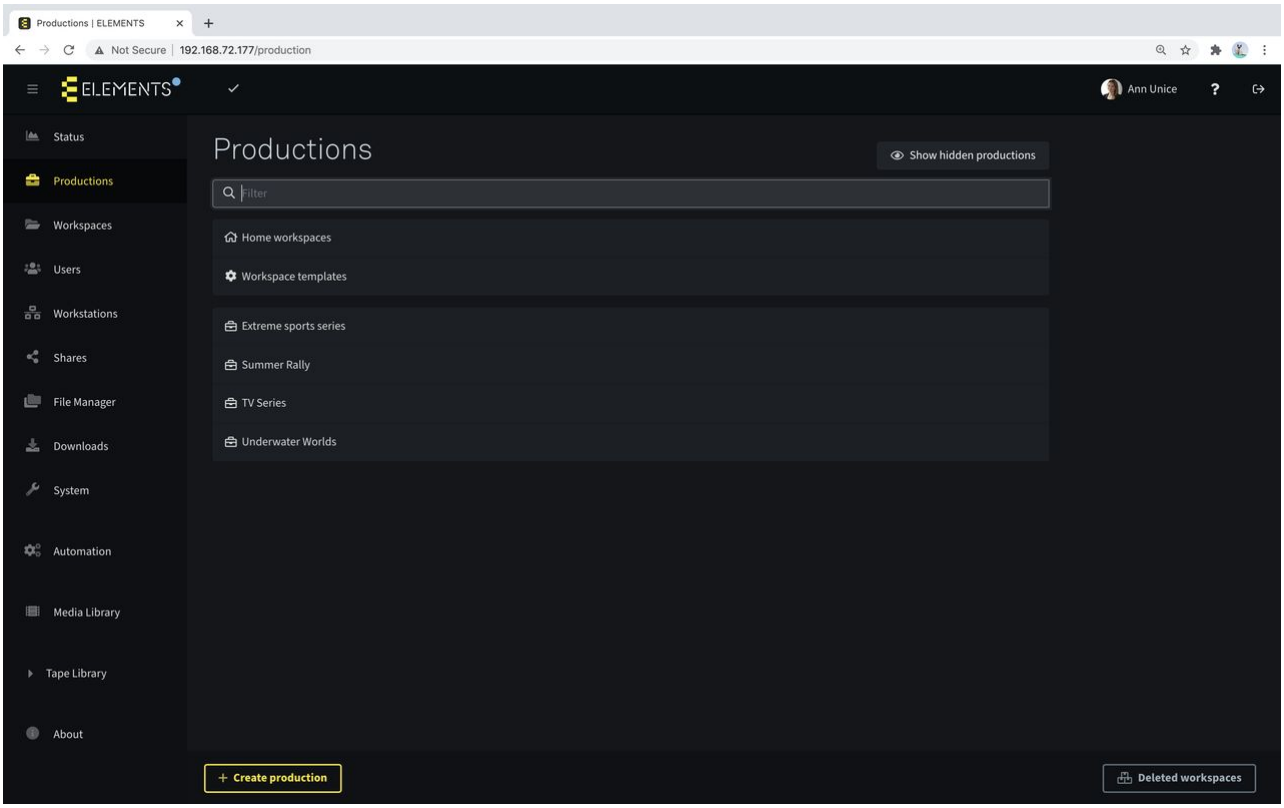
4 Productions

Data on ELEMENTS systems is stored in Workspaces and Workspaces are grouped into Productions. This approach maintains a clear and intuitive structure, even with a large number of simultaneously running projects. At the same time this helps to improve efficiency in processes such as backup and archiving.

- Productions page(see page 29)
- Production settings(see page 30)
  - Workspaces tab(see page 30)
  - General tab(see page 31)
  - Bottom bar(see page 31)
- Watch the video(see page 32)
  - Creating workspaces(see page 32)

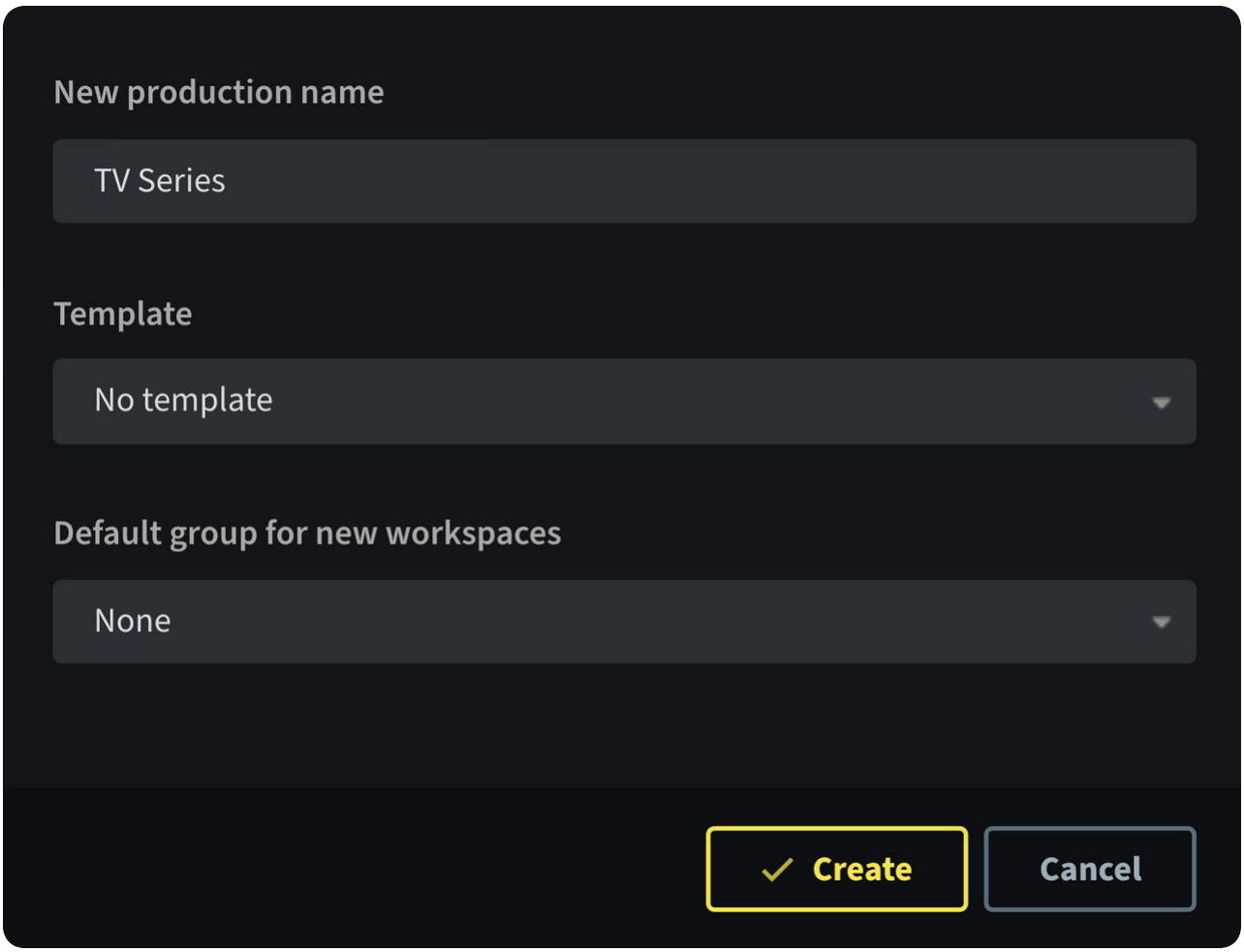
4.1 Productions page

The start page of the productions section displays a list featuring all productions currently found on the system.



- The button "Show hidden productions" adds all inactive productions to the productions list. Inactive productions will be flagged with the word "HIDDEN".
- Clicking the "Home workspaces" button displays all home workspaces in a separate list.
- With the button "Workspace Templates" it is possible to see a list with all workspace templates.
- The button "Deleted workspaces" displays all removed workspaces, which still have data on the system. Clicking on a deleted workspace opens the location of the workspace in the file manager. The workspace data can then be accessed or deleted permanently.
- Using the filter bar, a specific production can be searched by name.

- Underneath the filter bar a list featuring all the productions can be found.
- The button "Create production" opens a popup window with the following settings:
    - The first field allows the user to name the new production.
    - Using the "Template" dropdown menu, a template for creating a predefined production can be selected. The new production will adopt an identical folder structure to the template, including workspaces, folders and files, as well as the relevant access permissions.
    - "Default group for new workspaces" allows the user to specify a group with read and write permissions, which is predefined in every new workspace of this production.
    - The button "Create" will create the production. "Cancel" will abort the creation process.
    - After confirming the creation of the new production, the system will display the new production and its content.



4.2 Production settings

4.2.1 Workspaces tab

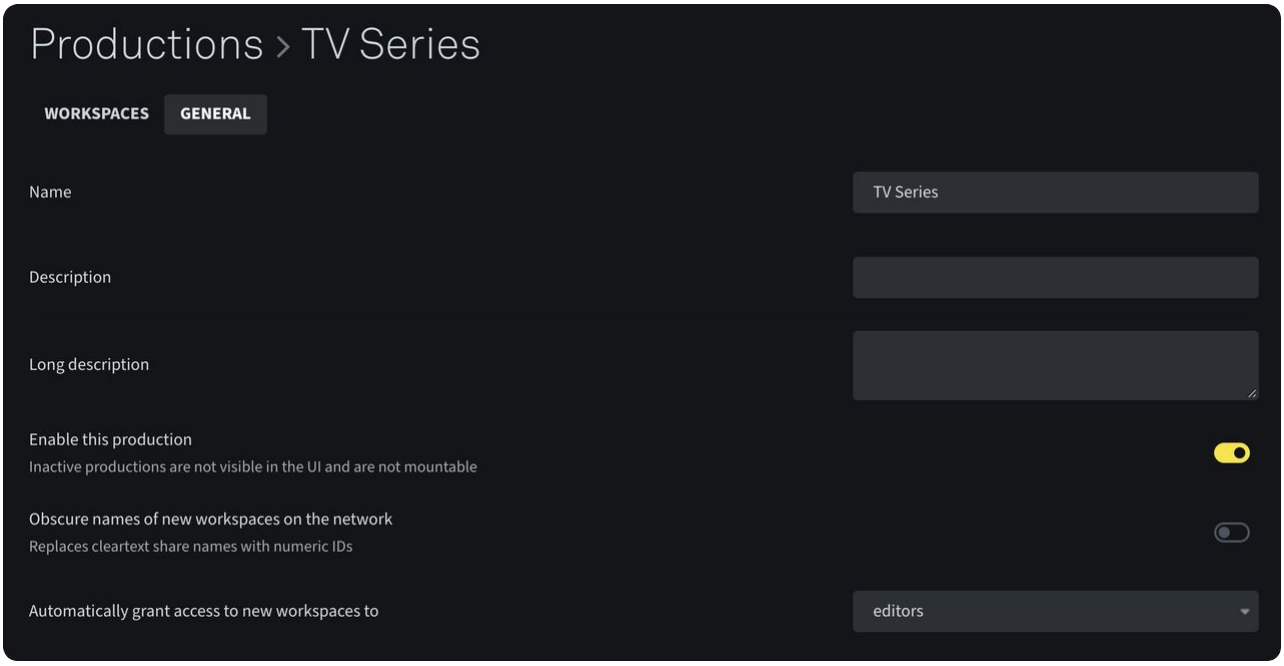
Clicking on any production in the list opens it and displays a list of all workspaces in the production. External workspaces will be marked as "EXTERNAL”, letting the user know that the data is being stored on external storage.

- Clicking on a specific workspace will open the settings of the workspace. It is then possible to modify or edit the selected workspace.

- The Filter bar can be used to search for a specific workspace in the production by name.

4.2.2 General tab

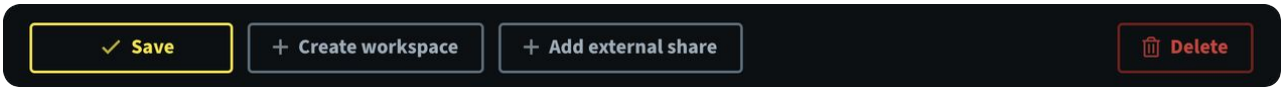
The general tab provides basic settings for the selected production, such as changing the name, adding a description or changing a default access group.



- With the field "Name" it is possible to change the name of the production.
- The textfield "Description" can be used to enter a short description about the production. This description will be displayed in the productions list, right behind its name, and is restricted to a maximum of 255 characters.
- With "Long description" it is possible to make a longer description, not limited by the number of characters. For this purpose it is possible to expand the textfield by dragging the right bottom corner of the field. This description will be shown additionally in "Description" and is searchable in the ELEMENTS Client application.
- If the checkbox "Enable this production" is disabled, the selected production will no longer be shown in the list of active productions. This function helps to maintain order whilst not deleting productions
- After enabling "Obscure names of new workspaces on the network" all newly created workspaces in the selected production will be named with numeric IDs on the filesystem so there are no cleartext names. The Media Library will still display the cleartext name. This function can be used to mask the names of confidential projects on the system.
- If a group is selected for "Automatically grant access to new workspaces to" this group will have preconfigured write access to every newly created workspace in the production. The access permissions can still be changed during the creation of a new workspace, or afterwards in the workspace settings.

4.2.3 Bottom bar

The bottom bar allows the user to save all newly made changes and to create new workspaces in the selected production.



- With the button "Save" all changes can be saved.
- "+ Create workspace" allows the user to create a new workspace for the selected production (a popup window will appear).
    - The first textfield "New workspace name" asks the user to name the workspace.
    - "Template" allows the user to select a template of preconfigured directories or files.
    - With the checkbox "AVID workspace" it is possible to quickly setup the workspace for AVID shared projects.
    - The button "Create" creates the new workspace and "Cancel" aborts the process.
- With the button "+ Create external workspace" it is possible for the user to create an external workspace:
    - The first textfield "New external workspace name" asks for the name of the workspace.
    - With the dropdown list of "Template" the user can choose a template and structure the workspace.
- The button "Delete" deletes the selected production. Confirming the delete request is necessary in the next step. If the checkbox "Delete production content" is marked, all data stored in the production will also be deleted from the system. Otherwise the data will remain stored on the system and will be accessible through the File Manager.

4.3 Watch the video

4.3.1 Creating workspaces

https://youtu.be/QkKYLlyjEcE

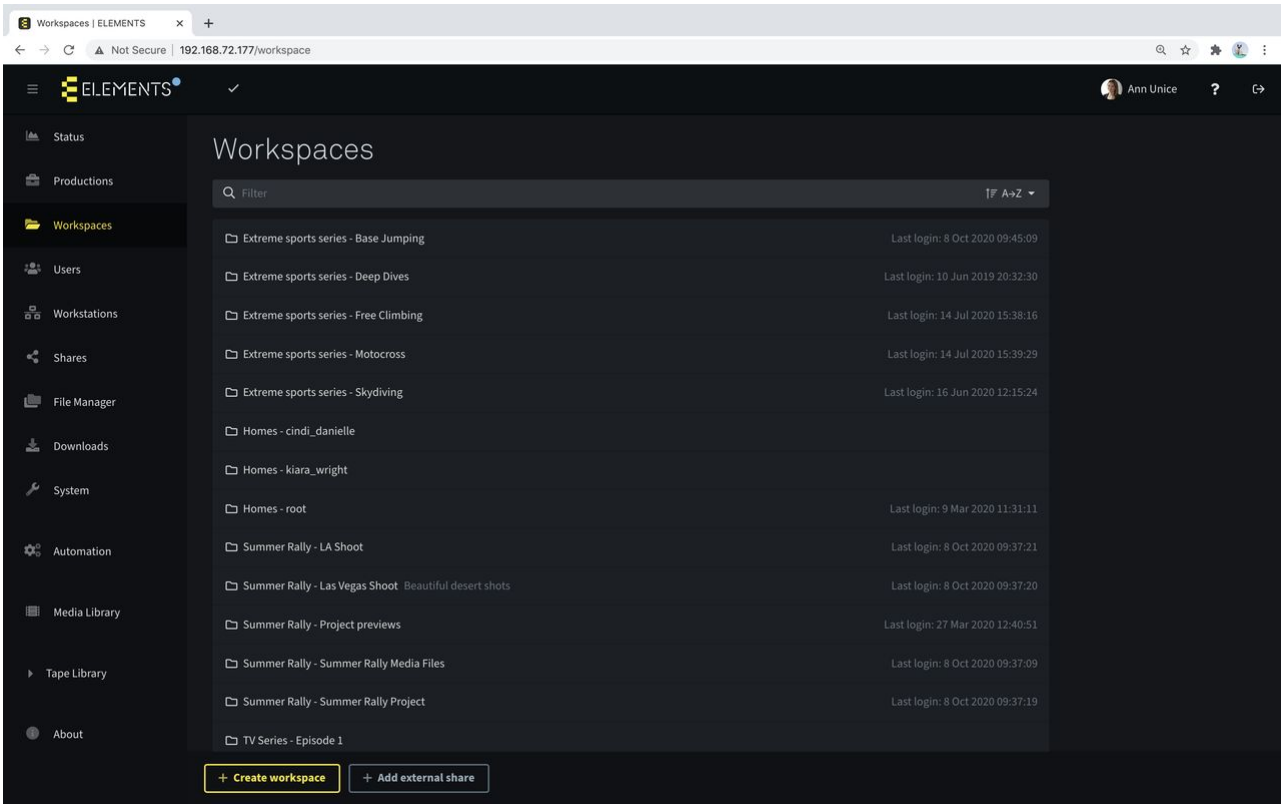
5 Workspaces

Data on an ELEMENTS system is stored in workspaces - a freely-definable and highly-customisable organisational unit. Workspaces can be mounted with a single click using the ELEMENTS Client and can contain any number of files and folders. The Workspaces section in the Web UI allows for a precise configuration of access permissions, quotas, mounting parameters and many more options for every workspace individually.

- Workspaces page(see page 33)
- Workspace settings(see page 34)
    - General tab(see page 34)
    - General tab external workspace(see page 34)
    - Permissions tab(see page 35)
    - Shadow copies tab(see page 36)
    - Advanced tab(see page 37)
    - Advanced tab external workspace(see page 38)
    - Mounts tab(see page 38)
- Bottom bar(see page 41)
- Watch the video(see page 42)
    - Creating workspaces(see page 42)
    - Setting up workspace templates(see page 42)

5.1 Workspaces page

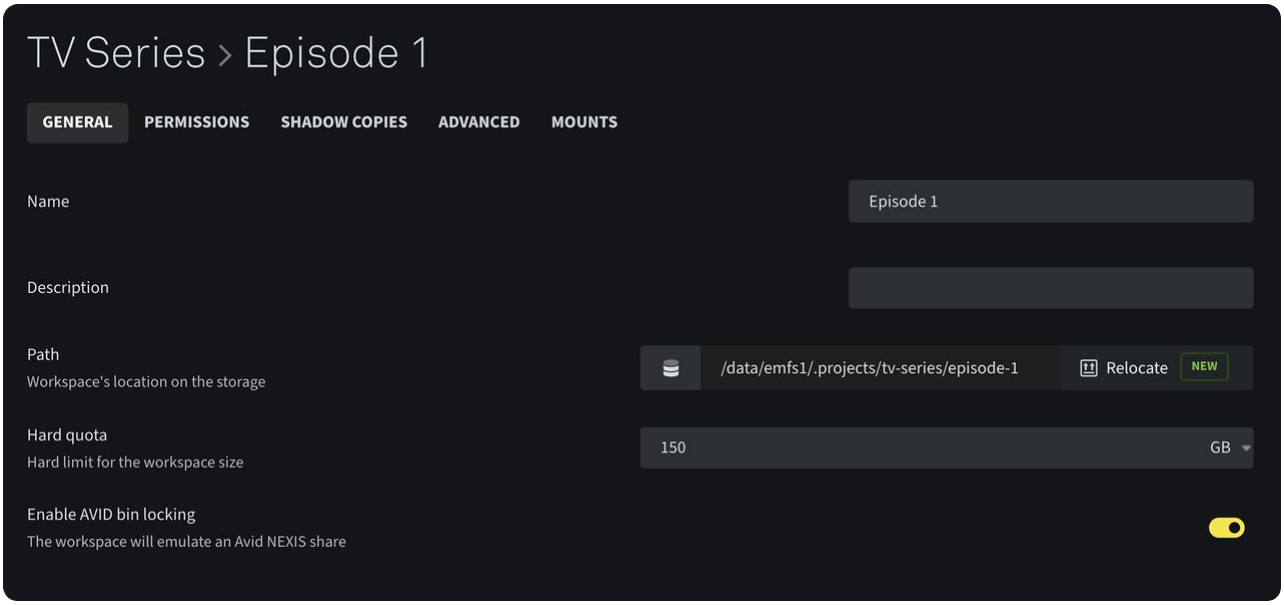
The Workspaces page shows every existing workspace on the system along with the production to which it belongs, its quota status and the last login date. The filter bar allows the user to search for a specific workspace by name. The sorting button on the right side of the filter bar opens a dropdown menu containing the workspace sorting options. Selecting a workspace will open the workspaces settings page.



5.2 Workspace settings

5.2.1 General tab

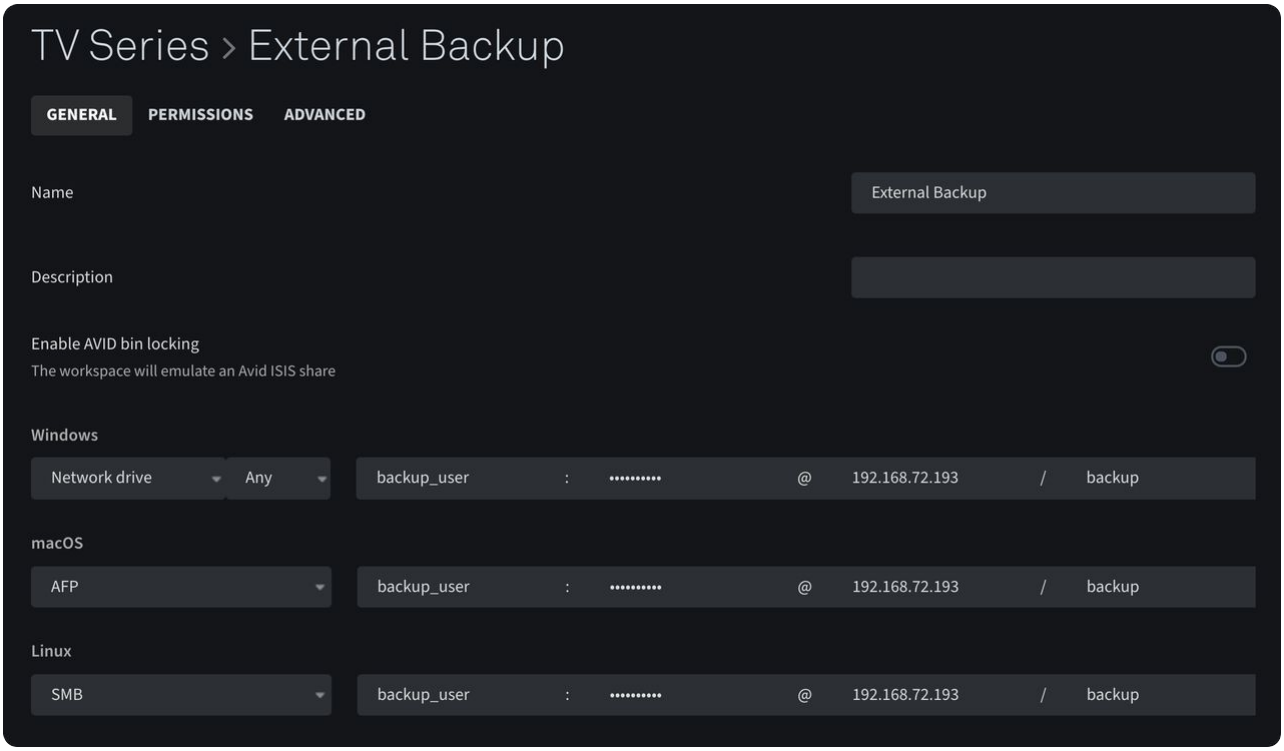
In the General tab, basic workspace parameters such as the workspace name, description and quotas can be set.



- Textfield "Name" allows the user to change the name of the workspace.
- Textfield "Description" allows the user to enter a short description. On the Workspaces page, the description is displayed next to the workspaces name.
- The "Path" fiekds displays the storage path of the workspace on the filesystem. Clicking on the path will automatically select the full path so it can be copied easily. The button "Relocate" on the right side of the path field allows the user to relocate the entire workspace. Even changing the volume is possible.
- The "Soft quota" (available on systems with a StorNext filesystem) allows the user to specify a storage space limit for the workspace. If the soft quota has been exceeded for longer than 7 days, the write access to the workspace will be deactivated. The write access reactivation will automatically occur when the workspace size falls below the set soft quota.
- "Hard quota" allows the user to set an absolute limit to the workspaces size. The set value can not be exceeded with any operation failing after the set quota is met.
- The checkbox "Enable AVID bin locking" allows the user to enable the bin locking function in AVID Media Composer on the workspace.

5.2.2 General tab external workspace

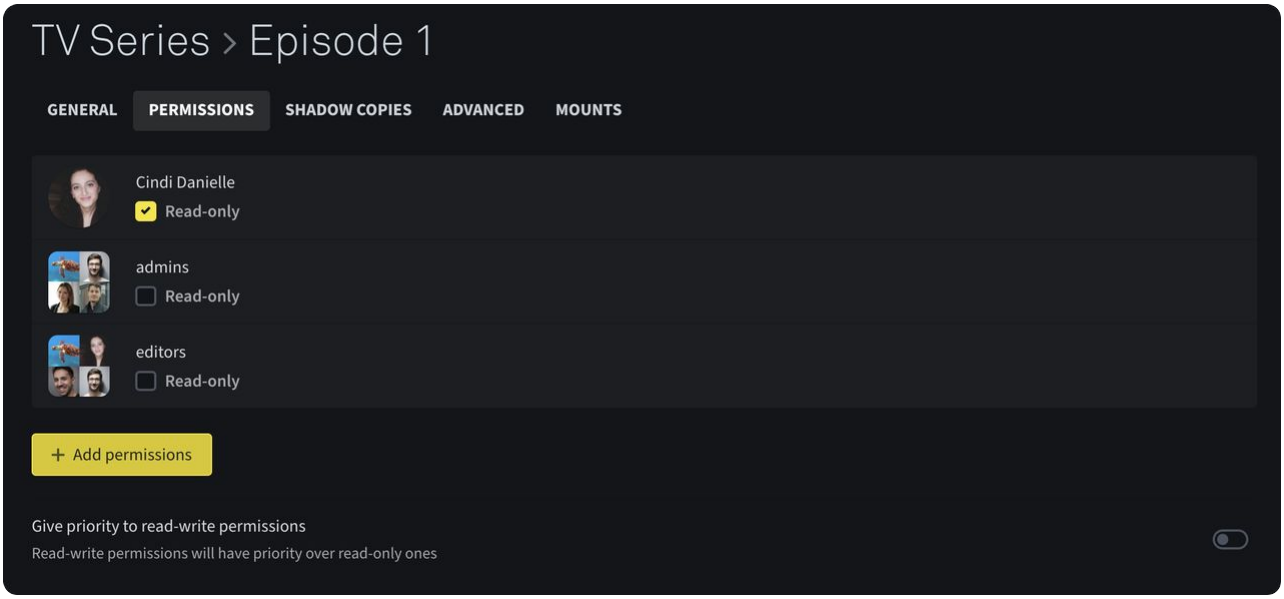
External workspaces provide the functionality of the ELEMENTS Client to access a 3rd party storage device. This function allows for the integration of other storage devices into ELEMENTS workflows. On the 3rd party storage device, a share must be set up and the access permissions granted. To enable the connection between the devices, these settings can be entered in the general tab of the external workspace settings.



- Textfield "Name" allows the user to change the name of the workspace.
- Textfield "Description" allows the user to enter a short description. On the Workspaces page, the description is displayed next to the workspaces name.
- The checkbox "Enable AVID bin locking" allows the user to enable the bin locking function in AVID Media Composer on the workspace.
- The mounting section allows the user to define how the external storage workspace will be mounted on different operating systems.
    - Windows mounting: With the dropdown list it is possible to adjust the way the workspace will be mounted on Windows clients. Choose between mounting as a network folder or mounting as a network drive using the first alphabetically free letter or a specific drive letter. Additionally, user credentials such as username and password need to be entered as well as the host address and the share name, set up on the external storage.
    - Mac mounting: The dropdown list allows the user to define the network protocol, which should be used for mounting this workspace on a Mac. Additionally, user credentials such as username and password need to be entered as well as the host address and the share name set up on the external storage.
    - Linux mounting: It is possible to define the network protocol required for mounting this workspace. Additionally, user credentials such as username and password need to be entered as well as the host address and the share name set up on the external storage.

5.2.3 Permissions tab

With the Permissions tab it is possible to list and manage all users or groups who are authorised to access this workspace.

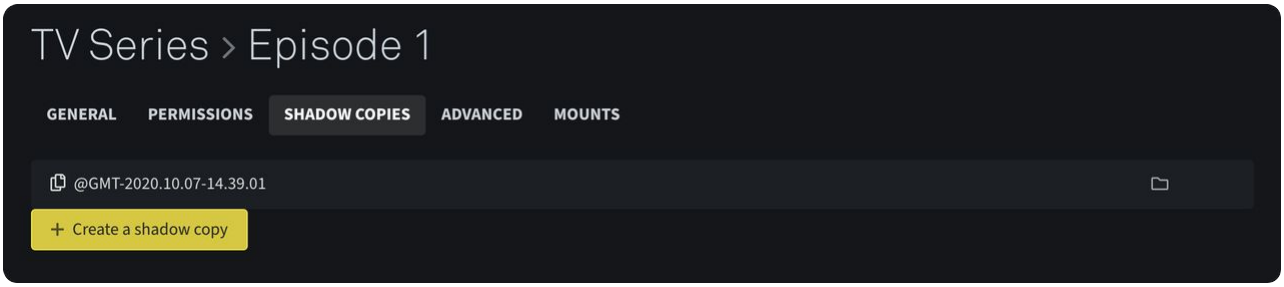


- A list with all users and groups with access to the workspace is be displayed.
  - Turning on the "Read-only" checkbox underneath the user or group name limits the access of a specific user or group to read-only. This function restricts users or groups ability to add, create or modify files in the workspace.
  - When hovering over an entry a trash bin symbol will appear on the right hand side. Clicking the trash bin button deletes the entry from the permissions list of the workspace.
- The button "+ Add user" displays a popup window where permissions can be granted for selected users to gain access to the selected workspace. Clicking the button "Save" in the popup window will add the selected users to the list. The "Cancel" button closes the popup window without changing the permissions list.
- With the button "+ Add group" it is possible to select one or more groups and grant them access to the workspace. Clicking the button "Save" in the popup window will add the selected group to the list. The "Cancel" button closes the popup window without changing the permissions list.
- Enabling the "Give priority to read-write permissions" option will overwrite the read-only permissions of a user if a group to which the user is a part of gets read-write permissions for this workspace.

In the case of an external workspace it is not possible to set the read only permission for a single user or a group. The access permissions need to be adjusted on the external system.

5.2.4 Shadow copies tab

This tab allows the user to manage shadow copies of the selected workspace. Please note that this function is only available on an EMFS filesystem, which can be found on an ELEMENTS NAS and ELEMENTS CUBE.

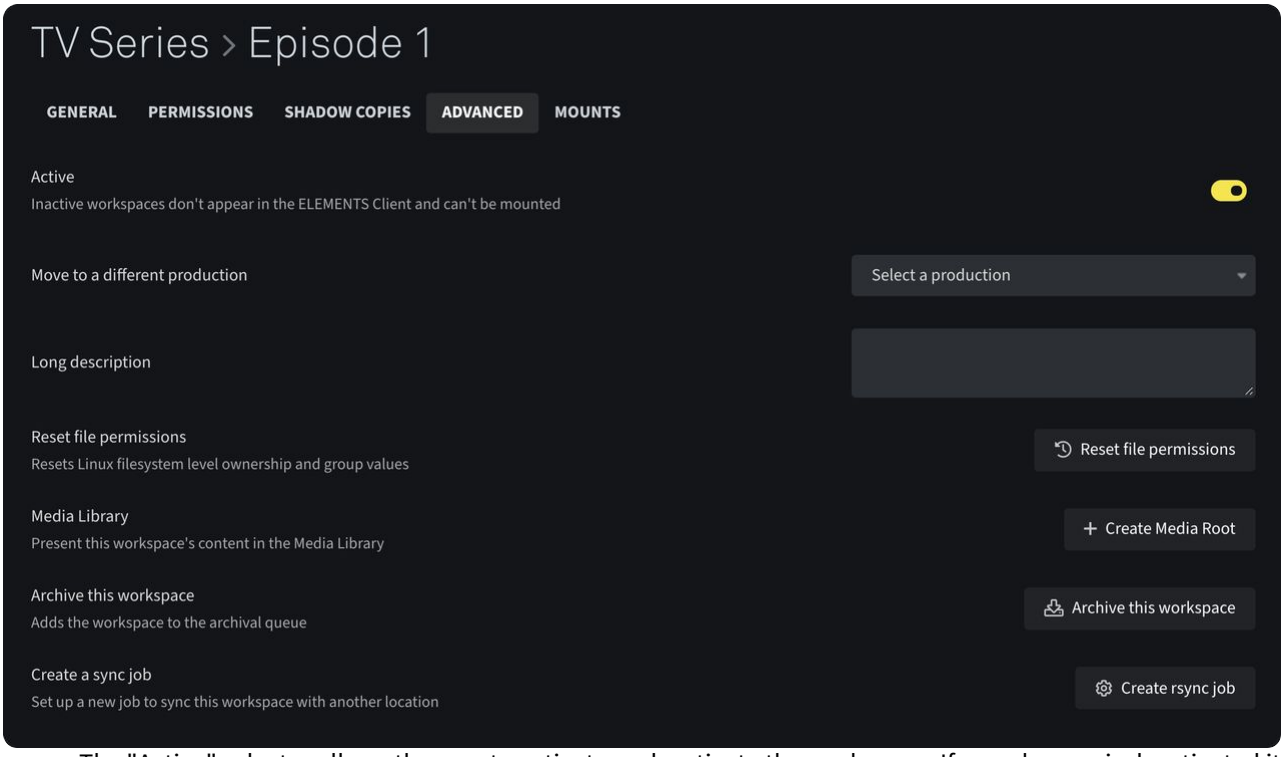


- All existing shadow copies of a workspace will be listed in this tab by date and time.
  - The folder symbol allows the user to browse through the files in the shadow copy by opening the file manager of the web UI.

    - Clicking the trash bin on the right hand side of the entry deletes the concerning shadow copy.
- The button "Create a shadow copy" creates a new shadow copy of the selected workspace.

5.2.5 Advanced tab

The Advanced tab provides additional time-saving functions, such as easy Media Root creation, adding the workspace to the archive queue or setting up a synchronisation task.



- The "Active" selector allows the user to activate or deactivate the workspace. If a workspace is deactivated it will no longer be possible to mount it.
- The dropdown menu "Move to a different production" allows the user to move the workspace into another production.
- With the textfield "Long description" the user can enter a long description for the workspace.
- If the system has several RAID groups it is possible to select or change the RAID group which the workspace is stored on by using the dropdown menu "RAID group". ELEMENTS systems can contain both hard drives and SSDs in one device. By deciding where the workspaces data is stored, users can enjoy the benefits of different storage technologies at the same time.
- The button "Reset file permissions" restores the configured file permissions of the workspace.
- With the "+ Create Media Root" button in the Media Library section, the workspace in question can be used to create a Media Root easily. This function is only available if the Media Library is active on the system.
    - If the Media Library doesn’t yet contain a Media Root with this workspace, the "+ Create Media Root" button will be displayed. Clicking the button opens a popup window with the following options:
        - The "Name" field allows the user to modify the name of the Media Root in the Media Library.
        - The "Path" field is pre-filled with the filesystem path to the selected workspace. If required, the path can be modified.
        - In the "Profiles" list, any number of proxy profiles can be selected. Proxy profiles can be set up in the configuration tab of any Media Root in the Media Library. These determine the settings with which the proxies of the files on the workspace will be created, in order to be displayed in the Media Library. It is necessary to select at least one profile from the list of existing profiles.

        - The "Create" button creates a new Media Root in the Media Library and forwards the user to the configuration menu of the new Media Root.
    - Should a Media Root with the workspace in question already exist, a button "Edit Media Root" will be displayed. Clicking the button will open the settings of the related Media Root.
- "Archive this workspace" will add the workspace to the Archive queue of the Tape Library. Read the full manual on using the ELEMENTS Tape Library.
- The button "Create a rsync job" creates a job in the Automation tab, which will sync the workspace to the chosen destination. A description of how to create an rsync job can be found in the "Jobs" tab in Automation.

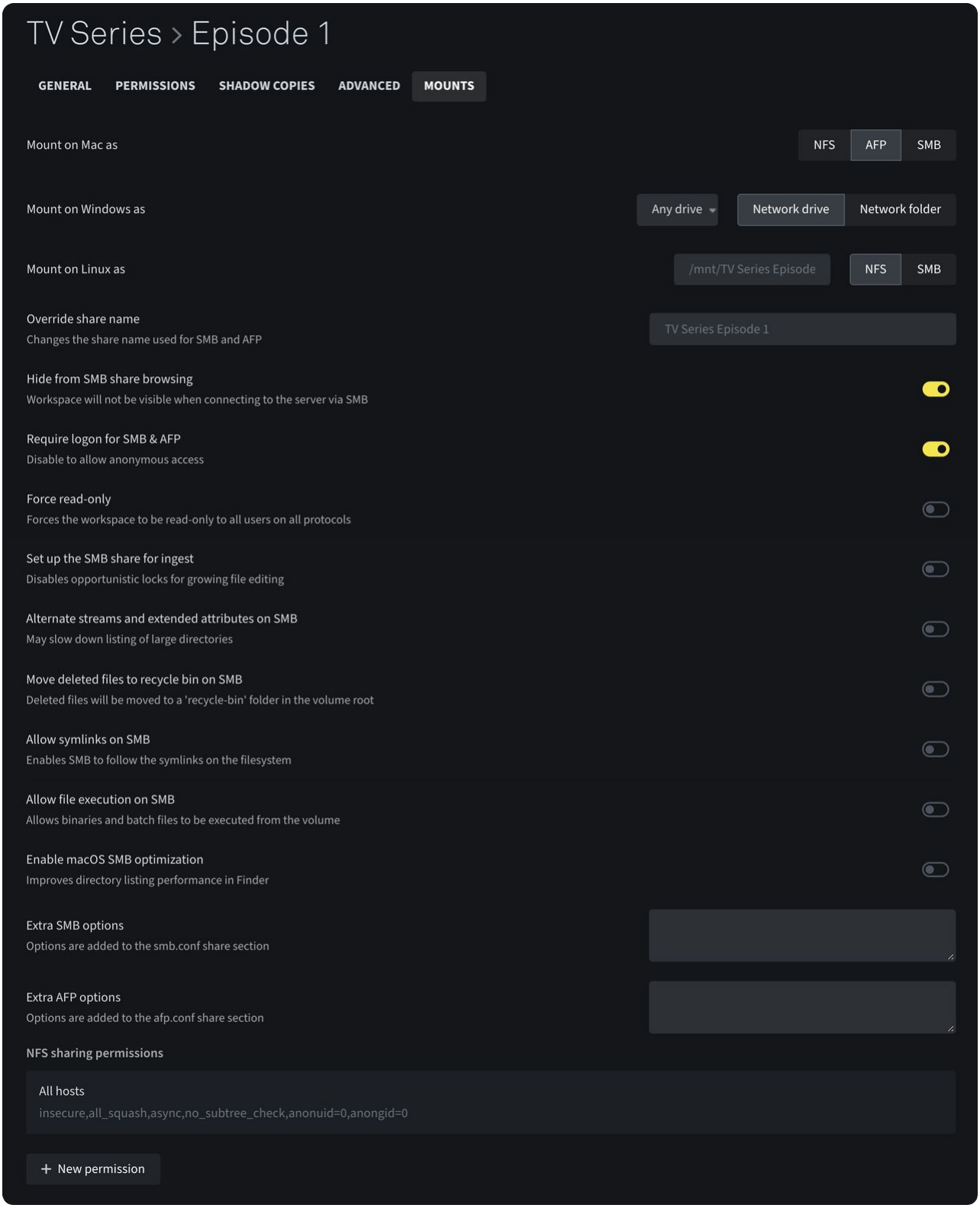
5.2.6 Advanced tab external workspace

The Advanced tab in the settings of an external workspace offers reduced settings.

- The "Active" selector allows the user to activate or deactivate the workspace. If a workspace is deactivated it is no longer possible to mount this workspace.
- The dropdown menu "Move to a different production" allows the user to move the workspace into another production.
- With the textfield "Long description" it is possible to give the workspace a longer description if required.

5.2.7 Mounts tab

The Mounts tab allows precise management of the workspaces mounting settings on different operating systems. On newly created workspaces recommended mount settings (see below) are set automatically.



- With "Mount on Mac as" it is possible to select NFS or AFP or SMB as a protocol used for the mount.
- The dropdown list of "Mount on Windows as" allows the user to determine if the workspace will be mounted as a network drive or a network letter. Additionally, a drive letter for mounting this workspace on a Windows PC can be set. If the drive letter is set, but not available on the PC, the user will be notified and the

first available drive will be offered. Mounting workspaces by using a drive letter on Windows is recommended as certain applications, including NLEs, may require it.

- With the textfield "Mount on Linux as" it is possible to set up the location of the mount on the Linux system. The default mount point on the Linux machine is displayed in the empty text field. It is possible to choose the used protocol for the mount by clicking NFS or SMB on the right side of the textfield.
- "Override share name" changes the displayed name of the mount when one of the protocols AFP or SMB is used.
- The checkbox "Hide from SMB share browsing" will hide the folder of the workspace in question when browsing its parent production by using the Shares function. The workspace will be hidden when accessing the share via SMB protocol.
- Disabling "Require logon for SMB & AFP" makes it possible to access the workspace anonymously, without demanding user login.
- "Force read-only" disables the write access of any group or user so that every user accessing the workspace has read access only.
- If "Set up the SMB share for ingest" is enabled it is possible to access a growing file simultaneously with more than one user.
- The checkbox "Alternate streams and extended attributes on SMB" allows the turning on of alternate streams and extended attributes to create invisible metadata for selected filesystems.
- The option "Move deleted files to recycle bin on SMB" can prevent data loss through human error (accidental file deletion). This function is available only for shares connected via SMB protocol. If this function is activated a textfield "Recycle bin exclude" will appear. This function allows certain file formats to be excluded from the recycle bin function. Simply enter the extensions of file format to be excluded, e.g ".zip,.png". In this example, deleted ZIP archives and PNG files will not be moved to the recycle bin but deleted permanently.

- Activating "Allow symlinks on SMB" allows SMB to follow symbolic links on the file system.

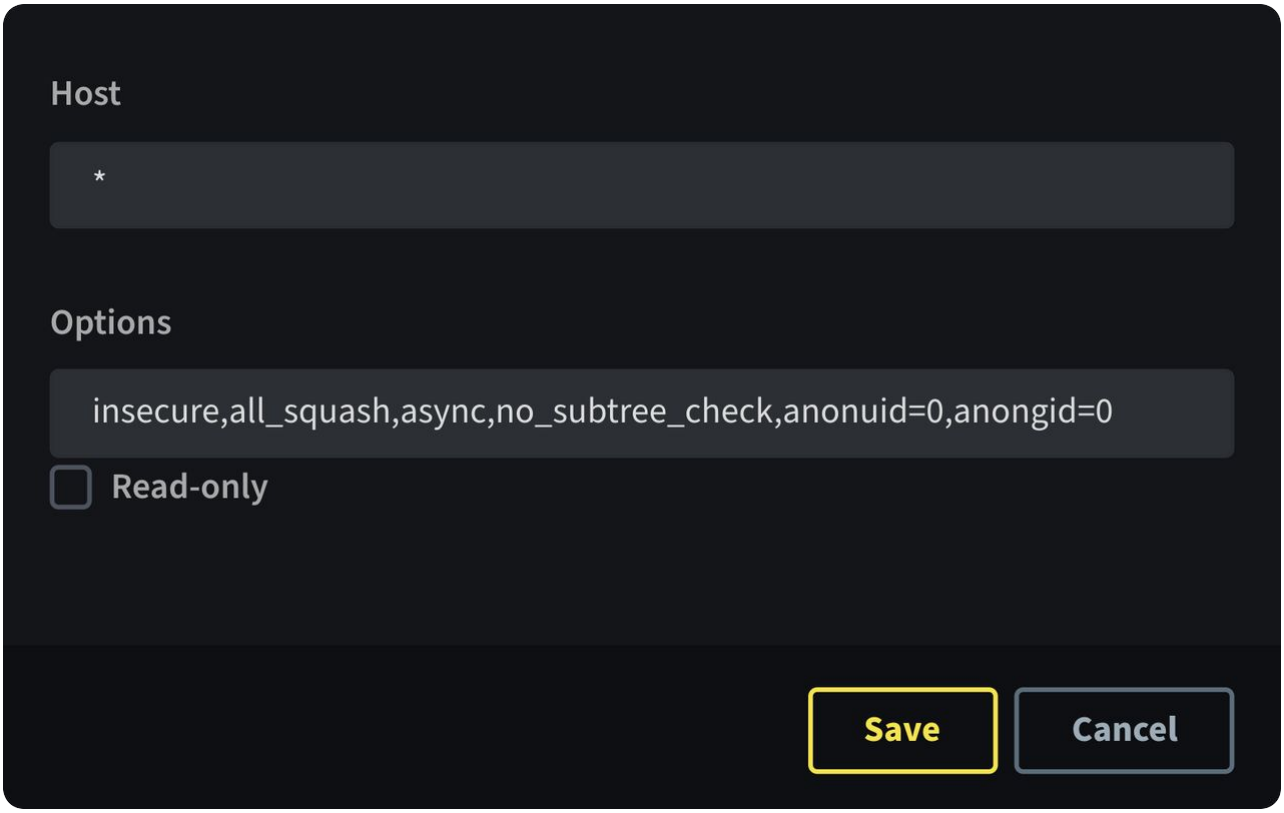
> **Symbolic links:**
> A symbolic link or symlink is a file that contains a reference to another file or directory in the form of an absolute or relative path that affects path resolution.

- With "Allow file execution on SMB" it is possible to execute binaries and batch files if the workspace is mounted via SMB. This function is disabled by default.
- The option "Enable macOS SMB optimization" enables emulation of Apple's SMB protocol feature enhancement to speed up directory listings and workaround compatibility issues with Final Cut X etc.

> **Warning:**
> Not for general usage, only enable when it is required. Must be enabled on all workspaces that will be mounted on a Mac to work as expected.

- "Additionally Share Using" will display the workspace in the file manager of the workstation via the activated protocol, even when this protocol is not used for this workspace. This option is only available if NFS and/or AFP were not selected for mounting on Mac/Linux.
- With "Extra SMB options" it's possible to configure the access for an SMB share more precisely.
- The textfield "Extra AFP options" allows the user to setup the settings for an AFP share more precisely.

- "NFS sharing permissions" displays all given permissions for an NFS mount and allows the user to delete permissions or create new ones.
    - If the permission field is selected, a popup window will appear. In the popup window the host and options can be chosen for the selected permission. The checkbox Read-only deactivates the write access for the share. The button "Save" saves all changes and the button "Cancel" closes the window without saving.
    - With the button "+ New permission" the user can create a new permission for NFS. After clicking the button a popup window will appear, which asks for a host address. After confirming the host address with the button "Save" the popup window will disappear and the permission will be added to the list of permissions with standard settings. By selecting the permission it is possible to modify the permission.



5.3 Bottom bar

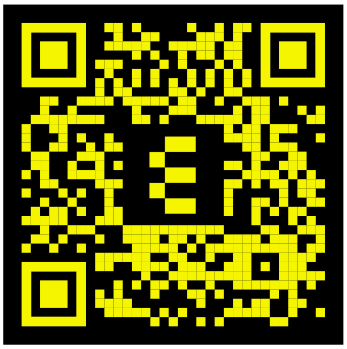
The bottom bar provides the following functions for the selected workspace:

- The button "Save" will save all made changes in the settings of the selected workspace.
- With "Open locally" the system will mount the workspace on the used computer by using the ELEMENTS Client app.
- "Browse contents" redirects the user to the workspace in the "File manager" section.
- The button "Delete" deletes the workspace.

5.4 Watch the video

5.4.1 Creating workspaces

https://youtu.be/QkKYLlyjEcE



5.4.2 Setting up workspace templates

https://youtu.be/o3xq86Z-nsI

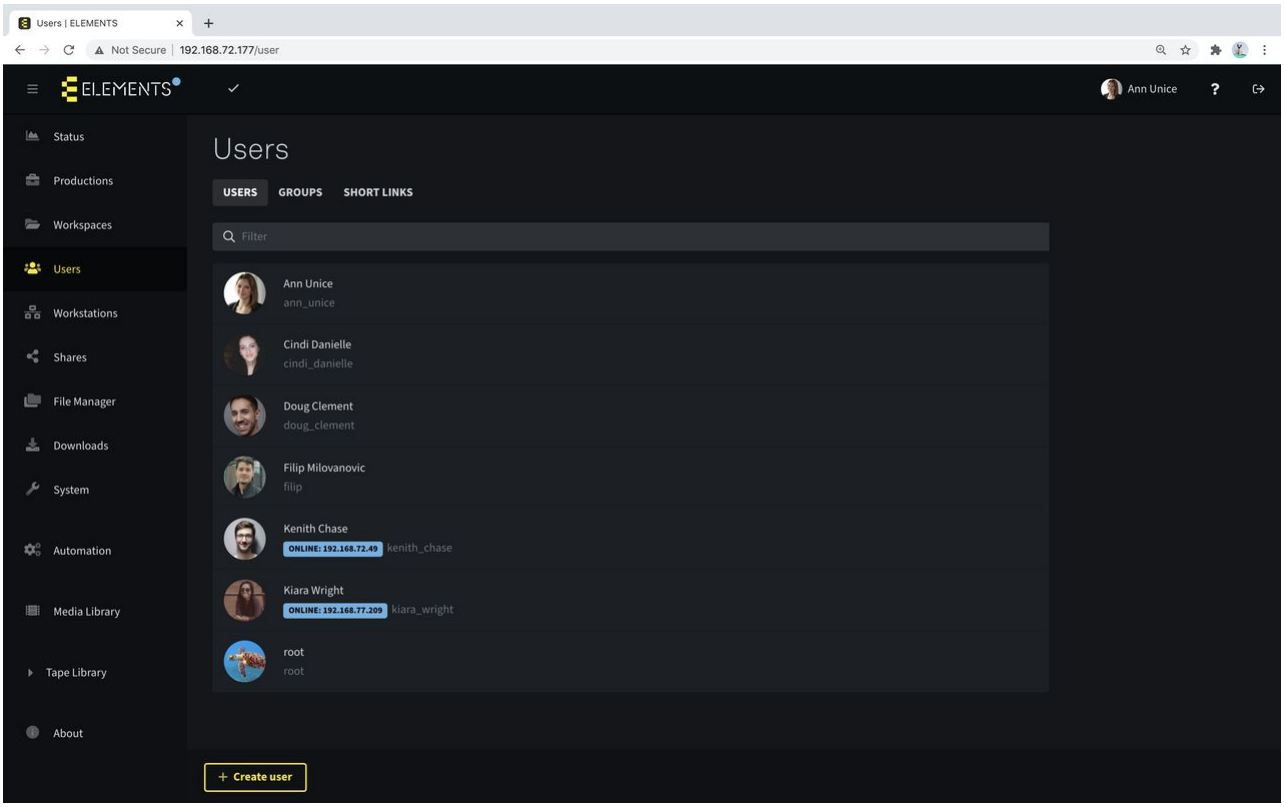
6 Users

The Users page offers a wide range of tools to easily manage users and groups on the system. The intuitive and structured approach offers easy-to-understand permissions management. ELEMENTS also provides the opportunity to easily integrate Active Directory.

- User tab(see page 43)
- Click user tab(see page 44)
- Groups tab(see page 44)
- Connections tab(see page 45)
- Short links tab(see page 45)
- Settings of a user(see page 46)
    - General tab(see page 46)
    - Groups tab(see page 47)
    - Security tab(see page 47)
    - Workspaces tab(see page 50)
    - Advanced tab(see page 51)
    - Bottom bar(see page 51)
- Settings of a group(see page 51)
    - General tab(see page 51)
    - Security tab(see page 52)
    - Bottom bar(see page 53)
- Watch the video(see page 54)
    - Creating a user(see page 54)
    - Creating a group(see page 54)
    - Setting up Two-factor authentication via App(see page 54)

6.1 User tab

The User tab shows a list of all the existing users on the system and allows you to manage them.



- The filter bar above the user list allows to search for a specific user by name or username.
- With the button "+ Create user" it is possible to create a new user by choosing the username in the popup window. After confirming the username a new user will be created and the users settings page opened.
- User settings can be accessed by clicking on any user in the list.

6.2 Click user tab

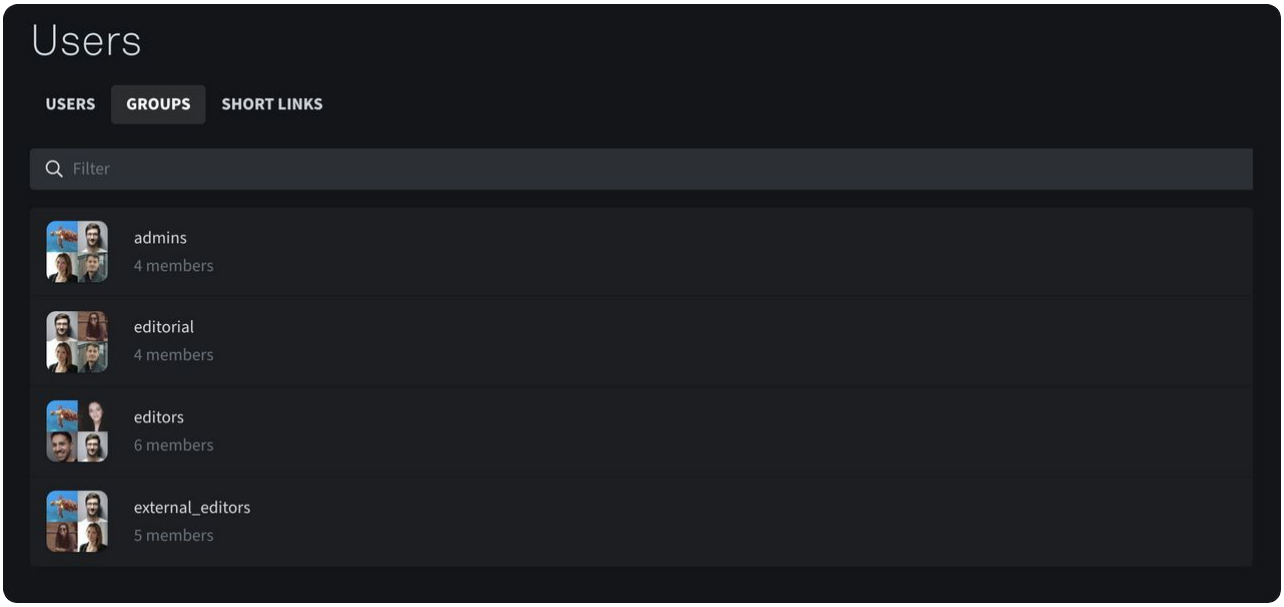
This tab shows all existing ELEMENTS Click users and allows their management. ELEMENTS Click is a cloud-based Media Asset Manager with a direct connection to the Media Library for sharing the proxies, comments and ratings. Please note that ELEMENTS Click is an additional paid feature.

- After selecting a click user the system will open the settings of the click user.

6.3 Groups tab

The groups tab lists all existing user groups and allows the user to manage them.

- The filter bar above the group list allows the user to search a specific group by name.
- With the Button "+ Create group" it is possible to create a new group by entering a new group name in the popup window. After confirming the group name the system will open the settings of the new group.
- By selecting a specific group it is possible for the user to edit the settings of the group.



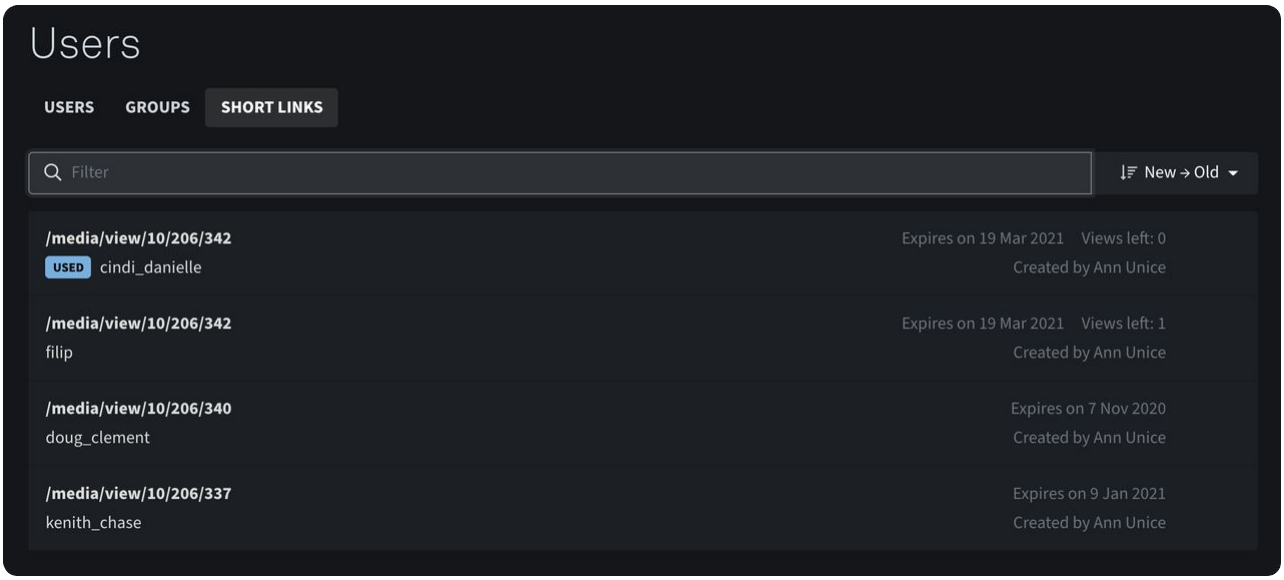
6.4 Connections tab

The connections tab shows a list of all the existing users.

- The filter bar allows you to search for a specific user or an ip address as well as a mount point etc.

6.5 Short links tab

The short links tab displays a list of all links shared from the Media Library when using the share via link function. Selecting one of the links from the list allows to manage the sharing options.



- This tab displays the list of shared short links together with information about which user created the link, expiry date, remaining view count as well as the users that have permission to access to the link.
- By selecting a short link a popup window will appear, which allows the user to manipulate the URL and the destination of the link.

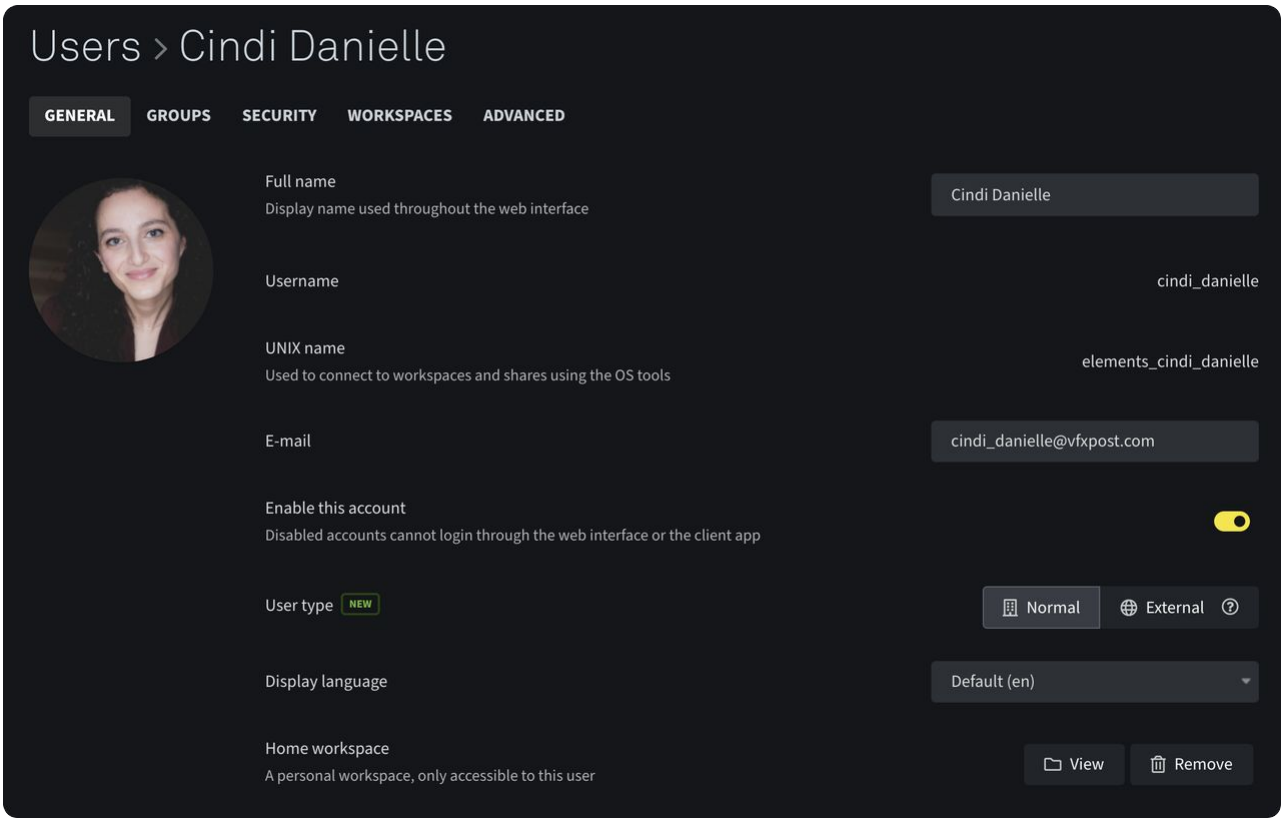
- The trash bin, which appears when hovering over the short link, allows the user to delete that specific entry.

6.6 Settings of a user

Selecting any user in the user list opens its settings. User settings are divided into five tabs.

> **Important**
> Please change the default root password.

6.6.1 General tab

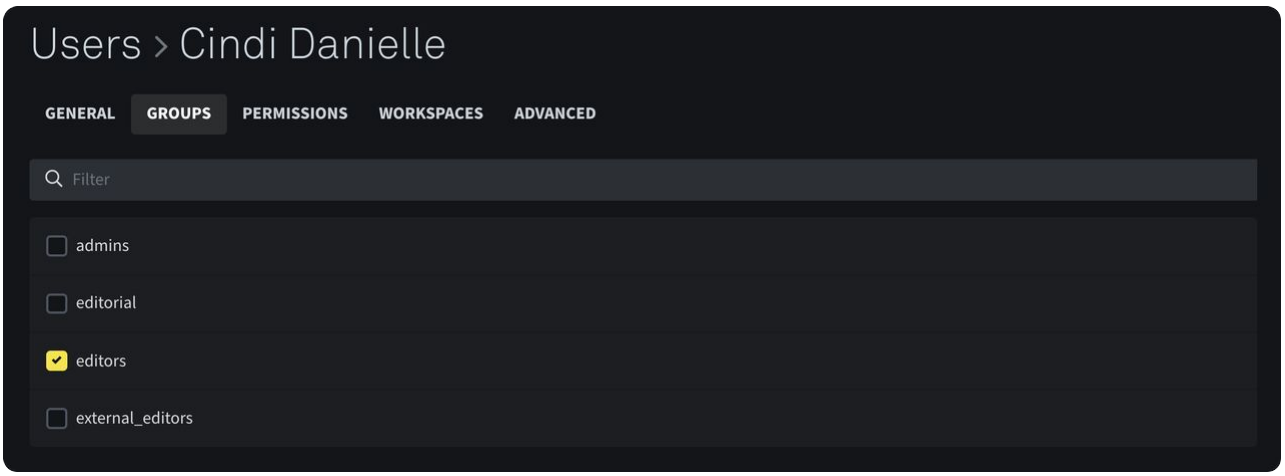


- The "Full name" field allows to set the users display name.
- The username is automatically generated based on the users full name and cannot be modified after user creation.
- The UNIX name shows the username of the user on UNIX level. This name is automatically generated by the system and cannot be modified after user creation.
- The "E-mail" field allows to define an e-mail address for the selected user. The e-mail address can be used for logging in instead of the username. If the e-mail account has been setup properly in the System menu, the system can use the entered user e-mail address to send user notifications or to share assets from the Media Library.
- "Enable this account" feature allows to enable or disable the user account. Should the user be disabled, it will remain on the system but will not be able to log in. That feature is especially useful for freelancer accounts. These usually only require temporary access and the account can be deactivated when not needed. Automatic account deactivation after a certain date can also be set up in the Advanced tab.

- The "User type" selector allows you to mark a user as an external user. External users can not see some internal informations like a list of other users. This function can be used to keep your company internal information hidden from external users.
- With the "Display language" selector, the language of the WebUI can be adjusted for the selected user. The WebUI is available in English, German, French or Russian language.
- "Home workspace" section allows the creation of a users personal workspace, that only the user has access to through the ELEMENTS Client. Users with administrative permissions can still manage and access the home workspaces. Creating a home workspace can be done via the "+ Create on …" button. If a home workspace already exist it is possible to open the settings(see page 33) of the workspace with the button "View" or to delete the workspace with the button "Remove". The remove function will not delete the data from the system only the database entry will be deleted so it is still possible to access the data on the filesystem.

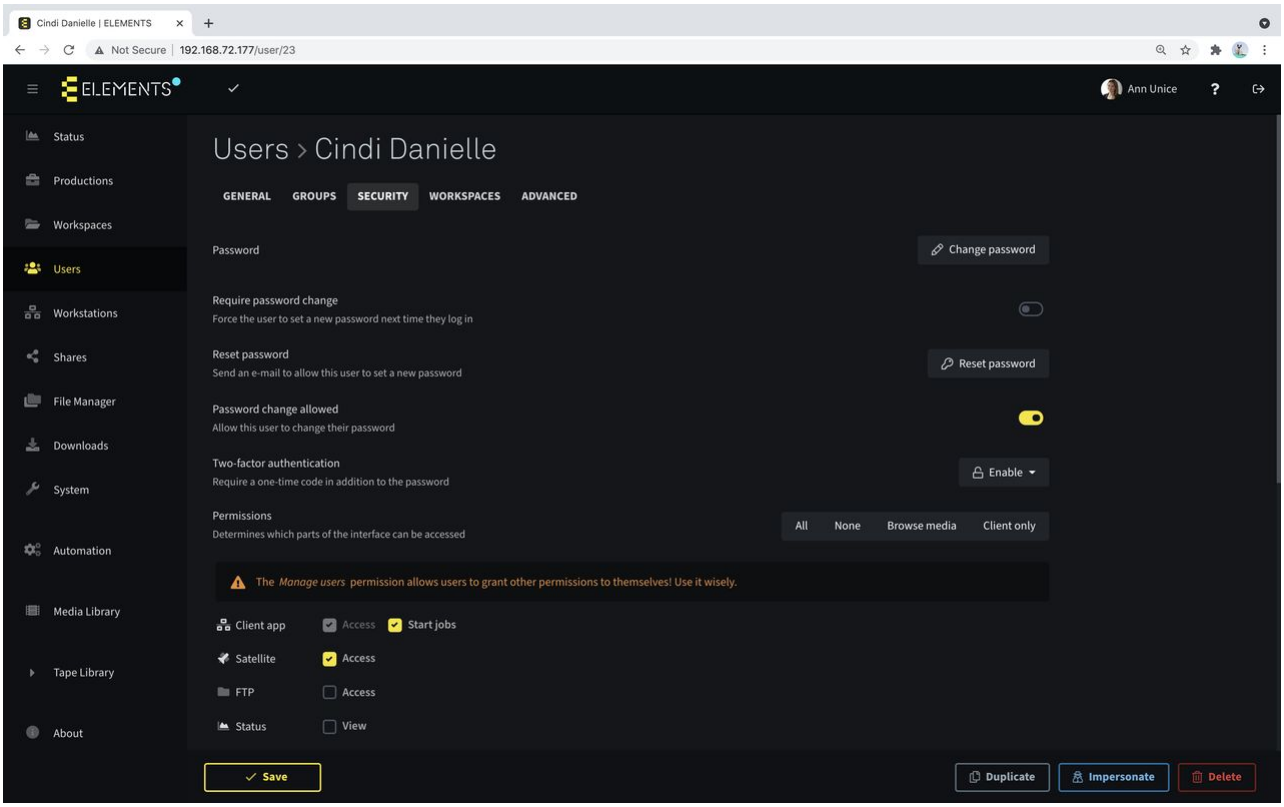
6.6.2 Groups tab

The groups tab allows you to add the selected user to one or more groups by easily checking the checkboxes of the existing groups where the user should be added. If a group has more permissions than the user, user permissions will be expanded.



