



# Viz Mosart Web Applications

Version 3.1



Mosart Web Applications



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  - C:\ProgramData\[Product Name]
  - Any custom directory where [Product Name] stores data, and any specific process related to [Product Name].
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## **Created on**

2026/07/07

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Mosart Web Applications are value-adding utilities and plugins that simplify working with Viz Mosart. They are *not* part of a standard Viz Mosart delivery.

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# 1 Prerequisites

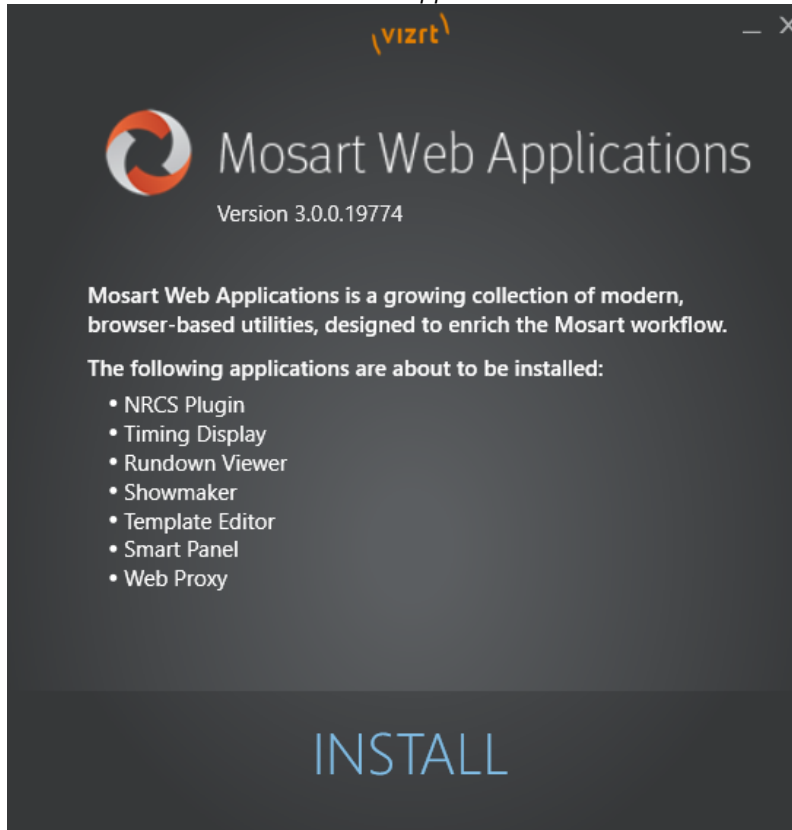
- Mosart Web Apps are compatible with Viz Mosart 5.1.0 or later.
- To use *Showmaker*, you must have Viz Mosart 5.14.3 or later.

## 2 Getting Started

1. Collect the latest software bundle from Vizrt's customer FTP at <https://download.vizrt.com/products/VizMosart/Latest Version/WebApplications/>.

**Note:** If *upgrading*, make sure an existing instance of the Mosart Web Applications Configuration Tool is **not** open.

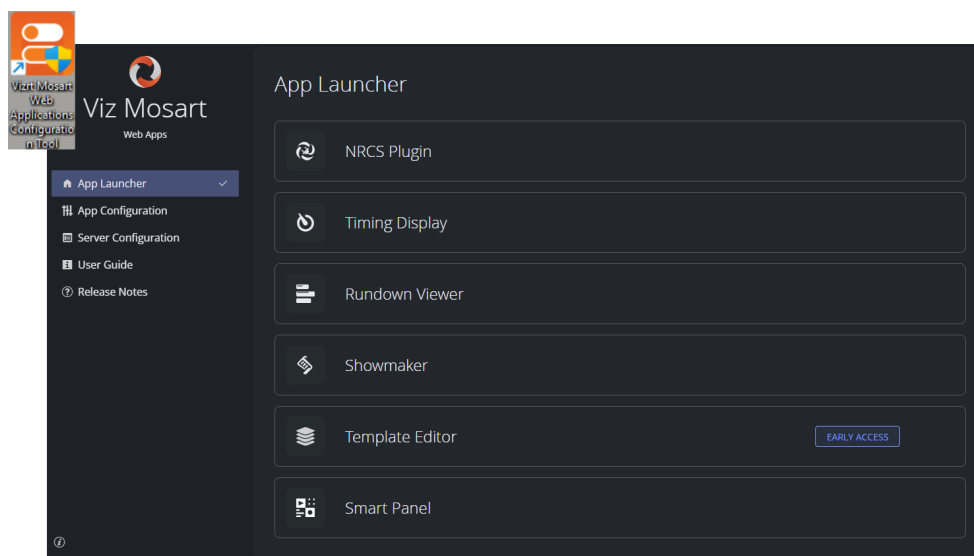
2. Run the downloaded file *MosartWebApplications.Bundle-n.n.n.n.exe*.



The Web Applications that will be installed are listed.

- Info:** The Installer places these services and applications on the target machine:
1. **Mosart Web Applications:** A Windows service that serves the Mosart Web Applications.
  2. **Mosart Web Proxy:** Caddy2 bundled within the Mosart Web Apps installer, running as a Windows service.
  3. **Mosart Web Applications Configuration Tool:** A desktop web application for configuring and launching the web applications.
  4. **The set of Mosart Web Applications** listed on the Installer.

3. Click **Install**.  
Any previously installed version of the Mosart Web Applications is automatically upgraded. All configurations and preferences are retained and you complete the installation by clicking **Finish**.
4. After successful installation, the **Mosart Web Applications Configuration Tool** displays, together with a desktop shortcut for quick access.



5. From the left panel, select one of the following:

|  |                                     |
|--|-------------------------------------|
|  | <b>App Launcher</b>                 |
|  | <b>App Configuration</b>            |
|  | <b>Server Configuration</b>         |
|  | <b>User Guide and Release Notes</b> |

- If your system is *already configured*, click **App Launcher** and select from:  
[NRCS Plugin](#)  
[Timing Display](#)  
[Rundown Viewer](#)  
[Showmaker](#)  
[Template Editor](#) (Early Access)  
[Smart Panel](#).
- If this is your *first running* of the Configuration Tool, or you will start using a new Web App, you must make some one-time configurations, as described in section [Mosart Web Applications Configuration Tool](#).

## 2.1 User Guides

Links to a recent version of the documentation.



**Tip:** The onboard descriptions are often early drafts. For *latest documentation*, visit the online resources at the [Viz Mosart Documentation Center](#).



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## 3 Related Documents

- [Viz Mosart User Guide](#): Operating Viz Mosart in a live production.
- [Viz Mosart Administrator Guide](#): Configuring and customizing Viz Mosart and pre-production show design.

For more information about all of the Vizrt products, visit:

- [www.vizrt.com](http://www.vizrt.com)
- [Vizrt Documentation Center](#)
- [Vizrt Training Center](#)
- [Vizrt Forum](#)

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## 4 Feedback and Suggestions

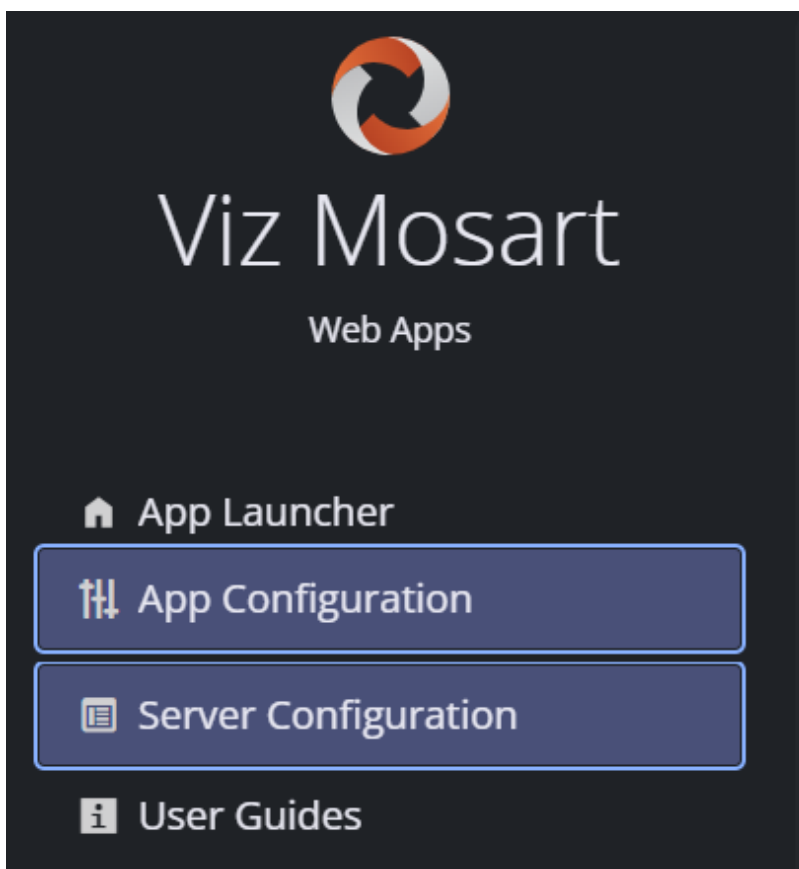
We encourage suggestions and feedback about our products and documentation. To give feedback and/or suggestions, please contact your local Vizrt customer support team at [www.vizrt.com](http://www.vizrt.com).

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## 5 Configuration Tool

This section presents advanced, mostly one-off configurations and references for the Mosart Web Apps system administrator.

- [App Configuration](#)
- [Server Configuration](#)
- [Mosart REST API](#)
- [HTTPS Usage Notes](#)
- [Authentication](#)
- [Troubleshooting](#)



The Configuration Tool enables rapid setup and management of all your the Mosart Web Applications.

- If your setup is already configured, use **App Launcher** for [NRCS Plug](#), [Timing Display](#), [Rundown Viewer](#) and [Showmaker](#).

However, on *first run*, you must perform all necessary one-time setups for all the Mosart Web Apps from the two menus:

- [App Configuration](#)
- [Server Configuration](#).

## 5.1 App Configuration

- [NRCS Plugin](#)
- [Showmaker](#)
- [Template Editor \(Early Access\)](#)

Settings here are needed when you:

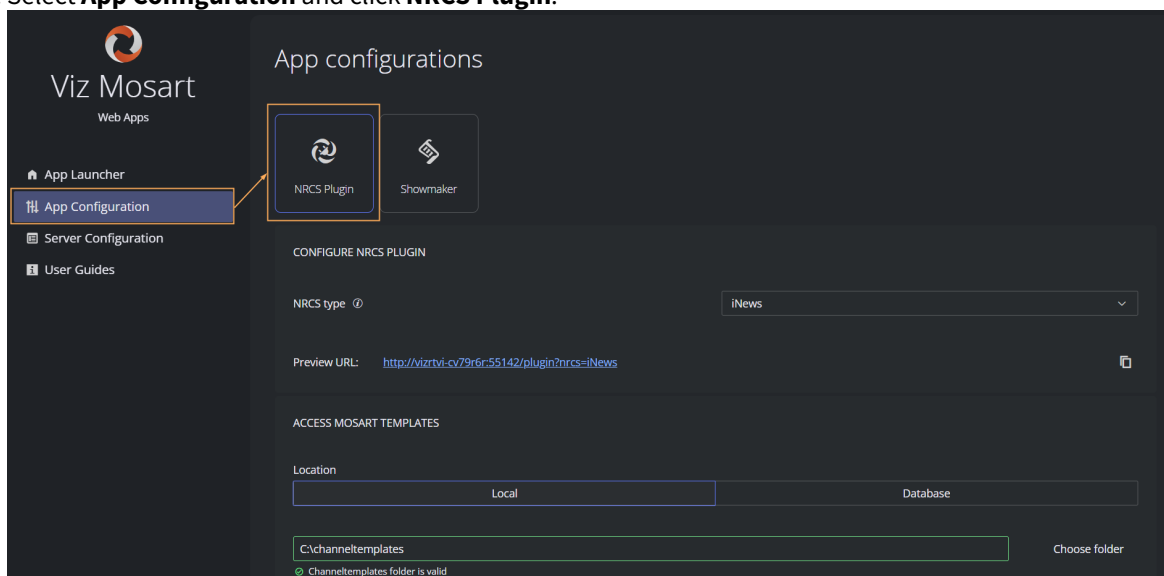
- Use the [NRCS Plugin](#) or [Showmaker](#) for the first time.
- Have installed the Mosart Web Apps bundle on *a separate server* to the Viz Mosart server.

**Note:** *Showmaker* always requires the [NRCS Plugin](#) to be correctly configured.

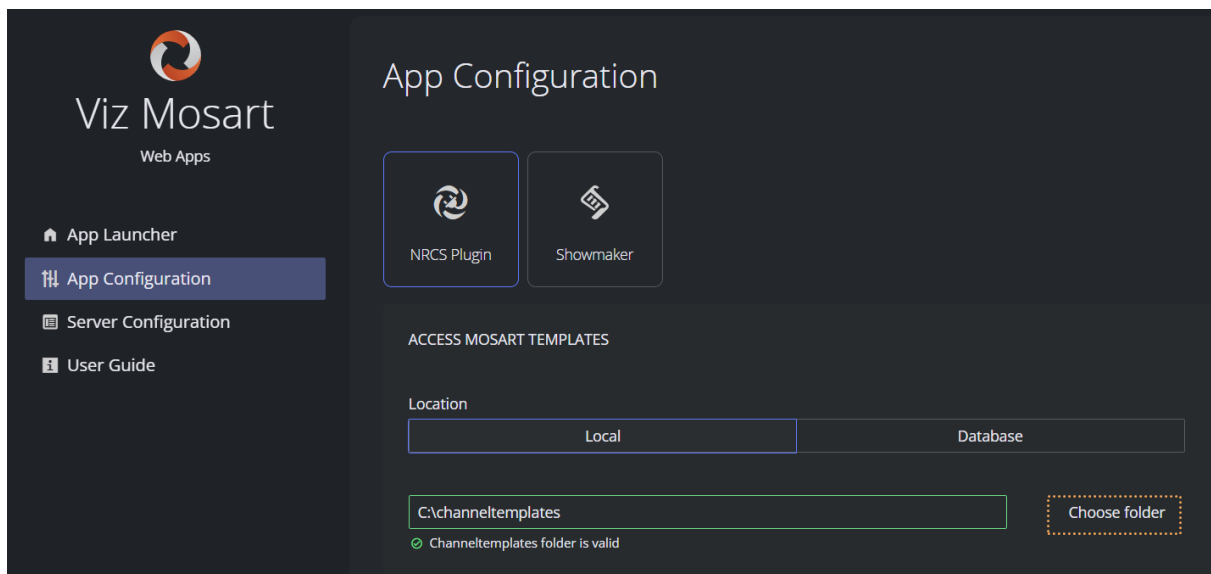
### 5.1.1 NRCS Plugin

To configure the NRCS Plugin

1. First perform the [Getting Started](#) (Installation) procedure.
2. Select **App Configuration** and click **NRCS Plugin**.



3. From the **NRCS type** drop-down menu, select your newsroom system type.
4. (If *iNEWS* is selected **NRCS type**, ignore this step)  
Enter **Mos ID**.  
This is a mandatory field if you select NRCS type *ENPS*, *Octopus* or *Other*.  
**To find your Mos ID**
  - a. In the Manus Administrator console, type *settings*.  
For more details, see the [Viz Mosart Administrator Guide](#), section *Manus Administrator > Settings Editor MOS > NRCS Configuration*.
5. Back in the Web Apps Configuration Tool **App Configuration** page for the NRCS Plugin, in section **ACCESS MOSART TEMPLATES**, specify the location of your Viz Mosart templates.

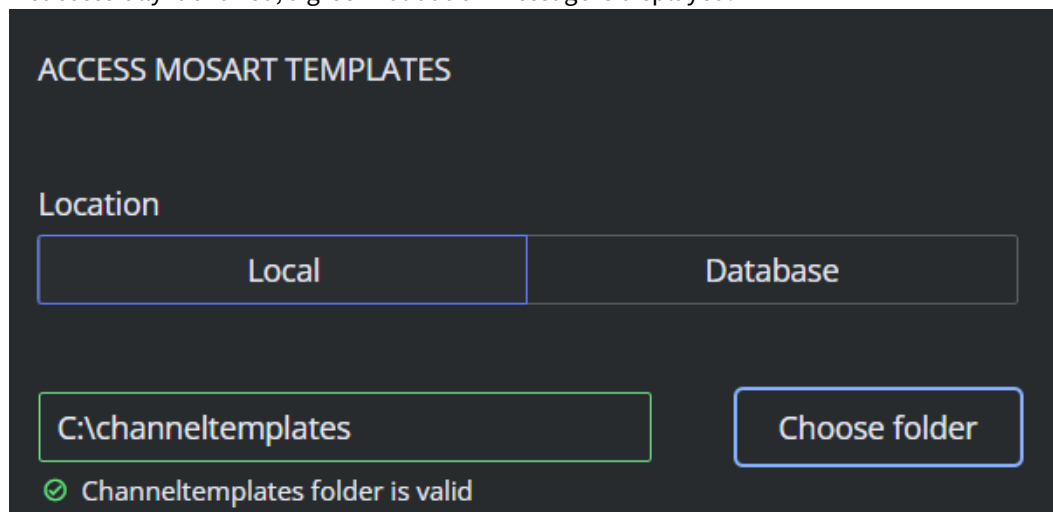


This can be either

a. **Local:** By default, this is a local folder C:\channeltemplates. The tool will automatically scan for three files:

- channeltemplates.xml
- avconfig.xml
- newsroomsettings.xml

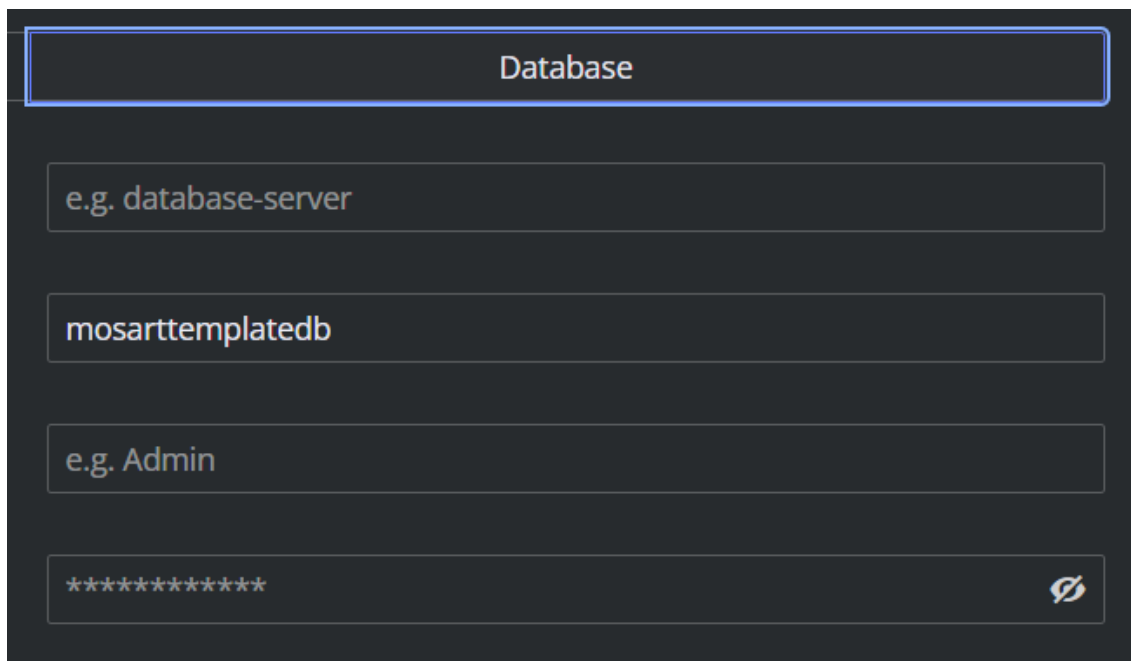
If successfully identified, a green validation message is displayed.



b. **A network folder:** When your template folder is on a network drive

- Click **Choose folder** and navigate to the target folder.
- Ensure the network folder has adequate permissions.

c. **Database:** If template details are stored in a database, enter host access and authentication details.



Database

e.g. database-server

mosarttemplatedb

e.g. Admin

\*\*\*\*\* 

6. Click **Save**.

**Info:** To complete the NRCS Plugin one-time setup, you will also need to visit the [Server Configuration](#) page, presented below.

## 5.1.2 Showmaker

### Prerequisites

- A running Viz Mosart 5.14.3 or later.
- *Manus Administrator* is running.
- The *Viz Mosart client UI* is running and can display a rundown.

 **Note:** Currently one Mosart Web Apps instance (and therefore one Showmaker) connect to a *single* a single gallery Mosart server setup.

- Controlling several galleries from one Showmaker (multi-gallery control) is on the roadmap, for this Showmaker version, multi-gallery sites require one Mosart Web Apps instance per gallery.

If either Manus Administrator or Viz Mosart is down, start them now. You only need to do this once after a server reboot.

### Setup

To use Showmaker with Viz Mosart, follow these instructions, that depend on whether Showmaker is installed on either the Viz Mosart server or another server.

**Info:** Users *can* run Showmaker standalone without a connected Viz Mosart. This user scenario would be for their early versions of a rundown (running order) where structure is being drafted, rather than operations verified.

## MOS COMMUNICATION SETTINGS

Showmaker uses standard MOS protocol. These configurable properties define the communication.

A fresh installation has *one* MOS device pointing to your Mosart server. In MOS COMMUNICATION SETTINGS you see a single row in the **MOS DEVICES** table, plus a **Push Settings to Manus Administrator** button on that row. Use that button (with Manus Administrator closed) to write the matching MOS configuration into Mosart.

To establish communication between a single MOS device and Showmaker

**Info:** This will establish contact with a single MOS device. The procedure to then set up *additional* MOS devices is similar, and [presented below](#).

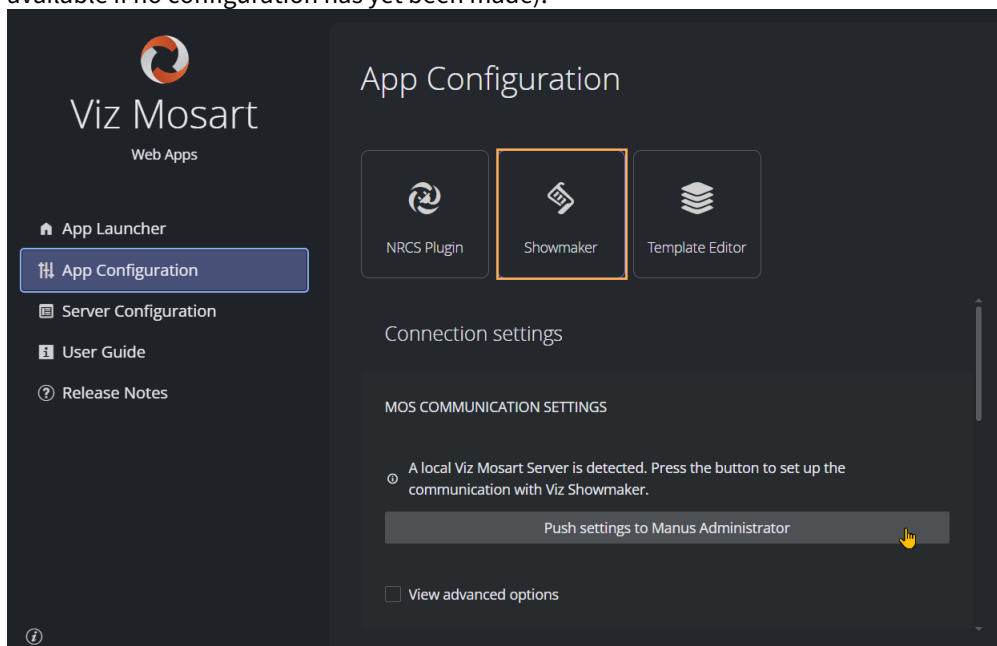
There are two alternative setups, depending on your network structure.

- Showmaker is installed on the [same server as Viz Mosart](#).
- Showmaker is installed on [separate server to Viz Mosart](#).

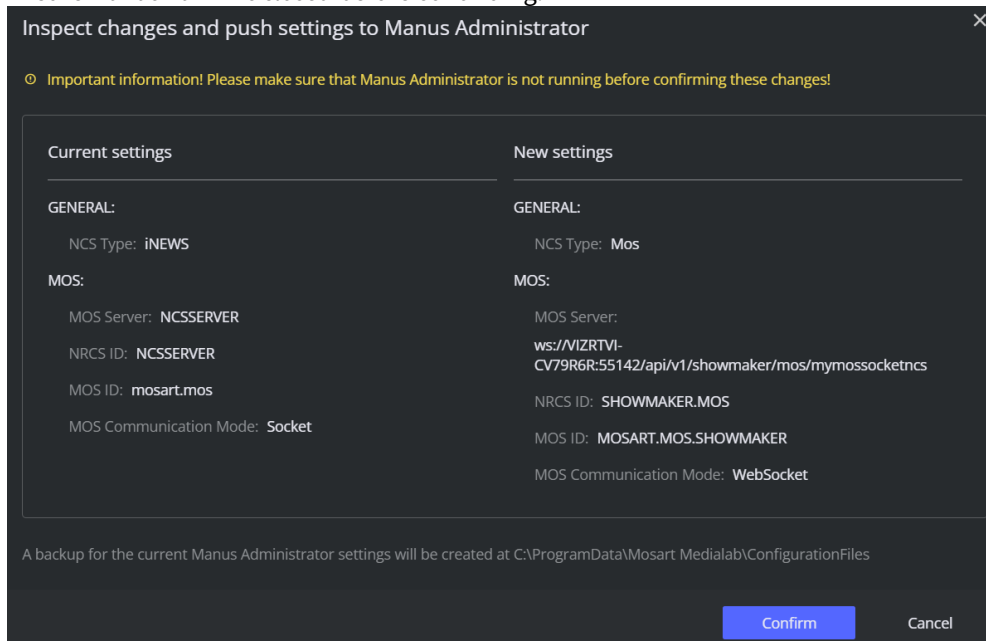
### Showmaker is installed on the same server as Viz Mosart

If you are running Showmaker on the *same* server as the Viz Mosart server, the Configuration Tool provides a quick way to automatically configure Viz Mosart for establishing communication with Showmaker.

1. From the **App Configuration** page, select *Showmaker*.
2. Under *Showmaker*, tick **View advanced options** and review settings.  
If necessary, adjust the default values by referring to the table [MOS COMMUNICATION SETTINGS](#) below.
3. In the same **App Configuration** menu for *Showmaker*, click **Push Settings to Manus Administrator** (only available if no configuration has yet been made).



4. A warning message reminds that Manus Administrator shall *not* be running at this point. Ensure *Manus Admin* is closed before continuing.

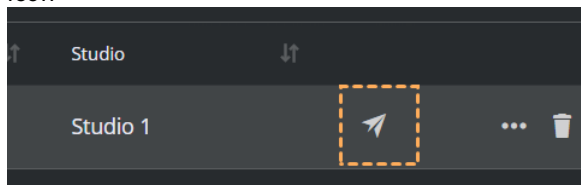


5. To complete the action, click **Confirm**.

#### Showmaker is installed on separate server than Viz Mosart

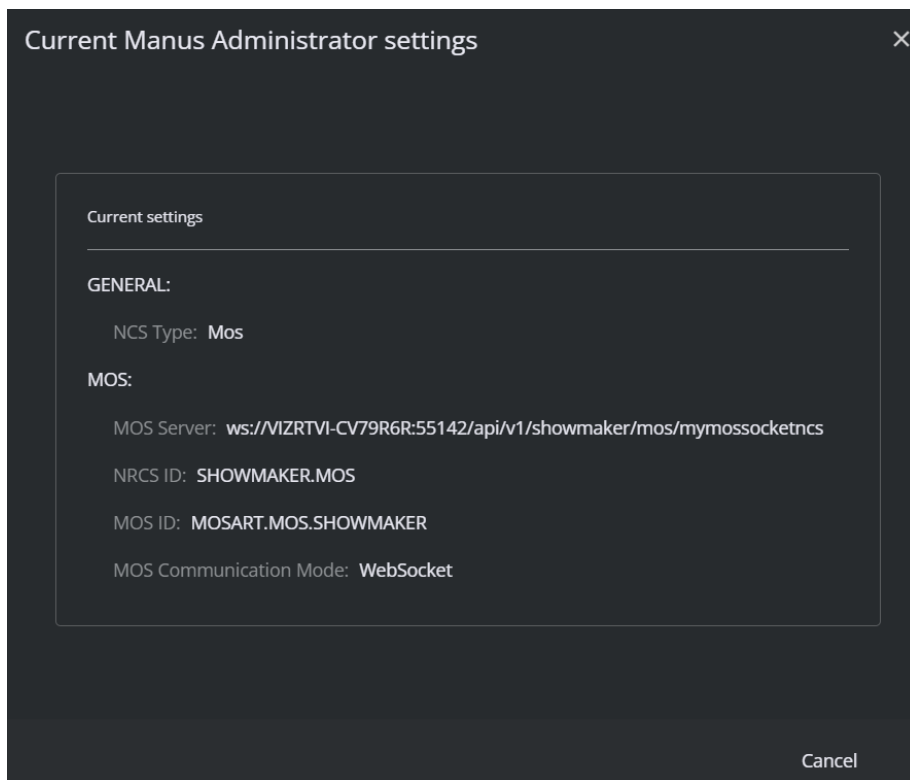
If you are running Showmaker *on another server than the Viz Mosart server*, Viz Mosart must be manually set up for connecting to Showmaker, following these instructions:

1. Review the Advanced options and, if necessary, adjust the default values as presented in the [table below](#).
2. In the **App Configuration** menu (MOS COMMUNICATION SETTINGS) for Showmaker, click the **Showmaker** icon

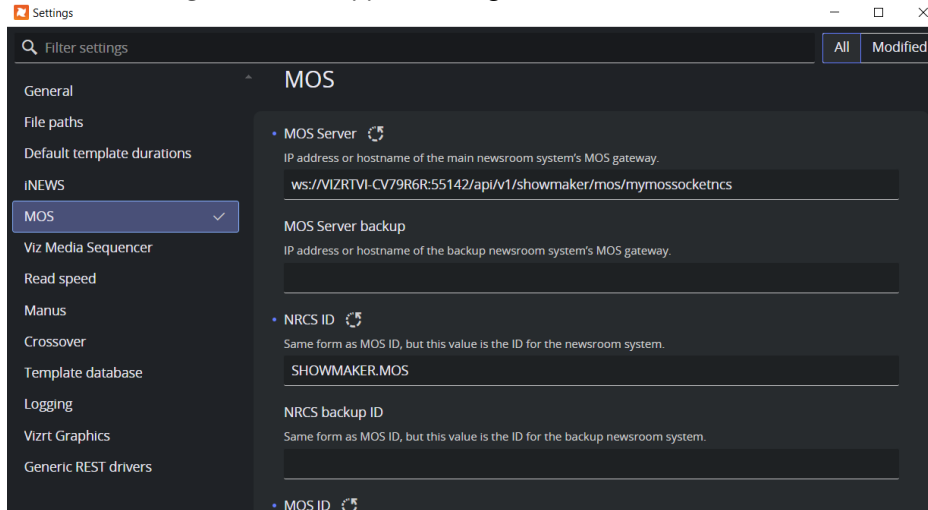


**View Settings for Manus Administrator.**





3. On the Viz Mosart server, in the Viz Mosart Manus Administrator console, type *settings*
4. From the **Settings** menu that appears, navigate to the section **MOS**.



5. Configure the MOS settings as presented in the Web Apps pop-up menu **Settings for Manus Administrator** (shown above) in the Web Apps Configuration Tool.
6. Click **Save**.
7. (optional) If changes do not appear immediately, restart the Windows service *Vizrt.Mosart.WebApps.Server*.
8. Verify the live status of each device, by calling the status endpoint with:

```
GET /api/v1/showmaker/mos/status
```

## Default Values and Multiple MOS devices (main/backup or multiple studios)

MOS COMMUNICATION SETTINGS

NCS ID ⓘ

MOS DEVICES + Add MOS Device

| ID                   | ↕ | URL                                   | ↕ | Studio   | ↕ |
|----------------------|---|---------------------------------------|---|----------|---|
| MOSART.MOS.SHOWMAKER |   | ws://localhost:10540/mos/mosartsocket |   | Studio 1 | ➤ |

## MOS COMMUNICATION SETTINGS

| Table Property | Description                                                                                                                                                                                                                                                                                                                                        |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NRCS ID        | This is the Newsroom System ID for Showmaker. Set this ID on any MOS-enabled NRCS device to establish communication with Showmaker.<br>For Viz Mosart, this value must be set in Viz Mosart Manus Admin.<br>Default: <i>SHOWMAKER.MOS</i> .                                                                                                        |
| Add MOS Device | For defining multiple MOS devices<br>Click <b>Add MOS Device</b> and follow the guidelines in this table.                                                                                                                                                                                                                                          |
| MOS Device ID  | This is the ID of a MOS device configured to communicate with Showmaker. For Viz Mosart, copy this value from <b>Manus Admin console &gt; Type settings &gt; MOS</b> section.<br>Default: <i>MOSART.MOS.SHOWMAKER</i> .                                                                                                                            |
| MOS Device URL | The URL for connecting to a MOS device.<br>For Viz Mosart server, the URL is <i>ws://mosart-server-host:10540/mos/mosartsocket</i> .<br>The port in the URL ( <i>10540</i> ) is the MOS lower port configured in the <b>Settings</b> menu of Manus Admin, under the <b>MOS</b> section.<br>Default: <i>ws://localhost:10540/mos/mosartsocket</i> . |

| Table Property | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Studio         | <p>The Studio label that this device belongs to. Type a new name to create a Studio.</p> <div> <p><b>Info:</b> A <i>Studio</i> is a label that groups one or more MOS devices. A Studio represents one production environment, typically a main Viz Mosart server with an optional backup, or a single gallery in a multi-studio site:</p> <ul style="list-style-type: none"> <li>• The metadata value of Studio exists as long as at least one MOS device references it, and disappears when no device uses the name anymore.</li> <li>• There is no separate Create studio step. You create a Studio simply by entering its name when adding a MOS device.</li> <li>• Once Studios are configured, each show (and optionally each rundown) can be assigned to a Studio. This assignment governs which Mosart server(s) the rundown is sent to.</li> </ul> <p>The Studio model keeps a single Showmaker installation flexible inside one gallery:</p> <ul style="list-style-type: none"> <li>• <b>Failover without downtime:</b> Main + backup Mosart servers under one Studio means a failover keeps the same Showmaker rundowns on air.</li> <li>• <b>Per-rundown overrides:</b> A show defaults to one Studio, but individual rundowns can be reassigned (as shown with an orange badge in the UI) This is useful for rehearsals or last-minute changes.</li> <li>• <b>Lightweight setup:</b> Studios are automatically recognized, so adding or retiring one is just a simple update to the MOS device table.</li> </ul> </div> |
| Examples       | <p>Typical configurations:</p> <ul style="list-style-type: none"> <li>• <b>One studio with main + backup:</b> Two rows with the same Studio label and the same MOS ID, and different URLs ( <code>studio1-main</code> and <code>studio1-backup</code> ).</li> <li>• <b>Multiple studios:</b> One or more rows per Studio. Each Studio can have its own main + backup pair, with the same or different MOS IDs.</li> </ul> <div> <p> <b>Note:</b> The same MOS device URL cannot be used twice across the table. Duplicates are rejected with an error message</p> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

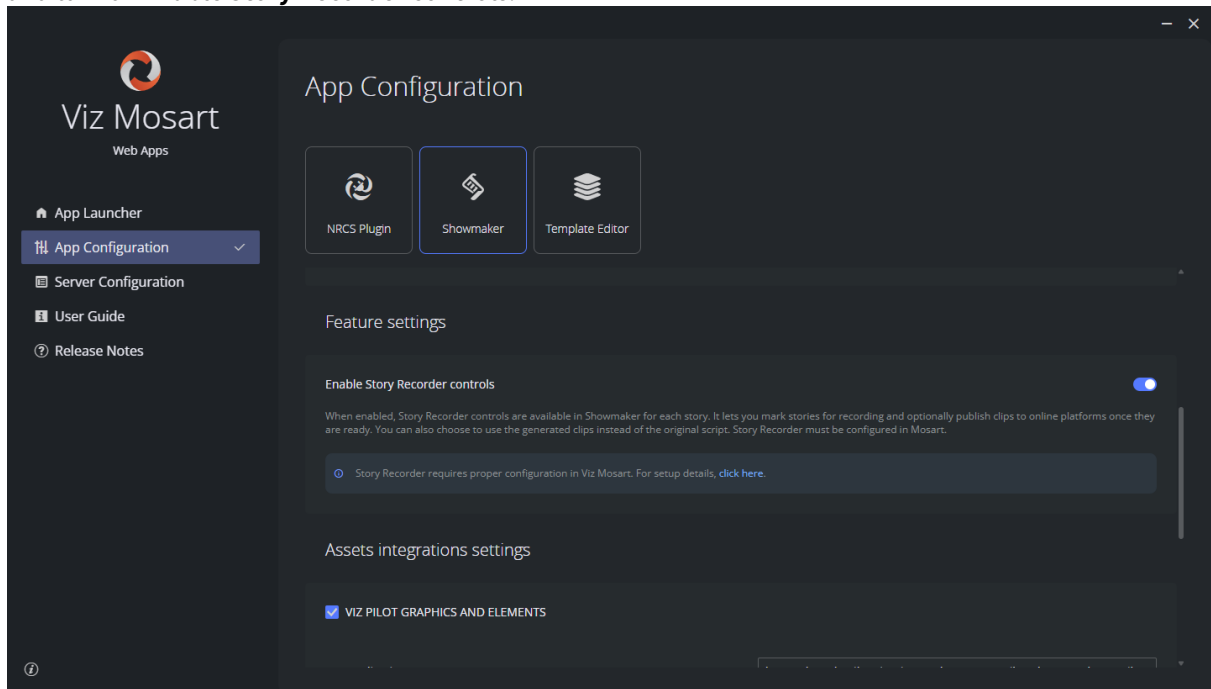
## Feature settings

### Story Recorder

Story Recorder lets operators mark stories for recording in Viz Mosart, optionally publish the resulting clips to

online platforms (only available with TriCaster) or replace the original story script with the recorded version. To make these controls available in Showmaker:

1. Configure Story Recorder in Viz Mosart first. See the [Vizrt Documentation Center](#), under *Viz Mosart Administrator Guide > Operational Examples > Story Recorder Setup*.
2. In the Configuration Tool, under App Configuration, select **Showmaker** and scroll down to **Feature settings** and turn on **Enable Story Recorder controls**.



Once enabled, every story in Showmaker contains **Record / Publish** actions and a **Use recording** toggle . For how operators use these controls, see [Working with Showmaker - Story Recorder](#).

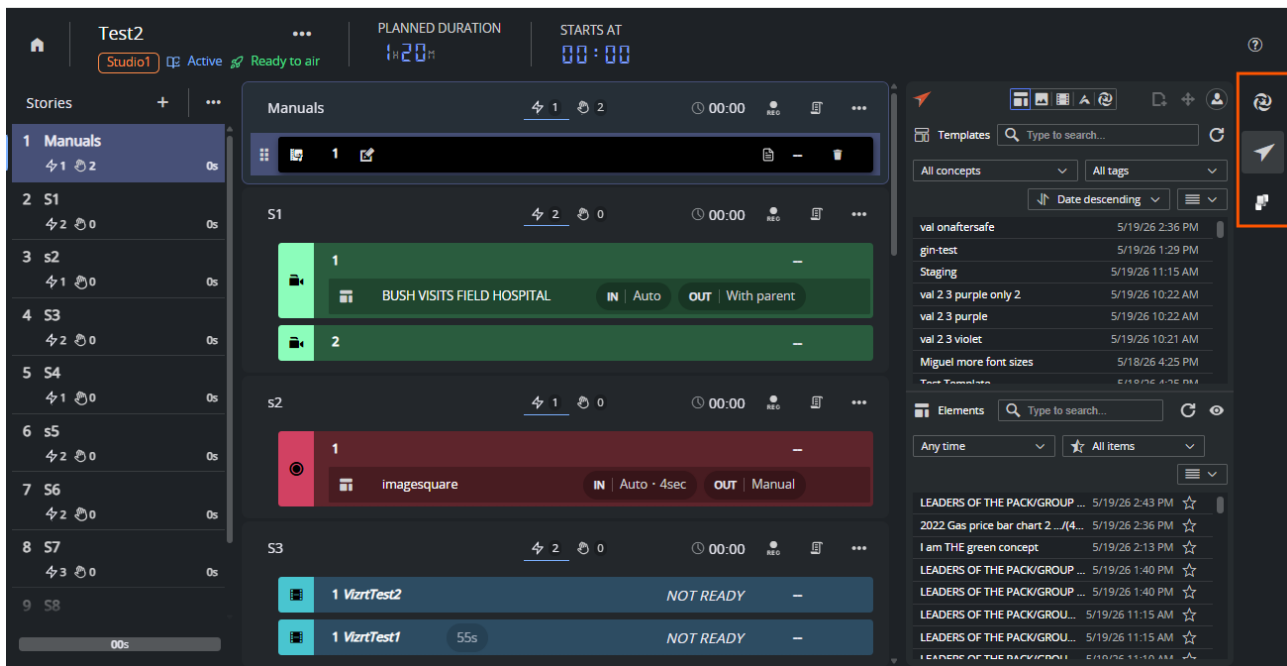
**Info:** Story Recorder details are in the [Vizrt Documentation Center](#). Refer to

- *Viz Mosart User Guide > Operation > Story Recorder*.
- *Viz Mosart Administrator Guide > Operational Examples > Story Recorder Setup*.

## Asset integrations settings

If you use either [Viz Pilot](#) or [Viz Flowics](#) to provide assets for your show, you need to configure some one-time settings. The integrations are displayed in the Showmaker integrations sidebar together with the Mosart web app, *NRCS Plugin*.

**Info:** These integrations appear in the Showmaker integrations sidebar as selectable, embedded MOS plugins (iFrames). They communicate directly with Showmaker in the browser using MOS messages, so no additional server-side configuration is required beyond specifying the URL and MOS Plugin ID.



## Viz Pilot

### To enable Viz Pilot graphics in the Assets panel

1. If you will run Showmaker with assets from Viz Pilot, select the checkbox for **VIZ PILOT GRAPHICS AND ELEMENTS**.
2. By following the on-screen information (i icon), provide values for
  - a. **Application URL**  
Where Viz Pilot Edge is running. Default: `http://localhost:8177/app/pilotedge/pilotedge.html?mosid=pilot&sendbutton`  
Enter the host of your Viz Pilot Edge installation, if not on the same machine.
  - b. **MOS Plugin ID**  
The MOS ID that Viz Pilot Edge announces. Default: `PILOT`.  
This value must match what your NRCS / Mosart side anticipates.
3. Click **Save**.

## Viz Flowics

### To enable Viz Flowics graphics

If you will run Showmaker with live assets from Viz Flowics, select the checkbox for **VIZ FLOWICS GRAPHICS**.

1. Ensure you have your Viz Flowics (cloud application) credentials to hand.
2. By following the on-screen information (i icon), provide values for
  - a. Integration token  
A token issued by Flowics support. It is stored encrypted and displays as `*****` after saving.
  - b. Application URL  
Where Viz Flowics is running.
  - c. MOS Plugin ID  
Default: `flowics.com.mos`. Change only if your NRCS / Mosart side anticipates a different id.
3. Click **Save**.  
Viz Flowics now appears as a tab in the Showmaker Assets panel.

**Info:** Nearly there! To complete this Showmaker one-time setup, you will also need to visit the [Server Configuration](#) menu, as described below.

### 5.1.3 Template Editor (Early Access)

- Please refer to the section [Setup and Administration of Template Editor](#).
- 

## 5.2 Server Configuration

- [Proxy Setup Method](#)
- [Automatic Proxy Setup](#)
- [Manual Proxy Setup](#)
- [Enabling Updates from the Mosart Server over HTTPS](#)
- [Mosart API Access](#)
- [Video Clips](#)
- [Coder for Live Previews](#)
- [TriCaster Live Previews](#)

Most settings here are needed when you

- Install the Mosart Web Apps bundle on *a separate server* to the Viz Mosart server.
- Move the Web Apps to a different server.
- Need to define the Viz Mosart backup server.
- Need to set up HTTPS across the Mosart network.
- Need to set up an authentication provider.

### 5.2.1 Proxy Setup Method

Mosart Web Apps communicates through a proxy server that must be configured.

You can choose to use the onboard proxy bundled with Viz Mosart or an external proxy.

## Server Configuration

Proxy setup method

☒ Automatic proxy setup
 ☐ Manual proxy setup

○ The automatic proxy setup method utilises an internal proxy web server where the configurations are automatically generated based on the settings on this page.

**MOSART MAIN SERVER**

Address ⓘ  Port

☐ **MOSART BACK-UP SERVER**  
If Viz Mosart is configured for redundancy with a main and backup server, provide the address of the backup Viz Mosart Server to support failover for the Mosart web applications.

☐ **HTTPS**  
Upload or manage certificates to ensure secure communication between clients and servers. When Viz Mosart Web Applications is configured with HTTPS, all communication between Viz Mosart web clients, proxy server and Viz Mosart servers must be secured.

**PROXY WEB SERVER**

Click either

- **Automatic proxy setup** - to use the onboard proxy server ([Caddy v2](#)).
- or
- **Manual proxy setup** - to use your own proxy server.

## 5.2.2 Automatic Proxy Setup

To set up the automatic proxy server

1. You can use the onboard proxy web server where configurations are automatically generated based on the settings displayed on the **Server Configuration** page.
2. All default settings are already pre-filled and *no further action should be necessary*. However, if you need to change any values see the settings below:
  - a. **MOSART MAIN SERVER**
    - i. **Address:** By default, this field will contain the address of the Mosart Web Applications. Please enter the hostname, IP address, or FQDN of the main Viz Mosart server *if located on another machine*.
  - b. **MOSART BACK-UP SERVER**

When running Viz Mosart with a backup for redundancy, provide the backup server address.

    - i. Select the **MOSART BACK-UP SERVER** checkbox.
    - ii. **Address:** Enter the hostname, IP address, or FQDN of the backup Viz Mosart server.
  - c. **PROXY WEB SERVER**

- i. **Address:** Hostname or IP address of the machine where the Mosart Web Applications are installed. The system attempts an auto-detect.

If the *FQDN is required* (for example, by a certificate), provide this instead.

3. Click **Save**.

## HTTPS

In this *Automatic proxy setup*, selecting HTTPS automatically configures both the Mosart Web Applications and the Mosart Web Proxy (Caddy). The hosts included in the certificate are validated against the web proxy server defined in the field **WEB PROXY SERVER > Address**.

For the Mosart Web Proxy, the configured private key is used to automatically generate an unencrypted PEM-format required by Caddy,

which is saved in `C:\ProgramData\Mosart Medialab\Mosart Web Apps`.

**Info:** If the Mosart Web Proxy and the Mosart Web Applications are configured with *HTTPS*, you must also configure **HTTPS for the Mosart servers** (Main and Backup, if applicable). See [Enabling Updates from the Mosart Server over HTTPS](#).

### 5.2.3 Manual Proxy Setup

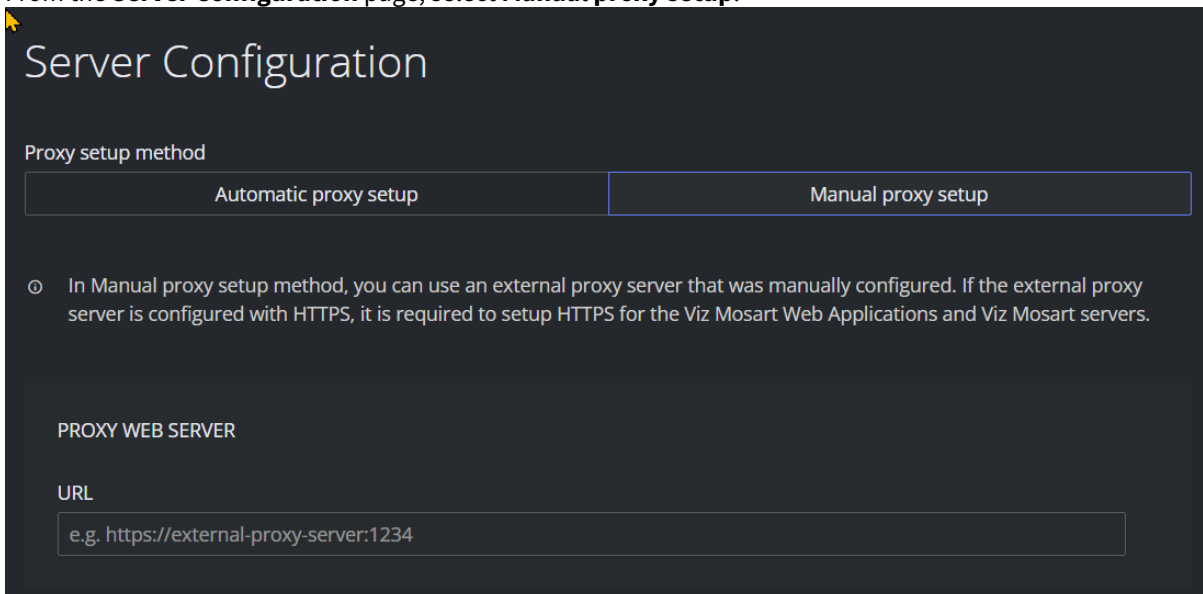
You can use an external proxy server, but it must be manually configured.

If the external proxy server is configured with *HTTPS*, you must also set up HTTPS for the Viz Mosart Web Applications and Mosart servers.

- ✓ **Tip:** You can examine the [Caddy file](#) generated when *Automatic proxy setup* is selected to understand how to set up an external proxy. This Caddy file resides at `C:\ProgramData\Mosart Medialab\Mosart Web Apps`.

To manually set up a proxy server

1. From the **Server Configuration** page, select **Manual proxy setup**.



The screenshot shows the 'Server Configuration' window. At the top, the title 'Server Configuration' is displayed. Below it, the 'Proxy setup method' section has two buttons: 'Automatic proxy setup' and 'Manual proxy setup'. The 'Manual proxy setup' button is highlighted with a blue border. Below the buttons, there is a note: 'In Manual proxy setup method, you can use an external proxy server that was manually configured. If the external proxy server is configured with HTTPS, it is required to setup HTTPS for the Viz Mosart Web Applications and Viz Mosart servers.' Further down, the 'PROXY WEB SERVER' section is visible, with a 'URL' label and a text input field containing the example 'e.g. https://external-proxy-server:1234'.



- Under section **PROXY WEB SERVER** in field **URL**, enter the URL address to the external proxy server. This must be a valid web URL starting with http or https.

### HTTPS

In *Manual proxy setup*, the certificate is only for the Mosart web server. The hosts included in the certificate are validated against the Mosart web server address field (under the **HTTPS** section).

If you are using *HTTPS*, continue with steps **3** to **5** below.

- Select the **HTTPS** check-box and follow the onscreen guidelines 'i'.

☒ **HTTPS**

Upload or manage certificates to ensure secure communication between clients and servers. When Viz Mosart Web Applications is configured with HTTPS, all communication between Viz Mosart web clients, proxy server and Viz Mosart servers must be secured. This section enables HTTPS for the Viz Mosart Web Applications only. Enabling HTTPS for the external proxy server must be handled manually.

Web Server Address ⓘ

Certificate file ⓘ  Choose file

Private Key file ⓘ  Choose file

Password ⓘ

- Web Server Address:** The IP or the hostname of the Viz Mosart web server. The system attempts an auto-detect. If the *FQDN is required* (for example, by a certificate), provide this instead.
- Certificate file:** The certificate in encrypted PEM format. If FQDN is specified in the certificate file, the Mosart web server address must also be a FQDN.
- Click **Save**.

## 5.2.4 Enabling Updates from the Mosart Server over HTTPS

If using *HTTPS* with the Mosart Web Apps (*NRCS Plugin*, *Rundown Viewer* or *Smart Panel*), you need to configure the Mosart Remote Dispatcher Service to allow continuous rundown updates between the Viz Mosart server and the web applications.

### To turn HTTPS on in Mosart Remote Dispatcher Service

- On the Viz Mosart server machine, copy the file `C:\Program Files (x86)\Mosart Medialab\Mosart Server\ConfigurationFiles\RemoteDispatcherServiceConfig.xml` to `C:\ProgramData\Mosart Medialab\ConfigurationFiles`.
- Fill in the following fields:
  - SignalRUseHttps:** `true`
  - SignalRCertificatePath:** `<Certificate File for Viz Mosart server>`
  - SignalRCertificateKeyPath:** `<Private Key file for Viz Mosart server>`
  - SignalRCertificatePassword:** `<Password as configured for the private key>`

```
<item name="SignalRUseHttps" value="true" />
<item name="SignalRCertificatePath" value="C:\CODE\server2.cer" />
<item name="SignalRCertificateKeyPath" value="C:\CODE\server2.key" />
<item name="SignalRCertificatePassword" value="password" />
```

3. Restart the Remote Control Service.

## 5.2.5 Mosart API Access

MOSART API ACCESS  
Web Applications can call a limited set of methods directly on the Mosart Server. To protect the Mosart API from unauthorized access we use authorization method called 'API Key'. Each call to the Mosart Server will be automatically appended with the key when you send a request. See details  
  
Authorization Key ⓘ

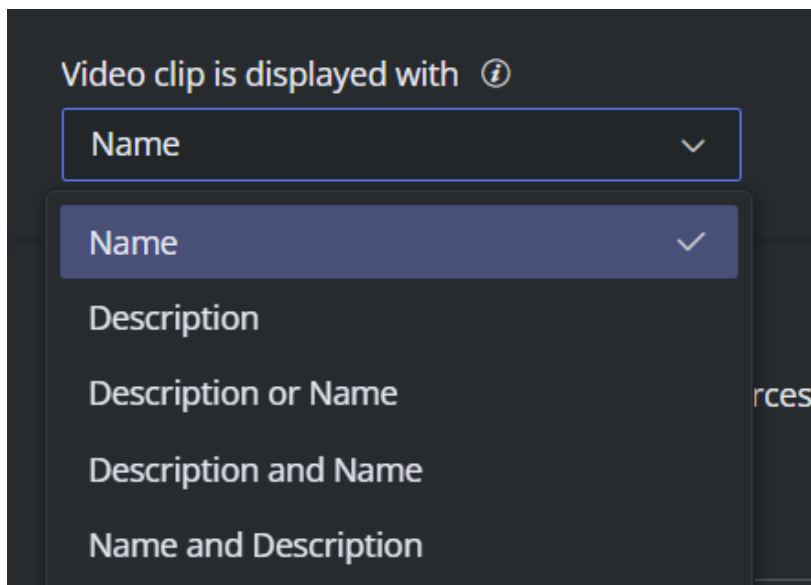
The Authorization Key entered here is essential for accessing methods provided for special features. For example, *clip search* utilities in the NRCS Plugin request lists of clips from the Viz Mosart Media Administrator. This requires a special secure call to the Viz Mosart server through the Mosart Remote Control Service (RCS). RCS contains the special key-value item in its configuration file `RemoteDispatcherServiceConfig.xml`, where the **RestApiKey** entry is the value that must be entered here as **Authorization Key**.

**See also:** Authentication provider guidelines for [Mosart REST API](#) (below).

## 5.2.6 Video Clips

This Server Configuration setting affects only *Timing Display*. Video clips (PACKAGE templates) can be presented with various details.

- Select what to display from the dropdown menu.



### 5.2.7 Coder for Live Previews

Coder is a Vizrt application which makes NDI sources on your network available to the web apps as live previews (for example, an NDI camera or program feed shown in Smart Panel). The Mosart web server reverse-proxies Coder to the browser, so only the Mosart web server needs network access to the Coder host, end users do not.

1. Install and run Coder on a machine that can see the NDI sources you want to preview. The latest version is recommended.
2. In the Configuration Tool, open **Server Configuration** and scroll down to **CODER FOR LIVE PREVIEWS**.
3. Enter the **Address** (host name or IP of the Coder machine) and **Port** (default `8081`).

The Configuration Tool checks the URL as you type and shows whether Coder is reachable.

4. After the Mosart Web Application restart, open `http://<your-mosart-web-apps-host>:5512/coder/web_preview/` in a browser to verify Coder is reachable.

You should see an XML list of sources. If the page returns an error or nothing at all, Coder is not running, not reachable, or has no sources to publish.

**Note:** Mosart Web Apps connect to Coder over HTTP. Coder is *not* reachable over HTTPS in this setup, even if Mosart Web Apps itself is configured with HTTPS. The Coder host must be on a trusted internal network.

### Troubleshooting Coder

If Smart Panel cannot find any NDI sources, or live previews fail to load, work through these checks in order:

1. **Confirm Coder is installed and running** on the configured host, and that the address and port match the Configuration Tool.
2. **Open the Coder UI** in a browser at `<http://<coder-host>>:8081/ui/war/index.html` :
  - Under **Workers**, at least one worker must be listed as *Responsive*.

- If the worker status is *Not benchmarked*, run `run_benchmark.exe` from the Coder installation folder, then restart both the Coder master and the Coder worker. NDI sources only become available after a successful benchmark.
3. **Verify a single source from the browser.** In Smart Panel, copy the preview URL of an NDI item from the **Layout Items** list and open it in a new browser tab. If it does not play there, the problem is on the Coder side, not in Smart Panel.
  4. **Check the network.** NDI sources only appear when they are on the same network segment as the Coder host. If sources are missing, confirm they are visible from the Coder machine itself.

### 5.2.8 TriCaster Live Previews

If your studio uses a TriCaster, Smart Panel can show its video inputs as *Live previews*. The Mosart web server proxies the streams on behalf of the browser, so it needs the TriCaster address and a user account.

1. In the Configuration Tool, open **Server Configuration** and scroll down to **TRICASTER FOR LIVE PREVIEWS**.
2. Enter the TriCaster **Address** and the **Username / Password** of an account with access to the TriCaster web browser URL.

After this, TriCaster inputs become selectable as preview sources in the relevant Web App.

## 5.3 Mosart REST API

Mosart Web Applications can be used as a proxy to call the Mosart REST API on the current active server.

### 5.3.1 API Documentation

- With Web Apps running, you can browse the API documentation at `http://[web-apps-machine:port]/mosart/swagger`.

## 5.4 HTTPS Usage Notes

When Mosart Web Applications are configured with HTTPS, all communication between clients, proxy servers, and content servers must be secured.

This includes the following components:

- Mosart web clients (*Rundown Viewer, NRCS Plugin, Timing Display etc.*).
- Mosart web server (*Mosart Web Applications* service).
- Proxy server (either internal (*Mosart Web Proxy* service) or external).
- Mosart server (*Mosart Remote Control Service*).
- Coder: Mosart Web Apps connect to Coder over HTTP. Coder is *not* reachable over HTTPS, even when Mosart Web Apps are configured with HTTPS.

### 5.4.1 Certificate Requirements

- **Type:** X.509 certificates.
- **Format:** PEM-encoded certificates and private keys.

- For the Mosart Web Proxy (Caddy), the key must be in unencrypted PEM format, which is automatically generated by Mosart from the provided encrypted key file.
- **Encryption:** Private keys must be encrypted and provided with the corresponding password. You can verify if the key is encrypted by opening it in an editor and checking that it starts with "-----BEGIN ENCRYPTED PRIVATE KEY-----" and ends with similar text.
- **Host coverage:** The certificate must include the host where the Mosart Web Applications are installed. The hosts provided in the Mosart Web Config tool will be validated against the certificate (case sensitive). If the hosts in the certificate are the Fully Qualified Domain Name (FQDN), then the hosts provided in the Mosart Web Config Tool must be the FQDN as well. If the same certificate and key files are used across all Mosart components (Mosart web server, Mosart web proxy, Mosart server main, Mosart server backup), the certificate must specify all relevant hosts or their FQDNs.

## 5.4.2 Certificate Installation

Certificates must be trusted on any machine where Mosart Web Apps are used. Ensure the certificates are installed on:

- Mosart Web Applications / Mosart Web Proxy.
- Any Mosart server.
- Any machine running Mosart web clients.

If the certificate is not installed on a machine using a Mosart Web App, the browser will warn of insecure connection, suggesting you proceed at your own risk. However, if the Mosart Web App is integrated as a plugin within other applications (for example, into ENPS), there may be no warning, and instead issues like pages displaying blank, may be experienced.

---

## 5.5 Authentication

Viz Mosart Web Applications supports authentication using *OpenID Connect*.



**Info:** For the corresponding mandatory authentication settings on the Viz Mosart server side, refer to the [Viz Mosart Administration Guide](#), section **Operational Examples > Mosart Remote Control REST API**.

### 5.5.1 Prerequisites

- HTTPS has to be configured to use authentication.
- You need a third party OpenID Connect authentication service, such as Keycloak, Okta, or Microsoft Entra ID. (If you are already using Vizrt's asset management system, *Viz One*, you should already have a Vizrt SSO Keycloak authentication server).

### 5.5.2 Roles

- Roles grant user permissions, what a user can do with the app. Roles are assigned either to a single user or to all members of one or more groups.

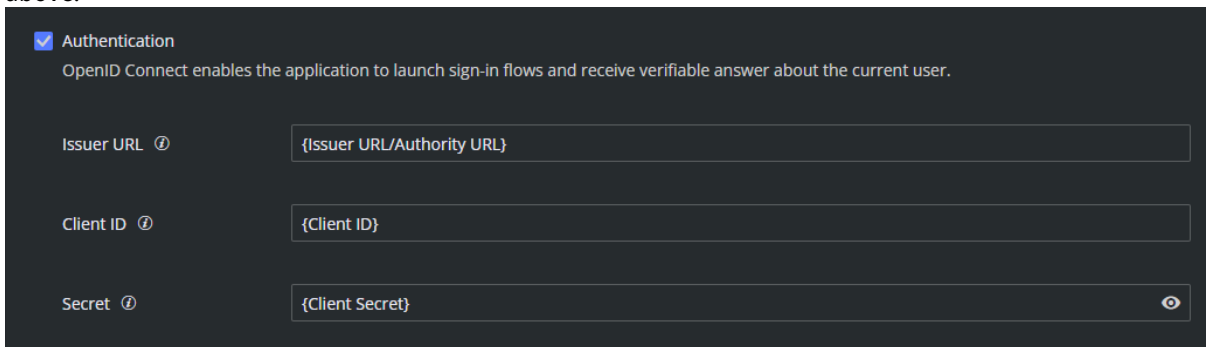
- You can configure user roles in Mosart Web Applications to define user permissions. The granularity of permissions depends on the authentication provider being used.
- Role *names* are predefined and fixed by Vizrt, but you are free to define or reuse groups as you like.

## Showmaker

| Role name        | Permissions      |
|------------------|------------------|
| showmaker-viewer | ✓ (view only)    |
| showmaker-admin  | ✓ (full control) |

### 5.5.3 Setup

1. Create a new Client/App registration according to your authentication provider guidelines:
  - a. [Keycloak guide](#)
  - b. [Keycloak guide for Vizrt SSO](#)
  - c. [Entra guide](#)
  - d. [Okta guide](#).
2. Your authentication provider must provide
  - Issuer URL/Authority URL
  - Client ID
  - Client Secret.
3. Open the Mosart Web Application Configuration Tool and select **Server Configuration**.
4. Under the **HTTPS** section, enable the **Authentication** check-box and enter the details obtained at step 2, above.



The screenshot shows a dark-themed configuration window. At the top, there is a checkbox labeled 'Authentication' which is checked. Below it, a text description reads: 'OpenID Connect enables the application to launch sign-in flows and receive verifiable answer about the current user.' Below this, there are three input fields: 'Issuer URL' with a placeholder '{Issuer URL/Authority URL}', 'Client ID' with a placeholder '{Client ID}', and 'Secret' with a placeholder '{Client Secret}' and a toggle icon on the right.

5. Click **Save**.

Authentication is now enabled.

### 5.5.4 Provider-specific Newsroom Authentication

#### iNEWS

Authentication will only work if you are using the NRCS plugin with the NRCS plugin *iNEWS Client Addon*. Authentication will not work by hosting the Plugin as a regular HTML plugin.

## ENPS

To use the NRCS plugin with ENPS, first add your ENPS server machine to the list of allowed frame-ancestors in the Content Security Policy on your Authentication Provider.

Typically this is a simple edit of the Content Security Policy:  
From

```
frame-src 'self'; frame-ancestors 'self'; object-src 'none';
```

to

```
frame-src 'self'; frame-ancestors 'self' {Your ENPS server}; object-src 'none';
```

- **Keycloak:** Go to **Realm Settings > Security Defenses**.
- **Okta:** Follow this [Okta guide](#).
- **Entra:** Since you cannot edit the Content Security Policy for Microsoft Entra ID, authentication with Entra ID for the NRCS plugin in ENPS is not supported.

## Octopus

NRCS plugin authentication is not currently supported with Octopus.

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## 5.6 Troubleshooting

See section [Troubleshooting](#).

