



Cnario Messenger 3.8.5

User Guide

November 2019

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Contents

1. Introduction	10
1.1 Document Scope	10
1.2 Related Documentation	10
1.4 Terminology and Basic Concepts	11
2. Getting to Know the User Interface	12
2.1.1 Examples of Tasks Performed Using Different Methods	13
4. Authoring Content	21
4.1 Edit Module	21
4.3 Edit Area	21
4.4 Resources Pane	22
4.5 The Workflow	22
4.6 Working With Projects and Layouts	23
4.6.1 Adding a Project and a Layout	23
4.6.2 Performing Additional Tasks on Projects and Layouts	24
4.7 Editing Layout Windows	25
4.7.1 Edit Mode	25
4.7.2 Changing Window Properties	26
4.7.3 Window Layering	28
4.7.4 Window Aligning and Relative Resizing	28
4.8 Adding Content Items	29
4.8.3 Assigning Content Items to Windows	31
4.9 Previewing Layouts	33
5. Managing the Library	34
5.1 Content Item Types	34
5.1.8 Live Feed	49
5.1.9 Multi Stream	51
5.2 Assigning Properties to Content Items in the Library	51
5.3 Locating Assigned Items in the Library	52
5.4 Searching the Library	53
6. Managing Playlists and Schedules	54
6.1 Creating Layout Playlists	54
6.2.1 Understanding Scheduling Concepts	56
6.2.2 Using Schedule Actions	56
6.2.3 Configuring a Schedule	57

6.3.1	Creating a Playlist Content Item	60
6.3.2	Editing a Playlist Content Item	62
6.3.3	Nesting Playlists.....	62
6.3.5	Applying Playlist Master Schedulers	63
6.4	Applying Playback Rules with Keywords	67
6.4.1	Adding Keywords to the Keywords Library.....	68
6.5	Advanced Scheduling	71
6.5.1	Creating Playlist Rules using Devices and Location	71
6.5.4	Switch Playlists	77
7.	Adding Advanced Content Item Types	81
7.2	Alpha Animation.....	82
7.2.1	Setting Alpha Animation	83
7.3.1	Creating Users for Web Login.....	86
7.3.2	Organizing the Library for the Media Manager	87
7.3.3	Setting Access Permission to the Folders.....	87
7.3.7	Anchoring the Items.....	96
7.3.8	Finalizing Layout	98
7.3.9	Granting User Permission to Access the Players	99
7.4.1	Anchoring the Windows	101
7.5	Analog Clock	102
7.6.2	Synchronization Tab.....	105
7.6.3	Misc Tab	105
7.7	Database Master	106
7.7.4	Data Formatting Tab	112
7.8	Digital Clock.....	113
7.9	Web Feed Reader	114
7.9.3	Windows Editor Tab.....	116
7.9.5	Settings Tab.....	119
7.9.9	Save Settings	123
7.10	Windows Presentation Foundation Master.....	123
7.11.2	Synchronized Sequences.....	128
7.11.3	Defining Filters and Key Frames.....	129
8.	Distribution, Control and Monitoring	134
8.1	Managing Layout Transfers and Integration	134
8.1.1	Deploying Layouts and Files.....	135
8.1.6	Viewing Events.....	154
8.1.8	Controlling Network Speed	158

8.2Managing Players and Canvases.....	160
8.2.1 Working with the Template Toolbar	161
8.2.2 Using Templates to Manage Canvases.....	162
8.2.3 Arranging Template Details	162
8.2.4 Setting Up Email for Notifications	163
8.2.6 Setting Up Canvas Events.....	172
8.2.7 Creating Reports.....	173
8.2.8 Maintenance	174
9. Reading Reports.....	182
9.1Creating and Assigning Customers to Content Items	182
9.2Setting the Report Properties.....	184
Appendix A. Complex Playlist Example.....	186
A.1 The Challenge	186
Appendix B. XML Scripting and Parsing	190
B.1Introduction.....	190
B.2XML File Sample	190
B.3XML Parsing Commands.....	190
B.3.1 Scope Parameter	190
B.3.2 Command List	191
B.5Samples	192
B.6Web feed reader script samples	194
B.6.1 Select maxTemp of city number 2: Option 1	194
B.6.2 Select maxTemp of city number 2: Option 2	194
B.6.3 Get attribute value + sample of use %% in the Xpath.....	194
B.6.4 Set XML Attribute	195
Appendix C. Web Feed Reader Scripting.....	197
C.1 Web Feed Reader Tags.....	197
D.3 Assigning User Permission to the Library Folders	204
D.4 Assigning User Permissions to the Canvases	206
D.5 Creating a Layout and Playlist Content Item	207
D.5.1 Assigning Canvases to the Layout.....	209

1. Introduction

1.1 Document Scope

This User Guide describes how to use the Cnario Messenger digital signage solution to design, deploy, monitor and control playback canvases. The guide presents the basic procedures for each module, as well as the advanced features and components, providing you with a complete understanding of the solution capabilities.

1.2 Related Documentation

Advanced usage is covered in additional guides and in Messenger College courses listed in the following table.

Document	Description
<i>Cnario Media Manager</i>	How to set up and use Media Manager to update multimedia displays via the Internet.
<i>Cnario Getting Started Operation Manual</i>	

1.3 About Cnario Messenger

The Cnario Messenger digital signage solution includes a comprehensive suite of software products designed to display targeted pixel-perfect digital media on digital signage networks. Typically, this includes network management and screening of media and promotional material on digital signage displays in retail and recreational environments, as well as public spaces such as supermarkets, shopping malls, bars, airport and rail transport terminals and museums.

Cnario Messenger features include content management, layout (canvas) authoring, network management and playback enhancements. Together, this functionality provides an intuitive production, distribution, display and management system for screening digital dynamic media spots on wide area digital signage display networks.

1.4 Terminology and Basic Concepts

Digital signage often includes a group of display devices (screens / projectors) combined to form one large display area.

The following is needed to create a digital signage display:

Canvas - Refers to each display area, consisting of one or more channels.

Screen - Refers to the display device(s) that make up the **canvas**.

Player - Refers to the unit responsible for playback. The player receives displays sent through the **Channels** and projects it to the **screen(s)**.

Channels - Refers to the physical output of a player computer.

Pins - Parameters associated to the playback devices. Pins can be configured to receive real time data and manage your players.

Projects - Contain the layouts. You can create multiple projects to sort your layouts into different groups.

Folders - Project folders are configured and added in Messenger. You can access and add content to these folders, or add new folders to sort content items.

Folders - Add folders to your project to sort your layouts into sub-groups.

Layout - Represents the canvas in Messenger. You design the layout in the way you want to present your content on the canvas.

Windows - Hold content items and are placed inside the layout.

After you create a layout with windows designed, placed and layered, you assign content items to the windows.

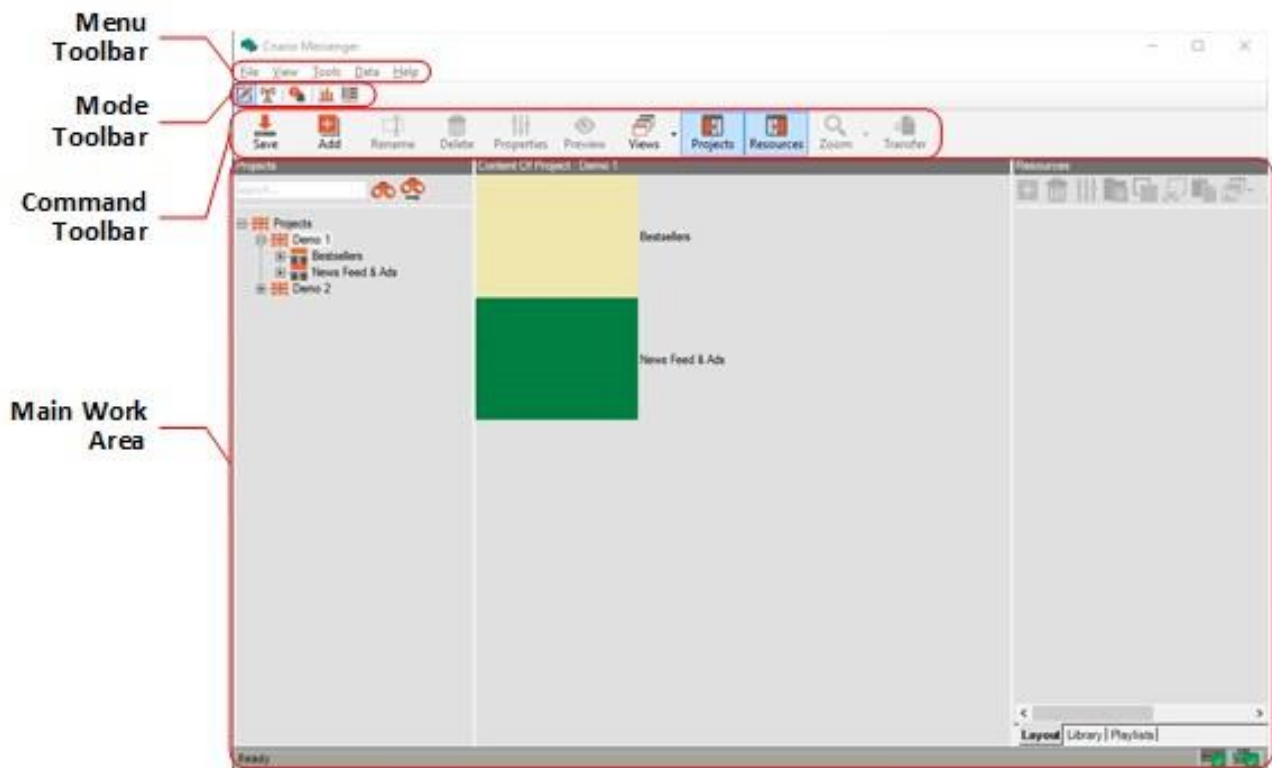
Playlist - Used to play multiple content items, consecutively, in a single window.

Schedules - Defines, in advance, the specific times or logic for certain content to be played. Schedules can be added to layouts, library items and pins.



2. Getting to Know the User Interface

The user interface consists of the following main parts:







- Menu Toolbar - contains various menus with common actions
- Mode Toolbar - contains buttons for switching between modes
- Command Toolbar - contains buttons for performing tasks in the current mode
- Main Work Area - main workspace where you perform tasks


The interface, including menu options, is dynamic and changes according to the mode selected in the Mode Toolbar.

2.1 Using Multiple Methods to Perform Tasks

In Messenger, you can perform many of the tasks using more than one method. The main methods are (with associated icon):

- Menu Toolbar button )
- Command Toolbar button ) (in Edit Module, may also refer to the layout or the resources toolbar)
- Context menu (right-click) )
- Keyboard shortcut )

In this guide, procedures are demonstrated using the recommended method. Tasks that you can perform using additional methods are marked with the relevant icons to the left of the task. For example:

-  1. In the Menu Toolbar, click **File**, then click **Add Layout**.

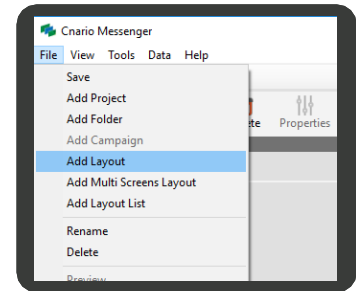
2.1.1 Examples of Tasks Performed Using Different Methods

2.1.1.1 Adding a Layout


You can add a new layout to a project using one of the following methods:

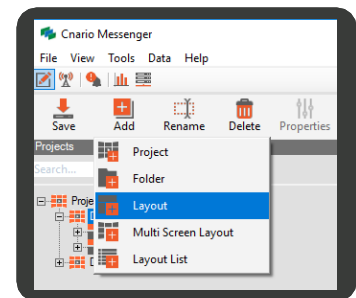
Method 1: Menu Toolbar

1. In the **Projects** pane, click the project in which you want to add the layout.
2. In the Menu Toolbar, click **File**, then click **Add Layout**.



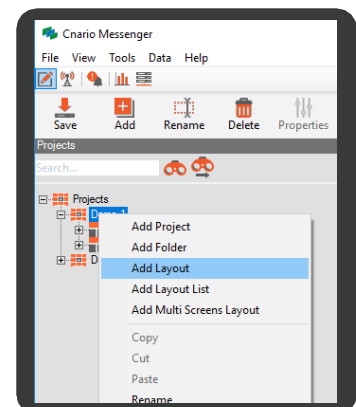
Method 2: Command Toolbar

1. In the **Projects** pane, click the project in which you want to add the layout.
2. In the Command Toolbar, click  (**Add**), then click **Layout**.



Method 3: Context Menu

1. In the **Projects** pane, right-click the project in which you want to add the layout.
2. Click **Add Layout**.



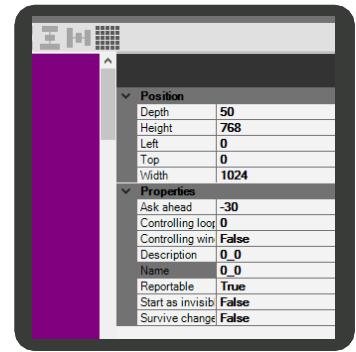
2.1.1.2 Editing Window Properties

You can edit window properties using one of the following methods:


Method 1: Properties Pane

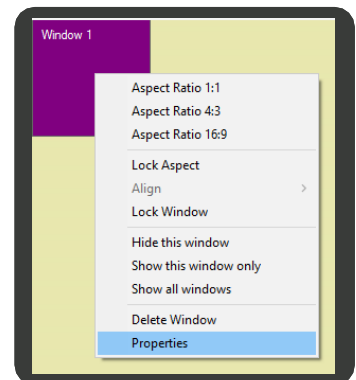
In the Layout Toolbar, click  (**Toggle Edit mode**) and then click 

(**Window Properties**) to display the **Properties** pane, then click the field you want to edit and enter a value.




Method 2: Context Menu

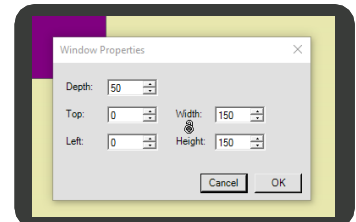
In the Layout Toolbar, click  (**Toggle Edit mode**) and then right-click the window, then click **Properties** to open the properties dialog box.



Method 3: Command Toolbar

Click the window, then in the Command Bar, click  (**Show Item Properties**)

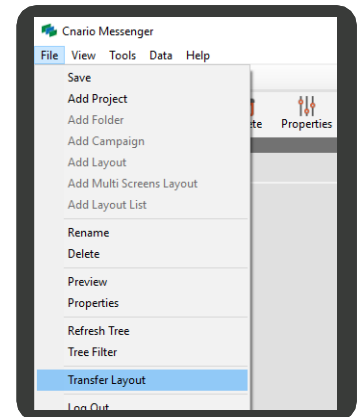
to open the properties dialog box.




2.1.1.3 Transferring Layouts

Method 1: Menu Toolbar

1. In the **Projects** pane, click the layout you want to transfer.
2. In the Menu Toolbar, click **File**, then click **Transfer Layout**.



Method 2: Command Toolbar

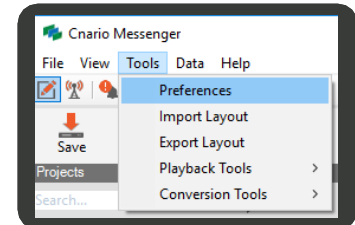
1. In the **Projects** pane, click the layout you want to transfer.
2. In the Command Toolbar, click  (**Transfer Layout**).

3. Setting Up the Network

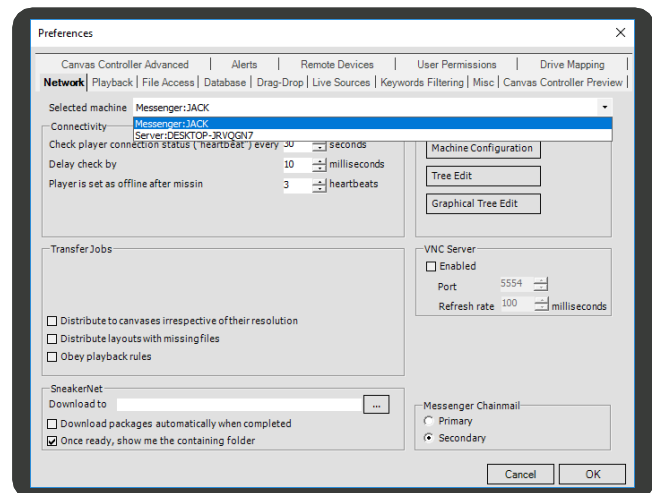
3.1 Defining the Messenger Network

To define the Messenger network


1. In the Menu Toolbar, click **Tools**, then click **Preferences** to open the **Preferences** dialog box.

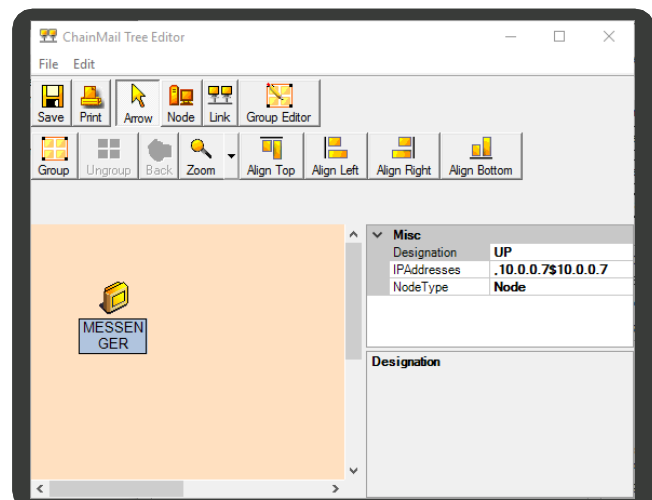


2. In the **Network** tab, in the **Transporter** section, click **Graphical Tree Edit**.



If you install Messenger and Player on the same computer, in the **Messenger Chainmail** section you must select **Secondary**.

The **Chainmail Tree Editor** opens. The  (Arrow) is active by default, and the local machine icon appears in the network screen.



3.2 Building the Network Structure

Use the **Chainmail Tree Editor** for the graphical deployment of the network players (nodes) included in the Messenger digital signage network.

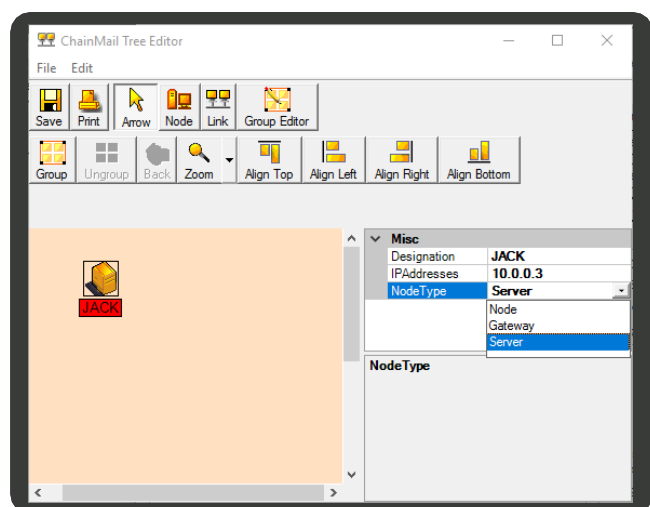
This section describes the work flow required to build the network structure.

The work flow consists of the following main procedures:

1. [Set the server details.](#)
2. [Add and configure the players.](#)
3. [Link the server to the players](#), then set the link type.
4. [Import the ChainMail Channels.](#)




To set the server

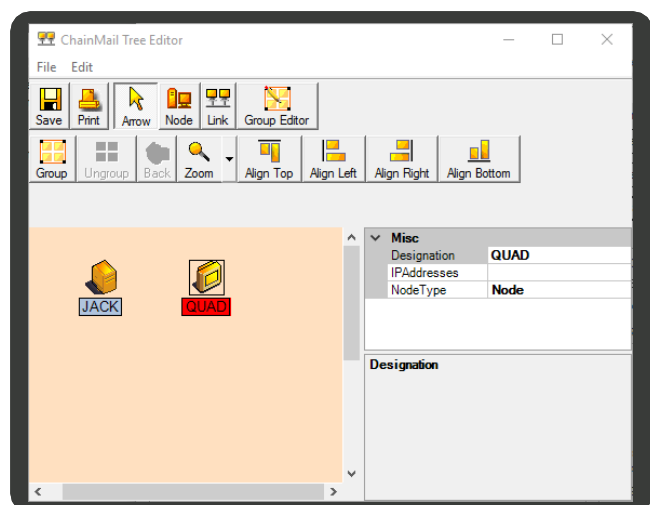
1. Click the **Messenger** icon to display the **Misc** pane detailing the **Designation**, **IPAddresses**, and **Node Type**.
2. In the **Misc** pane, click **Designation** and change the default (Messenger) name.
3. Click **Node Type**, then select **Server** from the drop down list.




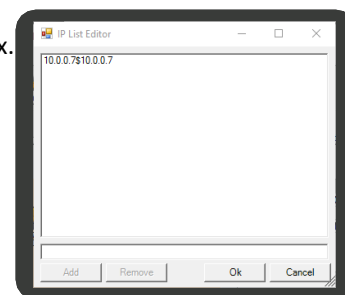
If any of the field information is incorrect or missing it can be added to or edited.

To add and configure the nodes



1. Click  (**Node**), then click anywhere in the network screen. A new node (player) icon is added to the layout.
2. Click the  (**Arrow**), then click the  (**New Node**) icon to activate it for configuring.
3. In the **Misc** pane, click **Designation** and change the default name to correspond to the Local Designation name of the (remote) Canvas node, for example, QUAD.



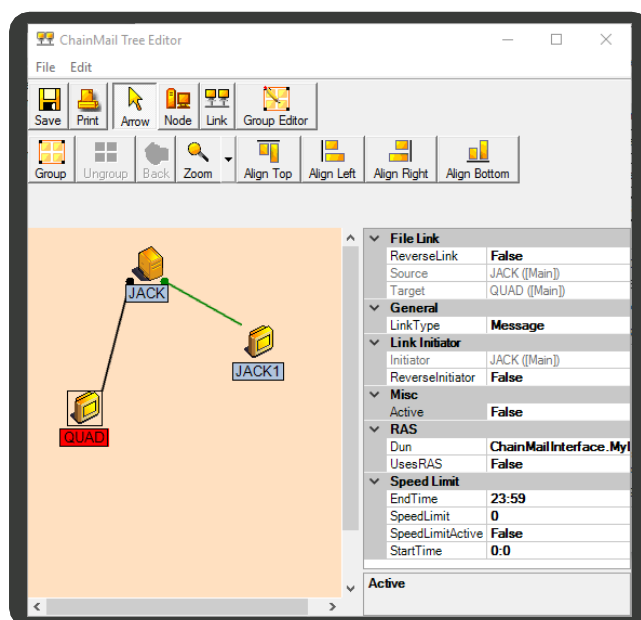
4. Click **IPAddresses**, then click  (**Browse**), to open the **IP List Editor** dialog box.
5. In the **IP List Editor** dialog box, select an existing IP address in the top pane or to add a new IP address:
 - a. In the bottom pane, type the IP Address.
 - b. Click **Add**, then select the added address.
6. Click **OK**.
7. In the **Misc** pane, click **Node Type**, then select one of the following icons from the drop-down list:
 - **Node**
 - **Gateway**
 - **Server**
8. Repeat steps 1 to 7 above to add more players to the network layout.



To link the server to the nodes

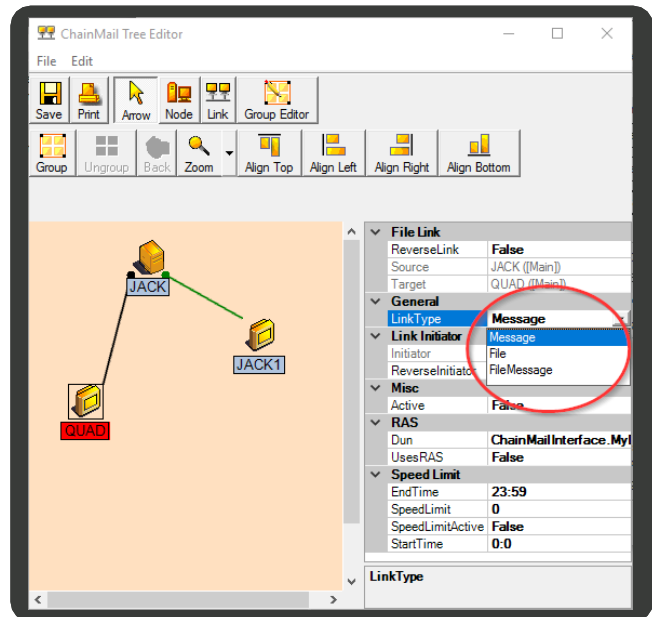
1. Click the  (**Link**), then click the  (**Server**) icon. Drag the selected icon to the node you created. An active communications link between the two nodes is created.

The network is configured and the **File Link** pane is opened.




2. Set the communication link type:


- a. In **General**, click **Link Type**, then select from one of the following:
 - * **Message** - Establishes a bidirectional link that enables the Control Station to send messages to the player and vice-versa. For example: a. A message from the player to the Control: "I am alive"; "I'm playing Layout X". b. A message from the Control to the player: "what layout are you playing?"
 - * **File** - Establishes a unidirectional link that enables files, for example a video file that is set to play in the window of a layout, to be sent from the Control Station to the player.
 - * **FileMessage** - Enables both of the above Link Type functions.

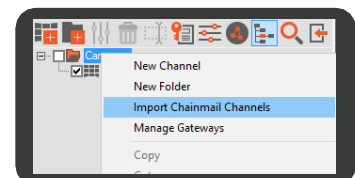


Communications link types can be set between a Control Station and a player, or between any two network players that have Messenger Control Station or player applications installed on them.

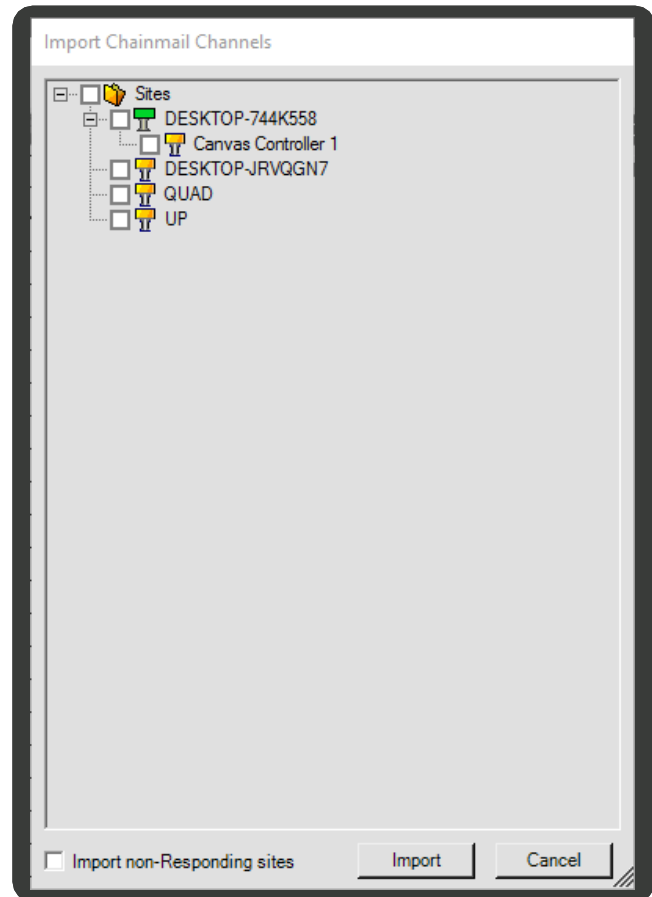
3. In **Misc**, set the **Active** setting to **True**.
4. Click  (**Save**) to save your local network settings.
5. Close the ChainMail Tree Editor dialog box, then yes for the confirmation message.

To import ChainMail Channels

1. In the Mode Toolbar, click  (**Device Manager**).
2. In the **Channels** pane, right-click the **Canvases** tree, then select **Import ChainMail Channels** to open the **Import Chainmail Channels** dialog box.



3. Select the check boxes of the required players for example, QUAD and check the display device (canvas) you require, for example Canvas Controller 1.
4. Click **Import**.




The player will appear as connected in the **Channels** pane in the network module.



Your Local Network is now set up. You can continue to add additional nodes and expand the Local Network as required.

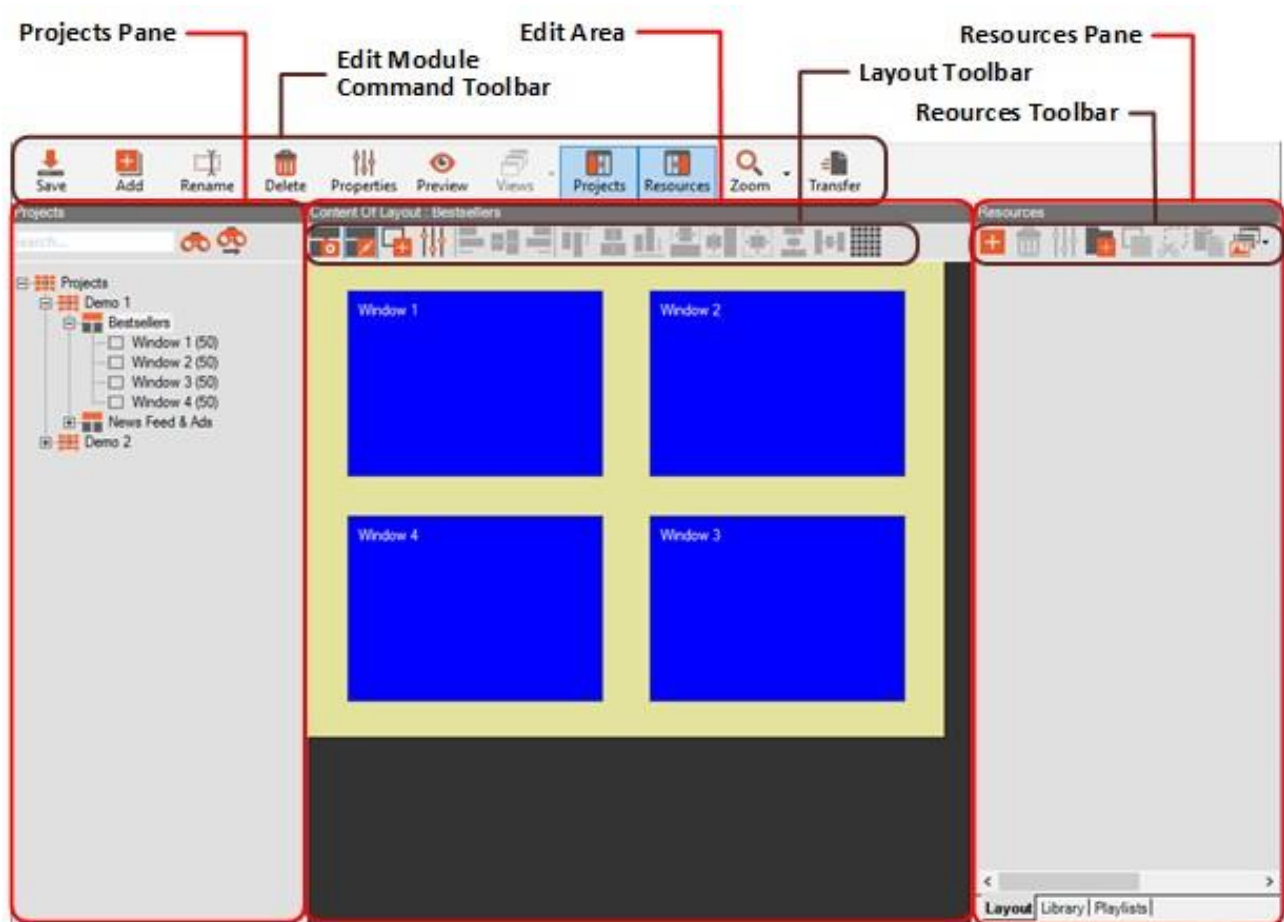
4. Authoring Content

The Edit Module is where you manage and author your content.

To enter the Edit Module, in the Mode Toolbar, click  (**Edit Module**).


4.1 Edit Module

The Edit Module interface consists of the following parts:



4.2 Projects Pane

The **Projects** pane displays the projects, folders and layouts in a hierarchical order.


- Use the **Search** field at the top of the pane to search for elements in the **Projects** pane.
- To show or hide the **Projects** pane, in the Command Toolbar, click  (**Show / Hide Projects**).

4.3 Edit Area

The Edit Area consists of the main workspace where you edit the layout, and the Layout Toolbar which contains various commands to perform in the layout.

4.4 Resources Pane

. The Resources Toolbar, located under the tabs, contains various commands for use with content items.

- To show or hide the **Resources** pane, in the Command Toolbar, click  (**Show / Hide Resources**).

4.5 The Workflow

Content authoring consists of the following steps:

1. [Adding a Project and a Layout](#)
2. [Creating Windows](#)
3. [Creating a Content Item](#)
4. [Assigning Content Items to Windows](#)


4.6 Working With Projects and Layouts

4.6.1 Adding a Project and a Layout


The first step in authoring your content is adding a project and then a layout. You can add a single screen layout, or you can add a multi-screen layout. Select the multi-screen layout for playback on a canvas with multiple screens. The multiscreen wizard will help you build a layout with the correct number of screens and incorporate the bezel (spaces between the screens).

You can also create folders in your project to organize your layouts in the project.


To add a project

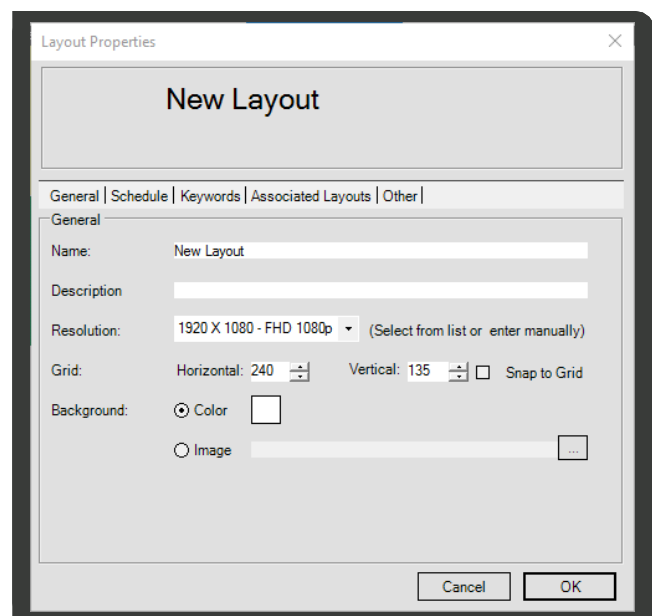
1. In the Command Toolbar, click  (**Add**), then click **Project**.
2. Type a name for the project, then press **Enter**.

To add a folder (optional)


1. In the **Projects** pane, click the project in which you want to add the new folder.
2. In the Command Toolbar, click  (**Add**), then click **Folder**.
3. Type a name for the folder, then press **Enter**.

To add a layout

1. In the **Projects** pane, click the project or folder in which you want to add the new layout.
2. In the Command Toolbar, click  (**Add**), then click **Layout**. The **Layout Properties** dialog box appears.



Layout properties are described in the following table:

Field	Description
Resolution	<p>Select or type a layout resolution in the format of <width> X <height>.</p> <div>  <p>The layout resolution should match the resolution of the screen (or multiple screens) that displays the content.</p> </div>
Align To Grid	<p>Displays a grid in Edit Mode, to allow alignment of the windows by snapping them to the grid.</p> <p>Horizontal and Vertical defines the grid size.</p>
Background	<p>Select one of the following background options:</p> <p>Background Image - Select an image to display as the background to your layout</p> <p>Background Color - Select a color to display as the background to your layout.</p>
Jump Start	<p>Used for dynamic content, allows you to select the point from which you want the layout to start playing.</p>
Auto Deletion	<p>Select one of the following options for deleting the layout:</p> <ul style="list-style-type: none"> ■ Never delete - Retains it infinitely. ■ Delete when not in use - deletes it when its no longer playing. To automatically delete unused content from the player you must also configure the player, see Section 8.2.8.1.1 (Auto-Deleting Unused Media Files). ■ Delete if not in use after - deletes it on the date you set.

3. In the **Schedule** tab, add a playback schedule to the layout (optional). See [Section 6.2.3 \(Configuring a Schedule\)](#) on how to create and add a schedule to the layout.
4. In the **Keywords** tab, set the **Layout Priority**, click the **Change Keywords** button, then select the keywords you want to link to the layout (optional). See [Section 6.4 \(Applying Playback Rules with Keywords\)](#).
5. In the **Associated Layouts** tab, in the **Layouts** box, select an existing layout you want to link to your new layout, then click **Add** (optional).



The player will automatically load associated layouts into the player memory when this layout starts playing. This will improve the speed / transition between layouts. However, preloading the layouts will consume more of the player's memory.

6. Click **OK**.

4.6.2 Performing Additional Tasks on Projects and Layouts

You can perform additional tasks with projects and layouts such as delete, rename, copy, etc. by clicking the command buttons in the Command Toolbar, or by right-clicking the project or layout in the **Projects** pane.


4.7 Editing Layout Windows

The following sections describe the basic operations required to design the windows in your layout.

4.7.1 Edit Mode

When you work on a layout, you can work in either of the following modes:

- Edit Mode active - For editing windows design properties (such as size and position).
- Edit Mode inactive - For content related properties and tasks (such as assigning content items, managing playlists in the windows).

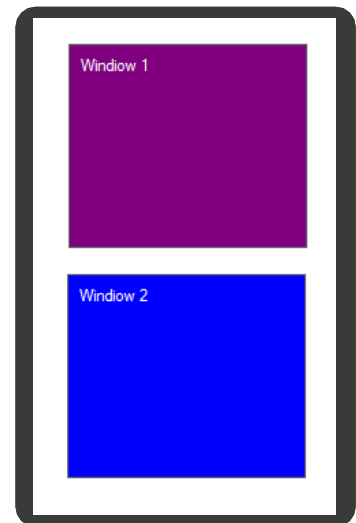
To toggle Edit Mode on or off, in the layout toolbar, click  (**Toggle Edit mode**).

When Edit mode is active, windows appear in blue, and selected windows appear in purple.

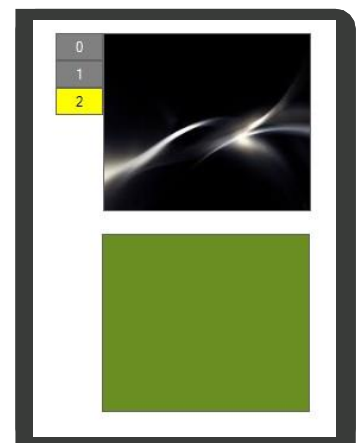



To select multiple windows

Hold down the **Ctrl** while clicking the windows. The selected windows are pink, and the last window you select is purple.





When Edit Mode is inactive, the windows display a thumbnail of the content items that are assigned to them, or they appear in green if no content item is assigned.

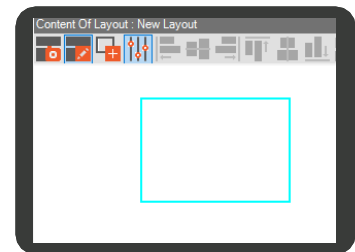
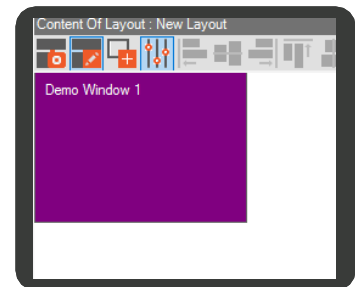


The tasks in this chapter are demonstrated using the **Properties** pane. Therefore, while performing the steps in this chapter, make sure the **Properties** pane is displayed while Edit Mode is active. To toggle the **Properties** pane on or off, in the Layout Toolbar, click  (**Window Properties**).

4.7.1.1 Creating Windows


To add a window to your layout

1. Make sure Edit Mode is active (as described in [Section 4.7.1](#)).
2. If the **Properties** pane does not appear to the right of the layout, in the Layout Toolbar, click  (**Window Properties**) to display it.
3. To create a window, perform either of the following:
 - In the Layout Toolbar, click  (**Create a New Window**). A new window appears in the upper left corner of the layout by default.
 - Click a blank spot on the layout background and drag to create a window in the size you want.



4.7.2 Changing Window Properties

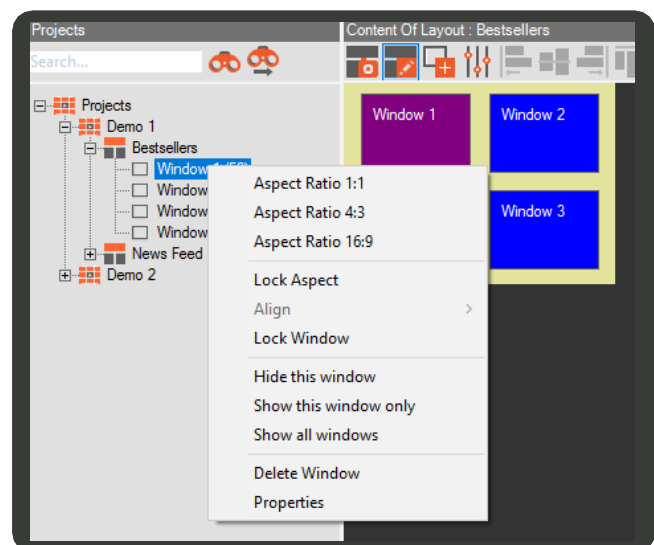
To change window properties

1. Make sure Edit Mode is active (as described in [Section 4.7.1](#)).
2. If the **Properties** pane does not appear to the right of the layout, in the Layout Toolbar, click  (**Window Properties**) to display it.
3. Select the window using either of the following methods:

- Click the window in the layout in the Edit Area.
- Click the window in the **Projects** pane, in the windows list under the layout (this method is mainly useful if you use window layering).