6.6.3 Security tab

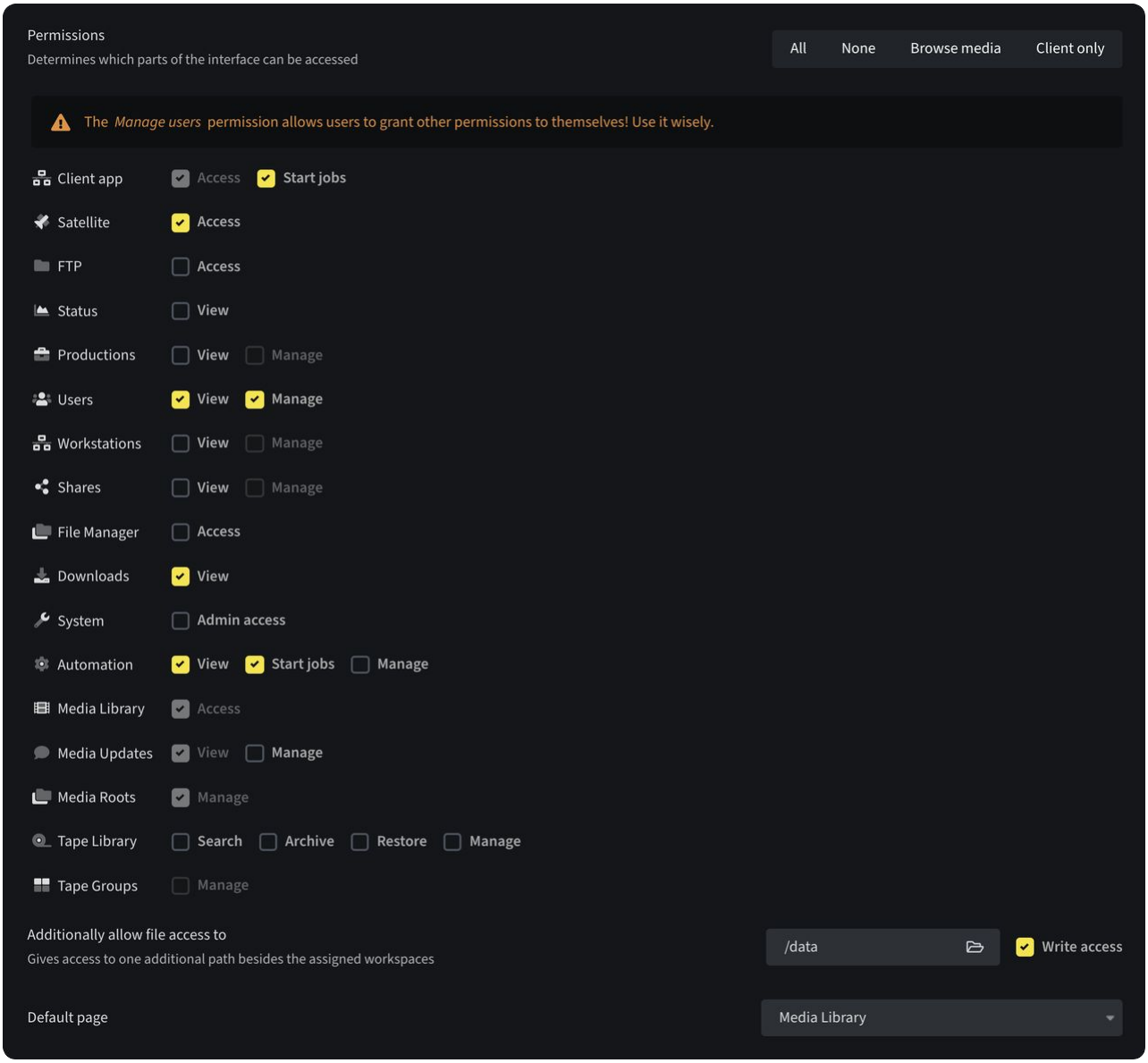
In the Security tab, user login data and access permissions for individual sections and functions of the Web UI, as well as the ELEMENTS Client app, can be set.



- Use the "Change password" function to set up a new password for the user. Clicking the button opens a popup window where the new password needs to be entered and confirmed. The button "Random" allows for the creation of a random password, which will be displayed after clicking the button. "Try again" generates a new random password. The new password has to be confirmed with the "Set password" button.

Please note:
ELEMENTS recommends using the characters A-Z / a-z / 0-9 for user password.

- By enabling the option "Require password change" the selected user will be prompted to change the password upon their next login in the Web UI or the ELEMENTS Client.
- "Reset password" will send an e-mail to the selected user who will then be able to change the password using the link.
- The checkbox "Password change allowed" allows the user to change their own password at any time.
- Two-factor authentication can be enabled for every user individually. This feature can be used with a TOTP Dongle or with an App on a smartphone or tablet. For using a TOTP Dongle the user needs to enter the six-digit secret key as well as the current code from the dongle. To activate TOTP via an app, scan the QR code with a smartphone and enter the generated code. Please note that this option can be allowed or restricted by the administrator.



The default permission for newly created users allows only a login into the ELEMENTS Client. These settings can be restored by using the "Client only" preset.

- The buttons "All", "None", "Browse media" and "Client only" will set up the following predefined permissions:
    - "All" grants the user all permission.
    - "None" disables all permissions.
    - "Browse media" preset enables permissions needed to use the Media Library.
    - "Client only" grants the user access to the system only by using the ELEMENTS Client application.
- "Client app" enables the login from the ELEMENTS Client application. The permission "Start jobs" allows the user to start automation jobs through Windows Explorer or macOS Finder on the workspaces mounted through the ELEMENTS Client application.
- "Satellite" allows the user access to the remote editing tool ELEMENTS Satellite.
- "FTP" allows the user to access its data via the File Transfer Protocol.

- With the "Status" page the user can see all the important information about the system as well as current metrics like CPU and RAM memory load or the systems fill capacity etc.
- "Productions" "View" allows the user to see all productions and workspaces on the system. With "Manage" the user can configure the settings of the productions and workspaces.
- "Users" "View" allows the user to see all users present on the system. If "Manage" is also selected, the user will be able to edit users and create new ones.
- The "Workstations" section grants the user with the rights to view or manage shared workstations for the Satellite remote editing tool.
- With "Shares" "View" the user can see all existing shares on the system and if the permission "Manage" is also given, the user can edit the shares and create new ones.
- The "File manager" permission allows the user to browse through the filesystem and manage the files on the ELEMENTS system straight from the Web UI.
- If "Downloads" are enabled the user can access the download page to download the ELEMENTS Client application for offered operating systems as well as other provided applications in the Download section.
- Checking "Admin access" in the "System" section allows the user to get an overview and edit systems settings, such as date and time, IPMI address and E-mail settings. Furthermore, the "Admin access" permission grants the user access to the admin page.

⚠ The admin page should be used with extra caution as it only provides power-user settings that can modify fundamental functions of the system. The admin panel settings should be modified only if the user is absolutely certain of the outcome.

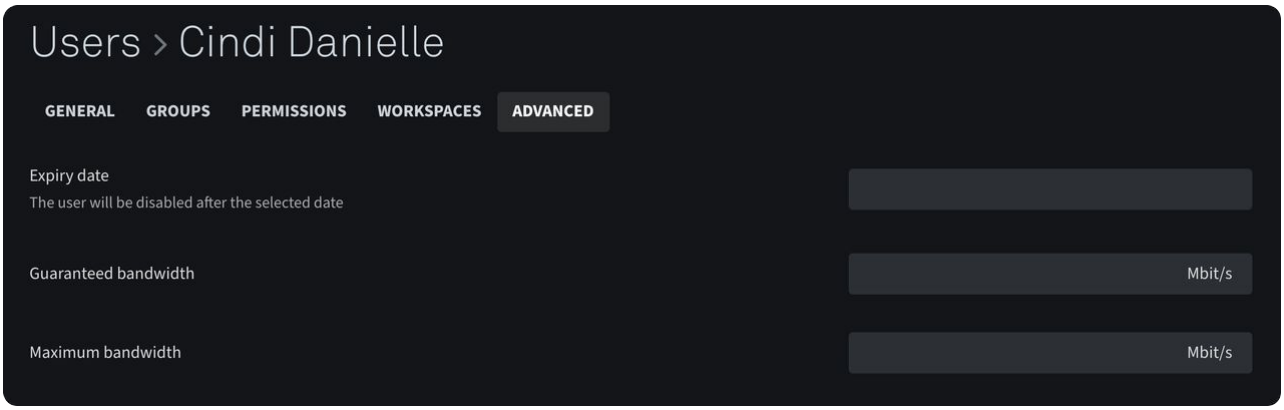
- "Automation" "View" enables an insight into the active and finished tasks as well as the option to view predefined jobs. By activating the permission "Start jobs" the selected user can start predefined jobs that it has permissions for. When the permission "Manage" is given, the user can run and configure tasks and use the scheduler.
- The permission field "Media Library" allows the user access to the Media Library section of the Web UI.
- "Media updates" "View" enables the update feed in the Media Library and "Manage" allows the user to edit the posts in the feed.
- "Media roots" "Manage" permission allows the user to see and manage all media roots as well as create new media roots.
- "Tape library" "Search" enables the search function of the tape library. With the "Archive" permission, the user will be able to setup and start archive jobs. "Restore" permission allows the user to create restore jobs to write the content of the LTO tapes onto the system. The "Manage" permission will show the Jobs of the Archive subsection of the Tape Library section. With these permissions, the user will be able to see all tapes in the Tape Library as well as current or finished jobs.
- "Tape groups" permission allows the user to create and manage LTO tape groups.
- With "Additionally allow file access to" it is possible to specify the path where the file manager has its root folder. It is not possible to get a level above this folder. Turning on the read-only setting will prevent the selected user from making any changes to the content of the File Manager.
- "Default page" sets the default page to be shown when the user logs in.

6.6.4 Workspaces tab

The workspaces tab displays all workspaces which the selected user has access to. On the right hand side of the entry it is possible to see if the access of a user is granted through a direct permission or through group permissions. If any of the entries are selected, settings of the selected workspace will be open.

6.6.5 Advanced tab

With the advanced tab changes can be made to control a users bandwidth or restrict their access after a certain period.



- "Expiry date" allows the user to disable the selected user account after reaching a defined date. The date can easily be set up by using the calendar, displayed after the field has been selected.
- "Guaranteed bandwidth" determines the minimal bandwidth for this user. The condition for guaranteeing bandwidth is the performance of the underlying infrastructure.
- With "Maximum bandwidth" it is possible to limit the bandwidth for this user. This function can be used to control the network usage peaks that occur when moving through timelines in NLE applications. Please note that it is only possible to limit the read bandwidth.

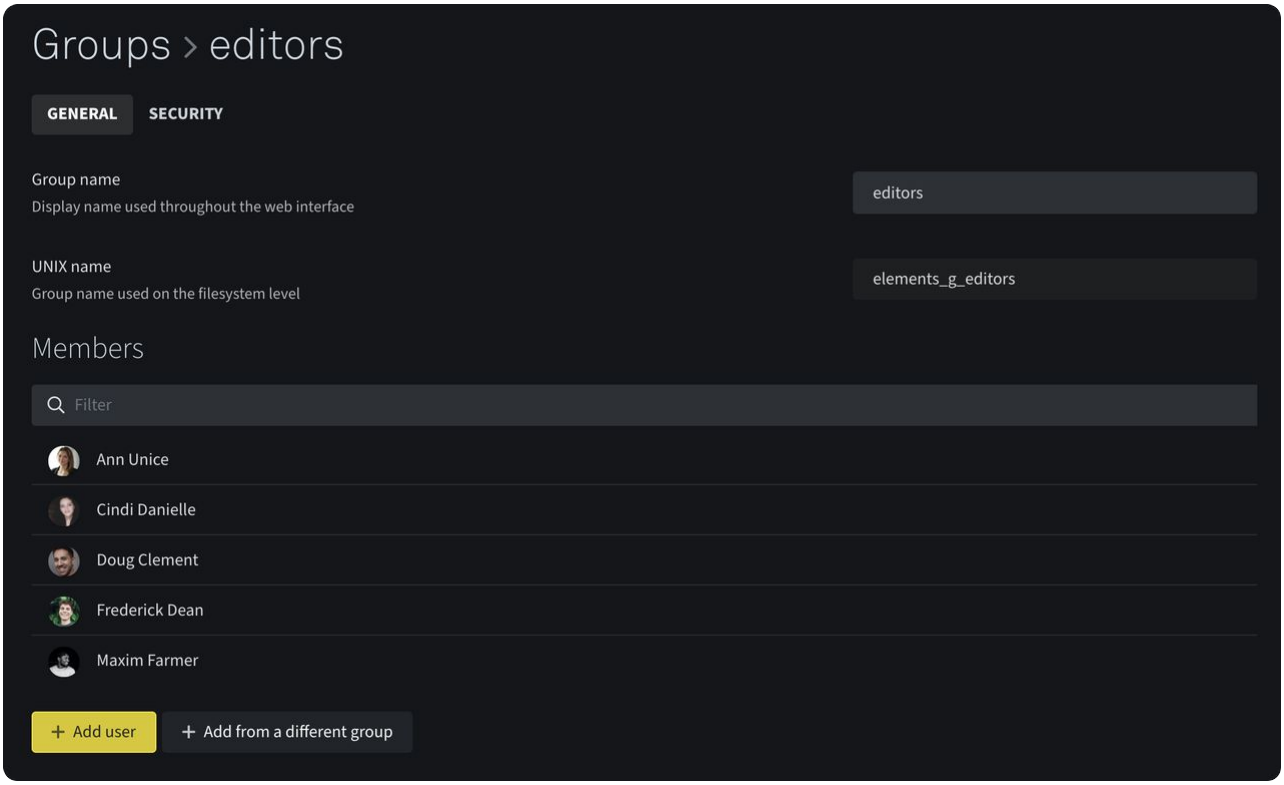
6.6.6 Bottom bar

- The "Save" button saves all of the changes that have been made. Whilst these changes are being saved it is possible to continue work.
- With the button "Duplicate" it is possible to create a new user with the same settings as those of the selected user. Only the name, e-mail and password must be set.
- "Impersonate" gives the administrator the option to switch to the selected user in order to easily and intuitively check how users Web UI is displayed. If the impersonate function is activated a red impersonate button will appear in the top-bar, making it is possible to exit the impersonation and return to the primary user.
- With "Delete" the selected account will be deleted.

6.7 Settings of a group

6.7.1 General tab

The General tab shows basic information about the group, such as the group name and the unix name. It also allows the user to manage the group members.



- The textfield "Group name" allows the user to change the name of the group.
- "UNIX name" shows the unix name of the group, which is used for the group permissions on the file system. This UNIX name cannot be changed by users or administrators.
- The member section allows to manage the members of the group.
    - The filter bar allows to search users by their names.
    - "+ Add user" opens a popup window which contains all existing users of the system. It is possible to select the users to be added to the group. Additionally it is possible to search for a specific user in the popup window by using the filter bar.
    - "+ Add from a different group" opens a popup window which contains all existing groups on the system. Selecting a group adds all of the groups members to the permissions list.
    - It is possible to remove a user from the group by clicking the trash bin on the right hand side of the list, which appears whilst hovering over a user.

6.7.2 Security tab

Newly created groups have no default permissions selected. Using the group permissions allows for more flexibility than applying permissions to individual users.

- The buttons "All", "None", "Browse media" and "Client only" will set up the following predefined permissions:
    - "All" grants the user all permission.
    - "None" disables all permissions.
    - "Browse media" preset enables permissions needed to use the Media Library.
    - "Client only" grants the user access to the system only by using the ELEMENTS Client application.
- "Client app" enables the login from the ELEMENTS Client application. The permission "Start jobs" allows the user to start automation jobs through Windows Explorer or macOS Finder on the workspaces mounted through the ELEMENTS Client application.
- "Satellite" allows the user access to the remote editing tool ELEMENTS Satellite.

- "FTP" allows the user to access its data via the File Transfer Protocol.
- With the "Status" page the user can see all the important information about the system as well as current metrics like CPU and RAM memory load or the systems fill capacity etc.
- "Productions" "View" allows the user to see all productions and workspaces on the system. With "Manage" the user can configure the settings of the productions and workspaces.
- "Users" "View" allows the user to see all users present on the system. If "Manage" is also selected, the user will be able to edit users and create new ones.
- The "Workstations" section grants the user with the rights to view or manage shared workstations for the Satellite remote editing tool.
- With "Shares" "View" the user can see all existing shares on the system and if the permission "Manage" is also given, the user can edit the shares and create new ones.
- The "File manager" permission allows the user to browse through the filesystem and manage the files on the ELEMENTS system straight from the Web UI.
- If "Downloads" are enabled the user can access the download page to download the ELEMENTS Client application for offered operating systems as well as other provided applications in the Download section.
- Checking "Admin access" in the "System" section allows the user to get an overview and edit systems settings, such as date and time, IPMI address and E-mail settings. Furthermore, the "Admin access" permission grants the user access to the admin page.

⚠ The admin page should be used with extra caution as it only provides power-user settings that can modify fundamental functions of the system. The admin panel settings should be modified only if the user is absolutely certain of the outcome.

- "Automation" "View" enables an insight into the active and finished tasks as well as the option to view predefined jobs. By activating the permission "Start jobs" the selected user can start predefined jobs that it has permissions for. When the permission "Manage" is given, the user can run and configure tasks and use the scheduler.
- The permission field "Media Library" allows the user access to the Media Library section of the Web UI.
- "Media updates" "View" enables the update feed in the Media Library and "Manage" allows the user to edit the posts in the feed.
- "Media roots" "Manage" permission allows the user to see and manage all media roots as well as create new media roots.
- "Tape library" "Search" enables the search function of the tape library. With the "Archive" permission, the user will be able to setup and start archive jobs. "Restore" permission allows the user to create restore jobs to write the content of the LTO tapes onto the system. The "Manage" permission will show the Jobs of the Archive subsection of the Tape Library section. With these permissions, the user will be able to see all tapes in the Tape Library as well as current or finished jobs.
- "Tape groups" permission allows the user to create and manage LTO tape groups.
- With "Additionally allow file access to" it is possible to specify the path where the file manager has its root folder. It is not possible to get a level above this folder. Turning on the read-only setting will prevent the selected user from making any changes to the content of the File Manager.

6.7.3 Bottom bar

- The button "Save" saves all changes which were made.
- The button "Delete" will delete the selected group.

6.8 Watch the video

6.8.1 Creating a user

https://youtu.be/XjbvMk1zS8s

6.8.2 Creating a group

https://youtu.be/urcQSVbkM10

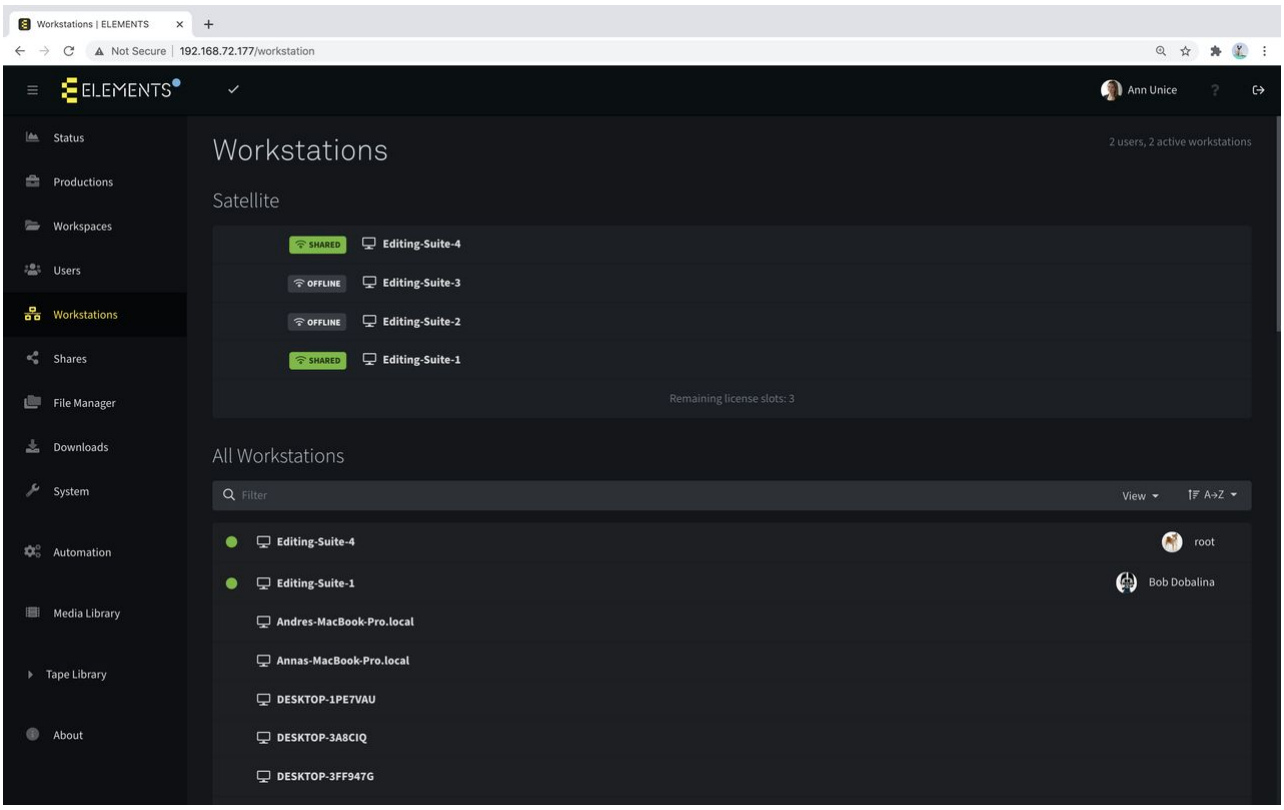
6.8.3 Setting up Two-factor authentication via App

https://youtu.be/QT6VeNVGmCY

7 Workstations (requires ELEMENTS Satellite)

The workstations section allows to manage all PCs and workstations which are using ELEMENTS Satellite.

- Workstations page(see page 55)
- Settings Workstation(see page 55)
- Watch the video(see page 57)
    - ELEMENTS Satellite(see page 57)



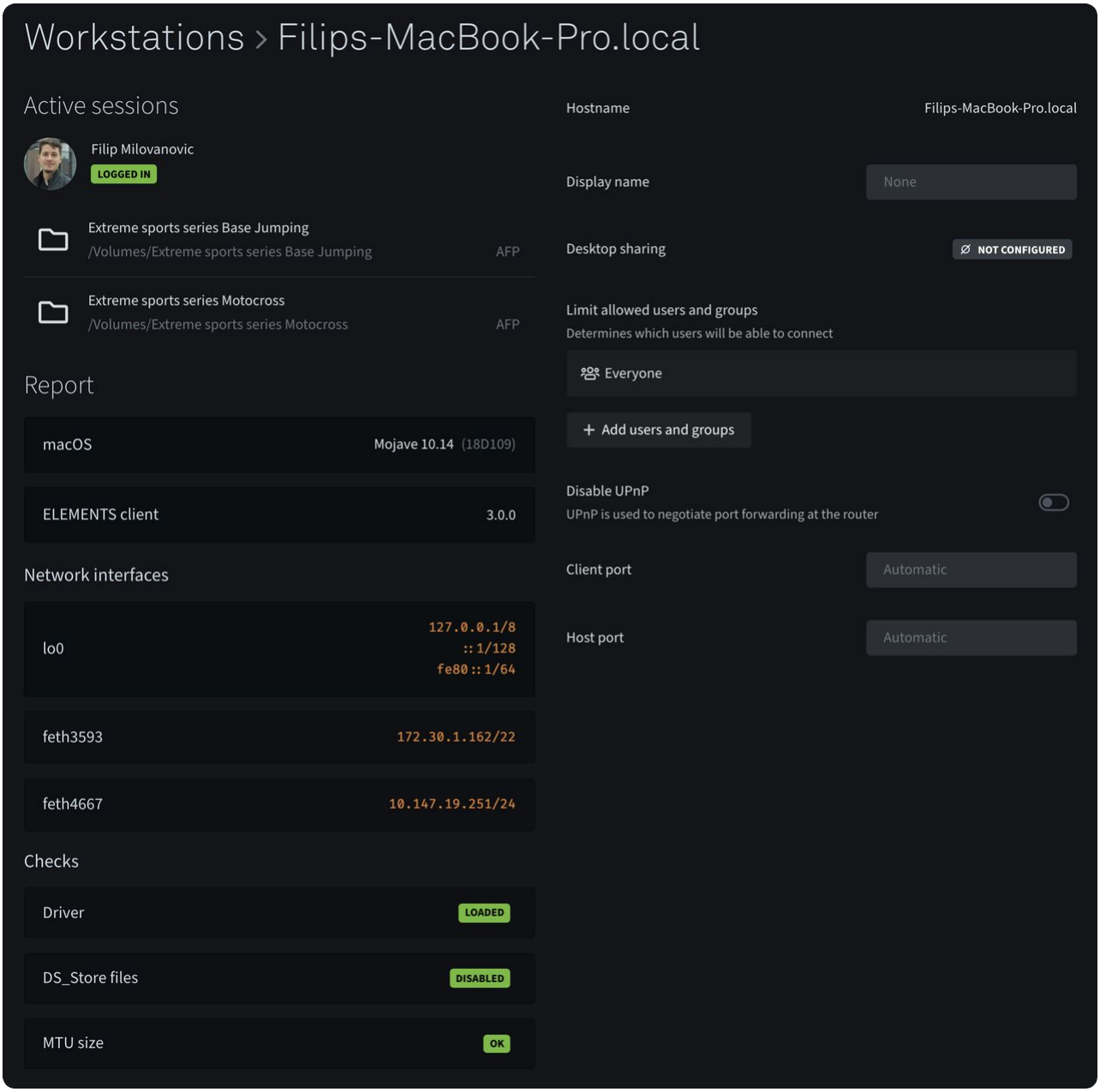
7.1 Workstations page

The Workstations page displays a list of all PCs and workstations connected to ELEMENTS Satellite.

- The green circle on the left side of an entry indicates that the ELEMENTS Client is running and is connected to the system.
- The "Shared" tag indicates that workstation sharing has been turned on on the concerning workstation. If the tag is green, a connection to this workstation can be started.
- The "Offline" tag indicates that Satellite is currently not running on the concerning workstation.
- On the right side of an entry, the logged in user can be seen.

7.2 Settings Workstation

Clicking on any workstation in the list opens the workstations settings.



The left side of the workstation settings page provides information about the connected workstation, current user and mounted workspaces.

- The "Active sessions" section displays all workspaces currently mounted by the user, as well as the used network protocol.
- The "Report" section displays the operating system together with the exact version used by the user. Additionally, the version of the used ELEMENTS Client is also displayed.
- The "Network interfaces" section displays all detected interfaces of the connected workstation.
- The "Checks" section provides information regarding the workstation and the ELEMENTS Client running on it. A warning is displayed if settings are detected that could compromise the proper functioning of the system.

On the right side of the workstation settings page, settings of the selected workstation can be modified.

- The "Hostname" section displays the name of the workstation.

- The "Display name" field allows to set a custom name to be displayed on the Workstations page instead of the hostname.
- The "Desktop sharing" section displays the sharing status of the workstation. Possible states are "Online", "Offline" and "Not Configured".
- "Limit allowed users and groups" allows to determine which users and/or groups are allowed to connect to this workstation.
    - If no users are selected, all users connected to the system will be able to connect to this workstation.
    - The trash bin symbol beside a user in the list allows the user to be removed from access permission list.
    - The button "+ Add user" will open a popup window with a list of all users on the system. Any number of users can be added to the permissions list. Use the Search bar to find specific users.
    - The button "+ Add group" will open a popup window with a list of all groups on the system. Any number of groups can be added to the permissions list. Use the Search bar to find specific groups.
- If "Disable UPnP" function is turned on, automatic negotiation of the port forwarding at the router is disabled.
- "Client port" allows to manually specify a port for the client. If no port is set up the port will be assigned automatically.
- "Host port" allows to manually specify a port for the host. If no port is set up the port will be assigned automatically.

7.3 Watch the video

7.3.1 ELEMENTS Satellite

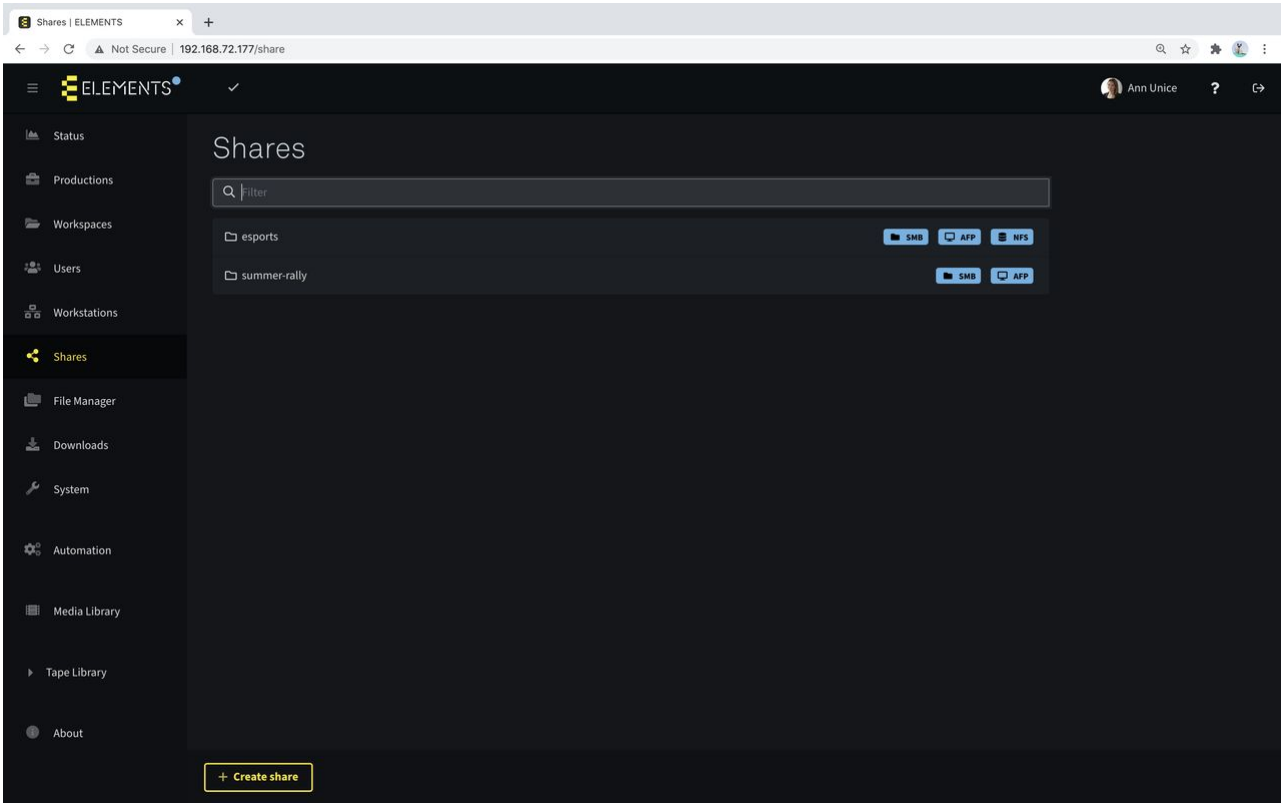
8 Shares

The Shares page allows you to create and manage custom shared access to a specific path on the filesystem. Shares are not limited to productions or workspaces but can be set up for every folder on the filesystem. Individual network protocols can be turned on or off and the access permissions can be defined.

- Shares section(see page 58)
- Settings Share(see page 58)
    - General tab(see page 59)
    - Advanced tab(see page 60)
- Settings NFS sharing permissions(see page 61)
- Watch the video(see page 61)
    - Setting up a share(see page 61)

8.1 Shares section

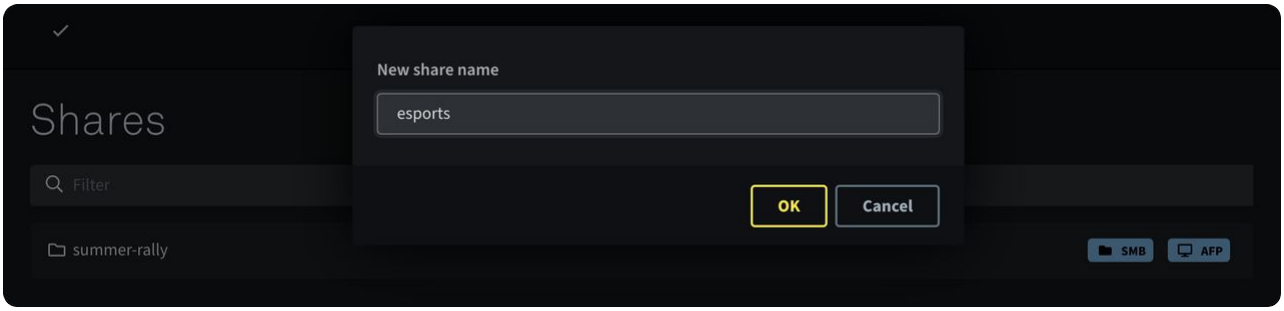
The Shares section displays all existing shares and the supported data transmission protocols.



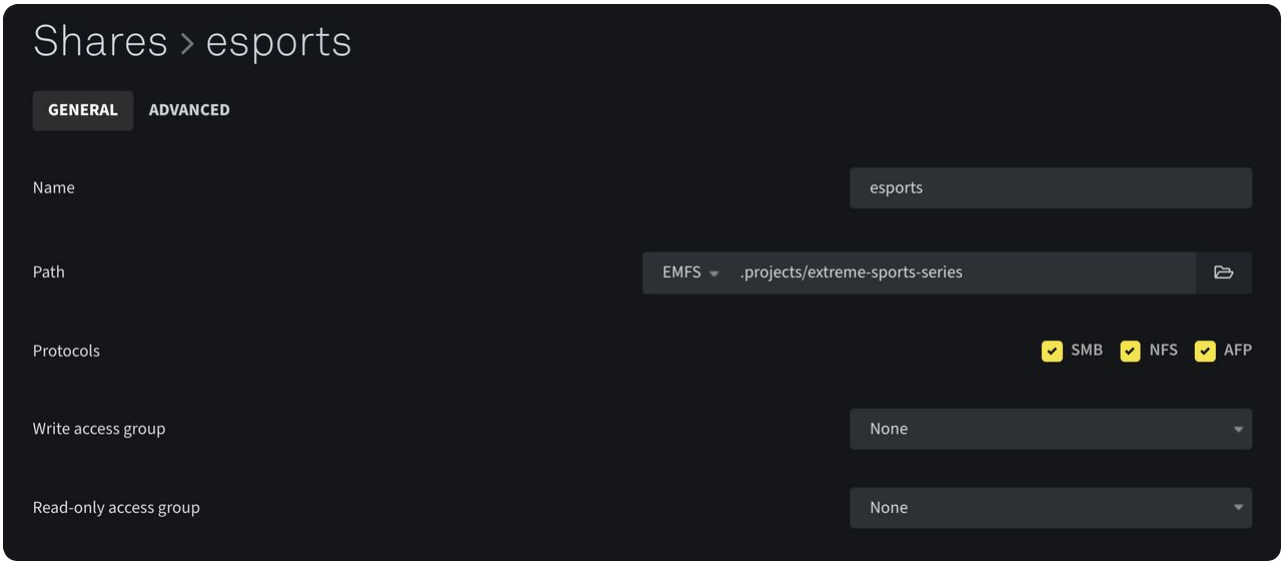
- Search shares by using the filter bar.
- The button "+ Create share" will open a popup window in which the name of the new share can be set. After confirming the name the settings of the new share will be opened.

8.2 Settings Share

After creating a new share or clicking on any entry in the shares list, the general tab of the shares settings will be opened.



8.2.1 General tab

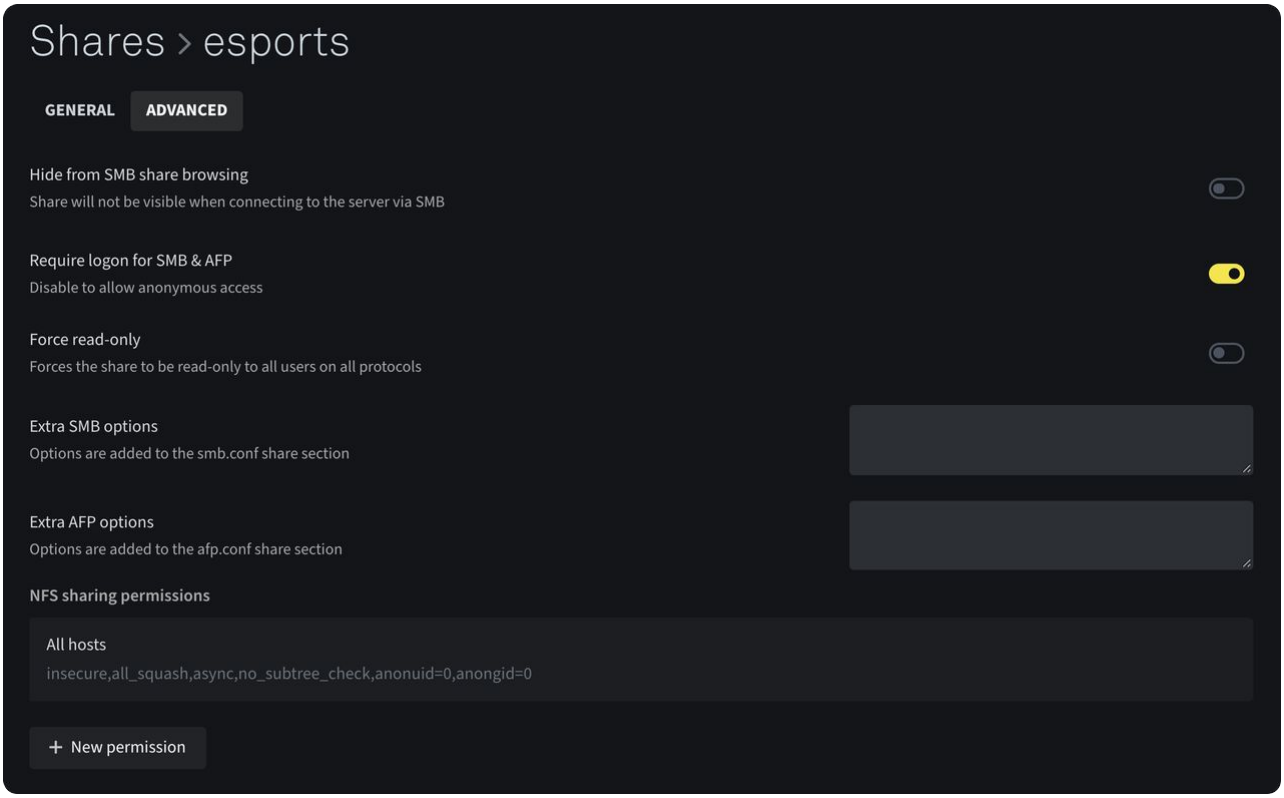


- With the field "Name" it is possible to change the name of the share.
- "Path" allows the user to define the folder or the file which should be shared.
    - Clicking the first section of "Path" will open a dropdown list which allows the user to select the volume which contains the content for sharing.
    - The second section allows the user to define the shared folder or file. The path can be entered manually or the folder can be selected from a file manager popup window when the folder symbol on the right hand side of the input field is selected.
- The "Protocols" section allows the user to enable or disable different network protocols. Different operating systems support the following protocols:
    - SMB: The Server Message Block is the protocol used by Microsoft, and since macOS X Mavericks, by Apple too. SMB implements a network filesystem, which will usually be independent of the basic filesystem.
    - NFS: PCs with a Linux-based operating system use the Network File System. NFS implements a network filesystem, which will usually be independent of the basic filesystem. This protocol can also communicate with Windows Server.
    - AFP: The Apple Filing Protocol is a protocol developed by Apple for the special needs of now older macOS generations. This protocol supports SMB and NFS.
- "Write access group" allows the user to select one of the existing groups from a dropdown list containing all user groups on the system. Members of the group will be granted read and write access permissions to the data of the share.
- The "Read-only access group" allows the user to select one of the existing groups from a dropdown list containing all user groups on the system. Members of the group will only be granted read access permissions to the data of the share.

- Using the slider field "Hide from SMB share browsing" the share cannot be used via SMB, even when SMB is enabled as protocol. In addition the share won't be displayed at all.
- The slider field "Require logon for SMB & AFP" is enabled by default so that, when trying to access the share, the user will be prompted to enter its username and password. If this permission is disabled all users on the network can access the share via SMB and AFP without verification.
- The "Force read-only" slider checkbox overrides the given write access permissions so that every user who has access to the share can only read the data.

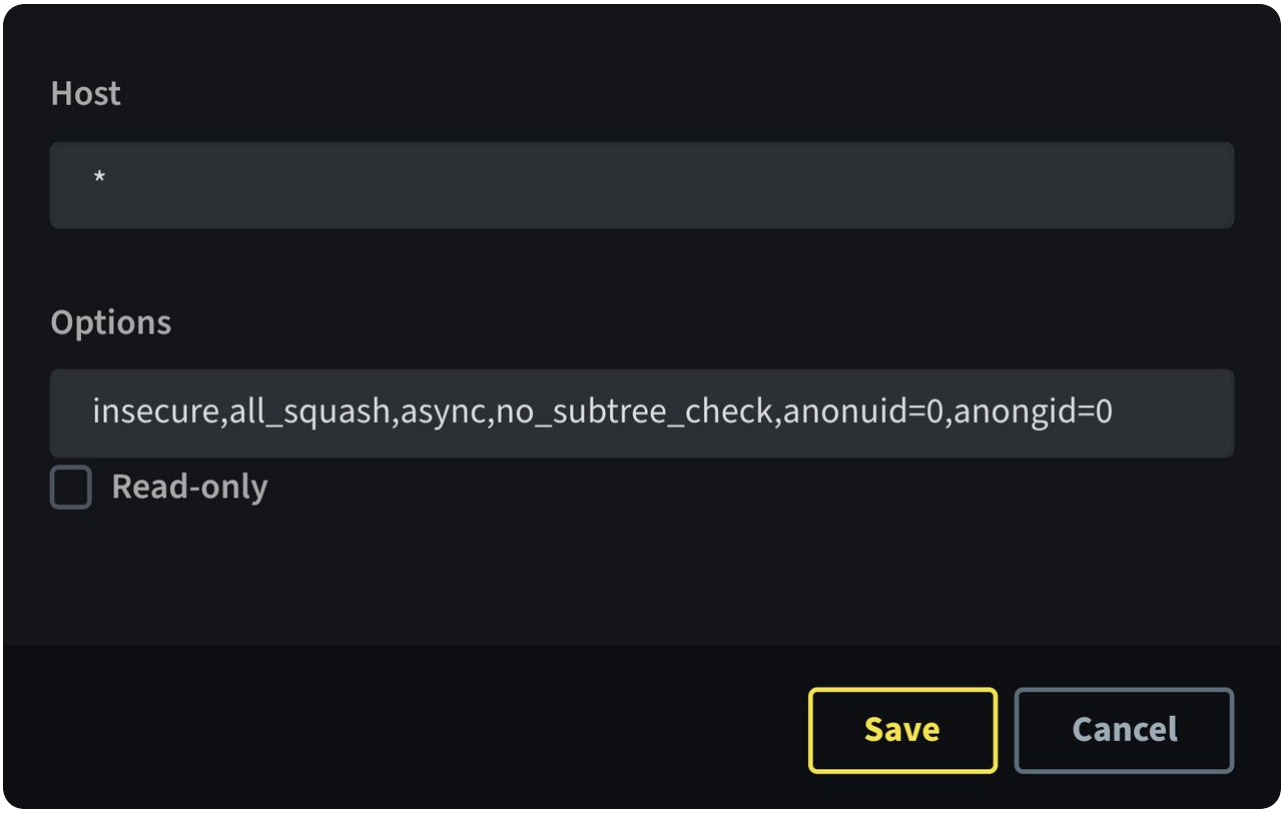
8.2.2 Advanced tab

The "Advanced" tab of the share allows the user to set network protocol connection parameters.



- In the "Extra SMB options" field additional settings for the connection using the SMB protocol can be set.
- In the "Extra AFP options" field additional settings for the connection using the AFP protocol can be set.
- In the "NFS sharing permissions" section permission settings for the shares using the NFS protocol can be added. A list with all existing NFS permissions is displayed.
    - By selecting an existing NFS permission it is possible to change the settings of the entry.
    - Remove the permission entry by clicking the trash bin on the right hand side of a permission.
    - The button "+ New permission" opens a popup window in which the host address can be entered. After confirming the host address the permission will be created with the default settings.

8.3 Settings NFS sharing permissions



- "Host" allows the user the option to change the host address.
- With "Options" it is possible to change the settings of the selected permission.
- "Read only" will set the selected permission to read only.

8.4 Watch the video

8.4.1 Setting up a share

https://youtu.be/_52dvObU_Cg

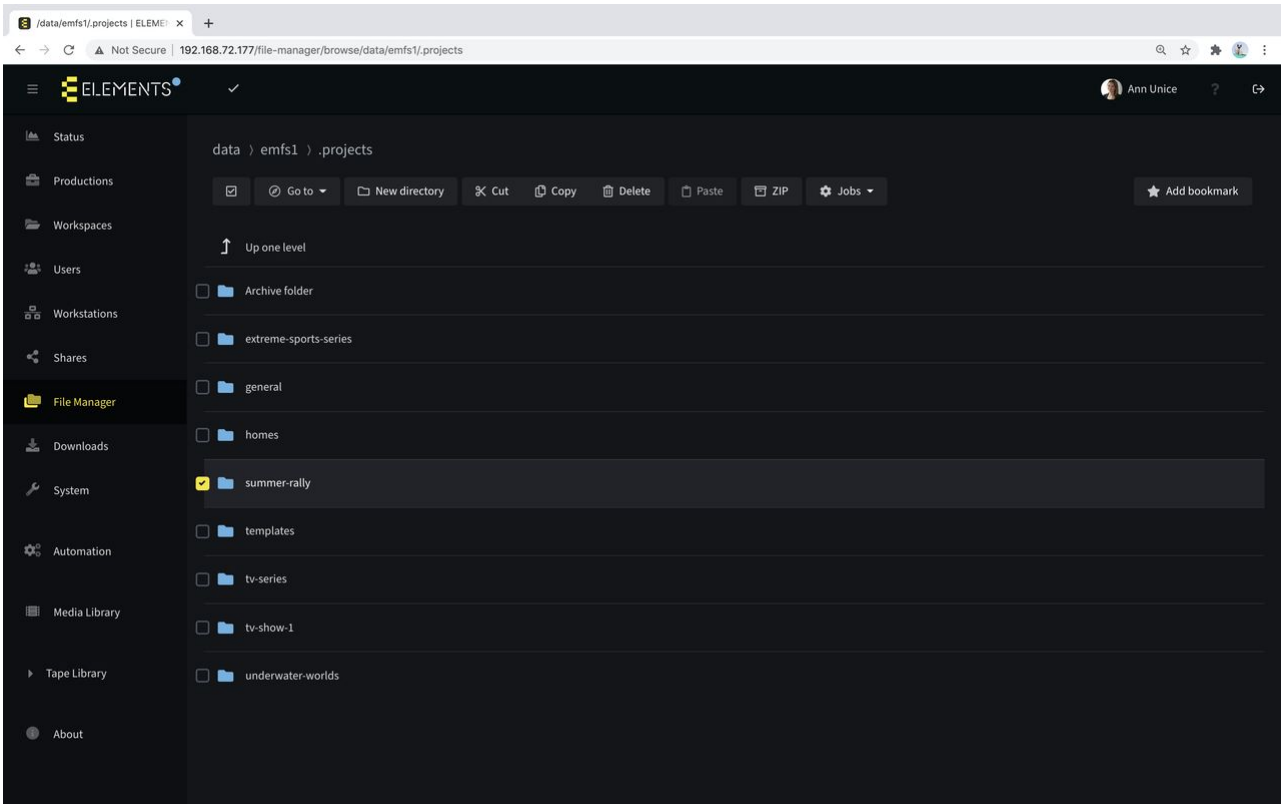
9 File Manager

The File Manager section allows a user with sufficient access permissions to browse and manage the data on the filesystem. This section can be used to move, copy and delete files and folders on the filesystem and execute automation jobs.

- Start page(see page 62)
- Properties(see page 63)
  - General tab(see page 63)
  - Permissions tab(see page 65)

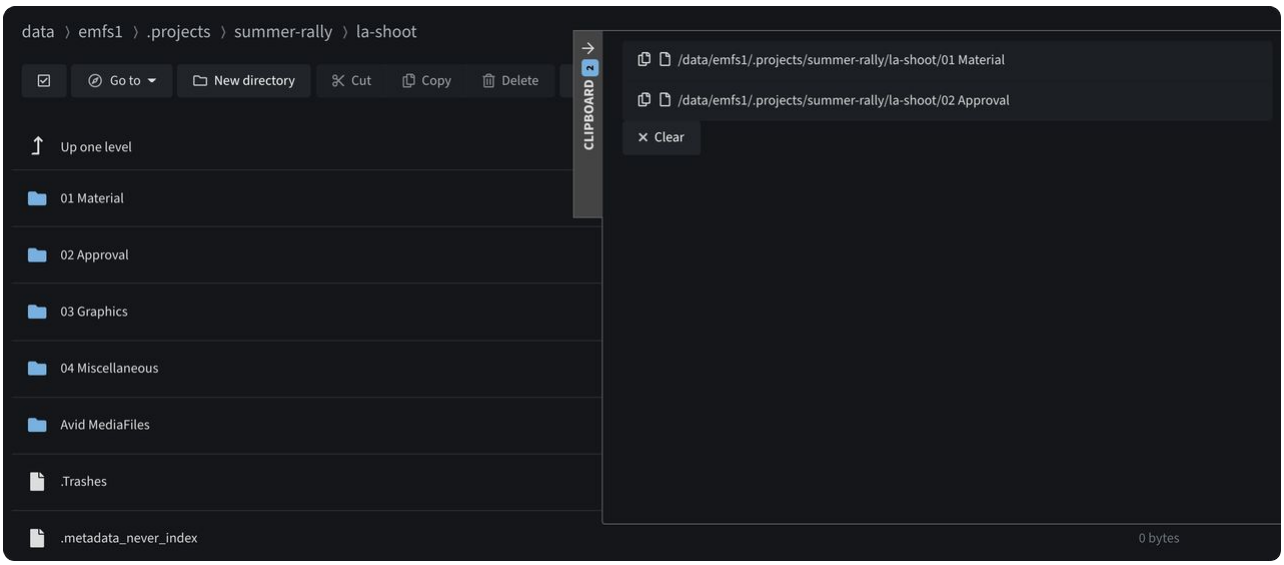
9.1 Start page

The start page of the file manager shows the root folder set for the user. The root folder can be set in the user settings for each user individually.



- If the cursor is positioned over a folder or file entry a properties symbol will appear on the right hand side. Clicking this button opens a popup window featuring the settings of the item. This popup window provides informations about the selected folder or file and allows the user to manage the permissions in question. More about this feature in the properties section.
- When hovering over a file or folder a checkbox will appear, which can be used to select the item. If items are selected it is possible to use the following functions: "Cut", "Copy", "Delete" and "ZIP".
- After "Cut" or "Copy" are selected a slider clipboard window appears on the right hand side of the screen. The content of the clipboard will be displayed in the slider window together with icons to indicate intended operations.
  - Minimize the clipboard window by clicking on the clipboard icon on the left hand side of the window.
  - The trash bin besides every entry in the clipboard appears upon hovering and allows for the removal of the item.

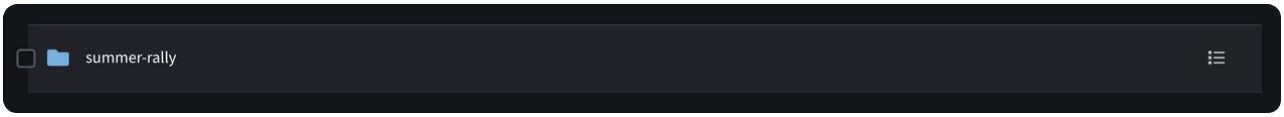
- With the button "X Clear" the user can empty the clipboard.
- The clipboard will not be cleared if the user decides to log out of the Web UI. Upon the next login the user can continue working with the last state of the clipboard.



- When the button "Delete" is clicked a popup window will appear and ask for confirmation of the deletion.
- If the clipboard already contains files, they can be pasted into the currently open folder.
- Using the "Add bookmark" function adds the current folder to bookmarks and makes it easily accessible through the "Go to" dropdown menu.
- The "Jobs" dropdown menu allows the user to execute automation jobs for the selected folder or selected files.
- When using the "ZIP" function, a popup window will appear and ask for a name for the new ZIP archive. After confirming the chosen name with the button "OK" the ZIP archive will be created under the given name.
- The checkbox button above the list allows the user to select the whole contents of the actual directory. If certain folders or files were already selected this button will invert the selection.
- With the button "New directory" it is possible for the user to create a new folder in the current destination on the filesystem. After pressing the button, a popup window will appear, where the user can add the name of the new directory. After confirmation, a new directory is created.
- The "Go to" dropdown menu allows to access the root folder of the logged in user as well as users bookmarks.
- The "Up one level" button forwards the user to the parent folder of the current destination.

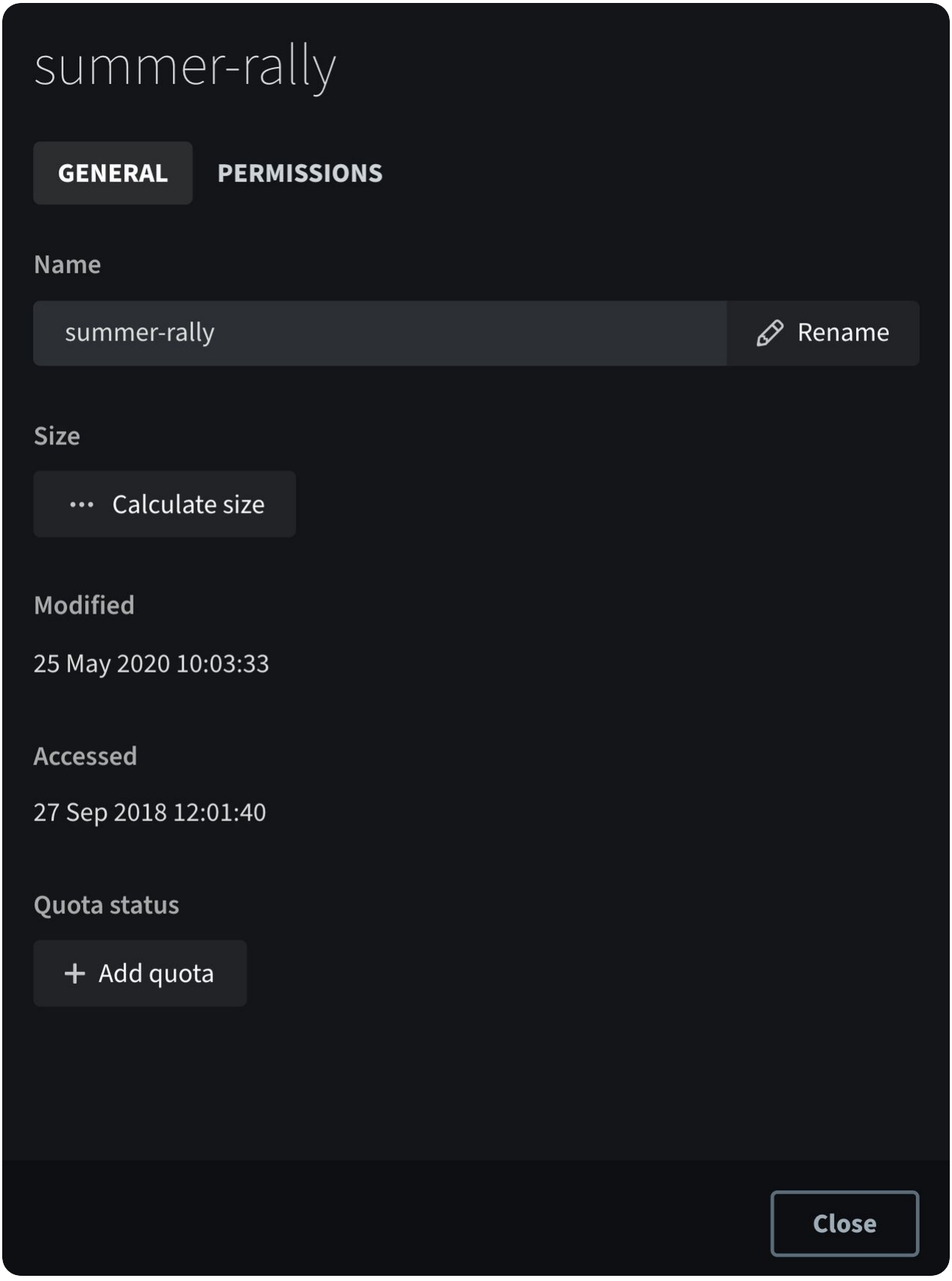
9.2 Properties

Whilst hovering over any entry in the File Manager, a properties icon appears on the right hand side of the entry. Clicking the properties icon opens a popup window for the selected file or folder.



9.2.1 General tab

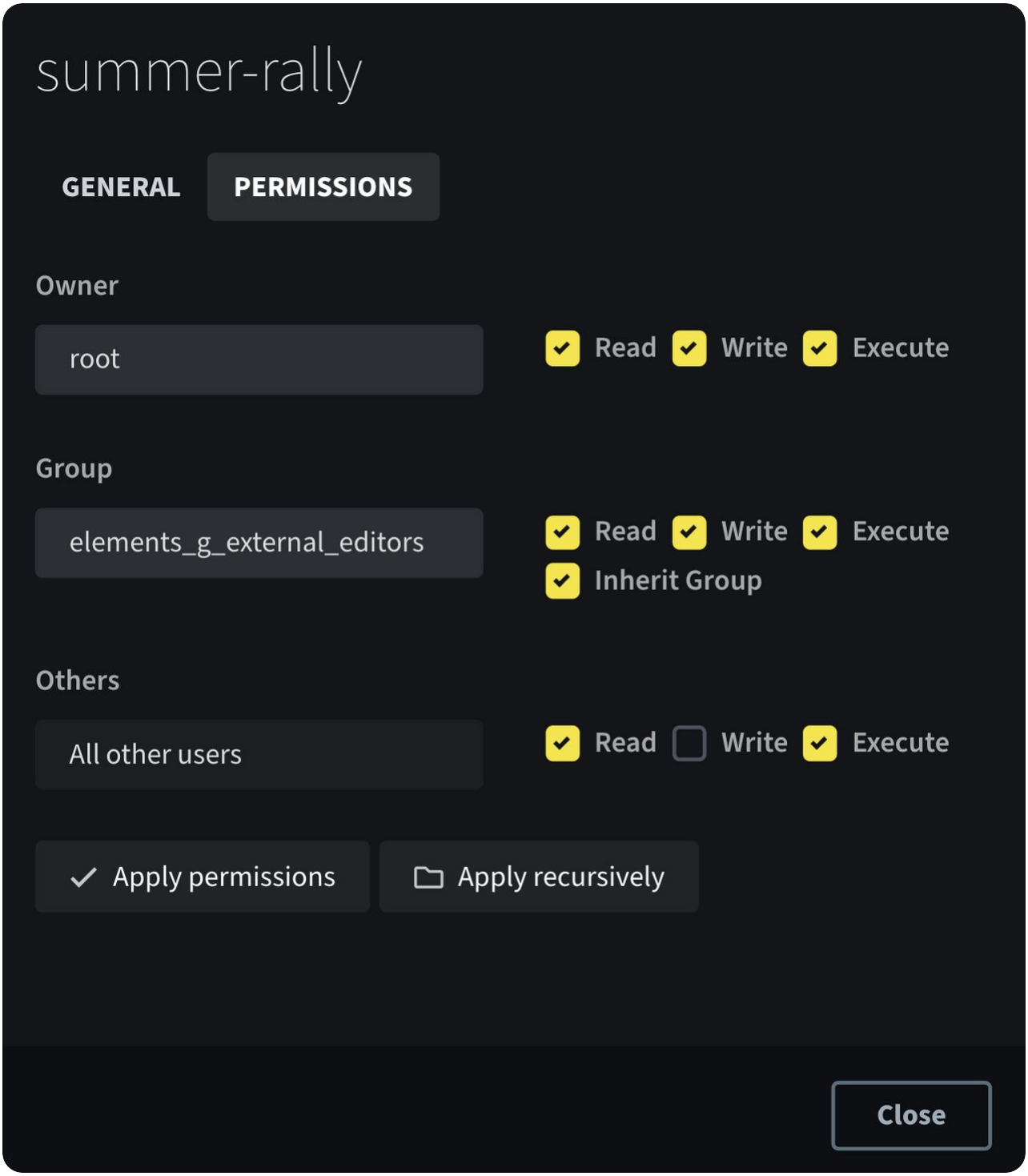
The tab "General" of the properties window allows the user to manage the general settings of the folder or file as well as see basic information about the file or folder.


summer-rally
GENERAL
PERMISSIONS
Name
summer-rally
Rename
Size
Calculate size
Modified
25 May 2020 10:03:33
Accessed
27 Sep 2018 12:01:40
Quota status
Add quota
Close

- The field "Name" allows the user to change the name of the folder or file. Confirm the new name with the button "Rename".
- With the button "Calculate size" it is possible to get the actual size of the selected folder. If a file is selected the size will automatically be displayed.
- If the selected file or folder is located on a StorNext filesystem the function "Affinity" will also be displayed. With this function the user can select the RAID group highlighted in the dropdown list where the concerning folder or file should be stored. This allows dedicating disk bandwidth to specific folders. Please note that changing the affinity will only affect new content.
- The "Modified" section shows the date and time when the file was last modified.
- The "Accessed" section shows the date and time when the file was last accessed.
- If a selected folder is being used as a workspace a warning will be displayed, informing the user about the workspace.
- With the button "+ Add quota" it is possible to set up soft and hard quotas for a selected folder. After clicking the button, two input fields for the soft and the hard quota are displayed. The left section of the input fields allows for the size of the quota to be set and the dropdown on the right side allows the user to define the unit (MiB or GiB etc.).
- Use the "Apply" to save the quota changes.

9.2.2 Permissions tab

The "Permissions" tab allows the user to manage the access permissions of the selected folder or files. The access permissions can be changed for the Owner, a Group and all other users. The dropdown menus allow the user the ability to select an owner or a group easily.

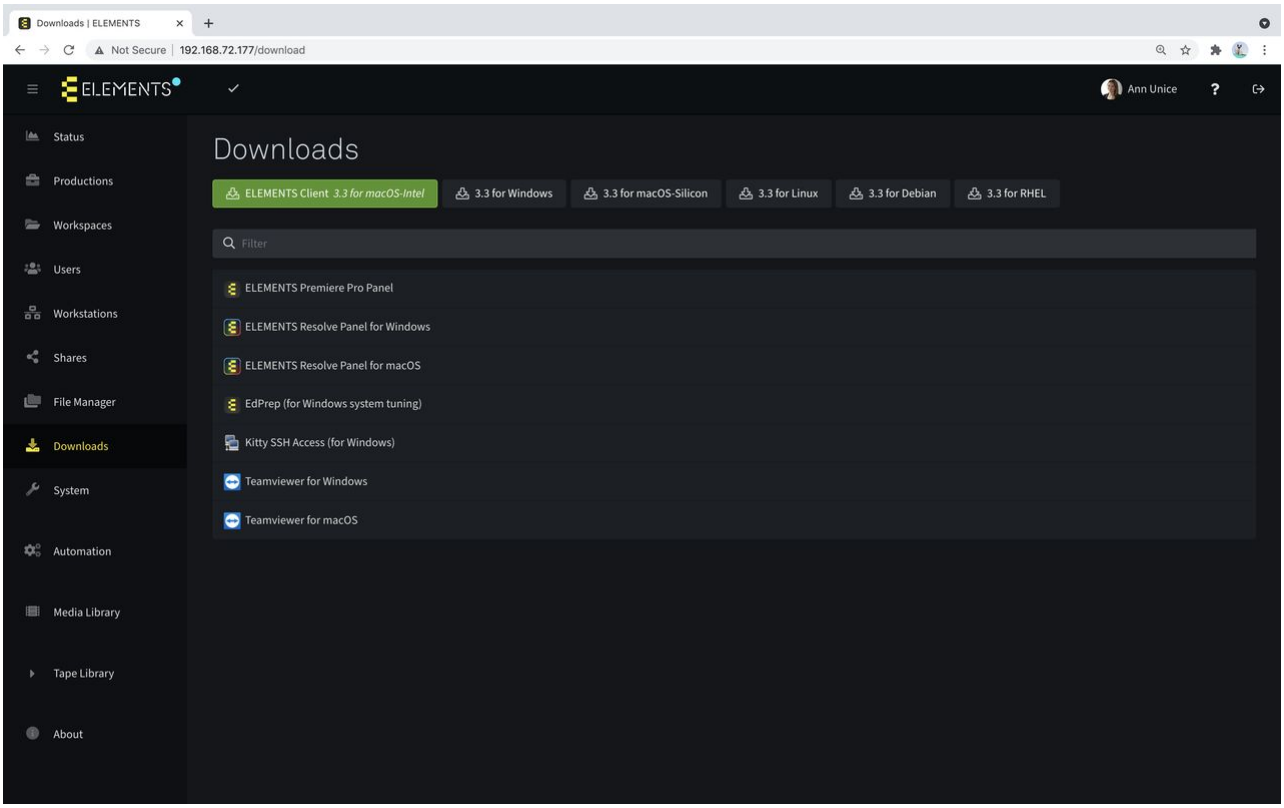


- "Owner" gives the user the ability to change the owner user and set the read, write and execute permissions.
- The "Group" textfield allows the user to change the group of the file or folder and the checkboxes allow to set up the read, write and execute permissions. With "Inherit Group" it is possible to inherit the permissions of the group to all new files recursively.
- In the "Others" section, read, write and execute permissions can be set for all other users.
- With the button "Apply permissions" the set permissions will be applied.

- The button "Apply recursively" applies the set permissions for all subordinated directories. This button is displayed only in a properties window of folders.

10 Downloads

The Downloads page provides quick and easy access to the ELEMENTS Client application for different Operating Systems, as well as other useful applications to manage and use the ELEMENTS system.



The first row of buttons allow the user to download the ELEMENTS Client Application for any of the five listed major operating systems. The green button highlights the ELEMENTS Client for the operating system which is being used by the logged in user. The ELEMENTS Client is available for Windows, macOS, Linux, Debian and RHEL operating systems.

The download list provides the following useful applications, which can be used to manage or use the system more efficiently:

- ELEMENTS Adobe Premiere Panel: Forwards the user to the Adobe Exchange, straight to the page of the ELEMENTS Adobe Premiere Panel. Here, the Panel can easily be installed. The Panel allows the user the possibility of accessing the Media Library functions straight out of Adobe Premiere Pro or Adobe After Effects.
- ELEMENTS Resolve Panel (Windows, macOS): Provides the ELEMENTS Resolve Panel, allowing the user the possibility of accessing the Media Library functions straight out of DaVinci Resolve.
- EdPrep (for Windows system tuning): Allows the user to optimise Windows for Avid workstations.
- Kitty SSH Access (for Windows): This software allows the user to connect to the ELEMENTS system via SSH. This is a useful tool for system administrators and the ELEMENTS support and does not require installing.
- Teamviewer (for Windows, macOS): Allows ELEMENTS support team to access the system remotely.

By clicking any of the entries, the browser will download the selected application. The search bar allows the user to find a specific application by entering its name.

10.1 Watch the video

10.1.1 Installing ELEMENTS Adobe Premiere Pro Panel

https://youtu.be/4EChWthwFRI

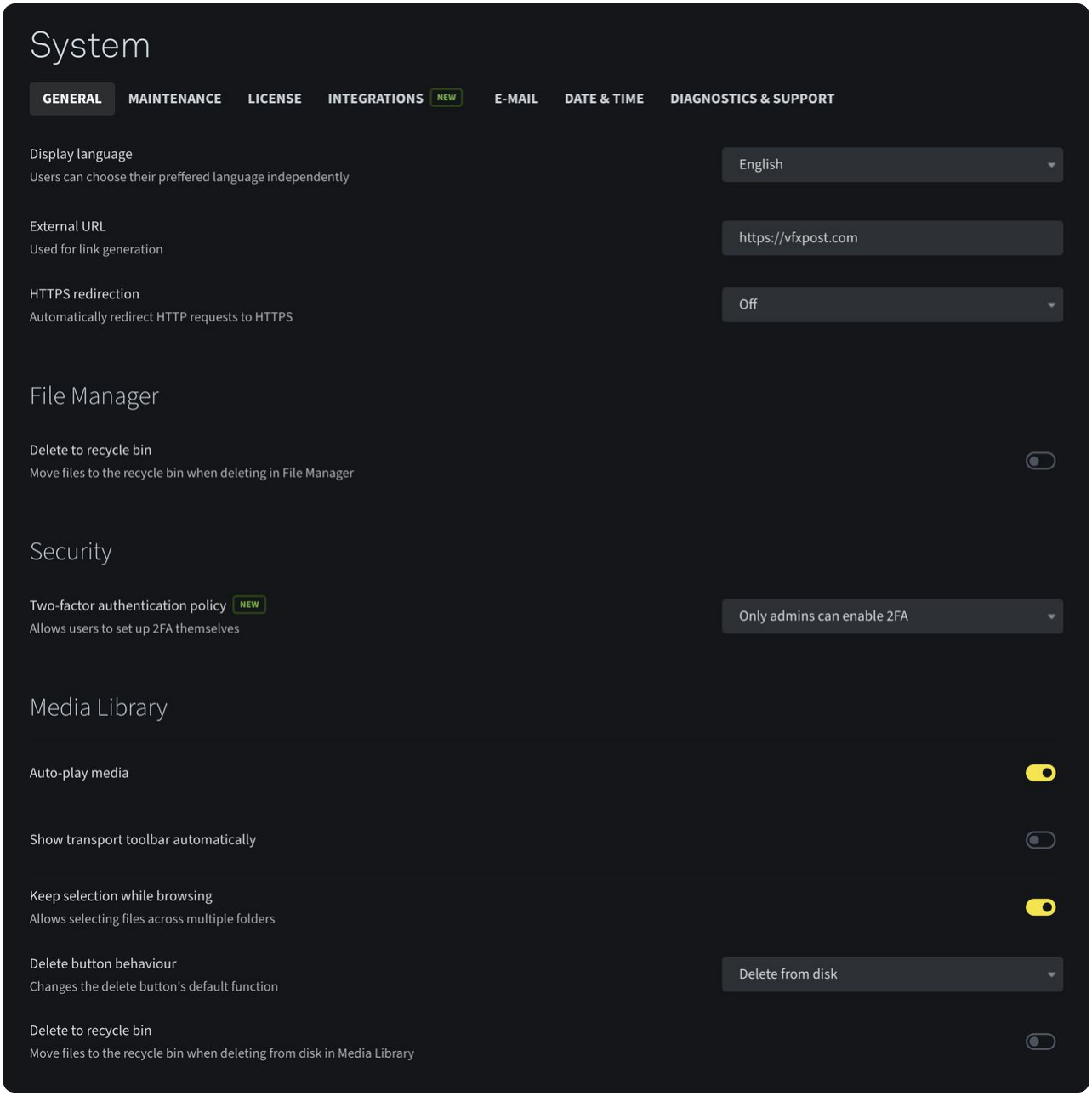
11 System

The maintenance section allows for an easy and intuitive configuration of connection parameters such as IPMI address and E-mail server, as well as setting up NTP server time synchronization. The maintenance section makes it easy to restart or shut down the system and enables quick assistance from the ELEMENTS support team.