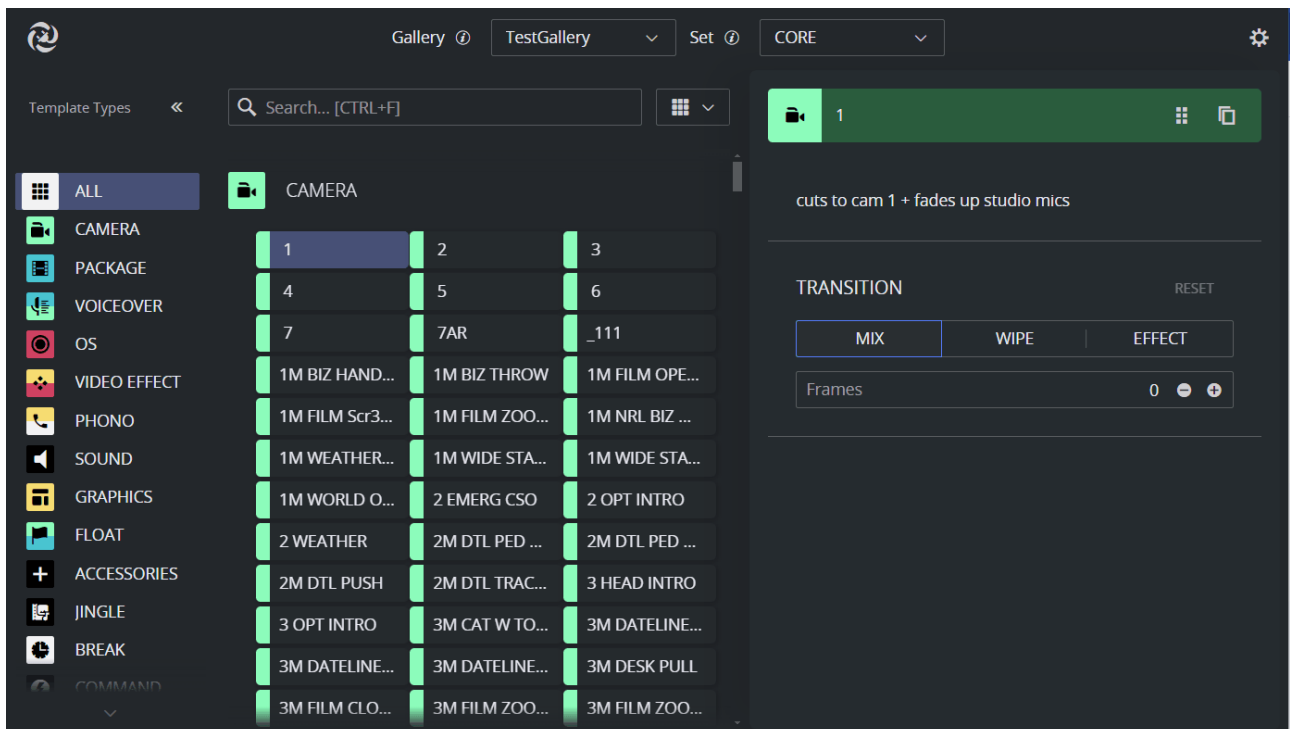
## 6 NRCS Plugin

The NRCS Plugin is an effective drag and drop tool for reliably adding Viz Mosart template instructions to an NRCS story.

- [Working with the NRCS Plugin](#)
- [NRCS Plugin in Pilot Edge](#)
- [Setup and Administration](#)

**Info:** For news-breaking details on the **Mosart NRCS Plugin**, please refer to the *Mosart Web Apps Release Notes* for your version of Viz Mosart at [the Vizrt Documentation Center](#).

**Tip:** This document contains *animated graphics*. If you are viewing as PDF, we recommend browsing the latest [web version](#).





---

## 6.1 Working with the NRCS Plugin

The NRCS Plugin delivers the functionality previously provided by the legacy *Viz Mosart ActiveX* Plugin.

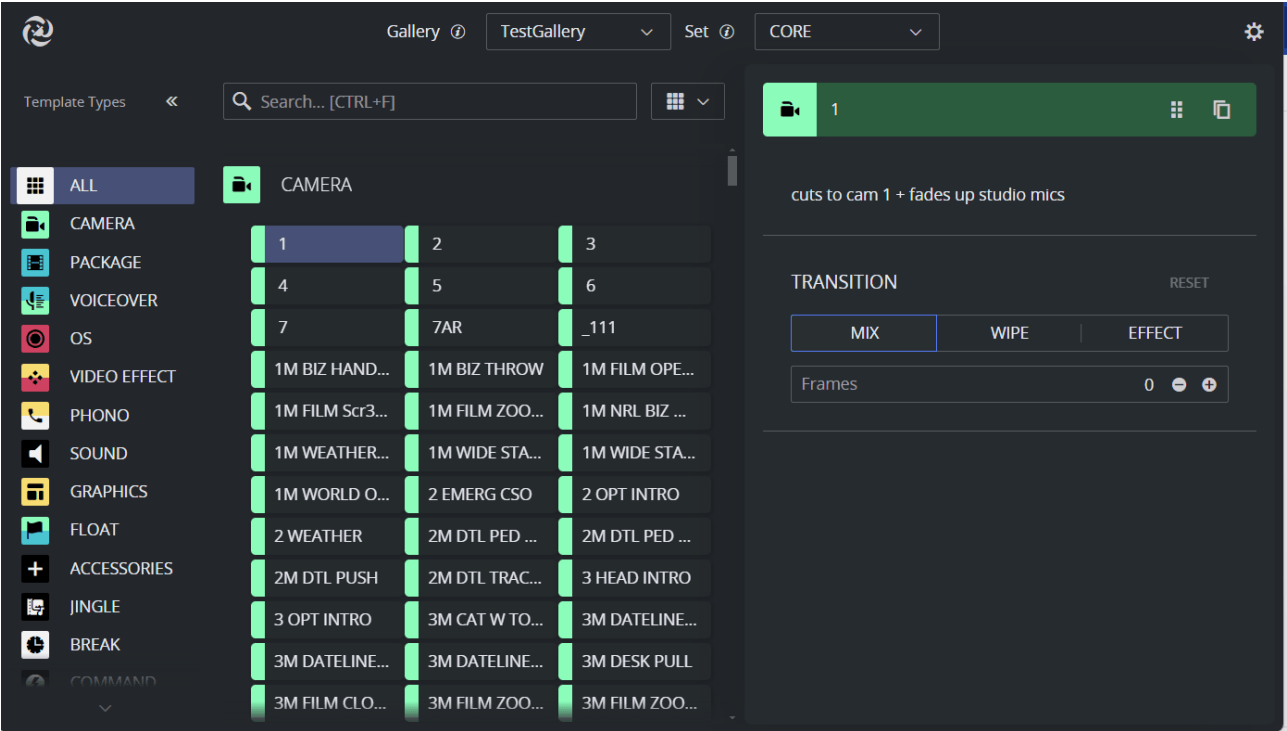
- [User Operations](#)
- [Getting Help](#)
- [Error Handling](#)
- [API Documentation](#)

### 6.1.1 User Operations

- [Searching for a Template](#)
- [Modifying a Template](#)
- [Adding Template Details to the NRCS](#)
- [Refreshing Template Changes](#)
- [Optimizing Your NRCS Plugin Workspace](#)
- [Copying the MOS Object Details](#)
- [Modifying Existing MOS Objects](#)

#### Searching for a Template

Locate a template by selecting a *template set* and typing a *variant* or *template type* in the Search box. Auto-suggest will display search results as you type. If the application is configured to use a template database, you will also need to select a *gallery*. If the application uses templates from a file, there will be only one gallery, so no gallery selection is required.



Text highlighting helps with pinpointing search results:



## Modifying a Template

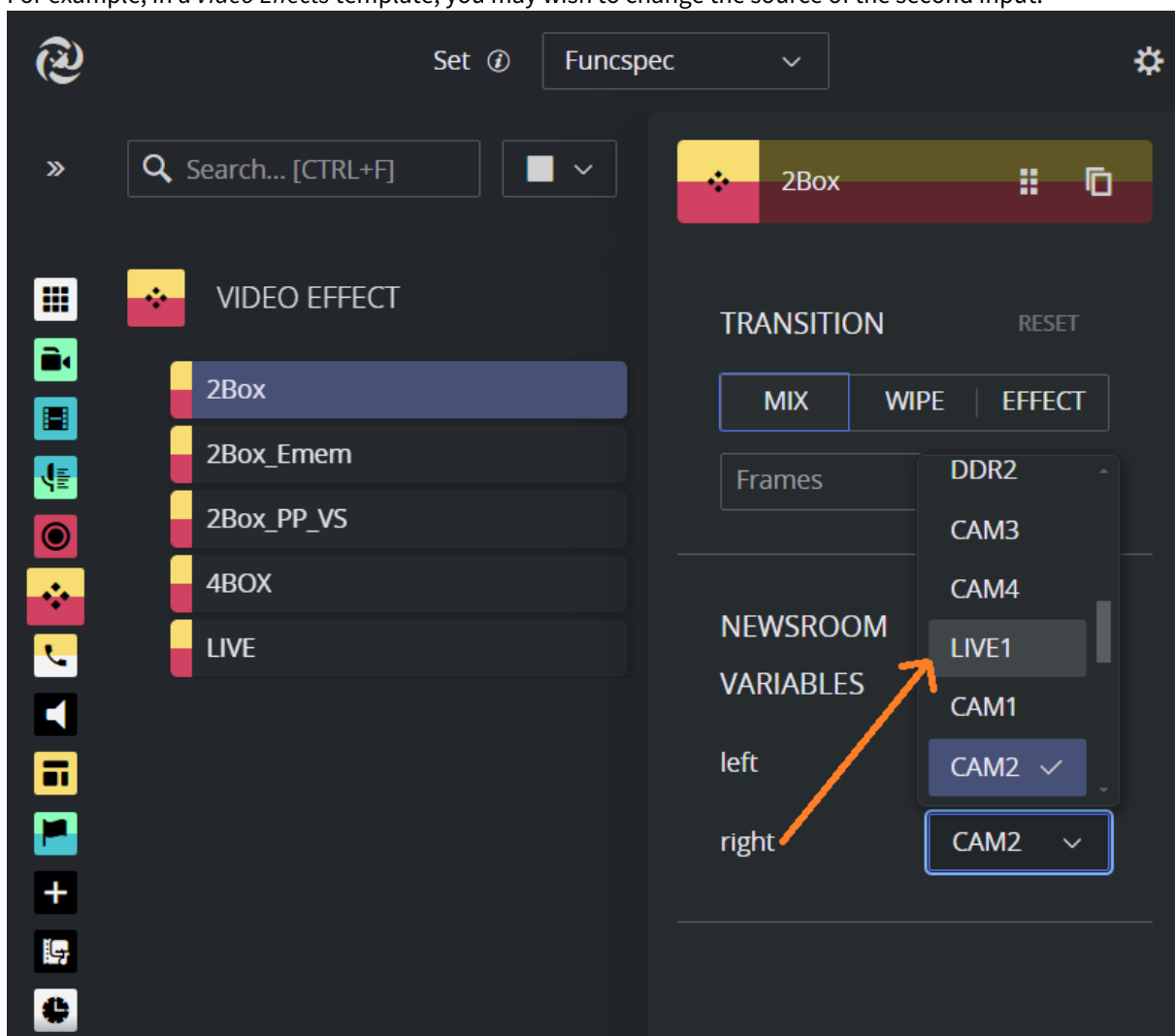
To modify production characteristics

### Variables

- Click on a template in the search listing. Properties (called *Variables*) that have been added to the template (using Viz Mosart's Template Editor) appear to the right.

**Note:** *Variables* are called *Newsroom tags* in the Viz Mosart Template Editor.

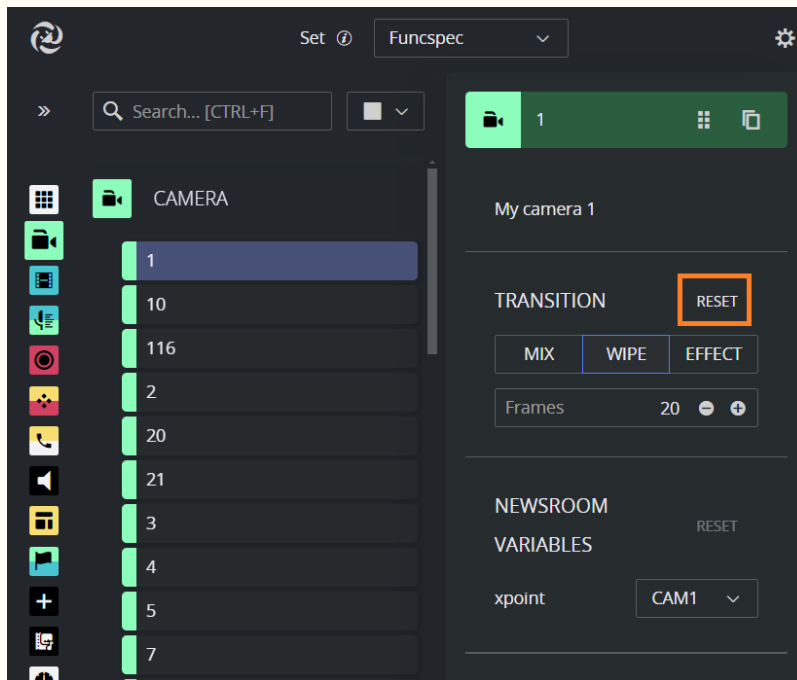
- You can temporarily override any defaults, and add new variables.  
For example, in a *Video Effects* template, you may wish to change the source of the second input:



### Transitions

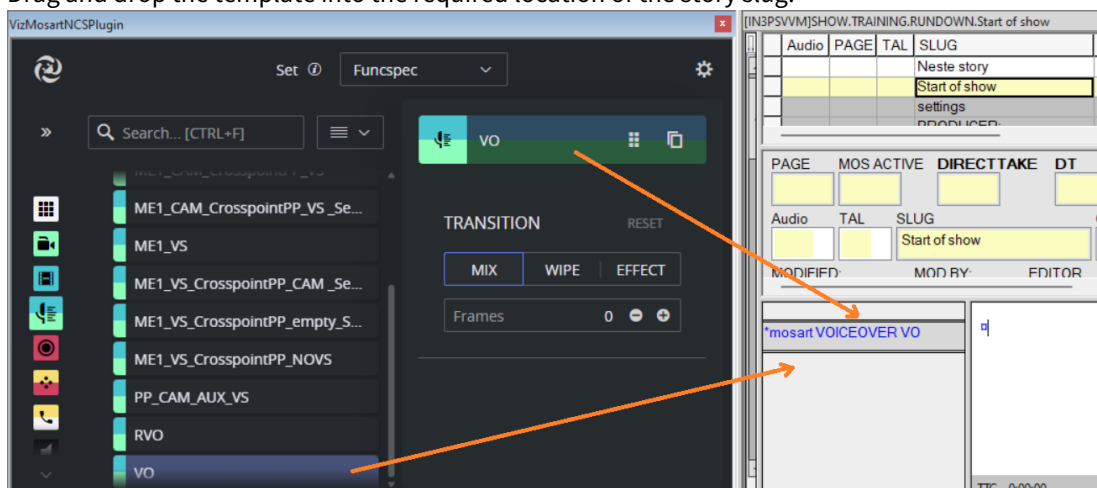
- The **Transition** field initially displays the *default* transition type. This value indicates the most significant template behavior.
- You can temporarily *modify* this transition type, and then later restore the default transition (as originally set in the Template Editor).

**Note:** You can restore the default transition by clicking the **Reset** button.

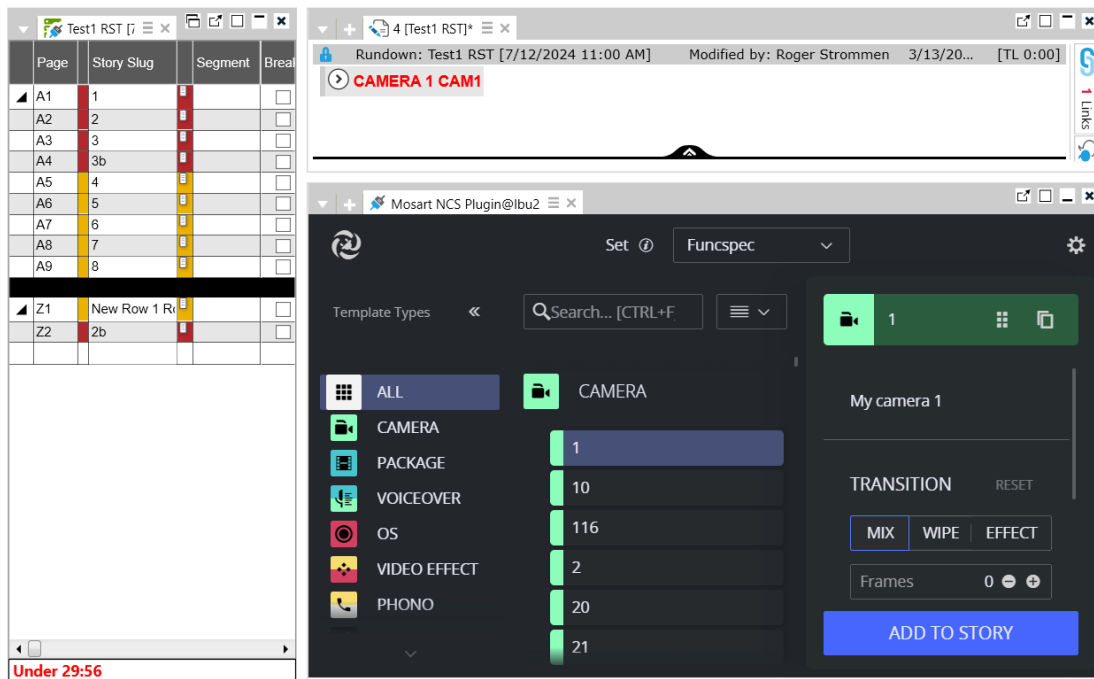


## Adding Template Details to the NRCS

- Drag and drop the template into the required location of the story slug.



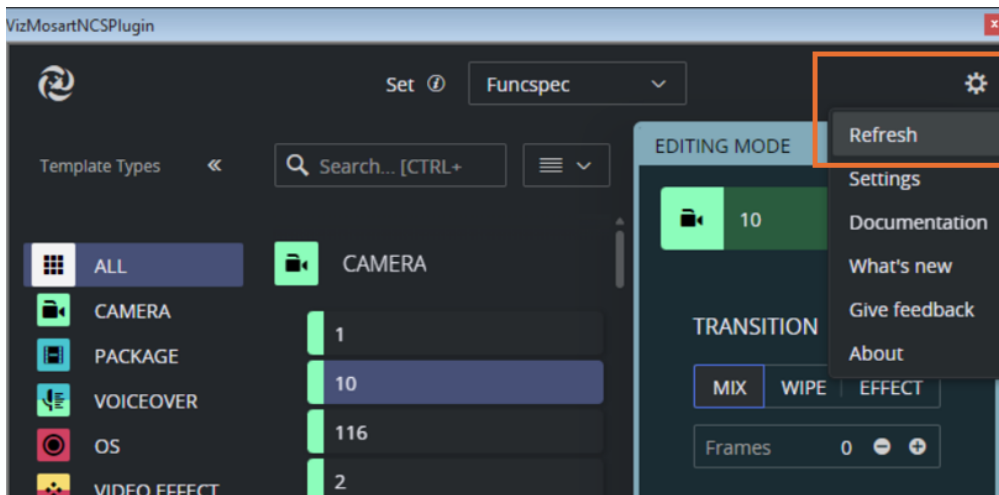
- In a MOS-based NRCS, in addition to drag and drop, the **Add to Story** button can be used to add a template to a story.



**Info:** The names of both the *gallery* and the *template set* of your selected template are always included with the MOS object that you store as a story item in your NRCS rundown. Any future use of this NRCS MOS item will always point to exactly the same template (same *gallery*, *template set* and *template name*) when it displays in the Mosart NRCS Plugin.

## Refreshing Template Changes

If changes are being made to the active template set (by another operator using Viz Mosart's Template Editor), click the **Refresh** button from **Settings** to get the latest template changes.

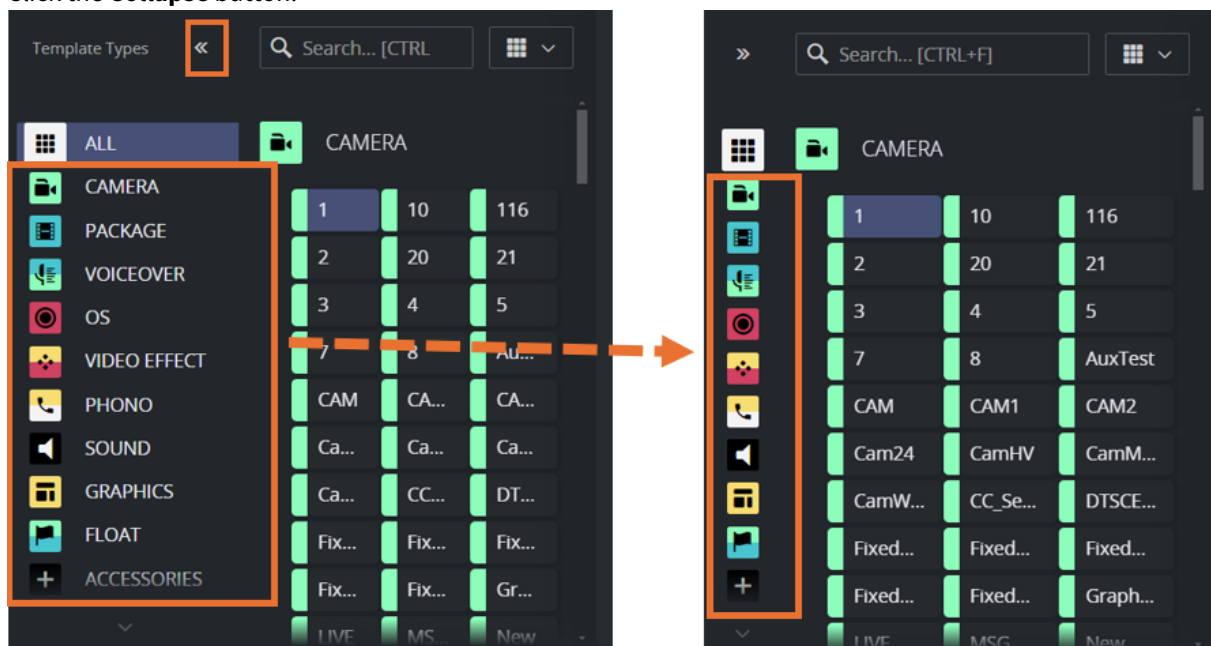


## Optimizing Your NRCS Plugin Workspace

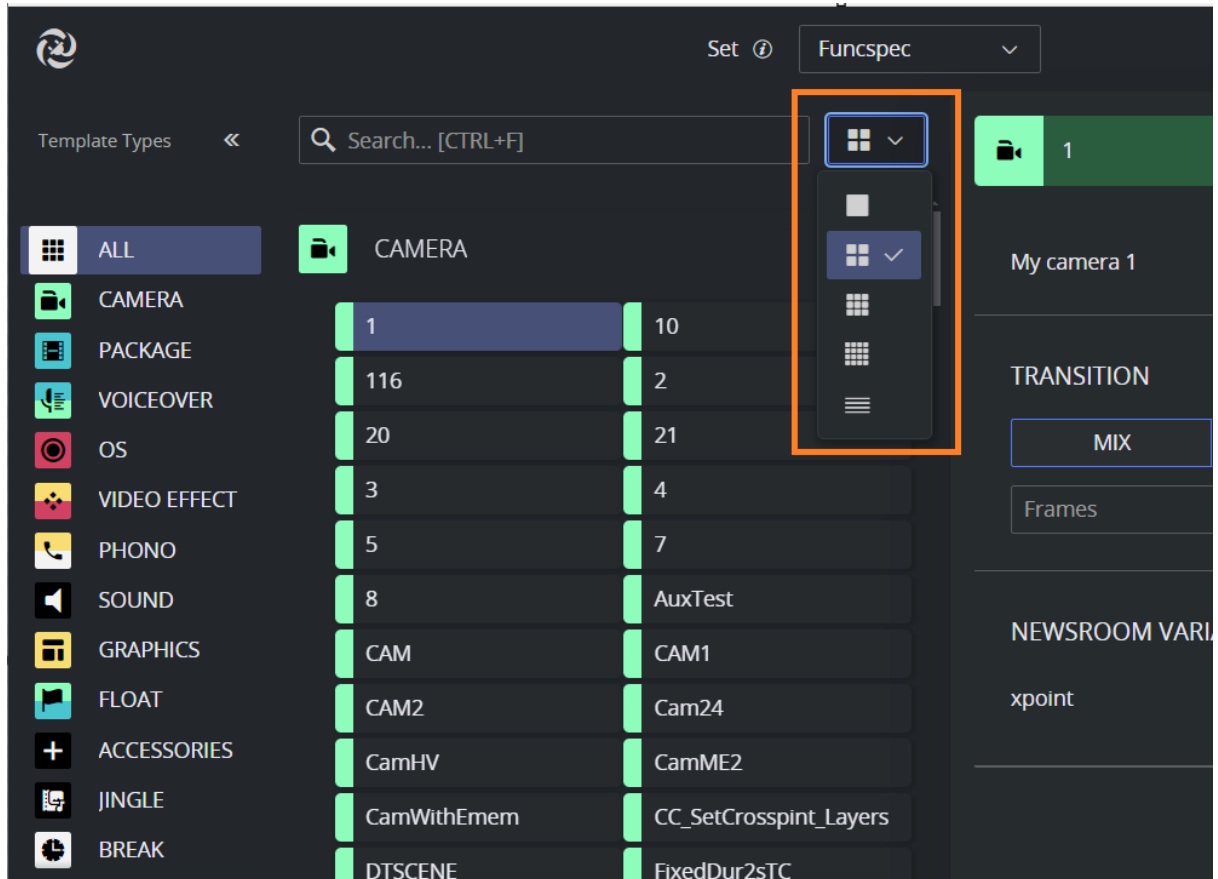
### Collapsing the Type listing

You can save some screen space taken by the Mosart NRCS Plugin by collapsing the **Template Types** panel:

- Click the **Collapse** button.



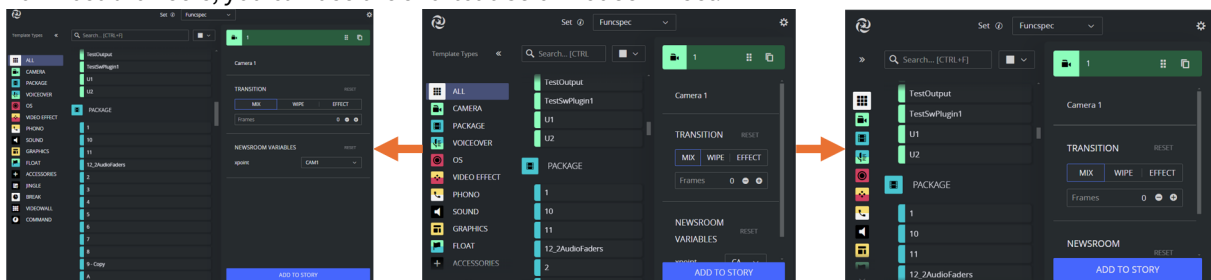
- You can customize the number of columns to adjust the template list size. Selecting the last option will automatically fit the number of columns to the window size.



## Scaling the View

As the Plugin is a web application, you can set your preferred scale by *zooming in and out*.

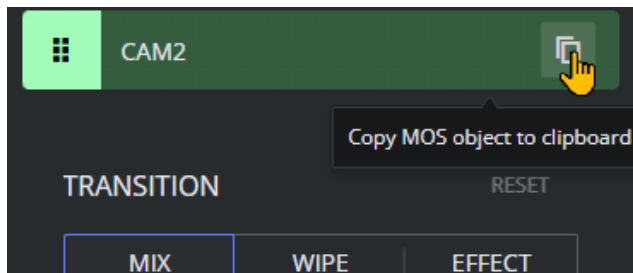
- For most browsers, you can use the shortcut **Ctrl+mouse wheel**.



## Copying the MOS Object Details

You can work with the template's raw MOS data by first copying it to your PC's clipboard.

- From a selected template, click **Copy** icon.

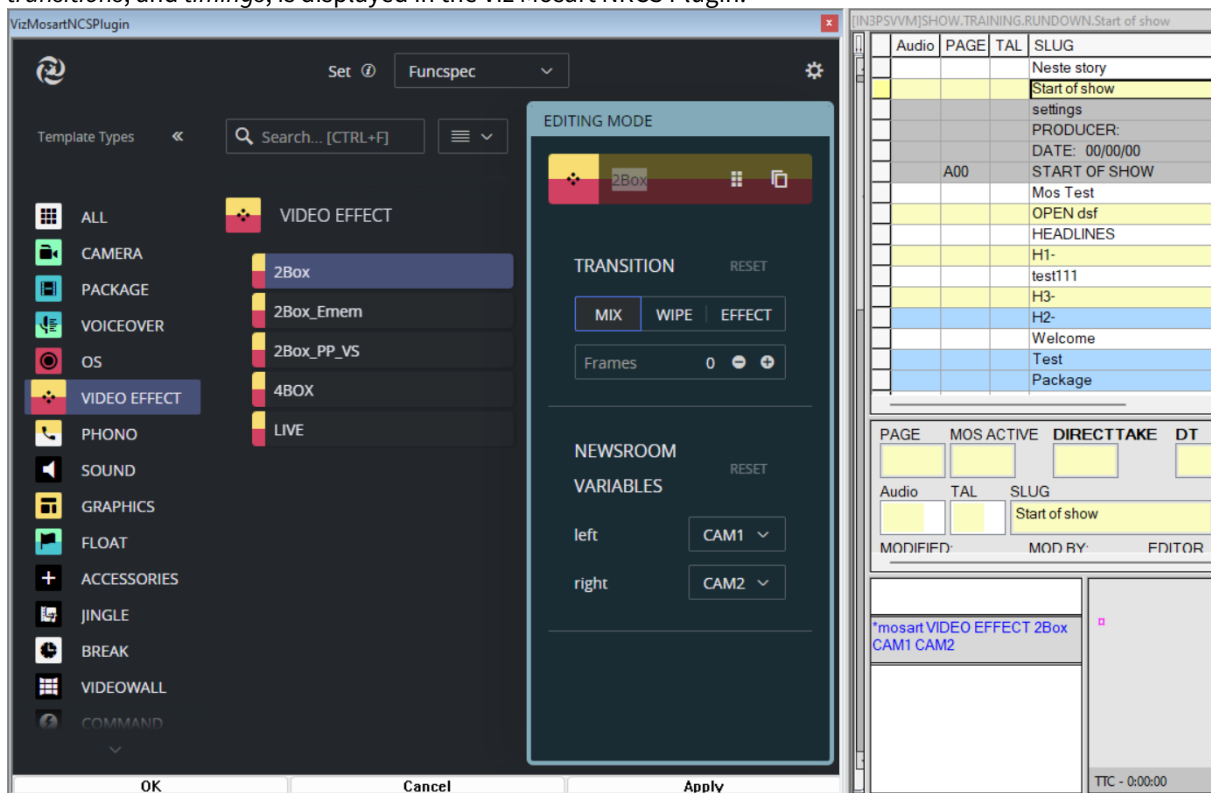


## Modifying Existing MOS Objects

Your rundown will usually contain slugs with MOS objects that have been created with either this Mosart NRCS Plugin or the legacy component, Viz Mosart ActiveX.

To modify an existing MOS object

1. On the selected rundown story, double-click the slug or grommet that holds the story's MOS object.
2. The corresponding Viz Mosart template, along with control details such as *newsroom tags*, *crosspoints*, *transitions*, and *timings*, is displayed in the Viz Mosart NRCS Plugin.

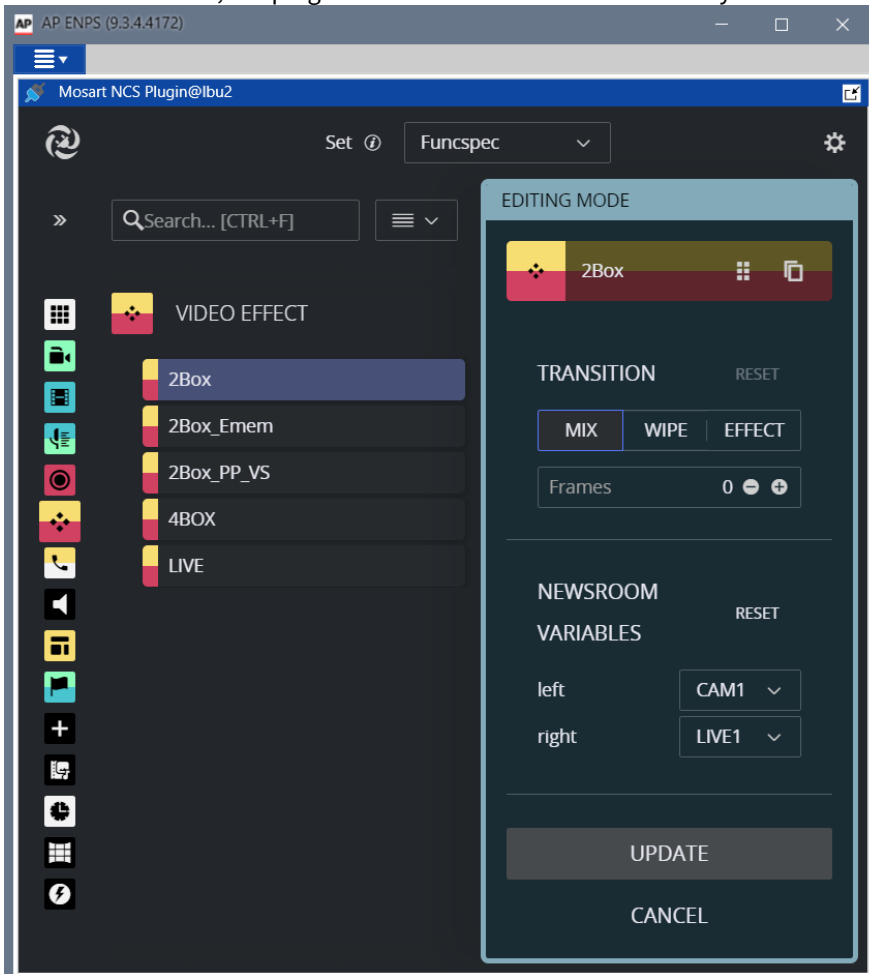


Make the modifications directly in the Mosart NRCS Plugin window.

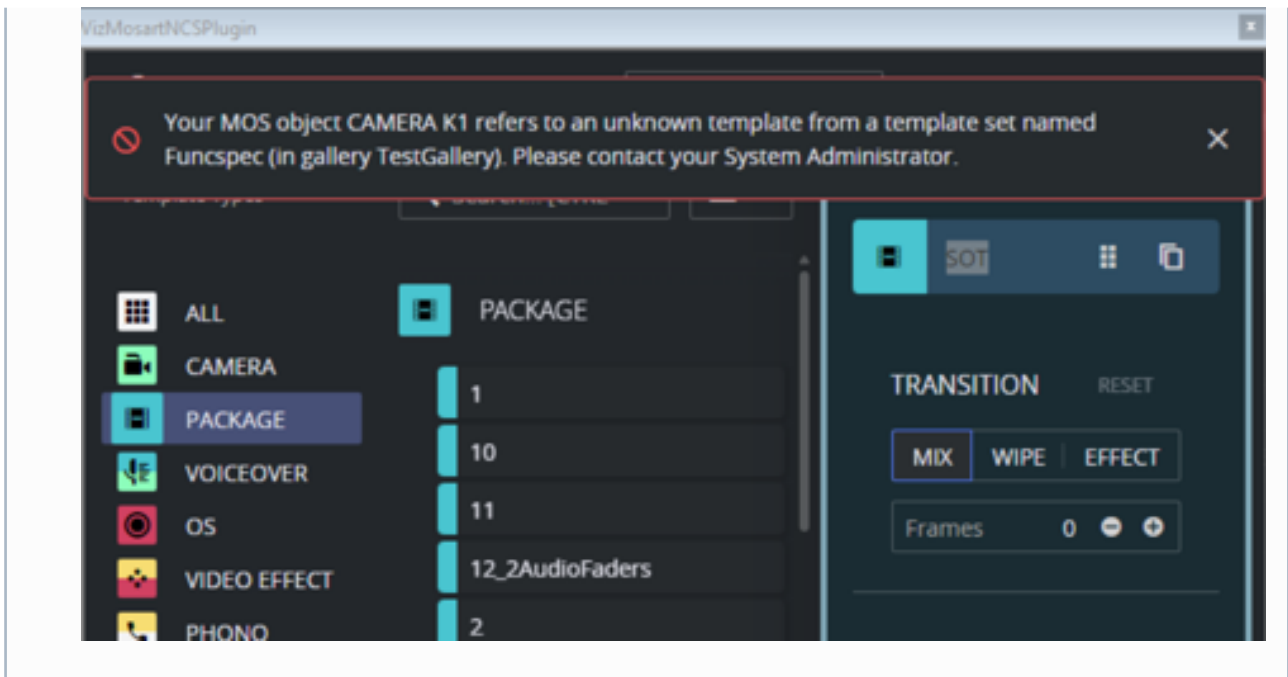
3. When finished editing, apply the changes. In the iNews newsroom system, use the **OK**, **Apply**, or **Cancel** buttons (specific to iNews) to modify and close, modify without closing, or cancel the editing, respectively. In



a MOS-based NRCS, the plugin includes its own buttons to modify or cancel the editing.



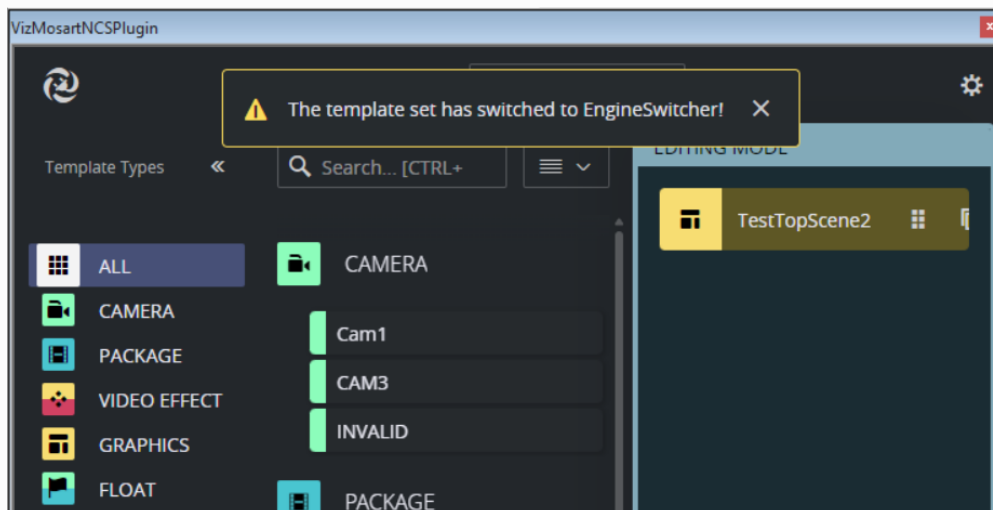
**Info:** You cannot modify a MOS object that refers to a not-found Viz Mosart template.



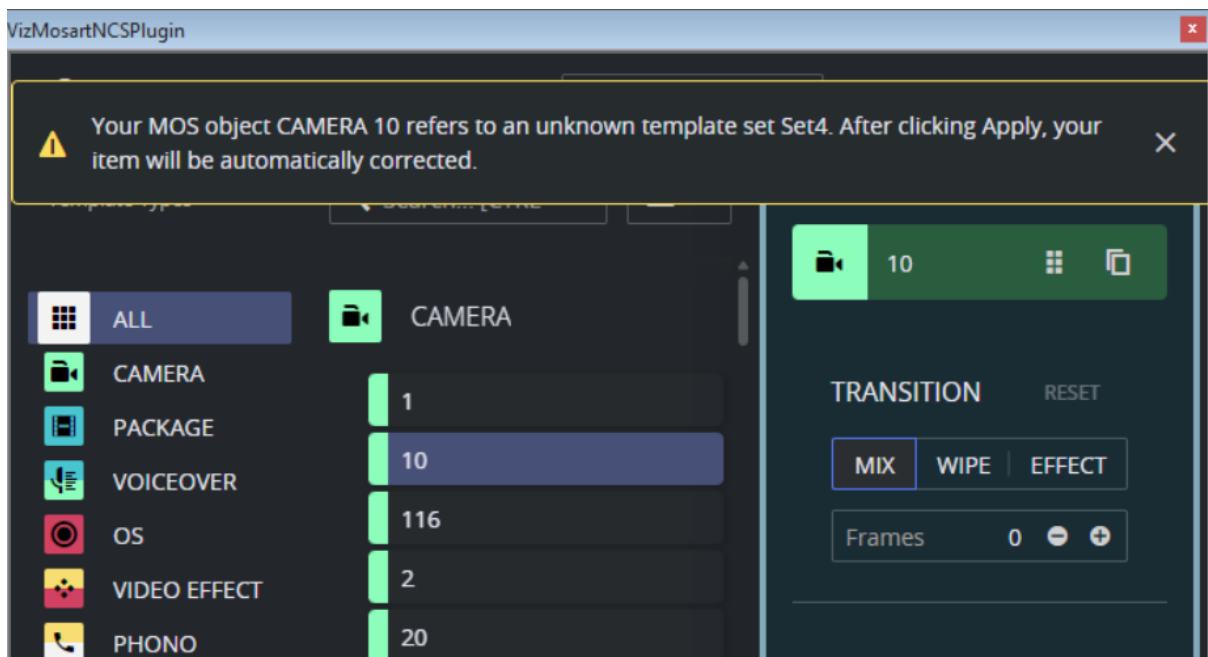
To modify MOS objects created with the Mosart NRCS Plugin

- MOS objects created by the Mosart NRCS Plugin include references to the *gallery* name and *template set* name.

**Info:** The active *Gallery* and/or *Template set* name may automatically change if your selected MOS object references a different gallery/template set. You are always notified if this happens.



- If your rundown item refer to a template set that cannot be found in the gallery, the Mosart NRCS Plugin checks the active gallery and template set for a corresponding template. This valid reference is then applied to the MOS object, when you click **Update** (in MOS-based NRCS) or **OK/Apply** (in iNews) on the replacement template.



- Alternatively, you can manually search gallery/template sets to locate a similar template. After editing and applying the changes, the new (active) gallery and template set name are stored in your rundown MOS object.

### To edit MOS objects created by ActiveX

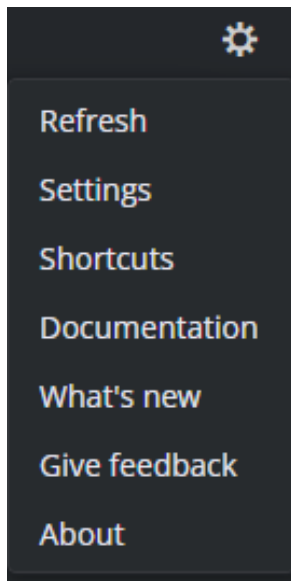
When working with MOS objects that were created with Viz Mosart's legacy NRCS Plugin (Mosart Active-X) the currently selected gallery name and template set name will always be used as template source. In the Plugin, ensure to select correct gallery and template set before you start editing.

## 6.1.2 Getting Help

The NRCS Plugin documentation is continually updated and available online. This includes both this User Guide and the Release Notes.

You can also send your feedback directly to the Mosart NRCS Plugin design team.

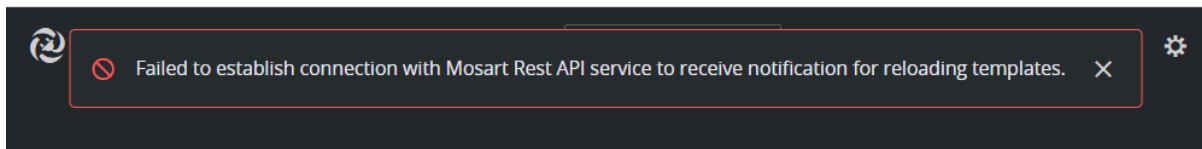
- Click the **Settings** icon at the top right:



### 6.1.3 Error Handling

While navigating through templates, if there are exceptional conditions, the Mosart NRCS Plugin displays an error message.

See the example below:



Please refer to the [Troubleshooting](#) or contact Vizrt Support if you encounter any error messages.

### 6.1.4 API Documentation

The NRCS Plugin also installs the Mosart REST API. Details about the API endpoints are provided in the open API documentation (Swagger Open API (OAS) documentation) at:

<http://localhost:55142/docs>

**Info:** Replace *localhost* with the IP address of the computer on which the API is installed.

### Examples

- Retrieve *all* galleries:  
<http://localhost:55142/api/v1/galleries>  
(A list of gallery names is obtained)
- Choose a gallery name from the list obtained in the previous example. For the sake of this example, assume that *Local* was on the list. (If not, choose some other gallery name.)

To retrieve the template sets for the gallery named *Local*:  
<http://localhost:55142/api/v1/galleries/Local/templatesets>.

## 6.2 NRCS Plugin in Pilot Edge

If you are using the Pilot Edge version 3.0 or later, you can host the NRCS Plugin within the Pilot Edge Plugin.

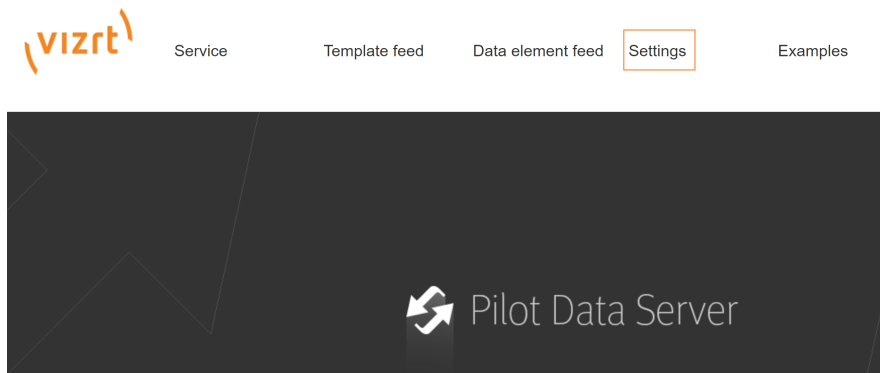
### 6.2.1 Hosting NRCS Plugin within Pilot Edge

- [Set Up](#)
- [Working with the Mosart NRCS Plugin in Pilot Edge](#)

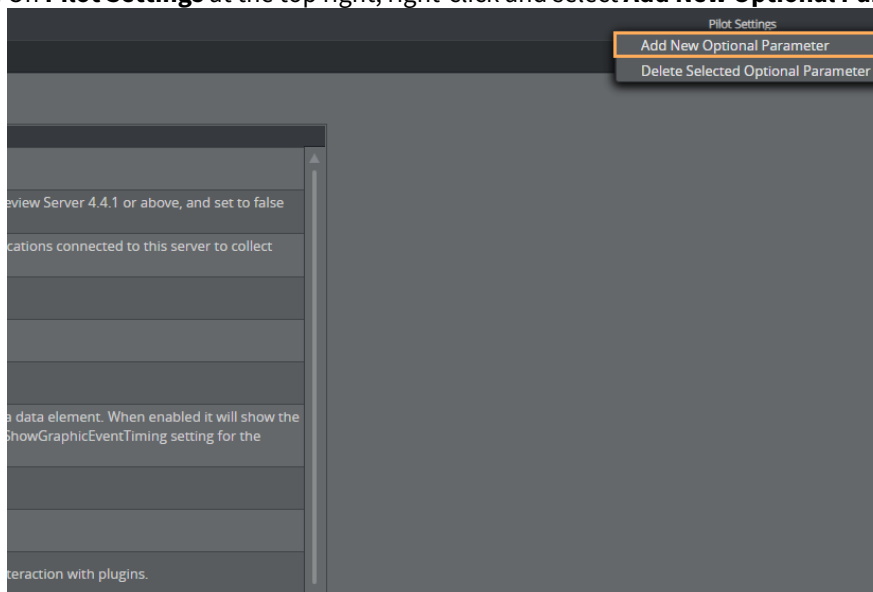
#### Set Up

To activate the NRCS Plugin in Pilot Edge

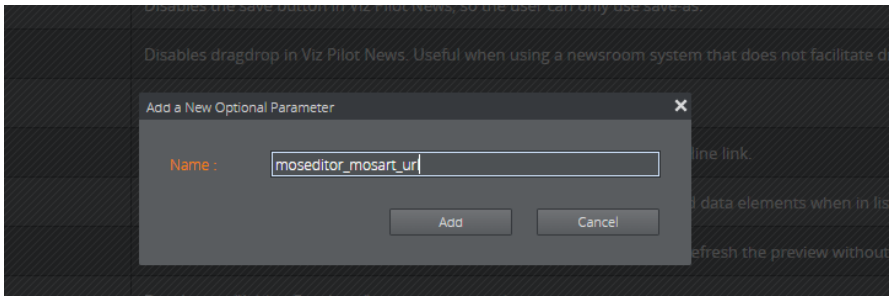
1. Open your Pilot Data Server.
2. In the menu bar, click **Settings**.



3. On **Pilot Settings** at the top right, right-click and select **Add New Optional Parameter**.



4. In the **Name** field, add the name *moseditor\_mosart\_url*.

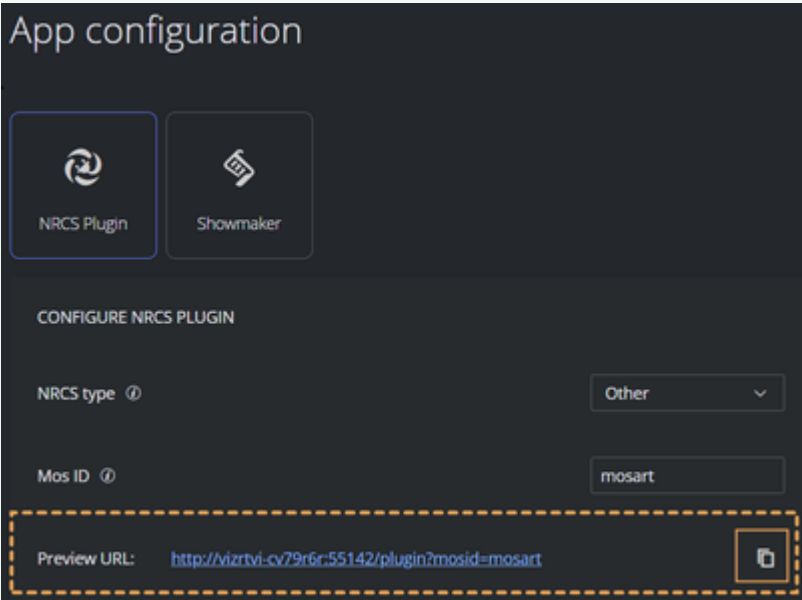


This now appears under the **Name** column:

| Name                 | Value                                                                  | Description                                                                |
|----------------------|------------------------------------------------------------------------|----------------------------------------------------------------------------|
| mos_legacy_template  | <input type="checkbox"/>                                               | If true, legacyTemplate MOS Item is sent.                                  |
| mos_plugin_url       | https://bgo-wonderland.vizrt.internal/pds/app/pilotedge/PilotEdge.html | URL of the Pilot MOS HT that use redirection (HT latter that needs to be s |
| moseditor_arc_url    | https://bgomsevizarc:9005/mos-plugin                                   | Custom parameter.                                                          |
| moseditor_mosart_url |                                                                        | Custom parameter.                                                          |
| mse_script_runner    |                                                                        | Parameter can be used                                                      |
|                      | https://v1poc.vizrtapps.com/taskui/?form-columns=4&theme=viz           |                                                                            |

5. Under the **Value** column, enter the URL to your Mosart NRCS Plugin.

✔ **Tip:** You can fetch this address from the Configuration Tool by selecting **App Configuration > NRCS Plugin** and copying the value of **Preview URL**.



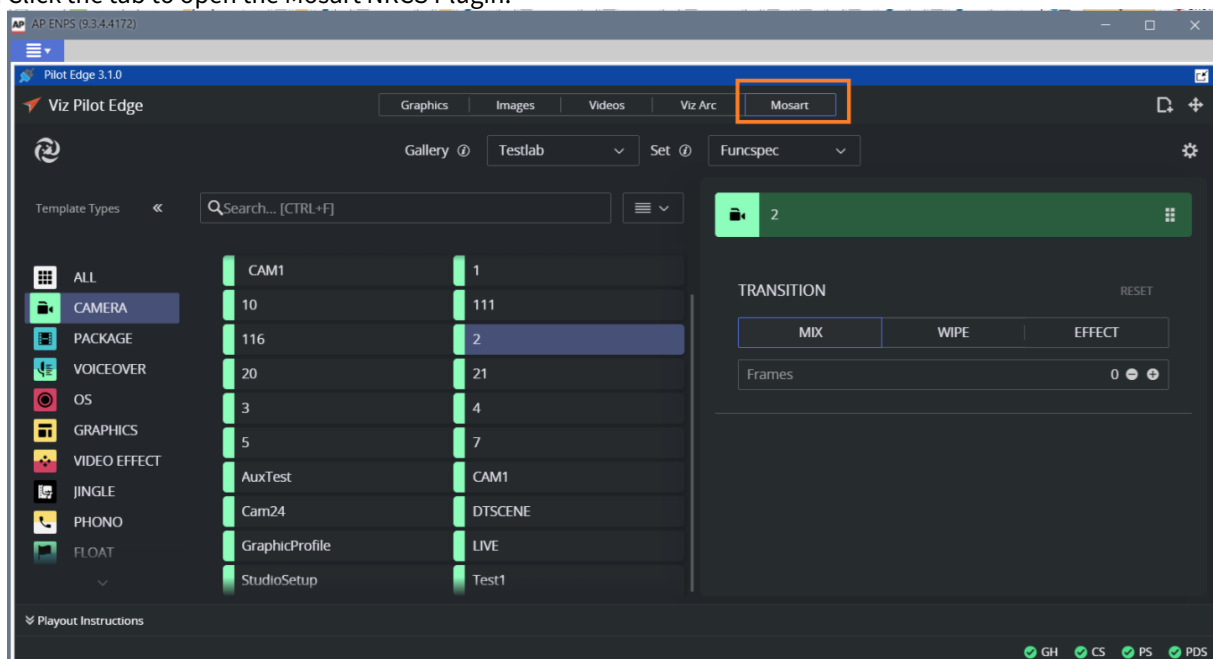
| Name                        | Value                                                                  | Description                                                                   |
|-----------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| mos_legacy_template         | <input type="checkbox"/>                                               | If true, legacyTemplate MOS Item is sent.                                     |
| mos_plugin_url              | https://bgo-wonderland.vizrt.internal/pds/app/pilotedge/PilotEdge.html | URL of the Pilot MOS HTML that use redirection (HTML) latter that needs to be |
| moseditor_arc_url           | https://bgomsevizarc:9005/mos-plugin                                   | Custom parameter.                                                             |
| <b>moseditor_mosart_url</b> | <b>https://localhost:55143/plugin?nracs=iNews</b>                      | <b>Custom parameter.</b>                                                      |
| mse_script_runner           |                                                                        | Parameter can be used                                                         |
|                             | https://v1.pds.vizrt.com/task                                          |                                                                               |

6. At the top left, click **Save**.

**Note:** If you are using the Pilot Edge on **HTTPS**, the Mosart NRCS plugin must also be on **HTTPS**.

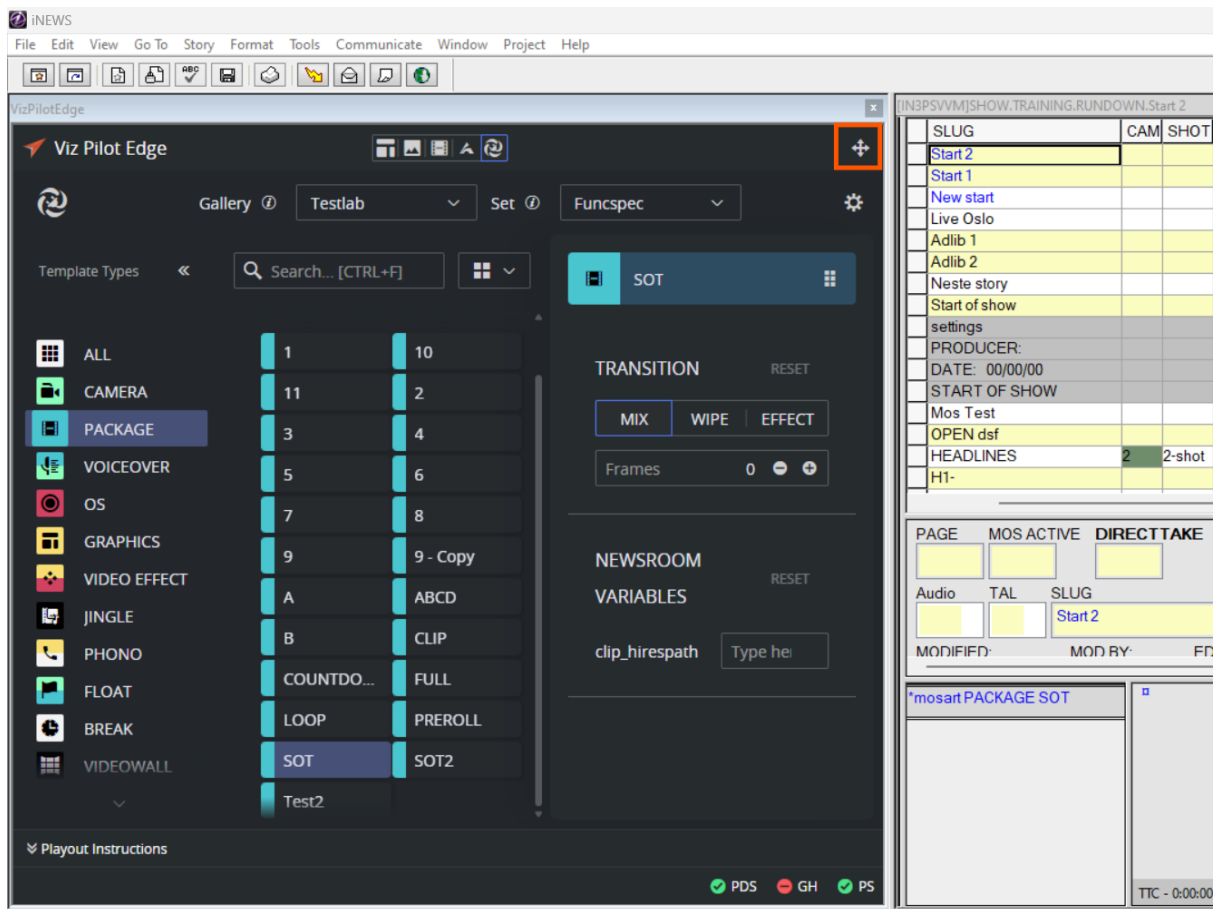
## Working with the Mosart NRCS Plugin in Pilot Edge

1. In your newsroom system, open the Pilot Edge Plugin.  
A new tab **Mosart** appears at the top.
2. Click the tab to open the Mosart NRCS Plugin.

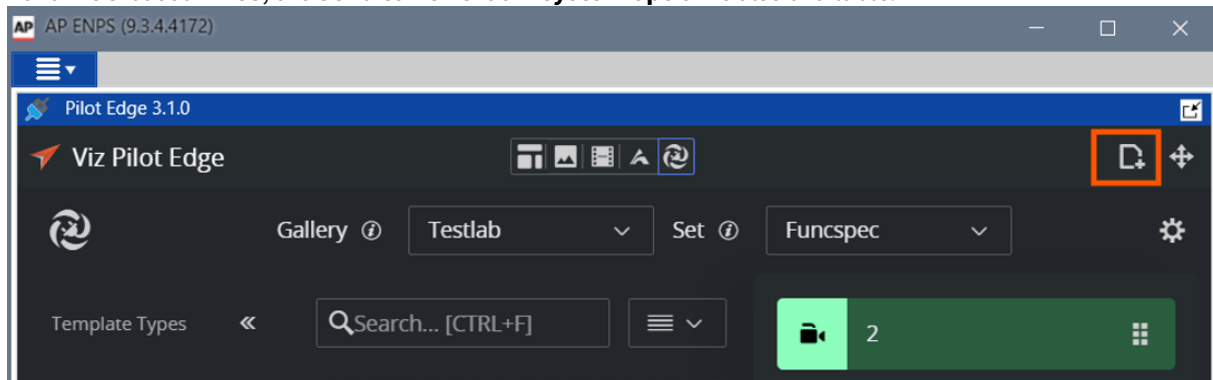


3. **To add a Mosart item to your rundown**, select the item and drag in the **Cross** icon at the top right of the plugin.

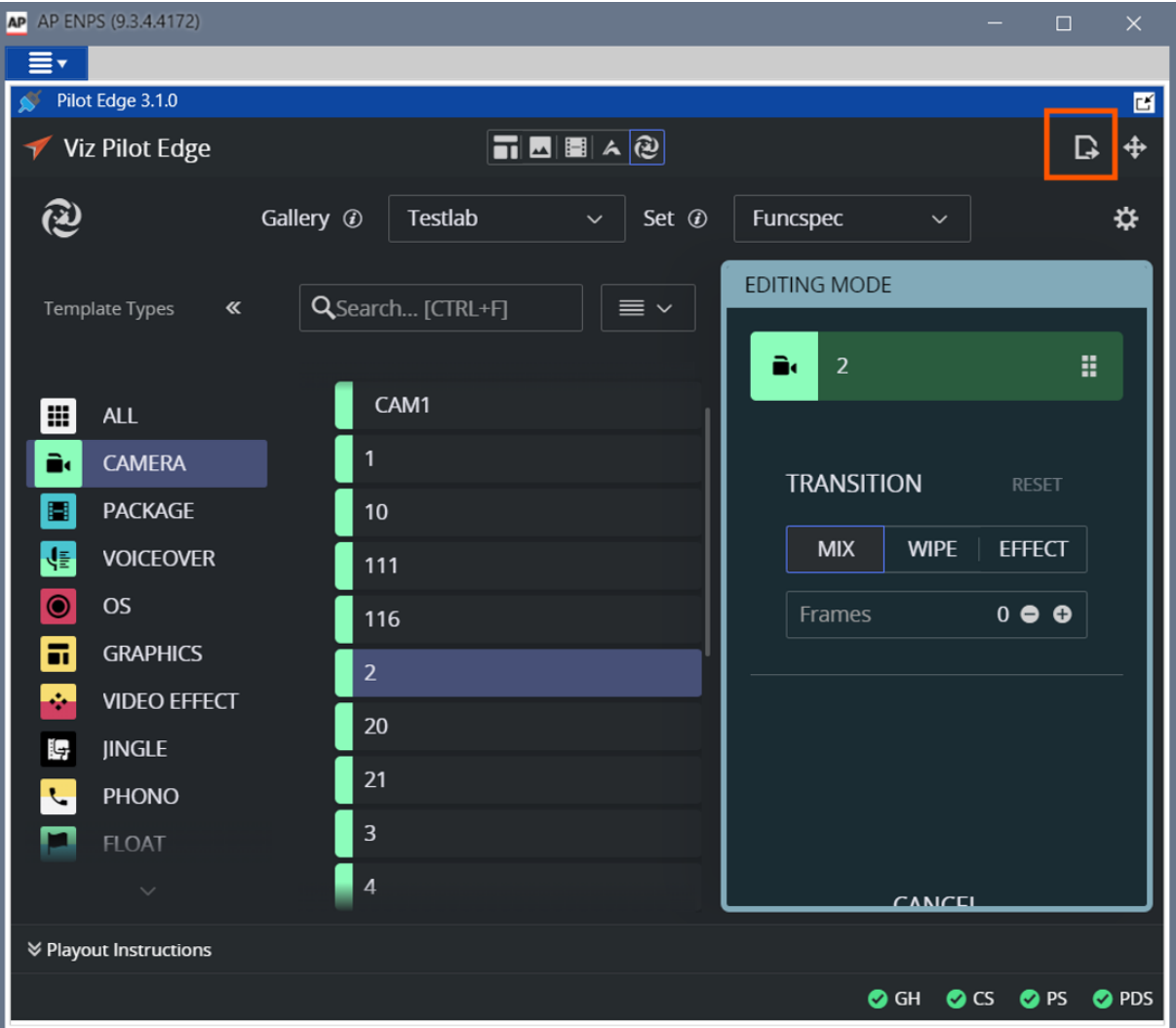




For a MOS-based NRCS, the **Send to newsroom system** option is also available:



4. **To edit an added item**, Pilot Edge automatically opens the NRCS Plugin inside Pilot Edge. In the iNews newsroom system, use the **OK**, **Apply**, or **Cancel** buttons (specific to iNews) to modify and close, modify without closing, or cancel the editing, respectively. In a MOS-based NRCS, the Pilot Edge plugin includes the **Update in newsroom system** button.



## 6.3 Setup and Administration

This section describes essential post-installation configurations, usually performed by a system administrator.

- [Setting up the NRCS Plugin](#)
- [Optional Server Setups](#)
  - [Support for Main/Backup Connection](#)
  - [Support for HTTPS](#)
- [Verifying the Mosart Installation](#)
- [Hide Effects from Users](#)
- [Integrating with an NRCS](#)
  - [ENPS](#)
  - [iNEWS](#)
  - [Octopus](#)
  - [OpenMedia](#)
  - [Showmaker](#)
- [Troubleshooting](#)

### 6.3.1 Setting up the NRCS Plugin

There is a standard setup that must first be followed. Please refer to the configuration procedure in section [NRCS Plugin](#).

### 6.3.2 Optional Server Setups

#### Support for Main/Backup Connection

- If you have a *backup server* for redundancy, you will need define the environment in the menu [Server Configuration](#).

#### Support for HTTPS

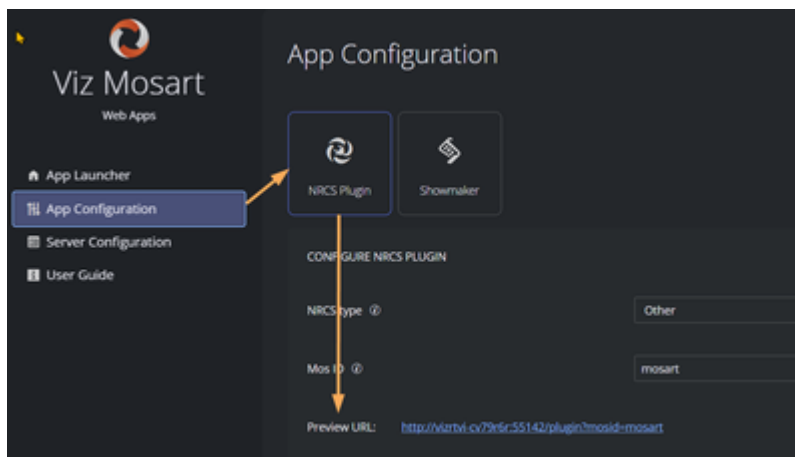
- If you are using *HTTPS*, you will need define the environment in the menu [Server Configuration](#).



