CAMIO Producer's Guide V5.5.2

May 2025

SINCE DAY ONE.

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Purpose of this User Guide

This manual is intended to provide a comprehensive resource for CAMIO and LUCI users. It outlines how the LUCI interface works in a Media Object Server (MOS) newsroom environment. In particular, specific information on using LUCI in a Newsroom Computer System (NRCS) environment is provided. For more detailed information on your NRCS, please refer to the documentation supplied with that product.

This manual outlines the complete LUCI functionality and should be the first reference if functional or operational questions about LUCI arise.

Chapter 1: Workflow and LUCI Overview

What Are CAMIO and LUCI?

CAMIO is a centralized Media Object Server (MOS) and graphics asset management system. You can upload Image, movie and template assets to CAMIO from anywhere on your facility's network or station group.

LUCI is a graphical user interface for CAMIO available through Newsroom Computer Systems (NRCSs), such as AP ENPS, Octopus, Dalet Galaxy, Avid iNews, CGI OpenMedia and Ross Inception. Assets are available in LUCI in groups called Contexts. LUCI enables newsroom staff to build and preview graphics for their stories from a WYSIWYG interface, and receive a true preview of the content created. Staff can add these graphics, as MOS objects, to the scripts in the NCRS Rundown. They are then listed in LUCI as "Completed Graphics." CAMIO manages distribution of graphic assets associated with the NRCS Rundown to the specified Chyron playout devices.

Template editing in LUCI includes text entry and replacement of image and movie assets from CAMIO's library. Through LUCI, a user can also order custom images, movies or even templates using Chyron Order. With a Chyron Axis subscription, LUCI also offers you the ability to design your own images using a variety of comprehensive libraries including AP Graphics Bank, Getty Images, and/or a custom library created by the Art Department and shared across your organization. Additional Axis modules include map, financial quote, and chart graphic creation.

NOTE: The terms "Rundown" and "Running Order" are used interchangeably in the LUCI application and in this document.

Access LUCI

Prior to Using LUCI

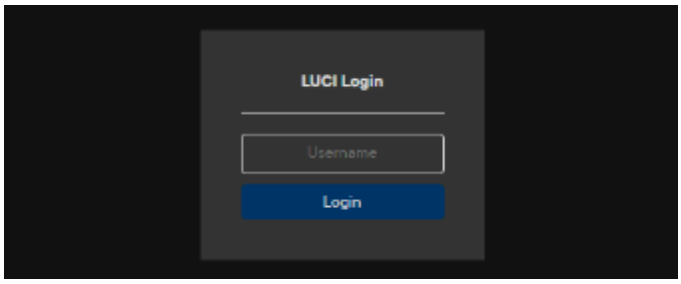
This document assumes that the setup and configuration required to access LUCI have been completed. These Administrator tasks are typically performed when the equipment is installed. If LUCI does not start or work as described in this manual, then please contact your CAMIO Administrator.

Open LUCI in a Web Browser

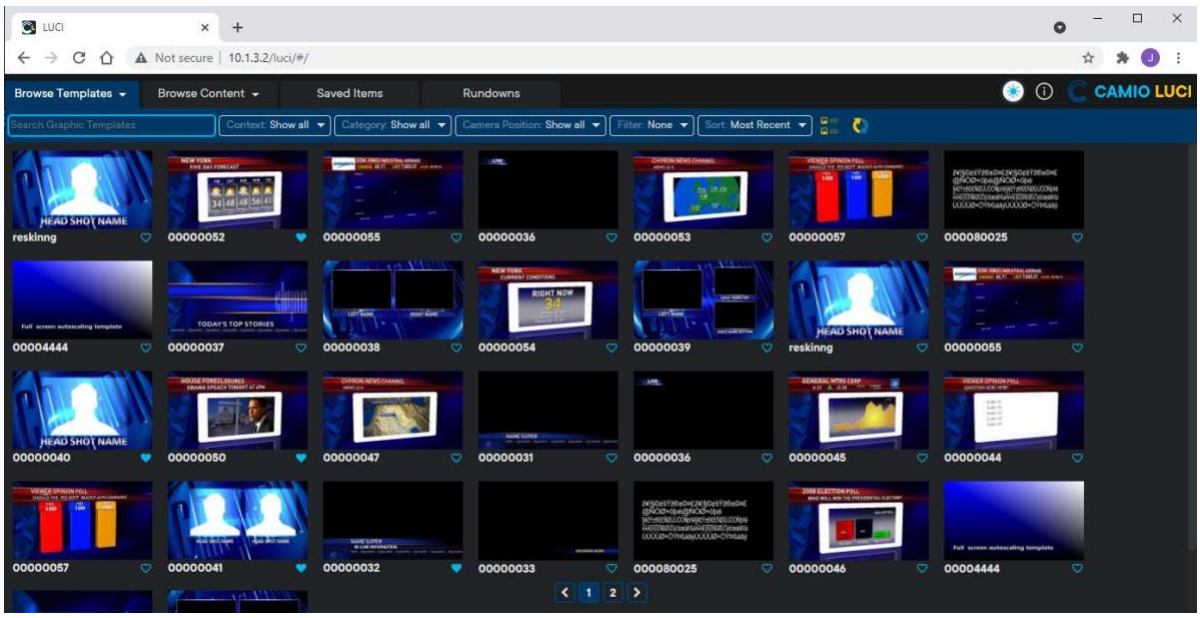
The LUCI interface is a web page hosted on the CAMIO Server. LUCI can run inside an HTML5-compatible browser. Chrome is recommended.

To open LUCI:

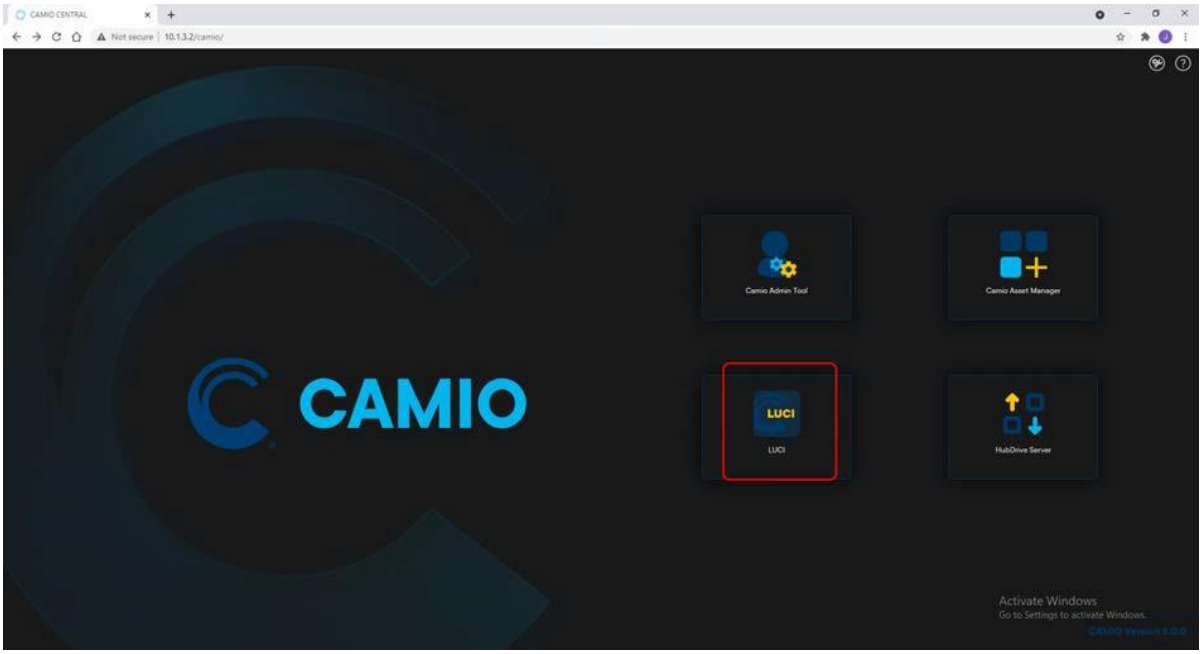
1. Navigate to http://camioservername/LUCI, where “camioservername” is the machine name or IP address of the installed CAMIO Server.



2. A prompt appears, requesting the username to log into LUCI. Enter your username and click Login button. The LUCI interface displays:



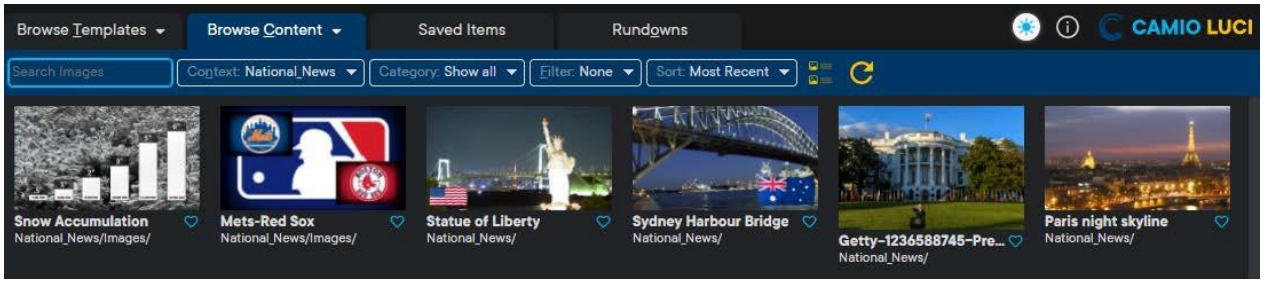
You can also display LUCI in the browser by going to the CAMIO Central home page (http://camioservername/camio) and selecting the LUCI link:



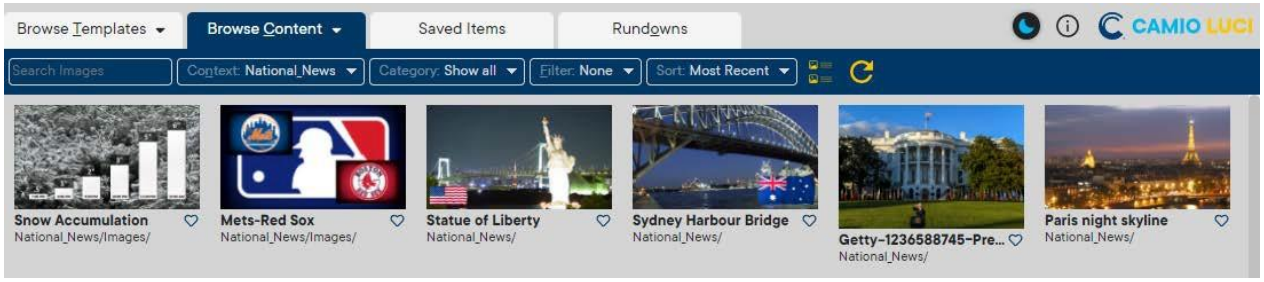
Dark Look vs. Light Look

You can choose to display in either the **Dark Look** or **Light Look**. To toggle between the **Dark Look** and **Light Look**:

Dark Look



Light Look

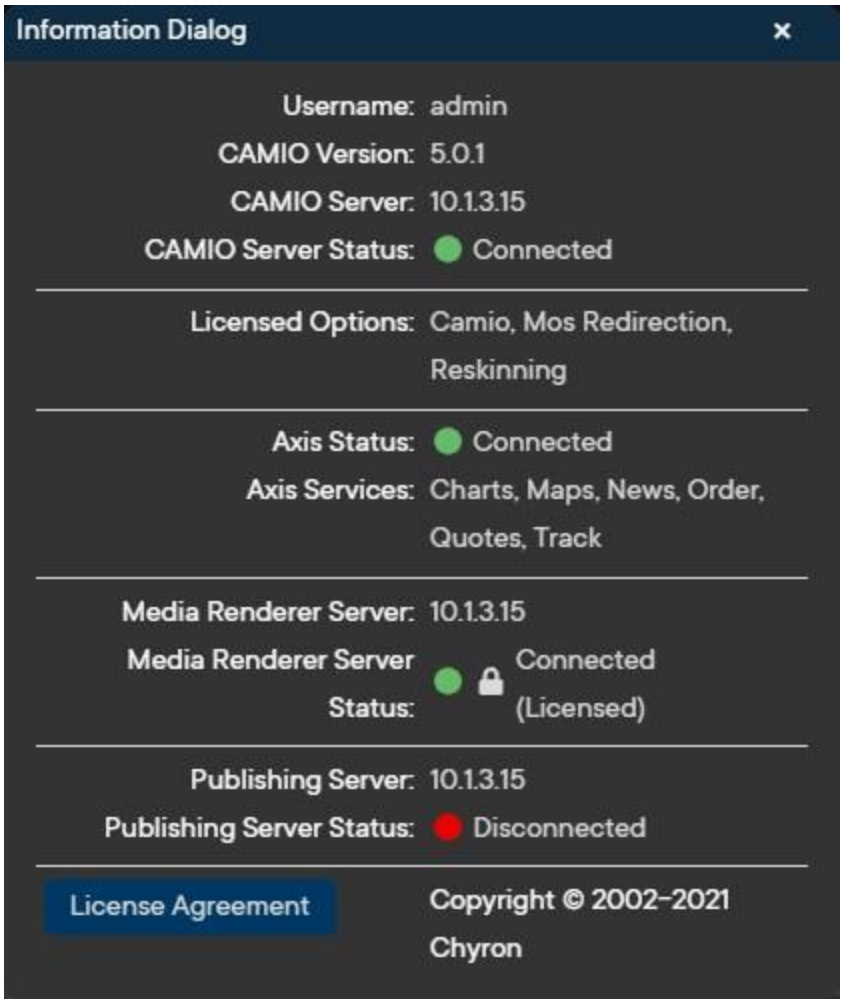


- When in **Dark Look** mode, click the **Light Look** icon to switch to **Light Look**.
- When in **Light Look** mode, click the **Dark Look** icon to switch to **Dark Look**. For the sake of simplicity, the graphics in this User Guide are shown in the **Dark Look** only.

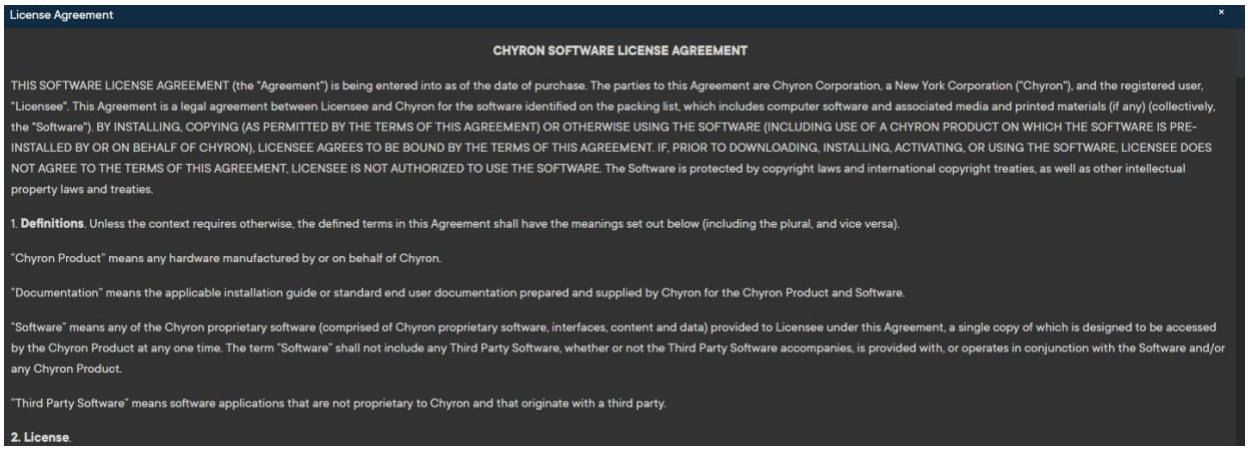
Version, License and Status Information

To display version, license and status information about the CAMIO and its related components:

1. Click the **Information** icon ⓘ in the upper right. The **Information Dialog** displays:



2. To view the **License Agreement**, click the **License Agreement** button. Scroll to view the entire **License Agreement**.



3. When finished viewing the **License Agreement**, click the **Close** icon ✕ at the upper right corner.
4. When finished viewing the **Information Dialog**, click the **Close** icon ✕ at the upper right corner.

Opening LUCI in the ActiveX Container

Legacy MOS Newsroom Computer Systems (NRCSs) expect a MOS ActiveX plugin. There is a component called the ActiveX Container which adapts the NCRS to run the LUCI web page. Chyron provides several versions of an ActiveX container depending on which NRCS you are using. Please contact Chyron Support to find out which version you should install on your NRCS.

Open LUCI in iNews

The ActiveX Container must be installed on every iNews client workstation.

1. Start iNews.
2. In the iNews **Tools** drop-down, select **Plugins > ChyronHego LUCI**.
    - LUCI opens into the iNews workspace.
    - iNews logs into LUCI as the user who started the iNews application.

Many iNews administrators have assigned shortcuts to invoke frequently used tools, e.g., such as LUCI. Ask your CAMIO Administrator or NRCS administrator if there is a shortcut to open LUCI.

Open LUCI in ENPS

To open LUCI in ENPS:

1. Start ENPS.
2. Click the MOS plug icon at the bottom of the screen.

    ENPS logs into LUCI as the user currently logged into the Windows desktop.

Open LUCI in other Newsroom Computer Systems

For other newsroom computer systems, please refer to the NRCS documentation for information on accessing configured MOS devices. Some newsroom systems support LUCI as a native HTML5 plugin. Other newsroom systems require an ActiveX container.

LUCI Workflow Overview

The LUCI workflow is straightforward and provides you the speed and flexibility to quickly add graphics to your story. You can easily update graphics as needed.

When you create a graphic in LUCI, the result is a **MOS Object** which is inserted into the NRCS's rundown. The **MOS Object** contains the metadata necessary to play the graphic on the specified playout device when the rundown is activated. The workflow is as follows, and is described in detail in subsequent chapters of this document.

1. Select the **Template Types** at the left of the screen and **Context** at the top of the screen to display only the templates that you would like to view.
2. In the **Browse Templates** panel, select a template.
3. Highlight the desired template, and then press **Enter** or double-click the message to load it into **Edit Mode**.
4. Enter new text into the **Text** input field(s). Note that the thumbnail image displayed in the Preview Display does not reflect the change at this time, but will update later.
5. Double-click any image or movie field to open the **Asset Browser**. Drag and drop or single-click to select the image or movie to populate the selected **Image/Movie** field.
6. If desired, enter text into the **Slug** field. This is additional information which can be displayed by the MOS Object in the newsroom rundown..
7. Click the **Preview** button to preview the graphic. Depending on system settings you may get automatically generated previews as you modify the replaceable fields.
8. Add the completed graphic or **MOS Object** to the story as follows.
    - Click **Insert** to insert the **MOS Object** at the point where the cursor was located in the script; or,
    - Alternatively, you can Drag and Drop the MOS Object into the script. The item needs to be made drag ready by clicking the Preview button. You will see a bar that says Drag/Drop under the preview image when it is drag ready. You can drag from the preview thumbnail or the Drag/Drop bar.

After the insert the MOS Object will appear in the newsroom system's rundown as a **Production Cue.** Depending on the newsroom system the format of the Production Cue is defined in CAMIO as the **MOS Abstract** or **Object Slug.**

The display format of the MOS Abstract and Object Slug is a **Global** setting determined by the **CAMIO Administration** page. To change these formats, contact your System Administrator.

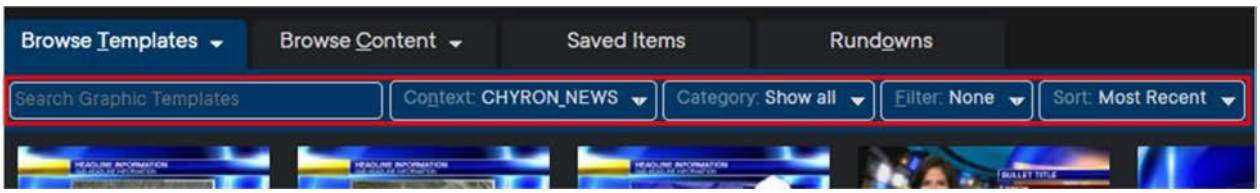
Once a new file is inserted to a script, a pop-up indicates the context and number of the created object, so you can feel confident that your content was created successfully. The example above specifies that the template data message is in the context **NAB 2017**, and the message number is **00010852**,

Introduction to the LUCI Workspace

LUCI Workspace Overview

The LUCI interface is a web page that can run in browsers that support HTML5, as well as leading newsroom control systems. LUCI is primarily used to create new graphics MOS objects to insert into a newsroom rundown.

There are four main **Asset Browser** categories, each accessible via a tab at the top of the LUCI interface.



- **Browse Templates:** Most common LUCI workflow. Browse, search, and select a template that is used to create the graphics MOS object. You can choose from **Graphic Templates**, **Completed Graphics**, **Automation**, and **Studio Clips**.
- **Browse Content:** Alternate LUCI workflow. Browse, search, and select **Image** or **Movie** content first, and then select a compatible template in which to place it.
- **Saved Items:** Browse **Saved Items** and use them to create a new **MOS Object**.
- **Rundowns:** Displays **MOS Objects** in currently active rundowns published by the newsroom system. Allows for editing of those objects.

Directly below the **Asset Browser** categories, you can search for assets as follows:

- **Search Field:** Enter search terms into this text field.
- **Context:** Display the assets in the selected **Context**.
- **Category:** Display based on **All Categories** or a specific **Category**. Categories are defined by the CAMIO Administrator.
- **Filter:** Filter by **None**, **Favorites** or a **Filter** defined by the CAMIO Administrator.

You can also sort the assets, based on **A - Z** or **Z - A** alphabetical sorting based on the Title. Also can sort on **Most Recent** and **Least Recent** based on last modified date. .

See Search, Filter, and Sort for more information.

Asset Browser Views

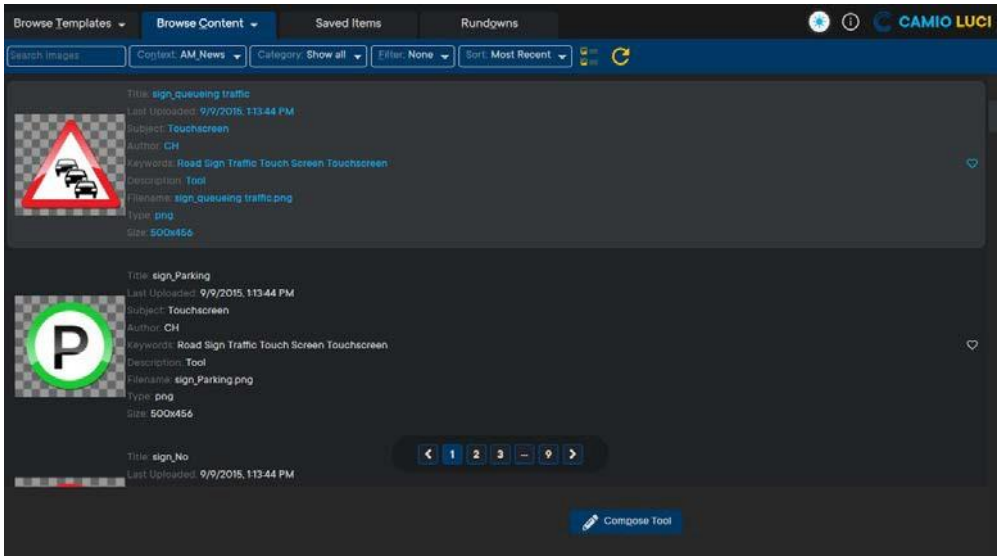
Thumbnails and Details Views

When you view assets in **Browse Templates** and **Browse Content**, you can set the **Template** and **Content Browsers** to display in either asset thumbnails view or asset details view.

- **Asset Thumbnails View** displays each asset as a thumbnail, with abbreviated information underneath the thumbnail.
- **Details View** displays a detailed view of the asset's metadata.

Asset Thumbnails View

Asset Details View



To toggle between **Details View** and **Thumbnails View**:

- Click the **Details/Thumbnails View** icon , located to the right of the **Sort** drop-down box at the top of the LUCI window.

Blue text indicates that the mouse is hovered over the item.

Refresh View

LUCI does not automatically refresh the Asset Browser when new assets are added. You may also want to refresh the view.

To check if expected new assets have been added, you can refresh and update the **Asset Browser**:

- Click the **Refresh** Icon , located to the right of the **Details/Thumbnails View** icon at the top of the LUCI window. The LUCI **Asset Browser** updates.

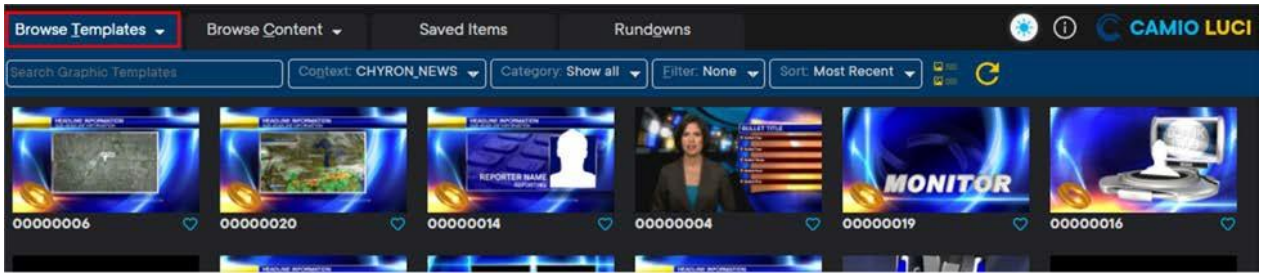
Bad Asset Display

If the following displays in the **Asset Browser**, contact your organization's CAMIO Administrator to investigate.

Browse, Search and Sort Templates

Browse Templates Overview

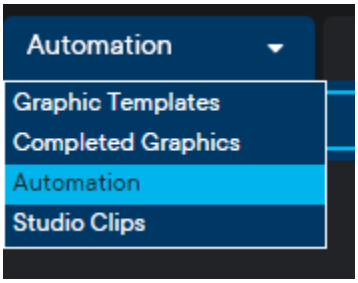
When first opened, LUCI is usually in the **Browse Templates** view.



There are four types of templates in LUCI:

- **Graphic Templates:** Templates from which you can build graphics.
- **Completed Graphics:** Graphics that have been created and can be edited and/or copied.
- **Automation:** Templates in which you can enter automation cues, e.g., switch to a specific camera and raise microphone level.
- **Studio Clips:** Chyron **PRIME Clips** which must be played on a PRIME system. These differ from movies, which are software-based animation formats that can be played in a Chyron Lyric or PRIME template and other systems.

Each template type is a shell of a graphic, automation event, or clip that can be updated with replaceable content. When you choose a template type from the Browse Templates list, the name of that template type will then be displayed as the label at top of the list. This is to make it easier to scan the various filters and know which options have been selected without having to click on the list to find out.



The lower middle of the **Asset** window displays the number of the current page, along with the total pages available of that asset type in the selected **Context**.

To navigate through the pages:

- Click a page number, or the **Back** or **Forward** icons to navigate backwards or forwards.

To load a template into the **Edit Panel**:

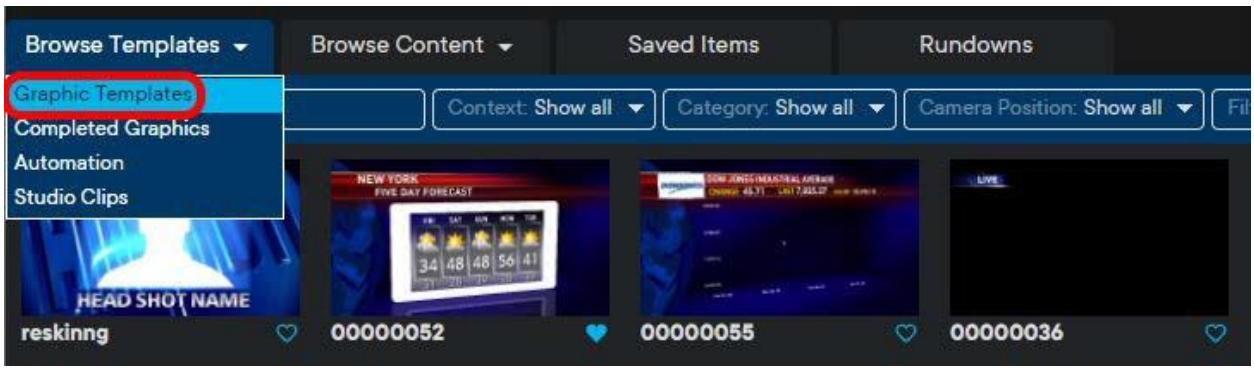
- Double-click its thumbnail.

Assets are grouped in **Contexts**, which are available from the **Context** drop-down box. You have access to only **Contexts** to which you have been granted access privileges. Once you have customized a template, then you can use it to create a rendered graphic or save it to a newsroom script.

NOTE: Your user interface may be missing elements listed in Graphic Templates, Completed Templates, Automation, and Studio Clips if they have been hidden by your Admin from your user interface. Please check with your CAMIO admin if you have any questions.

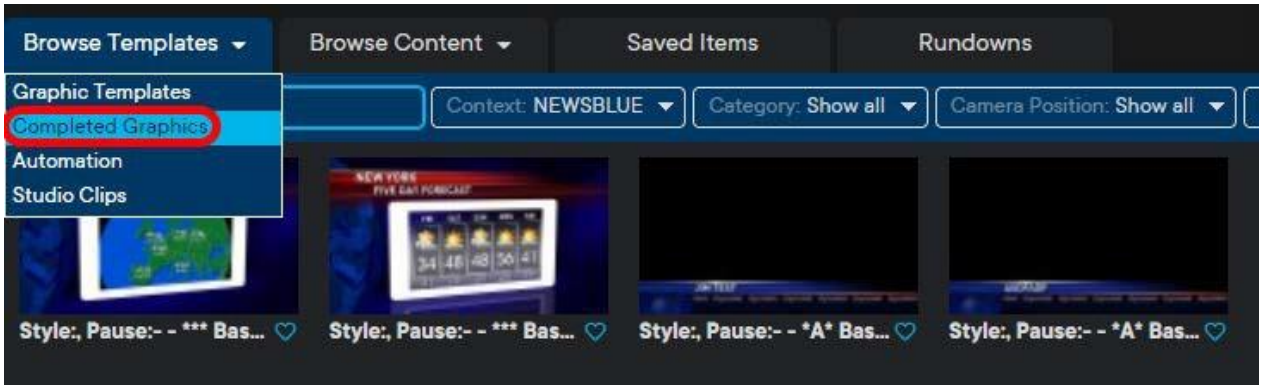
Graphic Templates

Graphics Templates displays the templates from which you can create new graphics.



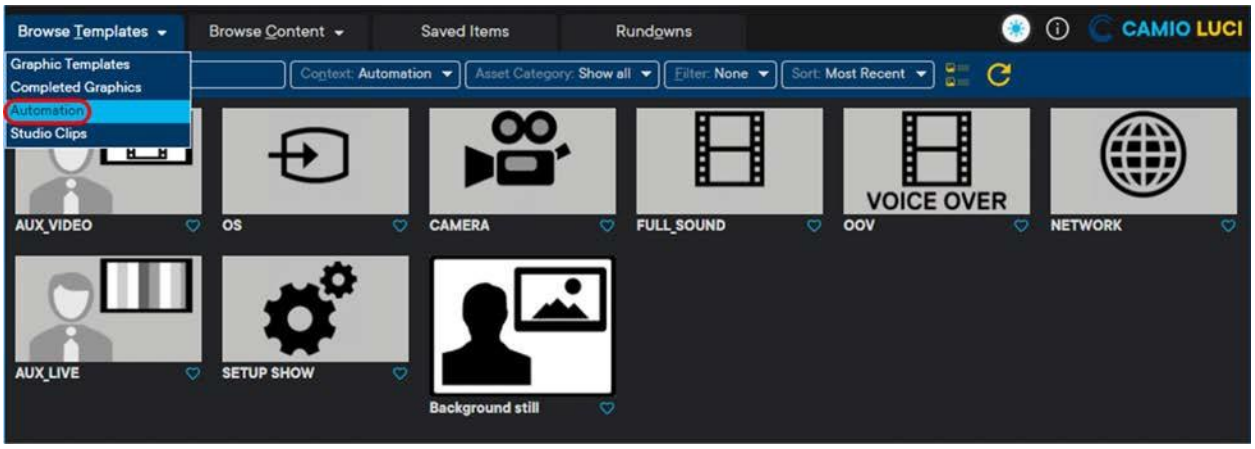
Completed Graphics

Completed Graphics are graphics that were already created by the logged-in user. You can open, reuse or modify a graphic as a new story evolves.



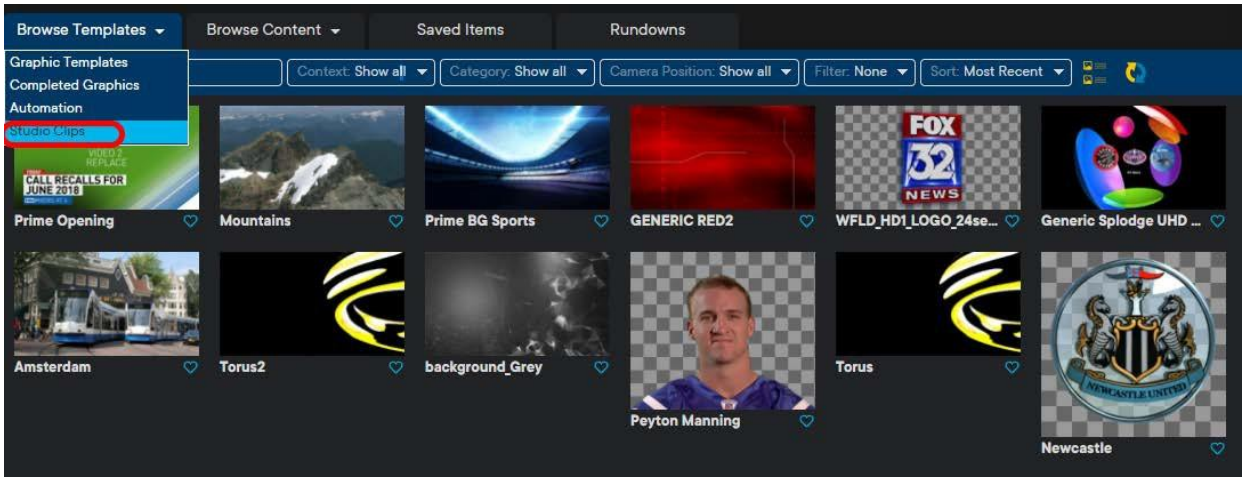
Automation

Automation contains templates in which you can enter automation cues, e.g., switch to a specific camera and raise microphone level.



Studio Clips

Studio Clips holds clip objects for **PRIME Clips**.



Browse Content

Browse Content Overview

Browse Content enables you to create graphics using flexible workflows:

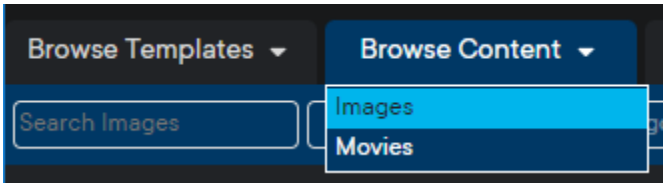
- Browse images or movies inside LUCI, select an image or movie, display the templates that can accept the image or movie, select a template, populate the remaining fields, and then preview the graphic composed from the selected image or movie, and the template.
- Browse templates in LUCI, select a template, populate the image and/or movie fields with the available images or movies, and then preview the graphic composed from the selected template, and images and/or movies.
- Create graphics based on existing **Completed Graphics**.

You can also access tools that enable you to create composite images, create images and movies within Chyron's Axis News, Maps, Quotes and Charts subscription services, and order bespoke content via the Chyron Axis Order subscription service.

Quickly Create Graphic Based on a Selected Image or Movie

To select an image or movie and display templates that can accept the image or movie:

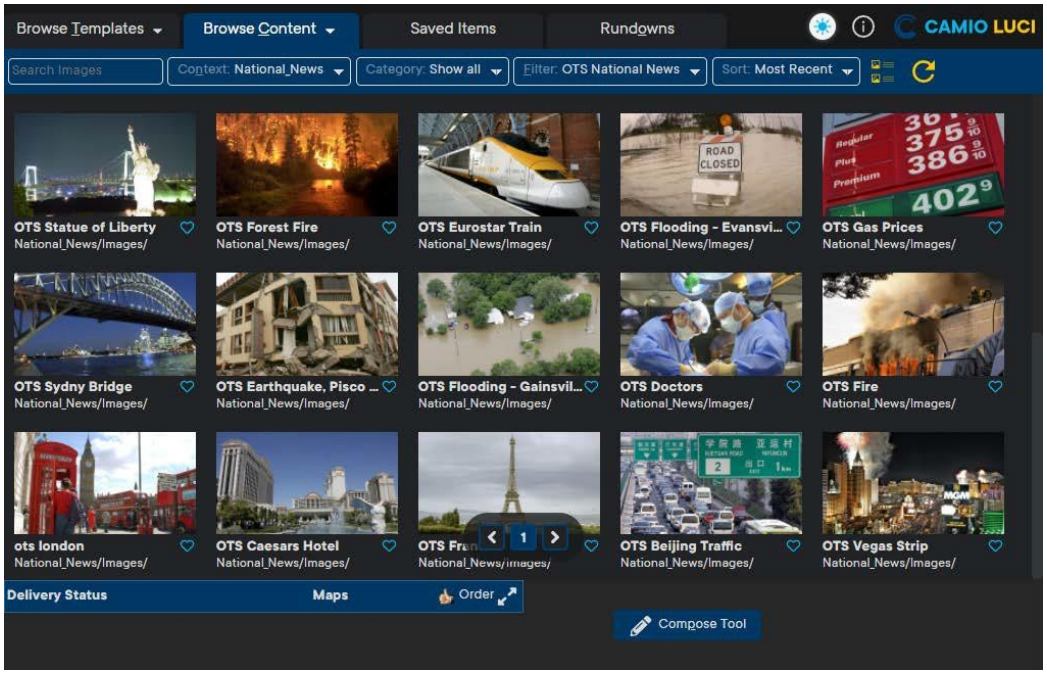
1. From the **Browse Content** drop-down, select **Images** or **Movies**. The **Search** field at the top left of the interface reflects your choice, and displays **Search Images** or **Search Videos**. Note that the term "Videos" and "Movies" are used interchangeably in this document and in the application.



2. LUCI provides the ability to search, filter and sort results. If desired, enter a search string and/or select **Context**, **Category**, Custom **Filter**, and/or **Sort** parameters:

    - Enter a search string in the **Search Images** or **Search Movies** field, and then press **Enter**. The search results display.

    - Select any of the **Context**, **Category**, **Filter**, and **Sort** dropdowns. As you select from each drop-down, the search results dynamically display.