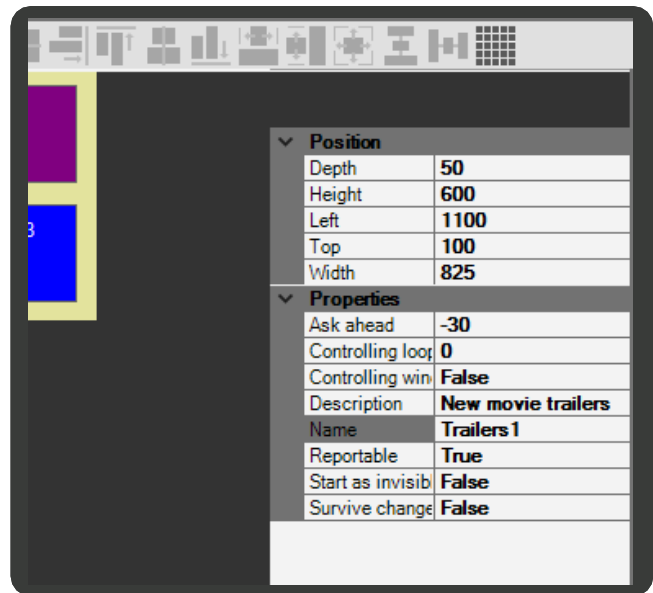
Both methods can be used to select the window, or to open its context menu by right-clicking.



4. To rename a window:
 - a. Select the window.
 - b. In the **Properties** pane, click **Name**.
 - c. Type the window name.
5. To enter a window description:
 - a. Select the window.
 - b. In the **Properties** pane, click **Description**.
 - c. Type the window description.



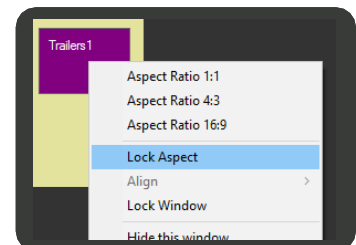
6. To set the window size, perform one of the following:
 - Drag the edges of the window.
 - Select the window, then in the **Properties** pane, type the pixel sizes in the **Width** and **Height** fields.



7. To lock the aspect ratio of the window size, right-click the window, then click **Lock Aspect**. You can also select one of three predefined ratios (1:1, 4:3 or 16:9) from the menu.



When you click one of the predefined ratios, the **Lock Aspect** option is automatically enabled. To unlock the aspect ratio, right-click the window, then click **Lock Aspect** to remove the check mark.



8. To change the window position, perform one of the following:
 - Drag the window.
 - Select the window, then in the **Properties** pane, type the pixel distance from the layout top in the **Top** field, and the pixel distance from the layout left edge in the **Left** field.
9. To prevent unintentional changes to the window size and position, right-click the window, then click **Lock Window**.

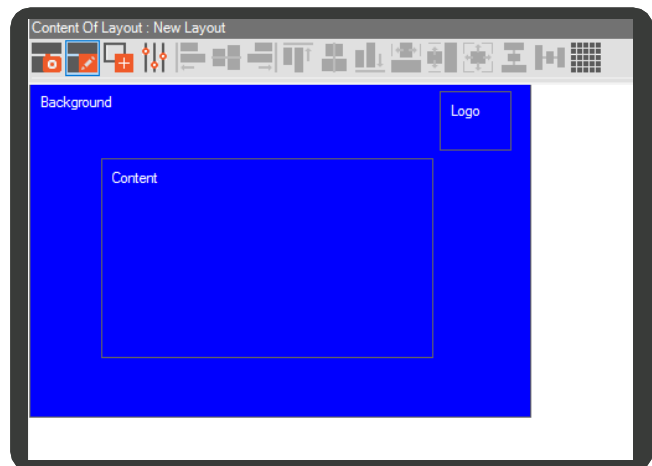
4.7.3 Window Layering

You can place multiple windows on top of each other to create window layers. For example, use a window as the layout background, and place another window on top of it to display content.

Set the layering by using the window **Depth** property, where 0 is the front window, and 99 is the back window (default value = 50).

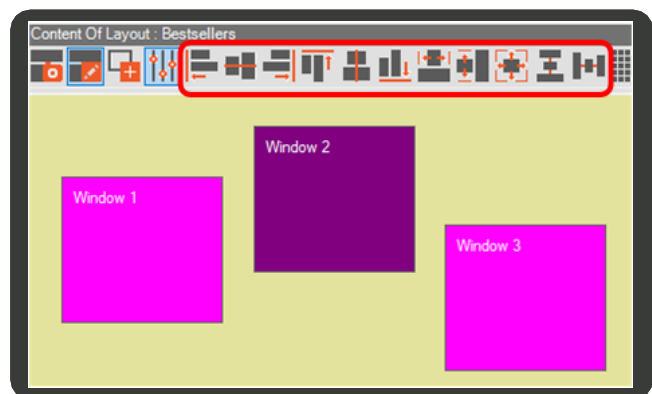
To set window depth

1. Select the window.
2. In the **Properties** pane, type a value in the **Depth** field.



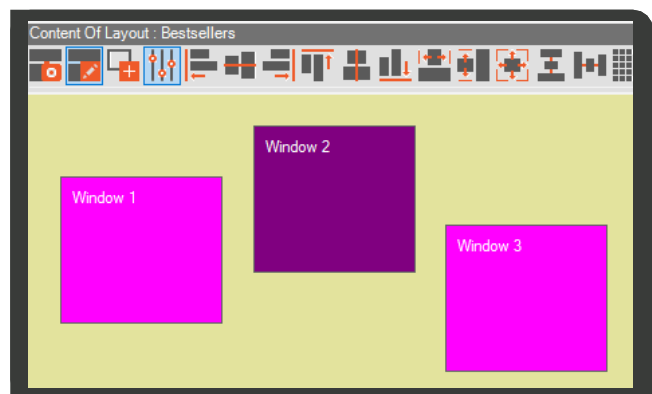
4.7.4 Window Aligning and Relative Resizing

In the layout toolbar, you can use the aligning and resizing command buttons when you want to align multiple windows relative to each other, or to assign them the same size.

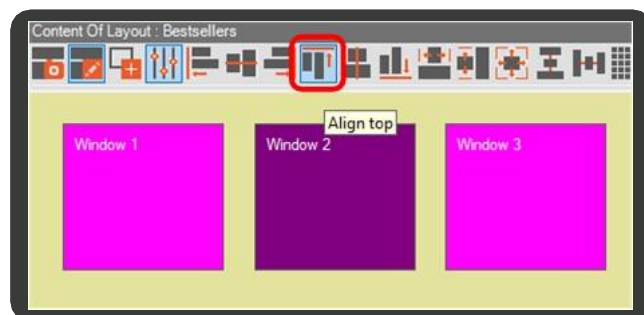


To align or resize windows

1. Select the windows you want to align or resize, by holding **Ctrl** while clicking the windows. The last window you select is colored dark green and serves as a point of reference when using the aligning and resizing commands.



2. In the Layout Toolbar, click the matching command button to set the windows position or size as you want (hover over a command button to display its description).



4.8 Adding Content Items

The next step after designing the layout windows, is to add your content to the layout. In Messenger, each piece of content, with its properties, is defined as a content item. Content items may belong to one of the following types:

- Stored media (such as videos and images)
- Dynamic content (such as RSS feeds)
- Applications (such as HTML5, Flash)

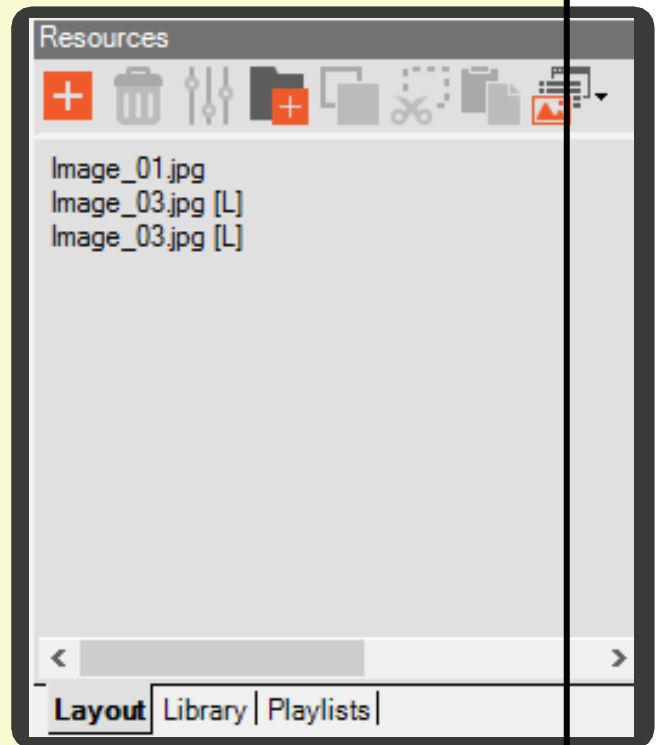
4.8.1 The Resources Pane

Both options for creating content items are represented in the **Resources** pane by the following tabs:

- **Layout** - Displays all content items that are included in the current layout.
- **Library** - Displays the content items library.

When you create a new content item using the **Resources** pane, the selected tab determines whether it is created in the library or in the layout.

When you work in a certain layout, the **Layout** tab also displays library-linked content items that are used in that layout. These items are marked with **(L)** at the end of their name. This indicates that the content item is linked to the library and is not a layout item.



You can arrange your content items in different folders. If folders are used, the Resources pane is divided into two parts, displaying a folder tree on the left side, and content items from the selected folder on the right side.

The Resources Toolbar contains command buttons for performing various tasks in the **Resources** pane (such as create a new folder, copy or move content items to different folders, change the view mode of the content items).



Advanced library tasks are described in [Section 7 \(Adding Advanced Content Item Types\)](#).


4.8.2 Creating a Content Item


The following procedure describes how to add an image type content item. For information on other types of content items, see [Section 5.1](#).

To create a content item

1. In the **Resources** pane, select the **Layout** tab or the **Library** tab, according to where you want to create the content item.
2. If folders are used, click the folder in which you want to add the content item.

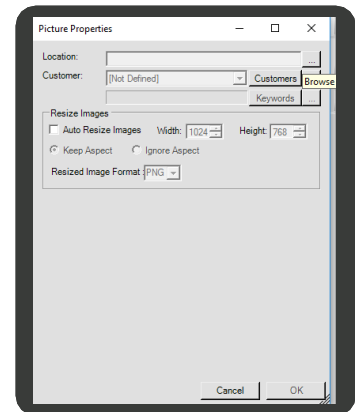


3. In the Resources Toolbar, click  (**Add Item**).

- From the drop-down menu, select **Image**. The **Picture Properties** dialog box appears.
- Click  (**Browse**), then select the image file you want to add.
- Click **OK**.



For information about the resize feature, see [To add an image item](#).



4.8.3 Assigning Content Items to Windows

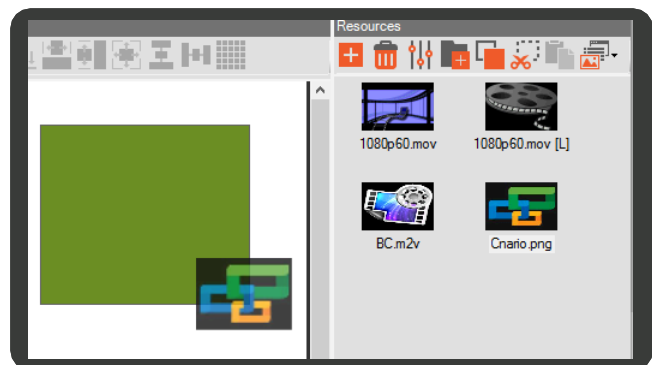
To assign a content item to a window

- Make sure Edit Mode is inactive (as described in [Section 4.7.1](#)).

- Drag the content item from the **Resources** pane to the window.

You can drag multiple content items to a window to create a playlist, as described in detail in [Section 6 \(Managing Playlists and Schedules\)](#).

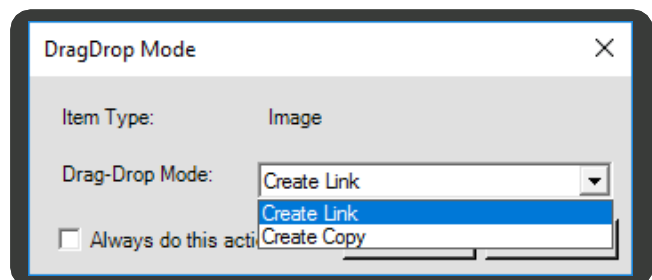
- If you assign a content item from the library, the **Drag-Drop Mode** dialog box appears. For information on the dialog box, see [Section 4.8.3.1 \(Creating Linked Content Items\)](#) below.



4.8.3.1 Creating Linked Content Items

When you assign a content item from the library, a dialog box appears asking you to select one of the two options described in [Section 0.1 \(Options for Creating Content Items\)](#):

- **Create Link** - Select this option to assign the content item as a Linked Content Item. This means, any changes you make to the content item in the Library will affect the item in the layout.
- **Create Copy** - Select this option to copy the content item to the layout as a new Layout Content Item. This means, any changes you make to the content item in the Library, will not affect the item in the layout, because it is not linked to the library item.



To select a mode

- Next to **Drag-Drop Mode**, select the mode you want to use for the current content item.
- If you want to set your selection as the default option for the current content item type, select the **Always do this action** check box.



To reset or change default options, in the **Main Menu** click **Tools->Preferences->Drag-Drop** and select the default action for Drag-Drop mode.

3. Click **OK**.

4.8.3.2 Disconnecting a Linked Content Item

If a certain layout contains a Linked Content Item, you can remove the link at any point to disconnect the content item from the library and turn it to a Layout Content Item.

To disconnect a Linked Content Item

1. In the **Resources** pane, under the **Layout** tab, locate the Linked Content Item.

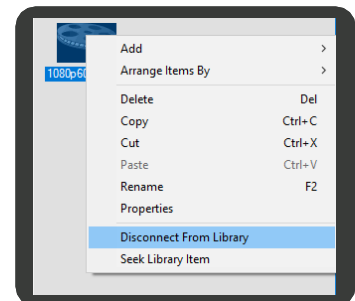


In the **Layout** tab, Linked Content Items are marked with **(L)** at the end of their name.

2. Right-click the item, then click **Disconnect from Library**.




If you want to make changes to a Linked Content Item, you must perform the changes from the library. Otherwise, the link will be automatically removed.



4.9 Previewing Layouts

After you finish editing your layout and adding your content, you can see a preview of the layout.

To preview the layout

1. In the Command Toolbar, click  (**Preview**).

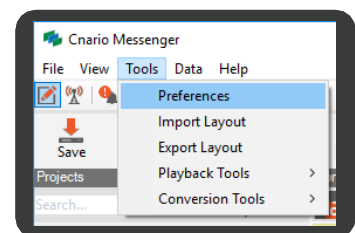
2. Press **Esc** to close the preview window.

4.9.1 Adjusting the Preview Window Dimensions

You can adjust the dimensions of your preview window to ensure that the preview window reflects the same aspect ratio as the screens the display will be played on.

To set the preview window dimensions

1. In the Menu Toolbar, click **Tools**, then click **Preferences** to open the **Preferences** dialog box.



2. Click the **Canvas Controller Preview** tab.
3. Select the **Enable Canvas Controller Preview** check box.
4. Select the **Windowed Preview** check box to override the resolution dimension, then set the size of the preview window.




For best previewing experience, match the preview's dimensions to layout's aspect ratio.

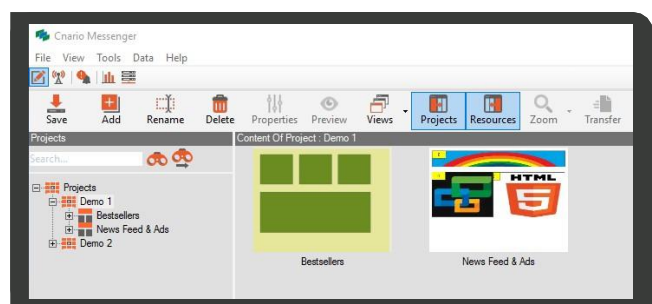
5. Click **OK**.

4.10 Layout Thumbnails

To help you identify layouts quickly, you can assign a thumbnail to each layout. The thumbnail will appear when you select in the **Projects** pane the project or folder containing the layout.

To set a layout thumbnail

1. Open the layout for which you want to set the thumbnail.
2. Set the layout in the state you want for the thumbnail (i.e. with Edit Mode active or inactive, or with certain content items selected).
3. Click  (**Capture Layout Thumbnail**) to set the current state as the layout thumbnail.



5. Managing the Library

Add content items directly to the **Library** pane for use in one or more windows, and in one or more layouts. Making changes to a content item in the library will automatically enforce that change to item in all the layouts / windows where it has been used.

5.1 Content Item Types

This section describes how to add the following basic types of content items to the library:

- [Audio](#)
- [FlashHTML5](#)
- [Image](#)
- [RSS](#)
- [Windows Media Streaming](#)
- [Text](#)
- [Video](#)



Advanced content item types are described in the [Section 7](#).

5.1.1 Audio


You can add **audio** items to provide playback music or sound while other content items are displayed. Messenger supports the following audio formats:


- .mp3
- .m2v
- .mp2
- .wav
- .wma

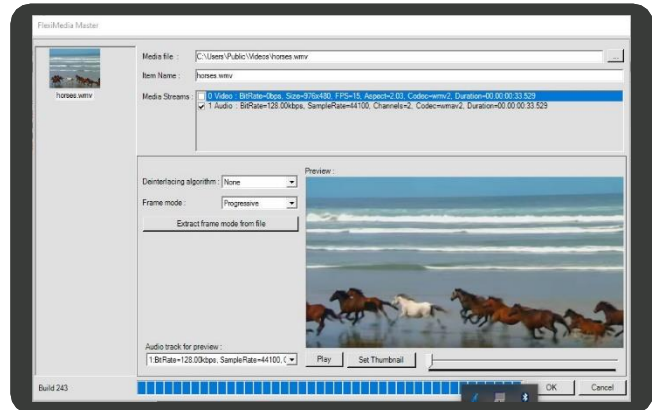


Adding an audio item is done through the Fleximedia dialog box. This allows you to treat the audio track of a multiplexed audio-video file as an audio item. You can choose whether to include the video with the audio playback.

To add an audio item

1. In the **Layout** or the **Library** tab, click  (**Add Item**), then click **Audio**.

2. Select your audio item, then click **Open** to open the **FlexiMedia Master** dialog box.
3. Click  (**Browse**) to add more audio files. A thumbnail of each file will be listed in the left hand pane of the **FlexiMedia Master** dialog box.
4. In the **Item Name** box, type a name for your file.
5. In the **Media Streams** box, select the audio stream check box, then click on the audio stream text.
6. If you have customized audio output targets, in the **Force Mapping** box, select an output.



Force Mapping is an optional setting targeting custom-made audio mapping.

7. In **Volume (%)**, set the volume.
8. Click **Play** to listen to your track.
9. Click **OK**.



5.1.2 Flash

You can add Adobe **Flash** animation items to be played on screen. This includes:

- Basic Flash animation
- Dynamic Flash (able to read data from an external dynamic source)
- Interactive Flash (enables user interaction using a mouse or touch screen).

Messenger supports the .swf Flash file format only.

To add a Flash item

1. In the **Layout** or **Library** tab, click  (**Add Item**), then click **Flash** to open the **Flash CI** dialog box.
2. In the **SWF File** box, click  (**Browse**), select a Flash file, then click **Open**.
3. Select the options according to the following table:

Option	Description
Movie Mode	Use with frame-based Flash files that were created as video-like animations.
Infinite Mode	Use with Flash files that were created as an interactive application or as an animation with multiple time lines (identifies itself as a one frame long file).
Ignore Stop Command	Use when Infinite Mode is selected. If a Stop command is part of an active action script, enabling this option will keep playing the item when called.
Transparent Flash	Select this option only when necessary, as it requires additional system resources and may reduce performance.

Option	Description
Render Zoom (%)	Changes the size of the rendered animation (when set over 100% it reduces quality and improves performance).
Set Thumbnail	Sets the thumbnail image for the Library item.
Exposed Variables	When global variables are enabled with the Flash program, they can be exposed over the 'Devices' interface.
Copy to Original Location	If additional files are needed to run a Flash application, and if a certain structure is imposed, this box ensures all files are copied to the same path on the player as they are loaded from (requires having the same drive letter available on the player machine).


4. If there is .xml or related dynamic data the Flash needs to read from, add it in the **Tag Along Files** section of the settings window.
5. You can preview the Flash file by clicking **Play**.
6. Click **OK**.

5.1.3 HTML5

You can add local and remote HTML5 items. Playback of HTML5 content in the Messenger environment requires special care and consideration compared to playing the same content inside a browser.

Please contact YCD support (supportUS@ycdmultimedia.com or supportINT@ycdmultimedia.com) for version-specific guidelines and visual verification tools for HTML applications.

To add HTML5 content

1. In the **Layout** or **Library** tab, click  (**Add Item**), then click **HTML5** to open the **HTML5 CI Master** dialog box.
2. In the **Item Name** box, type a name.
3. In **Item Duration**, type or select the length of time you want the HTML5 item to play.
4. Add HTML5 content from one of the following sources:
 - [Remote HTML5 content](#)
 - [Local HTML5 content](#)
5. In the Rendering section, you can select from the following options:

Option	Description
Prefer GPU Acceleration	Set higher priority for GPU processing power over CPU processing power.
Allow Transparency	Allows alpha-keying of HTML items over other layers. Use this option only when necessary, as it requires additional system resources and may reduce performance.
Force Rendering Size	Forces the media item to fit the layout window by adjusting the Pixel sizes.
Frames / second	Increases or decreases the speed of the frames.


6. In the **Failover and Recovery** section, select the **Enable** check box, then set the testing, failover, and recovery times.

7. In the **Test URL** box, paste or type the URL site to be tested.
8. Leave the **Failover URL** box blank to use as the primary URL, or add a new URL to be used in case of a failover.
9. Click **OK**.

To add remote HTML5 content

1. In the **HTML5 CI Master** dialog box, select **URL**, then paste or type in the web address in the box.
2. Click **Inspect HTML**. **Status: OK** will appear at the bottom of the window if the link works. **Status: The remote server returned an error** will appear if the link does not work.
3. Select the **User / Password Authentication** box, then add the necessary credentials for a secured HTTP connection.

To add local HTML5 content

1. In the **HTML5 CI Master** dialog box, select **File**, then click  (**Browse**)
2. In the **Select HTML Local File** dialog box, select an HTML5 file, then click **Open**.

5.1.4 Image



You can add high resolution images for pixel perfect play. Messenger supports the following formats:

- .bmp
- .tga
- .jpg
- .png
- .gif
- .tif
- .tiff

The .png and .tga playback also enables playback with transparency features (alpha canvas).

The image properties can also be edited to change the aspect ratio and create images that scroll across the window.

To add an image item

1. In the **Layout** or **Library** tab, click  (**Add Item**), then click **Image** to open the **Pictures Properties** dialog box.
2. To resize the image, before you open the image, perform the following steps:
 - a. Select **Auto Resize Images**, then set the size and format you want for the image. Using this option will generate a new copy of the image.
 - b. To save the image in a different format, click the **Resized Image Format** arrow, then click the required format.
3. In **Location**, click  (**Browse**), select an image file, then click **Open**.
4. Click **OK**.

To set the image aspect ratio and scroll it across the window

1. In the **Library**, right click on the content item thumbnail, then click **Playback Properties** to open the **Playback Properties** dialog box.
2. In Picture Behavior, set the aspect ratio from one of the following options:
3. In the **Image Properties** section, in **Behavior**, select one of the following aspects:

Option	Description
Keep Aspect	Retains image's default settings.
No Scaling	Maintains image's aspect ratio.
Ignore Aspect	Stretches image over the entire window, may cause changes to aspect ratio.
Maximize X	Stretches image horizontally.
Maximize Y	Stretches image vertically.

4. Set the **Direction**, **Speed** and **Gap Size** of the image's movement across the window.
5. Click **OK**.

5.1.5 RSS

You can add Rich Site Summary (RSS) items to deliver regularly changing web content such as news sites, web blogs, weather, sports results, etc. This is the ideal tool for adding the timely delivery and playback of eye-catching, topical messaging to existing scheduled layouts.

Messenger can read common RSS feed from the web, including:




- Attached media images
- Item images
- Media items (video, Flash and audio)
- Canvas titles
- Item titles
- Canvas descriptions
- Item descriptions

It can also display feeds as crawling text in the displayed layout, and fits the standard feed found on the web.



The player must maintain constant access to the Internet during the RSS display or information may become outdated.

To add an RSS item












1. In the **Layout** or **Library** tab, click  (**Add Item**), then click **RSS** to open the **RSS Master** dialog box.
2. In the **Link** tag, in the **Link** box, type or paste the URL link of your RSS feed, then click  (**Reload RSS**). The available image and text from the RSS feed file link will appear.
3. You can click  (**Open link in browser**) to open the link in Internet Explorer.

- Click **OK** to save and close, or the **Windows Editor** tab.

5.1.5.1 Windows Editor Tab


Add and organize your RSS content into windows in the **Windows Editor** tab.

In the **Windows Editor** tab. The following options will appear on the windows tool bar:

Option	Description
 (Show Windows List)	Provides a list of all windows.
 (Create a New Window)	Creates a new window. You can create multiple windows.
 (Show Window Properties)	Shows window properties.
 (Zoom)	Zooms in or out (in percentages %).
 (Delete window)	Deletes highlighted window.
 (Lock All Windows)	Locks all the windows in the layout so you cannot add more changes.
 (Unlock All Windows)	Unlocks all the windows in the layout, so you can make more changes.
 (Move Left)	Moves the highlighted window to the left.
 (Move Right)	Moves the highlighted window to the right.
 (Move Up)	Moves the highlighted window up.
 (Move Down)	Moves the highlighted window down.

See [Window Aligning and Relative Resizing](#) for a description of each aligning tool.

To add an RSS window

- In the **Editor Size** section, type or select the size of the editor to fit the actual window it will be placed on.
- Click  **(Create a New Window)**.
- In the **Continuous Scroll / Crawl Mode** section, set the options according to the following table:

Option	Description
Direction	Allows you to choose the direction the text will move across the window.
Duration	Allows you to determine the length of time (in seconds) it takes for the text to move across the window.

Option	Description
Gap	Allows you to determine the gap (in percentage relative to window size) between text appearances. A 100% gap means that the next item will appear only when the last one has finished playing.
Auto Resize	This option is grayed out if any motion is selected. This advanced feature is usable only in Static mode Direction . Using this selection you can auto resize the rendering Vertically or Horizontally . Alternatively, you can choose not to auto resize the item by selecting None , (which will show only the rendered text that fits in the designated window).



The Auto Resize is an advanced feature and is to be used only if the item is located inside a sequence item and has received motion and filter manipulation via the sequence and not via the selection.

4. Add one of the following to each window:


- [Text](#)
- [Dynamic Text from RSS Link](#)
- [Image](#)
- [Dynamic Image from RSS Link](#)

5. Click **OK** to save and close, or click the **Preview** tab.

To add text to a window

1. Click on the window you wish to use.
2. Click **(Show Window Properties)** to open the **Window Properties** dialog box.
3. In the **Name** box, type a name for the selected window.
4. In the **Windows Properties** section, in the **Type** list, select **Text**.
5. In the main window, type the text you want to appear. See [To add a text item](#) for additional text formatting options.
6. In the **Windows Position** section, in the **Top**, **Left**, **Height**, and **Width** boxes type or select the size and position of the window.



To add dynamic text to a window

1. Click on the window you wish to use.
2. Click  **(Properties)** to open the **Window Properties** dialog box.
3. In the **Name** box, type a name for the selected window.
4. In **Type**, click **Text From Tag**.
5. In **Tag**, select one of the following:

Option	Description
Canvas- Each canvas describes the RSS feed.	
Canvas Title	Defines the title of the canvas.
Canvas Description	Describes the canvas.
Item - Each item defines a "story" or article in the RSS feed.	
Item Title	Defines the title of the item.
Item Description	Describes the item.
Item Title & Description	Combination of the item's title and description.

See [To add a text item](#) for additional text formatting options.


To add an image to a window

1. Click on the window you wish to use.
2. Click  (**Show Window Properties**) to open the **Windows Properties** dialog box.
3. In the **Name** box, type a name for the window.
4. In the **Windows Properties** section, in the **Type** list, select **Image**.
5. In the **Static Image** box, click  (**Browse**), select an image, then click **Open**.
6. In the **Image Properties** section, in **Behavior**, select one of the following aspects:

Option	Description
Keep Aspect	Retains image's default settings.
No Scaling	Maintains image's aspect ratio.
Ignore Aspect	Stretches image over the entire window, may cause changes to aspect ratio.
Maximize X	Stretches image horizontally.
Maximize Y	Stretches image vertically.

7. In the **Image Properties** section, in **Alignment**, select the position of the image within the window.
8. In the **Windows Position** section, in the **Top**, **Left**, **Height**, and **Width** boxes type or select the size and position of the window.

To add a dynamic image to a window

1. Click on the window you wish to use.
2. Click  (**Properties**) to open the **Window Properties** dialog box.
3. In the **Name** box, type a name for the selected window.
4. In **Type**, click **Image From Tag**.
5. In **Tag**, select one of the following:

Option	Description
Image	Canvas image, taken from the RSS feed.
Item Image	Image per item taken from the RSS feed.

Option	Description
Item Media	A media item with its metadata (audio, video and image), taken from the RSS feed.

6. In the **Image Properties** section, in **Behavior**, select one of the following aspects:

Option	Description
Keep Aspect	Retains image's default settings.
No Scaling	Maintains image's aspect ratio.
Ignore Aspect	Stretches image over the entire window, may cause changes to aspect ratio.
Maximize X	Stretches image horizontally.
Maximize Y	Stretches image vertically.


7. In the **Image Properties** section, in **Alignment**, select the position of the image within the window.

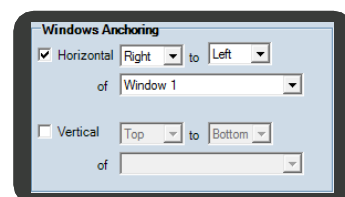
8. In the **Windows Position** section, in the **Top**, **Left**, **Height**, and **Width** boxes type or select the size and position of the window.

5.1.5.2 Anchoring Two Windows


When you set the properties for your windows, you have the option to anchor adjacent windows, horizontally and / or vertically. By anchoring the windows, you ensure their content is synced and their positions remain next to one another even if the content duration or size of the windows change.

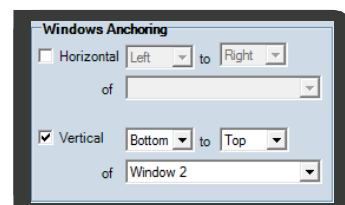
To add a horizontal anchor

1. Make sure you are clicked on the left window in your layout, then click  **(Show Window Properties)**.
2. Scroll down to the **Windows Anchoring** section, then select the **Horizontal** check box.
3. Click the drop-down arrows to anchor the **Right** window to the **Left** window.
4. In "of", select the window you want anchored.



To add a vertical anchor

1. Make sure you are clicked on the upper window in your layout, then click  **(Show Window Properties)**.
2. Scroll down to the **Windows Anchoring** section, then select the **Vertical** check box.
3. Click the drop-down arrows to anchor the **Bottom** window to the **Top** window.
4. In "of", select the window you want anchored.






5.1.5.3 Preview Tab

You can preview your **RSS** link in the **Preview** tab.

To preview your RSS feed

1. In the **Preview** tab, select the following options to adjust your preview:

Option	Description
 (Change Preview Zoom) button	Adjusts the appearance size of the feed.
 (Change Preview Background Color)	Adjusts the background color.
 (Next Result)	Skips to the next tag.

2. Click **OK** to save and close, or click the **Settings** tab.

5.1.5.4 Settings Tab

You can set the appearance of your RSS feed in the **Settings** tab.

To set the appearance of your RSS feed

- In the **Settings** tab, select one of the following options:
 - **Show all items** to present all the items available in the same page together.
 - **Loop Items** to loop one or more items per page. Use this option to [select the media items](#) to play.



Loop items can provide a more organized presentation than the **Show all items** option, which may load the viewer with unorganized, cluttered information.

- Set the other options as required (see table below):

Option	Description
Use Web Cache	Presents saved Web Cache when the Internet is offline. Do not select this option for real-time information, such as stocks and traffic.
Separators	Creates a visual separator between feeds. Select text or a symbol (such as ----->>>) to create a visual separation.
Read Interval	Sets the duration (in seconds) between updates.
Restart when available	Restarts the RSS item whenever RSS content is updated, without waiting for the whole loop to play.
Delete unused cached media if not used in the last	Type or select the number of days.
Disregard extra media files info	Discards additional files information such as RSS hash codes.
Loop Items	You can select which media items to download and play from the RSS source.

To select which media items to play

- Select the **Loop Items** option.
- In the **Include item media of type** section, select any combination of **Image**, **Video**, **Audio**, or **Flash** streams that you require.
- Select the **Merge with text** and **Image** boxes to play the image media item within the text. This will cause the image media item to play in another window in the RSS media item (with parameters of **Image** from tag).

4. In the **Play on window** box, type the name (case sensitive) of the layout window you want the media item to play on. Use this option to play the item in a layout window that is not set in this RSS item.
5. Set the scaling by selecting one of the options in the Scaling menu:

Option	Description
Default	Retains image's default settings.
Keep Aspect	Maintains image's aspect ratio.
Ignore Aspect	Stretches image over the entire window, may cause changes to aspect ratio.
Maximize X	Stretches image horizontally.
Maximize Y	Stretches image vertically.
Zoom to window	Stretches the image to fit the window.

6. Click **OK** to save and close, or click the **Default Tags Values** tab.

5.1.5.5 Default Tags Values Tab

Set the default tag values for the RSS item in the **Default Tags Values** tab. These values will be displayed during the sequence editor preview when RSS results are unavailable.

To set the default tag values

1. In the **Default Tag Values** tab, highlight the tag by clicking on it.
2. In the **Tag Value** column, double click on the cell, then type in a value.
3. Repeat steps 1 and 2 above for each additional tag.
4. Click **OK** to save and close, or click the **Web Access** tab.

5.1.5.6 Web Access Tab

You can set an Internet proxy for your feed in the **Web Access** tab.


To set a proxy

1. In the **Web Access** tab, select the **Use Proxy** check box.
2. In the **Host** box, type a host.
3. In **Port**, type or select a number.
4. To insert a user name and password for the proxy:
 - a. In the **Proxy Password** section, select the **Use Password** check box, then type a **User Name** and **Password**.
5. Select the **Domain** check box (optional), then type a domain name.
6. Click **OK**.

5.1.5.7 Save Settings for Re-use



You can save your RSS settings locally for re-use on additional RSS items.






To save your settings for re-use

1. Click  (**Save Settings**) to open the **Save As** dialog box.

2. Select a local location, then in **File Name** type a name for the RSS settings.
3. Click **Save**.

To re-use your saved settings

1. In the **Layout** or **Library** tab, click  (**Add Item**), then click **RSS**.
2. Click  (**Load Settings**), locate and click on the RSS file, then click **Open**.
3. See the table below for additional options:


Option	Description
 (Templates)	You can copy saved RSS Settings files (.rsf) to: C:\Program Files (x86)\C-nario\Messenger 3\CustomItems\RSS Master\Templates" They will then appear in the templates drop-down menu.
 (Load Settings)	Load previously saved settings.
 (Save Settings)	Save setting for re-use.
 (Load Defaults)	Load previously saved defaults.
 (Save Defaults)	Save RSS settings as default.

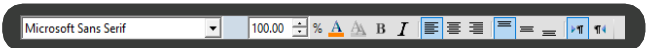
5.1.6 Text

You can add a text to display messages. The text items can be displayed as static, crawling or scrolling. Text can be uniformly altered for:

- Fonts
- Colors
- Shadows
- Outlines
- Textures

To add a text item

1. In the **Layout** or **Library** tab, click  (**Add Item**), then click **Text** to open the **Flexi Text 2 Master** dialog box.
2. In the main window, type the text you want to appear.
3. On the toolbar, select the font, size, color, and positioning of the text.



The size of the text is a percentage relative to the window size.

4. Format the text according to the following options:

Option	Description
Render Type	
Text As Image	Renders text as single, full-sized image (default option).
Direct Write	For canvases driven by multiple player PCs.
Text Properties	
Single Line	Forces text onto one line. Clear the check box to allow line breaks in text that exceeds width of the window. Select this mode for scrolling / crawling text only.
Auto Font Resize	Fits the text to the window. Select this mode for static text only.
Text Opacity	Increases or decreases the transparency of the text.
Background Color	Provides a range of color options that sit behind the text.
Background Opacity	Increases or decreases the transparency of the background color.
Antialias Quality	Prevents step-like effects on round shaped letters: 1=no antialias; 5=best quality
Shadow	
Style	Select between a hard or soft shadow style.
Vertical / Horizontal Shift	Moves the shadow horizontally or vertically, relative to the text.
Blur Ratio	Blurs or sharpens the shadow edges, can only be used when Soft Shadow style is selected.
Opacity	Increases or decreases the transparency of the shadow.
Texture	
Use Texture	Browse and select a texture for the text. This will replace a color.
Style	Flips the texture on its axis.
Outline	
Use outline	Set the color, width and opacity of the outline around the text.

5. In the **Name** box, type a name for the text item.
6. In the **Editor Size** section, type or select the size of the editor to fit the actual window it will be placed on.
7. In the **Continuous Scroll / Crawl Mode** section, set the options according to the following table:

Option	Description
Direction	Allows you to choose the direction the text will move across the window.
Duration	Allows you to determine the length of time (in seconds) it takes for the text to move across the window.

Option	Description
Gap	Allows you to determine the gap (in percentage relative to window size) between text appearances. A 100% gap means that the next item will appear only when the last one has finished playing.
Auto Resize	This option is grayed out if any motion is selected. This advanced feature is usable only in Static mode Direction . Using this selection, you can auto resize the rendering Vertically or Horizontally . Alternatively, you can choose not to auto resize the item by selecting None , (which will show only the rendered text that fits in the designated window).

8. Select the **Use Device** check box to enable the text item to expose a 'Device' and a 'Pin' that will allow external control over the inputted text. See .
9. Click the **Preview** tab to preview the text.
10. Click **OK**.

5.1.7 Video


You can add high end quality videos, in the highest resolutions, with set time code to playback on screen. Messenger supports the following formats:

- .mpg
- .mp3
- .m2v
- .mp2
- .wav
- .avi
- .wmv
- .wma
- .mov
- .mp4
- .flv
- .mkv
- .ts
- .tss




Adding a video item is done through the Fleximedia dialog box. This allows you to play back a multiplexed audio-video where you can choose whether to include the audio with the video playback.

To add a video item

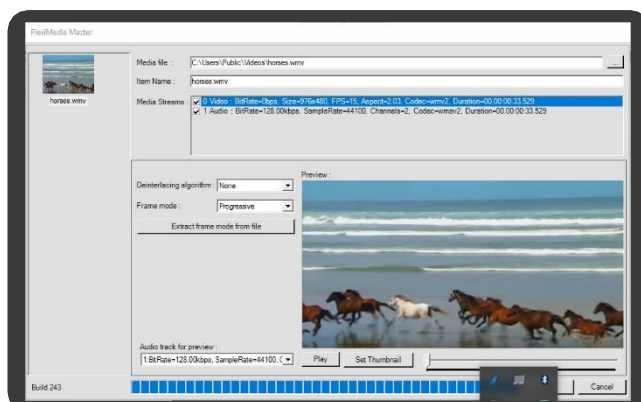
1. In the **Layout** or the **Library** tab, click  (**Add Item**), then click **Video**.

2. Select your video item, then click **Open** to open the **FlexiMedia Master** dialog box.

3. Click  (**Browse**) to add more video files. A thumbnail of each file will be listed in the left-hand pane of the **FlexiMedia Master** dialog box.

4. In the **Item Name** box, type a name for your file.

5. In the **Media Streams** box, select the video stream check box, then click on the video stream text.



The audio check box must also be selected to include audio alongside the video, see [To add an audio item](#)

6. In the **Deinterlacing algorithm** list, select one of the following options:

Option	Description
Weave	No Interlacing
Bob	Displays each half-picture like a full picture, by simply displaying each line twice. Preserves temporal resolution of interlaced video (double resolution).
Blend	Creates each line of the picture as the average of a line from the odd and even half-pictures. This ignores the fact that they are supposed to be displayed at different times (full resolution).
Mean	Displays a half-picture that is created as the average of the two original half-pictures (half resolution).



Deinterlacing allows you to double the perceived frame rate of a video display without consuming extra bandwidth.

7. In the **Frame mode** list, select one of the following options, or click the **Extract frame mode from file** button:

Option	Description
Progressive	Also referred to as noninterlaced scanning, displays, stores, or transmits moving images in which all the lines of each frame are drawn in sequence.
Top Field First	Displays the image from the top left first.
Bottom Field First	Displays the image from the bottom.

8. Select the **Interlace for 3DTV display** check box only if the intended file will be played on a 3DTV.
9. In **Audio track for preview**, click **No Audio** to exclude the audio from the preview (optional).
10. Click **Play** to preview your file.

11. Click **OK**.

5.1.8 Live Feed

You can add any video input from an external source, and that is not read directly from a local file. Most common live feeds are camera input, streaming or TV input.

Using off the shelf input hardware, the following inputs can be fed into the system to be used everywhere on video walls, seamless displays and single displays:

- Analog video inputs – up to broadcast quality HD component input.
- Digital Video Inputs –HDMI, SDI, HD-SDI and IEEE-1394 (these are all digital video standards).
- RGB inputs – connect any computer VGA output to be displayed in a window on screen. Full frame rate is supported. Custom resolutions as well as different synch options are supported.
- DVI inputs – connect any computer DVI output to be displayed in a window on screen; full frame rate is supported.
- IP inputs – video over IP streams. Messenger supports many protocols,including:
 - UDP multicast
 - HTTP streams
 - RTP and RTSP streams
- Messenger supports the following formats
 - mpeg2-ps
 - mpeg2-ts
 - mpeg4/H264
 - mjpeg

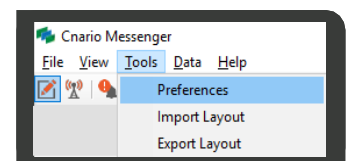
The following data is usually retrieved over IP:

- Streaming video – support for major streaming formats and protocols.