**Info:** Make sure to execute *all* instructions, including the one-time edits to the Mosart Remote Dispatcher Service.

### 6.3.3 Verifying the Mosart Installation

1. After following the mandatory App Configuration and [Server Configuration](#) procedures, a background Windows service, *Mosart REST API* (a combination of the REST API and the NRCS Plugin) starts.
2. You can check that the NRCS Plugin is accessible by either:
  - a. In the Configuration Tool, click **App Launcher > NRCS Plugin**.
  - or
  - b. following the URL next to the **Copy** button.



**Info:** The Plugin URL comprises the machine name, port number 55142, NRCS type and (when supported) Mos ID in the form: `http://machine-name:55142/plugin?nrcs={type}&mosid={mosid}`

4. To complete the integration, configure the NRCS side, according to the appropriate NRCS as described in section Integrating with an NRCS below (where you will use the copied URL).

### 6.3.4 Hide Effects from Users

In some production situations, there may be an effect recalled from specific templates, that should only be run under specific circumstances (for example, on an ME row).

Unintentionally selecting such an effect from the NRCS plugin (or the Viz Mosart GUI) can give unplanned on-air consequences.

To hide an effect from the user

**Info:** This feature requires Mosart Web Apps version 2.5 or later.

1. On the Mosart server open AV Automation.
2. Navigate to **A/V Setup > Effects**.
3. Check **Hide From User** to prevent the effect displaying in the **NRCS Plugin** (and the Viz Mosart GUI **Transition** panel).
4. Save.
5. Refresh the NRCS Plugin.

### 6.3.5 Integrating with an NRCS

- The server-based plugin configuration described below avoids having to configure each individual newsroom control system (NRCS) client.
- This section assumes the Mosart NRCS Plugin has been successfully installed and set up, as described in section Mosart Web Applications Configuration Tool.

The NRCS Plugin supports connections to

- **ENPS**

- iNEWS
- Octopus
- OpenMedia
- Showmaker.

You connect each client NRCS machine to the Viz Mosart server (which hosts the Mosart REST API.)

## ENPS

1. In the Configuration Tool select **App Configuration > NRCS Plugin** and copy the value of **Preview URL**.

2. On the ENPS machine, navigate to **System Maintenance > MOS Configuration**.
3. Paste the NRCS Plugin's copied URL, similar to the example below:

| MOS Configuration           |                    |            |              |         |                                                                       |             |                |     |
|-----------------------------|--------------------|------------|--------------|---------|-----------------------------------------------------------------------|-------------|----------------|-----|
| Address *                   | Description *      | IP         | ActiveX      | Program | Default Settings                                                      | MOS Version | Local DragDrop | Mod |
| Click here to add a new row |                    |            |              |         |                                                                       |             |                |     |
| MOS.ID                      | MOSART NRCS Plugin | HOST PC IP | ENPSHTMLHost | SYSTEM  | URL:http://VIZRTV1-7VLU0D1.55142/plugin?nracs=ENPS&mosid=Mosart.s2mos | 2.8.4       | On             |     |

- Info:** The URL comprises a combination of the Plugin's URL + a fixed port number and Viz Mosart's *MosId* value in the form:
- http://machine-name:55142/plugin?nracs=ENPS&mosid=xxxx*
- If you need to derive current *MosId* value, see the item To find your Mos ID.

## iNEWS

There are two possible setup routes, depending on whether your iNEWS version supports HTML5 plugins. Please consult the documentation of your iNEWS system to determine whether this is the case.

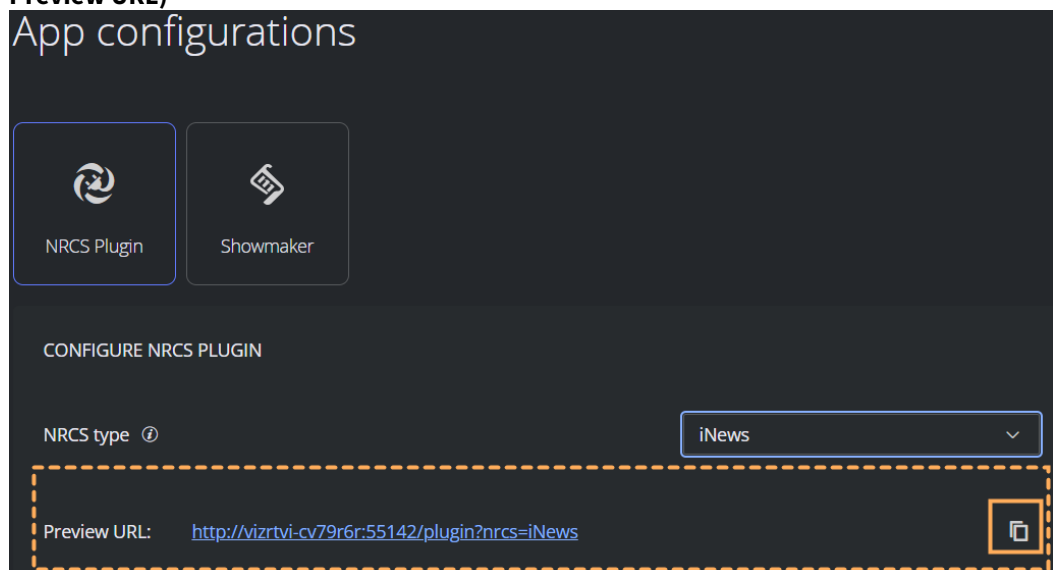
- [iNEWS Clients with HTML5 Support](#)
- [iNEWS Clients without HTML5 Support](#)

### iNEWS Clients with HTML5 Support

1. In the iNEWS client, from the directory navigation tree, open the file **SYSTEM.MOS-MAP** and verify that between `TABLE-START DeviceTable` and `TABLE-END` there is a line  

```
mosart ...
```

 If not, add the mosart reference,  
 For example: `mosart MosartNRCSPlugin`
2. For this step and the next, please refer to Avid's [MediaCentral Newsroom Management Setup and Configuration Guide](#), section *Configuring Newsroom Management for HTML5* (chapter *HTML5 Plugins*). If you have at least one HTML5 plugin already defined, you can *skip* this step.  
 From Avid's *Configuring Newsroom Management for HTML5*, follow their setup steps **1** to **6**. Please note that at:
  - Step **3**: (name of the new queue): Use the name *HTML-PLUGINS*, as recommended by Avid.
3. Continue with steps **7** to **10**, observing these clarifications:
  - Step **7**: In case you skipped the previous step, *the queue* refers to `SYSTEM.HTML-PLUGINS`
  - Step **9**: (slug): Enter something like *Viz Mosart NRCS Plugin*. (This is the string that will be shown in the **Plugins** sub-menu of the **Tools** menu.)
  - Step **10**: (parameters): In the **Story** panel,
    - i. Enter 'URL = '.
    - ii. At that exact spot, paste the URL copied from the Configuration tool  
 (In the Configuration Tool select **App Configuration > NRCS Plugin** and copy the value of **Preview URL**)



- iii. Finally, append  
`mosItemBrowserProgID = Mosart.ActiveX`

mosItemEditorProgID = Mosart.ActiveX

**Example:**

URL = <http://machine-name:55142/plugin?nracs=iNews>

mosItemBrowserProgID = Mosart.ActiveX

mosItemEditorProgID = Mosart.ActiveX



**Info:**

- The parameter *mosItemPlayerProgID* mentioned in the Avid document is not mandatory in this context.
- The URL element *mosid* is not required for iNEWS.



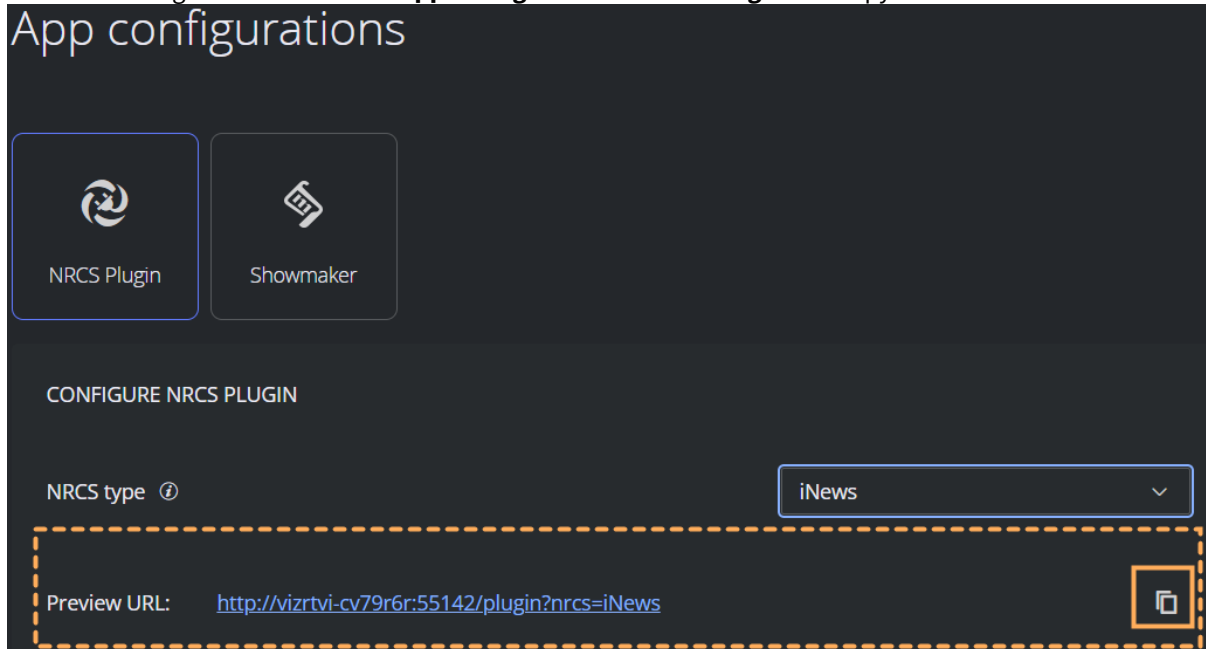
**Note:** If the old Mosart ActiveX opens instead of the Mosart NRCS Plugin when trying to modify/edit a Mosart item (by double clicking on the item), you must uninstall the Mosart ActiveX.

## iNEWS Clients without HTML5 Support

### Installing the iNEWS Client Addon

For older versions of iNews without HTML5 support, you need to install a small wrapper utility, the **Mosart NRCS Plugin - iNEWS Client Addon** on each iNEWS client machine.

1. From the Vizrt FTP /products/VizMosart/Latest Version/WebApplications/ download and run the utility file *MosartNRCSPlugin-iNEWSClientAddon-1.1.0.96.exe*
2. From the Configuration Tool select **App Configuration > NRCS Plugin** and copy the value of **Preview URL**.



3. In **Mosart NRCS Plugin - iNEWS Client Addon**, paste-in the URL of the Plugin.

**Note:** If the old Mosart ActiveX opens instead of the Mosart NRCS Plugin when modifying a Mosart item (by double clicking on it), you must first uninstall the Mosart ActiveX, and then reinstall the *MosartNRCSPlugin-iNEWSClientAddon*.

**Info:** To change the configured URL after the installer was closed, simply open a command prompt and execute:  
 "%programfiles(x86)%\Vizrt\Mosart NRCS Plugin - iNEWS\MosartNCSPugin.exe" url "https://machine-name:55142/plugin/?nrcs=iNews"

## Octopus

1. From the Configuration Tool select **App Configuration > NRCS Plugin** and copy the value of **Preview URL**.

App configurations

NRCS Plugin Showmaker

CONFIGURE NRCS PLUGIN

NRCS type ⓘ Octopus

Mos ID ⓘ mosart

Preview URL: <http://vizrtvi-cv79r6r:55142/plugin?nrcs=Octopus&mosid=mosart>

2. Log-in to Octopus with Admin privileges.
3. From the sidebar, navigate to **MOS Devices > Devices**, select *mosart* and click **Edit**.



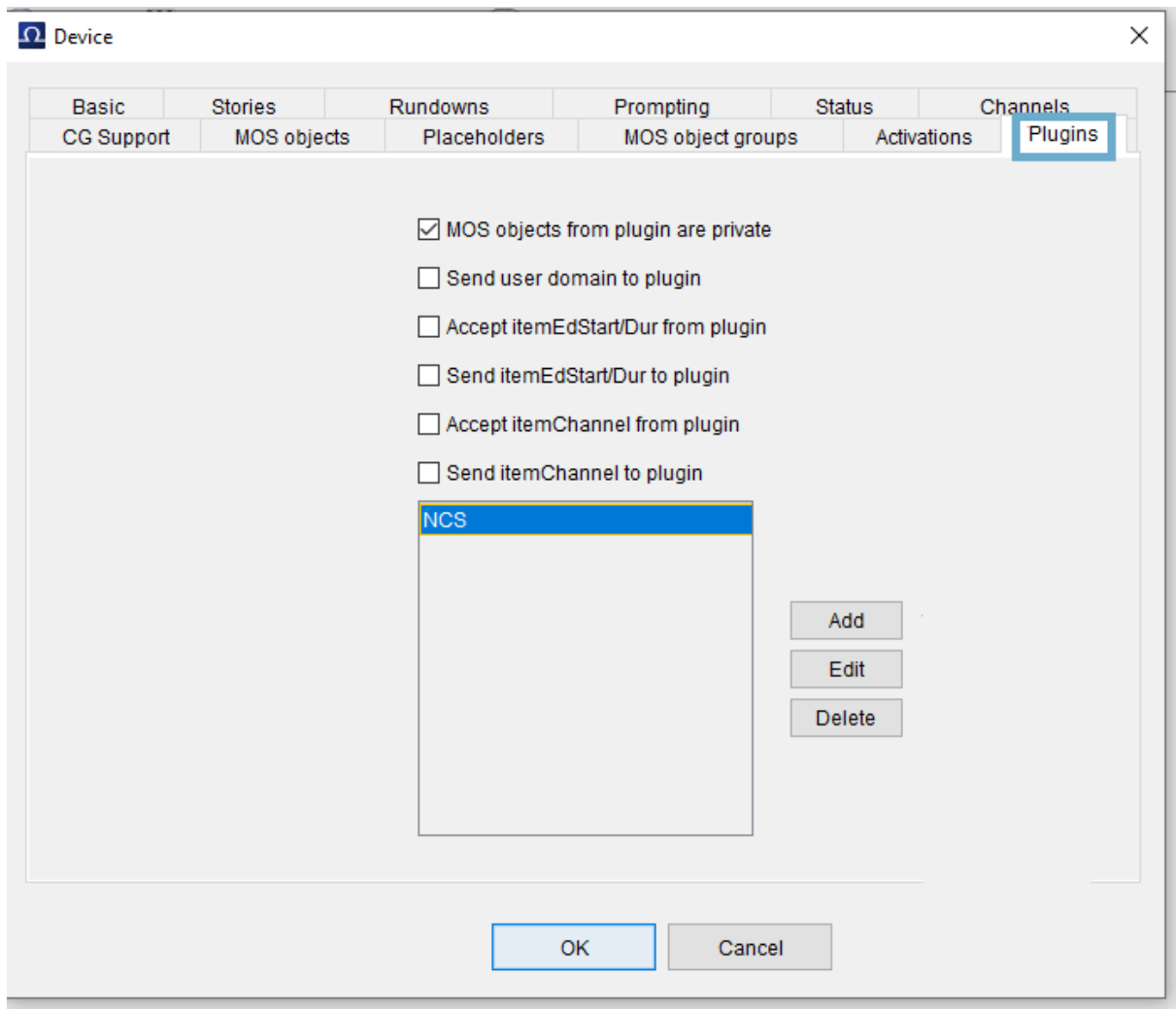
**MOS Devices ~ Devices**

**MOS Devices ~ Devices**

[New](#)
[Edit](#)
[Delete](#)
[Content sync](#)
[CG template sync](#)
[Export / Import](#)
[MOS objects](#)
[Resend active rundown](#)

|        | Connection config                                                                                                                                                                                            |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| mosart | ncsID: Octopus<br>Device media address: 10.211.112.37 10540<br>Device rundown address: 10.211.112.37 10541<br>Octopus media port: 10540<br>Octopus rundown port: 10541<br>Octopus IP address: 10.211.112.32  |
| MOSART | ncsID: OCTOPUS<br>Device media address: 10.211.8.55 10840<br>Device rundown address: 10.211.8.55 10841<br>Octopus media port: 10840<br>Octopus rundown port: 10841                                           |
| pilot  | ncsID: Octopus8<br>Device media address: 10.211.112.37 10540<br>Device rundown address: 10.211.112.37 10541<br>Octopus media port: 10540<br>Octopus rundown port: 10541<br>Octopus IP address: 10.211.112.32 |
| PILOT  | ncsID: OCTOPUS8<br>Device media address: 10.211.112.37 10540<br>Device rundown address: 10.211.112.37 10541<br>Octopus media port: 10540<br>Octopus rundown port: 10541<br>Octopus IP address: 10.211.112.32 |

4. Select the **Plugins** tab:



5. Fill-in as below, and providing:

- a. A unique name
- b. Version
- c. The URL to the Viz Mosart NRCS Plugin (*copied* in step (1).

Plugin

Short name: Mosart NCS Plugin

Long name: Mosart NCS Plugin

Width: 800

Height: 600

Type: Player (ActiveX)

Version: 2.8\_Web

Platform: Chrome (CEF)

Placement: Modeless

Shortcut number:

☐ Stretch when inline

☐ Allow creation in media

☒ Run in separate thread

☒ Run in separate process

☒ Run in native window

☐ Reuse running plugin

☐ Use <ncsAppInfo>

☐ <ncsAppInfo> sends <item>

☐ Show use

☐ Show close

☒ Close when object arrives

☐ Primary editor

☐ Allow in read-only script

Implementation: <http://vizrt-tv-public:55142/plugin?nrns=Octopus&mosid=Mosart.s2-mos>

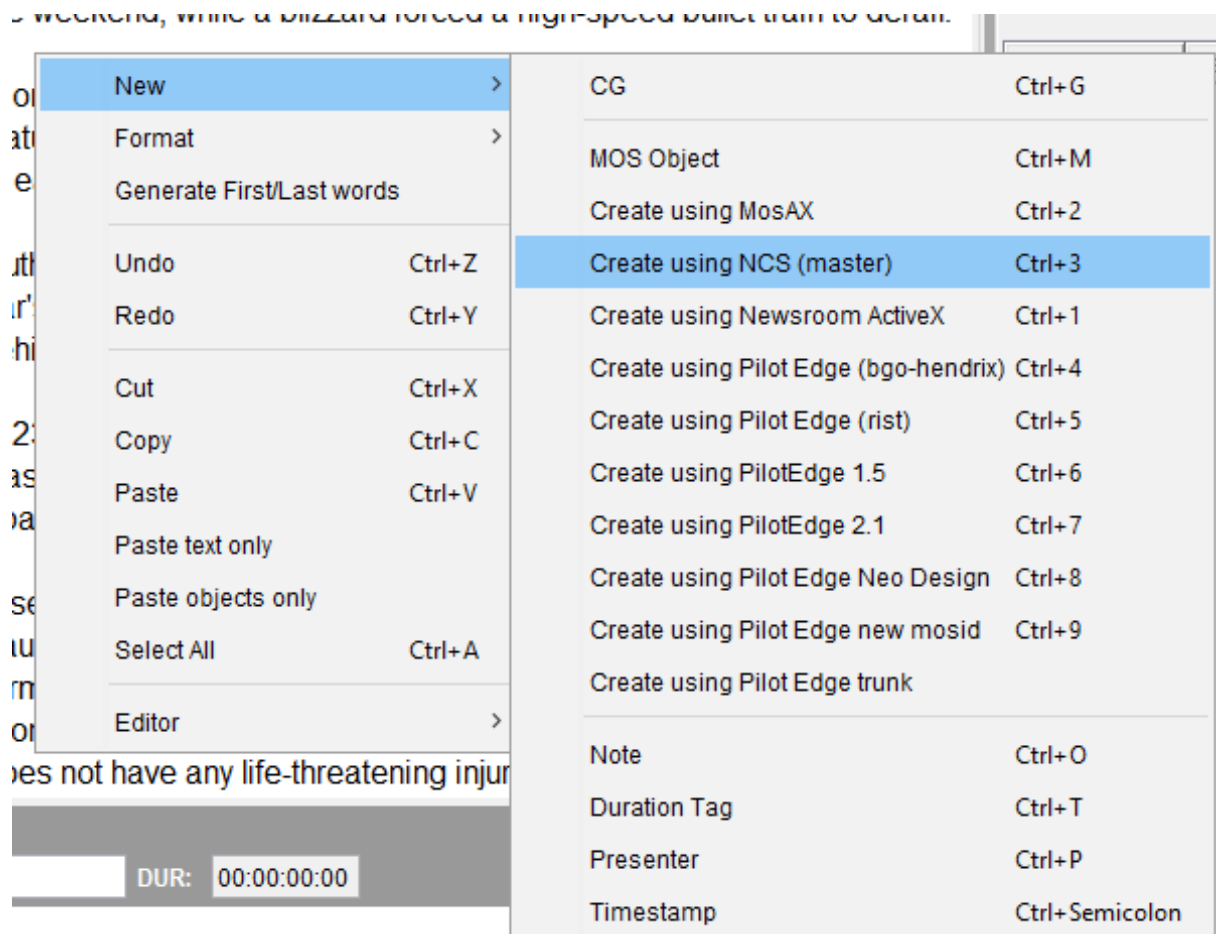
In case of ActiveX enter GUID (in { } parentheses) or ProgId

Separate process directory:

OK Cancel

6. Setup is complete.

When editing a selected rundown, the user right-clicks for **New > Create using** <given name of the Plugin>



For more details, see the [Viz Mosart Administrator Guide](#), section **Manus Administrator > Settings Editor MOS > NRCS Configuration**.

## OpenMedia

Connections to OpenMedia must be setup as a project with OpenMedia. Please contact OpenMedia for further details.

## Showmaker

See section [Setup and Administration of Showmaker](#) in this guide.

## 6.3.6 Troubleshooting

See section [Troubleshooting](#).

## 7 Timing Display

The Mosart Timing Display web app provides browser-based timing information for the studio control room and studio floor.



- Synchronizes with the active Viz Mosart rundown, it can be customized to display user-specific details.
- Supports a variety of devices.  
For example an iPad or networked phone.
- Provides multiple, customized timing displays.  
For example, one timing display can be running on the studio floor, connected to the in house intercom system. A second timing display is in the control room counting down packages, keeping the producer updated on the current show.
- Customizable audio countdowns.

**Info:** For news-breaking details on the **Mosart Timing Display**, please refer to the *Mosart Web Apps Release Notes* for your version of Viz Mosart at [the Vizrt Documentation Center](#).

This section describes:

- [Working with TD](#)
- [Setup and Administration of TD](#)

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## 7.1 Working with TD

- [Key Features](#)
- [Operating Modes](#)
  - [View Mode](#)
  - [Edit Mode](#)
  - [Viz Mosart Server Status](#)
  - [Audio Countdown](#)
- [Distributing a Timing Display](#)

### 7.1.1 Key Features

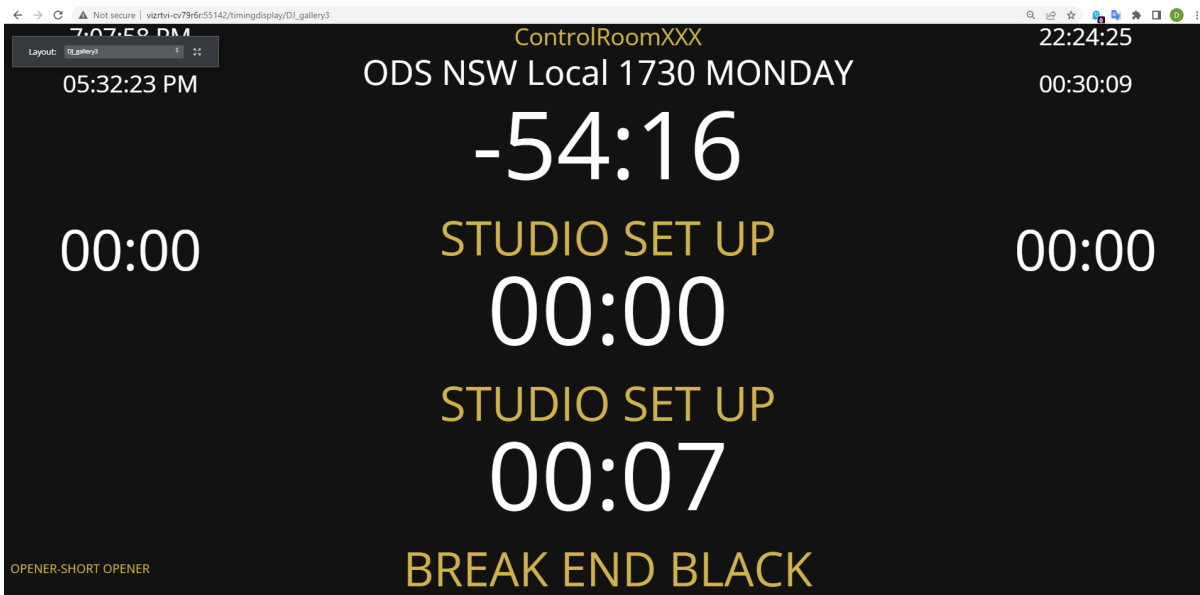
- Supports a variety of devices (for example an iPad or networked phone).
- A 24 x 24 editing grid enables rich flexibility for timer layouts.
- Each timer has a consistent and readable appearance. Available space is optimized with proportionate fonts.
- Rapid drag and drop of timer elements, from an intuitive list.
- Rich text formatting: *Color picker* + *Bold* + *Alignment* + *Show label*.
- Customizable Audio Countdown.

### 7.1.2 Operating Modes

For daily operations, the Timing Display runs in [Working with the Timing Display#View Mode](#). Use [Working with the Timing Display#Edit Mode](#) to create or adjust the display.

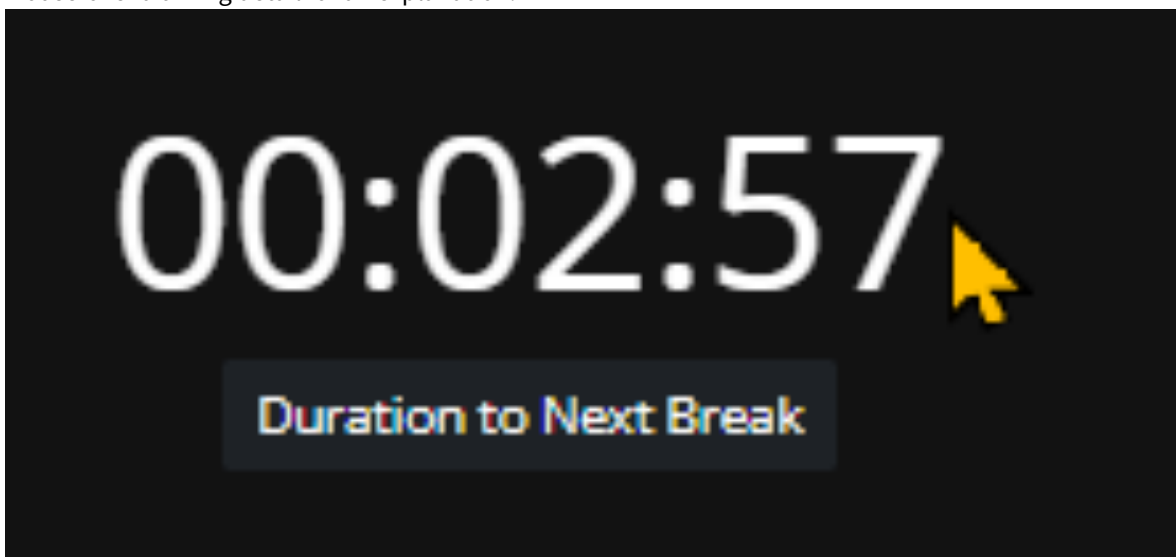
#### View Mode

Browse-anywhere timing information in your web browser.

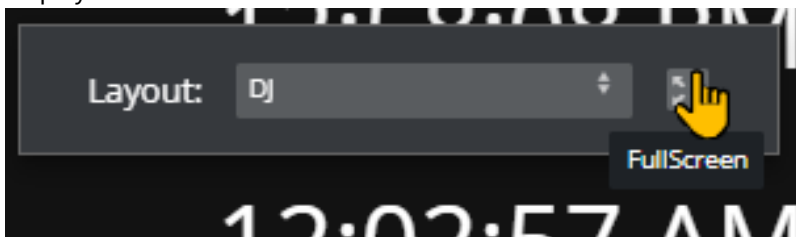


In View mode you can:

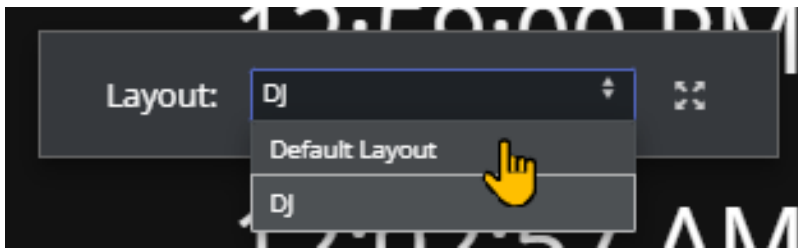
- Mouse-over a timing detail for an explanation.



- Display as full screen.

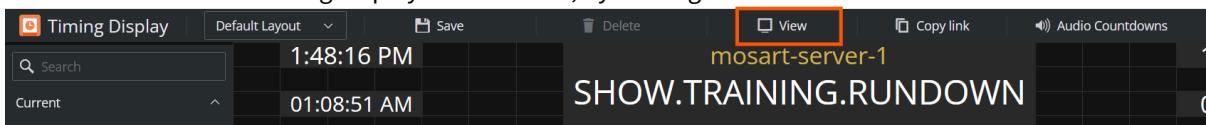


- Select any other defined view of the display.



### To display a Timing Display in View mode

- View Mode is the result of [Distributing a Timing Display](#).
- You can also browse a Timing Display in View Mode, by clicking the **View** button in the menu bar.



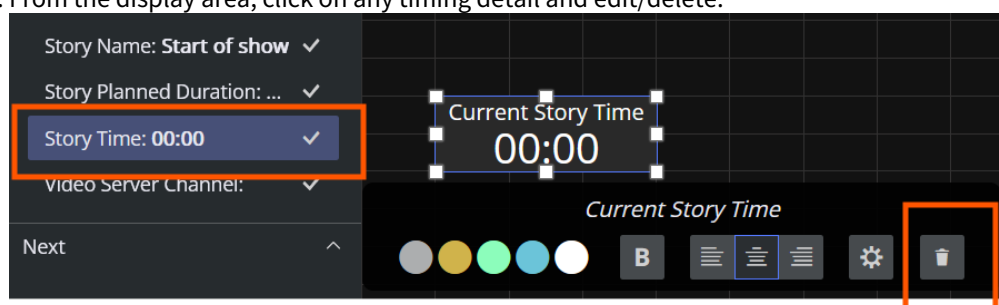
The View Mode opens in a new tab.

### Edit Mode

#### To create and modify a Timing Display

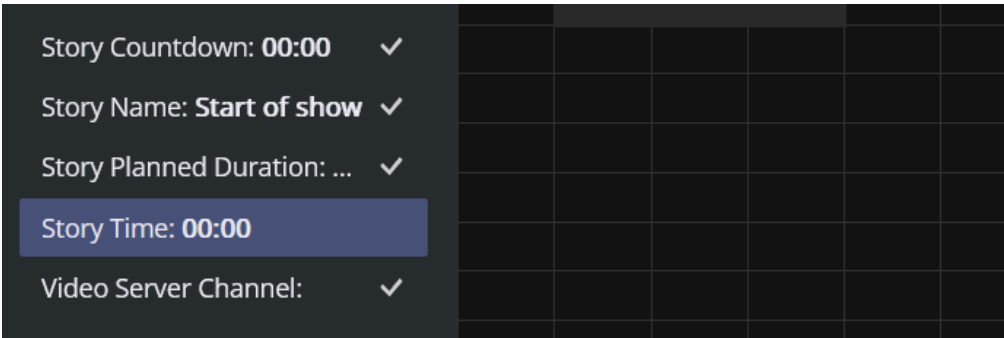
You can reconfigure or create a new Timing Display with details relevant to your operation.

1. If no Timing Display editor is running in your web browser
  - a. From the desktop shortcut or **Programs** menu, start the **Viz Mosart Web Applications Configuration Tool**.
  - b. In the **Timing Display** panel, click **Open**.  
A Timing Display editing web page opens.
2. Configure the display. For example:
  - a. From the **Timers** panel to the left, drag any highlighted timing detail into the display area.
  - b. From the display area, click on any timing detail and edit/delete.





c. The action **Delete** simply returns the selected timing detail back to the **Timers** selection panel on the left.

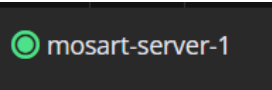
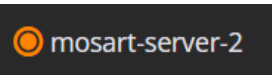


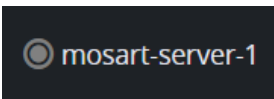
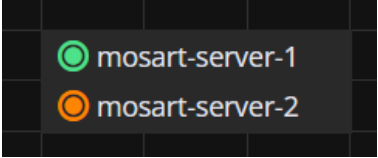
3. From the menu bar, click **Save as** and enter a unique, meaningful name for the display.

Viz Mosart Server Status

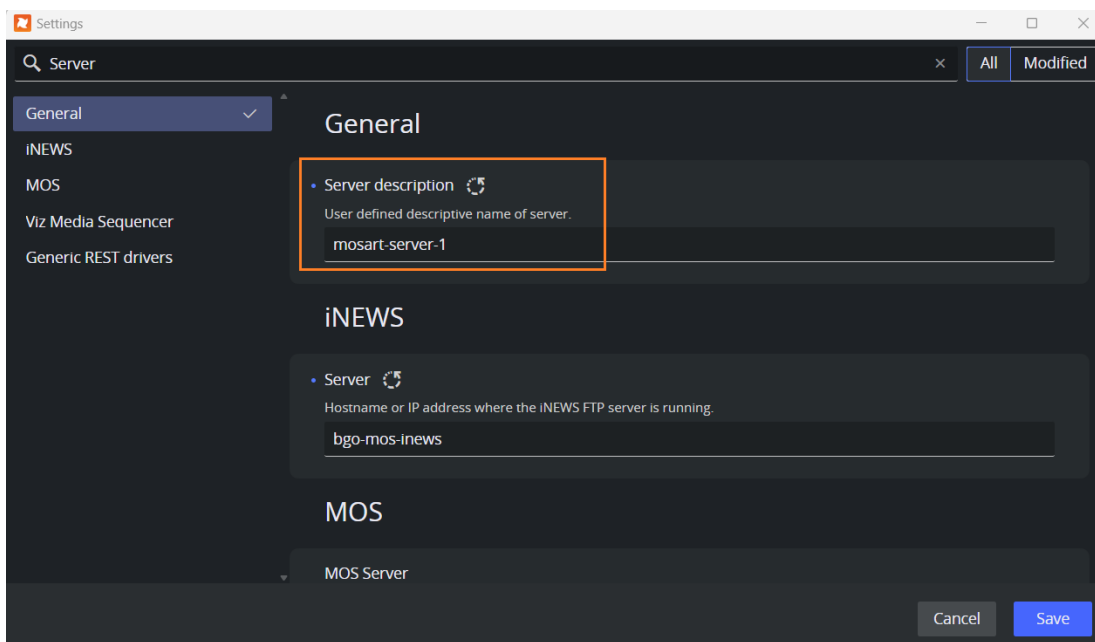
Viz Mosart server status can be displayed using **Connection Status** field.



| Status                                                                              | Description                 |
|-------------------------------------------------------------------------------------|-----------------------------|
|  | Viz Mosart server is active |
|  | Viz Mosart server is idle   |

| Status                                                                            | Description                                                                                                                                 |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
|  | Manus Admin is not running or Mosart Remote Control Service (RCS) is not running or it is not accessible.                                   |
|  | Viz Mosart is setup with main and backup and backup Mosart server has been configured in Viz Mosart Web Config Tool > Server Configuration. |

By default, the hostname, IP address, or FQDN configured in the Viz Mosart Web Config Tool > Server Configuration for the main and backup Viz Mosart servers will be displayed. However, in newer versions of Viz Mosart, the Server Description configured on each Viz Mosart Server under Manus Admin Settings is used instead.



## Audio Countdown

### Prerequisites

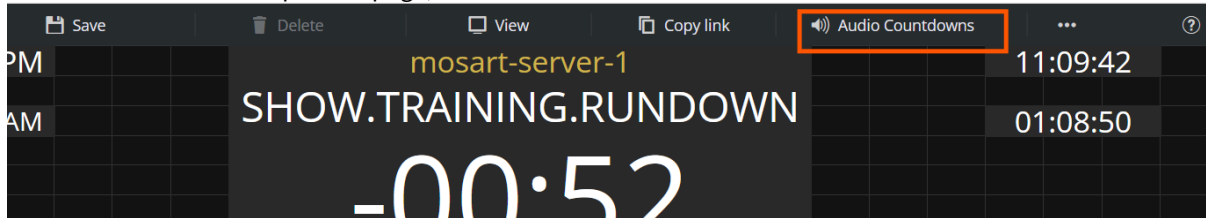
Timing Display plays its audio files located in the folder C:\ProgramData\Mosart Medialab\Mosart Web Apps\TimingDisplayMedia of the host machine for Timing Display.

Each audio file that you wish to use must be placed here.

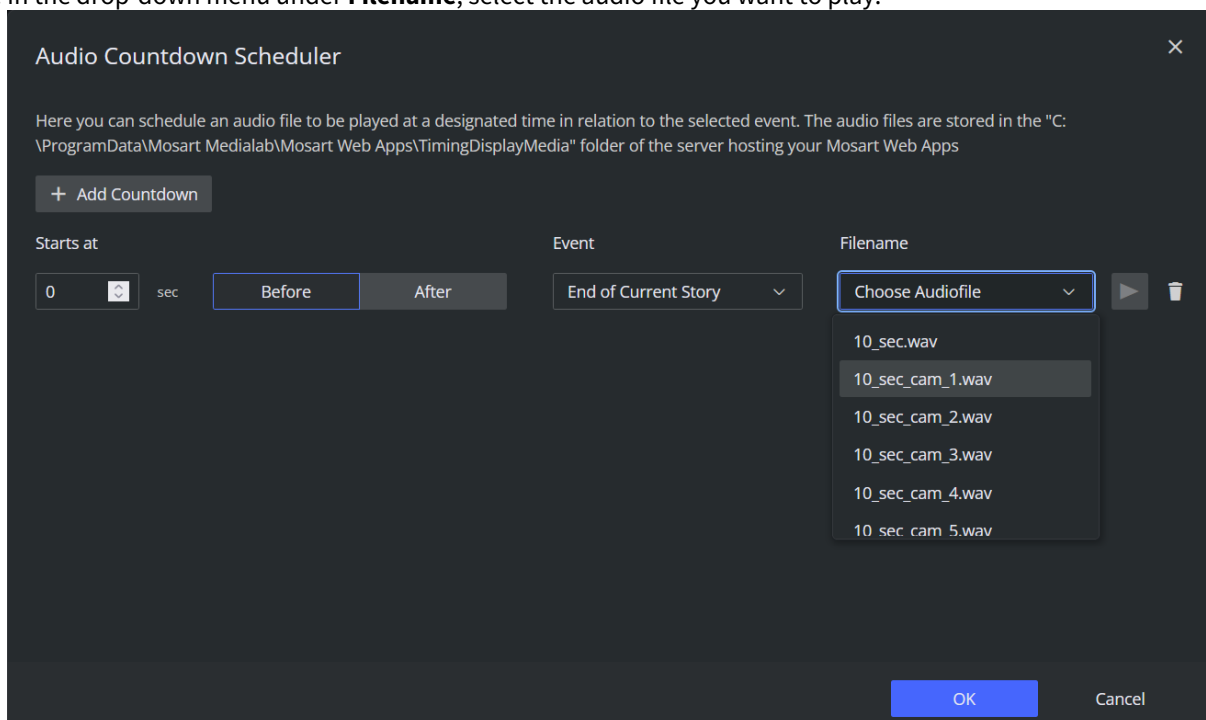
The range of supported audio file formats is dependent on the web browser you use for the Timing Display, [this external article](#) lists audio formats supported per browser.

To activate audio countdown in a Timing Display

1. Open Timing Display in [Edit Mode](#).
2. In the menu bar at the top of the page, click **Audio Countdown**.



3. From the dialog window that appears, click **Add Countdown**.
4. In the drop-down menu under **Filename**, select the audio file you want to play.



The selections are populated with audio files added to C:\ProgramData\Mosart Medialab\Mosart Web Apps\TimingDisplayMedia (on the machine where the Mosart Web Apps are installed).

You can also *test* the selected audio file by clicking the **Play** icon to the right of the drop-down menu.

5. In the drop-down menu under **Event**, select the event you want the audio file to countdown towards. Choose from:
  - **End of Current Story:** Counts down to the end of the current story.
  - **Start of Next Break:** Counts down to the next planned break.
  - **End of Rundown:** Counts down to the planned end of the rundown.
  - **End of Current Package:** Counts down to the end of a current Package template.
  - **End of Current Break :** Counts down to the end of a current Break template.
  - **End of Current Voice Over :** Counts down to the end of a current Voice Over template.
  - **End of Current Float/Adlib :** Counts down to the end of a current Float/Adlib template.
  - **End of Current Item :** Counts down to the end of each respective Story item.

**Audio Countdown Scheduler** ✕

Here you can schedule an audio file to be played at a designated time in relation to the selected event. The audio files are stored in the "C:\ProgramData\Mosart Medialab\Mosart Web Apps\TimingDisplayMedia" folder of the server hosting your Mosart Web Apps

[+ Add Countdown](#)

Starts at  sec Before After

Event End of Current Story ▼

- End of Current Story
- Start of Next Break
- End of Rundown
- End of Current Package
- End of Current Break
- End of Current Voice Over

Filename 10\_sec\_cam\_2.wav ▼ ▶ 🗑️

OK Cancel

6. Set the number of seconds **Before** or **After** the event you want the Audio file to *start at*.

**Audio Countdown Scheduler** ✕

Here you can schedule an audio file to be played at a designated time in relation to the selected event. The audio files are stored in the "C:\ProgramData\Mosart Medialab\Mosart Web Apps\TimingDisplayMedia" folder of the server hosting your Mosart Web Apps

[+ Add Countdown](#)

Starts at  sec Before After

Event End of Current Story ▼

Filename 10\_sec\_cam\_2.wav ▼ ▶ 🗑️

OK Cancel

7. Repeat steps **3** to **6** for all required audio files.

8. Click **OK**

To verify, start a rundown and listen that the correct audio files plays at the specified time.

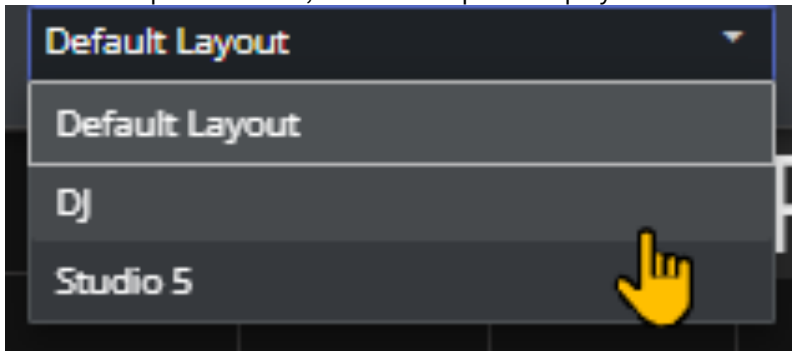
**Info:** If you *refresh* the Timing Display, you must again perform some activity on the web page before any audio can be played. Simplest is just clicking on the page or pressing any keyboard key while the web page has focus. This is standard web browser behavior.

### 7.1.3 Distributing a Timing Display

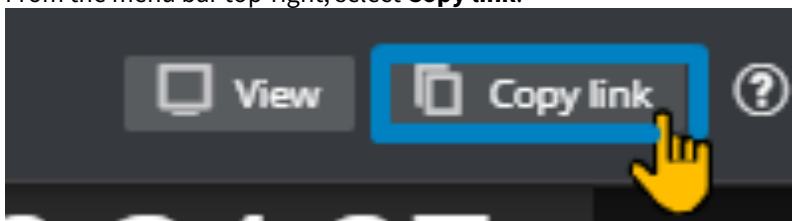
Once you have created or modified a Timing Display, you can share it with other users on the same network.

To distribute a Timing Display

1. Create/modify the Timing Display as described in [Working with the Timing Display#Creating and modifying a Timing Display](#) above.
2. From the drop-down menu, select the required display.



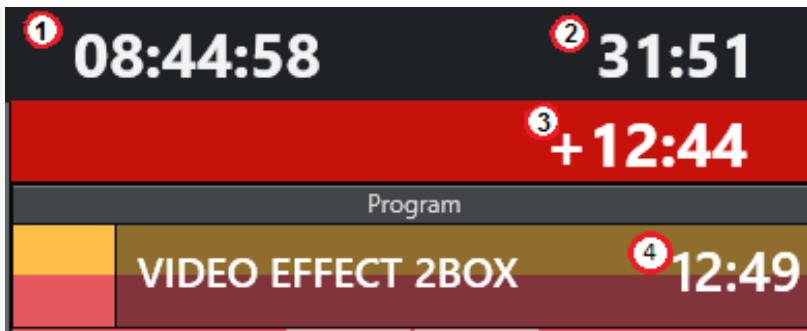
3. From the menu bar top-right, select **Copy link**.



4. Share the URL with your users.

**Info:** The original Viz Mosart Timing Display, with explanation of the elements, is described in [the Timing Display section of the Viz Mosart User Guide](#) .

**Tip:**  
**Appearance of timing information in the Viz Mosart UI**



1. Counts the downtime to the *next break*.
2. Counts how much the rundown is *over/under*.
3. Counts down the *remaining time* for the current On Air template.
4. Shows the *duration* of the current On Air template.

## 7.2 Setup and Administration of TD

- [Setting up the Timing Display](#)
  - [Prerequisites](#)
  - [Configuration](#)
- [Optional Server Setups](#)
  - [Support for Main/Backup Connection](#)
  - [Support for HTTPS](#)
- [Troubleshooting](#)

### 7.2.1 Setting up the Timing Display

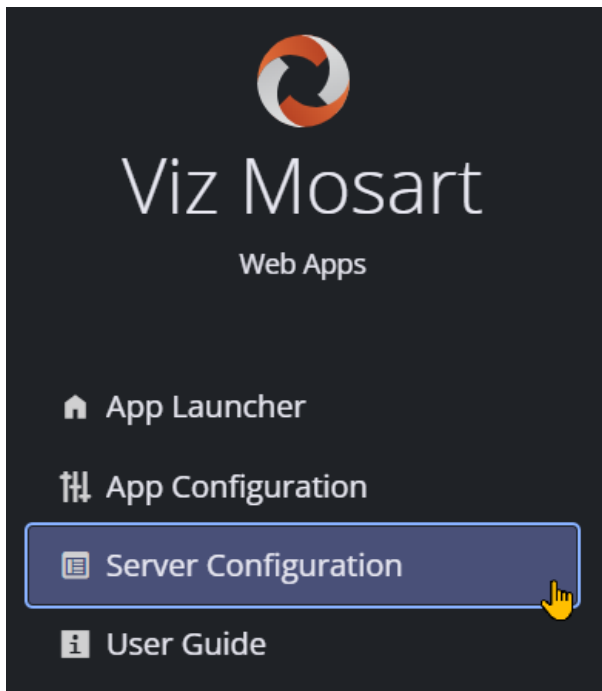
#### Prerequisites

- Viz Mosart 5.0.3 or later.
- Perform the installation as described in [Getting Started](#).

#### Configuration

Timing Display will work out-of-the-box if the Mosart Web Apps are installed on the same machine as the Viz Mosart server.

It is recommended to visit the [Server Configuration](#) page to verify proxy server connections and other security aspects.



## 7.2.2 Optional Server Setups

### Support for Main/Backup Connection

- If you have a *backup server* for redundancy, you will need define the environment in the menu [Server Configuration](#).

### Support for HTTPS

- If you are using *HTTPS*, you will need define the environment in the menu [Server Configuration](#).

## 7.2.3 Troubleshooting

Please see section [Troubleshooting](#).

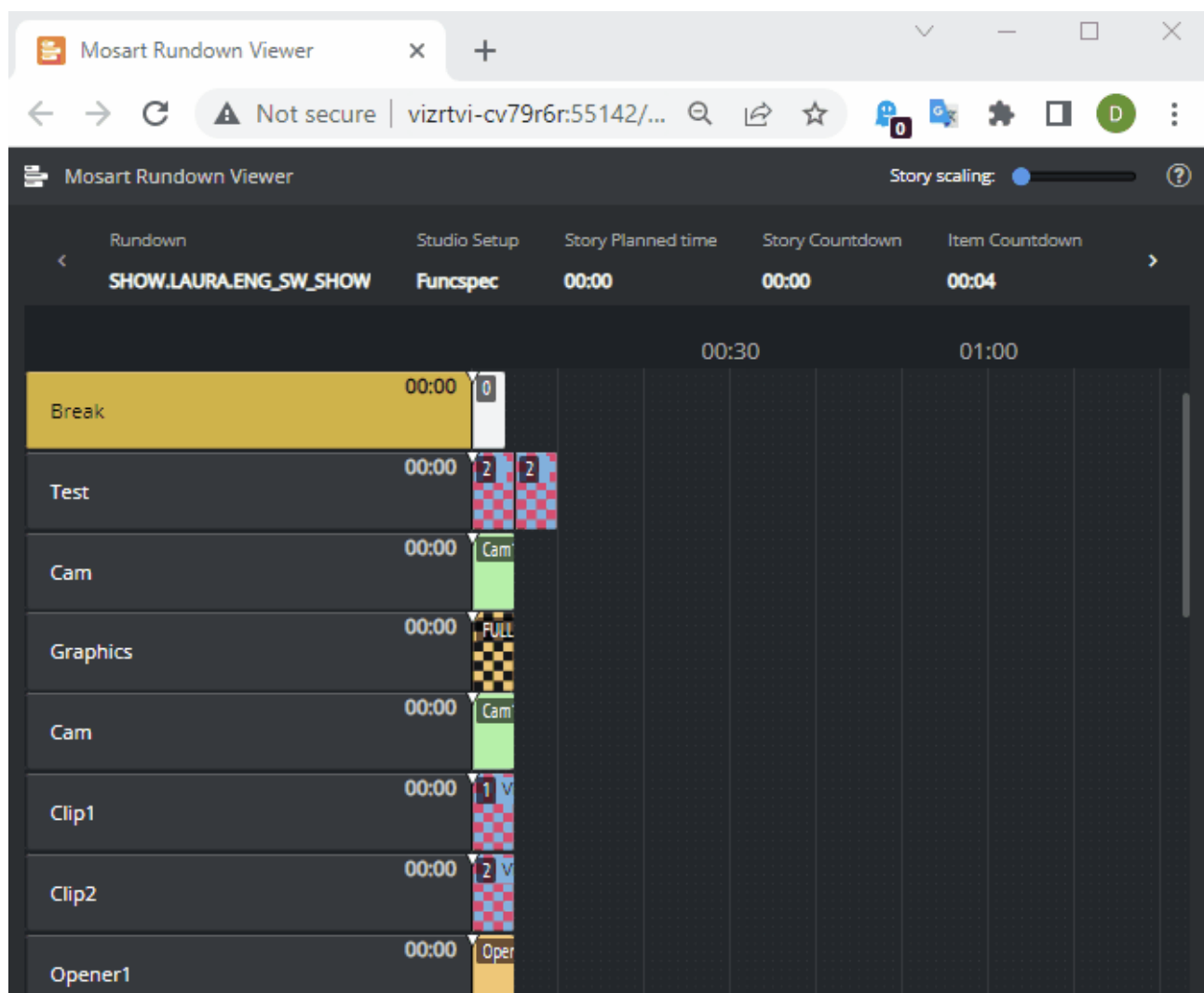


## 8 Rundown Viewer

The Mosart Rundown Viewer provides a convenient web browser view of details from the current Viz Mosart rundown.

- Displays the active Viz Mosart rundown.
- Summary of story timings.
- Supports a variety of devices. For example an iPad or networked phone.

**Info:** For news-breaking details on the **Mosart Rundown Viewer**, please refer to the *Mosart Web Apps Release Notes* for your version of Viz Mosart, at [the Vizrt Documentation Center](#).



This section describes:

- [Working with the Rundown Viewer](#)
- [Setup and Administration of RV](#)

## 8.1 Working with the Rundown Viewer

- [Opening the Rundown Viewer](#)
- [Key Features](#)
  - [Viz Mosart Server Status](#)
  - [Story Scaler](#)
  - [Story Script](#)
  - [Go to On Air Story](#)

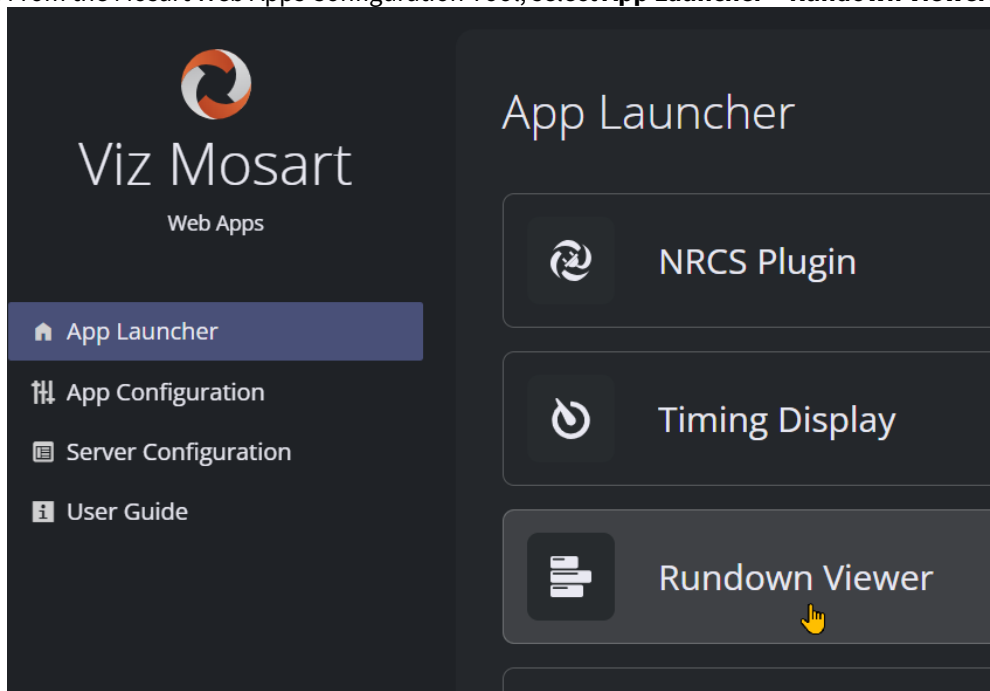
The Mosart Rundown Viewer provides a convenient, browser-based display of a Viz Mosart rundown.

**Info:** To browse a rundown in Rundown Viewer, a standard Viz Mosart setup must first be running with a loaded rundown.

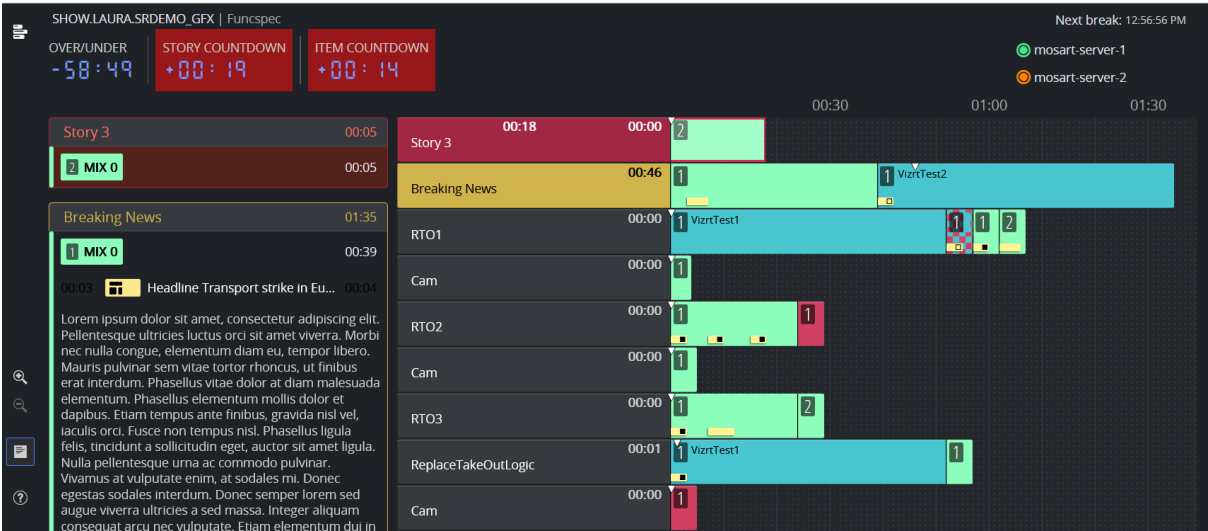
### 8.1.1 Opening the Rundown Viewer

You launch the Mosart Rundown Viewer from the Mosart Web Applications Configuration Tool.

1. From the Mosart Web Apps Configuration Tool, select **App Launcher > Rundown Viewer**:



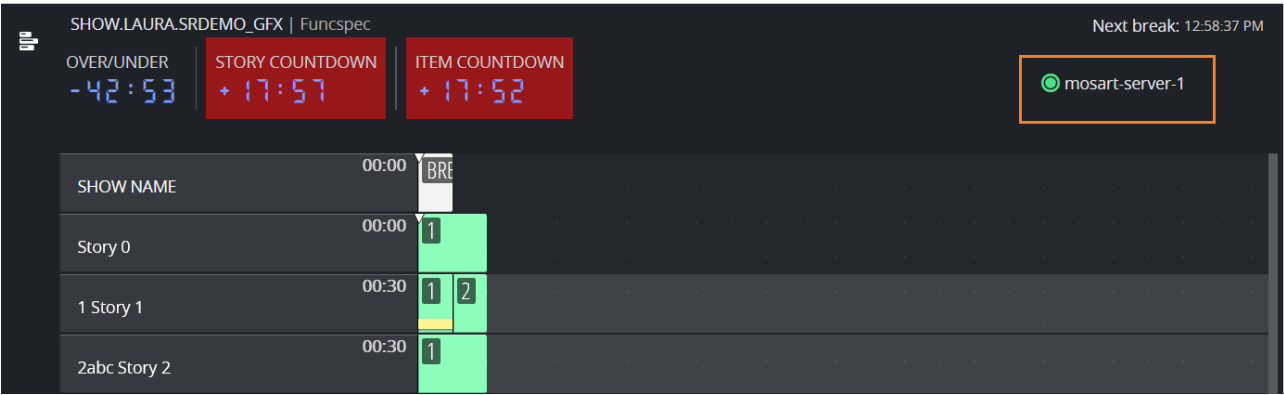
2. The Mosart Rundown Viewer displays in your default web browser.



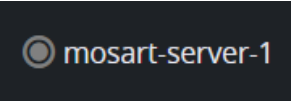
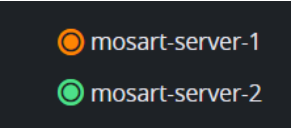
8.1.2 Key Features

Viz Mosart Server Status

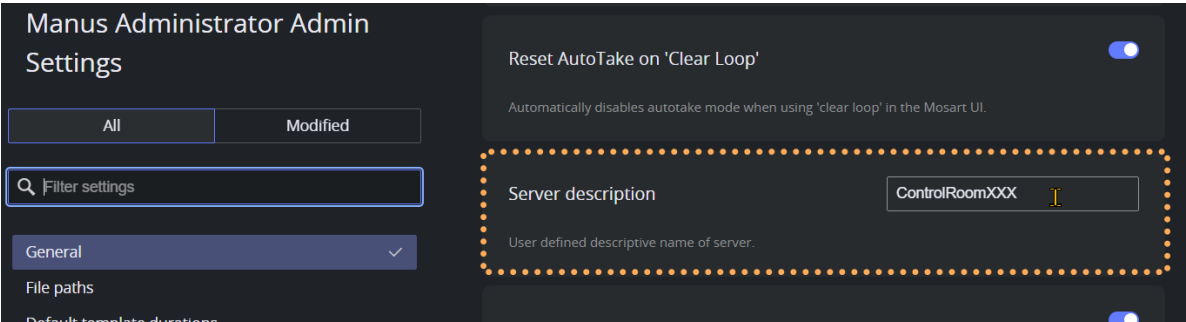
Viz Mosart server status will be displayed in the upper right corner:



| Status                                                                                              | Description                 |
|-----------------------------------------------------------------------------------------------------|-----------------------------|
|  mosart-server-1 | Viz Mosart server is active |
|  mosart-server-1 | Viz Mosart server is idle   |

| Status                                                                            | Description                                                                                                                                |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
|  | Manus Admin is not running or Mosart Remote Control Service (RCS) is not running or it is not accessible                                   |
|  | Viz Mosart is setup with main and backup and backup Mosart server has been configured in Viz Mosart Web Config Tool > Server Configuration |

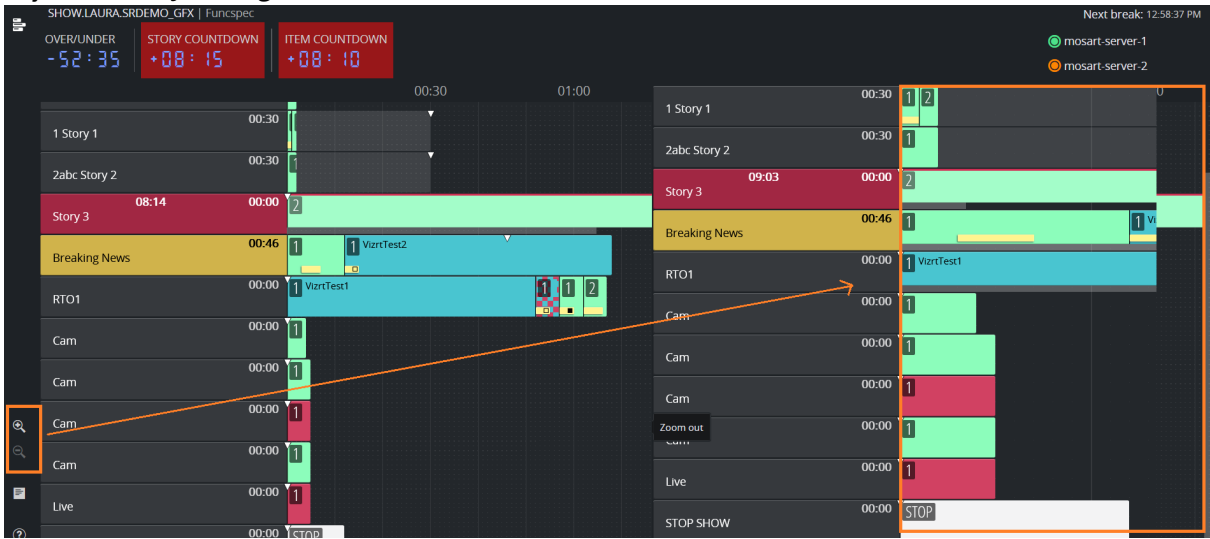
By default, the hostname, IP address, or FQDN configured in the Viz Mosart Web Config Tool > Server Configuration for the main and backup Viz Mosart servers will be displayed. However, in newer versions of Viz Mosart, the Server Description configured on each Viz Mosart Server under Manus Admin Settings is used instead.



Story Scaler

You can expand the viewing area for items in a story row. This is useful to see full text details on an item.

- Adjust the **story scaling** to desired column width.



## Story Script

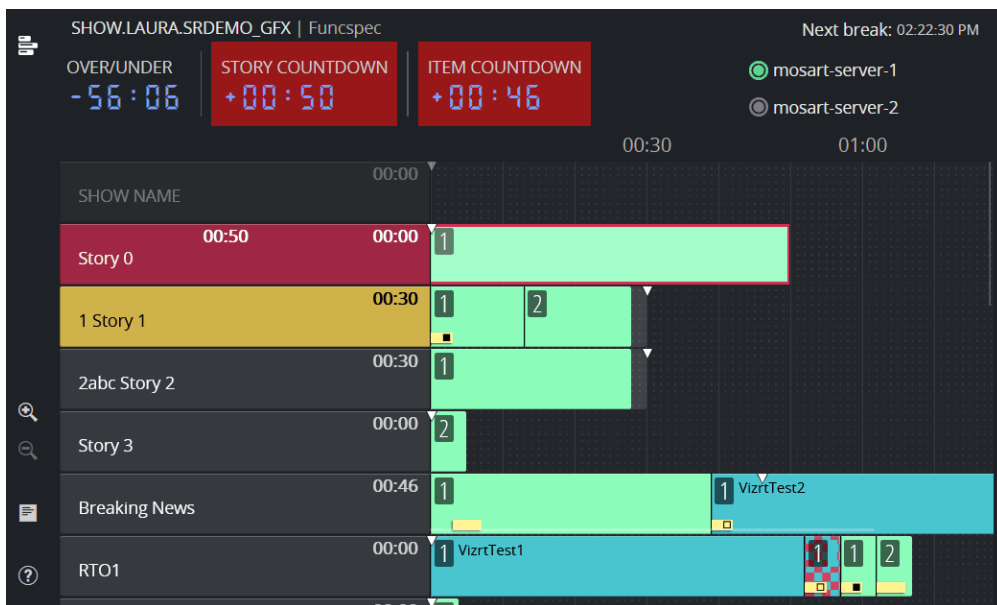
You can work with the story script from within the Rundown Viewer.