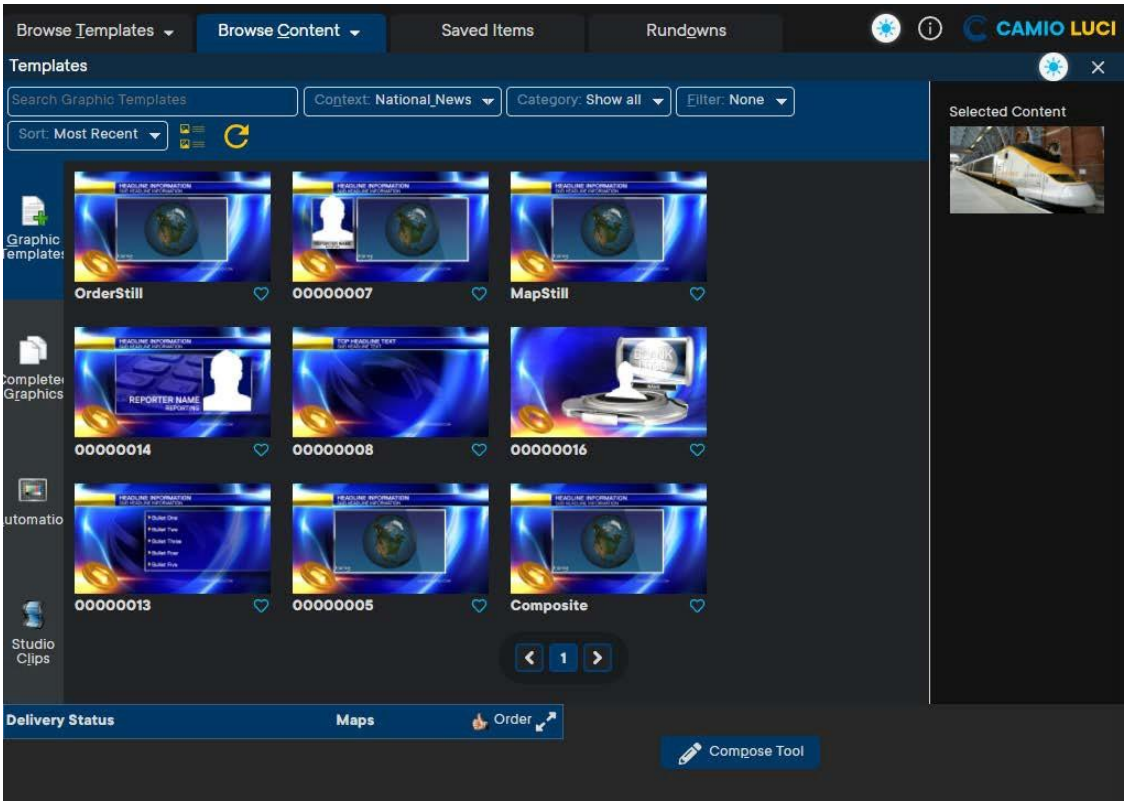


To view a larger version of a graphic, hover over the graphic, and then click **VIEW**.

Use the scroll bar to view the entire image.

3. Double-click the image or movie. The image or movie appears on the right of the screen, and available templates for that image or movie to the left of the image, organized by context.

   If the image or movie is in a restricted **Asset Category**, then only templates that have a field restricted to that category appear.



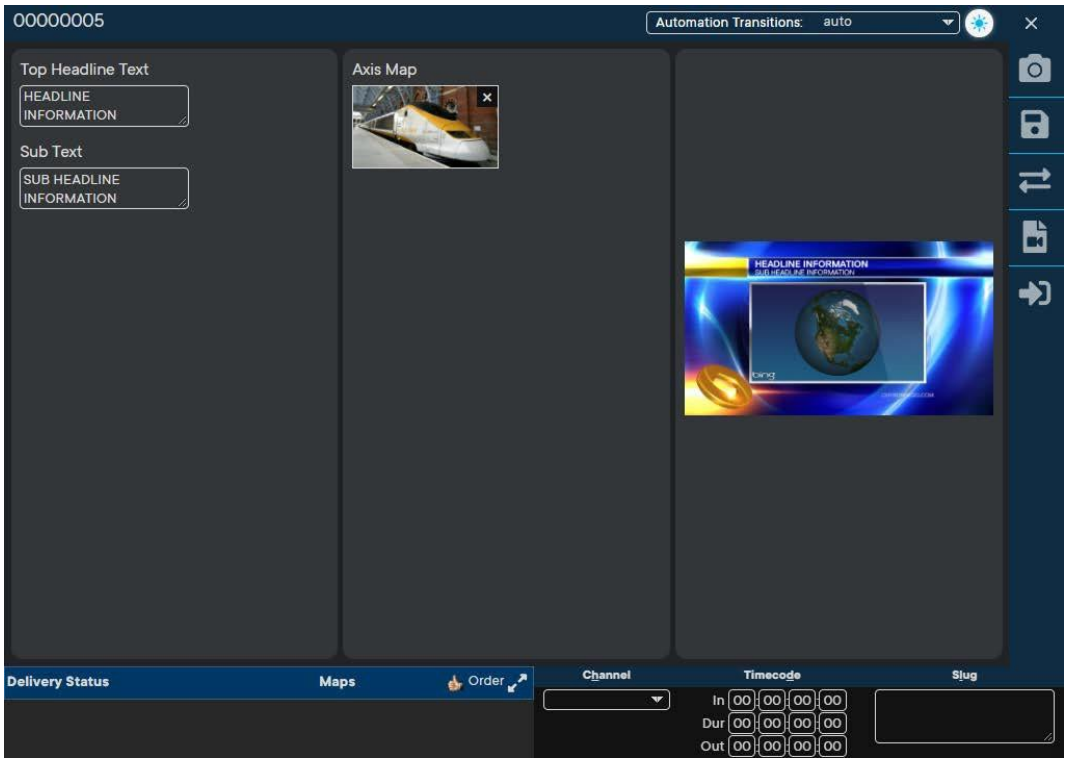
The column at the far left displays the icons that correspond to the **Browse Templates** items, i.e., **Graphic Templates**, **Completed Graphics**, **Automation**, and **Studio Clips**, providing easy display of the templates of each template type.

To display the templates associated with a template type:

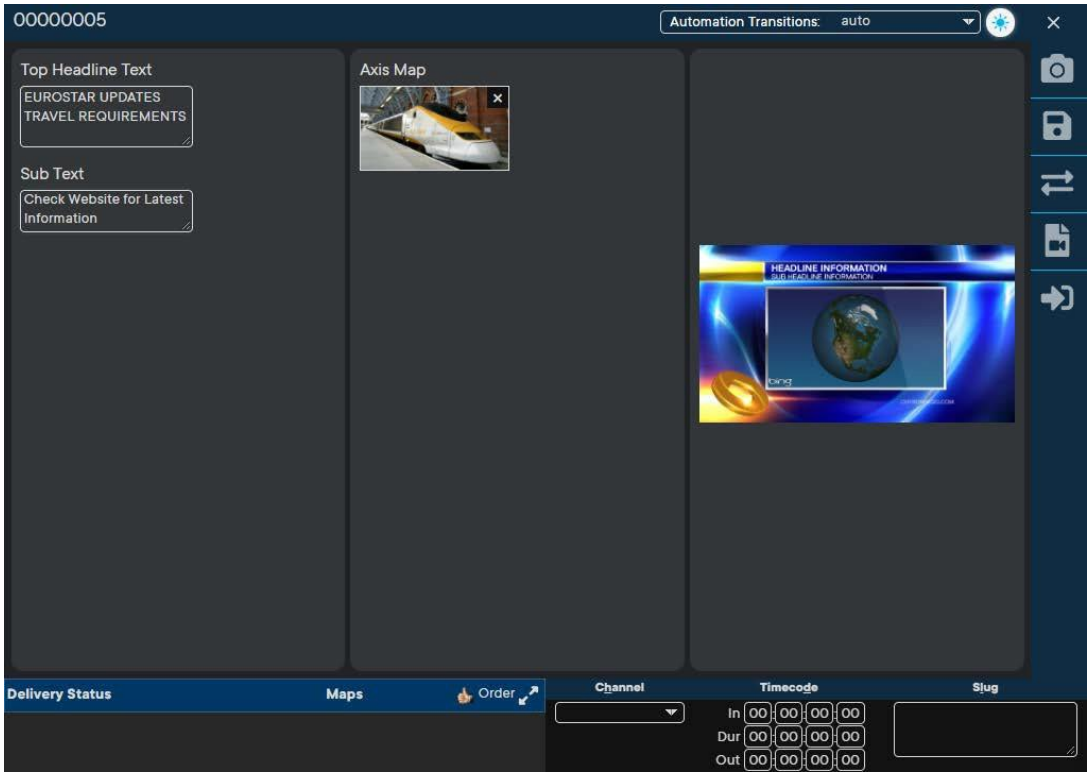
- Click the **Graphic Templates**, **Completed Graphics**, **Automation**, or **Studio Clips** icon.

When you select a template, the selected image or movie populates the template with the image or movie displayed on the right. You can then preview the graphic. To select a template and preview the graphic:

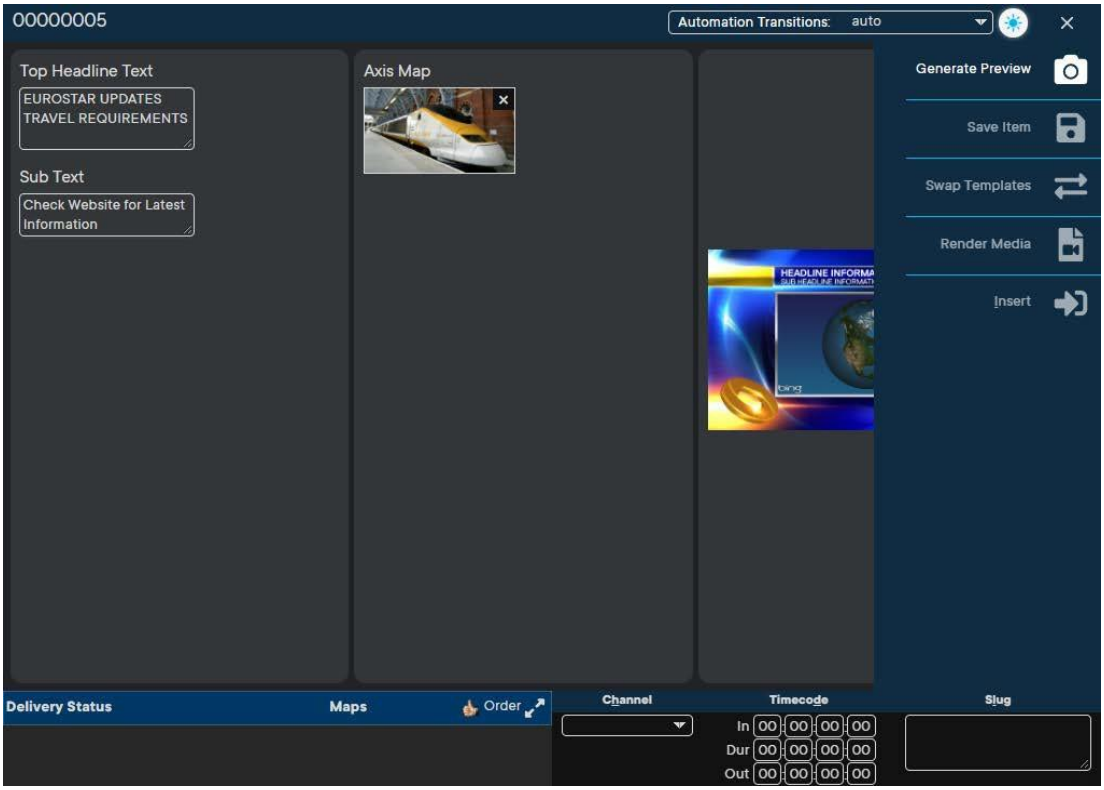
1. Double-click the desired template. The image or movie appears at the left, and the template appears at the right. The template enters **Edit Mode**, and the selected image displays.



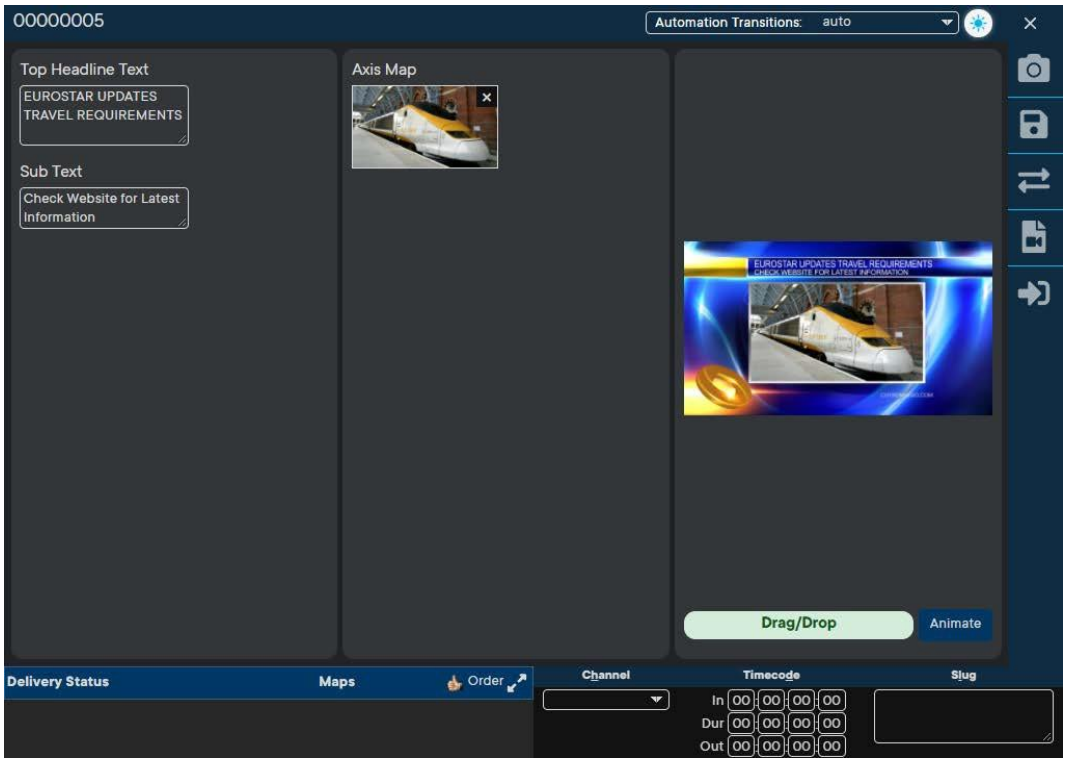
2. In this example, there are also two text fields. Enter the desired text into each. In this example, text was typed in upper case in the **Top Headline Text** field, and title case in the **Sub Text** field. The template text fields, however, are specified to display as all upper case; as such, lower case characters are converted to upper case when rendered.

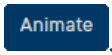


3. In the **Action Toolbar**, click the **Generate Preview** icon .



The image and text populate the template.

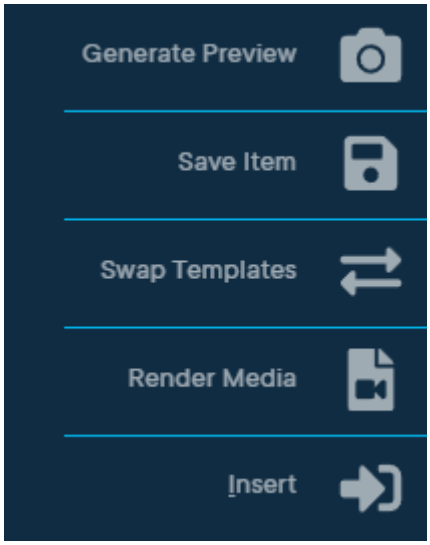


4. If the template includes an animation, then to preview the animation, select the **Animate** button 

.

5. To view a larger version of the preview image, double-click the preview image.

LUCI provides additional functions from the Edit Mode sidebar include the following:



- **Save Item:** Saves the item that you created to the **Saved Items** folder hierarchy. *Also see Saved Items.*
- **Swap Templates:** Provides the ability to apply a different template, using the same image and text field content.
- **Render Media:** Renders the item to an image or movie, that you can download to a disk, or save to a specific folder in a **Context** in LUCI.
- **Insert:** Inserts the item into your story and saves it to **Completed Graphics**.

For additional details on graphics creation, see xxx.

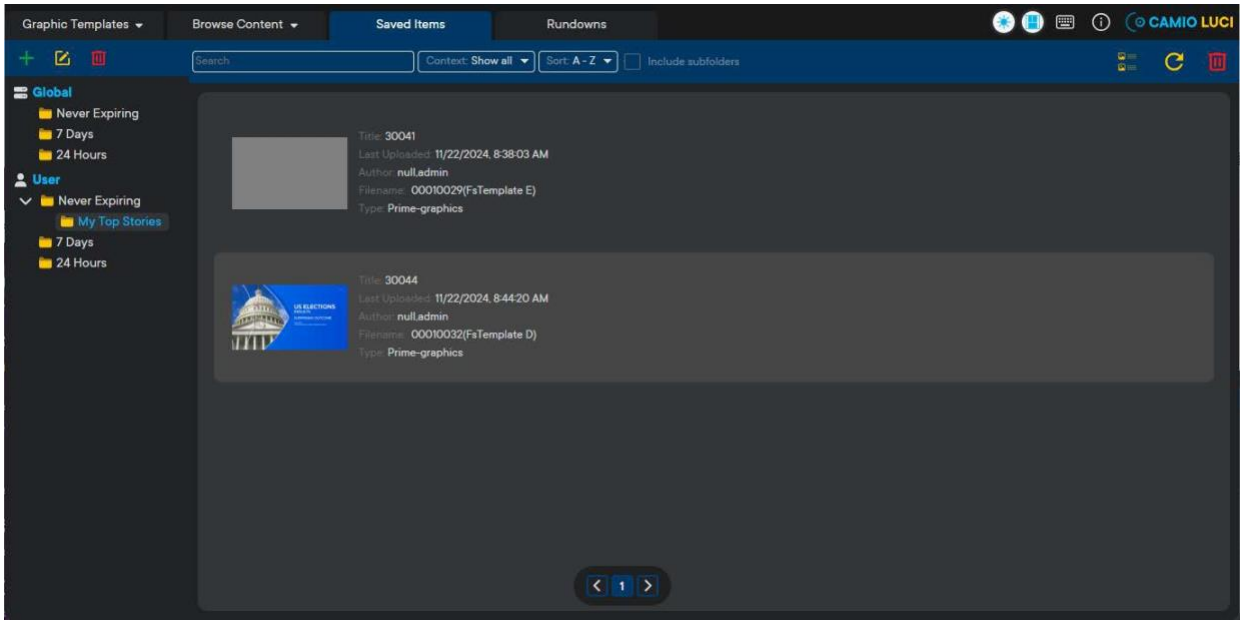
Saved Items

Saved Items Overview

Saved Items provides a way for users to save and browse frequently used items for easy re-use and/or to protect them from being purged by a cache cleanup script.

Folder Structure

Click the **Saved Items** tab to display the saved items folder hierarchy.



The default folder structure contains:

- **Global Folders** available to all users.
- **User Folders** that are unique to the logged-in LUCI user.

Both have three categories of sub-folders, the names of which are self-explanatory:

- **Never Expiring**
- **7 Days**
- **24 Hours**

Cleanup of expired items is handled by the **Saved Items Cleanup** script. *See the CAMIO Administration Manual for details.*

Create, Rename and Delete a Subfolder

Create, Rename and Delete Subfolder Overview

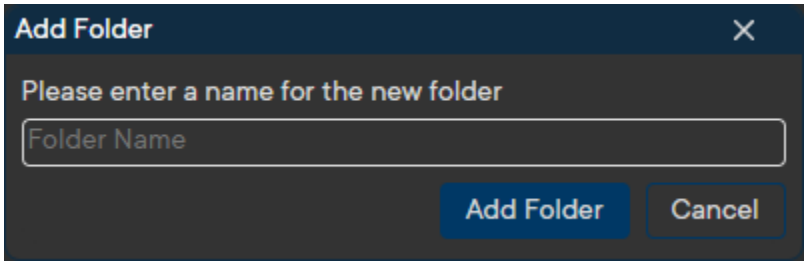
Saved Items cannot be added directly to the six default folders, but to subfolders below each of them.You must create subfolders below the six default folders, as shown in the above figure.

You can create, rename and delete folders, via the following icons, respectively:

Create a Folder

To create a folder:

1. Select the folder in which you would like to create the new folder, and then click the **Add Folder** icon . The **Add Folder** dialog displays.

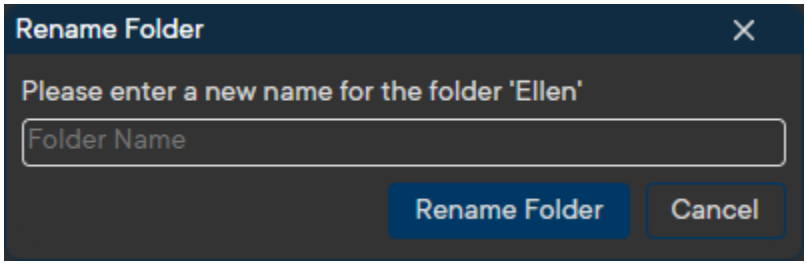


2. Enter the name for the new folder, and then click **Add Folder**. The new folder appears in the folder hierarchy.

Rename a Folder

To rename a folder:

1. Select the folder that you would like to rename, and then click the **Rename Folder** icon . The **Rename Folder** dialog displays:

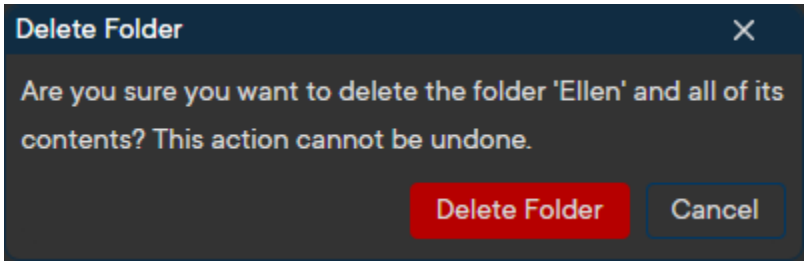


2. Enter the name for the new folder, and then click **Add Folder**. The new folder appears in the folder hierarchy.

Delete a Folder

To delete a folder:

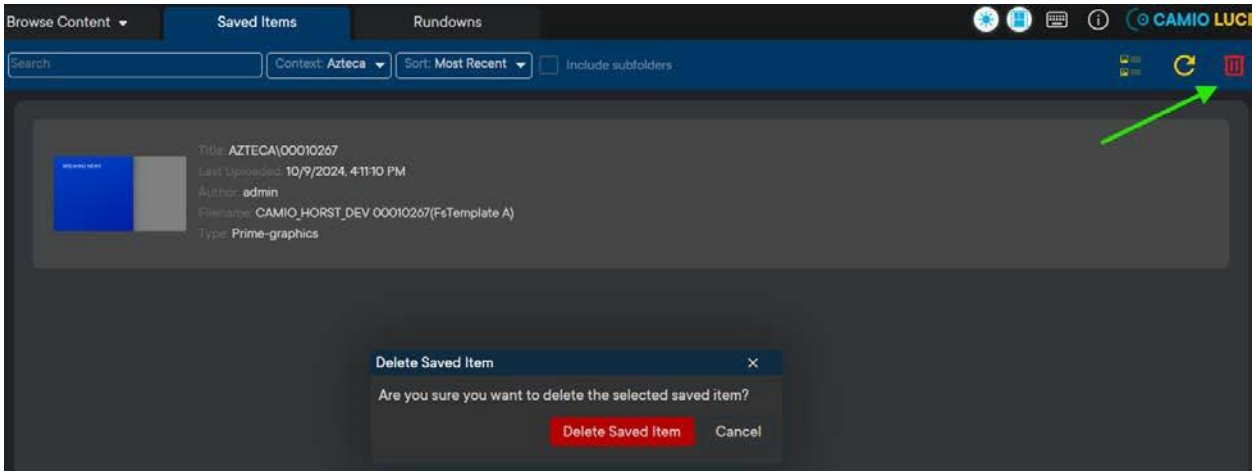
1. Select the folder that you would like to delete, and then click the **Delete Folder** icon . The **Delete Folder** dialog displays:



2. Click **Delete Folder**. The folder is deleted from the folder hierarchy and no longer appears.

Delete a Saved Item

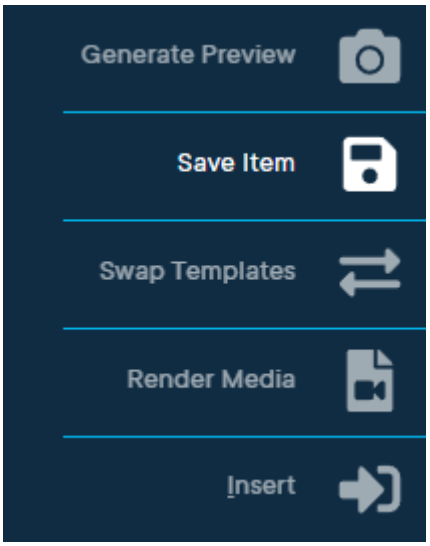
To delete an individual saved item, select the saved item and and then click the Delete icon at the top right of the saved items browser. A confirmation message will appear.



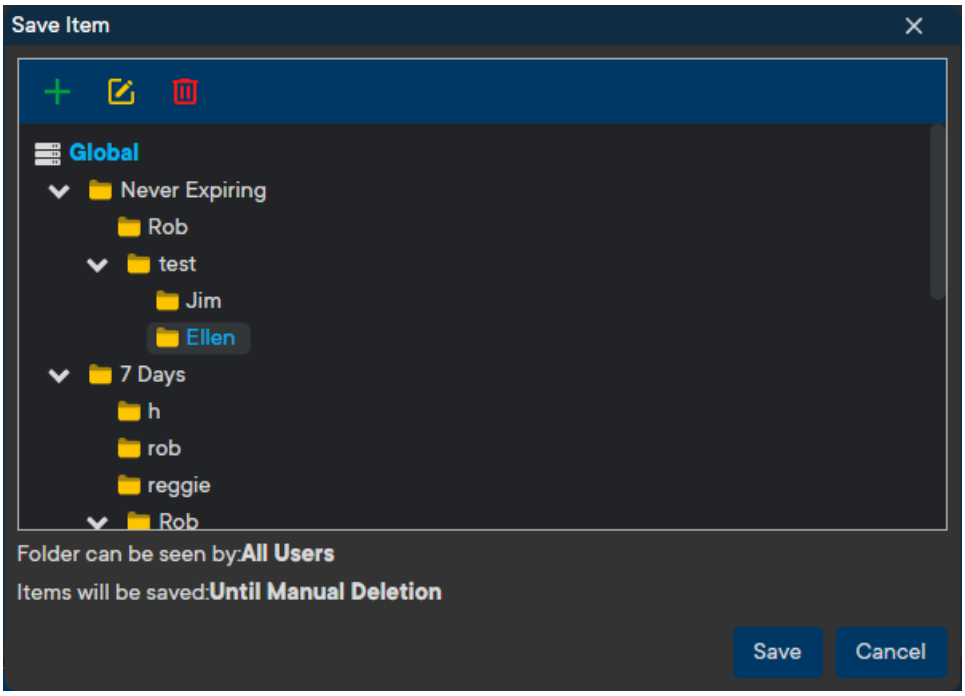
Save Item to the Saved Item Browser

To save an item to the **Saved Items** browser:

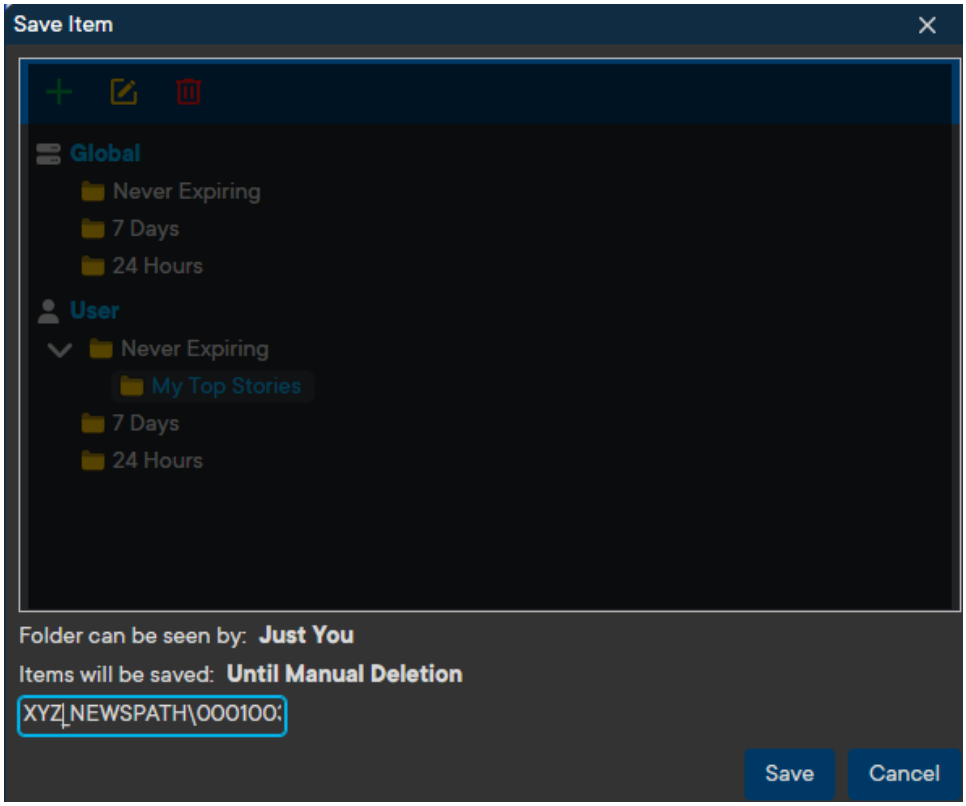
1. In the **Action Toolbar**, click the **Save Item** icon.



2. Select the sub-folder to which to save the item, and then click **Save**.



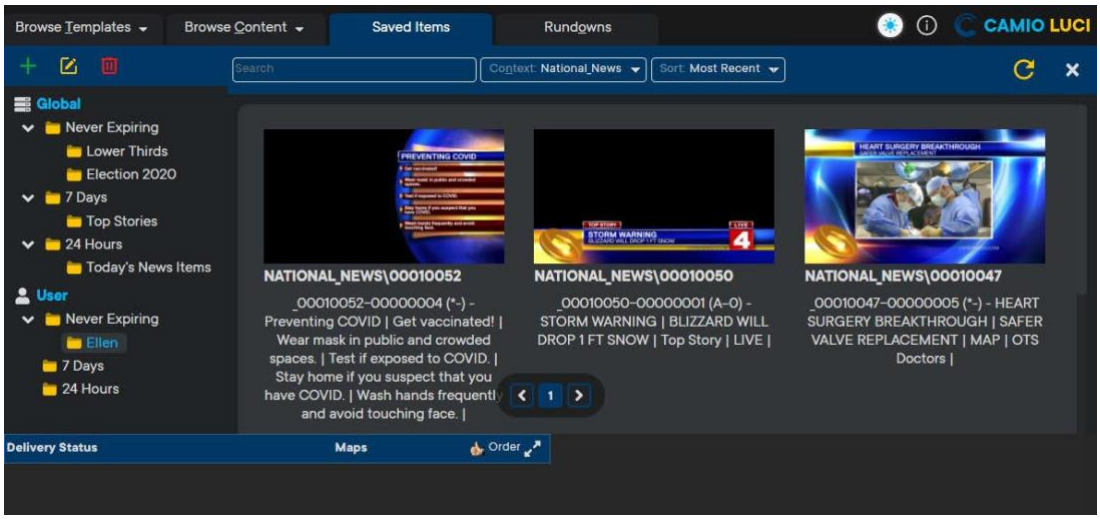
1. If you want to give the saved item a custom filename then Preview the template first. You will then have the option to change the default filename which is based on the MOS abstract. Then click **Save**.



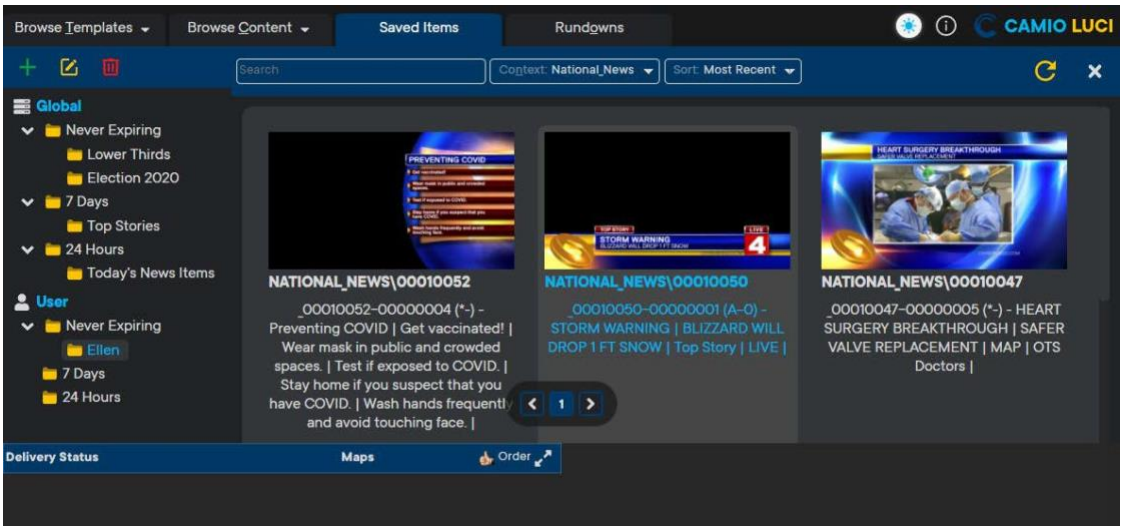
Use a Saved Item

To use a **Saved** item:

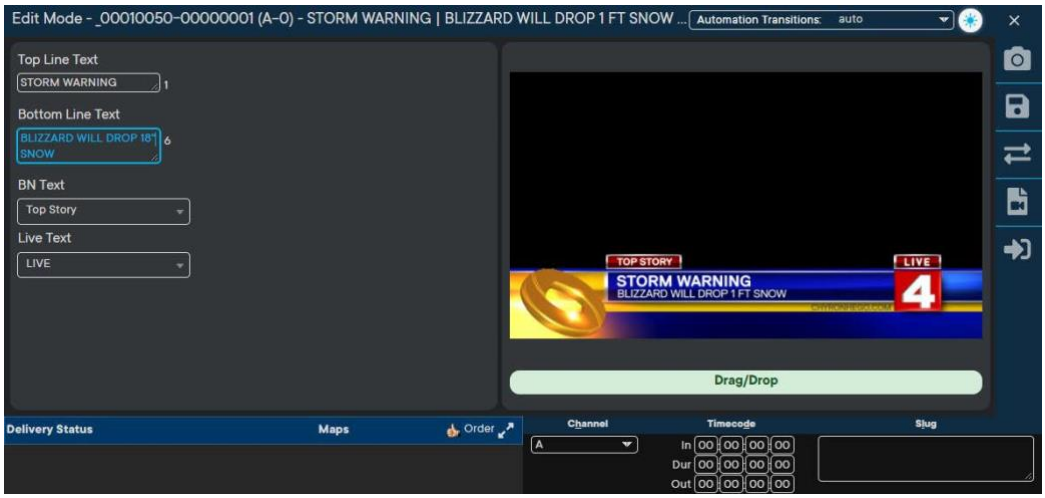
1. Click the **Saved Items** tab, and then select a folder. The folder contents display.



2. Double-click a saved item to open it in the **Edit Mode** window. When you select an item, the descriptive text displays in blue.



3. The item opens for editing. In this example, the graphic is updated from "**BLIZZARD WILL DROP 1 FT SNOW**" to "**BLIZZARD WILL DROP 18" SNOW**".



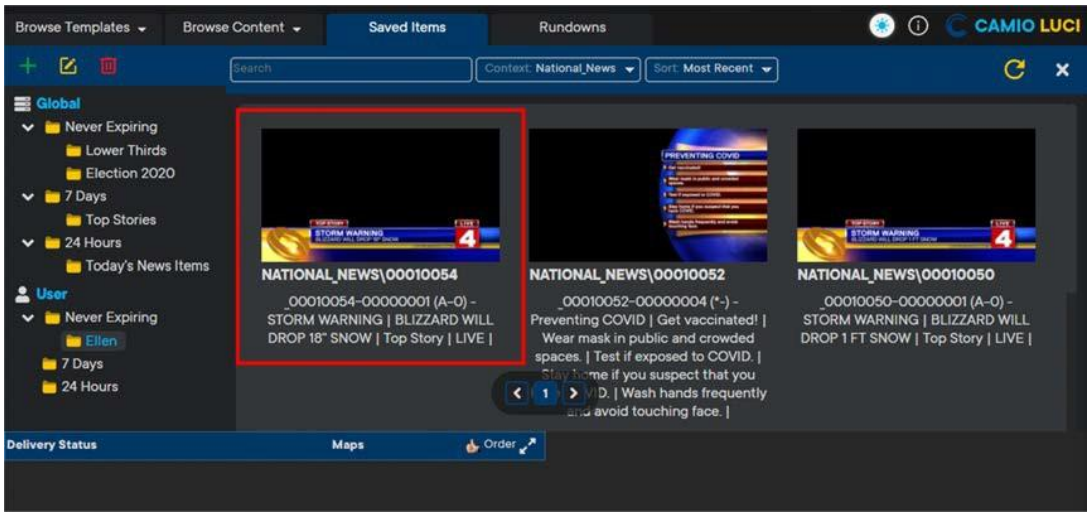
4. In the sidebar, select **Generate Preview**.

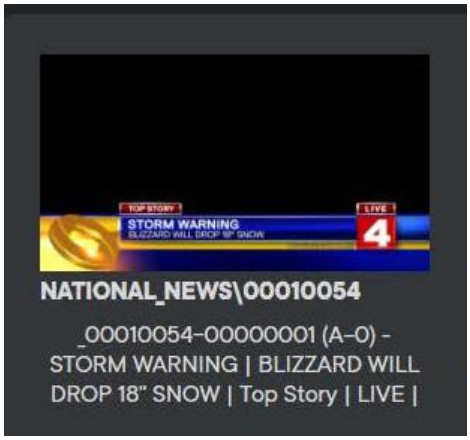
The preview displays:

You can double-click the preview to view a larger version of the changes:

5. In **Edit Mode**, you can render, insert or even resave the item. The following shows the **Edit Mode Sidebar** expanded. **Note that when an item is reused, it is assigned a new Object ID**.

The following shows the **Saved Items** folder with the new **MOS Object** added, with the graphic and metadata updated, and that the original **MOS Object** remains.





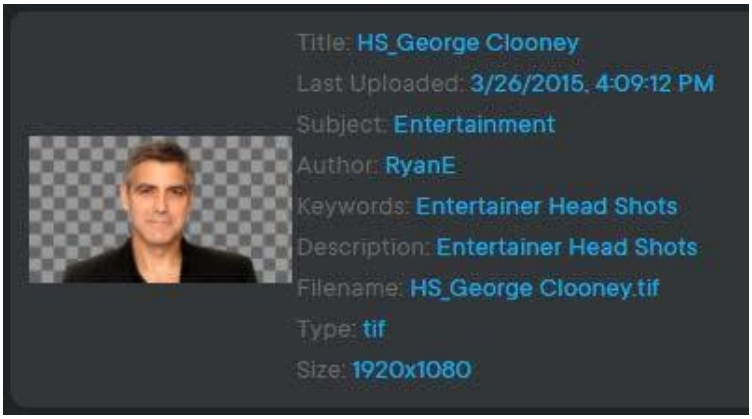
Use Saved Items to preserve a MOS Object

A **MOS Object** that is in **Saved Items** will not be deleted by the **MOS Object** cleanup script.

Search, Filter and Sort

Search, Filter and Sort Overview

When the Art Department uploads an asset into CAMIO, the artist enters metadata for the asset. Within each asset page, you can search, filter and sort based on the asset's metadata.



Search

You can search all browsing views for content, based on **Title**, **Subject**, **Author**, **Keywords**, and **Description** metadata associated with the content.

To search a browser:

- Enter (type) the search term(s), and then press **Enter**. The results display.

If you change the string in the **Search** field after conducting a search, and then press **Enter**, then the search executes again, based on the new search term(s).

To remove the search term(s):

- In the **Search** field, delete the search term(s).

Search Rules

AND searches are limited to one metadata field at a time. For instance, if searching for red & green, it would not return an item whose subject is 'red banner' and whose author is 'Doug Green'. The words red and green need to be in one metadata field.

- **Rule 1** - spaces between words act as an OR operator

- **Rule 2** - & between words acts as an AND operator (must be spaces on each side of the &)
- **Rule 3** - "double quotes" define a string that has to be specifically searched for
- **Rule 4** - with multiple operators, AND has precedence over OR, the resolved left to right.
- **Rule 5** - if you are searching for the & character it has to be put in double quotes "&"
- **Rule 6** - & character within a word is just treated as a character in the word, i.e. A&P , there must be a space on either side for it to be treated as an operator.

Examples :

red blue green - Returns any asset with either red, blue or green in any metadata field

red blue "green yellow" - Returns any asset with either red, blue or the string "green yellow" specifically

red & blue - Returns any asset with both red and blue in any order

Red & blue & green - Returns any asset with all three terms red and blue and green in any order

Red & blue green - Returns any asset with both red and blue or just green.