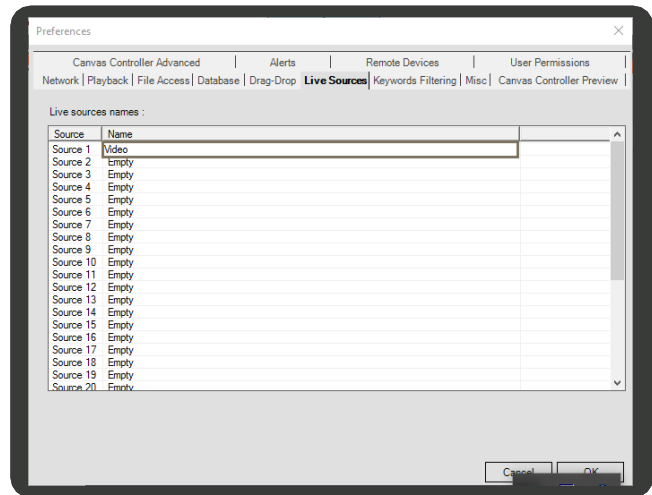
Before you can add the live feed content item, you must first configure the source of the live feed.

To configure the live feed source

1. Connect your camera or other live feed source to the Player.
2. In the Menu Toolbar, click **Tools**, then click **Preferences** to open the **Preferences** dialog box.



- Click the Live Sources tab, double click on the Source 1 Name cell, then type a name.
- Click **OK**.




You can now add the live feed content item.



Messenger does not add the live sources according to any order. Therefore, if you have more than one live source, you will need to define which source you have selected by adding it to the live feed item and then viewing it on player. Once you have defined each of the live sources, you can set the names accordingly in the **Preferences** dialog box.

To add a live feed item

- In the **Layout** or **Library** tab, click  (**Add Item**), click **Live Items**, then click **Live Feed** to open the **Live Feed Properties** dialog box.
- In the **Name** box, type a name for your live feed.
- In the **Description** box, type in a description for your live feed.
- In the **Duration** section, select one of the following options:
 - No limit - For continuous playback
 - HH:MM:SS - To set the length of your live feed
- In the **Device** list, select the live source.
- In **Field Order**, select a field from the following options:

Option	Description
Progressive	Also referred to as noninterlaced scanning, displays, stores, or transmits moving images in which all the lines of each frame are drawn in sequence.
Top Field First	Displays the image from the top left first.
Bottom Field First	Displays the image from the bottom.

- Select the **Enable Audio** check box to enable sound, then set the **Audio Device number**.
- If your hardware supports multiple inputs, in the **Input** section, select the appropriate input type.



If you select the tuner input, only the analogue tuner signal is supported.


9. Click **OK**.

5.1.9 Multi Stream

You can add a rich set of video streaming from IP cameras, IP streamers and other standard sources. Messenger supports multi-casting of RTP, UDP and HTTP streams with payloads of MPEG2 Transport Stream and MPEG4 (H.264).

Messenger also supports many other compression types available under the **Format** drop-down menu. RTSP support is provided for some compatible devices. Contact Cnario Messenger support at supportINT@ycdmultimedia.com for more information.

To add multi stream items

1. In the **Layout** or **Library** tab, click  (**Add Item**), click **Live Items**, then click **Multi Stream** to open the **Multi Stream Master** dialog box.
2. In the **Item Name** box, type a name for your **multi stream** item.
3. In the **URL** box, paste or type the web address in the box. You can click the drop-down arrow to select the remote source protocol.
4. Ensure the **Format** check box is selected, then select a compression type.
5. If the captions are part of the source stream, select **Closed Captions**.
6. Select the **Fail Stream if Audio is Not Present** check box to play the stream only when its accompanied by sound.
7. In **Program ID**, type or select the program number.
8. Under **Use Stream Type**, select one or both of the **Video** and **Sound** check boxes to include video and / or audio in the playback.
 - a. Select the **Index** check boxes to edit the **video** and **sound** indexes.
 - b. Type or select the **video** and **sound** index numbers.



The program number and indexes are established during the setup of the stream. Whoever creates the stream must provide these.

9. In **Audio Mapping Name**, select a default name. To use default mapping, leave the field blank.
10. Select the **Redundant URL** check box to provide an alternate URL to be loaded when the primary source returns an error.
11. Use **URL 2**, **URL 3**, etc. to enter additional redundancy URLs.
12. In **Buffer Redundancy Threshold (ms)**, type or select the size of the redundant URL buffers.
13. Select the **Ignore Stream PTS** to reduce dependency on the source stream time stamp.
14. Click **OK**.

5.2 Assigning Properties to Content Items in the Library

The following properties can be added to content items located in a layout playlist, in the Library resources tab, or in the Playlist content item:

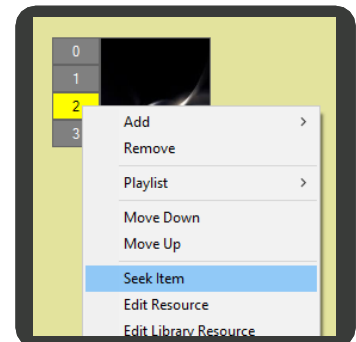
- **Customers** - Assign customers to content items to create activity reports and quantitative analyzes of the item for the customer. See [9.1 Creating and Assigning Customers to Content Items](#).
- **Auto Deletion** - Assign one of the following automatic deletion options to the content item:
 - **Never delete** - Retains it infinitely.
 - **Delete when not in use** - deletes it when it's no longer playing. To automatically delete unused content from the player you must also configure the player, see [Section 8.2.8.1.1 \(Auto-Deleting Unused Media Files\)](#).
 - **Delete if not in use after** - deletes it on the date you set.
- **Schedules** - Control the playback of your content according to the times and priority that you define. See [Creating and Assigning Schedules](#).
- **Keywords** - You can assign specific keywords to content items for the purpose of playing specific items on specific canvases. This is defined by assigning identical keywords to the content item and the canvas. For more information see [Applying Playback Rules with Keywords](#).
- **Playback Rules** - Assign rules to the keywords to define when the item should be played. See [Setting the Playback Rules](#).

5.3 Locating Assigned Items in the Library

Items that appear in your layout can be located in the **Resources**

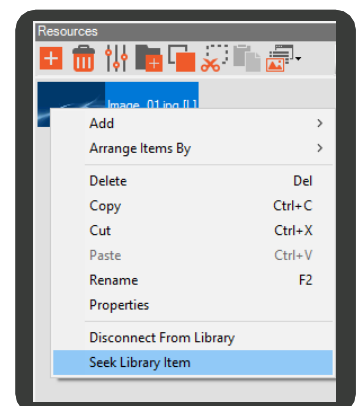
pane. **To locate an item in the Layout tab**

1. In the layout, right-click on the number item tab that represents the item in the window's playlist.
2. Click **Seek Item**. The item will be highlighted in the **Resources** pane in the **Layout** tab.



To locate a linked item in the library


1. In the **Resources** pane, in the **Layout** tab, right-click the item you want to locate.
2. Click **Seek Library Item**. The item will be highlighted in the **Library** tab.





5.4 Searching the Library

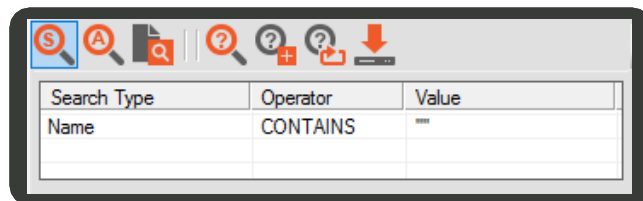
Use the search tool to quickly locate an item in the library.

To search for an item in the library

1. In the Resources Toolbar, click  (**Search**).

The search pane appears under the library:





2. Click  (**Simple Search**).
3. In the **Search Type** column, double-click the field to select the search criterion (default: **Name**).
4. In the **Operator** column, double-click the field to select the query operator (default: **Contains**).
5. In the **Value** column, double-click the field and enter the string to search for.
6. Click  (**Execute Query**).

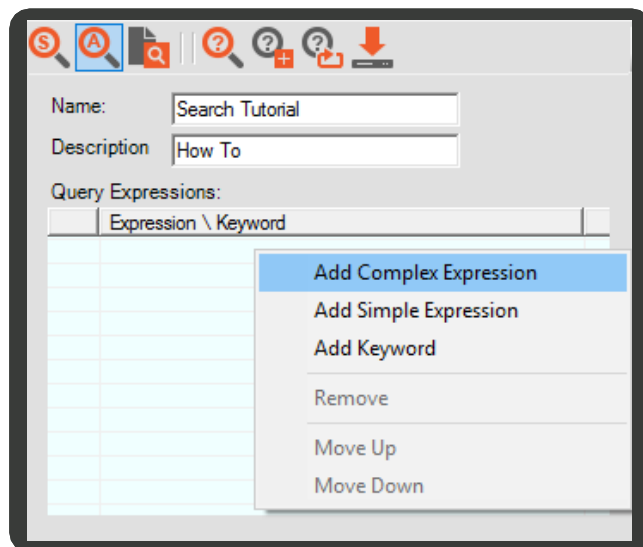


5.4.1 Advanced Search

You can create complex query expressions to search for complex parameters using the **Advanced Search**.

To create an advanced library search

1. In the Resources Toolbar, click  (**Search**). The search pane appears under the library:
2. Click  (**Advanced Search**). Type a name and description.
3. Right click in the **Query Expression** area to open the drop down search menu.
4. Add one or more of the following search definitions to the **Query Expressions** area:
 - Add Complex Expression
 - Add Simple Expression
 - Add Keyword - Only keywords allocated to Library items can be accessed with this search function, see [Adding Keywords to the Keywords Library](#).
5. Double-click the field to set the search criterion for each option selected.
6. Click  (**Execute Query**), then click  (**Show Query Results**).



6. Managing Playlists and Schedules

A playlist is a group of content items in a certain window that is programmed to play in a certain order or at certain times according to different, defined parameters.

There are two types of playlists you can create:

- **Layout Playlist** - A playlist in the layout level. This type of playlist is created when you assign more than one content item to a window.
- **Playlist Content Item** - A playlist that contains content items from the library and is represented in the **Resources** pane as a content item itself. This type of playlist is far more sophisticated and configurable than the Layout Playlist.

The playlist timing and order are managed primarily using schedules, as described in the section below.

You can bind playback rules to the playlists. The playback rules will use keywords to trigger the playlist to begin its playback, as described in the section below.

6.1 Creating Layout Playlists

This section describes how to create and manage a Layout Playlist.

To create a new Layout Playlist in a window

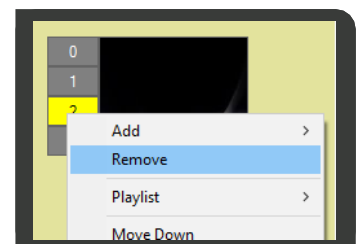
1. Assign items to the window as described in [Section 4.8.3 \(Assigning Content Items to Windows\)](#).

For each content item you assign, a tab with a number appears in the top left corner of the window. This number represents the item position in the playlist order. To select an item in the playlist, click on its tab. The selected item tab is colored yellow.



2. To change an item position in the playlist, drag the item tab up or down the tab list, or right click the tab, then click **Move Up** or **Move Down**.

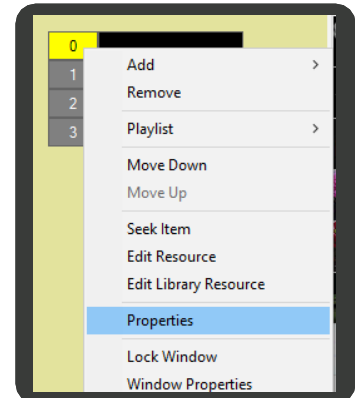
3. To remove an item from a playlist, right-click the item tab, then click **Remove**. If you want to remove an entire playlist from a window, right-click the window, then point to **Playlist** and click **Remove**.



6.1.1 Setting Playlist Items Properties

For each content item in the playlist you can set various properties such as name, schedule, keywords, etc.

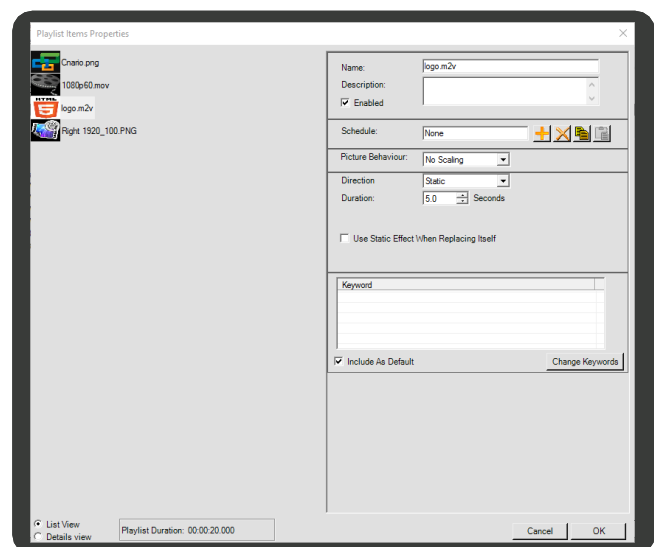
1. To open the Playlist Items Properties dialog box, right-click one of the items tabs, then click **Properties**.



2. The properties dialog box contains a list of the items on the left pane. Select an item from the list to view and edit its properties on the right pane. You can change the view through the selection options in the bottom of the list.
3. You can enter a name for the item and a description (optional). The name that you enter in this dialog box will not affect the item file name that is displayed in the **Resources** pane.



Scheduling and Keywords are described in the following sections.



6.2 Creating and Assigning Schedules

Use a schedule to control the playback of your content according to the times and priority that you define. This section describes the concepts and procedures required to configure an item schedule.

Schedules can be assigned to the following elements:

- Content Items
- Playlist Master
- Layouts



If different schedules are assigned to both the layout and a content item in the layout, the layout schedule will be given priority as an item cannot play if the layout that holds it is not valid and doesn't play.

6.2.1 Understanding Scheduling Concepts

A schedule is based on two elements - time settings and priority. Whenever a player is playing content items, it plays the highest priority item that was set to be available at the current time.

The time settings in a schedule are based on two levels:

1. You can set a period based on weekdays and / or dates in which the item will be available (**Active Period**) or unavailable (**Exclude Dates**). A schedule can contain multiple periods.
2. Within each **Active Period** you can set specific hours in which the item will be available (**Working Hours**) or unavailable (**Exclude Time**).

Scheduling Concepts Example

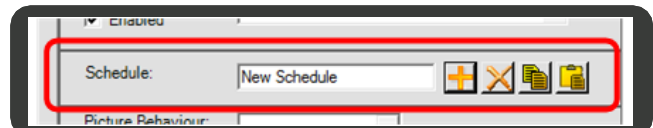
If you want to have a window in your layout that will present "Welcome" throughout the day while your business is open, and "Closed" while your business is closed, you can perform the following steps. (These steps are only conceptual. Practical instructions are described in the following sections):





1. Create two text items, one for "Welcome" and the other for "Closed".
2. Assign both items to the same window in your layout to create a playlist.
3. In the "Welcome" item schedule, set the priority to **Normal**, without setting any particular time settings. This way the "Welcome" item will act as the "default" item.
4. In the "Closed" item schedule, set the priority to **Higher**, and add an **Active Period** with **Working Hours** containing the hours your business is closed. By doing so, the "Closed" item will be available only at the times your business is closed.

As a result, during opening hours the player will always display the "Welcome" item, since this is the only item available at that time. But when closing time arrives, although both items are now available, the player will only play the "Closed" item because it has a higher priority.

6.2.2 Using Schedule Actions

The following command buttons appear in the **Properties** dialog box for elements that can be scheduled:



-  (**Add / Update Schedule**) - opens the **Schedule** dialog box, in which you configure the schedule as described in [Section 6.2.3](#) below.
-  (**Delete Schedule**) - deletes the assigned schedule.
-  (**Copy schedule to clipboard**) - copies the assigned schedule to the clipboard, so that you can paste it in another item.
-  (**Paste schedule from clipboard**) - pastes from the clipboard a schedule that you copied from a different item.

6.2.3 Configuring a Schedule


You can assign schedules to all types of content items in the library or layout playlist.

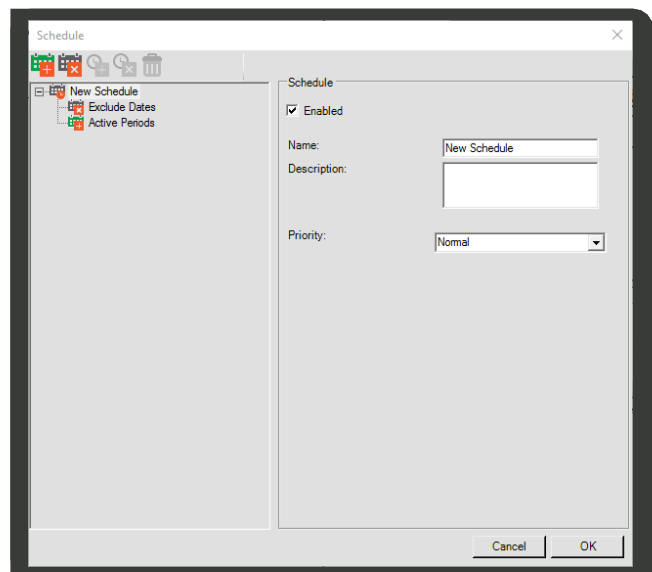
This section describes the work flow required to add or update a schedule assigned to a content item.

The work flow consists of the following main procedures:

1. [Open the Properties dialog box](#) and [add a new schedule](#).
2. [Set the schedule properties](#).
3. [Add an active period](#). The content you are scheduling will be available only during this period.
4. [Add exclude dates](#). The content you are scheduling will be unavailable during this period.
5. [Add working hours or exclude time](#). The content can be set to play only at certain hours within the active period, or cease playing during certain hours.

To add a schedule to a content item

1. Open the properties dialog box for the content item located in one of the following:
 - **Layout window** - Right click on the content item's tab, then click **Properties**.
 - **Playlist Master** - Right click on the content item, then click **Playback Properties**.
 - **Library** - Right click on the content item thumbnail, then click **Playback Properties**.
2. Click  (**Add / Update Schedule**) to open the **Schedule** dialog box.
3. Set the schedule properties:
 - a. In the main schedule dialog box, enter a name for the schedule and a description (optional).
 - b. In the **Priority** list, select the item priority.




4. Add an active period:
 - a. In the left pane, click **Active Periods**, then click  (**Add Active Period**). A new period appears under **Active Periods** on the left pane.

- b. Enter a name for the Active Period and a description (optional).
- c. Select the weekdays in which you want the content to be available.
- d. In **Minimum Gap**, enter the minimum duration you want to set between two occurrences of the item.
- e. In **Start Period** and **End Period**, enter the beginning and ending dates of the period in which, you want the content to be available. If you want the content to be available from / to an unlimited time, select the **Unlimited** check box.

5. Add an exclude date:

- a. In the left pane, click **Exclude Dates**, then click **(Add Exclude Date)**.
- b. Enter the beginning and ending dates and times for the Exclude Period.

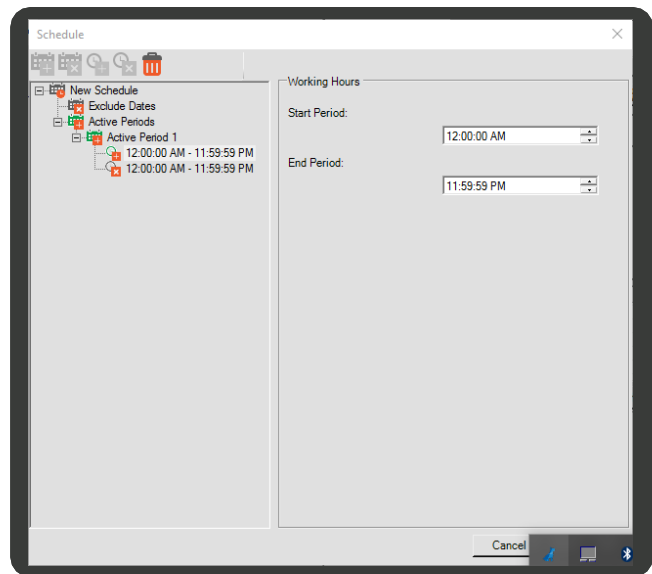
6. Add working hours or exclude time:


- a. Select the Active Period in which you want to add the setting, then click 

(Add Working Hours) or 

(Add Exclude Time) according to the type of period you want to add.

- b. Enter the beginning and ending times for the period.



7. To delete any element from the schedule (for example, Active Period, Working Hours, etc.) select the element in the left pane, then click  (Delete).
8. If you want to temporarily disable a schedule or a period in the schedule, in the left pane, select the element you want to disable, then click the **Enabled** check box in the right pane to remove the check mark.
9. Click **OK** to close the Schedule dialog box.
10. Click **OK** to save and close the schedule to the content item.

6.3 Managing Playlist Content Items

This section describes the Playlist Content Item, which is a tool to create rule based dynamic playlists for a large network. The capabilities of the Playlist Content Item include both types of rules. The chapter will first show how to create a Playlist and then how to assign rules to it.

The Playlist Content Item defines a playlist, which can define the relationship between different playlists. A playlist is normally built of other playlist items, library folders and other media items. The playlist may also hold various sets of rules, either generic or tailored to the project needs, which can be easily applied over the selected playlists.


6.3.1 Creating a Playlist Content Item

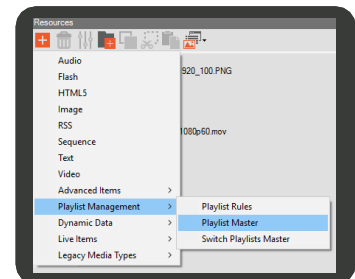
Use the Playlist Master to add content items or remove them from your playlist and edit various properties as described below.



Assigning a Playlist Content Item is performed the same way as other content items, as described in [Section 4.8.3 \(Assigning Content Items to Windows\)](#).

To create a Playlist Content Item

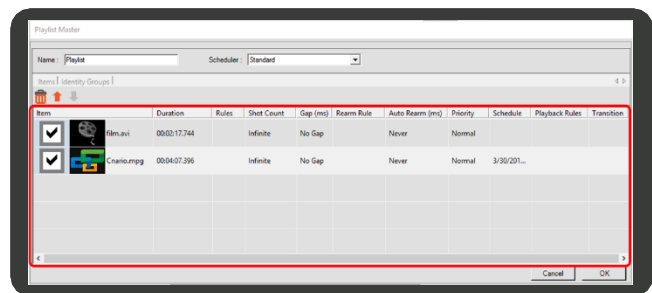
1. In the **Resources** pane, click either the **Layout** tab or the **Library** tab, according to where you want to create the Playlist Content Item, then click  (**Add Item**).
2. Point to **Playlist Management**, then click **Playlist Master**. The Playlist Master dialog box appears.



3. Enter a name for the Playlist Content Item.



For this basic example make sure that the **Scheduler** field is set to **Standard**. For a detailed description of Schedulers, see [Section 6.3.5 \(Applying Playlist Master Schedulers\)](#).

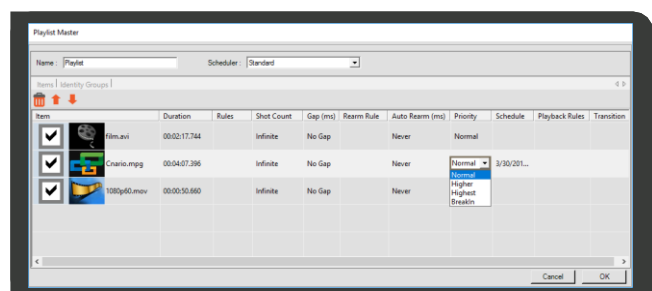


4. To add content items to the playlist, drag and drop the items from the library to the Items Table (marked in red in the figure above).



You can add content items to the Playlist Content Item from the library only.

5. The Items Table contains various properties described in the table below. To edit any property of a content item in the Playlist Master, double-click its cell in the content item row. For example: to change a certain content item priority, double-click the **Priority** field in its row and select the priority you want.





Some of the following properties are described in detail in the following sections.

Field	Description
Item	Item name and a check box to select whether to enable or disable the item in the playlist item.
Duration	The item's duration time. (In case the item has no duration such as other playlist items or folders, the duration will show --:--:--).)
Rules	Different rules may be applied over the item, for more info, see Section 6.4.3 (Setting the Playback Rules) .
Shot Count	Defines the number of appearances the item will make once a rule is valid.
Gap (ms)	Defines the minimum gap between two continuous layouts of the item.
Rearm Rule	Defines the rule that once it's valid, resets the shot count and starts the counting from zero.
Auto Rearm (ms)	Defines a given interval in milliseconds, after which the shot count is automatically rested.
Priority	Defines the level of priority of the item. A valid item in higher priority will always play over a lower priority item.
Schedule	If an item has a schedule, this column will show the name of the schedule.
Playback Rules	If an item has a playback rule, this column will show the name of the playback rule.



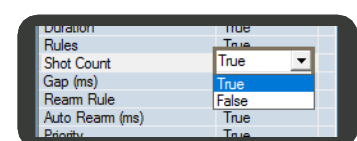
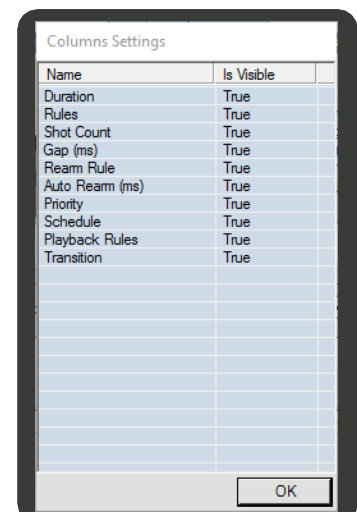
You can customize the items table to show or hide certain fields to your selection. For information, see [Customizing the Items Table](#) below.

6.3.1.1 Customizing the Items Table

You can customize the appearance of the Items Table by selecting which fields you want to show and which fields to hide.

To change the Items Table fields view

1. Right-click anywhere in the Items Table, then click **Columns Settings**. A list containing all the fields appear.
2. To change the setting of a field, double click the value in the right column and select **True** to show the field, or **False** to hide the field.
3. Click **OK**.



6.3.2 Editing a Playlist Content Item

To edit an existing Playlist Content Item

1. In the **Resources** pane, locate the Playlist Content Item where you created it (either in the **Layout** tab or the **Library** tab).
2. Double-click the Playlist Content Item to open the Playlist Master and edit the playlist.

6.3.3 Nesting Playlists

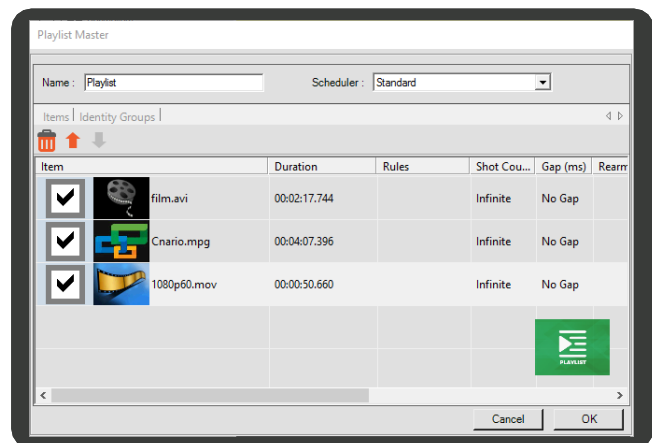
Nested Playlists allow you to efficiently manage your content items by adding Playlist Content Items or even library folders (with multiple content items) to a Playlist Item.

For example, you can define a parent playlist that contains multiple child playlists, with each child playlist having its own schedule for its content items.

Another example is when multiple users with different privileges are managing your content using Media Manager (see *Cnario Media Manager User Guide* for information on accessing and updating playlists through the Media Manager web site).

To create a Nested Playlist

1. In the **Resources** pane, double-click a Playlist Content Item to open the Playlist Master for editing, or create a new Playlist Content Item.
2. Drag the Playlist Content Item or the folder you want to add from the library to the Items Table in the Playlist Master.
3. In the Playlist Master, you can double-click a playlist or a folder to display the content items that are included in it and edit their properties.



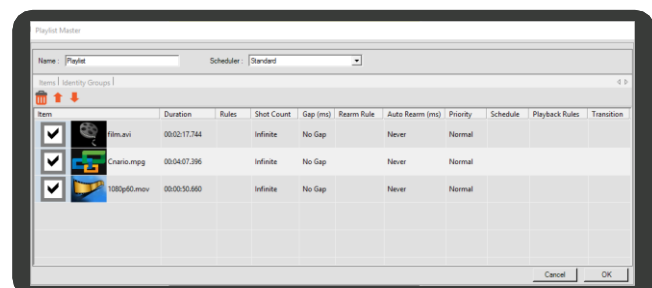
6.3.4 Assigning Schedules to Playlist Content Items

You can implement the scheduling concepts described in [Section 6.2 \(Creating and Assigning Schedules\)](#) on each content item in the Playlist Content Item. In addition, if you create the Playlist Content Item in the library, you can also set a schedule for the Playlist Content Item itself.

6.3.4.1 Assigning a Schedule to an Individual Content Item in the Playlist

To assign a schedule to an individual content item in the playlist

1. In the **Resources** pane, double-click the Playlist Content Item to open the Playlist Master.
2. In the content items Table, double-click the **Schedule** cell in the content item row. The **Playback Properties** dialog box appears.
3. Assign the schedule as described in [Section 6.2.3 \(Configuring a Schedule\)](#).



6.3.4.2 Assigning a Schedule to the Playlist Content Item



You can perform the following procedure only on Playlist Content Items created in the library.

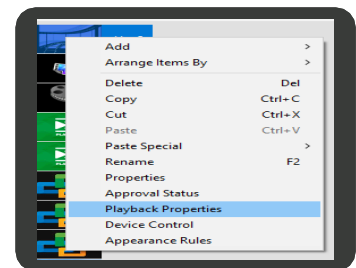
If you assign a schedule for the Playlist Content Item itself, then once you assign this Playlist to a window, all the content items in the playlist will be played according to that schedule. Setting a schedule to the Playlist Content Item will not affect the schedule properties of each content item individually.

For example, assume you have in the library a video content item named **clip1.mpg** with an assigned schedule. You then add **clip1.mpg** to a Playlist Content Item. You assign a different schedule to the playlist, and you add it to a window. When playing from the playlist, **clip1.mpg** will follow both its individual schedule and the playlist schedule. But if you then assign **clip1.mpg** (not as part of the playlist) to another window, then it will still just follow its own individual schedule.

Whenever two schedule settings contradict each other, an exclude setting will override an active setting.

To assign a schedule to a Playlist Content Item

1. In the **Library**, right-click the Playlist Content Item, then click **Playback Properties**.
2. Assign a schedule to the Playlist Content Item as described in [Section 6.2.3 \(Configuring a Schedule\)](#).



6.3.5 Applying Playlist Master Schedulers

A playlist master scheduler defines the playing order and frequency of the content items in the playlist. The main schedulers are:

- **Standard** - The default scheduler. Plays the content items in the playlist in their standard order.
- **Serial** - Plays content items in nested playlists in a different order than the standard scheduler.
- **Exposures** - Enables you to control the number of exposures of each content item in the playlist.
- **Weights and Exposures** - Advanced scheduler which combines the Exposures scheduler together with ratio control between two content item groups (Ads & Fillers).



With any scheduler, the content items in the playlist will be played only as long as their schedule permits.

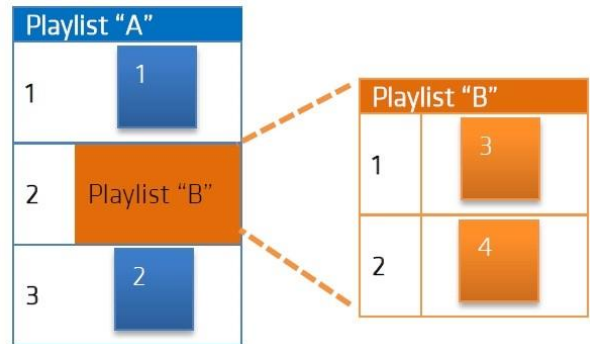
6.3.5.1 Standard Scheduler

The standard scheduler steps through the content items in the playlist in sequential order.

When used in a nested playlist, it will only play through one content item each time it is “encountered” in the parent playlist (according to their order in the playlist).

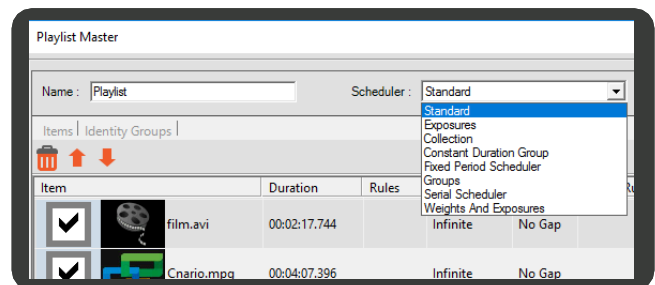
For example, the figure to the right describes a parent playlist named Playlist A, which contains, among other media content items, a nested playlist named Playlist B. The blue and orange cubes "1", "2", "3" and "4" represent media content items in the playlists.

With Playlist B scheduler set to Standard, the playing order of the content items will be as follows:



To configure the Standard scheduler

1. Open the Playlist Master of the Playlist Content Item you want to edit.
2. Next to **Scheduler**, select **Standard**.
3. You can edit the content items properties if needed, as described in [Section 6.3.1 \(Creating a Playlist Content Item\)](#).
4. Click **OK**.

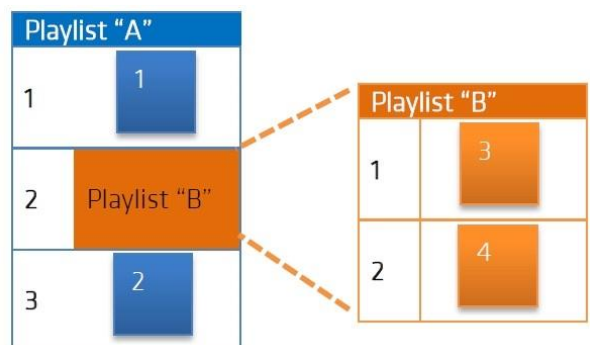


6.3.5.2 Serial Scheduler

The serial scheduler is used in nested playlists, when you want it to play through all its content items before continuing to the content items in the parent playlist.

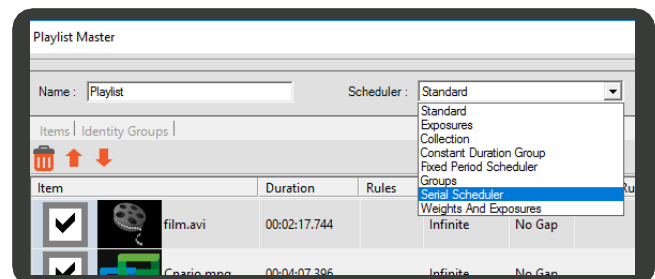
For example, the figure to the right describes a parent playlist named Playlist A, which contains, among other media content items, a nested playlist named Playlist B. The blue and orange cubes "1", "2", "3" and "4" represent media content items in the playlists.

With Playlist B scheduler set to Serial, the playing order of the content items will be as follows:



To configure the Serial scheduler

1. Open the Playlist Master for the nested Playlist Content Item you want to edit.
2. Next to **Scheduler**, select **Serial**.
3. You can edit the content items properties if needed, as described in [Section 6.3.1 \(Creating a Playlist Content Item\)](#).
4. Click **OK**.

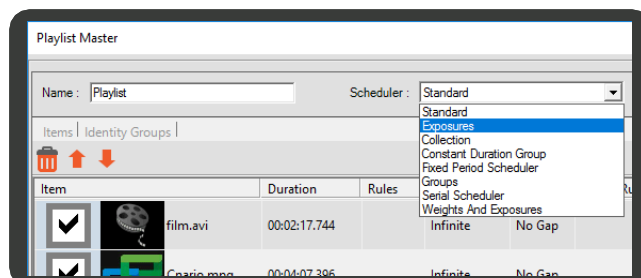


6.3.5.3 Exposures Scheduler

Use the Exposures scheduler to control the number of times each content item in the playlist will appear during a period of either an hour or a day.

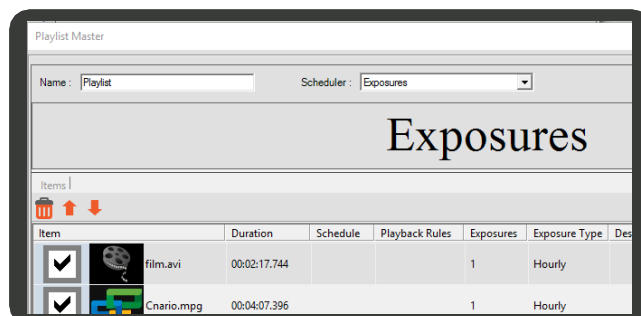
6.3.5.3.1 Configuring Exposures Scheduler

1. Open the Playlist Master for the Playlist content item you want to edit.
2. Next to **Scheduler**, select **Exposures**.

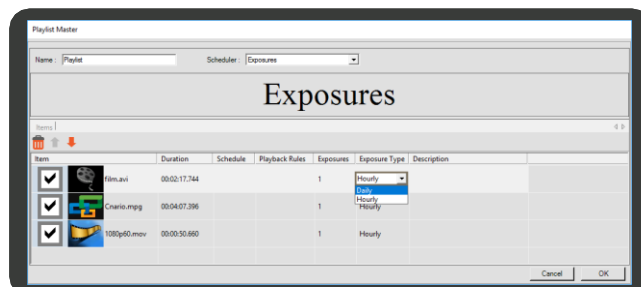


3. In the Items Table, for each content item in the playlist perform the following:

- a. Double-click the **Exposures** cell, then enter the number of times you want the content item to appear during the exposure period.



- b. Double-click the **Exposure Type** cell, then select whether you want it to use an **Hourly** or **Daily** exposure period.



4. Click **OK**.

6.3.5.4 Weights and Exposures Scheduler

Use the Exposures and Weights scheduler to control the exposure ratio of two content item groups. This scheduler is useful when you have commercial content items and fillers content items, and you want the playlist to play each of these types to a certain ratio you defined (for example: 70% of the time to play fillers and the other 30% percent to play ads).

In addition, for each of the content items, you can set the number of exposures during a certain period as described in the section below.

6.3.5.4.1 Configuring Weights and Exposures Scheduler

This procedure is demonstrated by describing a work flow to create a playlist, which combines advertisement content items and fillers content items according to 70%/30% ratio, while each advertisement is played according to defined

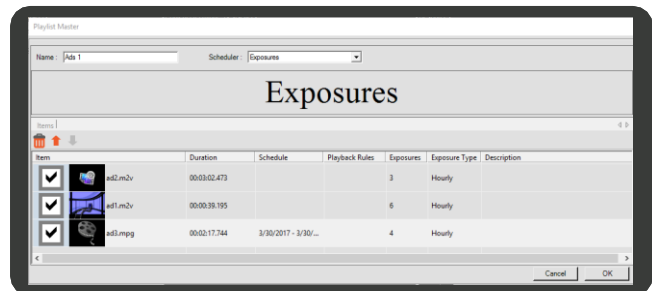
exposures.

The work flow consists of the following main procedures:

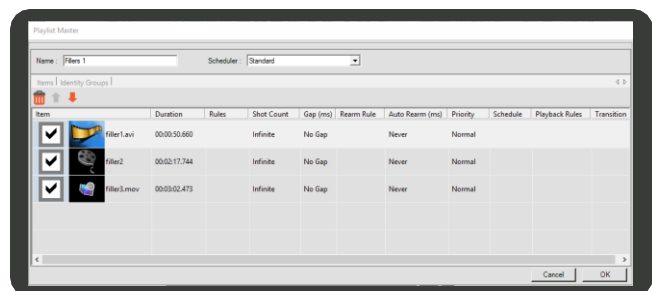
1. Creating an ads playlist and a fillers playlist (both will be used as nested playlists).
2. Creating the parent playlist which includes both the ads and the fillers playlists.
3. Configuring the Weights and Exposures properties in the parent playlist.
4. Validating the schedule.

To configure the playlist described in the example above

1. Create the ads Playlist:
 - a. Create a Playlist Content Item and name it **Ads 1**. Add your advertisement content items to the playlist, as described in [Section 6.3.1 \(Creating a Playlist Content Item\)](#).
 - b. Under **Scheduler**, select **Exposures**, then configure the exposure properties for each content item in the playlist, as described in [Section 6.3.5.3 \(Exposures Scheduler\)](#). In addition, you can configure other playback properties if needed (such as schedule, playback rules)

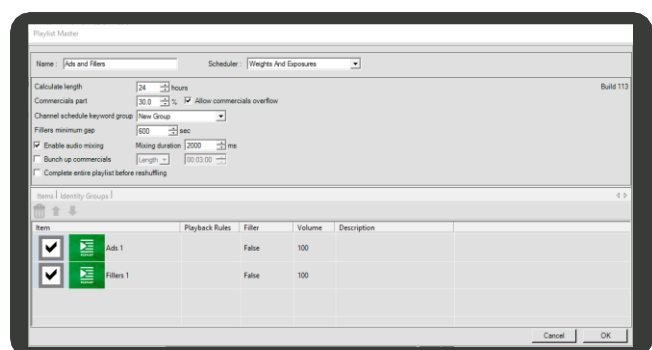


2. Create the fillers Playlist:
 - a. Create a Playlist Content Item and name it **Fillers 1**. Add your fillers content items to the playlist.
 - b. Under Scheduler, select Standard. For each content item in the playlist, configure playback properties if needed (such as schedule, playback rules).



3. Repeat steps 1 and 2 if you want to use more than one playlist for the ads or for the fillers.
4. Create the parent playlist:

- a. Create a Playlist Content Item and name it **Ads and Fillers**. Add the **Ads 1** and the **Fillers 1** playlists to the new playlist.
- b. Next to **Scheduler**, select **Weights and Exposures**. A new **Properties** pane appears.
- c. Set the scheduler properties as follows:



Property	Description
Calculate length	Length of the canvas's generated playlist.
Commercials part	Percentage of the ads playback out of the general playlists.
Allow commercials overflow	Allow ads skew in case the ads playlists exceed the commercials part percentage.
Canvases schedule keyword group	Using Keywords and Keywords wake up, each playlist can have different working hours. (i.e. if there are different working hours for the mall canvases, the same playlist will play in the relevant mall working hours according to the canvas's keyword).
Fillers minimum gap	Minimum time between the last time the filler was played to the next time the same item will be played.
Enable audio mixing	Allows audio Cross-Fade (For filler audio playlists only).
Bunch up commercials	Select whether the ads should be spread over the selected interval or played as a group (in case there is an ad flow with several items and all should be played one after the other).

d. In the Items Table, for each nested playlist set the following properties:

- * **Filler** - Defines whether a playlist is the Exposure (Ads) type or Standard (filler music) type. Set True for filler playlists and False for Ads playlists



- * **Volume** - This selection effects the volume for a specific playlist; can be used to implement different volume levels between Ads and fillers.