## Go to On Air Story

A navigation button



enables immediate scrolling to the current on-air story.



**Tip:** For an explanation of the elements in a Viz Mosart rundown, please refer to the [Viz Mosart User Guide](#), under **User Interface**, the section **Rundown Window**.

## 8.2 Setup and Administration of RV

- [Setting up the Rundown Viewer](#)
  - [Prerequisites](#)
  - [Installation and Configuration](#)
- [Optional Server Setups](#)
  - [Support for Main/Backup Connection](#)
  - [Support for HTTPS](#)
- [Troubleshooting](#)

### 8.2.1 Setting up the Rundown Viewer

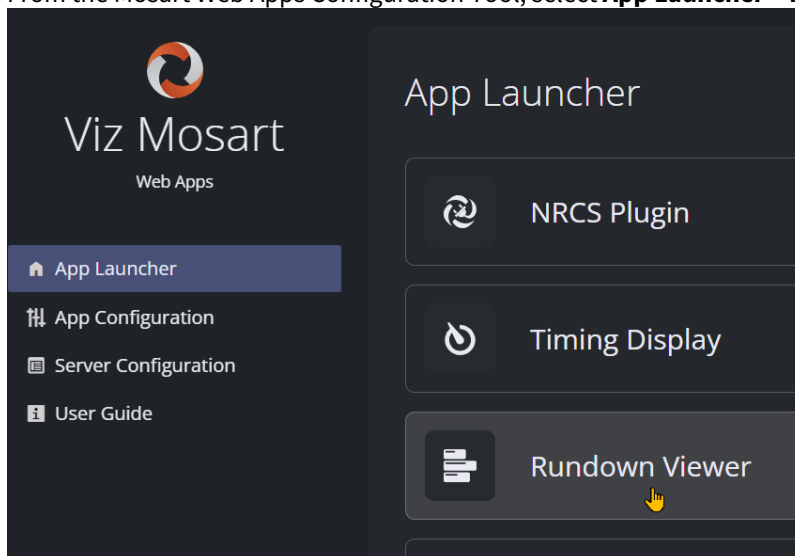
#### Prerequisites

- Viz Mosart 5.1.0 or later

#### Installation and Configuration

The Rundown Viewer requires no additional configuration.

1. Ensure that your Viz Mosart system is operating under normal working conditions.  
As a minimum,
  - a. Manus Admin must be running.
  - b. The Viz Mosart UI is running, displaying a rundown.
2. From the Mosart Web Apps Configuration Tool, select **App Launcher > Rundown Viewer**.



## 8.2.2 Optional Server Setups

### Support for Main/Backup Connection

- If you have a *backup server* for redundancy, you will need define the environment in the menu section [Server Configuration](#).

### Support for HTTPS

- If you are using *HTTPS*, you will need define the environment in the menu [Server Configuration](#).

## 8.2.3 Troubleshooting

Please refer to section [Troubleshooting](#).

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## 9 Showmaker

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### 9.1 About Showmaker

Showmaker is a lightweight, web-based, efficient MOS-rundown creation tool, eliminating the need of a complex newsroom system.

Showmaker provides all features needed to quickly create and control a Viz Mosart show, with rundowns and stories that contain automation templates, graphics, clips and scripts.

#### 9.1.1 Typical Usage

- Standalone creation of Viz Mosart-automated shows.
- Provide an independent backup for a newsroom system.
- Quickly get on air. Especially useful at the beginning of a project:
  - The automation is prepared in advance, not requiring any newsroom system.
  - If you are using a newsroom system, all automation can be prepared upfront in Showmaker.
- Enables non-journalist skeleton staff (for example, in the middle of the night) to get breaking news on-air.

 **Info:** Showmaker is not intended as a replacement for a newsroom system. Showmaker offers self contained, quick and easy creation and management of a Viz Mosart rundown.

#### 9.1.2 Key Features

- **Shared Production:** Team members collaborate in a single place, preparing and managing rundown content for automated or semi automated productions.
- **Structured workspace:** Visually organize with a clear overview, shows, rundowns and rundown templates, all in one place.
- **Automation integration:** Add and edit Viz Mosart templates.
- **Graphics gathered:** Optional [Viz Flowics](#) (HTML graphics) and [Viz Pilot Edge](#) graphics all in the same tool.
- **Story crafting:** Rapid modification of scripts, manual items, and timing information in a single, elegant UI.
- **Synchronized operations:** Updates display immediately in the active Viz Mosart rundown.
- **Future-proofed:** Modern, secure, web-based architecture. Support for MOS 4.

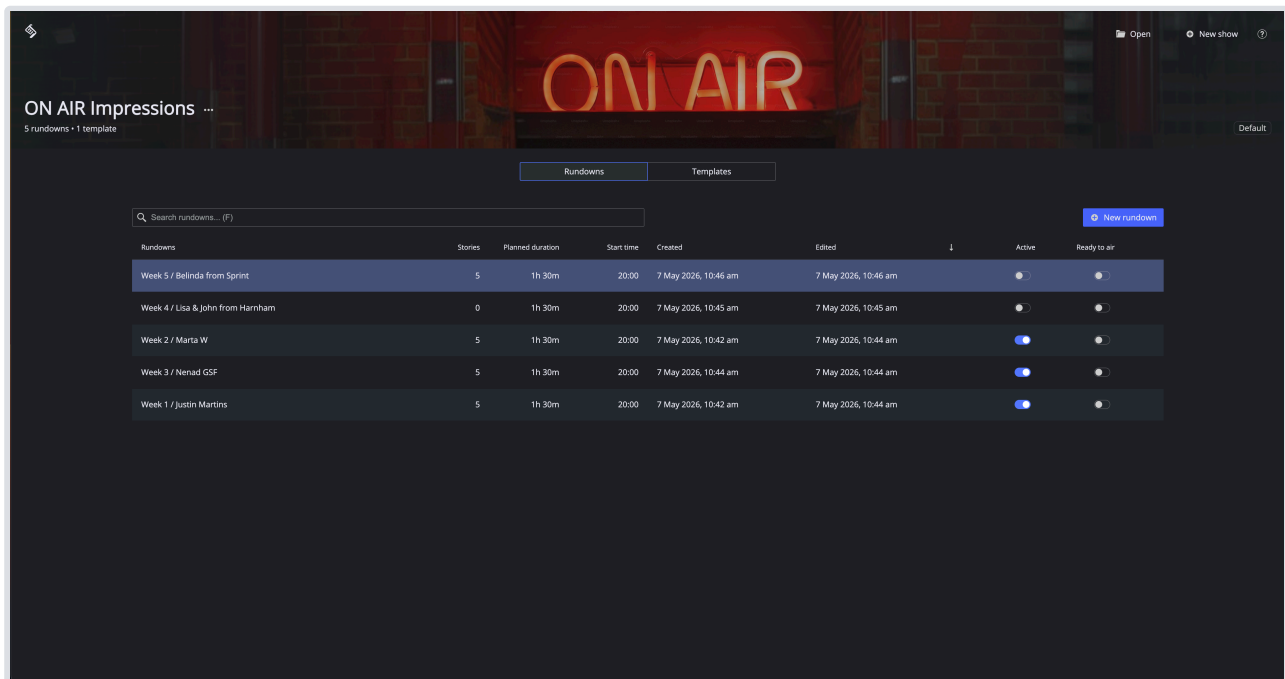
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## 9.2 Why Showmaker

Traditional newsroom systems are powerful but complex, with long onboarding, heavy configuration, and far more functionality than many productions actually need. Showmaker takes the opposite approach. Light, focused, and built around the small set of tasks needed to drive a Viz Mosart rundown: open a show, build stories, add automation and graphics, go on air. New users are productive in minutes rather than days - a practical choice for teams wishing to move away from a heavyweight NRCS or that need a fast, self-contained way to run shows.



Showmaker is also designed to be the operator's own workspace. The show banner, with its image, title and program window, make each show immediately recognizable for the people who run and own the content. A fast and focused tool that operators can familiarly return to.



## 9.2.1 Typical Workflow

Showmaker takes you from blank screen to ready-for-air rundown, in five short steps:

Create a show, build the rundown, populate the stories with Mosart templates and other instructions, activate so it syncs with Viz Mosart and mark it Ready-to-Air, as the operator's active rundown.



## 9.3 Showmaker in your Ecosystem

Showmaker is a new addition to the suite of *Mosart Web Apps*. Browser-based tools from a single server. These utilities are included with every Viz Mosart delivery.

Showmaker covers the role played by a newsroom system in a traditional setup, owning the rundown and pushing it to Viz Mosart for playout.

| Component                          | Role for Showmaker                                                                                                                                                                                                        | Required?      |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Viz Mosart Server                  | Receives the Showmaker rundown (over MOS, Showmaker acts as a virtual NRCS) and plays it on air.<br>Also the source of the Mosart automation template sets that Showmaker displays in the Viz Mosart <b>Assets</b> panel. | Yes            |
| Mosart Web Apps Configuration Tool | Required for one-time setup:<br>- Point Showmaker to the Mosart server(s)<br>- Point Showmaker to any optional graphics integrations.<br>See <a href="#">Setup and Administration of Showmaker</a> .                      | Yes, once only |
| NRCS Plugin                        | Mosart Web App plugin. Showmaker embeds it to read Mosart template sets and to import data from a connected NRCS.                                                                                                         | Yes, bundled   |
| Viz Pilot Edge                     | Plugin. Showmaker embeds a Pilot Edge panel for Pilot Edge graphic template instant editing.                                                                                                                              | Optional       |
| Viz Flowics                        | Plugin. Showmaker embeds a Flowics panel for real-time cloud-based HTML5 graphic editing.                                                                                                                                 | Optional       |

Technically, Viz Pilot Edge, Viz Flowics and the Mosart NRCS Plugin display asset panels inside Showmaker as iframes that exchange MOS messages directly in your browser, so you don't have to open separate applications.

---

## 9.4 Getting Started

Here you learn to open Showmaker, recognize the main views, understand some important terminology, then create and execute your first rundown.

- [Opening Showmaker](#)
- [Tour of the Interface](#)
- [Key Terms](#)
- [Your First Rundown](#)
- [Getting Help](#)

### 9.4.1 Opening Showmaker

First try this

- Showmaker runs in a web browser. Enter the URL that your administrator provided . It will look something like this:

```
https://<your-mosart-web-apps-host>/showmaker
```

Otherwise, launch the Mosart Web Apps Configuration Tool

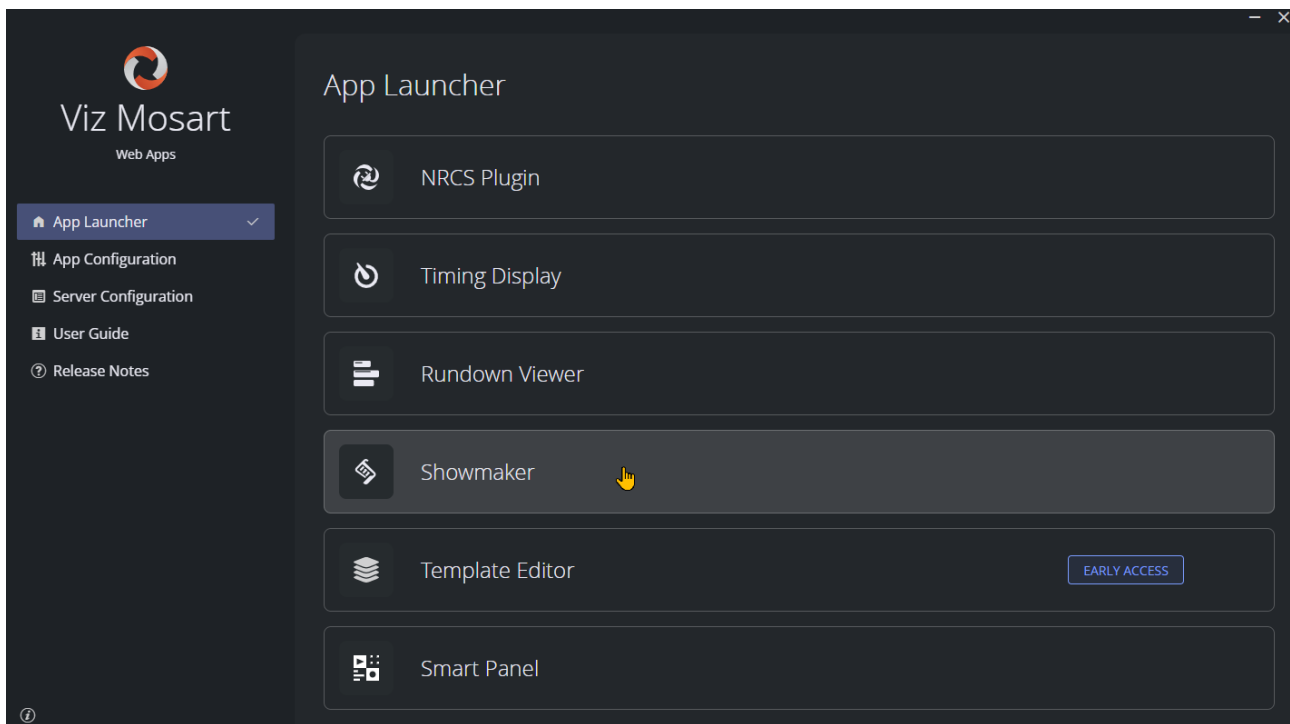
- Click your Desktop shortcut



or run C:\Program

Files\Vizrt\MosartWebApplicationsConfiguration\MosartWebApplicationsConfiguration.exe.

- From **App Launcher**, select **Showmaker**.



## Authentication

Whether you need to sign-in depends on how your administrator has configured Mosart Web Apps.

- **Authentication off:** You reach Showmaker without signing in (default).
- **Authentication on:** From the Showmaker welcome page, you are redirected to your organization's identity provider and sign in there.  
Once in, your email appears in the user avatar in the top-right.

**Info:** Showmaker is one of several Mosart Web Apps, with the same host serving all apps in the suite. Switching between Web Apps does not require further signing-in.

## Roles

Your role decides what you can do. When authentication is on, Showmaker reads your role from the identity provider:

- **showmaker-admin:** Full access to create, edit, activate, and put rundowns on air.
- **showmaker-viewer:** Read-only access to browse shows, rundowns and templates. Editing controls are hidden or disabled.

## Troubleshooting

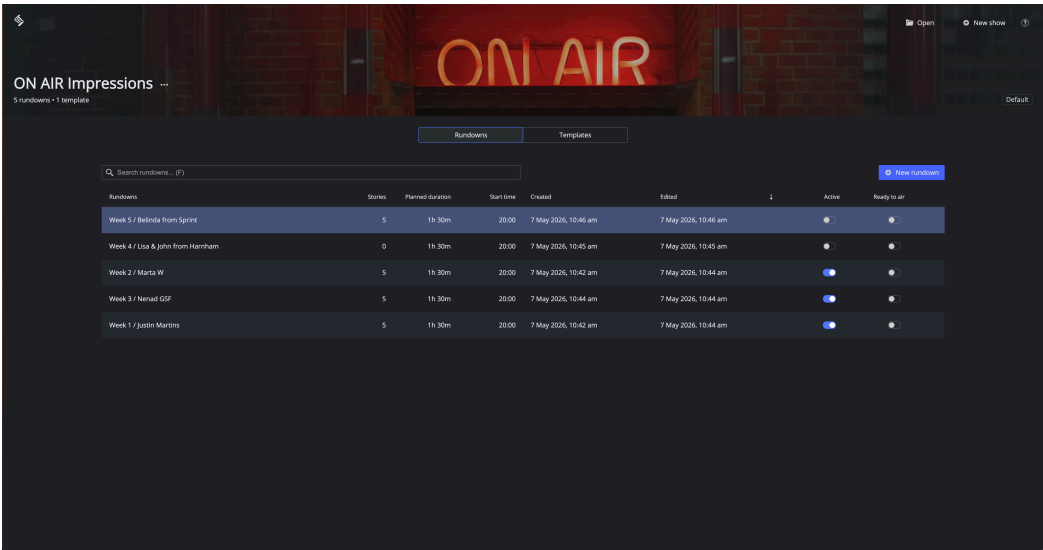
If Showmaker opens but you cannot see any shows, or the rundown table cannot reach a Mosart server, the one-off configuration is needed. Please refer to [Setup and Administration of Showmaker](#).

## 9.4.2 Tour of the Interface

Showmaker has three views.

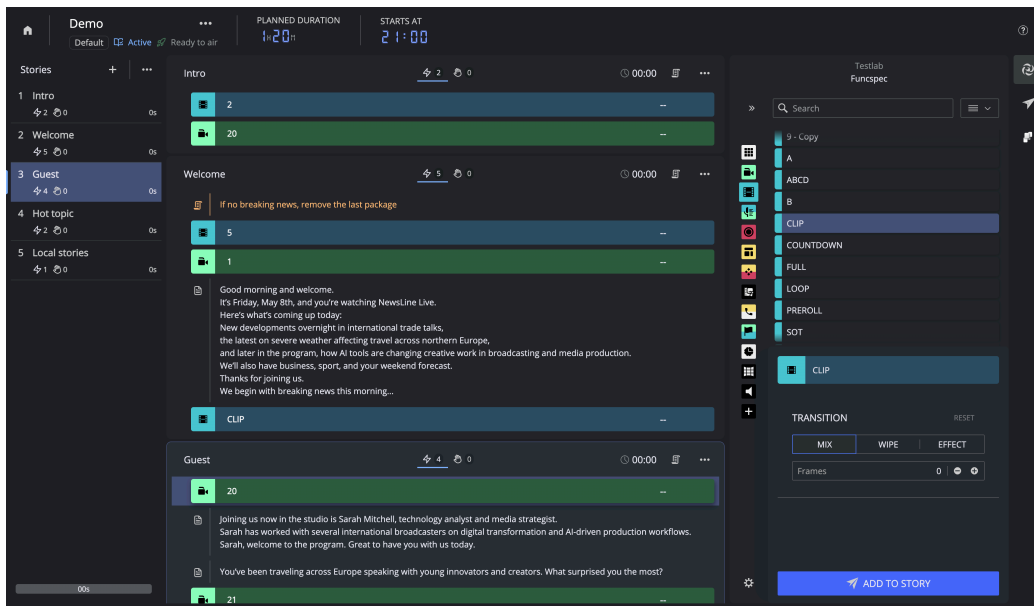
### Landing Page

Select a show and browse its rundowns or rundown templates.



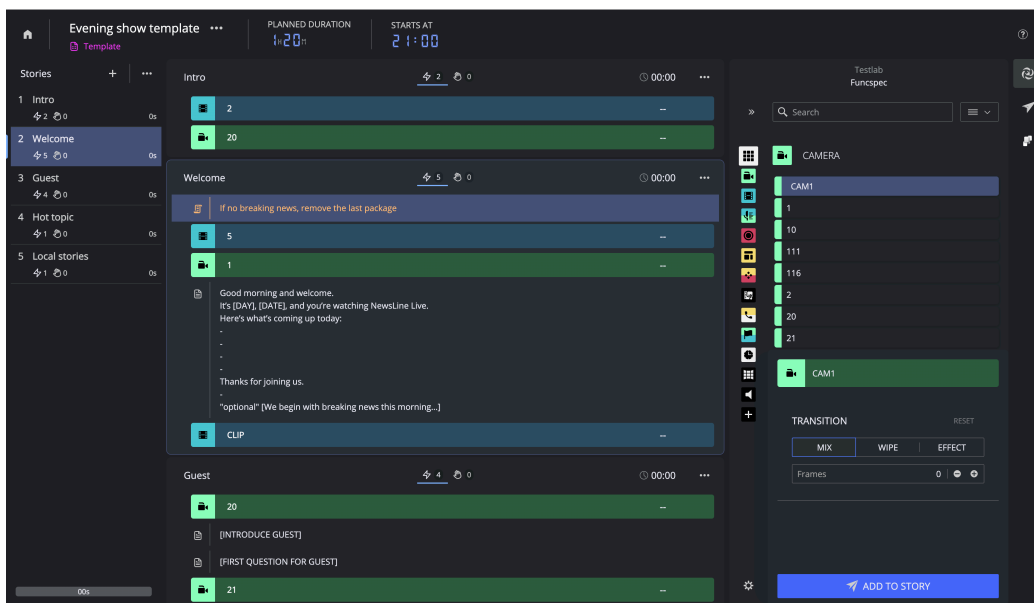
### Rundown Page

Build and edit a single rundown.



## Rundown Template Page

Build and edit a single rundown template.



**Info:** All three pages are described in detail in section [Working with Showmaker](#).

### 9.4.3 Key Terms

Showmaker organizes your content as a hierarchy. A *show* contains *rundowns*, each rundown is made of *stories*, and each story holds *items*, *notes* and *content* that go on air.

| Term             | Meaning                                                                                                                                                                                                                                                                                                          |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Show             | Top-level container. Holds rundowns and rundown templates for a single program or production.                                                                                                                                                                                                                    |
| Rundown          | An ordered sequence of stories that Viz Mosart can run on air.                                                                                                                                                                                                                                                   |
| Rundown template | A reusable rundown structure. You can create a rundown based on a rundown template, for your own use.                                                                                                                                                                                                            |
| Story            | A slice of a rundown. Holds automation items, manual items, graphics, clips and scripts that share a context.                                                                                                                                                                                                    |
| Story item       | One automation step inside a story (a Mosart template instruction).                                                                                                                                                                                                                                              |
| Manual item      | A story item taken to air by the operator during the show, not automatically executed.                                                                                                                                                                                                                           |
| Story note       | Free-text block, pinned to the top of a story. Not sent to Viz Mosart. Can be dragged under an item to convert it into a script.                                                                                                                                                                                 |
| Script           | Presenter or editorial text attached to a specific item. Sent to Viz Mosart with the rundown.                                                                                                                                                                                                                    |
| Graphic overlay  | A Viz Pilot Edge or Viz Flowics element, attached to an item.                                                                                                                                                                                                                                                    |
| Clip             | Video media attached to an item. Can only be added to compatible story item types, for example <i>Package</i> or <i>Voice-overlay</i> .                                                                                                                                                                          |
| Studio           | A label (name) that groups one or more MOS devices. For example, the main and backup Viz Mosart servers of a single gallery, or several galleries on one site. Configured in the <b>App Configuration</b> menu and assigned per show or per rundown. See <a href="#">Setup and Administration of Showmaker</a> . |
| MOS active       | Toggle button on a rundown. When <i>ON</i> , the rundown is synced live with Viz Mosart.                                                                                                                                                                                                                         |
| Ready to air     | Toggle button on the active rundown. When <i>ON</i> , this rundown is added to Viz Mosart <b>Rundowns &gt; NCS active &gt; READYTOAIR</b> rundowns.                                                                                                                                                              |

| Term          | Meaning                                                                                   |
|---------------|-------------------------------------------------------------------------------------------|
| On air        | Badge on a rundown when Viz Mosart is currently running it.                               |
| Floated story | A story marked to skip during playout. Displayed with diagonal stripes in the story list. |

#### 9.4.4 Your First Rundown

This five minute walk-through introduces core concepts. It assumes your Showmaker is connected to a working Viz Mosart system (see [Setup and Administration of Showmaker](#)).

##### 1. Create a show.

From the landing page, open the **Show** menu and top-right click **New show**. Give it **Show title** *My first show*, select **Studio** *Default Studio* and click **Create**.

The screenshot shows a 'Create new show' modal window. At the top is the title 'Create new show' and a close button (X). Below is a 'Show title' input field containing 'My first show'. Underneath are two time input fields: 'Starts at (optional)' and 'Ends at (optional)', both set to '00:00:00'. Below these is a 'Banner image (optional)' section with a dashed border and the text 'Drag and drop here, or click to browse files' and 'Supported formats: PNG, JPEG. Max file size: 50MB.' At the bottom of the modal is a 'Studio' dropdown menu with an information icon (i) and the text 'Choose a studio'. At the very bottom are two buttons: 'Create' (highlighted in blue) and 'Cancel'.

- ##### 2. Create a rundown.
- With the show open, click **CREATE NEW RUNDOWN**, give it **Rundown title** *Demo*, and set a planned duration of 10 minutes. Clicking **Create** takes you to the Rundown page.



Create new rundown

Rundown Title

Demo

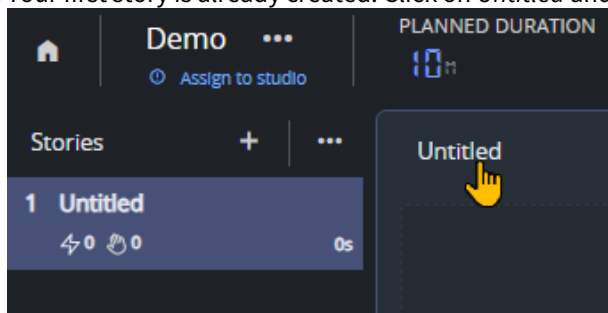
Rundown planned duration

Hours 0 Minutes 0

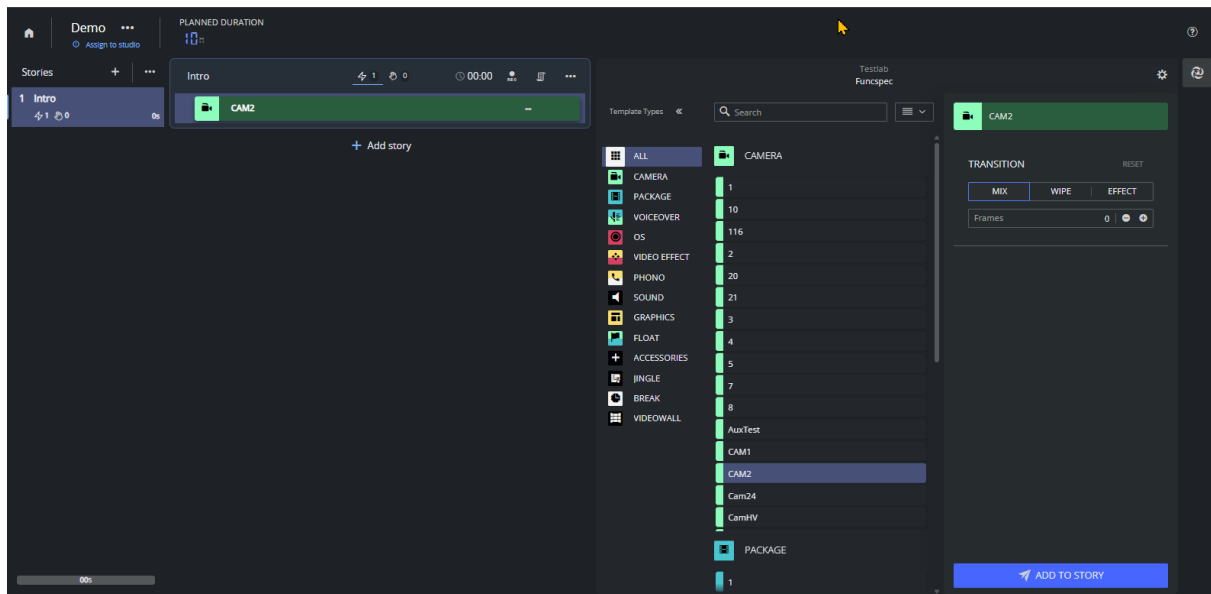
☐ Add start time

Create Cancel

3. Your first story is already created. Click on *Untitled* and rename the first story to *Intro*.

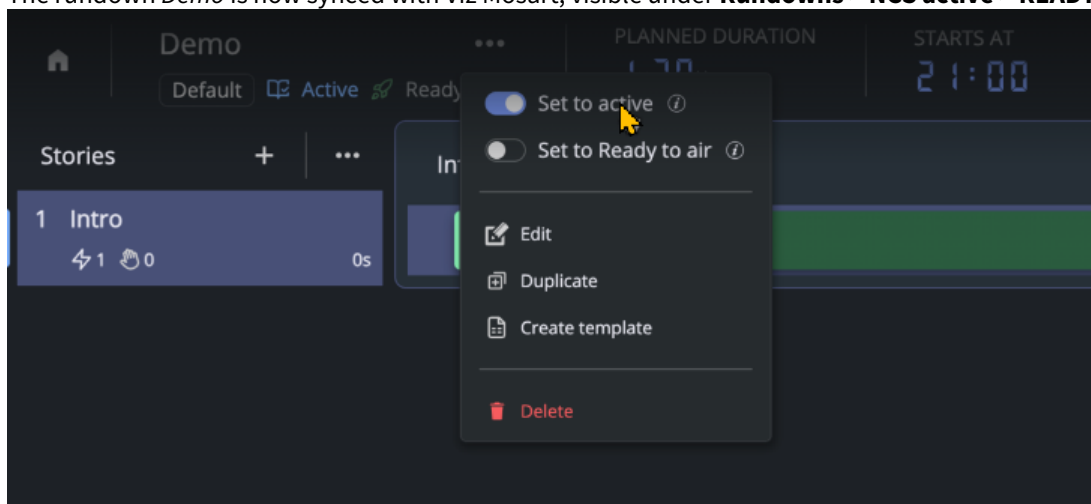


4. **Add an automation item.** From the Assets Integration sidebar on the right, open the Mosart NRCS Plugin if it is not already open, then drag a Mosart template (in this example, a green CAM2 template) onto the story. Alternatively, select the template and click **ADD TO STORY**.



5. **Make the rundown discoverable in Viz Mosart.** In the rundown top bar, click the Rundown options button (three ellipses) and toggle **Set to active**.

The rundown *Demo* is now synced with Viz Mosart, visible under **Rundowns > NCS active > READYTOAIR**.



6. **Send it on air.** Toggle **Set to Ready to air**. The rundown is appended to the *NCS active > READYTOAIR* rundown in Viz Mosart, where the operator can run the added stories.

You have now built and aired your first Showmaker rundown. Dive deeper into any step, with [Working with Showmaker](#).

## 9.4.5 Getting Help

**Help menu:** The ? icon in the top-right corner of every page opens a Help menu.

| ? Option           | Opens                                                                                                 |
|--------------------|-------------------------------------------------------------------------------------------------------|
| Keyboard Shortcuts | List of available shortcuts. See section <a href="#">Keyboard Shortcuts</a> .                         |
| Documentation      | Link to user documentation.                                                                           |
| What's new         | Link to Showmaker Release Notes.                                                                      |
| Give feedback      | Feedback mail form for the Showmaker team.                                                            |
| About              | Showmaker version and build information. Essential information to include on your Feedback mail form. |

## 9.5 Working with Showmaker

You make and organize your shows in the **Landing page** and the **Rundown page**. For a guided first-time tour, see [Getting Started](#).

- [Common Actions](#)
- [Landing Page](#)
- [Rundowns View](#)
- [Rundown Templates View](#)
- [Keyboard Shortcuts](#)
- [Examples, Videos, Further Guidance](#)

### 9.5.1 Common Actions

Shows, rundowns, and rundown templates share the same set of management actions where they appear in Showmaker.

| Action                               | What it does                                                                                              |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Open                                 | Opens the entity for editing. Click the row, or press Enter on the highlighted row.                       |
| Edit                                 | Opens a properties dialog (title, start time, planned duration, banner image, default-on-create, Studio). |
| Duplicate                            | Creates an independent copy of the entity. Rundowns and templates are duplicated within the same show.    |
| Set as default                       | (Shows only) Opens this show automatically the next time you launch Showmaker.                            |
| Delete                               | Removes the entity. For shows, a confirmation dialog adds two safeguards - see Delete show.               |
| Create rundown template from rundown | (Rundowns only) Saves the rundown as a reusable Template in the same show.                                |

### 9.5.2 Landing Page

Showmaker opens on the landing page. From here you pick a show, browse its rundowns or rundown templates, and decide which rundown is sent to Viz Mosart.

## Show

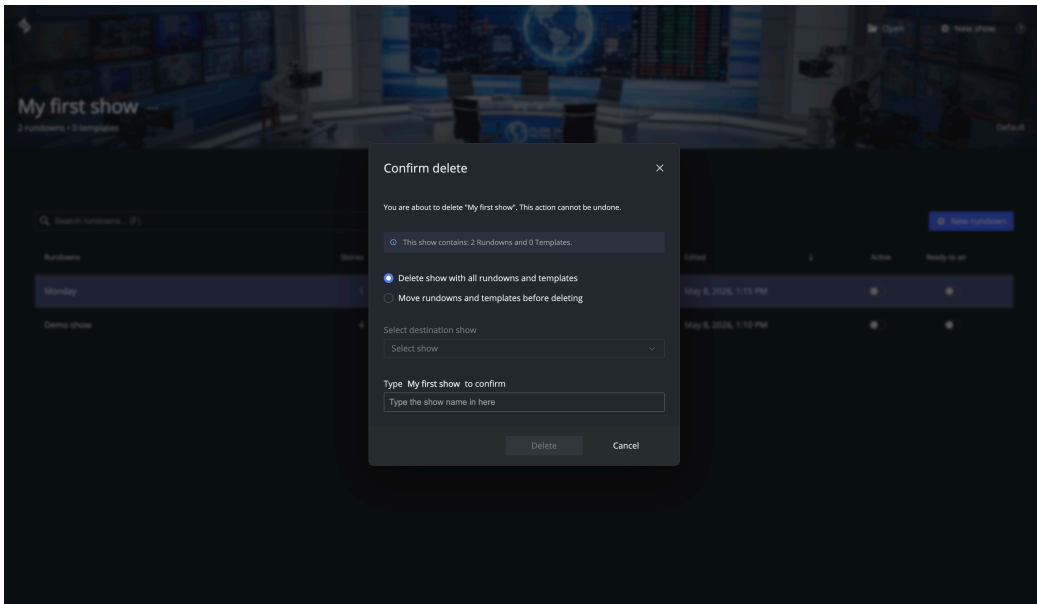
A *show* is a container for related rundowns and rundown templates, typically one program or production. Each show can hold any number of rundowns and templates.

The **show banner** at the top of the landing page is both a functional space and an identity space. Functionally it is the show selector, content counter, and action menu. As an identity surface, the banner image, title, and program window personalize the workspace, give operators a personal connection to the program they are producing, and signal authority over the rundowns and templates that sit beneath it.



## Show actions

- **Open:** Pick a show from the dropdown.
- **New show:** Create a new show.
  - Show title: Required.
  - Starts at / Ends at: (optional) When both are set, every new rundown and rundown template in this show inherits these values: Starts at is the rundown start time, and the Planned duration (show length) is automatically displayed. Both can be manually overridden per rundown.
  - Banner image: (optional) Convenient identifier for the active show.
  - Studio: Selectable when a MOS device is configured. This is an Administrator [configuration task](#).
- **Edit show:** Modify any of the above on an existing show and the default option for a new rundown: Start blank or seed from a specific rundown template.
- **Set as default:** See [Common entity actions](#).
- **Delete show:** Deleting a show can affect every rundown and rundown template inside it, so a Confirm delete dialog provides two safeguards:
  - Choose what happens to the contents:
    - Delete show with all rundowns and templates: Delete everything in one go.
    - Move rundowns and templates before deleting: Select a destination show - everything is moved to another show (original show is deleted, but nothing is lost).
  - Type the show name to confirm (The **Delete** button stays disabled until you type the exact show name).

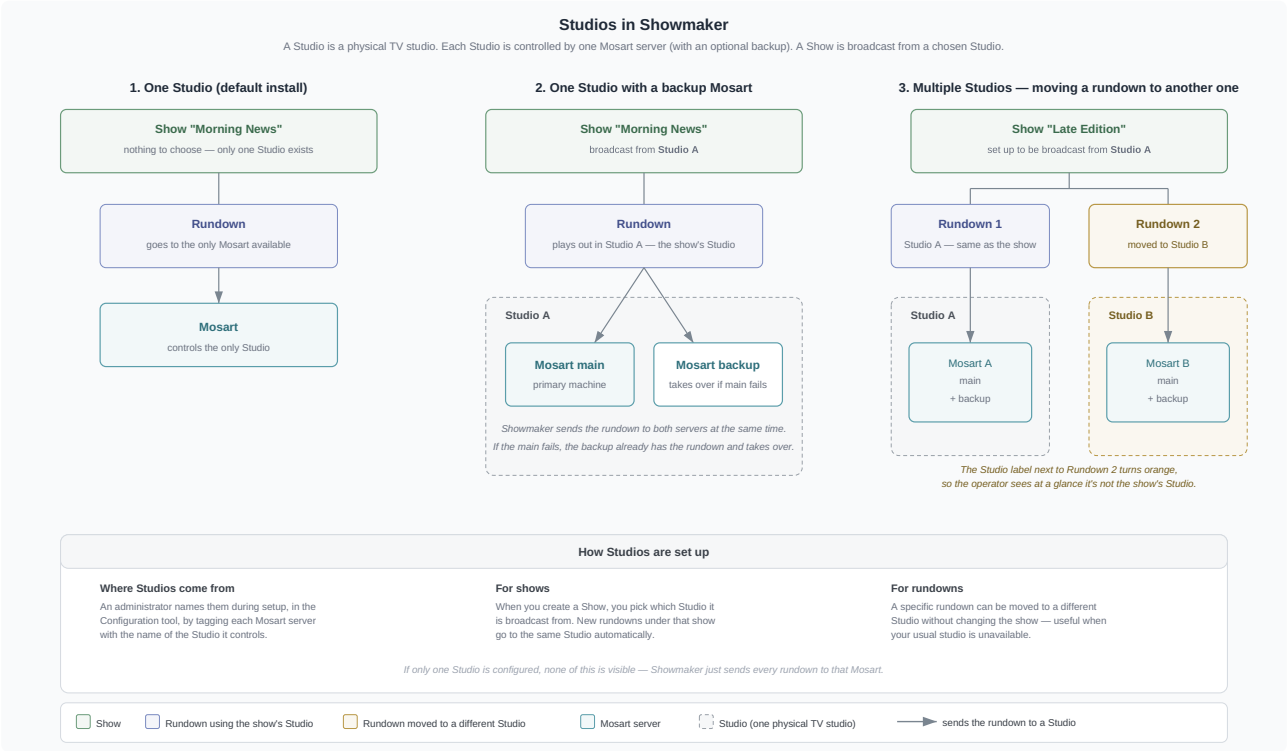


## Studio Assignment

Each show in Showmaker originates from a *Studio*, the physical production environment under the control of a Mosart server.

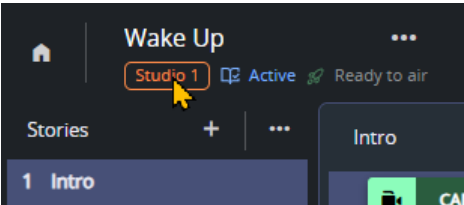
The common, and default situation is that a rundown is associated with the show's original studio. But Showmaker enables sharing of rundowns between studios. You can point a single rundown at a different Studio without changing the show.

The diagram below shows three practical setups.



**Info:** Studios are defined once when Showmaker is installed. See the [Setup](#) section to understand how an administrator configures them.

Above the list of rundowns, the Studio badge tells you more about the rundown’s origins.



| What you see               | Status     | Meaning                                          |
|----------------------------|------------|--------------------------------------------------|
| Grey-outlined studio badge | Default    | All rundowns inherit this studio                 |
| Orange badge               | Overridden | This rundown overrides the show's default studio |
| "Assign to studio" button  | Unassigned | No studio is set. Click to pick one              |

### 9.5.3 Rundowns View

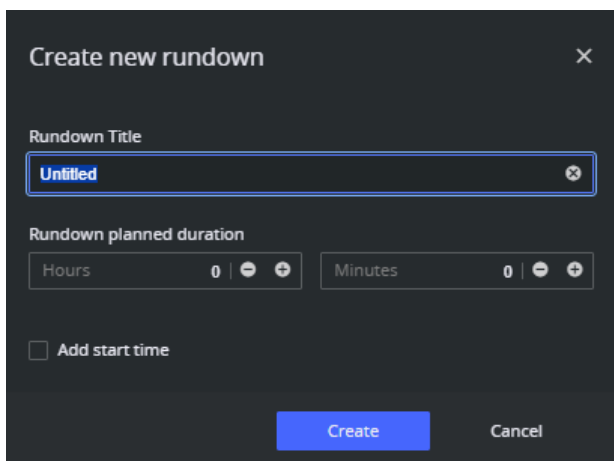
Switch between **Rundowns** and **Rundown templates** to filter the list. The **rundown view** shows every rundown in the current show with a search field and a New rundown button. The search field filters the table by rundown title as you type.

#### New Rundown

Opens a dialog with two creation paths. The default option follows the show's "default option for new rundowns" setting.

- **Start from scratch** : creates an empty rundown.
- **Use a rundown template** : creates an independent copy of the selected template.

Other fields, **Starts at** and **Planned duration** are pre-filled from the show's settings when. Change them here to override for this rundown only.



Create new rundown

Rundown Title

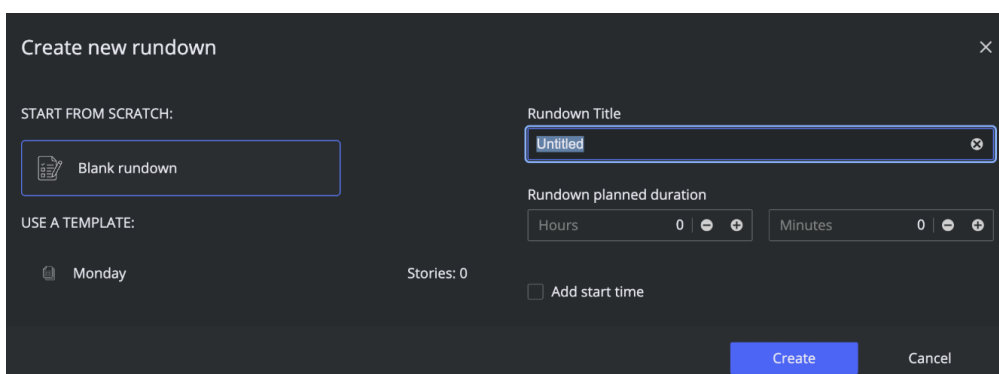
Untitled

Rundown planned duration

Hours 0 Minutes 0

☐ Add start time

Create Cancel



Create new rundown

START FROM SCRATCH:

Blank rundown

USE A TEMPLATE:

Monday Stories: 0

Rundown Title

Untitled

Rundown planned duration

Hours 0 Minutes 0

☐ Add start time

Create Cancel

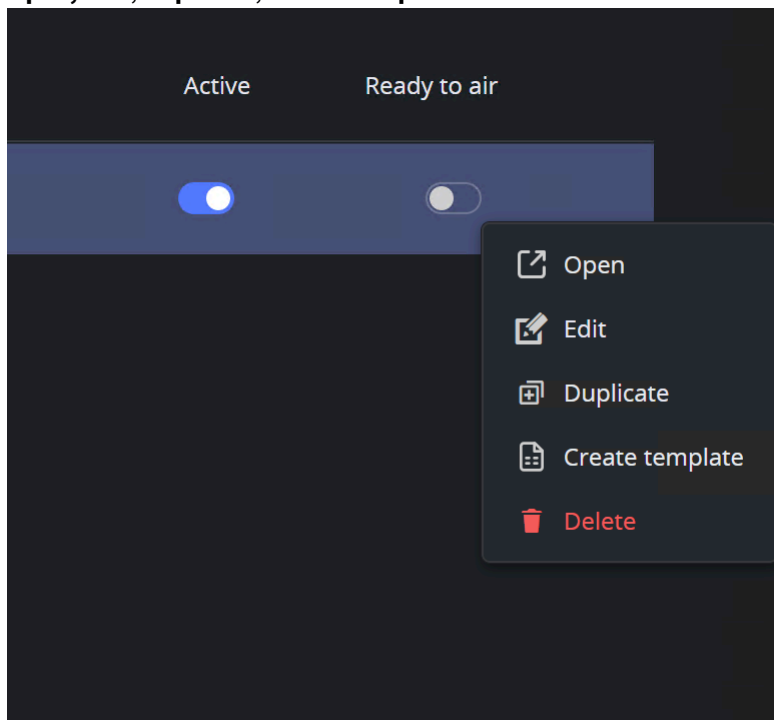


## Rundown list details

| Column           | Description                                                                          |
|------------------|--------------------------------------------------------------------------------------|
| Rundowns         | Rundown title. An <b>ON AIR</b> chip appears when Viz Mosart is currently running it |
| Stories          | Number of stories in the rundown                                                     |
| Planned duration | Planned length of the rundown                                                        |
| Start time       | Rundown start time                                                                   |
| Created          | Date the rundown was created                                                         |
| Edited           | Date the rundown was last edited                                                     |
| Active           | Toggle for MOS active. See <a href="#">Putting a Rundown On-air</a>                  |
| Ready to air     | Toggle for ready-to-air. See <a href="#">Putting a Rundown On-air</a>                |

## Rundown options

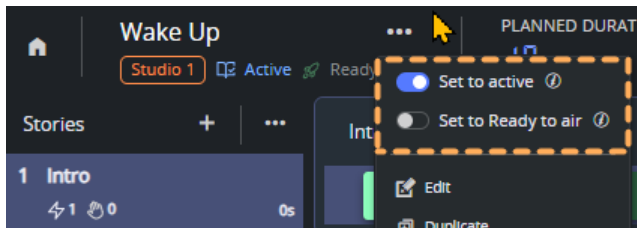
- **Open, Edit, Duplicate, Create template** and **Delete**. See [Common Actions](#).



## Putting a rundown on-air

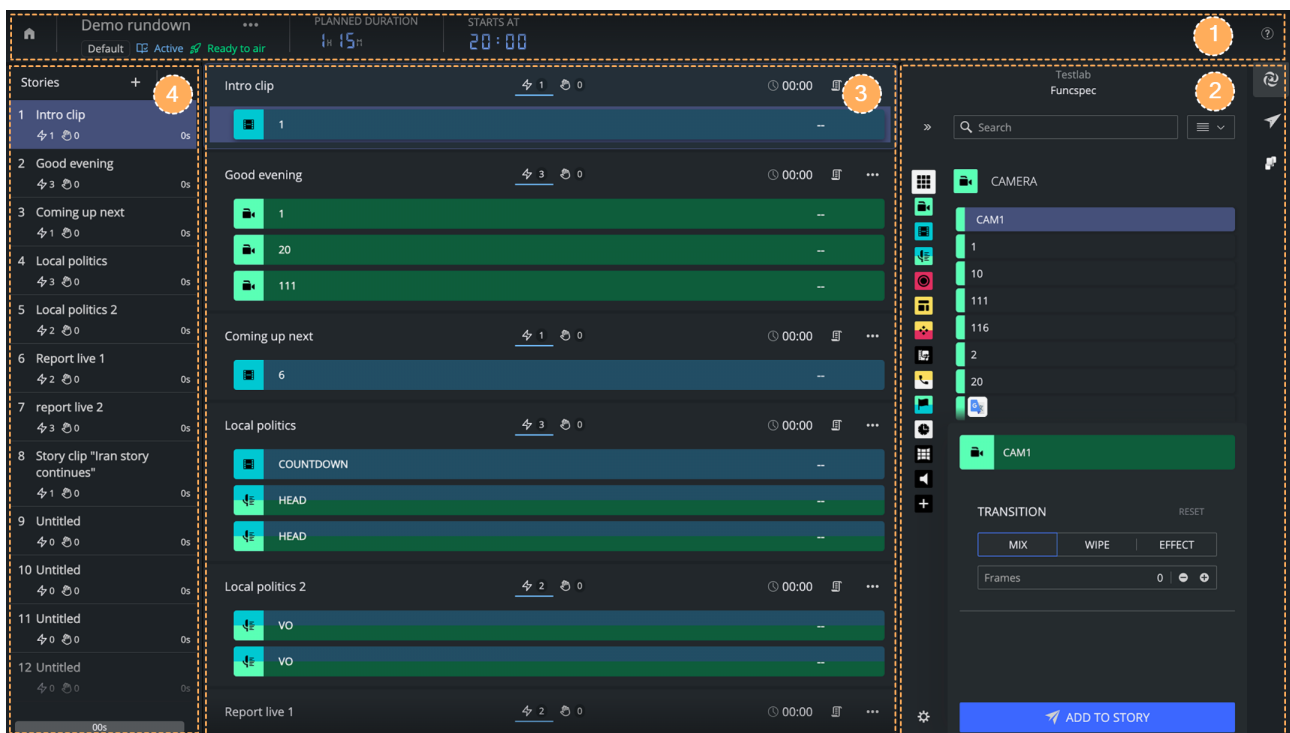
Two toggles control how a rundown reaches Viz Mosart. Use them in this order:

1. **Active:** Turn *ON* to live sync the rundown with Viz Mosart. Your rundown appears in the Mosart UI, any edits in Showmaker are reflected immediately.
2. **Ready to air:** Turn *ON* to add this rundown to the Viz Mosart **Rundowns > NCS active > READYTOAIR** rundown, where the operator can take it on air.



## Rundown Operations

Double-clicking a rundown from the [Rundowns View](#) opens the Rundown page. This is where you build your rundown.



- [1 Rundown Information Bar](#)
- [2 Assets Panel](#)
- [3 Story Editor](#)

- [4 Story List / Navigation Panel](#)

## 1 Rundown Information Bar

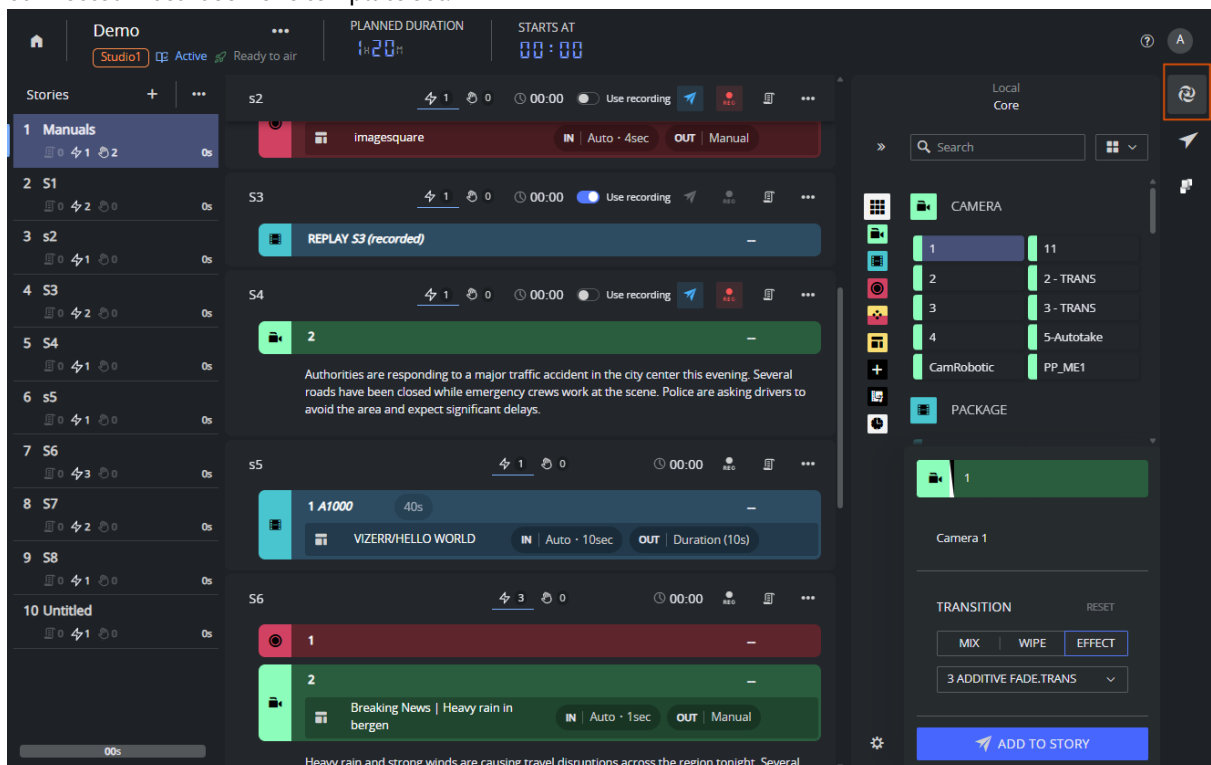
Top bar of the page, with everything that applies to the rundown as a whole.

- **Home:** Back to Landing page.
- **Title and status badges:** Rundown name with **MOS active** and **Ready to air** badges when *ON*.
- **Studio badge:** Click the badge to override or reset. See [Studio Assignment](#).
- **Starts at:** Start time, inherited from the rundown or its template.
- **Planned duration:** Automatically calculated from any Start time. Turns red when the total story duration exceeds it.
- **Options menu:** Edit, Duplicate, Create template, Paste story (when one is on the clipboard), Delete.
- **Help menu:** The top-right ? icon always accesses Help.
- **User avatar:** (when set) Next to the ? Help icon. Click to see your account and to **Sign out**. This user identity is shared across all Mosart Web Apps.

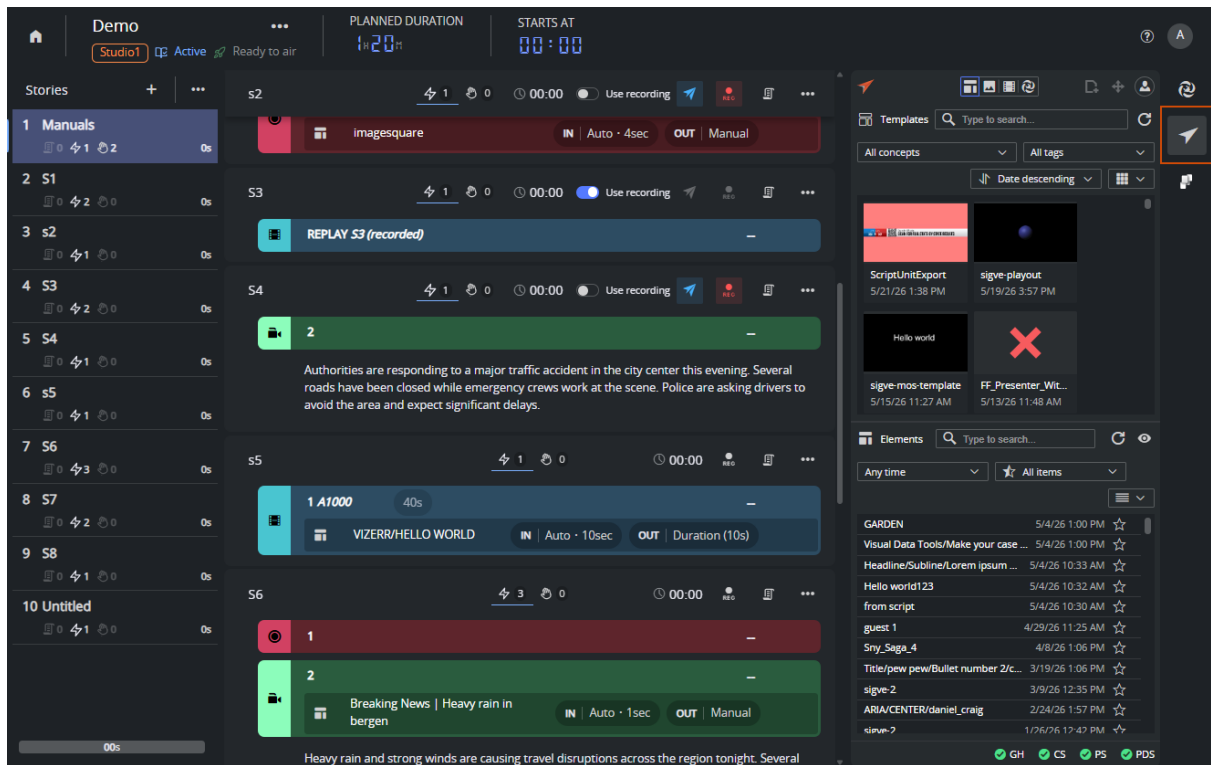
## 2 Assets Panel

Holds the building blocks that you drag into stories.

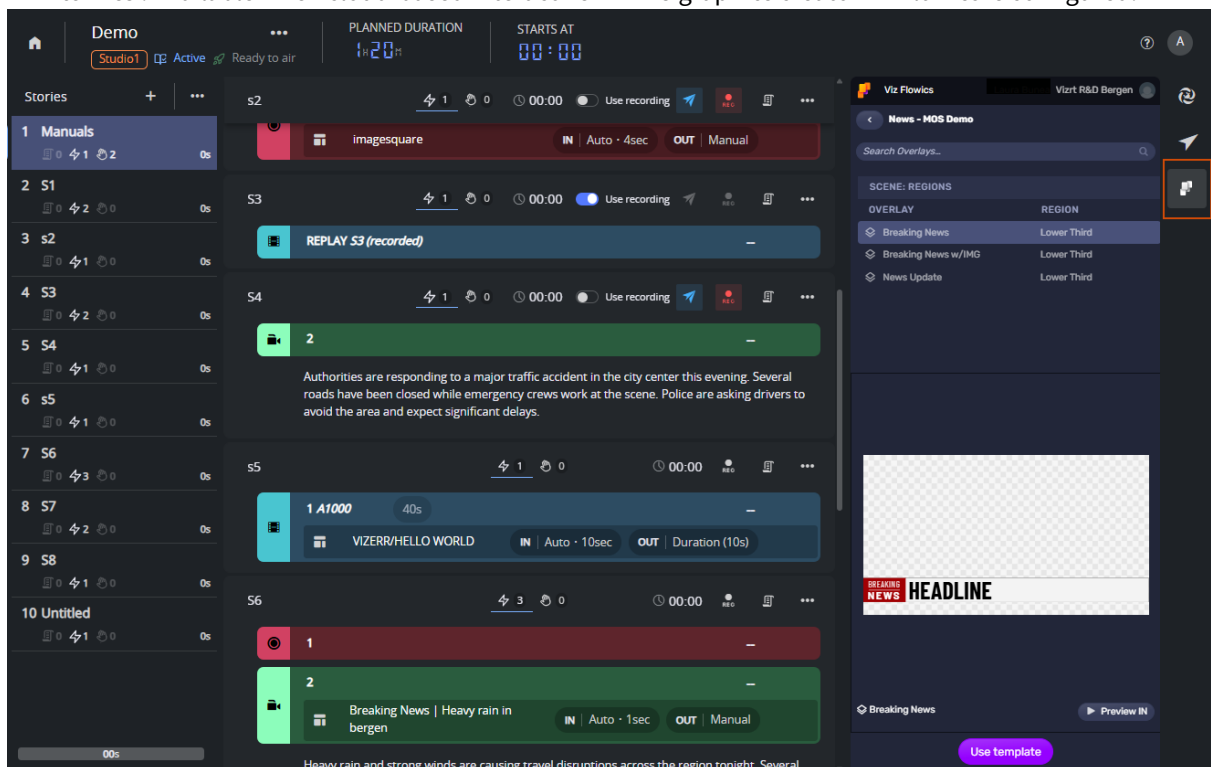
- **Viz Mosart automation templates:** Always displayed. The available set of templates depends on the connected Mosart server's template set.



- **Viz Pilot Edge:** Available when the graphics template manager [Viz Pilot Edge](#) is configured.



- **Viz Flowics** : Available when cloud-based interactive HTML5 graphics creator *Viz Flowics* is configured.



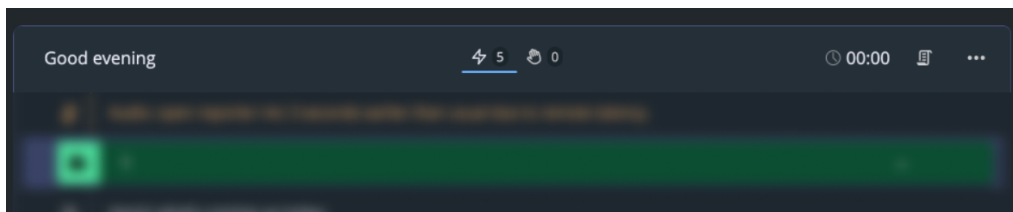
### 3 Story Editor

The main center panel chronologically lists all stories and content. Selecting a story in the Story list scrolls the editor to it.

- **Saving and live sync.** All edits are saved automatically as you make them - there is no Save button. While the rundown is **Active** (see [Putting a Rundown On-air](#)), changes are pushed to Viz Mosart over a live connection, so what you edit in Showmaker appears immediately in Viz Mosart.
- **Copy and paste a story.** Use **Copy story** in the story list options menu to put a story on the clipboard. The story nav panel header bar's options menu then shows **Paste story**, which appends the copy at the end of the current rundown. The clipboard works across rundowns and templates within the same Showmaker session. You can also click on the options menu in the story header and **Paste story as next**.

### Story header

Each story has a header with name, duration, and an options menu.



- **Story title:** Editable inline.
- **Auto / Manual toggle:** Per-story view filter. *Auto* hides manual items so you see only what runs automatically. *Manual* only displays manual items. Each story has its own setting, and this setting does not affect what is sent to Viz Mosart.
- **Planned Duration:** User-defined duration.
- **Options menu** (ellipses): Float, Copy, Duplicate, Paste item, Paste story as next, Delete.

### Story body

The editing area inside a story. This is where you add and arrange automation elements that control Viz Mosart templates, graphics elements, timing and scripts.

A story can hold any combination of:

- **Automated item:** Viz Mosart template that runs automatically.
- **Manual item:** Items an operator can manually select during the show. Listed separately for clarity.
- **Story note:** Pinned to the top of the story , this free-text field enables script-first authoring. For example, your draft or final editorial context, or production/editorial staff instructions.

#### Info:

- Story notes remain visible while you build the automation underneath.
- Can be dragged and dropped under any item (for example, a CAM template) to repurpose as on-air script for the item.

- Anything left at the top of the story stays as editorial guidance for the team.

- **Script field:** Presenter or editorial text attached to a specific item.
- **Graphic:** Viz Pilot Edge or Viz Flowics elements attached to an item.
- **Clip:** Video playback elements from Media Administrator, attached to an item.

## 4 Story List / Navigation Panel

Ordered list of every story in the rundown. Has controls to add, reorder, float, copy, and delete.

### Header

- **Add story (+):** Appends a new empty story at the end of the rundown. Hold **Shift** and press to add as *next* story, below the currently selected one.
- **More options** (3 ellipsis button):
  - **Import stories:** Imports stories from a prepared CSV or Excel file.  
Accepts CSV and Excel files, mapping each row to a new story at the end of the rundown.
  - **Paste:** Paste-in any story on the Clipboard.



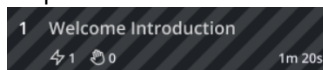
**Tip:** Adding a story is a frequent action, so Showmaker offers two methods:

- The **+** icon in the story list header
- **ADD TO STORY** button at the foot of the editor area.

Both append a new, empty story. The lower button automatically reveals the story. Use whichever is closer to where you are working.

### Story list item

- **Story number:** Story position in the rundown.
- **Story name:** Title
- **Drag to reorder:** Select the row by its drag handle and drag up or down to change story location in the rundown. Numbering updates automatically.
- **Story options:** Clicking the handle (without dragging), opens a per-story menu:
  - **Float story:** Marks the story to be skipped during playout. Floated stories are rendered with diagonal stripes and are not sent to air, but stay in the rundown as a reference.



- **Copy**
- **Duplicate**
- **Delete.**
- **Items counter:** Icon with a count  showing number of scheduled and manual items that the story contains (information only).
- **Story planned duration:**   
(Click the **Dash**  to initially add)

## Quick Guide to Rundown Operations

### To add a Mosart template

1. Open the Mosart Assets panel  on the right side.  
The colored templates represent automation commands that control devices such as cameras, video servers, graphics engines and audio mixers.
2. Pick a template and adjust its properties, as needed.
3. Click **ADD TO STORY**, or drag the template onto a story.

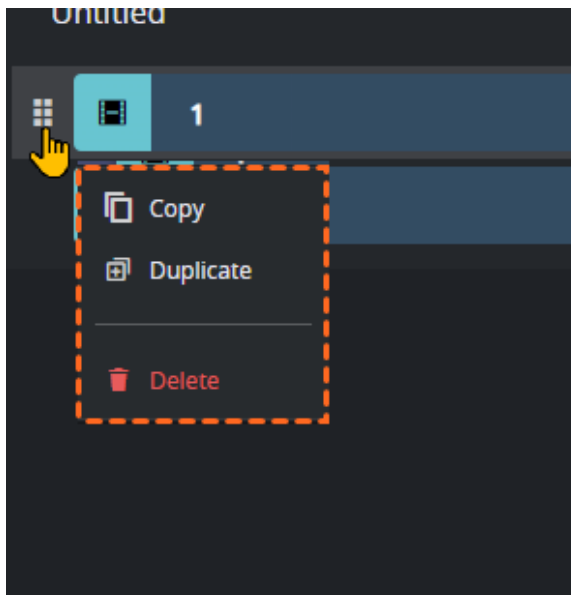
### To add a graphic

1. Click the icon for either
  - a. [Viz Mosart](#)
  - b. [Viz Pilot Edge](#) (Vizrt graphics assets and template creation tool)
  - c. [Viz Flowics](#) (Vizrt cloud-based interactive HTML5 graphics) panel.
2. Pick a graphic and adjust its properties.
3. Click **ADD TO STORY**. The graphic is attached to the selected item in the story.

**Info:** The appearance of graphics icons depend on how your Showmaker is configured by your administrator.

### To manage a story and story items

You can copy, duplicate, edit, add script to, change timing of or delete a story item.



- Click the handle to reveal user actions.

- Click the script icon  to modify the script.