Red & blue green & yellow - Returns any asset with either (both red and blue) or (both green and yellow)

Include subfolders

Within Saved Items the default behavior is to search in the current folder. You can extend the search to subfolders by checking the **Include Subfolders** option.

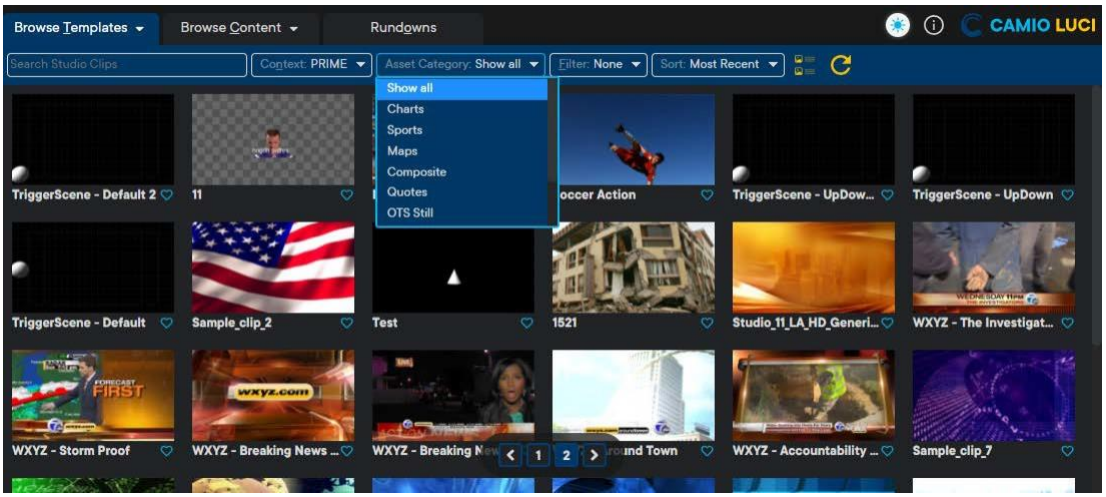
Contexts

Contexts can be thought of as projects, and are generally the shows or looks organized by the Art Department. The CAMIO Administrator may restrict the visibility of specific projects based on your user privileges.

Asset Categories

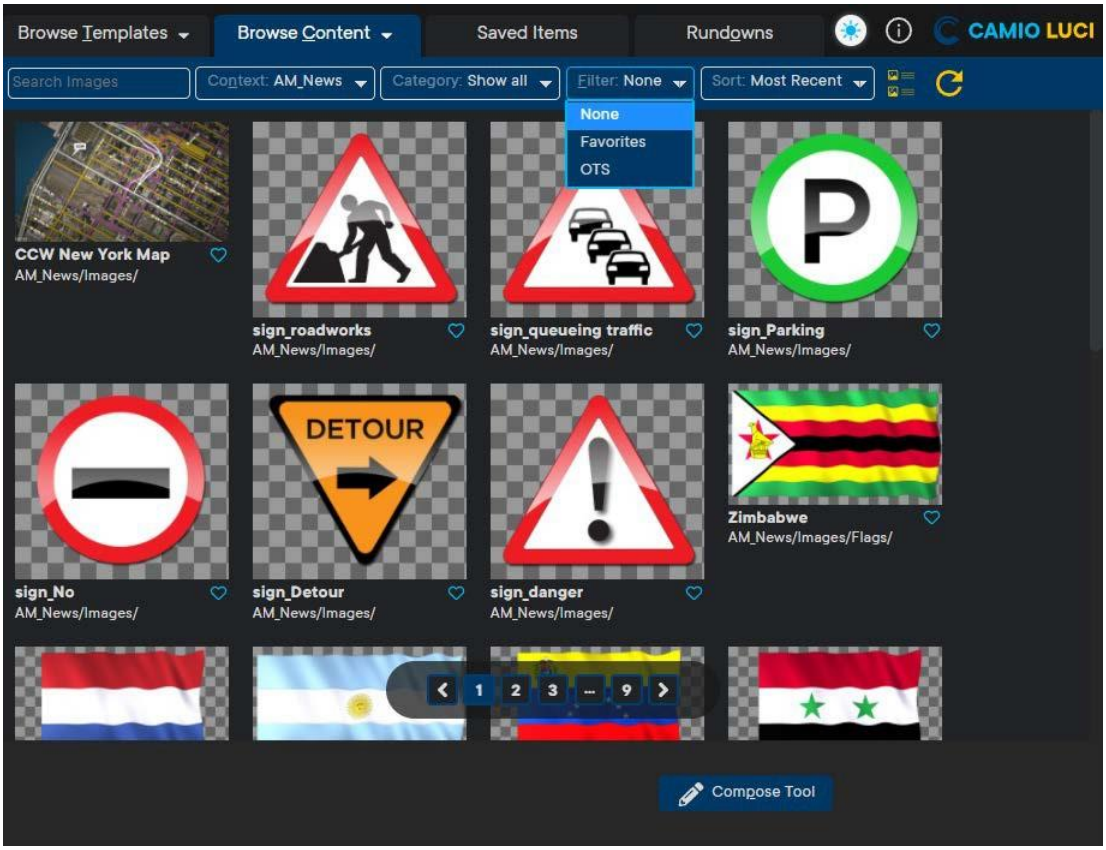
Your Art Department or admin can set up **Categories** for all possible template or replaceable asset types. **Category** is a form of metadata that has a limited set of values defined in **Asset Managers**. Common **Categories** may include, for example, **Elections** and **Weather** for templates, **Headshots** and **Logos** for images, or **Show Opens** for movies.

Selecting a **Category** filters the assets to those assigned to that category. In a template, replaceable images can be set to allow only specific **Categories**.



Filters

The predefined **Filters** include **None** and **Favorites**. In addition, you can create custom **Global Filters**. The following shows the filters, and the custom **Global Filter** "**OTS**." Note that only an admin can create a **Global Filter**.



If you need one or more additional specific **Global Filters**, then contact your CAMIO Admin. *See Request a Global Filter from Admin for additional information.*

You can set your own **Favorites**. To

specify a **Favorite**:

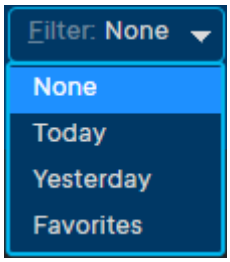
- Select the heart icon next to the filename.

The icon becomes solid-colored .

To remove **Favorite** status:

- Click the solid-colored heart icon . The heart icon displays as an outline .

For **Completed Graphics**, you can further and more precisely filter items by **Today** and **Yesterday**, to display only the graphics from which you need to select.



Global Filters

Global Filter Overview

A **Global Filter** enables you to search assets using precisely targeted search parameters, for example, all assets created by a specific author, containing specific keywords, and created

within the past month. Only a CAMIO Administrator can create a **Global Filter**. Unless you also have **Admin** privileges, you cannot create one.

Request a Global Filter from Admin

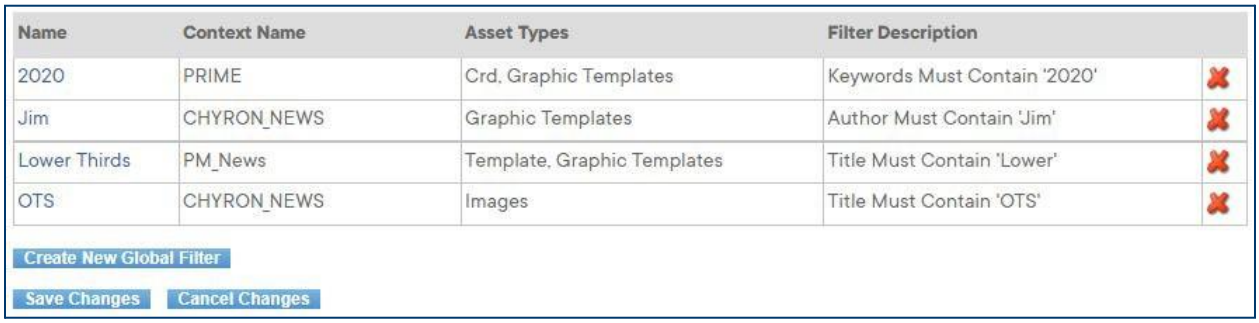
If you need a specific **Global Filter**, then you can request that your admin create one. This section is informational only, and describes the **Global Filter** parameters and how they work, which can make it easier for you to request precisely what you need.

The CAMIO Administrator creates **Custom Global Filters** in **Admin Tools**, and adds them to the list of **Filters** that are available to you in LUCI. **Filters** are specific to a **Context** and apply to one or more **Asset Types**. As such, when you request a new **Global Filter**, then make sure to describe the specific **Context** and **Asset Types** to which it should apply.

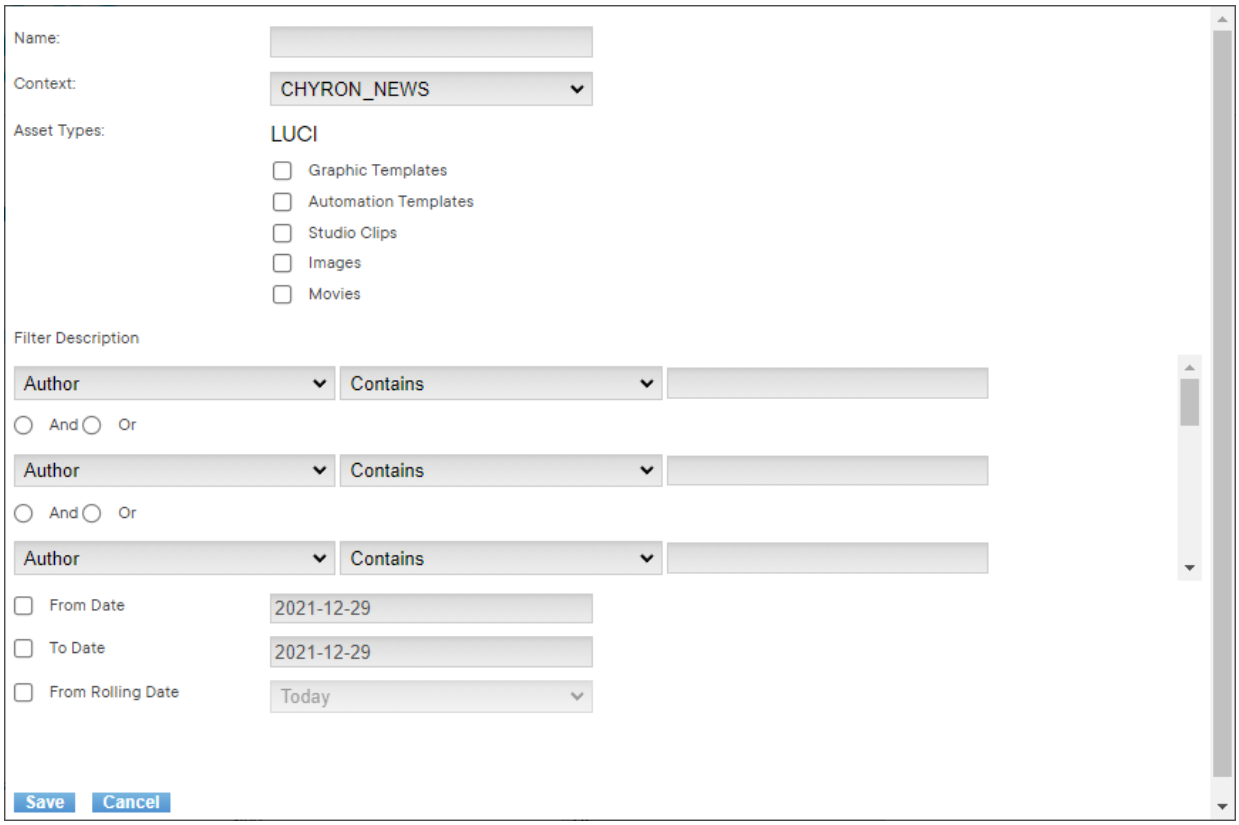
The **Global Filter** creation process is as follows:

1. In the **CAMIO Admin Tool** navigation hierarchy, go to the **Configuration** section, and then select **LUCI User Defaults Configuration**. **LUCI User Defaults Configuration** page displays.

2. Scroll to the bottom of the page. The list of **Global Filters** displays.



3. Click the **Create New Global Filter** button.



4. Set the following:
    - **Name:** Enter name of the new **Global Filter**.
    - **Context:** From the drop-down, select the name of the **Context** to which to apply the **filter**.
    - **Asset Types:** Select the **Asset Types** to which to apply the **filter**.
5. **Filter Description - String-based Constraints:** You can specify the following parameters for up to ten constraints, and use Boolean logic to combine them. Use the scroll bar to access the constraints that are not visible.
    - The selections in the left column correspond to the CAMIO asset metadata fields. Select the metadata type:
        - **Author**
        - **Description**
        - **Keywords**
        - **Subject**
        - **Title**
    - In the center column, specify **Contains** or **Doesn't Contain**.
    - In the right column, enter one or more strings, i.e., search terms.

      If you specify more than one constraint, then select either **And** or **Or** to specify how to combine them. For example, a set of **Filter Description** items can specify:

        - **Author** **Contains** **Jim**
        - **Or**
        - **Author** **Contains** **Ellen**
        - **And**
        - **Subject** **Contains** **Entertainment**

      When you apply the filter, then the results are any asset that has **Jim** or **Ellen** as an **Author**, and for which the **Subject** contains the term **Entertainment**.

6. **Filter Description - Date-Based Constraints:** You can select date parameters as follows:
    - **From Date:** Specifies a start date of the **Global Filter** range.
    - **To Date:** Specifies an end date of the **Global Filter** range.
    - **From Rolling Date:** Specifies a date or date range, based on the current date:
        - **Today**
        - **Last 2 Days**
        - **Last 4 Days**
        - **Last Week**
        - **Last Month**
        - **Last 6 Months**
        - **Last Year**
7. Select **Save**. The new **Global Filter** appears in the list.

Edit an Existing Global Filter

Only an admin can edit an existing **Global Filter**. To

edit an existing **Global Filter**:

1. Click the **Global Filter Name**.
2. **Edit**, and then select **Save**.

Sort

You can sort assets based on the following:

- **A-Z / Z-A:** Sorts the asset titles from A-Z or Z-A.
- **Most Recent / Least Recent:** Sorts the assets by the most recently/least recently uploaded by the Art Department to LUCI. This is a good way to view the most up-to-date content in the system.

Edit Templates and Render Graphics

Edit Panel

In LUCI's **Edit Panel**, you can compose a graphic and use it for various purposes:

- Insert into a **Running Order** script.
- Use with CAMIO NLE Plugin (formerly known as MediaMaker plugin).
- Render the template to an image or movie file.

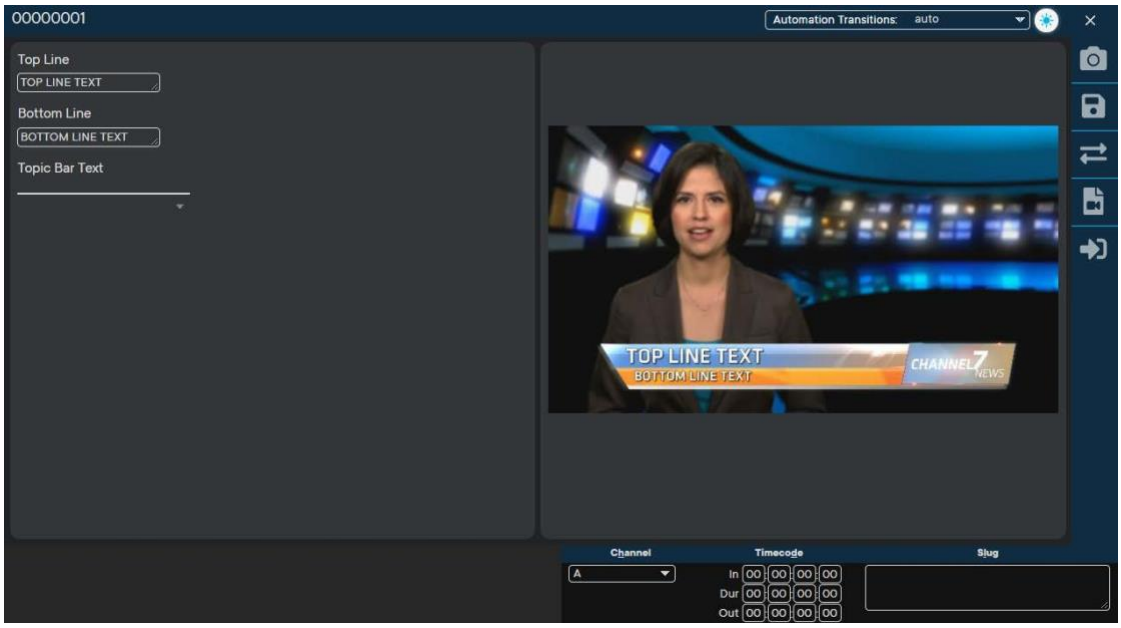
NOTE: The terms "Running Order" and "Rundown Order" are used interchangeably in the LUCI application and in this document.

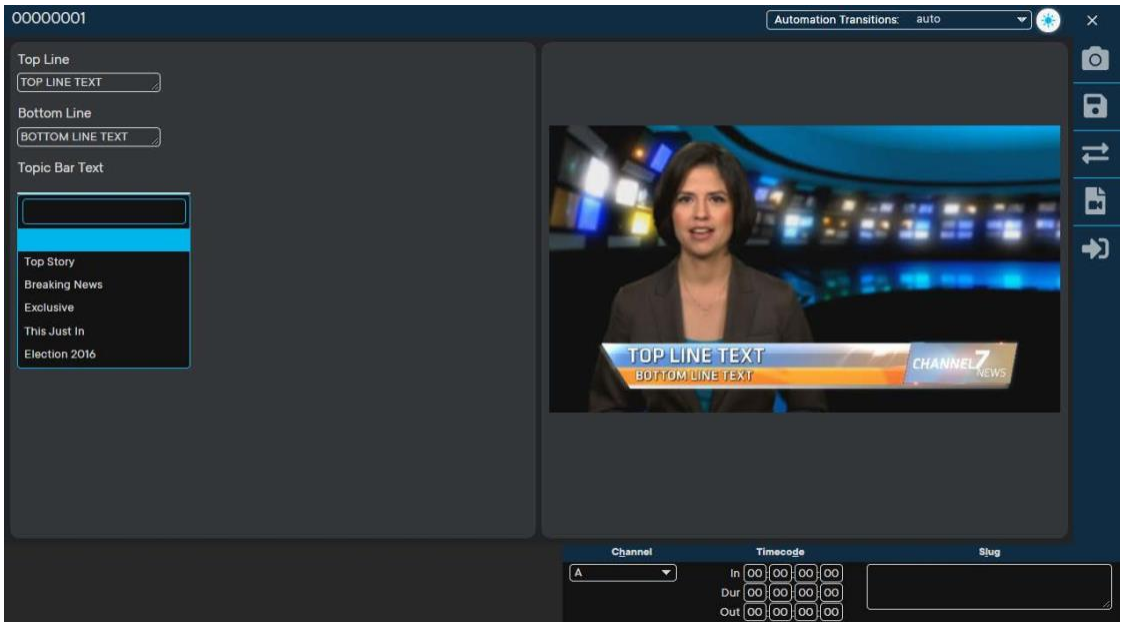
Many templates contain fields in which you can enter text (e.g., reporter name, location), and/or areas in which you can replace images and/or movies (e.g. for an OTS).

To access the **Edit Panel** for a **Graphic Template** or **Completed Graphic**:

- Double-click the **Graphic Template** or **Completed Graphic**. The graphic's **Edit Panel** displays. All available replaceable fields are displayed as text fields or image and movie preview image thumbnails.

The following example shows a template that contains two replaceable text fields, and a replaceable text field combobox from which you can either select or enter text.





Some templates may not have any replaceable fields when loaded into the **Edit Panel**, but you may still modify the playout **Channel** and **Timecode** data in the **Edit Panel**.

When you open a **Completed Graphic**, a copy of the existing graphic opens for editing, and **does not overwrite the original**.

In the **Edit Panel**, you can edit the following:

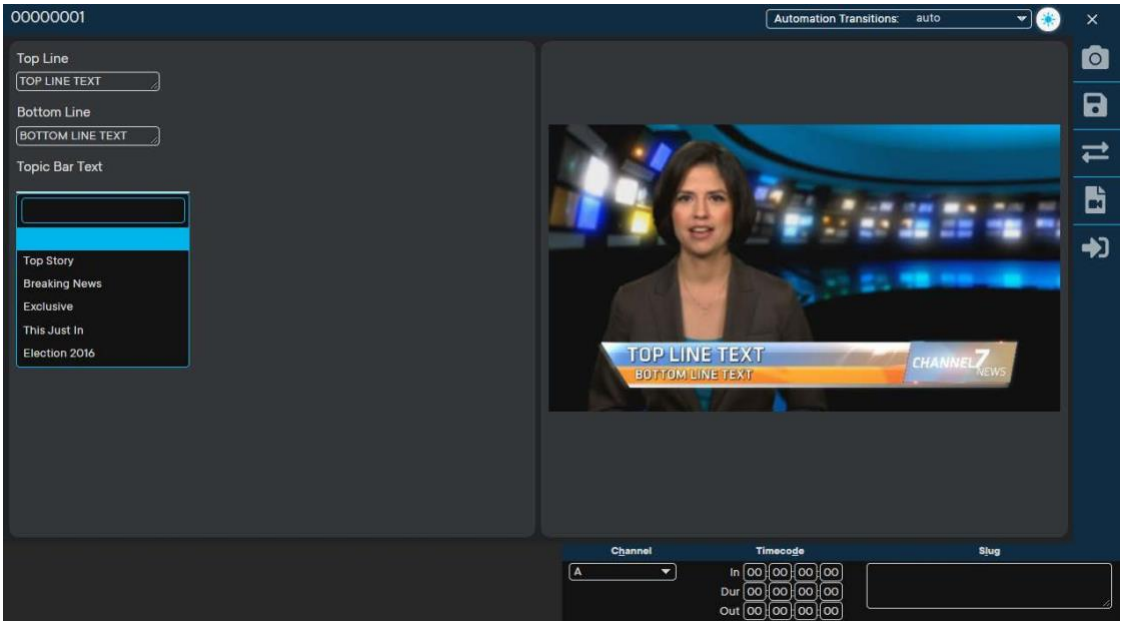
- **Replaceable Text Field Area:** If the template contains replaceable text fields, then they are displayed.
- **Replaceable Image/Movie Preview Image Thumbnails:** If the template contains replaceable image and/or movie fields, then they are displayed.
- **Channel/Layer:** On the playout system, the specific **Channel** and **Layer** within the **Channel** on which the graphic plays.
- **Timecode In/Duration/Out:** The **In Point**, **Out Point** and **Duration** of the graphic, in format **HH:MM:SS:FF**, where **HH** is hours, **MM** is minutes, **SS** is seconds, and **FF** is frames.
- **Slug:** A description added to a graphic that can display in the CAMIO Rundown Endpoint and Viewer (formerly iSQ) playout list or inside the rundown in the script.

NOTE: Your user interface may be missing elements listed in the following items if they have been hidden by your Admin from your user interface, e.g., Channel, Timecode, etc. Please check with your CAMIO admin if you have any questions.

Text Replaceables

Text Replaceables Overview

Text that can be updated has a dedicated text field for entry of content. The following template contains two replaceable text fields, and a replaceable text field combo box from which you can either select or enter text.



To populate text fields:

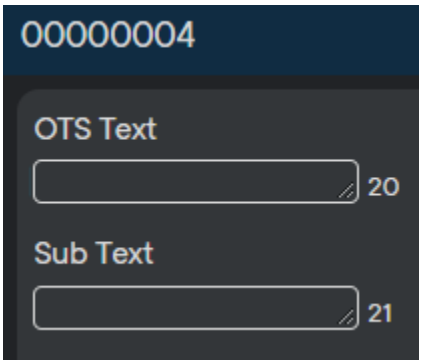
- Type the desired content into the field. Press **Tab** to move the cursor focus to the next input field. If the field includes a drop-down, then you can select from the drop-down.

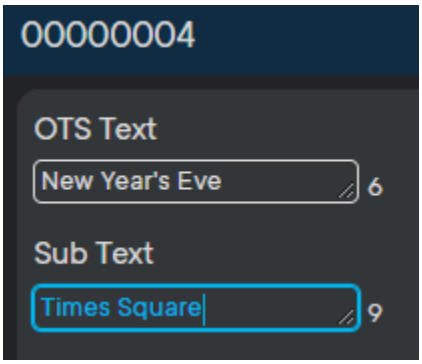
Spell Check

Spell check capabilities are set individually for each workstation, via the Chromium window in which LUCI is running. Please contact your CAMIO Administrator or Chyron Support to configure spell check settings on your device.

Character Count

When a text field has a limit on the number of characters that can be typed into it, that number displays at the side of the field and counts down to 0 as characters are typed.





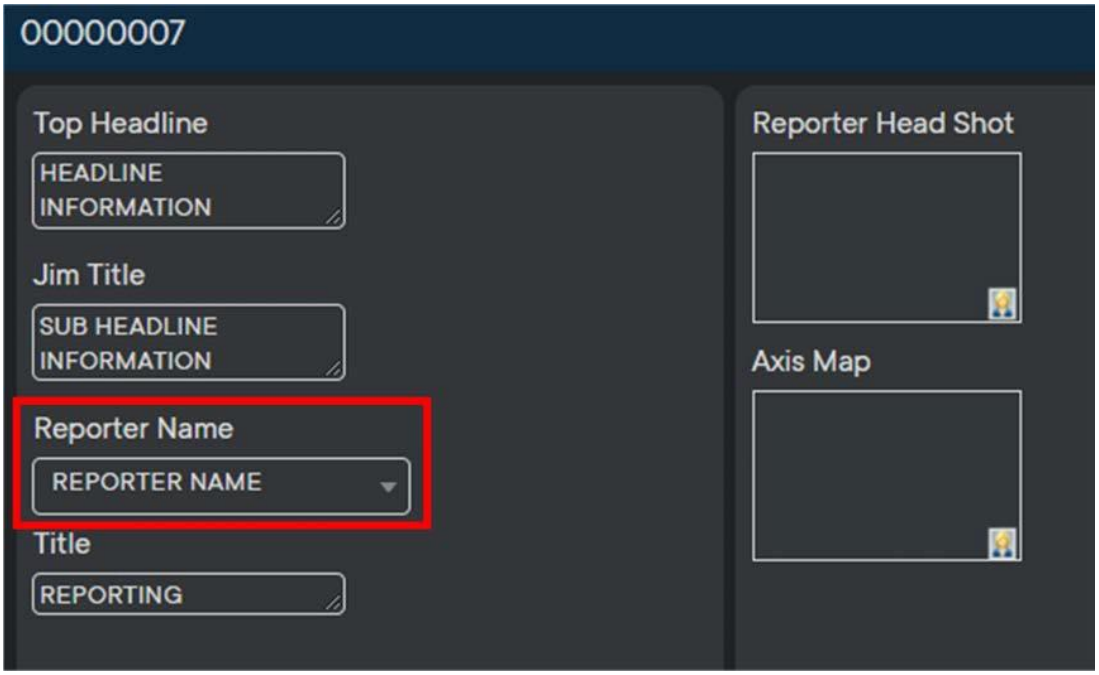
LUCI AutoFill

LUCI's **AutoFill** feature provides the ability to update templates with predefined text and images, instead of requiring you to type and drag and drop the required content. You can simply select from a list of pre-populated options in the **AutoFill** input field, and then the text field automatically populates.

LUCI Autofill can also fill in additional linked fields when you select a value. For example, selecting a name in one text field can fulfill its associated title and headshot in another text and image field, respectively. You can also overwrite the fields, if desired.

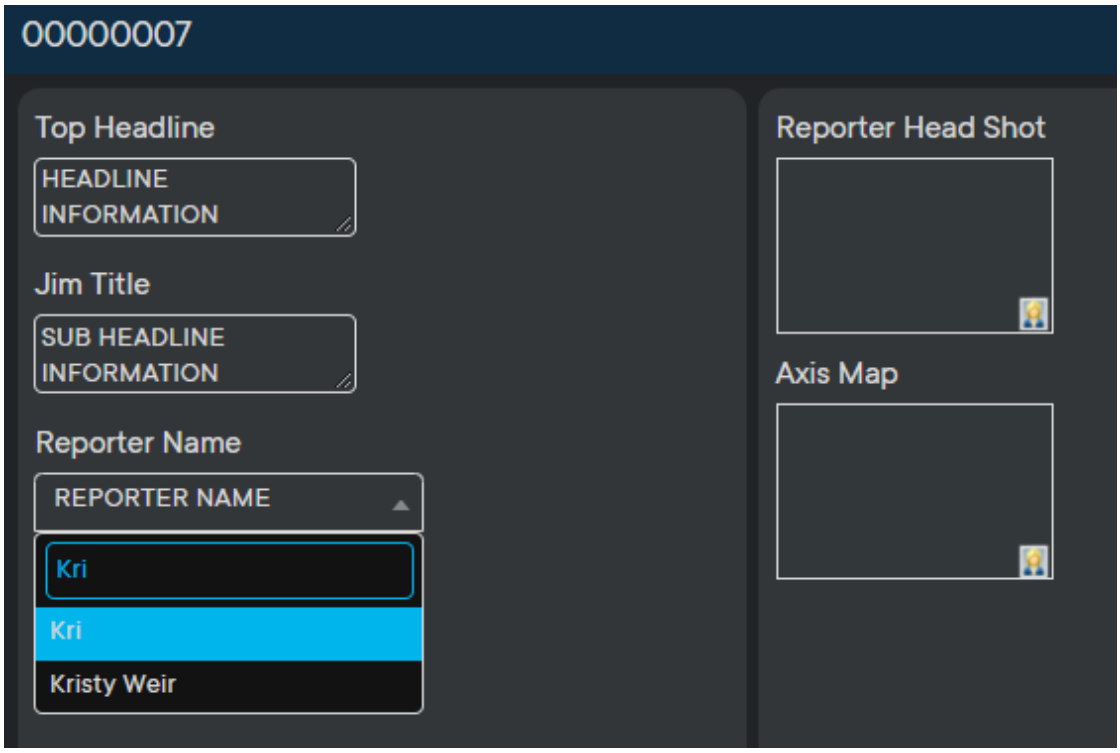
An **AutoFill** field is specified by a drop-down arrow at the right of the field . When selected, the field displays a combo box, from which you can select an item, or into which you can type text.

The following shows that the **Reporter Name** field is an **AutoFill** field.

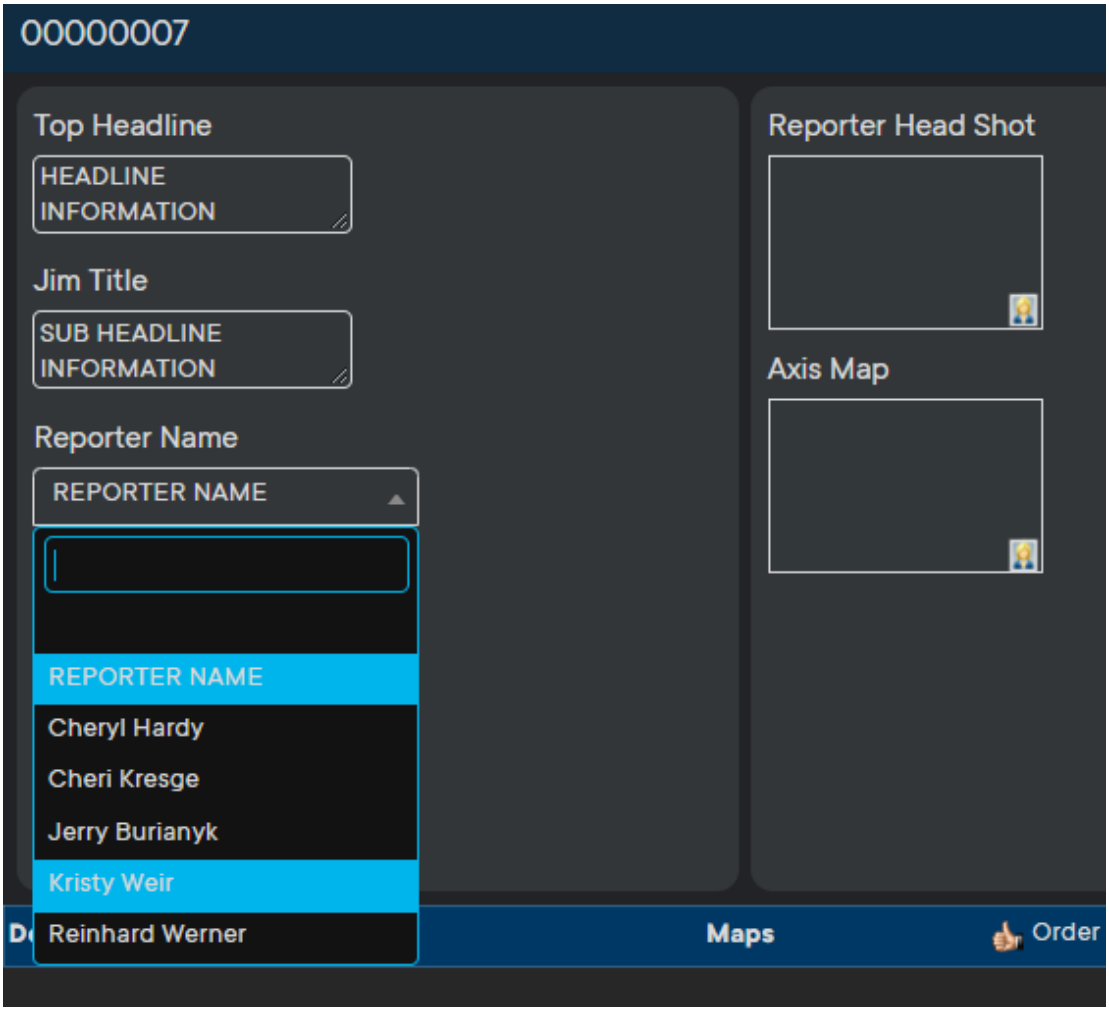


To populate an **AutoFill** template:

1. In the **AutoFill** field, which in this example is the **Reporter Name** field, do one of the following:
    - In the **Reporter Name** combo box, start typing a name that you know is in the list. If the name is in the list, then it will autocomplete as you type, filtering down the available options to narrow down the list. You can select from the filtered list at any time.

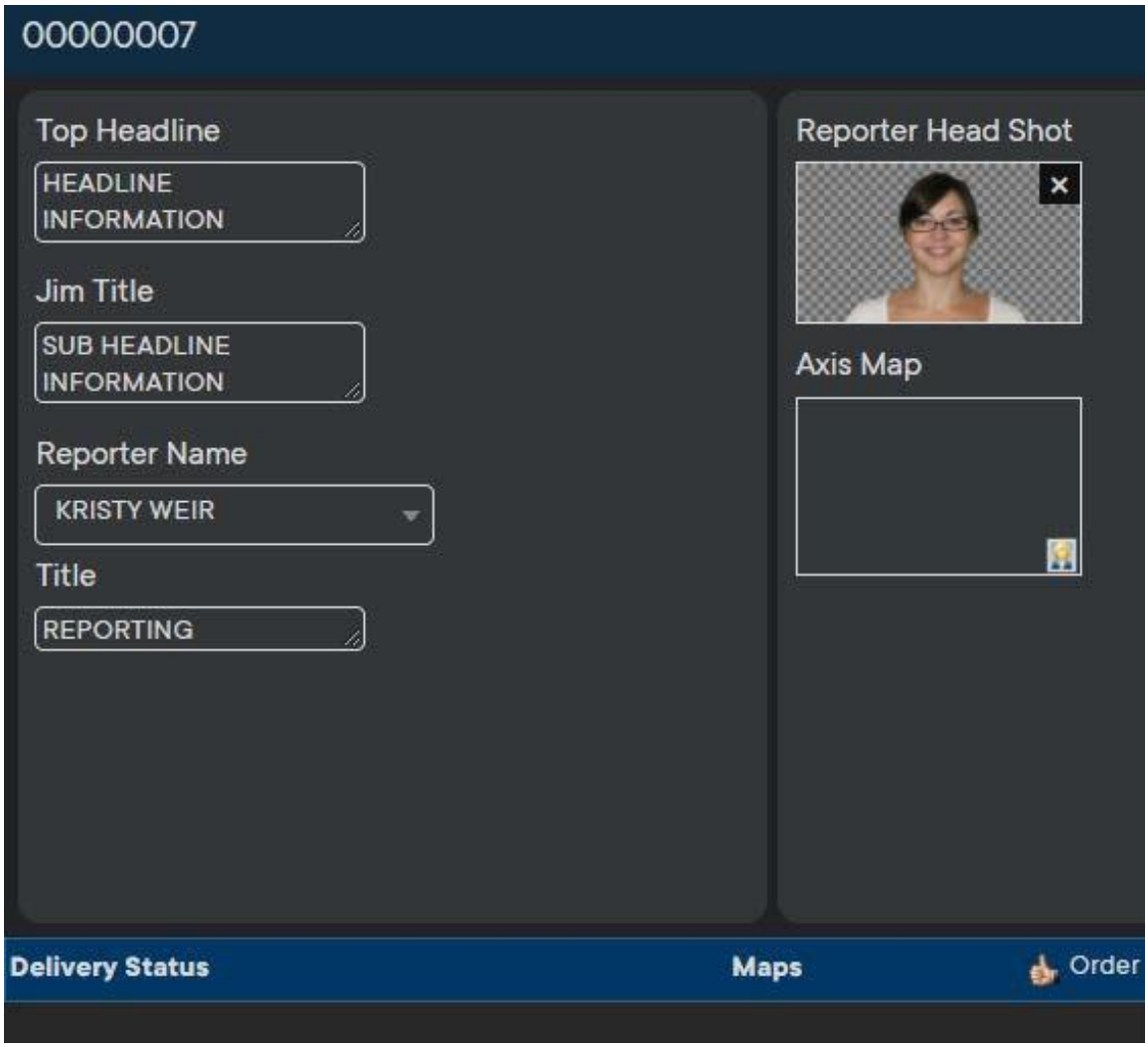


- Select a name from the drop-down.



- Overwrite the text field with free text.

Once the combo box data is populated, then any other linked text and image fields also populate.



Should an associated image not be found, then the image does not populate the image field. Please contact your Art Department if an expected image does not auto-populate.

2. Populate the remaining text/image/mvie field(s).

Image and Movie Replaceables

Image and Movie Replaceables Overview

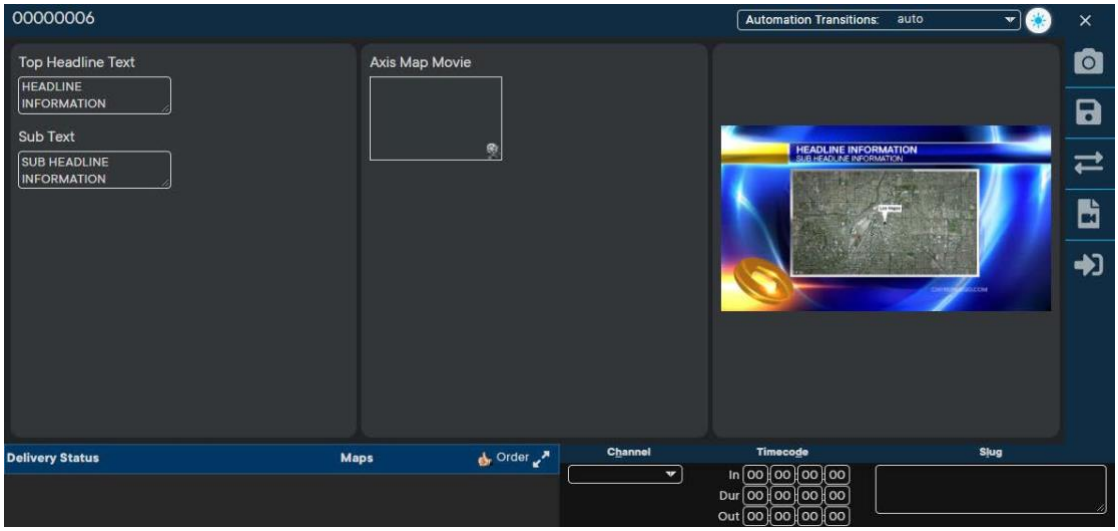
In addition to replaceable text fields, a template can have replaceable image and/or movie fields, providing great flexibility when you create your graphics.