5. To validate your schedule:

- Click the **Identity Groups** tab.
- In the **Date** field, enter the date you want to check.
- Click **Recalculate Groups** to generate the playlist groups for the Ads playlist.

6.4 Applying Playback Rules with Keywords

Playback Rules bind content items with specific canvases by using keywords. This feature is useful when using multiple canvases in different locations (such as different departments in a company, or branches in different areas). You assign keywords to categorize each canvas, then set a Playback Rule using these keywords for content items you want to play in those specific canvases.



For example, if your company has multiple branches spread over the East Coast and the West Coast, and it provides separate services for personal and business customers, you can define keyword sets with the keywords **Personal**, **Business**, **East Coast**, and **West Coast**, and categorize each canvas by assigning the relevant keywords. Then you can set, for example, a Playback Rule for content items that are intended for business departments in the West Coast branches, so that these content items will eventually reach only their intended audience.

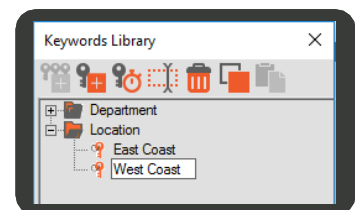
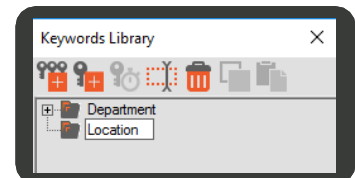
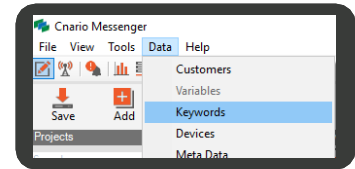
This section describes how to create keyword sets, assign the keywords to content items and canvases, and set the playback rules for the content items.

6.4.1 Adding Keywords to the Keywords Library

To use Playback Rules, you must first create a set of keywords, which will be used in the rules. Keywords are created and managed using the **Keywords Library**. If you want to use multiple categories of keywords (such as location, department), you can sort them to different groups.

To create a set of keywords

1. In the Menu Toolbar, click **Data**, then click **Keywords**. The **Keywords Library** appears.
2. To create a new group, click  (**Add Keyword Group**), then enter the name of the group.
3. To create a new keyword, click the group in which you want to add a new keyword, then click  (**Add Keyword**).
4. Enter the keyword.
5. You can use the Command Toolbar at the top of the Keywords Library to perform additional tasks on keywords such as delete, rename or copy a keyword.
6. When you finish creating all keywords, click **OK**.




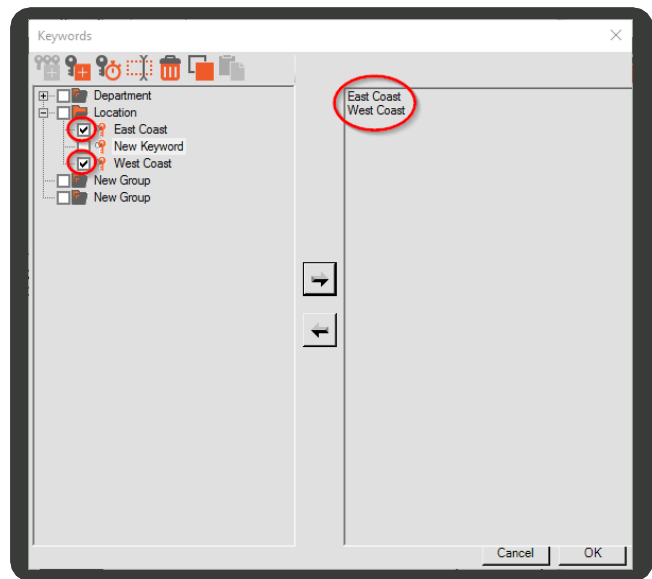
6.4.2 Assigning Keywords to Content Items and Canvases

You can assign keywords to all types of content items in the library or layout playlist.



To playback the particular content items and playlists on particular canvases, you must also assign the same keywords to the canvases. In this way the canvas will recognize the selected keywords and play those specific items.

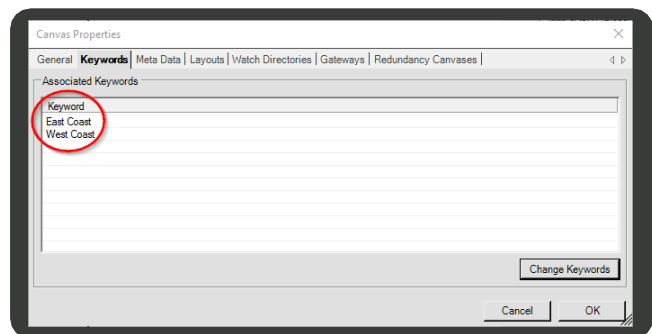
To assign keywords to a content item

1. Open the properties dialog box for the content item located in one of the following:
 - **Playlist Master** - Right click on the content item, then click **Playback Properties**.
 - **Library** - Right click on the content item thumbnail, then click **Playback Properties**.
2. In the **Keywords** pane, click the **Change Keywords** button to open the **Keywords** dialog box.
3. Select the check boxes of the relevant keywords, click  (**Add Keyword to Item**), then click **OK**.
4. Click **OK**.



To assign keywords to canvases

1. In the Mode Toolbar, click  (**Device Manager**).
2. In the **Channels** pane, right click on the relevant canvas, then click **Properties** to open the **Canvas Properties** dialog box.
3. Click the **Keywords** tab, then click the **Change Keywords** button to open the **Keywords** dialog box.
4. Select the check boxes of the relevant keywords, then click  (**Add Keyword to Item**).
5. Click **OK**.



6.4.3 Setting the Playback Rules

Playback Rules are part of the content item's Playback Properties (such as the schedule). You can assign playback rules to all types of content items in the library.



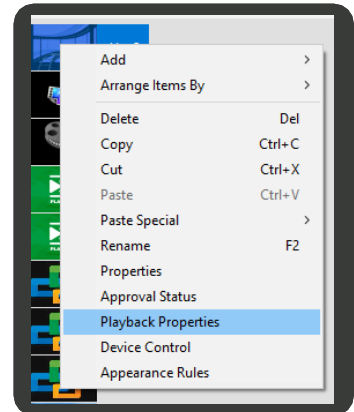
Playback Rules are a library item property and therefore all changes made to the rules of a content item, even from within the Playlist Item, apply for all other linked instances of the item.

The keywords you set in Playback Rules are used together with logical operators (such as **And**, **Or**, **Not**). For example, if you want a certain content item to play only in the business departments in the west coast, you would add the keyword **Business**, then add the keyword **West Coast** with the **And** operator.

To set Playback Rules

1. Open the content item's **Playback Properties** dialog box using either of the following methods:

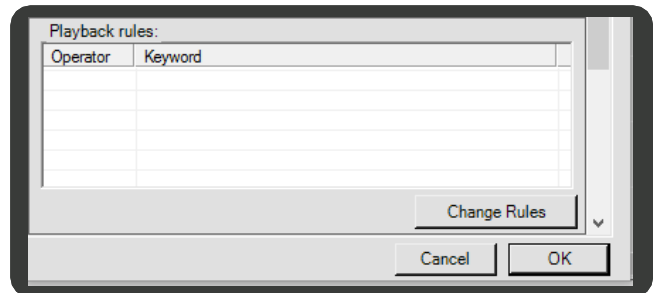
- In the **Library**, locate the content item, then right-click it and click **Playback Properties**.




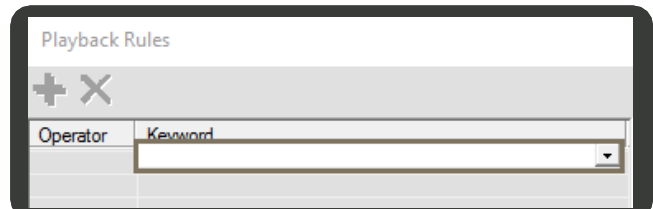
- When using the Playlist Master, double-click the **Playback Rules** cell in the content item row.



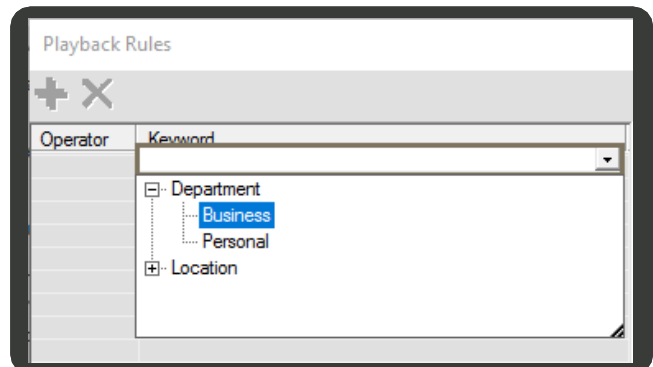
2. In the **Playback Rules** section, click **Change Rule**.




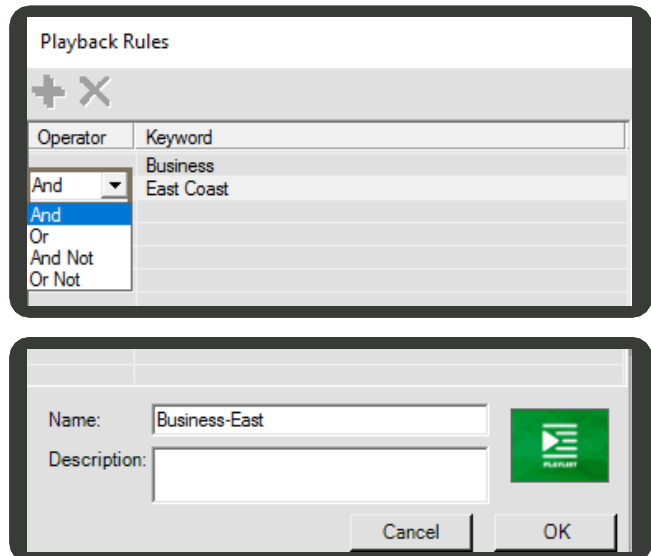
3. To add a keyword, click . A new row in the keywords table is highlighted.



4. Click the arrow on the right edge of the **Keyword** field to open the keywords list.
5. Double-click a keyword group to expand it, then double-click the keyword.



6. If you want to change the logic operator, double-click the **Operator** cell next to the keyword and select an operator from the list.
7. To add another keyword, repeat steps 3- 6.
8. To delete a keyword, click its row, then click .
9. In the bottom of the dialog box, enter a name for the Playback Rule and a description (optional).
10. Click **OK**.



6.5 Advanced Scheduling

Use advanced tools to create play back items based on data received from devices and according in defined locations, then set and apply the playback rules to the playlists.

6.5.1 Creating Playlist Rules using Devices and Location

Use the **Playlist Rules** content item to create rules based on real time information received from devices “at the scene”, such as a GPS or tracking device. Use these rules to trigger events that play or disable your content items in a playlist. Messenger supports the following types of playlist rules:

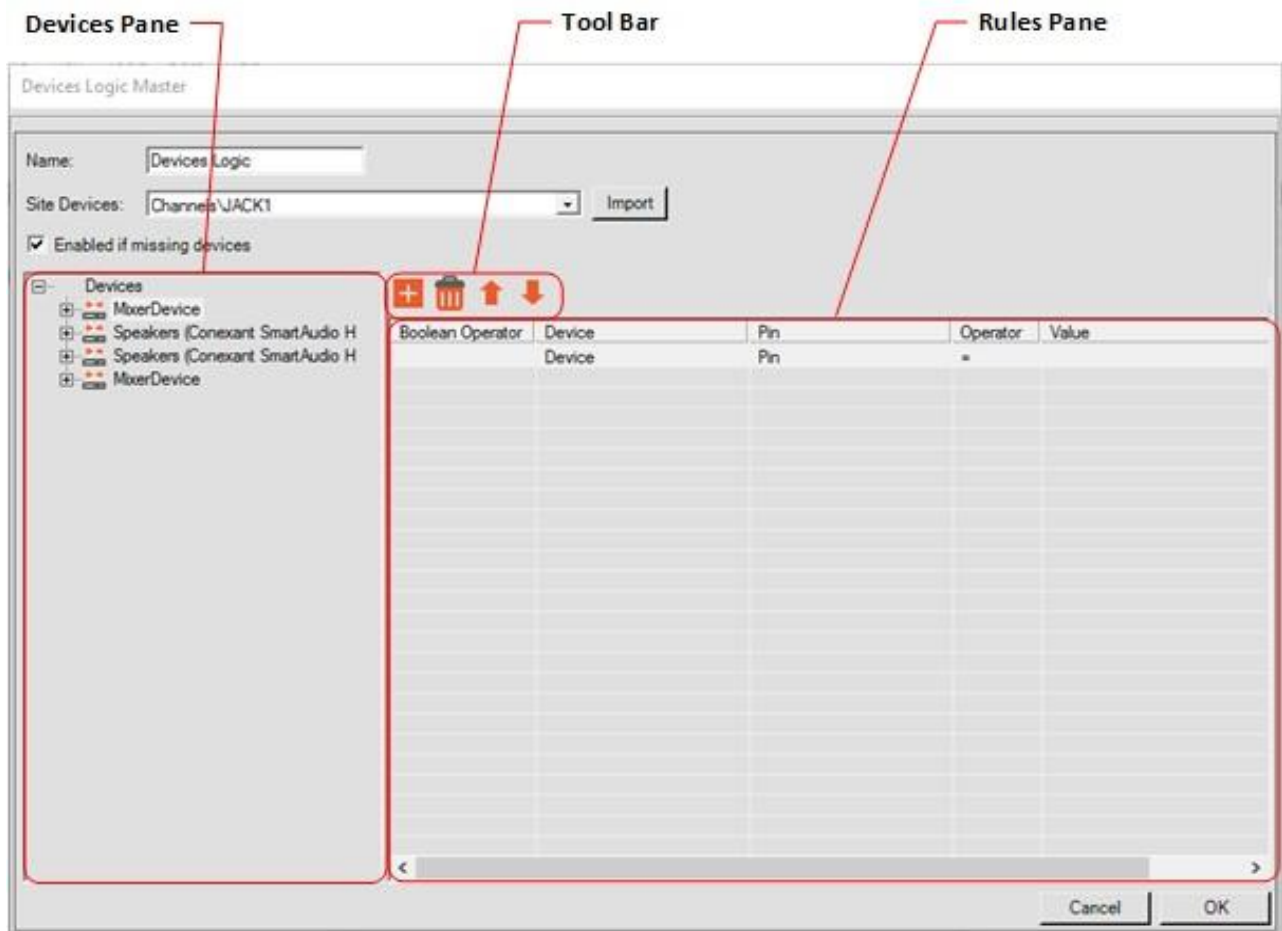
- **Device Logic Master** - Uses real time information from a remote device to trigger an event.
- **Location Rules Master** - Uses geographic location (from a GPS) to trigger an event.
- **Rules Logic Master** - Combines the Device Logic Master and Location Rules Master to create complex rules to trigger an event.

6.5.1.1 Devices Logic Master




Use the **Devices Logic Master** item to define the set of rules and expected results that need to apply in order for the playlist or item to be played. All rules are based on the system pins and their values. Apply simple logical definitions (AND, OR, AND NOT and OR NOT) to the device / pin or a set of devices and pins to define the required relationship.

This item is based on real time information that comes from the player’s device. The device rules master can read the set data that triggers it to present information.

The **Devices Logic Master** interface consists of the following main parts:




- Devices Pane - Displays all connected devices listing on which rules can be defined upon.
- Tool Bar - Contains the following options:


Option	Description
 (Add Device Action)	Adds a new rule.
 (Remove Device Action)	Deletes a selected rule.
	Changes rules order.

- Rules Pane - Contains the following options:

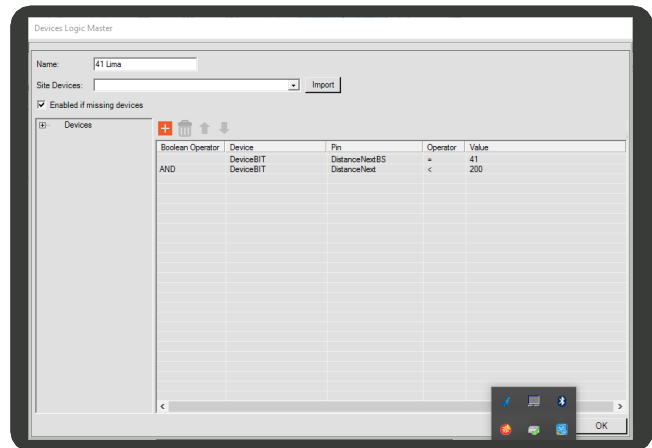
Option	Description
Boolean Operator	<p>Defines the relationship between several rules that is required an item (or playlist) to playback:</p> <ul style="list-style-type: none"> ● AND - Both rule A and B must be valid for the item to playback. ● AND NOT - Rule A needs to be valid and Rule B must return false for the item to playback. ● OR - Rule A or Rule B must be valid for the item to playback. ● OR NOT - Rule A must be valid or Rule B must return false for the item to playback
Device	Device name. Devices may be dragged from the Devices pane or manually entered.
Pin	Pin (device exposed attribute) name.
Operator	<p>Rule may be checked according to the following values:</p> <ul style="list-style-type: none"> ● < Greater than ● <= Greater or equal to ● <> Different than ● = Equals to ● > Smaller than ● >= Smaller or Equals to
Value	The value to which the pin's value is been compared to. Values may be defined according to a selection box or entered manually.

To add a devices logic master item

1. In the **Layout** or **Library** tab, click  (Add Item), click **Playlist Management**, click **Playlist Rules**, then click **Devices Logic Master** to open the **Devices Logic Master** dialog box.
2. In **Name**, type a name for the item. In this case we named it 41 Lima.
3. In **Site Devices**, you have the option of importing devices from remote notes (players). In this case, we imported the devices from Player.
4. Select the **Enabled if missing devices** check box. When selected, the rule will act as if the rule returned true if the device was missing in the player.

5. Click  (**Add Device Action**). In this case two rules were added:

- DeviceBIT, DistanceNextBS Pin = 41
- And DeviceBIT, DistanceNext Pin < 200



Result – this is an example of a device in a bus company. The DeviceBIT is a device that receives information from the bus. In this case the information is that within the range of the bus station, specific station content should be presented.


6. Set the other options as required.
7. Click **OK**.

6.5.1.2 Rules Logic Master

You can create sophisticated playback rules by combining several rules (from both the **Devices Logic Master** and **Location Rules Master**). For example, a bus company can use the **Rules Logic Master** to create a playlist rule to play specific content when the following conditions are met:

- The screen is turned on.
- The player is at specific coordinates, but not in a bus station.
- The bus doors are closed.

To add a rules logic master

1. In the **Layout** or **Library** tab, click  (**Add Item**), click **Playlist Management**, click **Playlist Rules**, then click **Rules Logic Master** to open the **Rules Logic Master** dialog box.
2. In **Name**, type a meaningful name for the rules logic item (in this case we have used 41 Lima and Madrid City and Airport).
3. Drag all of the required device logic master content items from the **Library** (in this example two rules were used):
 - The first defines that the bus is in the range of the bus station.
 - The second defines that the station is IN the allowed playback radii (Madrid City and Airport).

6.5.2 Setting the Playlist Rules

Use the following rules' settings to create rules that trigger the playlist:

Rule	Description
GAP	<ul style="list-style-type: none">● Defines the gap in milliseconds between each appearance of the item.● A valid item set with a gap of 3600000 (60 minute) will not appear before one hour has passed since the last appearance.● Combined with higher priority can be used to set an item to have repeating appearances.● Gap disregards the length of the playlist.
Shot count – Rearm	<ul style="list-style-type: none">● Shot count is the number of times the item will play once it is valid. The shot count is reset by the rearm – either by a rearm rule or by auto-rearm.● By default (when no rule is set), rearm is the NOT of the rule. So, if the rule is set with a location rule X (bus is within the range of point X) then the rearm would be when the location rule X is invalid (bus exits the range of point X).● Rearm rule should be used when a specific rule (different than NOT rule) should rearm the shot count.● Auto rearm can be used to rearm the shot count after a preset time. For example - to have an item playing three times every five minutes.

Rule	Description
Priority	<ul style="list-style-type: none"> ● Logic is that higher priority items play. ● If the playlist includes two valid items, one is 'normal' and the 2nd is 'higher', then only the 2nd 'higher' priority item will play. ● In the same manner 'Break-In' before 'Highest' before 'Higher' before 'Normal'. ● If a higher priority item becomes valid during the playback of another item, it will play as soon as the last item is finished (this can happen if the rule becomes valid or if the items schedule is valid etc.) ● Priority can be set to a playlist within the playlist CI. Therefore, If the playlist CI includes two valid items, one is a video set with 'normal' priority and the 2nd is a playlist CI set with 'higher' priority', then only the playlist will play – all its items. ● Equal priority – in case the playlist includes two video items and a playlist then the playback will be item1->item2->playlist (item PL1)->item1->item2->playlist (item PL2).

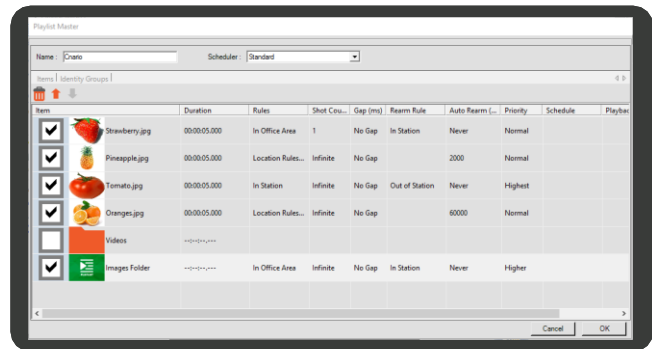
6.5.3 Applying the Rules in the Playlist

You can associate the rules (See [Setting the Playlist Rules](#)) with the relevant members of the playlist CI (other playlist CI or media item). When playback rules are set, the items are evaluated to determine if it is eligible for playback on a player (canvas).

To apply the rules to a playlist

1. Prepare your playlist rules (see [Section 6.5.1.1 \(Devices Logic Master\)](#), [Section 6.5.1.2 \(Location Rules Master\)](#), and [Section 6.5.1.3 \(Rules Logic Master\)](#)). For our example we have created the following rules:
 - In station and out of station (Devices Logic Master) defining the requested device status that indicates the location of the player in the bus station or out of the bus station.
 - In Office Area and out of station (Rule Logic Master) – defining the actual area location of the player according to its GPS coordinates.
 - New York Area (Location Rules Master).
 - Alert Notification – Alerts the system once the emergency contact closure is enabled.
 - Disable Alert – Removes the alert once the contact closure is disabled.
2. Add the rules to the playlist.

- Open the playlist CI.
- Select the item to which you would like to apply the rules.
- From the Playlist items folder, simply drag the desired rule into the Rules column.
- Define the amount of times the item should playback once the rule is applied.
- Drag the desired rule to rearm the rule into the Rearm Rule column.
- Set the Auto rearm interval in case needed.
- Set the item or playlist priority.



8. Click **OK**.

See [Complex Playlist Example](#) for a demonstration of the Playlist capabilities turning a complex scheduling requirement into an easy to use operation.

6.5.4 Switch Playlists


You can interactively command a playlist to play by creating a **Switch Playlists Master** content item.

This procedure is demonstrated by describing a work flow to create a playlist within the **Switch Playlists Master** content item. The playlists can then be manually commanded to play or set with device rules that initiate playback.


The work flow consists of the following main procedures:

- Create the playlists in the **Switch Playlists Master** content item.
- Connect the **Switch Playlist Master** to the relevant canvas(es) in the **Network Module**.
- Set playback rules in the **Device Manager**.

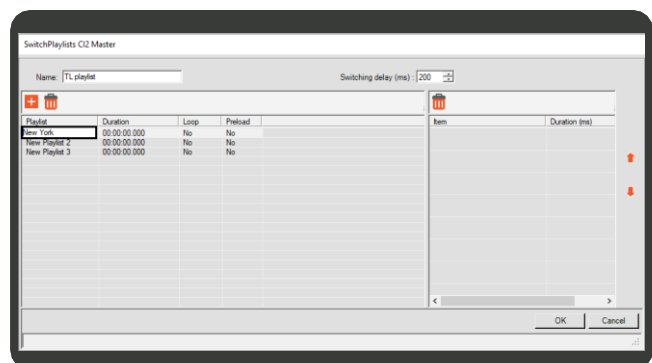
To add a Switch Playlists Master content item

- In the **Layout** or the **Library** tab, click  (**Add Item**), click **Playlist Management**, then click **Switch Playlists Master** to open the **SwitchPlaylist CI2 Master** dialog box.

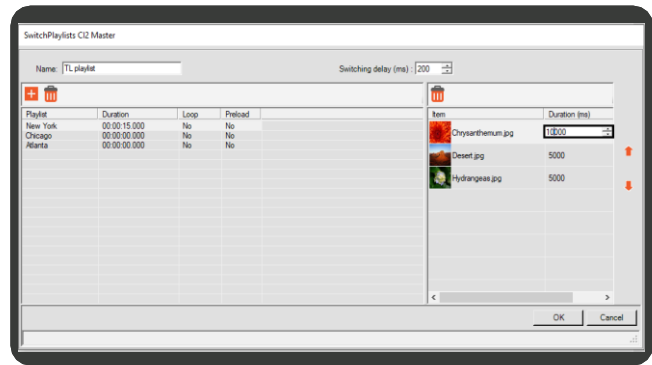
- In the **Name** box, type a name. In our example we have called it TL playlists.

- In the Playlist pane, click  (**Add playlist**) to add one or more playlists.


- Double click on the added playlist, then type a name for the playlist. In our example, we will add three playlists called, New York, Chicago and Atlanta.



- In the Playlist pane, click on the New York playlist, then drag and drop items from the **Library** to the Item pane.

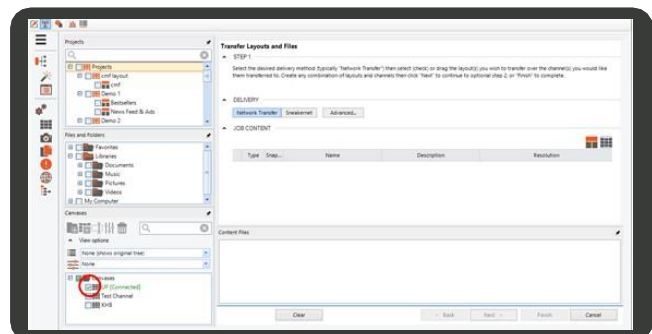


Switch Playlists Master does not support the Playlist Master content item; therefore, do not add these to the playlists.


- Double click on the cell in the duration column to set a duration for the item. You cannot change the duration of video item.
 - Repeat steps 5 and 6 above to add content items to the Chicago and Atlanta playlists.
- The total duration of the playlist items is listed in the playlist pane, in the duration column.
- Click **OK**.
 - If you saved your playlist to the Library, drag and drop it into a layout.
 - In the Command Toolbar, click  (**Transfer Layout**) to open the **Network Module**.

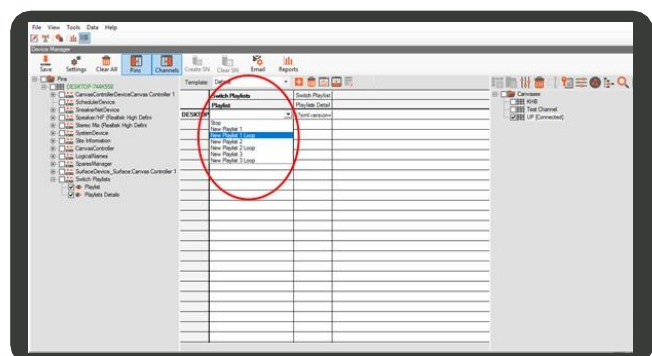
To connect the Switch Playlists Master to the relevant canvases

- In the Network Module, in the Layout transfer tab, select the canvases to where you want to transfer the playlists. See [Section 8.1 \(Managing Layout Transfers and Integration\)](#) for more information about transferring layouts.
- Click **Finish**.



To set playback rules to command the playlist to play

- In the Mode Toolbar, click  (**Device Manager**).
- In the **Channels** pane, select the canvases that you connected to the **Switch Playlists Master**.
- In the Pins pane, in the Device list, open the **TL playlists** device (the name of our Switch Playlist Master).
- Select the **Playlist** pin to open it in the **Template Working Area**.



5. In the **Template Working Area**, double click on the cell to open the playlist options (New York, Chicago and Atlanta).



For each of the created playlists, the same playlist is offered with the addition of a loop. To play the playlist once and then have it stop, select the playlist without the loop option. To have the playlist continuously play, select the loop option.

6. Select a playlist.
7. See [Managing Players and Canvases](#) and [Configuring and Monitoring Pins](#)
8. Click  (**Save**).

7. Adding Advanced Content Item Types

This section describes how to add the following advanced content items to the library:

[Windows Media Streaming](#)

[Alpha Animation](#)

[Template Master](#)

[Multi Zone Text](#)

[Analog Clock](#)

[Counter Master](#)

[Database Master](#)

[Digital Clock](#)

[Outlook](#)

[Web Feed Reader](#)


[Windows Presentation Foundation Master](#)

[Sequences](#)

7.1 Windows Media Streaming

You can add Windows Media Streaming from an external source into your digital signage system. Messenger enables the playback of .wmv streams from a Windows streaming server and supports both .wmv and .asx formats.

To add a Windows media streaming item

1. In the **Layout** or **Library** tab, click  (Add Item), click **Live Items**, then click **Windows Media Streaming** to open the **Windows Media Streaming** dialog box.
2. In the **Stream URL** box, write or paste the address of the link you wish to use.
3. If you are using an ASX URL, click **Parse ASX URL** to open the **ASX Parser** window.
 - a. In the **ASX Parser** window, click **Parse ASX** to open the available streams in the ASX container.
 - b. In the **Available Streams** box, select a stream, then click **OK**.
4. Select the **Include Video** check box to include images.
5. In **Deinterlacing Mode**, select one of the following:

Option	Description
Progressive	Also referred to as noninterlaced scanning, displays, stores, or transmits moving images in which all the lines of each frame are drawn in sequence.
Top Field First	Displays the image from the top left first.
Bottom Field First	Displays the image from the bottom.

6. In **Aspect Ratio Mode**, select one of the following scaling options:

Option	Description
Default Setting	Retains image's default settings.
Keep Aspect	Maintains image's aspect ratio.
Ignore Aspect	Stretches image over the entire window.
Maximize X	Stretches image horizontally.
Maximize Y	Stretches image vertically.
Zoom to Window	Stretches the image to fit the window.

7. Select the **Include Audio** check box to include sound.
8. If you have customized audio output targets, in the **Mapping Name** box, select an output (optional)



Force Mapping is an optional setting targeting custom-made audio mapping.

9. In **Duration**, type or select the length of time your stream will play.
10. Click the **Preview** tab to connect to your URL and preview your item.
11. Click **OK**.

7.2 Alpha Animation

You can layer a video on top of another media item and use the special alpha animation format file (.cmf) to create the transparency effect needed for both media items to be viewed simultaneously. The .cmf file does not stand alone and cannot be played by itself. Rather, it is a video file constructed with a white to black range and is played along with another video file (usually an .mpeg2).

To achieve the effect, you will need to save the media and .cmf files to the Library and then insert them into a series of sequences that are layered one on top of another in the same layout window. Then, when the sequences are played together, both media items are displayed.

Messenger's alpha animation supports the following formats for the accompanying media files:

- .mpg
- .mpeg
- .m1v
- .m2v
- .wmv
- .avi
- .mva
- .mp4
- .vob



The .cmf files have been specifically developed by YCD Multimedia for the efficient production of alpha animation videos. You can produce this format using the splitter plugin, please see ? for further details. Alternatively, for support contact the YCD Multimedia support team at supportINT@ycdmultimedia.com.

7.2.1 Setting Alpha Animation

This section describes the work flow required to create an alpha animation content item.

The work flow consists of the following procedures:

1. Save the following media files to the Library:

- [.cmf file](#)
- [Split video file](#)
- [Background image file](#)





The video file must be added to the library through the **Fleximedia Master** dialog box and NOT through alpha animation **Window Properties** dialog box.



to the sequence.

4. Preview and save the item.



To add the .cmf file to the Library

1. In the **Layout** or **Library** tab, click  (**Add Item**), click **Advanced Items**, then click **Alpha Animation** to open the **Video Properties** dialog box.
2. In **Location**, click  (**Browse**), select the .cmf file, then click **Open** to view the selected files in the **Video Properties** dialog box.
3. Click **Save Thumb** to create a thumbnail.
4. Click **OK**.

To add the video file to the Library



1. In the **Layout** or **Library** tab, click  (**Add Item**), then click **Video**.
2. Click  (**Browse**), select the video file item, then click **Open** to open the **FlexiMedia Master** dialog box.
3. Click **OK**.

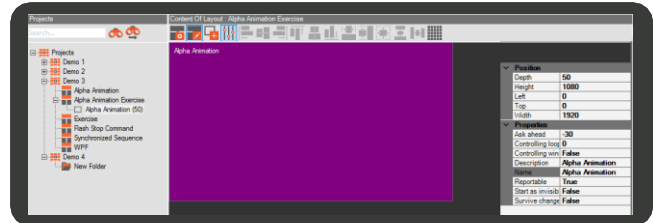
To add the background image to the Library


1. In the **Layout** or **Library** tab, click  (**Add Item**), then click **Image** to open the **Picture Properties** dialog box.
2. In **Location**, click  (**Browse**), select an image file, then click **Open**.
3. Click **OK**.

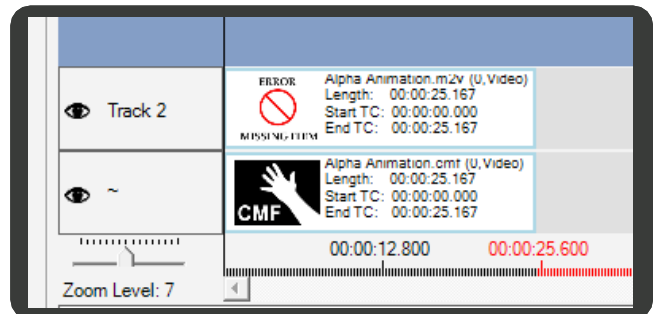
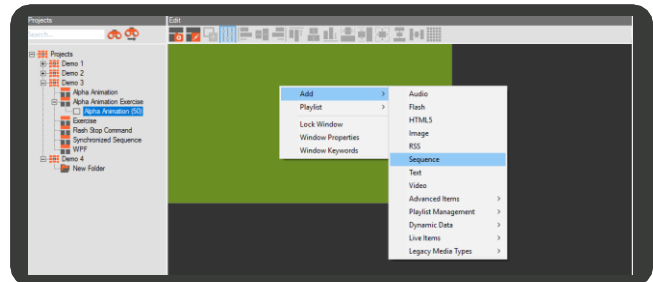
You will need to create two windows in a layout (one on top of the other). Each window will contain a sequence. The uppermost window will carry the Alpha Animation sequence, while the lower window sequence will only contain the background image.

To create the upper window

1. Create a new project and layout, see [Section 4.6.1 \(Adding a Project and a Layout\)](#). For this example, we have called the project **Alpha Animation Exercise**.
2. In the **Layout Toolbar**, click  (**Create a New Window**), drag the edges of the window to fit the layout.
3. In the **Layout Toolbar**, click  (**Window Properties**).
4. In the **Windows Properties** pane, leave the **Depth** value at the default 50, then rename the window **Alpha Animation**. This window will contain the video file and .cmf file sequence.
5. Add a sequence to the **Alpha Animation** window:






- a. In the **Layout Toolbar**, make sure  (**Toggle Edit mode**) is inactive (as described in [Section 4.7.1](#)).
- b. Right click on the window, click **Add**, then click **Sequence**.
- c. Drop and drag the .cmf file and then the video file into the sequence.
- d. In the tracks column, right click on **Track 0**, click **Rename Track**, then type a name starting with the "~" (alpha symbol).






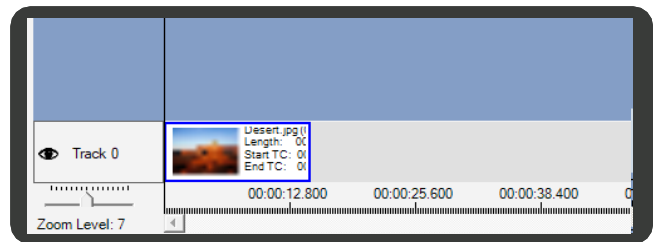
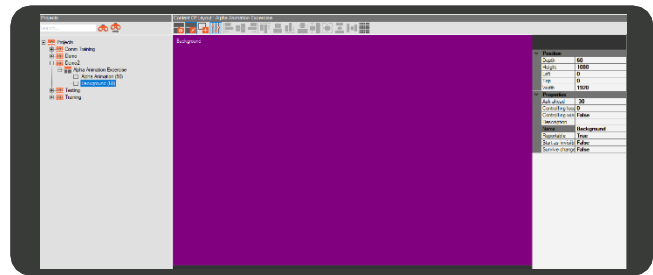
The .cmf file must be marked on the tracks with "~"; this mark represents the playback engine. It means that whatever is placed on the track will act as the alpha canvas for the track above.

6. Click **OK**.

To create the background window

1. In the **Layout Toolbar**, make sure  (**Toggle Edit mode**) is activated, click  (**Create a New Window**), then drag the edges of the window to fit the layout.
2. In the **Layout Toolbar**, click  (**Window Properties**).

3. In the **Windows Properties** pane, change the **Depth** value to 60. This will ensure the window sits underneath (at a greater depth to) the Alpha Animation window.
4. In the **Windows Properties** pane, rename the window **Background**. This window will contain the background image file.
5. Add a sequence to the **Background** window.
 - a. In the **Layout Toolbar**, make sure  (**Toggle Edit mode**) is inactive (as described in [Section 4.7.1](#)).
 - b. Right click on the window, click **Add**, then click **Sequence**.
 - c. Drop and drag an image file into the sequence.
6. Click **OK**.
7. Click  (**Preview**) to view your sequence.
8. Click  (**Save**).



7.3 Template Master

Create sequences that contain "placeholder" items. The placeholders are special items that will be exposed to Media Manager users. The Media Manager can add content to the placeholders through the web interface. This allows them to change and update the content, without accidentally changing the layout or synced items.

This procedure is demonstrated by describing the work flow to create the following three sequences:

- News Information
- Slideshow
- Promotion

Each sequence contains placeholders in a layout that is ready for the WebUser to access and distribute to players. The work flow consists of the following main procedures:

1. Configure Messenger for User with Media Manager. See [Appendix D Configuring Messenger for use with Media Manager](#) for more information.
 - a. [Create users for web login](#).
 - b. [Organize the Library for the Media Manager](#).
 - c. [Set access permission to the folders](#).
2. Prepare the layouts and placeholders.
 - a. [Create the layouts for your templates](#), including the [layout structure](#).
 - b. [Add template placeholders to the Library](#).
3. Create the sequences.

- a. [Create sequences for the templates.](#)
 - b. [Add filters to the sequences.](#)
 - c. [Anchor the items.](#)
4. Prepare the sequences for the Media Manager user (WebUser1).
 - a. [Add the template folder to the layouts.](#)
 - b. [Assign the layout to the players.](#)
 - c. [Grant user permission to access the players.](#)

The layout is now ready for the WebUser to access, upload content and distribute to players via Media Manager.

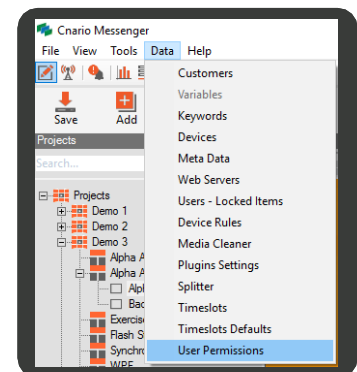
7.3.1 Creating Users for Web Login


Create the Media Manager WebUsers. The WebUsers will be able to log into Media Manager through the web portal, through which they can access the Library template and folders, and add the content to the template holders.

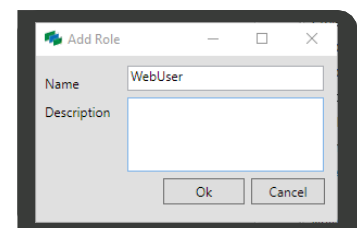
To create WebUsers, you first have to create the Role and set specific permission to this role. You can then add Users to the Role. The Users will then inherit the permissions assigned to the Role. In this way, you can quickly create a group of Users with the same permissions.


To create users for web login

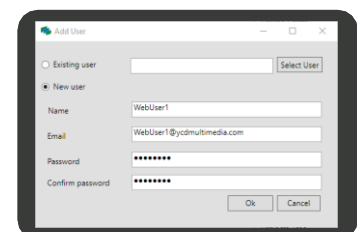
1. In the Menu Toolbar, click **Data**, then click **User Permissions** to open the **User Permissions** dialogbox.



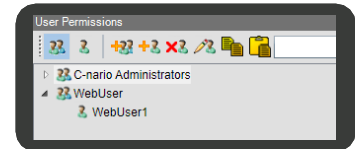
2. In the **User Permission** dialog box, click  (**Add Role**).
3. In the **Add Role** dialog box, type a name and description (optional) for the user, then click **OK**.



4. In the **User Permissions** dialog box, click on the WebUser role that you added above, then click  (**Add User**).
5. In the **Add User** dialog box, select **New User**, type in the **Name** and **Email**, then set the **Password**.
6. Click **OK**.



The user will now be added as WebUser1, in the WebUser role, as shown in the image.



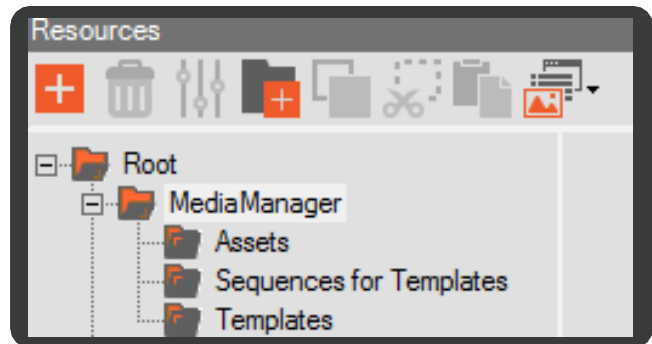
7.3.2 Organizing the Library for the Media Manager

Once you have established the WebUsers, you can organize the library for the Media Manager.