- General tab(see page 70)
  - File manager(see page 71)
  - Security(see page 72)
  - Media Library(see page 72)
- Maintenance tab(see page 72)
- License tab(see page 73)
- Integrations tab(see page 74)
- E-Mail tab(see page 75)
  - E-mail account settings(see page 76)
  - Style(see page 76)
  - Test your setup(see page 77)
- Date & Time tab(see page 77)
  - Date & time(see page 77)
  - Time synchronization(see page 78)
- Diagnostics & support tab(see page 78)
- Watch the video(see page 78)
  - Exploring the maintenance menu(see page 78)

11.1 General tab

The general tab provides software management functions for the Web UI.



- With the dropdown menu "Display language" it is possible to set up the default language of the Web UI. Please note that each user can set up its own preferred language.
- "External URL" allows to specify the external URL for link generation when sharing content from the Media Library.
- Turning "HTTPS redirection" on will automatically redirect HTTP requests to HTTPS requests.

11.1.1 File manager

- If "Delete to recycle bin" is activated the system will not delete files for good but keep them in a recycle bin which can be found at `/data/SNFS*/.recycle-bin` or in case of an EMFS at `/data/EMFS*/.projects/the_concerning_workspace`

11.1.2 Security

- "Two-factor authentication policy" allows to determine whether users are allowed to setup own two-factor authentication and also deactivate it themselves. Alternatively, this action can only be done by an administrator.

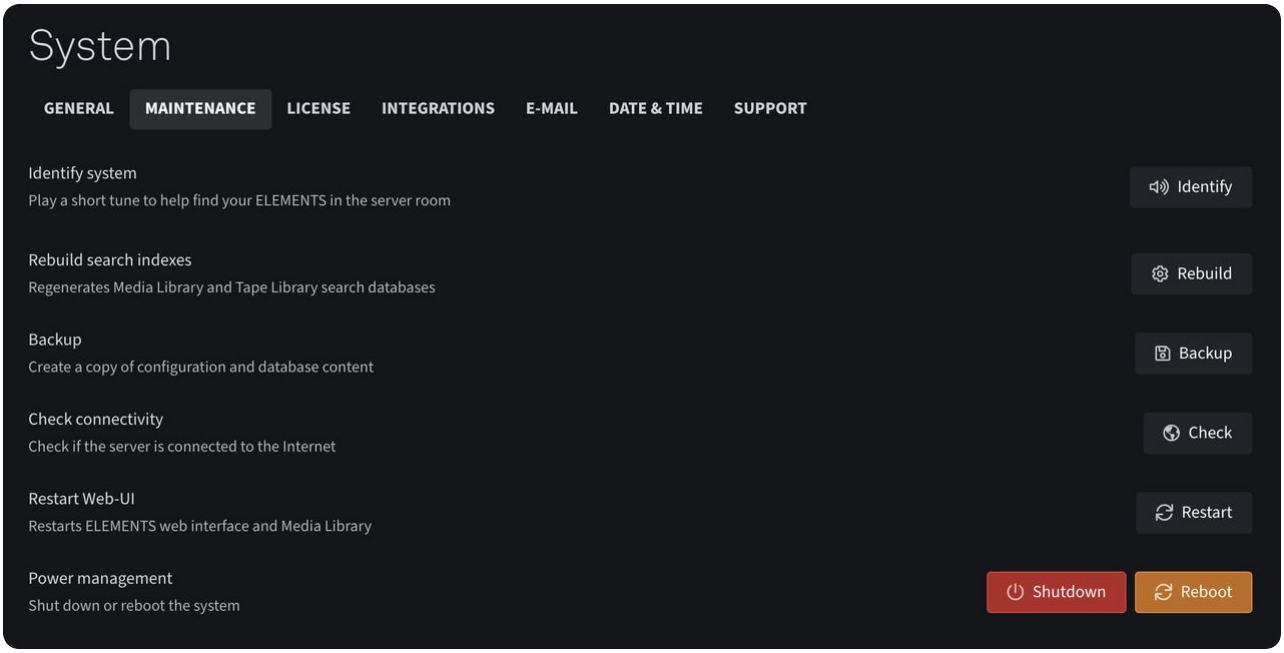
11.1.3 Media Library

> **Please note**
> The Media Library is a payed option and might not be available.

- Enabling "Autoplay media" will automatically start the playback after opening a proxy view.
- "Show transport toolbar automatically" will expand the transport toolbar automatically after opening a proxy view. The transport toolbar can still be collapsed manually.
- With "Keep selection while browsing" it is possible to select multiple files or folders from different located folders.
- The dropdown list "Delete button behaviour" allows to set the delete button of all Media Roots to "Delete from Disk", "Delete from Database" or "Delete completely".
    - Delete from Disk will delete the original file but keep the ELEMENTS metadata and it is still possible to see the concerning proxies in the Media Library.
    - Delete from Database will delete the ELEMENTS metadata but keep the original file on the system.
    - Delete completely will delete all concerning data of the selected files.
- If "Delete to recycle bin" is activated the system will not delete files for good but keep them in a recycle bin which can be found at `/data/SNFS*/.recycle-bin` or in case of an EMFS at `/data/EMFS*/.projects/the_concerning_workspace`

11.2 Maintenance tab

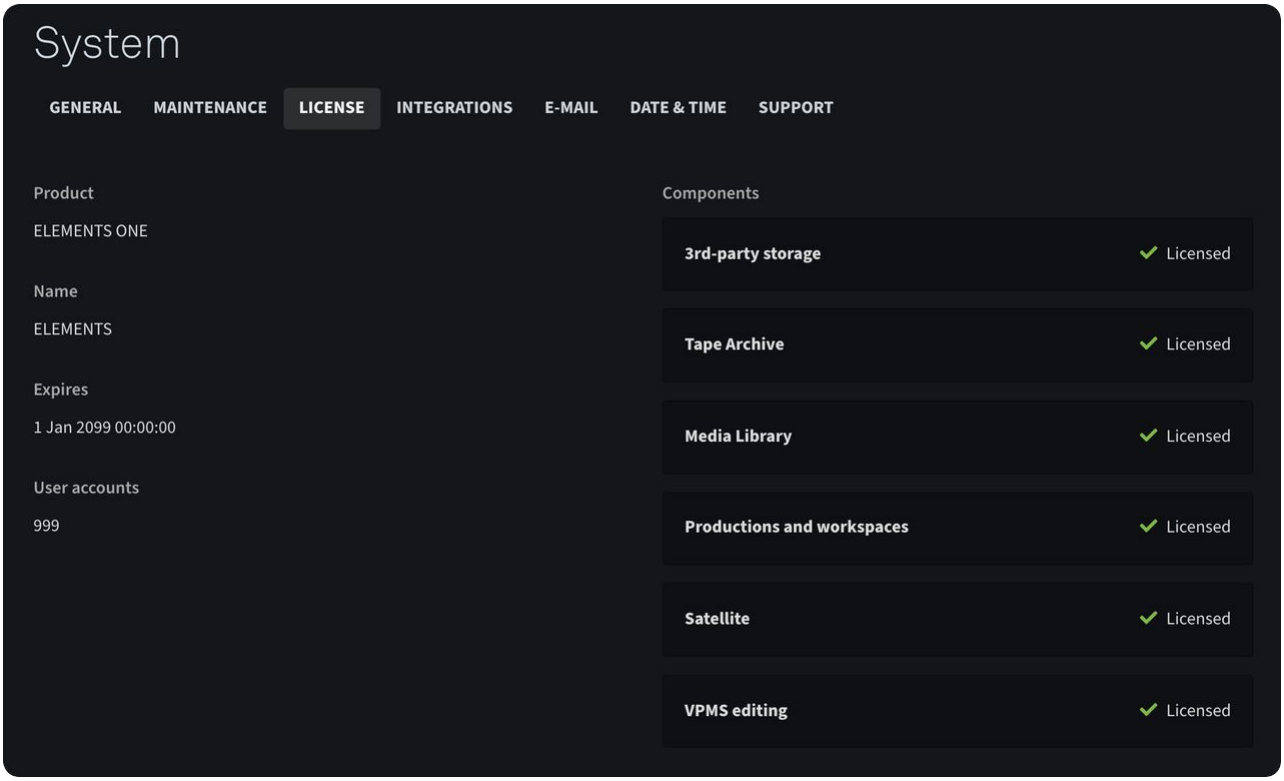
The maintenance tab provides basic hardware management functions for each storage device.



- When clicking the Button "Identify system" the hardware will play an audio signal. This can help to easily identify the system, even if it is a part of a bigger storage environment.
- "Rebuild search indexes" reindexes the database search indexes to allow for a reliable search functionality when using the ELEMENTS Media Library and Tape Library.
- Using the "Backup" function will create a backup of the RAID-settings, the networking settings, the filesystem, the permissions and the settings of the Web UI.
- The "Check connectivity" function offers a quick way to check if the system has a connection to the internet.
- Use the "Restart Web-UI" button to reload the services that provide the Web UI including the Media Library.
- The button "Shutdown" shuts down the system.
- "Reboot" reboots the system.

11.3 License tab

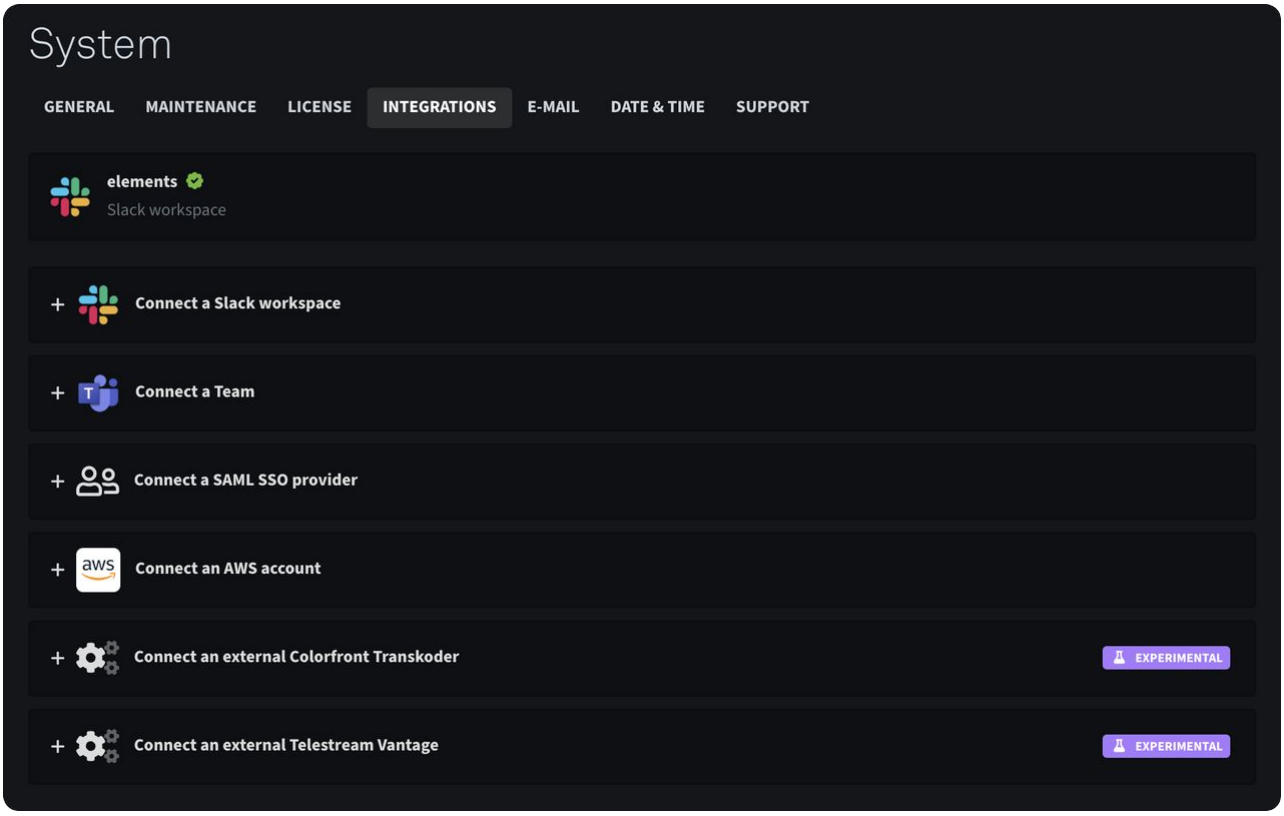
The License tab provides information about the systems licenses.



- The ELEMENTS Licenses tab shows all the information about ELEMENTS related licenses.
  - Product name and the name of the system will be displayed along with the serial number. The expiry date of the licence and the number of available user accounts plus the number of possible client connections will also be displayed.
  - On the right hand side, license components included in the ELEMENTS system are displayed
- The StorNext Licenses tab is additionally available if the system integrates a StorNext filesystem.
  - It is possible to enter a new license in the textfield beneath.
  - With the button "Check license" the system checks the entered license and adds the license if its status is confirmed.

11.4 Integrations tab

This tab allows the user to easily setup and modify the integration of 3rd party apps into ELEMENTS services.

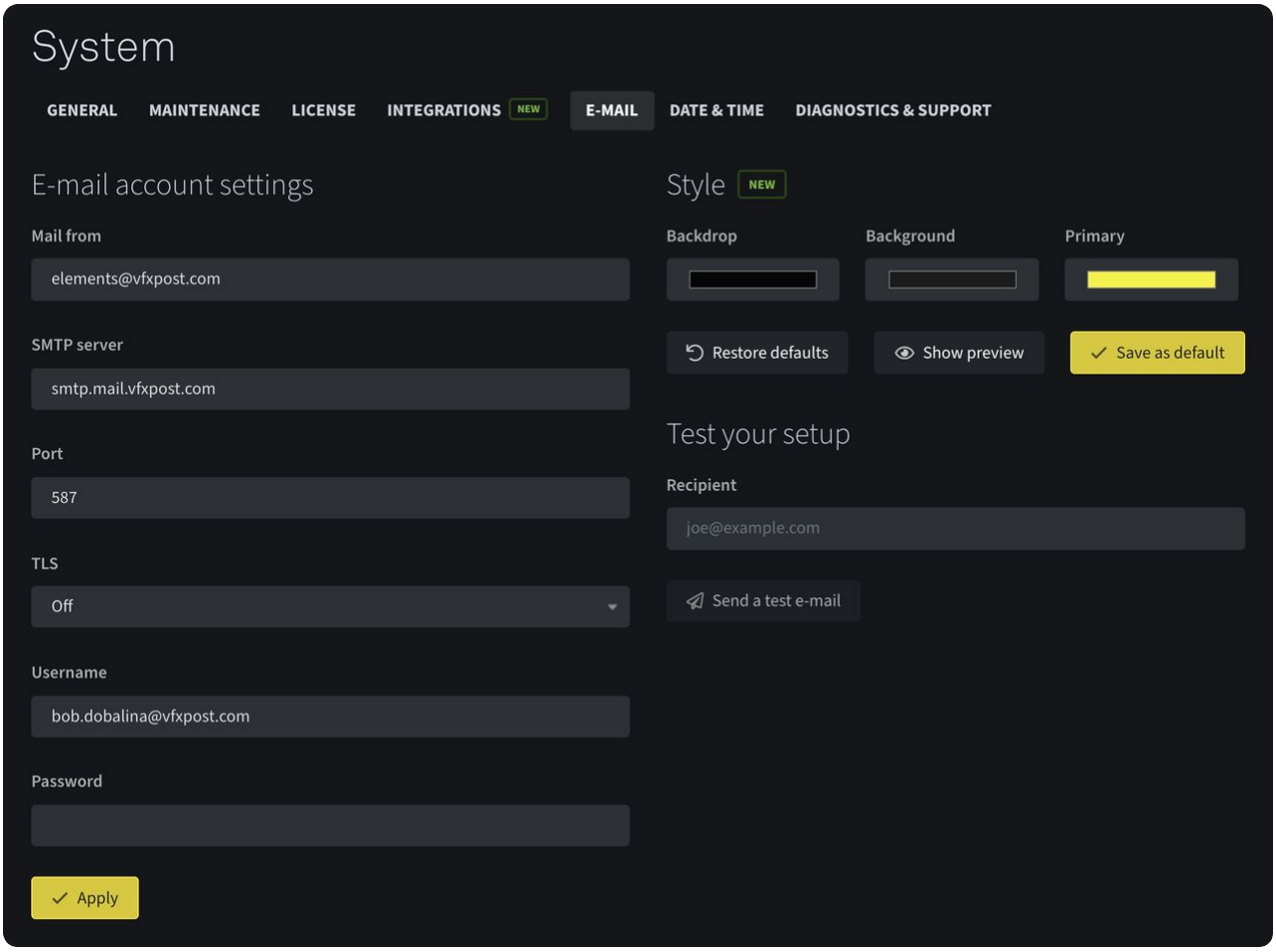


Clicking on any of the offered apps redirects the user to the setup menu for the chosen application. The external page includes setup instructions. Following integrations are offered:

- Slack
- Microsoft Teams
- SAML SSO
- Amazon Web Services (AWS)
- Colorfront Transkoder
- Telestream Vantage

11.5 E-Mail tab

The E-Mail tab allows the user to manage the e-mail settings of the system as well as the appearance of the sent e-mails.



11.5.1 E-mail account settings

- The field "Mail from" allows the user to enter the e-mail address. When an e-mail is sent from the system, the entered e-mail address will be displayed as a sender.
- With the "SMTP server" field, the mail server can be defined.
- "Port" defines the port where the SMTP server is accessible.
- With the field "TLS" it is possible to select the used security protocol. The following options are offered: STARTTLS, SSL and Off.
- In the fields "Username" and "Password" login credentials for access to the e-mail account can be entered.
- "Apply" accepts the entered data and saves it.

11.5.2 Style

Clicking one of the color panels will open a popup window with a color palette.

- "Backdrop" allows the user to configure the overall background color of the e-mail.
- With "Background" it is possible to configure the background color of the text area.
- By changing the color of "Primary" the color of primary components like the headline can be changed.
- The button "Restore defaults" will set all made color changes back to the saved default values.

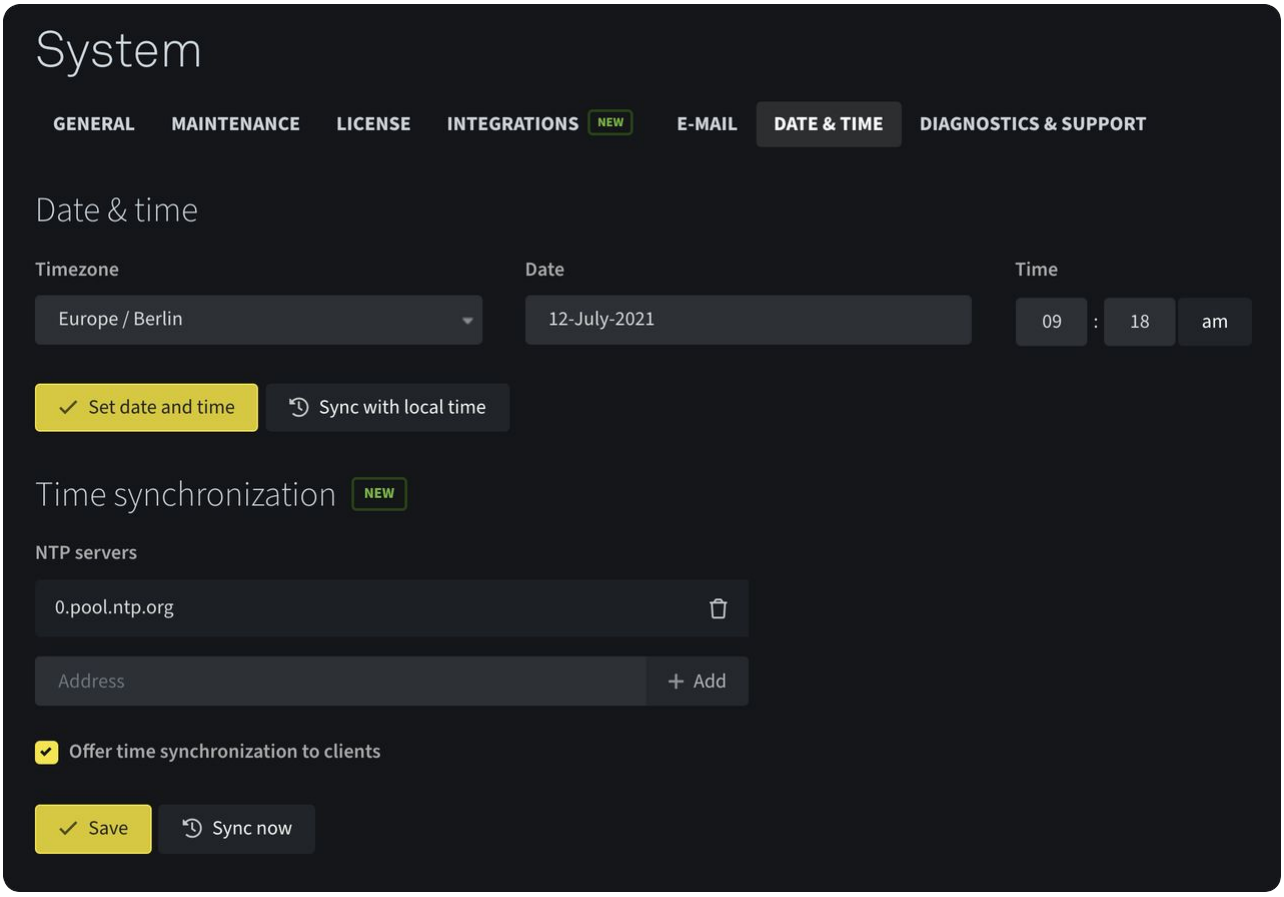
- With the "Show preview" button it is possible to open a popup window which shows a preview of an e-mail with the selected colour scheme.
- "Save as default" will save the current color selection as new default.

11.5.3 Test your setup

- By entering an e-mail address in "Recipient" it is possible to test the setup of the e-mail server.
- With the button "Send a test e-mail" it is possible to send a test e-mail to a specified e-mail address so that the functionality of the e-mail setup can be tested.

11.6 Date & Time tab

The Date & Time tab can be used to set up the the date and time as well as the NTP synchronization.



11.6.1 Date & time

- With "Timezone" it is possible to setup the timezone of the server by selecting the respective timezone in the dropdown menu.
- The actual "Date" can be selected from the calendar, which pops up when the field is clicked.
- Adjust the time of the system by clicking the AM or PM symbol.
- The button "Set date and time" saves the changes on the system.

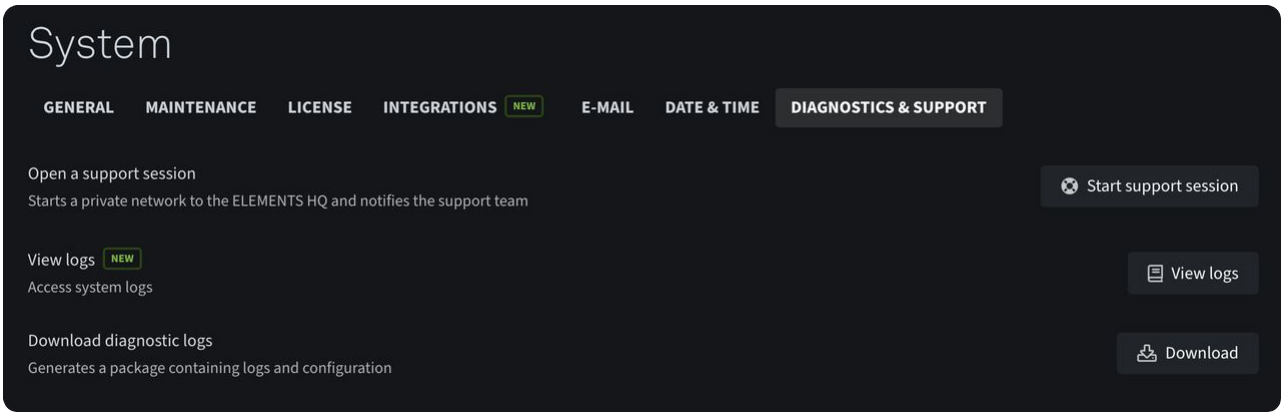
- The button "Sync with local time" will set the system time according to the time of the used computer.

11.6.2 Time synchronization

- "NTP servers" lists all configured NTP servers. Clicking the trash bin icon on the right side of each entry will delete the associated NTP server.
- Entering the address of an NTP server in the text input field "Address" allows to add a new NTP server to the NTP server list by clicking the "Add" button on the right side of the text input field.
- Turning on the checkbox "Offer time synchronization to clients" will enable the system to offer time synchronization to the connected clients.
- "Save" saves the settings of the time synchronization.
- With the button "Sync now" it is possible to synchronize the time at the moment the button is clicked.

11.7 Diagnostics & support tab

The Diagnostics & support tab is used for the ELEMENTS support as well as diagnosing the system.



- With the button "Open a support session" a SSH tunnel will be created, which will grant the ELEMENTS support staff access to the system. ELEMENTS support will advise to use this function of needed.
- "View logs" will open the analytics platform Kibana which allows to view and analyse the logs of the system inside the Web UI.
- The function "Download diagnostic logs" saves a zip file, which contains all diagnostics and system logs. These logs are useful to ELEMENTS support staff.

11.8 Watch the video

11.8.1 Exploring the maintenance menu

https://youtu.be/Dl8lU82AiTE

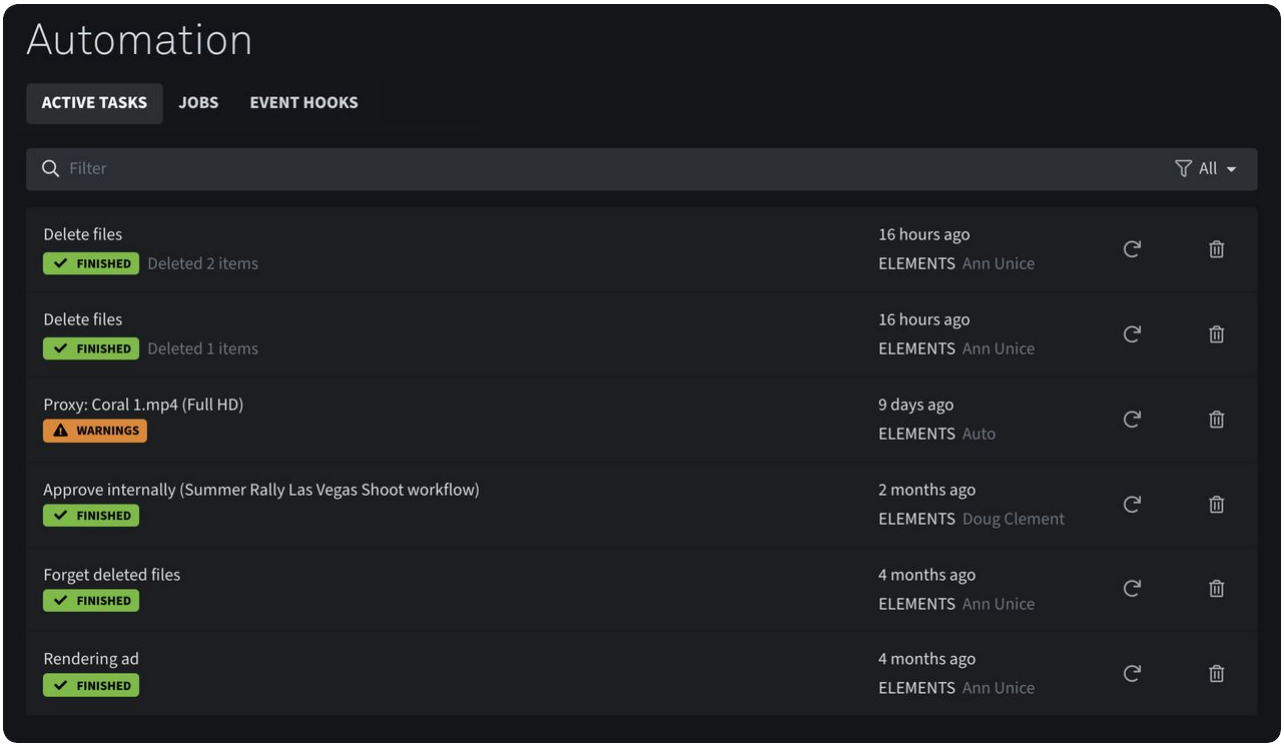
12 Automation

The Automation page allows to set up complex and fully automated jobs and allow users to trigger them from the Media Library or directly from the Windows Explorer or macOS Finder. Speed up the reoccurring tasks by simply scheduling them.

- Active tasks tab(see page 80)
  - Bottom bar(see page 81)
  - Python playground(see page 82)
  - Task log(see page 82)
- Jobs tab(see page 83)
- Task list(see page 84)
  - Scripting tasks(see page 84)
  - Filesystem tasks(see page 85)
  - Notifications tasks(see page 85)
  - General tasks(see page 85)
  - Media Library tasks(see page 85)
  - AWS(see page 86)
  - Automation(see page 86)
- Settings Jobs(see page 87)
  - General tab(see page 87)
  - Variables tab(see page 88)
  - Advanced tab(see page 89)
  - Schedule tab(see page 90)
  - Settings schedule(see page 91)
  - Bottom bar(see page 91)
- Settings task (step)(see page 91)
  - Parameters tab(see page 92)
  - Advanced tab(see page 93)
- Settings variable(see page 95)
  - General tab(see page 95)
  - Validation tab(see page 98)
- Event hooks tab(see page 100)
- Event hook list(see page 100)
  - Authentication(see page 101)
  - Media Library(see page 101)
  - Configuration(see page 102)
  - Users and groups(see page 102)
  - Alerts(see page 102)
  - Storage(see page 102)
  - Workstations (Satellite)(see page 102)
- Event settings(see page 103)
- Watch the video(see page 104)
  - Workflow Automation Engine Overview(see page 104)
  - Workflow Automation - Archive and Restore Workflows(see page 105)

12.1 Active tasks tab

The Active Tasks tab lists all current tasks, outlining their statuses to easily view running, finished and failed tasks.



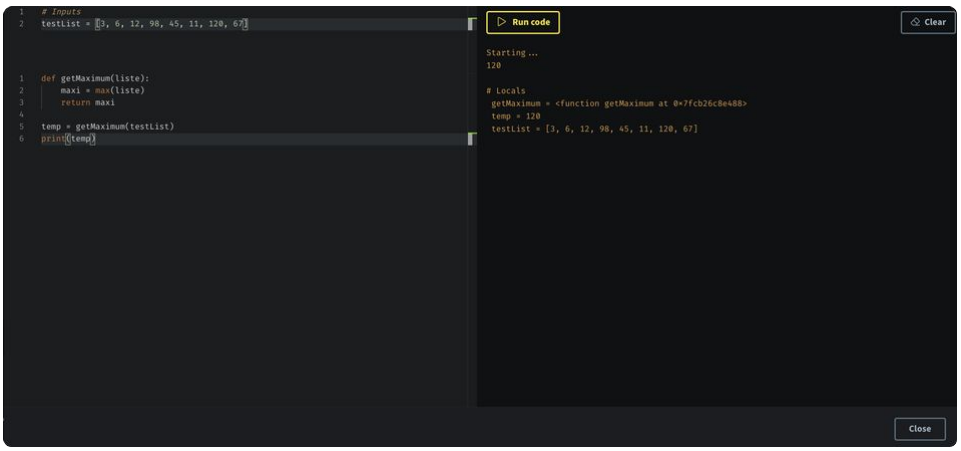
- Active task list updates are paused when the mouse hovers over the list.
- The filter bar above the task list allows users to search for a specific task. The filter options dropdown on the right hand side of the filter bar allows the user to filter the list for the statuses.
- In the text field of an entry, the category of the first step of the task is displayed, followed by the tasks custom definable name. Underneath the name, the status of the task is displayed. Clicking an entry in the task list forwards the user to the task log.
- The right side of the entry shows the time when the task was started as well as the starting user.
- With running tasks, a button for stopping this task is also displayed. In the case of a finished task two buttons are displayed. The first one restarts the task and the second one deletes the task from the list together with its log entry.
- The task shows 10 entries per page, but the page controls beneath the list allow the user to browse the pages of the task list.

12.1.1 Bottom bar

The bottom bar allows the user to perform general actions.

- "+ Start a new task" will open a popup window with all available tasks listed, which allows the user to select a task to be run. This function enables the quick start of a task without searching for a template or having to create one.
- The button "Download reports" will download a ZIP archive onto the users PC. This archive contains all task logs.
- By clicking "Python playground" the system will open a popup window where it is possible to test a python script or train new skills. Please note that this function is only available if the logged in user has "Admin access".
- With the button "Clear reports" all logs of the tasks will be deleted and the list will show no entries.

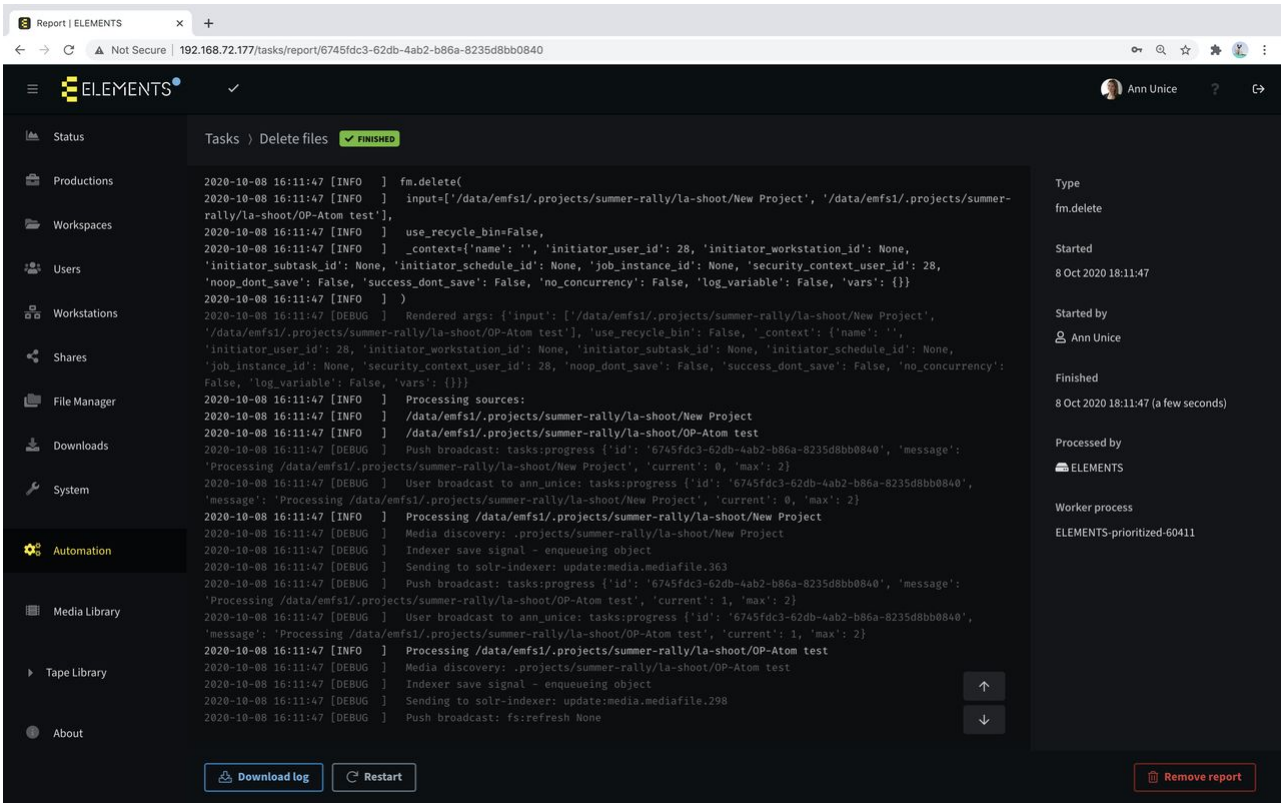
12.1.2 Python playground



- On the left hand side of the Python Playground, two editors are displayed.
  - The upper editor can be used for inputs. With this approach it is easy to test the script without having to change the variables in the actual code.
  - The lower editor is for the actual code to be run and tested.
- The right hand side of the Python Playground displays the execution of the script.
  - With the button "Run code" the entered code will be executed with root permissions. Executing a Python code the system will start a new automation task.
    - Beside the "Run code" button a "Stop" button is also displayed if a script is being executed.
  - Underneath the button bar the execution log of the tested python script is displayed.
  - "Clear" clears the log.
- The button "Close" closes the Python Playground and and the entered code will be lost.

12.1.3 Task log

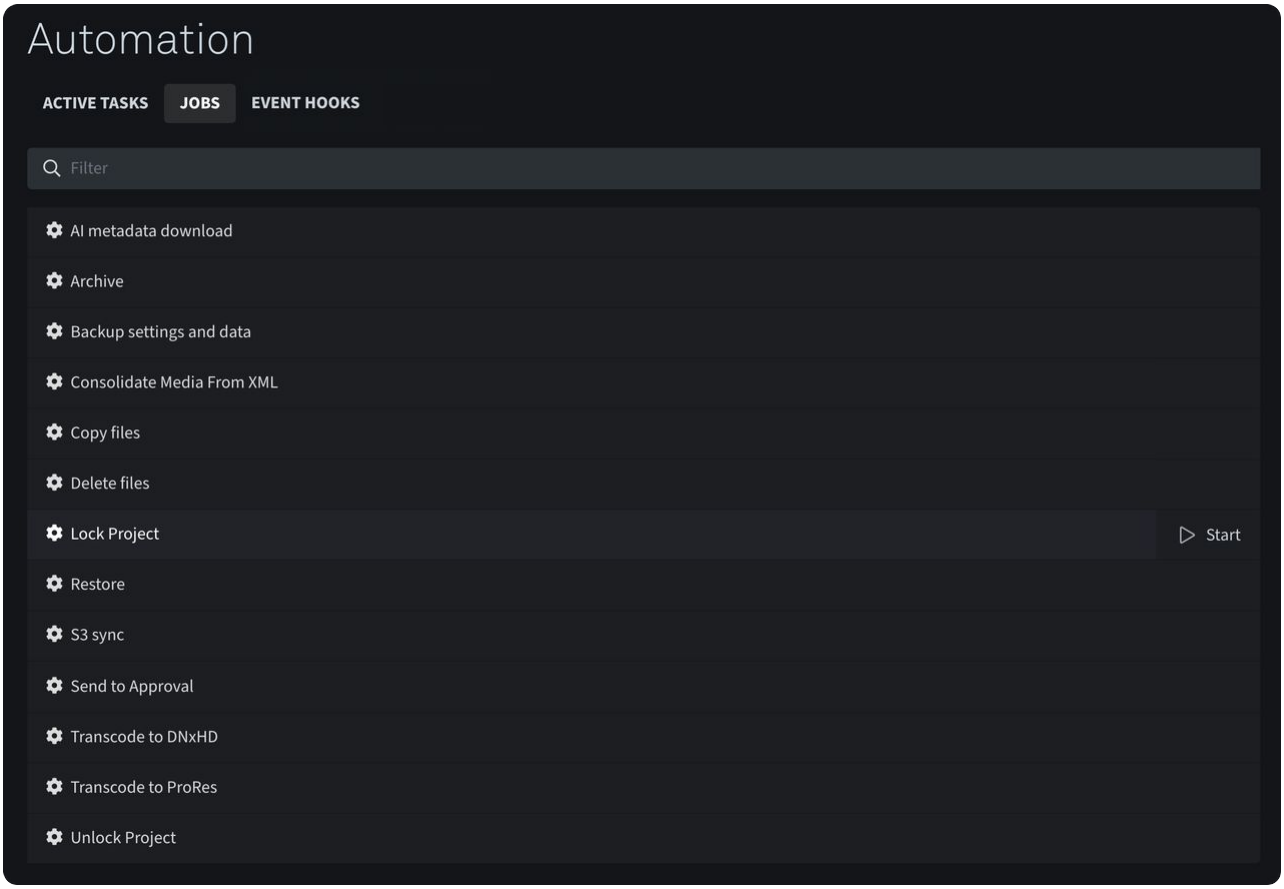
Clicking any entry in the Active Tasks list forwards the user to the task log of the selected entry.



- At the top of the page the name and the status of the task are displayed.
- The window underneath the task status displays a full task log.
- Scrolling through the log is possible by using the mouse-scroll or the arrow buttons on the bottom right hand side of the log window.
- To the right of the log, following task details are listed: Type of task, starting and finishing times, as well as the device that has processed the task.
- "Download log" button in the button bar allows the user to download the selected log.
- Use the "Restart" button to restart the task.
- With the button "Remove report" the opened task report will be deleted.

12.2 Jobs tab

The tab "Jobs" displays a list of all existing jobs and allows the user to manage them as well as create new ones. A job consists of one or more tasks and allows chaining of tasks according to the execution status of the tasks before.



- Clicking on a job will open its specific settings menu and allows the user to modify it.
- A "Start" button appears upon hovering over any job in the list and allows the user to start the job immediately.
- The dropdown list "Create a new job" allows the user to create a new job by selecting any task in the in the displayed list. It is then possible to set up the new job in the settings window, which opens after the start task is selected.
- With "Create from a template" it is possible to create a new job using an existing job template. The template job list is incrementally expanded with every Web UI update.

12.3 Task list

12.3.1 Scripting tasks

- Python: This task will execute the entered Python code on the selected ELEMENTS system.
- Shell: Enter a Shell script, which will be executed by the selected ELEMENTS system. With the `return $variablename "value"` construct it is possible to return variables so they can be used from following tasks/steps.

12.3.2 Filesystem tasks

- Copy files: With this task it is possible to copy files or directories from multiple paths to one destination path. It is possible to setup the overwrite/merge behaviour for this task. Additionally, as an alternative to the copy task, the system can try to create a hard link. A linked file does not use additional storage space. It is however not possible to create a hard link between two filesystems or between two BTRFS subvolumes.
- Delete files: Provides the option to delete multiple files or folders from the system.
- FTP Download: Allows a data download from an FTP server onto the ELEMENTS system.
- FTP Upload: With this task it is possible to upload data from the ELEMENTS system to an FTP server.
- Move files: It is possible to move files from multiple sources to one destination path. Also the overwrite/ merge behaviour can be setup for this task.
- Repair workspace permissions: Restores the configured file permissions of the selected workspace.
- Resequence: This task allows the user to order the images produced during still image sequencing.
- Rsync: Use this task to synchronize a folder with a destination folder using the rsync tool. Additional settings of the rsync utility can be used, such as activating error ignoring or predefining the available bandwidth etc.
- Workspace shadow copy: This task will create a shadow copy of the selected workspace. The shadow copies of a workspace can be found in its settings(see page 0).

> Please note that the shadow copy function is only available on an EMFS filesystem, which can be found on an ELEMENTS NAS and ELEMENTS CUBE.

12.3.3 Notifications tasks

- Client notification: Allows the user to send a push notification via the ELEMENTS Client app.
- E-mail: This task allows to send an e-mail with a predefined fixed or variable message (e.g. informing about the processed files).
- Slack: With this task it is possible to send Slack notifications.

12.3.4 General tasks

- Backup settings and data: This task will create a backup of all settings and configuration data such as users, networking and filesystem settings so that the user can rollback to this state if required. It is also possible to define a path where the backup should be saved.
- Finder/Explorer refresh: Running this task allows the user to refresh the Finder/Explorer panels of the client so that they are up to date.
- Generate status report: Running this task will generate a list containing the last used workspaces and the relevant capacity as a variable so that it can be sent in a notification for example.
- Log: Running this task will generate a system log and save it to the set location.
- Sync time: Will start a synchronization of the server time. In the task settings, the address of the NTP server can be entered.
- Transcode: Use the task to transcode footage into any of the pre-implemented formats. Custom ffmpeg and ffmbc scripts can be added in the admin panel to expand the list of possible transcoding formats of the task.

12.3.5 Media Library tasks

- Forget deleted files: If files and folders are deleted from the system (through the ELEMENTS Client, File Manager, Automation or the Media Library), the Media Library will still display the proxies. Forget deleted files task deletes the proxies of the original files which can not be found in the original location.

- Create a sharing link: Allows to generate a sharing link for a selected asset. The link will be passed to the next step in the job making it possible to send this sharing link via e-mail or as a Slack message.
- Media scan: This task allows the user to scan a Media Root for new assets. If new assets are found the system will create the proxies for the new assets.
- Merge custom fields: Will merge all custom fields from the the file level to the asset level so they are accessible over the complete ELEMENTS Media Library if this asset is used in multiple Media Roots.
- Parallelized media scan: The task parallelized media scan allows the user to scan a location for new assets. If new assets are found, the system will generate the proxies for the new assets. The load of this task can be spread across multiple systems.
- Regenerate proxies: This task allows the user to regenerate existing proxies, for example in the case of an updated proxy profile.
- Set custom fields: Set custom fields of any asset in the Media Library.
- Set workflow state: This task allows the user to set workflow states for directories or single files.

12.3.6 AWS

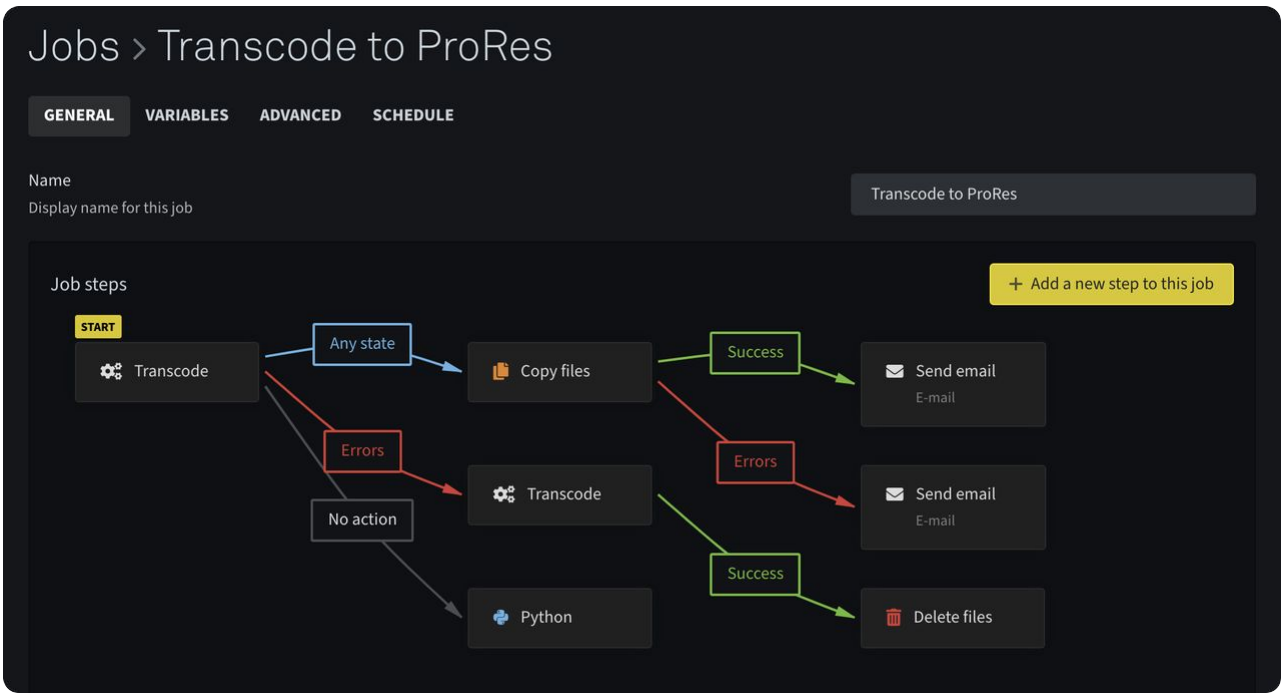
- Amazon SNS message: Allows sending of automised Amazon SNS (Simple Notification Service) messages.
- S3 copy: Copy data from cloud to cloud, from cloud to system or from system to cloud.
- S3 delete: Allows the user to delete content from the cloud.
- S3 sync: This task allows the user to sync data from cloud to cloud, from cloud to system or from system to cloud.

12.3.7 Automation

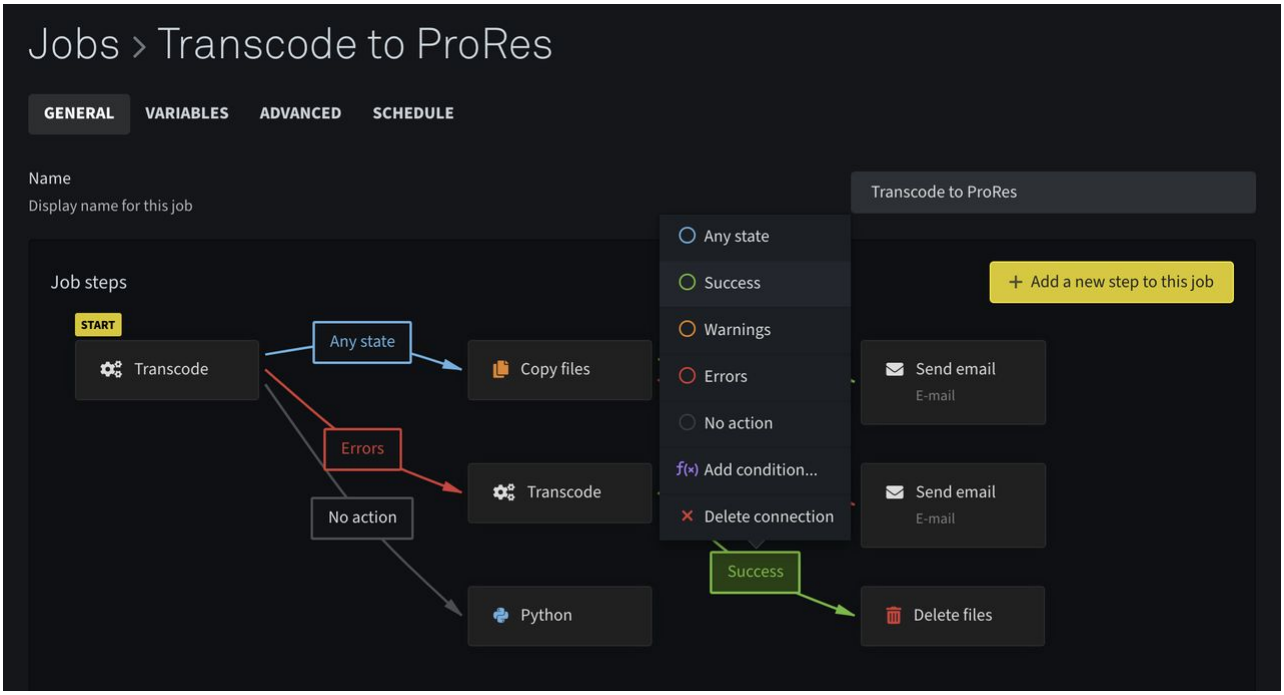
- Start another job: With this task it is possible to start/trigger another Automation Job.

12.4 Settings Jobs

12.4.1 General tab

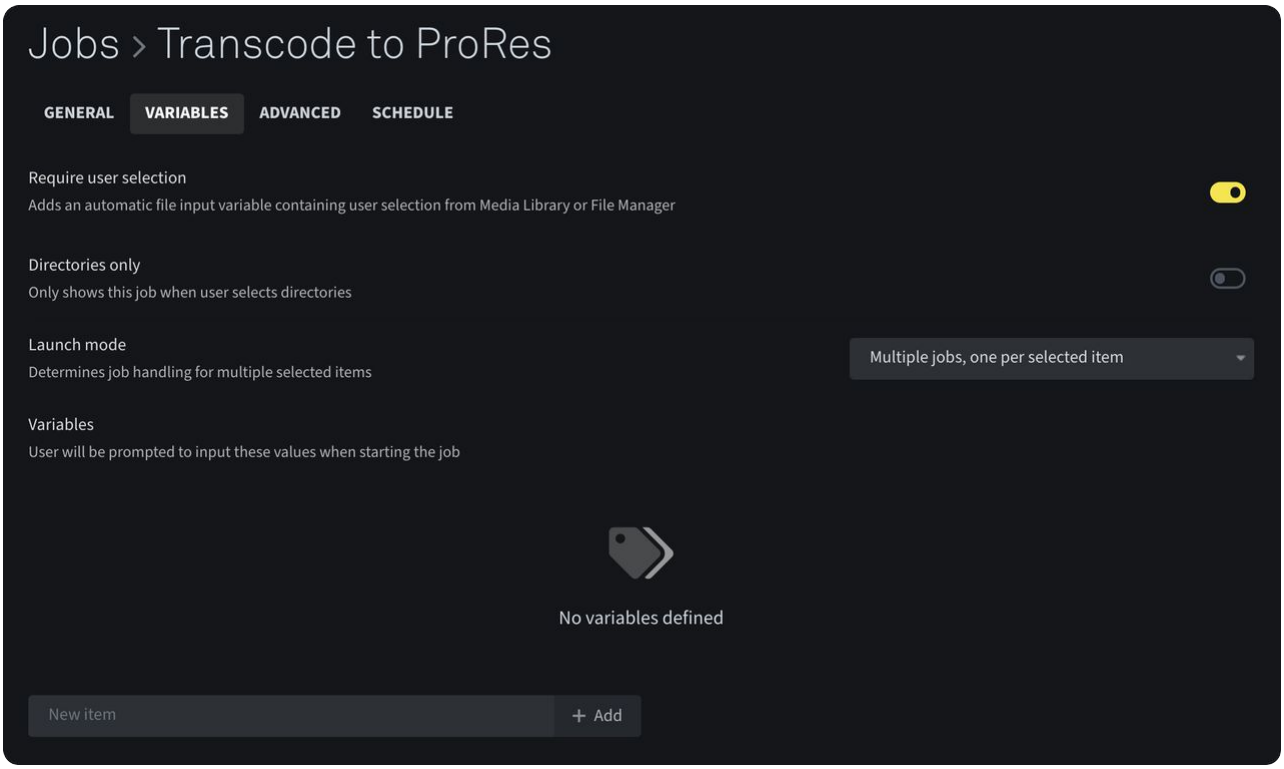


- "Name" allows the user to change the name of the selected job.
- The steps section allows the user to manage all steps/tasks of a job. In case that the job has only one task, the tasks settings will be displayed in this position. If the selected job consists of several tasks, a flow chart of the tasks is displayed. Manually reposition the task in the flow chart by using the drag-and-drop function. By clicking one of the tasks a popup window will show the settings of the selected task.
- The tasks are executed according to the execution status of the previous task. The status is displayed on the connection between two tasks. Clicking the state displays a list of offered states.
- The offered state list:
    - Any state: Execute the following task independent of the previous task's execution status.
    - Success: Execute the following task only if the previous task was executed successfully.
    - Warnings: Execute the following task only if the previous task was executed with warnings.
    - Errors: Execute the following task only if the previous task was executed with errors.
    - No action: Execute the following task if the previous task finished with a no action status.
    - Add condition: Allows to execute the task according to preset conditions such as exit codes of the task before.
    - Delete connection: Allows the user to remove the connection between two states.



12.4.2 Variables tab

The Variables tab allows the user to configure customised variables, which could be used in individual steps.



- Turning the "Require user selection" on adds an automatic input variable. This variable allows the user to start the job with any number of selected items in the Media Library, File Manager or the context menu of the

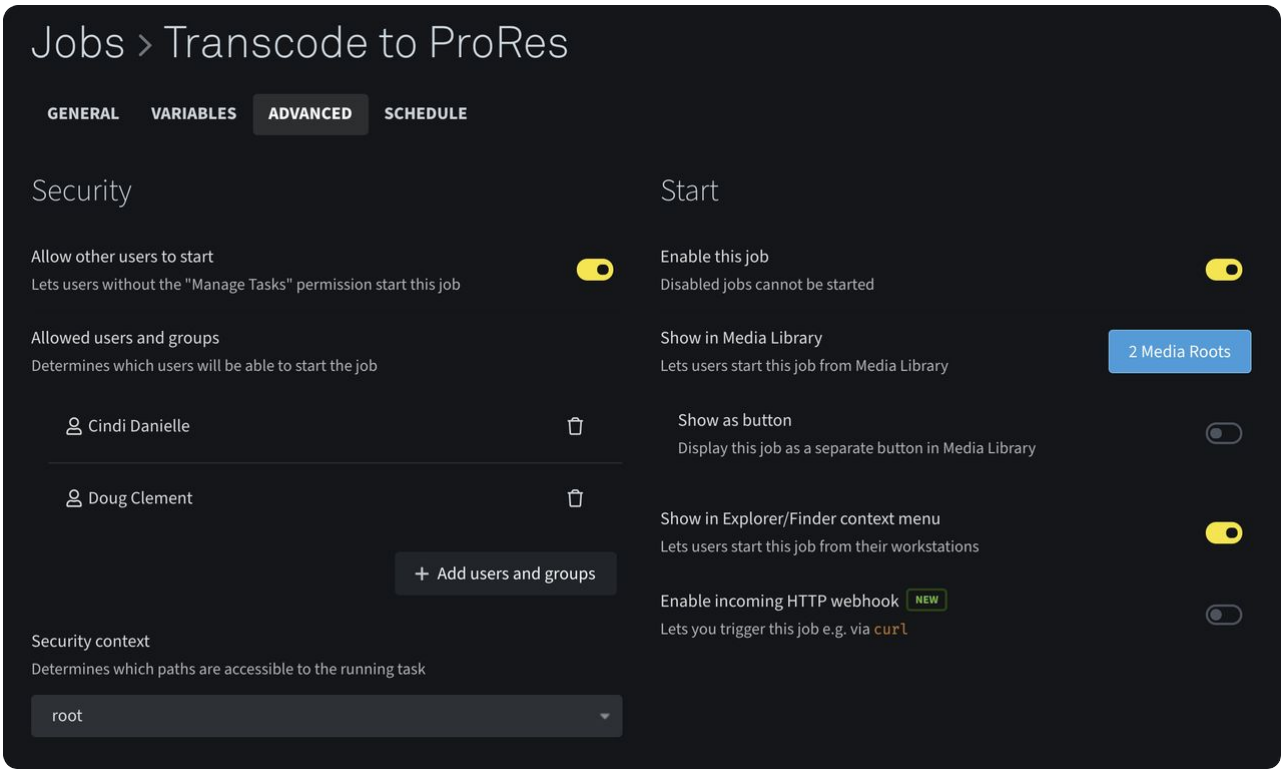
Windows Explorer or macOS Finder (right-click on a file or folder in a workspace mounted via ELEMENTS Client). In order to enable starting jobs from the Media Library, the jobs must be enabled in the Configuration menu of the Media Root.

- The "Directories only" function allows only directories to be selected as an input for the job.
- The "Launch mode" allows the user to determine the job handling for multiple selected items. "A single job with all items at once" will start a single job with all specified files and/or folders. Only one task entry will be displayed in the Active Task tab of the Automation menu. The mode "Multiple jobs, one per selected item" will start one job for each specified file and/or folder with one file by another as input variable. For every item selected, a task entry will be displayed in the Active Task tab of the Automation menu.
- "Variables" allows the user to define custom variables which can be used in jobs.
    - All created variables are displayed in a list.
    - Dragging an entry toward the arrow symbol on the left hand side will allow the user to change the ordering of the list.
    - Clicking an entry opens its settings.
    - With the trash bin symbol, displayed on the right hand side of the entry upon hovering, the concerning entry can be deleted.
    - The textfield underneath the variable list allows the user to add new variables. After confirming the new variables name with the button "Add" by hitting ENTER or clicking the "+ Add" button the new variable will appear in the list of variables and can be setup.

More information about creating variables can be found in the section Settings-variable(see page 0).

12.4.3 Advanced tab

This tab allows the user to configure the start permissions of the selected job.

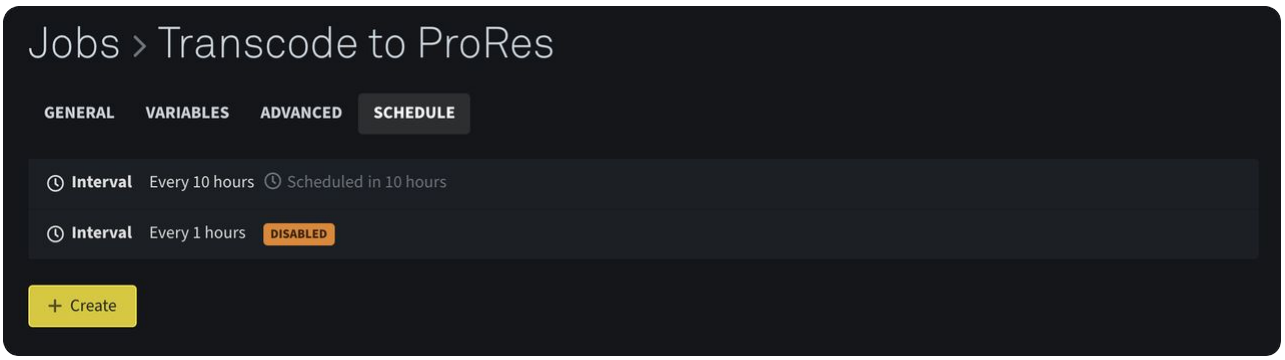


- "Allow other users to start" allows any user with the "Start Jobs" user permission to start the job if this option is enabled.

- By adding users and/or groups to the "Allowed users and groups" list, it is possible to define a list of users or groups who will exclusively be able to start the selected job. If no users and/or groups are defined any user with the "Start Jobs" permission will be able to start this job. This panel will only appear if the option "Allow other users to start" is enabled.
- With "Security context" it is possible to define the permissions used for the execution of the job. This function determines which paths on the system are accessible to the running task. When starting a Job, access permissions for the starting user can be used (Select "The user starting the task"). Alternatively, access permissions of another user, with wider access permissions, can be used. Example: To use the permissions of the root user, log into the Web UI as root, navigate to the speciffic job in the Automation menu and choose the root user in the security context section. This function allows users to write files to workspaces that the user starting the task has no direct access to.
- Using the "Show in Media Library" function, the selected job can be displayed in the Media Library without the need to turn it on in the Media Root's configure menu.
    - If turned on, an additional option "Show as button" appears. This function allows to display the job as an additional button in the Media Library.
- Turning on the "Show in Explorer/Finder context menu" function allows users to start the selected job out of the Explorer or Finder if the workspace is mounted via the ELEMENTS Client app. For starting the jobs from the context menu of Windows Explorer or macOS Finder, a variable input must also be enabled.
- The "Enable incoming HTTP webhook" allows the user to start the job via the ELEMENTS API.

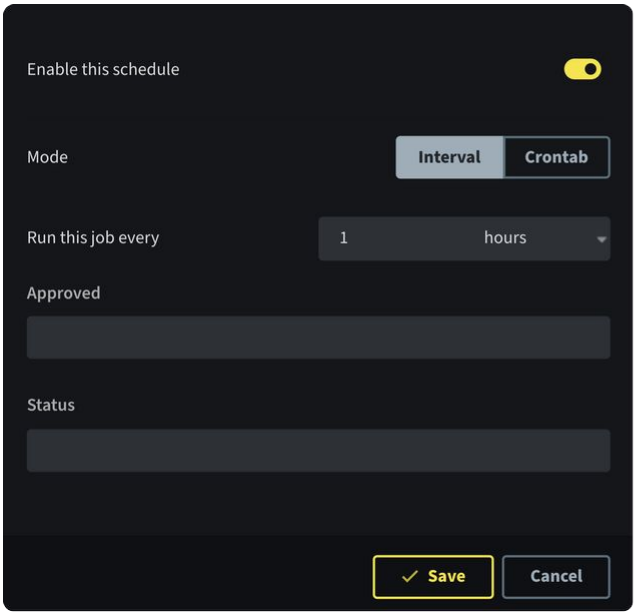
12.4.4 Schedule tab

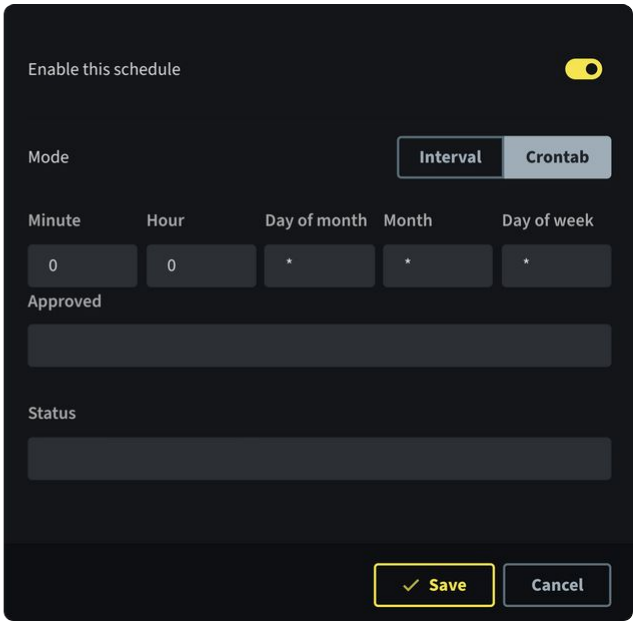
This tab allows the user to schedule the selected job.



- All existing schedules will be listed together with the defined repetition. If no schedules exist for the selected job, the system will only show the "+ Create" button.
- Clicking on an existing scheduler will open a popup window displaying the settings of the new scheduler.
- The trash bin symbol displayed on the right hand side of an entry upon hovering allows the user to delete the concerning schedule entry.
- After clicking the "+ Create" button a popup window with the settings of the new scheduler will be opened. The new scheduler will be created after saving the settings with the "Save" button in the popup window.

12.4.5 Settings schedule





- "Enable this schedule" switch allows the user to enable or disable the selected scheduler.
- "Mode" allows the user to define the kind of scheduler.
    - The interval mode allows the user to start the job in a defined interval. It is possible to select the kind of interval from the dropdown list. The available options are days or hours or minutes.
    - The crontab mode allows the user to schedule the selected job in greater detail.
- The scheduler also allows to set values of predefined custom variables.
- The made changes will only be saved and applied after clicking the "Save button". The newly created scheduler entry will appear in the scheduler list of the job.

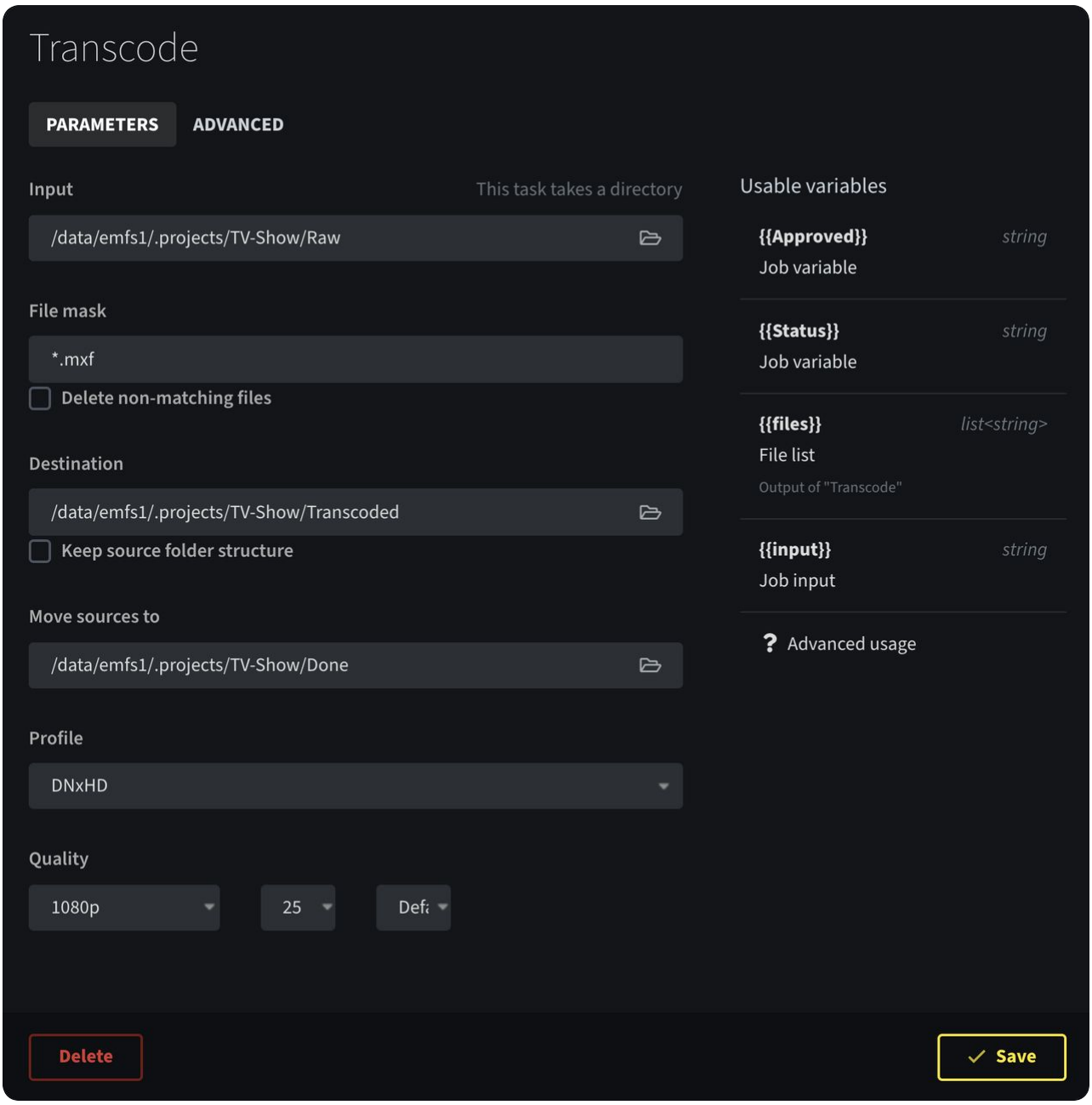
12.4.6 Bottom bar

- "Save" will save all made changes.
- "Start job" allows the user to start the job with the actual settings.
- "Delete" will delete the selected job.