Asset Browser Operations

The **LUCI Asset Browser** provides access to the assets from which you can create your graphics. To display the **Asset Browser**:

1. In the **Browse Template** tab, double-click the template that you would like to use to create a graphic. In this example, template **00000008** is selected.

The template **Edit Mode** displays.



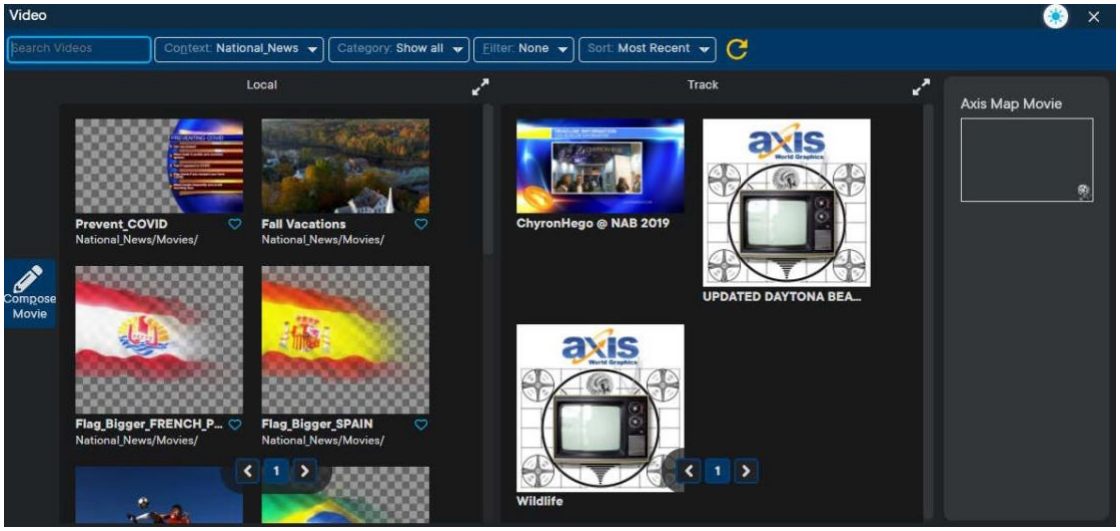
2. In this example there are no **Image** fields and one **Movie** field. Select the movie thumbnail field (box). The process is the same for an **Image** field. In this example, **Axis Map Movie** is selected.

The available movies display. In this example, the **Movie** field is linked to **Axis Track**. As such, you can select from movies available locally from **CAMIO** (on the left), and from **Axis Track** (on the right) assets.

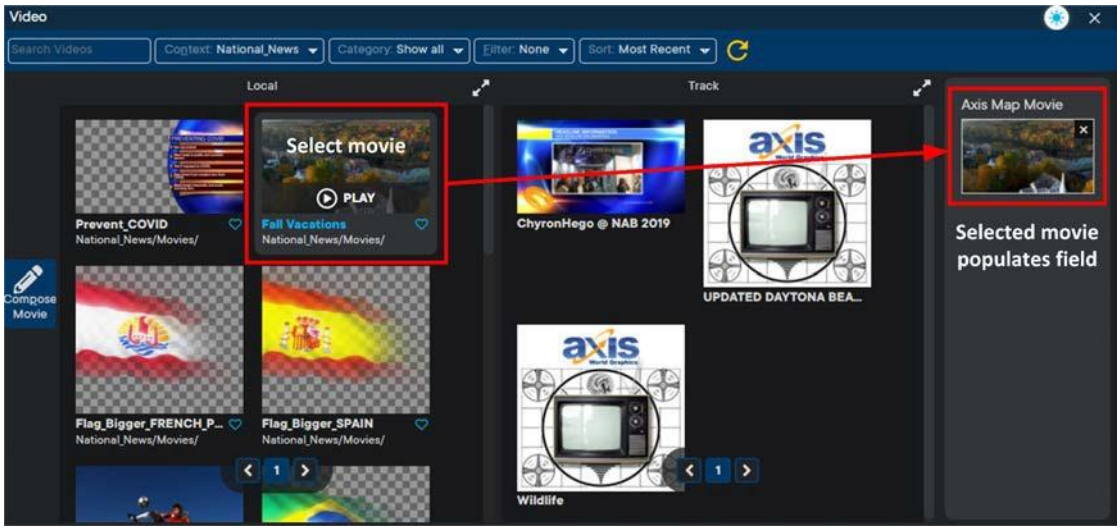
The **Asset Browser** displays only movies if you click a **Movie** field, and only images if you click an **Image** field.

If desired, you can search, select a **Context** and **Category**, filter and sort the images. Note that these operations work as follows, depending on whether you are searching **Local (CAMIO)** or **Axis Track**:

Type of Search/Sort/Filter	Local (CAMIO)	Axis Track
Search Field	Yes	Yes
Context	Yes	No
Category	Yes	No
Filter Sort	Yes	None and Favorites Only Yes
	Yes	

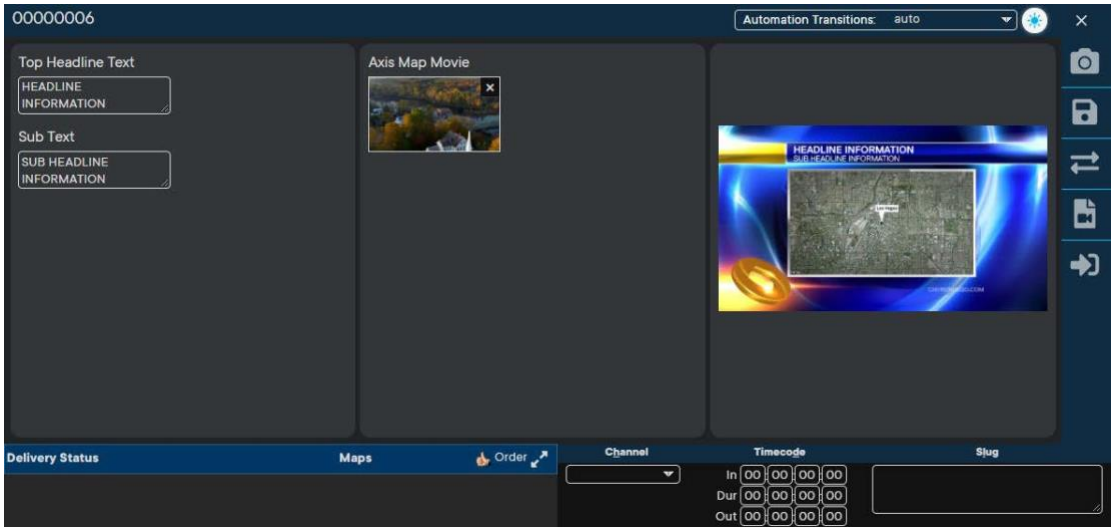


3. Select (click) the movie to populate the **Movie** field. The movie thumbnail appears in the field at the right asset display.



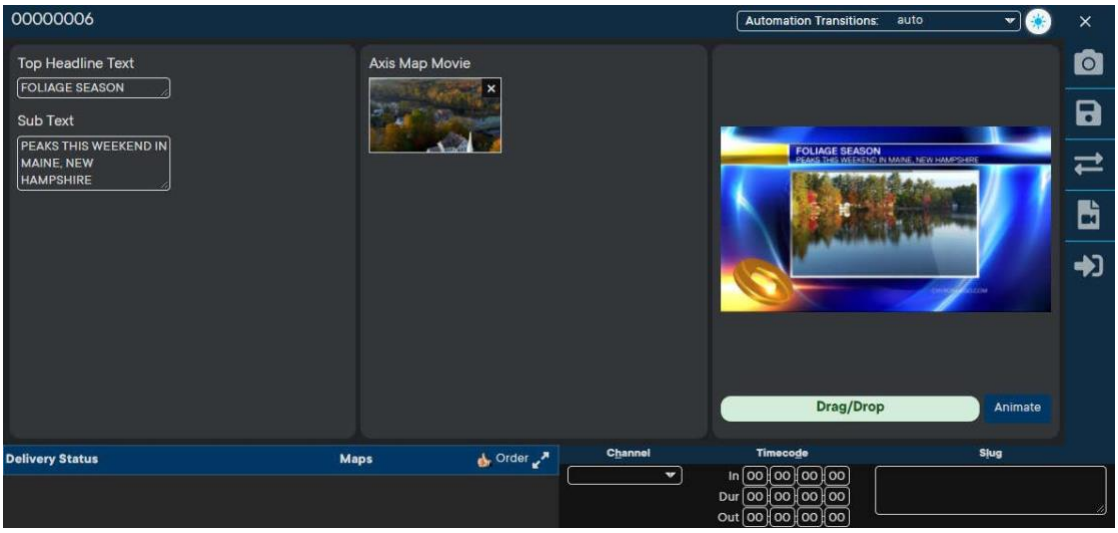
To clear a **Movie** or **Image** field while in **Asset Browser**, select the **Close** icon ✕ in the upper right corner of the field.

4. Double-click the movie thumbnail in the **Asset Browser**. The **Asset Browser** closes, and the template **Edit Mode** displays the **Movie** field populated with the selected movie.



To clear a **Movie** or **Image** field while in **Edit Mode**, select the **Close** icon in the upper right corner of the field.

5. Populate any other **Text**, **Image**, or **Movie** fields, and then from the sidebar, **Generate Preview**. *See Templates with Multiple Image and/or Movie Fields for information about working with multiple images and /or movies.*



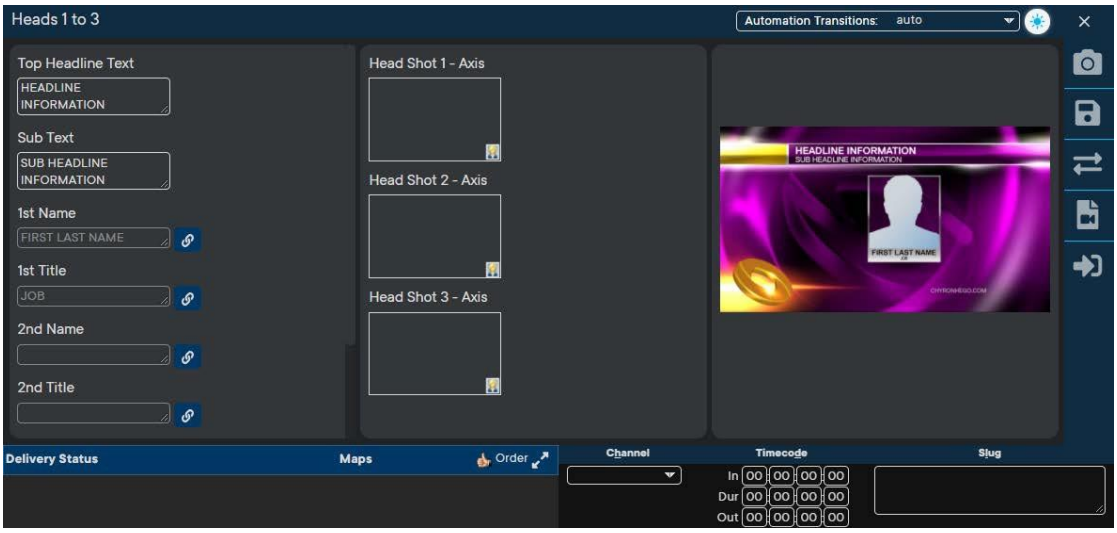
6. If desired, select the **Animate** button to view the final animation.

7. If desired, double-click the **Preview** to view an enlarged version of the **Preview**.

Templates with Multiple Image and/or Movie Fields

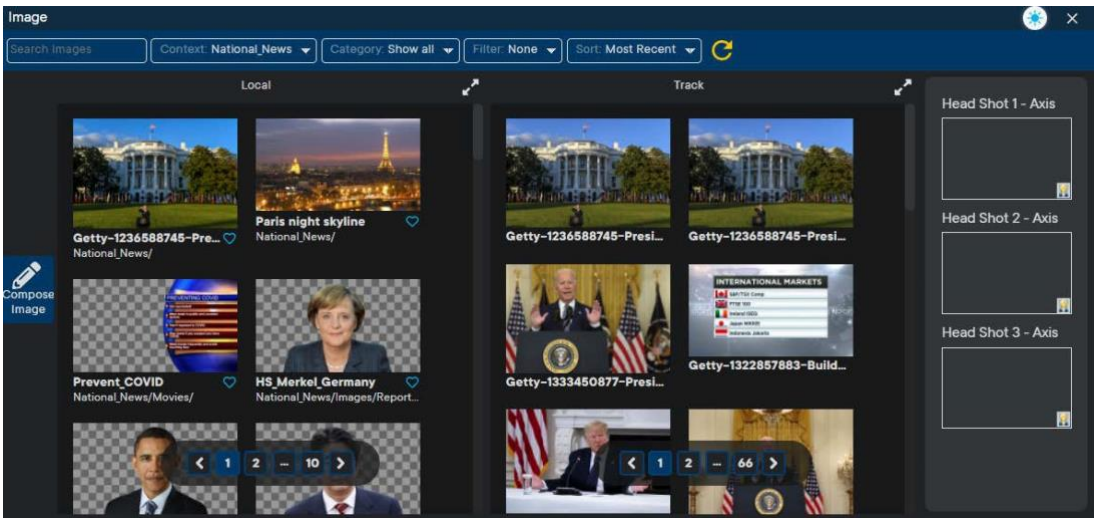
If there are multiple **Image** and/or **Movie** fields in a template, then you can select images or movies for all of the fields without leaving **Asset Browser** until you have completed selection.

For example, the following template contains three image fields:

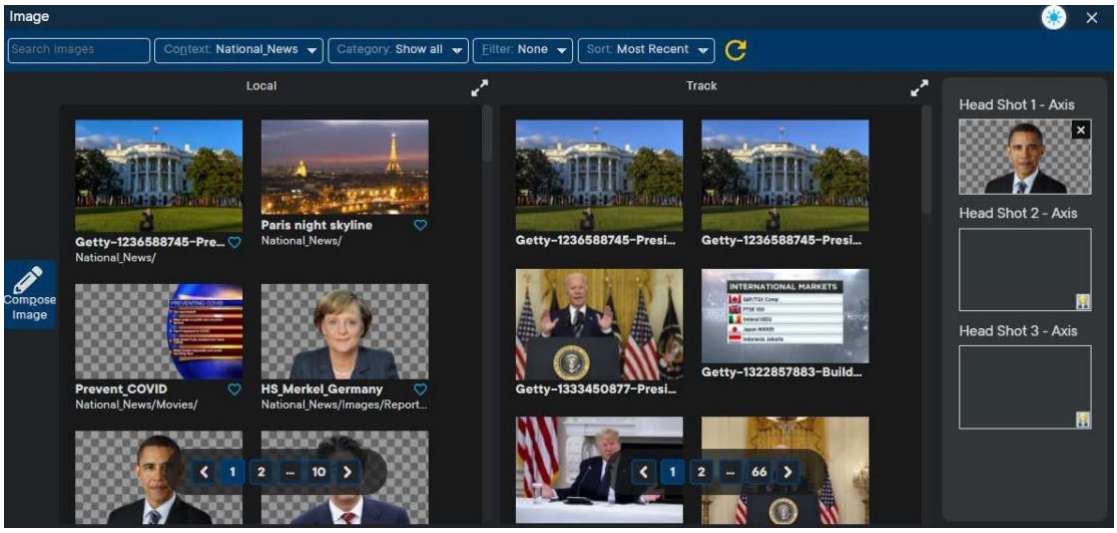


To populate the images:

1. Select an **Image** field to access the **Asset Browser**. For this example, **Head Shot 1 - Axis** is selected.

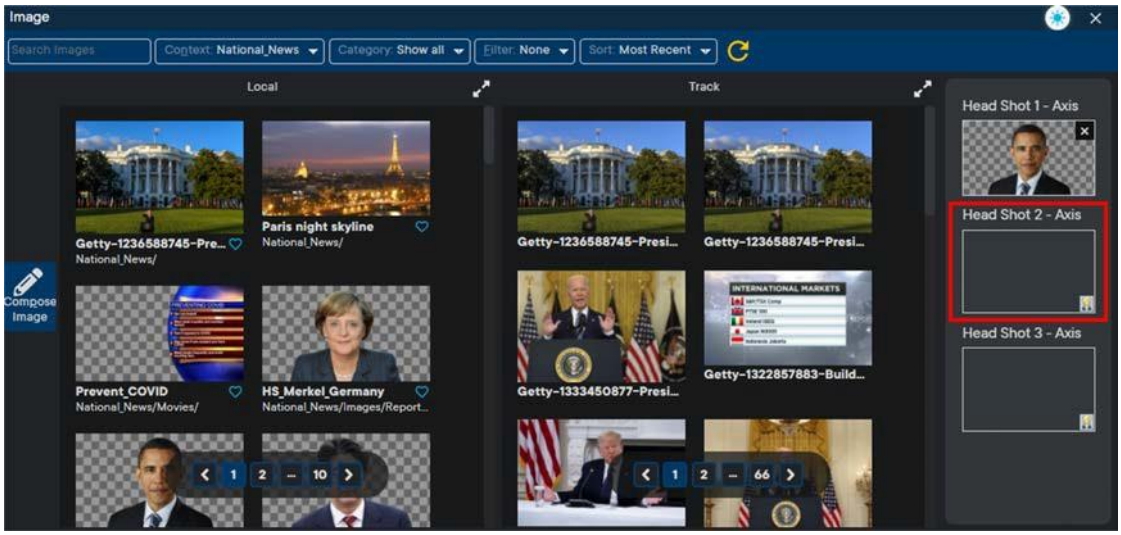


2. Select an image. The **Head Shot 1** field populates.



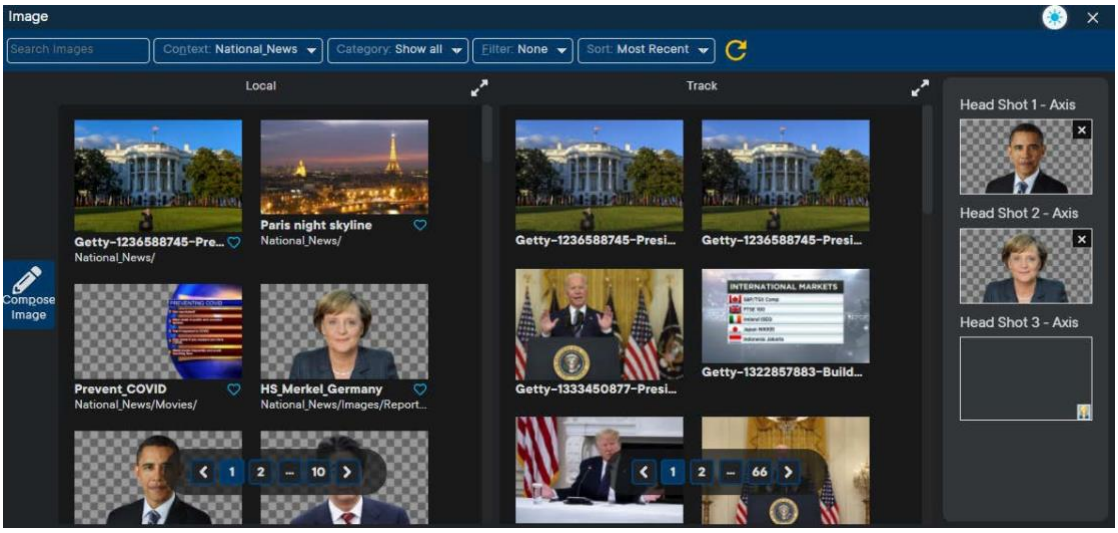
To change the image, select a different image.

3. Once the first image is set, then select the **Head Shot 2** field.



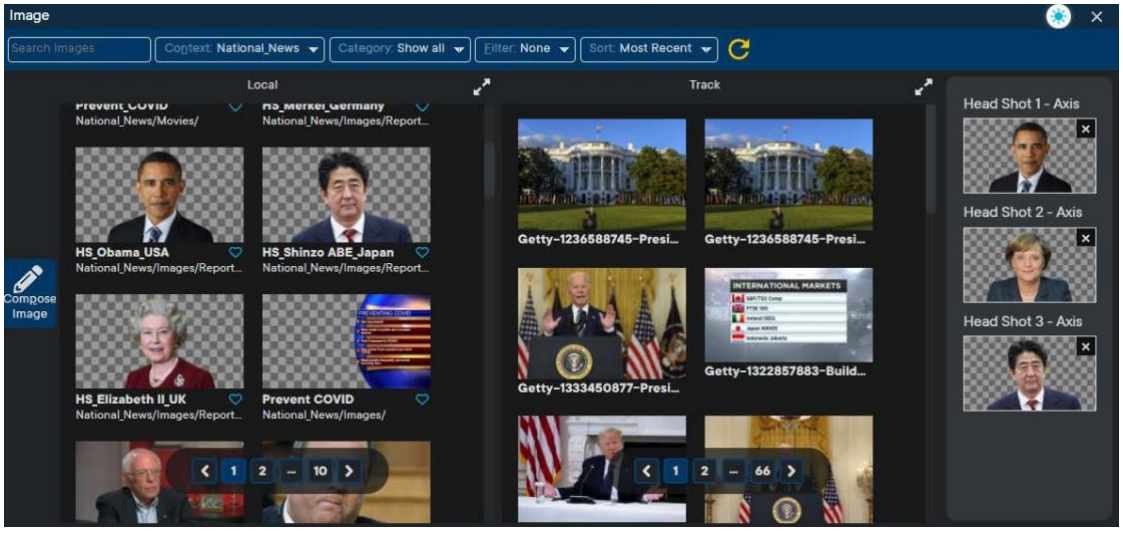
NOTE: In this example, all of the image fields have access to the same set of images. In other templates, each field may have access to a different set of images or movies. When you select an image or movie field, then the set of assets available to that field display.

4. Select an image to populate **Head Shot 2**.



5. Once the second image is set, then select the **Head Shot 3** field.

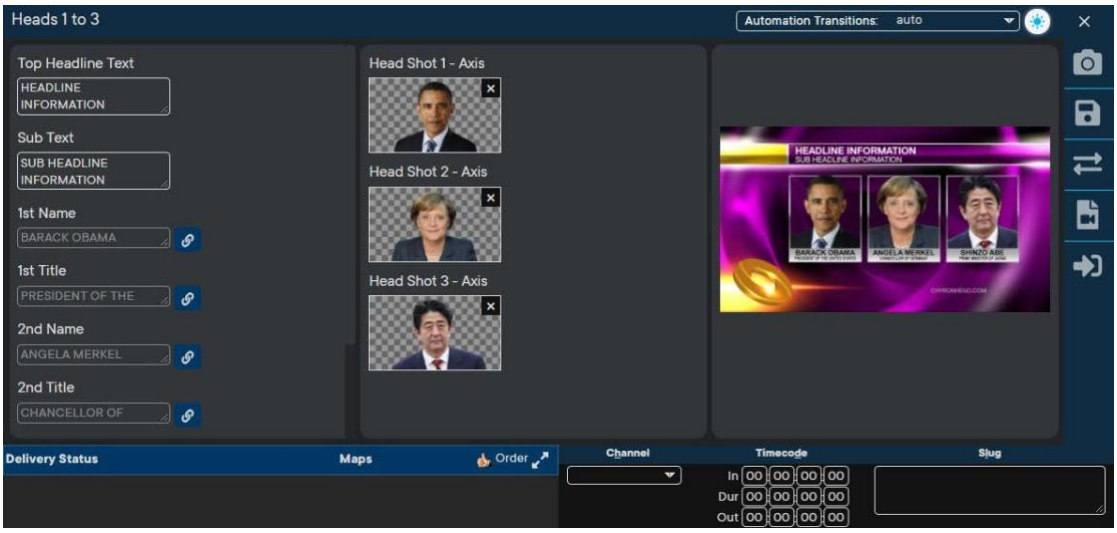
6. Select an image to populate **Head Shot 3**.



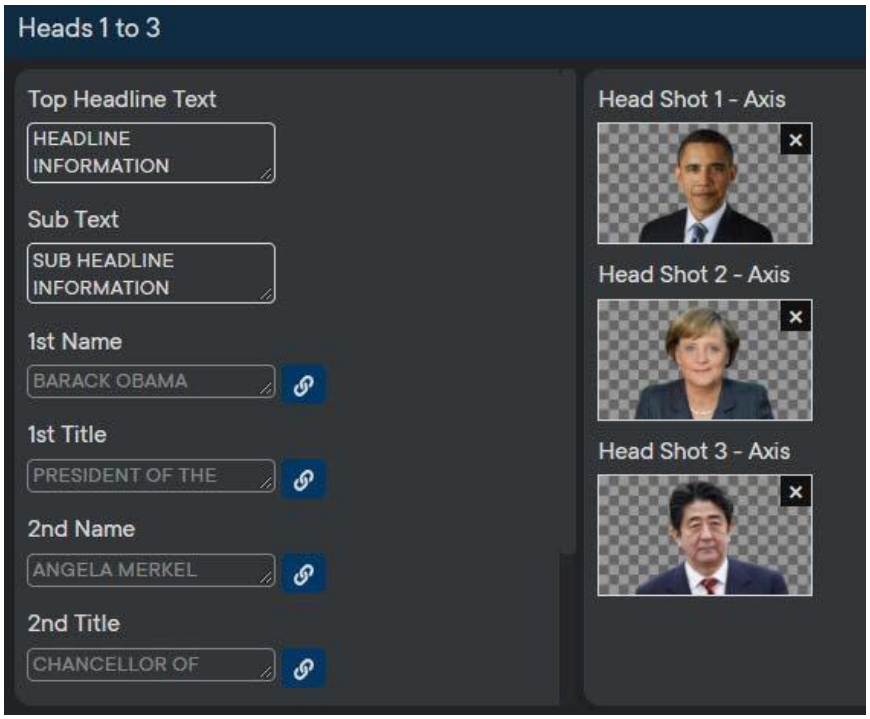
7. Once the third image is set, then do one of the following:

    - Double-click the image thumbnail that you just selected.
    - Select the Close icon.

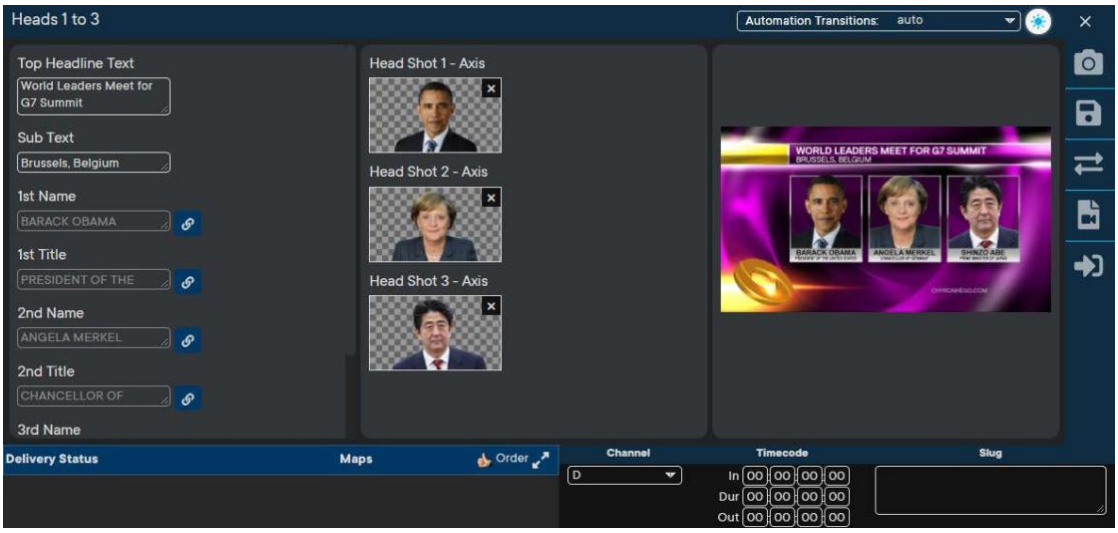
LUCI returns to **Edit Mode**. The template displays all three images populated.



Note that this specific template has **XMP**-linked text fields, as indicated by the **Link Enabled** icon to the right of the **XMP**-linked fields. As such, if the images contain the **XMP** data to populate these fields, then the fields automatically populate, as shown in this example. *See Images with XMP Data - Automatic Text/Image/Movie Replacement for information on working with XMP assets.*



8. Populate the unlinked fields, and then from the sidebar, select **Generate Preview**.



9. If desired, select the **Animate** button to view the final animation.

10. If desired, double-click the **Preview** to view an enlarged version of the **Preview**.

Clear an Image or Movie from a Field

To clear an image or movie from a field in **Asset Manager** or template **Edit Mode**::

- Click the **Close** icon , located at the top right of the **Image** or **Movie** field.

Close the Asset Browser and Return to Edit Mode

To close the **Asset Browser** do one of the following:

- Double-click an asset.
- Click the **Close** icon in the upper right corner of the display.

Image and Movie Category Filtering

The Art Department can use **Asset Manager** to assign a preferred **Asset Category** for replaceable image and movie fields in templates. This assignment displays as follows in **Asset Manager** > **Replaceables Tab Picture (Image)** or **Movie Input Properties** can be **Restricted** or **Unrestricted**, and is specific to each individual selected template.

Restrict works as follows:

- If it is preferred that the producer can add assets ONLY from the selected **Asset Category**, then **Restrict** should be enabled (checked). In this case, LUCI displays only assets from this **Category**, and it is not possible to select other **Categories**.
- If the **Restrict** checkbox is not enabled (checked), then LUCI defaults to the selected **Category**, but the producer can select a different **Category**.

For example, if a template image field is restricted to using only images that are in the **Headshots Category**, then the following would be available to the template within the specified **Context**.

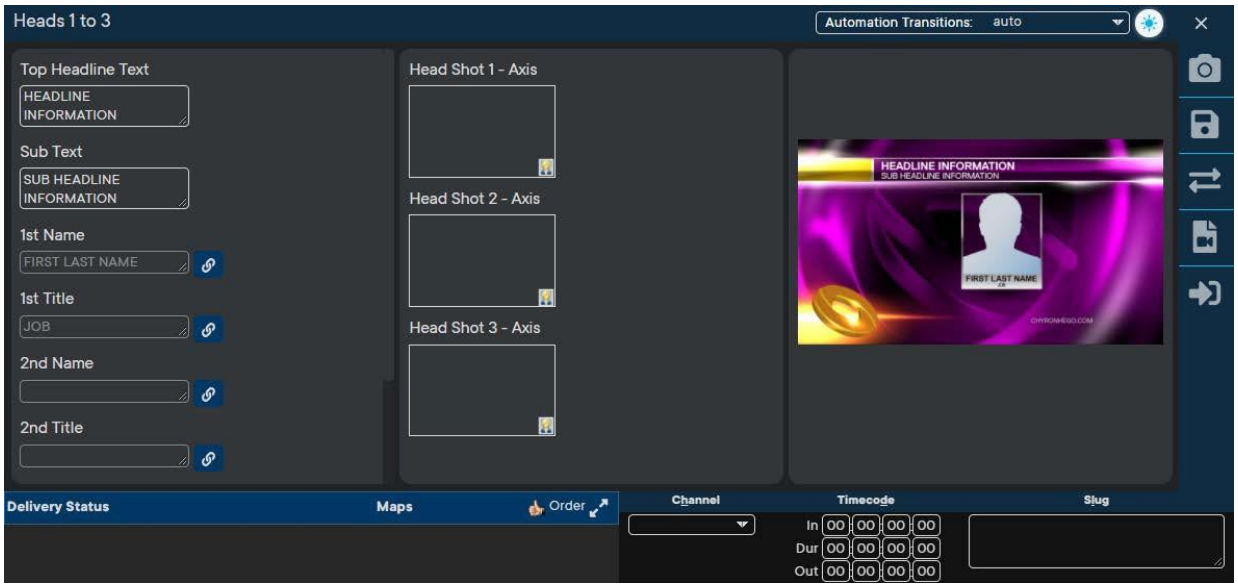
Images with XMP Data - Automatic Text/Image/Movie Replacement

The LUCI XMP Workflow works together with the Lyric renderer to extract XMP Metadata from a replaceable image, and then to update other replaceable fields based on that metadata.

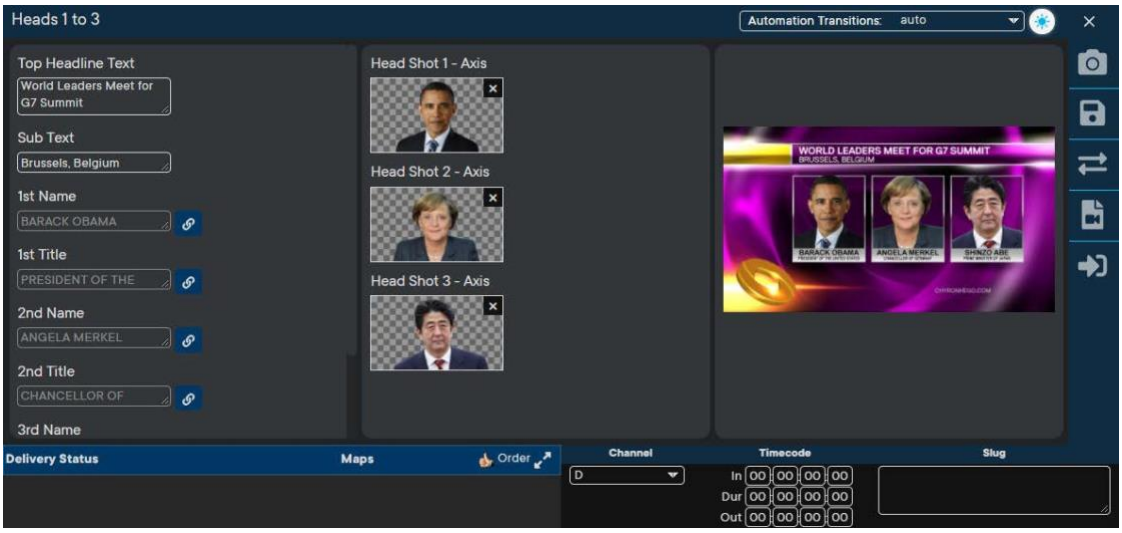
Similar to **LUCI AutoFill**, in which, for example, selection of a name from a drop-down can automatically populate another text field and an image field, the selection of an image can automatically populate text and other fields.

Similar to **LUCI AutoFill**, in which, for example, selection of a name from a drop-down can automatically populate another text field and an image field, the selection of an image can automatically populate text and other fields.

The following template shows three image fields. The **Name** and **Title** text fields display **Link Enabled** icons to their right. The **Link Enabled** icon indicates that if a selected image contains **XMP Name** and **Title** data, then the **Name** and **Title** fields automatically populate.



In the following example, selecting the images of Barack Obama, Angela Merkel, and Shinzo Abe automatically populates the **Name** and **Title** fields of each. The **Top Headlines Text** and **Sub Text** fields are not linked, and therefore you must enter text in those fields.



The result shows the auto-populated **Names** and **Titles**, plus the manually entered **Top Headlines Text** and **Sub Text**.

Note the following:

- If the image does not contain **XMP** data, then the linked fields do not populate.
- You can unlink a field so that you can manually enter information or select an image or movie. To do so:
    - Click the **Link Enabled** icon . The icon changes to the **Link Disabled** icon .

  To re-enable the link, select the **Link Disabled** icon .

Compose Image and Movies

LUCI provides the ability to compose images and movies using **Axis News**, **Maps**, **Quotes**, or **Charts** if your organization subscribes to the Axis web services. There is also an image **Compose Tool** that does not require Axis,

1. In the **Asset Browser**, select a template.
2. Click **Compose Image**. One of two things occurs:
    - If the Art Department, when configuring the template, assigned the currently selected field to **Axis News**, **Maps**, **Quotes**, or **Charts**, then a browser window opens to the specified Axis service, that is directly to the mapped Axis template, allowing you to fulfill the graphic in Axis.
    - If the currently selected field is not mapped to an Axis graphic, then the image **Compose Tool** opens.

Axis News, Maps, Quotes and Charts

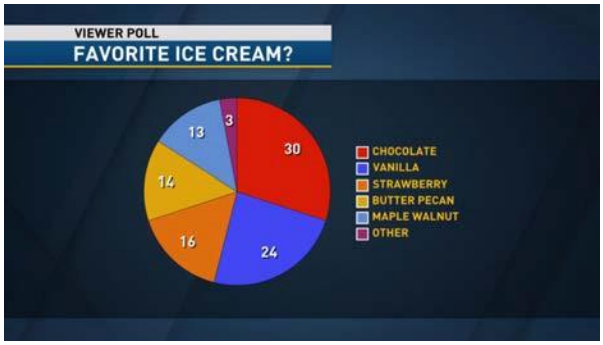
Axis Overview

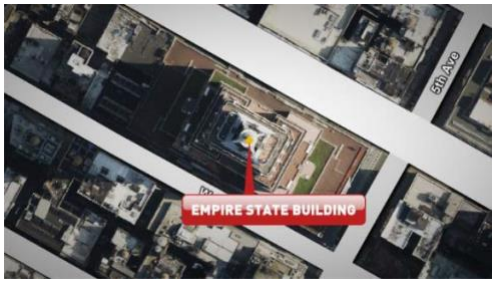
If your organization is subscribed to the Chyron Axis subscription service, then fields in LUCI templates can be mapped to specific templates in **Axis News, Maps**, **Quotes**, and **Charts** services.

To subscribe to any Axis service, please contact your Chyron sales representative.

If your organization has already subscribed to Axis, then contact your CAMIO Administrator or Art Department to connect these services to your show's templates.