To organize the library for the media manager user

1. In the **Library** tab, create a **MediaManager** folder.
2. In the **MediaManager** folder, add the following subfolders:

- **Assets** - To be used by the WebUser1 to store and organized the content uploaded and that will be used for its templates
- **Sequences for Templates** - Will store all predefined sequences the WebUser1 will be able to use for its template
- **Templates** - Will store the finalized templates created by the WebUser1 in media manager and will be linked to a layout to play on the players.



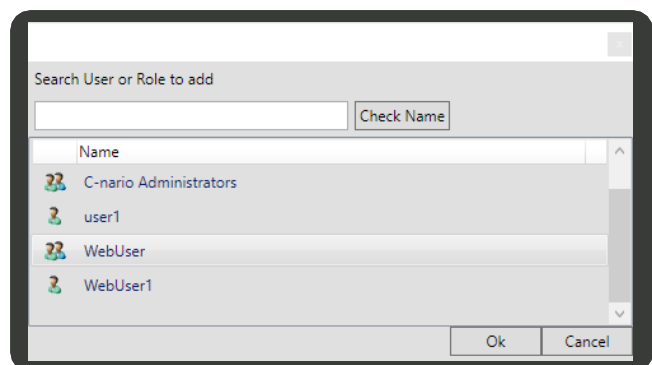
7.3.3 Setting Access Permission to the Folders

Set the following access permissions for the WebUser:

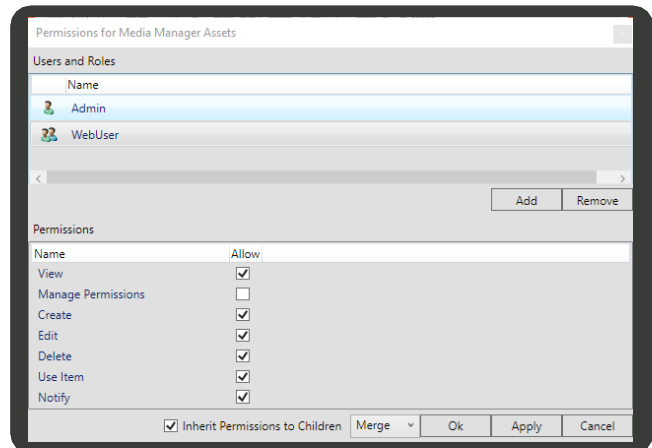
- [Grant the WebUser permission to access and add content](#) to the Library folders through the Media Manager web interface.
- [Deny the WebUser permission to edit the template sequences](#). Changes to the template sequences will impact the visual layout and synchronization of the media items.

To grant access permission to the Media Manager folders in the Library

1. Right click on the **MediaManager** folder, then click **Edit Permission** to grant permission to the WebUser role.
2. In the **Permissions for MediaManager** dialog box, in the **Users and Roles** section, click the **Add** button.
3. In the next window, click **Check Name**, click the **WebUser** role, then click **OK**.

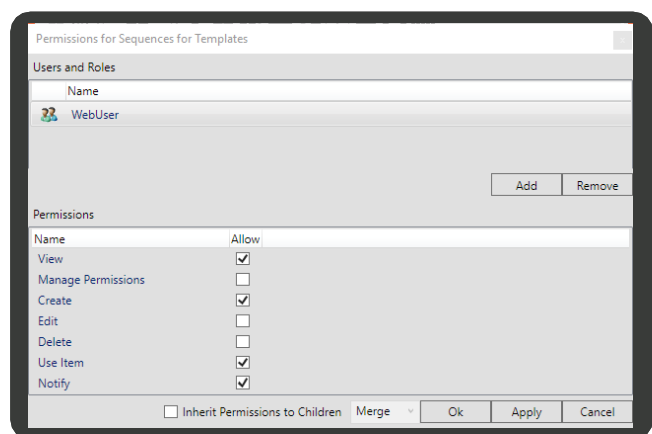


4. In the **Permissions for MediaManager Assets** dialog box, select all the permission check boxes, except **Manage Permission**, select the **Inherit Permission to Children** check box to copy the current permission to the subfolders
5. Click **Apply**, then click **OK**.



To prevent the WebUser from editing the Template Sequences

1. In the **Library** tab, right click on the **Sequences for Templates** folder, then click **Edit Permission**.
2. In the **Permissions for Sequences for Templates** dialog box, make sure the **WebUser** role is selected, then uncheck the **Delete** and **Edit** check boxes.
3. Click **Apply**, then click **OK**.

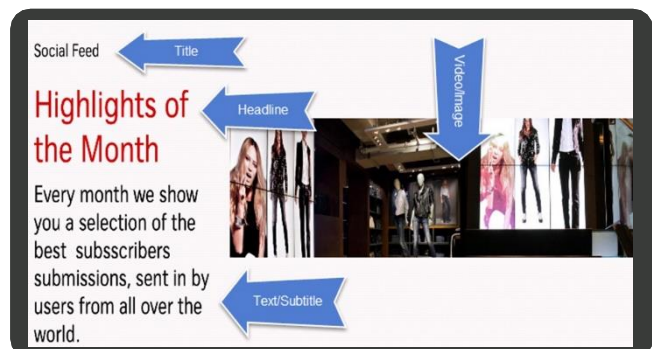


7.3.4 Creating the Layouts

When you create the layout, consider the templates' content location. The Messenger user should create the relevant windows to support the pre-created templates.

For our example we will create three layout sequences for the following templates:

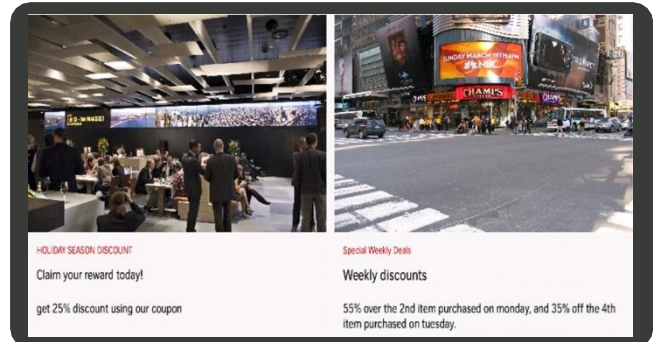
- **News Information** - This will support a title, headline, text / subtitle and image / video.



- **Slideshow** - This will support texts and up to five different media items that will slide while the text is statically shown on screen.





- **Promotion** - This will support two promotions with text fields.

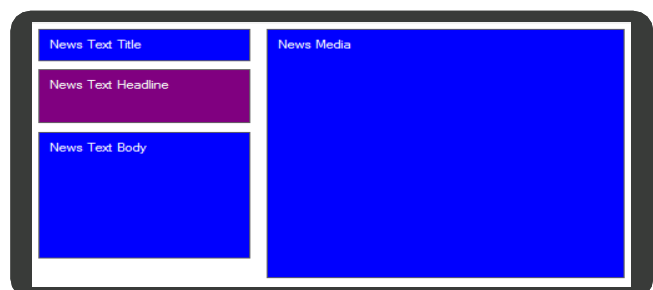
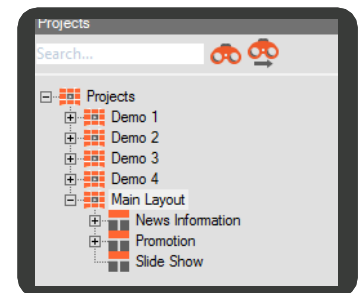


7.3.4.1 Creating the Layout Structure

Create the layout with all the supporting windows for the templates. For our examples, we will need to create the following two layout structures:

To create the layout structures

1. In the Mode Toolbar, click  (**Edit Module**).
2. In the **Projects** pane,  (**Add**), then click **Add Project**.
3. Rename the new project Main Layout.
4. In the Main Layout project, add the following 3 layouts:
 - News Information
 - Slideshow
 - Promotion
5. Set the windows to your layout for the **News Information** and **Slideshow** using the structure shown in the image.



6. Set the windows of your layout for the **Promotion** using the structure shown in the image.



Set the background window to a lower depth.

7.3.5 Adding Template Holders to the Library


The sequences will use template placeholder items. These are special items that will be replaced by WebUser1 through the web.

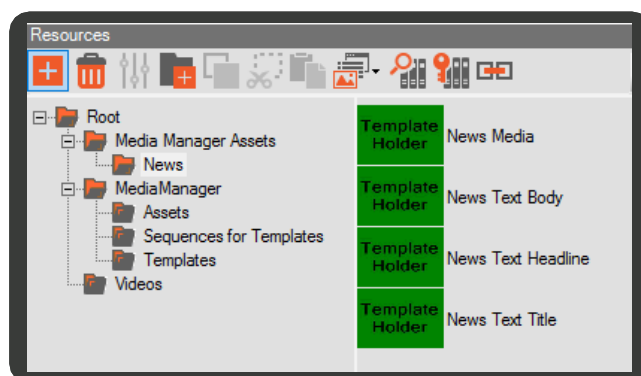
The replaced media items will inherit the Placeholder's playback location, timing and filters.

For our example, you will need to add the template placeholders to the library for the following sequences:

- News Information
- Promotion
- Slideshow

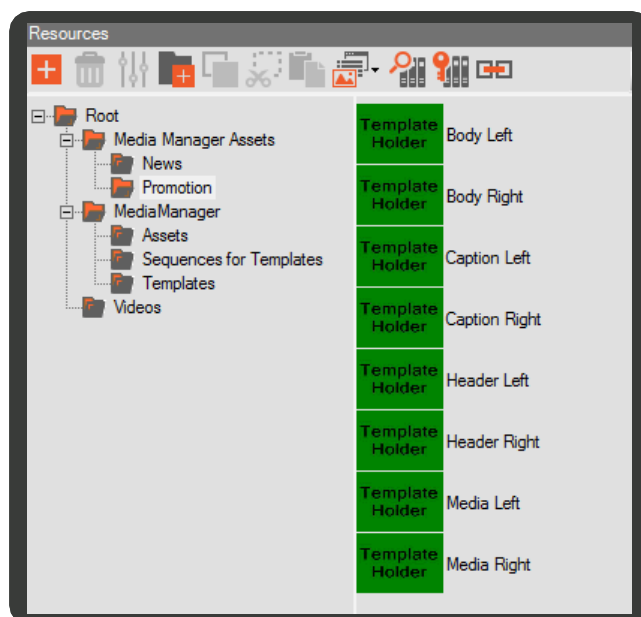
To add template placeholders to the library for the news information sequence

1. In the **Library**, create a new **Media Manager Assets** folder, then create a new subfolder called **News**.
2. In the **News** folder, add four Template Placeholders:
 - a. Click  (**Add Item**), click **Advanced Items**, then click **Template Placeholder Master**.
 - b. In the **Template Placeholder Master** dialog box, type **News Media**, then click **OK**.
 - c. Repeat steps a and b to create template holders for **News Body Text**, **News Text Headline**, and **News Text Title**.



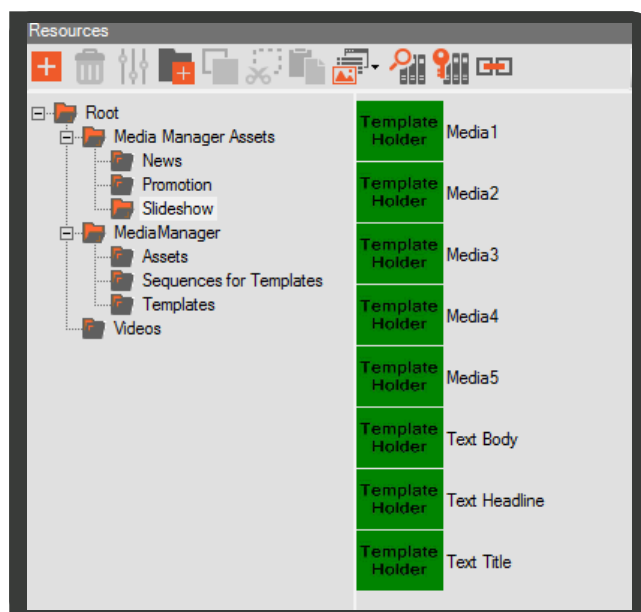
To add template placeholders to the library for the promotion sequence

1. In the **Library**, in the **Media Manager Assets** folder, create a new subfolder called **Promotion**.
2. In the **Promotion** folder, add eight Template Placeholders, see steps **a** to **c** above.
3. Name each Template Holder as shown in the image.



To add template placeholders to the library for the slideshow sequence

1. In the **Library**, in the **Media Manager Assets** folder, create a new subfolder called **Slideshow**.
2. In the **Slideshow** folder, add eight Template Placeholders, see steps **a** to **c** above.
3. Name each Template Holder as shown in the image.



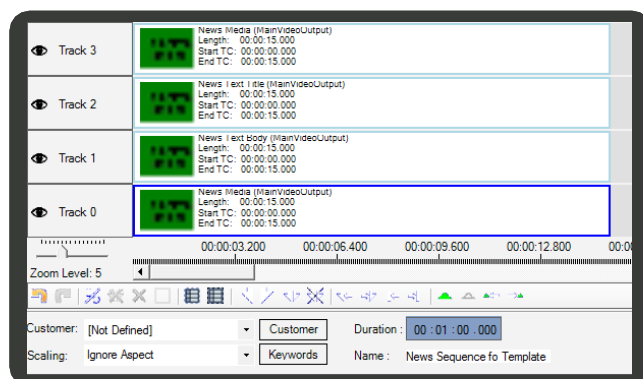
7.3.6 Creating Sequences for the Templates

You will need to create the followings sequences for the templates:

- News sequence
- Promotion sequence
- Slideshow sequence

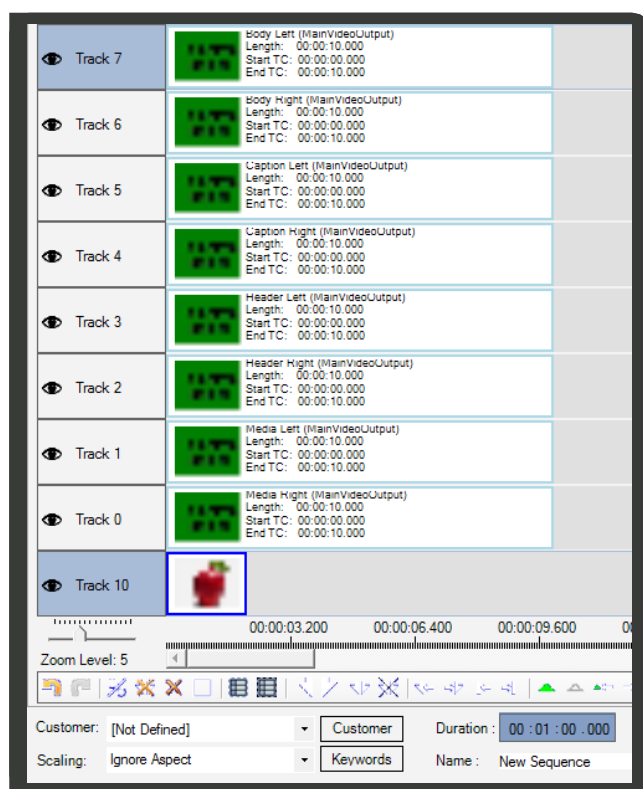
To create the News Information sequence

- In the **News Information Template** layout, in one of the windows add a new sequence with four tracks:
 - Right click on the window, click **Add**, then click **Sequence** to open the **Edit Sequence** pane.
 - Right click inside the **Edit Sequence** pane, then click **Add Track**.
- Drag and drop each Placeholder to a single track and set their durations to 15 seconds.
- Modify where each of the tracks will play in the layout:
 - Right click on the track, then click **Set Play On Window**.
 - In **Play On Window**, type or select a corresponding window for the title, media, headline and text body.
- Click **OK**.



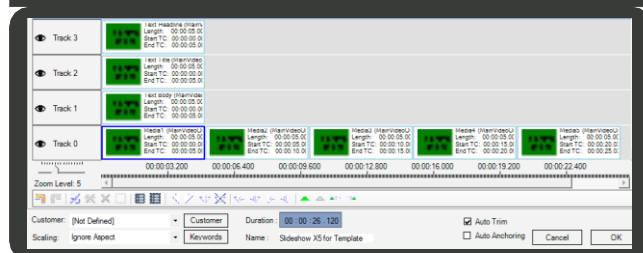
To create the Promotion sequence

- In the **Promotion Template** layout add a new sequence with nine tracks.
- Drag and drop each Placeholder to a single track and set their duration to 10 seconds.
- Drop a background image for the promotions from your library.
- Modify where each the track will play in the layout:
 - Right click on the track, then click **Set Play On Window**.
 - In **Play On Window**, type or select a corresponding window for the title, media, headline Caption, text body, etc.
- Click **OK**.



To create the Slideshow sequence

- In the **Slideshow Template** layout add a new sequence with four tracks.
- Drag and drop the text Placeholders to separate tracks, and the Media placeholders in playlists in a single track.
- Modify where each the track will play in the layout:
 - Right click on the track, then click **Set Play On Window**.



- b. In **Play On Window**, type or select a corresponding window for the title, headline, text body, and media.
4. Click **OK**.

7.3.6.1 Adding Filters to the Sequences

You can now add the templates' transition in / out by creating and adding filters and keyframes to the items.

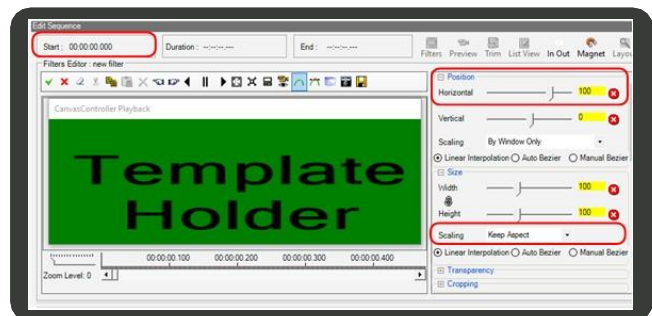
You will need to add the filters to the following sequences:

- News Information sequence
- Promotion sequence
- Slideshow sequence

To add filters to the News Information sequence

1. In the **News Information** sequence, right click the top track, click **Add Filter**.
2. Open the **Generic** filter, scroll down, in the **Continuous Scroll / Crawl Mode** section, in **Direction**, select right.
3. Add the following keyframes:

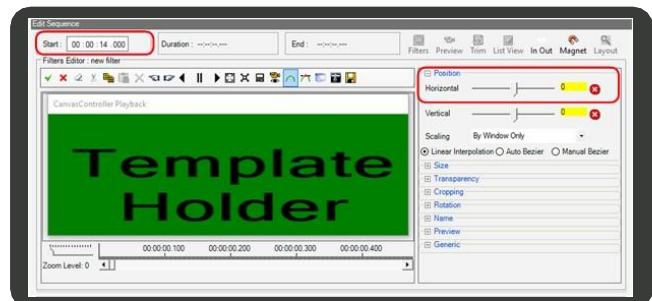
- a. Set the Setting Slider to 00:00:00:000.
- b. Open the **Position** filter, in **Horizontal**, type or set the slider to 100.
- c. Open the **Size** filter, in **Scaling**, select **Keep Aspect**.



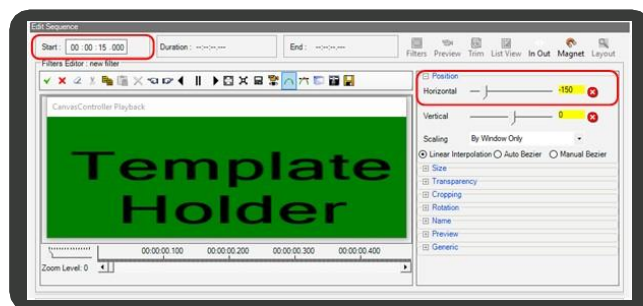
- d. Set the Setting Slider to 00:00:01:000.
- e. In the **Position** filter, in **Horizontal**, click **(Default)** to set the slider to 0.




- f. Set the Setting Slider to 00:00:14:000.
- g. In the **Position** filter, in **Horizontal**, click **(Default)** to set the slider to 0.



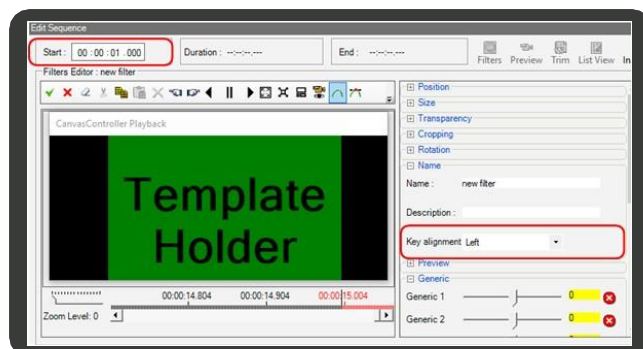
- h. Set the Setting Slider to 00:00:15:000.
- i. In the **Position** filter, in **Horizontal**, type or set the slider to -150.



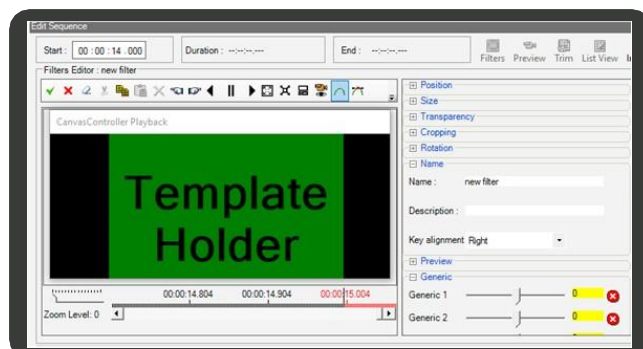
- j. Click  (**Play Preview**) to view the transition effect.

4. Add the following keyframe alignments to the second and third keyframes:

- a. Set the Setting Slider to 00:00:01:000.
- b. Open the **Name** filter, in **Key alignment** select **Left**.



- c. Set the Setting Slider to 00:00:14:000.
- d. In the **Name** filter, in **Key alignment** select **Right**.

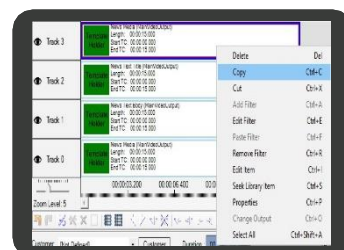


5. Click  (**Exit and Save Filter Changes**).



The transition effects will last one second for both the start and end of the video, and are unaffected by the length of the video.


6. Copy and paste the filter to all other items in the sequence:
 - a. Right click on the template placeholder item with the filter (the item is wrapped with a purple rectangle), then click **Copy**.



- b. Right click on another item in the sequence, then click **Paste Filter** (you can hold down the Ctrl Key to select multiple items).




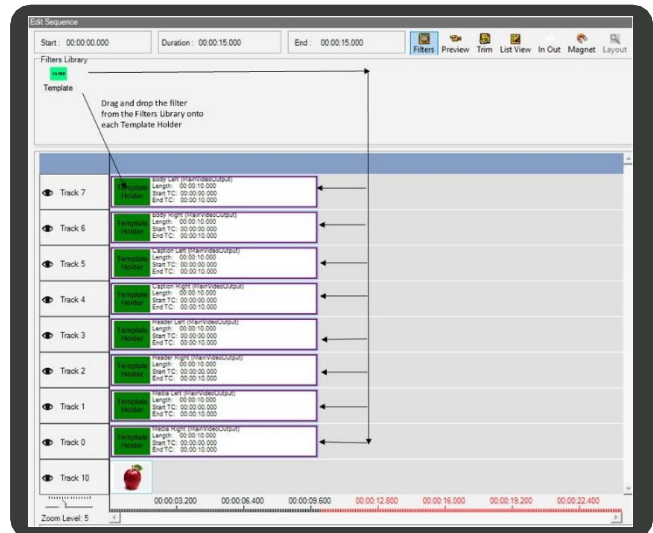
7. Copy the filter to the **Filter Library** for reuse on other templates.

- a. Click  (**Filters**) to open the filter library.
- b. Right click in the library and select **Paste Filter**.
- c. Rename the filter **Templates**.


8. Click **OK**.

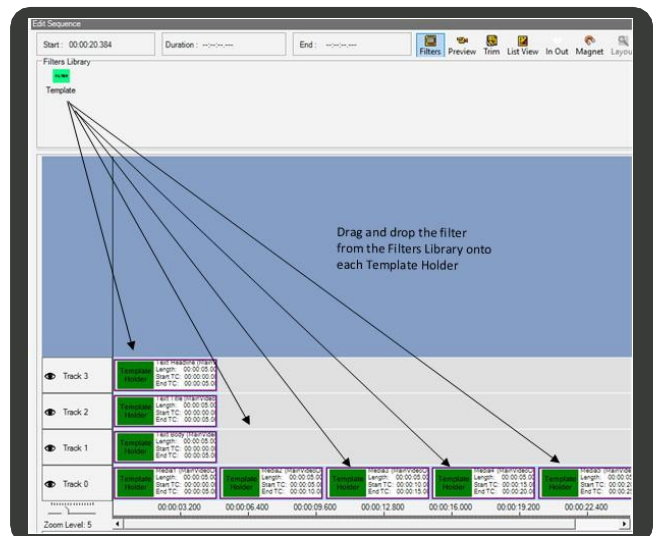
To add filters to the Promotion sequence

1. In the **Promotion** sequence, click  (**Filters**) to open the **Filters Library**.
2. Drag and drop the saved **Templates** filter onto all the placeholders, except the Background.
3. Click **OK**.



To add filters to the Slideshow sequence

1. In the **Slideshow** sequence, click  (**Filters**) to open the **Filters Library**.
2. Drag and drop the saved **Templates** filter onto all the placeholders in the sequence.
3. Click **OK**.



7.3.7 Anchoring the Items

Since the WebUser1 can assign video items with longer / shorter durations than 15 seconds, you need to "anchor" the text items (title, body, and headline) to the Media placeholder so that they start and end at the same time as the media item.

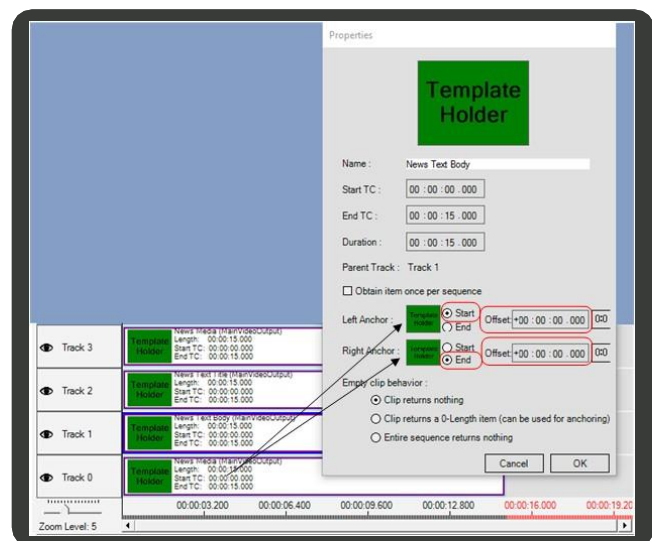
By anchoring the template holders in a sequence you can ensure that the image and text flow items are synchronized, with no regard to the duration of the media items that the WebUser adds.

You will need to anchor the items in the following sequences

- News Information sequence
- Promotion sequence
- Slideshow

To anchor the items in the News Information sequence

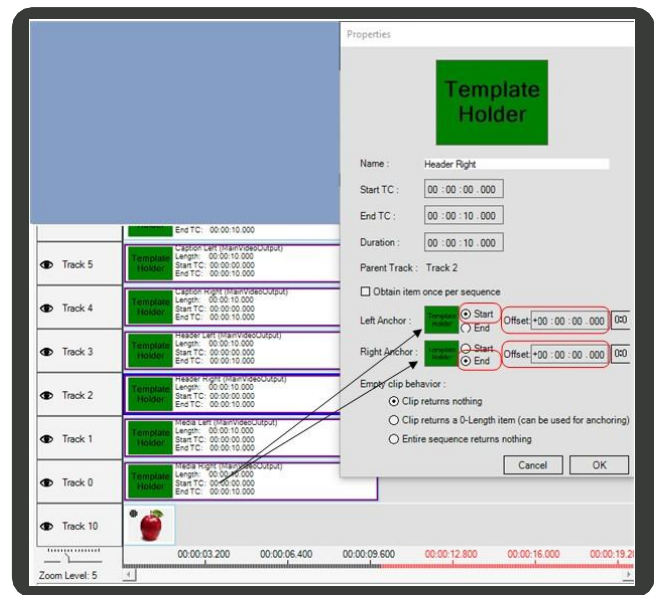
1. In the **News Information Template** sequence, right click on the **News Text Body** item, then click **Properties**.
2. In the **Properties** dialog box, drag and drop the **News Media** item to the left and right anchor holders.
3. Set the **Left Anchor** to the **Start** without offsets (00:00:00.000).
4. Set the **Right Anchor** to the **End** without offsets (00:00:00.000).
5. Click **OK**.
6. Repeat the anchoring process for the rest of the text items.
7. Click **OK** to accept the sequence, then copy the sequence from the **Layout** tab to the **Sequences for Templates** folder in the **Library** tab.



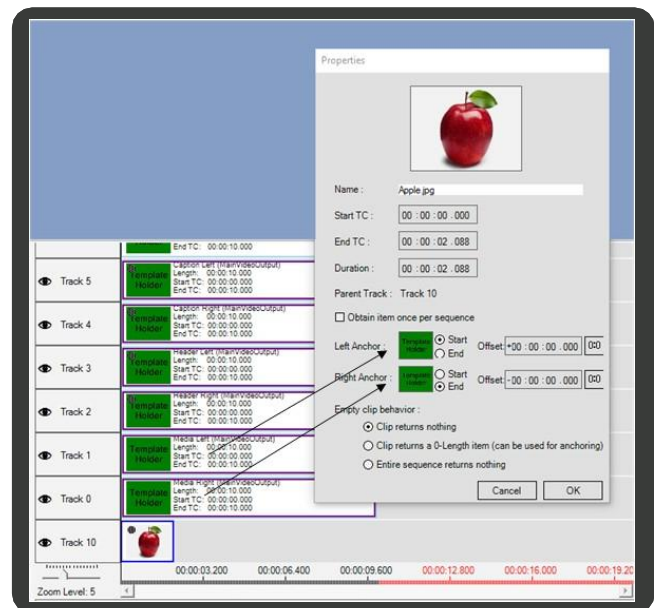
To anchor the items in the Promotion sequence

1. In the **Promotion Template** sequence, right click on the **Promotion Header Right** item, then click **Properties**.
2. In the **Properties** dialog box, drag and drop the **Media Right** item to the left and right anchor holders.
3. Set the **Left Anchor** to the **Start** without offsets (00:00:00.000).
4. Set the **Right Anchor** to the **End** without offsets (00:00:00.000).
5. Click **OK**.
6. Repeat the anchoring process for the rest of the text items.

Remember to assign the Left Media to the left text items for anchoring and Right Media to the right text items for anchoring.



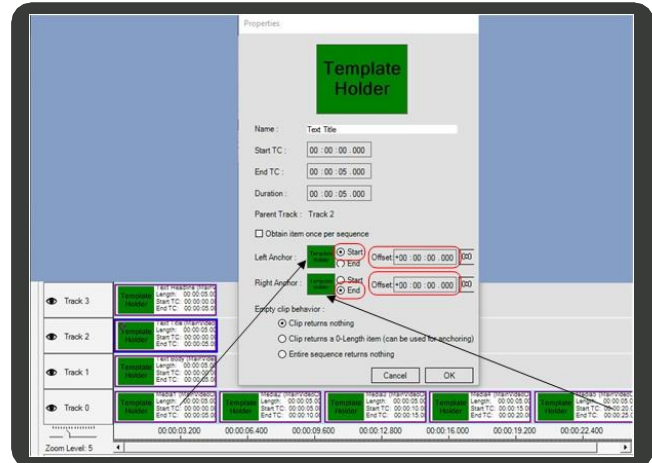
7. Set the Background duration to the longest media item, left or right.
 - a. Right click on the **Track** with the Background item, click **Duplicate Track**.
 - b. Create an anchor for the Left Media item and the Right Media item.
 - c. Click **OK**.



8. Click **OK** to accept the sequence, then copy the sequence from the **Layout** tab to the **Sequences for Templates** folder in the **Library** tab.

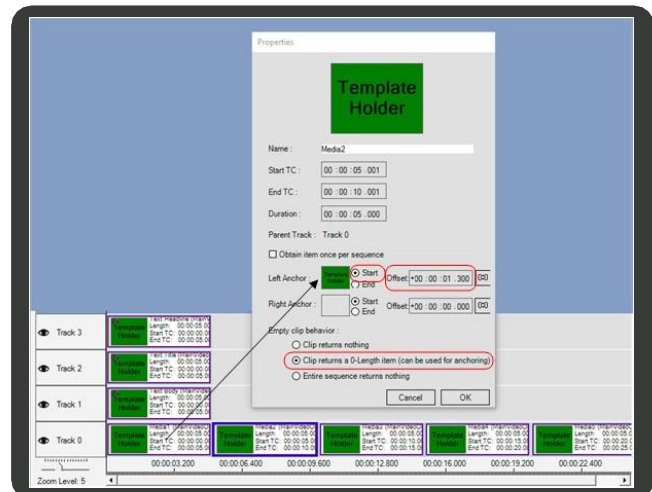
To anchor the items in the Slideshow sequence

1. Anchor the Text placeholders to the first and last media.
 - a. In the **Slideshow Template** sequence, right click on the **Text Title** item, then click **Properties**.
 - b. Drag the **Media1** placeholder to the left anchor, and **Media5** placeholder to right anchor.
 - c. Set the **Left Anchor** to the **Start** without offsets (00:00:00.000).
 - d. Set the **Right Anchor** to the **End** without offsets (00:00:00.000).
 - e. Click **OK**.



2. Repeat the anchoring process for the rest of the text items.
3. Anchor the Media placeholders to each other (to sync their duration in case one of the items has a different duration):
 - a. Right click on the **Media2** placeholder, then click **Properties**.
 - b. Drag **Media1** placeholder to the **Left Anchor**, set the **Start** with offset - 00:00:01.300.

(The offset will trigger the **Media2** to slide in 1.3 seconds before the **Media1** finishes its slide-out transition.)



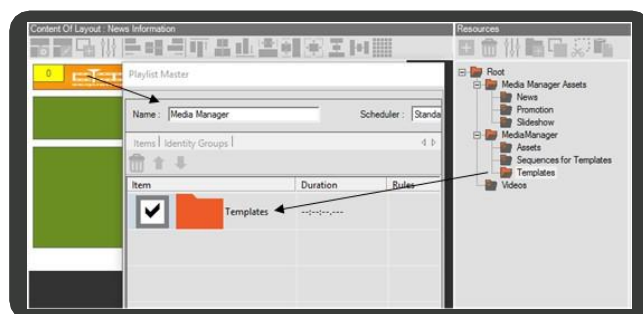
- c. In the **Empty clip behavior** section, select the **Clip returns a 0-Length item**, to skip to the next item if no media was assigned to the placeholder.
 - d. Repeat this for **Media3** - Assign **Media2** onto the **Left Anchor**, and select the **Clip returns a 0-Length item**.
 - e. Repeat this for **Media4** - Assign **Media3** onto the **Left Anchor** and select the **Clip returns a 0-Length item**.
 - f. Repeat this for **Media5** - Assign **Media4** onto the **Left Anchor** and select the **Clip returns a 0-Length item**.
4. Click **OK** to accept the sequence, then copy the sequence from the **Layout** tab to the **Sequences for Templates** folder in the **Library** tab.

7.3.8 Finalizing Layout

Add the **Template** folder to the layouts.

To add a template folder to the News Information layout

1. In the **News Information** layout, right click on one of the windows, click **Add**, click **Playlist Management**, then click **Playlist Master**.
2. In the **Name** box, type Media Manager.
3. Drag and drop the **Templates** folder from the Library to the **Playlist Master** window.
4. Click **OK**.
5. Repeat steps 1 to 4 above to add the **Templates** folder to the Promotion and Slideshow layouts.

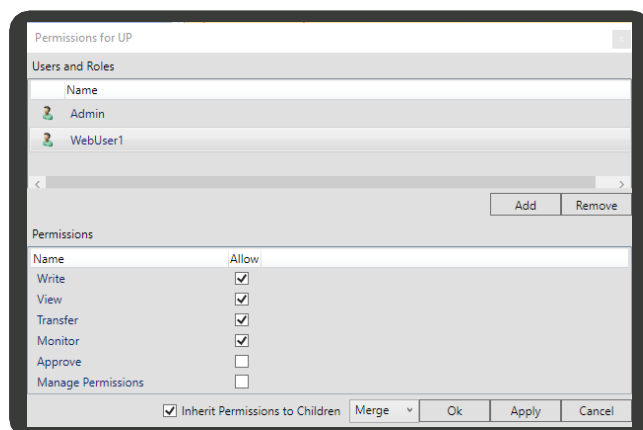


7.3.9 Granting User Permission to Access the Players

Grant permission to WebUser1 to control and manage the players.

To grant permission to WebUser1

1. In Network module, right click on the canvas you wish to grant WebUser1 permission to transfer and monitor, then click **Edit Permission** to open the **Permissions** dialogbox.
2. In **Users and Roles**, click **Add**, click **Check Names**, select the relevant user / role, then click **OK**.
3. In **Permissions**, select the **Write**, **View**, **Transfer** and **Monitor** check boxes.
4. Select the **Inherit Permissions to Children** check box if you are using the canvas folder.
5. Click **Apply**, then click **OK**.




WebUser1 can now access, transfer and monitor the created template, update the content directly, and send the content to the players from the Media Manager web portal. Refer to the *Cnario Media Manager User Guide* for further information on how to use Media Manager to manage your content.












7.4 Multi Zone Text

You can create multi zone text and images inside a window. You can add several text items in several zones (but inclusive in a single item) using the **Multi Zone Text** item. To do this, you create special windows, which act as sub-zones in the layout, for each text. This enables synchronization of several texts in a single layout zone (in a similar fashion to what the web feed reader provides for web-based text).


To add multi zone text items

1. In the **Layout** or **Library** tab, click  (**Add Item**), click **Advanced Items**, then click **Multi Zone Text** to open the **Flexi 2 Master** dialog box.

The following options will appear on the windows tool bar:

Option	Description
 (Show Windows List)	Provides a list of all windows.
 (Create a New Window)	Creates a new window. You can create multiple windows.
 (Show Window Properties)	Shows window properties.
 (Zoom)	Zooms in or out (in percentages %).
 (Delete window)	Deletes highlighted window.
 (Lock All Windows)	Locks all the windows in the layout so you cannot add more changes.
 (Unlock All Windows)	Unlocks all the windows in the layout, so you can make more changes.
 (Move Left)	Moves the highlighted window to the left.
 (Move Right)	Moves the highlighted window to the right.
 (Move Up)	Moves the highlighted window up.
 (Move Down)	Moves the highlighted window down.

See [Window Aligning and Relative Resizing](#) for a description of each aligning tool.

- In the **Editor Size** section, type or select the size of the editor to fit the actual window it will be placed on.
- Click  (Create a New Window).
- In the **Continuous Scroll / Crawl Mode** section, set the options according to the following table:

Option	Description
Direction	Allows you to choose the direction the text will move across the window.
Duration	Allows you to determine the length of time (in seconds) it takes for the text to move across the window.
Gap	Allows you to determine the gap (in percentage relative to window size) between text appearances. A 100% gap means that the next item will appear only when the last one has finished playing.
Auto Resize	This option is grayed out if any motion is selected. This advanced feature is usable only in Static mode Direction . Using this selection you can auto resize the rendering Vertically or Horizontally . Alternatively, you can choose not to auto resize the item by selecting None , (which will show only the rendered text that fits in the designated window).



The Auto Resize is an advanced feature and is to be used only if the item is located inside a sequence item and has received motion and filter manipulation via the sequence and not via the selection.


- Add one of the following to each window:

- [Text](#)
- [Image](#)



When you set the window properties, make sure to anchor it to the appropriate and corresponding windows to ensure the content items in each window are synchronized to play together, see [Anchoring the Windows](#) below.

6. Click **OK**.

To add text to a window

1. Click on the window you wish to use.
2. Click  (**Show Window Properties**) to open the **Window Properties** dialog box.
3. In the **Name** box, type a name for the selected window.
4. In the **Windows Properties** section, in the **Type** list, select **Text**.
5. In the main window, type the text you want to appear. See [To add a text item](#) for additional text formatting options.
6. Click **OK**.


To add an image to a window

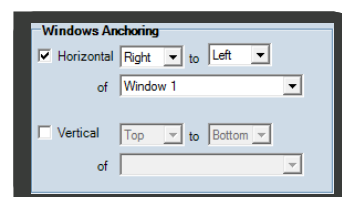
1. Click on the window you wish to use.
2. Click  (**Show Window Properties**) to open the **Windows Properties** dialog box.
3. In the **Name** box, type a name for the window.
4. In the **Windows Properties** section, in the **Type** list, select **Image**.
5. In the **Static Image** box, click  (**Browse**), select an image, then click **Open**.
6. Click **OK**.

7.4.1 Anchoring the Windows


When you set the properties for your windows, you have the option to anchor adjacent windows, horizontally and / or vertically. By anchoring the windows, you ensure their content is synced and their positions remain next to one another even if the content duration or size of the windows change.

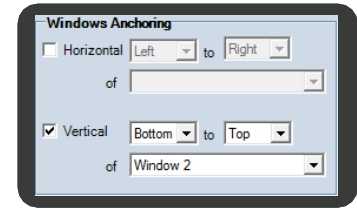
To add a horizontal anchor

1. Make sure you are clicked on the left window in your layout, then click  (**Show Window Properties**).
2. Scroll down to the **Windows Anchoring** section, then select the **Horizontal** check box.
3. Click the drop-down arrows to anchor the **Right** window to the **Left** window.
4. In "of", select the window you want anchored.