### To reorder a story

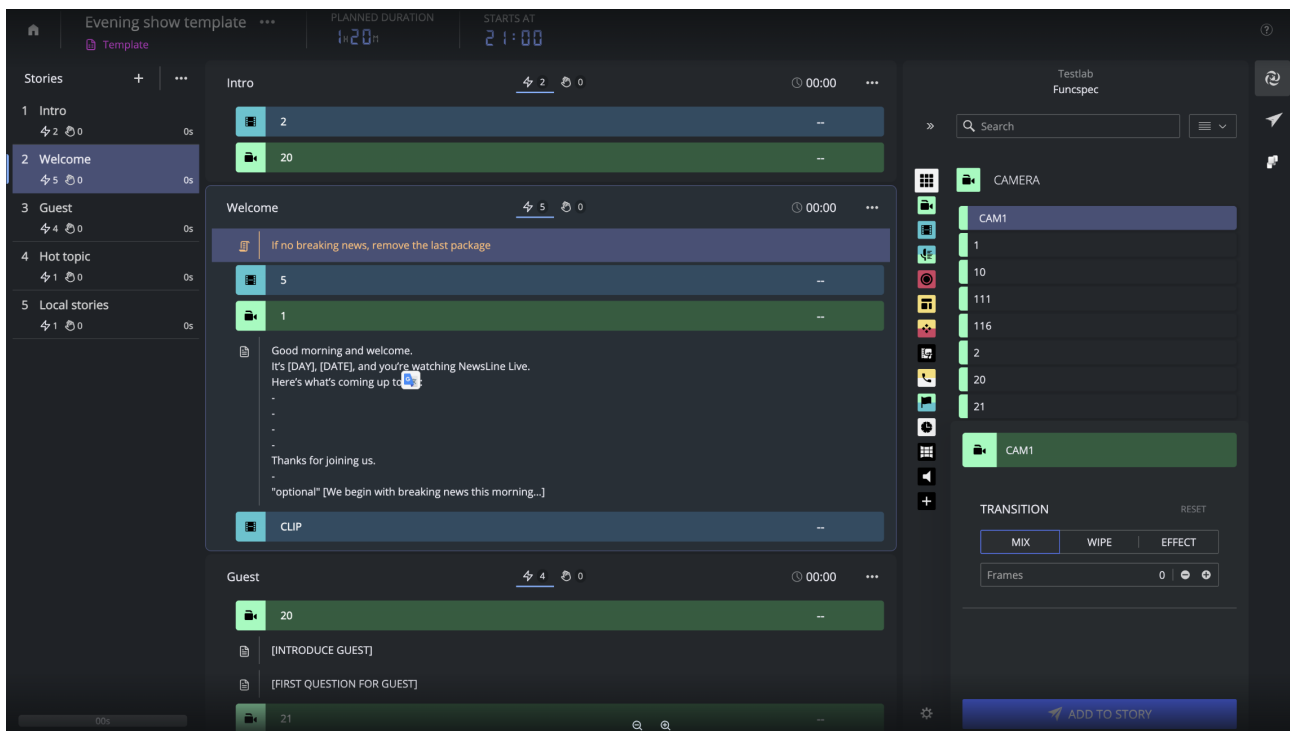
- Drag the handle and drop anywhere in the rundown to change execution order.



#### Info:

- Items can have *secondary* items (for example, an Overlay Graphic attached to a CAM template).
- These secondary items have their own actions menu that displays either from the handle or in a pop-up panel when double-clicked.

## 9.5.4 Rundown Templates View



A *rundown template* defines the structure of a rundown without specific content. Use templates for recurring programs and standard show formats.

Template lists and how you work with them, are very similar to the [Rundowns view](#). Refer to that section for how to manage templates.

- The only difference is that since Templates are never synced to Viz Mosart, there are no **Active** or **Ready to air** toggles. And since they are not associated with a specific studio, no Studio badge.
- Once a rundown is created from a template, it is fully independent. Editing the template later does not affect rundowns already created from it.



You open a rundown template for editing from the [Rundown Templates](#) view.

## Rundown Template Operations

You work with Rundown Templates in nearly the same way as described above for [Rundowns](#) with the same [2 Assets Panel](#), [3 Story Editor](#), [4 Story List](#).

- i Info:** The differences, reflecting what a Template is used for:
- **Template editing is local.** Once a rundown has been created from a template, it is independent. Subsequent editing of the template will only affect new rundowns created from it.
  - **No Active / Ready to air features.** Templates are not synced to Viz Mosart and never go on air, so the rundown information bar has no **MOS active + Ready to air** badges or controls.
  - **No Studio badge.** Studio Assignment is a Rundown, not a Template property. A rundown created from the selected template inherits the show's Studio (or whatever override is set on the rundown).
  - **Options adapted for templates.** The Options menu offers **Edit properties**, **Duplicate template**, **Create rundown from template**, **Paste story** (when one is on the clipboard), and **Delete**.

## 9.5.5 Keyboard Shortcuts

Open this list inside Showmaker any time with **K**, or pick **Keyboard Shortcuts** from the Help menu (see section [Getting Help](#)).

Shortcuts here are presented for

- [Landing Page](#) (initial view)
- [Rundown / Rundown Template Editor](#).

### Landing Page

| Action                  | Shortcut |
|-------------------------|----------|
| Open show               | O        |
| New show                | S        |
| Edit show               | E        |
| Browse list of rundowns | ↑ / ↓    |
| Create new rundown      | R        |

| Action                          | Shortcut |
|---------------------------------|----------|
| Create new template             | T        |
| Focus search (Find)             | F        |
| Switch Rundowns / Templates tab | V        |
| Make active                     | A        |
| Go - ready to air               | G        |
| Delete rundown                  | Delete   |

### Rundown Editor and Rundown Template Editor

| Action                   | Shortcut             |
|--------------------------|----------------------|
| Home / return to library | H                    |
| Make active              | A                    |
| Go - ready to air        | G                    |
| Edit rundown             | Shift + E            |
| Browse stories           | Shift + ↑ / ↓        |
| Add story                | N                    |
| Edit story title         | E                    |
| Reorder story            | Shift + Alt + ↑ / ↓  |
| Copy / Paste story       | Ctrl + Shift + C / V |

| Action               | Shortcut                            |
|----------------------|-------------------------------------|
| Delete story         | Shift + Delete or Shift + Backspace |
| Navigate items       | ↑ / ↓                               |
| Reorder item         | Alt + ↑ / ↓                         |
| Copy / Paste item    | Ctrl + C / V                        |
| Delete item          | Delete or Backspace                 |
| Add script to item   | S                                   |
| Edit script section  | Shift + S                           |
| Toggle Manual Assets | M                                   |
| Import from CSV      | Ctrl + I                            |

### Global

| Action                  | Shortcut |
|-------------------------|----------|
| Show keyboard shortcuts | K        |

## 9.5.6 Examples, Videos, Further Guidance

Showmaker is evolving rapidly. Already many Viz Mosart template tasks and workflows are fully functional, or coming soon.

Below is a starting point for finding some useful descriptions online:

### Making your Rundown

- [This short introductory video](#) takes you through the basics, so you can get started.

### Creating Rundowns for Breaking News, Sports, and Entertainment Shows

- [Making rundowns easy and intuitive to create](#), with drag-and-drop access to Viz Mosart templates.

## Newsroom Tags for Pre-production Accuracy

- [This 3-minute clip uses Mosart web Apps](#) to link smart Viz Mosart operations to the show's rundown.

## Viz University

Showmaker training is offered free of charge to registered customers at [Viz University](#).

## Documentation Updates

As development evolves, the documentation is continually updated. Between software updates, latest documentation is available at the [Vizrt Documentation Center](#).

## 9.6 Setup and Administration of Showmaker

Showmaker has limited usability out-the-box, there are a few one-off configurations that must first be completed. This section covers these one-off configurations, both for the [system administrator](#) and Showmaker [user](#).

**Info:** Documentation is continually updated, see the latest version at the [Vizrt Documentation Center](#).

- [System Administrator Only](#)
- [Setting up Showmaker for Daily Use](#)
- [Optional Server Setups](#)
- [Troubleshooting](#)

### 9.6.1 System Administrator Only

- Please follow the standard setup described in section [Mosart Web Apps Configuration Tool](#), as well as [Showmaker-specific](#) instructions, then return to this page.

### 9.6.2 Setting up Showmaker for Daily Use

#### Prerequisites

- Viz Mosart 5.14.3 or later

**Info:** With limited authentication features, Showmaker is largely compatible for testing with any version of Viz Mosart later than 5.1.0.

#### Installation and Configuration

You can open a standalone, pre-production rundown in Showmaker with no additional configuration.

However, to work with Viz Mosart templates or to test the rundown, you must perform these one-off configuration steps:

#### To manage Mosart templates

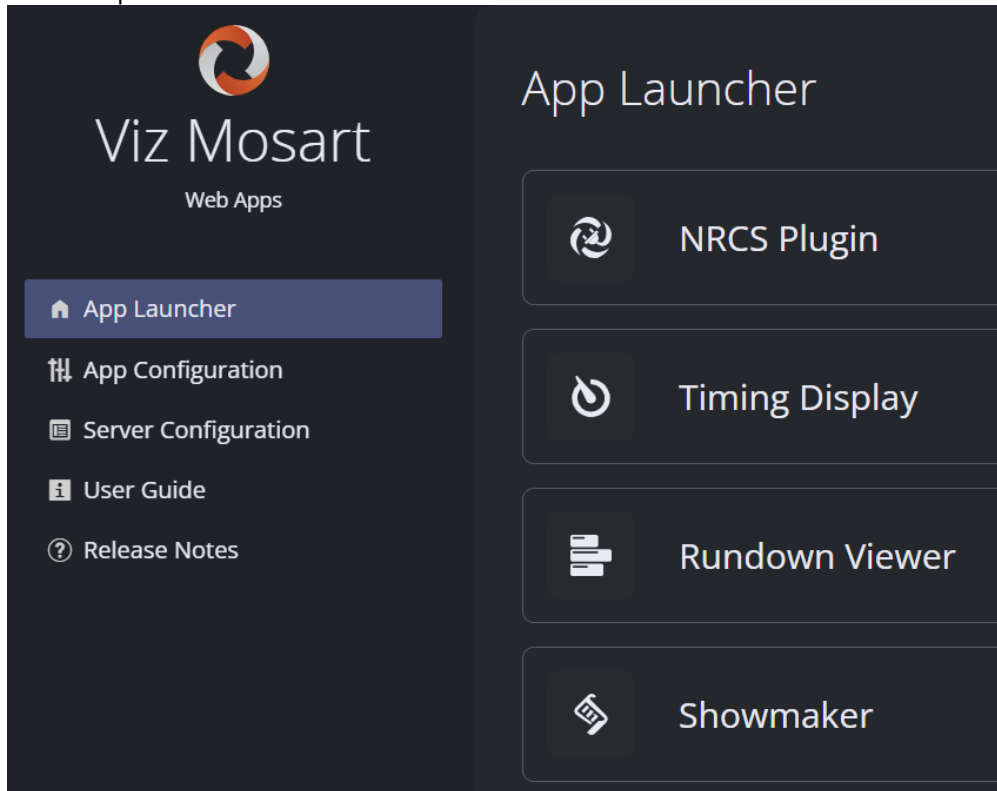
To work with Viz Mosart template sets in Showmaker, the bundled web application *NRCS Plugin* shall be correctly configured.

- Follow the *Showmaker* instructions under section [App Configuration](#).

#### To connect to Viz Mosart

To verify your Showmaker rundown in Viz Mosart, you will need to configure your browser's connection to the Mosart server.

1. Ensure that your Viz Mosart system is operating under normal working conditions.  
As a minimum,
  - a. Manus Administrator must be running.
  - b. The Viz Mosart UI is running, displaying a rundown.
2. From the Mosart Web Apps Configuration Tool, select **App Configuration** and ensure the required setup has been completed.



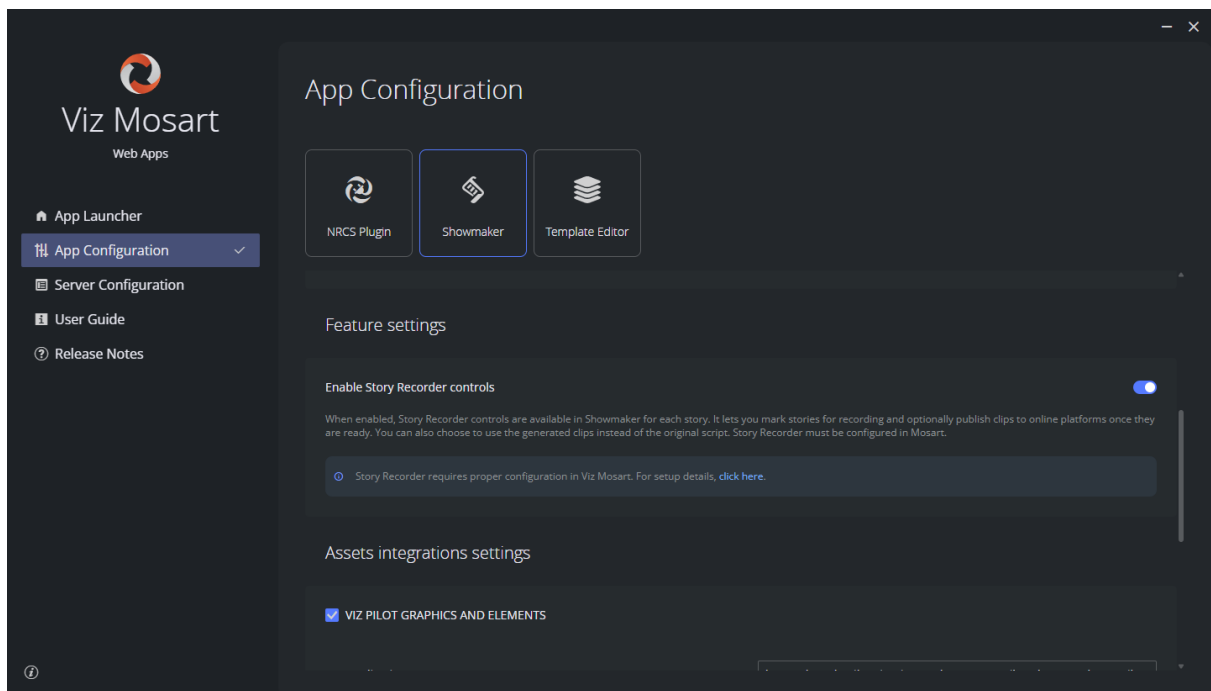
3. With these steps completed, Showmaker is ready to work with Viz Mosart.  
You or your administrator may need to consider the scenarios presented in Optional Server Setups below.
4. Jump straight into section [Getting Started](#).

### To work with Story Recorder feature in Viz Mosart

Story Recorder lets operators mark stories for recording in Viz Mosart, optionally publish the resulting clips to online platforms (TriCaster only) or replace the original story script with the recorded version.

To make these controls available in Showmaker:

1. Configure Story Recorder in Viz Mosart first. See the [Vizrt Documentation Center](#), under *Viz Mosart Administrator Guide > Operational Examples > Story Recorder Setup*.
2. In the Configuration Tool, open **Showmaker > Feature settings** and turn on **Enable Story Recorder controls**.



Once enabled, every story in Showmaker gains **Record / Publish** actions and **Use recording** toggle .  
For how operators use these controls, see [Working with Showmaker - Story Recorder](#).

**i** Background on Story Recorder itself can be read in the [Vizrt Documentation Center](#), under *Viz Mosart User Guide > Operation > Story Recorder*.  
Refer to the latest [Viz Mosart Administrator Guide](#), section *Operational Examples > Story Recorder Setup* for how to configure it in Viz Mosart.

### 9.6.3 Optional Server Setups

These settings are usually performed by a system administrator.

#### Support for Main/Backup Connection

- If you have a *backup server* for redundancy, you will need define the environment in the menu section [Server Configuration](#).

#### Support for HTTPS

- If you are using *HTTPS*, you will need define the environment, using the menu [Server Configuration](#).

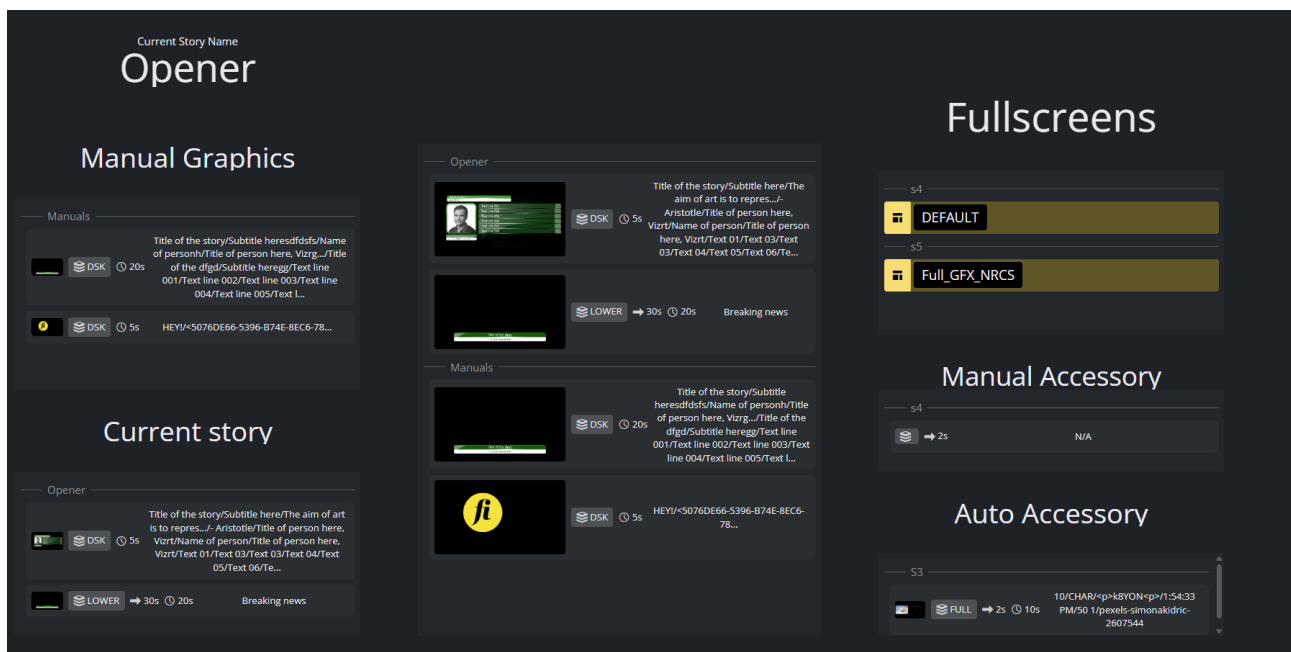
### 9.6.4 Troubleshooting

Please refer to section [Troubleshooting](#).

## 10 Smart Panel

- [Why Smart Panel](#)
- [Where Smart Panel Fits](#)
- [Key Features](#)
- [Typical Workflow](#)

Smart Panel is a web-based tool for building and operating custom panels that drive Viz Mosart. It is aimed at operators, technical directors, producers and presenters who want a tailored control surface for their show: the buttons, faders, timers and previews they need, arranged the way they want, on any device with a browser.



### 10.1 Why Smart Panel

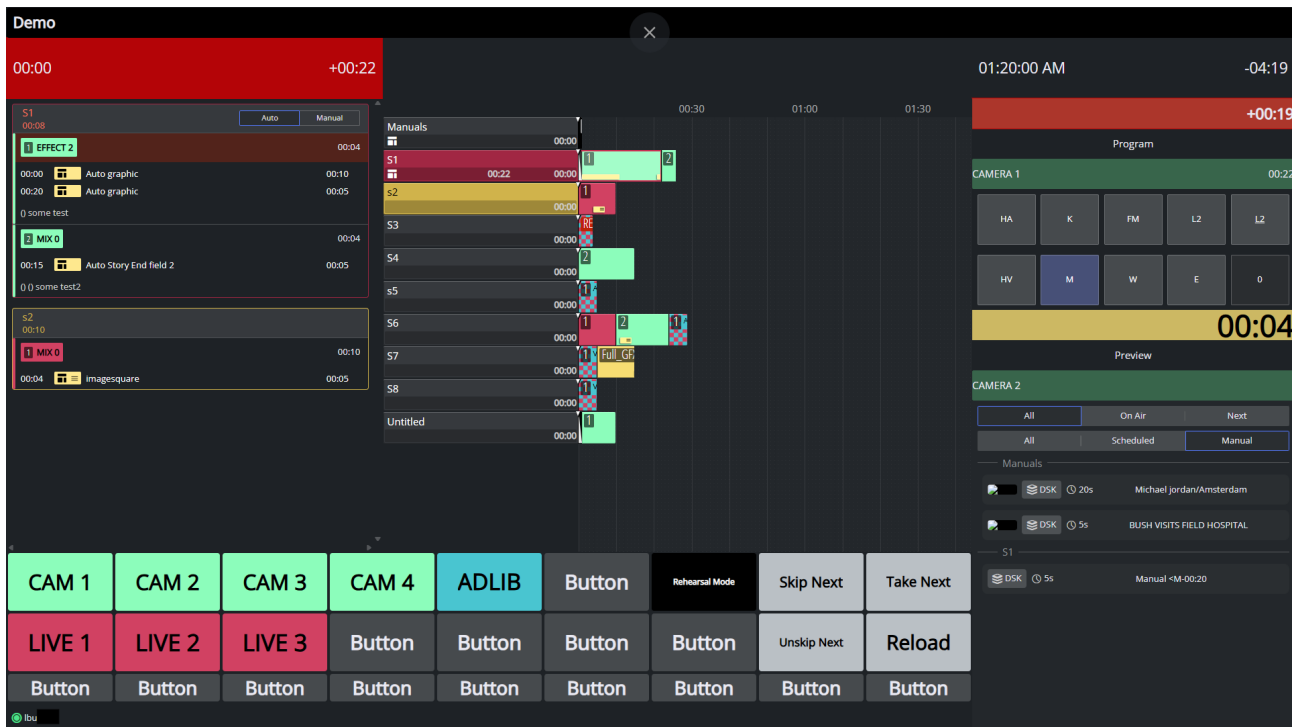
Live control rooms have always relied on hardware panels: dedicated boxes of buttons and faders wired to the automation system. They work, but every change to the show means a hardware change, every new operator means a new physical workstation, and every studio ends up with a different layout that lives only in someone's head.

Smart Panel takes the opposite approach. Layouts are designed in the browser and opened on any screen- a touch monitor in the gallery, a tablet at the presenter's desk, a laptop in a remote control room. An operator can drop in a take button, a story countdown, a live preview and an audio fader, arrange them, and have a working panel in minutes.

Smart Panel is also designed to feel like the operator's own surface. Each layout has its own name, aspect ratio and visual identifiers, so the same Mosart system can host a presenter panel, a director panel and an audio panel side by side without confusion. The aim is a control surface that is quick to build, easy to share, and pleasant to use on air.



**Info:** Smart Panel does not replace Viz Mosart itself. It is a configurable front-end for Mosart's automation, timing and audio commands.



## 10.2 Where Smart Panel Fits

Smart Panel is one of the **Vizrt Mosart Web Apps**, a suite of browser tools served by a single backend that ships with every Mosart installation. Other apps in the suite include the Rundown Viewer, Showmaker, NRCS Plugin, Template Editor, and the Mosart Web Config Tool. They share a host and a single sign-in, so once you reach one of them you can switch between the others without logging in again.

Within the suite, Smart Panel plays the role a hardware control panel would play in a traditional setup: it sends automation commands to Viz Mosart and shows live state and information back to the operator/presenter.

| Component                          | Role for Smart Panel                                                                                                                                                                | Required?  |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Viz Mosart Server                  | Receives Smart Panel's commands (take, cue, transition, audio, etc.) and streams back live timing, rundown and device state.                                                        | Yes        |
| Mosart Web Apps Configuration Tool | One-off setup that points Smart Panel at the Mosart server(s) and other optional services (Coder service, TriCaster). See <a href="#">Setup and Administration of Smart Panel</a> . | Yes (once) |

| Component              | Role for Smart Panel                                                                                          | Required?                 |
|------------------------|---------------------------------------------------------------------------------------------------------------|---------------------------|
| Mosart Web Apps server | Hosts all the web apps (sign-in, navigation, shared help) and stores Smart Panel layouts and uploaded images. | Yes (bundled)             |
| Mosart Web Proxy       | Reverse proxy that routes browser traffic to the right backend (web apps, Mosart server, Coder).              | Yes (bundled or external) |

Smart Panel uses the Mosart Web Apps server for storage (layouts, images, settings); live data and command execution go directly to the Mosart server. If Mosart is offline the panel still opens (with placeholder data) so layouts can be designed without a live show on air.

Two optional services extend what Smart Panel can show in a panel. Both are registered in the [Mosart Web Config Tool](#) and become available to all layouts on the system.

- **Coder:** A media encoder service. It converts NDI feeds (cameras, program, preview, multiviewer outputs) into browser-friendly streams that the **Live** widget can display. Without Coder, the Live widget falls back to a placeholder.
- **TriCaster:** The studio's TriCaster switcher controlled by the Mosart server(s). When configured, its outputs become available as additional live preview sources inside Smart Panel.

---

## 10.3 Key Features

- **Drag-and-drop layout editor:** Design panels on a configurable grid with a items palette, property panel and per-layout aspect ratio.
  - **Wide layout items library:** Buttons, timers, labels, images, live video, audio faders, audio toggles, asset lists, device statuses, transition selectors, embedded story script and timeline, and custom iframes (embedded web pages).
  - **Live integration with Viz Mosart:** Buttons trigger Mosart automation commands (template takes, timeline control, audio, overlays, transitions, etc.); timers, labels and indicators update in real time.
  - **Multiple layouts:** Build separate panels for different roles (director, audio, presenter) and switch between them per device.
  - **Browser-based, device-agnostic:** Runs in any modern browser on touch and standard monitors, tablets and laptops.
  - **Edit and display modes:** Design a panel in the editor, then open it full-screen on the operator's screen to run it on air.
- 

## 10.4 Typical Workflow

1. Open Smart Panel and create a new layout (name, aspect ratio, background).
2. Drag widgets from the palette onto the grid and configure each one (text, command, source, colors).
3. Save the layout.
4. Open the layout in display mode on the operator's screen and use it to drive Viz Mosart on air.

## 10.5 Get Started

- [Open Smart Panel](#)
- [Tour of the Interface](#)
- [Key Terms](#)
- [Your First Layout](#)

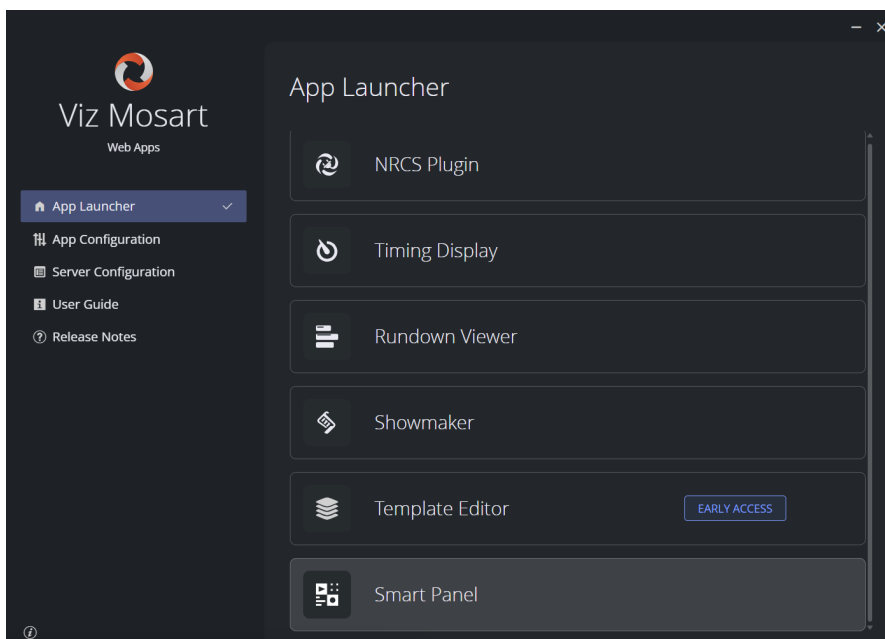
This page walks you through opening Smart Panel, recognizing the main views, the core terminology, and building and running your first layout.

For an overview of Smart Panel and where it fits, see the [Smart Panel](#) introduction.

### 10.5.1 Open Smart Panel

Smart Panel runs in a web browser. Open it at `http(s)://<server>:55142/smartpanel` (port 55143 for HTTPS), where `<server>` is the hostname or IP of the Mosart Web Server.

Users can also open Smart Panel from the **app launcher** in the [Mosart Web Apps Configuration Tool](#).



Smart Panel is one of the Mosart Web Apps, so the same host serves the other apps in the suite, switching between them does not require signing in again.

**Signing in.** Whether you need to sign in depends on how your administrator configured Mosart Web Apps:

- **Authentication off (default install):** You reach Smart Panel without signing in. Layouts can still be created and saved, but command buttons may not reach Mosart Server if it requires an API key.
- **Authentication on:** The first time you open the page, you are redirected to your organization's identity provider and signed in there.

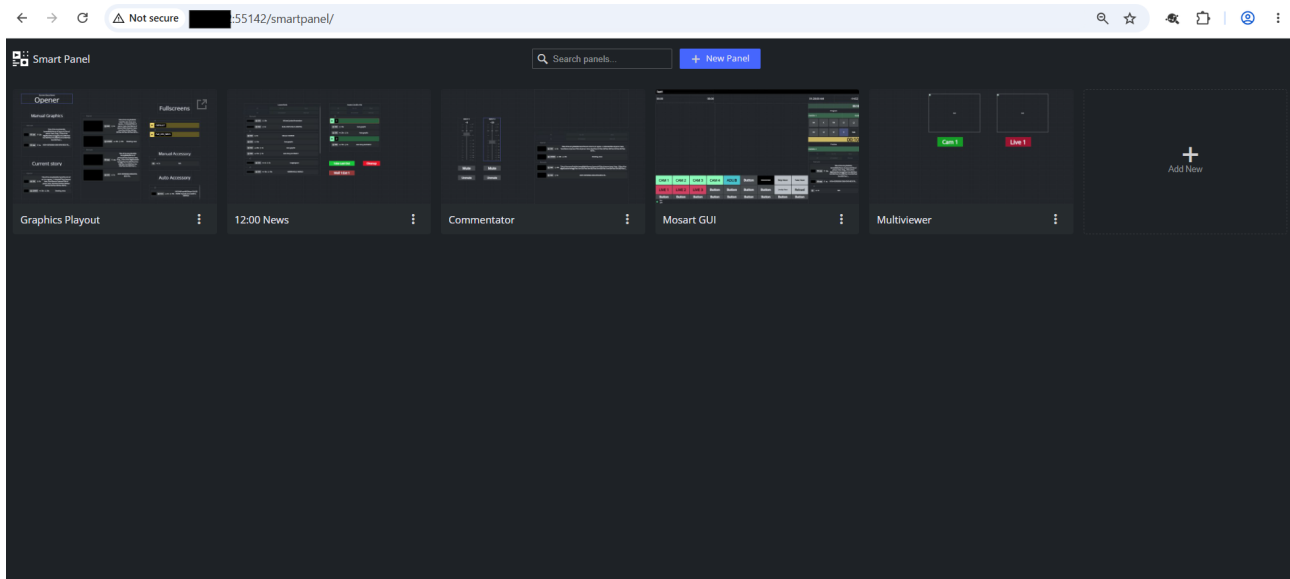
There are no Smart Panel-specific roles today. Anyone who can reach the URL can create, edit and run layouts.

If Smart Panel opens but the **Offline Mode** badge stays on in the app bar, the connection to Viz Mosart could not be established. See [Setup and Administration of Smart Panel](#) and the troubleshooting notes there.

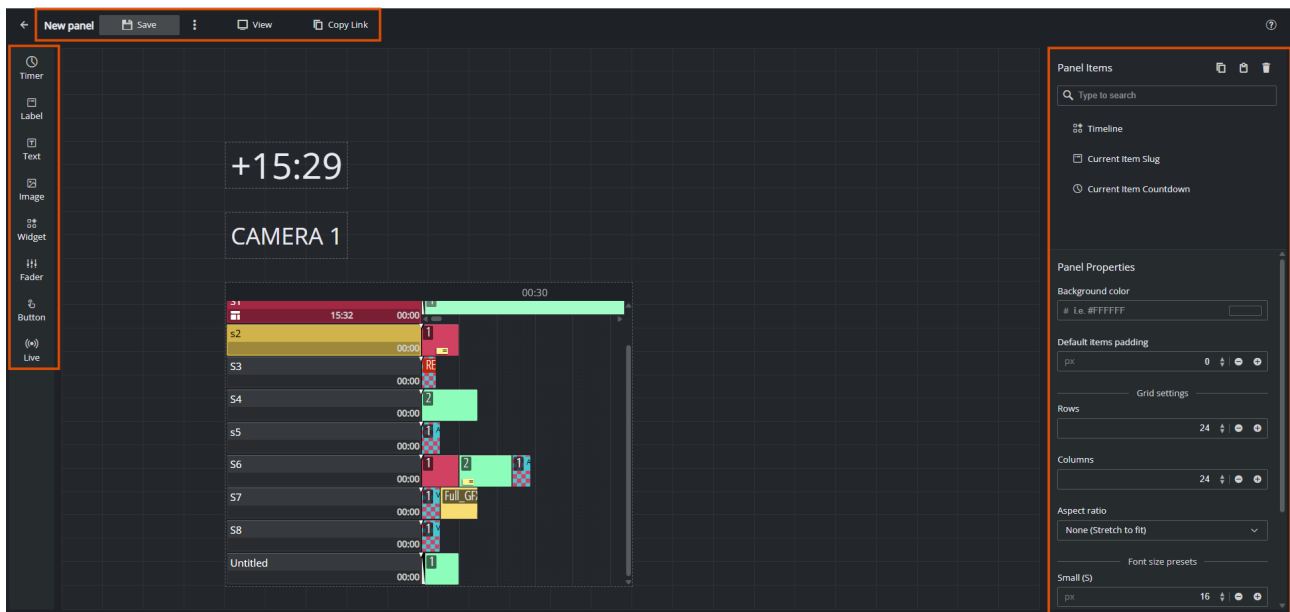
## 10.5.2 Tour of the Interface

Smart Panel has three main views.

**Landing page** ( `/smartpanel` ) : list of saved layouts. From here you create a new panel or open an existing one for editing or for use on air.

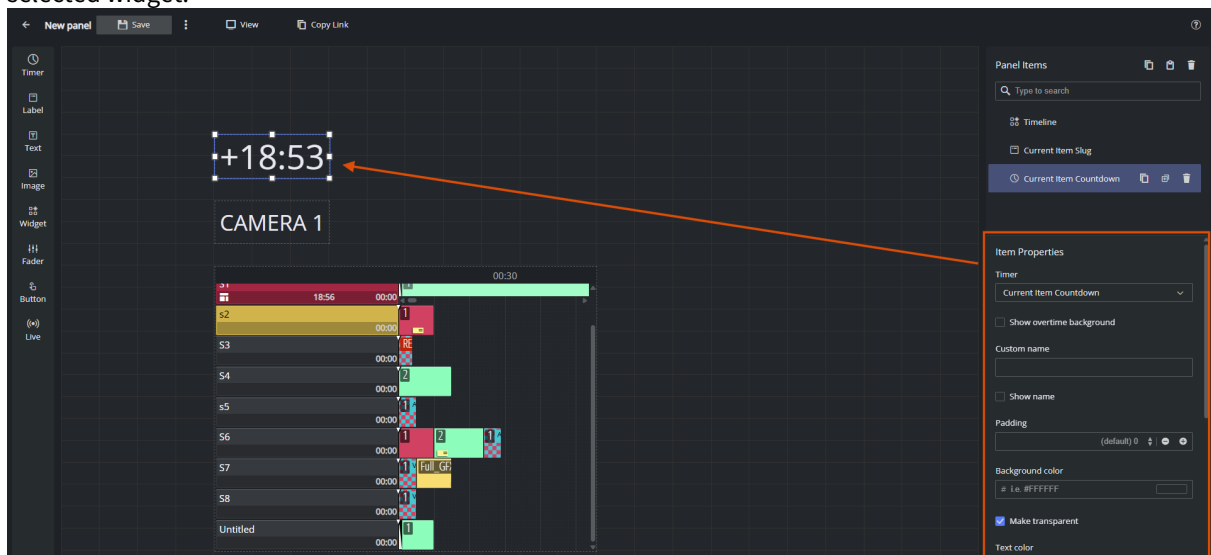


**Panel editor** ( `/smartpanel/<layout>/edit` ) : where you design a panel. Has four areas:

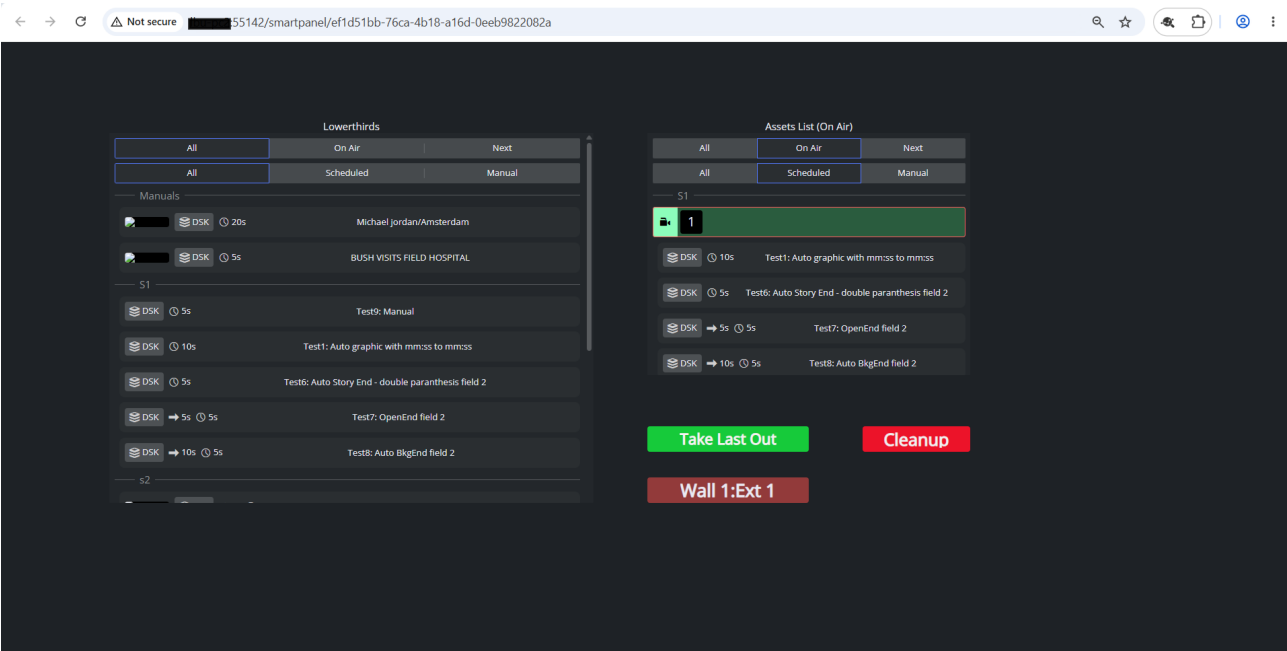


1. **App bar** (top) - Back arrow, Offline Mode badge when Viz Mosart is unreachable, Panel name (click to rename), **Save**, more-options menu, **View** (opens the panel in Display mode in a new tab), **Copy Link**, and the ? help icon.
2. **Panel items palette** (left) - Eight item types you can drop on the canvas: Timer, Label, Text, Image, Widget, Fader, Button, Live.
3. **Canvas** (center) - Layout grid. Click an empty cell after arming a widget to drop it; Click an existing element to select it.
4. **Properties panel** (right) - Split into **Panel Items** (top, a searchable list of every placed element) and **Property editor** (bottom).

The Property editor shows *Panel properties* when nothing is selected, and *Item properties* for the currently selected widget.



**Panel display** ( `/smartpanel/<layout>` ) - the same panel in view mode displayed touch-friendly, suitable for the operator's screen on air. Open with the **View** button in the editor, or navigate to the panel URL without `/edit` in the URL path. Displaying this in full-screen mode means setting the browser in the full-screen mode.



**Help menu** - the **?** icon in the top-right of every page opens the help menu:

| Option            | Opens                                                                          |
|-------------------|--------------------------------------------------------------------------------|
| Documenta<br>tion | This Smart Panel user documentation.                                           |
| What's new        | Release Notes for the current version.                                         |
| Give<br>feedback  | Email link to the Smart Panel team ( <code>mosart-feedback@vizrt.com</code> ). |
| About             | Smart Panel version and build information.                                     |

**User avatar** - when you are signed in, your avatar appears in the top-right next to the help icon. Click it to see your account and to **Sign out**. Smart Panel shares its identity provider with the other Mosart Web Apps, so signing in or out in one app applies to the others in the same browser session.

### 10.5.3 Key Terms

| Term               | Meaning                                                                                                                                                                                                                                                  |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Layout             | A single panel design: a grid of widgets plus its own name, aspect ratio, background, padding and font-size presets.                                                                                                                                     |
| Element            | One item on a layout - a button, timer, label, image, fader, etc.                                                                                                                                                                                        |
| Edit mode          | The layout open at <code>/smartpanel/&lt;layout&gt;/edit</code> . Shows web application menu bar, item palette, properties panel.                                                                                                                        |
| Display mode       | The layout open at <code>/smartpanel/&lt;layout&gt;</code> (no <code>/edit</code> ). Full-screen, no possibility to edit. This is what you run on air.                                                                                                   |
| Grid               | The rows × columns the canvas is divided into (default 24 × 24). Widgets snap to cells. Configure rows and columns in <b>Layout Properties</b> .                                                                                                         |
| Aspect ratio       | The shape of the canvas. Choose a preset (16:9, 9:16, 16:10, 4:3, 1:1, ultrawide and phone variants, etc.), set a Custom ratio, or pick None to stretch to fit. Set per layout in <b>Layout Properties</b> so a layout looks right on its target screen. |
| Layout Properties  | Panel shown when no widget is selected. Controls background colour, default padding, grid size, aspect ratio and font-size presets (S / M / L) used by widgets that pick a preset.                                                                       |
| Element Properties | Pane shown when a widget is selected. Controls the widget's text, colour, font, padding, command binding (for buttons) and any type-specific options.                                                                                                    |
| Layout Items       | Searchable list of every widget on the layout. Useful when widgets overlap or the layout is busy.                                                                                                                                                        |
| Offline Mode       | Badge in the app bar. Means the connection to Viz Mosart is not established. Live data is replaced with placeholder values so you can keep editing. See <a href="#">Setup and Administration of Smart Panel</a> .                                        |

### 10.5.4 Your First Layout

A 5-minute walk-through that uses every core concept once. It assumes Smart Panel is connected to a working Viz Mosart system (see [Setup and Administration of Smart Panel](#)). If the **Offline Mode** badge is on, you can still complete the design steps- only the on-air step at the end needs a live server.

1. **Open Smart Panel and create a layout.** From the landing page, click **New Layout**, name it *My first panel* and click **Create**. Smart Panel opens the new layout in the editor at `/smartpanel/my-first-panel/edit`.

2. **Set the canvas shape.** With no widget selected, the right pane shows **Layout Properties**. Pick an **Aspect ratio** that matches your target screen (for example 16:9 for a landscape touch monitor). Leave the grid at 24 × 24 for now.
3. **Add a Take button.** In the palette on the left, click **Button**. The cursor arms with a button preview. Click an empty cell near the bottom of the canvas to drop it. Smart Panel selects the new button and opens its **Element Properties** on the right.  
In the properties pane, set:
  - **Label:** *Take*
  - **Command type:** *Template*
  - **Select template bus:** *Program*
  - Pick any template from the picker that opens (for example a **CAM** template). Close the picker.
4. **Add a story countdown.** Click **Timer** in the palette, then click a cell at the top of the canvas. In Element Properties, pick **Current Item Countdown** as the timer type. The widget immediately shows a placeholder countdown (or a live one, if Mosart is connected).
5. **Add a label.** Click **Label**, click a cell next to the timer, and in Element Properties pick **Current Item Slug** so the widget shows the name of the on-air item. Set **Font size** to *M*.
6. **Save.** Click **Save** in the app bar. The button greys out, meaning the layout is saved to the server. Anyone who can reach the URL can now open it.
7. **Open it on air.** Click **View** in the app bar (or open `/smartpanel/my-first-panel` in a new tab). The layout fills the screen, ready for the operator. Tap the Take button, if Mosart is connected, it sends the template you bound in step 3.

You have now built and operated your first Smart Panel layout. To go deeper into any step, see [Working with Smart Panel](#).



## 10.6 Working with Smart Panel

- [Designing the Panel](#)
- [Working with Panel Items](#)
- [Item Reference](#)
- [Binding Buttons to Viz Mosart Commands](#)
- [Running a Panel On-air](#)
- [Panel Item Types](#)

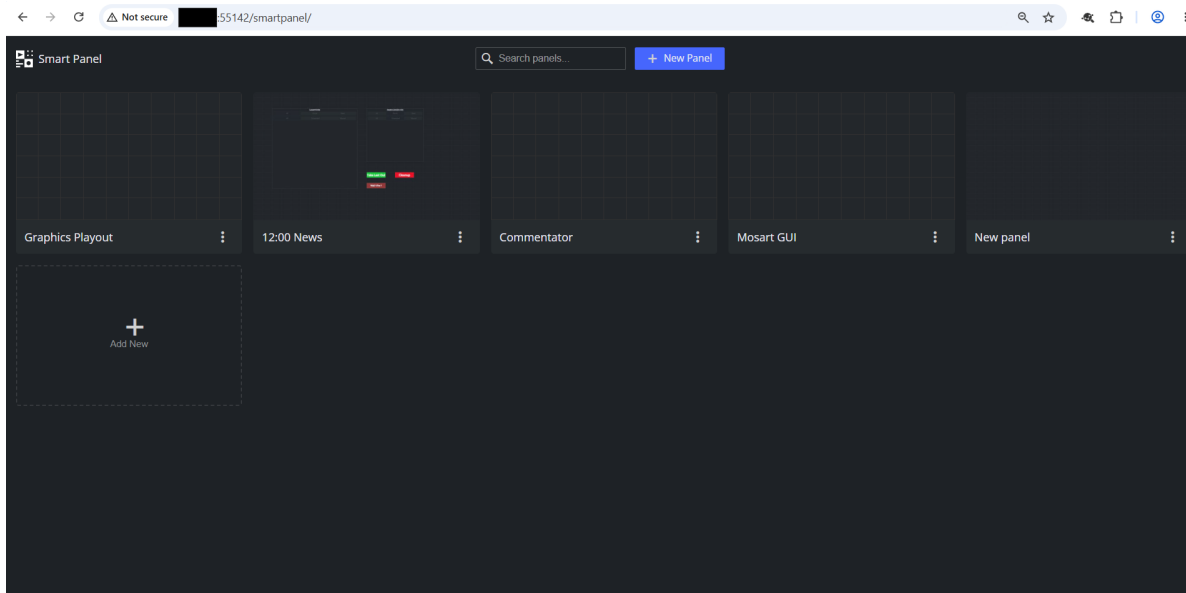
This section is the working reference for everyday use of Smart Panel: managing your panels, shaping the canvas, placing and configuring panel elements, binding buttons to Viz Mosart commands, and using a finished panel on air. It assumes you have followed [Getting Started](#) at least once and have a working connection to Viz Mosart.

### 10.6.1 Managing Panels

All panels live on the Mosart Web Server side, so anyone who can reach the Smart Panel URL sees the same list and works on the same files.

The **landing page** ( `/smartpanel` ) is the entry point for panel management.

Smart Panel ships with a small library of read-only **preset panels** (newsroom, multiviewer, commentator, etc.). Presets are not shown on the landing page and cannot be edited in place, they are available only as starting points in the **New panel** picker. Anything you create or duplicate from them is a normal, editable panel owned by your team.



From the landing page you can:

- **Create a new panel.** Click **New panel** to open the panel picker. Choose *Blank panel* to start from an empty canvas (pick an aspect ratio here, since there are no widgets to suggest one), or pick one of the built-in *preset panels* (*Mosart GUI*, *Multiviewer*, *Status Dashboard*, *Graphics Playout*, *12:00 News*, *Commentator*,

*Timing Display*) to begin with a ready-made layout. Give your new panel a name and click **Create**. Smart Panel then opens it in the Editor as a standard, editable panel. The original preset stays untouched.

- **Duplicate a panel.** Use the per-panel menu on the landing page to clone one of your existing panels with a new name. To start from a preset instead, use the panel picker in **New panel** (see above); presets do not appear in the landing-page grid and cannot be opened or edited directly.
- **Open a panel for editing.** Click the panel name/card (or the **Edit** action) to open it at `/smartpanel/<panel>/edit`.
- **Open a panel for use on air.** Use the **View** action (or just navigate to `/smartpanel/<panel>` without `/edit`) to open it full-screen in view mode (no possibility to edit).
- **Rename a panel.** Open it in the editor and click the panel name in the app bar.
- **Delete a panel.** Use the per-panel menu on the landing page. Deletion is permanent and removes the panel for every operator, so confirm before deleting a panel that may be in use.

## Designing the Panel

With no item selected, the right panel displays **Panel Properties**. These settings apply to the canvas and govern the entire panel.

## Panel Properties

**Panel Properties**

**Background color**

# i.e. #FFFFFF

**Default items padding**

px 0 - +

**Grid settings**

**Rows**

24 - +

**Columns**

24 - +

**Aspect ratio**

None (Stretch to fit) v

**Font size presets**

**Small (S)**

px 16 - +

**Medium (M)**

px 24 - +

**Large (L)**

| Property              | What it controls                                                                                                                                                                                                                                                                                                   |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Aspect ratio          | The shape of the canvas. Pick a preset ( <i>16:9</i> , <i>9:16</i> , <i>16:10</i> , <i>4:3</i> , <i>1:1</i> , <i>ultra-wide</i> , <i>phone variants</i> ), a <i>Custom</i> ratio, or pick <i>None</i> to stretch to fit the browser window. Match this to your target screen so that the panel looks right on air. |
| Grid (rows × columns) | How finely the canvas is divided. The default <i>24 × 24</i> suits most panels. Increase for fine-grained panels; decrease for chunky touch buttons. Items snap to cells.                                                                                                                                          |

| Property          | What it controls                                                                                                                                                                                                                    |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Background color  | Solid color behind all widgets. Pick something that contrasts with your item colors and is comfortable to look at during a long show.                                                                                               |
| Default padding   | Padding applied to new items. Individual items and sub-widgets can override this with their own properties.                                                                                                                         |
| Font-size presets | Three named font sizes you can refer to from any item. Set them once here, then pick <i>S</i> , <i>M</i> , or <i>L</i> on an item, instead of typing individual pixel values.<br>Changing a preset updates every item that uses it. |

## Working with Panel Items

Panel items are the building blocks of a smart panel. The palette on the left border has eight item types (see [Item Reference](#) below). For all types, you work with them in the same way on the canvas.

**Adding an item.** Click the required item type from the palette. The cursor holds a preview. On the canvas, click an empty cell to drop the item. Smart Panel places the new item and displays its characteristics in the panel **Item Properties**.

**Selecting an item.** Click it on the canvas, or its entry in the **Panel Items** list, top right. The selected item displays its handles, and the **Item Properties** panel populates with individual details.

**Moving and resizing an item.** To move, drag the item body. To resize, drag a corner or edge handle. The item snaps to the grid, as defined in [Panel properties](#).

**Panel Items list.** Every placed item appears in this searchable list. Use it when:

- Added items overlap and you need to select one underneath another.
- The panel is busy and you want to jump straight to a specific element by name.
- You want to confirm at a glance what is on your panel.



**Tip:** Give your item a descriptive *name* in **Item Properties** (for example *Take button*, *Story countdown*). These names display under **Panel Items**, so naming as you go pays off quickly as the panel grows.

**Deleting an item.** Select, and press the **Delete** key, or the corresponding **Delete** icon in the **Panel Items** list (top right).

## Item Reference

The palette has eight item types, each with its own set of properties. All use the *position*, *size*, *label*, *font-size* and *padding* settings.

| Item                  | What it is for                                                                                                                                                              |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">Timer</a> | Shows a live timer or countdown driven by Viz Mosart. Provides multiple, customized timing displays to build a timing display for the studio control room and studio floor. |

| Item   | What it is for                                                                                                                                                                                               |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Label  | Shows a live text value from Mosart. Some of the supported sub-types are: <i>current/next item slug and story name, current/next video-server and graphics channels, rundown name, server description</i> .  |
| Text   | Static text that does not change at runtime. Use for section titles, group headers, on-screen instructions, branding.                                                                                        |
| Image  | Static image uploaded to the server. Use for studio logos, role icons, panel branding, background decorations.                                                                                               |
| Widget | Category that hosts built-in Mosart sub-items ( <i>Timeline, Story Script, Current Item Type, Next Item Type, Connection Status, Iframe, Device Statuses, Audio Toggles, Asset List, Video Transition</i> ). |
| Fader  | Audio fader bound to a Mosart audio source. Drag the bar to change on-air level.                                                                                                                             |
| Button | The main interactive element. Sends a Viz Mosart command when tapped.                                                                                                                                        |
| Live   | Embeds a live video preview. Three transports: NDI (via Coder), TriCaster input source, or an HTML video URL are supported.<br>An optional <i>click action</i> enables options for command firing.           |

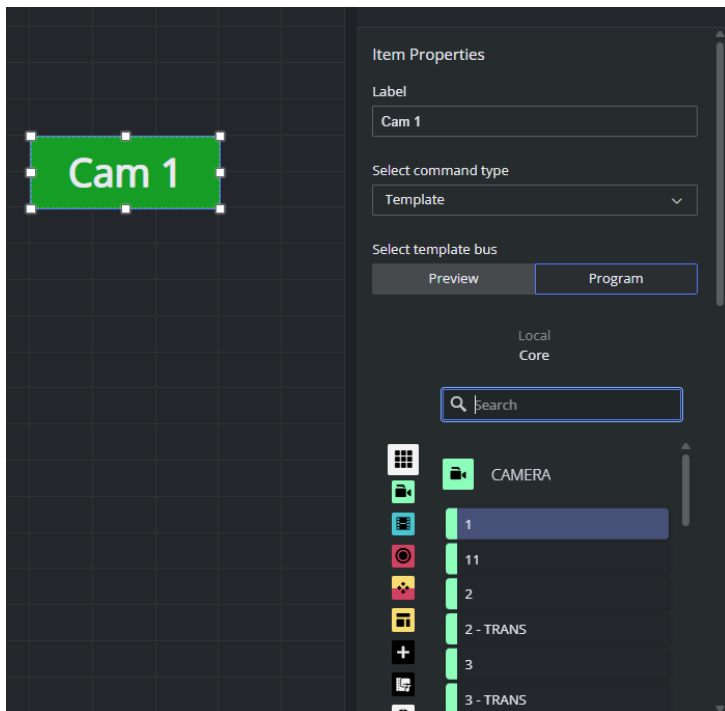
## Binding Buttons to Viz Mosart Commands

Buttons are how operators drive Viz Mosart from a Smart Panel. Each button has a *Command type* that governs what it does when tapped.

**Template buttons.** A Template button takes a Mosart template (camera, graphic, package, etc.) on the chosen output.

1. With the button selected, set **Select command type** to *Template*.
2. Set **Select template bus** to *Program* (take on air immediately) or *Preview* (cue to preview).
3. Open the template picker and choose a template that the button will fire. The picker lists all templates available to Viz Mosart.

**Built-in command buttons.** Built-in commands cover the standard Mosart actions that are not template takes, like *cue, transition, audio toggle, overlay control, timeline control*. Pick the command from the **Command type** drop-down. The properties pane shows the parameters that command needs.



**Confirm before send (optional).** For destructive or irreversible actions, enable the *Confirm* option in the button's properties. The operator sees a confirmation prompt before the command is sent.

**Visual feedback.** Use colors and label to make the button's purpose obvious at a glance.

## Running a Panel On-air

When a panel is ready, open it in *display mode*: in the app bar, click **View**, or navigate to `/smartpanel/<panel>` (without `/edit`). The panel opens in view mode displayed touch-friendly, suitable for the operator's screen on air. Displaying this in full-screen mode means setting the browser in the full-screen mode.

### On-air behavior:

- Timers, labels and indicators update live from Viz Mosart.
- Buttons send their bound command immediately when tapped.
- Faders apply audio level changes.
- The **Offline Mode** badge appears if the connection drops. Live values are replaced with placeholders and buttons may fail until the connection comes back. See [Setup and Administration of Smart Panel](#).

### What to avoid while live:

- Editing the panel the operator is currently using. Saves apply on next page reload, but unsaved changes in the editor are not reflected on the operator's screen, and an accidental misclick on the wrong button can fire a command.
- Renaming or deleting a panel that is in use.

### Touch operation tips:

- Use a panel aspect ratio that matches the touch monitor. A mismatched ratio leaves dead bands at the edges that operators may tap by accident.

- Avoid tiny canvas items. Buttons smaller than a fingertip are unreliable under pressure.
- Use clear color contrast between *active* states and *idle* states so the operator can see at a glance which action just fired.

## Panel Item Types

The palette on the left of the editor has eight item types: [Timer](#), [Label](#), [Text](#), [Image](#), [Widget](#), [Fader](#), [Button](#) and [Live](#). These fall into three groups: *info display* items (read-only, live data), *interactive* items (send commands or change values) and *container* items (host other content).

[Item Reference](#) is the quick lookup. This section is the deeper guide: when to use each type and the properties that matter.

## Common properties and actions (all item types)

Every panel item, regardless of type or widget sub-type, has a common set of base properties and same actions available in the **Panel Items** list. The per-type sections below describe only what is specific to that type. The common properties here are always available:

### Common properties

- **Custom name.** Text shown in **Panel Items** top right. Identifies the item when many items are on the canvas. Also shown on the item itself when **Show name** is *on*.
- **Show name.** Toggle whether the custom name is shown on the item.
- **Padding.** Numeric padding (in *pixels*) between the item's outer bounds and its content. Defaults to the panel-wide **Default padding** set in [Panel properties](#).

### Common action:

- **Delete**, **Copy** and **Duplicate**

## Timer

Shows a live timer or countdown driven by Viz Mosart. Synchronizes with the active Viz Mosart rundown and can be customized to display user-specific details.

Use for building a timing display for the studio control room and studio floor.

For example, one timing display can be running on the studio floor, connected to the in house intercom system. A second timing display is in the control room counting down packages, keeping the producer updated on the current show.

### Timer types

| Group         | Types                                                                                 |
|---------------|---------------------------------------------------------------------------------------|
| Current item  | Current Item Countdown (default), Current Item Time                                   |
| Current story | Current Story Countdown, Current Story Planned Duration, Current Story Time           |
| Next          | Next Break Time, Next Item Duration, Next Live Countdown, Next Story Planned Duration |

| Group          | Types                                                                                                 |
|----------------|-------------------------------------------------------------------------------------------------------|
| Rundown        | Current Rundown Out, Rundown Elapsed Time, Rundown Over/Under, Rundown Out Over/Under                 |
| Time / break   | Time of Day, Time to Next Break, Time to Rundown Out, Duration to Next Break, Duration to Rundown Out |
| Story Recorder | Story Recorder Preroll countdown, Story Recorder Recording time, Story Recorder Countdown             |

**Type-specific properties (in the order they appear in the pane):**

- **Timer type.** Drop-down selector of the twenty-one timer *Types* above.
- **Show overtime background.** Checkbox. When on, the timer changes its background color once it passes zero (used with countdowns and over/under timers).
- **Background color.** Hex ( `#RRGGBB` ) text field, with a **Make transparent** checkbox (checked by default). Switching transparency *off* enables the hex field.
- **Text color.** Hex ( `#RRGGBB` ) text field. Default `#000000` .
- **Font weight.** Radio: **normal** (default) or **bold**.
- **Text alignment.** Radio: **left**, **center** (default), **right**.
- **Font size.** Radio: *S*, *M*, *L*, *Fit* (default). The *S/M/L* values come from the [Panel properties](#) font-size presets. *Fit* auto-scales the text to the widget bounds and exposes the two fields below.
- **Min font size.** Numeric, in pixels. Only relevant when *Fit* is selected; sets the floor of the auto-scale.
- **Max font size.** Numeric, in pixels. Only relevant when *Fit* is selected; sets the ceiling of the auto-scale.

Plus the common properties

**Good to know.**

- The default font-size mode is *Fit*. If you want a Timer to share a consistent size with neighboring widgets, switch it explicitly to one of *S/M/L* and avoid mixing *Fit* and preset modes side by side.
- There is no per-threshold color. Over/under behavior comes from **Show overtime background** plus the background color you set, not from a separate *Warning* or *Critical* coloring.
- In *Offline Mode* all twenty-one timer types show placeholder values. Do not rely on a timer's apparent behavior in the editor to validate a configuration. Always check in *Display* mode with Viz Mosart connected.

## Label

Shows a live text value from Viz Mosart. Same role as Timer, but for text instead of time. Updates in real time.

Use it for current item slug, story name, next item slug, next story name, current and next video-server channels, current and next graphics channels, rundown name, and server description.

Pick the value an operator needs to read at a glance during the show.

**Label sources**



| Group            | Sources                                                                                                 |
|------------------|---------------------------------------------------------------------------------------------------------|
| Current          | Current Item Slug (default), Current Story Name, Current Video Server Channel, Current Graphics Channel |
| Next             | Next Item Slug, Next Story Name, Next Video Server Channel, Next Graphics Channel                       |
| Rundown / server | Rundown Name, Server Description                                                                        |

**Type-specific properties (in the order they appear in the pane):**

- **Label.** Drop-down with the 10 sources above. Equivalent to the **Timer type** drop-down on a Timer.
- **Show overtime background.** Checkbox. Used only for *Timer*. Has no effect for a text *Label*.
- **Background color.** Hex ( #RRGGBB ) text field, with a **Make transparent** checkbox (checked by default). Switching transparency off enables the hex field.
- **Text color.** Hex ( #RRGGBB ) text field. Default #000000 .
- **Font weight.** Radio: **normal** (default) or **bold**.
- **Text alignment.** Radio: **left**, **center** (default), **right**.
- **Font size.** Radio: **S**, **M**, **L**, **Fit** (default). The S/M/L values come from the [panel properties](#) font-size presets. **Fit** auto-scales the text to the widget bounds and exposes the two fields below.
- **Min font size.** Numeric, in px. Only relevant when **Fit** is selected; sets the floor of the auto-scale.
- **Max font size.** Numeric, in px. Only relevant when **Fit** is selected; sets the ceiling of the auto-scale.

Plus the common properties.

**Good to know**

- The Label drop-down list displays all ten sources. There is no free-form expression and no way to bind a Label to an arbitrary Mosart value not on this list.
- The **Show overtime background** checkbox is shared with Timer in the editor UI but has no effect on a Label. You can ignore it.
- Long values can overflow a narrow item. Either size the item generously, switch to a smaller preset (S), or rely on *Fit* with sensible Min/Max bounds.
- In **Offline Mode**, all ten Label sources show placeholder strings. Verify the panel against a live Mosart connection before going on air.

## Text

This is static text that does not change at runtime, and is only a design element. Has same styling controls as Label, but the value is typed by the panel author instead of being read from Mosart.

**Use it for** section titles (*Cameras, Audio*), group headers, on-screen instructions (*Hold to confirm*), branding (*Studio 3*), and any caption that the operator needs but Mosart does not provide.

**Type-specific properties (in the order they appear in the pane):**

- **Custom text.** Free-form text field. Whatever you type here is what the widget displays on air. There is no formatting or markdown; it is rendered as a single string.

- **Background color.** Hex ( #RRGGBB ) text field, with a **Make transparent** checkbox (checked by default). Switching transparency off enables the hex field.
- **Text color.** Hex ( #RRGGBB ) text field. Default #000000 .
- **Font weight.** Radio: **normal** (default) or **bold**.
- **Text alignment.** Radio: **left**, **center** (default), **right**.
- **Font size.** Radio: **S**, **M**, **L**, **Fit** (default). The S/M/L values come from the panel Properties font-size presets. **Fit** auto-scales the text to the widget bounds and exposes the two fields below.
- **Min font size.** Numeric, in pixels. Only relevant when **Fit** is selected; sets the floor of the auto-scale.
- **Max font size.** Numeric, in pixels. Only relevant when **Fit** is selected; sets the ceiling of the auto-scale.

Plus the common properties.

#### Good to know

- Text widgets do not update on air. If the value should change with the show, use a Label instead.
- Long values can overflow a narrow widget. Either size the widget generously, switch to a smaller preset (S), or rely on **Fit** with sensible Min/Max bounds.

## Image

Static image uploaded to the Mosart Web Server. Stored alongside the panel.

**Use it for** studio logos, role icons (a small camera icon next to camera buttons), background decorations, and any visual marker that helps an operator orient on the panel.

#### Type-specific properties (in the order they appear in the panel):

- **Upload image.** Button that opens a file picker. The chosen file is uploaded to the server and reused across every device that opens the panel. Until an image is uploaded, the widget shows an info badge ("Image") on the canvas.
- **Fit.** Drop-down with five values: **None**, **Contain** (default), **Cover**, **Fill**, **Scale-down**. Use **Contain** to letterbox inside the widget bounds, **Cover** to fill and crop, **Fill** to stretch, **Scale-down** for "Contain but never upscale", **None** to render at the file's intrinsic pixel size.
- **Background color.** Hex ( #RRGGBB ) text field, default #000000 . Visible behind the image whenever the Fit mode leaves transparent space (most often **Contain** or **Scale-down**, or when the image itself has alpha). There is **no Make-transparent toggle** on Image; the field always holds a solid hex value.

Plus the common properties.

#### Good to know.

- No **Opacity** property. To dim an image for a watermark effect, use a PNG with alpha baked in, or adjust the source file before uploading.
- Keep image files small. Upload an image file in one of the supported formats: **.jpg**, **.png**, **.gif**, or **.webp**. The maximum allowed file size is **5 MB**.

## Widget

**Widget** is not a single item type. It is a category that hosts ten built-in Mosart sub-widgets. When you drop a **Widget** on the canvas, Item Properties shows a **Widget type** drop-down where you pick which sub-widget the item should render.

Each sub-widget has its own properties, shown below the drop-down, plus the common Widget properties (position, size, label, and so on).

Except for Iframe, all sub-widgets are Mosart-driven and need a live connection to show real data. In **Offline Mode** they show placeholder content.