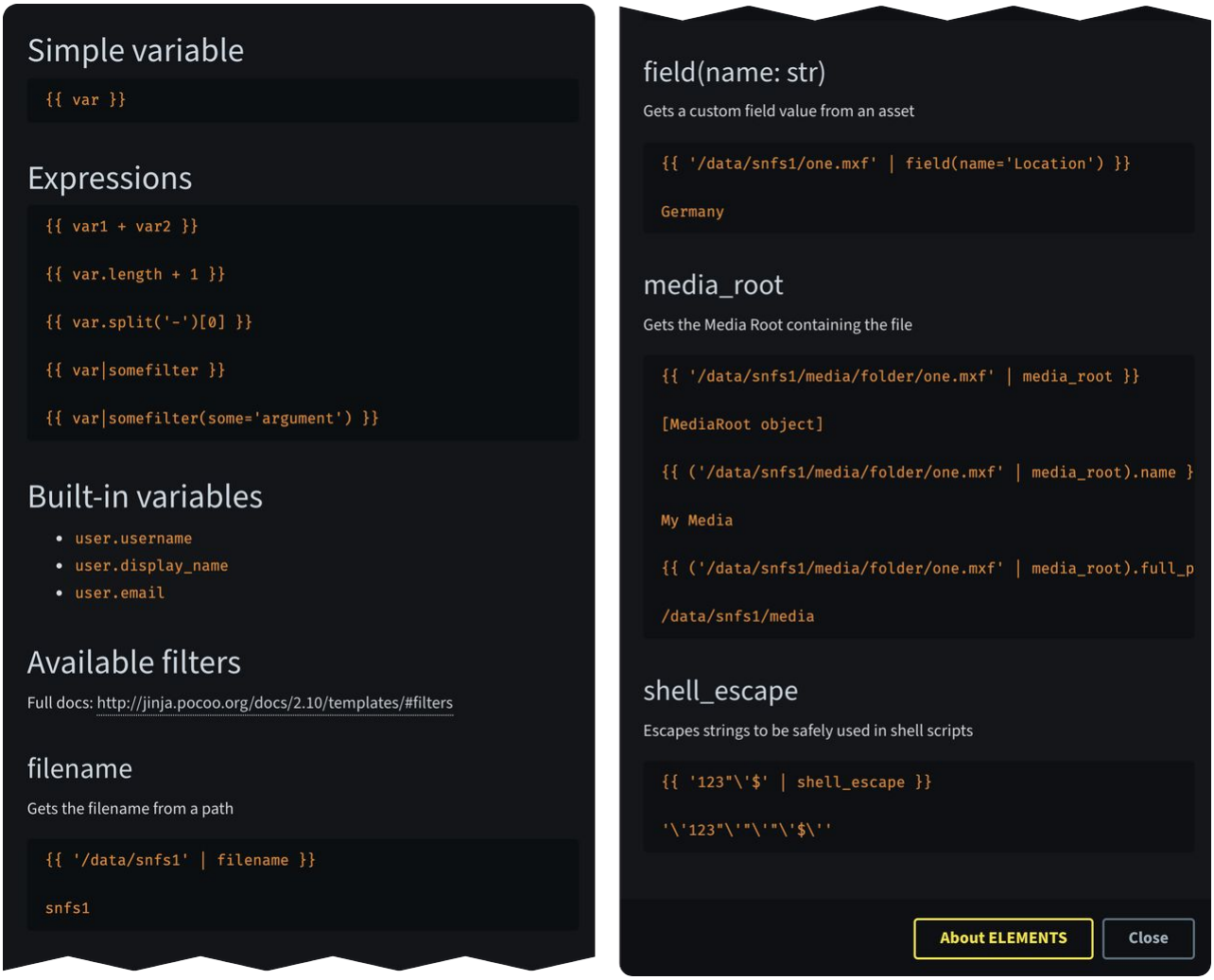
12.5 Settings task (step)

The settings of each task are divided in two tabs.

12.5.1 Parameters tab

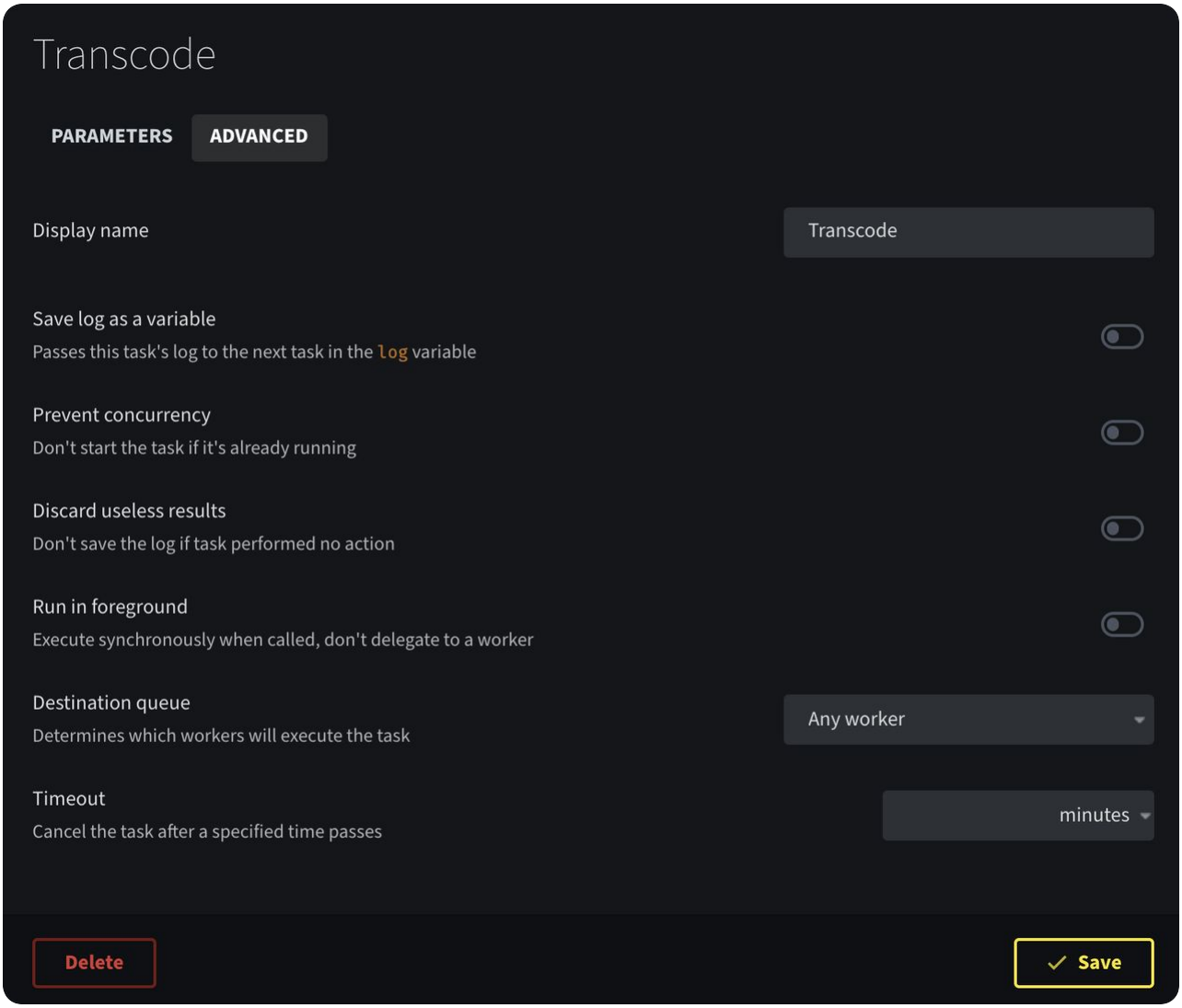


- The parameters tab allows the user to set up the actions of the selected task. For this purpose there are task specific fields which allow the user to set up the task.
- On the right hand side of the popup window usable variables for inputs and outputs are displayed. By clicking the "? Advanced usage" button, information on advanced function usage will be displayed.



12.5.2 Advanced tab

The Advanced tab provides additional functions. For example it is possible to define the task running behaviour or which destination queue the task should use.

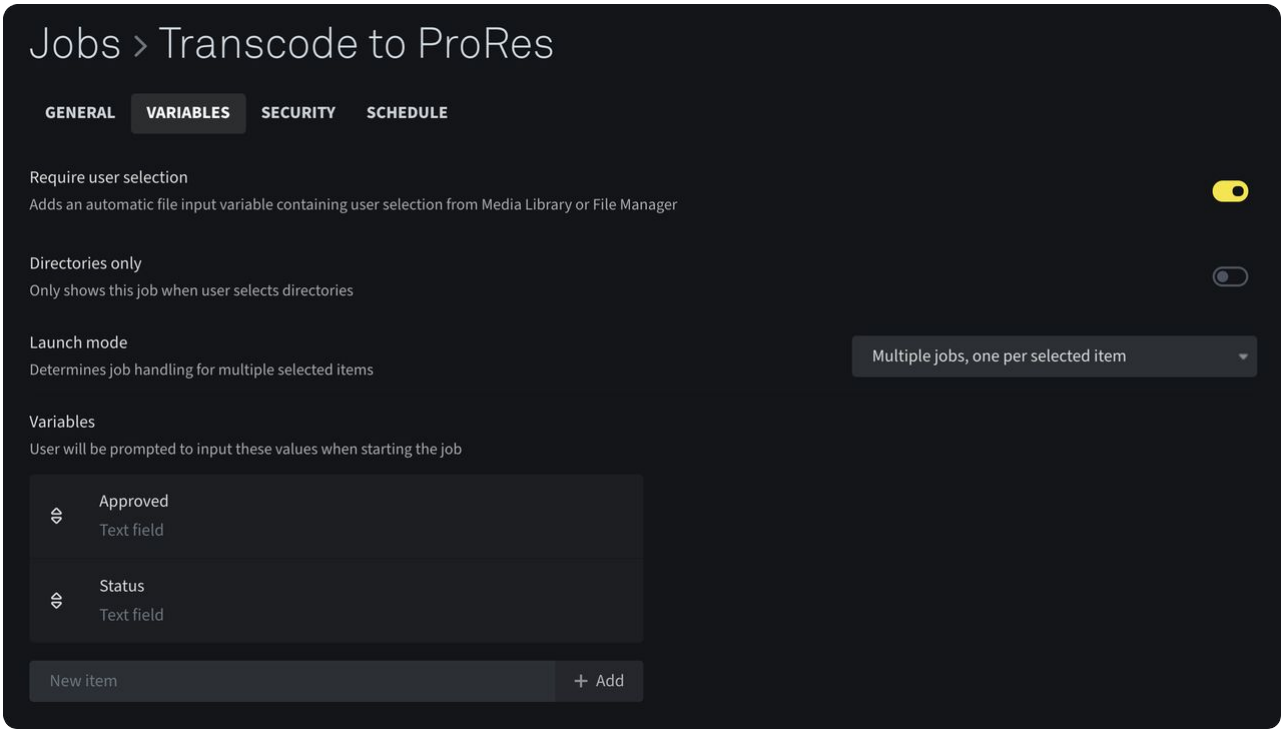


- "Display name" allows the user to change the name of the task.
- If "Save log as variable" is enabled the system will pass the log of the selected task in the variable log ({{log}}) so the subsequent task can use it.
- With the "Prevent concurrency" function it is possible to prevent the start of the task if the very same task is already running as a part of a different job.
- The function "Discard useless results" will reject the log of the task in the event of no operation (NOOP).
- Turn on the "Run in foreground" function to run the step synchronously within the process that started it. This step will not offloaded to a worker process.
- ~~"Destination queue" allows the user to specify the worker which will execute the task (the dropdown list will display all available nodes). Note that task execution influences the performance of the system.~~
- "Queue" allows the user to assign the selected task to a specific queue. If another queue than default is selected there appear two additional options:
    - Routing: This option allows to specify a node which should process the selected task, for example a worker. Please note that in case a task has inputs which are required while starting it is possible to select "Based on input". That means that the system will dynamically assigns a worker depending on the volume the files are on.
    - Priority: It is possible to determine the importance of the selected task. Please note that "Interactive" is a separate queue which is usually empty so that jobs can be calculated here for which the priority high is not sufficient.

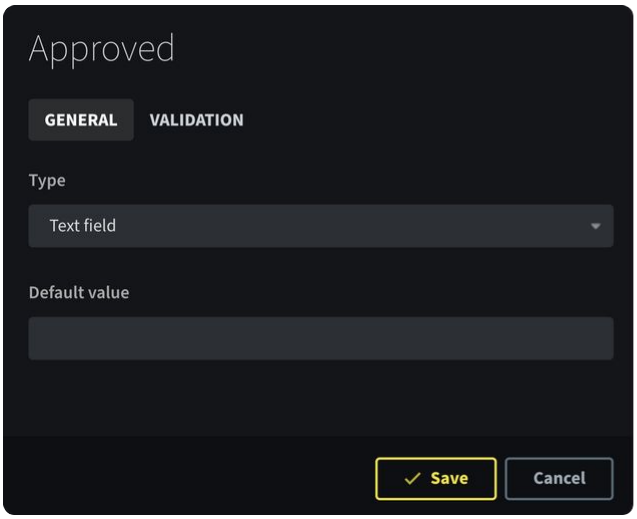
- If "Skip to the front of the queue" is activated the selected task will jump to the top of the assigned queue.
- The "Timeout" function allows to set a time after which the step will be canceled.

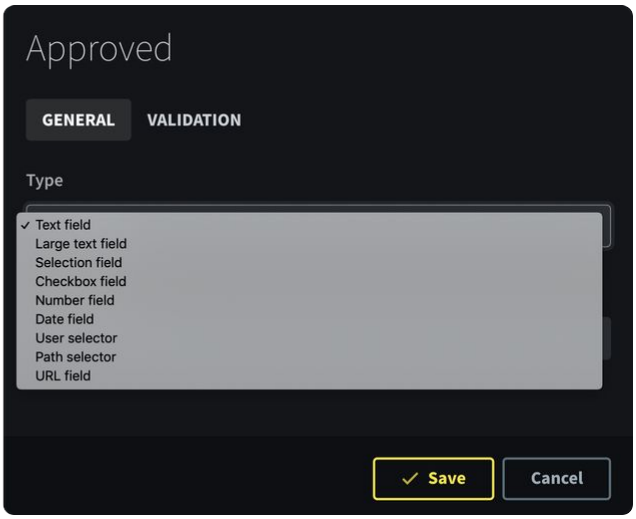
12.6 Settings variable

The settings of a variable allow the user to setup its type as well as the default values. For text based inputs it is possible to setup a validation so only certain inputs can be made.



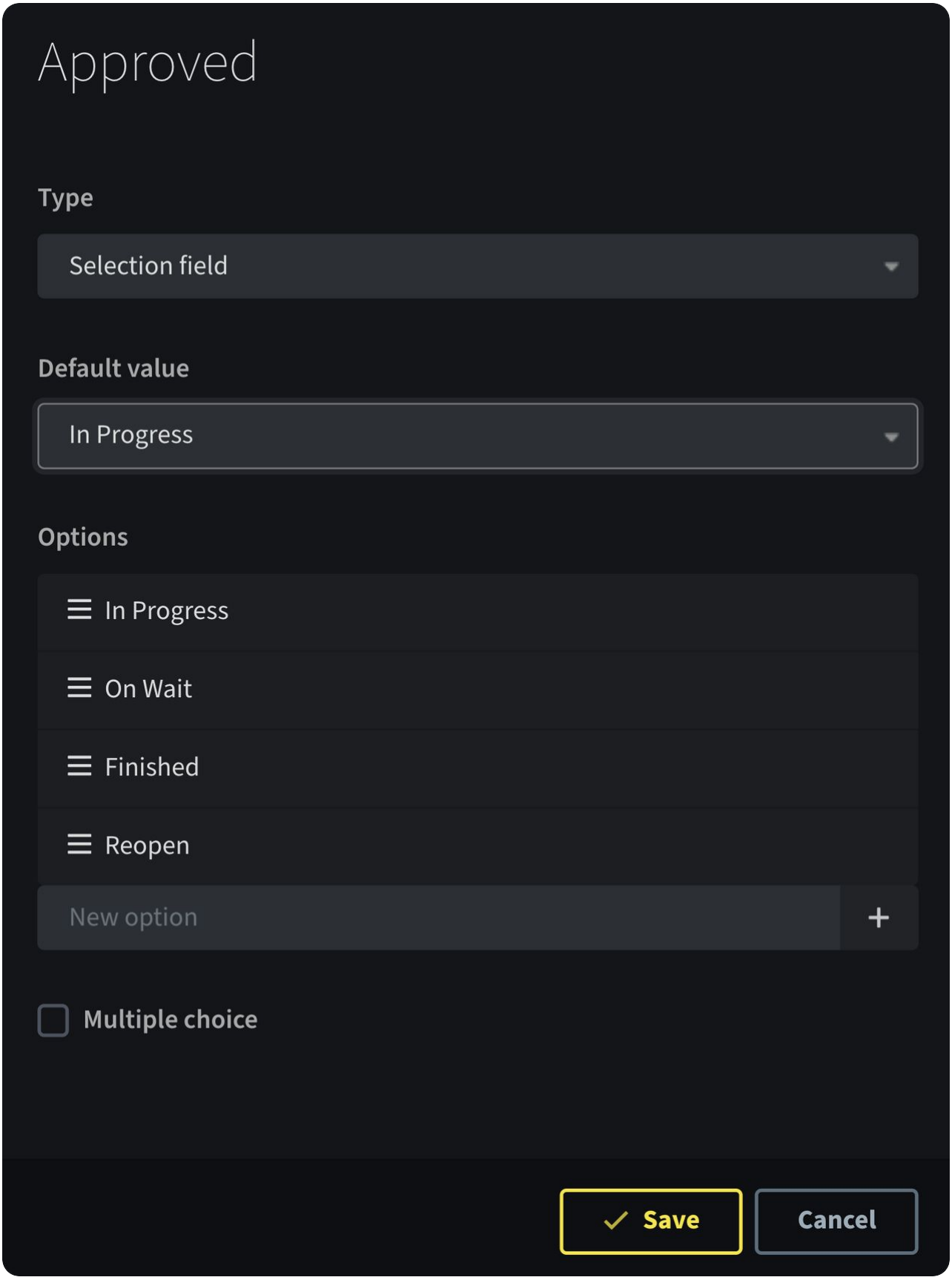
12.6.1 General tab





- The dropdown list "Type" allows the to select the type of the variable. Available options are "Text field, Large text field, Selection field, Checkbox field, Date field, User selector, Path selector, URL field"

- In the "Default value" field it is possible to define a default value for the selected variable. A checkbox field can be enabled or disabled by default.
- A selection field additionally offers the possibility of adding selection option. The options section allows the user to add any number of options to be selected.
    - Add an option by entering a name and confirm the new option with the "+" button or by hitting ENTER.
    - By clicking the trash bin next to an option the user can delete that specific option.

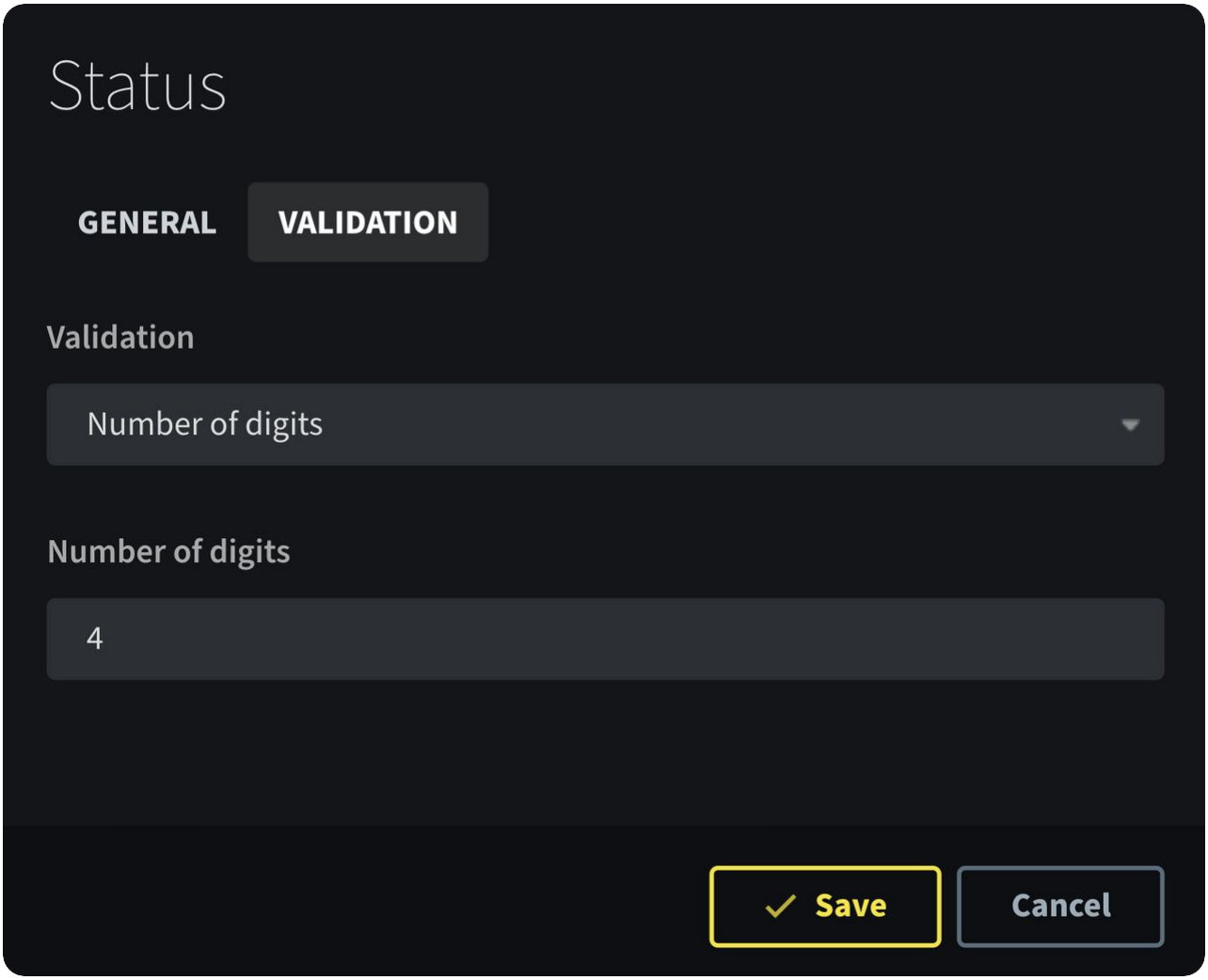

Approved
Type
Selection field
Default value
In Progress
Options
In Progress
On Wait
Finished
Reopen
New option
Multiple choice
Save
Cancel

12.6.2 Validation tab

Two types of variable validation are available.

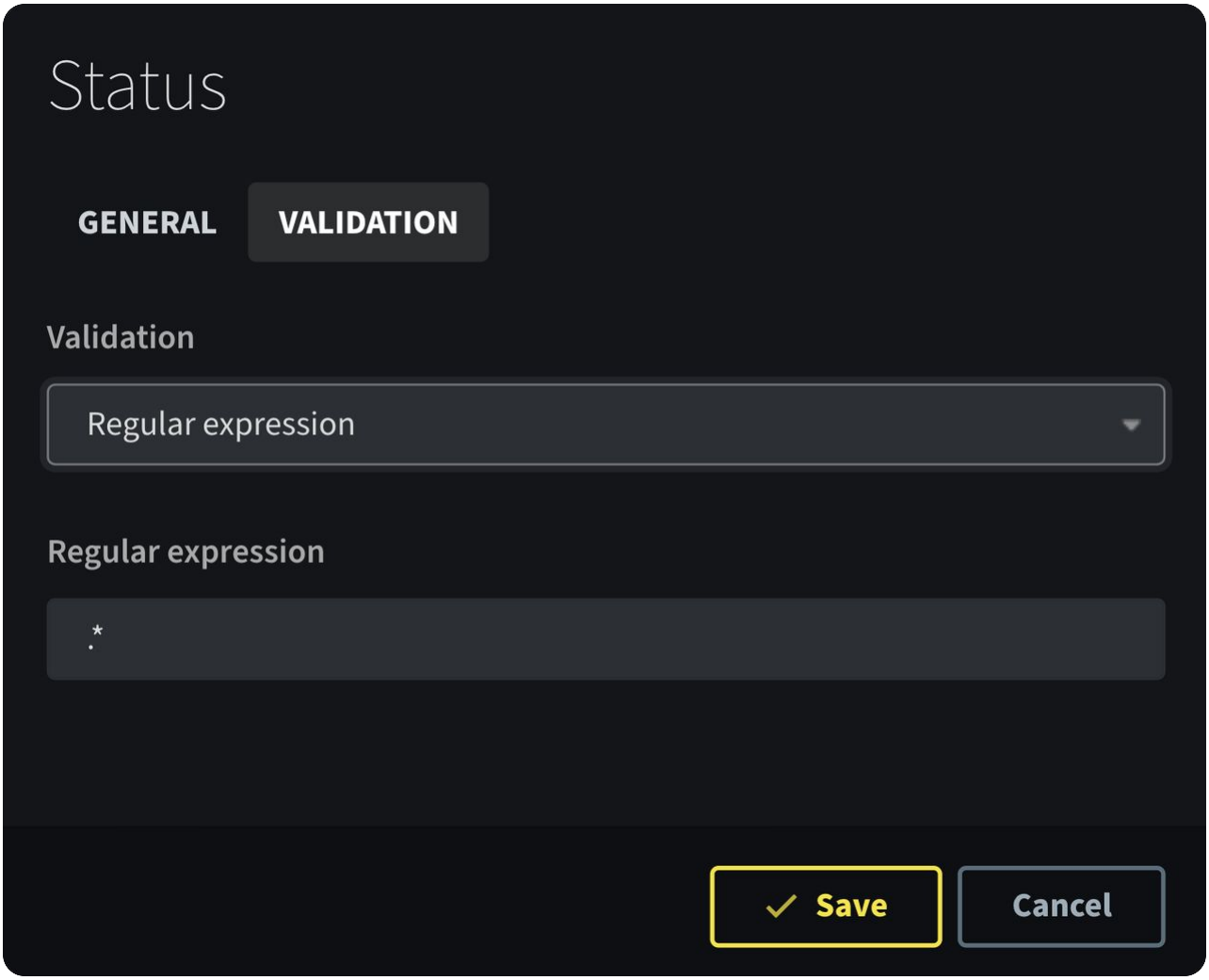
Number of digits:

- This option will only allow numeric inputs. The number of characters must correspond with the set up number of digits.



Regular expressions:

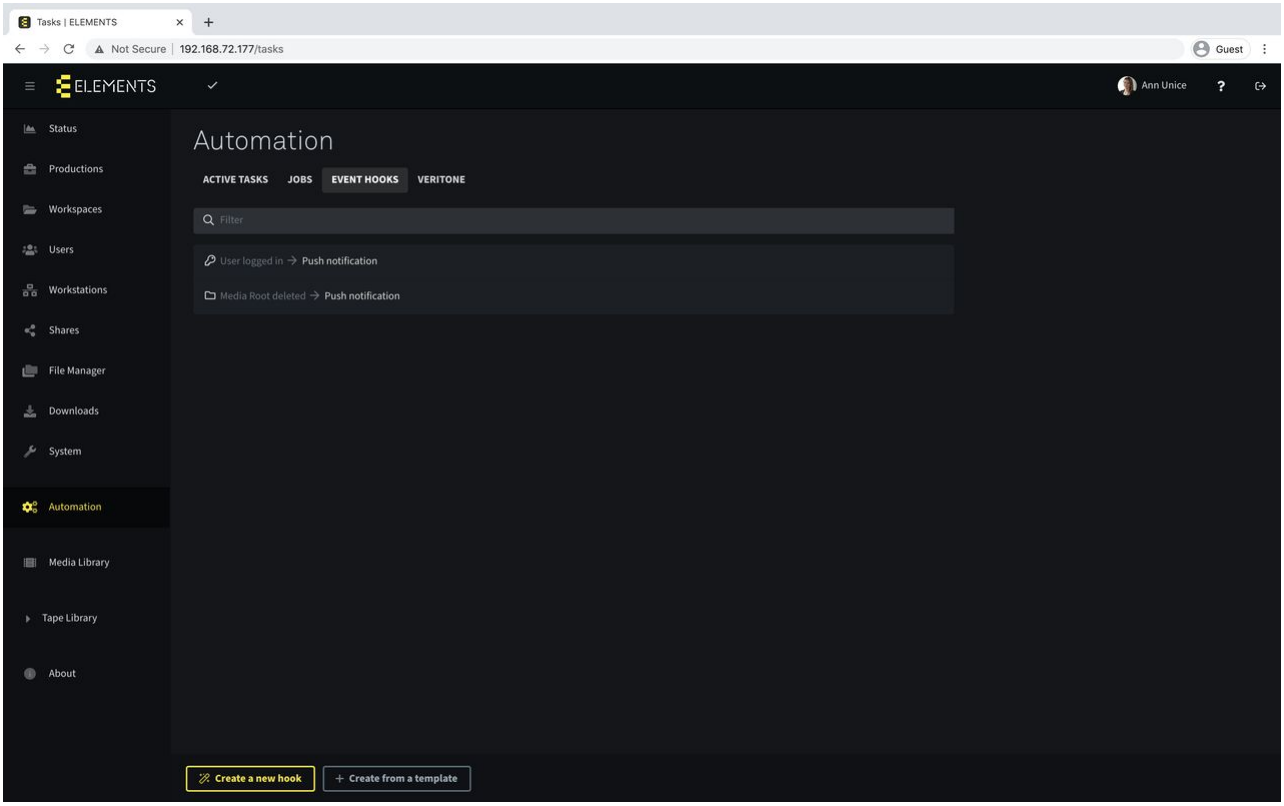
- Variable validation by using regular expressions defines a range of characters available for input.



- Possible expressions:
  - "[afg]" only allows one character "a" or "f" or "g". Additionally it is possible to allow one character out of a span of characters. For example [a-z] will allow one of all small latin letters. [0-9] will allow one number between 0 and 9.
  - "[^ag]" will allow any character except for "a" and "g".
  - "." matches any single character. Allowed inputs for example are "a", "B", "4", "9".
  - "*" will match the preceding element zero or more times. For example, ab*c allows "ac", "abc", "abbc", "abbbbbc".
  - "+" will match the preceding element one or more times. For example, the expression ab+c allows "abc", "abbc", "abbbc", but not "ac".
  - "[\d]" will only allow digits.
  - "[\D]" will only allow characters and not digits.
  - Examples:
    - "[a-f]*" allows any number of characters out of the small latin letter range a-f.
    - "[a-g][0-9]" would match for example "a3" or f7 etc.
    - The default value ".*" will allow almost any input.

12.7 Event hooks tab

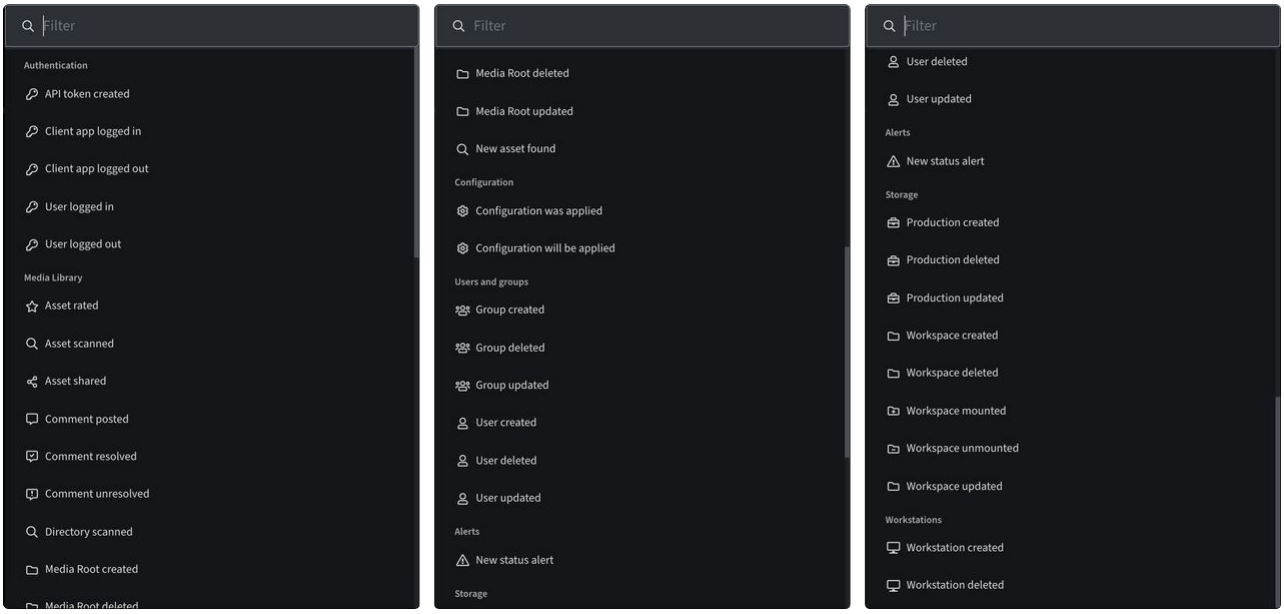
The Event hooks tab allows users to set up automations that will be triggered after a certain action has been executed.



- Clicking on an event entry in the list will open its specific settings menu and allows the user to modify it.
- The dropdown list "Create a new hook" allows the user to create a new event by selecting any of the event hooks in the in the displayed list.
- With "Create from a template" it is possible to create a new event by using an existing event template. The template
  list is incrementally expanded with every Web UI update.

12.8 Event hook list

Upon choosing any of the event hooks offered in the list, user will be redirected to the list of job steps and can choose the first step in the newly created event.



12.8.1 Authentication

API token created: Starts the event after a two-factor authentication API token has been created.

Client app logged in: Starts the event when a user-login via the ELEMENTS Client app has been detected.

Client app logged out: Starts the event when a user-logout via the ELEMENTS Client app has been detected.

User logged in: Starts the event when any user-login has been detected, including the ELEMENTS Client and the Web UI.

User logged out: Starts the event when any user-logout has been detected, including the ELEMENTS Client and the Web UI.

12.8.2 Media Library

Asset rated: The event will be triggered after an asset has been rated in the Media Library.

Asset scanned: The event will be triggered after an asset has been scanned in the Media Library.

Asset shared: The event will be triggered after an asset has been shared from the Media Library.

Comment posted: The event will be triggered after a comment has been created on an asset in the Media Library.

Comment resolved: The event will be triggered after a comment task has been resolved by a user in the Media Library.

Comment unresolved: The event will be triggered after a comment task has been marked as unresolved in the Media Library.

Directory scanned: The event will be triggered after a Media Library directory has been scanned.

Media Root created: The event will be triggered when a new Media Root is created.

Media Root deleted: The event will be triggered when a Media Root is deleted.

Media Root updated: The event will be triggered when a Media Root has been updated.

New asset found: The event will be triggered when a new asset is found in the Media Library.

12.8.3 Configuration

Configuration was applied: Starts the event when the config files been saved and the "Applying configuration" process finished. The configuration process runs when the settings of a production, workspace, user or a share have been modified and saved.

Configuration will be applied: Starts the event when the config files been saved but the "Applying configuration" process is not yet finished. The configuration process runs when the settings of a production, workspace, user or a share have been modified and saved.

12.8.4 Users and groups

Group created: Starts the event when a new user group has been created.

Group deleted: Starts the event when a user group has been deleted.

Group updated: Starts the event when a user group has been updated.

User created: Starts the event when a new user has been created.

User deleted: Starts the event when a user has been deleted.

User updated: Starts the event when a user profile has been updated.

12.8.5 Alerts

New status alert: Starts the event when a new status alert has been detected. The same alerts can be found on the Status page of the ELEMENTS Web UI.

12.8.6 Storage

Production created: Starts the event when a new Production has been created.

Production deleted: Starts the event when a Production has been deleted.

Production updated: Starts the event when a Production has been updated.

Workspace created: Starts the event when a new Workspace has been created.

Workspace deleted: Starts the event when a Workspace has been deleted.

Workspace mounted: Starts the event when a Workspace has been mounted through the Client app.

Workspace permission created: Starts the event when a user or a group was added to the access permissions of a workspace

Workspace permission deleted: Starts the event when a user or a group was deleted from the access permissions of a workspace

Workspace unmounted: Starts the event when a Workspace has been unmounted through the Client app.

Workspace updated: Starts the event when a Workspace has been updated.

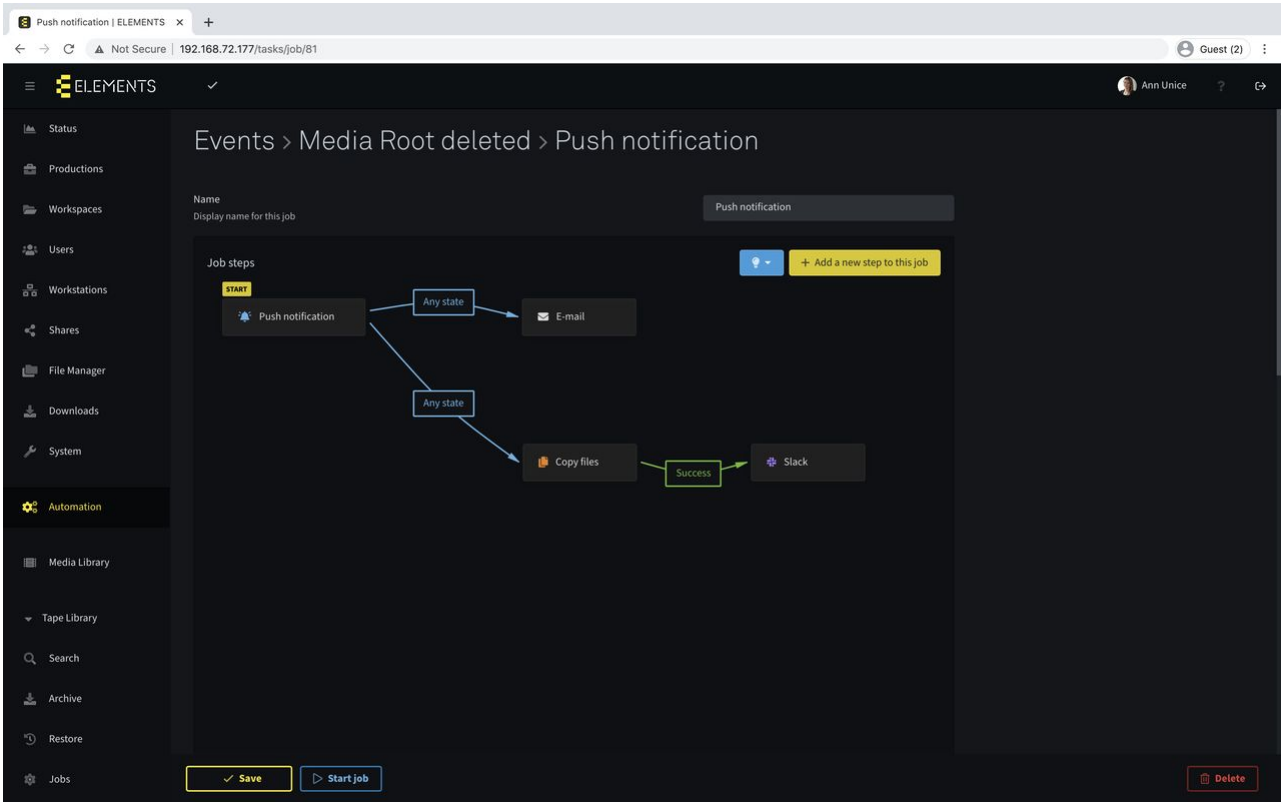
12.8.7 Workstations (Satellite)

Workstation created: Starts the event when a new Workstation has been added to the Satellite Workstations list.

Workstation deleted: Starts the event when a Workstation has been deleted from the Satellite Workstations list.

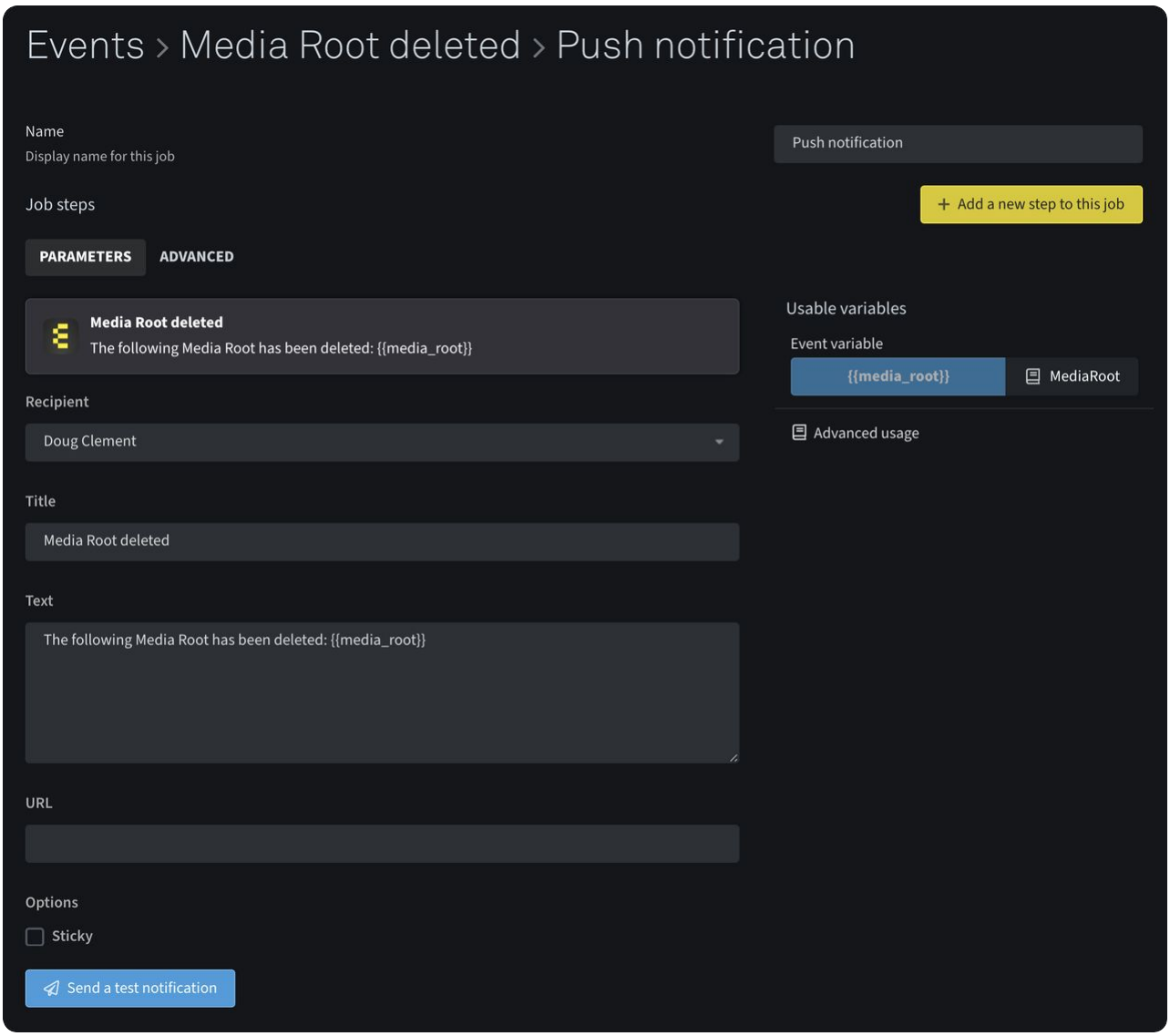
12.9 Event settings

Add any number of job steps to be executed after a certain action has been detected - in this case a client notification will be sent upon deletion of any Media Root. Setup of an Event functions in an identical manner to the setup of Jobs.



- "Name" allows the user to change the name of the selected job.
- With "Enable this event handler" it is possible to enable/disable the selected event handler. This allows to keep an event handler and use it if needed.
- The steps section allows the user to manage all steps/tasks of a job. In case that the job has only one task, the tasks settings will be displayed in this position. If the selected job consists of several tasks, a flow chart of the tasks is displayed. Manually reposition the task in the flow chart by using the drag-and-drop function. By clicking one of the tasks a popup window will show the settings of the selected task.
- The tasks are executed according to the execution status of the previous task. The status is displayed on the connection between two tasks. Clicking the state displays a list of offered states.
- The offered state list:
    - Any state: Execute the following task independent of the previous task's execution status.
    - Success: Execute the following task only if the previous task was executed successfully.
    - Warnings: Execute the following task only if the previous task was executed with warnings.
    - Errors: Execute the following task only if the previous task was executed with errors.
    - No action: Execute the following task if the previous task finished with a no action status.

- Add condition: Allows to execute the task according to preset conditions such as exit codes of the task before.
- Delete connection: Allows the user to remove the connection between two states.



12.10 Watch the video

12.10.1 Workflow Automation Engine Overview

https://youtu.be/l9hodRawWQ8

12.10.2 Workflow Automation - Archive and Restore Workflows

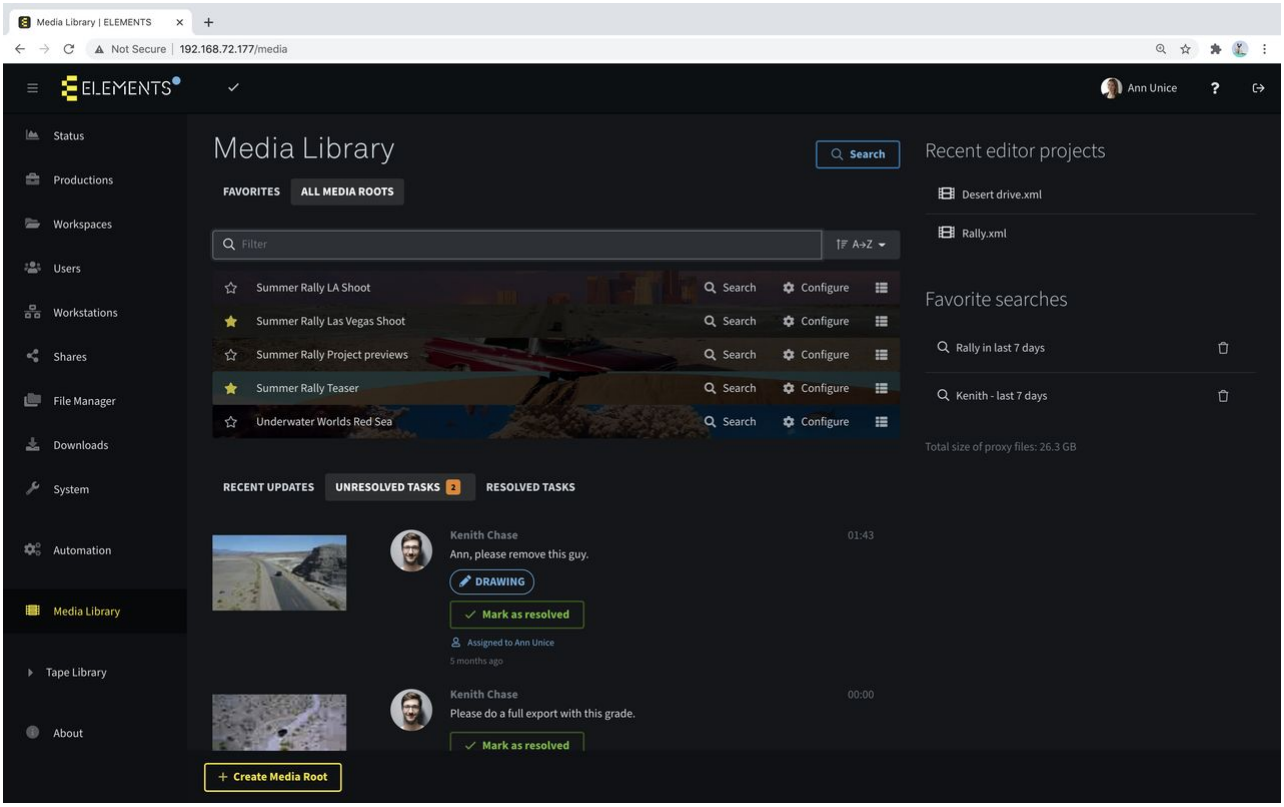
https://youtu.be/BMrExXYbkiQ

13 Media Library (paid option)

Media Library is a powerful collaboration platform that can increase the efficiency of your company's workflows. Use the browser based Media Library to browse, manage, edit and share media files - anywhere, anytime.

- Media Library(see page 106)
- Search function(see page 107)
- Supported File Formats(see page 110)
- Watch the video(see page 110)
    - Using the ELEMENTS Media Library(see page 110)
    - Collaboration in the ELEMENTS Media Library(see page 110)

13.1 Media Library

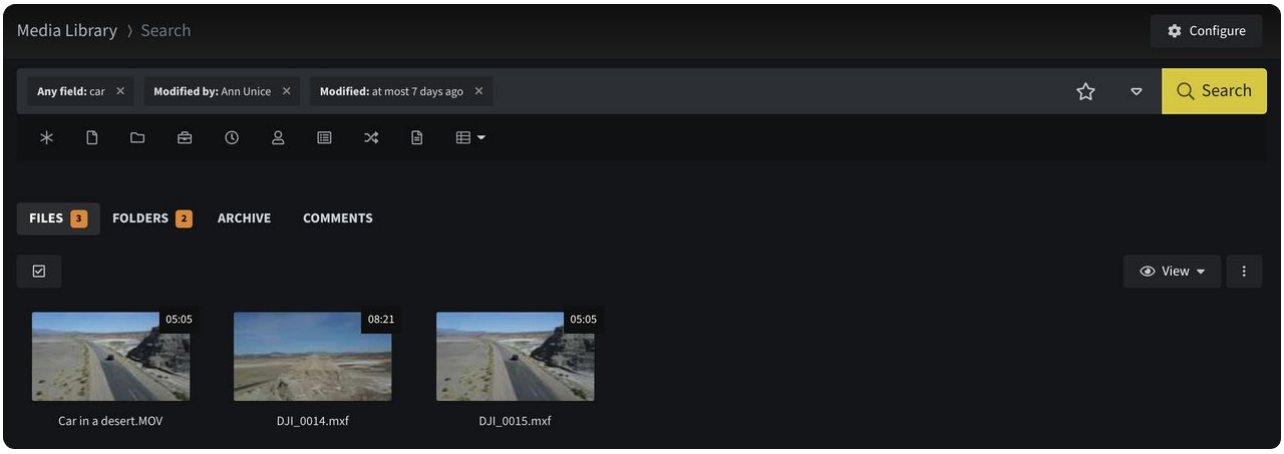


- The "Favorites" tab shows all Media Roots which are marked as favorite by clicking the star symbol next to the Media Roots name.
- "All Media Roots" displays all existing Media Roots the logged in user has access to.
- Using the filter bar, Media Roots can be searched by name.
- Beneath the listed Media Roots three additional tabs can be found "Recent Updates", "Unresolved Tasks" and "Resolved Tasks".
    - The "Recent Updates" tab displays the recent actions in the Media Library that the logged in user has access permissions for, such as comments and drawings etc.
    - The tab "Unresolved Tasks" displays all of the unresolved tasks for the logged in user.
    - "Resolved Tasks" displays all of the resolved tasks for the logged in user.
- The blue "Search" button allows a granular file search across all Media Roots that the user has access to. Full documentation can be found in the Search Function section.

- On the right hand side of the screen latest Editor Projects are displayed. Clicking on the recent project entry opens the project in the integrated Roughcut Editor.
- The "Favorite searches" section displays all searches marked as favorite whilst using the Search function. When clicking on an entry a search is run with the saved search parameters and the current results are displayed.
- With the button "+ Create Media Root" it is possible to create a new Media Root. Add the name of the new Media Root, the path on the filesystem and choose any number of available proxy profiles. After creating a new Media Root, its settings will automatically be opened.
- A Media Root can be opened by clicking on its entry in the list.
    - The button "Search" opens the search function which allows the user to search for files in the chosen Media Root.
    - Using the "Configure" button will take the user to the settings of a Media Root.
    - The "Flat View" button displays only files in the Media Root without displaying the folder structure.

13.2 Search function

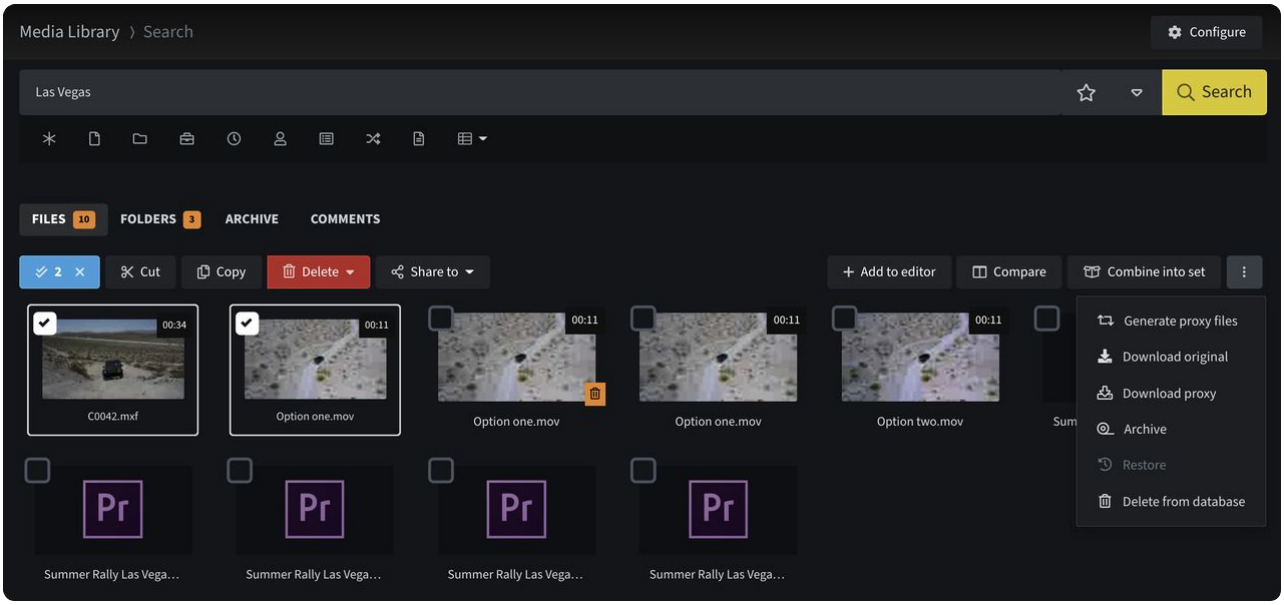
The search function allows the user to search for assets across all Media Roots that the user has access to. The Search function provides useful sifting functions such as: searching by name, path, modifying user, a keyword, editor project etc.



- After entering the search criteria, a star symbol will appear on the right hand side of the filter bar. Clicking the star symbol marks the entered search as a favourite and allows the user to name it. All favourite searches are displayed in a list on the main page of the users Media Library. Clicking any favourite search in the list will rerun the search request on the current content, according to current user permissions.
- On the right side of the star symbol, all favourite searches can be accessed in the dropdown menu.
- The symbols beneath the search bar allow the user to search for the following search criteria - multiple criteria can be combined:
    - Any Field: The default search mode. Any Field displays all results containing the searched term in the name, path, tags, comments etc.
    - Name: Displays all results containing the searched term in the name of the asset, folder or editor project.
    - Full Path: Displays all results containing the searched term in the path of the asset, folder or editor project. If a name of a production is searched, all files in the production present in any Media Root will be displayed.
    - Used in an editor project: Displays all files used in the searched editor project. This search function offers additional sifting criteria:
        - Belongs to a project: Lists all files used in any editor project that the user has access to.
        - Belongs to a specific project: Lists all files used in a specific editor project that the user has access to.

        - Does not belong to a project: Lists all files that have not been used in any editor project that the user has access to.
    - Time
        - Modified at: Lists all files that the user has access to that have been modified over a certain time period. Two additional sifting criteria are:
            - At most: Lists all files that the user has access to, which feature a modification date no older than a set number of hours, days, weeks, months or years.
            - At least: Lists all files that the user has access to, which feature a modification date older than a set number of hours, days, weeks, months or years.
        - Created at: Lists all files that the user has access to that have been created over a certain time period. Two additional sifting criteria are:
            - At most: Lists all files that the user has access to, which feature a creation date no older than a set number of hours, days, weeks, months or years.
            - At least: Lists all files that the user has access to, which feature a creation date older than a set number of hours, days, weeks, months or years.
    - Modified by: Lists all files modified by a selected user that the user has access to.
    - Content: Lists all files that contain the searched criteria in the content. This function helps to search text files according to content.
    - Filetype: Lists all files that the user has access to, which feature one of the following selected filetypes:
        - Video
        - Audio
        - Image
        - Document
        - Project file
- The result list displays the results grouped as following:
    - Files: Shows all files from the search results.
    - Folders: Shows all folders from the search results.
    - Archive: Displays all archived objects, which contain the search criteria. This results will only be displayed if the system contains a tape library.
    - Comments: Displays all comments where the searched word is included.
- If the search contains more than 50 results, results will be displayed on multiple pages.
- The button bar above the search results allows the user to select all results. Change the presentation of the search results with the "View" button and the order of the results with "A-Z" button - both can be found on the right hand side of the button bar.

If assets are selected, additional options can be found.



- The blue selection button shows the number of selected objects and allows the user to deselect all objects.
  - "Cut" and "Copy" will add the selected objects to the clipboard, so it is possible to paste them later. Cut will move the files and copy will duplicate them.
  - The red trash bin button will delete the selected objects. With the dropdown list beside the trash bin button it is possible to select the level of deletion.
    - "Delete original file" will only delete the original file but the proxies will stay in the Media Root.
    - With "Delete completely" the proxies and the original file will be deleted.
  - "Share to" allows the user to share the selected objects to ELEMENTS Click or to link the objects in the home workspace of the logged in user; as well as linking the selected objects to a showroom.
  - "+ Add to editor" adds selected assets to the editor queue.
  - The Compare function allows the user to compare multiple assets. This function is only available if the number of selected proxies is between 2 and 4.
  - With "Combine into set" it is possible to group selected assets into a set. When previewing the asset, all files belonging to the set will be displayed in the Set tab.
  - The options button shows a dropdown list with all additional options.
    - Generate proxy files: This option generates proxy files with the chosen proxy profiles for all selected assets. If the proxies already exist they will be regenerated.
    - Download original files: Will download the original files from the system. If multiple files are selected the browser may block a popup from the system, and only one file will be downloaded. In this case it is necessary to unblock this popup window in the browser settings, so that all of the files can be downloaded.
    - Download proxy: This function will download the proxy file. If multiple files are selected the browser may block a popup from the system, and only one file will be downloaded. In this case it is necessary to unblock this popup window in the browser settings, so that all of the files can be downloaded.
    - Archive: This option will add the selected assets into the archive queue of the Tape Library.
    - Restore: With this option it is possible to restore the selected objects from an LTO tape.
    - Delete from database: With this function it is possible to delete the generated proxies for the selected asset as well as all metadata added in the Media Library, including comments and ratings etc.

13.3 Supported File Formats

The ELEMENTS Media Library supports a broad range of professional video, audio and picture sequence formats, including ProRes, DNxHD, H.264 and H.265. Please contact us for detailed information regarding the codecs you would like to to use in your production and to receive additional information on available features and benchmarks for proxy generation. Please keep in mind that some formats can be demanding on hardware resources for proxy generation. Beside video formats the Media Library can also preview picture formats (eg. JPEG, PNG) and documents (e.g PDF. TXT).

13.4 Watch the video

13.4.1 Using the ELEMENTS Media Library

https://youtu.be/7DfhB0yLDQE

13.4.2 Collaboration in the ELEMENTS Media Library

https://youtu.be/tPMr-g30nyc

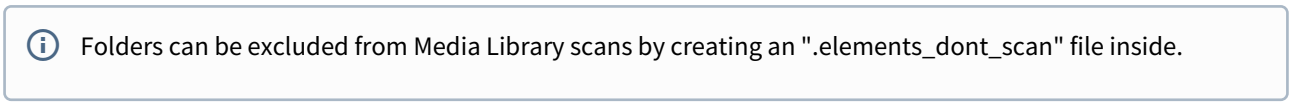
13.5 Media Root Overview

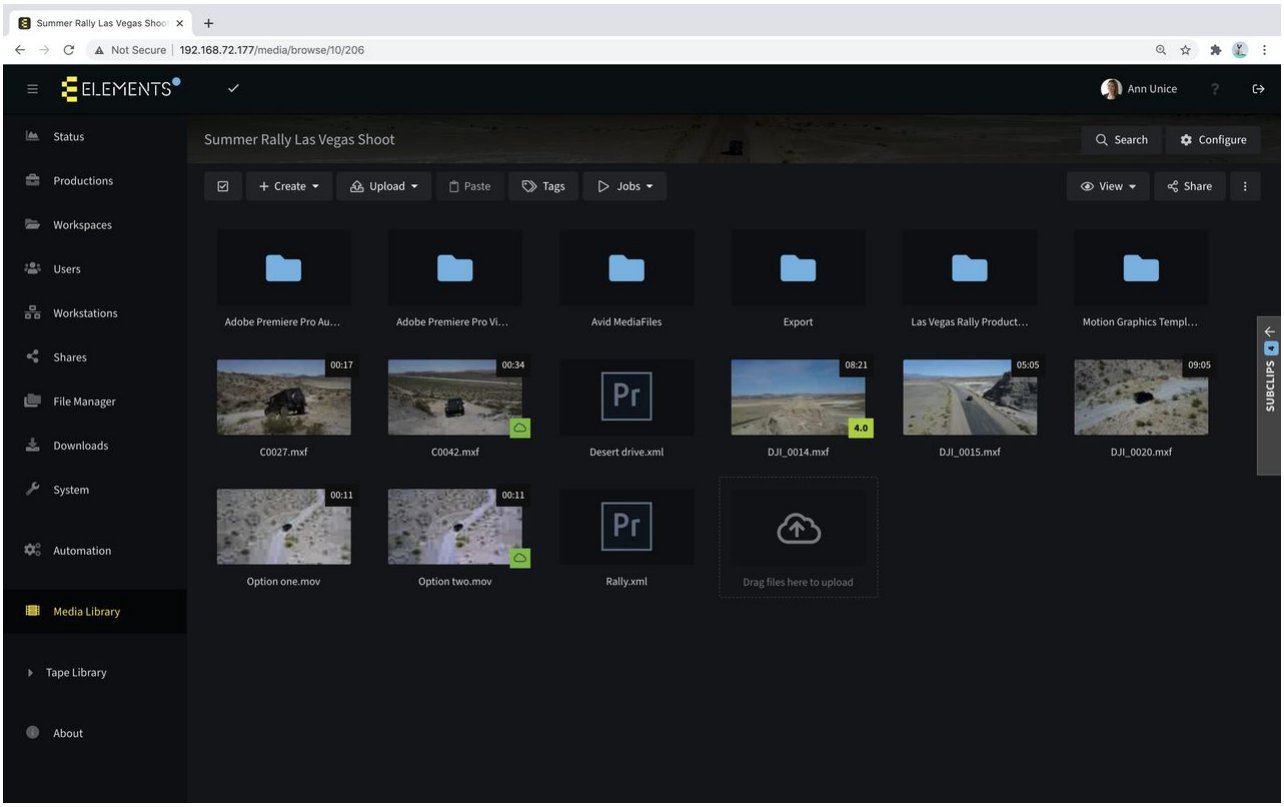
Media Roots represent folders that contain all the assets in the Media Library. Media Roots can be configured independently and typically hold individual projects.

- Media Root(see page 111)
  - Overview(see page 112)
  - Selected assets(see page 113)
  - Right-click menu(see page 116)
- Showroom(see page 117)
- Video Playback(see page 118)
- Share via link(see page 119)
- Collaboration functions(see page 123)
  - Comments tab(see page 123)
  - Storage tab(see page 126)
  - Subclips tab(see page 127)
  - AI Metadata tab(see page 129)
  - Markers tab(see page 130)
  - Metadata tab(see page 132)
- Upload panel(see page 133)
- Compare function(see page 134)
- Clipboard and Subclips slide-out panels(see page 135)
- Roughcut Editor Interface(see page 136)
  - Project preview(see page 136)
  - Editing mode(see page 136)
    - Project section(see page 137)
    - Playback section(see page 139)
    - Timeline section(see page 140)
    - Exporting features(see page 141)
    - Bottom bar(see page 143)
- Watch the video(see page 143)
  - Using the ELEMENTS Media Library(see page 143)
  - Collaboration in the ELEMENTS Media Library(see page 144)
  - Sharing assets from the Media Library(see page 144)
  - Using the ELEMENTS Rough cut editor(see page 144)
  - Using workflows in the Media Library(see page 145)
  - Media Library Compare function(see page 145)

13.5.1 Media Root

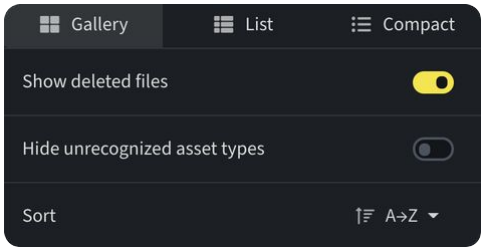
The displayed buttons and other UI elements in the Media Library depend on the user permissions for the Media Root. Clicking a specific folder will display this folders' contents. Clicking an asset opens the proxy preview of the selected asset, allowing the user to view the proxies as well as the ability to add metadata, comments, ratings etc.





13.5.1.1 Overview

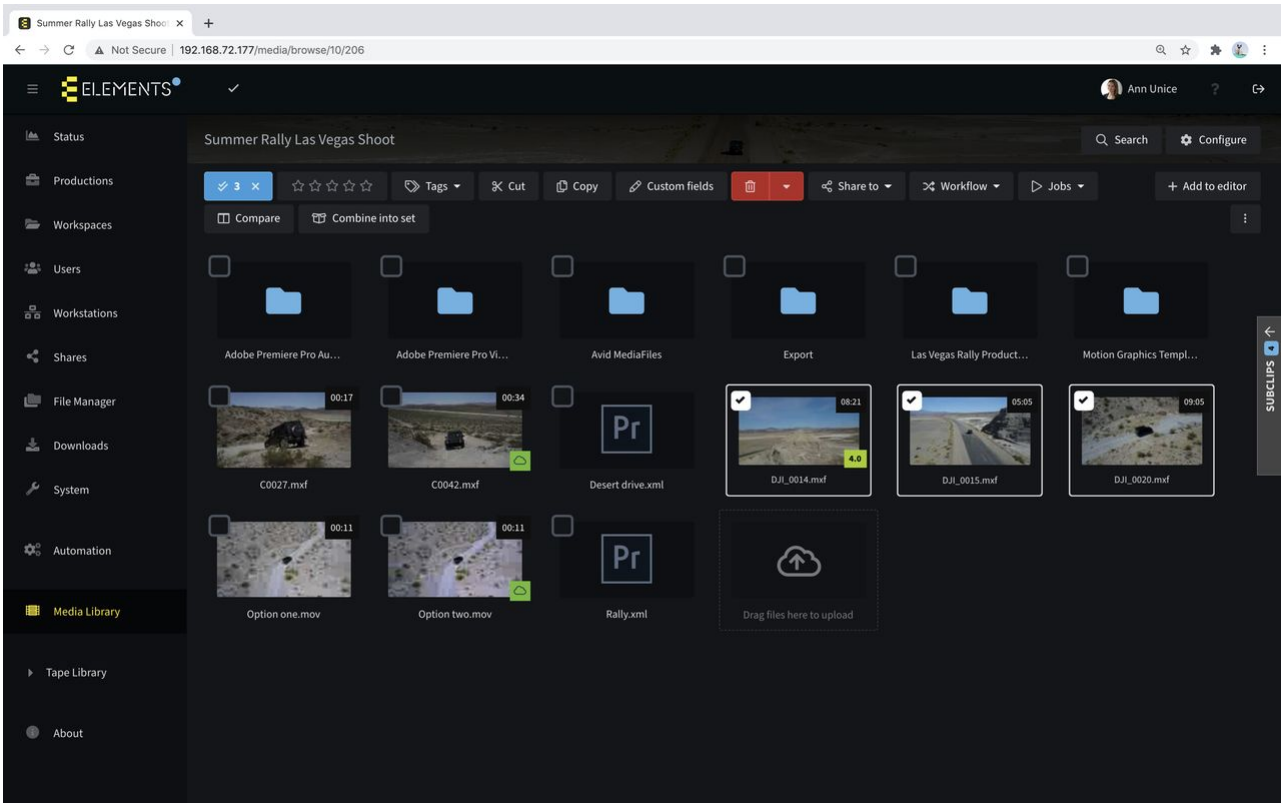
- The "Search" button opens the search view, which allows the user to search the content of the assigned Media Root.
- With the "Configure" button it is possible to view the settings of a Media Root.
- The button bar allows the user to edit the content of the Media Root as well as set up the way the content is displayed.
    - The checkbox button allows the user to select all items on the displayed page.
    - "+ Create" allows the user to create a new directory, showroom or a new editor project. It is also possible to create a new directory from an existing template.
    - Using the "Upload" button, the user can upload new files or folders into the selected Media Root. Uploaded files or folders will be stored on the filesystem and displayed in the Media Library. Clicking the upload button will open a window, within which files and folders can be selected for upload. Alternatively a simple drag-and-drop can be used. After selecting the files or folders for upload, the upload panel will be displayed. The files can also be uploaded independently of the Media Library by using the ELEMENTS Client.
    - If no object is selected the "Paste" button has no action. If directories or files have been cut or copied, the "Paste" button will paste all objects currently in the clipboard.
    - The "Tags" button shows all existing tags for this Media Root in the popup window. Tags can be edited and new ones created.
    - "Jobs" allows the user to select an available Automation job from the list. The jobs available in the list can be enabled in the configuration settings of every Media Root individually.
    - "View" allows the user to change the way the content of the Media Root is displayed. Choose between "Gallery", "List" or "Compact". In addition to that, displaying the proxies of the deleted original files can be turned on or off, and unrecognised asset types can be hidden.