To add a vertical anchor

1. Make sure you are clicked on the upper window in your layout, then click  (**Show Window Properties**).
2. Scroll down to the **Windows Anchoring** section, then select the **Vertical** check box.
3. Click the drop-down arrows to anchor the **Bottom** window to the **Top** window.
4. In "of", select the window you want anchored.



7.5 Analog Clock

Use information from a local time system and translate it into an analog clock. The clock is accurate to the second, and is displayed on screen. The clock itself is made up of several images, including the background and one for each hand, allowing the clock to be adjusted to meet the needs of the end user. Such a clock in a shopping mall, for example, can be sponsored by one of the local vendors, displaying the vendor's logo inside the clock itself.

To create an analog clock

1. [Save the clock graphic elements to the Library as images.](#)
2. [Create the analog clock custom item.](#)
3. Click **OK**.



To save the clock graphic elements to the Library

1. Save images to your local drive for each of the following clock graphic elements:
 - Clock background for working hours
 - Clock background for off hours
 - Clock face
 - Clock hour hand
 - Clock minute hand
 - Clock second hand

Each image of the clock's hands must conform to the following requirements:




- The image must be square.
- The image must match the window size.
- The hands must be perfectly centered.
- The hands must face 12 O'clock.
- The background must be transparent.

2. In the **Layout** or **Library** tab, click  (**Add Item**), then click **Image** to open the **Picture Properties** dialog box.
3. Click  (**Browse**), hold down the **CTRL** key, then select your saved images for the various clock graphic elements listed above.

4. Click **Open**, then click **OK**.

To create an analog clock custom item

1. In the **Layout** or **Library** tab, click  (**Add Item**), click **Dynamic Data**, then click **Analog Clock** to open the **Analog Clock II** dialog box.
2. In the **Behavior** section, in the **Time Zone** list, select a time zone. **Automatically adjust clock for day light savings time**, selected by default, provides the clock with the daylight savings times from the computer.
3. Select the **Activity Hours** check box to enable the **Activity Hours** option.
4. In **Start Activity Hour** and **End Activity Hour**, type or select the start and end hours.
5. Select the colors to display the **Working** and **Off Activity** hours.
6. Use the **Activity Hours Arc Transparency** slider and **Activity Hours Arc Width** slider to adjust the transparency and width of the activity arc.
7. Drag and drop the clock graphic element images from the **Library** into the corresponding panes:
8. View the results in the **On Activity Hours Preview** and **Off Activity Hours Preview** boxes.
9. Click **OK**.




The analog clock should only be applied to a square window on your layout.

7.6 Counter Master

You can create a counter in several forms, counting either upwards or downwards. Events can be triggered according to specific time code, and several counter items can be synchronized across a local area network (LAN).

To add a counter master item

1. In the **Layout** or **Library** tab, click  (**Add Item**), click **Dynamic Data**, then click **Counter Master** to open the **Counter Master** dialog box.
2. In the **Appearance** tab, in the **Name** box, type a name for your counter.
3. In **Counter Mode** box, select one of the following options:
 - [Timer](#) - Counts a period time, either up or down. This type of a clock is useful for timing the length of a sports game.
 - [Counter](#) - Used mostly for counting the scores of a sports game and updating the scoreboard via devices.
 - [Time](#) - Shows the time. You can also sync this time with the other clocks on your network so that changes and updates are implemented at the same time across all “counter master” items in your network (not just on this specific canvas)
 - [Period Time](#) - Counts a period of time, either up or down. It differs from the timer as it doesn’t provide the start / stop option. The Period time can be used, for example, to count down to New Year’s Eve.
4. Click **OK** to save and close, or click the **Events** tab.

To set a timer

1. In the **Counter Mode** list, click **Timer**.
2. In the **Timer Details** section, in **Direction** box, select one of the following:

- Up
- Down

3. In the **Start Time** and **End Time** boxes, type or select the start and end times.
4. In the **Interval** box, type or select the frequency you want the screen to be updated.
5. In the **Format** box, use the **Format Options** codes to define what values will be displayed.
6. In the **Total Format** box, use the **Format Options codes** to define how the values will be formatted in the display.
7. Click the **Set Appearance** button to set the appearance of the item. See [To add a text item](#) for additional text formatting options.

To set a counter

1. In the **Counter Mode** list, click **Counter**.
2. In the **Counter Details** section, select the **Loop** box (optional) to force the counter into a continuous loop.
3. In the **Start** box, type or select a starting value.
4. In the **Minimum** and **Maximum** boxes, type or select the maximum and minimum numbers for the counter.
5. In the **Step** box, type or select a step number.
6. In the **Format** box, use the **Format Options** codes to define what values will be displayed.
7. In **Preview Value**, type or select a number to appear in the **Preview** pane.
8. Click the **Set Appearance** button to set the appearance of the item. See [To add a text item](#) for additional text formatting options.

To set a time

1. In the **Counter Mode** list, click **Time**.
2. In the **Time Details** section, in **Interval**, type or select the frequency you want the screen to be updated.
3. In the **Format** box, use the **Format Options** codes to define what values will be displayed.
4. In the **Total Format** box, use the **Format Options codes** to define how the values will be formatted in the display.
5. Click the **Set Appearance** button to set the appearance of the item. See [To add a text item](#) for additional text formatting options.

To set a period time


1. In the **Counter Mode** list, click **Period Time**.
2. In the **Timer Details** section, in the **Direction** box, select one of the following:
 - Time
 - Up
 - Down
3. In the **Start Time** and **End Time** boxes, type or select the start and end times.
4. In the **Interval** box, type or select the frequency you want the screen to be updated.
5. In the **Format** box, use the **Format Options** codes to define what values will be displayed.
6. In the **Total Format** box, use the **Format Options** codes to define how the values will be formatted in the display.

- Click the **Set Appearance** button to set the appearance of the item. See [To add a text item](#) for additional text formatting options.

7.6.1 Events Tab

You can trigger an **event** by creating a specific time code. The event can then be used to set a playback rule using the Device rules module, see [Section 8.2 Managing Players and Canvases](#)

To create an event

- In the **Events** tab, click  (**Add Item**).
- In the **Trigger** column, double click on the added cell, then type a value (a number for the counter or a time for timer) for your trigger.
- In the **Value** column, double click on the corresponding cell, then type a value that will appear when the counter masters reach the value that appears in the **Trigger** column.
- Click **OK** to save and close, or click the **Synchronization** tab.

7.6.2 Synchronization Tab

You can add multiple counter masters to a layout and then synchronize their playback in the

Synchronization tab. To synchronize several counters

- In the **Synchronization** tab, select the **Enable Synchronization** check box.
- In **Receive Port**, type or select the value.
- In **Broadcast**, set the broadcast value.
- In **Sync Group Name**, type a name for the synchronized group.



For Counter Masters to be synced, they must all share identical **Receive Port**, **Broadcast**, and **Sync Group Name** values.

- In **Send sync message each**, type or select a time.
- In **Timeout**, type or select an expiry time.
- Click **OK** to save and close, or click the **Misc** tab.

7.6.3 Misc Tab

You can add additional settings to your counter in the **Misc** tab.

To add additional settings to the counter

- Select the setting from the following table:

Option	Description
Enable Manual Control from Player	Select the check box to allow control of the timer from the player.
Item Duration	Set the length of your counter display (in milliseconds).
Prepare Images Ahead	Preempt the player to prepare upcoming items.


Option	Description
Show Delay	?
Expose Current Value Pin	Select the check box to expose the value on the counter device, on the player.

- Click **OK**.

7.7 Database Master

The **Database Master** item can read Microsoft SQL Server, Oracle Database, Microsoft Excel or CSV files. This information is then displayed on screen in textual row or tabular form. More advanced usage can trigger events based on information provided from the Database to the events on screen using Messenger devices.

To add a database master

- In the **Layout** or **Library** tab, click  (**Add Item**), click **Dynamic Data**, then click **Database Master** to add the **Database** dialog box.
- In the **Settings** tab, in the **Name** box, type a name for your database.
- In the **Server** list, select one of the following servers (from which you will extract Microsoft SQL Server, Microsoft Excel or CSV data):
 - [MS-SQL Server \(Version 7.0 or later\)](#)
 - [OLE DB \(Oracle, MS-SQL Version 6.5 or earlier\)](#)
 - [MS-Access](#)
 - [MS-Excel](#)
 - [Text File \(Comma Delimited\)](#)
- Click **Connect**. The **Connection Status** bar will indicate whether the database media item is connected or not to its source.
- In **Item Duration**, type or select the playback duration (in seconds).
- In **Refresh Data From Server Each**, type or select the item refresh interval (in seconds).
- Select the **Disconnect from Server After Each Query** check box to disconnect the item from the database server after each successful retrieve
- Click the **Data Query** tab to select data for the playback.


To connect to the Microsoft SQL Server (Version 7.0 or later)

- In the **Server** list, click **MS-SQL Server (Version 7.0 or later)**.
- In the **Server Details** section, in the **Source Name** box, type in the source you want to use.
- In the **User Name** and **Password** boxes, type in the user name and password (if necessary).
- In the **Database Name** box, type in the name of the database.

To connect to OLE DB (Oracle Database, Microsoft SQL Server Version 6.5 or earlier)

- In the **Server** list, click **OLE DB (Oracle, MS-SQL Ver 6.5 or earlier)**.
- In the **Server Details** section, click the **Select Provider** button, then select a server.
- In the **Connection String** box, type a connection string.

To connect to Microsoft Access

1. In the **Server** list, click **MS-Access**.
2. In the **Server Details** section, in **Source Name**, click  (**Browse**), select an MS-Access file, then click **Open**.
3. Provide a **User Name** and **Password** if necessary.

To connect to Microsoft Excel

1. In the **Server** list, click **MS-Excel**.
2. In the **Server Details** section, in **File Name**, click  (**Browse**), select an MS-Excel, then click **Open**.

To connect to a Text File (Comma Delimited)

1. In the **Server** list, click **Text File (Comma Delimited)**.
2. In the **Server Details** section, in **File Name**, click  (**Browse**), select a text file, then click **Open**.


7.7.1 Data Query Tab

Depending on the database selected, you can extract data using one of the following methods:

- [Specific Columns](#)
- [SQL Statement](#)
- [Stored Procedure](#)

You can also sort and filter the data to be displayed.

To extract data using Specific Columns

1. In the **Data Query** tab, in the **Query Method** section, select **Specific Columns**.
2. If you are using an **MS-Excel** file, in the **Query Details** section, in the **Columns** tab, in the **Sheets** list, select a sheet.
3. In the **Query Details** section, in the **Columns** tab, select those columns you want included in the query.
4. To sort the data:
 - a. In the **Sort** tab, click the **Enable Sorting** check box.
 - b. In the **Directions** section, select either **Ascending** or **Descending**.
 - c. In the **According Column** box, click the column you want to use.
5. To set the filters:
 - a. In the **Filters** tab, click  (**Add Item**).
 - b. In the **Conditions** table, in the **Operator** column, double click on the cell, click the drop-down arrow that appears, then select the appropriate operator command.
 - c. Repeat step **b** above for the cells in the **Column Name** and **Conditions** columns.
 - d. In the **Condition Value** column, double click on the cell, then type in the specific condition you want included or excluded.
6. Click **Execute Query**.
7. Preview your query in the **Query Result** section.
8. Click **OK** to save and close, or click the **Appearance** tab to format your data.

To extract data using the SQL Statement

1. In the **Data Query** tab, in the **Query Method** section, select **SQL Statement**.
2. In the **Query Details** section, in the **SQL Statement** box, type your SQL statement.
3. Click **Execute Query**.
4. Preview your query in the **Query Result** section.
5. Click **OK** to save and close, or click the **Appearance** tab to format your data.

To extract data using the Stored Procedure

1. In the **Data Query** tab, in the **Query Method** section, select **Stored Procedure**.
2. In **Stored Procedure**, select a stored script procedure.
3. In **Stored Procedure Parameters**, type a value.
4. Click **Execute Query**.
5. Preview your query in the **Query Result** section.
6. Click **OK** to save and close, or click the **Appearance** tab to format your data.











7.7.2 Appearance Tab

You can display the data as one of following:


- [In a row](#)
- [In tabular form](#)

To display the data in a row

1. In the **Appearance** tab, select **Row Display**. The windows tool bar will appear.

Option	Description
 (Show Windows List)	Provides a list of all windows.
 (Create a New Window)	Creates a new window. You can create multiple windows.
 (Show Window Properties)	Shows window properties.
 (Zoom)	Zooms in or out (in percentages %).
(Delete window)	Deletes highlighted window.
 (Lock All Windows)	Locks all the windows in the layout so you cannot add more changes.
 (Unlock All Windows)	Unlocks all the windows in the layout, so you can make more changes.
 (Move Left)	Moves the highlighted window to the left.
 (Move Right)	Moves the highlighted window to the right.
 (Move Up)	Moves the highlighted window up.
 (Move Down)	Moves the highlighted window down.


See [Section 4.7.4 \(Window Aligning and Relative Resizing\)](#) for a description of each aligning tool.

1. Click  (**Create a New Window**) to add one or more windows to the layout.
2. In the **Editor Size** section, type or select the size of the editor to fit the actual window it will be placed on.
3. Add one of the following to each window:



- [Text](#)
- [Image](#)
- [Text from a tag](#)

4. Click **OK** to save and close, or click the **Rules** tab. **To**

add text to a window

1. Click on the window you wish to use.
2. Click  (**Show Window Properties**) to open the **Window Properties** dialog box.
3. In the **Name** box, type a name for the selected window.
4. In the **Windows Properties** section, in the **Type** list, select **Text**.
5. In the main window, type the text you want to appear. See [To add a text item](#) for additional text formatting options.
6. In the **Windows Position** section, in the **Top**, **Left**, **Height**, and **Width** boxes type or select the size and position of the window.

To add an image to a window


1. Click on the window you wish to use.
2. Click  (**Show Window Properties**) to open the **Windows Properties** dialog box.
3. In the **Name** box, type a name for the window.
4. In the **Windows Properties** section, in the **Type** list, select **Image**.
5. In the **Static Image** box, click  (**Browse**), select an image, then click **Open**.
6. In the **Image Properties** section, in **Behavior**, select one of the following aspects:

Option	Description
Keep Aspect	Retains image's default settings.
No Scaling	Maintains image's aspect ratio.
Ignore Aspect	Stretches image over the entire window, may cause changes to aspect ratio.
Maximize X	Stretches image horizontally.
Maximize Y	Stretches image vertically.

7. In the **Image Properties** section, in **Alignment**, select the position of the image within the window.

8. In the **Windows Position** section, in the **Top**, **Left**, **Height**, and **Width** boxes type or select the size and position of the window.

To add text from a tag to a window

1. Click on the window you wish to use.
2. Click  (**Properties**) to open the **Window Properties** dialog box.
3. In the **Name** box, type a name for the selected window.
4. In the **Type** list, click **Text from Tag**.
5. In the **Tag** list, click the tag you want to appear in the window.
6. See [To add a text item](#) for additional text formatting options.
7. In the **Windows Position** section, in the **Top**, **Left**, **Height**, and **Width** boxes type or select the size and position of the window.
8. Click **OK** to save and close, or click the **Rules** tab to add conditions to the data.

To display the data in a table


1. In the **Appearance** tab, select **Table Display**.
2. In the **Table Appearance** section, in **Number of rows**, type or select the number of rows you want in the table.
3. Format the border width, display and color according to the options available.
4. Click the **Set Header Appearance** button to format the appearance of the header row.
5. Click the **Set Data Appearance** button to format the appearance of the data.
6. Select the **Set Different Appearance for Even Rows** check box, then click the **Set Even Rows Appearance** box to create a different appearance for odd and even rows.

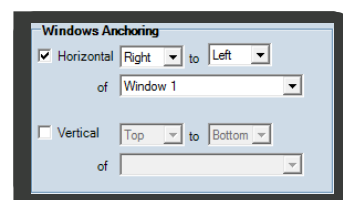
In the **Editor Size** section, type or select the size of the editor to fit the actual window it will be placed on.

7.7.2.1 Anchoring Two Windows


When you set the properties for your windows, you have the option to anchor adjacent windows, horizontally and / or vertically. By anchoring the windows, you ensure their content is synced and their positions remain next to one another even if the content duration or size of the windows change.

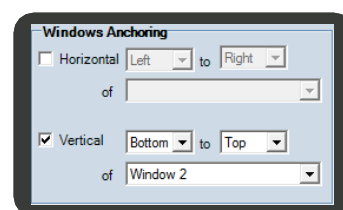
To add a horizontal anchor

1. Make sure you are clicked on the left window in your layout, then click  (**Show Window Properties**).
2. Scroll down to the **Windows Anchoring** section, then select the **Horizontal** check box.
3. Click the drop-down arrows to anchor the **Right** window to the **Left** window.
4. In "of", select the window you want anchored.



To add a vertical anchor

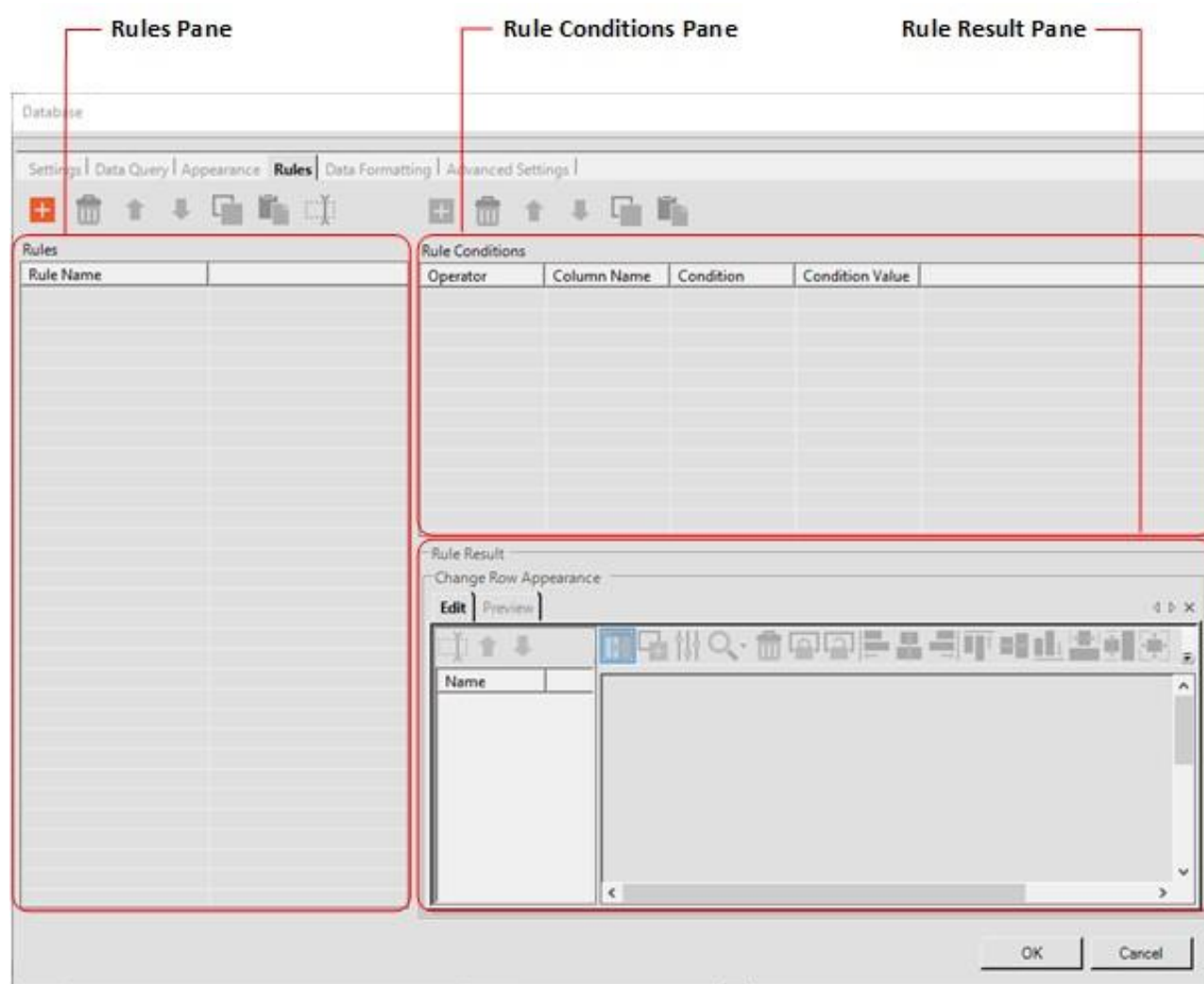
1. Make sure you are clicked on the upper window in your layout, then click  (Show Window Properties).
2. Scroll down to the **Windows Anchoring** section, then select the **Vertical** check box.
3. Click the drop-down arrows to anchor the **Bottom** window to the **Top** window.
4. In "of", select the window you want anchored.



7.7.3 Rules


You can add a specific event (rule) to trigger an appearance change within the data.

The **Rules** tab consists of the following main parts:



To create a rule


1. Click the **Rules** tab.
2. In the **Rules** pane, click  (Add Item). A **New Rule** will appear in the **New Rule** column.

3. Right click on the **New Rule** you inserted, click **Rename**, then type a name for the rule.
4. In the **Rule Conditions** pane, click  (**Add Item**).
5. To set the conditions of your new rule:
 - a. In the **Operator** column, double click on the "If" cell, click the drop-down arrow that appears, then select the appropriate operator command.
 - b. Repeat step **a** above for the cells in the **Column Name** and **Conditions** columns.
 - c. In the **Condition Value** column, double click on the cell, then type in the specific condition you want included or excluded.
6. Depending on the display you selected in the **Appearance** tab, in the **Rule Result** pane you can do one of the following:
 - [Change the appearance of the table display.](#)
 - [Customize the display of the inner item windows of the row display.](#)
7. Click **OK** to save and close, or click the **Data Formatting** tab.

To change a table display appearance

1. In the **Rule Result** pane, in the **Change Table Appearance** section, select either:
 - **Change appearance of entire row**
 - **Change appearance of specific column** - Click the drop-down arrow, then select the column you want.
2. Click the **Set Appearance** button.
3. In the **Windows Properties** dialog box, use the toolbar options to set the color, styles and format of the display.
4. Click **OK** to save your changes.

To change a row display appearance

1. In the **Rule Result** pane, in the **Change row appearance** section, click  (**Add Item**) to add one or more windows.
2. Add one of the following to each window:
 - [Text](#)
 - [Image](#)
 - [Text From Tag](#)
3. Click **OK** to save and close, or click the **Data Formatting** tab to add more formatting to your data.


7.7.4 Data Formatting Tab

In the **Data Formatting** tab, you can add one of the following formats to apply to a particular style or region

- [Numbers](#)
- [Date / Time](#)

To add a numbers format


1. In the **Formatting Strings Samples** section, in **Samples Type**, click **Numbers Formatting**.

2. Click  (Add Item).
3. In the **Formatting Strings** section, in the **Column Name** column, double click on the cell, click the drop-down arrow that appears, then select a column.
4. Repeat step 3 in the **Data Type** column.
5. In the **Formatting String** column, double click on the cell, then type in the formatting string, using the codes provided in the **Numbers Format Options** sections.



You can test the formatting string before saving it to your data by inserting the details in the **Test Formatting** section.

6. Click **OK** to save and close, or click the **Advanced Settings** tab.
- To add a date / time format**

1. In the **Formatting Strings Samples** section, in **Sample Type**, click **Date Time Formatting**.
2. Click  (Add Item).
3. In the **Formatting Strings** section, in the **Column Name** column, double click on the cell, click the drop-down arrow that appears, then select a column.
4. Repeat step 3 in the **Data Type** column.
5. In the **Formatting String** column, double click on the cell, then type in the formatting string, using the codes provided in the **Date Time Format Options** sections.



You can test the formatting string before saving it to your data by inserting the details in the **Test Formatting** section.

6. Click **OK** to save and close, or click the **Advanced Settings** tab.

7.7.5 Advanced Settings Tab

You can select an item show mode in the **Advanced Settings** tab. This will affect the way the data is displayed.


To select an item show mode

1. In the **Advanced Settings** tab, select one of the following item show modes:
 - Show row(s) sequentially
 - Show only first row(s)
2. Click **OK**.

7.8 Digital Clock

You can create, set the appearance and playback a digital clock in the Messenger layout.

To add a digital clock

1. In the **Layout** or **Library** tab, click  (Add Item), click **Dynamic Data**, then click **Digital Clock** to open the **Digital Clock** dialog box.

2. Click the **Set Appearance** button to set the appearance of the item. See [To add a text item](#) for additional text formatting options.
3. In the **Format** box, type a format code using the options provided.
4. Click **OK**.

7.9 Web Feed Reader

Insert dynamic and / or static items into Messenger's **Web Feed Reader** to display the items using an online feed template system. The items can be drawn locally, or remote content sources can be inserted, such as the www into a layout window. This is accomplished by writing and loading the required web script into the layout window.


Highlighted features:

- **Easy Scripting** - Implement scripts easily with Messenger scripting language.
- **Multiple source types integration** - Integrate multiple source types, locally stored or remote such as .xml, .html, .txt, .csv, etc.
- **Image Replacement** - Replace low resolution files from the source in high resolution media items. For example, high resolution video files with alpha layer can be prepared replacing matching low resolution images retrieved from the Internet.
- **Video Replacement** - Replace video files based on tags, scripts or low-resolution files.
- **XML parser** - Easily parse .xml data feeds using very simple scripting to create quick, reliable scripting and fast, simple integration of dynamic data feeds.
- **Static variables support** - Avoid redundant access of the same .xml and other data sources with scripts that 'remember' their state between subsequent invocations in a playlist. Static variables can be per item, per window or global player.



It is understood that the end user is conversant with and has a working knowledge of Messenger software-based platforms. For additional operational details, please refer to the relevant version of *Cnario Getting Started Operations Manual*.

To set up a web feed reader content item

1. In the **Layout** or **Library** tab, click  (**Add Item**), click **Dynamic Data**, then click **Web Feed Reader** to open the **Web Feed Reader** dialog box.



The following message will be displayed when the web feed reader is not certified.

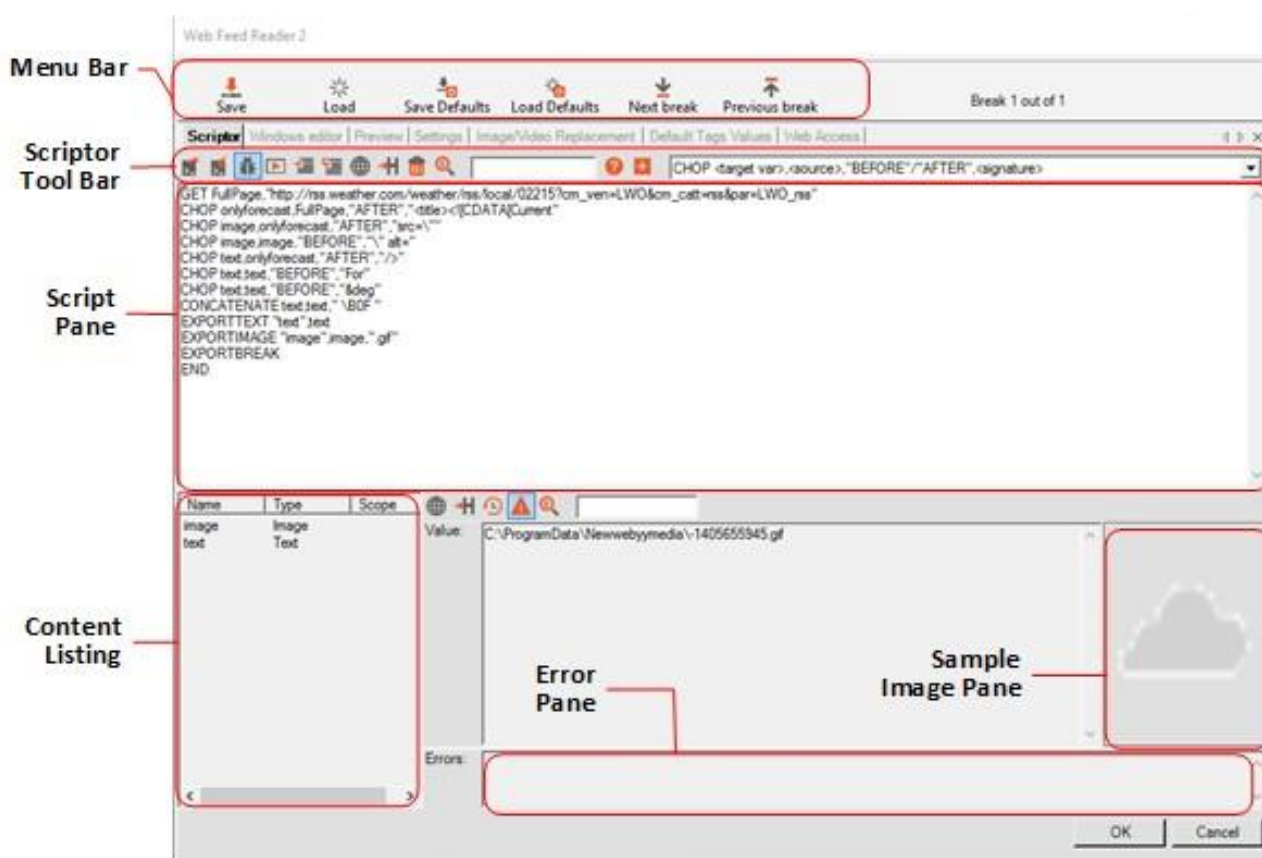
In order to certify your web feed reader, contact the YCD Multimedia support team at supportINT@ycdmultimedia.com

Demo version

This is a Demo version of Web Feed Reader custom item with limited functionality. The fully functional version of Web Feed Reader requires product certification. To order this Custom Item as an optional extra please contact our support department.

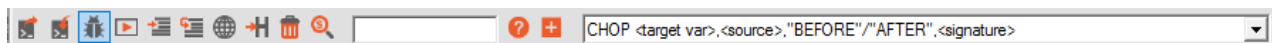
OK

The Web Feed Reader interface consists of the following main parts:















7.9.1 Scriptor Tool Bar

The **Scriptor** tab page will open by default.




The scriptor tool bar includes the following tools:

Icon	Description
 (Export script)	Exports script to a local drive, where it can be saved.
 (Import script)	Browse and imports script from a local drive.
 (Debug mode)	Used for script editing.
 (Run script - no debugging)	Runs and checks the script without stopping.
 (One step - F10)	Runs the script line by line if, for some reason, the script doesn't run as required.
 (Step to - F5)	Runs the script from a line in the script after clicking the line.
 (Open Link)	Opens link in Explorer.
 (Translate to Hex)	Translates text into Hex.
 (Search)	Search for keywords.
 (Help)	Opens the Help window, or press F1.
 (Add script command)	Adds new script commands.
 (Command list)	Command list drop-down menu.



7.9.2 Scriptor Tab

To insert script into the web feed reader

- In the **Scriptor** tab, click  (**Import script**), select a .scr file, then click **Open**. Alternatively, create / edit a script directly into the script pane of the web feed reader window. See [Web Feed Reader Scripting](#) and [XML Scripting and Parsing](#) for detailed explanations of web scripting and .xml parsing.














The required web script can be written by the end-user or written as a part of Messenger's professional services.

- Click  (**Run script - no debugging**). After a moment the image and text will be shown in the **Content Listing** pane. Selecting an item in the content list will display its content in the **Value** box. If it is an image, it will display an image in the **Sample Image** pane.
 - If the script doesn't run as required use the  (**One step - F10**) or F10 button to debug your script step by step.
- Click **OK** to save and close, or click the **Windows Editor** tab.

7.9.3 Windows Editor Tab


Create a layout for your script in the **Windows Editor** tab. Windows are created within the layout window (essentially creating windows within a window). Each window can be associated with a different tag from the script.

In the **Windows Editor** tab, the following options will appear on the windows toolbar.

Option	Description
 (Show Windows List)	Provides a list of all windows.
 (Create a New Window)	Creates a new window. You can create multiple windows.
 (Show Window Properties)	Shows window properties.
 (Zoom)	Zooms in or out (in percentages %).
 (Delete window)	Deletes highlighted window.
 (Lock All Windows)	Locks all the windows in the layout so you cannot add more changes.
 (Unlock All Windows)	Unlocks all the windows in the layout, so you can make more changes.
 (Move Left)	Moves the highlighted window to the left.
 (Move Right)	Moves the highlighted window to the right.
 (Move Up)	Moves the highlighted window up.
 (Move Down)	Moves the highlighted window down.


See [Window Aligning and Relative Resizing](#) for a description of each aligning tool.

To create a layout


- Click  **(Create a New Window)** to create one or more windows in a layout. In each window you can add one of the following options:
 - [Text](#) - To display static text.
 - [Image](#) - To display a static image.
 - [Text From Tag](#) - To display text from the tag.
 - [Image From Tag](#) - To display an image from the tag.
 - [Image From Script](#) - To display an image, triggered when a selected item of text drawn from a tag is displayed.





If you add more than one window to a layout, you have the option to anchor adjacent windows together (see [Anchoring Two Windows](#)).

- In the **Editor Size** section, type or select the size of the editor to fit the actual window it will be placed on.
- In the **Text Auto Resize** box, auto resize the rendering to **None**, **Vertical** or **Horizontal**.
- Select the **Generate Multiple Outputs** check box, then click  **(Add output)** to add new layouts.
- Click **OK** to save and close, or click the **Preview** tab.


To add static text

1. Click on the window you wish to use.
2. Click  (**Show Window Properties**) to open the **Window Properties** dialog box.
3. In the **Name** box, type a name for the selected window.
4. In the **Windows Properties** section, in the **Type** list, select **Text**.
5. In the main window, type the text you want to appear. See [To add a text item](#) for additional text formatting options.


To add a static image

1. Click on the window you wish to use.
2. Click  (**Show Window Properties**) to open the **Windows Properties** dialog box.
3. In the **Name** box, type a name for the window.
4. In the **Windows Properties** section, in the **Type** list, select **Image**.
5. In the **Static Image** box, click  (**Browse**), select an image, then click **Open**.
6. Click **OK**.


To add text from a tag

1. Click on the window you wish to use.
2. Click  (**Properties**) to open the **Window Properties** dialog box.
3. In the **Name** box, type a name for the selected window.
4. In **Type**, click **Text From Tag**.
5. In **Tag**, select the item you want displayed.
6. Click **OK**.

To add an image from a tag

1. Click on the window you wish to use.
2. Click  (**Properties**) to open the **Window Properties** dialog box.
3. In the **Name** box, type a name for the selected window.
4. In **Type**, click **Image From Tag**.
5. In **Tag**, select the item you want displayed.
6. Click **OK**.

To add an image from script


1. Click on the window you wish to use.
2. Click  (**Properties**) to open the **Window Properties** dialog box.
3. In the **Name** box, type a name for the selected window.
4. In **Type**, click **Image From Script**.

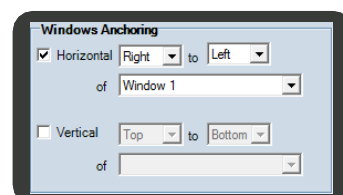
5. In **Tag**, select the item you want displayed.
6. Click **OK**.

7.9.3.1 Anchoring Two Windows


When you set the properties for your windows, you have the option to anchor adjacent windows, horizontally and / or vertically. By anchoring the windows, you ensure their content is synced and their positions remain next to one another even if the content duration or size of the windows change.

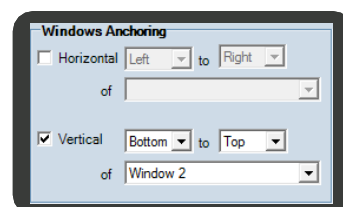
To add a horizontal anchor

1. Make sure you are clicked on the left window in your layout, then click  **(Show Window Properties)**.
2. Scroll down to the **Windows Anchoring** section, then select the **Horizontal** check box.
3. Click the drop-down arrows to anchor the **Right** window to the **Left** window.
4. In "of", select the window you want anchored.



To add a vertical anchor

1. Make sure you are clicked on the upper window in your layout, then click  **(Show Window Properties)**.
2. Scroll down to the **Windows Anchoring** section, then select the **Vertical** check box.
3. Click the drop-down arrows to anchor the **Bottom** window to the **Top** window.
4. In "of", select the window you want anchored.







7.9.4 Preview Tab

Once the windows are allocated with the proper image and text settings, open the **Preview** tab to view your work.

To preview your web feed reader

1. In the **Preview** tab, select the following options to adjust your preview:

Option	Description
 (Change Preview Background Color)	Adjusts the background color.
 (Item thumbnail)	Saves result as item thumbnail.
 (Change Preview Zoom) button	Adjusts the appearance size of the feed.
 (Show/hide windows borders)	Shows the borders on each layout window.

2. Click **OK** to save and close, or click the **Settings** tab.

7.9.5 Settings Tab

Set the item mode, network type access, and refresh interval for your feed in the **Settings** tab.

To set the item mode

1. In the **Settings** tab, in the **Item Mode** section, select one of the following options:
 - **Normal mode** - Displays all of the breaks encountered by the script. Use this when more than one break is to be displayed.
 - **Immediate mode** - Returns only the first break the script encounters.
 - * **Timeout** - Defines the duration the item will be displayed. For example, if the item in the source changes every three seconds and the timeout is set for five seconds, then every five seconds a new item will be displayed.
 - **In flight mode** - Displays items that are changing dynamically.
 - * **In-flight refresh delay** can be set to prevent the item from changing constantly at illogical intervals.
2. Select the **Enable filler when connection failed** check box to display an error message when the connection fails.
3. In the **Filler Settings** box, drag and drop a content item from the library, then in the **Delay** box, set the time delay between the time the connection fails and the error message displays.



This option is useful where a problematic network exists, and can serve to alert technicians about network issues on a player.

4. Select the **Use Web Cache** check box for retrieving data from the Internet or a local machine in the event the connection is interrupted.
5. Select the **Use Same Webby Instant For Identical Webby Definition** check box to maintain sync between different breaks when using the same web feed reader item multiple times in a sequence.
6. In the **Before Script Results Ready** section, select either:
 - **Return default image** to display an image with no tag values.
 - **Return nothing sequence** to leave the display empty.
7. Click **OK** to save and close, or click the **Image-Video Replacement** tab.

7.9.6 Image-Video Replacement Tab

Replace images or videos from an Internet source with an alternative image, video or alpha animation content items using the **Image / video Replacement** variables.

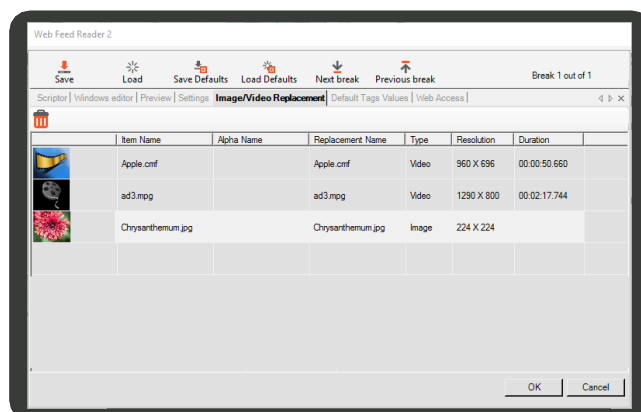
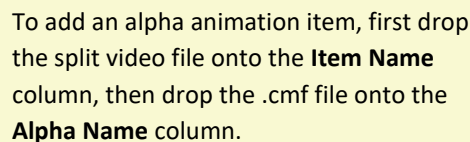
This section describes the work flow required to use the image-video replacement options.

The work flow consists of the following main procedures:

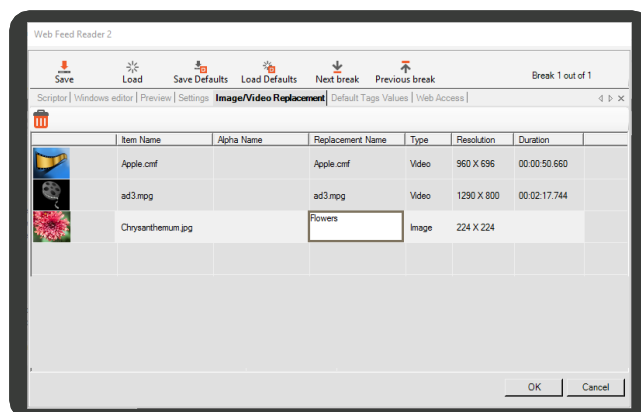
1. [Add the replacement content item](#) to the image / video replacement library.
2. [Set the script](#) to include the replacement tab and content item.
3. [Set the window properties](#) to include the replacement item tab from the script.
4. Preview your layout.

To add the replacement content item to the image / video replacement library

1. In the **Image / Video Replacement** tab, drag the media content item (image or video) and drop it onto the **Item Name** column.

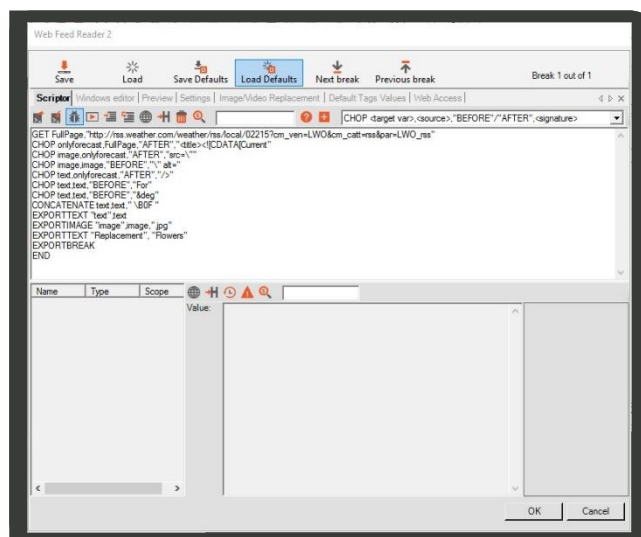
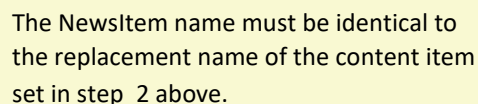


2. In the Replacement Name column, double click on the cell, then type a new name for the content item.




To set the script

1. In the **Scriptor** tab create a new export text line using the following formula: EXPORTTEXT <Tag>, <NewsItem>, as shown in the image.