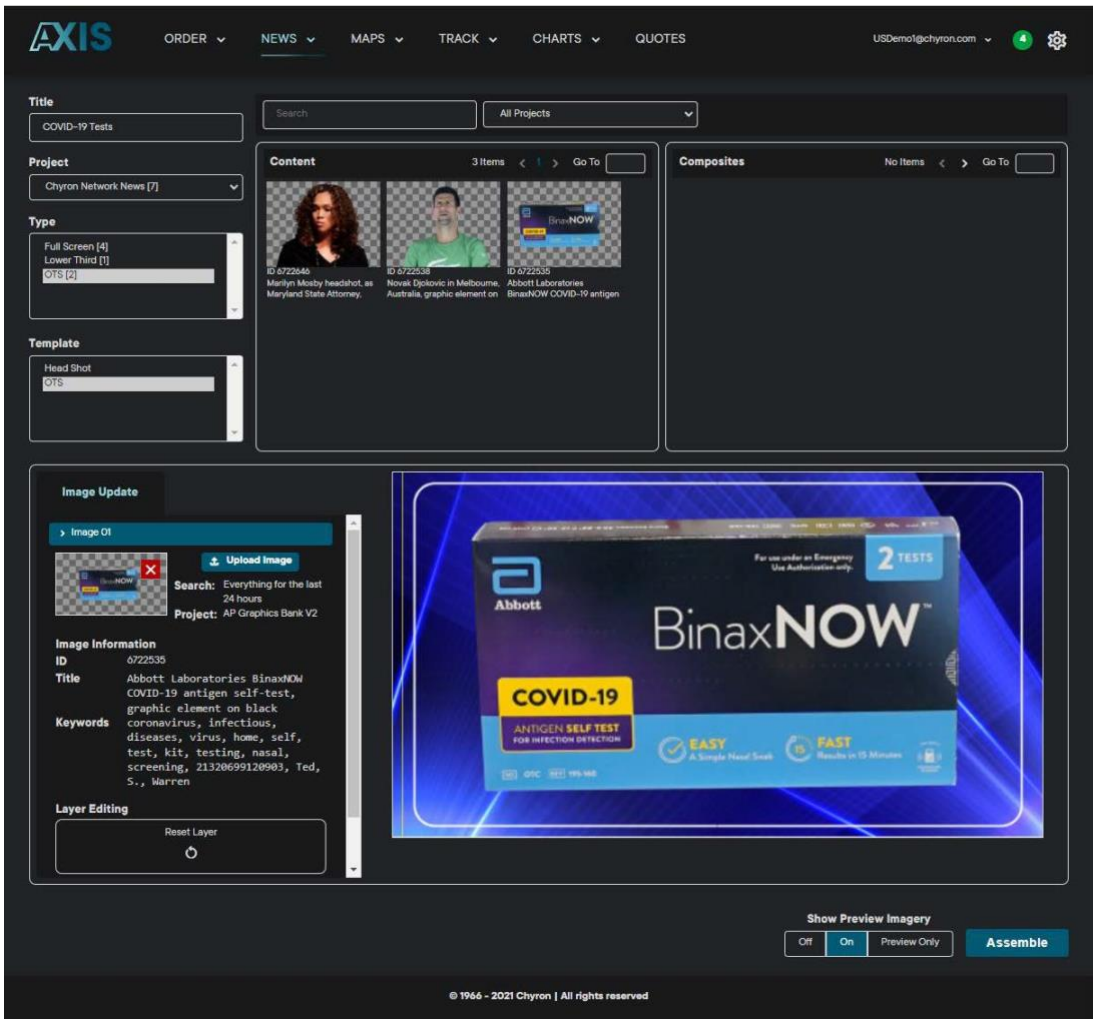
Apple Inc
173.08
9:30 AM
9:45 AM
10:00 AM
THOMSON REUTERS


VIEWER POLL
FAVORITE ICE CREAM?
30
24
16
14
13
3
CHOCOLATE
VANILLA
STRAWBERRY
BUTTER PECAN
MAPLE WALNUT
OTHER


5TH AVE
EMPIRE STATE BUILDING

Axis News

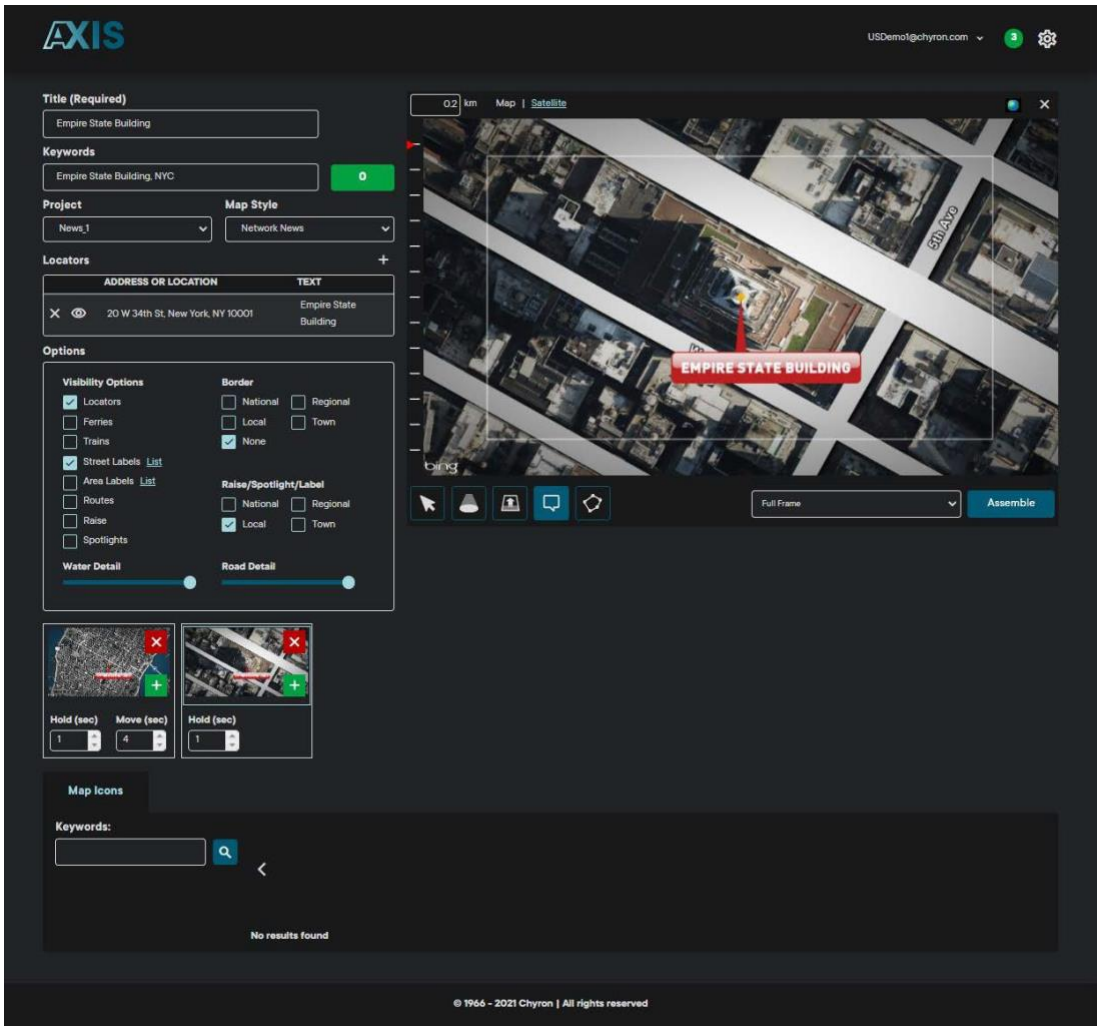
Axis News can generate multi-layered images from images in the AP Graphics Bank and Getty Images, and/or a custom library created by the Art Department and shared across your organization. **Axis News** is similar to the **Compose Tool**, the main difference being that the **Compose Tool** does not have access to the aforementioned third-party image resources.



You can also save an **Axis News** graphic without the background:

Axis Maps

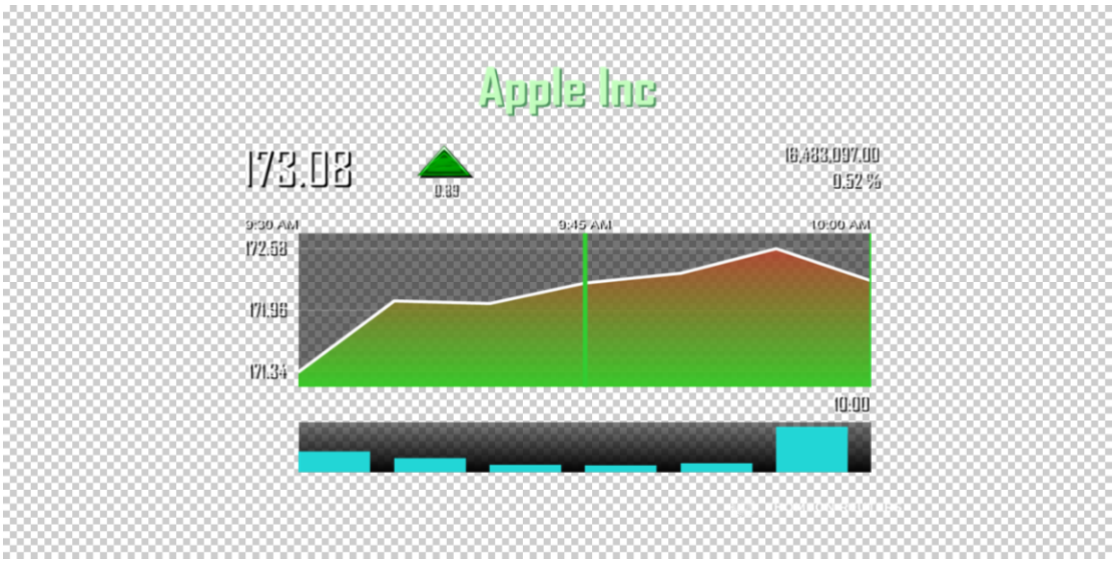
Axis Maps uses satellite and Bing imagery to illustrate animated and still maps created within the browser by producers. **Axis Maps** is the fastest-to-air map graphics creation solution in the industry. Axis Maps is supremely flexible. You create stills, animations, set altitude, and select which elements to display, including locators, roads, trains, ferries, borders, etc., and can raise or spotlight areas.



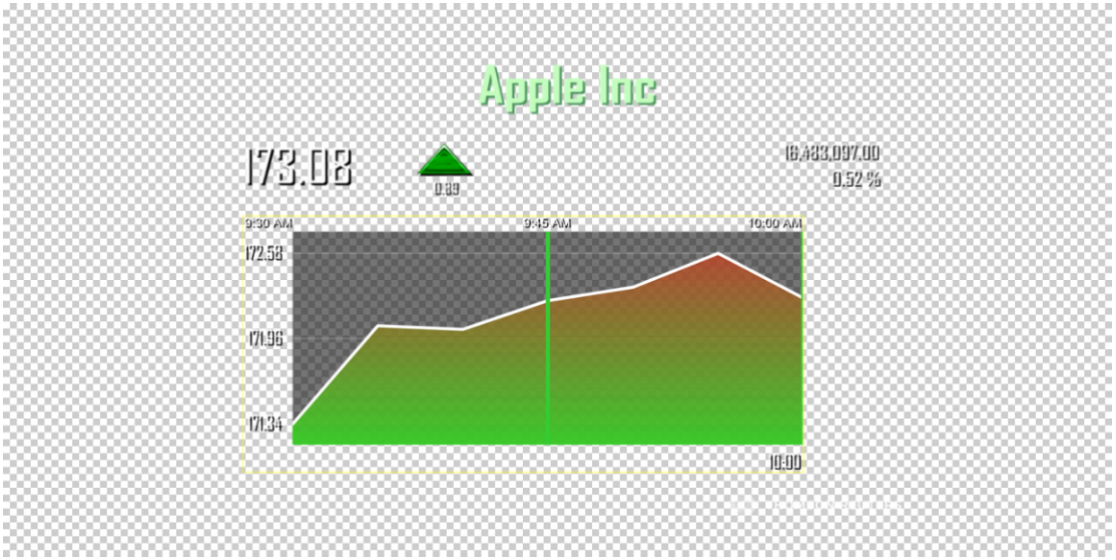
Axis Quotes

Axis Quotes visualizes live Refinitiv (formerly Thomson Reuters) financial data in line charts, in an easily searchable user interface. You can set a wide range of parameters, including stock symbol, period range, time scale, and create markers to show the price at any point in the graphic.

You can also save an **Axis Quote** without the background:



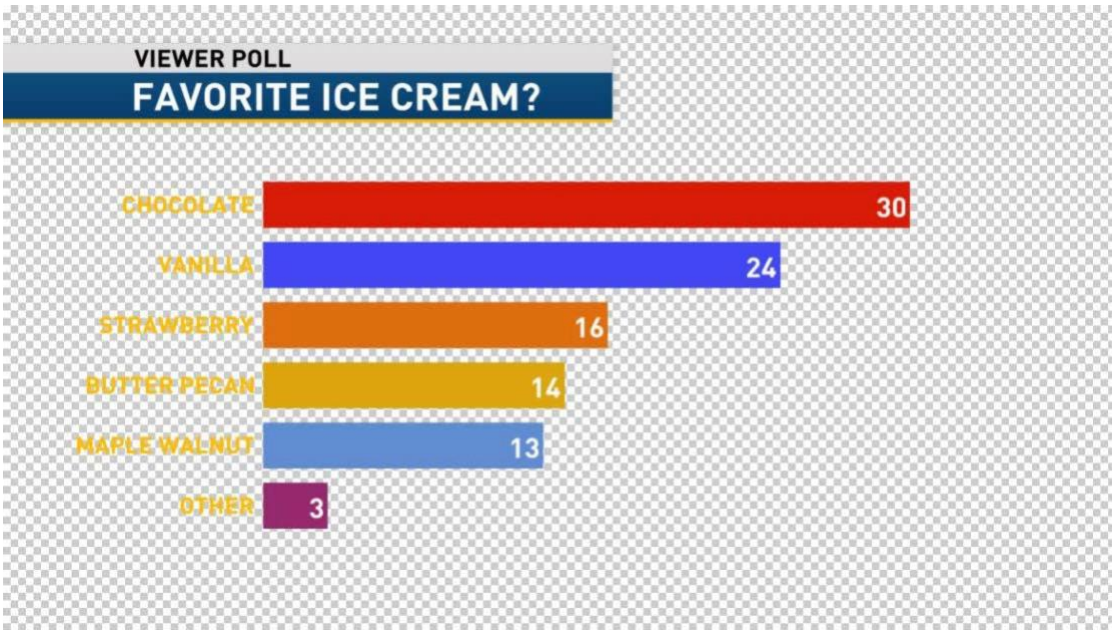
And in **Axis Quotes**, without the **Volume**:



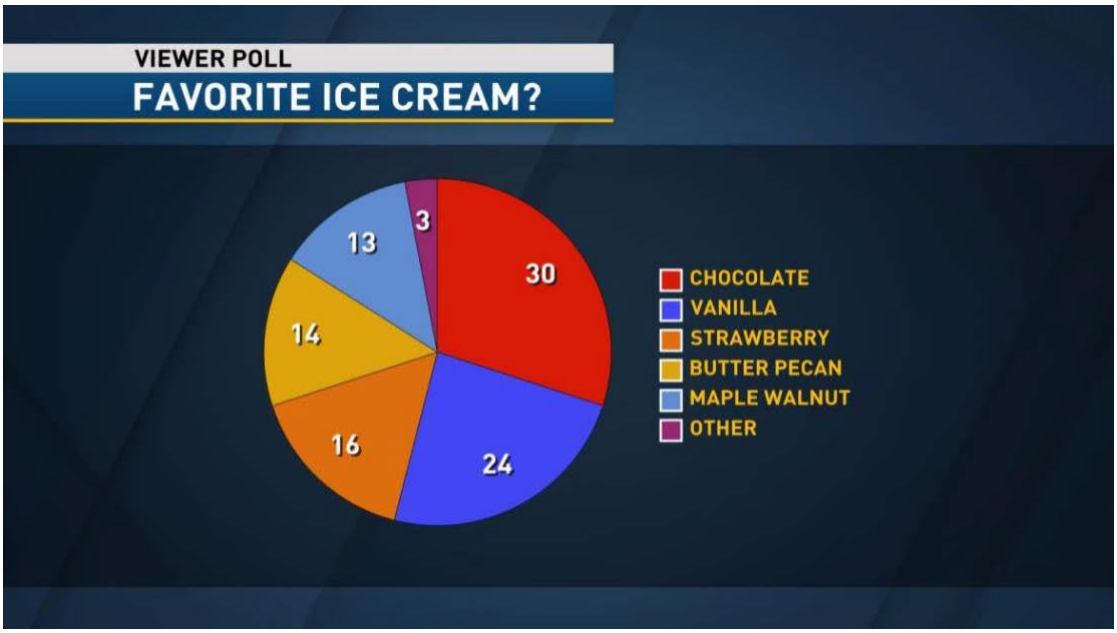
Axis Charts

Axis Charts creates bar and pie charts for simple data visualization.

You can also save an **Axis Chart** without the background:



You can create horizontal, vertical and pie charts. The following shows the same chart as a pie chart:



Use Axis Graphics Services with LUCI

When CAMIO is connected to Axis:

1. Click **Compose Image** or **Compose Movie** to launch the correct Axis service.
2. Complete the graphic or animation as you see fit.
3. Click the **Assemble** button.
4. From the pop-up window, click the **Deliver** icon to deliver the graphic back to your LUCI template.

The image or movie is delivered to LUCI and is ready to go to air.

Order Content from within LUCI

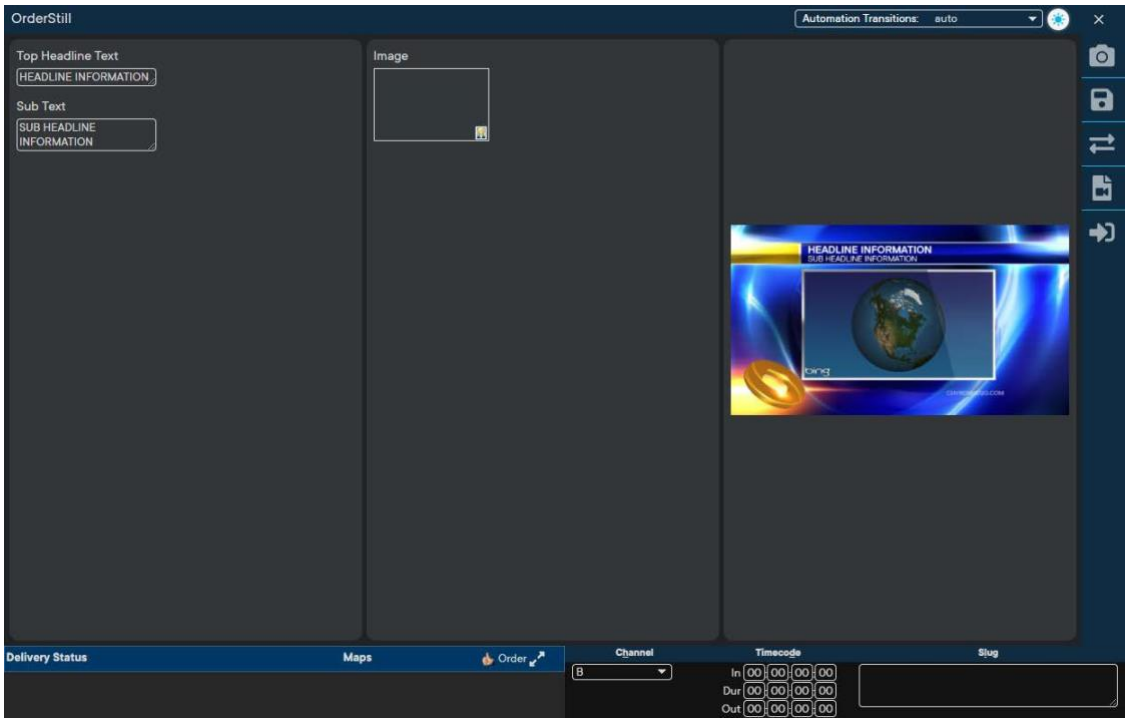
Create Order

Axis Order provides the ability to order bespoke images and movies from the Art Department, directly from within a template. Once the order is fulfilled by the Art Department, then the image(s)/movie(s) is delivered directly back into that template.

Axis Order integration is configured by CAMIO Admin.

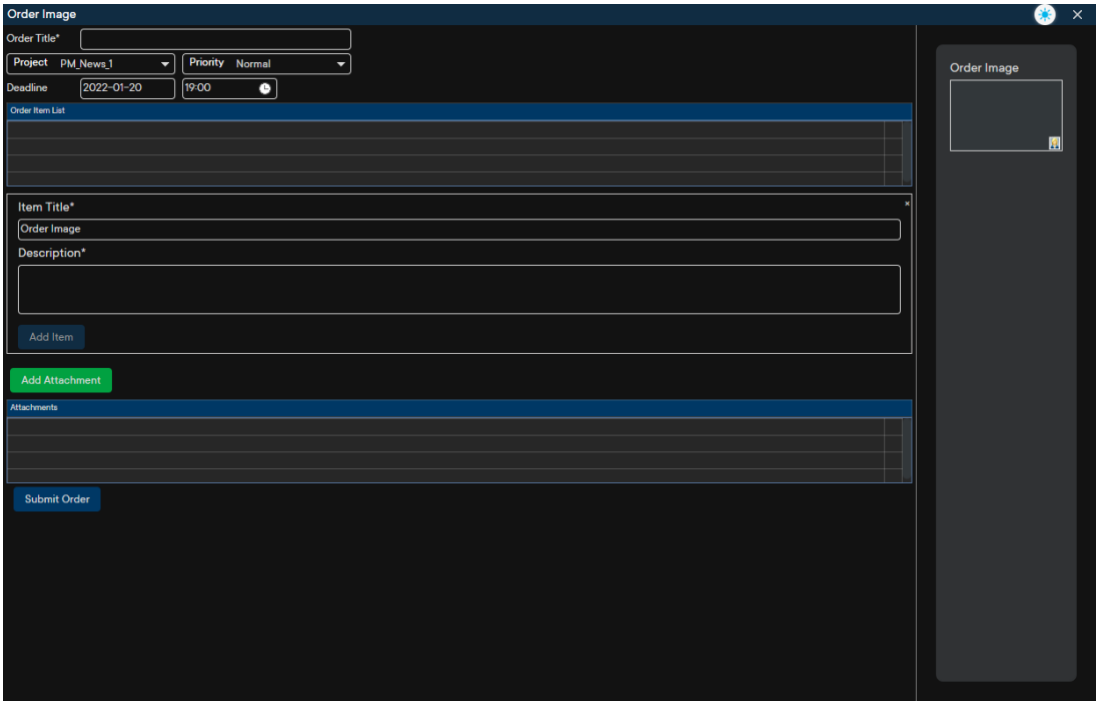
To order a graphic:

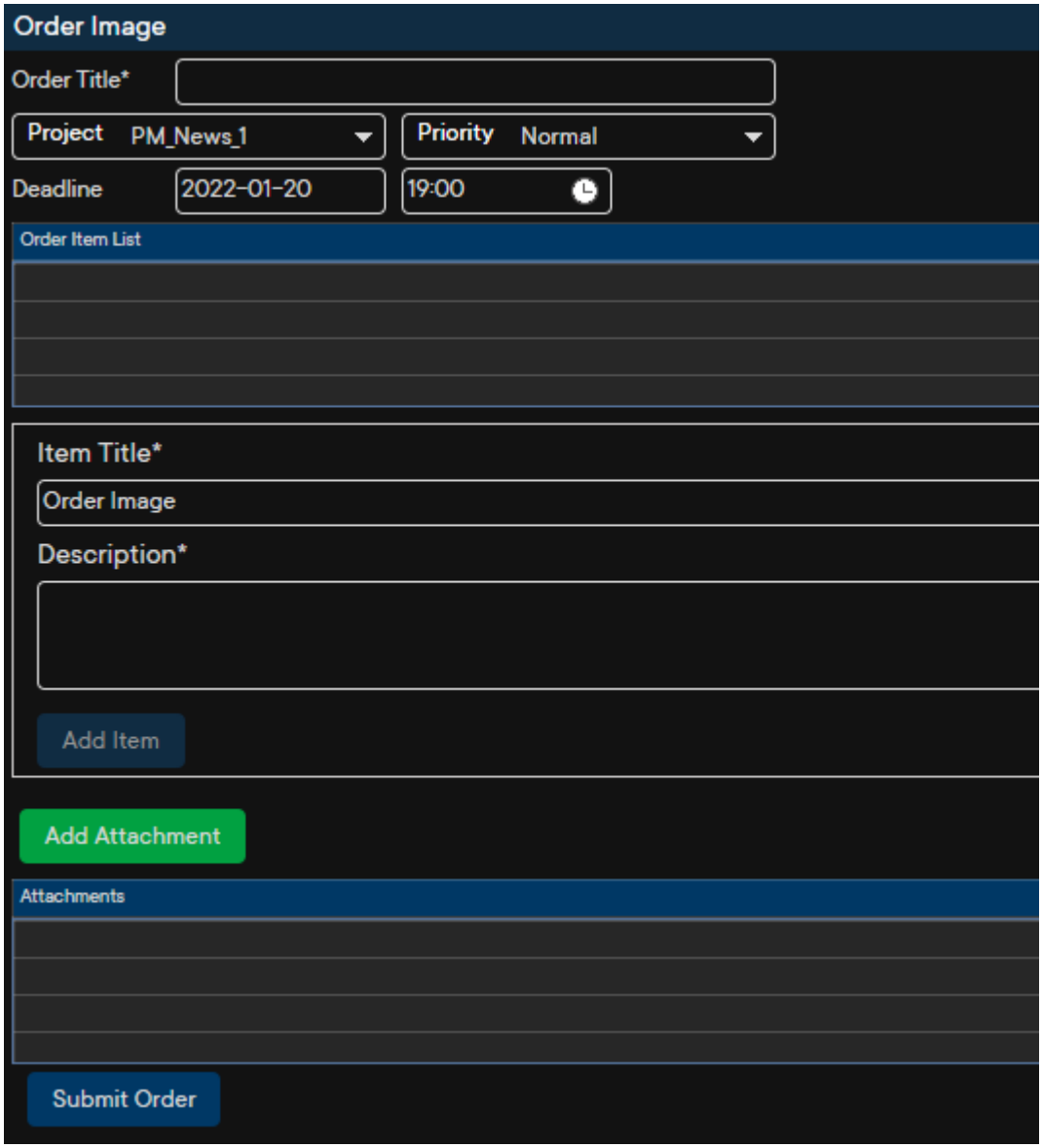
1. From the **CAMIO Asset Browser**, double-click the template that you would like to edit to open the template's **Edit Mode**.



2. Select the image or movie field within a template in the scene to populate. The **CAMIO Asset Browser** displays the available images.

3. Click the **Order Image** or **Order Movie** icon. The **Order Image/Movie** window appears.

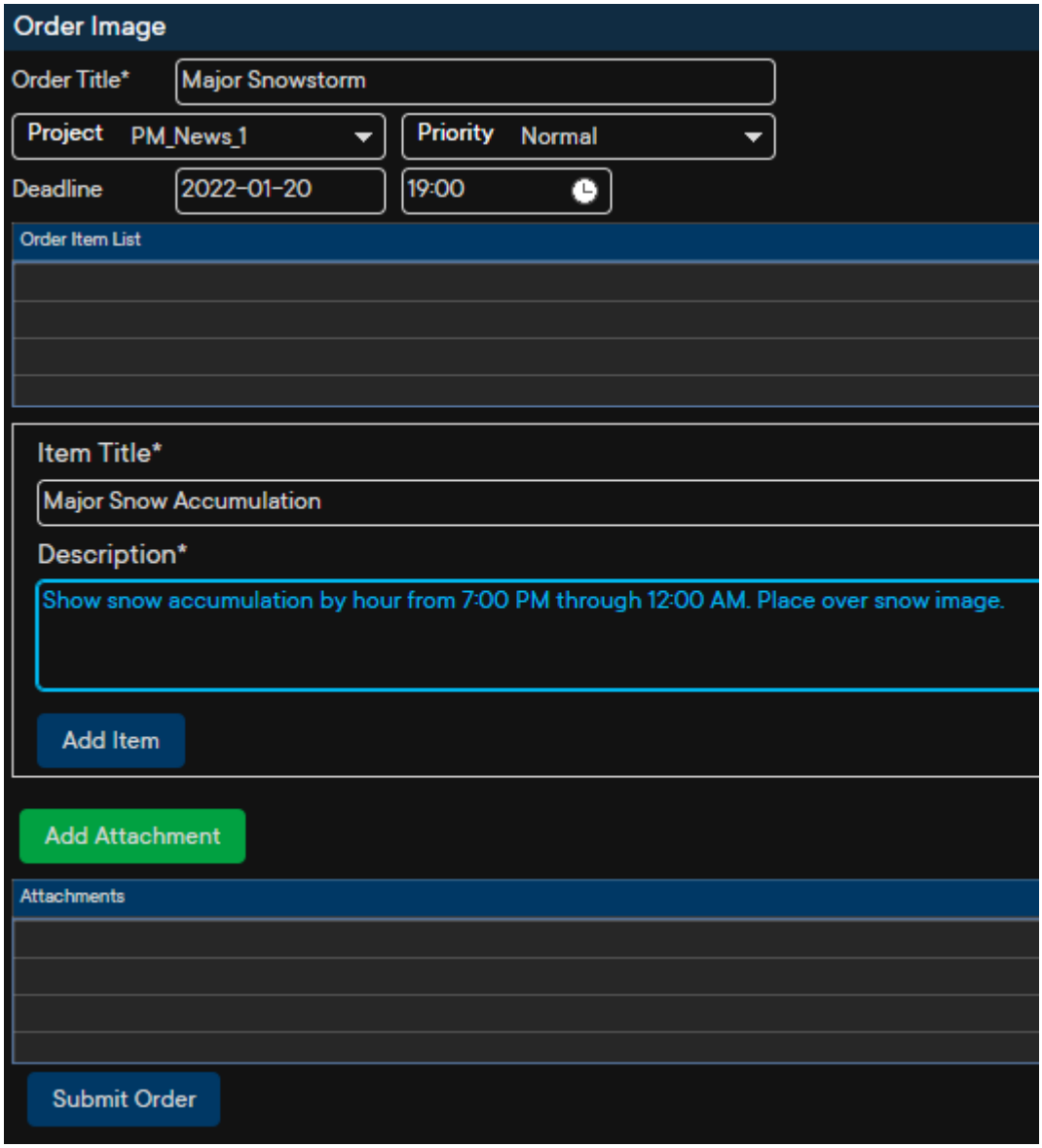




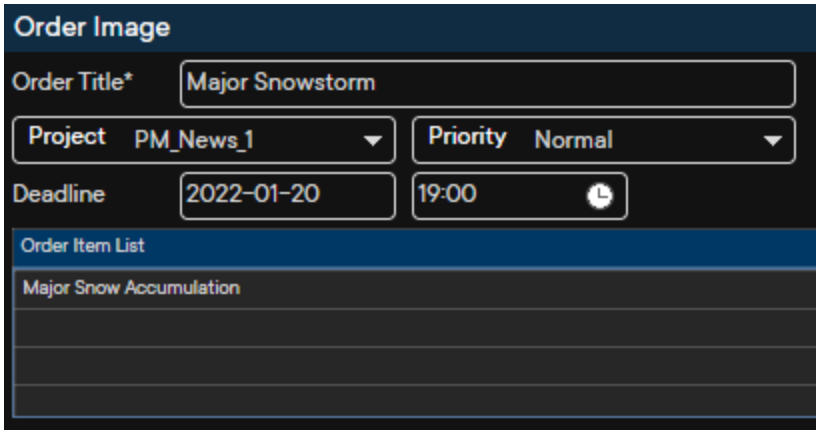
4. You must fill out all fields with an asterisk after the field name.

   The **Project**, **Priority**, **Deadline**, and **Item Title** fields are all prefilled. These have been preset by the Art Department to help them identify the item that you are adding to the order, which saves time, and aids communication between you and the Art Department. You can change these fields, for example, if the request is high priority.

   Enter an **Order Title** and **Description** to explain what the item you are ordering should look like or contain. You may also wish to overwrite the **Item Title** to make it more descriptive.


Order Image
Order Title*
Major Snowstorm
Project
PM_News_1
Priority
Normal
Deadline
2022-01-20
19:00
Order Item List
Item Title*
Major Snow Accumulation
Description*
Show snow accumulation by hour from 7:00 PM through 12:00 AM. Place over snow image.
Add Item
Add Attachment
Attachments
Submit Order

5. When you have completed filling out the fields, click the **Add Item** button. The item appears in the **Order Item List**.

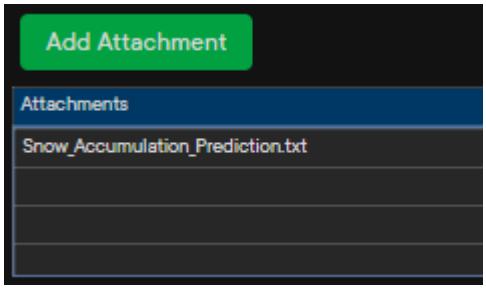


If need be, you can edit or delete an item.

6. If desired, you can add one or more attachments, which can be images, movies, and/or documents. An attachment may be an image that illustrates a concept, an image that should be included in the final product, or perhaps a document that provides additional details. To attach an item(s):

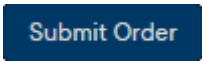
   a. Select the **Add Attachment** button.

   b. From the **Open** dialog, select one or more items, and then select **Open**. The item(s) appear in the **Attachments** list.



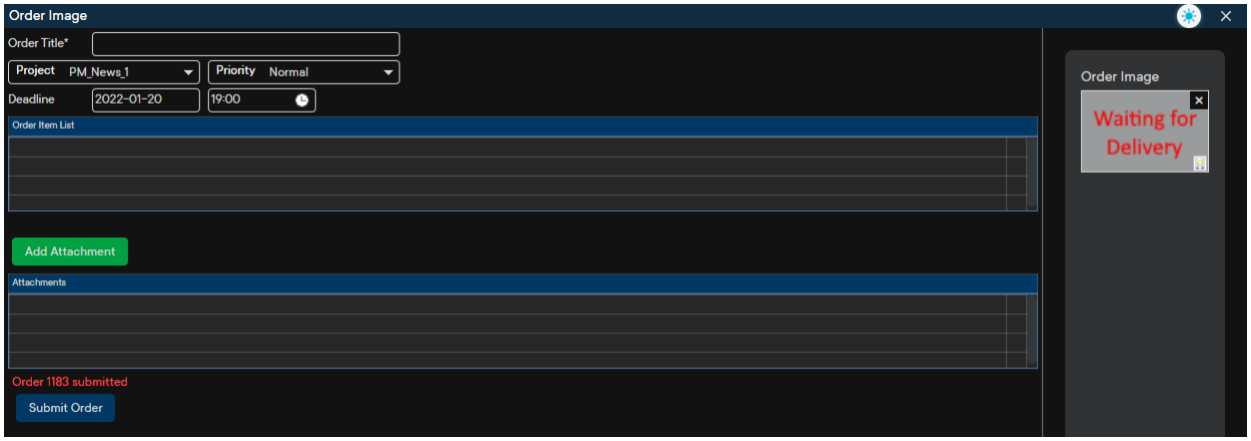
If need be, you can delete an attachment.

7. If there are no other attachments to add to this order, then click the **Submit Order** button.

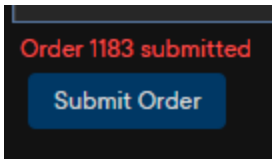


8. The item is submitted to the Art Department.

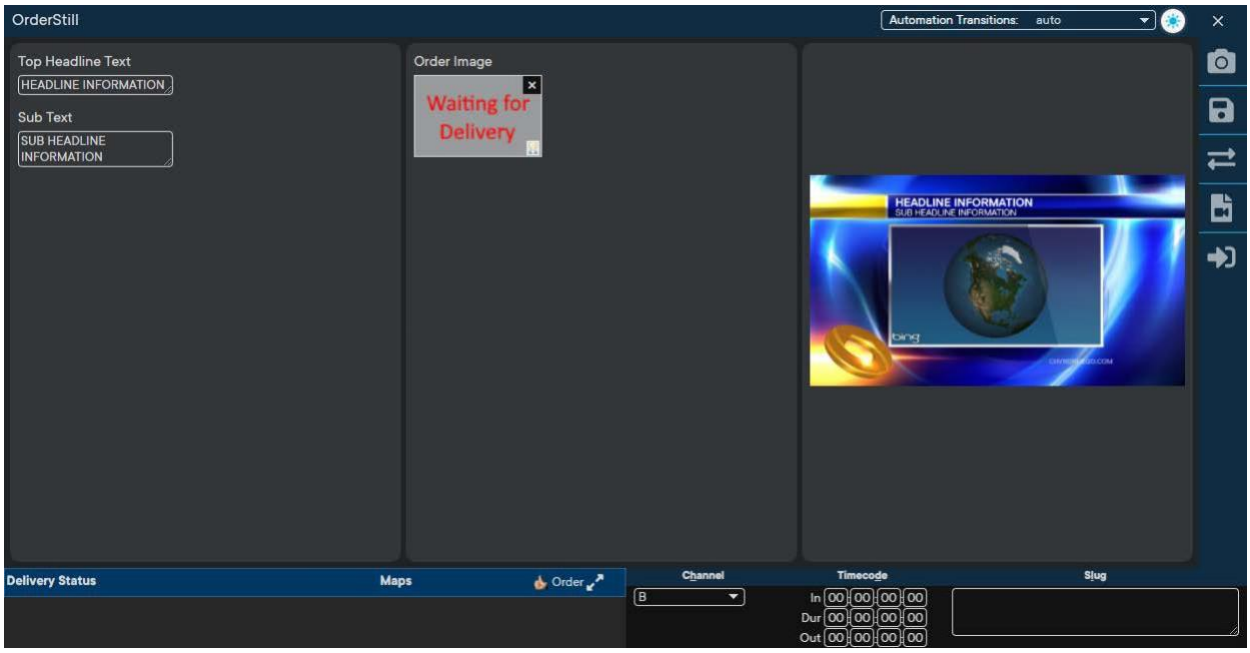
    - The field from which you started the order, and any other fields you have added to the order, are updated with "Waiting for Delivery."



    - The order number and confirmation of successful submission display.



9. Close the **Order Image** window. The template displays "**Waiting for Delivery**" in the image field:



10. Insert the graphic into your script and continue with your work.

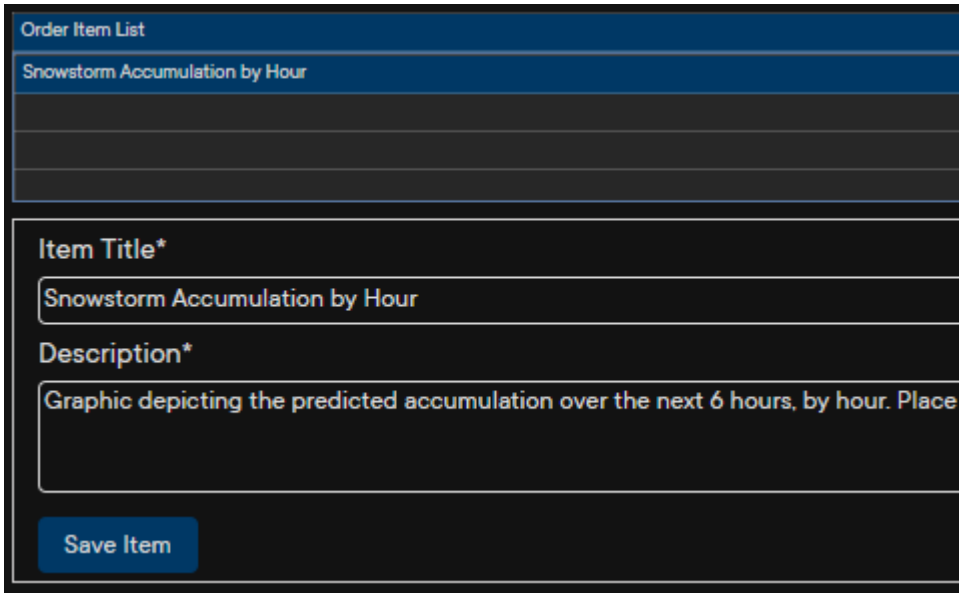
Once the Art Department fulfills your order, the order disappears from the **Order** list, and one of the following occurs, depending how your approval workflow is configured by the organization:

- If your **Order** workflow requires your approval, then a thumbs-up icon will appear to notify you that you have pending approvals. For additional information, see Delivery Status.
- If your **Order** workflow does not require your approval, then the **Order** will flash in the **Delivery Status** window when it arrives, and the graphic is available to go to air.

Edit Item

If you need to edit an item prior to submission:

1. In the **Order Item** list, select the item. The item's details display. Edit as desired.

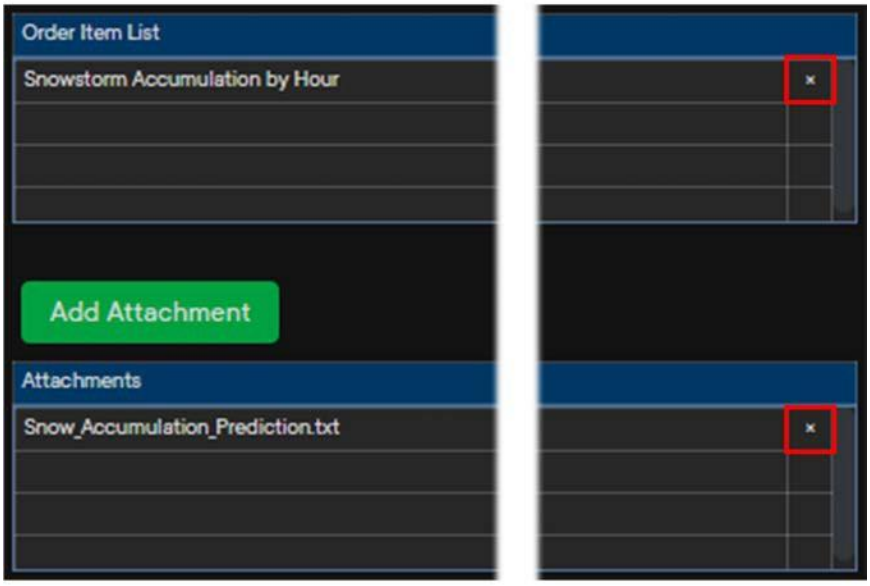


2. Select the **Save Item** button.

Delete Item or Attachment

To delete an item or an attachment:

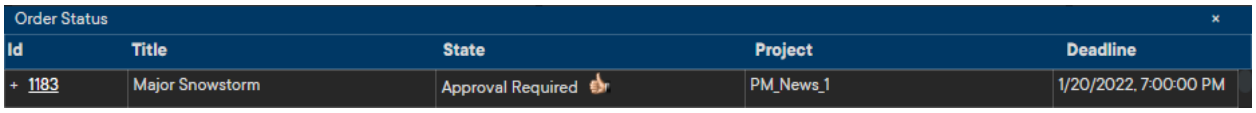
- Click the **Delete** icon at the right of the item or attachment name.