- "Open locally" will open the directory in the ELEMENTS Client app if the app is installed and the logged in user has sufficient permissions to access the workspace.
- Use the button "Share" to share content with other users or with an external user via e-mail. When using the share function, the number of views as well as an expiration date can be set. For each share, custom access permissions can be defined.
- The sorting button ("A-Z" is default) allows the user to sort the content of the Media Root in different ways.
- The options button opens a dropdown menu with the following options:
    - Rescan recursively: This option scans the current folder for new assets.
    - Forget deleted files: Proxy files and metadata with no corresponding original file (marked with a trash can symbol) will be removed.
    - Export non-proxied file list: Downloads a CSV list of all files which have no related proxy file. For example, if the system could not generate a proxy file for an unknown data type.
    - Open via FTP: This function will open the Media Root via FTP.

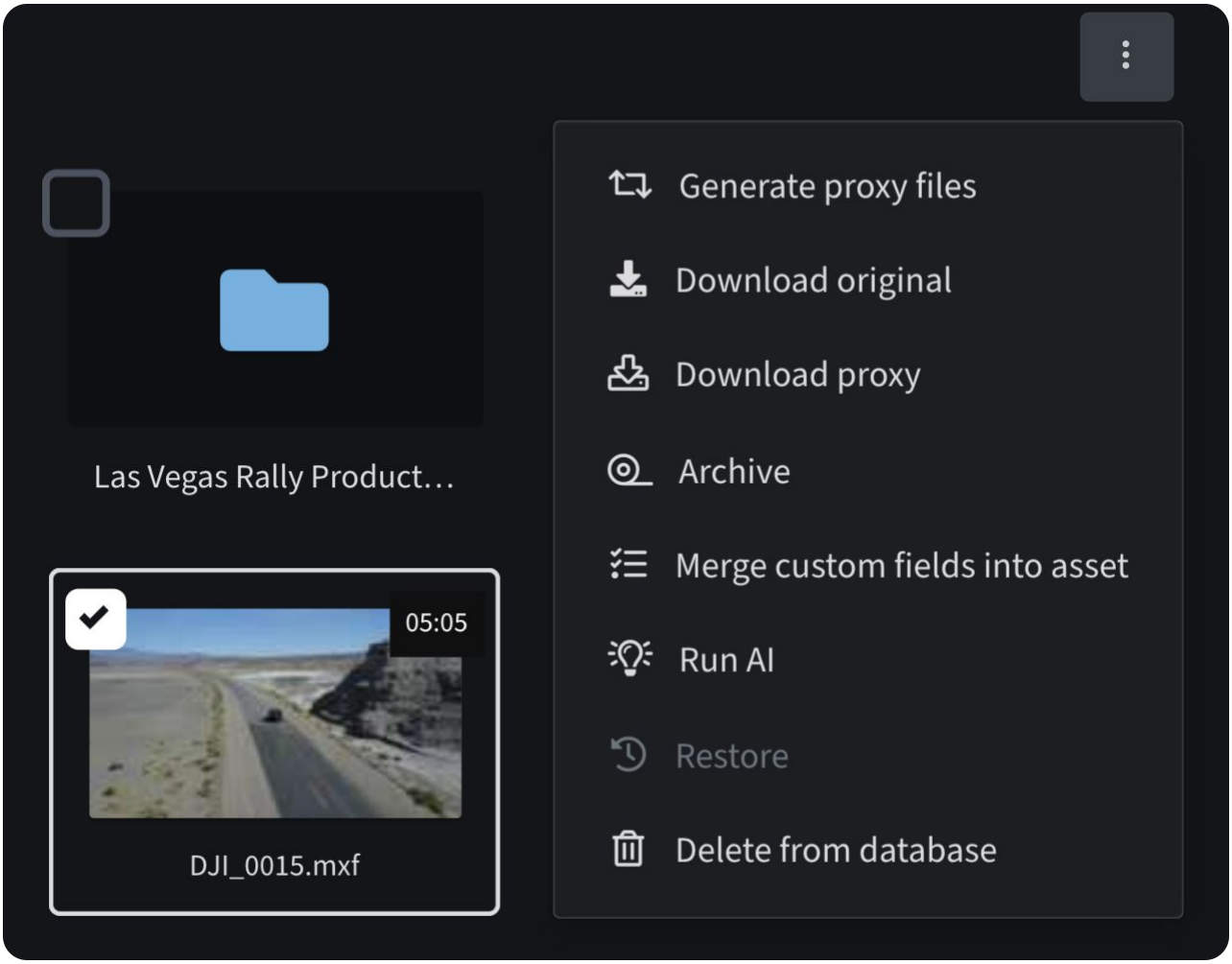
13.5.1.2 Selected assets

If assets are selected in the Media Root, additional options appear in the button bar. Assets can be selected by checking the checkbox, which appears while hovering over the asset.



- The button on the far left of the button bar shows the number of selected objects and allows the user to deselect all of these.
- The stars button allows the user to rate the selected assets.
- The "Tags" dropdown allows the user to add tags by selecting an existing tag from the list or to create new tags and add them to the selected items. If a folder is selected, tags will be added to all files in that folder.
- "Cut" and "Copy" will add the selected objects to the clipboard. Cut moves and copy duplicates the item.
- The red trash bin button will delete the selected objects. With the dropdown list beside the trash bin the user can select the level of deletion.
    - "Delete original file" will only delete the original file but the generated proxies will remain in the Media Root.
    - "Delete completely" deletes both the original files, proxies and all the metadata.
- The compare function allows the user to compare multiple assets. This function is available only if video files are selected and the number of selected files is between 2 and 4.
- "+ Add to editor" adds selected assets to the editor queue.
- With "Combine into set" the user can add selected Assets to a set. Whilst previewing the asset, all files belonging to the set will be displayed together in the Set tab.
- "Share to" allows the user to share the selected objects with other users through a link, to ELEMENTS Click or to link the objects into a home workspace of another user as well as linking the selected objects to a showroom.
- The "Workflow" dropdown list allows the user to trigger a workflow transition for the selected assets.
- "Jobs" shows the available Automation jobs and allows the user to start them with selected files as input. If assets are selected, the system will start the job with the selected objects. The objects which can be selected depends on the settings of the job.
- When Custom Fields are set up, the Custom Fields button allows the user to set their values for the selected assets.

If assets are selected, the options button on the right edge of the screen shows a drop down list with additional options.



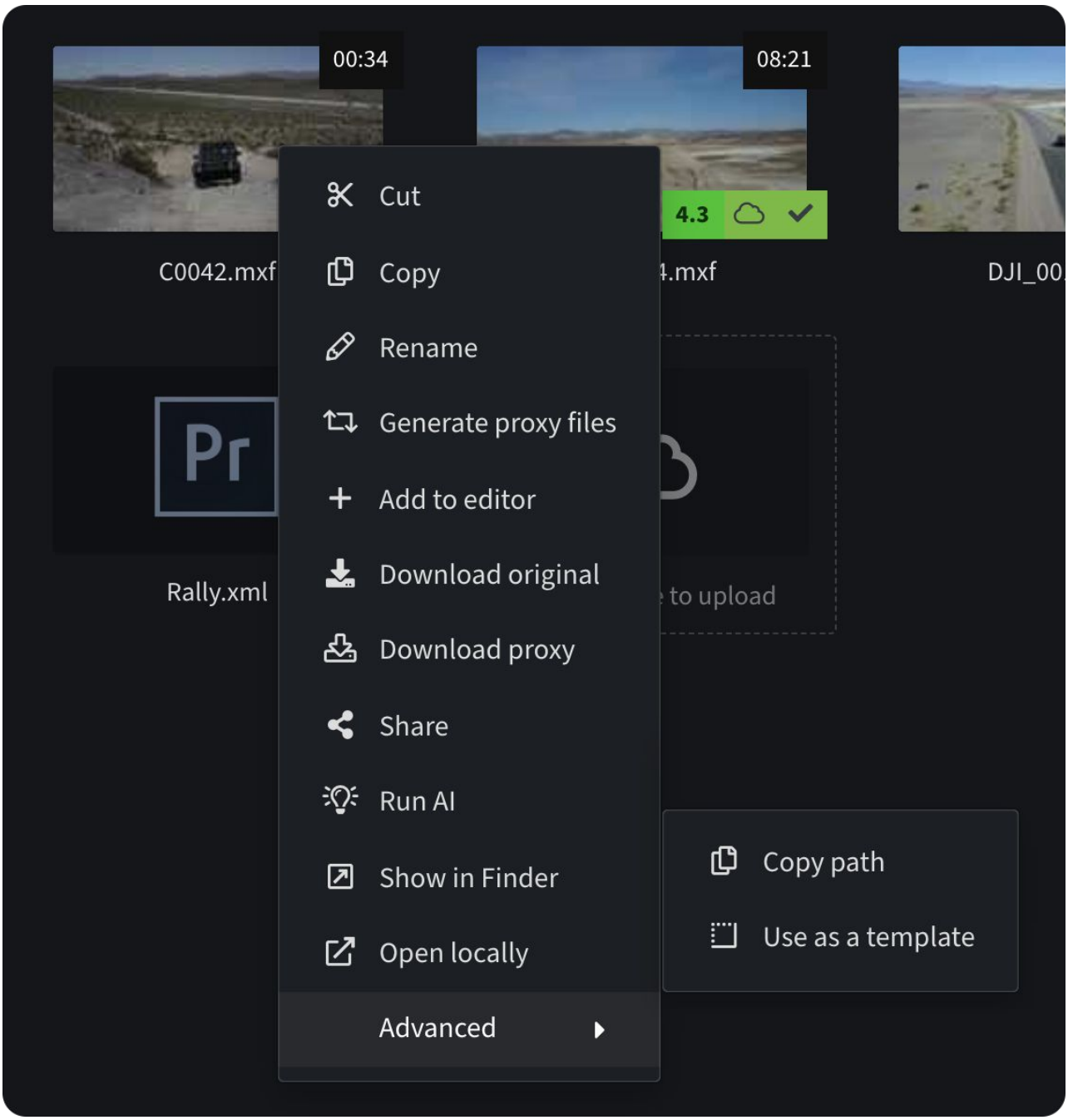
- Generate proxy files: Generates proxy files for all selected assets. If proxies already exist for the selected assets they can be regenerated. If multiple proxies have been selected in the configuration menu of the Media Root, the user can select which proxies should be regenerated.
- Download original files: Downloads the original files from the system.
- Download proxy: Downloads the proxy file of the selected asset.

Please note:
If multiple files are selected, they will be compressed first. Depending on the file size, this can take considerable time. The user will be presented with a progress window and a link to the download once it's ready.

- Archive: Adds selected assets into the archive queue of the Tape Library.
- Merge custom fields to assets: Allows the user to merge all custom fields, into the asset level fields. They will then be accessible across the entire Media Library.
- Run AI: Starts the AI analysis on the selected assets by using preconfigured engines in the configuration menu of the Media Root. Note that the AI functionality is not a standard part of the Media Library.
- Restore: Adds the selected assets to the restore queue of the Tape Library, but only if the selected files can be found on a known LTO tape.
- Delete from database: Deletes the generated proxies for the selected assets as well as all metadata added in the Media Library; including comments and ratings, without removing the file from the filesystem. The proxies will be regenerated the next time a user opens this Media Library folder.

13.5.1.3 Right-click menu

Another way to access the functions of the Media Root is by using right-clicking on any asset. A dropdown menu will appear, which provides the following functions:



- Cut: This function allows the user to cut the selected element and add it to the clipboard.
- Copy: This function allows the user to add the selected element to the clipboard.
- Rename: Allows the user to rename the selected element by entering a new name in the popup window.
- Generate proxy: Generates the proxy files for the selected asset. If the proxies already exist for the selected asset they can be regenerated. If multiple proxies have been selected in the configuration menu of the Media Root, the user can select which proxies should be regenerated.

- Add to editor: Adds selected assets to the editor queue.
- Download original: Downloads the full resolution file of the selected asset.
- Download proxy: Downloads the proxy file of the selected asset.
- Share: Share the selected asset via a link.
- Run AI: Starts the AI video analysis with the engines selected in the Media Root's Configure menu. Note that the AI functionalities are not a standard part of the Media Library.
- Show in Finder / Explorer: opens the specific location in Windows Explorer, macOS Finder or the File Manager in Linux, by mounting the workspace using the ELEMENTS Client and highlighting the file. This function can only be used if a user with sufficient workspace permissions is logged into the ELEMENTS Client.

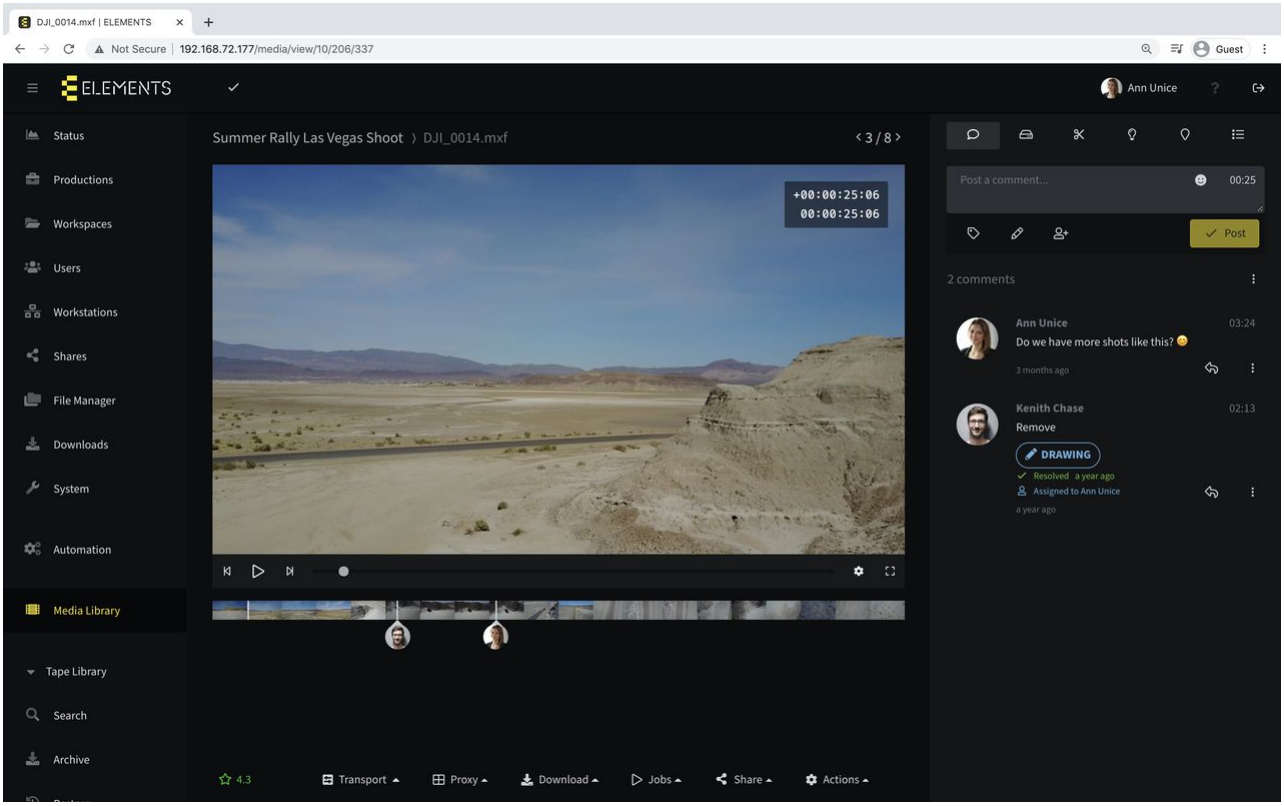
Please note:
The ELEMENTS Client app needs to be installed and the user needs to be logged in. The user must have sufficient access permissions for the workspace containing the selected asset.

- Open locally: This function will mount the corresponding workspace and open the selected file locally using the standard application for the selected file type.
- The "Advanced" drop down menu provides additional functions.
    - Copy path: This function will copy the filesystem path of the selected item to the clipboard.
    - Use as a template: This function will create a new template with the selected element. This template can be accessed by using the "+ Create" button in the Media Root.

13.5.2 Showroom

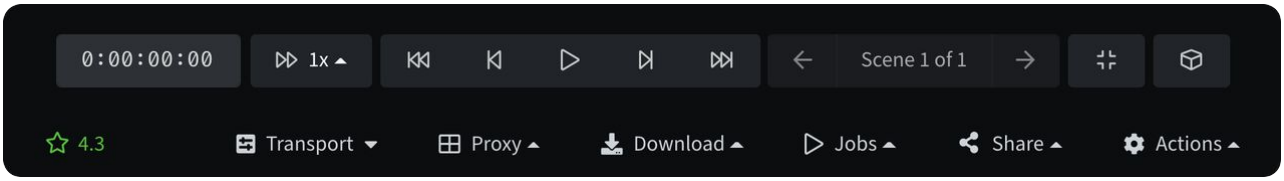
Use the "+ Create" dropdown menu in the Media Root to create a new showroom. A showroom is a virtual folder to which assets can be linked. Being that the assets are linked to the Showroom using a Hard Link and not copied, no additional storage capacity will be consumed.

13.5.3 Video Playback



The video playback can be controlled by using the standard NLE video control shortcuts.

- Space, K, 5: Play and pause the video
- 1: Jumps 10 frames back.
- 2: Jumps 10 frames forward
- 3: Jumps one frame back
- 4: Jumps one frame forward.
- J: Jumps 10 frames back.
- L: Changes the playback rate.
- I: Sets the in mark.
- O: Sets the out mark.



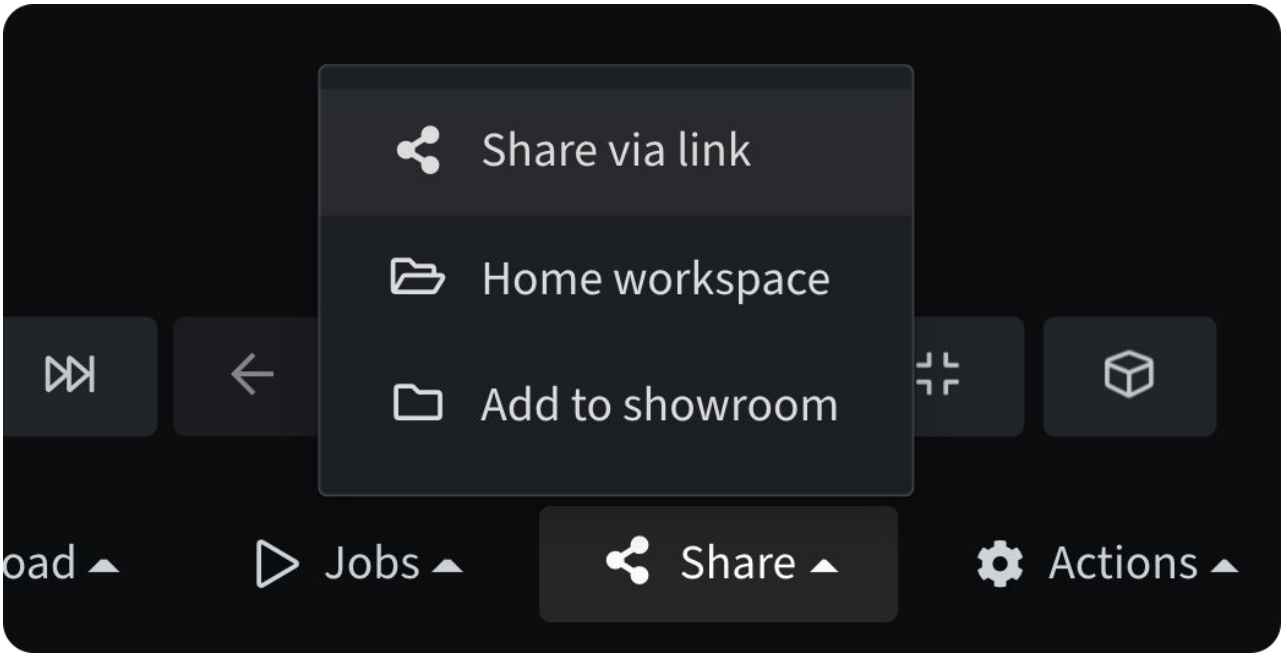
The button bar below the playback window provides the following functions:

- On the left hand side of the button bar the user can rate the video by selecting an amount of stars in the appearing popup.
- Transport: Opens the Transport bar that displays the playback functions.
    - The Timecode window allows the user to jump to a precise point in the video by typing in a desired timecode or by clicking the timecode and moving the mouse pointer left or right while holding the left mouse-key - this enables forward or backward movement through the video.

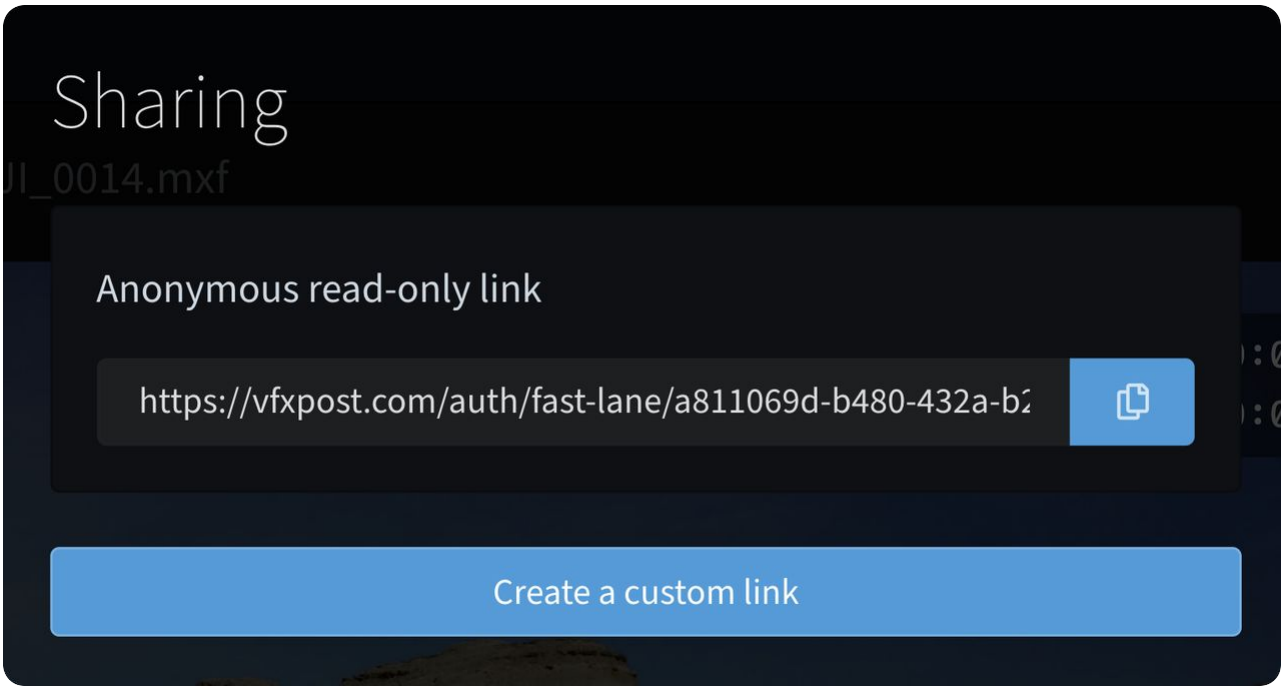
        - The Playback button on the right hand side of the timecode window allows the user to choose the video playback rate.
        - Arrow buttons allow the user to jump to the beginning or the end of the video, as well as the ability to jump one frame forward, backwards or play or pause the video.
        - Using the Scene selection arrows to jump to the next recognised edit in the video.
        - The "Original Size" button allows the user to format the video player to the original resolution of the proxy video.
        - The 3D button switches the video preview to a 360-degree view.
- Proxy: This dropdown menu allows the user to change the displayed proxy profile if multiple proxies were created.
- Download: Allows the user to download the original file or an existing proxy of the selected asset.
- Jobs: A dropdown menu displays all enabled jobs that can use this asset as input. Click on any job in the list to start using the opened asset as input.
- Share: Share the selected asset via a link, e-mail or to ELEMENTS Click if this option is enabled. The share button also allows the user to add the selected asset to the users home workspace or to a particular showroom.
- Actions: Opens a popup with all available actions for the selected asset.
    - Copy: This function allows the user to add the selected element to the Media Library clipboard.
    - Rename: Allows the user to rename the selected element by entering a new name in the popup window.
    - Copy path: This function will copy the path of the selected asset on the server to the clipboard.
    - Generate proxy files: Generates proxy files for the asset. If proxies already exist for the selected asset they can be regenerated. If multiple proxies have been selected in the configuration menu of the Media Root, the user can select which proxies should be regenerated.
    - Add to editor: Adds the whole asset to the integrated rough-cut editor queue.
    - Show in Finder/Explorer/file manager: Opens the specific location in Windows Explorer, macOS Finder or the File Manager in Linux, by mounting the workspace using the ELEMENTS Client and highlighting the file. This function can only be used if a user with sufficient workspace permissions is logged into the ELEMENTS Client.
    - Open locally: This function will open the selected file locally using the standard application for the selected file type. Please note that the system will try to download the file if it is not stored on the used pc.
    - Delete proxy: Will delete the concerning proxy file and will be available for all existing proxies.

13.5.4 Share via link

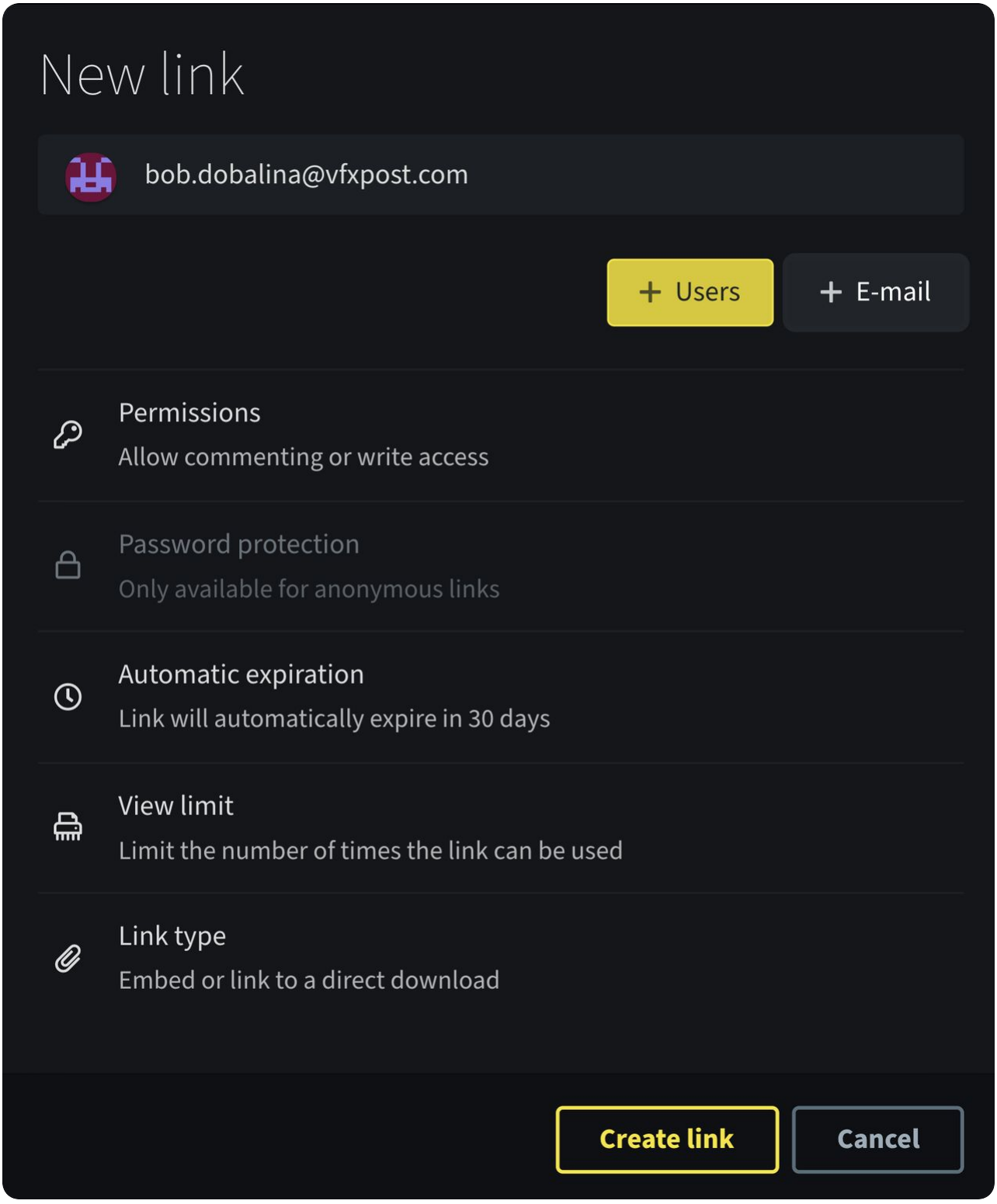
Share assets or whole folders directly from the Media Library via a link. If the Media Library has access to the internet, the access link can be sent directly over e-mail. After clicking "Share via link" a popup window will display URL links to the selected assets or folders. Administrators can see all links created by all users.



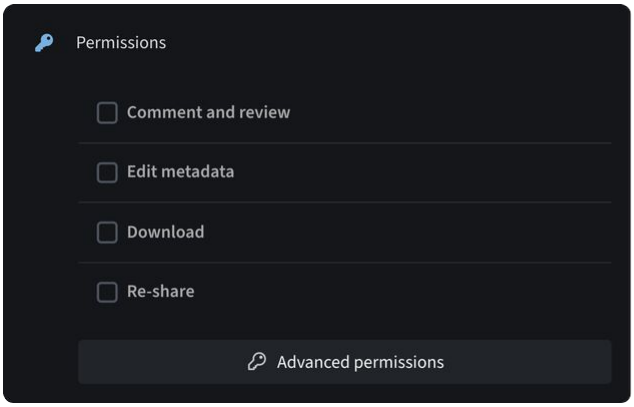
The list always includes a ready-to-copy "Anonymous read-only link" which provides view-only access to the shared asset. Any of the existing link entries in the list can be revoked by using the trashcan symbol (appears when hovering over an entry).

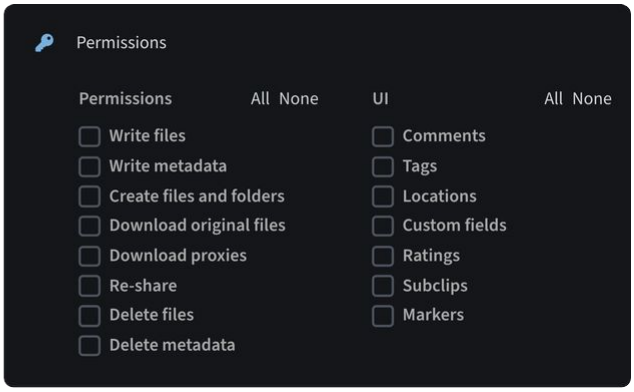


To create a link for a specific user, or add custom permissions, the "Create custom link" button can be used. By default, new links are not assigned to any existing user or email - use the "+ Users" or "+ Email" to add users, groups or email addresses respectively.



- Permissions sections lets you grant the recipient additional rights.
    - Click Advanced permissions for the full Media Library permission list.

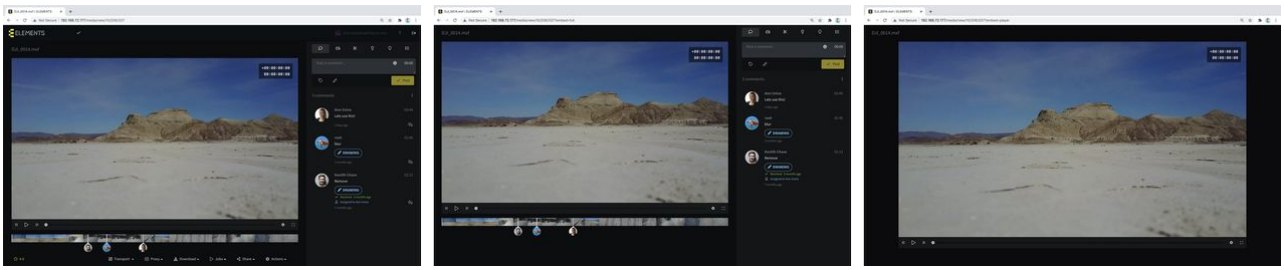




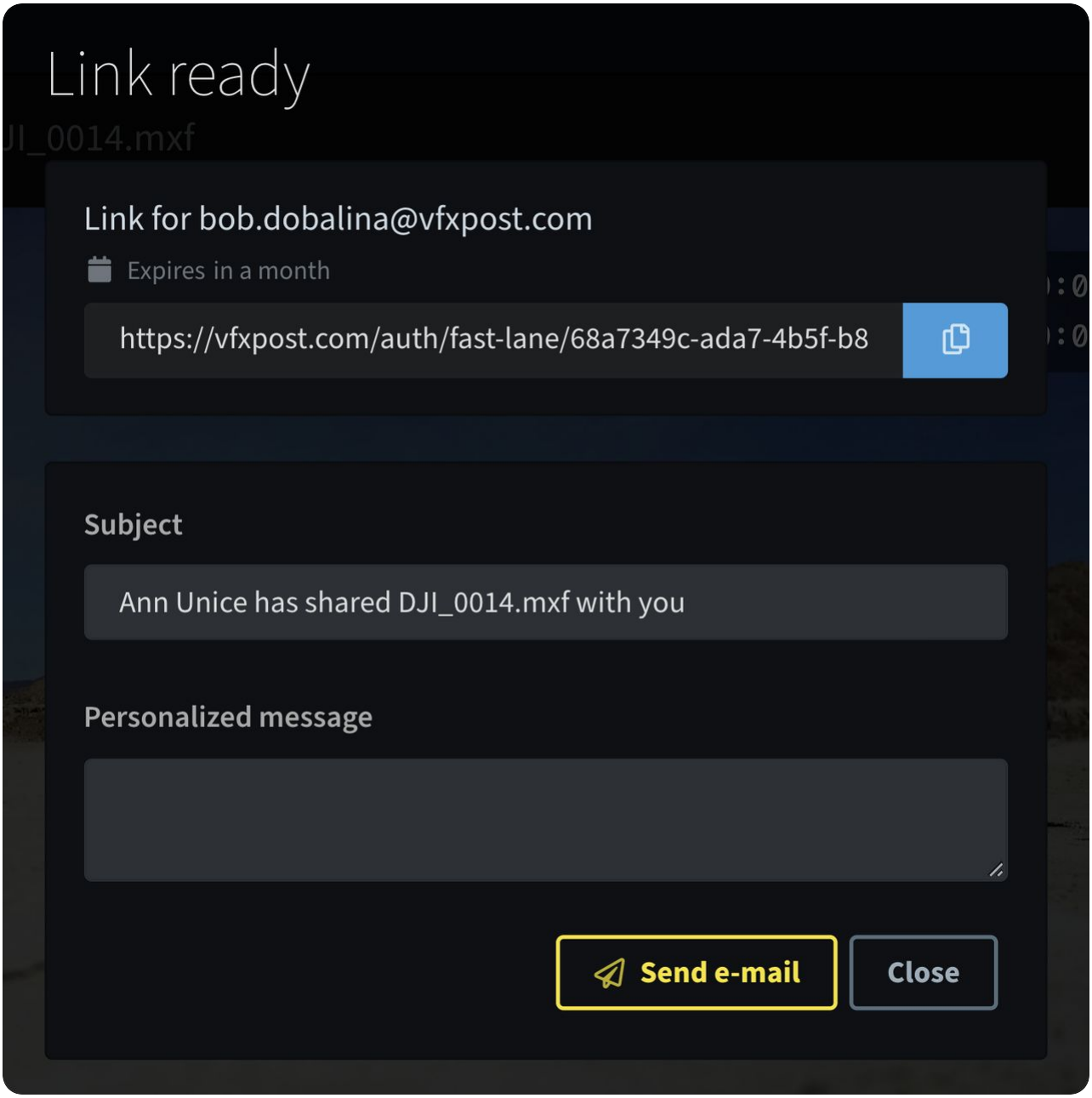
- Adding a password in the "Password protection" section will prompt the user to enter it when opening a link.

> Password protection is only available for anonymous links. Non-anonymous users will have to log in with their own password (and Two-factor authentication if enabled) when opening links.

- Automatic expiration: automatically deactivate and delete the link on a given day. The default sharing duration can be set in the Media Roots configuration menu.
- View limit: makes the link self-destruct once it's been used the set number of times.
- Link type changes the behaviour of the link:
  - Direct download: will immediately download the original or proxy file instead of showing the Media Library page.
  - Iframe: will strip away all of the UI elements except for the video player with () or without the comment section (Player only) - suitable for embedding on another website.
    - Full: strips away all of the UI elements and displays only the video player together with the comment section.
    - Player only: strips away all of the UI elements including the comment section and displays only the video player.



Once the link is created, you can either copy it, or (if once or more users you've shared it with have their e-mail addresses set) send out an email with a custom message straight from the Media Library.



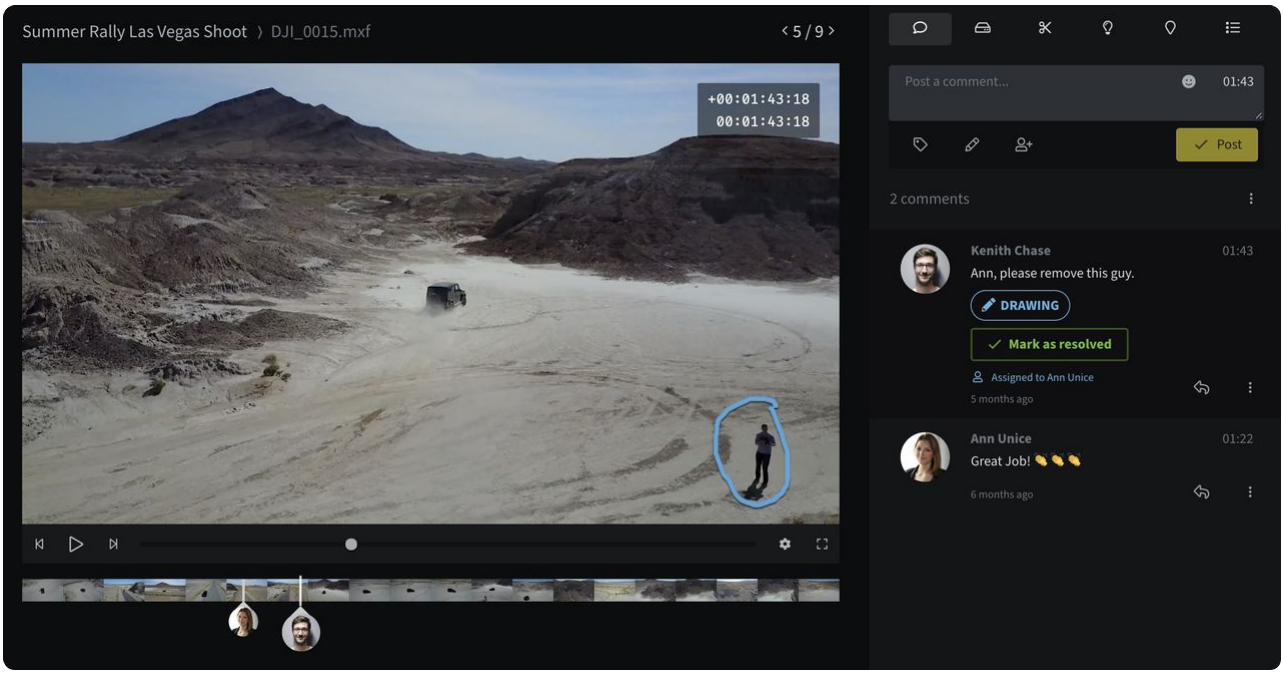
13.5.5 Collaboration functions

The Proxy View mode in the Media Library offers a wide range of collaborative features. On the right hand side of the playback window a section containing multiple tabs can be found. In the Configuration settings of a Media Root it is possible to enable or disable individual tabs for any user or group.

13.5.5.1 Comments tab

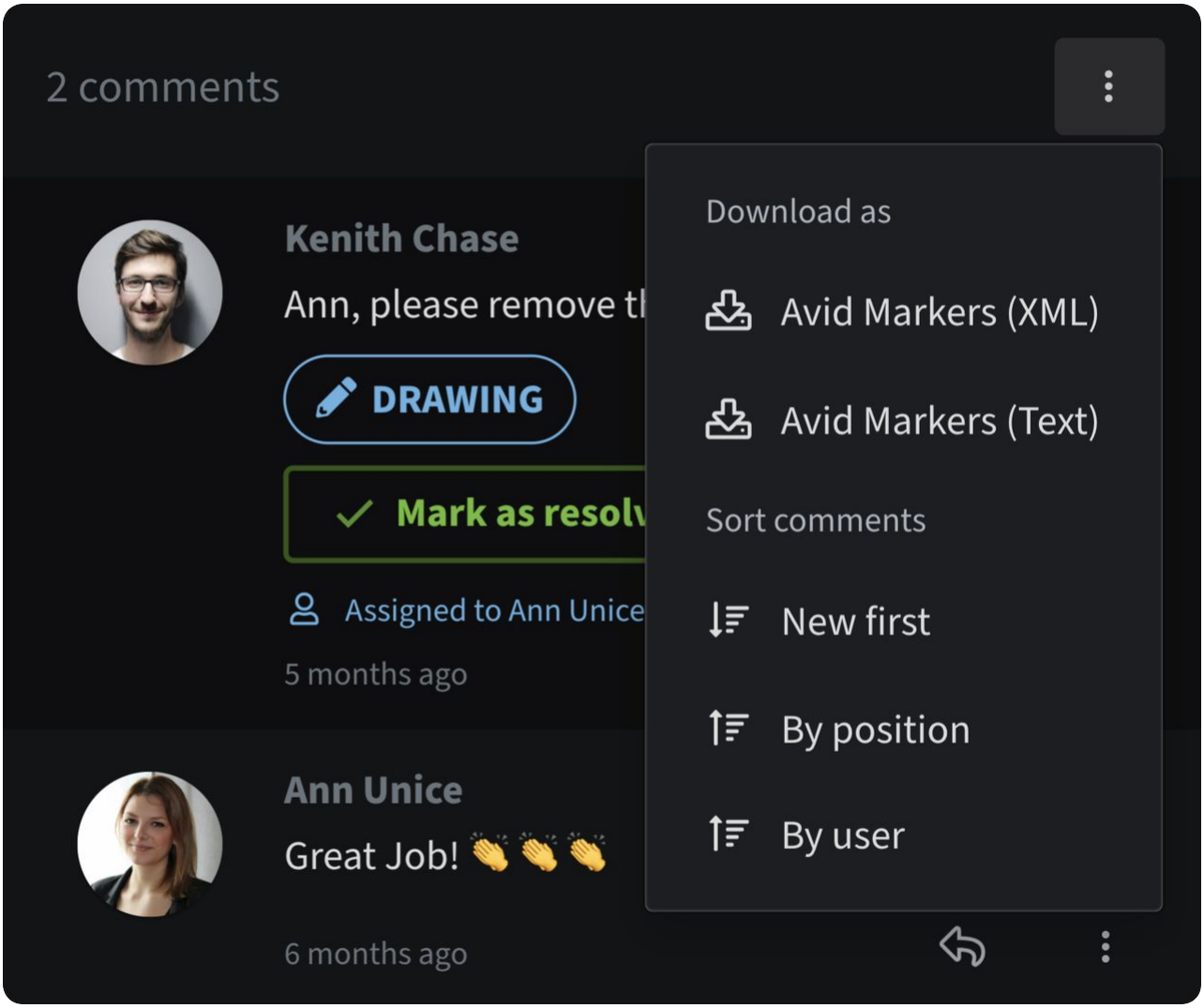
The "Comments" tab displays all existing comments and allows for the creation of new, frame-precise comments. The comment field is not restricted to characters or numbers and allows for the use of emojis. The size of the

comment field can be modified by dragging the size modification button in the lower right hand corner of the comment field.



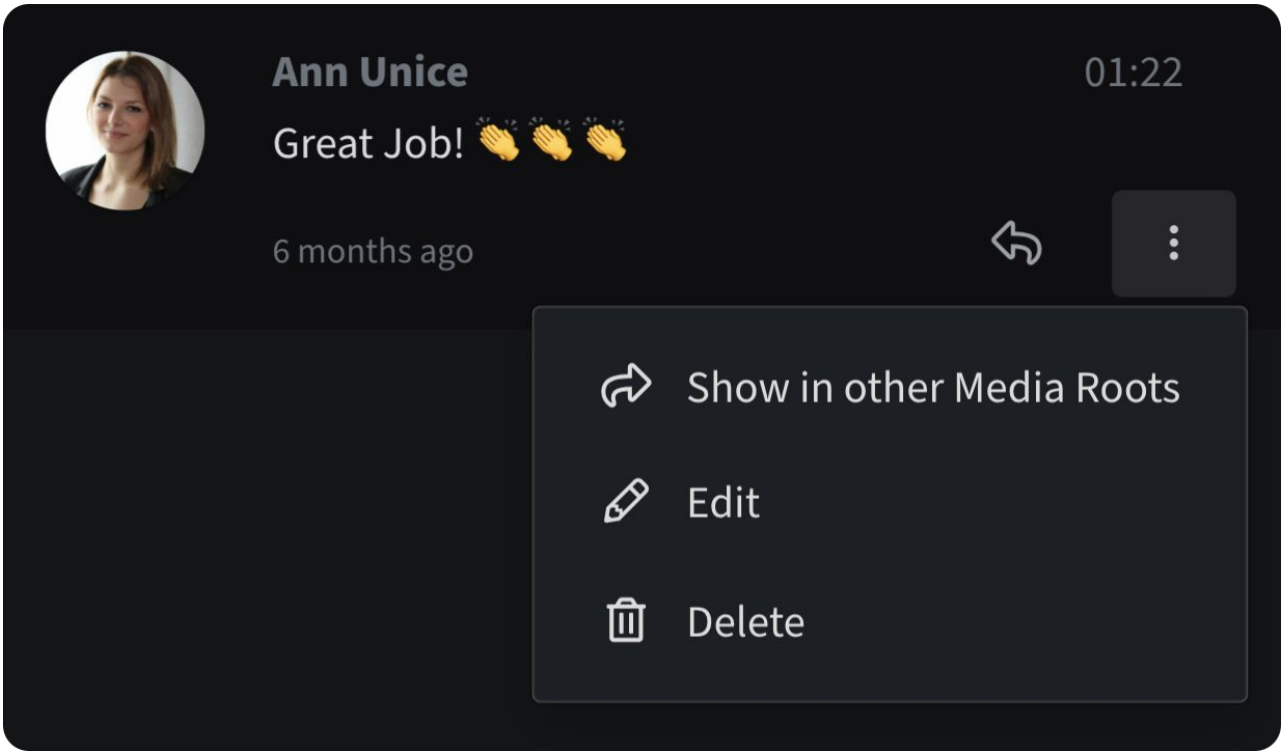
Additional information can be added to the comment using the following functions underneath the comment field:

- The "Add tags" button allows the user to add any number of tags to the comment.
- The "Add Drawing" button allows the user to draw on any frame in the video, using one of five optional colors and to attach the drawing to the comment.
- The "Assign to a user" button allows the comment to be assigned to a user. After a comment has been assigned, it will appear in the the assigned user's Unresolved Tasks tab on the main page of the Media Library. The comment can be marked as resolved by either the creator or the assignee.
- The options button underneath the comment field allows the user to change the order of existing comments. Existing comments can also be exported for import into Avid Media Composer. The comments can be exported in an XML or a text file and can be imported as markers into sequences in Avid Media Composer.



On the comments in the list additional options are offered.

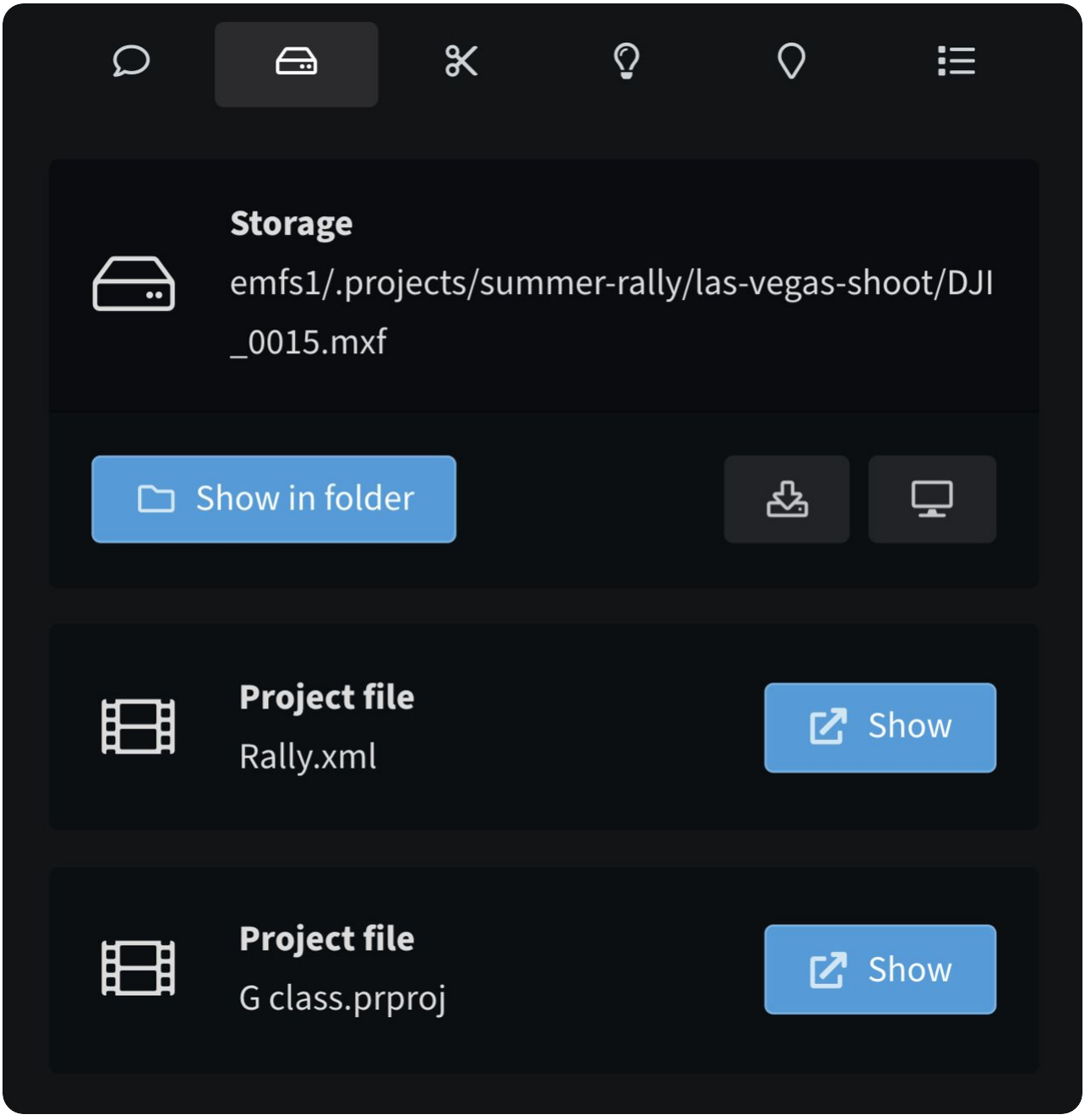
- The arrow button underneath a comment allows the user to reply to the selected comment. After clicking the button the text field for a new comment will be highlighted. Once posted the comment will appear as a reply.
- The menu of a comment allows the user to edit the comment.
    - "Show in other Media Roots" will display the comment wherever the same asset is present in the Media Library.
    - The "Edit" button allows the user to edit the comment as well as change its place in the timeline.
    - The "Delete" button will delete the related comment.



13.5.5.2 Storage tab

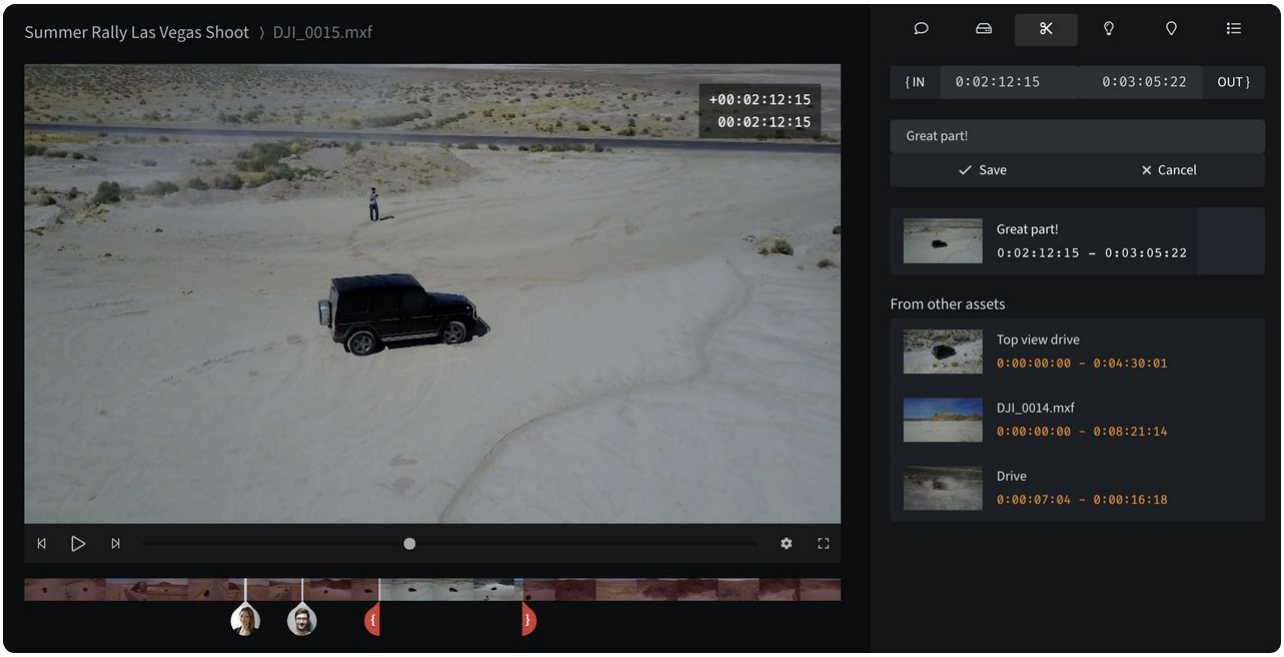
The "Storage" tab shows every location that the asset in question is stored in, whether on the filesystem or in the Archive. Each entry displays the storage location path of the asset or the label of the LTO tape containing the file.

- The "Show in folder" button opens the specific location in the File Manager.
- The "Archive" button adds the file to the Tape Library's archive queue.
- The "Show in Finder/Explorer/File manager" button opens the specific location in Windows Explorer, macOS Finder or the File Manager in Linux, by mounting the workspace using the ELEMENTS Client and highlighting the file. This function can only be used if a user with sufficient workspace permissions is logged into the ELEMENTS Client.
- The Projects section displays all editing projects on the system in which the selected asset was used. Projects created in the integrated roughcut Editor, as well as those created in Adobe Premiere Pro, will be displayed.



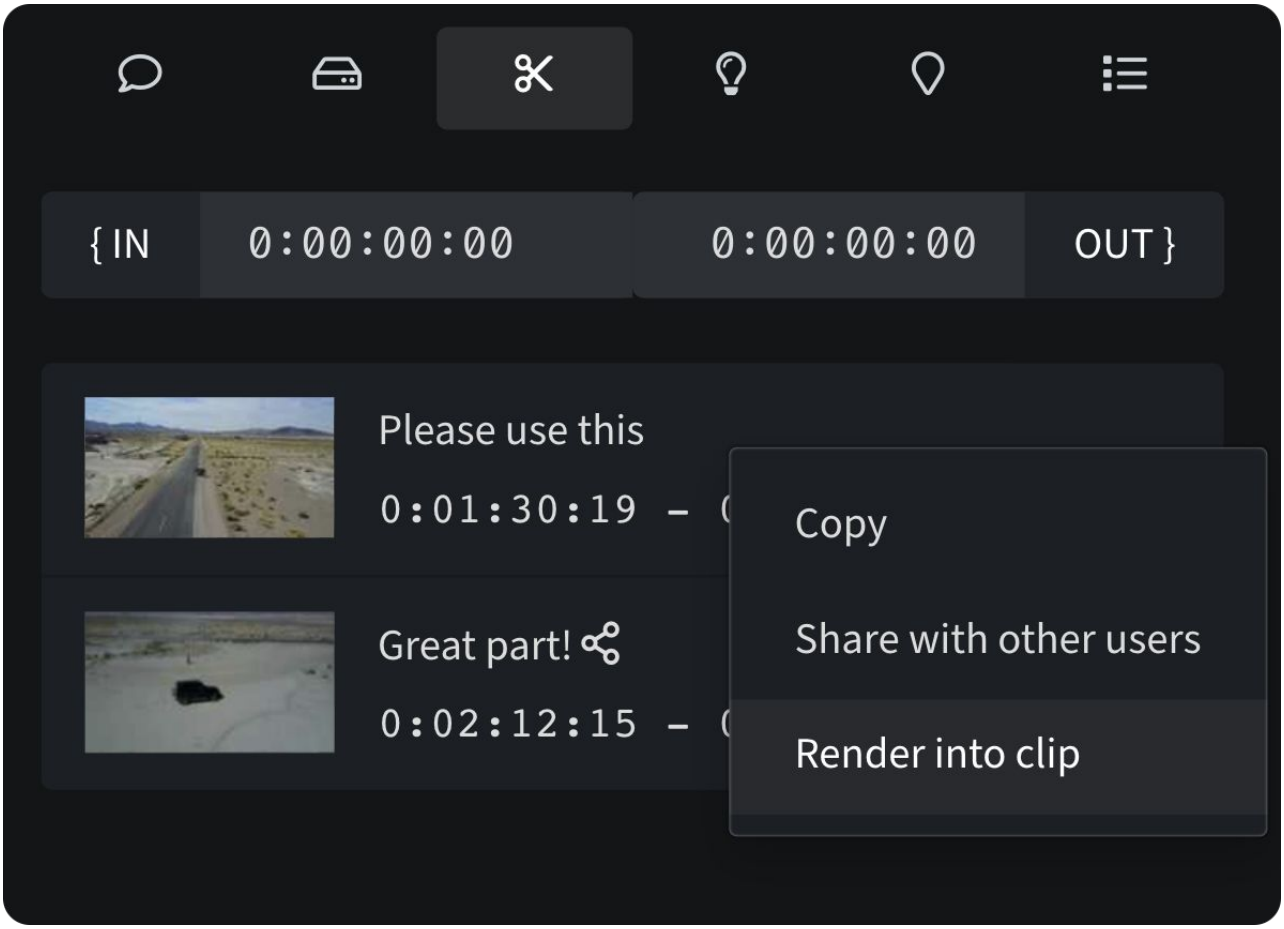
13.5.5.3 Subclips tab

The "Subclips" tab allows the user to create named subclips for the selected asset. Created subclips are automatically added to the queue of the integrated rough-cut editor.



To create a new subclip, in- and out- points need to be set and the subclip needs to be named. Use the in- and out- buttons to set the points on the current position in the timeline or use the timecode bar to enter a precise timecode. Keyboard shortcut I can be used to set an in point and the shortcut O to set an out point. Once created, the points can also be moved via mouse in the clips preview timeline.

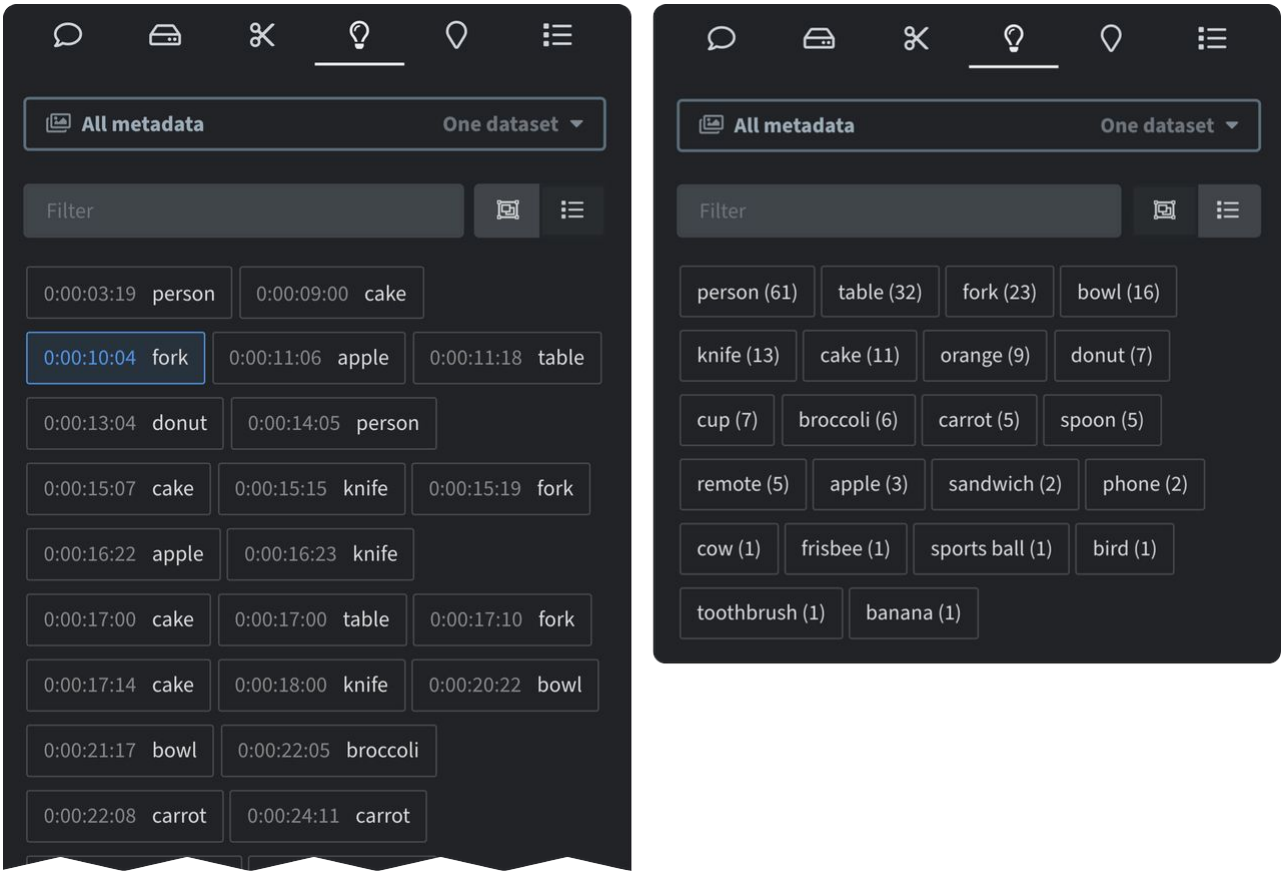
All created subclips are displayed in a list and the in- and out- points will be displayed when an entry is selected. A right-click on any subclip in the list allows it to be copied, shared with other users or directly rendered into a clip in the same Media Root, using the proxy profiles enabled in the config menu.



13.5.5.4 AI Metadata tab

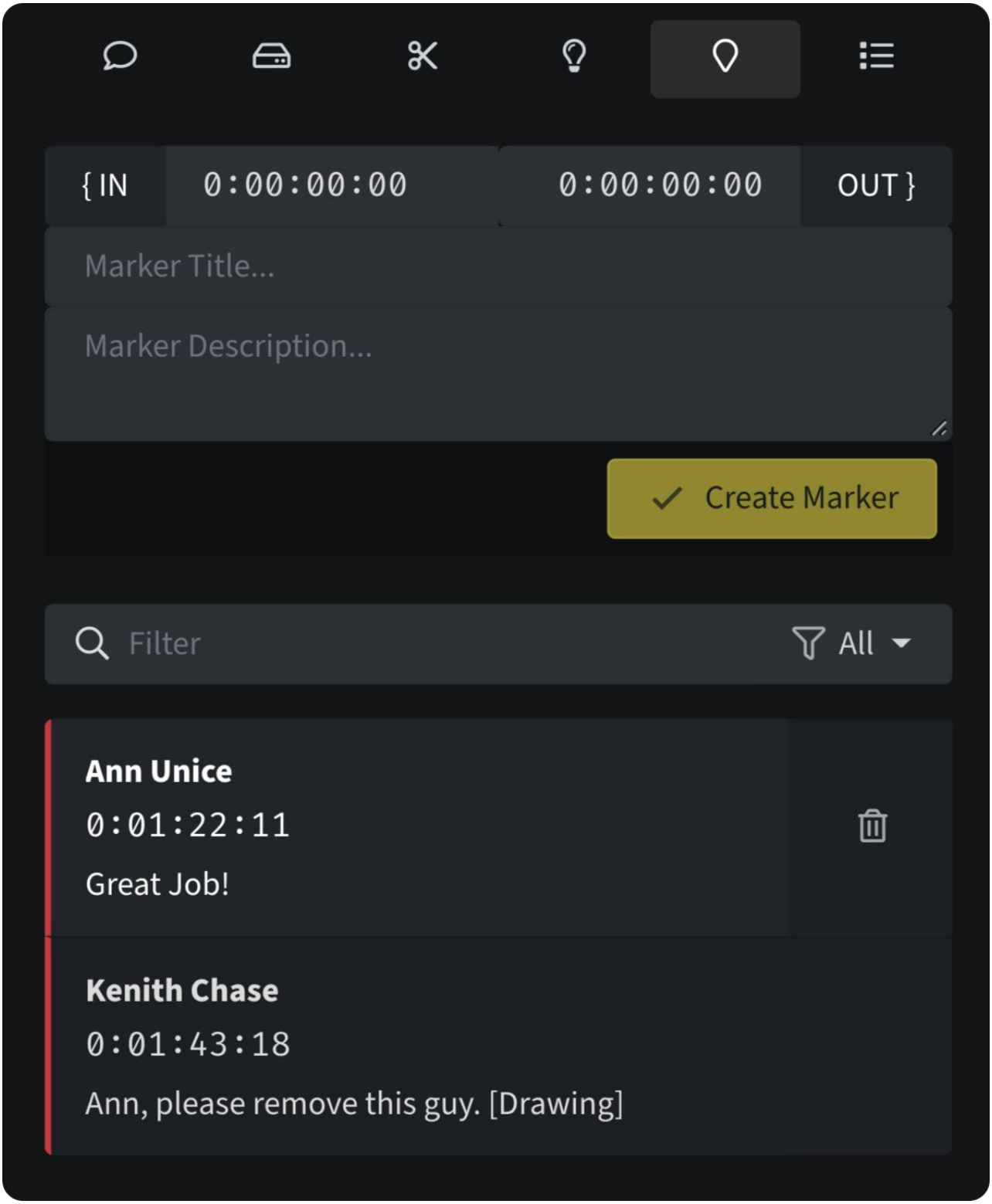
The "AI Metadata" tab displays all objects found during the AI analysis of the asset. Using the ELEMENTS on-premise AI analysis, AI engines can be easily be created through training in the Media Library.

- The dropdown menu allows the user to define which dataset objects should be displayed.
- The Filter bar allows the user to search for specific objects in the list.
- The buttons on the right hand side of the Filter bar allow the user to choose if the markers should be displayed in the form of groups containing the timecodes on which the object was found or as individual objects with the appropriate timecode.
- Clicking on any object in the list redirects the user to the timecode and marks the recognized object.



13.5.5.5 Markers tab

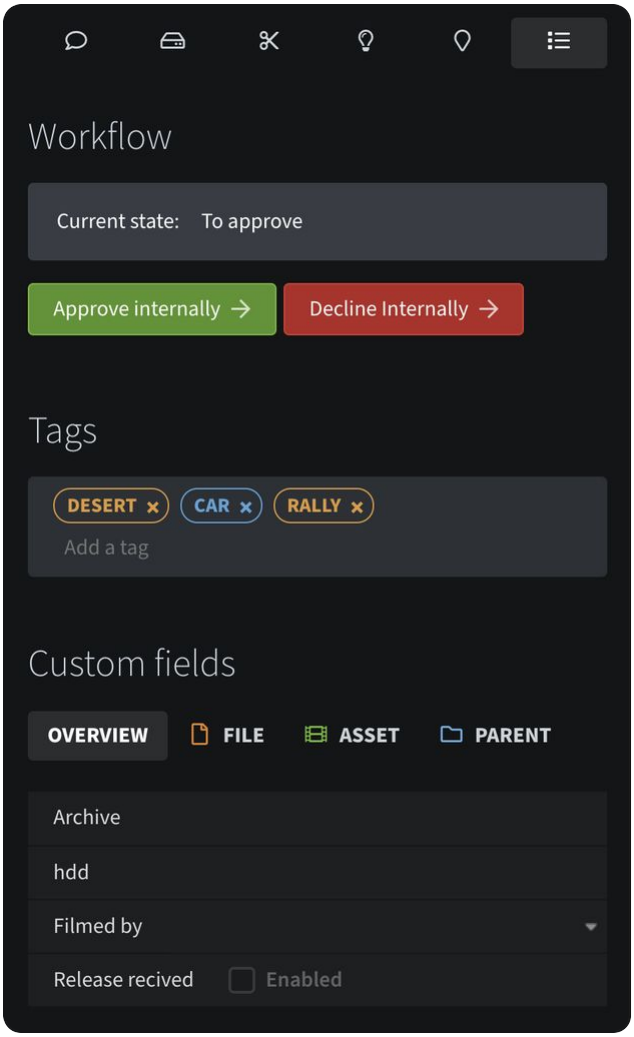
In the "Markers" tab, all existing markers are displayed. Here, new markers can be created and named. A marker description can be added to markers. Markers can be set on a single frame or on a portion of the video by selecting in and out points, making them ideal for video logging. Every comment is also displayed in the markers list and can be modified.