2. Click  (Run script - no debugging).

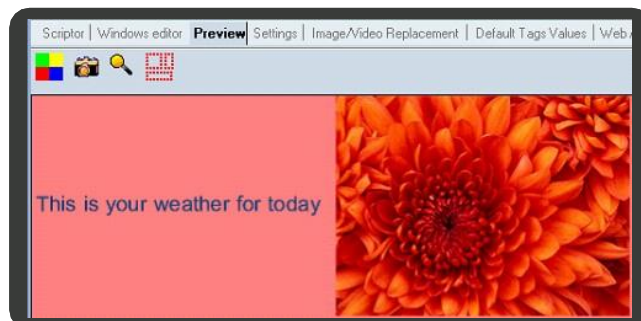
To set the windows properties

1. In the **Windows Editor** tab, click on the window you want to add the replacement media item to, then click  (**Properties**) to open the **Windows Properties** dialog box.

2. In the **Windows Properties** section, in **Type**, select **Image from script**.
3. In the **Tag** box, select the tag you set in step 2 above. In our example, we set the word “Replacement” as our tag label.



4. Click **OK**, then click the **Preview** tab to view your layout.



7.9.7 Default Tags Values Tab

Set the default tag values for each of the web feed reader tags. The value you set will be displayed during the sequence editor preview when the script results are unavailable.

To set the default tag values

1. In the **Default Tag Values** tab, highlight the tag by clicking on it.
2. In the **Tag Value** column, double click on the cell, then type in a value.
3. Repeat steps 1 and 2 above for each additional tag.
4. Click **OK** to save and close, or click the **Web Access** tab.

7.9.8 Web Access Tab

You can set an Internet proxy for your feed in the **Web Access** tab.


To set a proxy

1. In the **Web Access** tab, select the **Use Proxy** check box.
2. In the **Host** box, type a host.
3. In **Port**, type or select a number.
4. To insert a user name and password for the proxy:
 - a. In the **Proxy Password** section, select the **Use Password** check box, then type a **User Name** and **Password**.
5. Select the **Domain** check box (optional), then type a domain name.
6. Insert a user name and password for the web site:
 - a. In the **Web Site Password** section, select the **Use Password** check box, then type a **User Name** and **Password**.
7. Insert a domain:
 - a. In the **Web Site Password** section, select the **Domain** check box, then type a domain.
8. Click **OK**.



7.9.9 Save Settings







Save your settings locally as an .nws file for re-use.

To save your settings for re-use

1. Click  (**Save webby data**) to open the **Save As** dialog box.
2. Select a local location, then in **File Name** type a name for the RSS settings.
3. Click **Save**.

To re-use your saved settings

4. In the **Layout** or **Library** tab, click  (**Add Item**), click **Dynamic Data**, then click **Web Feed Reader** to open the **Web Feed Reader** dialog box.
5. Click  (**Load Settings**), locate and click on the .nws file, then click **Open**.
6. See the table below for additional options:


Option	Description
 (Save webby data)	Saves settings for re-use. Webby data includes the script, the windows arrangement and the image replacement.
 (Load Webby Saved Data)	Loads previously saved settings. Webby data includes the script, the windows arrangement and the image replacement.
 (Load Defaults)	Loads previously saved defaults.
 (Save Defaults)	Settings that you want to save as default settings.
 (Next Break)	Jumps to the next break in the tag.
 (Previous Break)	Jumps to the previous break in the tag.


7.10 Windows Presentation Foundation Master

The **Windows Presentation Foundation** (WPF) item is a computer-software graphical subsystem for rendering user interfaces in Windows-based applications. WPF utilizes DirectX and Microsoft .NET Framework 4. Messenger supports the following formats:

- .exe
- .xaml
- .dll

To create a WPF item

1. In the **Layout** or **Library** tab, click  (**Add Item**), click **Dynamic Data**, then click **WPF Master**.
2. In the **Item Name** box, type a name for the WPF item.

3. Click  (**Browse**) to upload the relevant .exe file, then click **Open**.
4. In the **Item Duration** section, in the **Hours**, **Minutes**, **Seconds** and **Millisec** boxes, type or select the playback duration.
5. Leave the **Transparent** box selected if you want to omit the background and utilize transparency layers.
6. In the **Tag-Along Files** section, click on the following to add the files needed to run the application:
 - [Files](#) - such as images, executables and .dll files
 - [Folders](#)



Leave the default **Copy to Original Location** box selected in case it is essential to run the executable or one or more of the tag-along files from a specific path on the player PC.

7. Click **OK**.

To add a file

1. Click the **Add** button.
2. Select a file, then click **Open**.

To add a folder

1. Click the **Add Folder Files** button.
2. Click the **Browse** button, select a folder or click the **Make New Folder** button to create a new folder, then click **OK**.



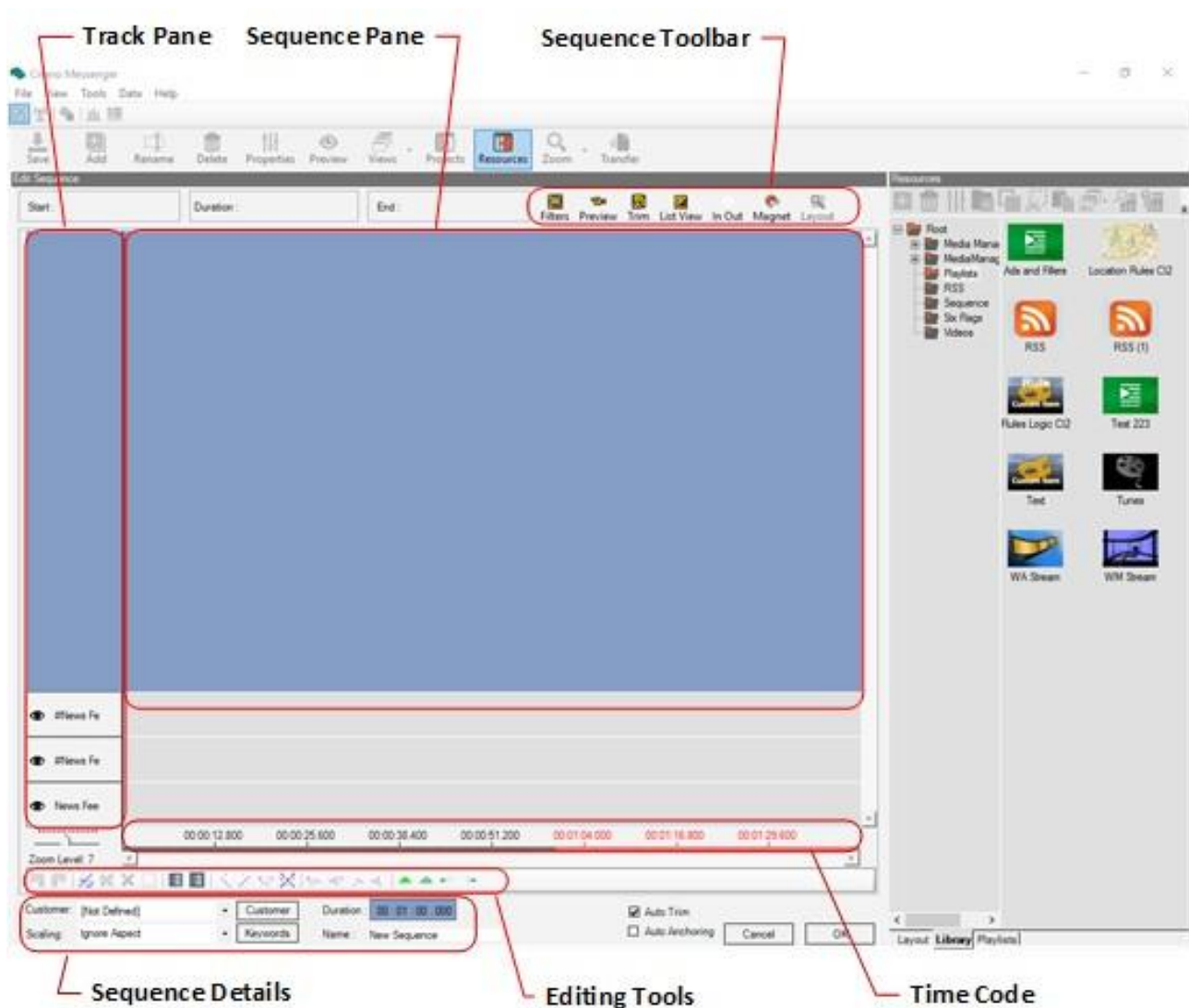
WPF is a customized development that must follow Messenger's specific API (see Cnario Player API Reference Guide) in order to ensure compatibility for playback.

7.11 Sequences

You can playback all supported media according to an exact time code using the **sequence** item. You can use the tracks in the **sequence**, to create special layering effects and – most importantly – synchronize these across several zones, with an accuracy down to the frame.


Unlike in a **playlist**, which uses the default playback of the playlist, you can use sequences to playback items across a timeline and add key frame filters to achieve post-production effects.

The **Sequence** interface consists of the following main parts:



- Track Pane - Lists the number of tracks in the sequence. Track pane starts with **Track 0** on the bottom line. **Track 0** will automatically be dedicated to the initial window you selected. **Track 1** will play behind **Track 0** if they share the same pixel range.
- Sequence Toolbar - Provides tools for editing, adding effects, and viewing your sequence.
- Sequence Pane - A visual working area to organize and manage content items in the sequence.
- Sequence Details - For adding playback parameters to the sequence.
- Editing Tools - For controlling and editing the sequence in the sequence pane
- Time Code - Indicates the duration of the items and the sequence. Time code numbers in red indicate where the entire sequence ends.

To add a sequence

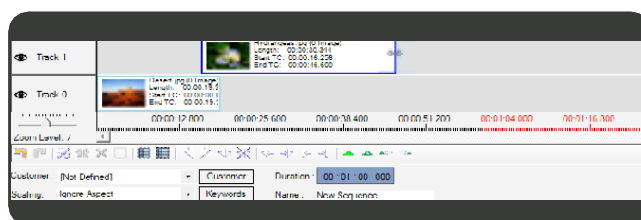
1. In the **Layout** or **Library** tab, click  (**Add Item**), then click **Sequence** to open the **Edit Sequence** pane.
2. In the sequence details section, type a name.

3. In the **Scaling** box, select one of the following aspect ratios:

Option	Description
Default	Retains image's default settings.
Keep Aspect	Maintains image's aspect ratio.
Ignore Aspect	Stretches image over the entire window, may cause changes to aspect ratio.
Maximize X	Stretches image horizontally.
Maximize Y	Stretches image vertically.
Zoom to window	Stretches the image to fit the window.


4. Drag and drop content items from the **Library** into the Sequence pane.

5. Extend the item's visible timeline by dragging the indicator or clicking the left and right indicator arrows.



6. You can also set the duration of the sequence in the **Duration** box at the bottom of the page.







7. Set filters for the media items, see [Filter Editor Tools](#).

8. Click  (**Preview**) to view your sequence.

9. Click **OK**.

7.11.1 Sequence GUI

Manage and edit your Sequence using the following options (see table below)

Option	Description
Zoom Level	Controls the view of the timeline. Increase the zoom level to see a long sequence.
Auto Trim	Selected by default, crops the sequence according to the end time code of the last item to play on all tracks.
 (Enable/Disable)	Enables / disables the track within the sequence.
Start, Duration and End	Indicate the start time, length, and end time of the selected track. <ul style="list-style-type: none"> Click on the timeline to create a new starting point for the sequence; indicated by the needle.
 (Filters)	Opens the Filters Library . Commonly used filters can be created or pasted to the Filters Library and be used again quickly on other items or sequences.
 (Preview)	Previews the sequence.
 (Trim)	Trims the sequence duration to fit the clips.
 (List View)	Opens the List View pane. Lists each media item included in the sequence by Name, Start TC, End TC, Duration and Track.
 (Magnet)	Snaps objects to the closest neighboring object boundaries or to the closest timeline marker. While dragging, a red column mark is added to the item on the timeline indicating where the magnet snap-to effect will occur.

Right click on a track to access the following options:

Default Scaling - Changes the default scale for this track. It is recommended to use filters to control aspect for specific items.

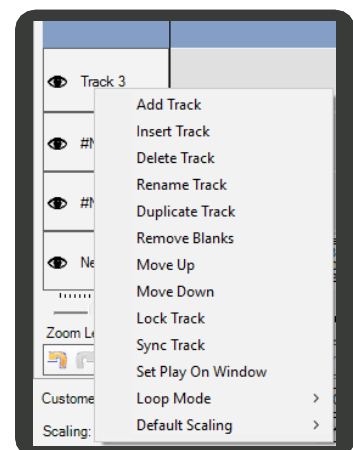
Loop Mode - Sets the track to loop within the designated time. Time set is normally in relation to a different track the loop should be in sync with. Loop can be set to cut track playback in its midst or continue till it finishes, according to allowance or disallowance settings of partial items. Text-based items or images can be set to continually crawl or scroll in a loop, in reference to a different track.

Set Play on Window - Enables you to choose a different window to play this track on. Optional windows in the drop down are only empty windows in the same layout.

Sync Track - When an item on a 'Synced' track is moved while 'CTRL' key is held, all items starting from that time code onward are moved in sync.

Lock Track - Locks a track from any editing

Remove Blanks - Removes any spaces between items on the track, making sure that playback is continuous

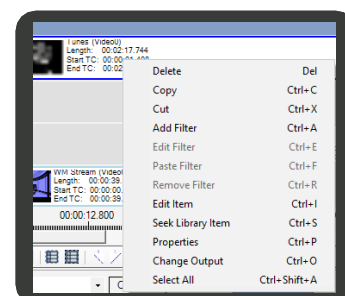


Right click on an item placed on a track to access the following options:

Change Output - Enables changing of file output track. Relevant for items with multiple outputs like video (which have both audio and video).

Seek Library Item - Finds the item in the resources **Library**.

Edit item - Edits the **Library** item. (If item is connected to other layouts, this can have a system wide effect.)



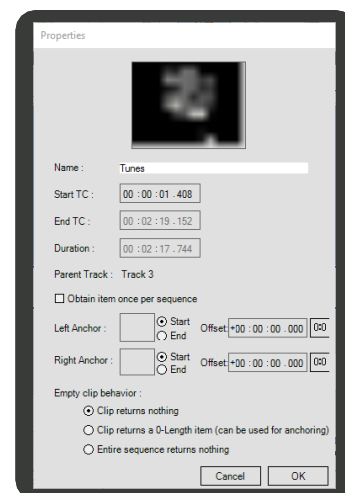
Properties - Opens the **Item Properties** dialog box

Start TC, End TC, Duration - Manually change the time code for items that do not have a hard-coded time code.

Anchoring - Drag items from the sequence and set the alignment of the selected item to it. An item can be aligned to the start or end of a different item, with a defined offset or preset. See [Anchoring the Items](#) for an example on how to do this.

Empty Clip - Enables you to control the behavior of a clip inside the timeline that returns nothing. Most commonly, when Playlist Master holds a Library folder that has no items inside. The available options for empty clip are:

- Return nothing (default) - The sequence will play without this item; just the background will be shown.
- Return a 0-length (zero length) item - The sequence will play without this item allowing other items to use anchoring on this item. This means the item before and the item after the non-existing item will now be anchored.
- Return empty sequence - The entire sequence will not play.



Additional Options:

Ctrl key - Hold down the **Ctrl** key to select multiple items on the time line and to move them together. Press **Delete** to delete all selected items.

Dragging and dropping multiple items to sequence:


- If you press **Ctrl** while dropping, the items will be added one for each track. The items will be ordered alphabetically starting at the dropped track and up. If there are not enough tracks, new tracks will be added (to hold all the dropped items).
- If you drag multiple items but don't press **Ctrl**, the items will be dropped into a single track one after the other.

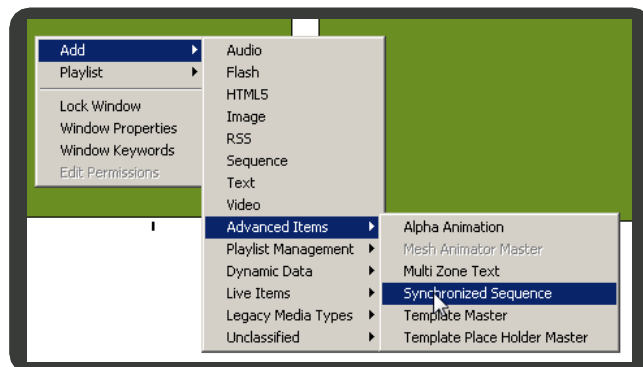
7.11.2 Synchronized Sequences

You can only create synchronized sequence items in a layout window (never to the **Library**). When added, it creates a sequence like the regular **Sequence** item (see [To add a sequence](#)), however it will create an empty track for any empty window that exists on the layout.

One of the main features of the sequence is to sync items across zones and across screens, to create smart playback arrays and video walls. The **sequence** can include any number of tracks and each track can include multiple video clips and images.

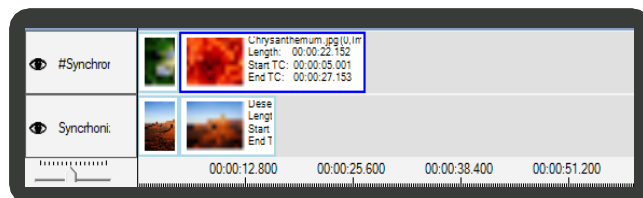
To set up a synchronized sequence



1. Create the layout with all required windows (see [Section 4.7.1.1 \(Creating Windows\)](#)). Leave the windows blank (additional windows can be added and synced later if needed).
2. Make sure the  (**Toggle Edit mode**) is disabled.
3. Right click an empty window in the layout, this one will contain the sequence. Click **Add**, click **Advanced Items**, then click **Synchronized Sequence** to open the **Edit Sequence** pane.



Selecting the **Synchronized Sequence** menu item will open the **Edit Sequence** pane with a preloaded Track for each of the layout windows you have created in the layout.

The name of each window appears in left-hand column and represents each track. Hover above the name to view it in full. The # sign before each window name denotes that it is a window name to be played on. The most bottom track has no # sign, this indicates that it is the window on which the track was created.



4. Drag and drop items from the **Library** on the right-hand pane.
5. Drag items around the tracks using the mouse, or give them a specific time code by right clicking and choosing properties. To make items sync by the frame, it is recommended to take note of the time code and match it exactly between items.
6. Preview your sequence positioning inside the **Sequence Editor** or by selecting the relevant layout and clicking  (**Preview**) to open the **Canvas Controller Playback** dialog box. Playback positioning can be viewed for this track only, or as a part of the complete layout by clicking  (**Full layout mode**).
7. Click **OK**.

7.11.3 Defining Filters and Key Frames



You can set filter functions to determine the behavior of the media (image or video clips) in a sequence. **Filters** can be used to add effects and themes that are needed on a post-production item, without the need to go back to render the original files.

Filter functions can be set and applied to a selected item or saved to the **Filter Library** for use on multiple items.

Once a filter has been set, it will be applied to the entire media item. You can use **Key Frames** ("Key Frame Tools" on page 131) to apply different filter settings to particular sections of a clip.

7.11.3.1 Filters

Select a filter option or combination of filters as required (see table below):

Option	Description
Position	<p>Changes the horizontal and vertical position of the object in the Layout Window.</p> <p>Positioning is set relative to the center of the Layout Window, this being 0.0 on both the x and y axes with positive and negative values indicated in the slider scale boxes. Values to the upper left area would be negative.</p>
Size	<p>Changes the width and height of the object using the sliders to zoom in and out. The height and width can be locked together or unlocked by clicking the  (Lock Aspect Ratio) icon.</p>
Scaling	<p>Click the drop-down arrow to select from the following options: Keep Aspect, Ignore Aspect, Maximize X, Maximize Y.</p>
Transparency	<p>Changes the transparency level so images or videos in layers behind the object are visible. You can also use this option to create fade-in and fade-out effects.</p>
Cropping	<p>Crops the Right, Left, Top, or Bottom of the image.</p>
Rotation	<p>Changes the angle of the image according to the x, y and z axes of rotation.</p> <p>You can also rotate the image and increase the speed of the rotation by increasing the number of loops.</p> <p>The Ratio option (available only on the x and y axes, adds depth to the image rotating.</p>
Name	<p>Provide a name and description for the filter to save it in the Filter Library for use again.</p>
Preview	<p>Adjusts the zoom and background color of the preview.</p>
Generic	<p>Use the Continuous Scroll / Crawl Mode options in the generic filter specifically for setting the Direction, Speed and Gap of dynamic content items in the sequence.</p> <div>  <p>Dynamic items have undefined lengths. Therefore, to use this option, you can place only one content item on a single track in the sequence</p> </div>

Click  (**Default**) to restore default filter settings.


7.11.3.2 Accessing Filters

There are two ways to add filters to your item:

- [Add the filter directly to your item.](#)
- [Create a filter in the Filters Library](#), then drag and drop it onto the item. This enables you to re-use the filter on additional items in the same sequence, or in new sequences.

To add filters to your media item




1. Right click on an image or video clip in the timeline, select **Add Filter**.

2. In the **Filters** window, select a filter or combination of filters (see "Filters" on page 129).
3. Click  (**Exit and Save Filter Changes**).













After creating the filter, it can be saved to the library for re-use.

To add filters to the Filters Library

1. Click  (**Filters**) to open the **Filters Library** pane.
2. In the **Filters Library** pane, right click, then click **Add**.
3. Create a filter setting or combination of filters, see [Section 7.11.3.1 \(Filters\)](#).
4. Click  (**Save filter to filters library**) to open the **Save Filter** dialog box.
5. Enter a file name, then click **OK**.
6. Click  (**Exit and Save Filter Changes**) to return to the **Filter Library**.

You can now drag and drop the saved filter from the **Filter Library** onto media items in sequence tracks.


7.11.3.3 Filter Editor Tools

Option	Description
 (Exit and Save Filter Changes)	Saves the filter effects to the Filter Library and returns to the Edit Sequence pane.
 (Exit and Cancel Filter Changes)	Cancels filter changes and returns to the Edit Sequence pane.
 (Reset Filter)	Removes all saved settings on the filter.
 (Ignore/Keep(Pushed) window aspect)	Configures whether the preview should ignore the window aspect or keep it.
 (Full screen preview)	Moves over to a full screen preview of playback. Press Esc to exit.
 (Full layout preview)	Displayed entire layout playback. Preview is a full Canvas Controller based layout playback and should be done only on machines with graphic cards that can support the operation.
 (Preview only edited clip)	Previews just the selected track in reference to its position in the complete layout.
 (Floating / Docking Window)	Detaches / reattaches the Filter Editor pane to the Edit Sequence pane.
 (Grab Thumbnail Image)	Grabs a thumbnail image.
 (Save filter to filters library)	Saves filter settings to the Filters Library for use again.









7.11.3.4 Key Frame Tools



You can use **key frames** to apply different filters to specific portions of a clip. **Key frames** are edited in the filters preview timeline and are marked to indicate where the settings for an effect will change.

To set a key frame

1. Position the pointer over the timeline in the exact location where you want to add the key frame. (You can use the scroll wheel on the mouse to adjust the precise time.)
2. Insert changes to the filter settings (see "Filter Editor Tools" on the previous page). A  (**Key Frame**) icon appears on the timeline to mark the point at which the changes are set.



Additional Key Frame tools:

Option	Description
 (Cut Key Frame)	Cuts the key frame from its current location
 (Copy Key Frame)	Copies the key frame.
 (Paste Key Frame)	Pastes the cut or copied key frame into a new place on the timeline.
 (Delete Key Frame)	Deletes the key frame from the timeline.
 (Jump to Previous Key Frame)	Moves the needle to the previous key frame icon.
 (Jump to Next Key Frame)	Moves the needle to the next key frame icon.
 (Play Preview Backward)	Previews the filter changes backward in the preview window.
 (Play Preview)	Previews the filter changes in the preview window.

3. Click  (**Save filter to filters library**) or  (**Exit and Save Filter Changes**).

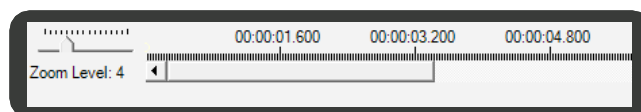
7.11.3.5 Key Frame Advanced Movement Control

Set the motion of your image across the screen using the following motion / bezier options:


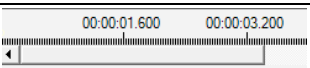

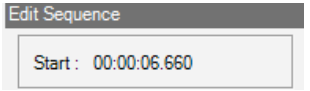
- **Linear Interpolation** - When setting a filter and choosing a specific X, Y position for specific time frame, the default motion behavior is Linear Interpolation. This means the filter will work its way from key frame to key frame in a linear form, which on a graph is presented as a straight line.
- **Auto Bezier** - Setting the movement from key frame to key frame to automatic Bezier calculation, lets the system calculate the Bezier curve for the movement of your image across the screen.
- **Manual Bezier** - The Bezier curve calculation can be manually set to achieve a more accurate flow for the filter. Enable this by clicking **Manual Bezier**, then click the  (**Show / Hide Bezier Control Points**) and  (**Show / Hide Bezier Editor**) buttons to view the graph of the filter. The Bezier control points can now be changed and viewed on a graph, and controlled with the mouse.

7.11.3.6 Filter Time Line Control

Manage the timing of your sequence, filters and key frames in the timeline control panel.



The timeline control panel includes:


Option	Description
 <p>Zoom Level Time Slider</p>	Controls the view of the timeline. Increase the Zoom Level to see a longer sequence.
 <p>Fine Adjustment Zoom Level Time Slider</p>	Scrolls through the item's timeline.
 <p>Setting Slider</p>	Drag using a mouse pointer or finely adjusted using the mouse scroll.
 <p>Start Box</p>	Displays the exact set start time.

8. Distribution, Control and Monitoring

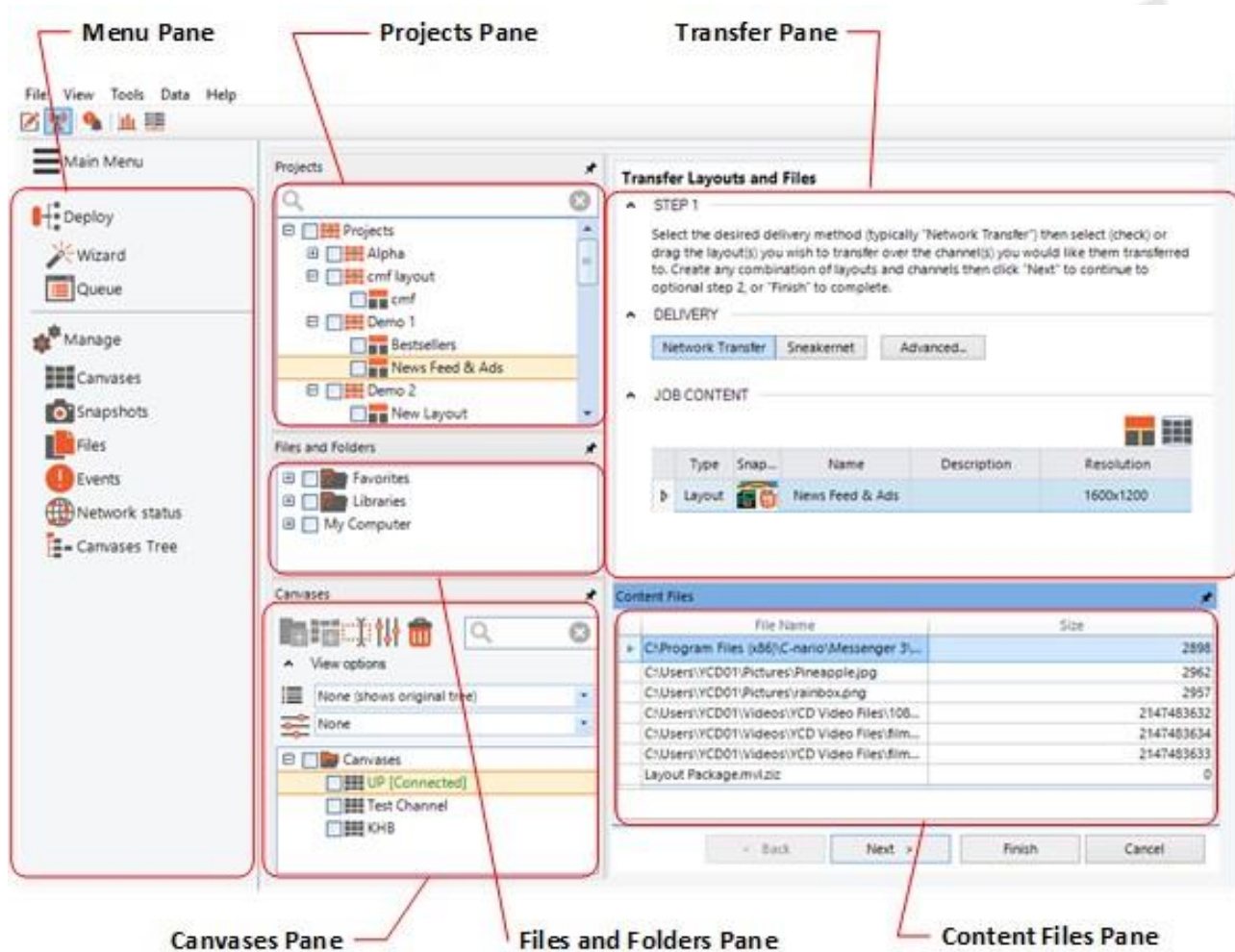
Use the following distribution, monitor and control tools to ensure all of the players are providing ongoing high-quality playback:

- **Network Module** - Manage layout transfers players and monitor their transfer progress and integration.
- **Device Manager** - Manage players and canvases by monitoring and controlling multiple devices settings and players.

8.1 Managing Layout Transfers and Integration

Send a single, or multiple layouts, and individual files to a remote canvas or a group of canvases through the  (**Network Module**). You can also monitor and control the transfer and integration of the layouts through this module.

The **Network Module** interface consists of the following main parts:



Menu Pane - Use the different menu items to access the Network Module functions:

Projects Pane - Lists your projects and layouts.

Transfer Pane - Drop selected projects into the Transfer List pane to prepare them for transfer to canvases.

Canvases Pane - Lists the Players and their associated canvases.

Files and Folders Pane - Lists the files on your computer.

Contents Files Pane - Lists the files for transfer to canvases.

8.1.1 Deploying Layouts and Files

Transfer layouts and files to canvases using the following scheduling methods:

- **Immediately** - A one step process. You select the delivery method, content, and then transfer.
- **Scheduling** - A two-step process. First, you select the delivery method and content. Second, you define general information about the transfer, define a schedule, and then transfer.

Transfer layouts and files to canvases using the following delivery methods:

- **Network connection** - Used to transfer through an online connection.
- **Sneakernet** - Used to transfer without an online connection. ZIP the layout and files then physically transfer them to the player using a USB flash-drive.
- **Dead Drop folder feature** - Used for one-way satellite connection.

8.1.1.1 Configuring Delivery Methods Without an Online Connection

For delivery methods without an online connection, you must configure the method before transferring layouts and files to canvases.




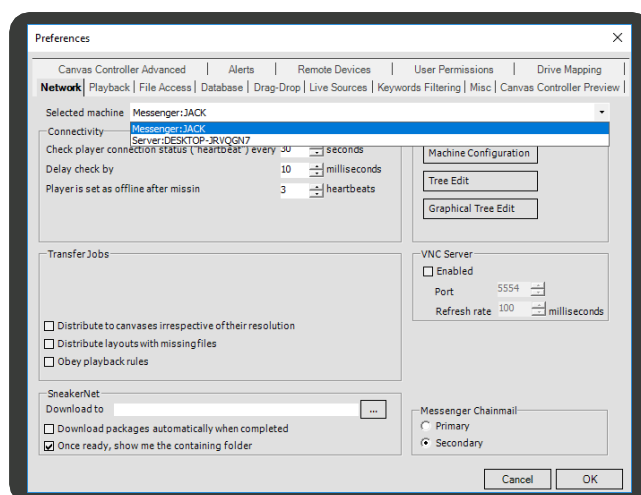
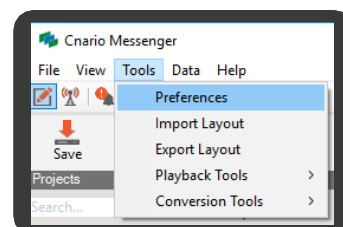
The network connection delivery method does not require any additional configuration.

8.1.1.1.1 Configuring a SneakerNet Folder for USB Flash-drive Transfer

Configure a SneakerNet folder to receive the transfer as a ZIP folder and then copy the ZIP transfer to your Player computer using a USB flash-drive.

To send a transfer without an online connection

1. In the Menu Toolbar, click **Tools**, then click **Preferences** to open the **Preferences** dialog box.
2. In the **SneakerNet** section, in **Download to**, click  (**Browse**), select your required folder, and click **OK**. The download folder appears.



- Click **OK**. Your SneakerNet download folder is set.



Once the files have finished transferring layouts and files (see your Sneakernet folder you assigned following the steps above) your Sneakernet file will be located in a folder called Sneakernet-1

- Copy only the content of the folder (not the actual folder) into the root of a storage device (USB key, CD, Mobile HDD).
- Open Player, then connect the storage device into the player PC. The layout will automatically play.



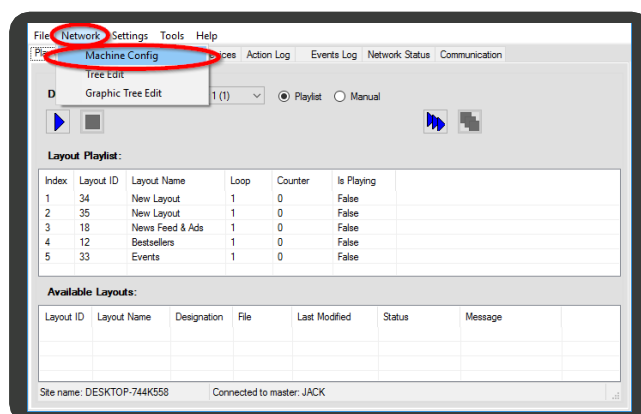
To remove the saved Sneakernet destination, click in **Download to** and delete the folder name.

8.1.1.1.2 Configuring Transfers With a One-Way Satellite Connection

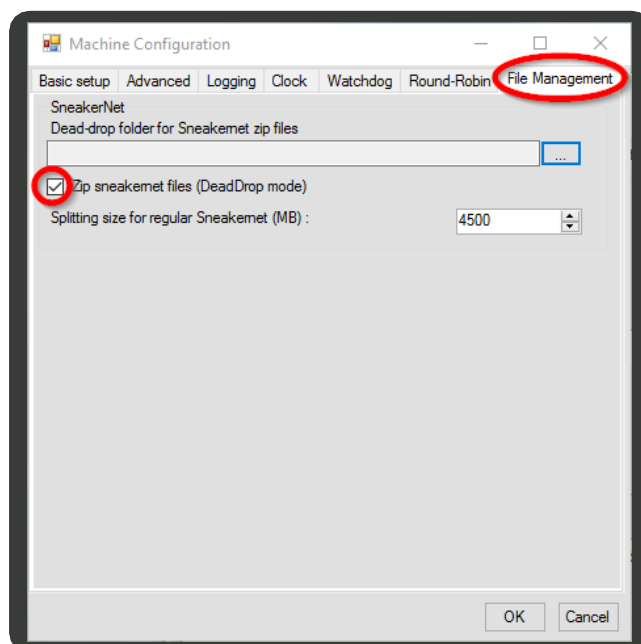
Configure the Player to use Zip SneakerNet files in DeadDrop mode.

To send a layout using the Dead-Drop folder feature




- In the Player PC, click **Network**, then click **Machine Config** to open the **Machine Configuration** dialog box.

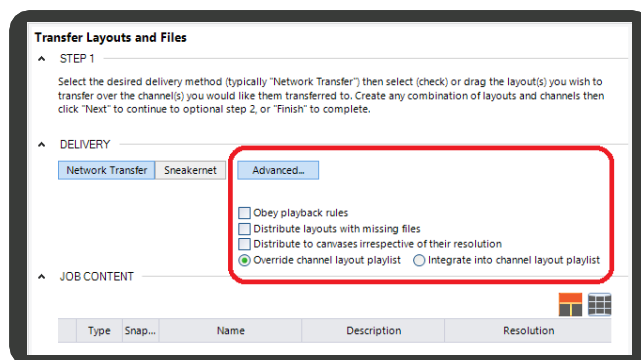
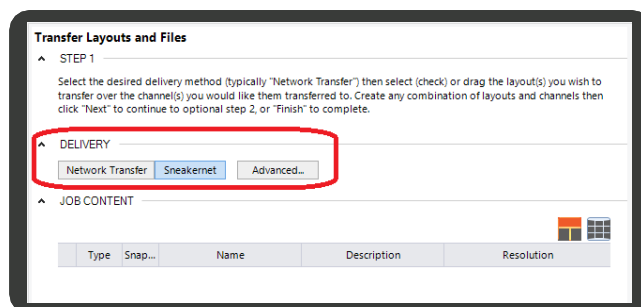


- In **Dead-drop folder for SneakerNet zip files**, click **(Browse)** and then select a shared folder for the transfer.
- If the dead-drop is a Zip folder, click the **File Management** tab, then select the **Zip Sneakernet files (DeadDrop mode)** check box.

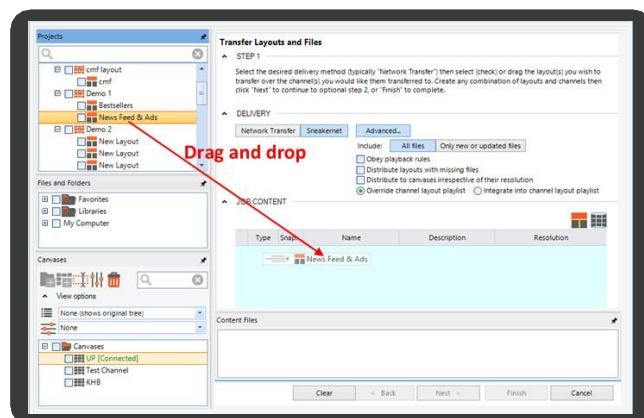


8.1.1.2 Transferring - STEP 1 - Required

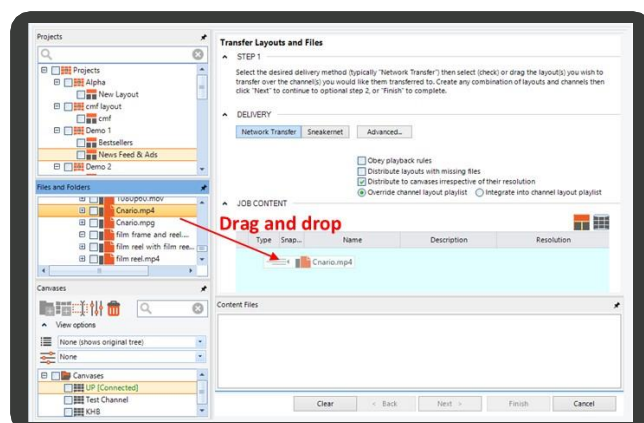
1. Click  (**Network Module**).
2. In the menu pane, click  (**Deploy**). The deploy menu expands.
3. In the deploy menu, click  (**Wizard**). The **Projects** pane, **Files and Folders** pane, **Canvases** pane, and **Transfer Layouts and Files** pane appears.
4. In **DELIVERY**, choose the delivery method, either:
 - **Network Transfer** - online connection is currently available
 - **Sneakernet** - to set download a folder on the USB flash-drive, see
 - **Sneakernet** - to set dead drop folder, see
5. Optionally, click **Advanced**. The advanced options appear.
 - Select any of the following:
 - * **Obey playback rules**
 - * **Distribute layouts with missing files**
 - * **Distribute to canvases irrespective of their resolution**
 - Choose either:
 - * **Override channel layout playlist**
 - * **Integrate into channel layout playlist**
 - If the delivery method is **SneakerNet**, select either:
 - * **All files**
 - * **Only new or updated files**
6. Choose the layouts or files to transfer:



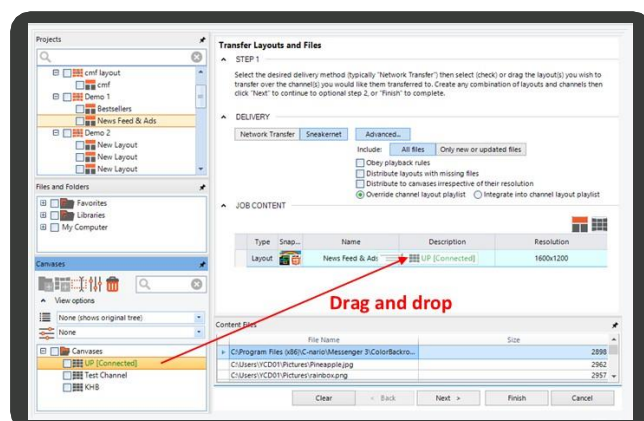
- Layouts - in the **Projects** pane, drag and drop the relevant projects into the **Transfer Layouts and Files** pane, **JOB CONTENT** area.



- Files - in the **Files and Folders** pane, expand the folder tree to locate your files and then drag and drop the relevant files into the **Transfer Layouts and Files** pane, **JOB CONTENT** area.



- In the **Channels** pane, select the canvases to which you want to transfer your layout(s) and then drag and drop the canvases into the **Transfer Layouts and Files** pane, **JOB CONTENT** area.



- You can transfer immediately or name and schedule your transfer, either:
 - Click **Finish** - to transfer immediately. The Queue pane appears. For more information about monitoring your transfer to the canvas, see [Monitoring Transfer Progress](#).
 - Click **Next**. The **Transfer Layouts and Files STEP 2** pane appears. For Step 2 instructions, see below.

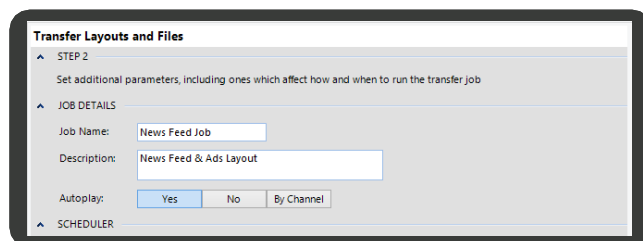
8.1.1.3 Transferring - STEP 2 - Only Scheduled Transfers

STEP 2 - Scheduled Transfers Only

Step 2 of transfer layouts and files is only required to create a transfer schedule. You can also modify general information about a transfer, including the job name, description, and autoplay to set when the player starts the layout.