Delivery Status

When Axis graphics, including **Maps**, are delivered from Axis back to LUCI, they populate the **Delivery Status** window. They blink orange when they are first delivered. To view the delivered graphic:

- Click the **ID** link on the line that lists the order.

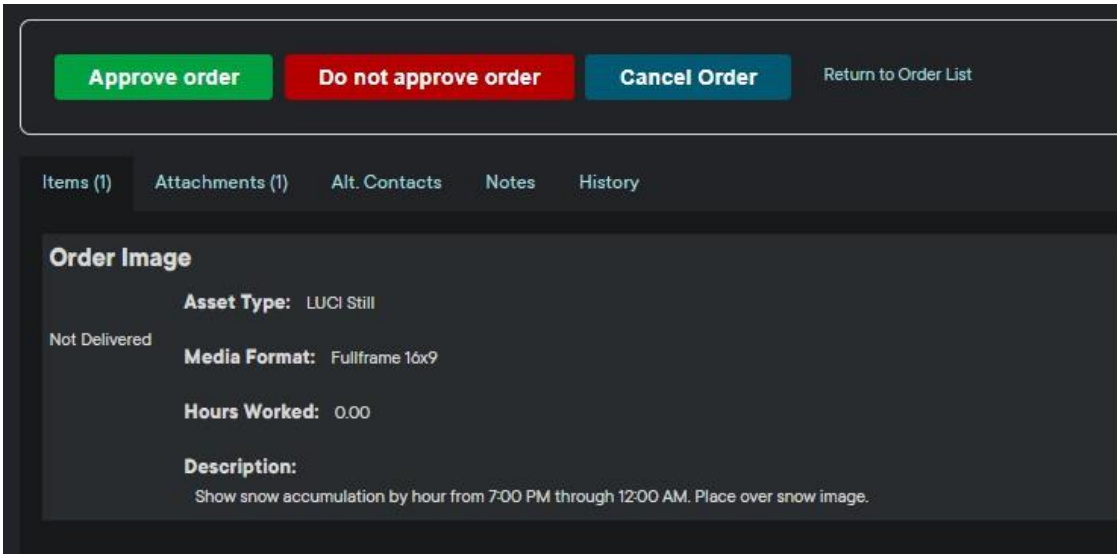


You can also expand the **Maps** and **Orders** windows for a more in-depth view of the status of all orders or maps that you created. To open an order:

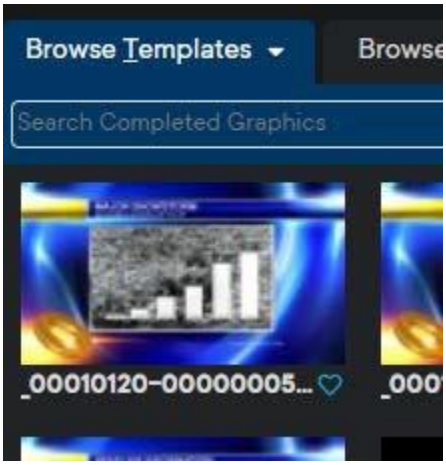
- Click the number link.

The thumbs-up icon next to the **Orders** pop-up indicates that an order that you created is ready for approval.

- Click the thumbs-up icon next to the **Pending Approval** state, and the browser automatically opens to that order for you to approve and have delivered.

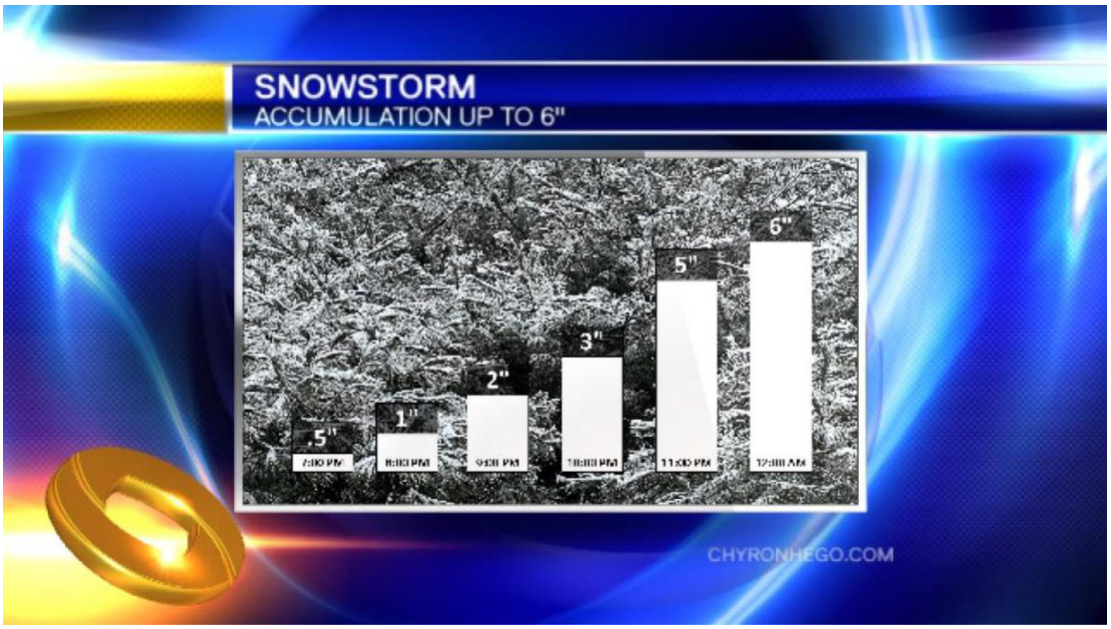


Once the Art Department has fulfilled the order, then the order disappears from the **Order Status** list. *See Delivery Status for more information.* You can then locate your completed graphic in the **Asset Browser**, in **Browse Templates** > **Completed Graphics**.

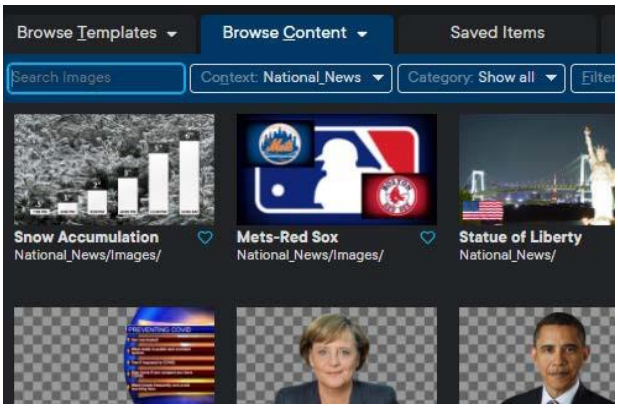


If you have not already inserted the graphic into your script, then you can do so. *See MOS Rundowns for more information.*

Double-click to view an enlarged version.



The image also becomes available for use in other graphics. In the **Asset Browser**, go to **Browse Content > Images**.



If you have already inserted the graphic into the script, then it will automatically fulfill and populate to the specified playout channel.

Compose Tool

Compose Tool Overview

For users who do not have **Axis News**, or whose administrators have not enabled **Axis News**, clicking **Compose Image** launches the **Compose Tool**, which allows users to generate multilayered, composite images using content in CAMIO, or uploaded from a local or network drive.

You can combine layers of images to create new editorial graphics, and can scale, rotate, flip, and position layers to create your composition. The image layers can be populated with either:

- Images in the **CAMIO Asset Browser**, accessed by using the **Search** tool; or,
- Images uploaded from your computer or network by selecting **Upload Image**. The

following shows a three-layer composite image created using **Compose Image**:

The following sections describe the various **Compose** editing elements and parameters. A step-by-step **Compose** process is described in Typical Compose Sequence.

Compose Movie and Axis

The **Compose Tool** is also used for movies, but has a different function from **Compose Image**, and applies only to Axis operations. When you select the **Compose Movie** icon, the linked Axis service, i.e., **Axis Maps or Charts**, opens. *See **Axis News, Maps, Quotes, and Charts** for more information.*

Compose Image and Axis

When you select the **Compose Image** icon, LUCI may connect to a linked Axis service, i.e., **Axis News**, **Maps**, **Quotes** or **Charts**, instead of opening the **Compose Image** dialog. If this occurs, then you should create the image within the Axis service. *See **Axis News, Maps, Quotes, and Charts** for more information.*

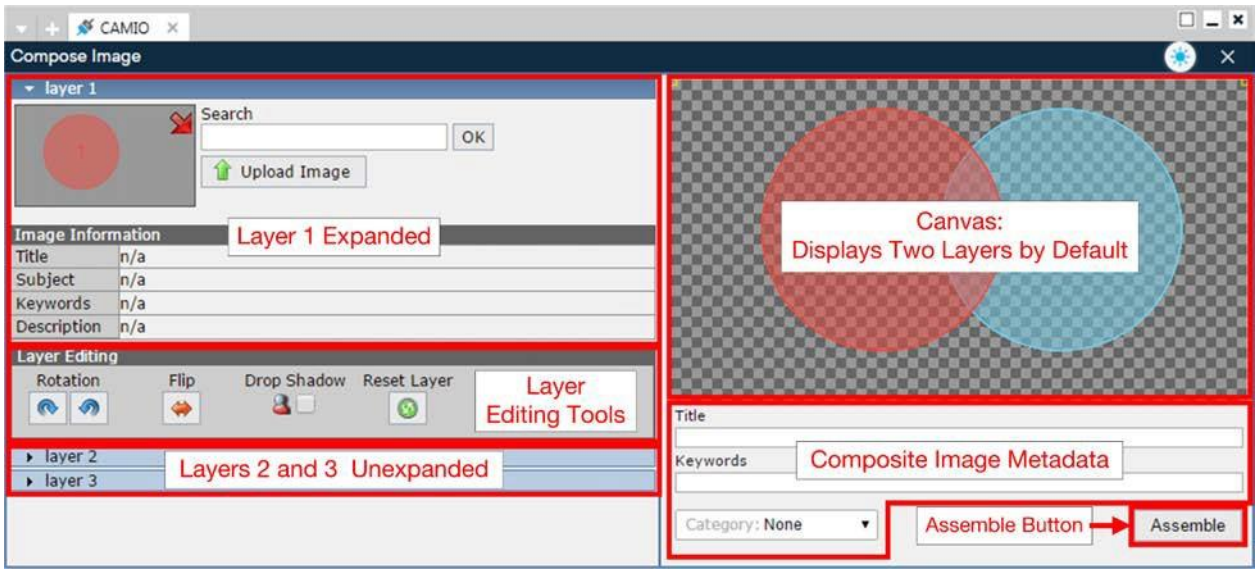
Access Compose Tool

You can create a composited image either from within a template, or from within the **Assets Browser**.

- To access from within a template, open the template, select the image field, and from within the browser, then select the **Compose Image** icon.

- To access from the **Browse Content > Images**, select the **Compose Tool** button, located at the bottom of the browser window.

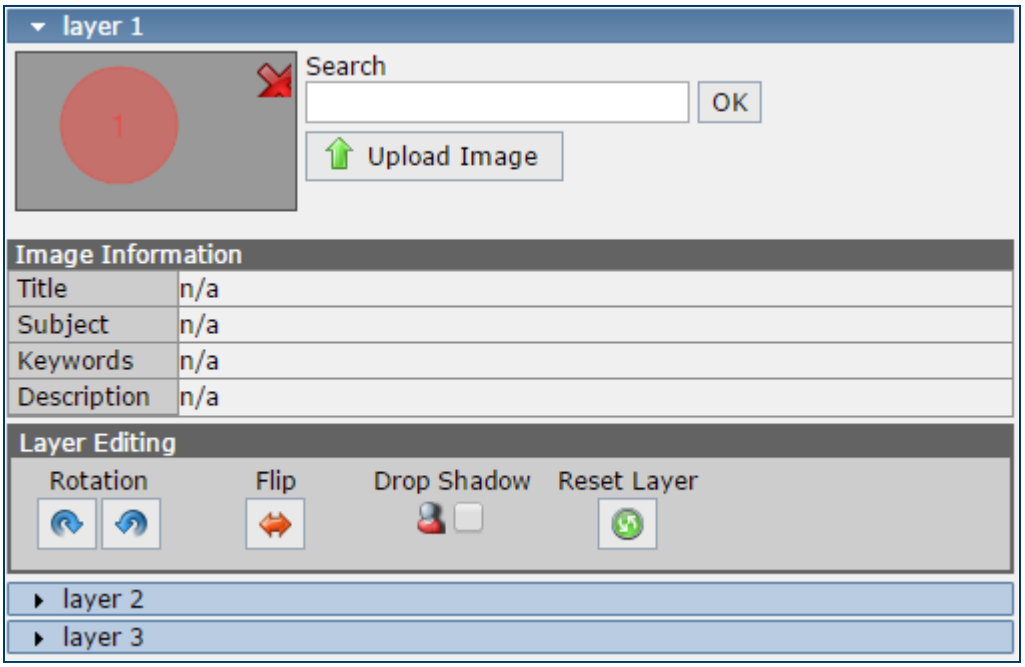
The **Compose Image** dialog displays



The **Compose Image** dialog comprises the following elements:

- **Layers:** You can composite up to three images, each on its own independently editable layer. You can search the **CAMIO Asset Browser**, and if your organization has an Axis subscription, then **Axis Track**, as well. When you select an image, the **Image Information** area displays the image's metadata.
- **Layer Editing Tools:** The **Layer Editing Tools** provide the ability to rotate, flip, and add a drop shadow to images.
- **Canvas:** The **Canvas** displays your edits as you perform them. You can independently scale and reposition each layer.
- **Composite Image Metadata:** This is metadate that you enter for the finished composite. You can also assign a **Category**.
- **Assemble Button:** The **Assemble** button triggers the creation of the finished composite image, and adds it to the **CAMIO Asset Browser** and populates the template.

Layers



Up to three layers of imagery are possible to layer in a composition. The layer priority is such that Layer 1 is on the top, with Layer 2 then 3 below.

To expand each layer to view the thumbnail and details, do one of the following:

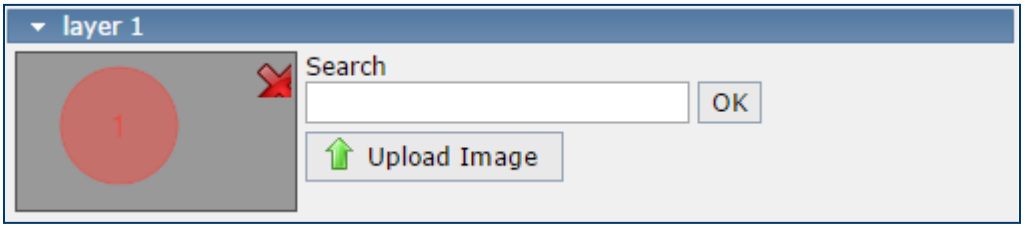
- Select the header bar or expandable arrow.
- Double-click the **Canvas** area to cycle through each available layer.

The selected image's metadata displays below the thumbnail. To

remove content from a layer:

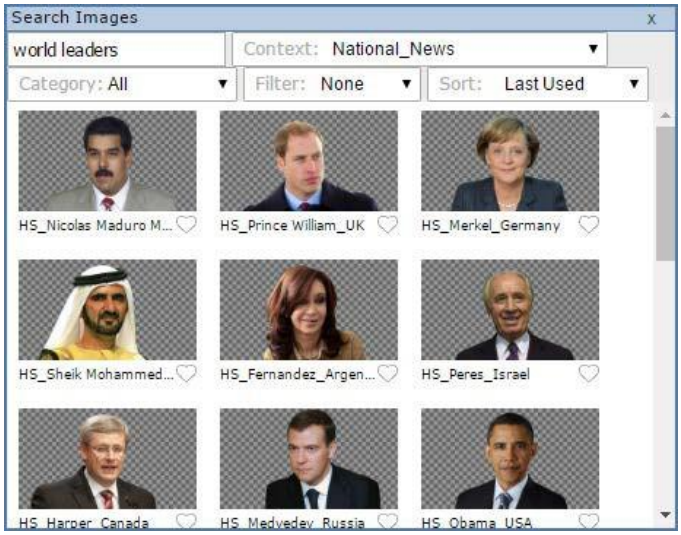
- Select the **Close** icon **X** at the top right of the thumbnail.

Search for Content



You can search content based on one or more search terms, or by searching all content.To perform a search:

1. Do one of the following:
    - To search based on one or more search terms, enter the search term(s) into the **Search** field, and then press **Enter** or select **OK**.
    - To browse all content, clear the **Search** field of any search terms so that it is empty, and then press **Enter** or select **OK**.
2. The **Search Images** browser displays, providing the same tools as the **CAMIO Asset Browser**: **Search** field, **Context** selection, **Category**, **Filter** and **Sort**.\

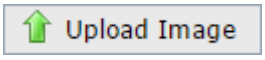


If you are an Axis user, you can search your organization's content and generate new layered graphics.

Upload an Image

If you cannot locate an image to use in the composite, then you can upload an image. To do so:

1. Select the **Upload Image** button.



2. In the **Open File** dialog, select the desired image, and then select the **Open** button. The selected image populates the layer.

Set Favorites

If there are images that you use frequently, then you can specify them as favorites and set the filter to display only the favorites. To specify a favorite:

- Select the **Heart** icon below the image. It displays red. When you set **Filter** to **Favorites**, all images that display a red heart display in the results.

To remove favorite status:

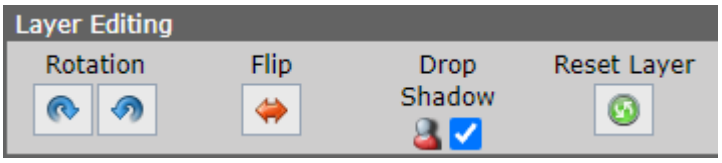
- Select the **Heart** icon below the image. It displays as an outline. When you set **Filter** to **Favorites**, this image no longer displays in the results.

Edit Image

Edit Overview

The **Compose Tool** provides the ability to finely adjust each image layer. The **Edit** operations apply only to the selected layer; therefore, you can independently edit each layer for optimal

composition. The **Layer Editing** area contains the editing tools, except for scaling and positioning, which are performed using the mouse and/or keyboard.



Scale

To **Scale** (resize) the image, do one of the following:

- Grab the handles (yellow squares) at the corners of the layer and drag to make the image larger or smaller.
- Use the scroll wheel on the mouse.
- Press and hold the **Shift** key and use the scroll wheel on the mouse to scale in large increments.

Position

To **Position** the image, do one of the following:

- Click and hold the left mouse button and drag the image to the desired position. Release the left mouse button to set the new position.
- Press the **Cursor** (arrow) keys to move layers.
- Press **Shift + Cursor** keys to position the layer in larger increments.

Rotate

Rotate rotates the image on the **Z**-axis. This can be useful for import of phone imagery that may not be at the correct rotational position on import. To rotate an image:

- **Select** the **Rotate** icons to rotate an image by 90 degree increments either clockwise or counterclockwise .

Flip

Flip rotates the image on the **Y**-axis and can be used, for example, to make a headshot face the opposite direction. To flip an image:

- Select the **Flip** icon .

Add Drop Shadow

You can add drop shadow to an image. Adding a drop shadow is only really effective on a cut-out image, such as a headshot with a transparent background.. To add a **Drop Shadow** to an image:

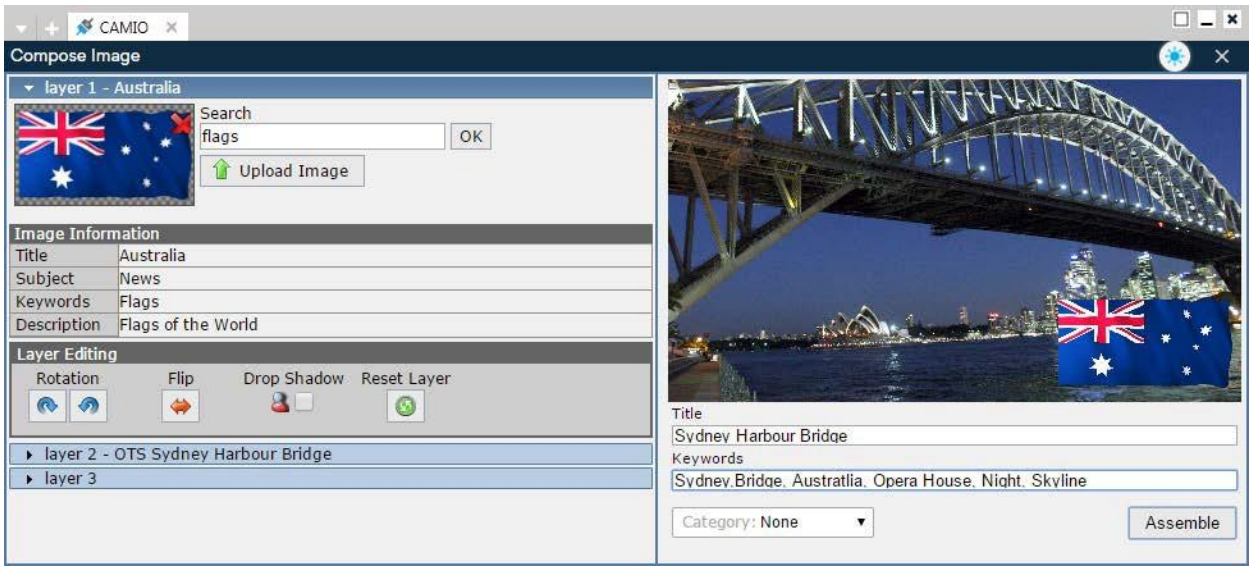
- Click the **Drop Shadow** checkbox .

Reset Layer

While editing, you may want to reset the layer to its original state when the image was added. To reset:

- Select the **Reset Layer** icon .

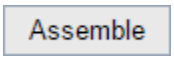
Assemble a Composed Graphic



Once you have completed editing the composite image:

1. Enter a **Title** for the composite image, so that it can be assembled and added to the **Asset Browser CAMIO** library. **This is mandatory.**
2. **Optional:** You can enter **Keywords** to add more metadata to the composite image, which aids in subsequent searches. Once assembled, other users will be able to search based on that metadata, and locate and use the same composite image.
3. **Optional:** You can assign a **Category** , so that the composite image can be filtered in the **Asset Browser**.

4. Select the **Assemble** button.

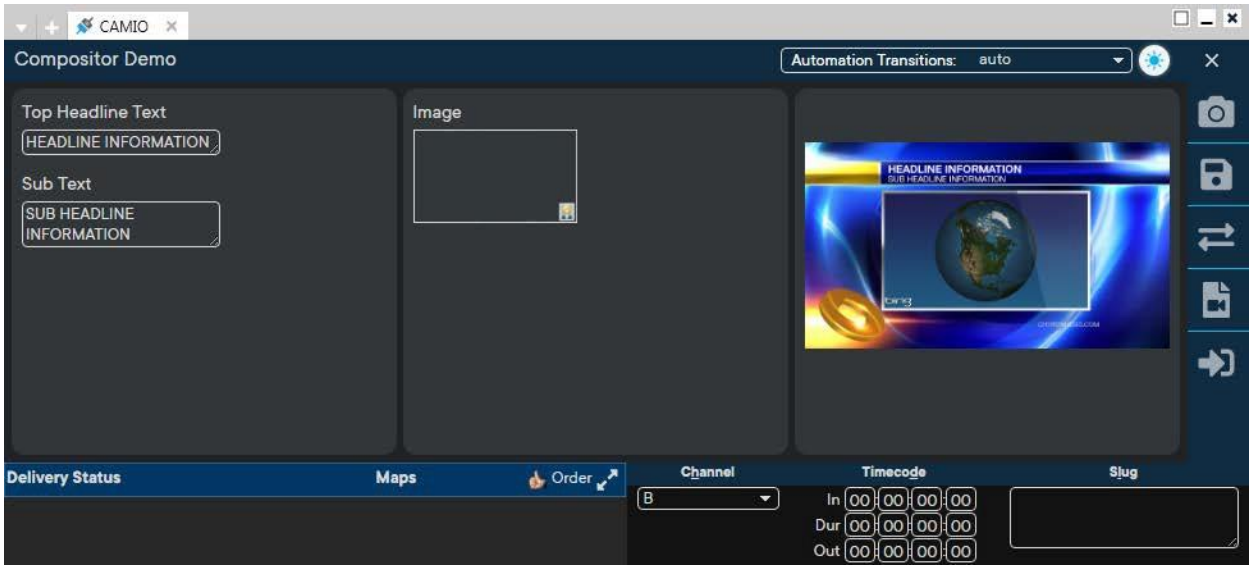


The composite images created using the **Compose Tool** are stored at the root of the **Context** folder in **CAMIO Asset Manager**, for monitoring and cleanup by the Art Department.

Typical Compose Sequence

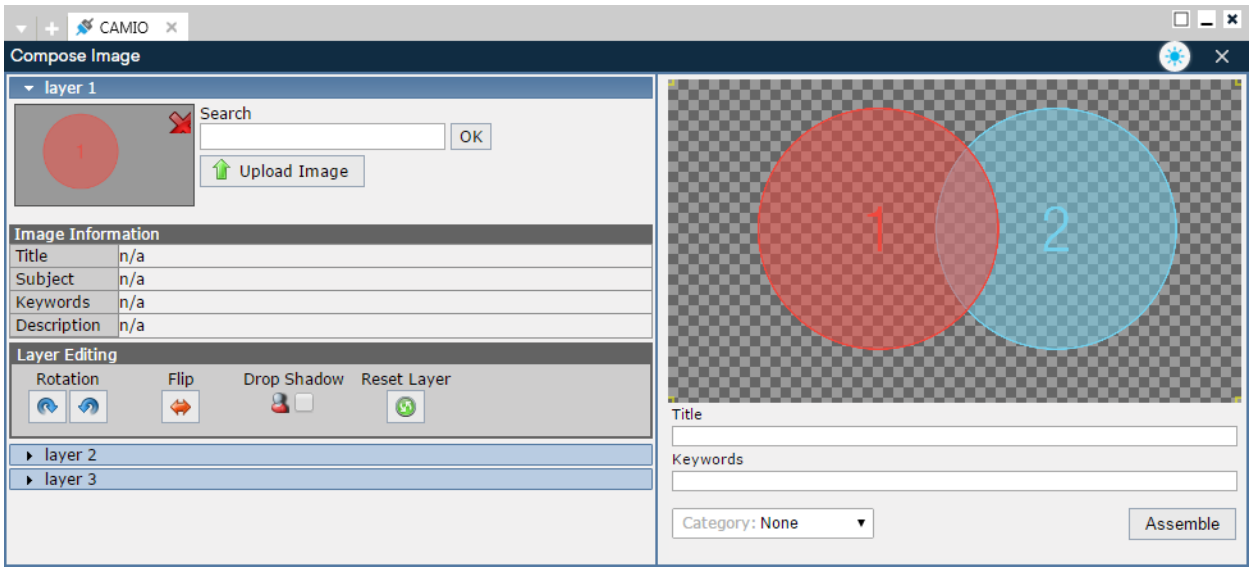
In this example, we will build an image of the Sydney Harbour Bridge, with an Australian flag overlay.

1. In the CAMIO **Asset Browser**, select the template in which the image is to be used.

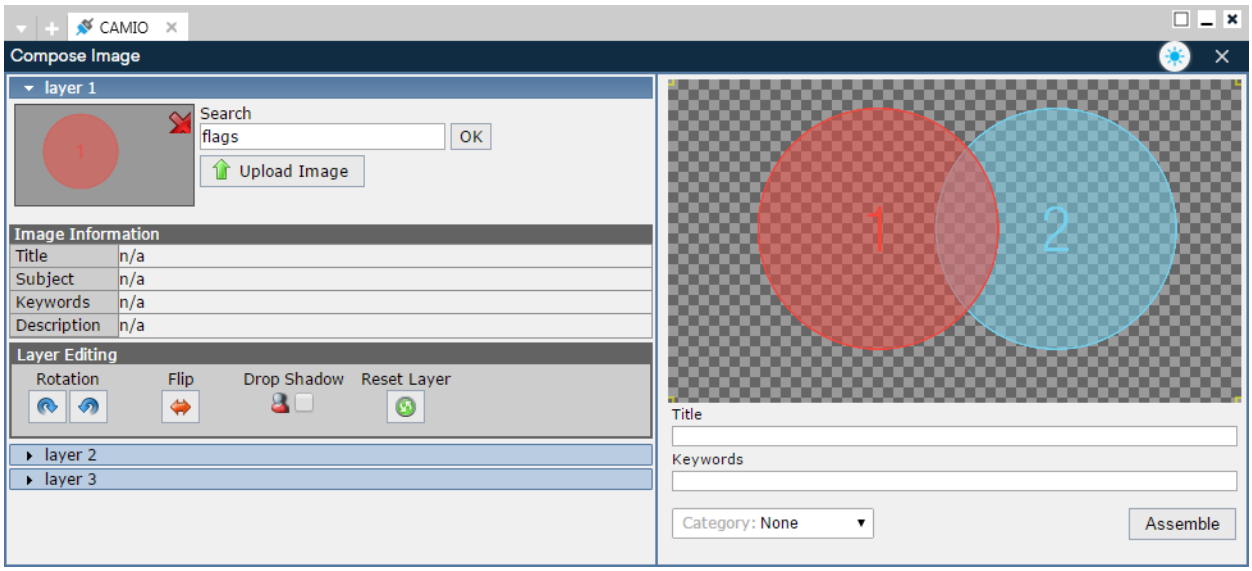


2. Select the image field.
3. The **CAMIO Asset Browser** displays the available images. Select the **Compose Image** icon.

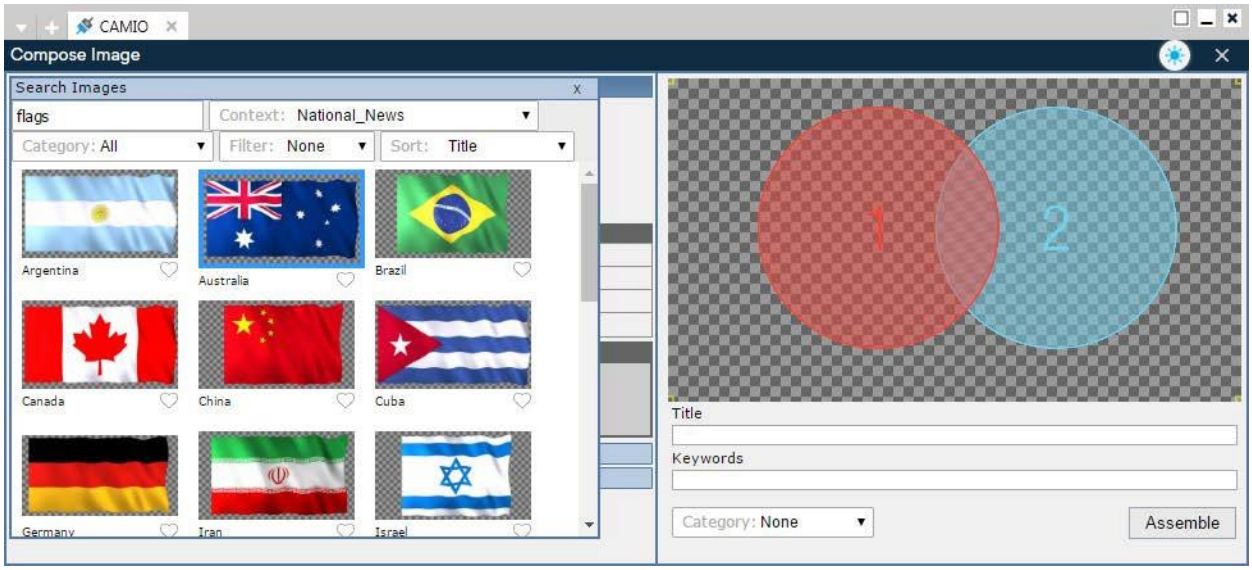
4. The **Compose Image** dialog displays.



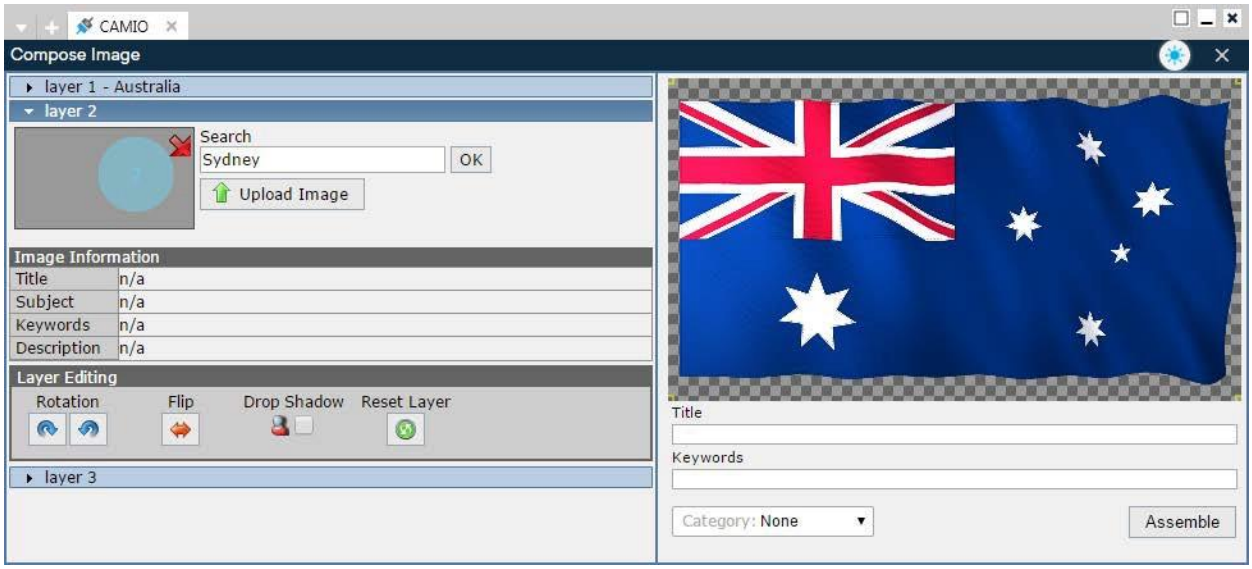
5. Select **Layer 1** heading and perform search for **Layer 1** flag overlay.



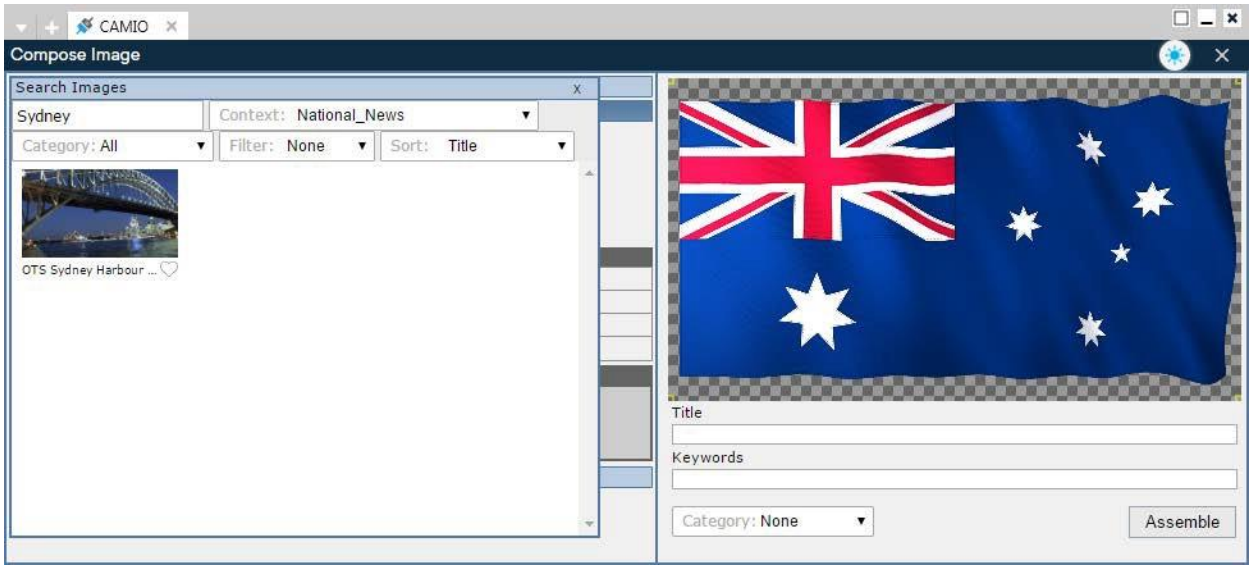
6. The results display. Double-click the Australian flag image.



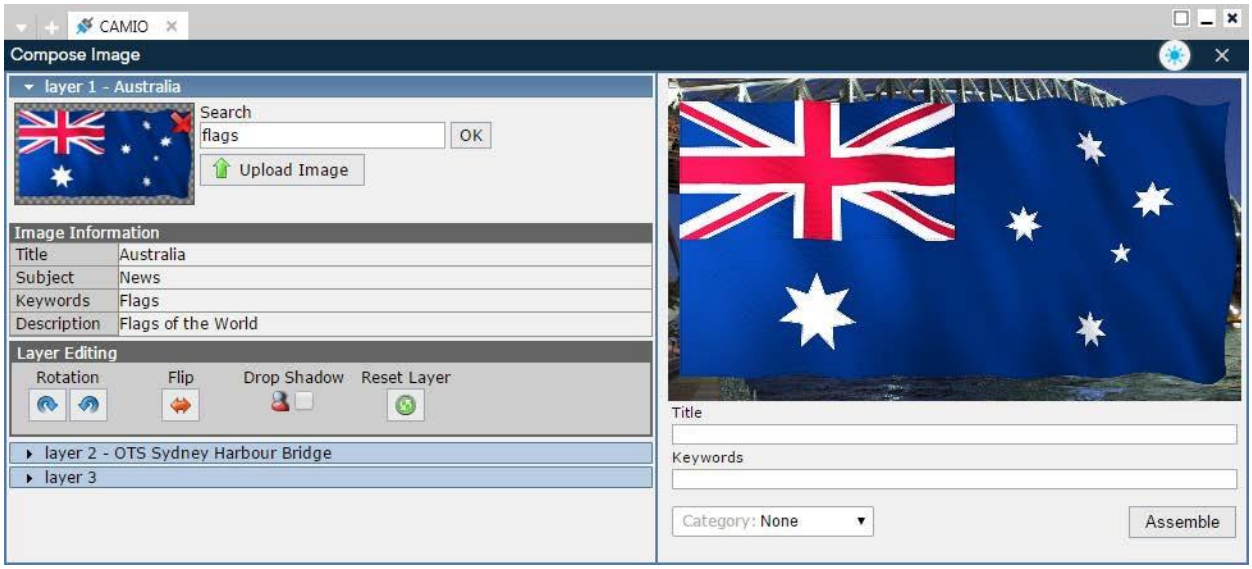
7. The Australian flag image populates **Layer 1**.