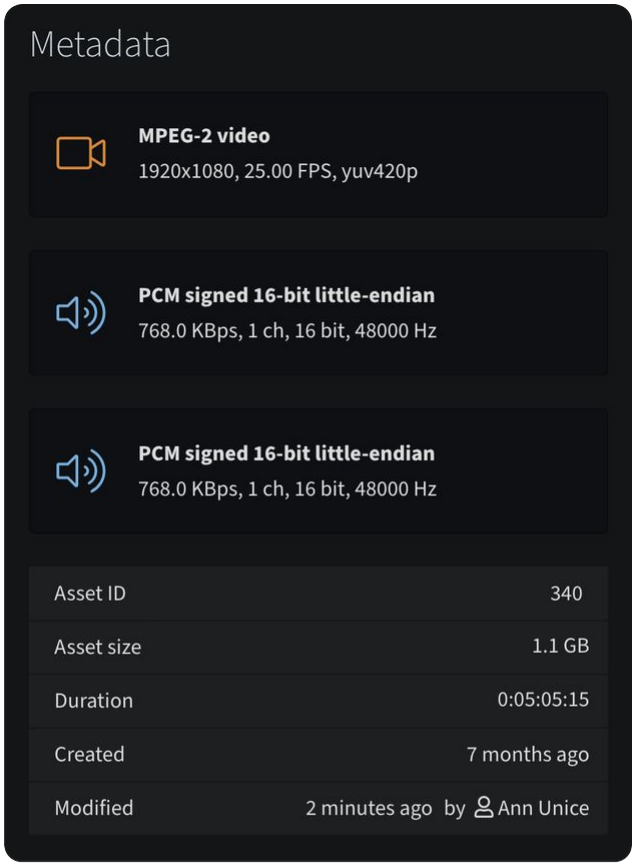

{ IN
0:00:00:00
0:00:00:00
OUT }
Marker Title...
Marker Description...
Create Marker
Filter
All
Ann Unice
0:01:22:11
Great Job!
Kenith Chase
0:01:43:18
Ann, please remove this guy. [Drawing]

13.5.5.6 Metadata tab

The "Metadata" tab displays information about the asset and offers the user the ability to add metadata or execute workflow transitions.

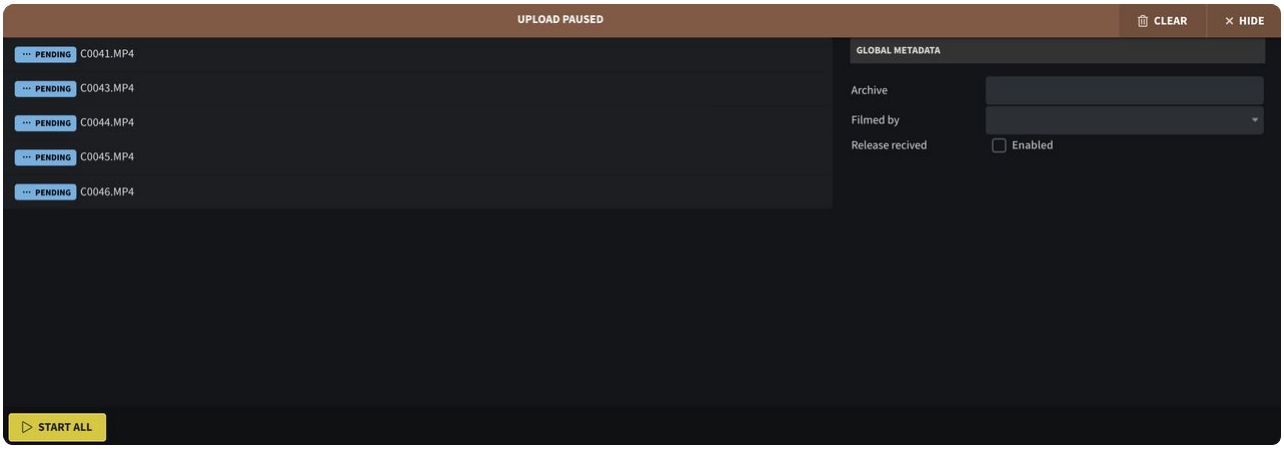
- In the workflow section, the current workflow state is displayed. Transitions can be started if workflows have been set up on the configuration page of the Media Root.
- In the Tags section, add tags to the asset by typing them in. Similar tags used in the same Media Root are offered in a dropdown menu.
- The Custom Fields section allows the user to see the values or add them to the predefined Custom Fields.
    - Overview: Displays the final combined values of File, Asset and Parent Custom Fields as they appear in the Media Library.
    - File: Adds Custom Field values to the specific copy of the file. If the file is copied or moved to another folder, the Custom Field entries will not "stick".
    - Asset: Adds Custom Field values attached to the clip itself. These fields are shared between all copies of the file and will be taken over if the file is moved to another folder. The button "Merge all fields into asset" will combine all values into the Asset level Custom Fields.
    - Parent directory: Displays Custom Fields entries inherited from the Parent directory.
- In the "Metadata" tab, information concerning the selected asset, such as video and audio codecs, resolution, frame rate etc. is displayed. Additional information such as Asset ID, Asset size, duration, creation and modification date are displayed along with the user name of the user executing the last modification.





13.5.6 Upload panel

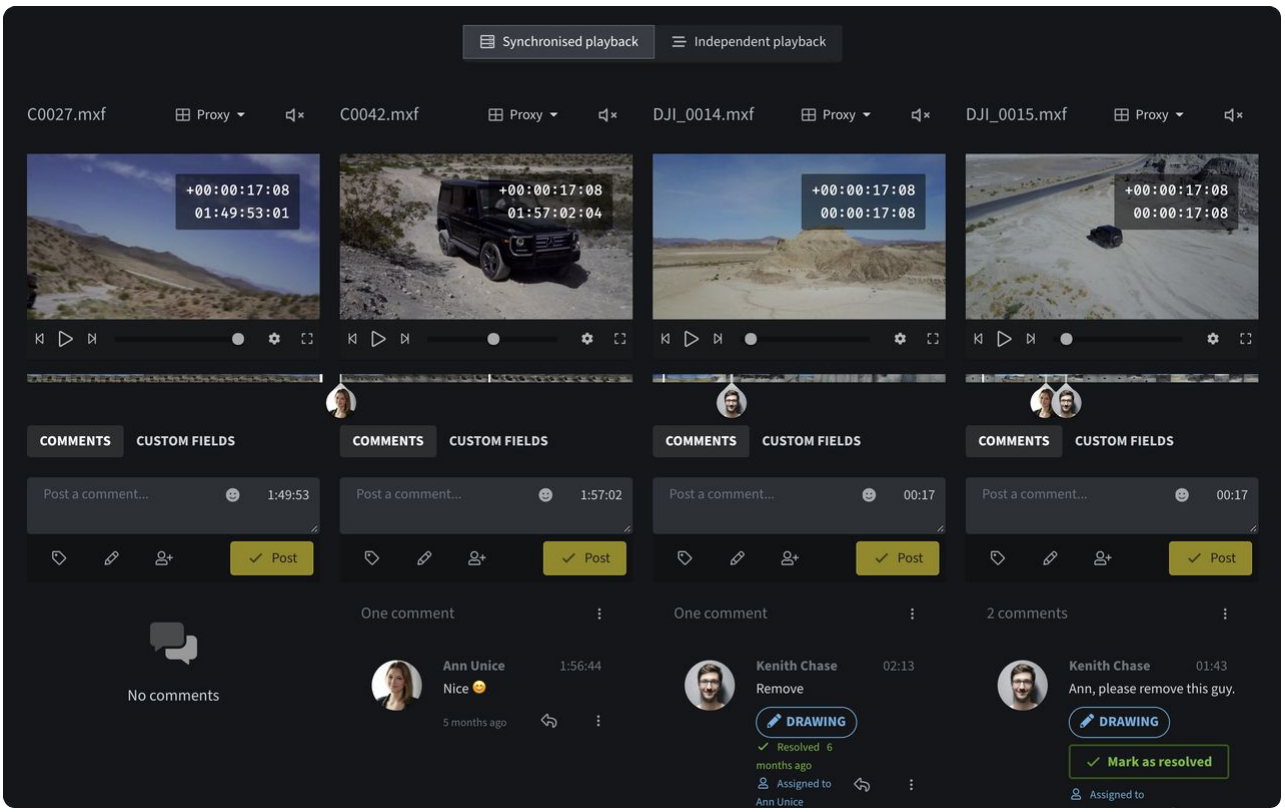
After initiating one or more uploads an upload panel appears allowing the user to manage the uploads to the selected Media Root.



- At the top-right corner of the upload panel it is possible to delete all items from the upload list by using the clear button. The user can also collapse the upload panel by using the hide button.
- The upload panel lists all files in the upload queue.
- The tag on the left hand side of each list entry shows the upload status.
- Clicking the Start button on any entry starts the upload of the individual file.
- The trash bin button removes the individual entry from the list.
- The right hand side of the upload panel allows the user to enter global metadata, which will be attached to every uploaded file. The editable fields displayed in this section can be defined in the configuration menu of the Media Root. If a Custom Field is marked as "Use for uploads" it will be displayed in this list.
- Clicking individual items lets you fill out metadata for individual files.

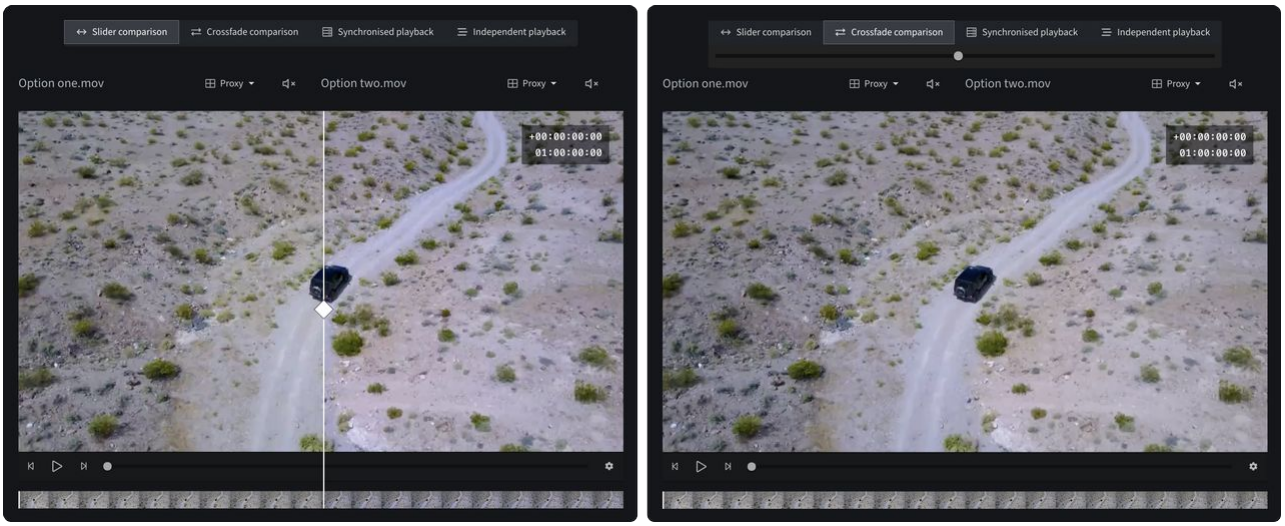
13.5.7 Compare function

The compare function allows the user to compare between 2 and 4 video assets with each other.

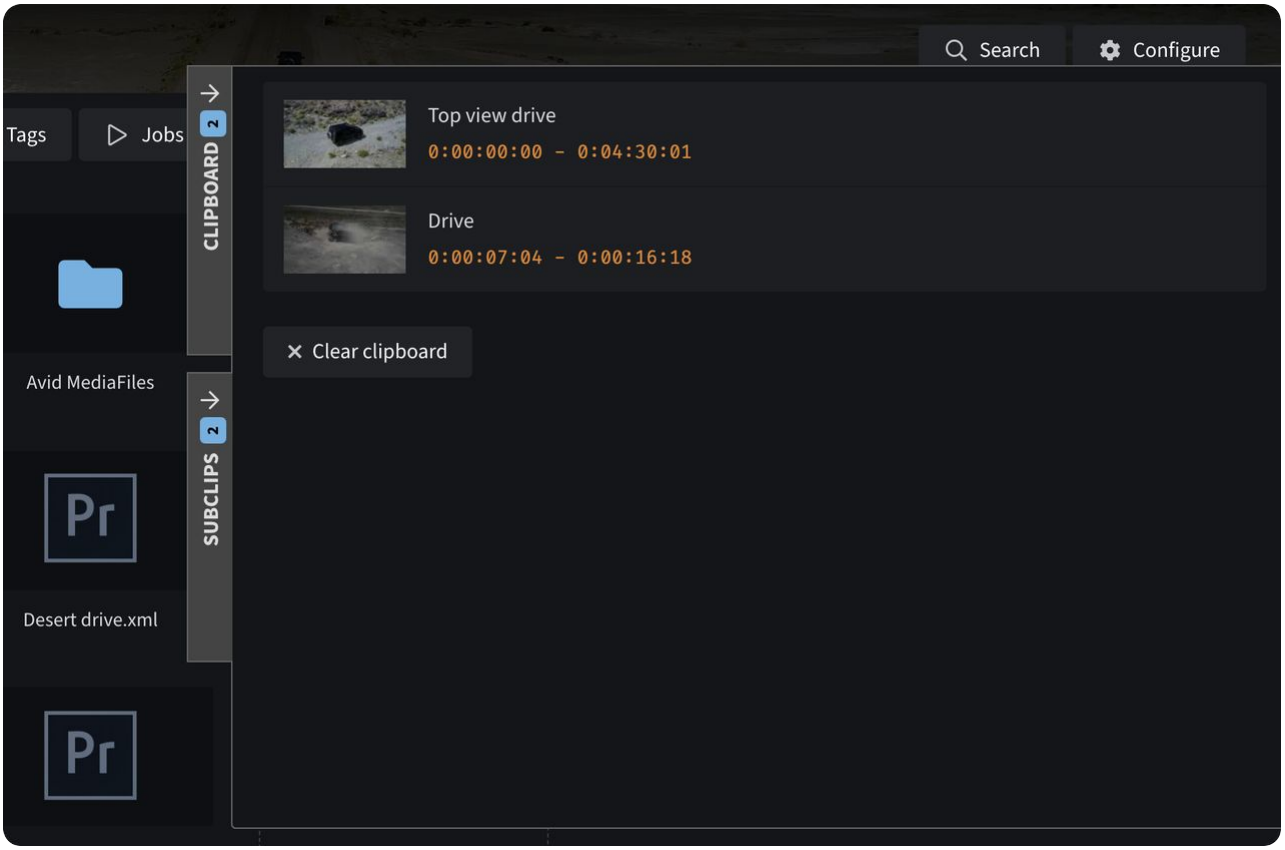


- The default mode is the "Synchronised playback". This mode displays all selected video assets next to each other and synchronises the position and play/pause state.
- "Independent playback" provides the same interface as the synchronised playback functionally, but the playback of the videos will be independent from one another.
- The "Slider comparison" function allows a dynamic change of the windowpane, displaying more of the left or right video during a synchronised playback. This function is only available if comparing two videos with the same aspect ratio.
- "Crossfade comparison" function allows a dynamic transparency change of each video. This function is only available when comparing two videos.
- Beneath each video all comments and custom fields are displayed. Users with sufficient permissions can add new comments or manipulate the values of the existing custom fields under the videos.
- The "Proxy" button above each video allows the user to change the displayed proxy if multiple proxy files were created.

- Clicking the name of any video opens the playback window of the selected video.
- Each video playback window has its own mute button, so it is possible to compare the sound too.



13.5.8 Clipboard and Subclips slide-out panels



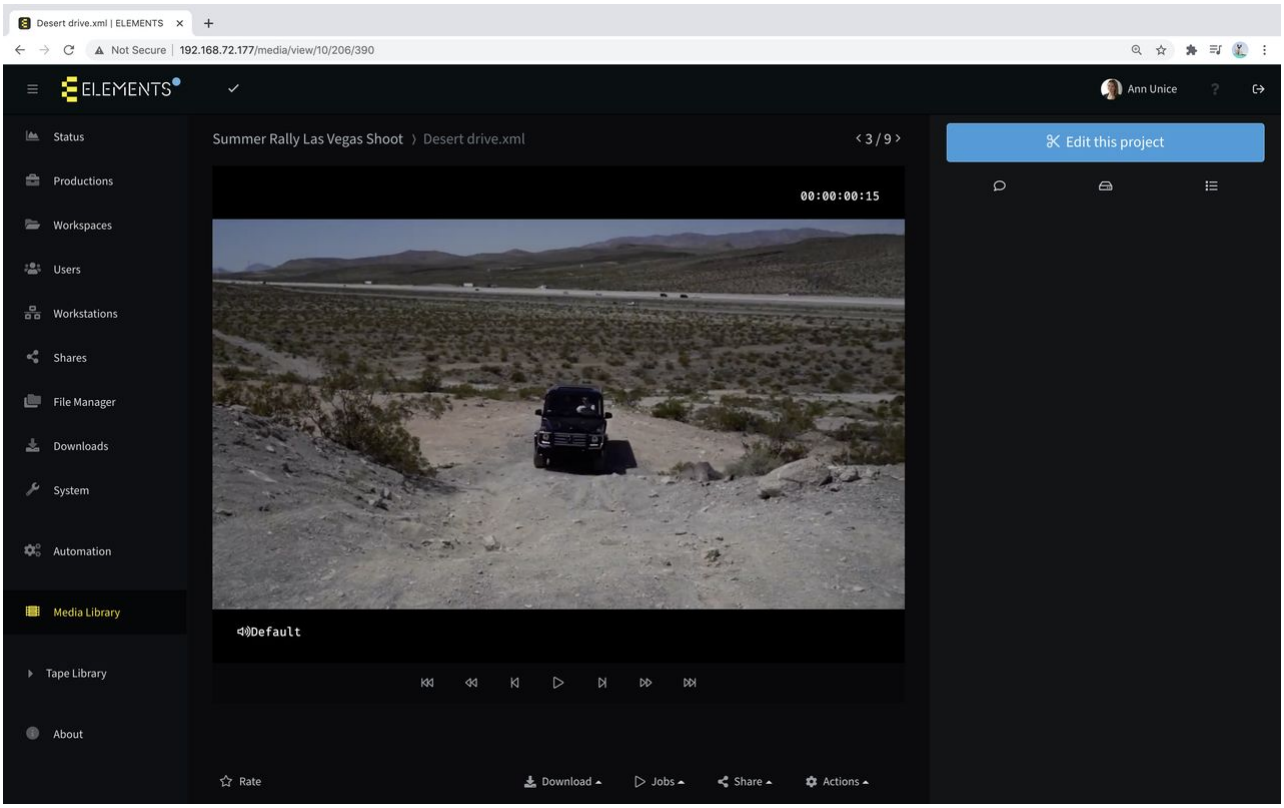
- If any file or folder is copied or cut, the files and folders will be added to a slide-out panel called "Clipboard".
- The second slide-out panel named "Subclips" displays all clips and subclips added to the editor queue. Every newly created subclip automatically gets added to the subclip clipboard.
- Slide out the panels by clicking the tab on the right hand side of the browser window.
- The trash bin behind each entry in the panel allows the user to delete single objects from the panel.

- The button "Clear clipboard" allows the user to delete all files, folders or subclips out of the clipboard.

13.5.9 Roughcut Editor Interface

13.5.9.1 Project preview

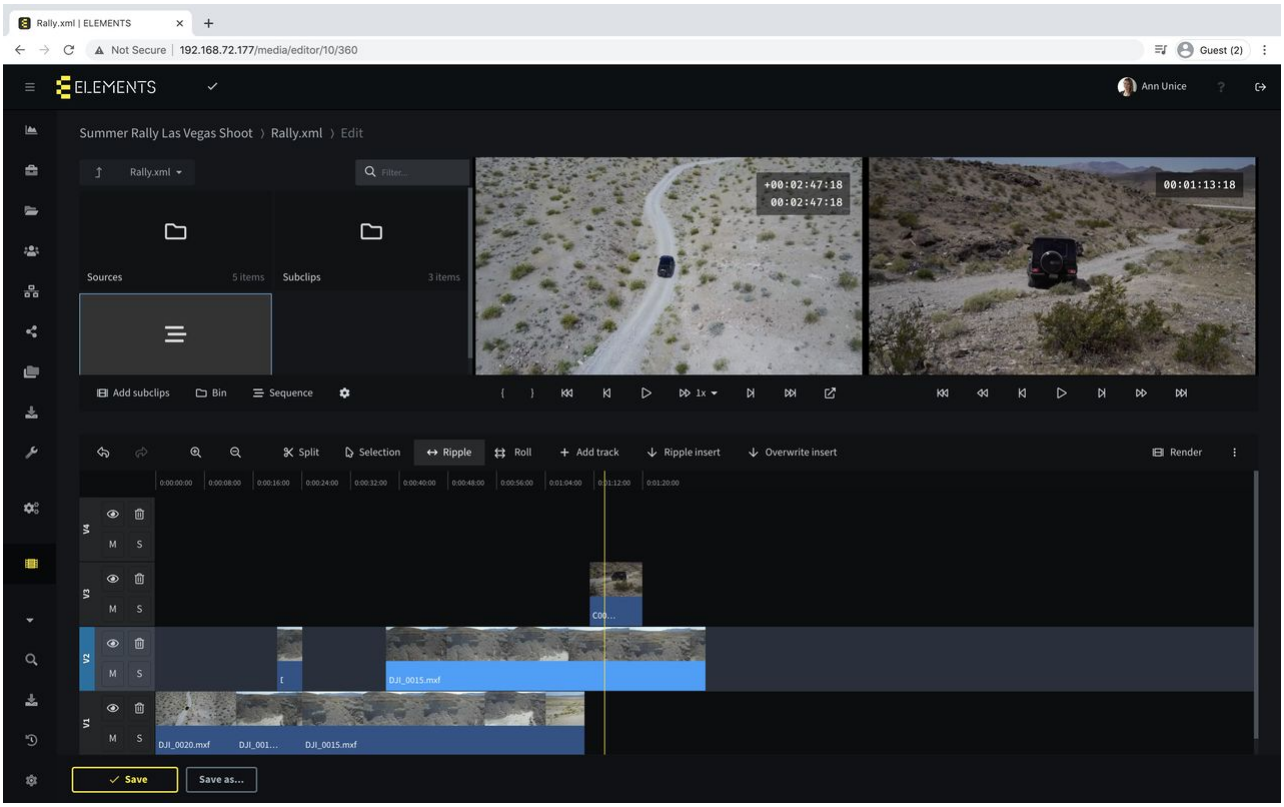
Media Library makes it possible to preview a project created in the integrated roughcut editor, Final Cut Pro XML files and Premiere Pro projects. When previewing a Premiere Pro project, effects and transitions cannot be displayed. The editor allows the user to import the created editing project into an NLE of their choice, as well as to export the sequence or the used subclips directly from the editor. Create an editor project via the "+ Create" button in the Media Library. If an editor project already exists the user can gain access to it by clicking on it. Projects files also have their own metadata and can be commented on just like all other asset types.



- The preview area displays the selected project sequence. If the project contains multiple sequences, they will be displayed on the left hand side of the preview window, allowing the user to select any of the sequences.
- When previewing a project file, the "Edit this project" button will take you to the Roughcut Editor interface.

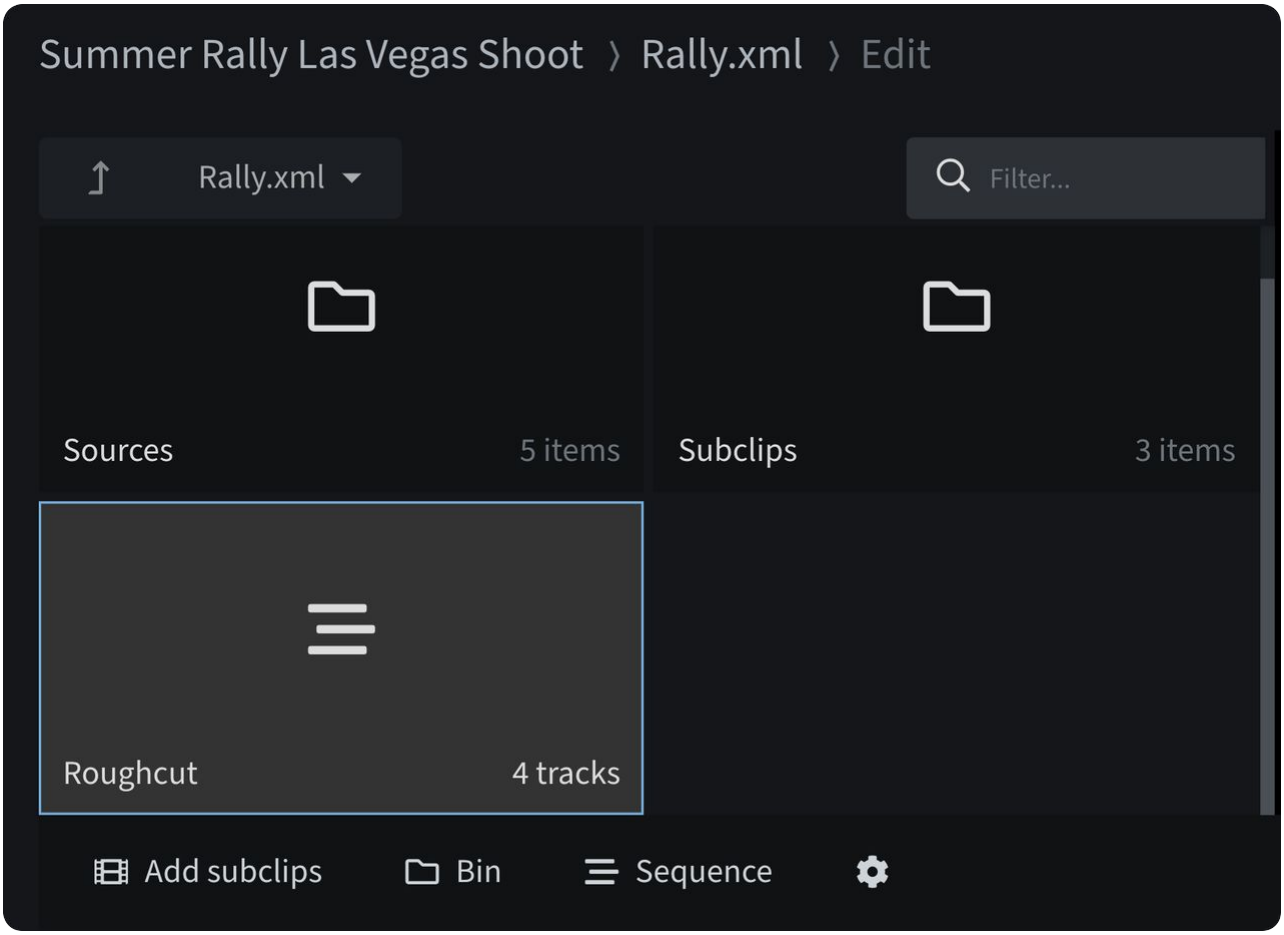
13.5.9.2 Editing mode

The editing mode of the rough-cut editor consists of the following three sections: Project section, Playback window section (containing the source and timeline playback windows) and the Timeline section.

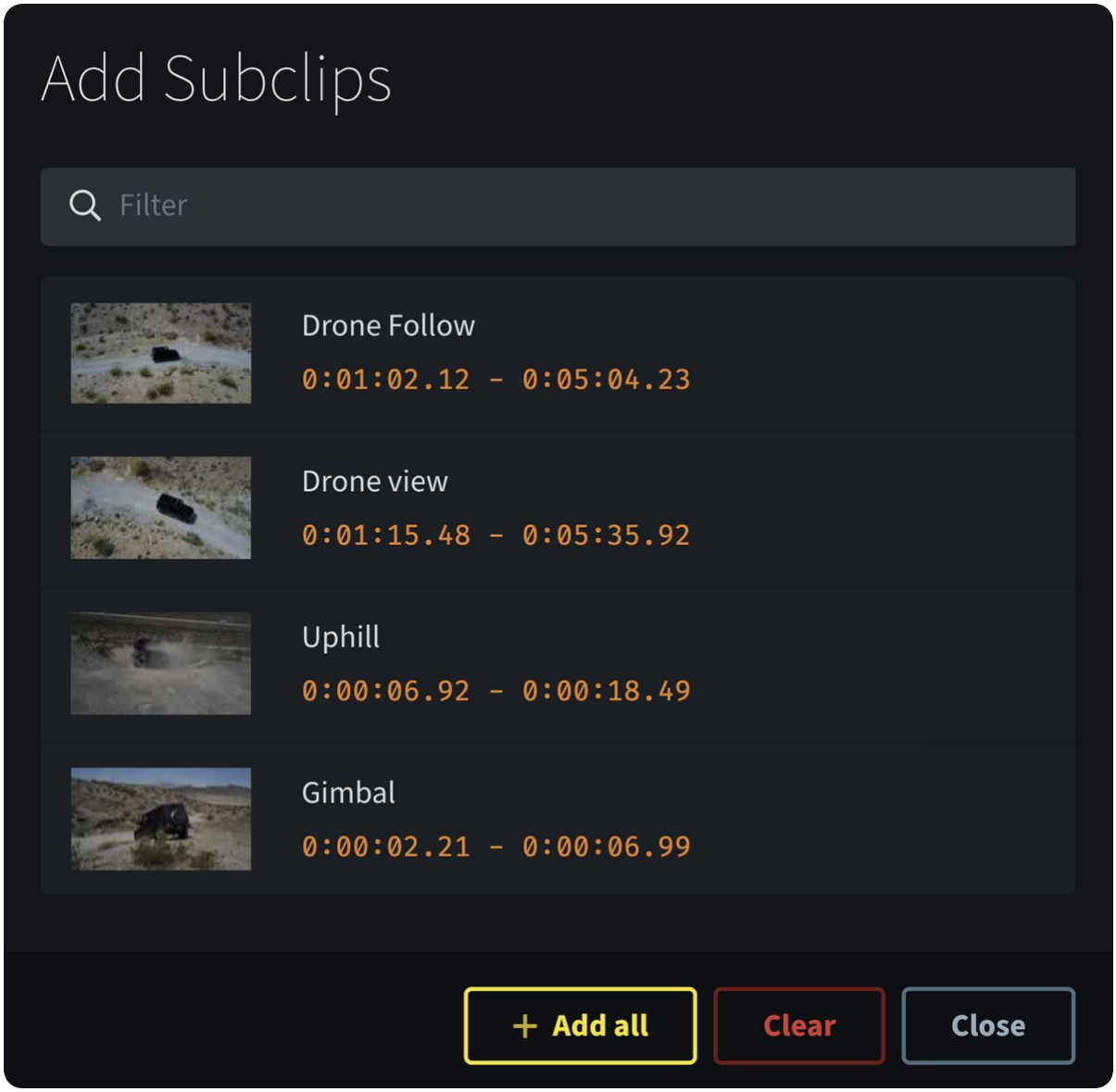


Project section

The Project section shows all clips, sequences and bins in the project.



- The "Sources" folder contains full-length imported assets. If a subclip is imported into the project, a full-length original clip will also be imported.
- The "Subclips" folder contains all imported subclips. These subclips have been created in the Subclips section of the Media Library asset preview mode. The user does not need to create subclips in order to use the roughcut editor, as full-length assets can be imported and modified by using the In- and Out- points.
- Underneath the Sources and the Subclips folders all existing sequences are displayed. Click on any sequence to open it in the timeline.
- The "Add subclips" button opens a popup window and displays the content previously added to the "Subclips" slide-out panel by using the "Add to editor" button or by simply creating a subclip in the Media Library. Clicking on a clip or a subclip in the list adds it to the appropriate folder in the Project window. If you’re editing a project an find yourself in need of another subclip, you can open another browser tab and add them there - the subclip list in the Editor will update automatically.



  - By using the filter bar, a specific subclip or clip can be searched by name.
  - Remove a single subclip out of the list by clicking the trash bin beside the entry, which appears when hovering over an entry.
  - "+ Add all" will add all clips and subclips from the list to the editor project.
  - The button "Clear" removes all clips and subclips from the list.
  - The button "Close" closes the popup window. Alternatively, the window can be closed by clicking beside the popup window.
- The button "Bin" allows the user to create a new bin to help organize the project.
- The button "Sequence" allows the user to create a new sequence.
- The gear symbol allows the user to adjust the file path format for a Windows PC or a Mac.

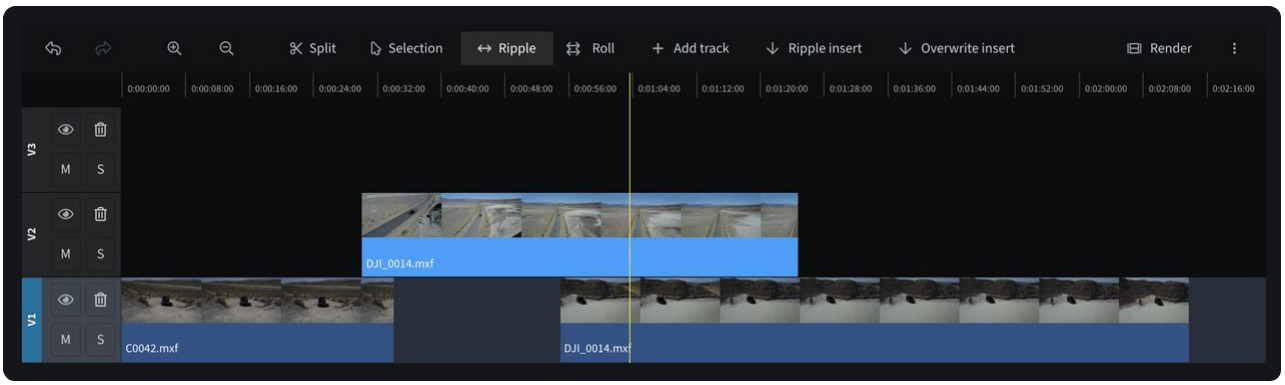
Playback section

The Playback section consists of two preview windows displaying an open clip and the timeline.

- Source playback window: A video player for source playback with the following buttons:
  - The first two buttons on the left allow the user to set in- and out- points on the source video to add to the timeline.
  - The "Beginning" button sets the playhead of the source playback window to the first frame of the video.
  - The "-1 Frame" button moves the playhead one frame back.
  - The "Play" button starts and pauses the playback at the selected playback speed.
  - The "Playback Rate" dropdown menu allows the user to select the speed of the video playback.
  - The "+1 Frame" button moves the playhead one frame forward.
  - The "End" moves the playhead to the last frame of the video.
  - The "View Details" button opens the source video in the video playback mode of the Media Library and pre-opens the Metadata tab.
- Timeline (Preview) playback window: A video player for timeline playback with the following buttons:
  - The "Beginning" button sets the playhead of the Timeline playback window to the first frame of the video.
  - The "-5 Frames" button moves the playhead five frames back.
  - The "-1 Frame" button moves the playhead one frame back.
  - The "Play" button starts and pauses the playback at the selected playback speed.
  - The "+1 Frame" button moves the playhead one frame forward.
  - The "+5 Frames" button moves the playhead five frames forward.
  - The "End" moves the playhead to the last frame of the video.

Timeline section

The Timeline section enables the creation of roughcuts by using many of the well-known NLE functions.



A number of editing tools are located in the button bar above the timeline.

- With the forward and backward arrows it is possible to undo or redo the last actions.
- The plus and minus magnifying glass symbols allow the user to zoom in or out of the timeline preview.
- The "Split" button divides a selected subclip on the playhead location.
- Using the "Selection" tool, clips in the timeline can be selected and moved.
- The "Ripple edit" tool allows the user to trim a clip whereby all subsequent clips will be moved. Using this tool results in a change to the overall timeline length. This tool prevents the appearance of holes in the timeline when shortening the clips.
- The "Roll edit" tool allows the user to trim a clip without affecting the position of any other clip. Using this tool does not result in a change of the overall timeline length. Shortening the clips by using the Roll edit function can therefore create holes in the timeline.
- The "+ Add track" button adds a new video track to the timeline. The roughcut editor is not restricted in a number of video tracks.
- The "Ripple insert" button adds a clip from the source browser (or a section of the clip if In- and Out- points are set) into the timeline on the current playhead position, whilst moving all subsequent clips by the clips length. If a clip is located at the current playhead location, the clip will be split. Using the Ripple insert function always changes the overall length of the timeline.
- The "Overwrite insert" button adds a clip from the source browser (or a section of the clip if In- and Out-points are set) into the timeline on the current playhead position while not moving other clips. If a clip is located at the current playhead location of the selected track, the clip will be overwritten from the playhead location. Using the Overwrite insert function does not always change the overall length of the timeline.

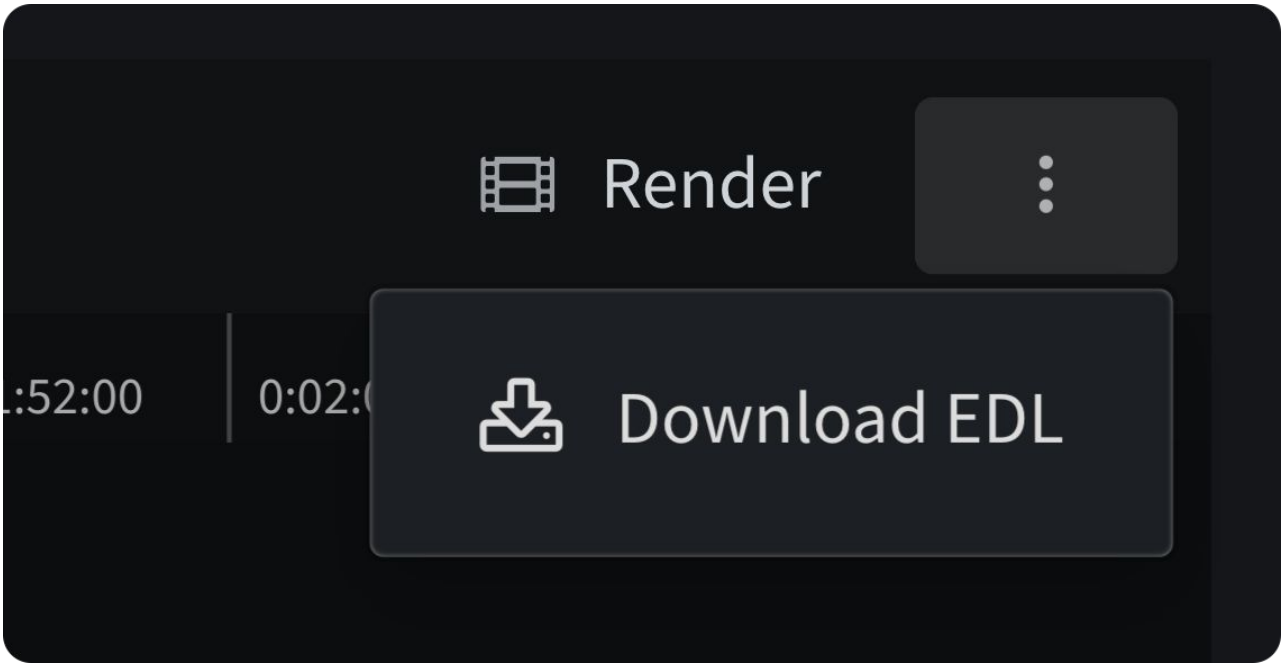
On the left hand side of every video track additional functions can be found:

- The eye symbol determines if the track should be displayed or ignored.
- The button "M" mutes the track so that no audio is played from this track during the preview of the sequence.
- The button "S" will mute all other tracks so that only the audio of the selected track will be played.
- With the trash bin symbol the specific track can be deleted.

Exporting features

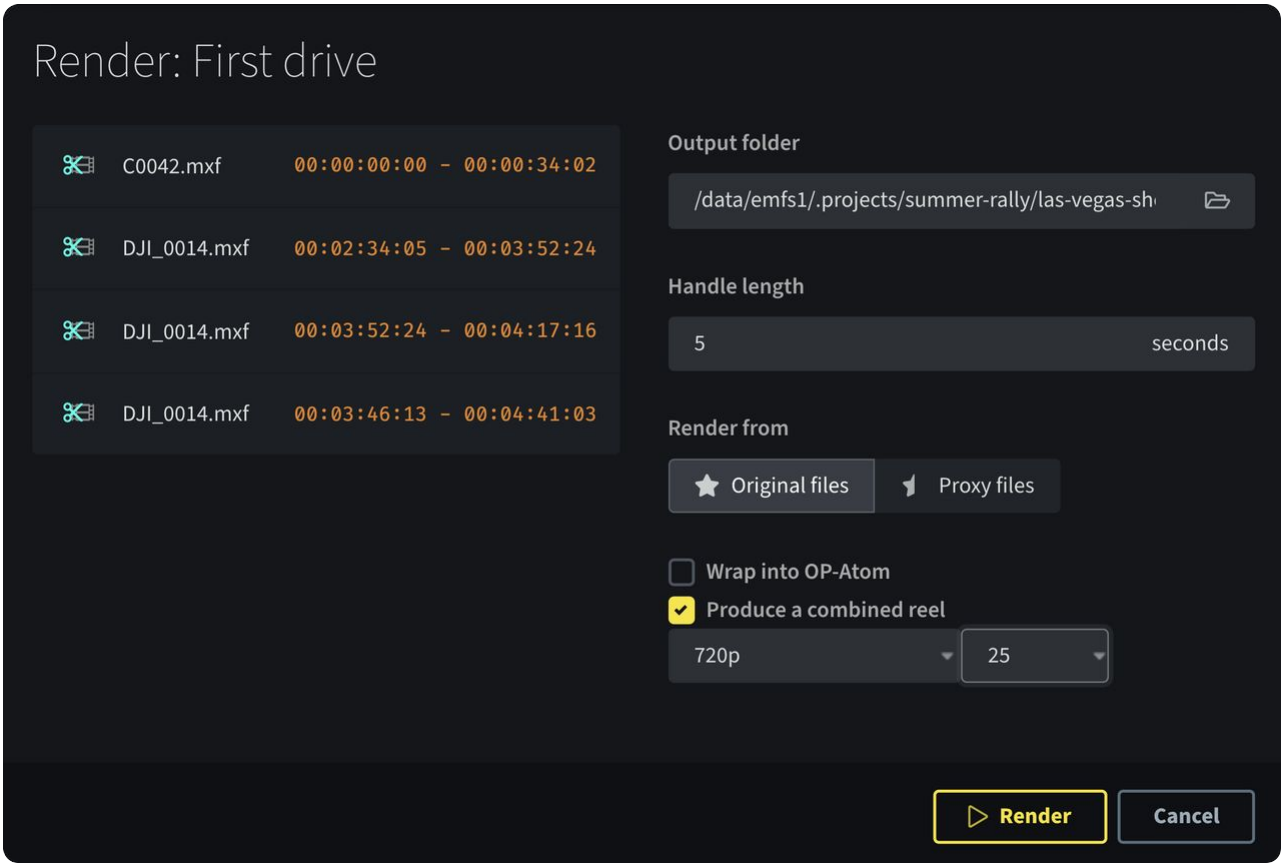
The created roughcut project can either be imported into one of the major NLEs or exported directly from the editor.

Being that the project is saved as an XML file, it can be opened in NLE’s that support XML import (such as Adobe Premiere Pro and DaVinci Resolve) via the import function of the application, a simple drag-and-drop or by using the ELEMENTS Premiere Pro Plugin. Importing the sequence into Avid Media Composer can be done via EDL file.



The render function of the roughcut editor allows the user to export the timeline as well as the used subclips. Clicking the "Render" button opens a popup window containing the render settings.

- The left hand side of the window displays all subclips used in the sequence as well as the starting and ending timecodes of the subclips.
- The "Output folder" field allows the user to type in or choose the destination folder for the exported files.
- The "Leave tails" field allows the user to set the handle length for subclip export in seconds. If, for example, a value of 2 seconds is set, every subclip will (if allowed by the length of the source clip) be exported with an additional 2 seconds before the in-point and 2 seconds after the out-point of the subclip.
- The "Render from" section allows the user to select if the subclips should be created from original files or from proxy files.
- "Wrap into OP-Atom" will export each essence track of the subclip separately
- Additionally a combined reel can be exported. Checking this option will export the whole sequence as one H.264-based clip with the set resolution and framerate.



Bottom bar

The bottom bar allows the user to save the made changes by using the "Save" button. Use the "Save as…" button to save the project as a new copy under another name .

13.5.10 Watch the video

13.5.10.1 Using the ELEMENTS Media Library

https://youtu.be/7DfhB0yLDQE

13.5.10.2 Collaboration in the ELEMENTS Media Library

https://youtu.be/tPMr-g30nyc

13.5.10.3 Sharing assets from the Media Library

https://youtu.be/nFSuODsTYHg

13.5.10.4 Using the ELEMENTS Rough cut editor

https://youtu.be/dCoyrHk1Mww

13.5.10.5 Using workflows in the Media Library

https://youtu.be/eiUfWEwOAkE

13.5.10.6 Media Library Compare function

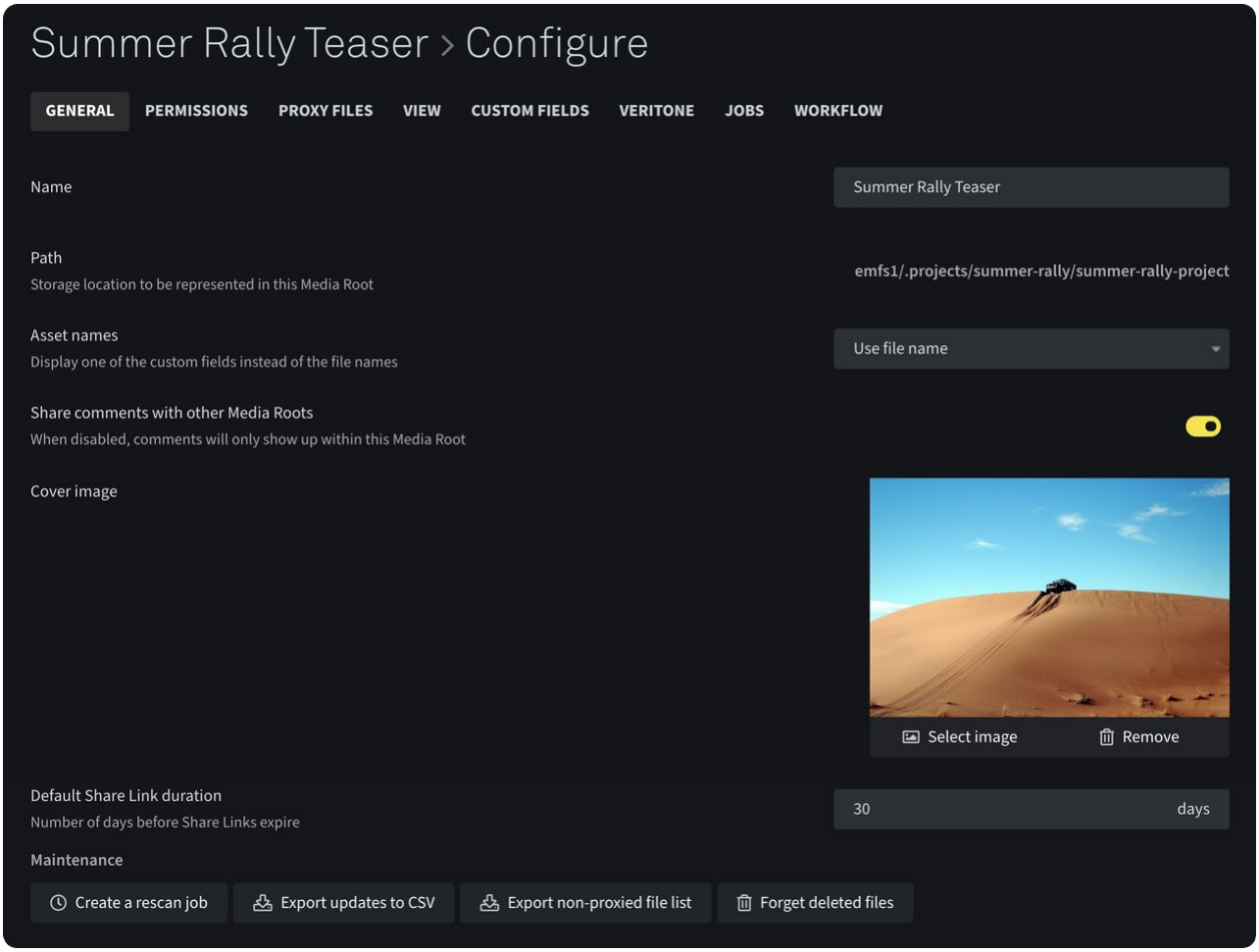
https://youtu.be/340e7WnBaXM

13.6 Media Root Configuration

- General tab(see page 146)
- Permissions tab(see page 148)
- Proxy files tab(see page 148)
- Settings of a Proxy Profile - Internal Transcoder(see page 149)
    - Transcoder tab(see page 150)
    - Watermark tab(see page 153)
    - Timecode tab(see page 155)
    - Advanced tab(see page 157)
    - Bottom bar(see page 158)
- Settings of a Proxy Profile - External Transcoder(see page 158)
    - Transcoder tab(see page 159)
    - Advanced tab(see page 161)
- View tab(see page 162)
- Custom fields tab(see page 162)
- Settings Custom fields(see page 163)
    - General tab(see page 164)
    - Validation tab(see page 165)
    - Labels tab(see page 166)
- Jobs tab(see page 166)
- Workflow tab(see page 167)
- Bottom bar(see page 170)
- Watch the video(see page 170)
    - Using workflows in the Media Library(see page 170)

13.6.1 General tab

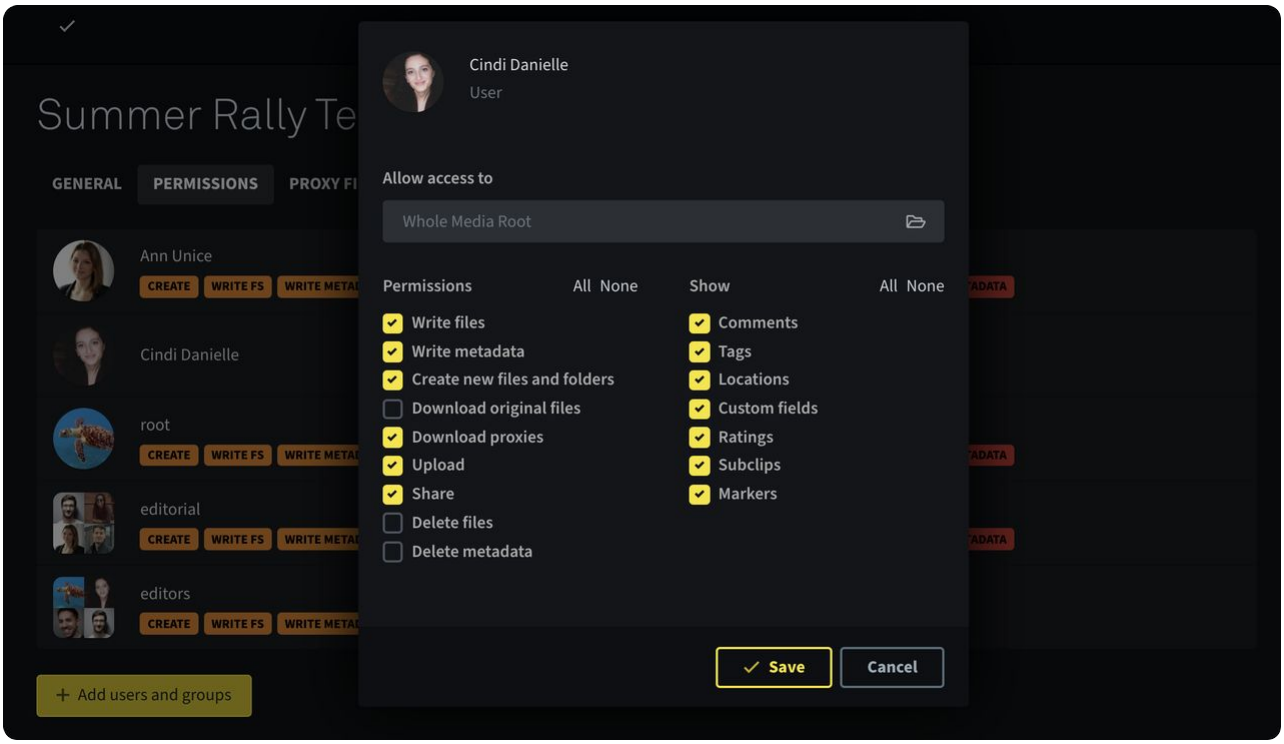
The general tab of the Media Root Configure menu allows users the ability to modify the name of a Media Root and to add a picture for easier recognition. It displays the path of the Media Root folder and allows the user to quickly set up a rescan job using the Workflow Automation page.



- The field "Name" allows the user to easily change the name of the Media Root.
- "Path" shows the location of the Media Root on the filesystem.
- "Asset names" allows the user to display one of the saved Custom Fields instead of the original file name.
- The function "Share comments with other Media Roots" allows the user to transfer all comments when copying an asset between Media Roots.
- The cover image section allows the user to add an image, which will be displayed in the Media Root list for easy recognition; as well as in the Media Root.
- "Default Share Link duration" allows the user to set the default number of days that every file shared via a link from the Media Library, will be accessible. When sharing the link, the expiry date can be modified.
- Maintenance section:
    - Create a rescan job: Creates a new rescan job for the selected Media Root and opens the configuration page of the job.
    - Export updates to CSV: Downloads a CSV file containing all added metadata on the assets in the Media Root, such as comments, ratings etc.
    - Export non-proxied file list: Downloads a CSV file with a list of all files without a generated proxy file.
    - Forget deleted files: If original files were deleted, the proxies and metadata still remain in the Media Root and are marked with a trash can symbol. Using this function will remove the proxies that do not have a corresponding original file.

13.6.2 Permissions tab

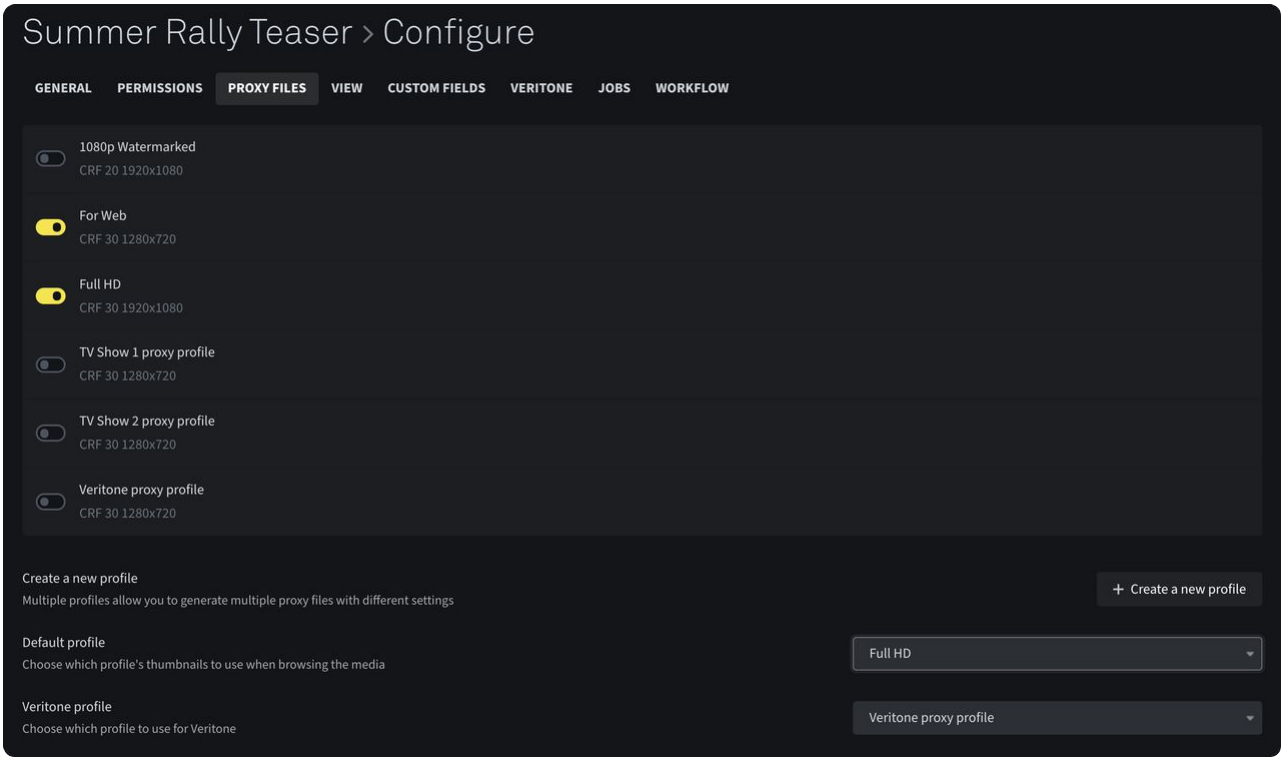
The Permissions tab shows a list of all users and groups with access permissions to the selected Media Root. It also allows the user to add users and groups to the permissions list.



- When hovering over any entry in the permissions list, a trash bin symbol appears on the right hand side of the entry. Clicking the symbol deletes the permission of the user or group.
- "+ Add user" allows the user to add one or more users by selecting them from a popup user list. Users who already have a permission to the selected Media Root will be disabled in the list. Simply mark multiple users to add them all at once.
- "+ Add group" allows the user to add one or more groups by selecting them from a popup group list. Groups who already have a permission to the selected Media Root will be disabled in the list. Simply mark multiple groups to add them all at once.
- Selecting a user or a group opens a popup window within which the permission settings can be defined.
    - With "Allow access to" it is possible to limit the access to one directory or only to one asset in the Media Root.
    - The "Permissions" list allows the user to define the access rights for the selected user or group. With "All" all permissions will be selected and with "None" they will all be deselected.
    - The "Show" list allows the user to configure all tabs and functions to be displayed to the user or group. With "All" all permissions will be selected and with "None" they will all be deselected.
    - Clicking the "Save" button saves the changes. Clicking the "Cancel" button will discard the made changes.

13.6.3 Proxy files tab

The Proxy Files tab shows a list of all existing proxy profiles and allows the user to enable or disable them for the selected Media Root. Here, new proxy profiles can also be created.

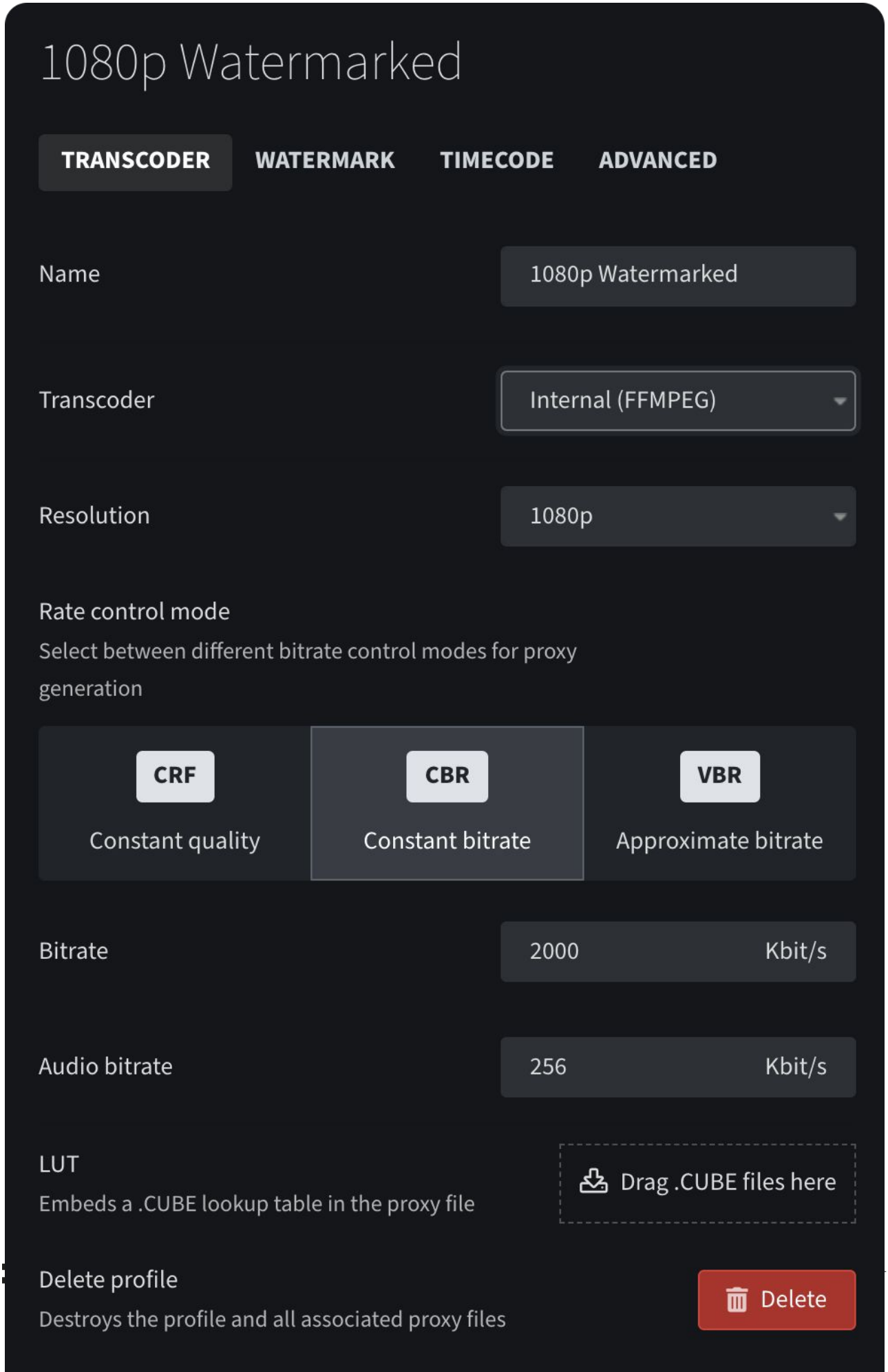


- Create a new proxy profile by using the "+ Create a new profile" button.
- "Default profile" allows the user to predefine a profile, which will be displayed by default when browsing the media in the particular Media Root.
- "ELEMENTS Click profile" allows to the user to choose the profile used for assets in ELEMENTS Click. This option will only be displayed if ELEMENTS Click is integrated into the system.
- "Veritone profile" allows the user to choose the profile used for AI analysis using the Veritone AI engines. This option will only be displayed if the Veritone AI module is integrated into the system.
- "AI profile" allows the user to choose the profile used for the ELEMENTS on-premise AI analysis. This option will only be displayed if the ELEMENTS AI module is integrated into the system.

13.6.4 Settings of a Proxy Profile - Internal Transcoder

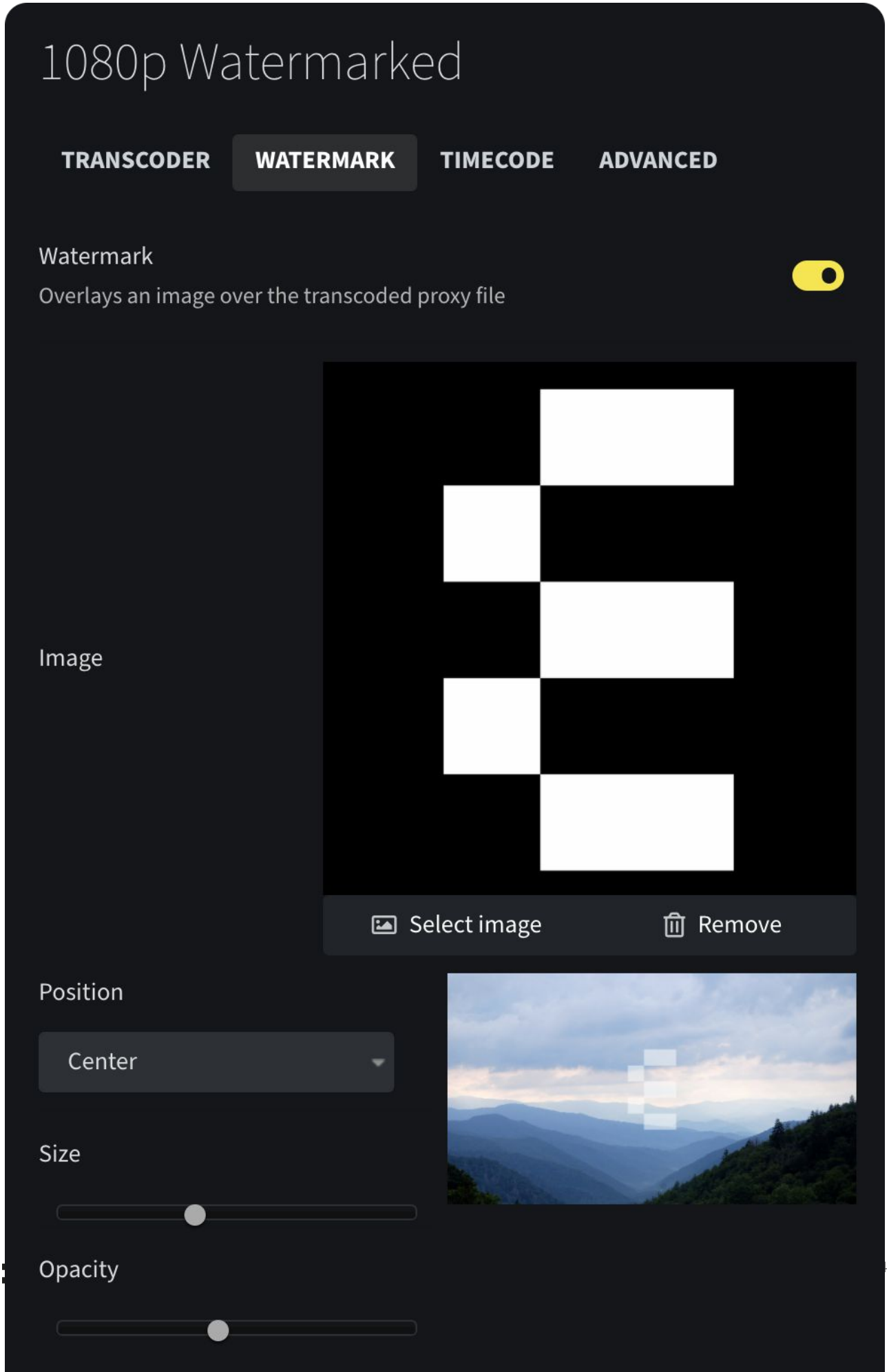
The internal transcoder used for the creation of Media Library proxy files is based on FFmpeg. Alternatively, an external transcoder can be used.