**Item Properties**

Widget  
Asset List

Status filter  
All | On Air | Next

☐ Show status filter in widget

Show the assets which are  
All | Scheduled | Manual

☐ Show execution filter in widget

Thumbnail size  
Off | Small | Medium | Large

☒ Show story name

☐ Show script

☐ Camera

☐ Video

☐ Live

☐ Graphics

☐ DVE

☐ Float

☒ Overlay graphic

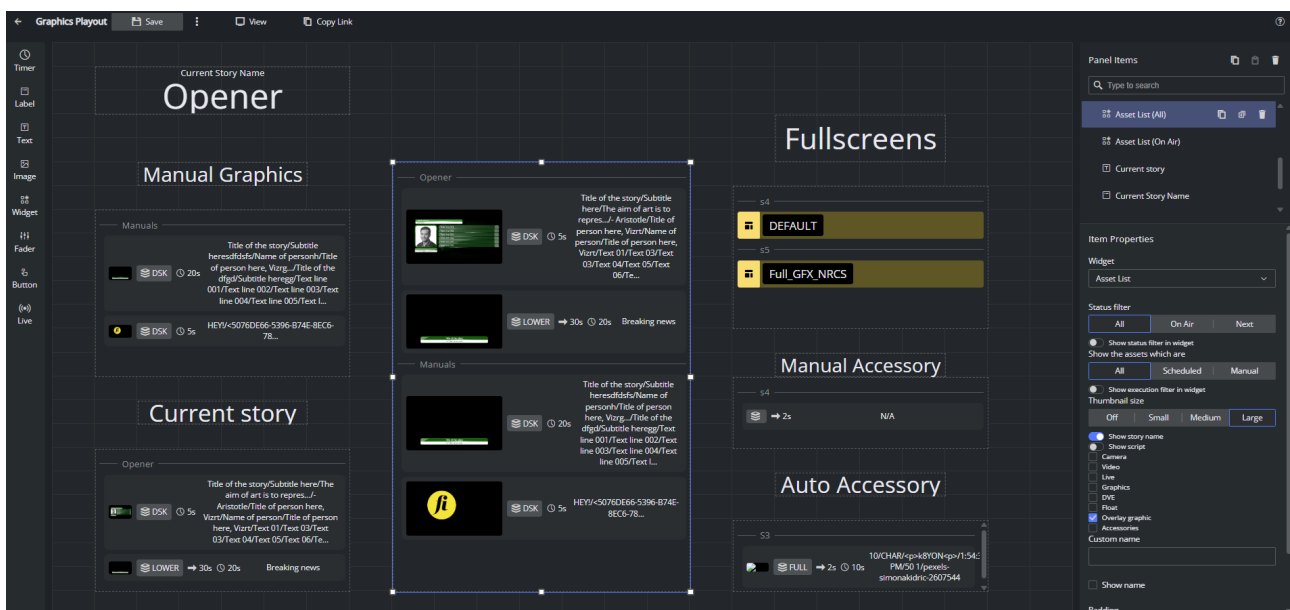
☐ Accessories

Custom name

| Sub-type          | What it shows                                                                          |
|-------------------|----------------------------------------------------------------------------------------|
| Timeline          | The Mosart timeline for the current story.                                             |
| Story Script      | The script for the current story.                                                      |
| Current Item Type | Visual indicator of the currently on-air item's type (camera, package, graphic, etc.). |
| Next Item Type    | Same, for the next item.                                                               |

| Sub-type          | What it shows                                                                                                                           |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Connection Status | Mosart server connection state, including main / backup beacon. The default sub-type when a new Widget is dropped.                      |
| Iframe            | Embeds an external URL inside the panel.                                                                                                |
| Device Statuses   | Live status indicators for connected Mosart devices.                                                                                    |
| Audio Toggles     | A group of audio mute / unmute toggles bound to Mosart audio sources.                                                                   |
| Asset List        | Filtered list of story assets (cameras, videos, graphics, etc.) for the on-air or upcoming stories, with thumbnails and rich filtering. |
| Video Transition  | Picker for the next video transition (mix, cut, wipe, etc.).                                                                            |

**Example** of a graphics playout panel with several **Asset List** widgets showing manual overlays, overlays on the current story, fullscreen graphics, and all graphics in the rundown:



### Iframe sub-type

- **URL.** The URL to embed. The frame is loaded directly.
- **Enable click action.** When on, the iframe area is clickable as a unit. When off, clicks pass through to the embedded site.

### Good to know

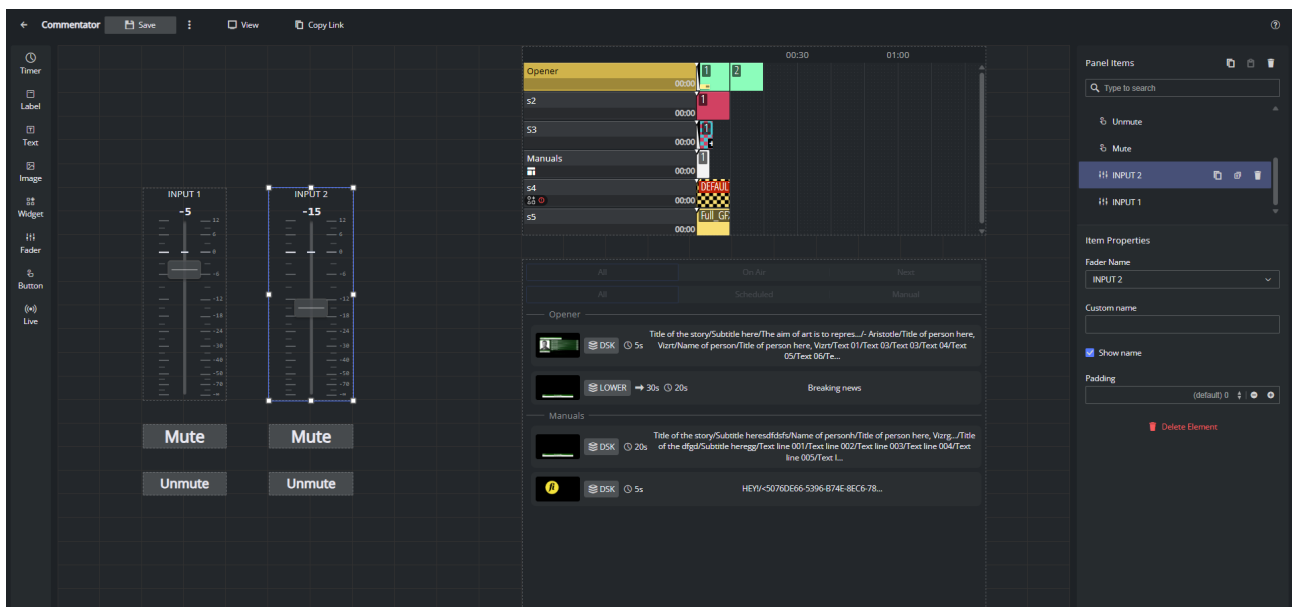
- The embedded site controls whether it can be framed. If the site sets `X-Frame-Options: DENY` or a restrictive `Content-Security-Policy: frame-ancestors`, the iframe shows a blank or error frame and Smart Panel cannot override it.

## Fader

Audio fader bound to a Mosart audio source. The operator drags the bar to change the level on air. Renders as a vertical bar with the source name at the top and the current level in dB at the bottom (shows  $-\infty$  when at the floor).

**Use it for** any audio source the operator needs continuous control over: presenter mic, music bed, remote feed level.

Here is an example of a Commentator panel: each commentator input has a vertical **Fader** widget with a live dB readout, plus **Mute** and **Unmute** buttons wired to the matching audio commands. Name each fader after its source (INPUT 1, INPUT 2, ...) so operators can tell at a glance which channel they are riding.



### Type-specific properties (in the order they appear in the pane):

- Fader Name.** drop-down populated from the live audio-channel list. The list contains exactly the channels Mosart Server is currently reporting (via `onAudioChannels` and `onAudioLevel`). In **Offline Mode** the drop-down is empty, so audio sources can only be bound when Mosart is reachable.

Plus the common properties

### Good to know

- The Fader Name drop-down depends on a live Mosart connection.

## Button

The main interactive item. Sends a Viz Mosart command when tapped. Renders as a labelled button on the canvas, styled with the full color and font stack.

**Use it for** taking templates on Program or Preview, driving the timeline (reload, start, skip, start-from-top), and firing built-in Mosart control commands such as *autotake*, *direct take*, *overlay graphics*, *audio actions*, *video-server goto*, and the dozens of other commands the server exposes.

### Type-specific properties (in the order they appear in the pane):

- **Label.** The text shown on the button face. Defaults to `Button`. Keep it short and unambiguous ( `TAKE`, `CUE`, `CAM 1` ).
- **Select command type.** Drop-down with exactly three values: **Template** (default), **Timeline**, **Control Command**. The fields below the drop-down change based on the choice.
- **Select template output** (Template only). Radio: **Preview** or **Program** (default). Determines which output the template is taken on.
- **Template picker** (Template only). A panel that lists every Mosart template by category (CAMERA, PACKAGE, VOICEOVER, OS, GRAPHICS, VIDEO EFFECT, JINGLE, PHONO, FLOAT, BREAK, VIDEOWALL, SOUND, ACCESSORIES) and lets you search and pick the template the button should fire. The picker reads the same template catalogue the rest of Mosart Web Apps uses.
- **Select timeline command** (Timeline only). Drop-down with eight options: Toggle Rehearsal Mode, **Reload** (default), Start Continue, Skip Next, Unskip Next, Skip Next Sub Item, Unskip Next Sub Item, Start From Top.
- **Select control command** (Control Command only). The full list of Mosart control commands, with `Start from top` as the default. Use it to bind the button to the operation you want.
- **Control command parameters** (Control Command only). Free-form text field for command parameters in URL query format ( `param1=value1&param2=value2` ). Required by some commands (for example `engine_switcher` needs an engine name); leave blank for commands that take no parameters.
- **Test action.** Button at the bottom of the command section. Fires the configured command from the editor without switching to display mode. Use it to confirm the binding works before going live.
- **Background color.** Hex ( `#RRGGBB` ) text field with a **Make transparent** checkbox. Defaults to `#464a4d` (dark grey) with transparency off, so buttons are visible against any panel background out of the box.
- **Text color.** Hex ( `#RRGGBB` ) text field. Default `#000000`.
- **Font weight.** Radio: **normal** or **bold** (default). Button is the only type where bold is the default.
- **Text alignment.** Radio: **left**, **center** (default), **right**.
- **Font size.** Radio: **S**, **M**, **L**, **Fit** (default). Same Min/Max font size fields appear when **Fit** is selected.
- **Min font size / Max font size.** Numeric, in px. Only relevant when **Fit** is selected.

Plus the common properties.

### Good to know

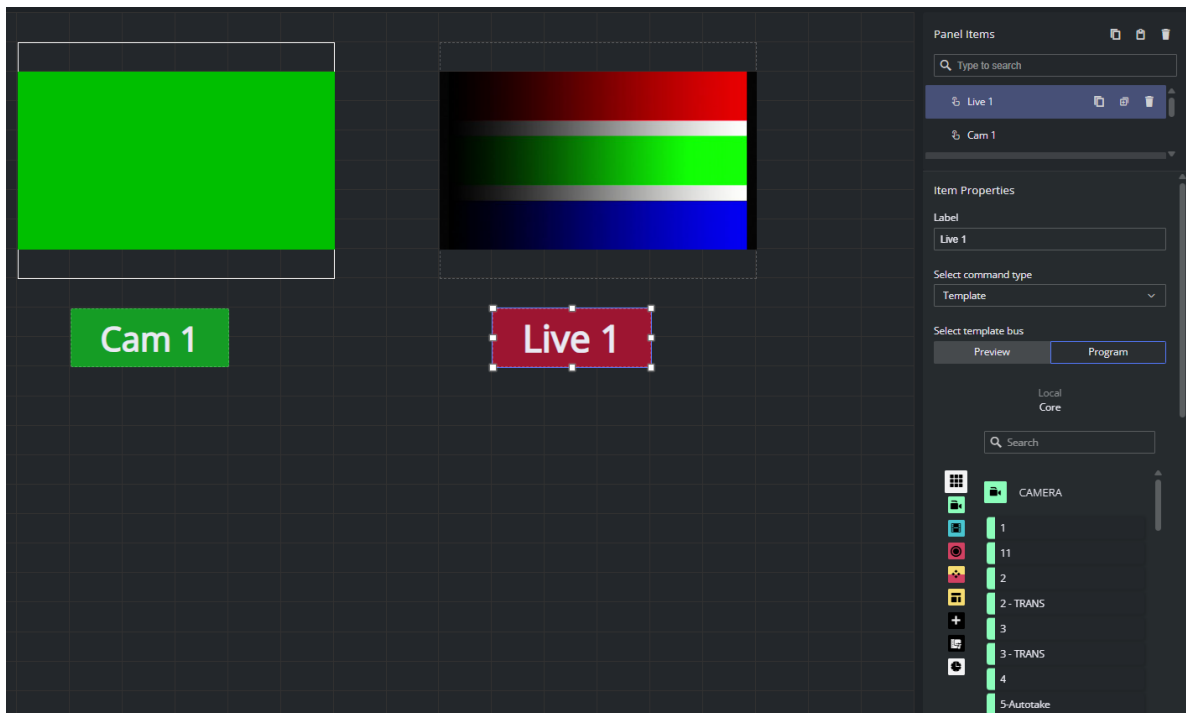
- **Control Command** values are sent verbatim to Mosart Server. A typo in the parameters field (or a parameter the command does not understand) fails silently from the operator's point of view; check the Mosart Server log if a button does nothing.
- The **Test action** button fires the real command against the connected Mosart Server. Do not click it during a live show unless you mean to.

## Live

Embeds a live video preview on the panel. Supports three source types: **NDI** sources discovered from the Coder service, a **TriCaster** WebSocket feed (the `video_notifications` stream), or any **HTML Video** URL the browser can play.

**Use it for** camera previews, NDI source previews, TriCaster feeds, and any other low-latency picture the operator needs to glance at.

Here is an example of a simple Multiviewer-style panel: two **Live** widgets display the feeds from two TriCaster inputs (Cam 1 and Live 1) so the operator can preview both sources side by side, and the two **Button** widgets below them are bound to **Template** commands on the **Program** bus that take the matching source on air with a single click. Pair each Live preview with its own take button and label both with the same source name so the link between what you see and what you cut to is obvious.



### Type-specific properties (in the order they appear in the pane):

- **Source type.** Segmented control with three values: **NDI** (default), **JPEG Stream**, **HTML Video**. The field below the segmented control changes based on the choice.
- **Select live source** (*NDI only*). Drop-down populated from Coder. Smart Panel calls Coder's `web_preview/` endpoint, parses the XML, and lists every input whose URL starts with `ndi://`. If Coder is not configured or returns no NDI inputs, the placeholder reads **No sources available** and the drop-down is disabled.
- **Select TriCaster input** (*TriCaster only*). Drop-down populated by Smart Panel from the TriCaster server configured in **Mosart Web Config Tool**. If the host is not configured the drop-down is empty and the pane

shows a hint to configure it; if the host is set but unreachable or rejects authentication, the drop-down is empty and an error is shown.

- **HTML video source** (*HTML Video only*). Free-form text field. Expects a URL pointing to a file the browser can play in a `<video>` element. Supported formats: `.mp4`, `.webm`, `.ogg`, `.ogv`.
- **Enable click action**. Checkbox. When on, the Live widget doubles as a button: the same **Select command type / template bus / template picker / timeline command / control command / parameters / Test action** sub-pane that the Button widget uses appears below the checkbox. When off, clicks on the preview do nothing.

Plus the common properties.

### Good to know

- The NDI source list comes from Coder over plain HTTP ( `web_preview/` ). If Coder is unreachable the drop-down stays empty and the editor logs `Failed to fetch sources - no coder service available`.  
See setup instructions in section [Coder for Live Previews](#).
- A configured Live widget that cannot reach its source (Coder down, TriCaster off, video URL 404) shows an empty or broken frame.
- Coder may publish duplicate previews for the same source; Smart Panel de-duplicates by URL before showing the drop-down, so the operator sees each source once.
- The TriCaster input list comes from the TriCaster server configured as described in section [Mosart Web Apps Config Tool](#).

If the host is empty, unreachable, or rejects the credentials, the drop-down stays empty and the editor surfaces the reason.



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## 10.7 Setup and Administration of Smart Panel

- [Setting up Smart Panel](#)
- [Enable Live Video Previews](#)
- [Using HTTPS](#)
- [Troubleshooting](#)

Smart Panel installs together with Mosart Web Apps. There is no dedicated **Smart Panel** section in the Mosart Web Apps Configuration Tool today. The panel reuses the shared Mosart server, authentication and HTTPS settings, plus optional configuration to the Coder service and TriCaster for live video sources. Configure those once and Smart Panel is ready.

### 10.7.1 Setting up Smart Panel

Follow these steps in order. Each one builds on the previous, so do not skip ahead.

**Step 1: Install a recent Viz Mosart (5.1.0 or later recommended).**

Smart Panel is part of the Mosart Web Apps suite that ships with Viz Mosart. Make sure your Mosart server is on a recent version. 5.1.0 or newer is the safe baseline. Without a recent enough version, Smart Panel is either missing or missing features it needs.

**Step 2: Make sure Viz Mosart is running.**

Smart Panel talks to a live Mosart server for automation commands, timing and rundown data. Before you continue, check that:

- **Manus Administrator** is running.
- The **Viz Mosart UI** is running and displaying a rundown.

If either is down, start it now. You only need to do this once after a server reboot.

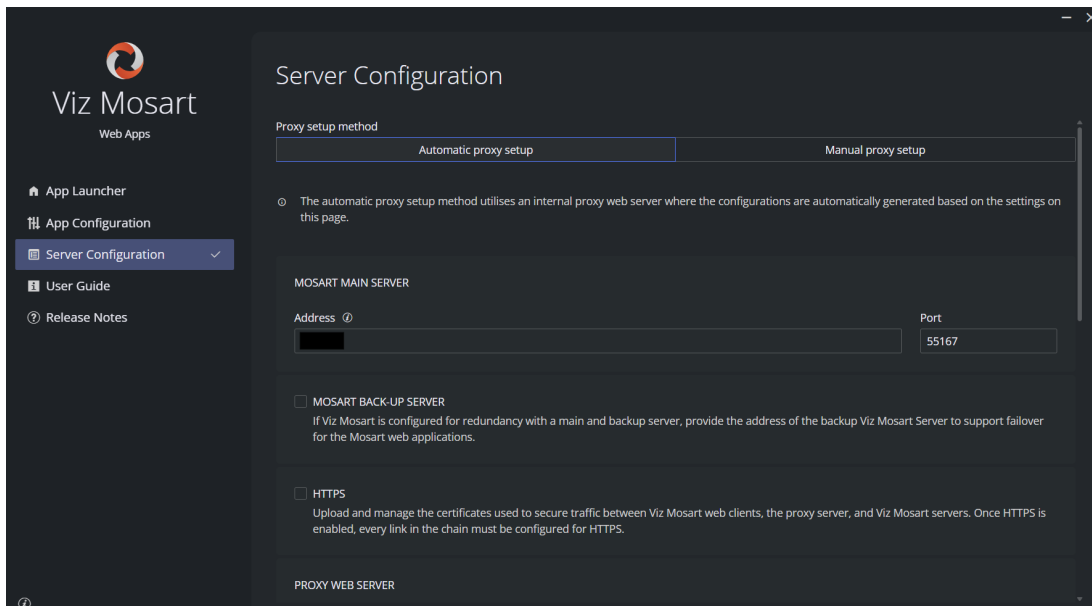
**Step 3: Open the Mosart Web Apps Configuration Tool.**

This is where every Mosart Web App, including Smart Panel, is set up. You should already have it from the Mosart installation.

**Step 4: Point the Web Apps suite at your Mosart server.**

In the Configuration Tool, open **Server Configuration** and fill in the main (and optional backup) Viz Mosart server addresses.

Smart Panel does not have a separate connection screen, it uses these shared settings to talk to the Mosart server.



### Step 5: (Optional) Enable live video previews.

If you plan to show NDI or TriCaster sources in the **Live** widget, set them up now. See [Enable Live Video Previews](#) below.

### Step 6: (Optional) Turn on HTTPS and authentication.

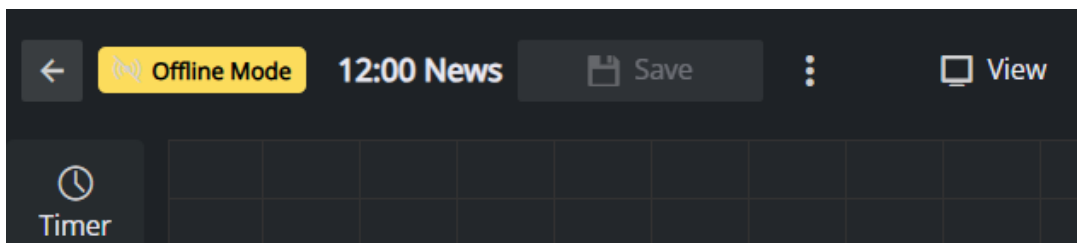
By default Mosart Web Apps runs without HTTPS or sign-in. If your site needs them, configure both in the Configuration Tool.

See section *Open Smart Panel* step below and [Using HTTPS](#) for the user-side effect (sign-in and the OIDC redirect).

**Note:** If *Live Preview* via Coder is used in Smart Panel, then Mosart Web Apps can not be configured with HTTPS. Coder is not reachable over HTTPS, even if Mosart Web Apps itself is configured with HTTPS.

### Step 7: Open Smart Panel and verify.

Browse to `http(s)://<your-mosart-web-apps-host>:port/smartpanel` (the default port for http is 55142 and 5513 for https). You should see the landing page (empty on a fresh install, ready for a **New Panel**). Open or create any panel and check that the **Offline Mode** badge in the app bar is **not** visible. If it is, the connection to Mosart did not come up. See *Troubleshooting* section.



## 10.7.2 Enable Live Video Previews

The **Live** widget supports three source types. Some of them need configuration in the [Configuration Tool](#):

- **NDI**: preview an NDI source through the Vizrt **Coder** service. Install Coder and make sure it is reachable from the operator's browser through the Mosart Web Apps host. See topic [Coder for Live Previews](#).
- **TriCaster**: preview an input from a TriCaster on the same network. Configure the TriCaster host once in the Configuration Tool; Smart Panel pulls the stream directly, no Coder needed. See [TriCaster Live Previews](#).
- **HTML video**: point the widget at an `.mp4`, `.webm`, `.ogg`, or `.ogv` URL the browser can fetch directly. Useful for pre-recorded clips or any source already exposed as a plain video file. No server-side setup.

## 10.7.3 Using HTTPS

If Mosart Web Apps is served over HTTPS, define the environment using the [Server Configuration](#) menu in the Mosart Web Apps Configuration Tool. Smart Panel inherits the same HTTPS setup as the other Web Apps. There are no Smart Panel-specific certificates to manage.

## 10.7.4 Troubleshooting

- [The "Offline Mode" badge stays on in the app bar](#)
- [The Live widget shows an Error icon](#)
- [Buttons do not execute](#)
- [Layout not saved between sessions](#)

### The "Offline Mode" badge stays on in the app bar

The **Offline Mode** badge means Smart Panel has lost contact with Viz Mosart. The panel keeps working, but timers, labels, and faders display fixed sample values instead of live data. As soon as the connection comes back, the badge disappears and live values resume automatically.

If the badge does not clear after a few seconds, work through the checks below in order.

Check, in order:

1. **Is Mosart Server configured?** Open the Mosart Web Apps Configuration Tool, go to **Server Configuration** and confirm the main Mosart Server host is set. Save and reopen Smart Panel.
2. **Is Mosart Server running and reachable?** On the Mosart Server machine, confirm **Manus Administrator** is running and a rundown is loaded. If it is, but Smart Panel still shows Offline Mode, the Mosart Web Apps host can not reach the server, check the network connection between the two machines.
3. **Using a custom reverse proxy?** Smart Panel always calls `/mosart/...` on the Mosart Web Apps host (SignalR hub, REST API, status endpoints). The bundled Caddy proxy forwards `/mosart/*` to Mosart Server automatically. If you replaced Caddy with your own proxy (nginx etc.), make sure it forwards `/mosart/*` to the Mosart Server.
4. **Is authentication misconfigured?** If OIDC is on, an expired or rejected JWT causes the page to reload. Persistent reload loops mean the identity provider is rejecting the token. Re-check the OIDC settings.
5. **Check the browser console.** Open the browser developer tools (F12), reload Smart Panel, and look at the **Console** tab for red error messages. They usually point directly at one of the causes above (server unreachable, authentication rejected, network blocked).

## The Live widget shows an Error icon

Coder is unreachable or has no sources. Review the section [Coder for Live Previews](#) in the Configuration Tool.

 **Note:** Coder is *not* available over HTTPS.

## Buttons do not execute

If timers and labels work (no Offline Mode badge) but a Button click does nothing, check:

- The button's **Command type** is filled in and, for Template buttons, a template is selected.
- **Authentication mismatch between Mosart Server and Mosart Web Apps.** Smart Panel needs the same authentication mode on both sides:
  - **If Mosart Server is configured with OIDC**, Mosart Web Apps must also have HTTPS and OIDC enabled (**Server Configuration** in the Configuration Tool — see Step 6).
  - **If you want to run over HTTP** (not recommended), Mosart Server must have a REST API key configured (RestApiKey), and Smart Panel must be opened with that key as a URL parameter (?apikey=<key>). Note that this exposes the key in browser history and logs.
  - To confirm the underlying REST endpoint is responding, open the Mosart Server Swagger page in a browser:
    - **HTTP:** `http://<mosart-server-host>:55167/swagger/index.html`
    - **HTTPS:** `https://<mosart-server-host>:55168/swagger/index.html`
 If the Mosart Server is configured with a REST API key (RestApiKey), click Authorize in Swagger and supply the same key (header X-API-Key) before invoking any endpoint. If neither an API key nor OIDC is configured on the Mosart Server, the REST API is not usable, the Swagger page may load, but every call returns 401.

## Layout not saved between sessions

Layouts are stored in a single file, `smartPanelLayouts.json`, under `C:\ProgramData\Mosart Medialab\Mosart Web Apps`. The built-in default layouts are part of the Mosart Web Apps installation and cannot be lost. If user-created layouts disappear after a server restart, check that this folder is included in your normal backup routine and has not been wiped by a reinstall.

---

## 11 Template Editor (Early Access)

The new **Template Editor** offers an improved experience for creating, editing and managing templates.

✓ **Tip:** Watch a 2' introduction [here](#).

This guide is designed for both first-time users of Viz Mosart and experienced users of the old Template Editor, providing detailed explanations of the features, workflows, and recommended best practices.



### Info: Early Access

The new Template Editor is currently provided as an **early access** version, intended for customers to test, explore, and provide insights and feedback for future versions.

### Safety first

This version is **not supported for production use**. We recommend enabling it in a staging or test environment to safely explore its features and to always back-up your `channeltemplates.xml` file *before* you start.

### Template storage

Once enabled, the new Template Editor will share the same template storage configuration as the NRCS plugin.

Only **file-based** template storage is supported in this version. Support for template database will follow in a later version.

### Control access

As a web-based app, the new Template Editor will be available to *all* users on the local network. To control access, this version also offers **authentication**.

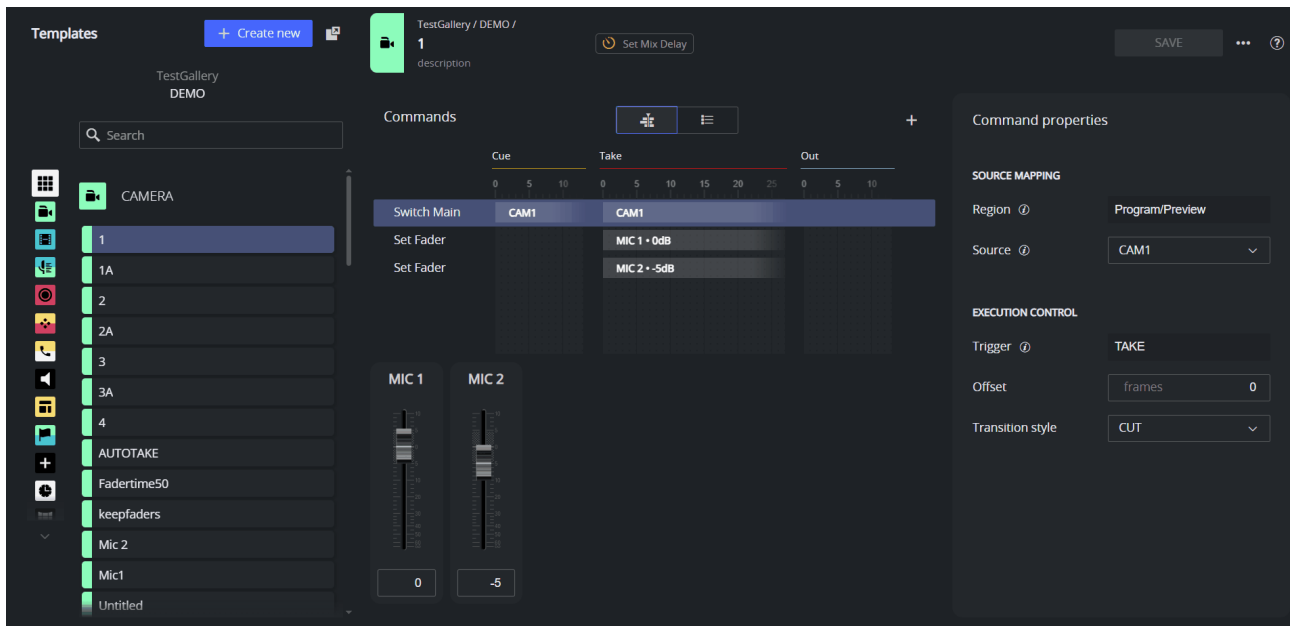
Once configured, the permissions apply to *all* Viz Mosart Web Apps.

- [Template Editor](#)
- [Benefits of the new Template Editor](#)
- [How the new Template Editor Works](#)
- [Further Information](#)

---

### 11.1 Template Editor

The Template Editor is your tool for creating, modifying, and managing templates. Each template defines a carefully timed sequence of automated commands, such as camera switching, audio adjustments, graphic transitions, lighting control and much more. By designing robust and powerful templates, you can produce complex live broadcasts reliably and consistently, which can be planned in a rundown, or recalled manually at any time.



## 11.2 Benefits of the new Template Editor

- **Web-based:** Accessible from a browser on any computer on the network.
- **Fast template browsing:** Uses the same familiar interface as the NRCS Plugin, for rapid navigation between templates.
- **Timeline view:** Gives a clear visual overview of all commands and their precise timing.
- **Simplified command model:** Fewer, more powerful commands, to make template creation easier.
- **Easier to learn:** A clean, intuitive UI lowers the learning curve, even for new users.

## 11.3 How the new Template Editor Works

The new editor is designed to be compatible with existing Mosart templates, while introducing a more modern and user-friendly editing experience. Here's what you need to know:

- Template Editor directly modifies the same `channeltemplates.xml` file as the old editor.
- The data format is the same, so changes are backwards compatible. Both editors can be used side-by-side.
  - ⚠ However, there is no mechanisms for synchronizing between them:
    - Saving in the *old editor*: Requires a browser refresh in *new editor* to view the changes.
    - Saving in the *new editor*: Requires a restart of AV Automation for changes to take effect in a rundown and to see the changes in the *old editor*.
  - There are no conflict or collaboration features: The latest save wins.
- This version supports a limited set of commands:
  - When opening an existing template, only the supported commands will be visible.
  - When saving, unsupported commands are preserved, even though you don't see them. They are not lost.
  - All commands will still appear in the old editor.

- Commands have been simplified, but may take some time to get used to:
    - The previous distinction between *Device Commands* and *Control Commands* is gone. Now you see a unified list.
    - Some commands have been unified for simplicity. For example, the command **Set source** can set a *Keyer*, *AUX* or *Crosspoint*, depending on which properties have been configured.
    - This change is only *visual*. When *saving*, a **Set source**, the command will be converted to a **SET\_CROSSPOINT** *Control Command* in the file and is visible in the old editor.
    - For more details, see [Transitioning from the old Template Editor](#).
  - No *template inheritance* features are currently included.
- 

## 11.4 Further Information

Additional documentation and guidance will continue to be added and refined as the new Template Editor evolves. For the latest updates, consult the [Vizrt Documentation Center](#). If you require assistance with setting up Template Editor, please reach out to your Viz Mosart Support contact.

## 11.5 Working with Template Editor

The opening view of the Template Editor provides access to all tools needed to browse, edit, and manage Mosart templates. Key operations like template selection, command editing, and property configuration are gathered in one workspace.

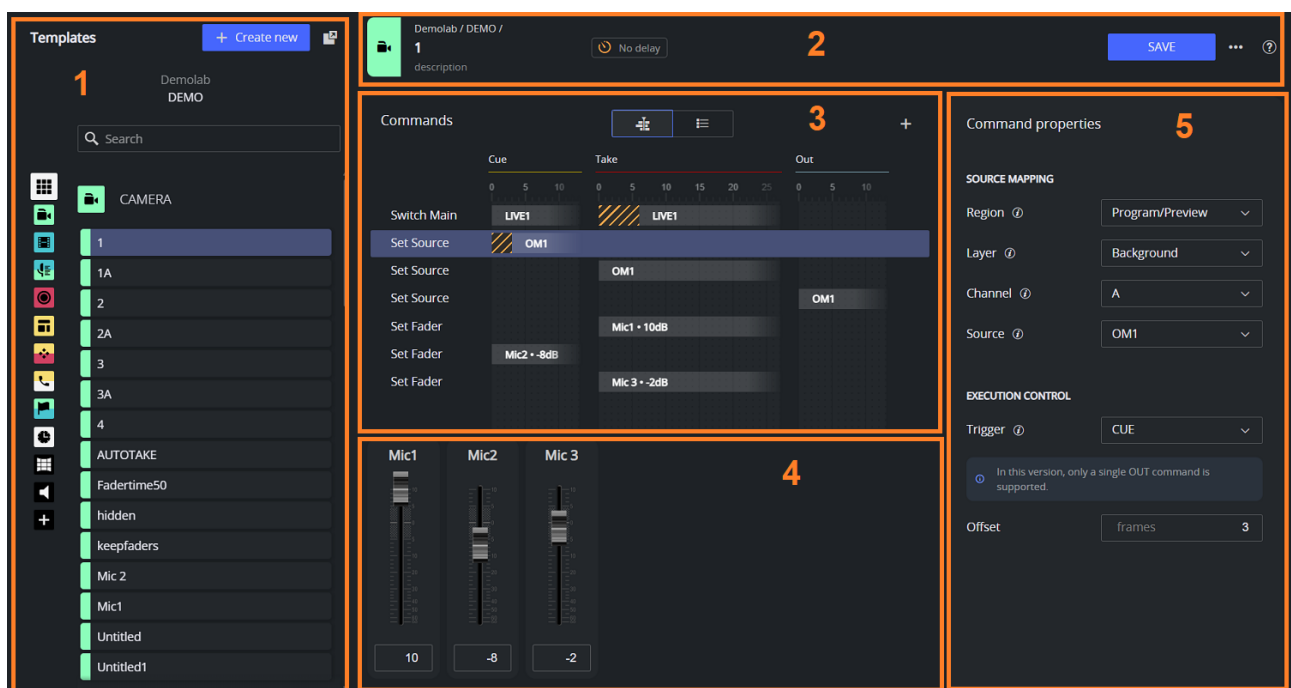
Each panel serves a specific phase of your template editing workflow. For example:

- searching and managing templates
- editing commands
- configuring properties.

The layout is intended to offer a visual and intuitive experience, with tools like timeline visualization, structured command organization and real-time property editing.

### 11.5.1 Overview of Template Editor

Each numbered panel is described below.



- (1) Template Search and Creation
- (2) Template Title Bar
- (3) Commands List and Timeline View
- (4) Audio Fader Panel
- (5) Command Properties

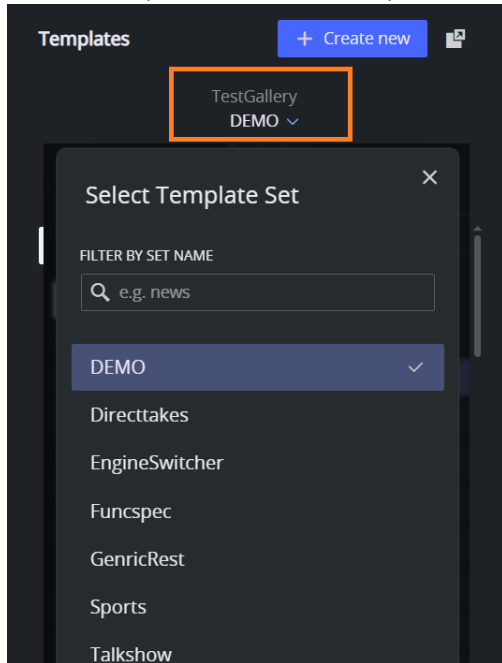


## (1) Template Search and Creation

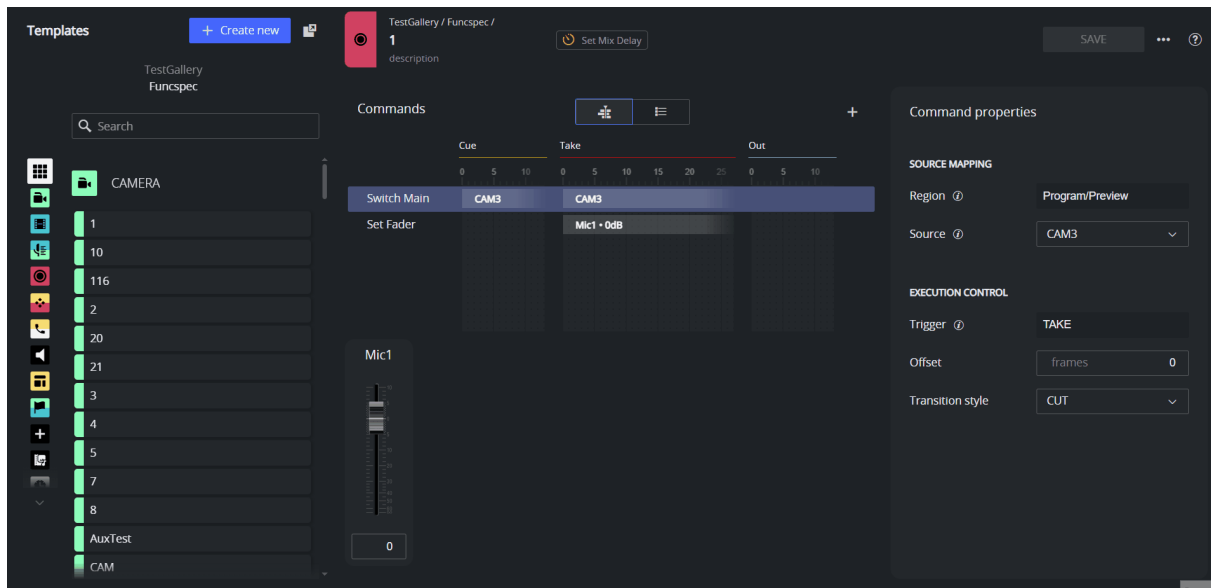
### Searching for Templates

The Template Editor provides a fast and responsive search experience similar to what you may be familiar with in the [Mosart NRCS Plugin](#).

- Select a *Template set* from the drop-down selector, to view its templates.



- Use **FILTER BY SET NAME** to locate a template set.
- Having selected a template set, type in the **Search** box to locate templates by *name* or *variant*. As you type, the list will automatically filter and highlight matching results.
- Templates are *grouped by type*, such as *CAMERA*, *PACKAGE*, or *GRAPHIC*, making browsing straightforward even without searching.
- When you select a template from the list, its implementation is *instantly loaded* and displayed in the **Commands** and **Command properties** panels on the right. This allows you to preview its configured commands, transitions, and audio fader levels at a glance—without needing to open each one manually.
- Use the **Arrow keys** on your keyboard to quickly scroll through the templates within your selected set. As you move through them, each template's configuration is shown instantly, offering a fast and efficient way to review templates in sequence.



**Info:** In this version, only file-based templates are supported. This means you won't need to select a gallery, as only one template source (the file) is available. Support for gallery-based template databases will be introduced in a future release.

## Creating a New Template

### To create a new template

1. Click the **+ Create new** button at the top of the template list.
2. In the dialog:
  - **Title** – Enter a name for your new template.
  - **Type** – Choose a template type from the drop-down menu (for example, *CAMERA*, *PACKAGE*).
  - **Description (optional)** – Optionally, provide a short description for clarity.

When creating a new template, the combination of template **Type** and variant name (**Title**) must be unique *within the selected template set*.

Create new template

Title

2

Variant exists.

Type

CAMERA

Description (optional)

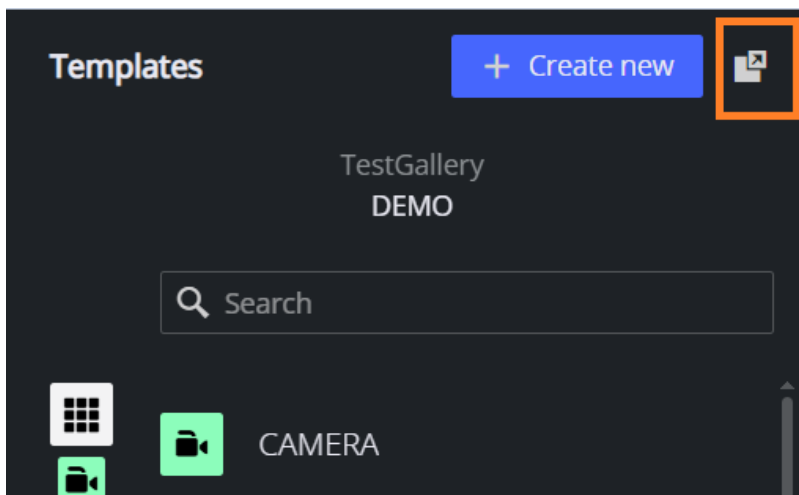
description

Create Cancel

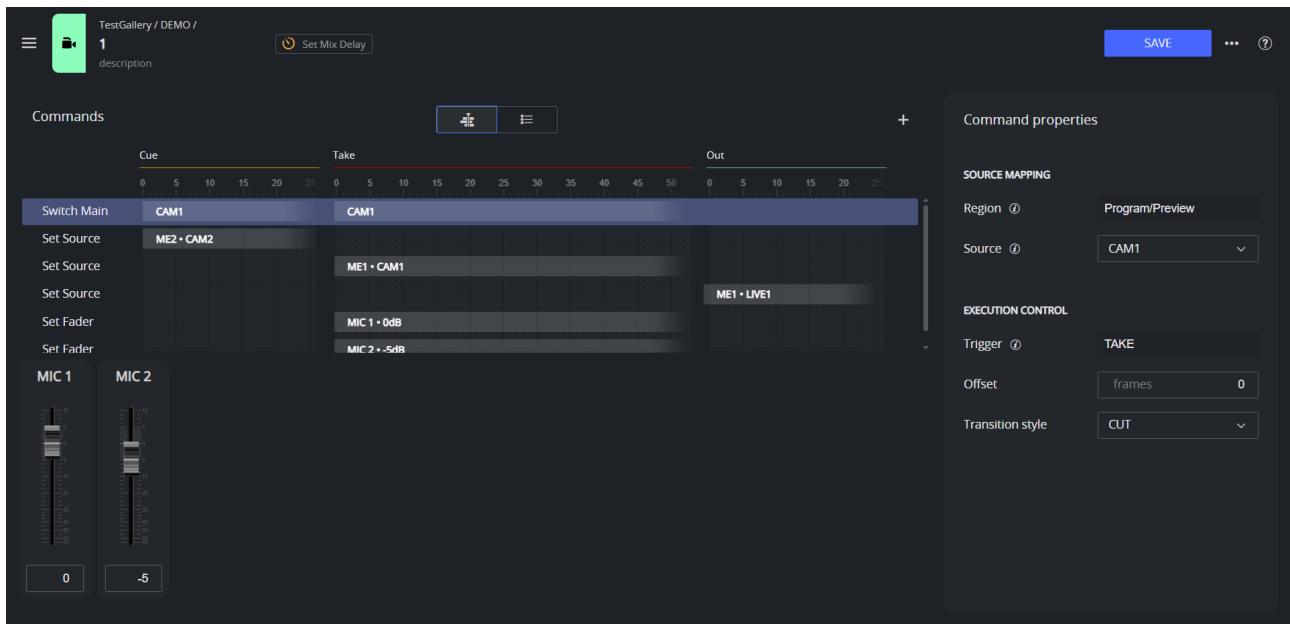
3. Click **Create** to add the new template.  
It is added to the selected set and immediately opened in the main editor view.
4. Once created, you can begin adding commands, adjusting their properties, and configuring timing in the visual timeline editor.

### Collapsing the Search panel

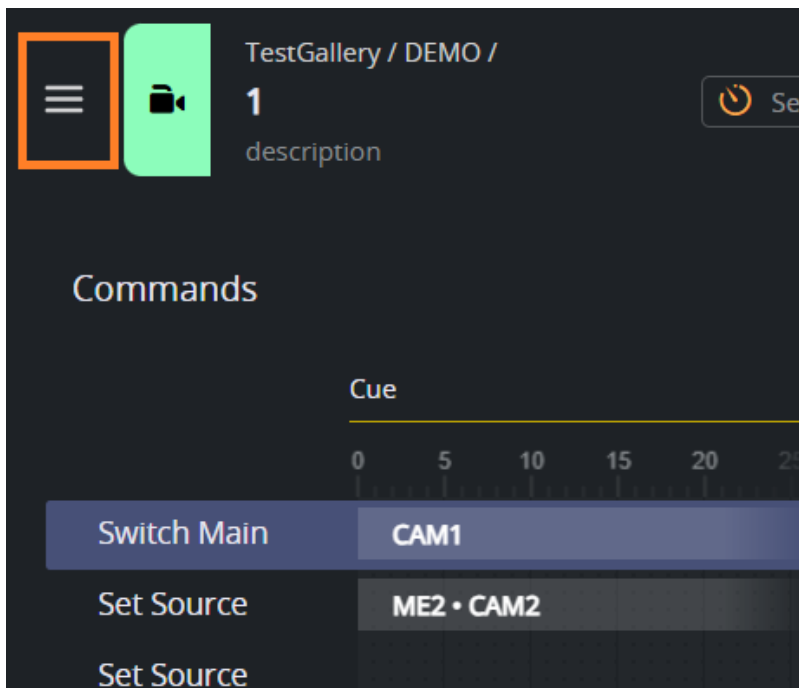
Once you've found a template to view or edit, or created a new one, you can collapse the **Templates** panel using the **Collapse** icon in its top-right corner.  
(You may need to move your mouse to hide the panel).



Collapsing the panel provides more workspace and visibility for editing the template body and viewing command details. This is especially useful when working with complex templates or multiple commands, as it allows you to focus on the command timeline and property panels without distraction.



You can re-expand the **Templates** panel at any time by clicking the menu icon in the top-left corner, allowing you to browse template sets or search for additional templates without leaving the current view.



## (2) Template Title Bar

The header section of Template Editor displays key information and actions related to the currently selected template. This panel provides access to template metadata, delay configuration, and management tools.

What you'll find in this section:

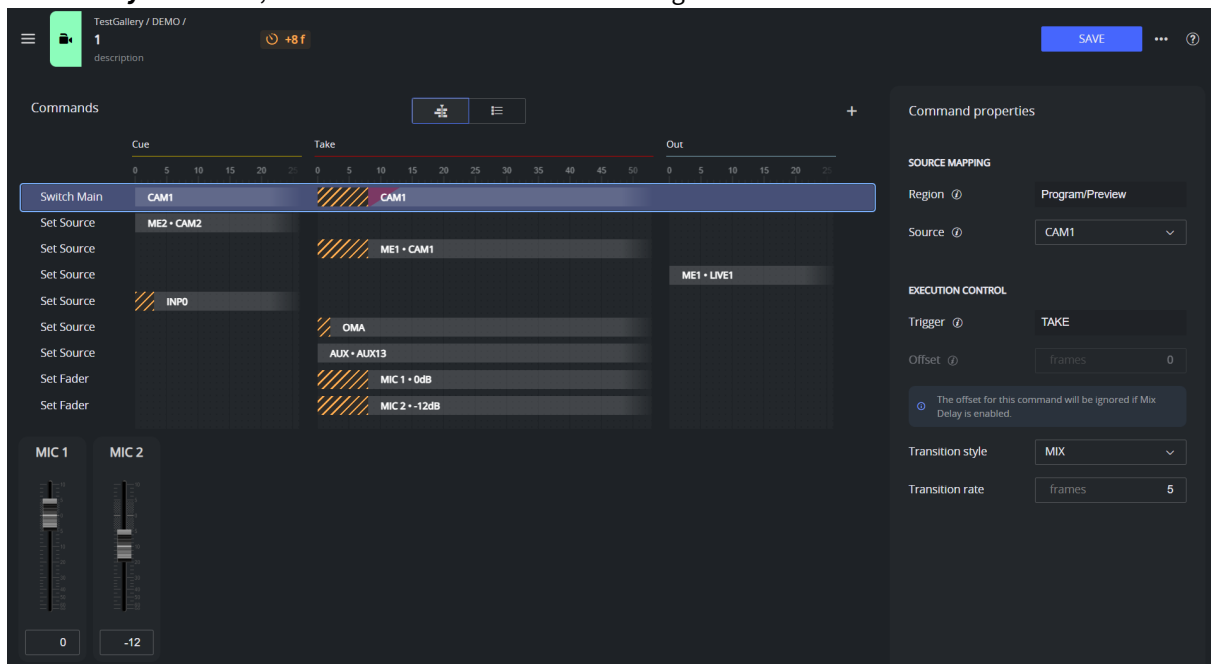
- **Template Information**

Displays the selected template's *name*, *variant*, *description* and *location*. This makes it easy to keep track of what you're editing, especially when navigating across multiple templates.

- **Mix Delay Configuration**

Clicking **Set Mix Delay** opens a dialog where you can apply a frame-based delay to specific command types (for example, *main source switches*, *region source switches*, *audio fades*). This helps with [fine-tuning on-air action timings](#).

If **Mix Delay** is enabled, individual command offsets will be ignored.



- **Template Actions – Save, Edit, Delete**

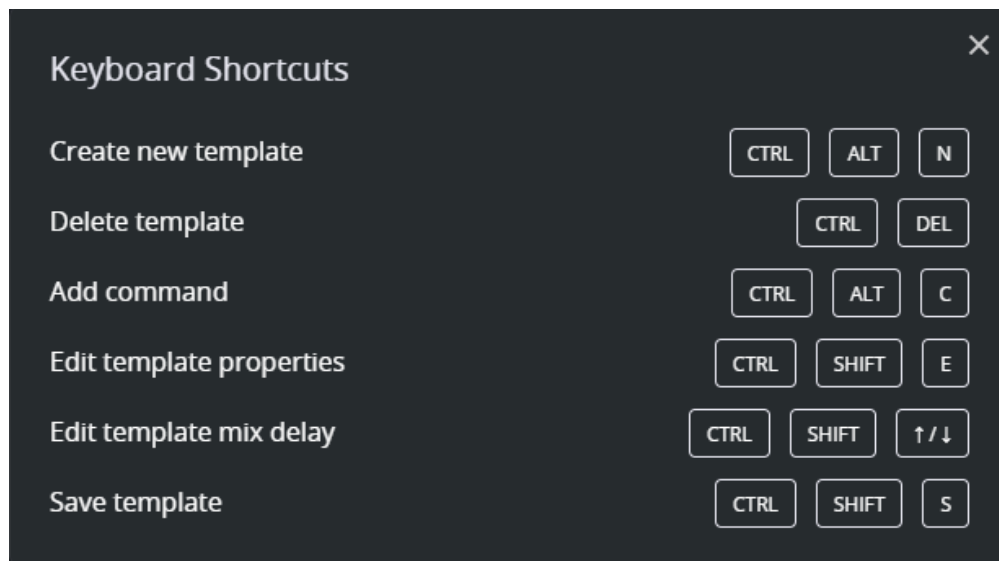
On the right side of the header:

- The **Save** button stores any changes made to the template.
- The **Three-dot menu** opens options to **Edit** or **Delete** the template.
  - Edit opens a dialog where you can rename the template, change its type, update its description, or modify its **Mix Delay** value.

- **Keyboard Shortcuts and About**

The **Question mark** icon (?) opens a drop-down menu with:

- **Documentation**
- **Keyboard Shortcuts** – view or memorize shortcuts to speed up common actions like creating, editing, and navigating templates.

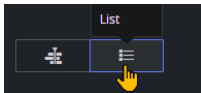


- **About Dialog** – includes product version, date, and a link to third-party license information used by the Template Editor.

### (3) Commands List and Timeline View

The **Commands** panel presents two complementary methods for exploring and managing commands in a template.

- Select **Timeline** or **List** view to switch between views.



Both views are interactive and synced with the **Command properties** panel.

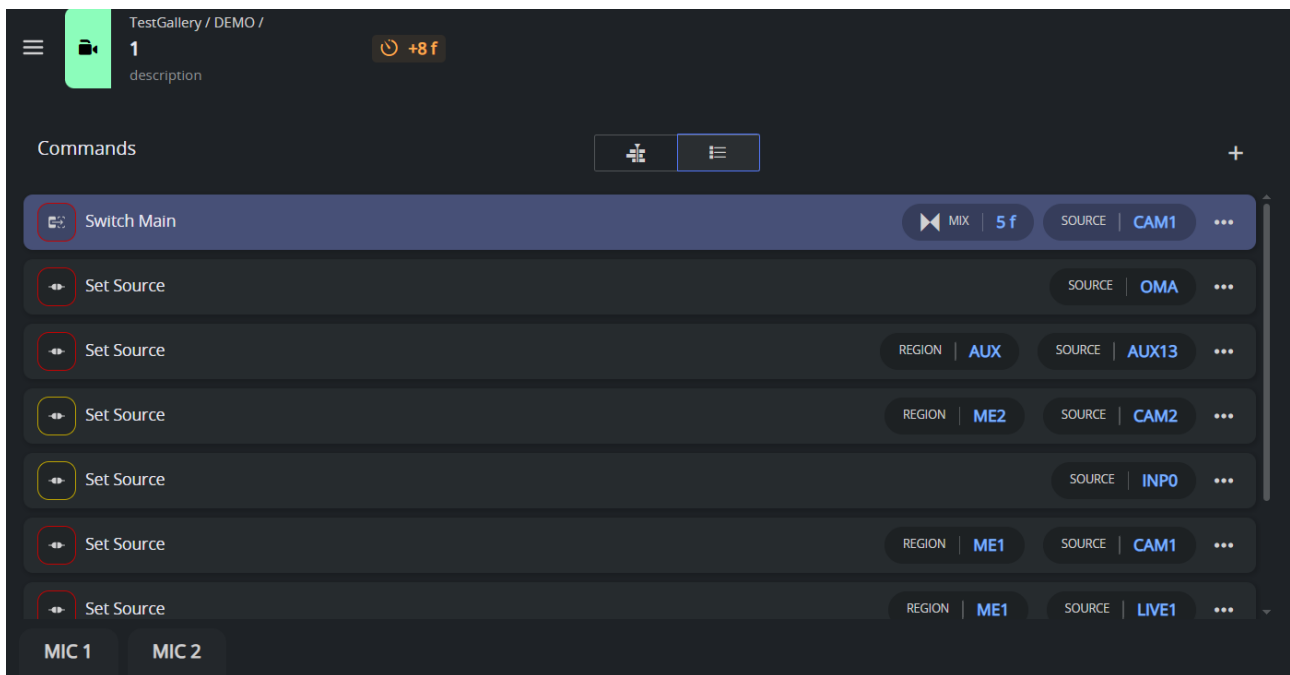
**Info:** Commands are currently grouped by *device* category (for example, *switcher* commands, *audio mixer* commands) and *not* by execution sequence. This reflects the structural grouping within a template, but not necessarily the order that Viz Mosart executes them at runtime. Additional sorting options may be introduced in future versions.

### Timeline View

A visual representation that shows when each command is executed during the *Cue*, *Take*, or *Out* phases. It provides an intuitive overview of execution timing, offset frames, and transition lengths. In addition, this view helps illustrate *multi-phase commands*, such as *Switch Main* or *Switch Region*—that trigger actions when the template is cued and when it is taken on-air. These distinct phases are easily identified on the timeline by their placement across *Cue*, *Take*, or *Out* segments.

### List View

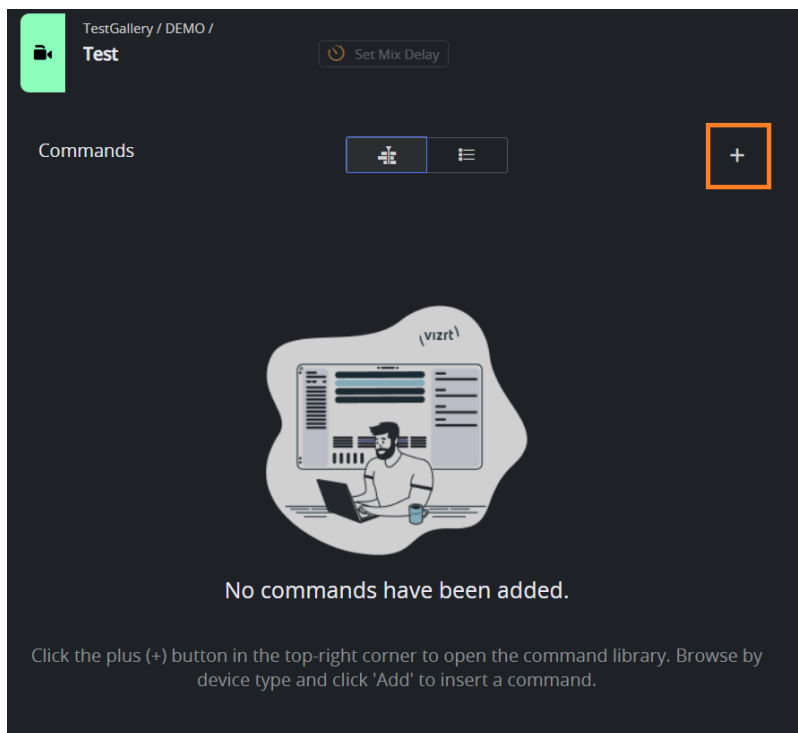
A compact format that displays the same commands and their core properties in a simplified linear layout. This is useful for quick review or editing when precise timing visualization is not required.



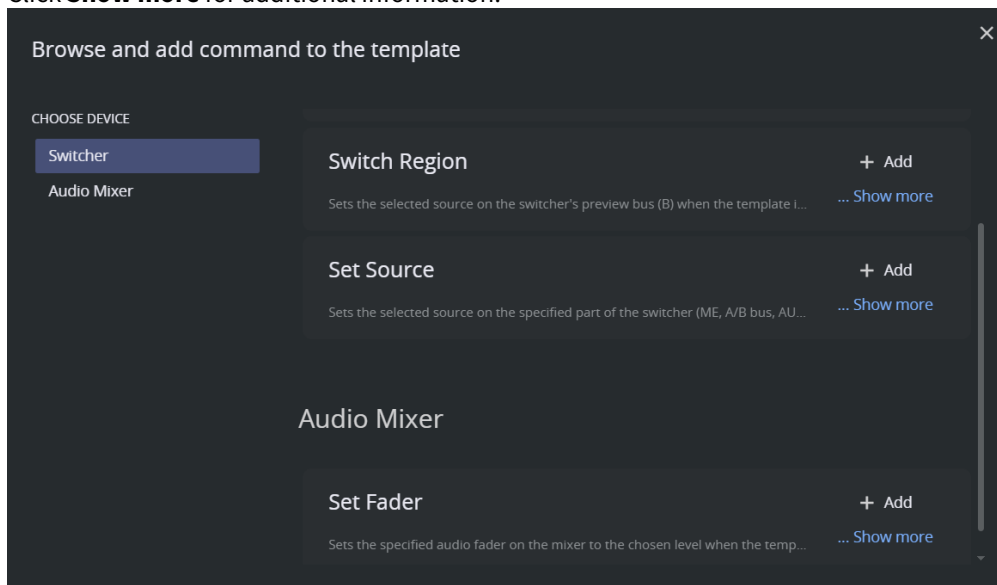
## Adding Commands to a Template

### To add a new command

1. Click the **Plus** button (+) located at the top-right corner of the **Commands** view.
2. This opens a dialog that lets you browse available device types (for example, *Switcher*, *Audio Mixer*) and choose specific commands to insert into the template.



3. Each command entry in the dialog provides a short description. Click **Show more** for additional information.



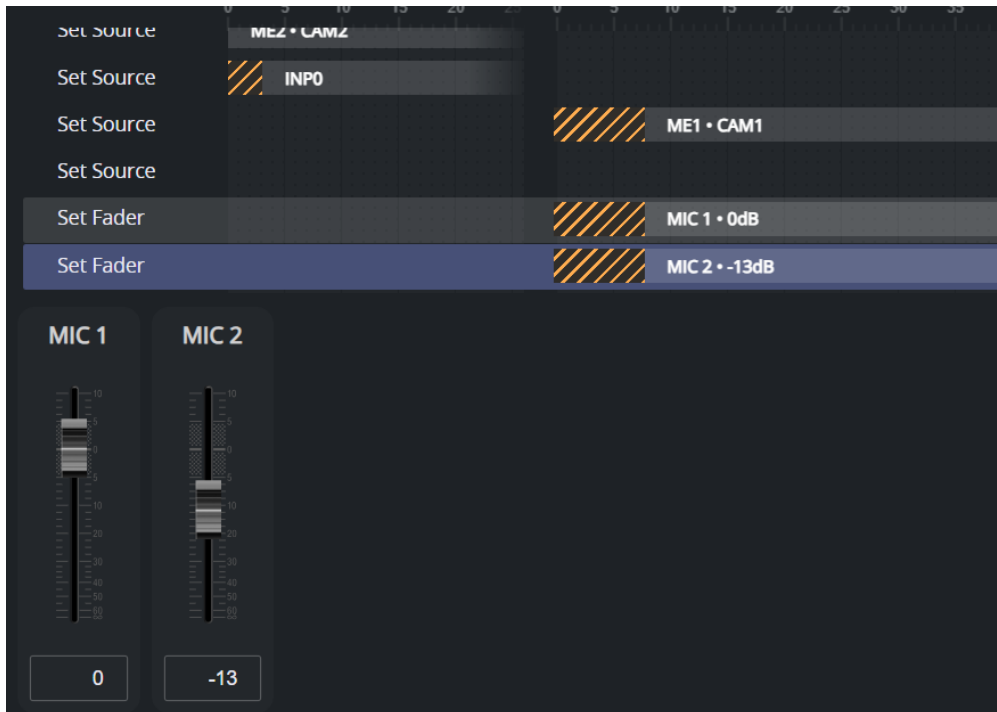
4. Select the desired command and click **Add** to include it in the active template.  
 5. You can continue editing the newly added command in the **Command properties** panel, immediately after adding it.

#### (4) Audio Fader Panel

The **Audio Fader** panel provides a quick overview of all **Set Fader** commands included in the template. Displayed for each configured audio channel are:



- The *source name* (for example, *MIC 1*, *MIC 2*)
- The *fader level*, in dB.



You can adjust the audio level directly by dragging the fader slider up or down. This allows quick tuning without navigating to the **Command properties** panel.

- To modify other command parameters like *Trigger type*, select the corresponding audio command from the Command list or Timeline view.

## (5) Command Properties

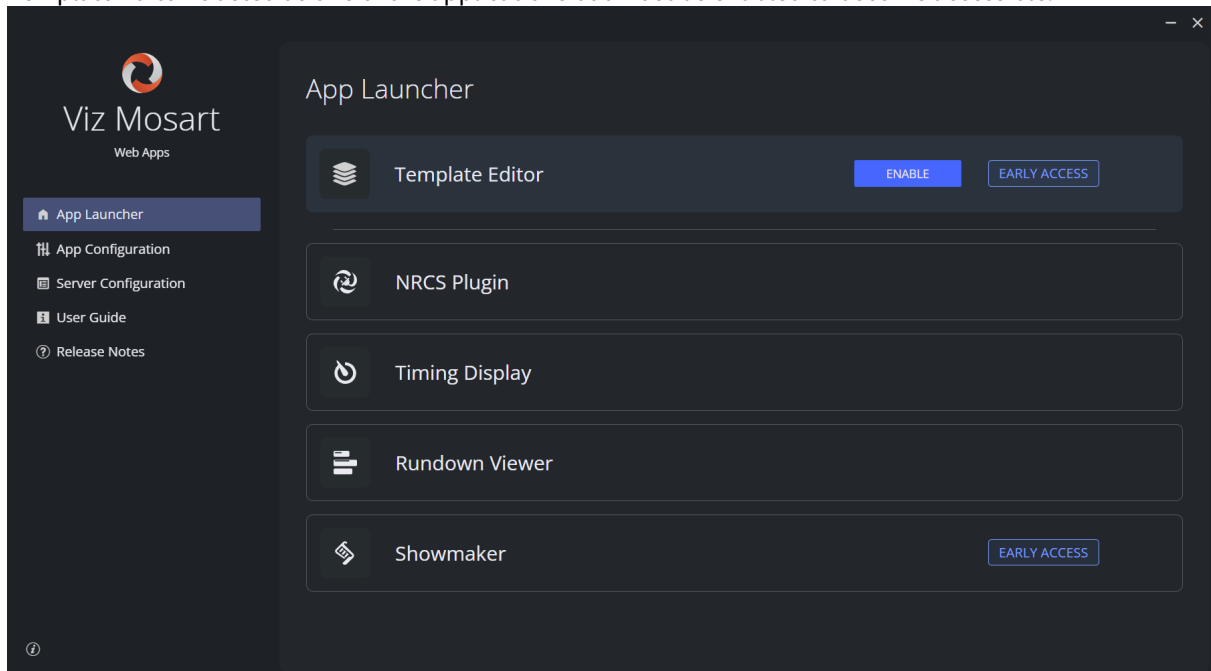
The **Command Properties** panel displays configurable options for the selected command. Properties vary depending on the *command* type and *device* type (for example, a *video switcher* or an *audio mixer*).