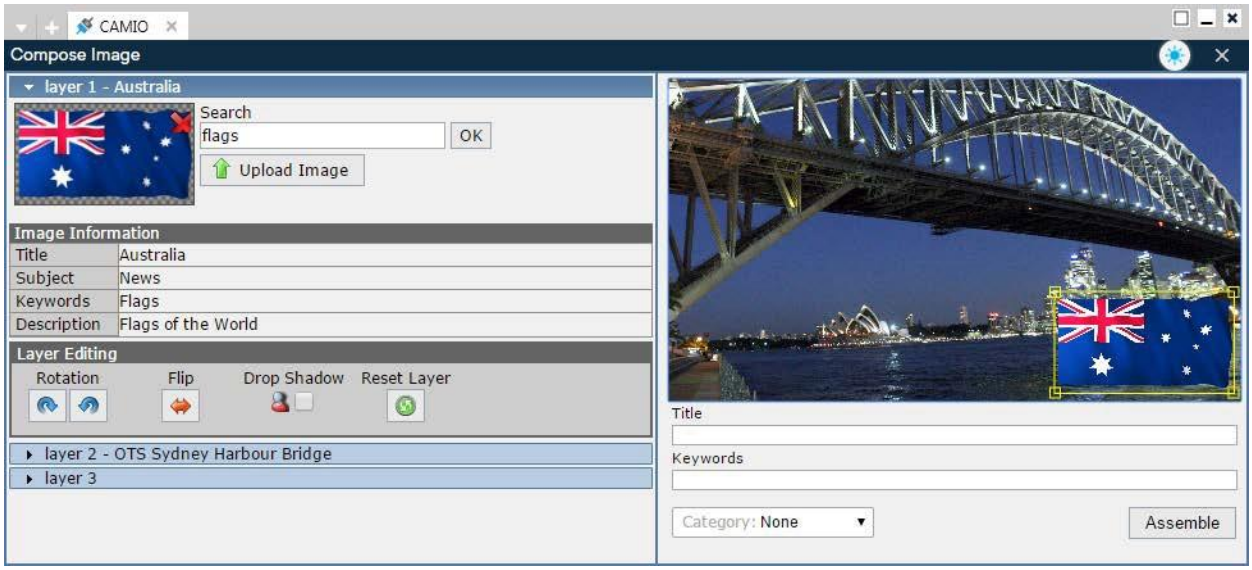
8. Select **Layer 2** heading, perform search for **Layer 2** Sydney Harbour Bridge image, and double-click the image.



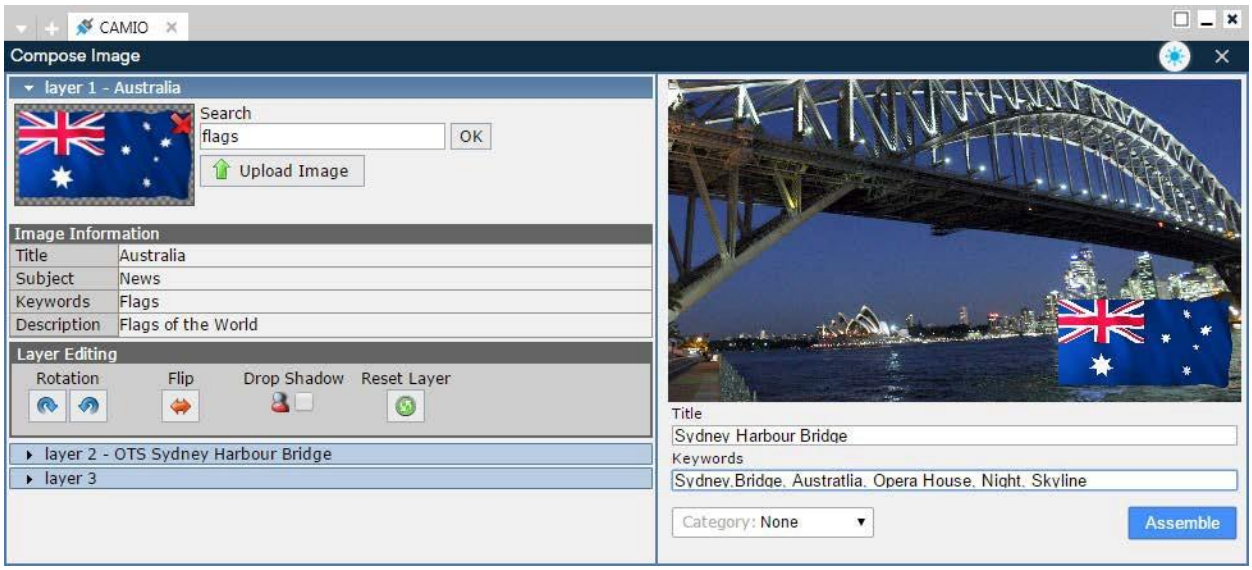
9. The Sydney Harbour Bridge image populates **Layer 2**.



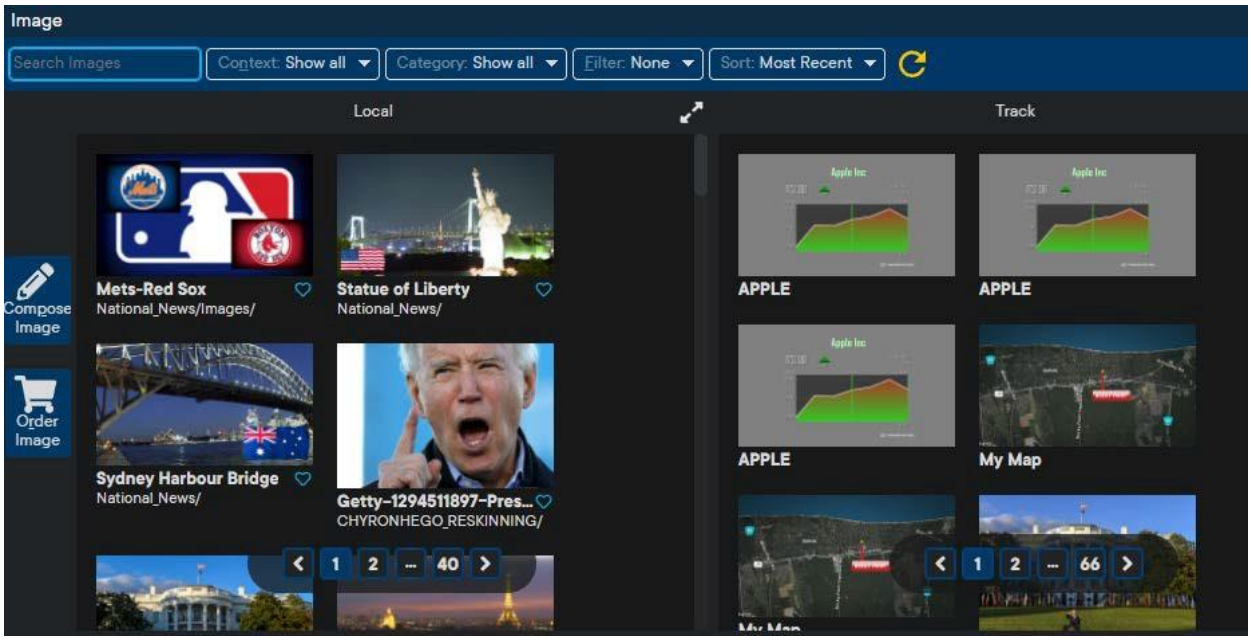
10. Select **Layer 1**, and then scale and position the flag image.



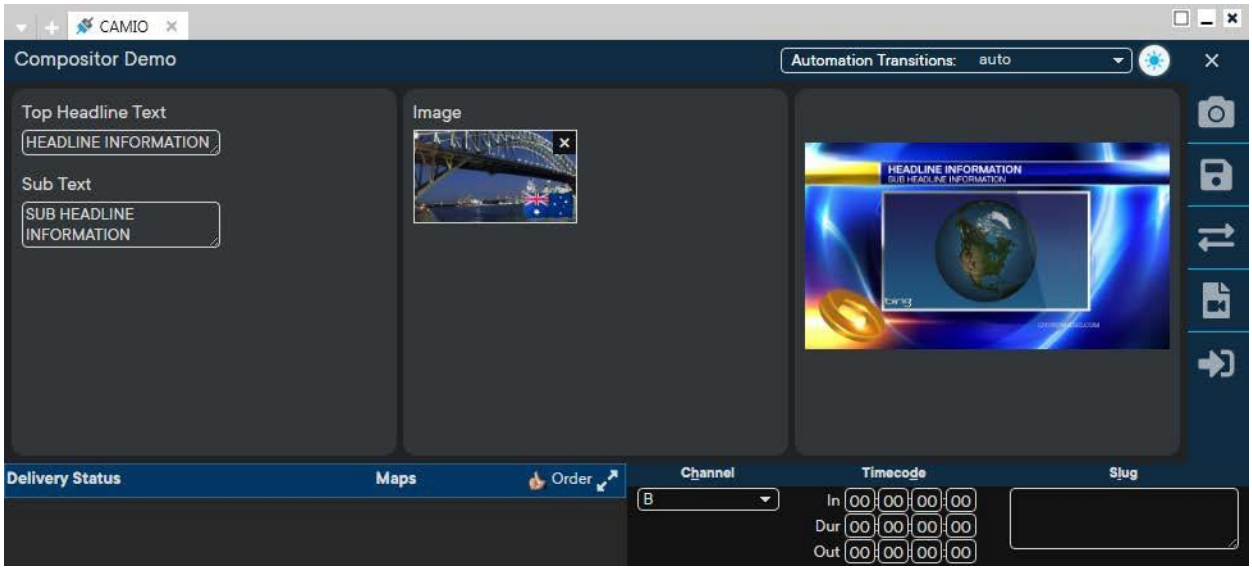
11. Enter the **Title** (required), and if desired, enter one or more **Keywords** and select a **Category** to which to assign the composite image. Select the **Assemble** button.



The graphic appears in the CAMIO **Asset Browser**.



12. Either double-click the image, or click the **Close** icon at the upper right corner of the **Asset Browser**. The image populates the **Image** thumbnail.



13. Enter the text field data.

14. Select the **Generate Preview** icon, and then double-click the **Preview** to view an enlarged version of the graphic. The graphic is ready to insert into your news story. *See MOS Rundowns for information on adding graphics to your scripts.*

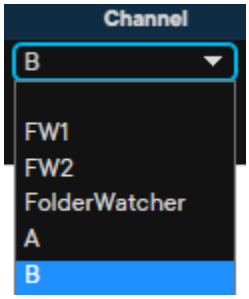
Set Message Properties

Message Properties Overview

Additional information can be saved with a graphic to provide more metadata and/or to specify how the graphic plays out, including:

- Channel Assignment
- Layer Assignment
- Timecode
- Slug
- Automation Transitions

Channel Assignment



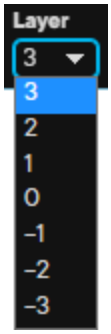
All templates have a default **Channel** specified by the Art Department, i.e., the customary **Channel** in which the graphic plays, as per the production workflow.

To override the default **Channel** assignment:

- Select a new **Channel** from the **Channel** drop-down.

Changing the default Channel assignment may hinder graphics workflows, so please communicate with the production team before changing a graphic's Channel setting.

Layer Assignment (PRIME Templates Only)



PRIME templates also have a **Layer Assignment** that specifies the **Layer** in which graphics will play relative to other graphics in the same channel. Higher **Layers** display over graphics on lower **Layers**.

PRIME graphics have a default **Layer** specified by the Art Department, i.e., the customary **Layer** in which the graphic plays, as per the production workflow.

To override the default **Layer** assignment:

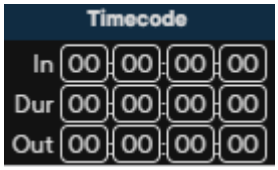
- Select a new **Layer** from the **Layer** drop-down.

Changing the default Layer assignment may hinder graphics workflows, so please communicate with the production team before changing a graphic's Channel setting.

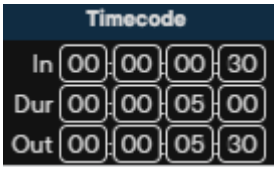
Timecode

In LUCI, you can enter time cues that specify when the graphic is inserted into the program stream in an automation workflow.

In/Out/Duration Not Set



In/Out/Duration Set



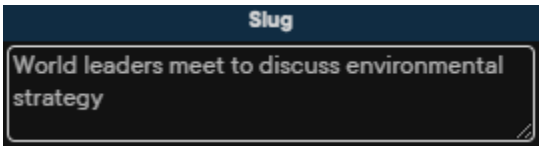
The **Automation Timecode** enables you to specify the graphic timings that can be processed by an automation system running graphics, or can be a visual cue to the production team to alert them when a graphic should be sent to air and for what duration.

The fields are **Hours**, **Minutes**, **Seconds**, **Frames**. You can tab from field to field to quickly enter times. The timings update depending on what times are entered:

- Entering an **In** time and **Duration** automatically populates the **Out** time.
- Entering **In** and **Out** times automatically populates the **Duration**.

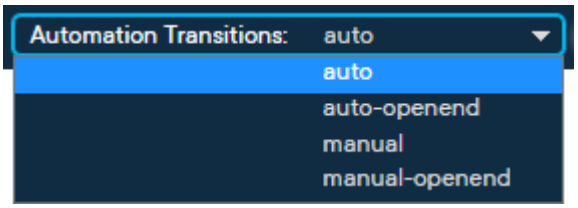
By default, the **Automation** values do not appear in the **MOS Abstract** for a **MOS Object** that is added into the newsroom script. CAMIO must be configured to display the **Automation** values in the **MOS Abstract**. If you would like for the **Automation** values to be added to the **MOS Abstract** displayed in the script, then please contact your CAMIO Administrator.

Slug



A **Slug** is a descriptive label for an object that is based on the graphic's text, image or movie content. The **Slug** line is an additional field into which you can add information to a graphic that can display in the **CAMIO Rundown Endpoint and Viewer** (formerly **iSQ**) playout list or inside the **Rundown** in the script. When creating **MOS Objects** in LUCI, you can add a **Slug** to those objects.

Automation Transitions



An **Automation Transition** specifies how an **Automation Transition** is performed when taking the graphic to air. Your system may display different choices. The above example displays the following:

- **Auto:** Automatically plays the graphic, based on specified **In Point** and **Duration**.
- **Auto-opened:** Automatically opens the graphic, but you must manually trigger the graphic.
- **Manual:** You must manually trigger the graphic.
- **Manual-opened:** You must manually open the graphic.

The specified **Automation Transition** metadata is saved to the **MOS Object** and read by some news automation systems to enable special features. The options available in the **Automation Transitions** drop-down at the upper right of the edit window are configured by your CAMIO Administrator, and display as additional information in the **MOS Object** that you inserted into the script. Please contact your CAMIO Administrator for more information on how to choose from the available options for your particular broadcast.

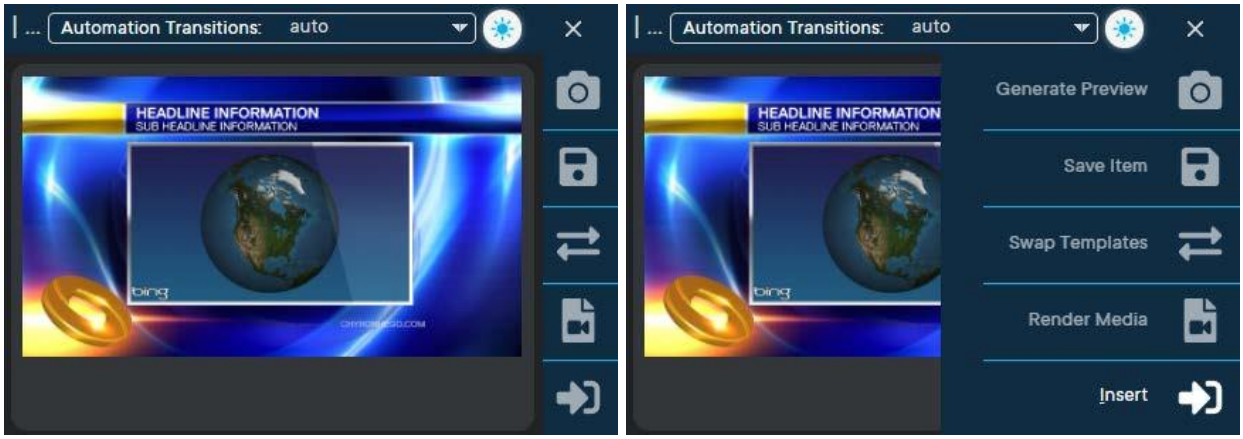
Sidebar Actions

In **Edit Mode**, you can perform the following operations, available from the sidebar:

- Generate Preview
- Save Item
- Swap Templates
- Render Media
- Insert

To access:

1. Hover over the sidebar. The sidebar slides out and displays text descriptions.



2. Select the desired operation.

Close Editor

To close the edit window and return to **Browse Templates**, click **Close Editor** at the upper right of the screen. Doing so closes the current item and loses any data already entered, but not saved.

Generate Preview

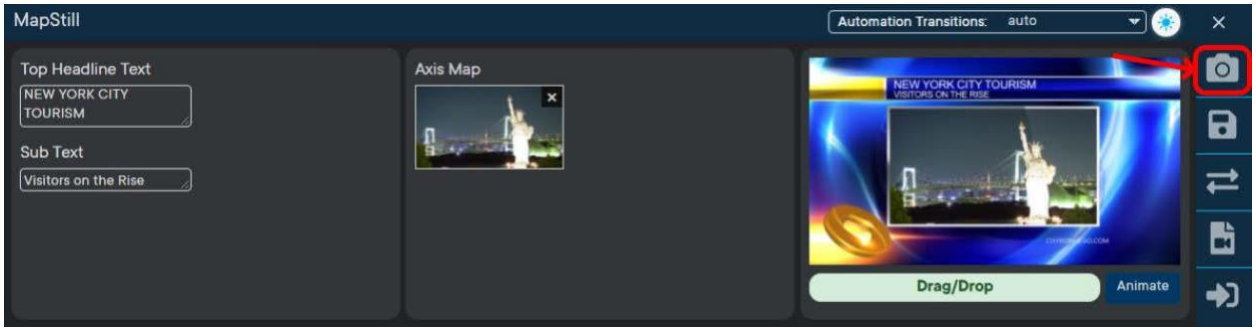
CAMIO will generate previews of MOS Objects created in LUCI using the CAMIO Render server. Static previews are most common but if the system is licensed for Media Engine you can get animated previews as well. The preview system is described below.

Auto Preview:

LUCI can be set to automatically generate a preview each time that you edit a field in the template. While Auto Preview is a useful feature, it does place more demands on the CAMIO rendering system so many clients disable it and instead the user can trigger a Manual Preview when desired.

Manual Preview:

In the sidebar, click on the **Generate Preview** button . A preview displays with the fields populated, and two buttons will appear under the preview; Drag/Drop and Animate. (Animate button may not appear depending on system licensing and configuration).



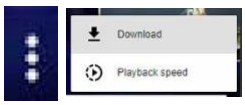
Drag/Drop

When you generate a **Manual Preview**, the CAMIO also creates a **MOS Object** that can be dragged and dropped into the rundown. A button appears below the thumbnail stating **Drag/Drop** and the object can be dragged from either the preview image or the Drag/Drop button. MOS Objects can also be inserted into a rundown using the Insert Button which is described below in the section Insert MOS Objects into a Rundown

Animated Preview:

If the Animate button is present you can generate and view a 5 second animation of the graphic. NOTE: This animation is a best guess based on the transitions built into the graphic and may not correctly render all graphics.

When the preview pane is in animation mode, you can make it render full screen by pressing the full screen button.



You can download the animation as a WEBM file by clicking on the three dot button and then Download.

While the preview pane is in animation mode, you can still drag/drop the object from the Drag/Drop button.

Save Item

Saved Items provides a way for users to save and browse frequently used items for easy re-use and/or to protect them from being purged by a cache cleanup script.

To save a graphic:

- Click **Save Graphic**.

This operation saves the graphic to the **Saved Items** hierarchy. This feature is described in detail in Saved Items.

Swap Templates

Swap Templates enables you to replace one template with another, while retaining the text and replaceables entered in the fields. The **Swap Templates** feature is similar to the **Ctrl+double-click** feature that was popular in LUCI4.

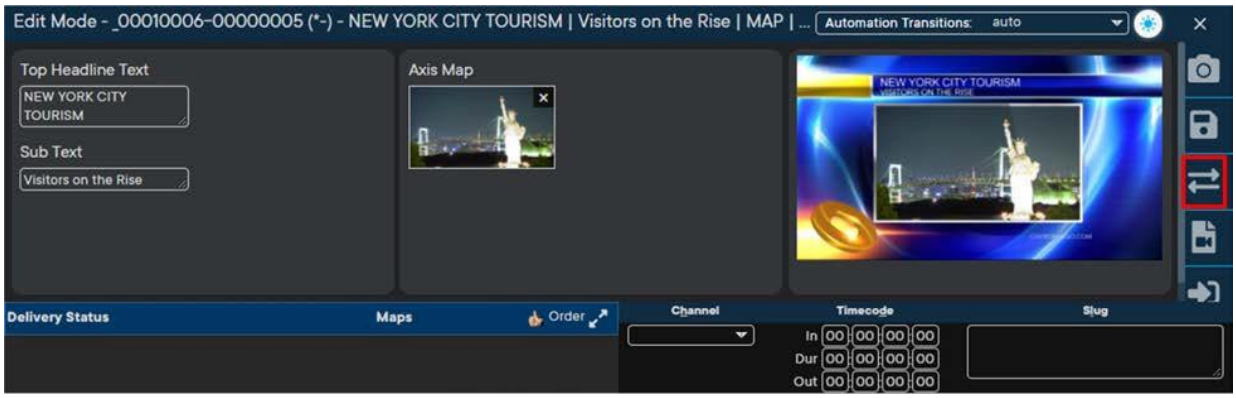
- **Swap Templates** transfers text fields, image fields and movie fields, in the LUCI UI display order, from the current template to the template that is to be swapped.
    - The first text field from the current template to the first text field in the template that is to be swapped, then the second text field in the current template to the second text field in the template that is to be swapped, etc.; and then,
    - The first image field from the current template to the first image field in the template that is to be swapped, then the second image field in the current template to the second image field in the template that is to be swapped, etc.; and then,
    - The first movie field from the current template to the first movie field in the template that is to be swapped, then the second movie field in the current template to the second moviefield in the template that is to be swapped, etc.
- Templates and template fields do not need to have the same names.
- Templates do not need to have the same number of replaceables. **Swap Templates** swaps what it can and ignores the rest.

- **Swap Templates** transfers data in **Autofill** drop-down without activating the drop-down functions, i.e., the operation does not auto-populate dependent fields.
- **XMP** links override swapped data.

To swap a template:

1. Double-click an existing **MOS Object** in a rundown:

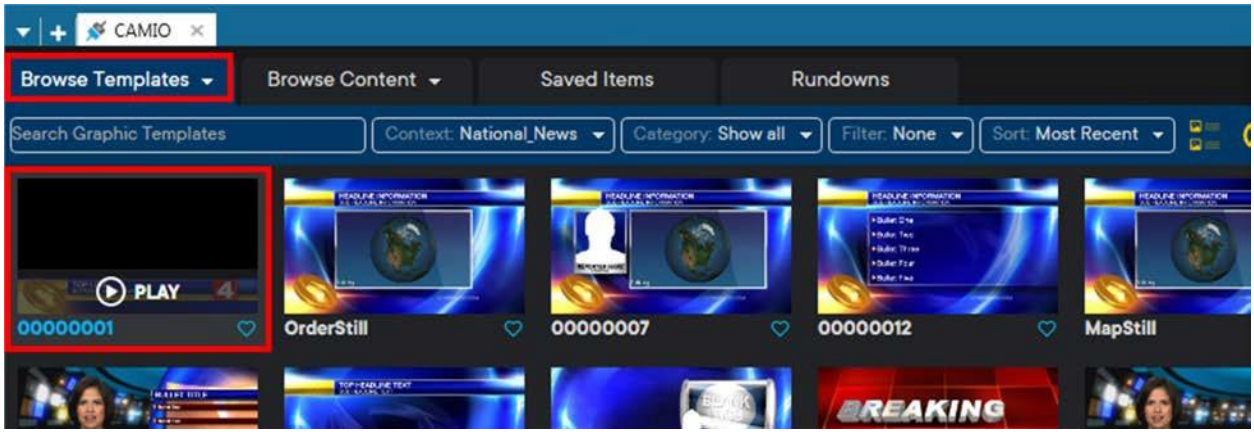
   The graphic displays in **Edit Mode**.



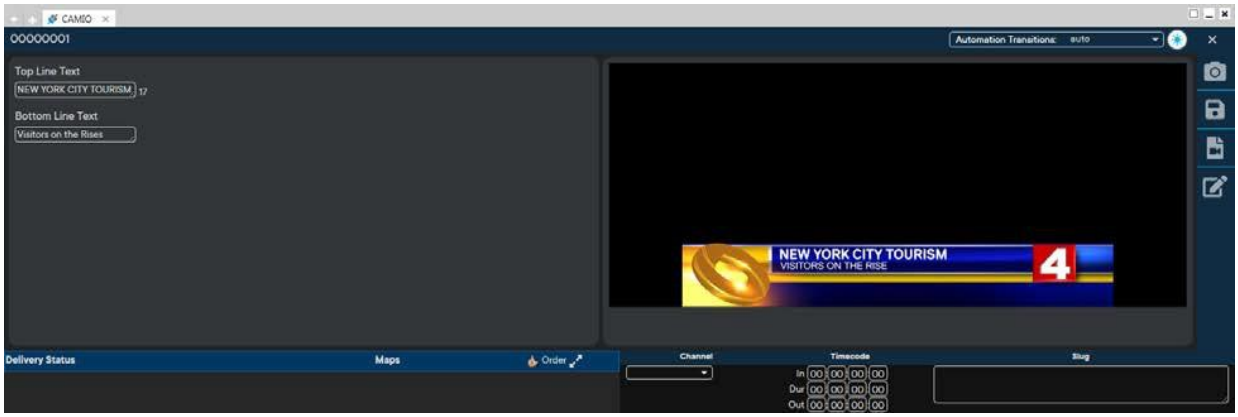
2. Select the **Swap Template** icon.

3. The **Template Browser** opens and displays all templates. Double-click the template that is to replace the template that is in the **Editor**.

   In this example, the template named **00000001** is selected. Note that you can switch between Lyric and PRIME templates, i.e. swap between the two types of templates.



   The text data transfers to the new template, field by field. In this example, as there is no image field, the image in the original template is ignored.



Note that because there is no image in the new template, the UI compensates for the missing image by stretching the screen. This is of no consequence. To view the graphic in its final form, double-click the **Preview**:

4. You can save the graphic, render to an image or movie file, or replace the MOS Object in the script.

   To replace the MOS Object in the script:

   - In the sidebar, select the **Replace** icon. The **MOS Object** reflects the change.

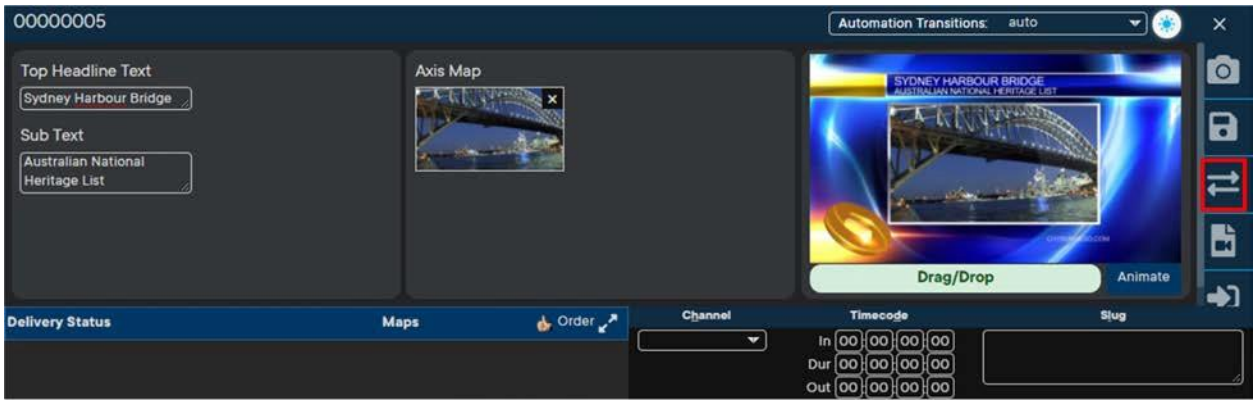
MOS Object Based on Original Template

MOS Object Based on New Template

Render Media

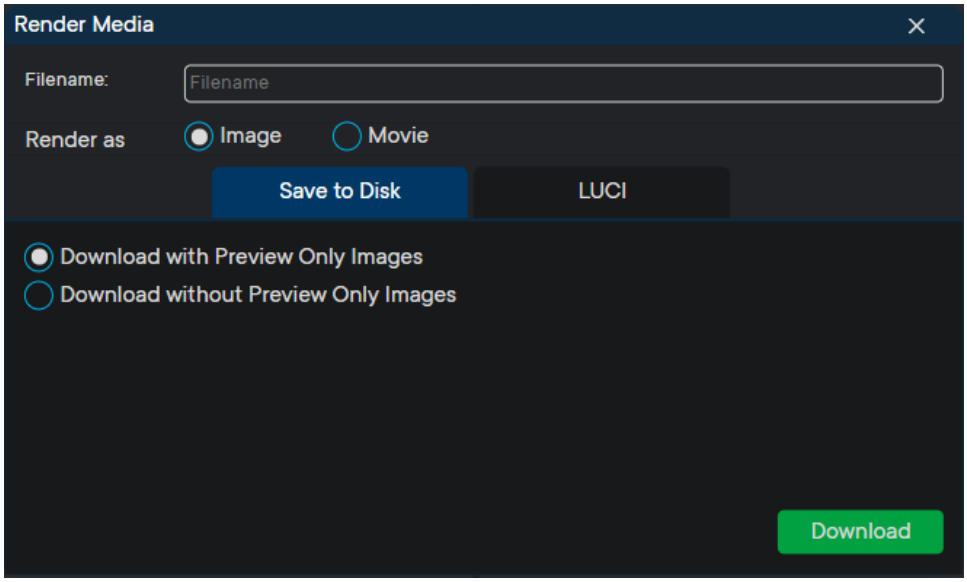
Render Media Overview

Render Media provides a user interface for rendering still images and movie files from **MOS Objects**. This feature is independent of the legacy MediaMaker editor plugins and **Folder Watcher**, which are still supported.



To initiate a render:

- Select the **Render Media** icon. The **Render Media** dialog displays.



Depending on the licensed options, you can render images (stills) only or and images (stills) and movies (animations). The following sections describe image and movie rendering.

Image Render

About Images Only Render

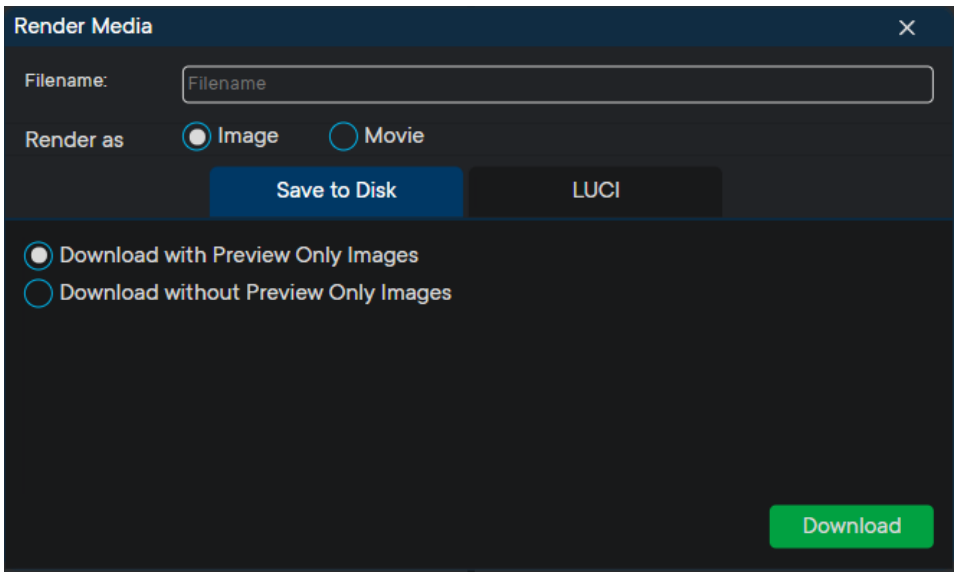
Systems without the **Media Engine Option** can render only still **PNG** format images. You can save rendered images either to disk or to CAMIO Asset Manager (LUCI).

Save Image to Disk

You can download an image to disk, **With** or **Without Preview Only Images**. To save

an image to disk:

1. Click the **Save To Disk** tab. If not already selected, then select the **Image** radio button.

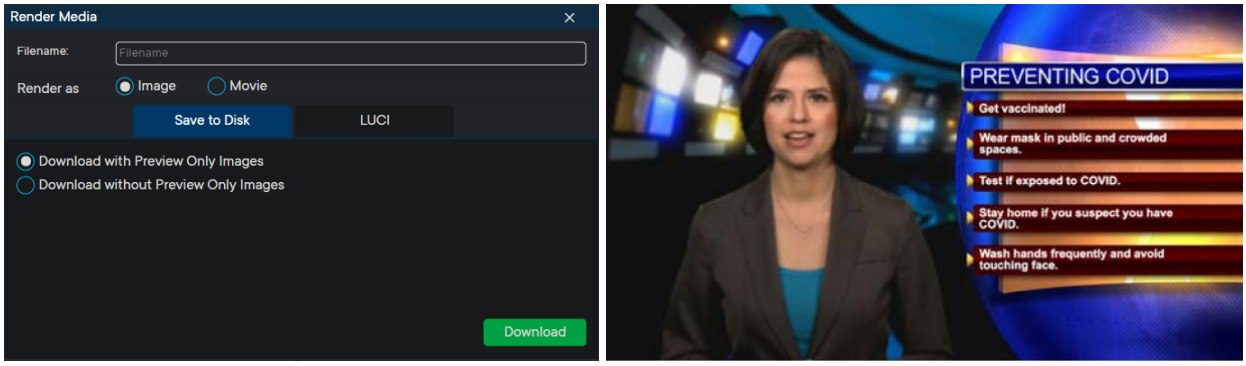


2. Enter a name for the file.

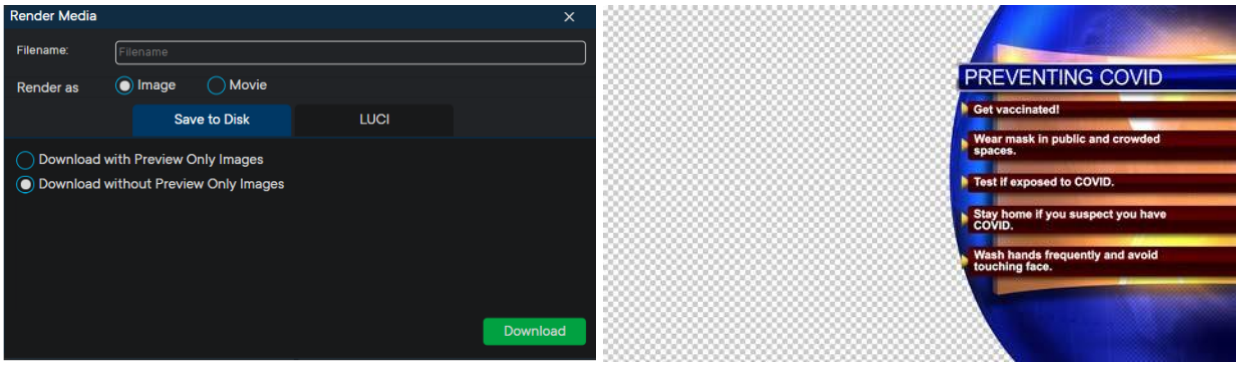
3. Select either the **Download with Preview Only Images** or the **Download without Preview Only Images** radio button.

   The following shows the download results **With** and **Without Preview Only Images** selected:

With Preview Only Images



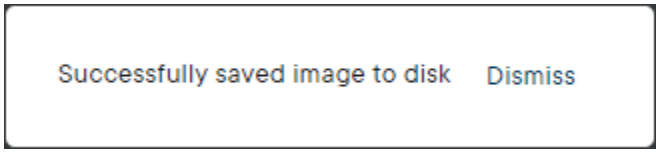
Without Preview Only Images



   The checkerboard area in the graphic represents transparency in the saved image.

4. Select **Download**. The **Save As** dialog displays. The default **Save to DIsk** location is the **Downloads** folder on the system.however, you can save to a different location. You can further edit the name in the **Save As** dialog. Images are saved as **PNG** files.

5. Select **Save**. The image saves to the specified location. The following displays:

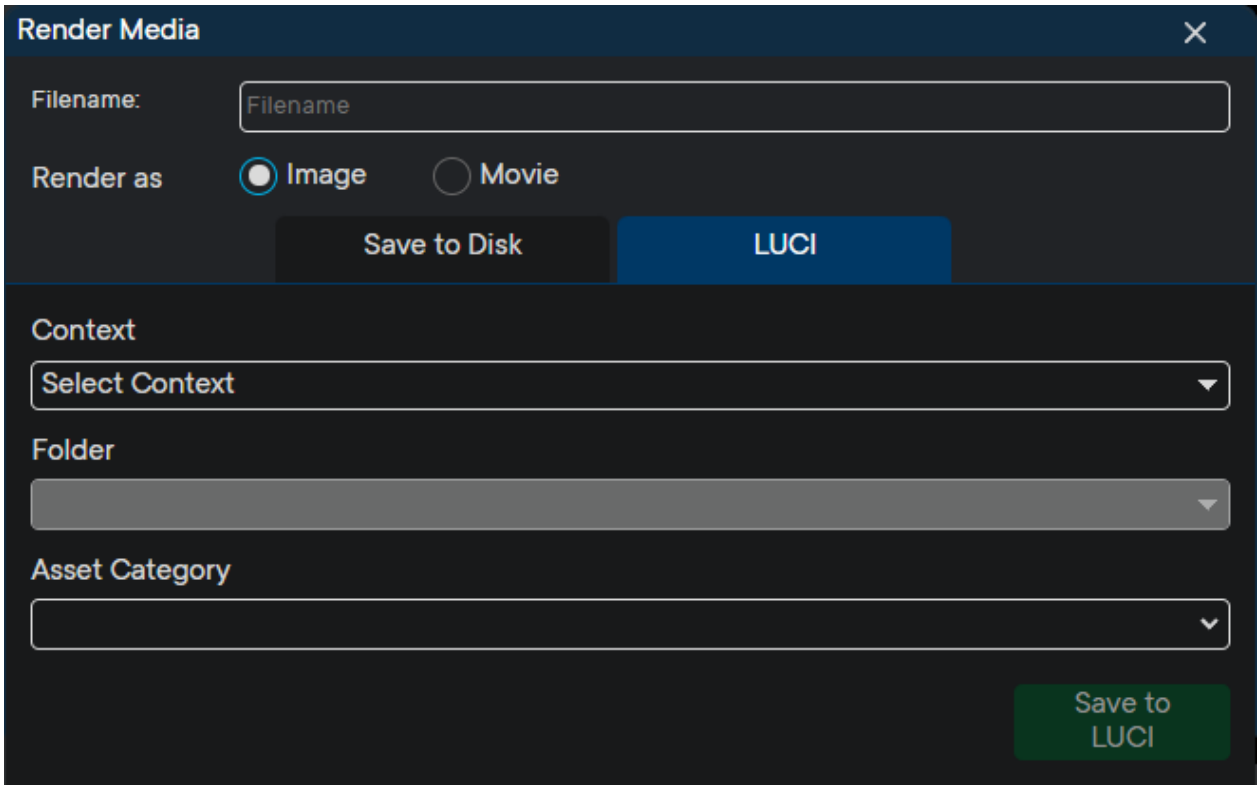


6. Click **Dismiss** or wait until the message disappears.

Save Image to LUCI

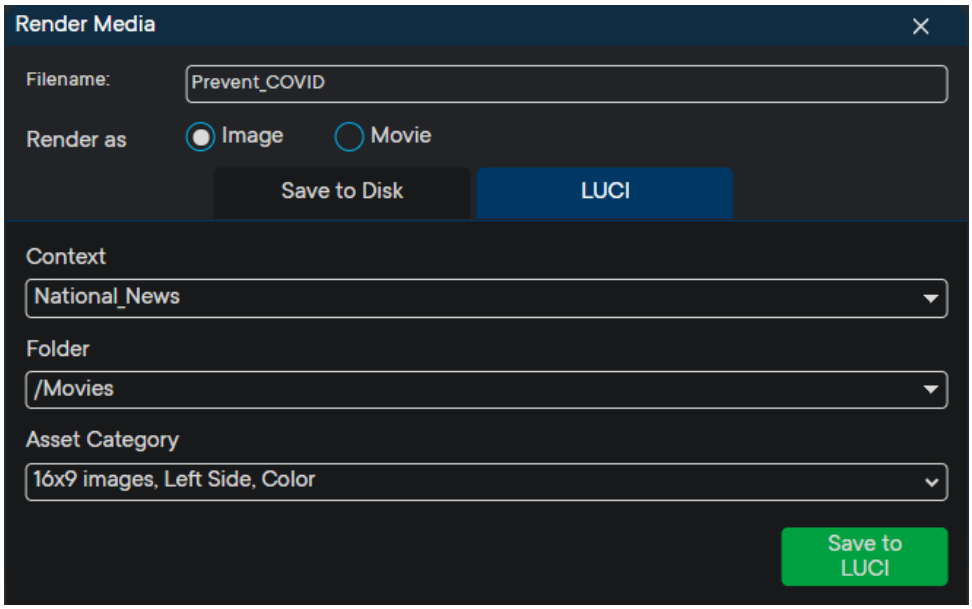
When you save an image to **LUCI**, the image always saves **Without Preview Only Images**. To save an image to **LUCI**:

1. Click the **LUCI** tab. If not already selected, then select the **Image** radio button.

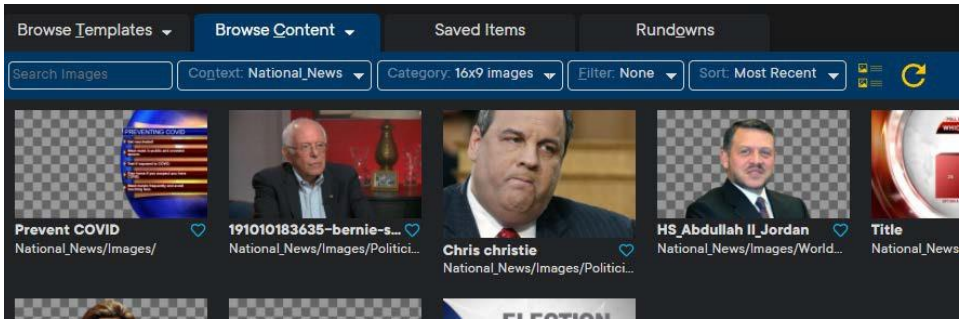


2. Select a destination **Context** and **Folder**.
3. If desired, select one or more **Asset Categories** (optional).

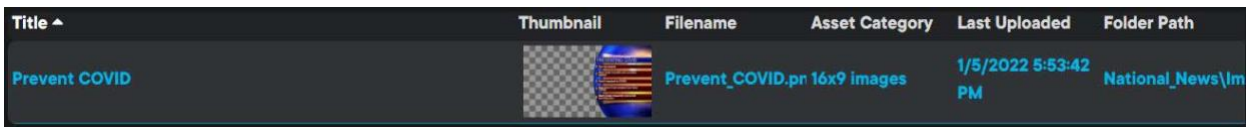
4. Click **Save to LUCI**. A confirmation displays, showing a checkmark on the LUCI tab:



You can access the image in LUCI by browsing, and can narrow the search based on the **Title**, **Context** and/or **Asset Category** that you specified when saving to LUCI. The following shows the **Prevent Covid** graphic saved as an image to LUCI.