13.6.4.1 Transcoder tab


1080p Watermarked
TRANSCODER
WATERMARK
TIMECODE
ADVANCED
Name
1080p Watermarked
Transcoder
Internal (FFMPEG)
Resolution
1080p
Rate control mode
Select between different bitrate control modes for proxy generation
CRF
Constant quality
CBR
Constant bitrate
VBR
Approximate bitrate
Bitrate
2000
Kbit/s
Audio bitrate
256
Kbit/s
LUT
Embeds a .CUBE lookup table in the proxy file
Drag .CUBE files here
Delete profile
Destroys the profile and all associated proxy files
Delete

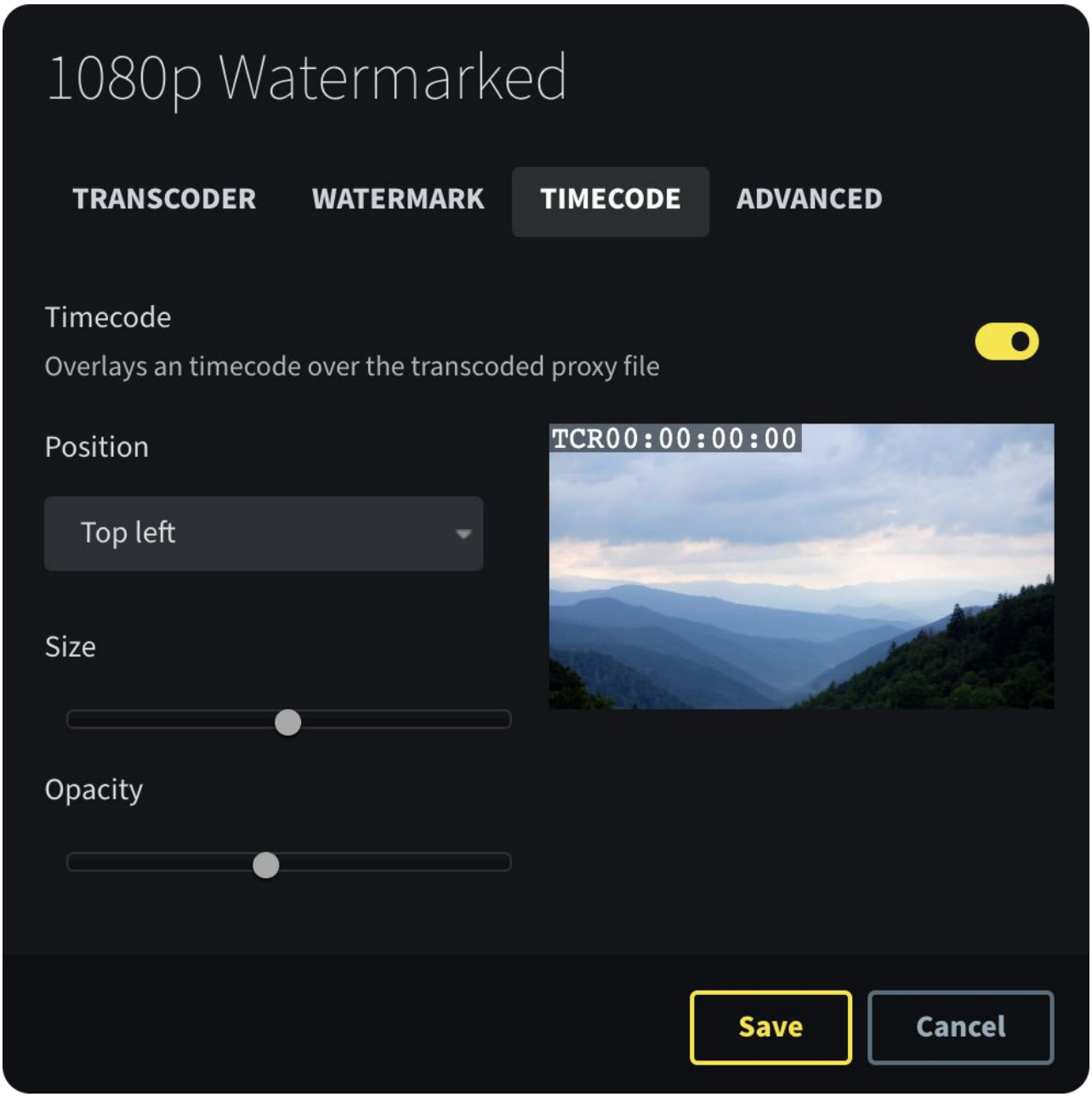
- The field "Name" allows the user to determine a name for the new proxy profile.
- The "Transcoder" section allows you to choose a transcoder for proxy file generation. This section describes the usage of the internal, FFmpeg-based transcoder.
- "Resolution" allows the user to select the resolution of the generated proxy.
- The "Rate control mode" allows the user to choose between three bitrate control modes:
    - Constant quality level (CRF): A H.264 quality specification with 7 offered number values (values 0 - 51). The default value is set to 30 - Good.
    - Constant bitrate (CBR): Allows the user to define a precise constant bitrate.
    - Approximate bitrate (VBR): Allows the user to define a target bitrate. The bitrate of the resulting video will be variable in order to produce a smaller-size file.
- The "Audio bitrate" field allows the user to determine the constant audio bitrate.
- The "LUT" section allows the user to apply a .CUBE LUT file for color correction in the proxy profile.
- Use the "Delete" button to remove the proxy profile.

13.6.4.2 Watermark tab


1080p Watermarked
TRANSCODER
WATERMARK
TIMECODE
ADVANCED
Watermark
Overlays an image over the transcoded proxy file
Image
Select image
Remove
Position
Center
Size
Opacity

- Enabling the "Watermark" slider displays the watermark settings.
- Using the "Select image" button, an image can be selected to be used as watermark.
- Using the "Position" drop-down menu allows the user to define the position on which the selected watermark will be overlaid.
- The slider "Size" allows the user to change the dimensions of the watermark.
- The slider "Opacity" allows the user to set the opacity level of the selected watermark.

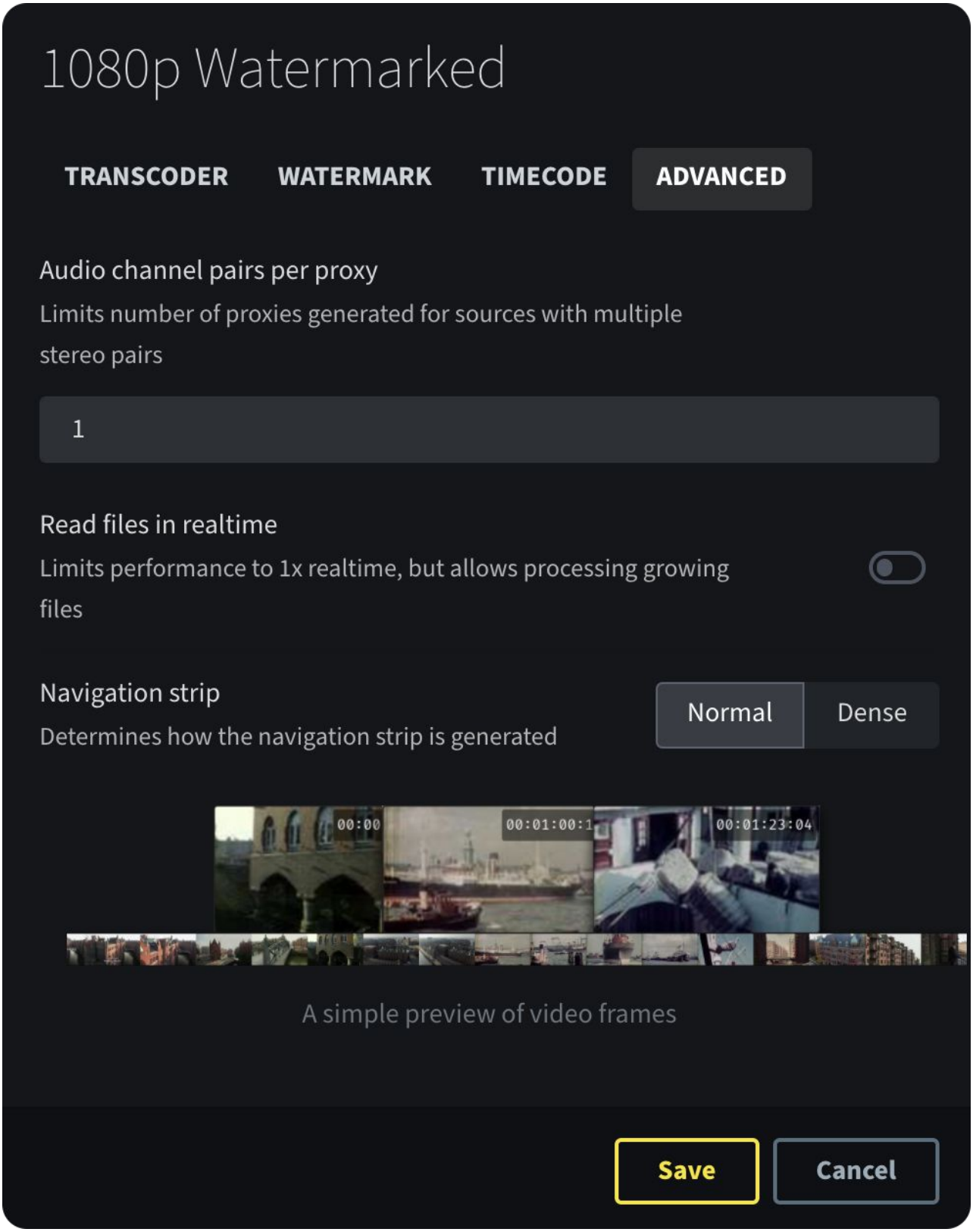
13.6.4.3 Timecode tab



- Enabling the "Timecode" slider turns on the timecode overlay over the transcoded proxy file.
- Using the "Position" drop-down menu allows the user to define the position on which the selected watermark will be overlaid.

- The slider "Size" allows the user to change the dimensions of the watermark.
- The slider "Opacity" allows the user to set the opacity level of the selected watermark.

13.6.4.4 Advanced tab



- With "Audio channel pairs per proxy" it is possible to determine the number of audio channel pairs. The maximum number of audio channel pairs is 8.
- Enabling "Read files in real time" will limit the proxy generation speed to 1x realtime and allow the processing of growing files.
- The "Navigation strip" section allows to set a kind of navigation strip to be created. The normal strip displays a single frame to represent a section of the clip. The dense strip merges the frames of the video together to offer an abstract representation of the content at any point in the video.

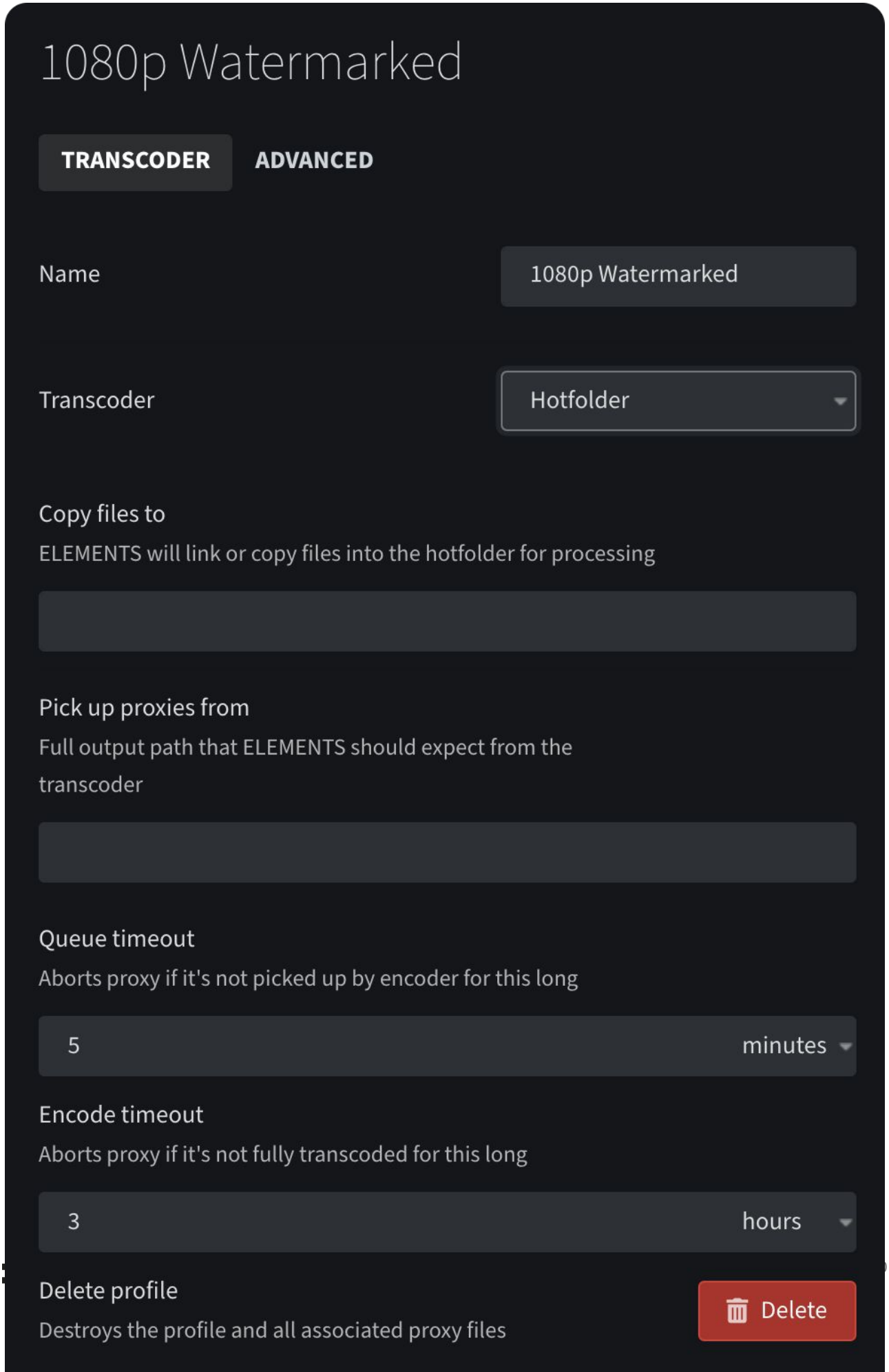
13.6.4.5 Bottom bar

- The "Save" button saves all made changes.
- The "Cancel" button discards all made changes.

13.6.5 Settings of a Proxy Profile - External Transcoder

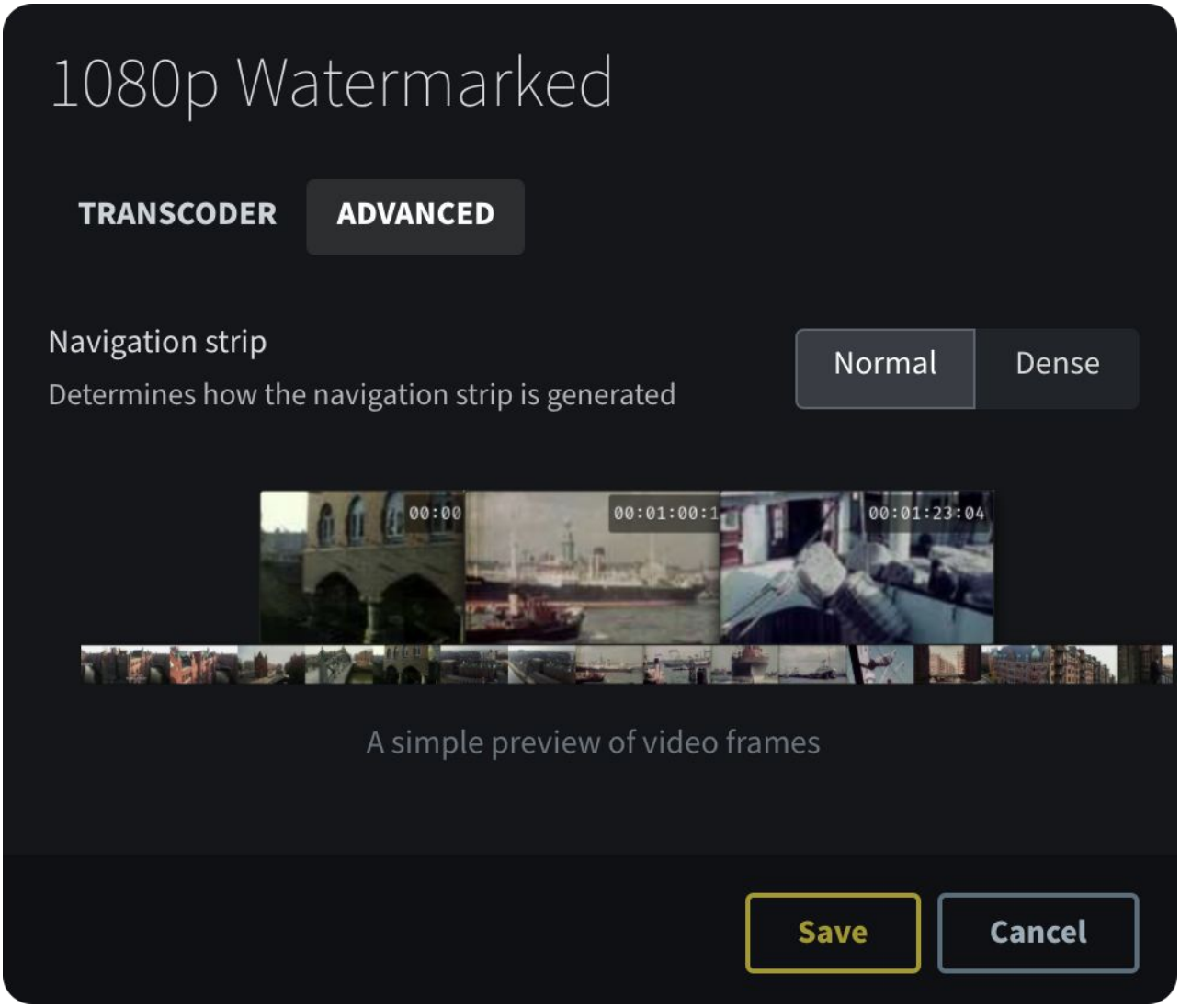
Users have the possibility of using an external transcoder for the creation of the Media Library proxy files. Alternatively, an internal FFmpeg-based transcoder can be used.

13.6.5.1 Transcoder tab


1080p Watermarked
TRANSCODER
ADVANCED
Name
1080p Watermarked
Transcoder
Hotfolder
Copy files to
ELEMENTS will link or copy files into the hotfolder for processing
Pick up proxies from
Full output path that ELEMENTS should expect from the transcoder
Queue timeout
Aborts proxy if it's not picked up by encoder for this long
5
minutes
Encode timeout
Aborts proxy if it's not fully transcoded for this long
3
hours
Delete profile
Destroys the profile and all associated proxy files
Delete

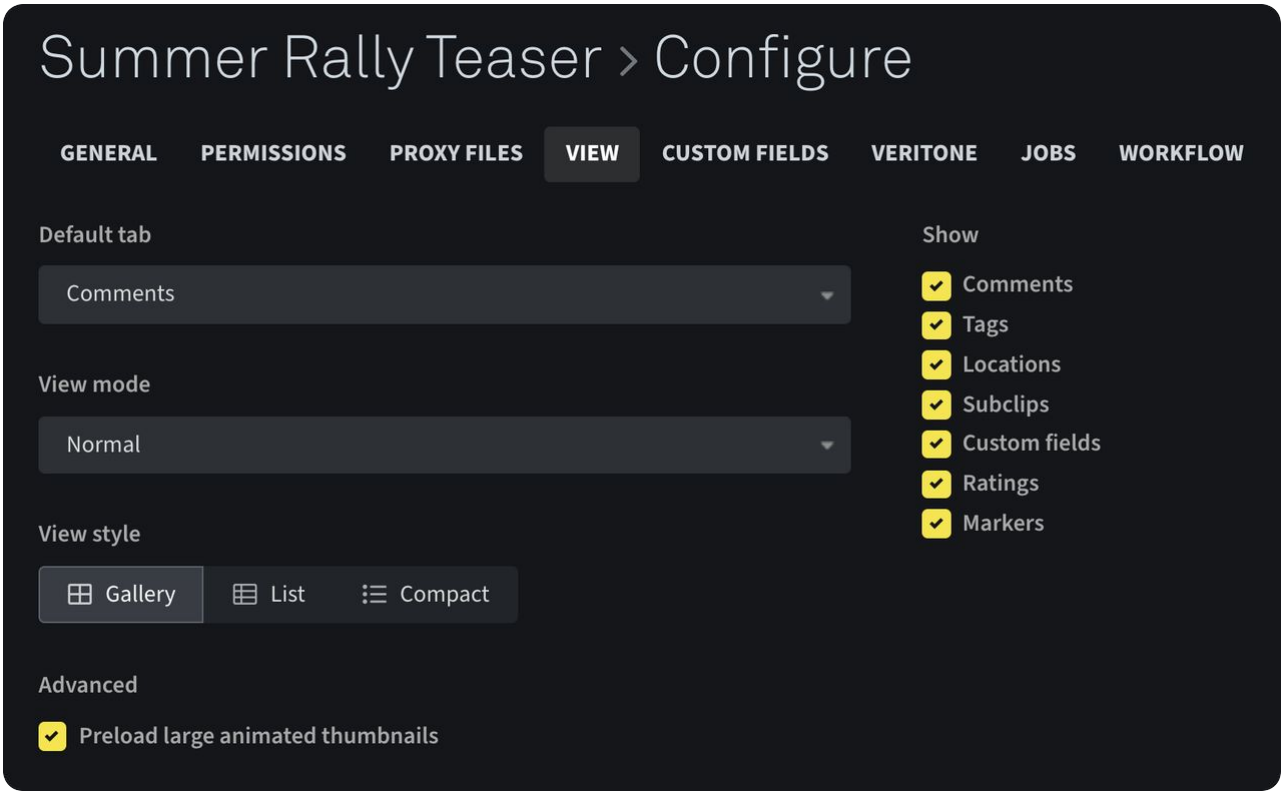
- The field "Name" allows the user to determine a name for the new proxy profile.
- The "Transcoder" section allows you to choose a transcoder for proxy file generation. This section describes the usage of an external, hotfolder-based transcoder.
- The "Copy files to" field allows the user to set the hotfolder location on the ELEMENTS system, used during the processing of the files.
- The "Pick up proxies from" field allows the user to set the location in which the proxies will be saved upon creation.
- Use the "Queue timeout" to set the time interval after which the queue entries should be deleted if not picked up by the transcoder.
- Use the "Encode timeout" to set the time interval after which the proxy will be aborted if the proxy creation has not yet been finished by the transcoder.
- Use the "Delete" button to remove the proxy profile.

13.6.5.2 Advanced tab



- The "Navigation strip" section allows to set a kind of navigation strip to be created. The normal strip displays a single frame to represent a section of the clip. The dense strip merges the frames of the video together to offer an abstract representation of the content at any point in the video.

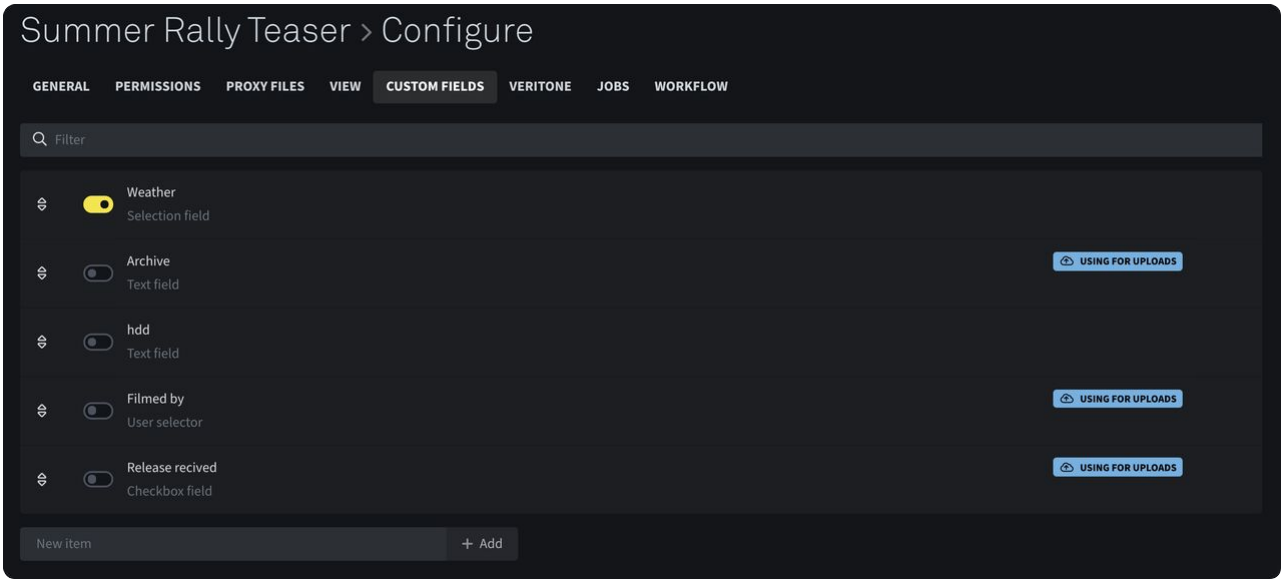
13.6.6 View tab



- "Default tab" allows the user to set up the tab, which will be displayed as default when an asset is opened. Choose between Comments, Locations, Subclips, Custom fields and Ratings tabs. These tabs can only be selected if they are enabled in the show section - displayed on the right hand side of the Default tab section.
- The "Show" section allows the user to enable or disable different collaboration and metadata tabs, which are displayed in the asset preview window.
- The "View mode" section offers the following two options:
    - Normal view: The Media Root will be displayed with the full folder structure. This is a default view setting.
    - Flat view: The Media Root will display all containing assets without the folder structure.
- "View style" sets the default view style of the Media Root. The view style can be changed by every user individually.
- The advanced settings option "Preload large animated thumbnails" allows the user to determine if the large scrub-over thumbnails should be preloaded in the browser or if they should be loaded when hovering over the asset. If turned on, this function increases responsiveness of the hover preview function if a lower speed connection is used.

13.6.7 Custom fields tab

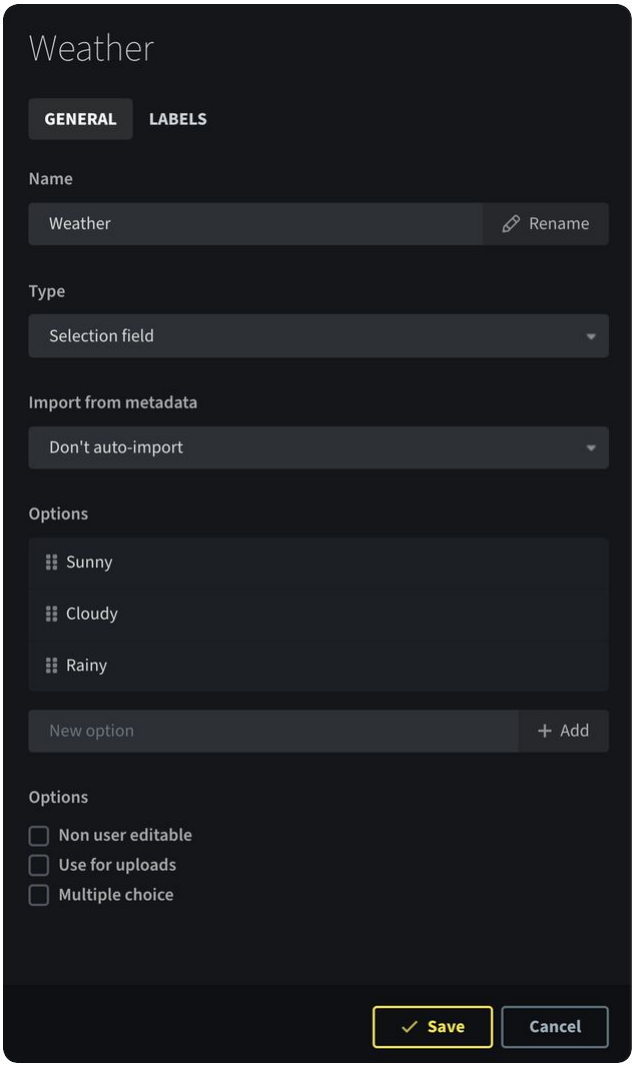
This tab displays a list of all existing Custom Fields in the selected Media Root. It also gives the user the option to create new ones. Change the order of the Custom Fields by using the arrow symbols.

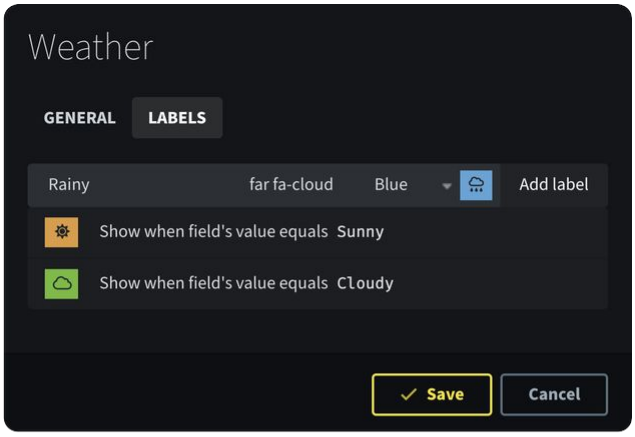


- Clicking on any Custom Field entry opens the settings of the selected field.
- When hovering over any entry in the list, a trash bin symbol appears on the right hand side of the entry. Using this button deletes the Custom Field entry in question.
- To create a new Custom Field, enter a name for a new Custom Field in the "New item" field and click the "Add" button or press enter. A Custom Field with default settings (text field) will be created. The type of Custom Field as well as all other settings can be set after selecting an entry in the list.

13.6.8 Settings Custom fields

Selecting an entry in the Custom Field list opens the fields settings.





13.6.8.1 General tab

- The "Name" field allows the user to change the name of the selected Custom Field. Please note that the name change of existing Custom Fields might take a while depending on the number of assets using it. The Custom Field's value will not be visible until the rename is completed.
- Change the type of the Custom Field in the "Type" dropdown list.
- The "Import from metadata" dropdown menu allows the user to automatically transfer the value of a certain metadata field from the file to the Custom Field. The dropdown menu offers metadata fields such as Tape name, Resolution, Copyright and many more.
- The "Options" section allows the user to determine if other users can edit the Custom Field.
    - "Non user editable" sets the Custom Field to read-only.
    - Turn on "Use for uploads" to display the Custom Field during the upload process in the Media Library.
        - If this option is enabled, the "Require for upload" option appears. If this option is enabled, the Custom Field will be required to be completed during the upload process in the Media Library.
    - The "Multiple choice" option allows the user to select more than one value for the Custom Field.
- If the "Selection field" type is selected, the Options section allows the user to add the values offered in the dropdown menu of the Custom Field. Checking the "multiple choice" checkbox allows the user to select multiple values for the field.

13.6.8.2 Validation tab

The validation tab is available for the following Custom Field types: Text field, Large text field and Path selector.

- The "Validation" tab allows the user to limit the possible inputs of a Custom Field. This feature can only be used if specific numbers or strings are expected (Regular expression) or if the input should contain more characters than defined (Number of digits).

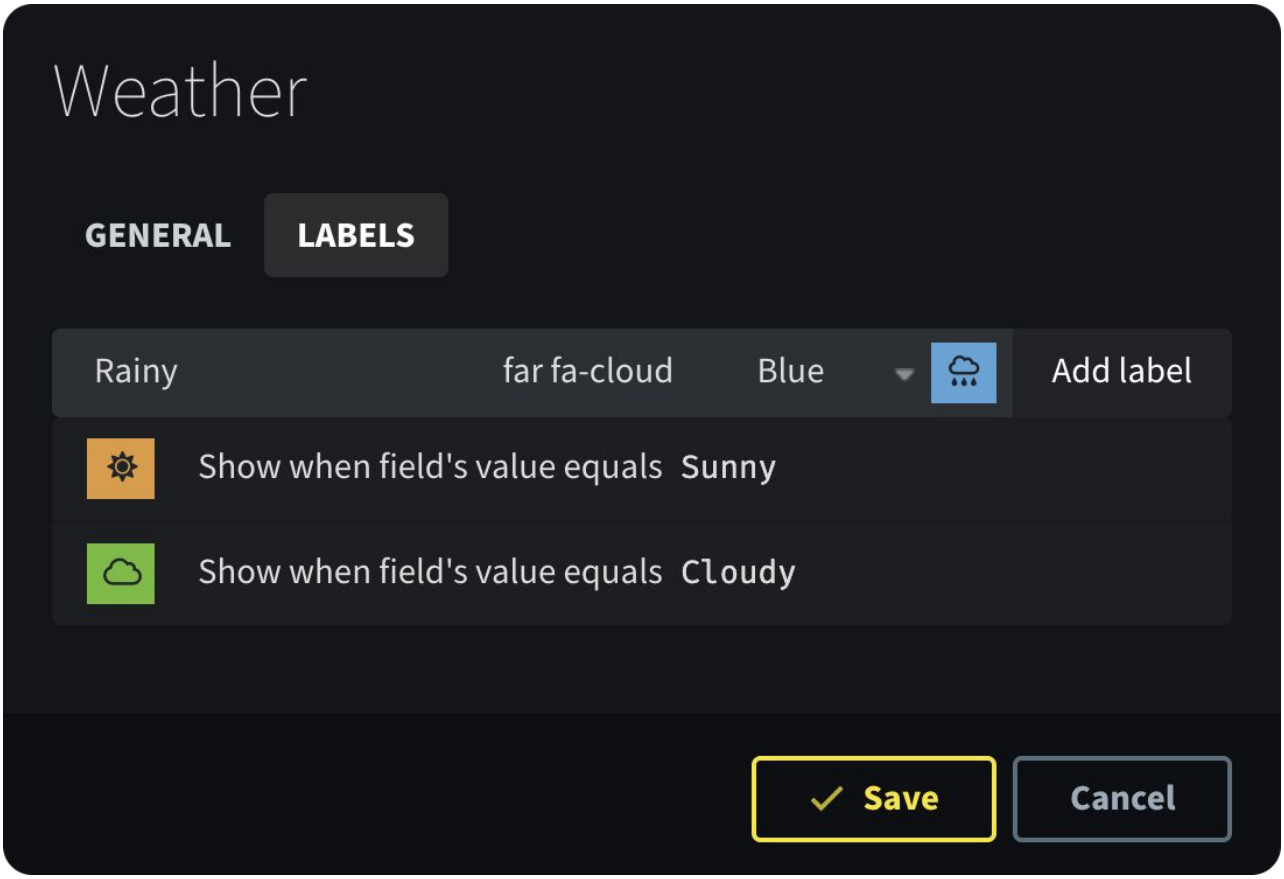
Number of digits validation

- This option will only allow numeric inputs. The number of characters entered into a Custom Field needs to correspond with the number of digits set in the validation tab.

Regular expression validation

- Validation using regular expressions can be used to precisely define the characters allowed for input.
- Rules:
    - "[afg]" only allows one character "a" or "f" or "g". Additionally one character out of a span of characters can be entered, for example [a-z] will allow all small latin letters or [0-9] will allow one number between 0 and 9.
    - "[^ag]" will allow any character except for "a" and "g".
    - "." matches any single character. Allowed inputs are for example "a", "B", "4", "9".
    - "*" will match the preceding element zero or more times. For example, ab*c allows "ac", "abc", "abbc", "abbbbbc".
    - "+" will match the preceding element one or more times. For example, the expression ab+c allows "abc", "abbc", "abbbc", but not "ac".
    - "[\d]" will only allow digits.
    - "[\D]" will only allow characters, but no digits.
    - Examples:
        - "[a-f]*" allows any number of characters out of the small latin letter range a-f.
        - "[a-g][0-9]" would match for example "a3" or f7 etcetera.
        - The default value ".*" will allow for almost any input.

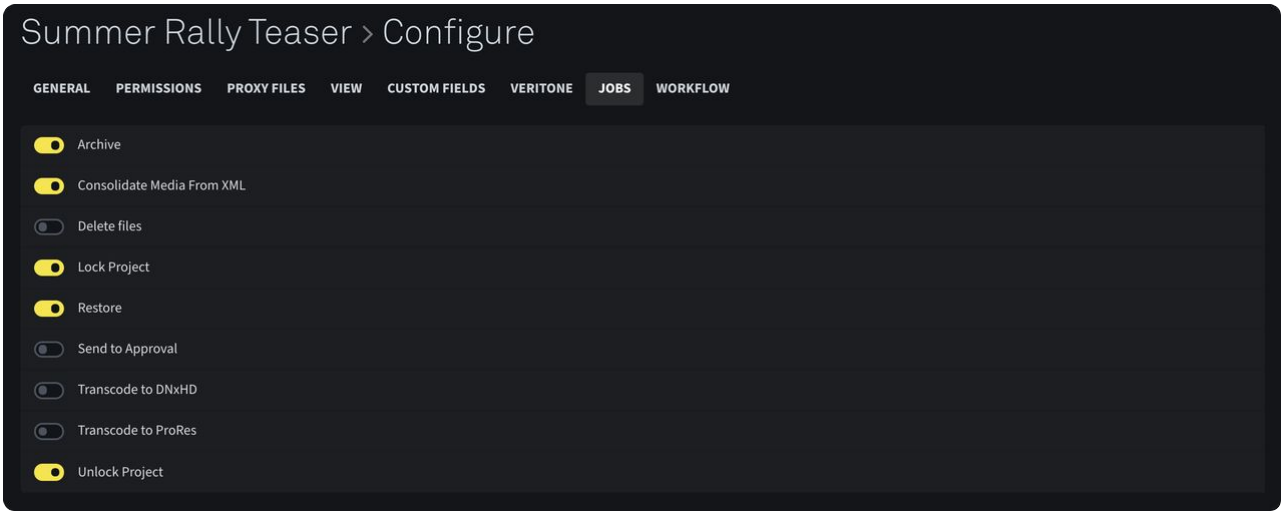
13.6.8.3 Labels tab



- The "Labels" tab allows the user to add an icon in the Media Library if a certain value is entered into the Custom Field.
- In the "Value" field, the value containing text or numbers can be entered. If the entry is identical to the value, the icon will be displayed.
- Upon entering the first few characters into the "Icon name" field, a popup window will display suggested available icons. Entering "cloud" into the field opens a popup window showing all available cloud symbols.
- Change the color of the icon using a dropdown menu.
- On the right hand side of the color selector a preview of the new label is displayed.
- The button "Add label" adds the label to the Custom Fields label list.

13.6.9 Jobs tab

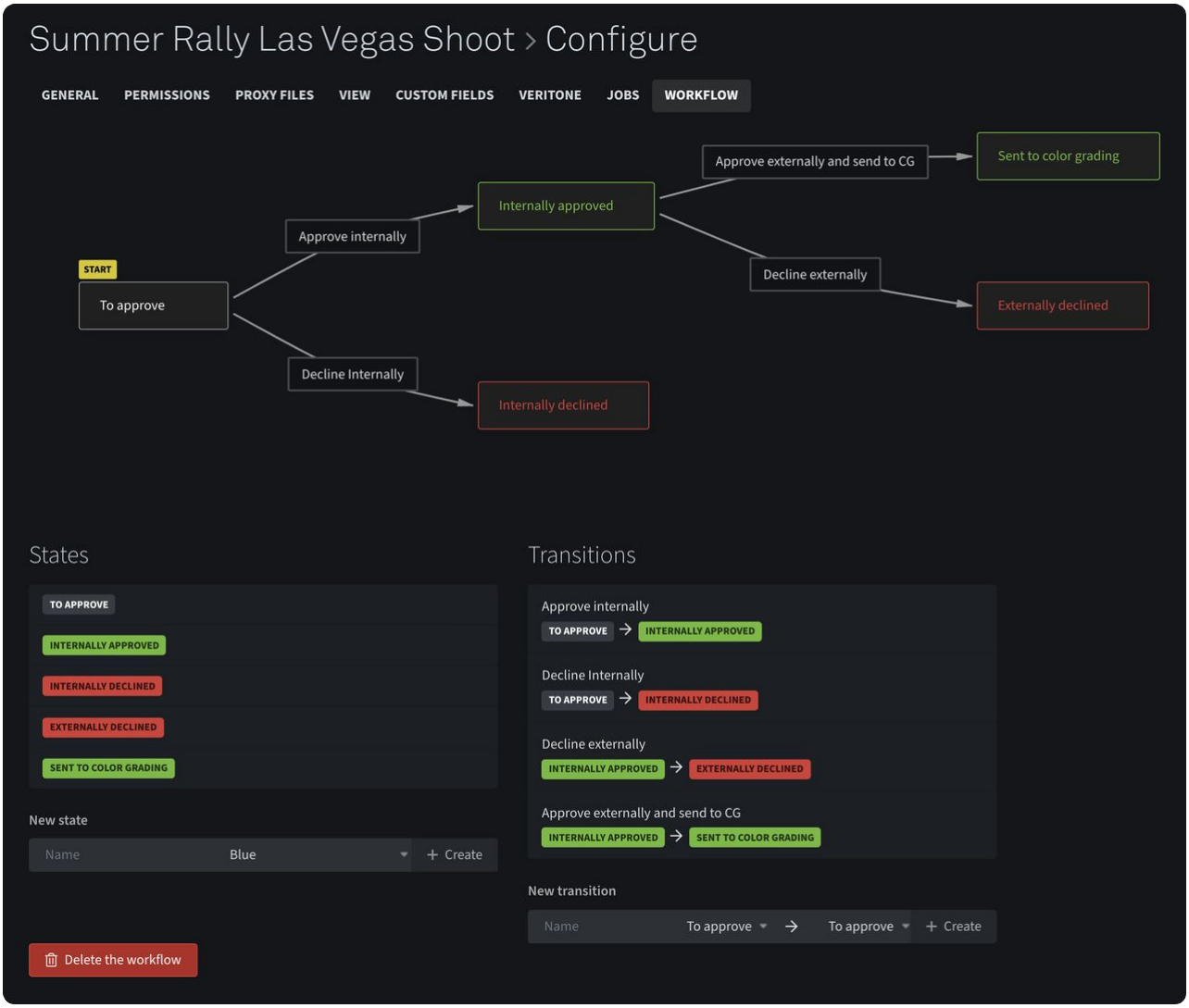
All automation jobs with a variable input can be turned on or off for every individual Media Root. The Jobs tab in the Configure menu shows a list with all these jobs and allows the jobs to be turned on or off for the current Media Root.



- Clicking any job in the list opens the settings for that job, but only if the user has the required Automation access permission.
- Jobs can be enabled or disabled for the selected Media Root by using the respective slider.

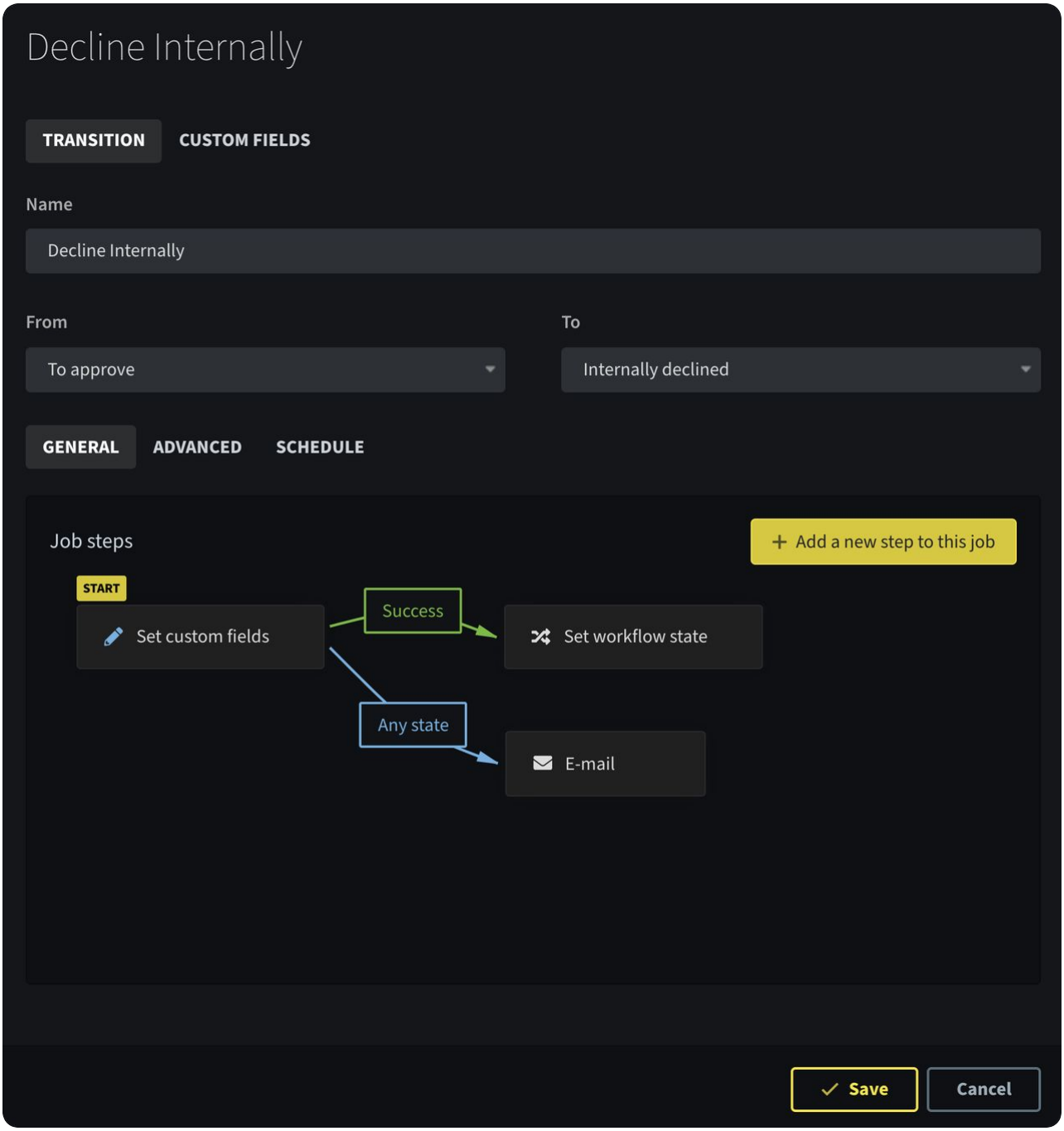
13.6.10 Workflow tab

The workflow tab allows the user to create and manage workflows for the selected Media Root. The transitions between the states can be manually triggered from the Media Library. The user can also execute predefined actions, such as sending an e-mail or starting a task on the system. Workflows, in contrast to Jobs in the Automation tab of the Web UI, are executed one step at a time and are designed in a way that offers more intuitive control straight from the Media Library.



- If no workflow exists in the Media Root, a new one can be created by clicking the "+ Create workflow" button.
- The "States" section under the workflow editor lists all existing states and allows new states to be created. States inform the user of the assets workflow status.
    - The user can modify the name and color of a state by clicking its specific list entry.
    - Clicking the trash bin deletes the state and all associated transitions. At least one state is required in every workflow.
    - The "New state" section allows the user to create a new state with a custom name and color.
- The "Transitions" section under the workflow editor lists all existing transitions and allows new transitions to be created. Transitions define all actions to be taken when traversing the workflow states.
    - The "New transition" section allows the user to create a new transition with a custom name between any two states.

Clicking on any transition in the list opens its configuration window.



- The "Name" field allows the user to change the name of the transition.
- The "From" and "To" sections allow the user to set the states between which the transition will be executed. For a clear graphical overview, it is possible to define how the connecting line between the states is displayed.
- In the "Steps" section, all tasks to be triggered in the transition can be set.
    - Using the "Add a new step to this job" dropdown menu, steps can be added to the transition.
    - Clicking on any step in the workflow editor will open a popup window with the settings of the selected step.
    - Step settings are identical to those in the Automation section(see page 80) except for the "Security" tab which allows to determine which users or groups can start the job behind the selected transition.

    - The "Security" tab allows the user to specify the security context - defines the permissions used for the execution of the job. Select "The user starting the task" or the permissions of the logged in user. This function allows to use workflows to write files to workspaces that the user starting the task has no direct access to.
    - In the "Schedule" tab, a scheduler can be added to automate the execution of the selected transition.
- The "Custom Fields" tab allows the user to define one or more Custom Fields, which have to be completed in order for the transition to be triggered.
- The "Save" button applies all made changes. The "Cancel" button reject all made changes.
- By using the "Delete the workflow" button the workflow can be removed.

13.6.11 Bottom bar

- "Save" will save all made changes to the settings of the Media Root.
- The button "Rescan media library" will start a Media Root rescan job in the background.
- With "Delete" the complete Media Root can be deleted.

13.6.12 Watch the video

13.6.12.1 Using workflows in the Media Library

https://youtu.be/eiUfWEwOAkE

14 Tape Library (Tape library required)

The Tape Library section allows the user to easily manage the connected LTO tape library, as well as set up archive and restore jobs. The LTO tape library expands the capacity of the ELEMENTS system drastically by using the inexpensive and robust LTO tapes. ELEMENTS offers a wide range of tape libraries from 8 to 560 tape slots without any license limitations of the tape slot count.

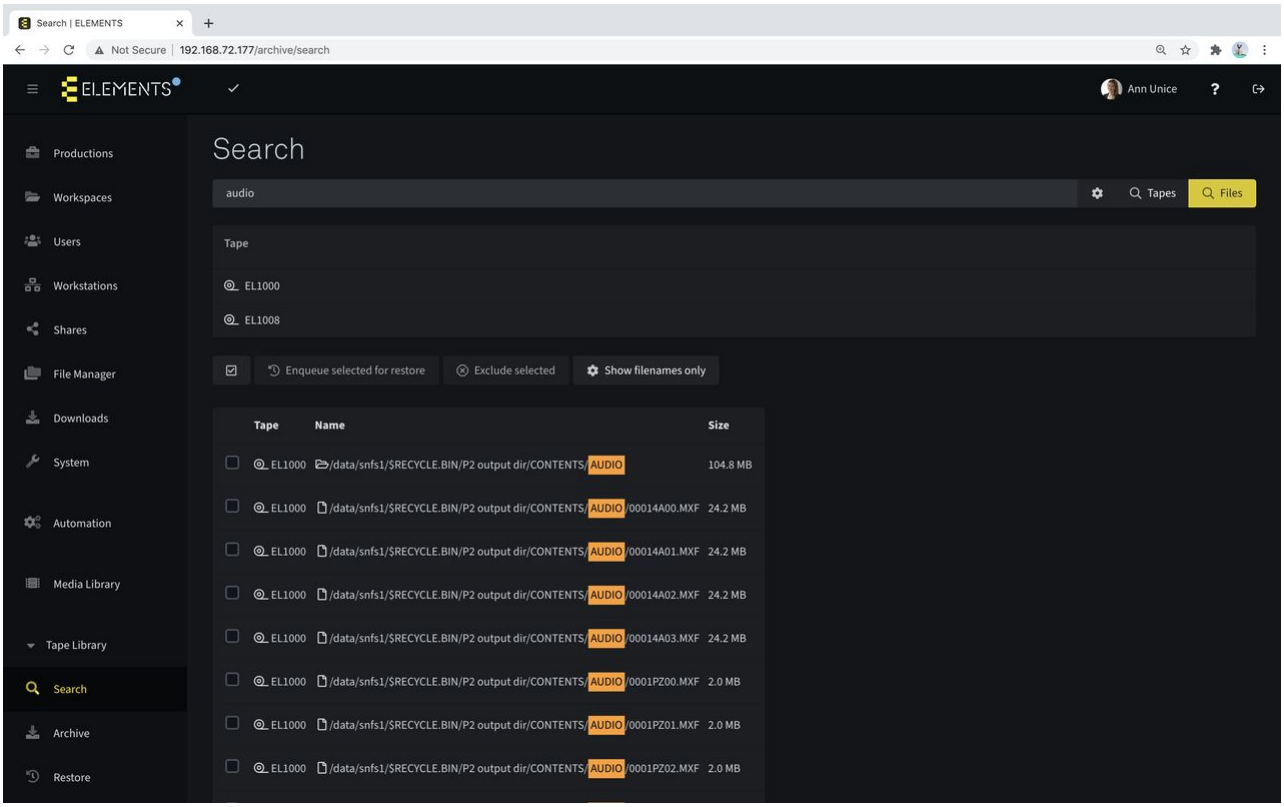
Note
The Tape Library function within ELEMENTS requires a Worker Node to connect the Tape Library and can be activated on installations with BOLT, ONE or NAS.

Important
Please note that ELEMENTS recommends creating at least two copies on different tape groups, before removing content from your online storage.

- Search section(see page 171)
- Archive section(see page 173)
- Restore section(see page 174)
- Jobs section(see page 175)
- Tape Group section(see page 176)
    - Settings Tape Group(see page 177)
- Settings Tape(see page 177)
- Tape Library Section(see page 179)
    - Barcode Printer(see page 180)
- Watch the video(see page 181)
    - LTO Tape Library Overview(see page 181)

14.1 Search section

The search function allows the user to search the content of all LTO tapes known to the tape library. The search results show a list of all found files and folders and allows the user to add them to the restore queue.



- The "Search" input field allows the user to search for files, folders or tape names.
- The button "Tapes" allows the user to search all tapes according to the tape name.
- When using the "Files" button, the results show a list of all the files or folders containing the searched term in the storage path. When using the ENTER key to start the search, the files search is executed.
- Clicking the gearwheel displays additional options to help specify the search.
    - With "Exclude" it is possible to exclude certain files and folders from the result list. This function can be used to exclude file formats irrelevant to the search such as for example .mov or .mxf files.
    - "Search for directories only" will exclude all files from the result list and displays only the found folders.
    - The "Search in names only" function will only list the folders or files, which contain the searched term in its name. The resulting list will not contain any subfolders.

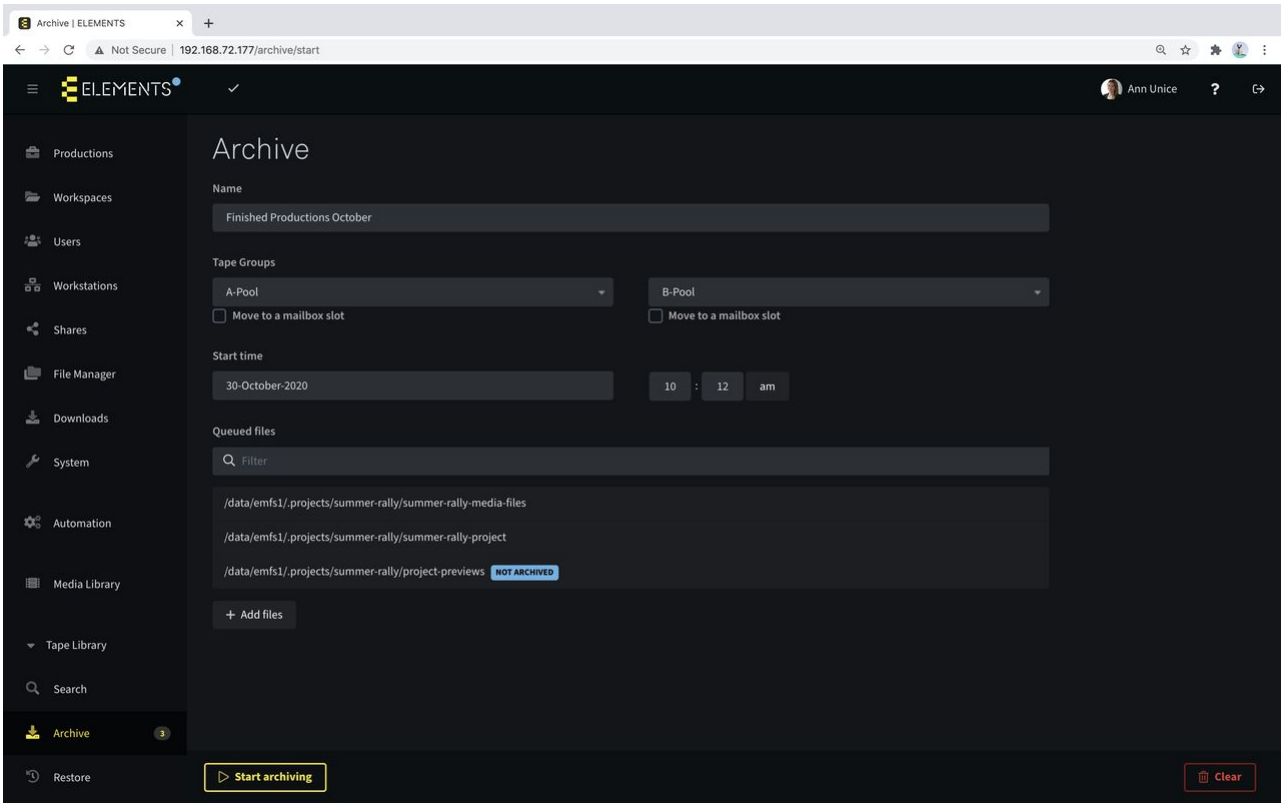
The results of a search query will be displayed in two lists underneath the search bar.

- The first list displays all tapes containing the found files and folders.
    - By selecting a tape it is possible to see a list of all the data stored on the tape.
    - The pencil button forwards the user to the settings page of the selected tape.
    - Using the trash bin button allows the user to delete the tape from the tape library's database. The written data will stay on the LTO tape, but will not be searchable until the tape has been reindexed.
- The second list displays all files and folders containing the search query.
    - The button bar provides functions for displaying and restoring the search results.
        - The checkbox button selects all entries in the list. If files have already been selected the selection will be inverted.
        - "Enqueue selected for restore" will add the selected files to the restore queue.
        - The function "Exclude selected" will add the selected files to the "Exclude" list of the restore function.
        - Using the "Show filenames only" function makes it possible to hide the file paths. Only the filename will be displayed.

- The search results list all LTO tapes containing the searched terms, as well as the full file path and file size.
    - Select any search result by clicking the checkbox on the left hand side.
    - Clicking on the the filename or the file path of any search result displays its content.

14.2 Archive section

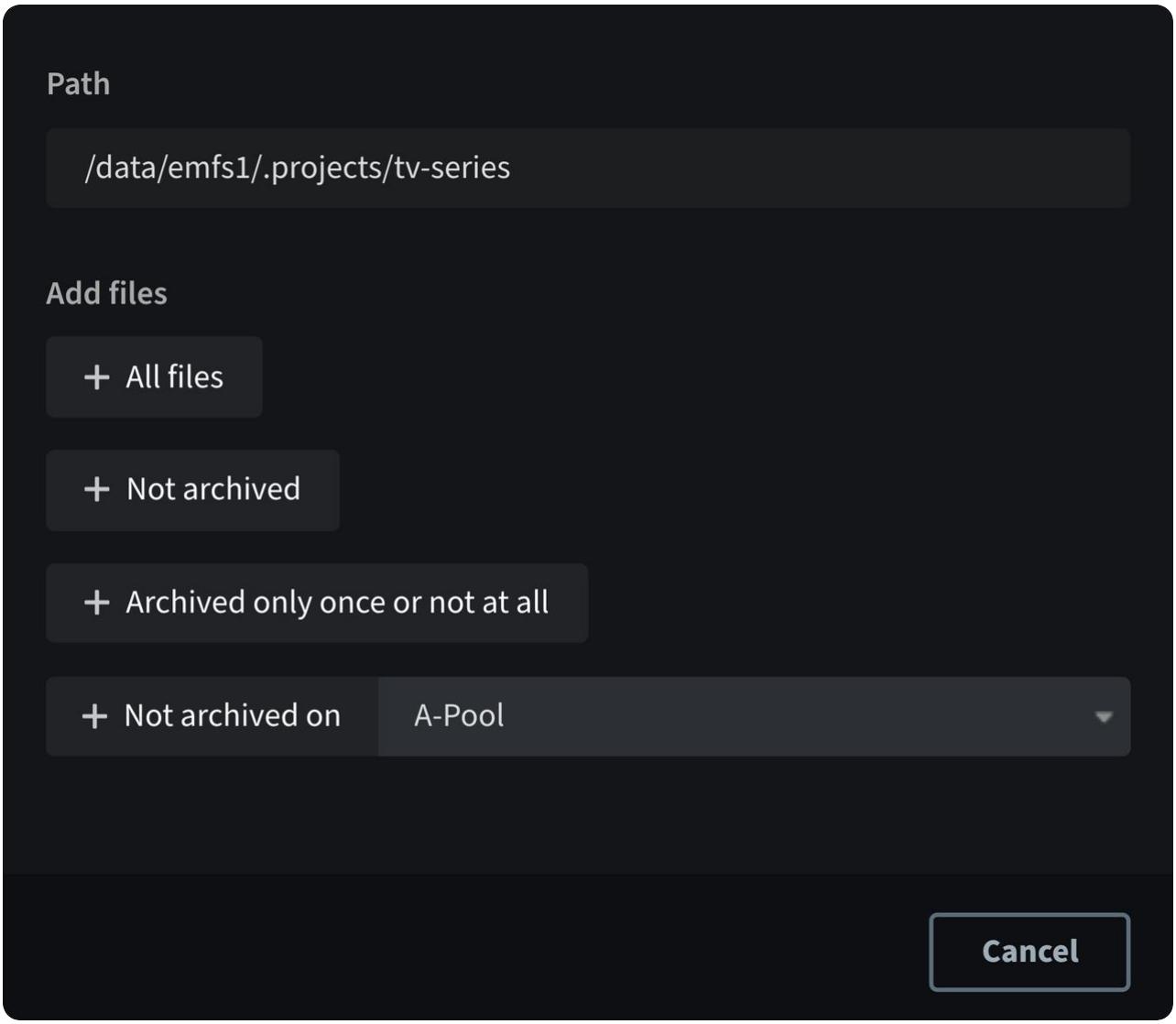
The Archive page allows the user to easily select files and folders to be archived onto selected tapes groups. The archive jobs can be triggered manually or scheduled to be executed at the chosen server time. Optionally after the job is finished the target tape can automatically be moved to a mailbox slot.



- The "Name" text field allows the user to change the name of the archiving task that will be created.
- The "Tape Groups" selectors allow the user to select one or two different tape groups to archive the files onto. Archiving data onto two different tape groups increases the data security.
- "Move to a mailbox slot" will move used tapes to a mailbox slot so they can be extracted more easily.
- The "Start time" section allows the user to schedule the archiving job. Set up a date and time to start the archive job. It is possible to switch between AM and PM by clicking the corresponding symbol.
- The "Queued files" list displays all files and folders which are a part of this archive job. If no files are selected, a button "+ Add files" appears. Clicking this button opens a popup window for selecting files and folders.
    - Search the list by using the filter bar.
    - Use the trash bin symbol to remove any entry from the archiving list. The trash bin symbol appears upon hovering over any entry in the list.
    - "+ Add files" allows the user to add new files to the archiving list in the popup window.
- The button "Start archiving" will create and start a new archiving job. If the job has been scheduled it will start at the predefined time.
- The "Clear" button resets the archiving section to default.

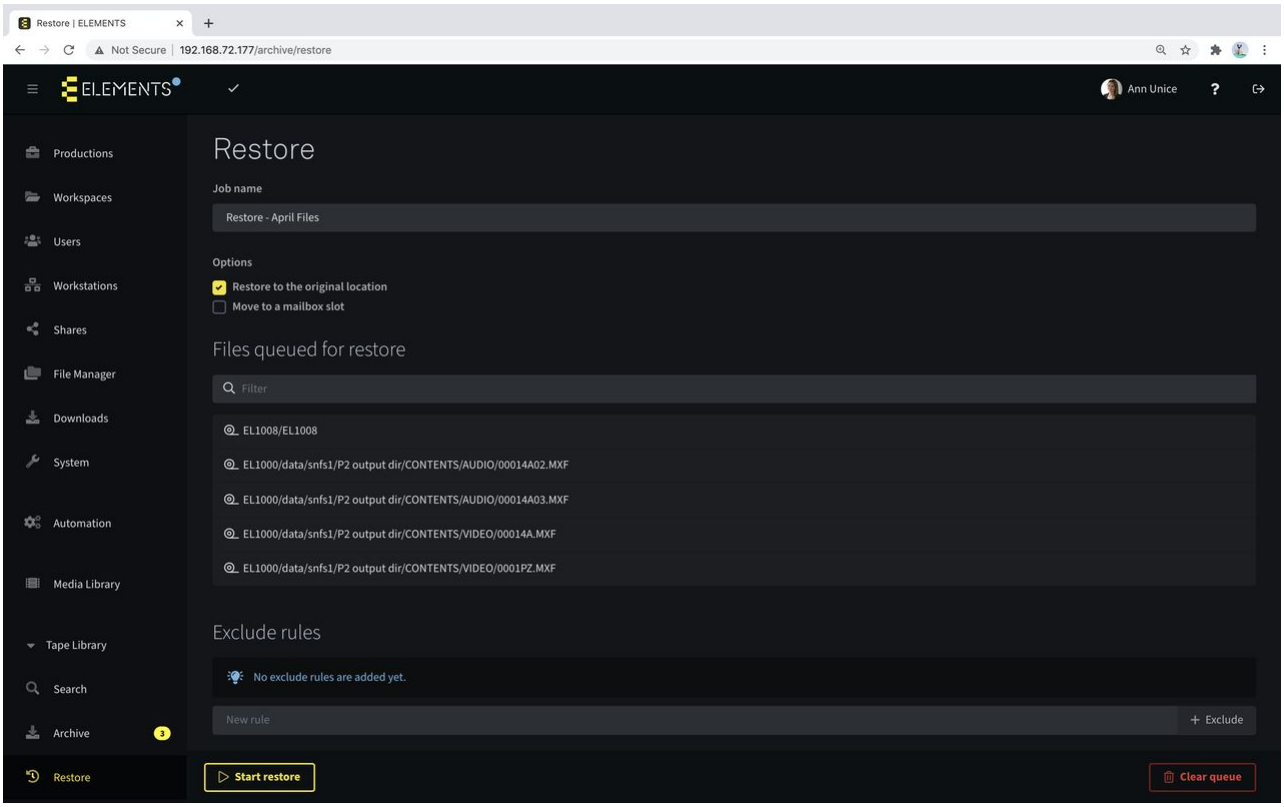
When adding folders to the archive queue via the "+ Add files" button, archive rules can be set.

- "+ Add files" - All files in the folder will be archived on the selected tape pools.
- "+ Not archived" - Only files that have not yet been archived will be archived on the selected tape pools.
- "+ Archived only once or not at all" - Only files that have not yet been archived or have only been archived once will be archived on the selected tape pools. The double archiving method increases data safety.
- "+ Not archived on" - Only files that have not been archived in the selected pool will be archived.



14.3 Restore section

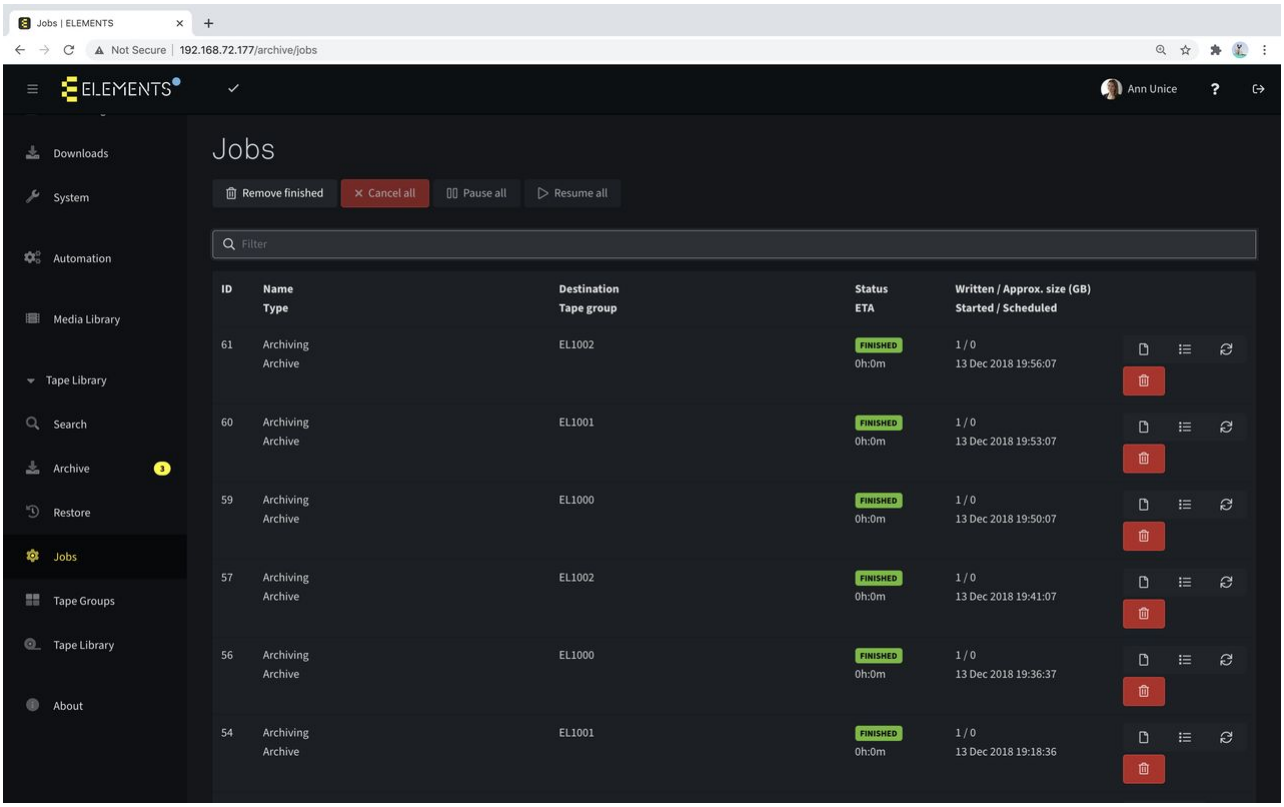
The Restore page allows the user to restore files and folders from the LTO tape to the ELEMENTS system. Add files or folders to the restore queue by using the Search page.



- "Job name" allows the user to define a name for the restore job.
- When the checkbox "Restore to the original location" is selected the files will be restored to the location on the filesystem from where they were archived. If this option is disabled it is possible to specify a location in the "Destination" field.
- "Move to a mailbox slot" will move the tape to a mailbox slot upon finishing the restore job so it can easily be extracted from the tape library.
- "Files queued for restore" lists all files which restored as a part of the current restore job.
    - Search for a specific file in the restore list by using the filter bar.
    - Clicking the trash bin symbol of any file removes it from the restore list.
- The list "Exclude rules" will display files or folders which will be excluded from the restore job. This option makes it easy to restore complete folders without restoring unwanted files and folders.
- With the textfield "New rule" it is possible to add a file or folder, which should be excluded from the restore queue. Confirm the entered path with the "+ Exclude" button or by pressing the ENTER key.
- The button "Start restore" starts the restore job. After pressing this button the new task will be listed in the "Jobs" section of the tape library.
- "Clear queue" clears the list of files queued for restore as well as the exclude rules list.

14.4 Jobs section

The Jobs page allows the user to manage all archive and restore jobs of the tape library. This page displays all pending, running and finished jobs and allows the user to pause, resume, cancel, remove and reschedule jobs as well as browse details of any entry in the job list.



- Using the filter bar, jobs can be searched by name, tape name or by the status.
- A job entry in the list displays the job ID as well as the name and task type.
- In the entry of an archive job, a tape with its corresponding tape group is displayed.
- A job status is displayed on every entry as well as the estimated run time and the starting time.
- On the right hand side of every entry, four buttons are displayed.
    - The "Log" button displays the jobs log and allows the user to download it.
    - The "File list" button opens a list of all files included in the job.
    - If a job is finished or paused, it can be restarted by clicking the restart button. If a job is running, this button turns into a pause button and allows the user to pause the job.
    - The red trash bin button allows the user to delete the job out from the job list.
- If the Jobs page contains more than 30 entries, they will be split into pages. The pages can be browsed using the page control buttons underneath the job list.
- "Remove finished" will remove all successfully finished jobs from the job list.
- The option "Cancel all" will abort all running and waiting tasks.
- With "Pause all" it is possible to pause all running or waiting tasks.
- "Resume all" will start all paused tasks.