## 11.6 Setup and Administration of TE

The new Template Editor is part of the **Mosart Web Apps** package. It is accessed and managed through the **Configuration Tool**, which launches automatically after installation.

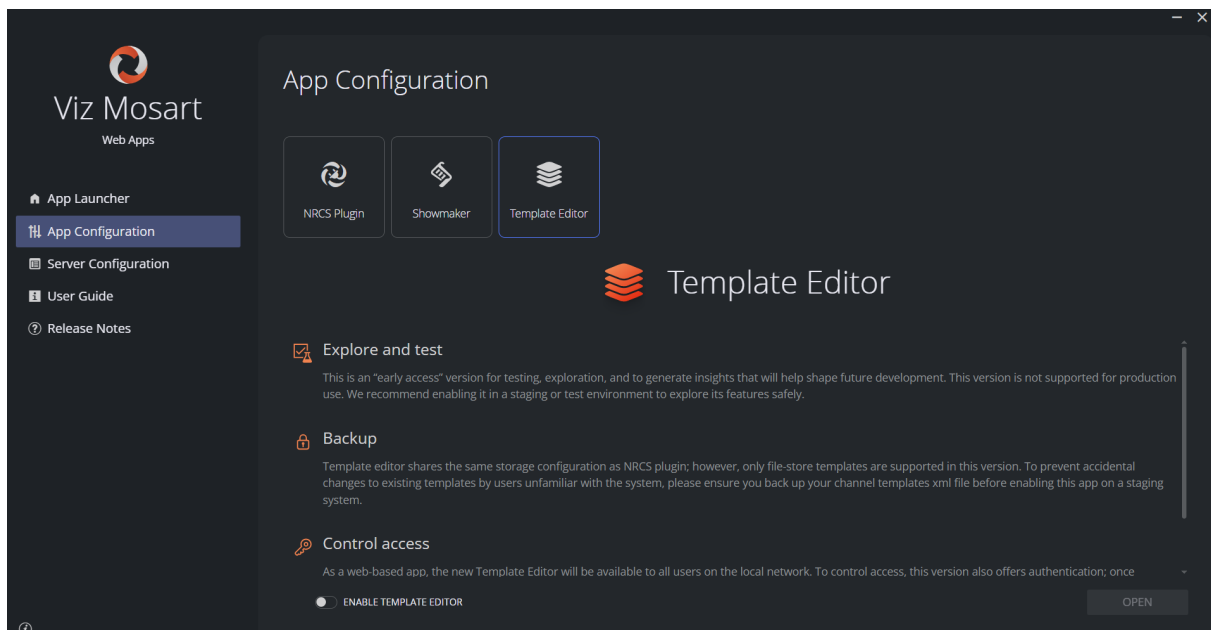
1. Open the Configuration Tool.

After installing the Web Apps bundle, the **App Launcher** will open, showing all available applications. Template Editor is listed as one of the applications but must be enabled to become accessible.



2. Enable Template Editor.

- a. Go to the **App Configuration** tab.
- b. Select **Template Editor**.
- c. Review the following important notes before enabling.



### 3. Save and launch.

Once you've enabled the Template Editor:

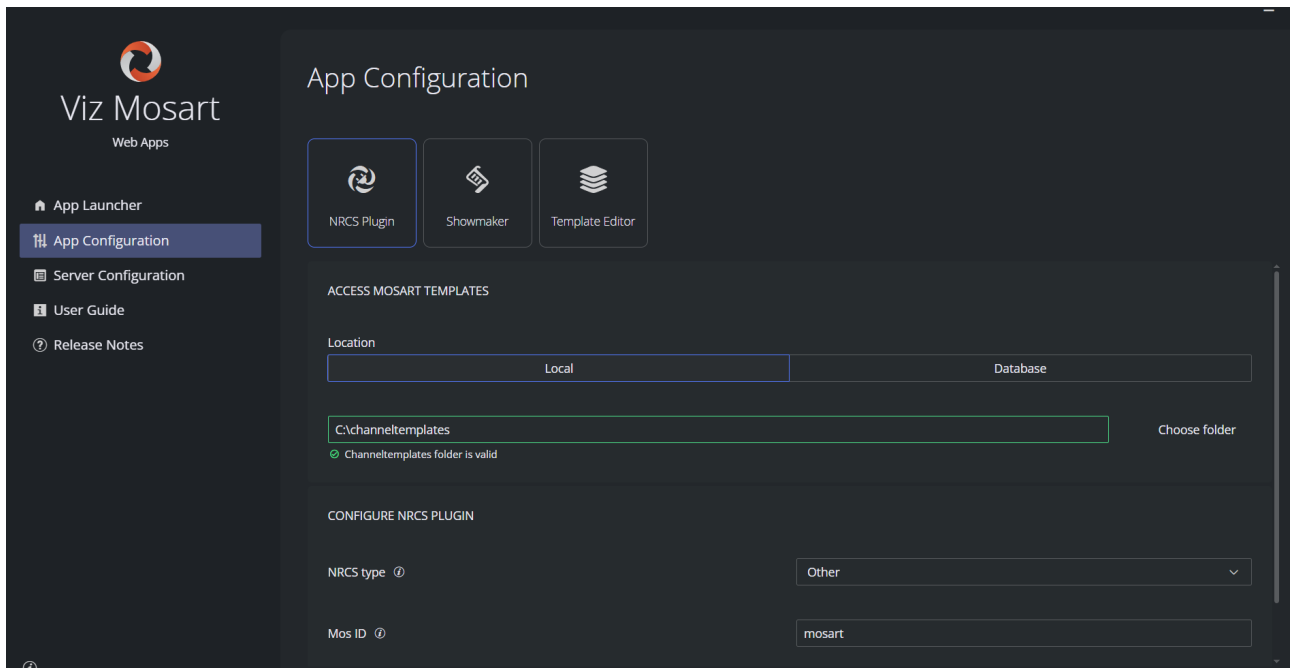
- a. Click **Save** to apply the change.  
This restarts the Web Apps service.
- b. After restarting, the **Open** button becomes available.  
Click **Open** to launch Template Editor in your default browser.

### 4. Confirm template storage file location.

Template Editor shares the template storage path configured in the **NRCS Plugin** tab.

- Ensure the **Local** file storage path is valid and accessible.

**Info:** Templates stored on a *database* are not supported in this version.



#### 5. Control access.

As a web-based app, the new Template Editor will be available to all users on the local network.

- To control access, this version also offers **authentication**. Once configured, the permissions affect *all* Viz Mosart Web Apps.

## 11.7 Command Reference

This guide covers command function, parameter structure, and how they are used in typical workflows.

- [Video Switcher Commands](#)
  - [Command Structure](#)
    - [Region](#)
    - [Layer](#)
    - [Channel](#)
    - [Source](#)
  - [Switch Main](#)
    - [Properties](#)
  - [Switch Region](#)
    - [Command properties](#)
  - [Set Source](#)
    - [Command properties](#)
    - [Examples](#)
- [Audio Mixer Commands](#)
  - [Set Fader](#)
    - [Command properties](#)
- [Fine-tuning On-Air Action Timings](#)
  - [Delay mechanism summary](#)
- [Template Terms and Definitions](#)
- Commands in this description are organized by the *type* of device they control (for example a *switcher* or *audio mixer*) with examples illustrating their common usage scenarios.
- For users familiar with the existing *desktop Template Editor*, a separate section, [Transitioning from a Desktop Template Editor](#), highlights key differences in behavior and compatibility.
- As the Template Editor evolves, more command types will be added.

### 11.7.1 Video Switcher Commands

#### Command Structure

For video switcher (vision mixer) commands that assign a source, such as *Switch Main*, *Switch Region*, or *Set Source*, Template Editor uses a hierarchical structure that precisely defines source destination, in the form:

**Region → Layer → Channel → Source.**

This hierarchical model supports a wide range of production systems, from traditional hardware switchers to modern software-based mixers. While it is essential for source-mapping commands, not all vision mixer commands necessarily use this structure.

Here's a breakdown of each element:

#### Region

The top-level destination for the source. This could be:

- **Program/Preview (PP):** The main switcher output
  - **Mix/Effect (ME1, ME2, etc.):** For complex layer compositions
  - **Auxiliary (AUX):** For independent outputs  
In some systems, this is called either a *scene* ([Panasonic Kairos](#)), or a *graphic scene* (see Viz Engine [as a Switcher](#)).

## Layer

Identifies a compositing layer (for example, *Background*, *Layer 1*, *Layer 2*, *Layer 3*) where the source should be placed.

- The *Background* (also referred to as *Main*) layer represents the base layer of the visual composition, the foundation onto which all other visual elements (graphics, overlays, picture-in-picture, etc.) are added. This layer may support A/B transitions (Preview + Program). In traditional switchers, this corresponds to the background video source of any M/E bank, not just the Program output. Each M/E has a base input (the *Background*), which can have keys and effects stacked above it. In modern, layer-based switchers like Panasonic Kairos, it serves as a virtual construct to simulate this foundation. The web-based Template Editor uses this concept to unify how the base layer is addressed across both traditional and fully composited switcher architectures.

**Note:** This layer is *not* available when region *Auxiliary* is selected.

- *Layer 1*, *Layer 2*, *Layer 3*, and so on, are used to place content on top of the main background layer. Each of these layers currently has just one video bus (called *A*) and currently does not support transitions between *two* sources like traditional A/B transitions.

Examples are:

- [Panasonic Kairos](#) supports multiple layers in both *single* and *dual-bus* modes.
- [TriCaster](#) M/Es allow multi-row compositions (A, B, C, D).
- [Viz Engine](#) treats superchannels as layers with A/B buses.

The *Layer* may be fixed based on command type (for example, *Switch Main* does not expose a layer setting, this is set by default to *Background* and cannot be changed).

## Channel

This is the final destination where the source is assigned. In a dual-bus background layer, this might be A (program) or B (preview). Single-bus layers typically only use channel A.

## Source

The actual input, such as a camera, live feed, graphics input etc., referenced by its name (crosspoint) configured on the Viz Mosart server in AV Automation in the menu

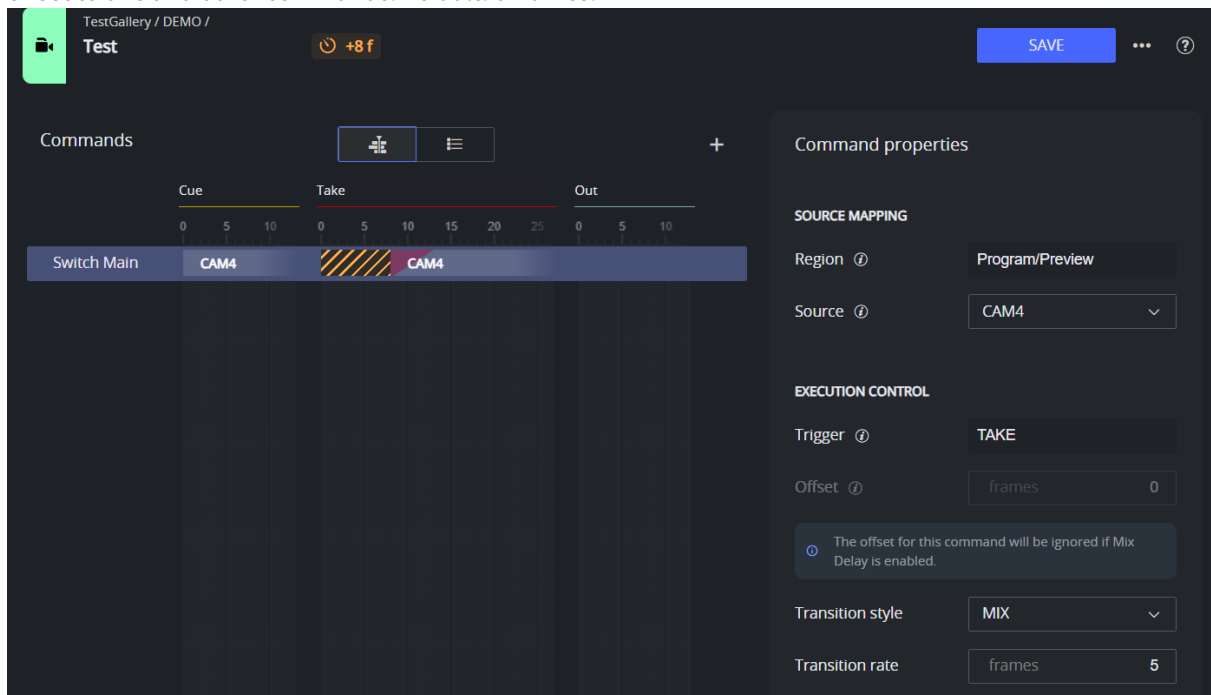
**Devices > A/V Setup > Video Config.** (for example, *CAM1*, *LIVE1*).

## Switch Main

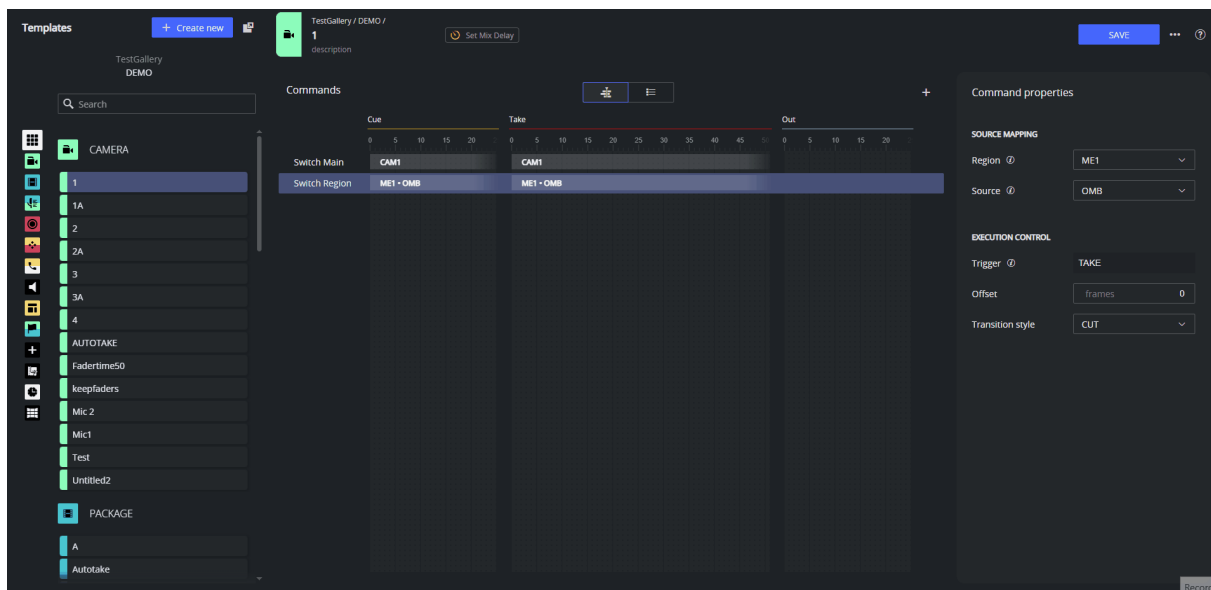
The **Switch Main** command sets the source on the main output (*Program/Preview*) of the switcher. This can be a direct source like a camera, graphic, or video feed (for example, *CAM1*), or a secondary region (for example, *ME1*) that is being composed elsewhere.

## Properties

- **Region:** Program/Preview (the main output). This can not be changed.
- **Source:** The desired source (e.g., CAM1). *Default:* the first command in the list.
- **Trigger:** Specifies where the command is executed. This can not be changed. The command transitions the selected source on the main output from Preview (B) to Program (A) when the template is taken on air. In the Properties on the command on TAKE is visualized, but in the Timeline view, both the commands on CUE and on TAKE are visualized.
- **Offset:** Optional delay in frames. Ignored when [Mix Delay](#) is enabled; instead, the Mix Delay applies a unified offset to this and other commands. *Default:* 0 frames.



- **Transition:** CUT, MIX WIPE or EFFECT. CUT is in fact a MIX with transition rate 0 frames. *Default:* CUT
- **Transition rate:** MIX and WIPE support optional transition rate (in frames). *Default:* 0 frames.



## Switch Region

Switches a source to the background of another mixer region (for example, *ME1*, *ME2*) different from the main output (PP). This allows for switching sources in parallel with the main output - typically used in compositions, picture-in-picture, or secondary outputs.

## Command properties

- **Region:** ME1, ME2, etc.
- **Layer:** 1, 2, 3 etc.
- **Source:** The desired source (for example, *CAM1*). Default: The *first* command in the list.
- **Trigger:** Specifies where the command is executed. This cannot be changed. The command transitions the selected source on the mixer region from Preview (B) to Program (A) when the template is taken on air. In the command Properties view only the TAKE command is shown, but in the Timeline view, both the commands on *CUE* and on *TAKE* are visualized.
- **Offset:** Optional delay in frames. Ignored when [Mix Delay](#) is enabled; instead, the Mix Delay applies a unified offset to this and other commands. Default: 0 frames.
- **Transition:** CUT, MIX WIPE or EFFECT. CUT is in fact a MIX with transition rate 0 frames. Default: *CUT*.
- **Transition rate:** MIX and WIPE support optional transition rate (in frames). Default: 0 frames.

### **Info: Limitations with current version**

- A maximum of *two* switch commands are supported in a single template execution
  - one for PP (main) and
  - one for a secondary region (for example, ME1).
- Only *one* non-main region (ME1, ME2, etc.) can be used for **Switch Region**.
- Shared *transition* and *offset*: Both **Switch Main** and **Switch Region** commands in a template will use the *same* transition type and *same* offset.



## Set Source

The **Set Source** command is used to assign a specific source to a *single-bus layer*, typically used for *keyers*, *picture-in-picture*, *video walls*, **auxiliaries** or other compositional elements within a production scene.

Unlike **Switch Main** or **Switch Region**, which operate on background layers and typically trigger a transition (for example, *Mix*, *Cut*), **Set Source** is used for direct source assignments that *do not involve transitions*.

## Command properties

- **Region:** Specifies the mixer region where the source should be applied. For example, *Program/Preview (PP)*, *ME1*, *ME2*, *Auxiliary*, etc.
- **Layer:** Indicates the layer within the selected region. Can be *Background* (except when **Region** is set to *Auxiliary*) or a numbered layer (for example, *Layer 1*, *Layer 2*, etc.).
- **Channel:** Defines the channel to assign the source to, A or B. This is only applicable when the **Layer** is set to *Background*.
- **Source:** The source to be assigned (for example, *CAM1*, *LIVE1*). If left empty, the first available source in the drop-down list is used by default.
- **Trigger:** Specifies when the command should be executed, on *CUE*, *TAKE*, or *OUT*.
- **Offset:** An optional delay (in frames) before the command is executed. In this version, the *Offset* property can only be applied if the **Trigger** is set to *CUE*.

- Info:** The **Mix Delay** setting (defined at the template level) applies to the **Set Source** command only if:
- the **Layer** is set to *Background*, and
  - the **Trigger** is set to *TAKE*.

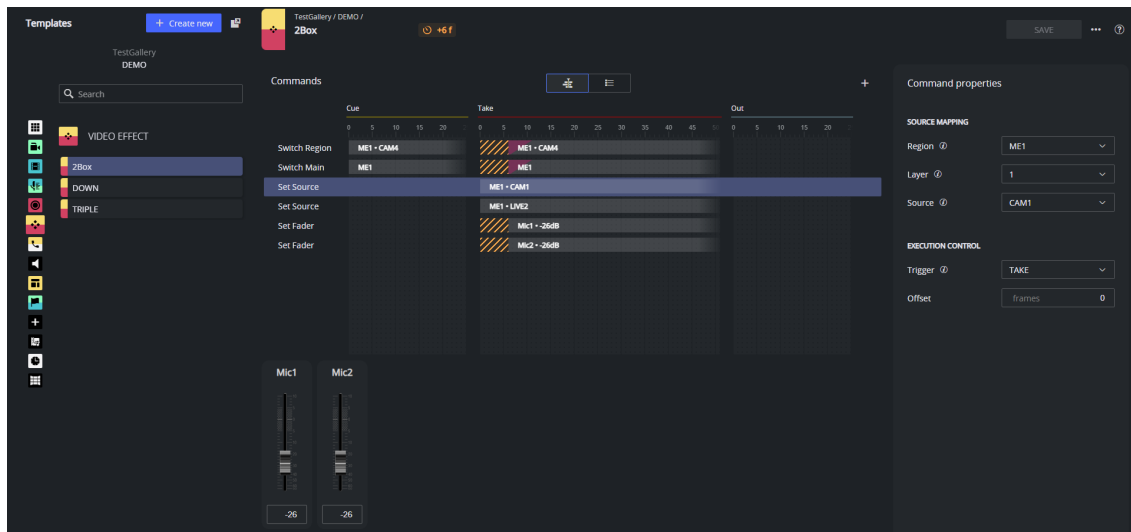
## Examples

- **Assigning keyers for a 2Box composition.**

This template uses two **Set Source** commands to assign video sources to different keyer layers on the *ME1* region.

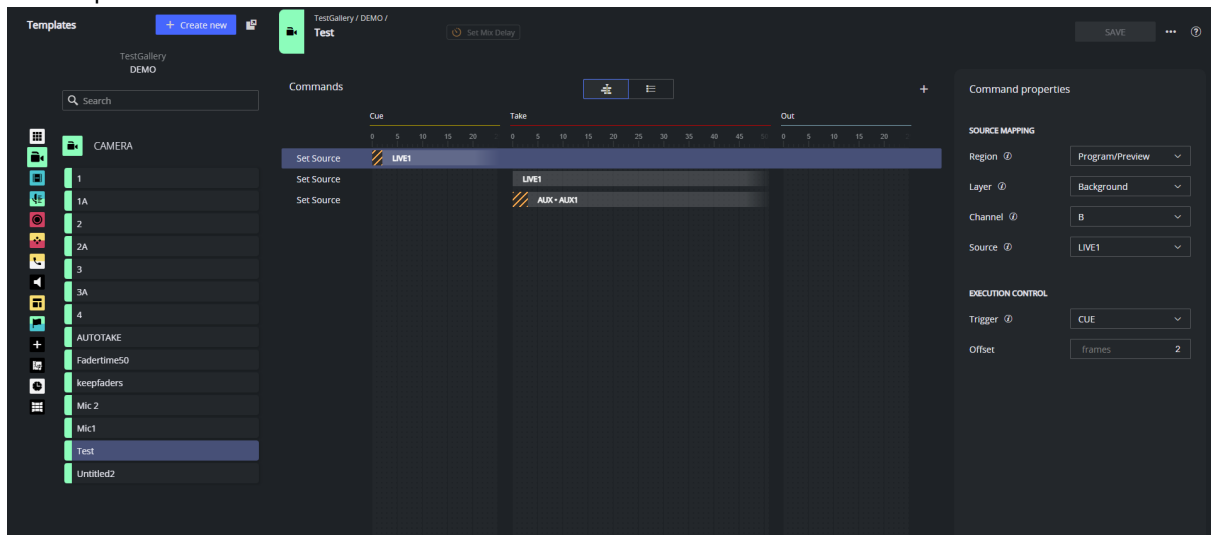
- The first command maps *CAM1* to *Layer 1*, used as the left video box.
- The second command maps *LIVE2* to *Layer 2*, used as the right video box.

This setup is commonly used in 2Box or split screen layouts, where two speakers or feeds need to be shown side by side, with the ME handling the composition.



- **Taking multiple sources simultaneously**

This template prepares and takes multiple sources simultaneously: It sets LIVE1 to preview (channel B) of ME2 on cue, then switches LIVE1 to program (channel A) of ME2 and routes Aux1 to an auxiliary layer when the template is taken.



## 11.7.2 Audio Mixer Commands

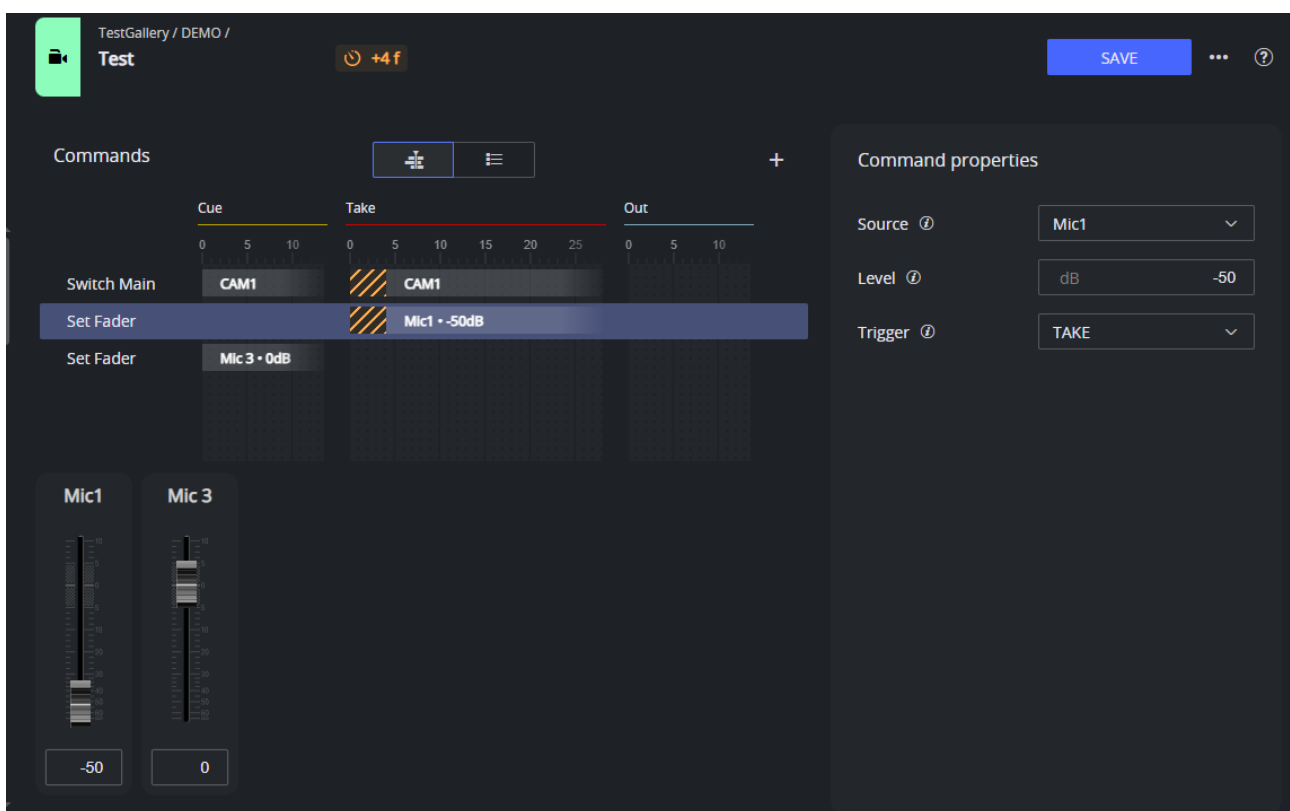
### Set Fader

The **Set Fader** command is used to adjust the audio level of a specific source at a defined point in the template timeline.

## Command properties

- **Source:** The audio input to be controlled (e.g., Mic1, Mic2, etc.) as configured on the Viz Mosart server in AV Automation in the menu **Devices > A/V Setup > Audio Config**.
- **Level:** The target audio level in decibels (dB). Typical range is from 0 dB (max) down to -90 dB (silent).
- **Trigger:** Defines when the fader level should be applied: on *CUE* or *TAKE*.

**Info:** The **Mix Delay** setting (defined at the template level) applies to the **Set Fader** command only if the command is executed on *TAKE*.



### 11.7.3 Fine-tuning On-Air Action Timings

In the Template Editor, you can control **when** certain actions are executed relative to the moment a template is taken on-air. This is done using either:

- A **global Mix Delay**, defined in the template properties.
- An **individual Offset**, defined per command.

Some commands support both, depending on their configuration.

**Mix Delay** introduces a shared delay (in frames) applied to eligible commands when the template is taken on-air. It's useful when you want multiple commands delayed together, in a coordinated way.

In addition to a template's Mix Delay, some commands also support their own **Offset** property, an individual delay in frames.

#### Delay mechanism summary

| Command Type  | Mix Delay applies if                                  | Offset applies if     |
|---------------|-------------------------------------------------------|-----------------------|
| Switch Main   | Trigger is <i>TAKE</i>                                | Mix Delay is not set  |
| Switch Region | Trigger is <i>TAKE</i>                                | Mix Delay is not set  |
| Set Source    | Layer is <i>Background</i> and Trigger is <i>TAKE</i> | Trigger is <i>CUE</i> |
| Set Fader     | Trigger is <i>TAKE</i>                                | Not supported         |

### 11.7.4 Template Terms and Definitions

Some common terminology used in template and show design:

- **Directtakes:** A special template set, where templates in this set are intended to be manually executed in an ad-hoc fashion.
- **Empty template:** An undefined, non-operative template. An empty template does nothing when executed. Note that empty templates are *not* displayed in the Viz Mosart client.
- **Gallery:** Corresponds to a Viz Mosart installation. Typically a gallery has a dedicated Viz Mosart server, with configured utilities and a Viz Mosart client.
- **Show design:** The background task of creating a set of templates, in a logical and programmatically valid order, for controlling a scheduled, rundown-driven, studio transmission.
- **Template description:** The template properties common for all Viz Mosart installations in a shared template set. This description uniquely identifies and describes the template.
- **Template implementation:** Contains the behavior or device control aspects of the template. The template implementation is related to the Viz Mosart installation.
- **Template set:** Viz Mosart templates are always contained in a template set. There may exist multiple *versions* of the same template but in *different* template sets. A template is uniquely defined by its *type* and *variant name* within its corresponding template set.
- **Template type:** Template type or category. Viz Mosart has a predefined set of template types. Each are displayed with a distinct visual appearance. Examples of template types are CAMERA, PACKAGE, VOICEOVER, LIVE, GRAPHIC and DVE.
- **Template variant:** Unique identifier of a template for given template type within a template set. For example, *camera1* and *camera2* are two variants of a Camera template.

## 11.8 Transitioning from the old Template Editor

Here we review considerations when adopting the new Template Editor.

- [Mapping Desktop Template Editor Commands to the Web Apps Template Editor](#)
- [Currently Unsupported Command Properties](#)
- [Examples](#)
- [Legacy commands](#)

### 11.8.1 Mapping Desktop Template Editor Commands to the Web Apps Template Editor

| Desktop TE          | Web Apps TE                                                                                                                                                                                                                                      | Notes                                                                                                                                                                                       |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Switcher crosspoint | Switch Main<br>Switch Region                                                                                                                                                                                                                     | <i>Switching sources</i> is supported for a maximum of <i>two</i> regions in parallel, one of which must be the main output (PP).<br>See <a href="#">Currently Unsupported Properties</a> . |
| KeyFill             | Set Source <i>Layer</i> =1, 2, 3 etc. <i>Trigger</i> =TAKE                                                                                                                                                                                       | See <a href="#">Currently Unsupported Properties</a> .                                                                                                                                      |
| Auxiliary           | Set Source <i>Region</i> =Auxiliary <i>Layer</i> =1,2,3 etc. <i>Trigger</i> =TAKE                                                                                                                                                                | See <a href="#">Currently Unsupported Properties</a> .                                                                                                                                      |
| SET_CROSSPOINT      | Set Source <i>Layer</i> =1, 2, 3 etc. <i>Trigger</i> =CUE/OUT<br>Set Source <i>Region</i> =Auxiliary <i>Layer</i> =1,2,3 etc. <i>Trigger</i> =CUE/OUT<br>Set Source <i>Layer</i> =Background <i>Channel</i> =A/B<br><i>Trigger</i> =CUE/TAKE/OUT | See <a href="#">Currently Unsupported Properties</a> .                                                                                                                                      |

| Desktop TE               | Web Apps TE                                                                             | Notes                                                                                                                                                                                                                                                                                                                |
|--------------------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SET_AUXILIARY_CROSSPOINT | Set Source <i>Region</i> =Auxiliary <i>Layer</i> =1,2,3 etc.<br><i>Trigger</i> =TAKE    | This control command is visible in the desktop Template Editor but it is not executed by Viz Mosart.<br>This command cannot be recreated in the web-based Template Editor, but a <b>Set Source</b> command can be used to assign a source on an auxiliary.<br>See <a href="#">Currently Unsupported Properties</a> . |
|                          | Set Source <i>Region</i> =Auxiliary <i>Layer</i> =1,2,3 etc.<br><i>Trigger</i> =CUE/OUT | Not supported in this version.                                                                                                                                                                                                                                                                                       |
| Audio Fader              | Set Fader                                                                               | See <a href="#">Currently Unsupported Properties</a> .                                                                                                                                                                                                                                                               |

### 11.8.2 Currently Unsupported Command Properties

This section lists command properties that are currently not supported in the new web-based Template Editor. These properties apply to commands already available in the editor but are either not implemented yet, planned for future support, or will be deprecated or handled differently in upcoming versions.

#### Switcher Crosspoint

- *Audio link*
- *Cross Point Hold*
- *Down stream keyer*
- *Mix Delay Out*
- The combination *Mix Delay* set to 0 frames and *Transition Only* checked. This executes the video transition with no delay after all the commands have been executed.

Switcher XPoints

Crosspoint 1

Mix Effect 1

PP

Crosspoint

CAM1

Audio link

none

Crosspoint PP

☐ Set ME in PP

☐ Cross Point Hold

Mix Delay

0

☐ Transition Only

Mix Delay Out

0

Down stream keyer

Off delay

☐ DSK Off

☐ DSK 2 On

☐ DSK 3 On

☐ DSK 4 On

0

0

0

OK

Cancel

Undo

KeyFill

- Audio link
- Key Enable

Template Editor | DEMO: CAMERA + 1

File ▾ Template ▾ Template Set ▾ DB ▾

DEMO

CAMERA + 1

Take

Key 1

BUS

XPOINT

AUDIOLINK

MIXEFFECT

KEY SET DELAY

KEY ENABLE

CAM5

1

CAM5

none

ME1

2

On

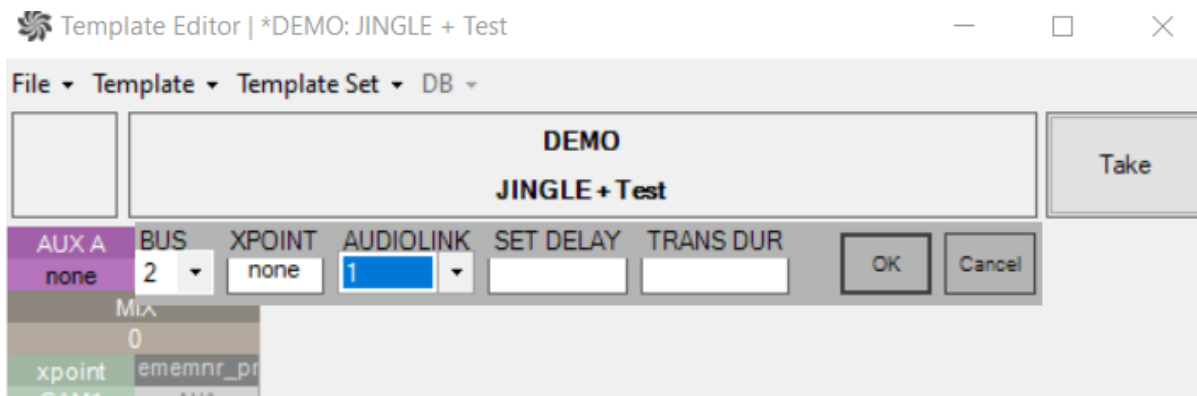
OK

Cancel

M2

Auxiliaries

- Audio link
- Trans Dur

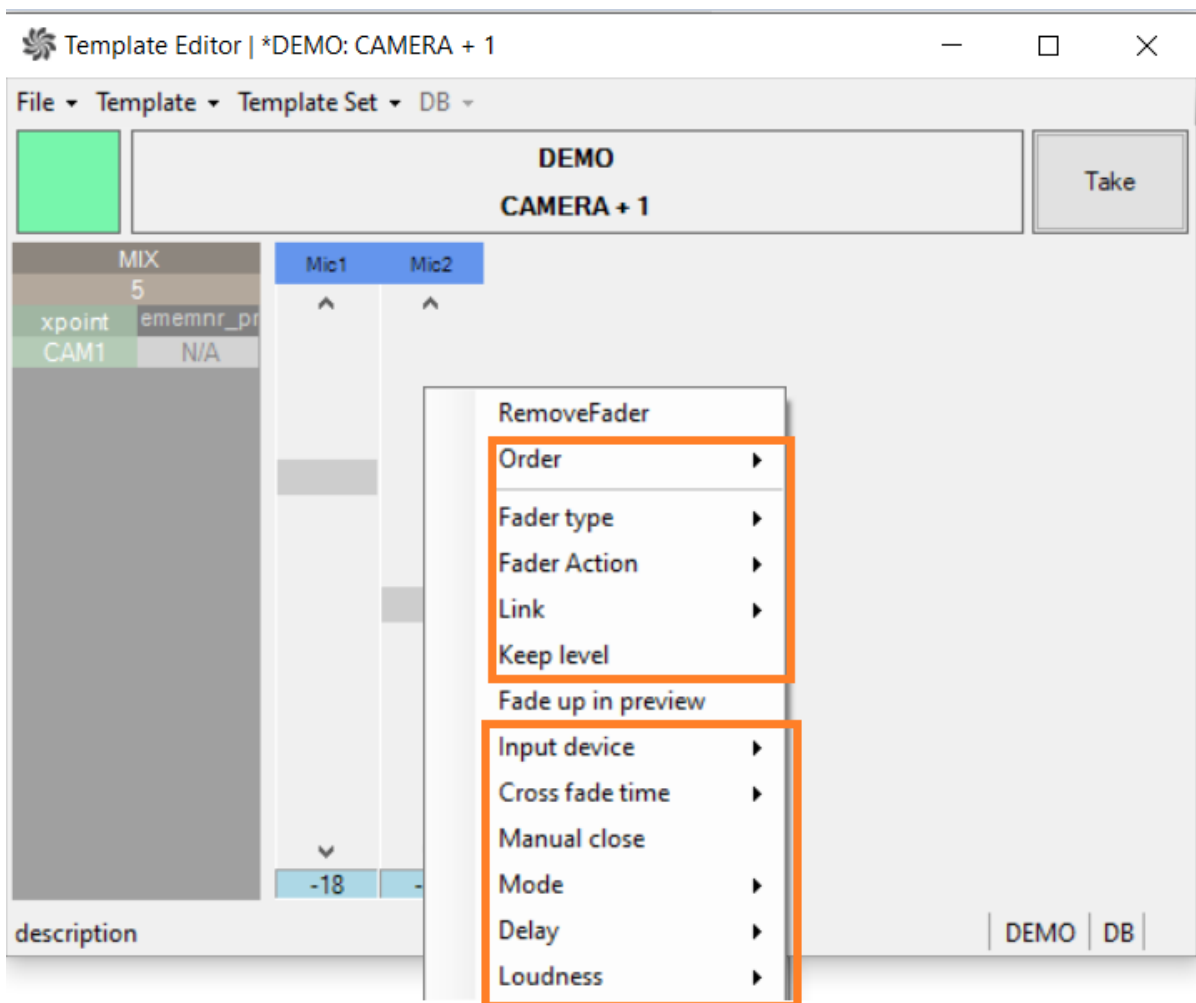


## Faders

Most of the fader properties are not yet supported in this version:

- *Order*
- *Fader type*
- *Fader Action*
- *Link*
- *Keep level*
- *Input device*
- *Cross fade time*
- *Manual close*
- *Mode*
- *Delay*
- *Loudness*
- *Set level 2*
- *Set level 3*





## Control Commands

Only SET\_CROSSPOINT commands are currently supported in the Web Apps Template Editor with some exceptions:

- SET\_CROSSPOINT as a continue point:

Template properties

General Control Commands Newsroom tags order Destination panel

☐ Commands On Cue

Commands to be cued

|   | Offset (ff) | Command | Value | Parameter |
|---|-------------|---------|-------|-----------|
| * |             |         |       |           |

☐ Command On Take

Control commands Take

|   | Command | Value | Parameter |
|---|---------|-------|-----------|
| * |         |       |           |

☒ Continue Points

Cue Next Item Index

Continue Points

|     | Autotake (ff) | Command        | Value | Parameter | Description    |
|-----|---------------|----------------|-------|-----------|----------------|
| ... |               | SET_CROSSPOINT | ME1   | 1:CAM1    | No description |
| *   |               |                |       |           |                |

☐ Command On Take Out

Control command Take Out

Cancel OK

☐ Hide from user

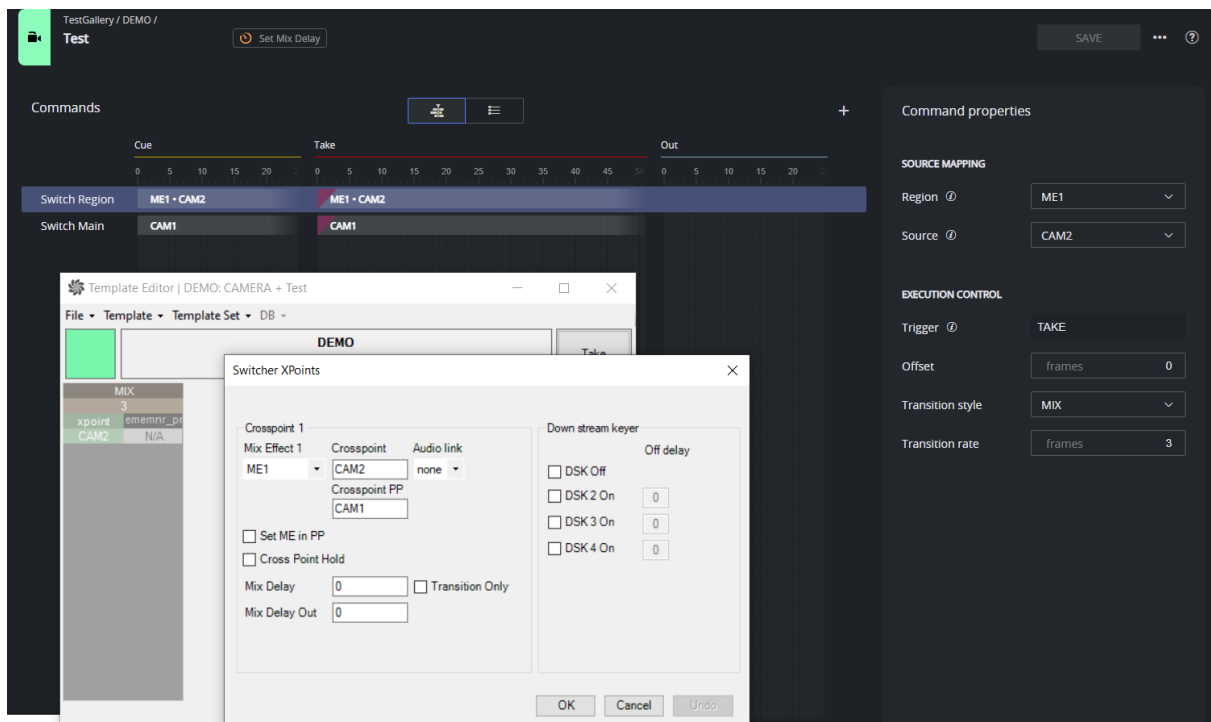
**Info:**

- **SET\_CROSSPOINT** with **Value=AUX** can be configured in the desktop Template Editor, but it is not actually executed by Viz Mosart.
- **SET\_AUX\_CROSSPOINT**, although available in the desktop Template Editor, is not executed by Viz Mosart.
- **SET\_CROSSPOINT on TAKE OUT** cannot be properly configured in the desktop Template Editor. This is however, supported in the new web-based version.

### 11.8.3 Examples

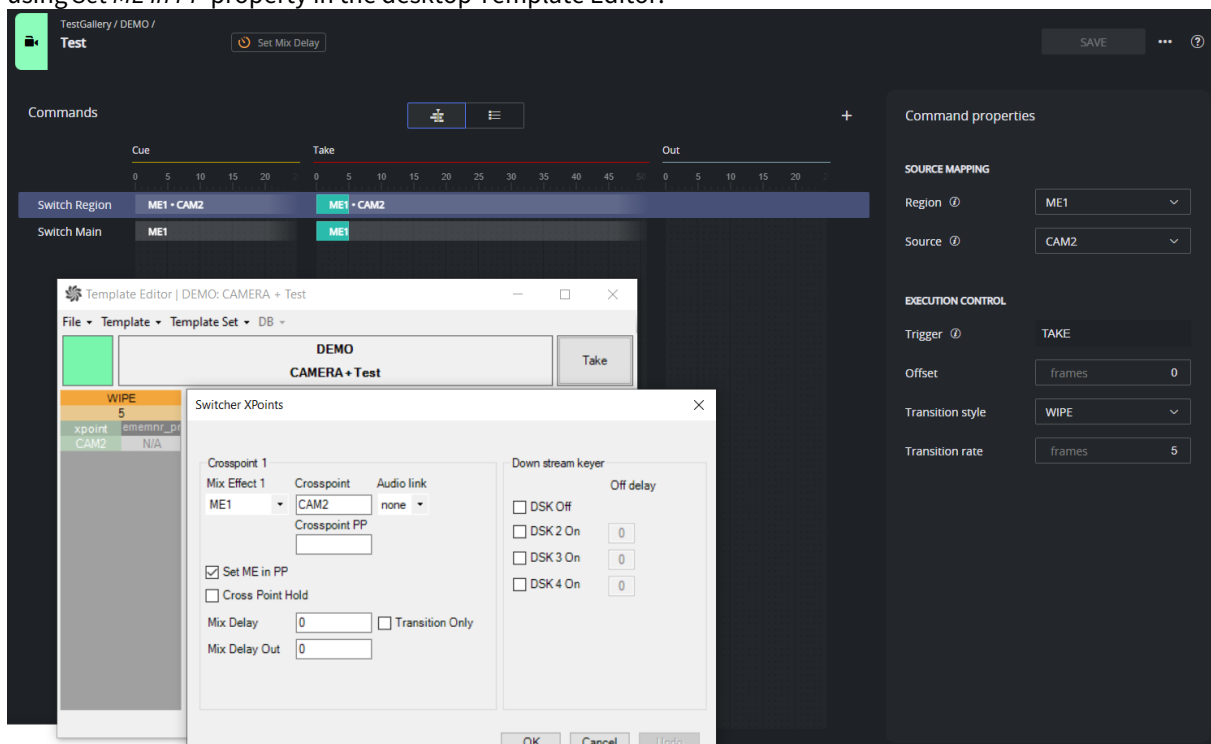
Here are some examples of templates created in the desktop Template Editor and how they are represented in the new Template Editor.

1. Switch different sources on the main output (PP) and another mixer region (ME1) with a mix rate > 0.



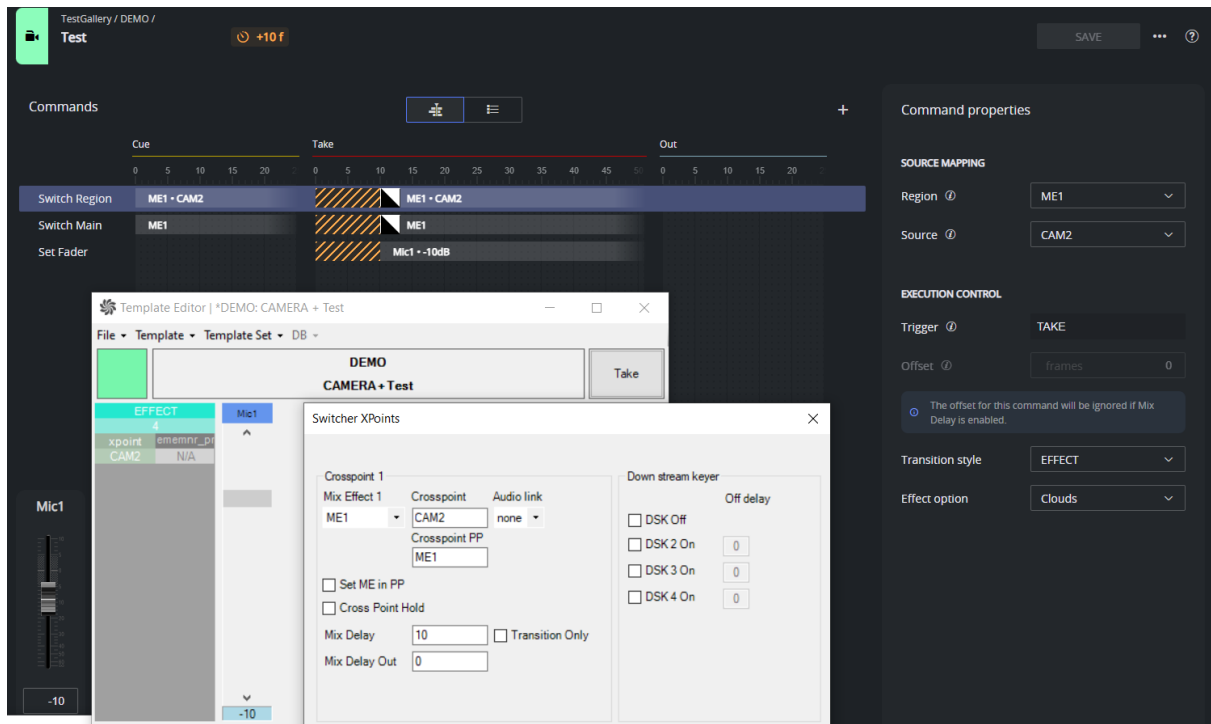
2. Switch M/E into the main output (PP) with a WIPE and rate > 0.

**Note:** The same commands could be executed in the web-based if *Crosspoint PP* is set to ME1 instead of using *Set ME in PP* property in the desktop Template Editor.

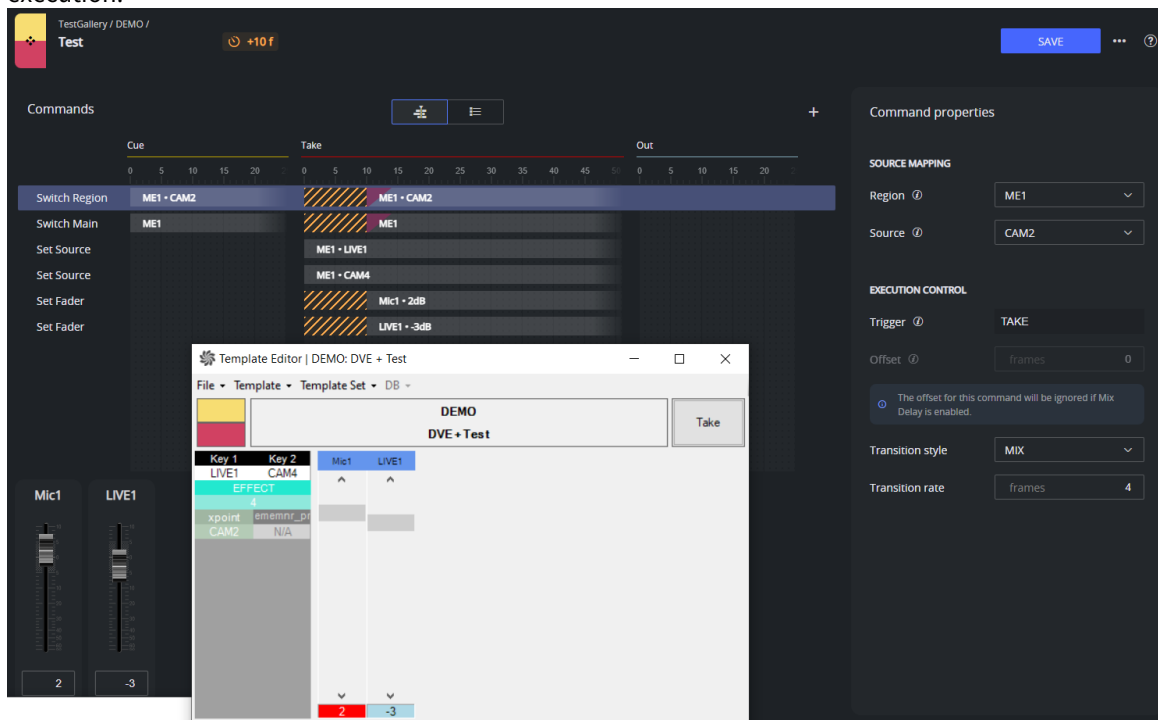


3. Switch a Mix/Effect (M/E) source into the main output using an effect transition, while also applying a mix delay across multiple commands.

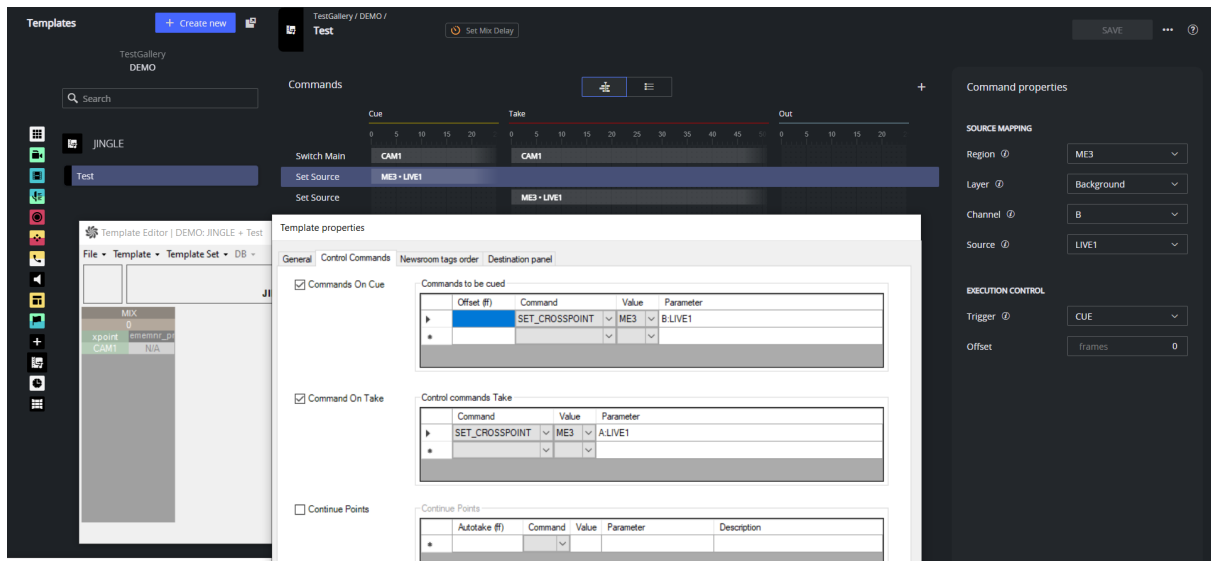
In addition, an audio fader adjustment is performed as part of the same template.



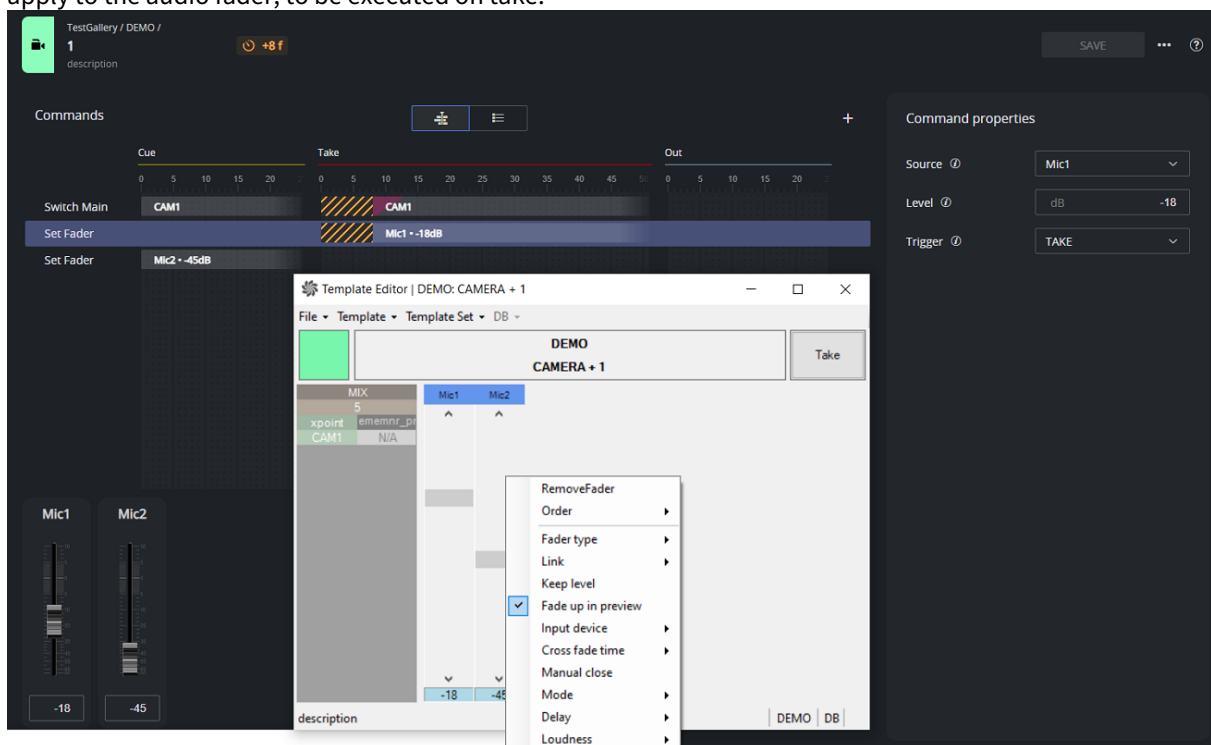
4. Take a DVE composition with multiple video and audio elements.  
In this template, two video sources (LIVE1 and CAM4) are inserted into a DVE layout (via ME1), which is then switched into the main output using a mix transition with a custom rate. Simultaneously, two audio faders (LIVE1 and MIC1) are adjusted. A mix delay is applied across multiple commands to synchronize the execution.



5. Assign a source to ME3 bus B at cue, and transition the same source to bus A on take:



6. Set fader level when the template is cued and when it is taken. A Mix Delay set on the *Switcher crosspoint* will apply to the audio fader, to be executed on take.



## 11.8.4 Legacy commands

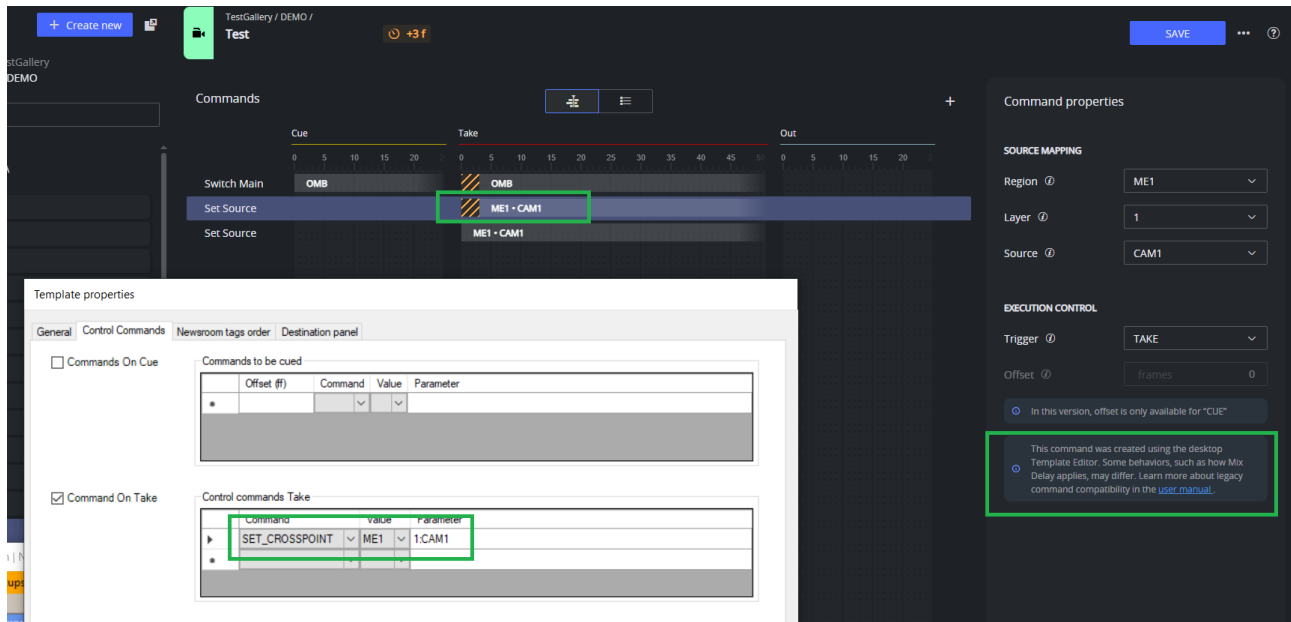
### Control Commands to set the Source on a Mixer Region Keyer

In the desktop Template Editor, you could add a *control command on take* like this:

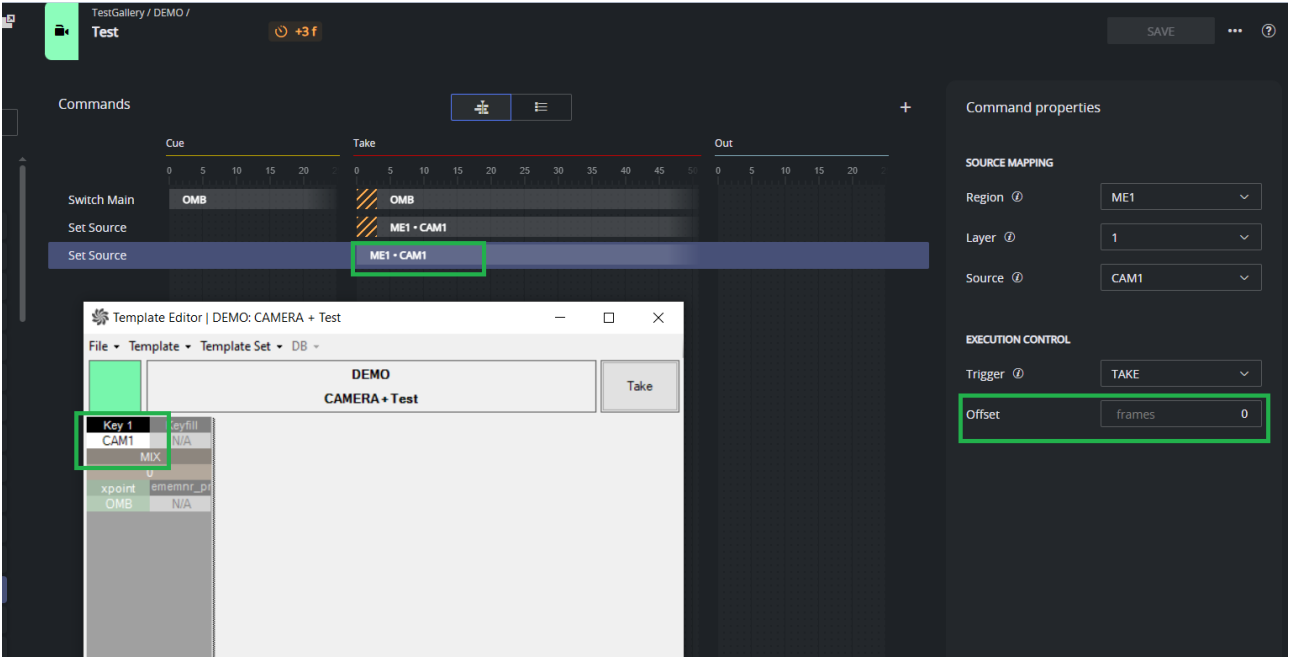
**SET\_CROSSPOINT on take ME1 "1:CAM1"**

This instructs Mosart to switch ME1 to input CAM1, using the bus number 1 to specify the source.

When this type of command is imported into the web-based Template Editor, it is recognized as a *legacy command* and preserved in its original form. If a Mix Delay is set on the template, this applies to *all* the control commands on take. This is visualized in the web-based Template Editor as in the screenshot below:



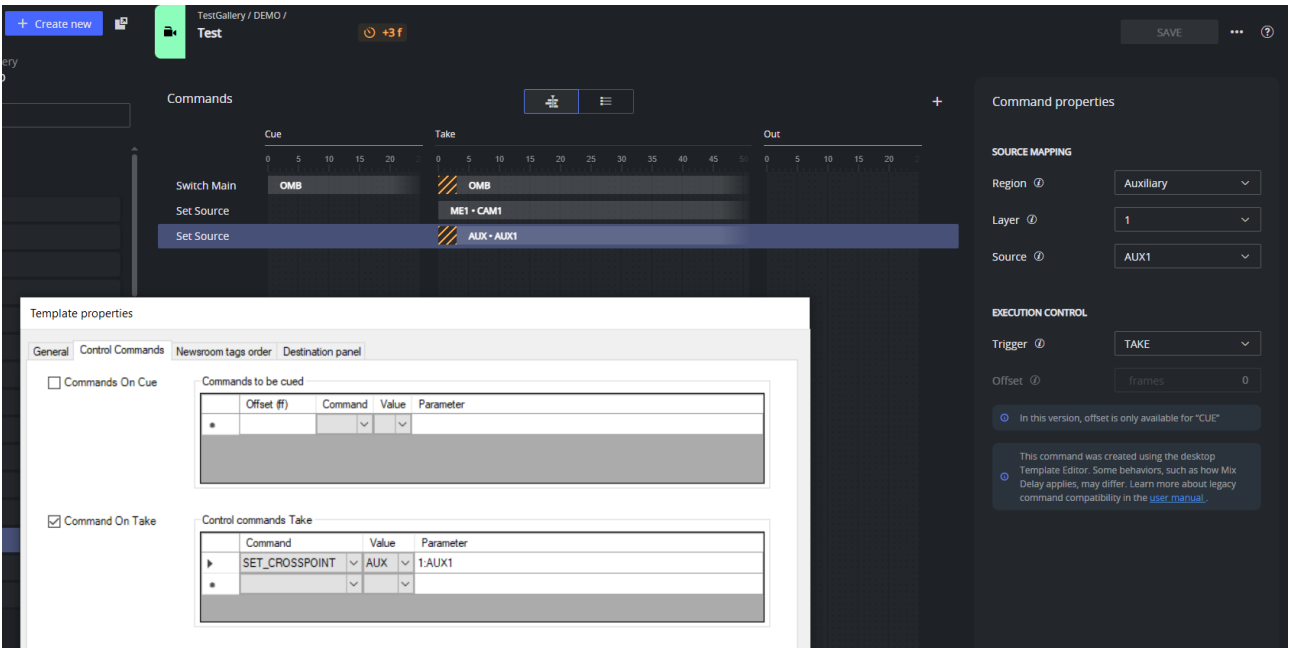
However, if you recreate a command in the web-based editor with the *same Region and Source settings*, the command will be exported to the desktop Template Editor as a **KeyFill** command. **Mix Delay** will not apply to this command. Instead, you can use the **Offset** property to delay the command execution relative to the Take.