If you have access to **CAMIO Asset Manager**, then the following is how the graphic appears in **CAMIO Asset Manager**:



Movie Render

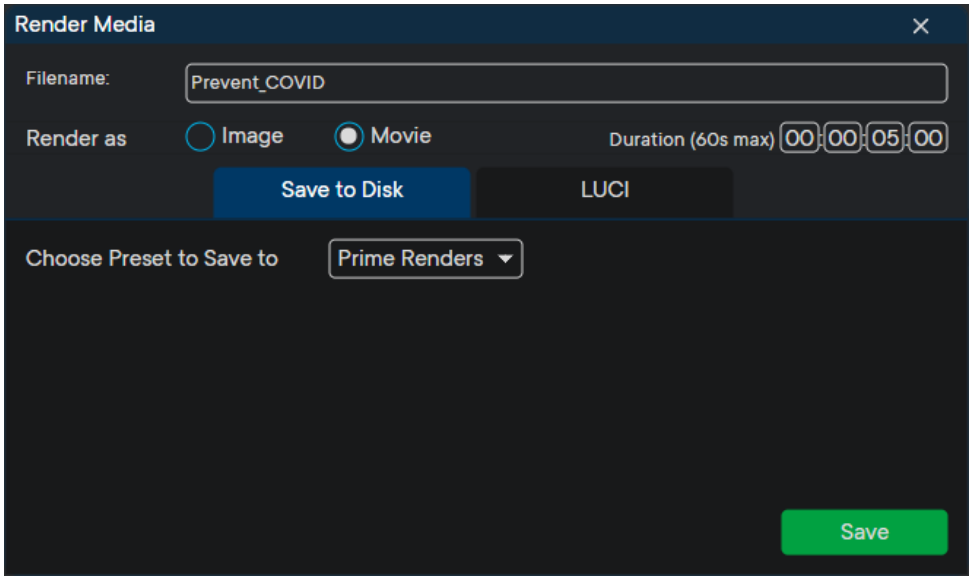
About Movie Render

Systems with the **Media Engine** option can render movies as well as images either to disk or to CAMIO Asset Manager (LUCI).

Save Movie to Disk

You can render the graphic as a movie and save it to disk. To do so:

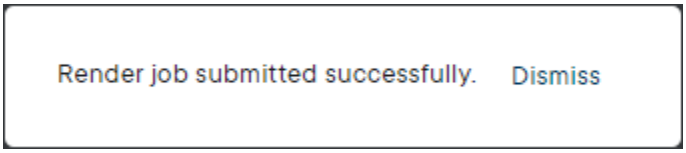
1. Click the **Save To Disk** tab. If not already selected, then select the **Movie** radio button.



2. Specify a render **Duration** in **HH:MM:SS:FF**. The default value is 5 seconds. Rendered movies are limited to a max duration of 60 seconds.

3. From the **Choose Preset to Save to** drop-down, select a movie format and destination **Preset**. The presets listed in dropdown are specified by CAMIO Administrator in **CAMIO Admin Tools Media Engine Presets**.

4. Select the **Save** button to render the movie to the folder specified in **CAMIO Admin Tools Media Engine Presets**. A confirmation message displays:

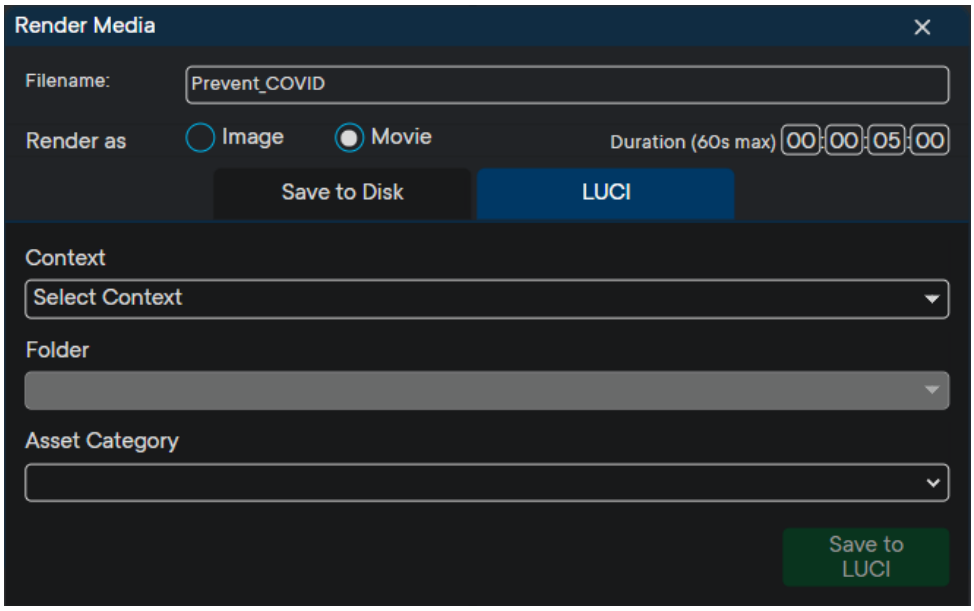


5. Click **Dismiss** or wait until the message disappears.

Save Movie to CAMIO Asset Manager (LUCI)

To save to **CAMIO Asset Manager**:

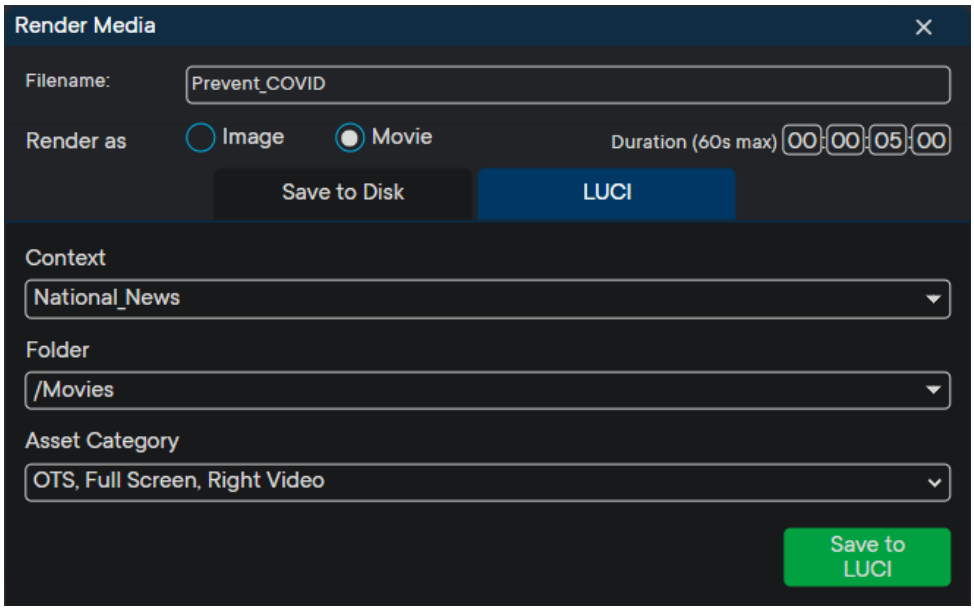
1. Click the **LUCI** tab. If not already selected, then select the **Movie** radio button.



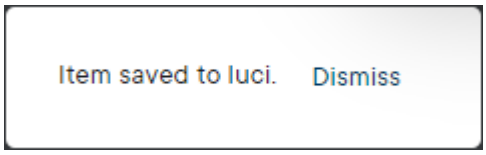
2. Specify a render **Duration** in **HH:MM:SS:FF**. The default value is 5 seconds. Rendered movies are limited to a max duration of 60 seconds.

3. Select a destination **Context** and **Folder**.

4. If desired, select one or more **Asset Categories** (optional).

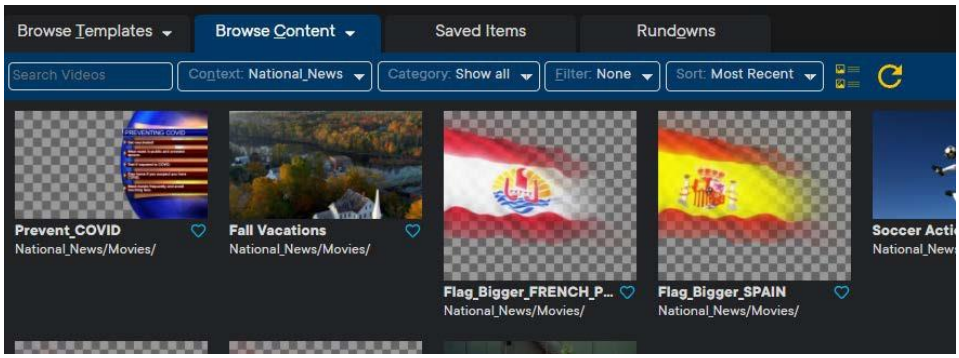


5. Click **Save to LUCI**. A confirmation message displays:



6. Click **Dismiss** or wait until the message disappears.

You can access the movie in LUCI by browsing, and can narrow the search based on the **Title**, **Context** and/or **Asset Category** that you specified when saving to LUCI. The following shows the **Prevent Covid** image saved as an image to LUCI.



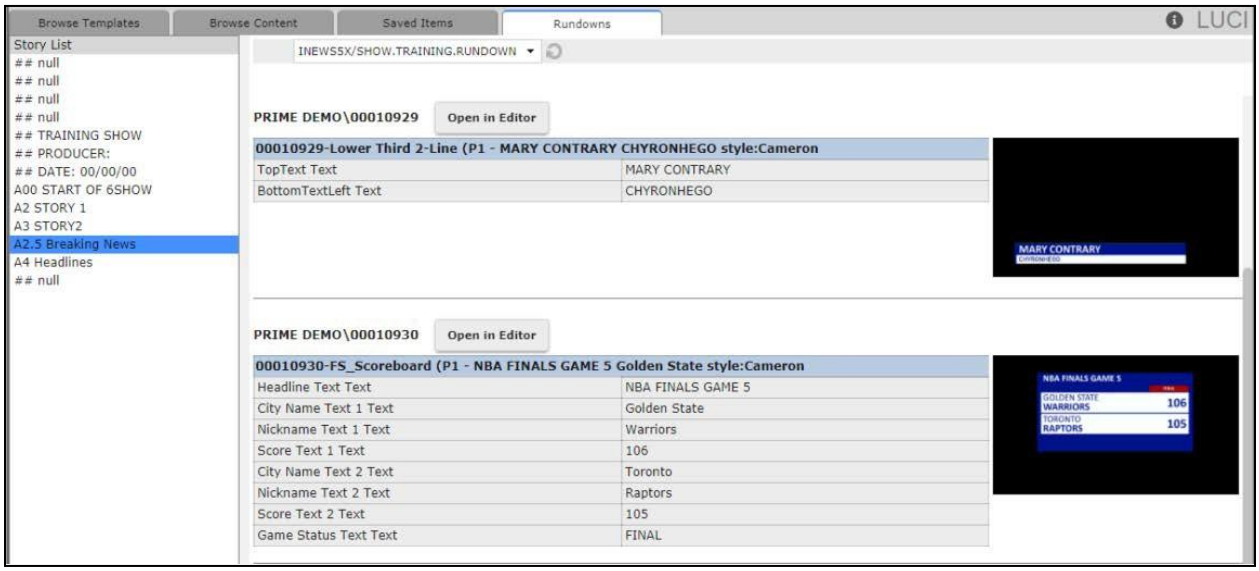
If you have access to **CAMIO Asset Manager**, then the movie appears as follows in **CAMIO Asset Manager**:

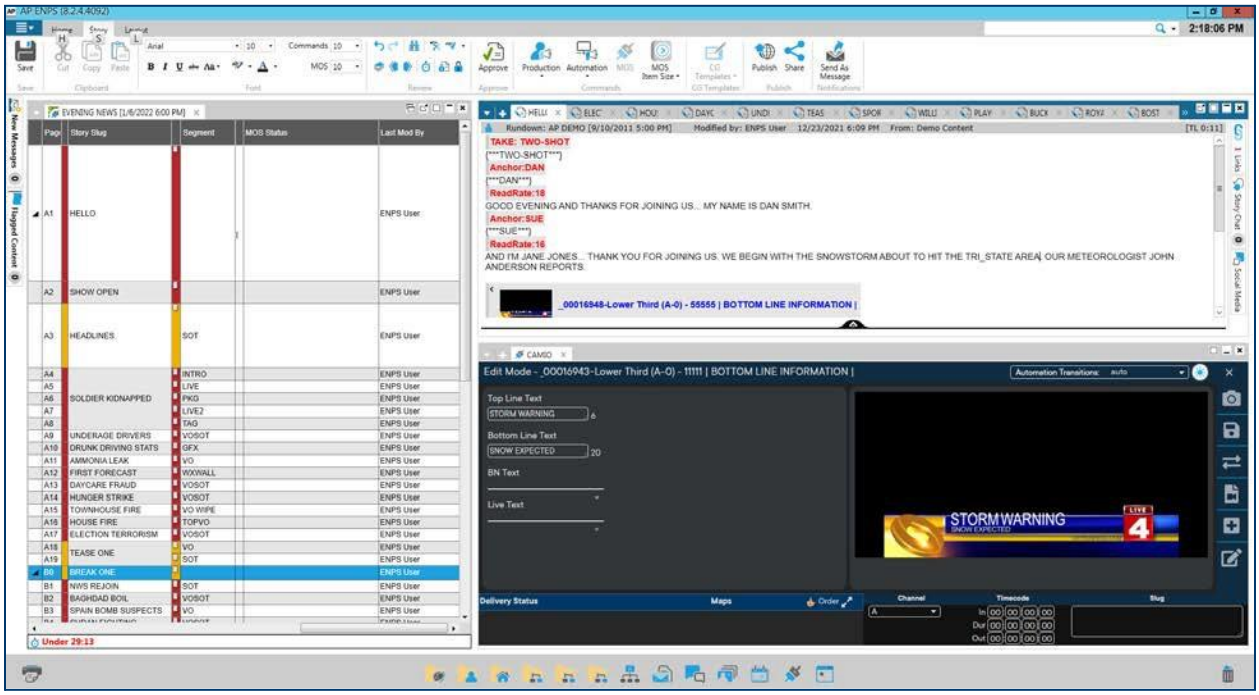
Add Graphic to Your News Story

After you finish editing your graphic, you can immediately insert the graphic into your news story. *See* *Insert MOS Object into Rundown*.

Rundown View

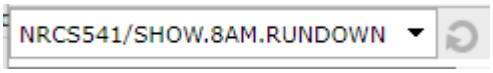
Rundown View Overview





Rundowns are visual representations of all of the stories in a monitored or on-air rundown and all of the graphics and studio objects in those stories. To see the rundowns that are currently active in the Newsroom System:

- Click the **Rundowns** tab and select the rundown from the drop-down list at the top of the screen.



The left panel lists all stories in the rundown. To

view the objects in a story:

- Select a story. The objects in the story display.

You should ensure that you are viewing the most current version of the **Running Order**. To view:

- Click the **Refresh** icon .

The high-resolution thumbnail and the list of text fields make it very easy to spell check all content and to quality control the graphics.

The process in LUCI is the same for all newsroom computer systems. Please refer to the documentation accompanying your NRCS for specific details on **Production Cues** and their functionality.

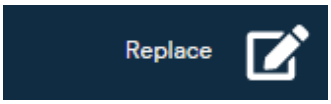
Insert MOS Object into Rundown

The **Insert** operation creates a **MOS Object** and inserts it into the newsroom rundown. There are four types of **Insert** operations, depending on if you are creating a new **MOS Object**, editing an existing **MOS Object**, and the system's **MOS Configuration**. They are each represented by an icon on the sidebar.

Create New Mode

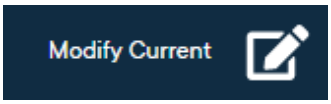
Inserts a new **MOS Object** into the rundown. This is the most common operation.

Edit Mode: Force Edit New = True

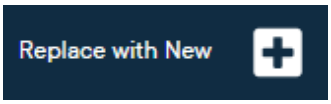


If you are in **Edit Mode**, and the system **MOS Configuration** is set to **Force Edit New = True**, then this updates the rundown object you are editing with a new object using a new **Object ID**.

Edit Mode: Force Edit New = False



If you are in **Edit Mode**, and the system **MOS Configuration** is set to **Force Edit New = False**, then this updates the rundown object you are editing with a new object using the same **Object ID**.



If you are in **Edit Mode**, and the system is configured to **Force Edit New = False** then this updates the rundown object you are editing with a new object using a new **Object ID**.

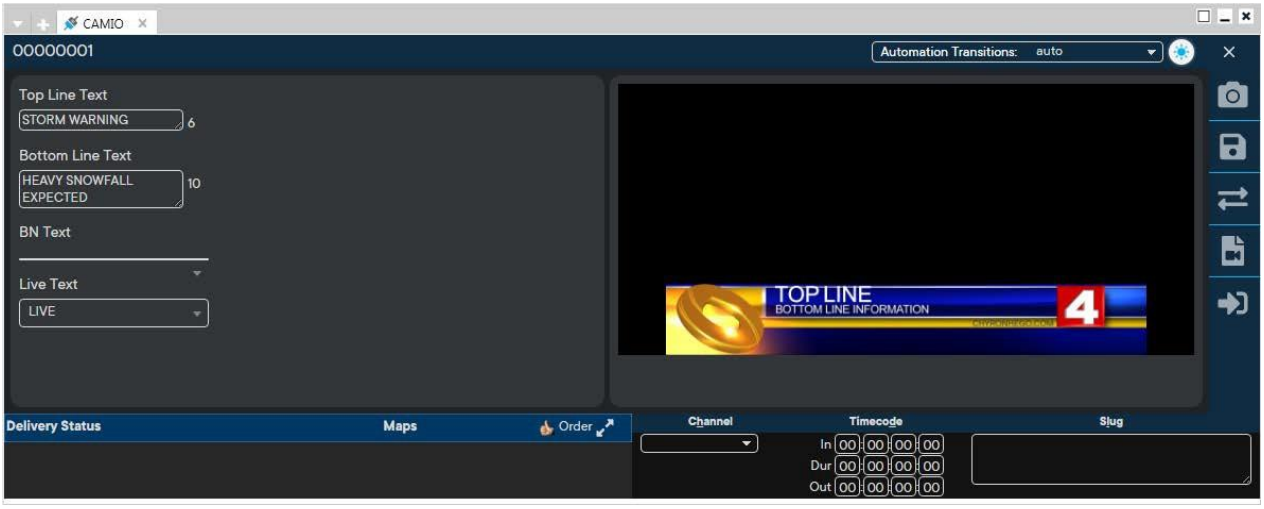
Note the following:

- Modify Current updates the existing MOS Object using the same Object ID. This could inadvertently modify other locations in the rundown from where that same MOS object may have been copied.
- Replace with New is strongly recommended in most cases.
- Force Edit New is a CAMIO system configuration. Setting the CAMIO system configuration to Force Edit New ensures that all edits work in Replace with New mode. Ask your CAMIO system administrator for more information.
- iNews Users: The Insert keys work in iNews only if the user keyboard shortcuts have been properly configured. If your Insert keys are not working, then please ask your CAMIO Administrator for assistance on setting up your keyboard preferences.

Drag/Drop Function in LUCI

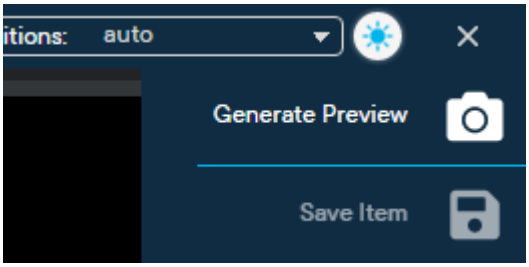
Previous versions of LUCI did not perform a true drag and drop of **MOS Objects** into the newsroom system rundown. This new version performs a true drag and drop, but requires a manual **Preview** operation to generate the draggable object.

Initially, the LUCI displays as follows. The image is not initially a draggable object.

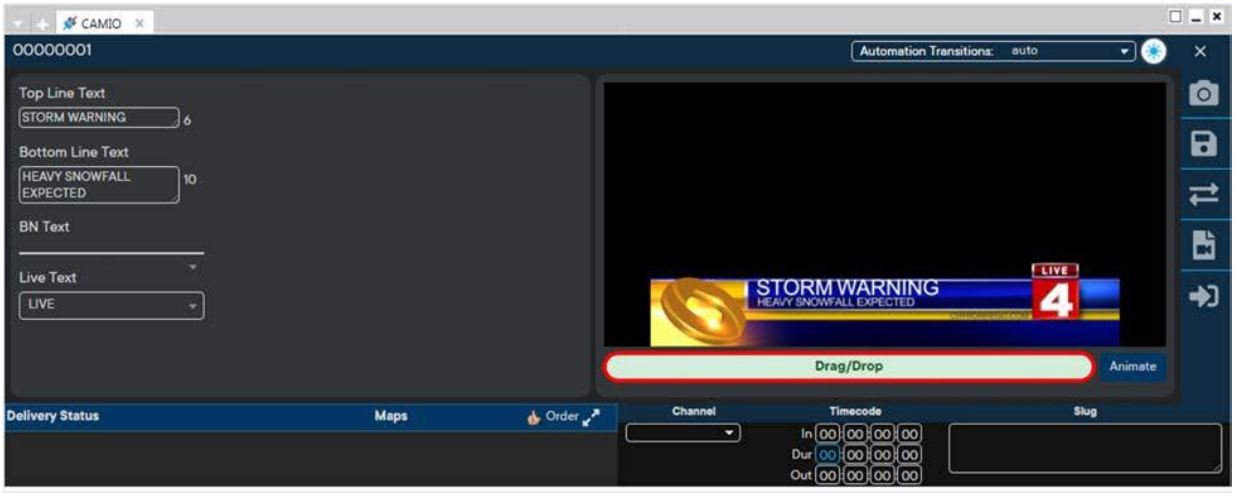


To create a draggable object:

1. Click the **Generate Preview** button to create a manual preview and a draggable object. Note that **Auto-preview** does NOT generate a draggable object.

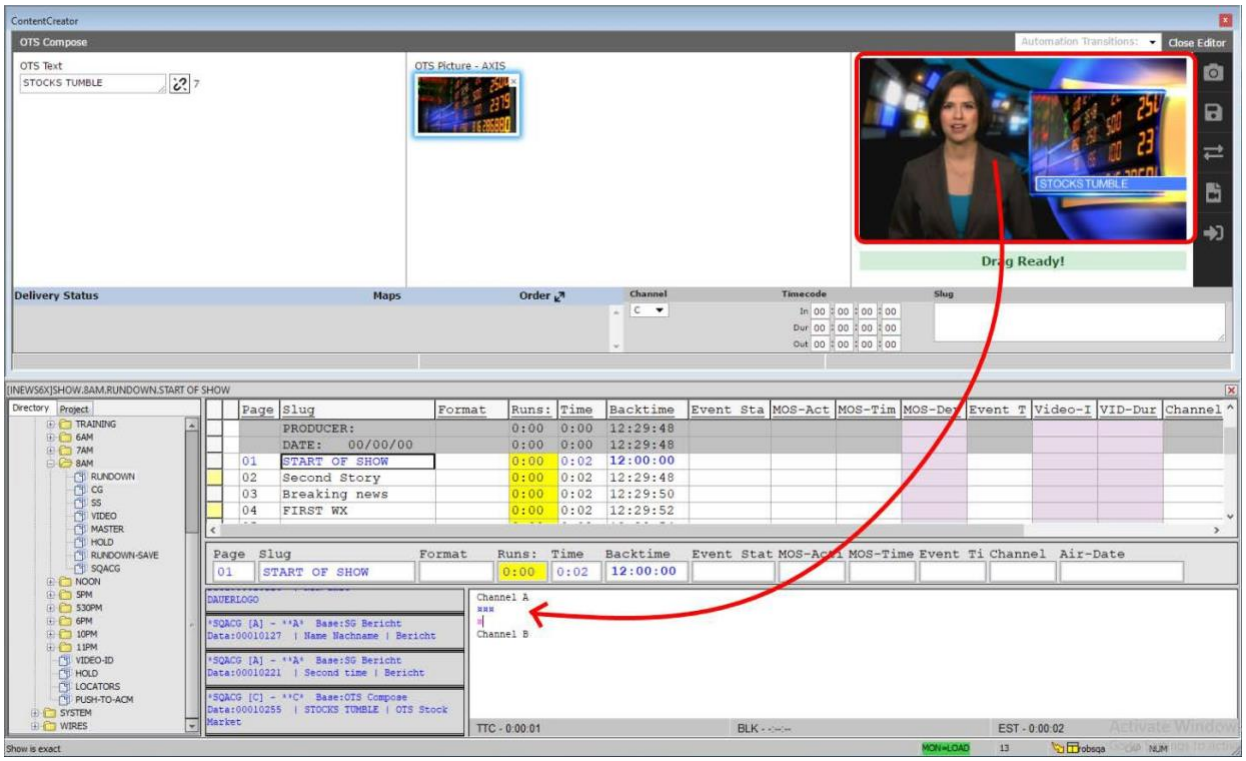


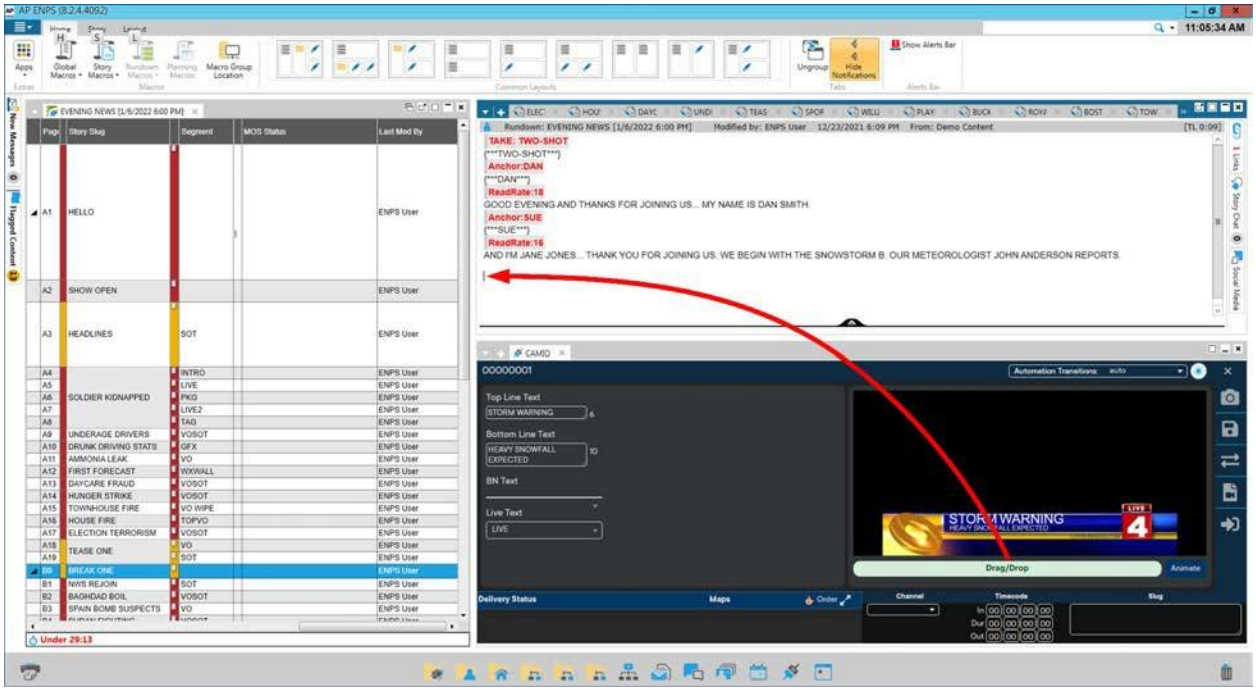
2. The **Drag/Drop** prompt appears below the **Preview Image**, indicating that you can drag and drop the graphic into your story.



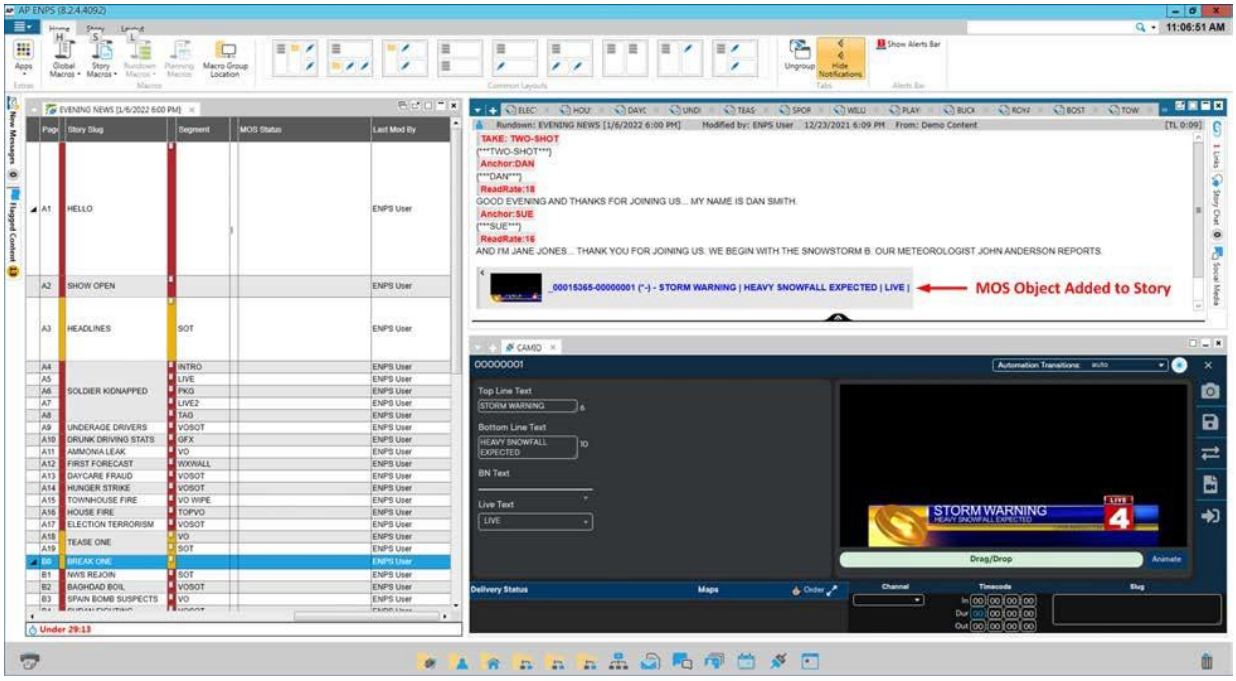
3. If desired and the graphic is an animation, then you can select the **Animation** button to preview the animation before you insert the graphic into your story.

4. Drag the **Preview Image** thumbnail to the newsroom rundown:





The graphic is added to the rundown as a **MOS Object**:



Note the following:

- You can drag and drop the same object multiple times into the rundown.
- Auto-preview does not generate a draggable object; only a manual preview generates a draggable object.
- Changing any replaceable data in LUCI disables the drag-and-drop ready state, and requires you to generate a new preview.

MOS Abstracts and MOS Objects

The code displayed as the **Production Cue** is an abbreviated version of the code that defines the **MOS Object**. This abbreviated code is known as a **MOS Abstract**. Note that in some newsroom systems, the **Object Slug** will be used instead but the following descriptions will be similar.

The display format of the **MOS Abstract** is a **Global** setting determined by the **MOS Abstract Settings** in the **CAMIO MOS Administration** page. To change the **MOS Abstract** format, contact your CAMIO Administrator.

Once a new file is inserted to a script, a pop-up indicates the context and number of the created object, so you can feel confident that your content was created successfully. The example above specifies that the template data message is in **Context NAB 2017**, and the template data message number is **10852**, so you can feel confident that your content was created successfully.

Preview an Existing MOS Object

After insertion into **Story Text**, you can preview the **MOS Object**. To do so:

- Double-click the **Production Cue** for the **MOS Object**. The message loads into LUCI.

Edit an Existing MOS Object

You can edit **MOS Objects** that have been inserted into a script. To do so:

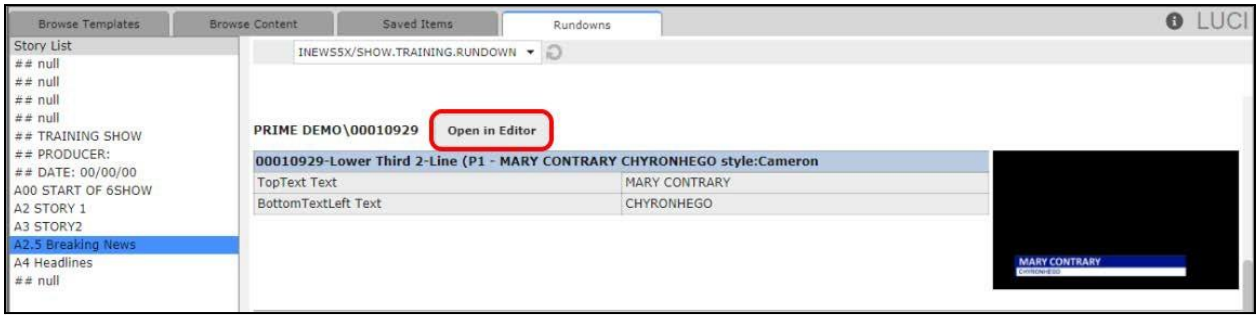
1. Double-click an existing **MOS Object** in the rundown to load LUCI with the existing **MOS Object**.
2. Edit the content or template type.
3. To update the selected item, do one of the following:
    - Click **Modify Selected**.
    - Click **Insert** to add a new instance of this graphic to the script at the cursor.

    This **MOS Object** will have a new **MOS Object Number**. **Any copies of the original object, e.g., a script that had been copied to another rundown, will remain in their original states.**

Story Locking: Note that if another user is editing the story, then it will be locked and your changes will not be viewable in the rundown until the lock is released.

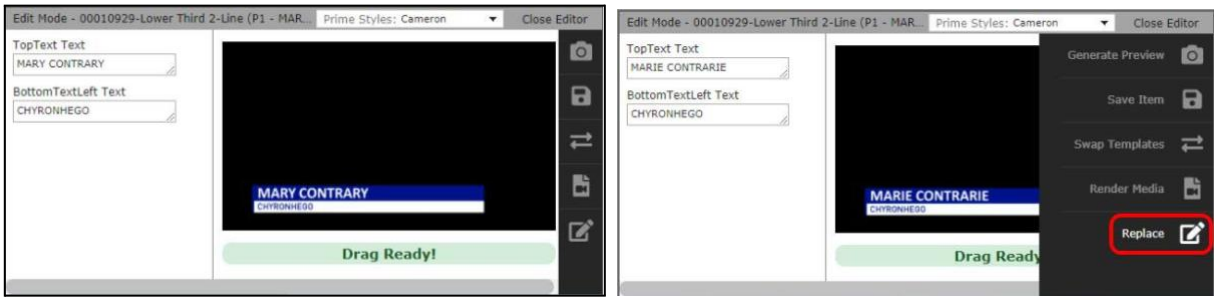
Edit in the Rundown View

If supported by the newsroom system, you can also edit graphics directly from the **Rundown View** even if LUCI is not running in the newsroom system.

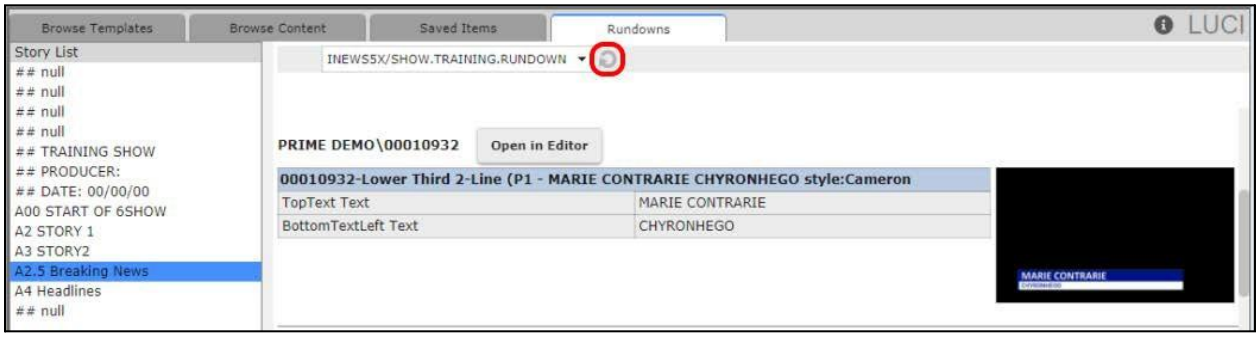


If editing is available, an **Open in Editor** button displays above each item in the rundown. To edit a graphic:

1. Click the **Open in Editor** button. The **LUCI Editor** displays:



2. Make the desired changes to the graphic.
3. Click the **Replace** button on the right sidebar.
4. When you return to the **Rundown** view, click the **Refresh** button to update the **Rundown** view with the new changes.



Story Locking: Note that if another user is editing the story, then it will be locked and your changes will not be viewable in the rundown until the lock is released.

ABOUT US

Chyron is ushering in the next generation of storytelling in the digital age. Founded in 1966, the company pioneered broadcast titling and graphics systems. With a strong foundation built on over 50 years of innovation and efficiency, the name Chyron is synonymous with broadcast graphics. Chyron continues that legacy as a global leader focused on customer-centric broadcast solutions. Today, the company offers production professionals the industry's most comprehensive software portfolio for designing, sharing, and playing live graphics to air with ease. Chyron products are increasingly deployed to empower OTA & OTT workflows and deliver richer, more immersive experiences for audiences and sports fans in the arena, at home, or on the go.

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