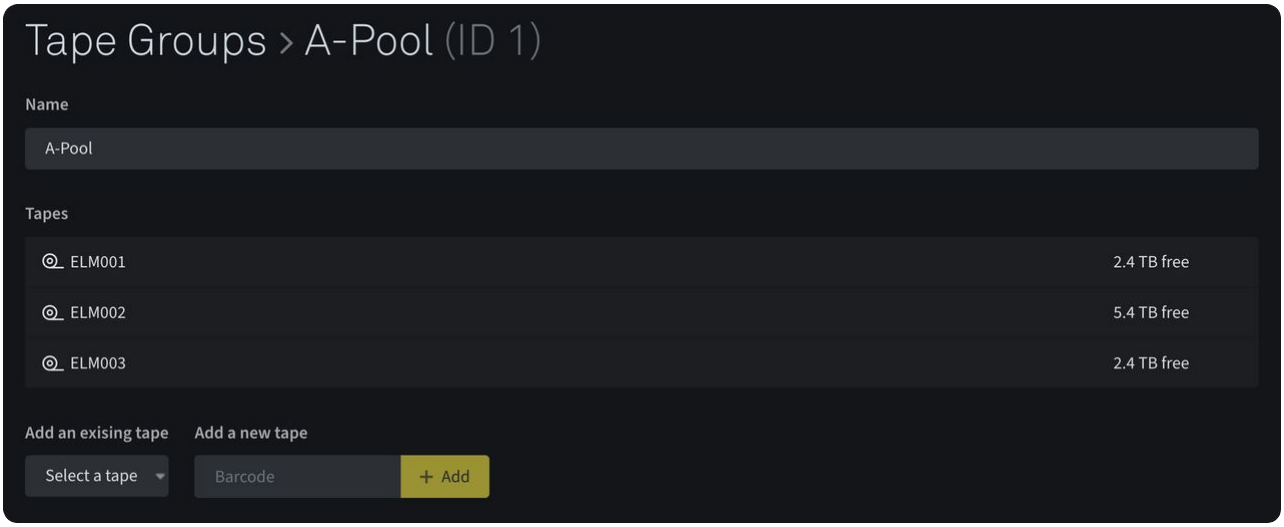
14.5 Tape Group section

The Tape Groups page allows for the combining of multiple LTO tapes into a tape group.

- All existing tape groups are displayed in a list together with the number of tapes in the group. LTO tapes, not yet assigned to a group, will be listed in ungrouped tapes.
- The filter bar allows the user to search for a specific tape group by name.
- The button "+ Create a Tape Group" opens a popup window which allows the user to enter a name for the new tape group. After confirming the groups name the user will be forwarded to the settings(see page 171) of the new tape group.

- Selecting any tape group from the list opens the groups settings.

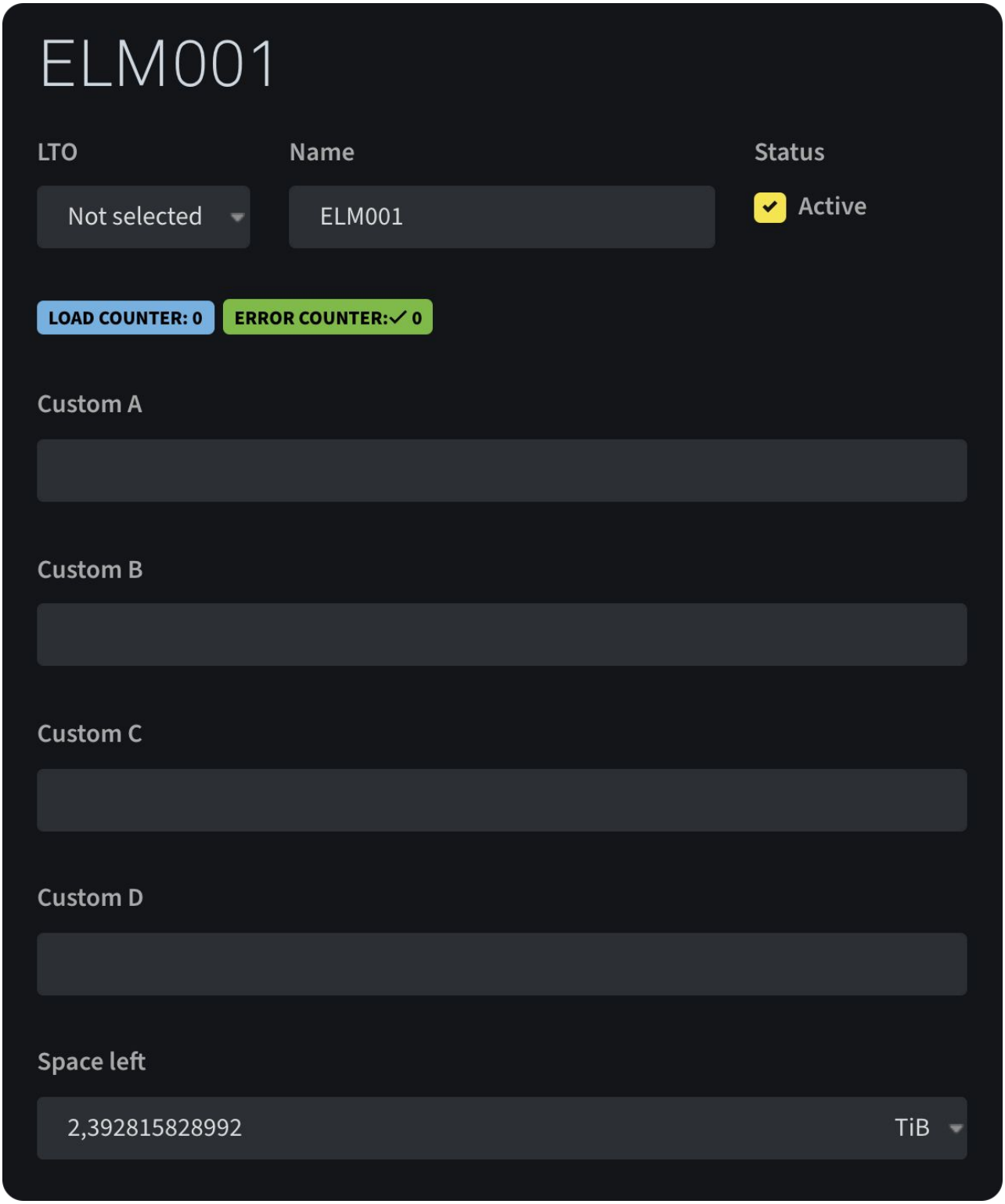
14.5.1 Settings Tape Group



- In the "Name" text field, a name for the selected tape group can be entered or edited.
- The "Tapes" list displays all LTO tapes in the tape group.
  - On the right side of every tape entry, the unused capacity of each tape is displayed.
  - The trash bin symbol (displayed when hovering over any entry) allows the user to remove the specific tape from the tape group.
  - Clicking on any tape entry opens the tapes settings page.
- There are two ways to add a tape to the selected tape group.
  - The first option is "Add an existing tape". This option allows the user to select an existing tape out of a dropdown list that contains all ungrouped tapes present in the tape library.
  - The second option "Add a new tape" allows the user to add a new tape to the group by entering its barcode. By clicking the button "+ Add" or pressing the ENTER key, a new tape with the given barcode will be added to the group.
- Bottom bar
  - The "Save" button applies all made updates.
  - The "Delete" button deletes the selected tape group.

14.6 Settings Tape

Manage the configuration of the LTO tapes by using the settings menu. The tapes settings menu can be reached by clicking on a tape in any tape group.



- The "LTO" dropdown menu allows the user to manually select the version of the used LTO tape.
- With the "Name" text field it is possible to change the name of the tape.
- By deselecting "Active" in the "Status" section, the tape will be blocked from writing. Inactive tapes can only be read.
- The "Load Counter" shows the number of loadings of the tape into the drive of the tape library.

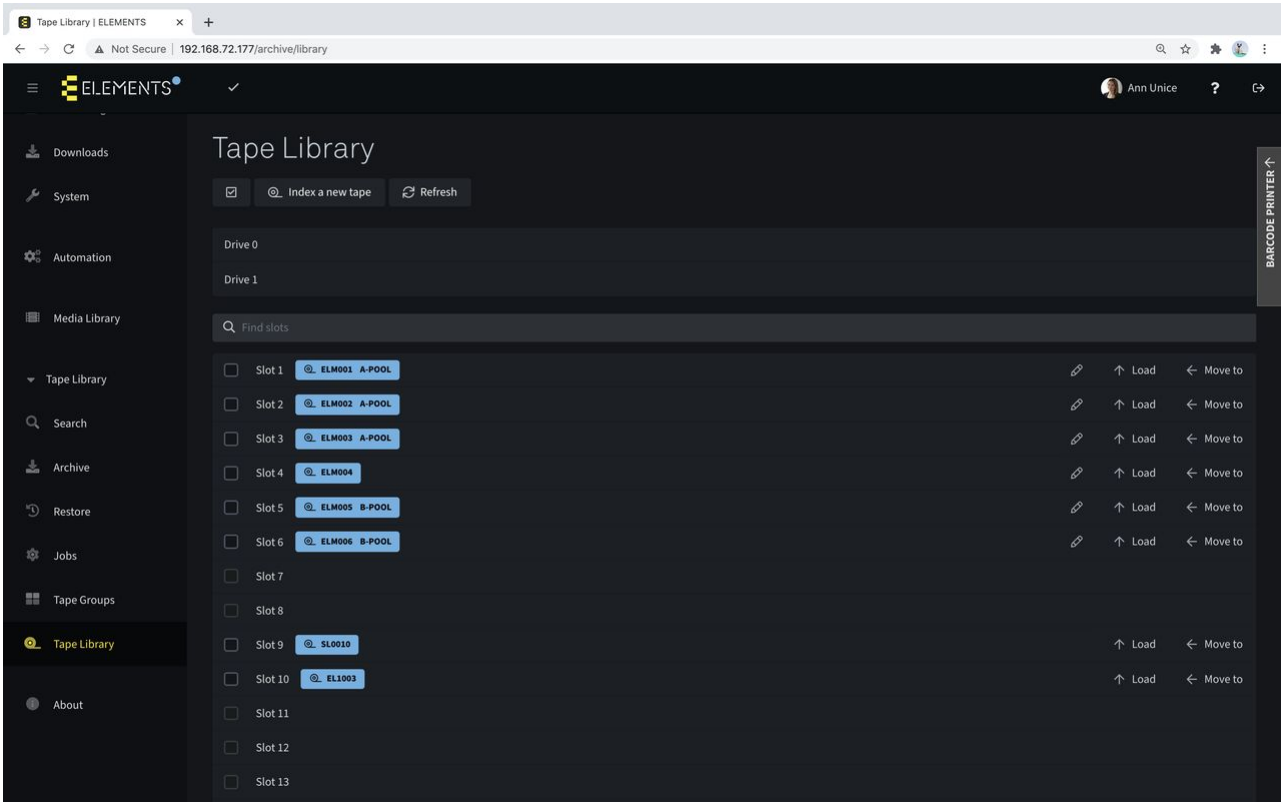
- "Error Counter" displays the number of errors which occurred when handling this tape.
- The Custom Fields A-D allow the user to add metadata to the LTO tape.
- The "Space left" field shows the free capacity of the tape. It is possible to manually reduce the tapes free capacity. The dropdown menu on the right hand side of the field allows the user to change the size unit .

Button bar

- The "Save" button allows the user to save all made changes.
- The "Browse" button opens the content of the selected tape. The content will be browsable in the style of the file manager.
- The button "Delete" deletes the selected tape out of the database of the tape library. The data will stay on the tape but will not be searchable because of the missing database.

14.7 Tape Library Section

The Tape Library page displays the current state of the tape drives and tape slots along with the tapes currently occupying them. Check the state of each drive and slot, load and unload tapes and generate printable barcodes for LTO tapes using the slide-out barcode printer.



The button bar offers the following functions:

- With the option "Index a new tape" the data on the selected tape will be reindexed, providing a current database for the selected tape. Having a tape database enables the search option of the tape library.
- Using the "Refresh" button manually updates the slot list of the tape library.
- If one or more slots are selected the buttons in the bar will change.
    - With the blue checkmark button it is possible to see the number of selected slots. By clicking this button the slots will be deselected.
    - The "Reindex" button allows the user to reindex the selected tapes.
    - The "Check" button allows the user to action a mounting and a filesystem check of the selected tape.

- The option "Format" will format the selected tape so the data stored on it will be deleted. As a part of the formatting process, the tapes database will also be deleted.

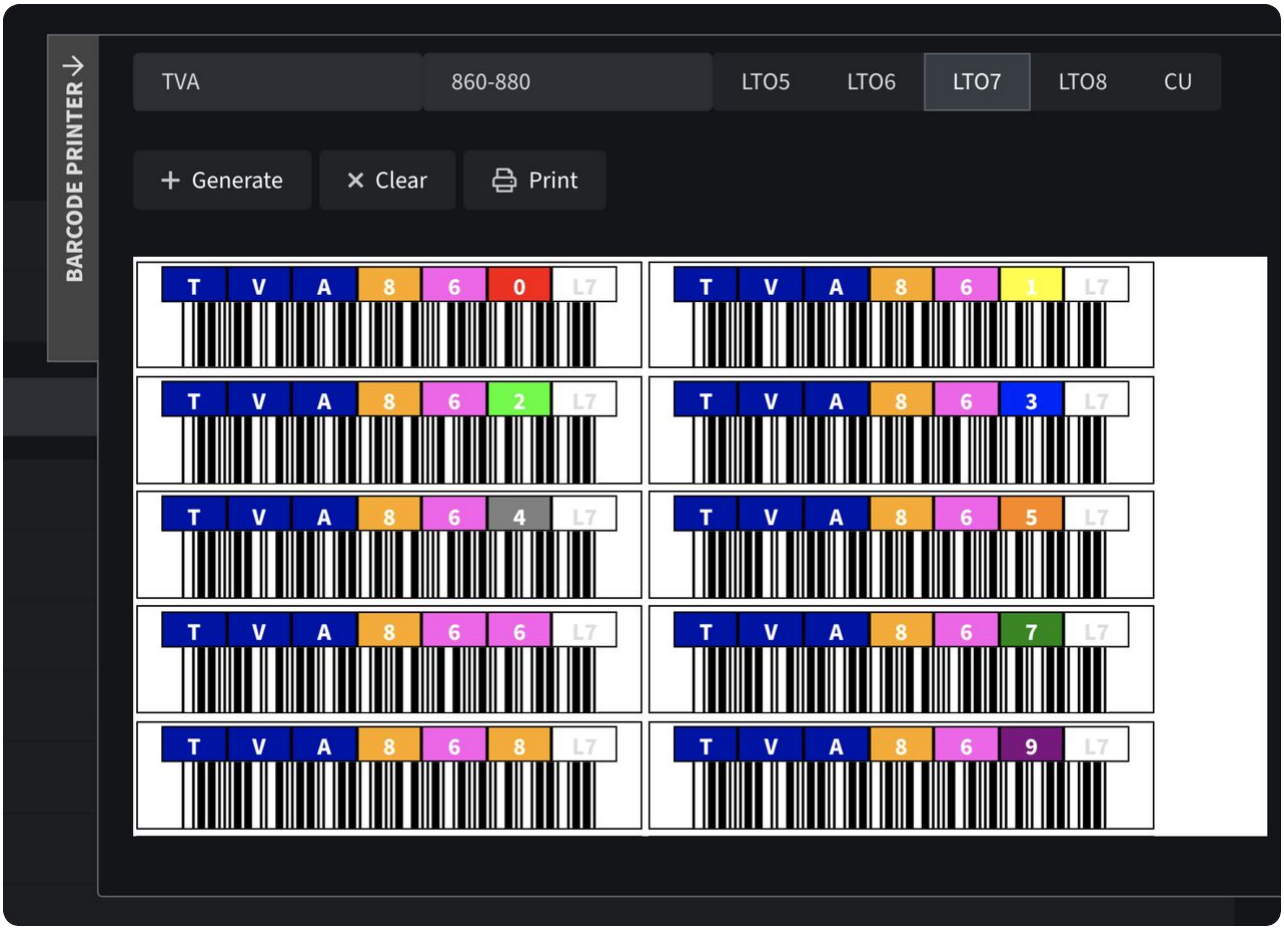
The Tape Library page displays all available drives of the tape library. If a tape is loaded into a drive, the name of the inserted tape will be displayed. Unload the tape from the drive by clicking the unload button on the right hand side of the drive entry. This button also informs the user about the slot into which the tape will be moved.

Beneath the "Drives" section all slots of the tape library are listed. If a slot is occupied with a tape, the name of the tape is displayed together with its assigned tape group.

- The filter bar allows the user to search for a specific tape name or slot by entering the slot number.
- Each loaded slot offers the following options:
  - The pencil symbol will open the settings of the related tape.
  - Clicking the "Load" button loads this tape into one of the free tape drives.
  - With the button "Move to" it is possible to move the tape to another slot. A popup window allows the user to choose the destination slot.

14.7.1 Barcode Printer

The "Barcode Printer" allows the user to create barcodes for new tapes. The label generator can be opened by clicking on the "Barcode Printer" slide-out menu on the top right hand corner of the tape library section.



- Enter a tape prefix which consists of two or three latin capital letters.
- Enter a tape number, no longer than four characters. If a "6" is entered the system will generate "006" or "0006".

    - Generate a range of numbers by using a hyphen between the start and end number. For example, the input "860-880" will generate all 21 tape labels in this number range.
    - Generate multiple unrelated barcodes by using the comma (",") character - "1000,2000,3000".
    - Also, multiple successive labels can be created by combining these two inputs "100-110,200-210".
- With the buttons "LTO5-7" it is possible to select the used LTO version. This information is printed in the last field of the label and is needed in order for the tape library to automatically detect and configure the tape.
- Using the button "+ Generate" generates the barcodes.
- Using the button "Clear" will delete all generated barcodes.
- The "Print" button opens the print panel of the browser and allows the user to print the generated barcodes.

14.8 Watch the video

14.8.1 LTO Tape Library Overview

https://youtu.be/bQUq9cZgtm4

15 About

The About section displays the contact details of syslink GmbH complete with support number and website link. Additionally, partner contact information will also be displayed.

About

syslink GmbH

ELEMENTS is a trademark of **syslink GmbH**.

Address:

Parkstraße 31,
40477 Düsseldorf
Germany

Phone:

+492117495350

Website

16 Add On

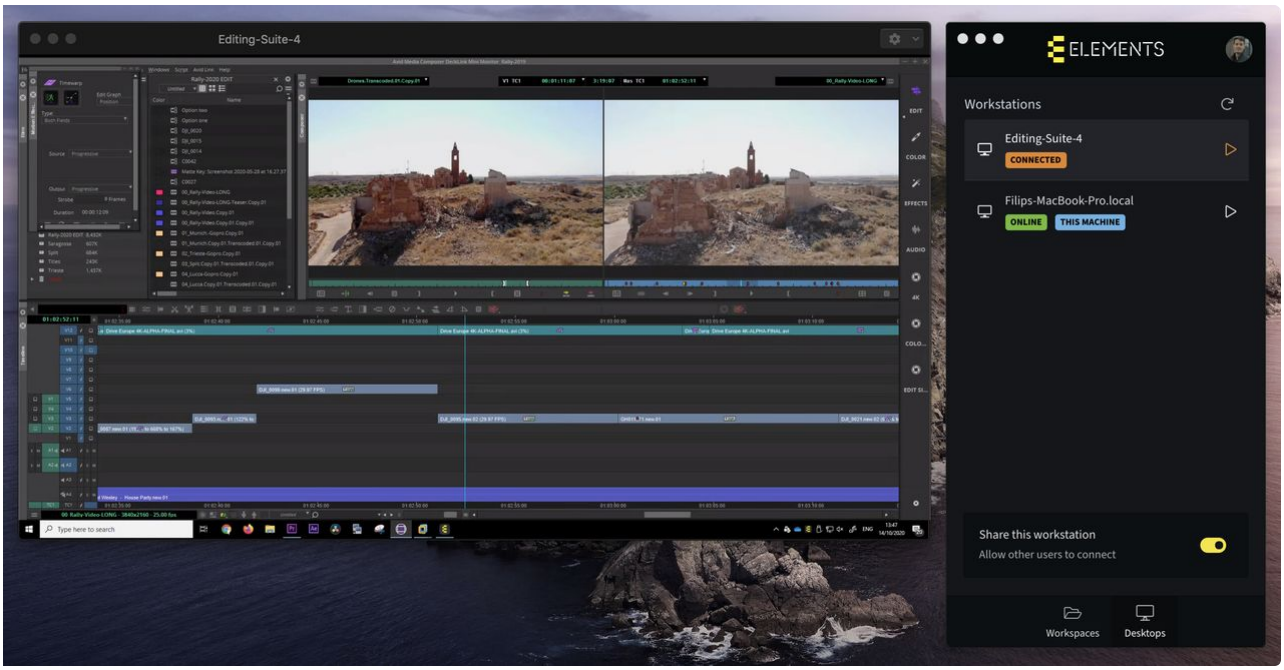
The Add on page lists additional modules available for ELEMENTS systems.

- ELEMENTS Satellite (paid option)(see page 185)
- ELEMENTS Click (paid option)(see page 187)
- Veritone (paid option)(see page 196)

16.1 ELEMENTS Satellite (paid option)

ELEMENTS Satellite is a remote editing application designed to provide the highest level of responsiveness while at the same time being easy to use and install. Unlike other available remote desktop applications, ELEMENTS Satellite is specifically developed to match the high demands of video editors and other creatives.

Fully integrated into the ELEMENTS client, the user can connect to available shared workstations and even share their own desktop - without the need for third-party software and troublesome configuration.



16.1.1 Watch the video

16.1.1.1 ELEMENTS Satellite

Visit the ELEMENTS Satellite knowledge base here[1]

Interested in ELEMENTS Satellite? Feel free to contact us[2].

1 https://syslink.atlassian.net/wiki/spaces/SATELLITEKB/overview
2 https://elements.tv/company/contact-us/

16.2 ELEMENTS Click (paid option)

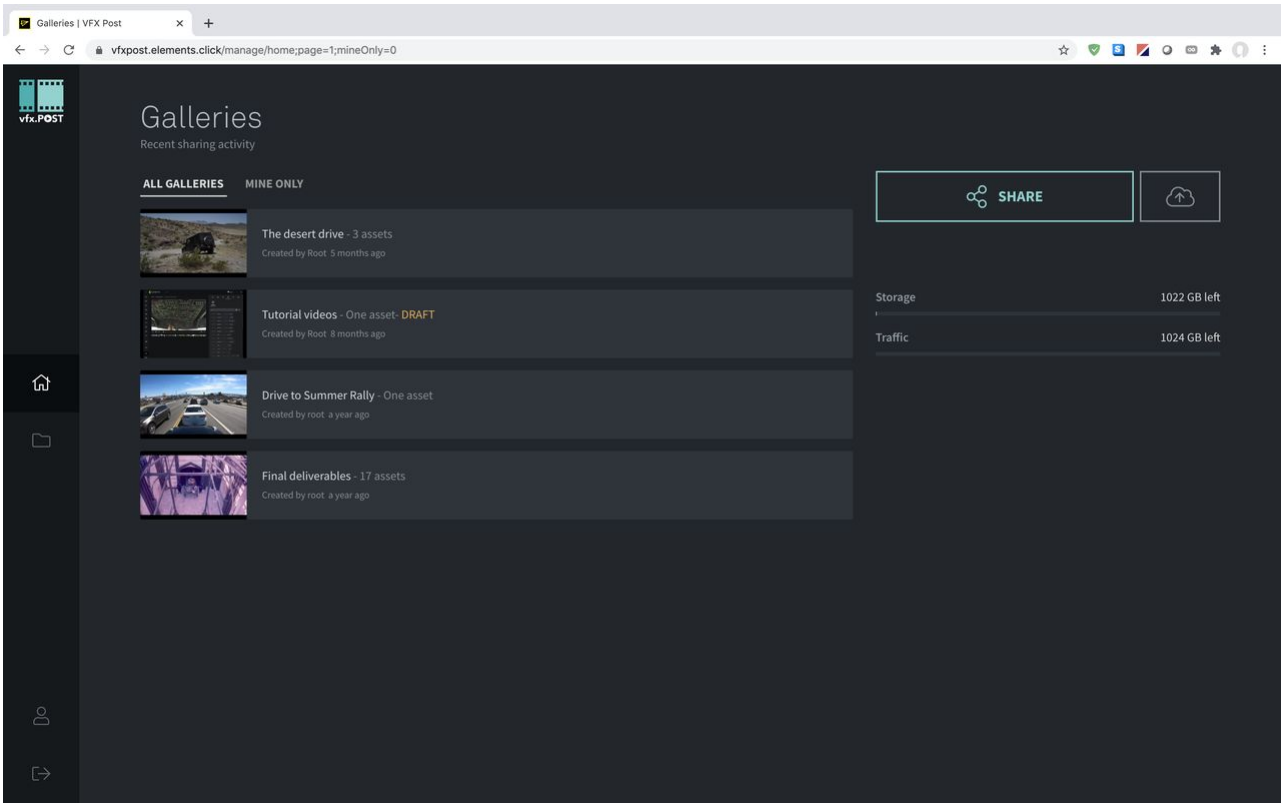
ELEMENTS Click is a cloud-based collaboration platform that provides a wide variety of collaborative and review features. This solution extends the functionality of the Media Library and adds another security layer to your infrastructure.

- Galleries (Home)(see page 187)
- Asset sharing(see page 188)
    - Anonymous tab(see page 189)
    - E-mail tab(see page 189)
    - Existing user tab(see page 190)
- Assets page(see page 190)
- Profile(see page 191)
- Log out button(see page 191)
- Gallery view(see page 191)
- Asset view(see page 193)
- Web UI Click Integration(see page 193)
    - User - Click user tab(see page 193)
    - Click Users(see page 193)
    - Automation Task ELEMENTS Click Sync(see page 194)
    - Media Library(see page 194)

The ELEMENTS Click user interface is accessible via a link or through the menu button in the Web UI of the ELEMENTS system.

16.2.1 Galleries (Home)

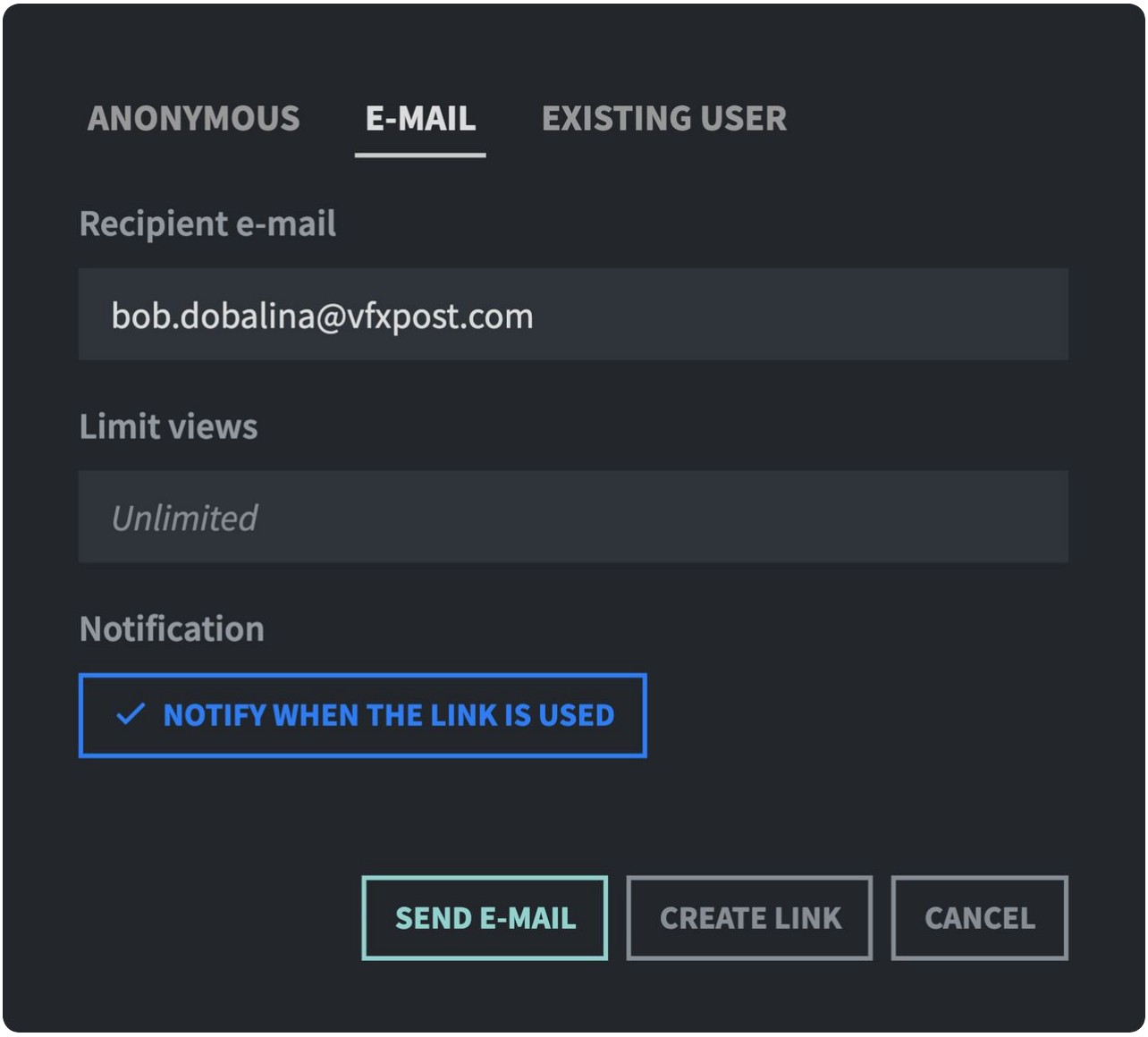
Assets in ELEMENTS Click are organised into galleries. This approach allows for easy project and permissions management. The Galleries page lists all accessible galleries and allows the user with sufficient permissions to manage them.



- On the left hand side of the page a navigation menu can be found, consisting of four icons:
  - Home - Forwards the user to the Galleries page.
  - Assets - Forwards the user to the asset list.
  - Profile - Displays the logged in user in a popup window.
  - Log out button.
- The "All galleries" tab shows all accessible galleries which are available in ELEMENTS Click.
- The "Mine only" tab shows only galleries created by the logged in user.
- On the right hand side or the Galleries page, following functions can be found:
  - Share - Allows the user to share assets via a link.
  - Upload - Allows the user to select a file from the computer to be uploaded into ELEMENTS Click.
  - Storage - Displays the the overall capacity as well as the current free capacity of the active ELEMENTS Click plan.
  - Traffic - Displays the overall maximum traffic set by the cloud plan, as well as the traffic left in the billing cycle.

16.2.2 Asset sharing

The button "Share" allows the user to share any asset from ELEMENTS Click via a link. The popup window allows the user to select an asset to be shared. After an asset has been selected, a popup window allows the user to generate a sharing link and to send that link directly to the recipient via an e-mail.



16.2.2.1 Anonymous tab

Using the Anonymous tab allows a general access link to be created.

- With the "Limit views" field, a limit can be set on how often the link can be used.
- The "Notification" section allows the user to determine whether the sharing user should be notified via e-mail when the link has been used.
- The "Create link" button generates a link to the shared asset, which can then be copied.

16.2.2.2 E-mail tab

Using the e-mail sharing function, the asset can be sent directly to an e-mail address.

- Enter the recipients e-mail address.
- Using the "Limit views" field, a limit can be set on how often the link can be used.

- The "Notification" section allows the user to determine whether the sharing user should be notified via e-mail when the link has been used.
- With the "Send E-mail" button, the link can be sent via e-mail to the chosen e-mail address.
- The "Create link" button generates a link to the shared asset which can then be copied.

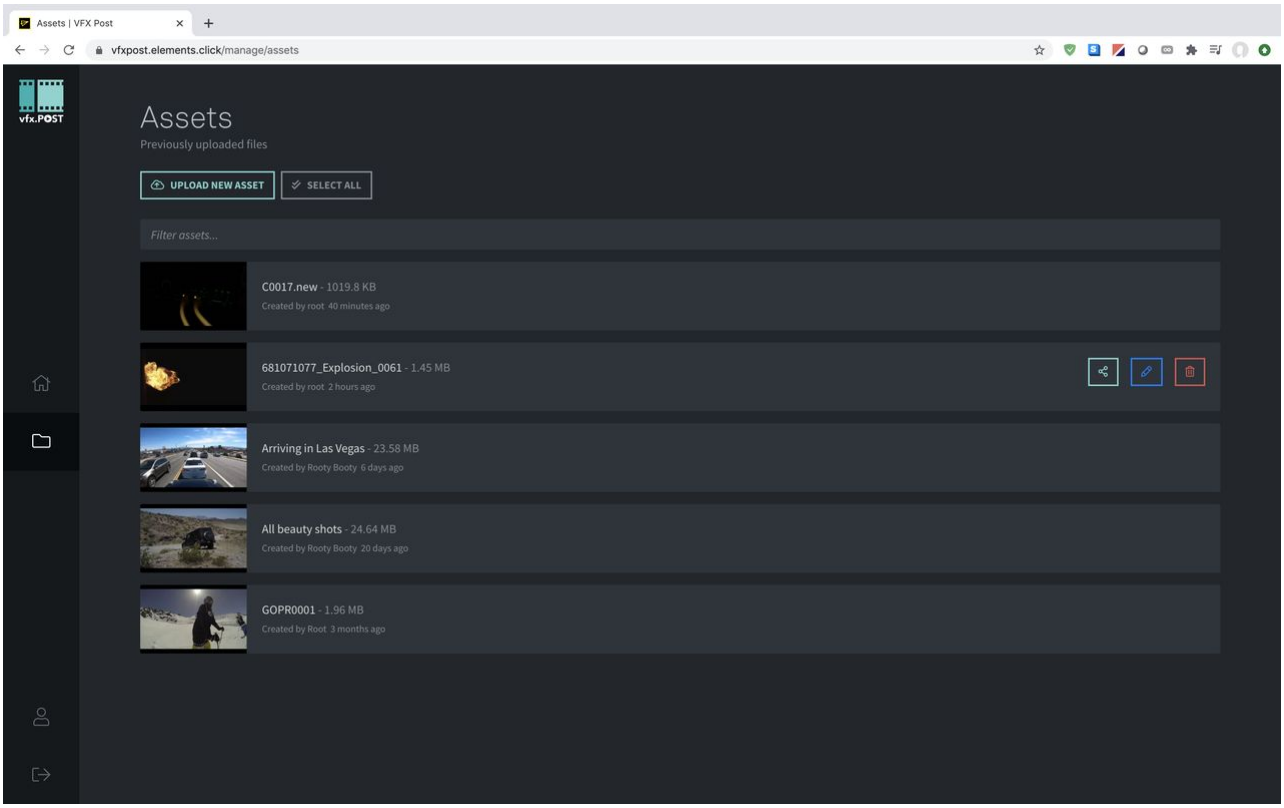
16.2.2.3 Existing user tab

The Existing user tab allows the user to send the link to an any existing user present on the ELEMENTS system by selecting it from the user dropdown list.

- Select a user from the dropdown list containing all users on the ELEMENTS system with an entered e-mail address.
- Using the "Limit views" field, a limit can be set on how often the link can be used.
- The "Notification" section allows the user to determine whether the sharing user should be notified via e-mail when the link has been used.
- With the "Send E-mail" button, the link can be sent via e-mail to the chosen e-mail address.
- The "Create link" button generates a link to the shared asset which can then be copied.

16.2.3 Assets page

The assets page lists all accessible assets in ELEMENTS Click and allows the user to manage them.



- Use the "Upload new assets" button to add new files directly to ELEMENTS Click.
- "Select all" allows the user to select all listed assets. If assets are already selected the button will change to "Invert selection".
- If assets are selected a button "Delete selected" will appear. Clicking this button will remove all selected assets from ELEMENTS Click upon confirmation.
- "Filter assets" allows the user to filter the listed assets by name.

- When hovering over an asset additional options are displayed.
  - "Share" will open the share popup window, which allows the user to generate and send a share link.
  - "Edit" allows the user to change the name of the asset as well as its description.
  - The "Trash bin" button allows the user to remove the asset from ELEMENTS Click.

16.2.4 Profile

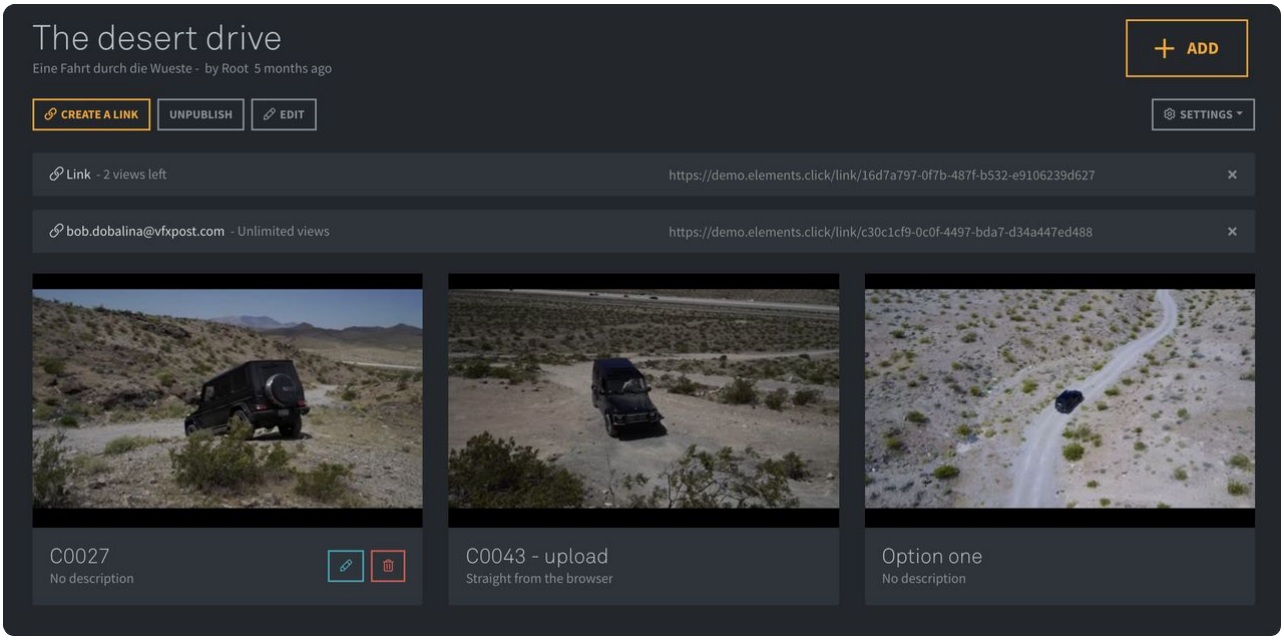
Clicking the profile button opens a popup window displaying information about the logged in user.

16.2.5 Log out button

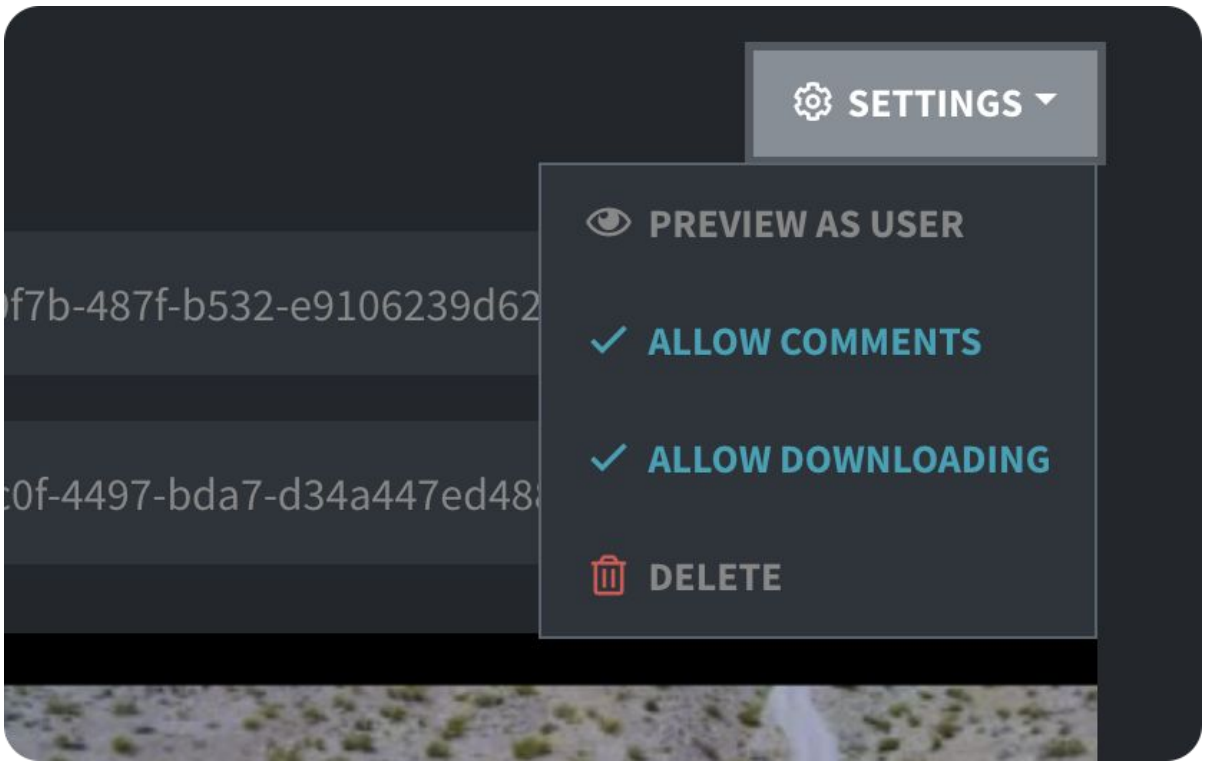
Clicking the "Log out" button logs the current user out and displays the ELEMENTS Click login page.

16.2.6 Gallery view

If a gallery is selected all included assets within the gallery will be displayed.

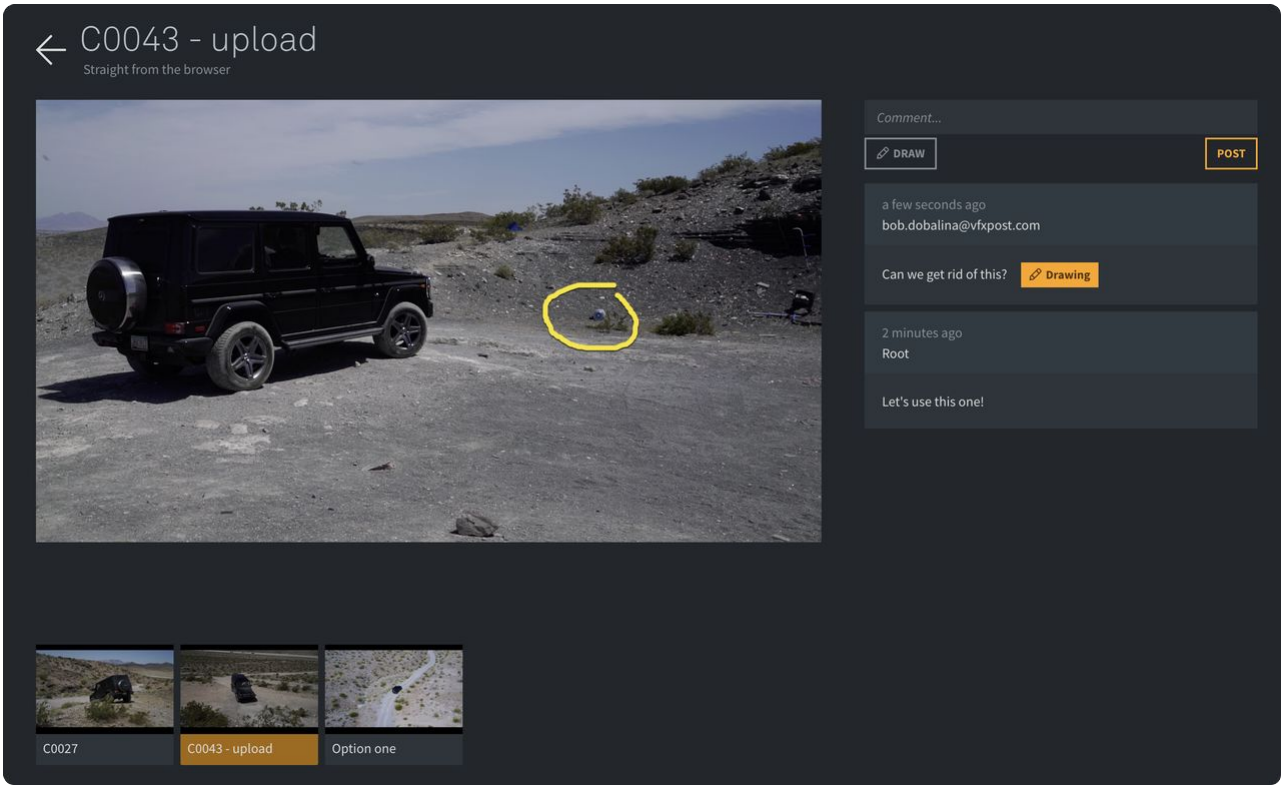


- The "+ Add" button allows the user to add an asset to the opened gallery.
- Clicking the "Create a link" button will open the share popup window allowing the user to generate a share link to the selected gallery and send it.
- Clicking the "Unpublish" button will disable the current gallery. The content within the gallery will not be viewable and the existing share links will be disabled.
- The "Edit" button allows the user to change the name of the open gallery as well as its description.
- The "Settings" dropdown list allows the user to change the settings of the actual gallery.



  - "Preview as a user" opens a new browser tab and displays the current gallery in the same way the user accessing the link will view it.
  - If "Allow comments" is checked, users will be able to create comments on the assets in the current gallery. This comments can be synced to the Media Library on the local ELEMENTS system.
  - If "Allow downloading" is checked, users can download the assets from the current gallery.
  - "Delete" deletes the current gallery.
- All existing access links to the current gallery, as well as the set view counter, are displayed above the assets. Clicking the link allows the user to copy it. Using the cross symbol on the right hand side of any entry will delete the selected share.
- When hovering over an asset two additional buttons are displayed.
  - "Edit" allows the user to change the name and the description of the asset.
  - "Delete" deletes the asset from the current gallery.
- Clicking any asset opens the asset preview.

16.2.7 Asset view



- The asset preview uses the default video player of the browser in use.
- Collaboration functions are provided on the right hand side of the video playback window.
    - The "Comment" textfield allows the user to enter a comment and add it by using the "Post" button.
    - The "Draw" button allows the user to add a drawing in any of the five optional colours to the comment.
    - The comment section displays all existing comments on the selected asset.
    - Click on any comment in the list and the video player jumps to the timecode of the comment.
- Underneath the video playback window, all assets of the current gallery are displayed.

16.2.8 Web UI Click Integration

16.2.8.1 User - Click user tab

This tab shows all existing ELEMENTS Click users and allows their management.

- After selecting a click user the system will open the settings of the click user.

16.2.8.2 Click Users

The Click Users tab in the Users section of the Web UI lists all available ELEMENTS Click users and allows their management. When content is shared via ELEMENTS Click to a new e-mail address, a Click user is automatically created. User settings are reduced to user credentials and information.

- In the "Full name" field the given name can be completed or changed.

- The username will automatically be generated based on the full name and cannot be changed.
- The UNIX name shows the username of the user on UNIX level. This name is generated automatically and cannot be changed.
- The "E-mail" field allows to define an e-mail address for the selected user. The entered e-mail address can be used for logging in instead of the username. The entered e-mail address can be used to send user notifications.
- "Enable this account" gives the user the opportunity to enable or disable the user account. Should the user be disabled, it will remain on the system but will not be able to log in. That feature is useful for freelancers accounts, which usually require temporary access. Accounts can then easily be reactivated when needed.
- Use "Set password" to set up a new password for the user. Clicking the button opens a popup window where the new password needs to be entered and confirmed. The button "Random" enables the creation of a random password, which will be displayed after clicking the button. "Try again" generates a new random password. The new password has to be confirmed with the "Set password" button.

16.2.8.3 Automation Task ELEMENTS Click Sync

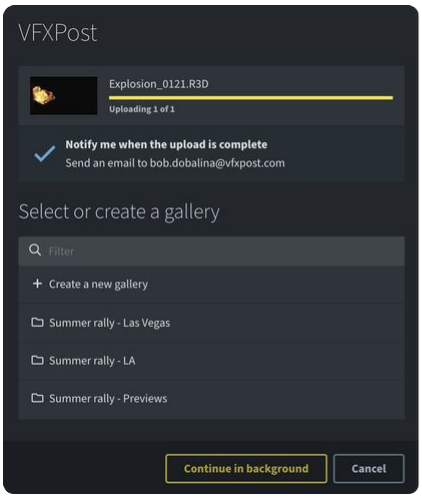
Using the ELEMENTS Click Sync task will synchronise the comments made in ELEMENTS Click with the Media Library.

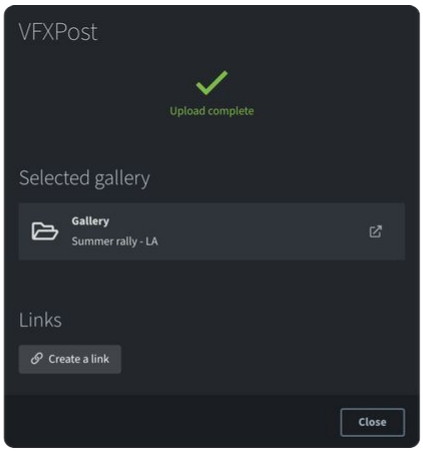
- To start the task simply select the ELEMENTS Click connection in the general tab, which should be used for synchronisation.

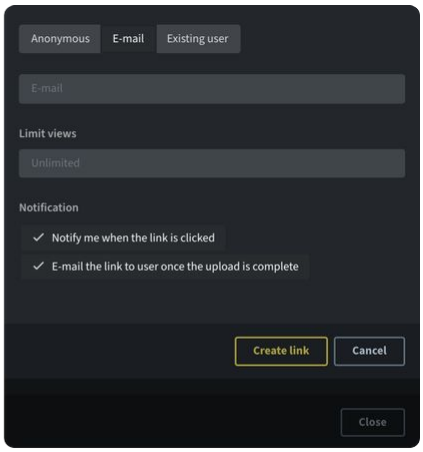
16.2.8.4 Media Library

Select one or multiple assets in the Media Root and use the "Share to" dropdown menu to easily share them to the connected ELEMENTS Click.

> **Please note**
> It is only possible to upload assets.







- After selecting the Click connection, a popup window appears
  - Select a gallery to add items to.
  - By clicking "+ Create a new gallery" the user can create a new gallery and access items through it.
- After selecting a gallery, selected items will be uploaded to ELEMENTS Click.
  - In the next window, the gallery can be opened in ELEMENTS Click by clicking the entry in the list.

- The "Create a link" button forwards the user to the sharing settings where three sharing options are available:
    - Anonymous: Allows a general link to be created.
        - Through the "Limit views" field a limit can be set on how often the link can be used.
        - The "Notification" section allows the user to determine whether the sharing user should be notified via e-mail when the link has been used.
        - The "Create link" button generates a link to the shared asset which can then be copied.
    - E-mail: The asset can be sent directly to an e-mail address.
        - Enter the recipients e-mail address.
        - Using the "Limit views" field, a limit can be set on how often the link can be used.
        - "Notify me when the link is clicked" allows the user to determine whether the sharing user should be notified via e-mail when the link has been used.
        - "Email the link to user once the upload is complete" allows the link to be automatically sent to the recipient via an e-mail once the upload of the asset to ELEMENTS Click is complete.
        - The "Create link" button generates a link to the shared asset which can then be copied.
    - Existing user tab: Allows the user to send the link to an existing user by selecting one from the user dropdown list.
        - Select user from a dropdown list containing all users on the ELEMENTS system with a predefined e-mail address.
        - Using the "Limit views" field, a limit can be set on how often the link can be used.
        - "Notify me when the link is clicked" allows the user to determine whether the sharing user should be notified via e-mail when the link has been used.
        - "Email the link to user once the upload is complete" allows the link to be automatically sent to the recipient via an e-mail once the upload of the asset to ELEMENTS Click is complete.
        - The "Create link" button generates a link to the shared asset which can then be copied.

16.3 Veritone (paid option)

ELEMENTS systems offer two distinct approaches to advanced AI video and image analysis: A cloud-based service realised through cooperation with Veritone - proxies are sent to Veritone for analysis and metadata returned, and an On-Premise AI solution, allowing easy custom AI engine training and maximum accuracy without your footage ever having to leave the company.

- Veritone Engine Settings(see page 196)
  - Proxy files tab(see page 196)
  - Veritone tab(see page 197)
- Automation(see page 199)
  - Veritone tab(see page 199)
  - AI metadata download task(see page 199)
- Web UI top bar(see page 199)
- Media Library integration(see page 200)
  - AI metadata tab(see page 200)
- Watch the video(see page 201)
  - Setting up Veritone artificial intelligence video analysis(see page 201)

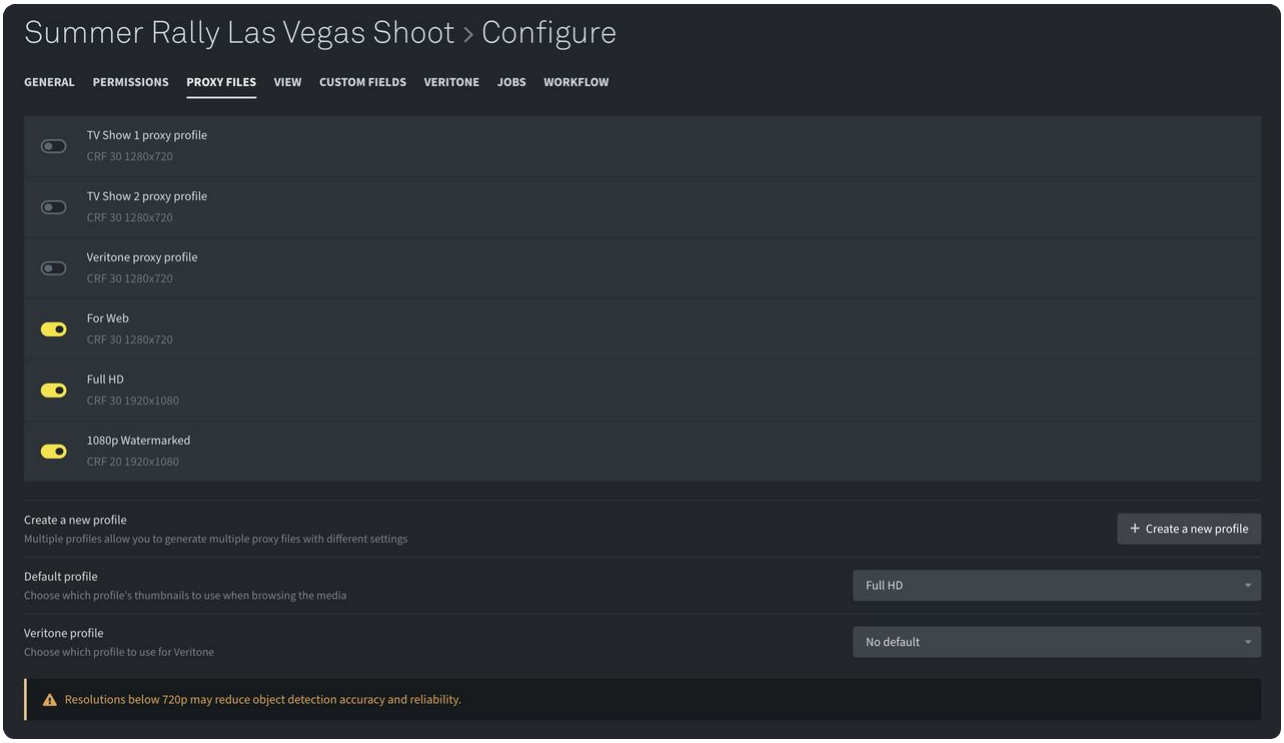
16.3.1 Veritone Engine Settings

A large selection of Veritone AI engines is offered in the Media Root's Configure menu. Every Media Root can feature individual settings according to the needs of the project.

16.3.1.1 Proxy files tab

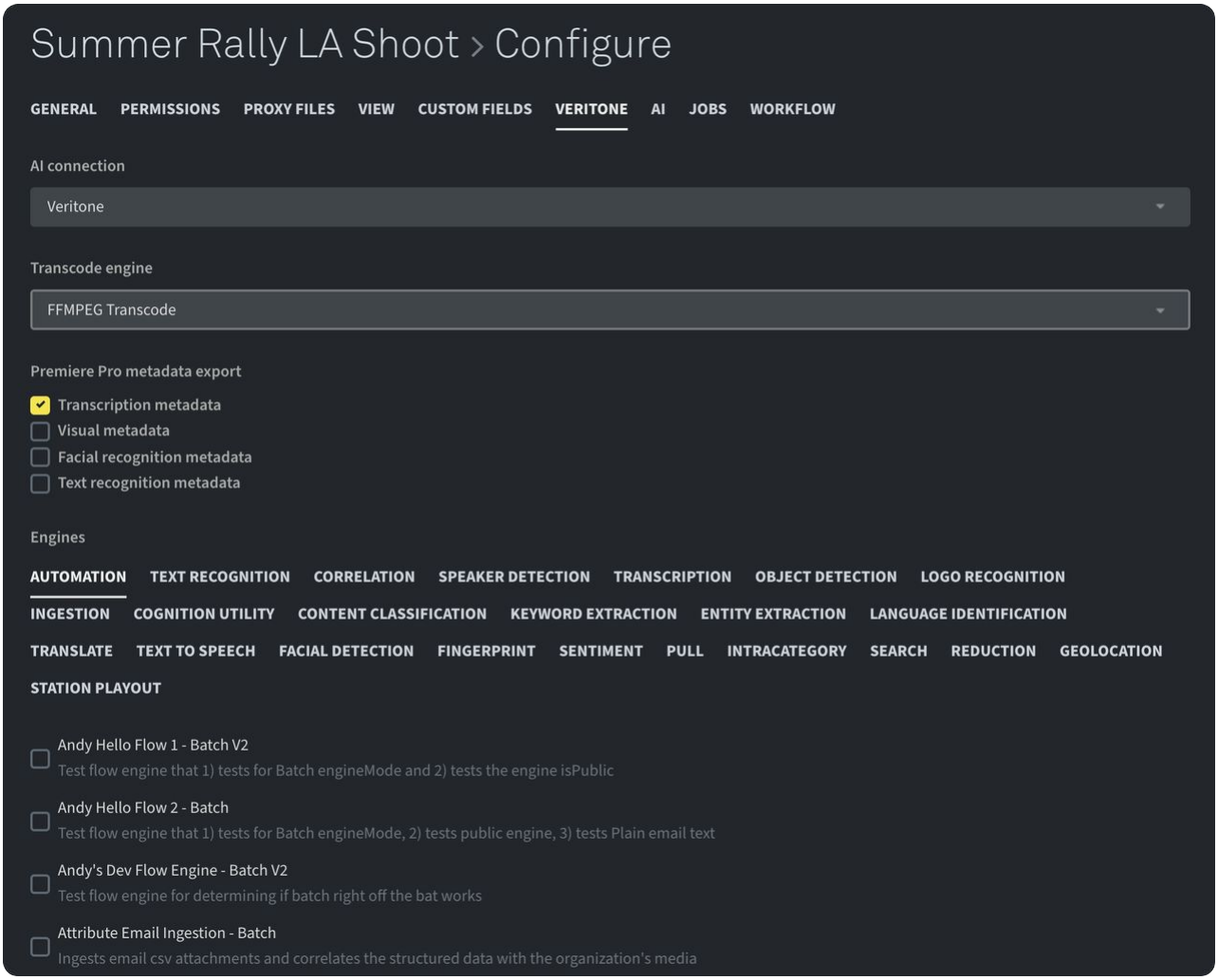
In the Configure menu of the Media Root to be configured for Veritone AI analysis, a proxy profile for upload and analysis can be selected. The "Veritone profile" dropdown list in the "Proxy Files" tab allows the user to choose the proxy profile to be used. The quality of the created proxy can have an impact on the accuracy of the AI engines.

> **Please note:**
> It is important to use at least 720p proxy profiles. Resolution lower than 720p will have a negative impact on the accuracy of the AI analysis.



16.3.1.2 Veritone tab

This tab in the Media Root's Configure menu allows the user to select all Veritone engines to be used for AI video analysis.



- The "AI connection" dropdown menu allows the user to enable or disable Veritone AI analysis for the selected Media Root.
- With the "Transcode engine" selector it is possible to choose the used engine for transcoding.
- The "Premiere Pro metadata export" section allows the user to select which AI metadata will be passed to Adobe Premiere Pro when importing footage using the ELEMENTS Premiere Panel or when importing a roughcut created in the Media Library Editor. The number of markers to be imported can have a considerable influence on the import speed. For this reason it is recommended to export only those metadata that will be needed in Premiere Pro.
- In the "Engines" section all available AI engine categories are displayed.
- Selecting any available category displays all available engines in the category.
- Setting a checkmark next to any entry in the list enables the engine for the selected Media Root.
- Certain engines provide additional options and settings. These can be accessed and modified via the gearwheel symbol on the right hand side of an engine entry.
- The bottom bar provides the following options:
    - The "Save" button applies the settings to the Media Root.
    - The "Rescan Media Library" button allows the user to start a rescan of the current Media Root.
    - The "Delete" button deletes the current Media Root after a delete confirmation.

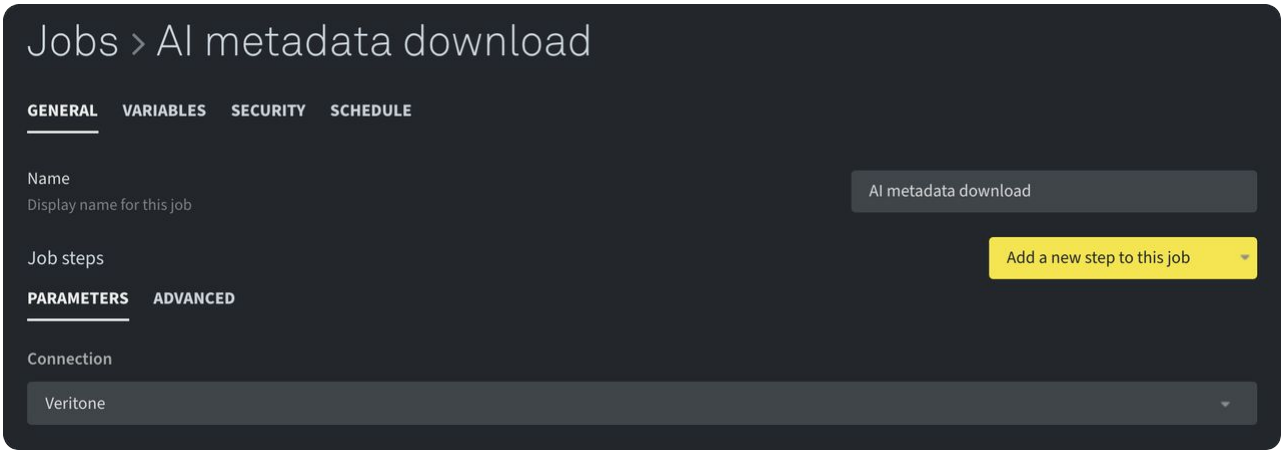
16.3.2 Automation

16.3.2.1 Veritone tab

If Veritone AI analysis is active on the system, an additional "Veritone" tab will be displayed in the Automation page. In this tab, the progress of all current Veritone tasks such as "Upload for processing" and "Downloading metadata" is displayed together with the tasks status.

16.3.2.2 AI metadata download task

After the footage analysis by Veritone has been finished, the results are provided in form of metadata. The "AI metadata download" task allows the user to download this metadata to the ELEMENTS system, so that it can be displayed and used in the Media Library.

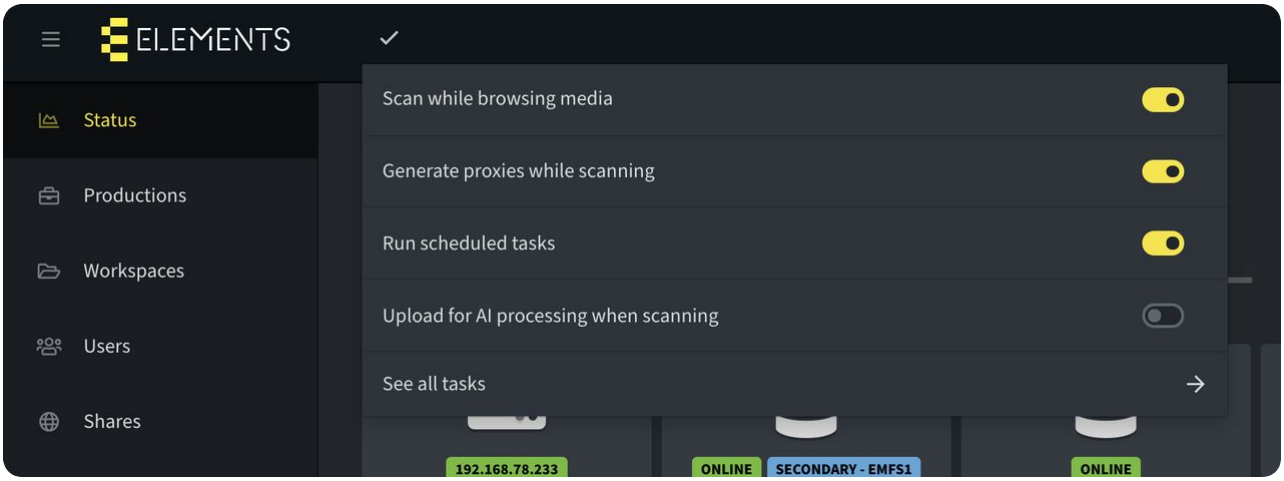


- Enable the task by choosing the Veritone connection in the "Connection" dropdown menu.

Like every other task in the Automation page, this task can be expanded, scheduled or integrated into any Automation workflow. Read the full Automation page documentation.

16.3.3 Web UI top bar

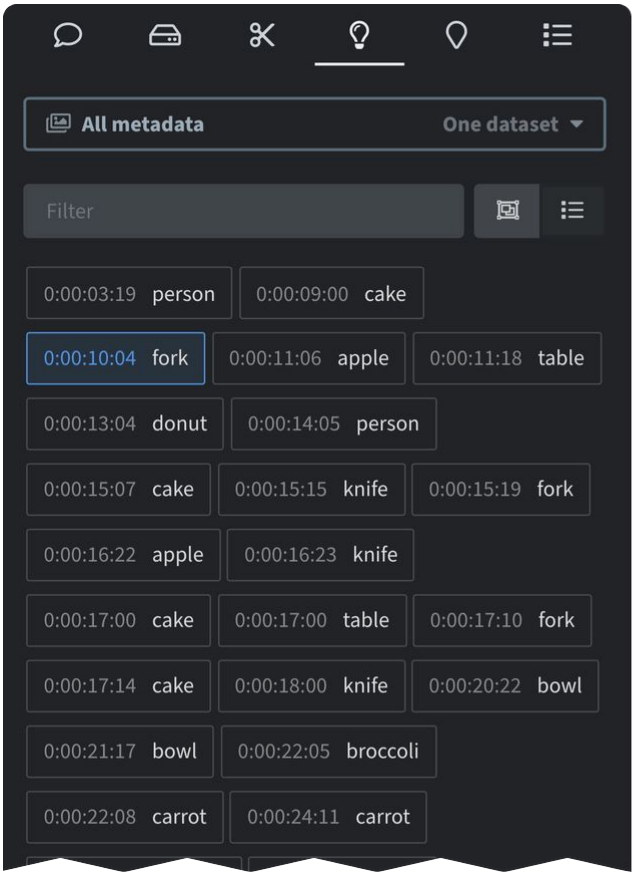
The dropdown menu in the top bar (accessed by clicking on the checkmark symbol) provides the "Upload for AI processing when scanning" option. This allows for the footage to be uploaded for AI processing during the scanning of the Media Library. When using this function, the upload of the footage does not need to be triggered manually.

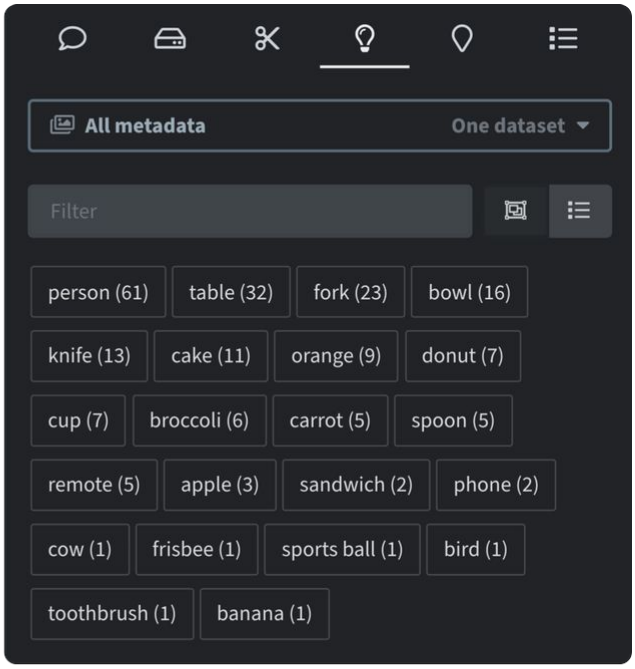


16.3.4 Media Library integration

16.3.4.1 AI metadata tab

The "AI metadata" tab will show all generated metadata for the selected asset. The generated metadata will be sorted in tabs. In the tabs it is possible to search for special results by using the filter bar.





16.3.5 Watch the video

16.3.5.1 Setting up Veritone artificial intelligence video analysis

https://youtu.be/lur-8D9qpFU