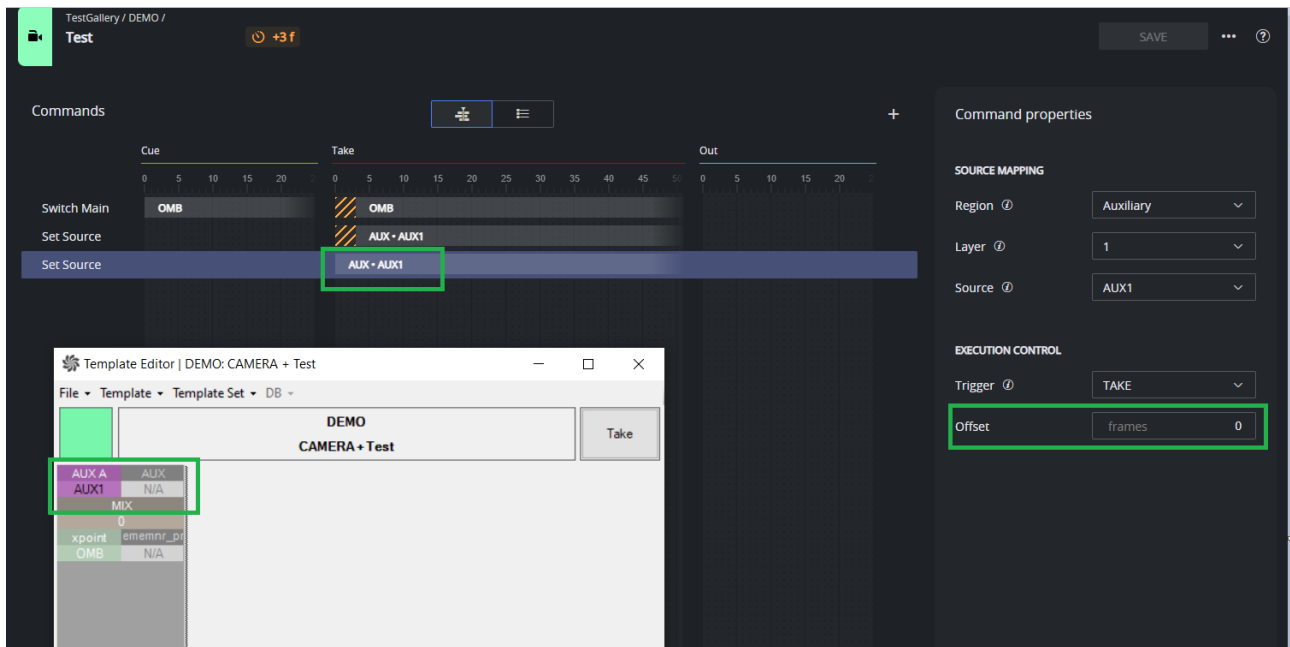
Control Commands to set the Source on an Auxiliary

Control commands to set the source on an auxiliary are also considered *legacy* commands and can not be recreated using the web-based Template Editor.

If a Mix Delay is set on the template, this applies to *all* the control commands on take. This is visualized in the web-based Template Editor as in the screenshot below:



If a command with exact properties is added in the web-based editor, it is translated into an *Auxiliary* command in the desktop version. **Mix Delay** will not apply to this command. Instead, you can use the **Offset** property to delay the command execution relative to the Take.





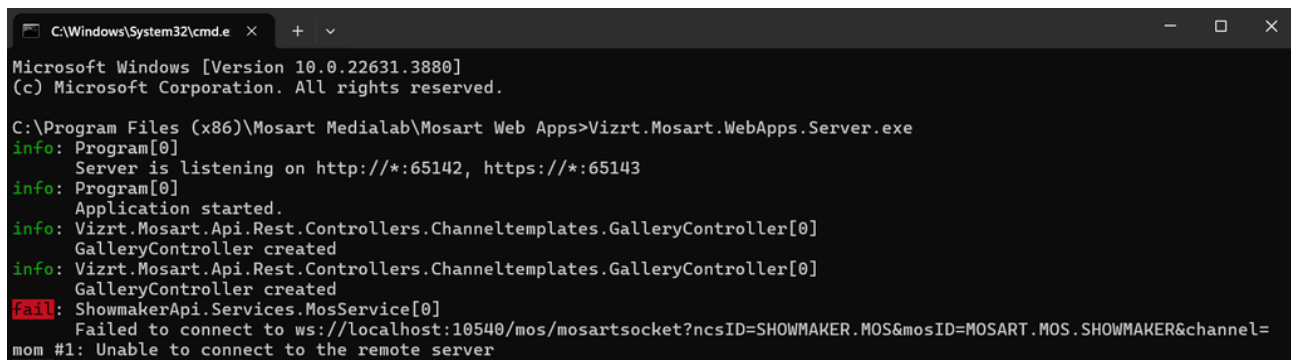
## 12 Troubleshooting

- [Web Apps Configuration Tool](#)
- [Run Down Viewer and Timing Display Issues](#)
- [Issues with Mosart Web Server Connecting to the Mosart Server](#)
- [Browser Logs](#)

### 12.1 Web Apps Configuration Tool

The *Mosart Web Applications Configuration Tool* provides you with error or warning messages that assist with common issues.

These messages may include a link to the Viz Mosart web server log files. These temporary log files are saved in C:\Users<username>\AppData\Local\Temp, with names starting with the date they were created, followed by an ID.



```

C:\Windows\System32\cmd.e  X  +  v
Microsoft Windows [Version 10.0.22631.3880]
(c) Microsoft Corporation. All rights reserved.

C:\Program Files (x86)\Mosart Medialab\Mosart Web Apps>Vizrt.Mosart.WebApps.Server.exe
info: Program[0]
Server is listening on http://*:65142, https://*:65143
info: Program[0]
Application started.
info: Vizrt.Mosart.Api.Rest.Controllers.Channeltemplates.GalleryController[0]
GalleryController created
info: Vizrt.Mosart.Api.Rest.Controllers.Channeltemplates.GalleryController[0]
GalleryController created
fail: ShowmakerApi.Services.MosService[0]
Failed to connect to ws://localhost:10540/mos/mosartsocket?ncsID=SHOWMAKER.MOS&mosID=MOSART.MOS.SHOWMAKER&channel=
mom #1: Unable to connect to the remote server
  
```

To troubleshoot issues, check the following locations for relevant logs:

- **Web server logs:** By default, these are written to `C:\MMLogs\WebServer`. The location is configurable in the web server configuration file:  
`C:\ProgramData\Mosart Medialab\Mosart Web Apps\serverSettings.json`. Look for the `NLogConfig` setting.
- **Proxy server logs:** By default, these are stored at `C:\MMLogs\Mosart Web Proxy`.
- **Windows Event Log:** Use the Event Viewer to check for system or application-related errors.
- **Browser logs:** To view logs in your browser, press **Ctrl+Shift+I** (this toggles the Developer Tools panel). Do this while using the **Mosart Web Applications Configuration Tool** or any browser with a Mosart web application open.

#### 12.1.1 The Mosart Web Proxy Service is not running or is not functioning properly

Review the settings in

- The Server Configuration page.  
Proxy server logs are located by default at `C:\MMLogs\Mosart Web Proxy`.

- The browser logs.

You can investigate your browser logs by typing **CTRL+Shift+I** (this is a toggle) in the **Mosart Web Applications Configuration Tool** or the browser where a Mosart web application is open.

## Start the Mosart Proxy Service in console

If the Mosart Web Proxy service fails to start and there is little information in either the proxy logs or the browser, you can start Caddy in the console to troubleshoot the problem using the following command. If this is running as a Windows service, stop it first.

```
C:\Program Files (x86)\Mosart Medialab\Mosart Web Proxy>caddy2.exe run --config "C:\ProgramData\Mosart Medialab\Mosart Web Apps\Caddyfile"
```

Typical situations are where Caddy fails to start because the port (default **55142** for HTTP and **55143** for HTTPS) is already in use by other applications or the certificate and/or the key files configured are not valid:

```
C:\Program Files (x86)\Mosart Medialab\Mosart Web Proxy>caddy2.exe run --config "C:\ProgramData\Mosart Medialab\Mosart Web Apps\Caddyfile"
2024/06/27 11:15:20.565 [34mINFO[0m using provided configuration {"config_file": "C:\\ProgramData\\Mosart Medialab\\Mosart Web Apps\\Caddyfile", "config_adapter": ""}
2024/06/27 11:15:20.567 [33mWARN[0m Caddyfile input is not formatted; run 'caddy fmt --overwrite' to fix inconsistencies {"adapter": "caddyfile", "file": "C:\\ProgramData\\Mosart Medialab\\Mosart Web Apps\\Caddyfile", "line": 91}
2024/06/27 11:15:20.568 [34mINFO[0m redirected default logger {"from": "stderr", "to": "C:\\MMLogs\\Mosart Web Proxy\\general.log"}
Error: loading initial config: loading new config: http app module: start: listening on :80: listen tcp :80: bind: Only one usage of each socket address (protocol/network address/port) is normally permitted.
```

## 12.1.2 The Mosart Web Applications Service is not running or is not functioning properly

### Review the settings in

- The Server Configuration page.
- Web server related logs written in the Windows Event Log accessible from the error message in the *Mosart Web Applications Configuration Tool*.
- Web server logs written on disk (default location “C:/MMLogs/WebServer” configurable in the web server configuration file, C:\ProgramData\Mosart Medialab\Mosart Web Apps\serverSettings.json - search for setting *NLogConfig*).
- The browser logs. You can investigate the browser logs by typing **CTRL+Shift+I** (this is a toggle) in the *Mosart Web Applications Configuration Tool* or the browser where a Mosart web application was opened for more details.

## Start the Mosart Web Applications Service in console

If the Mosart Web Applications service fails to start and there is little information in either the web server logs or the browser, you can start the service in the console to troubleshoot the problem. If this is running as a Windows service, stop it first.

```

C:\Windows\System32\cmd.e  x  +  v
Microsoft Windows [Version 10.0.22631.3880]
(c) Microsoft Corporation. All rights reserved.

C:\Program Files (x86)\Mosart Medialab\Mosart Web Apps>Vizrt.Mosart.WebApps.Server.exe
info: Program[0]
Server is listening on http://*:65142, https://*:65143
info: Program[0]
Application started.
info: Vizrt.Mosart.Api.Rest.Controllers.Channeltemplates.GalleryController[0]
GalleryController created
info: Vizrt.Mosart.Api.Rest.Controllers.Channeltemplates.GalleryController[0]
GalleryController created
fail: ShowmakerApi.Services.MosService[0]
Failed to connect to ws://localhost:10540/mos/mosartsocket?ncsID=SHOWMAKER.MOS&mosID=MOSART.MOS.SHOWMAKER&channel=
mom #1: Unable to connect to the remote server

```

Typical situations are where the web server fails to start because the port (default **65142** for HTTP and **65143** for HTTPS) is already in use by other applications or the certificate and/or the key files configured for HTTPS are not valid.

### 12.1.3 The External Proxy Service is unreachable or not functioning properly

Review the settings in

- The Server Configuration page.
- External proxy configurations.
- The web server logs accessible from the error message in the *Mosart Web Applications Configuration Tool*.
- The browser logs. You can investigate the browser logs by typing **CTRL+Shift+I** (this is a toggle) in the Mosart Web Applications Configuration Tool or the browser where a Mosart web application was opened.

### 12.1.4 Unable to reach the Viz Mosart Server (main or backup)

Some of the Mosart Web Applications might not function as expected. Ensure that the *Mosart Remote Control Service* (RCS) located on the Viz Mosart server is running. Review the settings in the Server Configuration page, web server log file accessible from the error message in the Mosart Web Applications Configuration Tool or the browser logs for more details. You can investigate the browser logs by typing **CTRL+Shift+I** (this is a toggle) in the Mosart Web Applications Configuration Tool or the browser where a Mosart web application was opened.

#### Check the status of the Viz Mosart server

In a browser, paste the URL to the Viz Mosart server *status* endpoint:

##### HTTP

`http://<mosart-server-host>:55167/status for HTTP`

##### HTTPS

`https://<mosart-server-host>:55168/status for HTTPS`

##### Using a Web proxy

`http://<webproxy-url>:55142/mosart/main/status`



**Note:** In the first two examples above, replace `<mosart-server-host>` with the hostname, IP address or the FQDN of your Viz Mosart server.

You should get a result similar with the following (*serverDescription* is not available in older Mosart versions):

| JSON                                 | Raw Data | Headers                             |
|--------------------------------------|----------|-------------------------------------|
| Save                                 | Copy     | Collapse All Expand All Filter JSON |
| state: "Active"                      |          |                                     |
| timeline: "Running"                  |          |                                     |
| autoTake: false                      |          |                                     |
| rehearsalMode: false                 |          |                                     |
| crossoverClient: false               |          |                                     |
| serverDescription: "mosart-server-1" |          |                                     |

If no response is received:

- Ensure that the Viz Mosart server version is compatible with the Viz Mosart Web Applications. Refer to the [Release Notes](#) for System Requirements.
- or

- Start Mosart Remote Control Service (RCS) as console to investigate further the issue. If the service is running as Windows service, stop it first.

Typical situations are where RCS fails to start because the port (default **55167** for HTTP and **55168** for HTTPS) is already in use by other applications or the certificate and/or the key files configured for HTTPS are not valid:

```

Viz Mosart - Remote Control
13:13:49 I 4 1 MMLog LogStatus Logging started: Trace only
13:13:49 I 4 1 ConsoleController Start RemotePanelDispatcherService version=5.8.0.35355 Beta build=2024-07-12T14:06:36Z
13:13:49 I 4 1 ConsoleController Start Registering Remoting Service: MosartRemotePanelService @8090
13:13:49 I 4 5 MMLogClient Log: Logging initiated: net.tcp://localhost:8091/Log
13:13:50 D 4 11 EventsReceiver InitializeRemoteConnection Connecting to TCP://localhost:8085/MMserver
13:13:51 I 4 9 ConsoleController RegisterRemoteConnection RemotePanel MosartGui connected to MosartMultiGui@LBU-PC2-18.07-13:42:47.97
13:13:51 I 4 1 ConsoleController Start WCF Service started at net.tcp://localhost:8093/RemoteControllerService
13:13:52 I 4 11 ConsoleController CombineDelegates Mosart ManusAdministrator Connected
13:13:52 E 4 1 ConsoleController ConfigureHttps Failed to load the certificate: System.Security.Cryptography.CryptographicException: The system cannot find the file specified.
   at System.Security.Cryptography.CryptographicException.ThrowCryptographicException(Int32 hr)
   at System.Security.Cryptography.X509Certificates.X509Utils._QueryCertFileType(String fileName)
   at System.Security.Cryptography.X509Certificates.X509Certificate.LoadCertificateFromFile(String fileName, Object password, X509KeyStorageFlags keyStorageFlags)
   at System.Security.Cryptography.X509Certificates.X509Certificate2..ctor(String fileName)
   at RemotePanelDispatcherService.SignalR.SignalRService.ConfigureHttps(ListenOptions options, Int32 httpsPort, SignalRServiceConfig config)
13:13:52 I 4 1 ConsoleController Start SignalR Service started at http://*:55167;https://*:55168
13:13:52 I 4 11 ConsoleController GET STATUS [RUNDOWN]
13:13:52 D 4 10 ConsoleController ManusAdmin SET SIGNALR [ServerStatusChanged] xml
13:13:52 D 4 10 ConsoleController ManusAdmin SET 4 STATUS [RUNDOWN]
13:13:53 I 4 8 ConsoleController RegisterRemoteConnection RemotePanel StoryRecorderAdapter connected to MMAsRunLogService@LBU-PC2-16.07-23:29:13.79
13:13:53 I 4 8 ConsoleController RegisterRemoteConnection RemotePanel MediaAdmin connected to MMMediaAdministrator@LBU-PC2-18.07-13:43:46.20

```

Viz Mosart Server version might be incompatible with this version of Viz Mosart Web Applications

- Please review the corresponding version [Release Notes](#) for product interoperability.

If HTTPS is used, this must be enabled on both Viz Mosart Server and Viz Mosart Web Applications

You may get this warning messages because no updates could be retrieved from Viz Mosart server.

- Ensure that the Viz Mosart server version is compatible with the Viz Mosart Web Applications. Refer to the latest [Release Notes](#) for System Requirements.
- Ensure that HTTPS is used and enabled on both Viz Mosart server and the Viz Mosart Web Applications. Check the settings in the Server Configuration page, Viz Mosart web server log file or the browser logs (**CTRL+Shift+I** in the Configuration Tool) for more details.
- Check the status to the Viz Mosart server as described above.

### 12.1.5 The Web Applications Service is not running

A common *offline* error occurs when the Windows service fails to start because the port is in use.

- Verify that the Web Applications service port is not in use. The default port is **65142** for HTTP and **65143** for HTTPS. The port can only be changed in the configuration file at `C:\ProgramData\Mosart Medialab\Mosart Web Apps\serverSettings.json`.



**Note:** Any changes to the Viz Mosart web server configuration file (`C:\ProgramData\Mosart Medialab\Mosart Web Apps\serverSettings.json`) are overwritten when you press **Save** in the Mosart Web Applications Configuration Tool.

- Try restarting the service with the **Restart** button available in the error message in the Mosart Web Applications Configuration Tool.
- Review the settings in the Server Configuration page, web server log file accessible from the error message in the Mosart Web Applications Configuration Tool or the browser logs for more details.

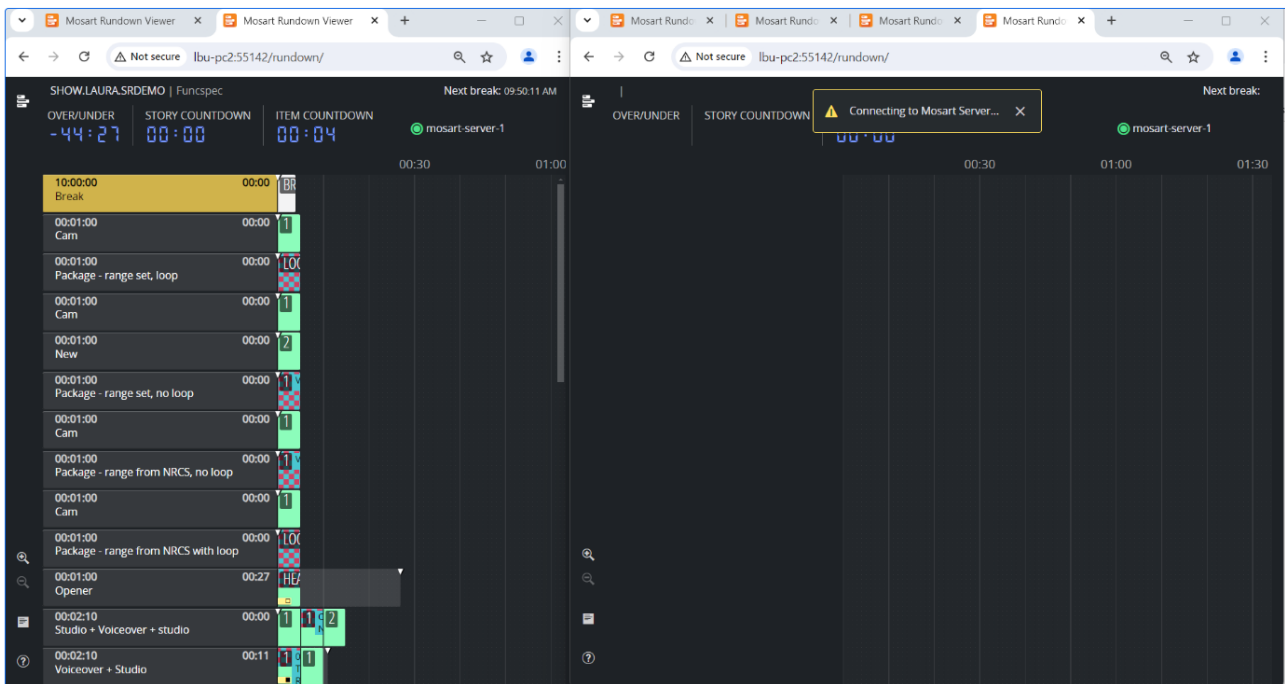
## 12.2 Rundown Viewer and Timing Display Issues

If you experience the following issues with Rundown Viewer and Timing Display:

- The content loads slowly or only partially.
- You cannot open more than 5-6 web sessions, meaning that opening the web application in multiple browser tabs or instances fails after 5-6 clients.

These problems may indicate that HTTPS is not properly configured across all relevant components.

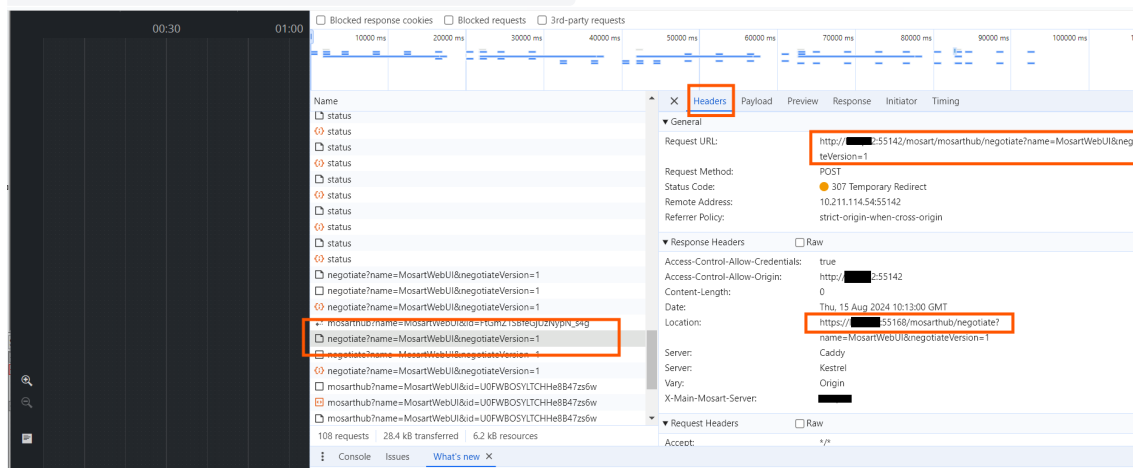
In the screenshot below, the 6th Rundown Viewer client displays an error connecting to the Mosart server, while the other clients are functioning correctly:



## Troubleshooting Steps:

### 1. Inspect Browser Logs:

- Open the browser's Developer Tools and go to the **Network** tab.
- Inspect some of the URLs. For example, you might see a request URL to the Mosart Server like `http://proxy-server:55142/mosart/mosarthub/negotiate?name=MosartWebUI&negotiateVersion=1`.



- A "307 Temporary Redirect" status code indicates that the resource has been temporarily moved to a different URL. This suggests that the proxy server (Caddy) has redirected the client to use HTTPS instead of the original HTTP request.

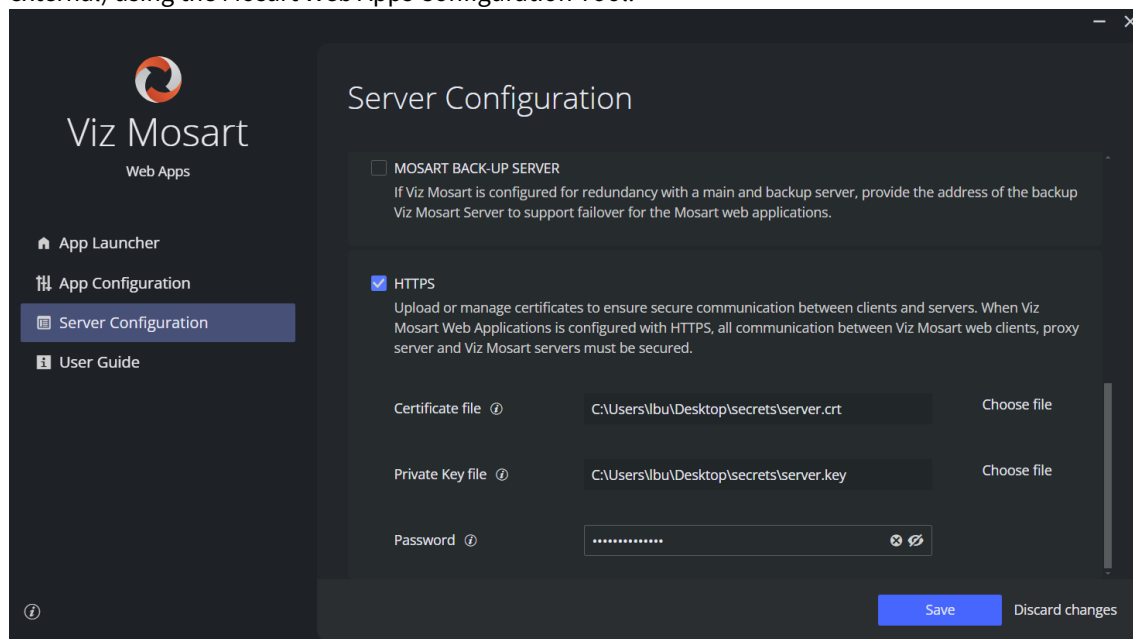
### 2. Understand the issue:

- In this example, the client (the Rundown Viewer in the web browser) initially made a request over HTTP to the Mosart server, but the proxy server redirected it to HTTPS.

- This indicates that HTTPS is configured for the Mosart server but not for the Mosart web server and the proxy server.
- By default, the Mosart Web Proxy is configured to enforce HTTPS by redirecting HTTP requests to HTTPS before they reach the Mosart server, if the Mosart server is set up with HTTPS.

### 3. Fix the problem:

- To resolve this issue, enable HTTPS for the Mosart web server and the proxy server (internal or external) using the Mosart Web Apps Configuration Tool.



## 12.3 Issues with Mosart Web Server Connecting to the Mosart Server

### 12.3.1 Mosart Remote Control Service (RCS)

Issues with Mosart web server connecting to the Mosart Remote Control Service (RCS), may be due to the RCS not automatically detecting the fully qualified domain name (FQDN) of the machine where it is installed.

For enhanced security and connection stability between the Mosart web server and the Mosart Remote Control Service, the setting **SignalRAllowedOrigins** is introduced.

This setting allows you to specify an exclusive list of origins that may access the SignalR service (used for communication to RCS), ensuring connections are secure and reliable.

1. Navigate to the default location of the RCS configuration file at *C:\Program Files (x86)\Mosart Medialab\Mosart Server\ConfigurationFiles\RemoteDispatcherServiceConfig.xml*.
2. Manually configure **SignalRAllowedOrigins** to include the fully qualified domain name of your Mosart server.



**Note:** For Mosart applications like the Rundown Viewer and Timing Display (which rely on SignalR for real-time communication), when failure to recognize a FQDN prevents communication to RCS, defining **SignalRAllowedOrigins** is essential.

For detailed configuration instructions, please refer to the RCS configuration file (*RemoteDispatcherServiceConfig.xml*) where inline comments provide explanatory documentation.

## 12.3.2 Firewall Ports

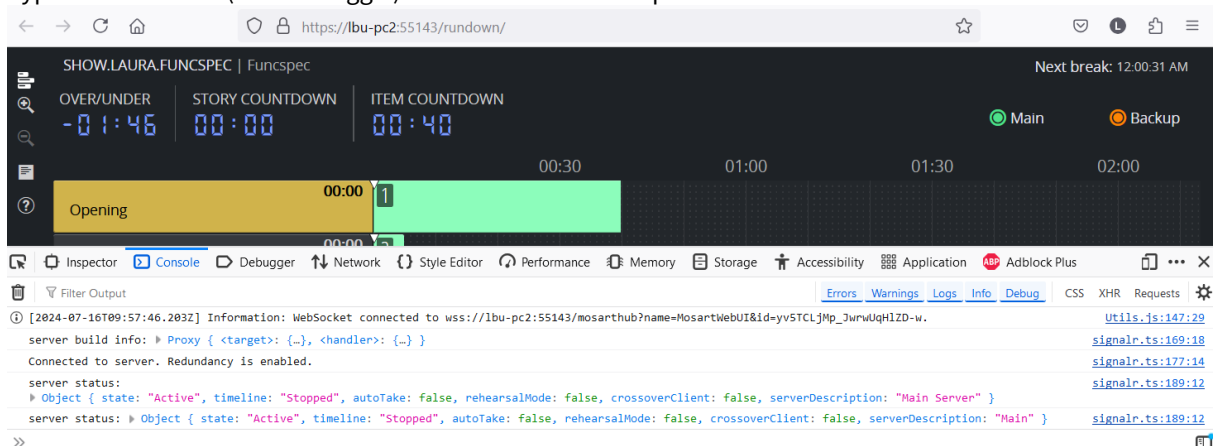
- Ensure the default ports have access.

## 12.4 Browser Logs

### 12.4.1 To investigate browser logs

In failure situations, you can use your web browser to access the Mosart Web Apps directly and further investigate the browser logs.

1. In the App Launcher, click on a web app to open it in the default browser, or paste the web app link directly into your preferred browser:
  - a. **NRCS Plugin:** `http(s)://<your-hostname>:<web-proxy-port>/plugin/?nracs=ENPS&mosid=mosart`
  - b. **Rundown Viewer:** `http(s)://<your-hostname>:<web-proxy-port>/rundown`
  - c. **Timing Display:** `http(s)://<your-hostname>:<web-proxy-port>/timingdisplay/editor`
  - d. **Showmaker:** `http(s)://<your-hostname>:<web-proxy-port>/showmaker/`
2. Type **CTRL+Shift+I** (this is a toggle) in the browser and inspect the **Console** tab or the **Network** tab.



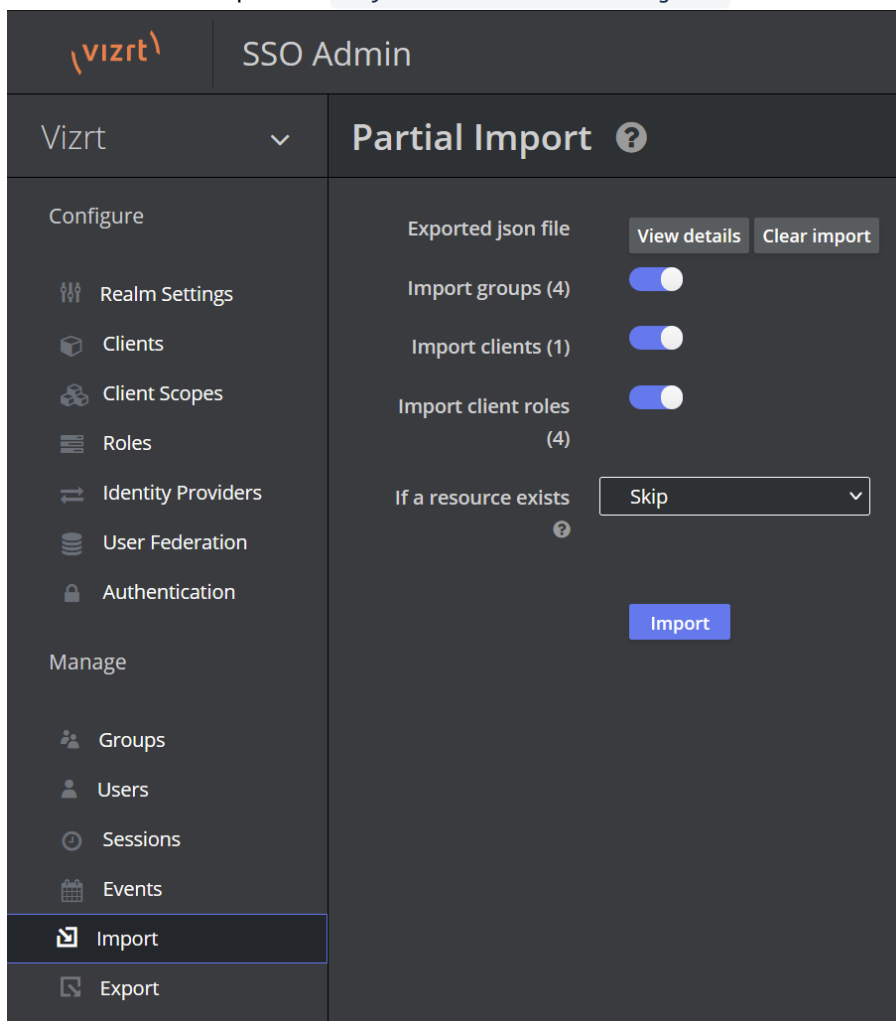


## 13 Appendix

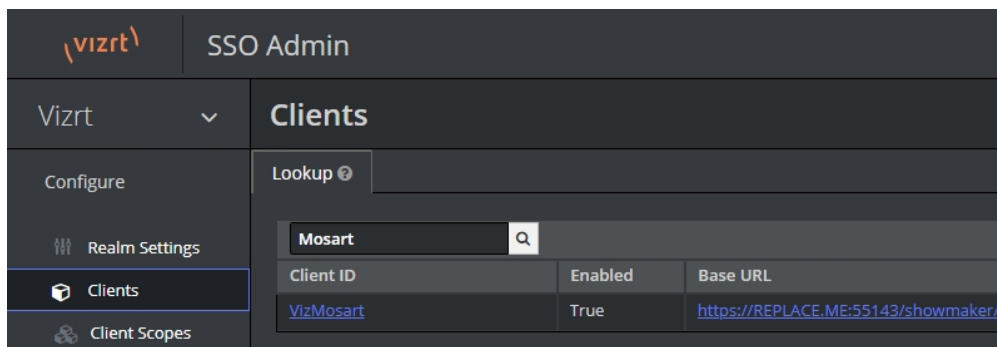
### 13.1 Vizrt SSO (Keycloak)

To connect the Mosart Web Applications to a Vizrt SSO (for example, when running together with a Viz One authenticated by SSO), perform the following steps:

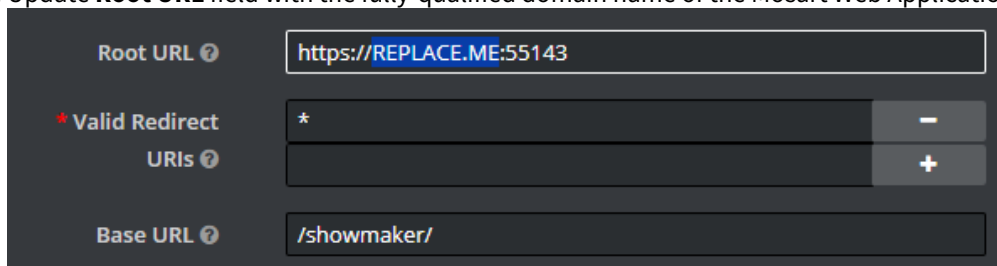
1. Download the `keycloak-mosart-sso.json` file from the same folder that you got the installer on [Vizrt's FTP](#) server.
2. Log in to the Viz One SSO Admin pages, and go to the **Import** tab in the left menu.
3. Click **Select file** and pick the `keycloak-mosart-sso.json` file.



4. Review the options and when ready, click **Import**.
5. Go to the **Clients** tab, find and open the *VizMosart* client that was just imported.



6. Update **Root URL** field with the fully-qualified domain name of the Mosart Web Applications server.

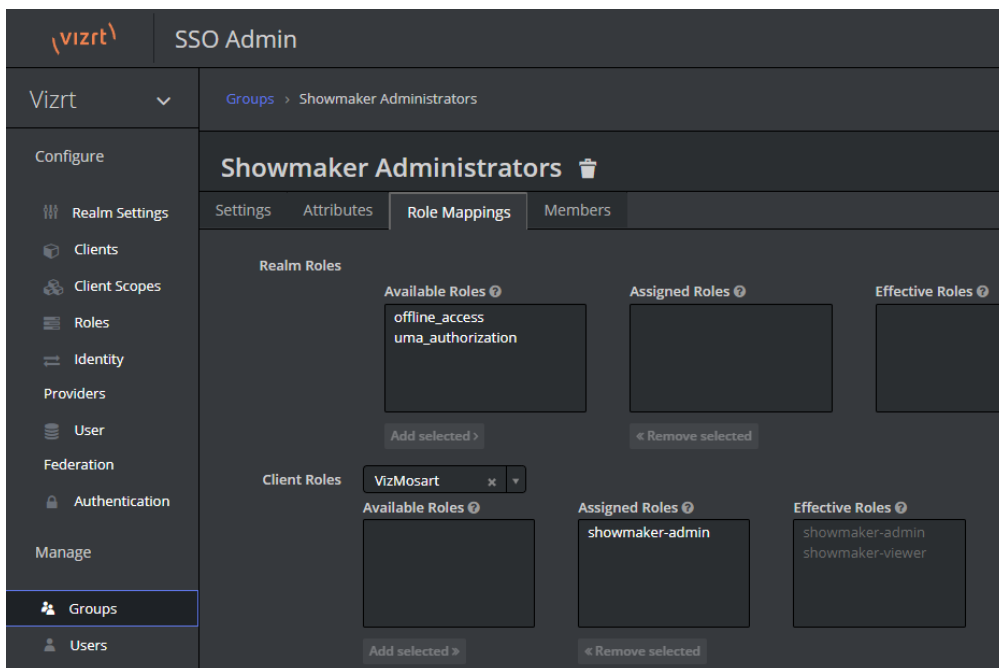


7. Manage users and groups to assign the two Mosart Web Application roles as desired. The roles are defined by the selected **Client ID** *VizMosart*, as shown in the screenshot. The imported configuration includes example groups which you can use as-is, customize, or replace with your own groups.



**Info:**

- Groups do not directly grant permissions, they assign corresponding *roles* to all group members.
- Roles grant user permissions.
- The *showmaker-admin* role implicitly grants *all* other Pilot roles.



8. Use the Configuration Tool to configure OIDC settings for the target server.
  - a. **Issuer URL** is typically the Viz One server's base URL followed by `/auth/realms/Vizrt`.
  - b. **Client ID** must be `VizMosart` when using the imported configuration.

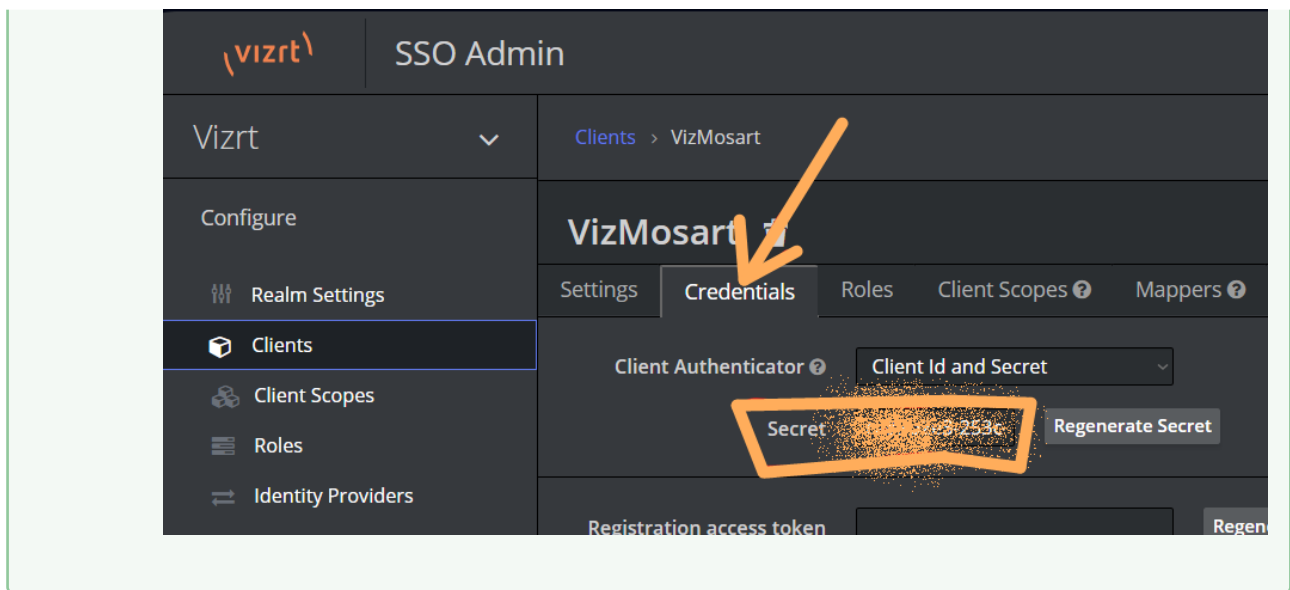
☒ Authentication  
OpenID Connect enables the application to launch sign-in flows and receive verifiable answer about the current user.

Issuer URL ⓘ

Client ID ⓘ

Secret ⓘ  ⓘ

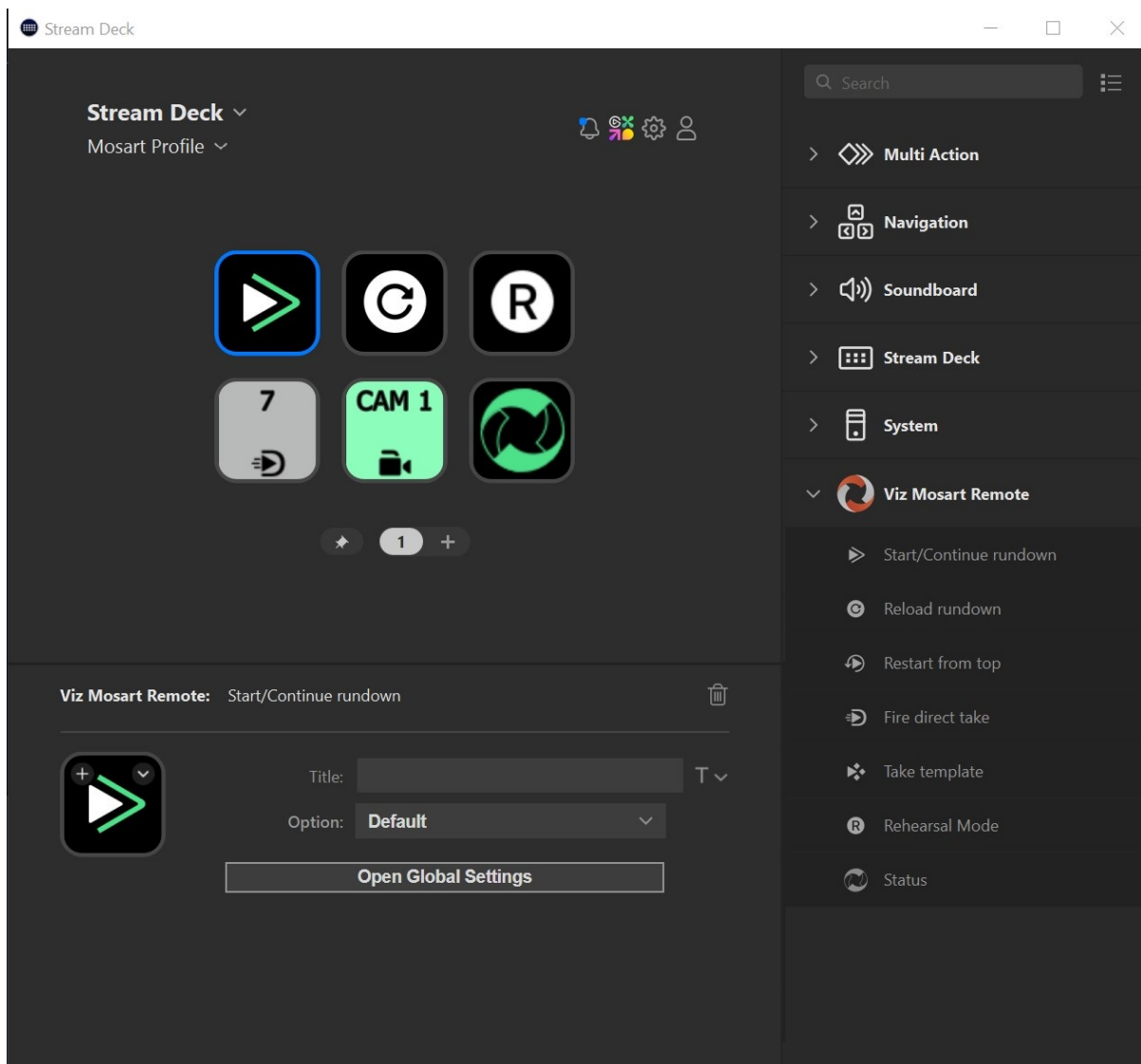
- ✓ **Tip:** The *Secret* key can be obtained from the Vizrt SSO Administration console.
- Select **Clients > Credentials** (tab).
  - Copy the value of **Secret**.



## 13.2 Elgato Stream Deck Plugin

The Elgato Stream Deck plugin for Viz Mosart allows you to send Viz Mosart rundown actions including *Start/Continue*, *Skip Next*, *Unskip Next*, *Take a template*. You can also fire a *Direct take* or a *Control* command.

The plugin communicates directly with the Viz Mosart server and all actions are triggered without needing a Mosart GUI open, active or in focus.



- [Installation](#)
- [Configuration](#)
- [Actions](#)
- [Status](#)

## 13.2.1 Installation

### Software Download

#### To download Stream Deck for Windows

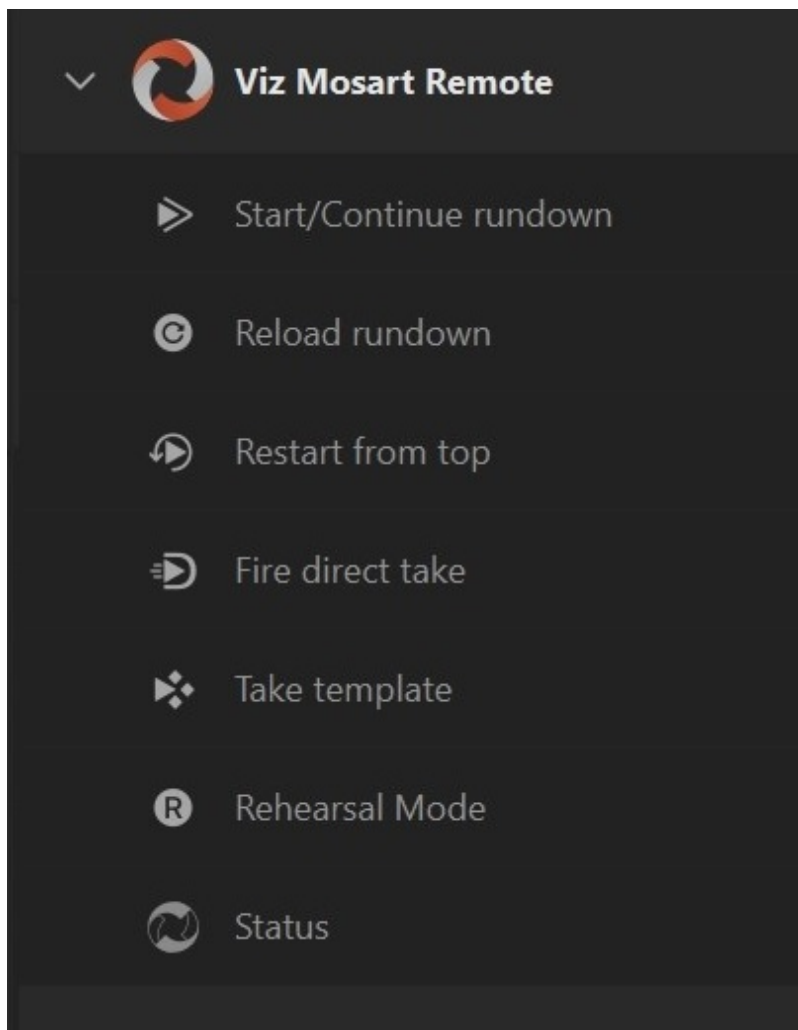
1. From Elgato's site, <https://www.elgato.com/us/en/s/downloads> select *Stream Deck for Windows* software and download.  
The Stream Deck utility starts up automatically after install.

 **Info:** The software can be installed on a different machine than the Viz Mosart Server or Mosart GUI client.

2. If not already installed, download and install the latest version of Viz Mosart Web Apps, located on the Vizrt FTP at  
`/products/VizMosart/Latest Version/WebApplications/`  
and perform the [one-time Server Configuration](#) setup.

 **Note:** Viz Mosart Web Apps has to be installed if you want to use the Stream Deck plugin with Mosart

3. From the Web Apps installation folder, locate the plugin file `com.vizrt.mosart-remote.streamDeckPlugin`.
4. Double click the file `com.vizrt.mosart-remote.streamDeckPlugin` for installation on the *same PC where you just installed the Stream Deck* for Windows software.
5. Accept when the Stream Deck application requests installation confirmation.
6. After installation, the **Viz Mosart** section displays with newly available actions.

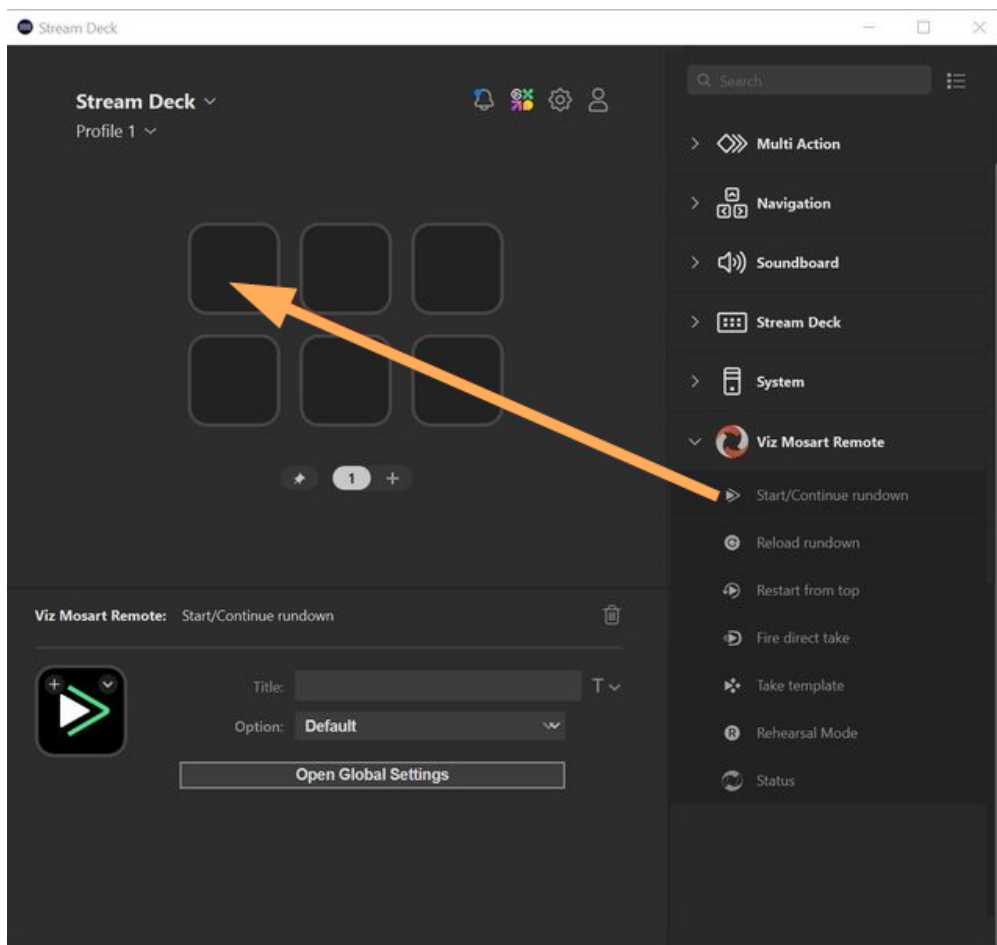


### 13.2.2 Configuration

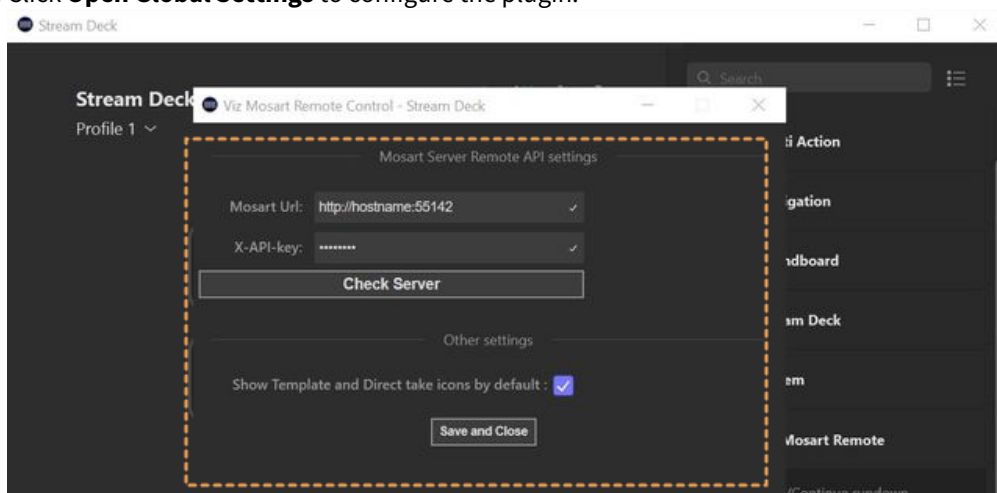
#### Configuring the Mosart Host

To configure the Viz Mosart host

1. Drag the **Start/Continue rundown** to any free Stream Deck key.



2. Click **Open Global Settings** to configure the plugin.



3. In field **Mosart Url**, enter the URL of the hostname of where your Mosart Web Applications are installed (failover is supported).

This Mosart Web applications proxy web server must be prefixed with *http://* (or *https* if used) and suffixed with port number *:55142*. See the screenshot for an example.



**Info:** See the [Viz Mosart Web Applications Config Tool User Guide](#) (section *Server Configuration*) for more information about the *Mosart Web applications proxy web server*.

5. In field **X-API-key** enter the key.

**Info:** See the Appendix topic *Mosart Remote Control REST API* in the [Viz Mosart Administrator Guide](#) for more information about *REST API endpoint* and *X-API-key*.  
For redundancy setup, configure the *same* API-key on both main and backup.

6. Click **Save & Close**. (The settings are set once-only and are saved for all operations).

### 13.2.3 Actions

- [Start/Continue Rundown](#)
- [Reload Rundown](#)
- [Restart from Top](#)
- [Fire Direct Take](#)
- [Take Template](#)
- [Rehearsal Mode](#)
- [Skip Next](#)
- [Unskip Next](#)
- [Control Command](#)

#### Start/Continue Rundown

Start or Continue a rundown. This action is the equivalent of a Mosart GUI timeline key, *Start Continue*.

##### Options

- **Default:** The next template's default transition.
- **Mix or Wipe:** Presents the *rate* entry field.
- **Effect:** The number of the effect.

#### Reload Rundown

This action triggers a rundown reload event. The timeline is stopped and the current rundown reloaded from the NRCS. No additional parameters.

#### Restart from Top

Restart the rundown from the first story. No additional parameters.

#### Fire Direct Take

Trigger a given Direct Take template. You must provide the *number* of the desired template. You can also optionally show or hide the Direct Take icon.

## Take Template

This action takes a template by its type and variant (name) and which bus.

- **Template Type:** Selection of template type first to be used. For example, *Camera*, *Package*.
- **Variant:** Exact variant name derived from your *channel templates* belonging to the chosen template type.
- **Program/Preview:** Select the preferred way of inserting this template into the current running story
- **Show Icon:** Show/Hide the Template type icon on the Stream Deck device button.

## Rehearsal Mode

Choose whether to enable/disable/toggle Rehearsal mode.

A Rehearsal Mode icon on the Stream Deck device displays *yellow* when Rehearsal Mode is activated, either from this action or from the Mosart GUI.

## Skip Next

By choosing *Skip Type* in the drop-down menu, the user can skip either the next item or sub-item, in the rundown.

## Unskip Next

By choosing *Skip Type* in the drop-down menu, the user can unskip (undo) a skipped item or sub-item, in the rundown.

## Control Command

This action will execute a control command on Viz Mosart.

Choose the control command to execute from the drop down menu. You can add parameters in the text area in the form "Param1=val1", separated by new line.



**Tip:** For a full list of the supported control commands and their parameters, refer to the [Viz Mosart Administrator Guide](#), in the *Appendix* section *Mosart Remote Control REST API*.

## 13.2.4 Status

The status of the current connected server is displayed.

 GREEN: Connected

 YELLOW: Standby/Idle

 RED: Not connected

This key is disabled on the Stream Deck device, pressing performs no action.



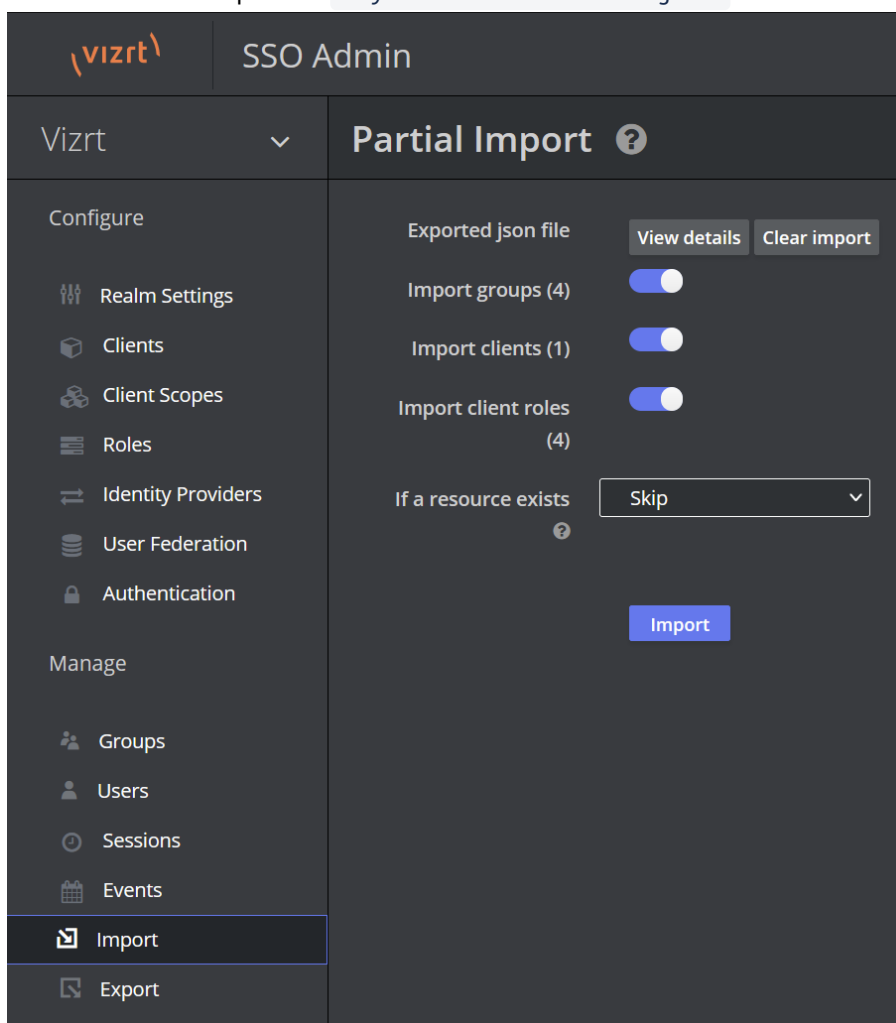
**Note:** When installing the Mosart Plugin, you may need to close and reopen the Stream Deck client application, to enable displaying of *status*.

## 13.3 Vizrt SSO (Keycloak)

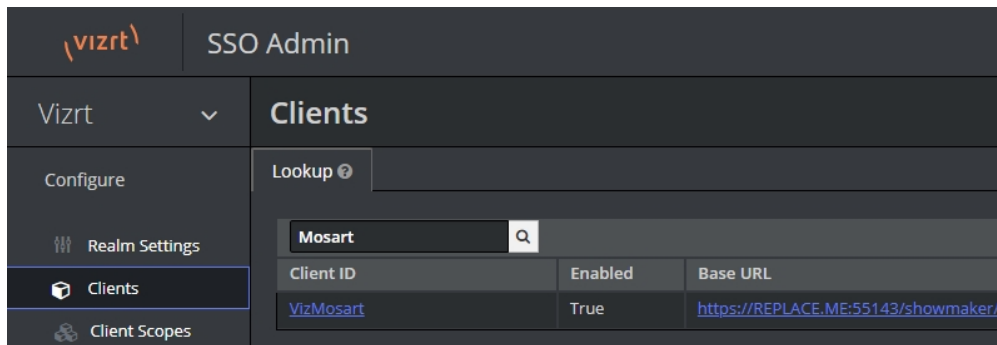
### 13.3.1 Working with Vizrt SSO (Keycloak)

To connect the Mosart Web Applications to a Vizrt SSO (for example, when running together with a Viz One authenticated by SSO), perform the following steps:

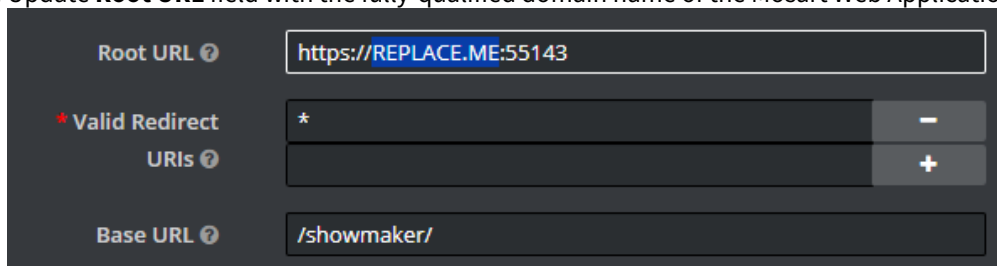
1. Download the `keycloak-mosart-sso.json` file from the same folder that you got the installer on [Vizrt's FTP server](#).
2. Log in to the Viz One SSO Admin pages, and go to the **Import** tab in the left menu.
3. Click **Select file** and pick the `keycloak-mosart-sso.json` file.



4. Review the options and when ready, click **Import**.
5. Go to the **Clients** tab, find and open the *VizMosart* client that was just imported.



6. Update **Root URL** field with the fully-qualified domain name of the Mosart Web Applications server.

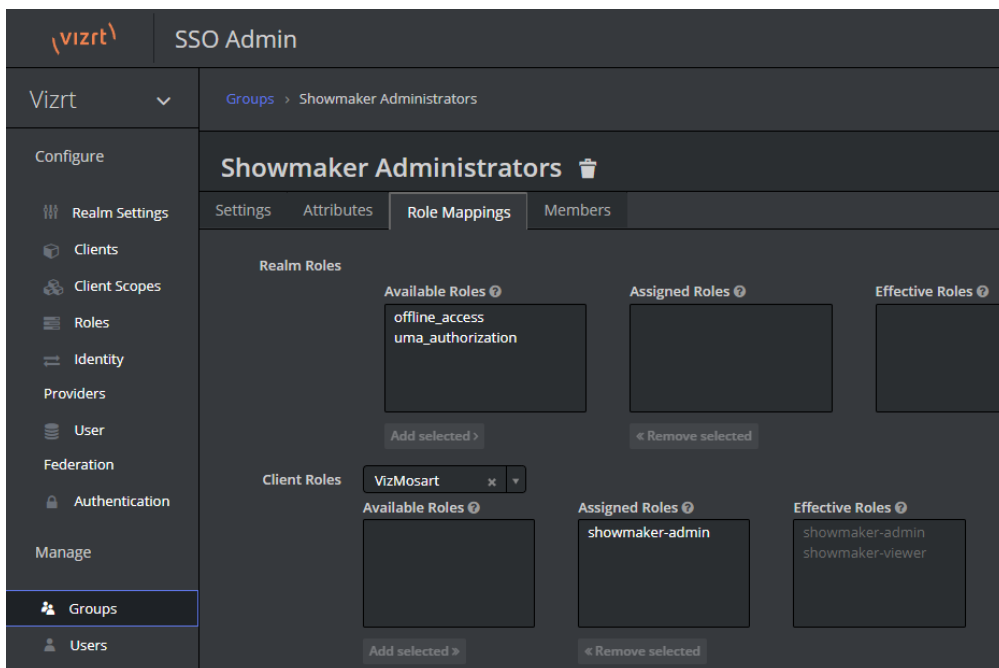


7. Manage users and groups to assign the two Mosart Web Application roles as desired. The roles are defined by the selected **Client ID** *VizMosart*, as shown in the screenshot. The imported configuration includes example groups which you can use as-is, customize, or replace with your own groups.



**Info:**

- Groups do not directly grant permissions, they assign corresponding *roles* to all group members.
- Roles grant user permissions.
- The *showmaker-admin* role implicitly grants *all* other Pilot roles.



8. Use the Configuration Tool to configure OIDC settings for the target server.
  - a. **Issuer URL** is typically the Viz One server's base URL followed by `/auth/realms/Vizrt`.
  - b. **Client ID** must be `VizMosart` when using the imported configuration.

☒ Authentication  
OpenID Connect enables the application to launch sign-in flows and receive verifiable answer about the current user.

Issuer URL ⓘ

Client ID ⓘ

Secret ⓘ  ⓘ

- ✓ **Tip:** The *Secret* key can be obtained from the Vizrt SSO Administration console.
- Select **Clients > Credentials** (tab).
  - Copy the value of **Secret**.