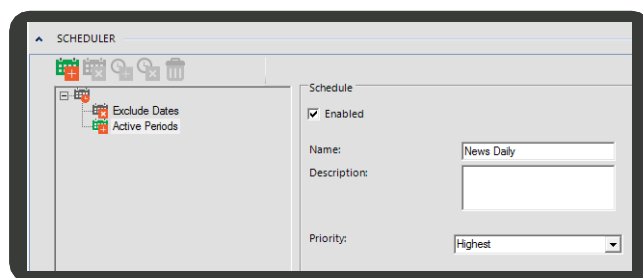
1. In **JOB DETAILS**, you can modify any of the following:

- In **Job Name**, type your required transfer job name.
- In **Description**, type your required transfer job description.
- In the **Autoplay** section, choose when the player starts the layout either:
 - * **Yes** - immediately and no manual start is required.
 - * **No** - manual start, only.
 - * **By Channel** - according to the settings in the channel properties.



2. In **SCHEDULER**, you can schedule the transfer and set the transfer priority. Select **Enabled** and then choose any of the following:

- In **Name**, type your required schedule name.
- In **Description**, type your required schedule description.
- In the **Priority** list, click either:
 - * **Normal**
 - * **High**
 - * **Highest**
 - * **Immediately**



- Add active periods for the transfer.

a. Click **Active Periods**

b. Click  (**Add Active Period**).

c. Click **Active Period 1**.

d. In the **Active Period** section

e. Select **Enabled**.

f. In **Name**, type your required active period name.

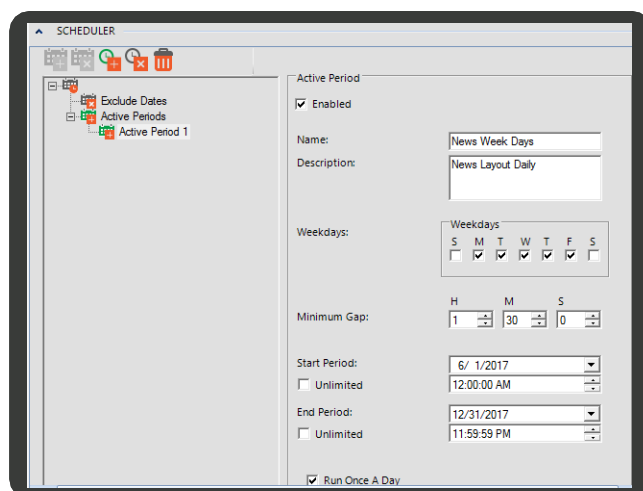
g. In **Description**, type your required active period description.

h. In **Weekdays**, select all of the active days.

i. In **Minimum Gap**, type or scroll to the number of hours (H), minutes (M), and seconds (S).

j. In **Start Period**, on the date list, click your required start date.

k. In **Start Period**, on the time list, click your required start time.



- l. In **Start Period**, select **Unlimited**.
- m. In **End Period**, on the date list, click your required start date.
- n. In **End Period**, on the time list, click your required start time.
- o. In **End Period**, select **Unlimited**.

- Add excluded date for the transfer.

- Click **Exclude Dates**

- Click  (**Add Exclude Date**).

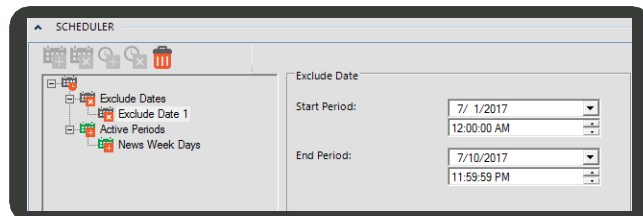
- Click **Exclude Date 1**.

- In **Start Period**, on the date list, click your required start date.

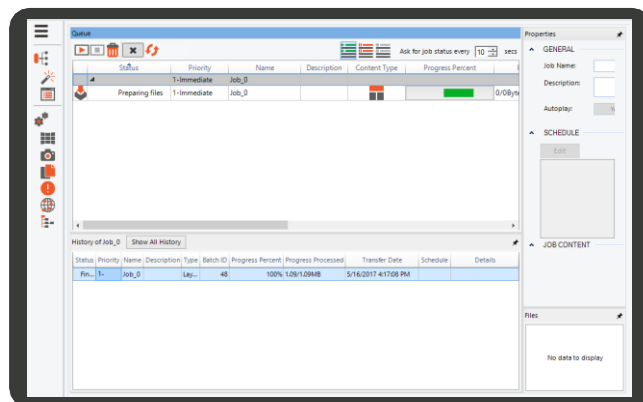
- In **Start Period**, on the time list, click your required start time.

- In **End Period**, on the date list, click your required start date.

- In **End Period**, on the time list, click your required start time.



3. Click **Finish**. The **Queue** pane appears showing your transfer job status. For information about the **Queue** pane and job transfer status, see



You can also send a layout list of several layouts in the same way.




8.1.1.4 Monitoring Transfer Progress

Monitor layout and file transfer progress in the **Network Module Queue** pane. View running, completed, and inactive transfers, as well as monitor whether the transfer was successful, if the player received the layout, and if the layout was successfully integrated it into the playlist. Restart and schedule completed transfers, including changing transfer contents and previously defined transfer schedules.







The Queue pane automatically appears when you complete the steps to transfer layouts or files.

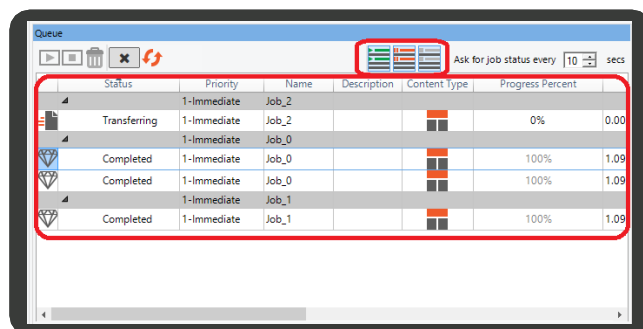
To monitor your transfer progress

1. Click  (**Network Module**).
2. Click  (**Deploy**). The deploy menu appears.
3. In the deploy menu, click  (**Queue**). The **Queue** pane appears.

4. Choose the transfer status to view:

- Click  (**Show running**) - transfers currently running.
- Click  (**Show pending**) - transfers not yet running and awaiting transfer.
- Click  (**Show inactive**) - transfers not running and not awaiting transfer.

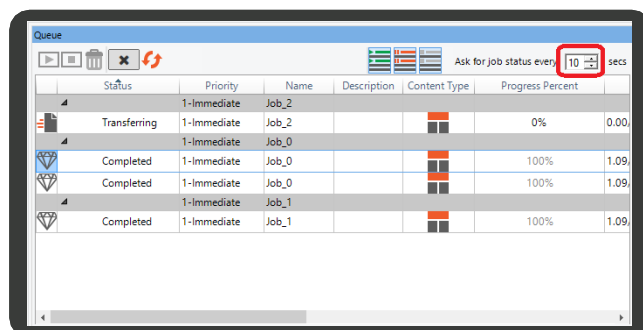
5. Click  (**Refresh Now**). The list of transfer updates.



To change the frequency of refreshing the queue

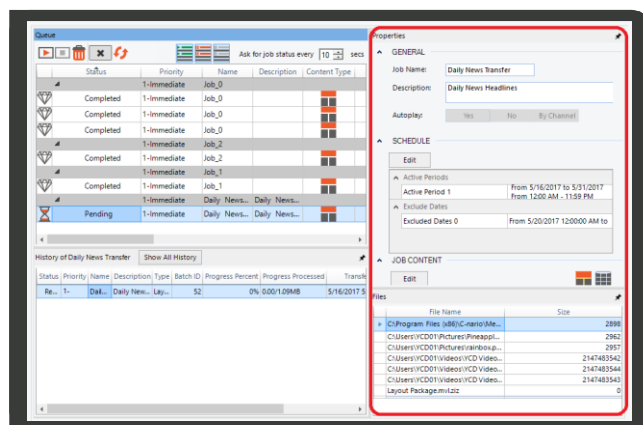
The list of transfers automatically refreshes. You can change the frequency of refreshing.

- In the **Queue** pane, in **Ask for job status every**, type or scroll to your required number of seconds to refresh.



To view a transfer's general information, schedule, content, and files

- In either the **Queue** pane or the **History** panel, click your required transfer. The transfer's general information, schedule, content, and files appears.

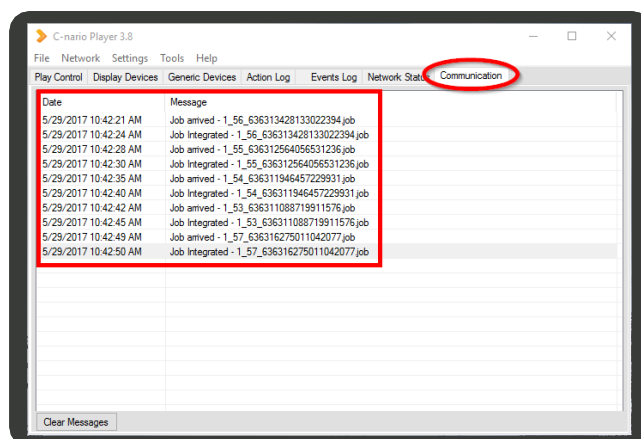


8.1.1.5 Monitoring Job Integration on the Player

You can check if the layout / layout list has arrived at the player and whether the job of playing the layouts has been integrated in the player in the **Jobs** tab.

Checking Job Integration on the Player









1. Open the **Communications** tab. Status messages appear.

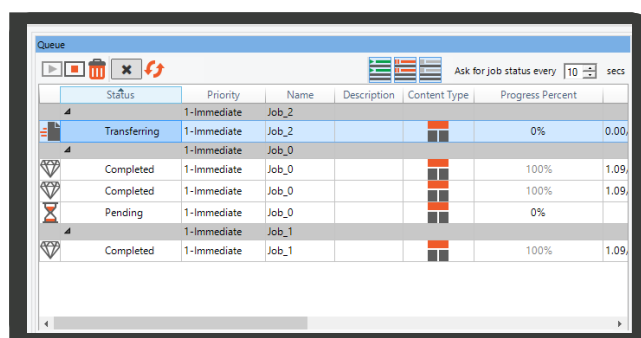


8.1.1.6 Canceling Pending and Active Transfers

active transfers in the **Network Module Queue** pane. To

cancel a pending or active transfer







1. Click  (**Network Module**).
2. Click  (**Deploy**). The deploy menu appears.
3. In the deploy menu, click  (**Queue**). The **Queue** pane appears.
4. Choose the transfer status to view:
 - Click  (**Show running**) - transfers currently running.
 - Click  (**Show pending**) - transfers not yet running and awaiting transfer.
5. Click  (**Refresh Now**). The list of transfer updates.
6. Choose transfers to cancel:
 - All transfers - click  (**Cancel all running transfer instances**). All running transfer are canceled.
 - Selected transfers
 - a. Click your required transfers to cancel.
 - b.  (**Cancel selected running transfer instances**). The selected transfer is canceled.

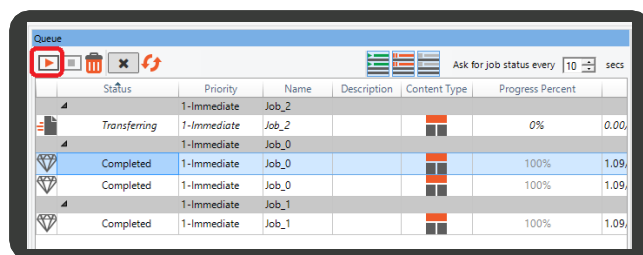


8.1.1.7 Restarting Completed Transfers

Restart completed transfers in the **Network Module Queue** pane.

To restart a completed transfer



1. Click  (**Network Module**).
2. Click  (**Deploy**). The deploy menu appears.
3. In the deploy menu, click  (**Queue**). The **Queue** pane appears.
4. Click  (**Show inactive**). The list of completed transfers and transfers with errors that did not transfer appears.
5. Click  (**Refresh Now**). The list of transfer updates.
6. In the Queue pane, click your required transfer.
7. Click  (**Run Now**). The transfer runs.

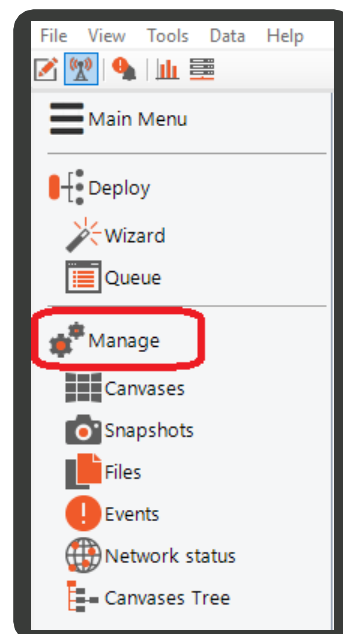



8.1.2 Viewing Canvases in the Canvas Tree

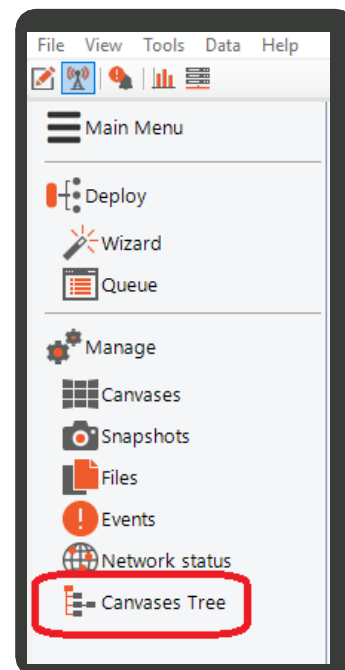
You can view your canvases in the canvas tree. You can also search the canvas tree, view canvases by group, and filter canvases.

To view canvases in the canvas tree

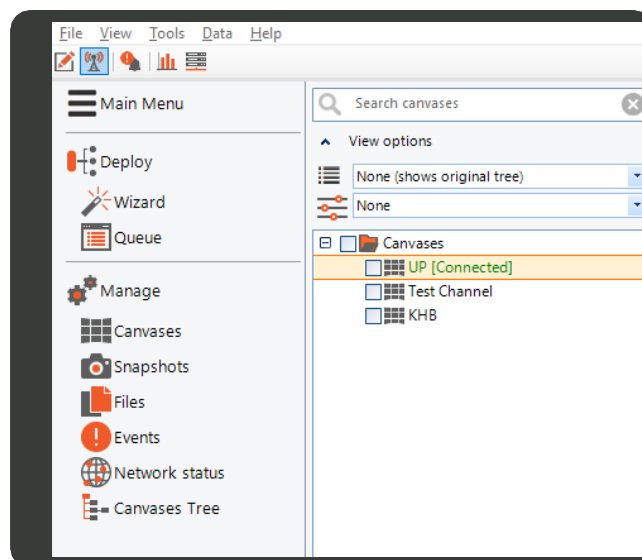
1. Click  (**Network Module**).
2. Click  (**Manage**). The manage menu appears.



3. In the manage menu, click  (**Canvases Tree**).

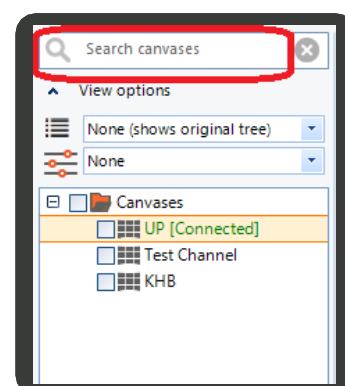


The canvases tree pane appears.



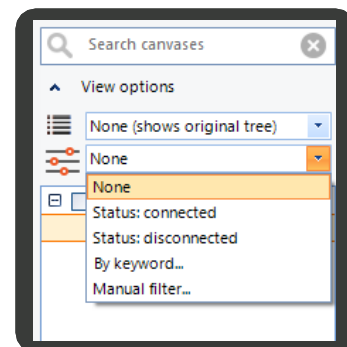
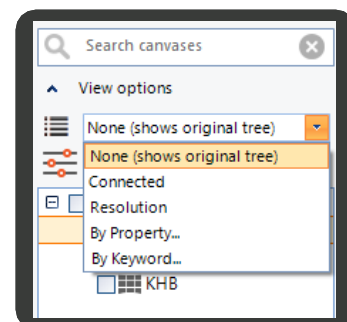
4. View your canvases using any of the following methods:

- search box - type a canvas name



- canvas group - original canvas tree, connected canvases, canvas resolutions, canvas property, or keywords.

- filtering - connected canvases, disconnected canvases, keywords, create a manual filter.




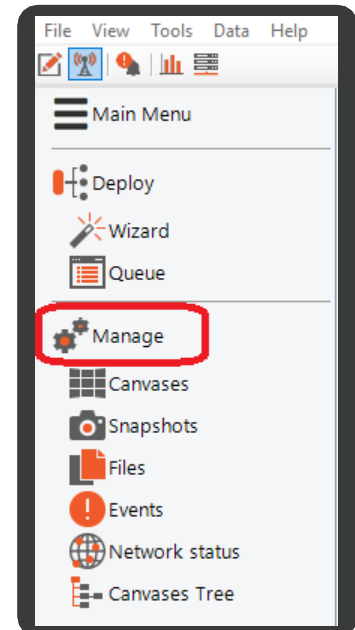
8.1.3 Monitoring Canvases


You can monitor a canvas(es) in the Network Module Canvases pane, including:

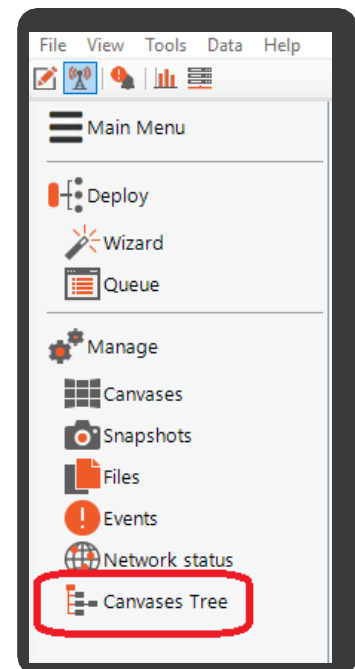
- Player Name
- Status
- IP Address
- CPU
- Disk
- Memory
- Player version
- Canvas (Channel) Name
- Resources

1. Click  (**Network Module**).

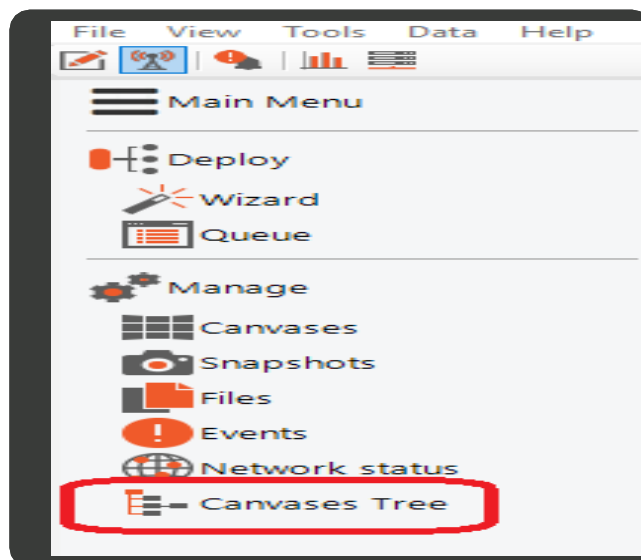
2. Click  (Manage). The manage menu appears.



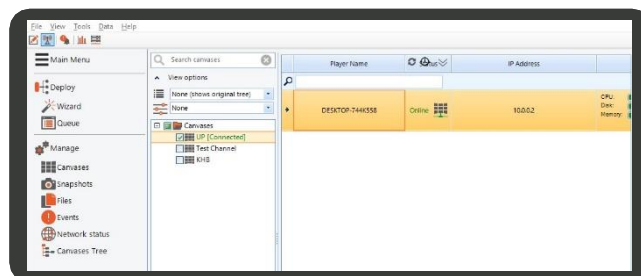
3. In the manage menu, click  (**Canvases Tree**).



The canvases tree pane appears.



4. Select your required canvases.




You can also manage the playlist from the Canvases pane.

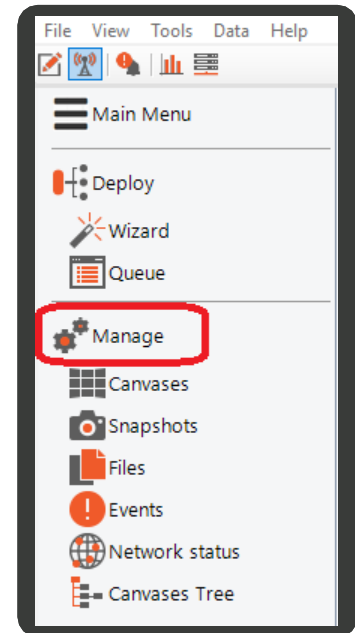
8.1.4 Taking Canvas Snapshots


Periodically grab and view players' output per canvas by collecting playback snapshots in the **Network Module Snapshots** pane. You can view the snapshots playing on all connected canvases from one surface. You can also refresh your snapshots, crop the snapshot to view a part of the snapshot, view snapshot alerts, change the number of seconds to refresh snapshots, and change the size of the snapshot.

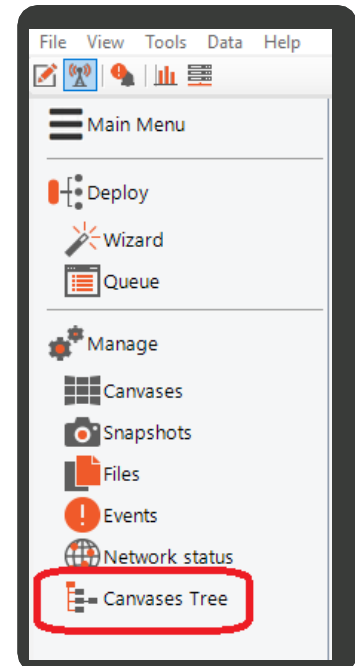
To collect snapshots from your players

1. Click  (**Network Module**).

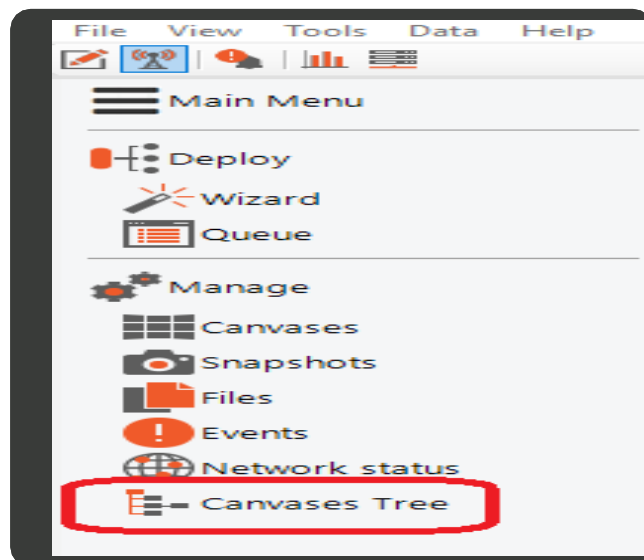
2. Click  (Manage). The manage menu appears.




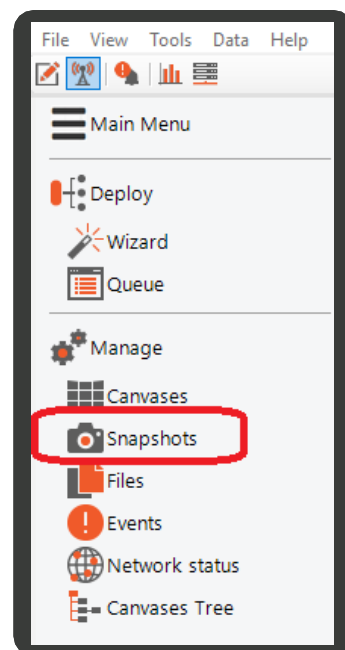
3. In the manage menu, click  (**Canvases Tree**).



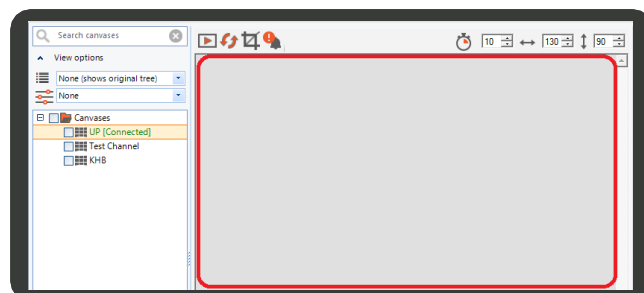
The canvases tree pane appears.



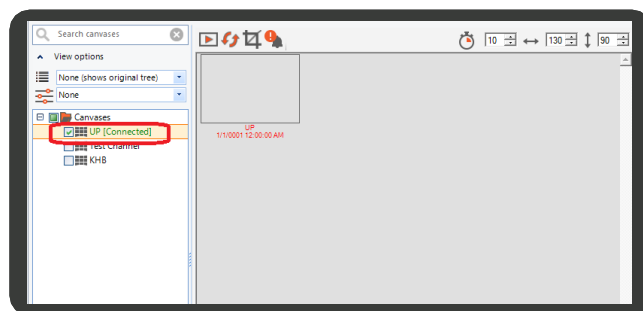
4. In the manage menu, click  (Snapshots).



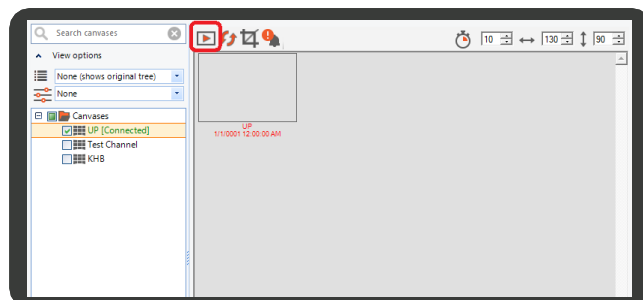
The snapshots pane appears.



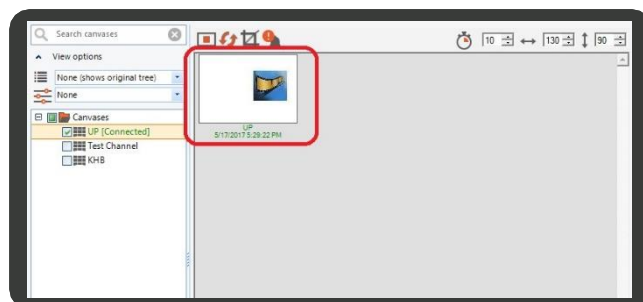
5. Select your required canvases.



6. Click  (Start collecting snapshots).



The snapshot appears.



To refresh snapshots

- Click  (Refresh snapshot). Your snapshots refresh.

To crop a snapshot

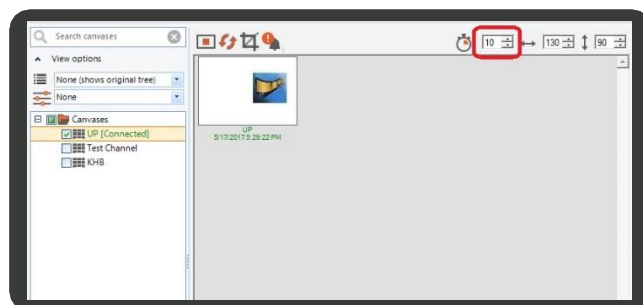
- Click  (Crop input image (Canvases Controller)).



For example, crop a snapshot to view part of the image.

To change the interval for refreshing snapshots

- Type of scroll to your required refresh interval in seconds.

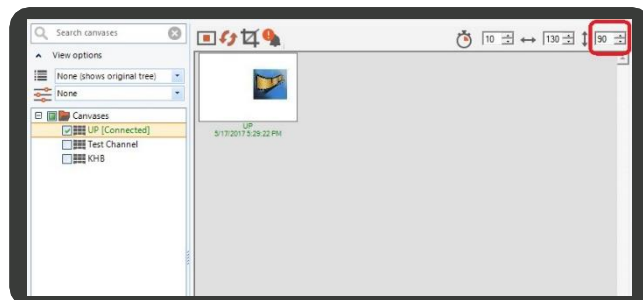




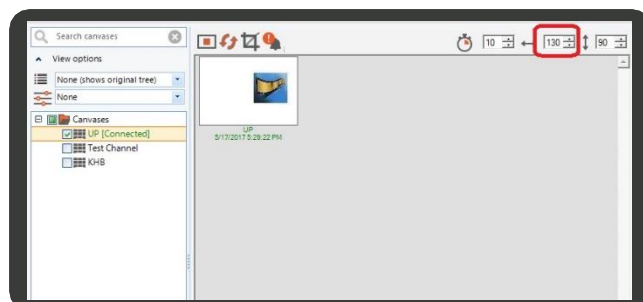
For example, collect snapshots from 2000 sites with a 5 sec interval.

To change the size of your snapshot

- Type or scroll to your required height in pixels.



- Type or scroll to your required width in pixels.



For example, collect small images when you have bandwidth problems.

To check snapshot alerts

- Click  (Check snapshot alert).


To stop collecting snapshots

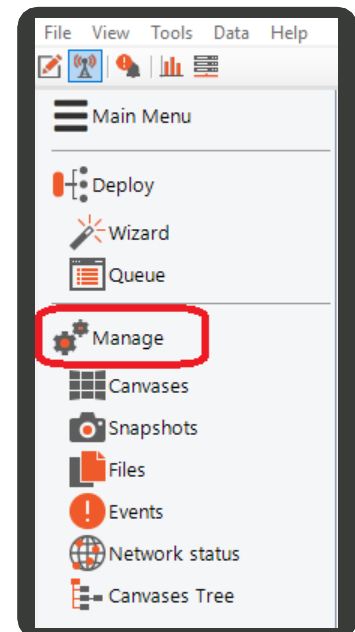
- Click  (Stop collecting snapshots). Your snapshots stop.


8.1.5 Viewing and Managing Files

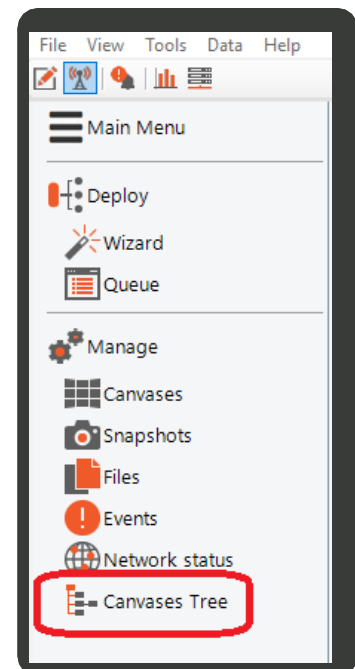
You can view and files on canvases. You can also compare local files with files in the stored in the database.

1. Click  (Network Module).

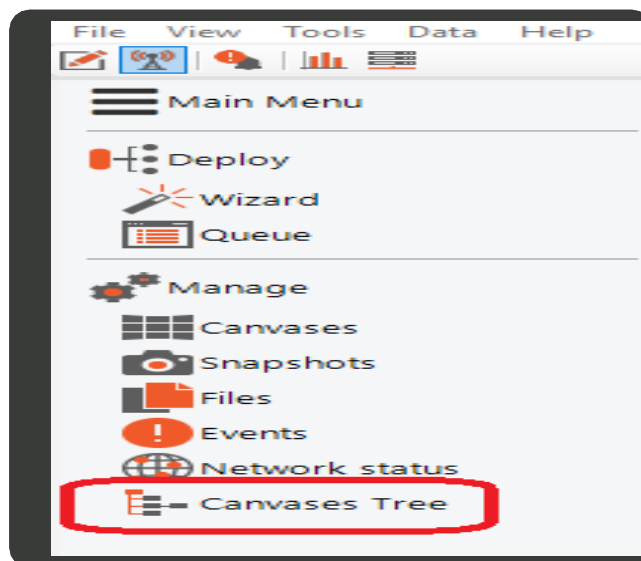
2. Click  (Manage). The manage menu appears.




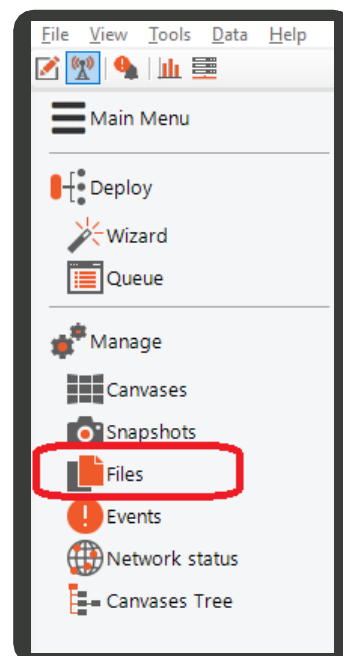
3. In the manage menu, click  (**Canvases Tree**).



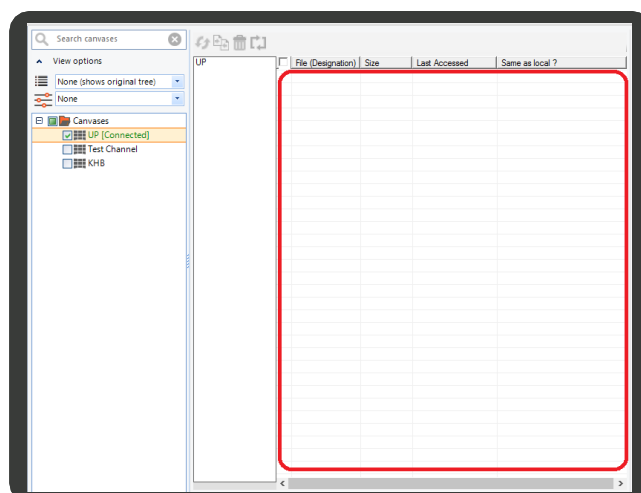
The canvases tree pane appears.




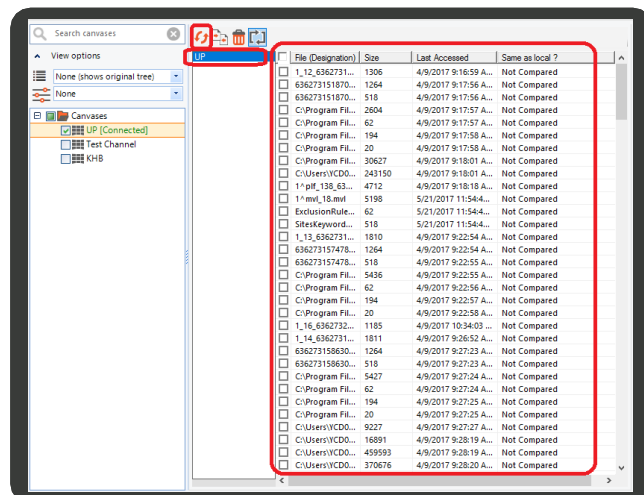
4. In the manage menu, click  (**Files**)




The files pane appears.




5. Select your required canvas and then click  (Dir).
The canvas' files appear.



To Compare files

1. Select your required files.
2. Click  (Compare). The **Same on Local?** column shows whether the file is the same as the file in the database.



To delete files

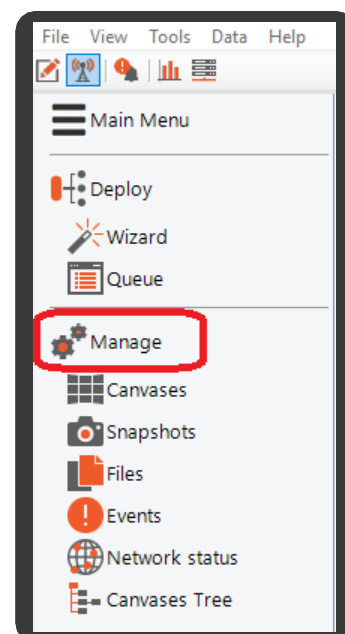
1. Select your required files.
2. Click  (Files).




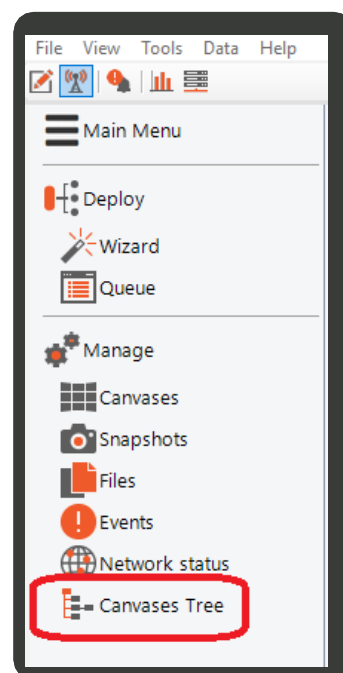
click to clear the selected files and select all other fiels.

8.1.6 Viewing Events

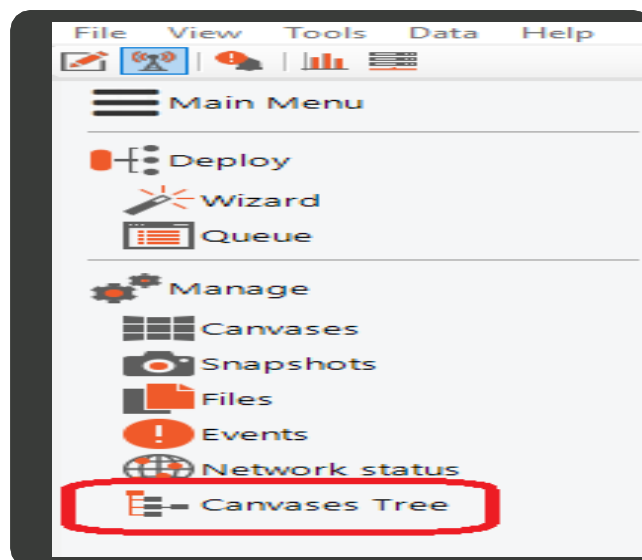
1. Click  (Network Module).
2. Click  (Manage). The manage menu appears.




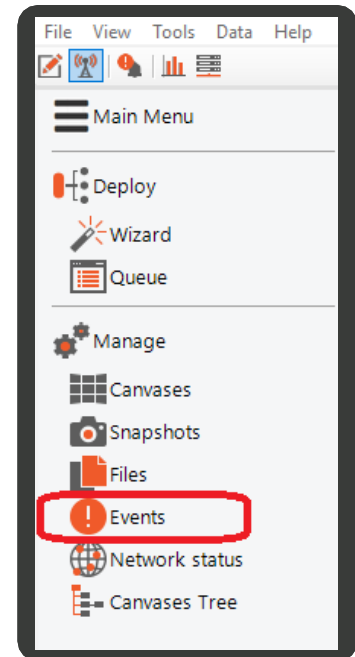
3. In the manage menu, click  (**Canvases Tree**).



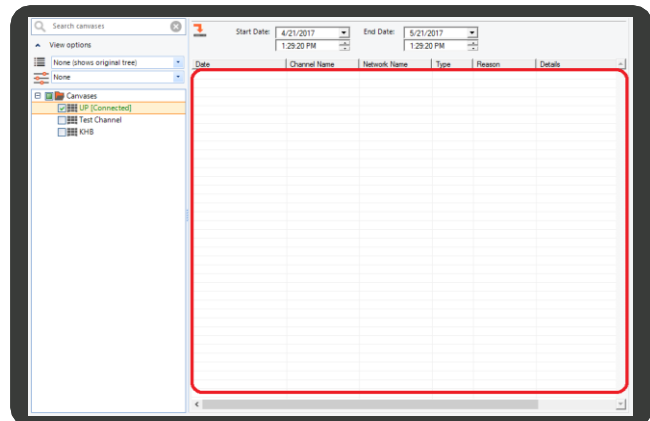
The canvases tree pane appears.




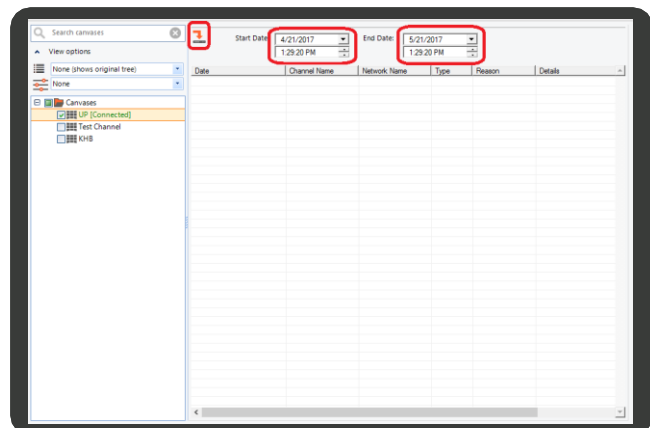
4. Click  .



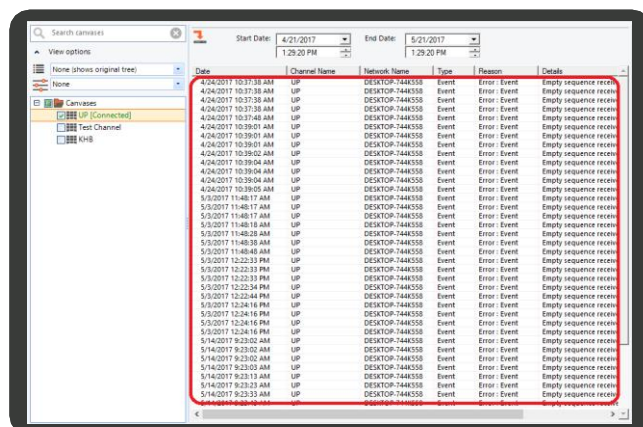
The events pane appears.



5. In **Start Date**, click your required start date and time.
6. In **End Date**, click your required end date and time.
7. Click  (**Query events**).





The events appear.

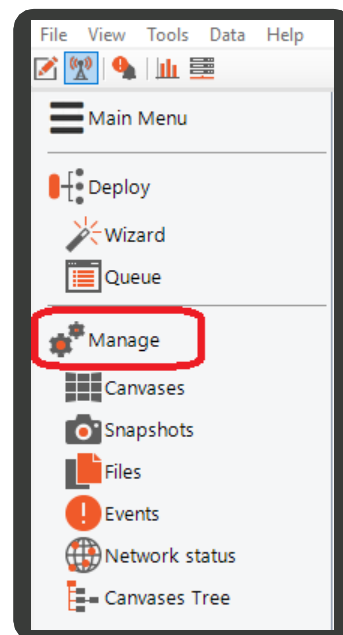


8.1.7 Monitoring Network Status

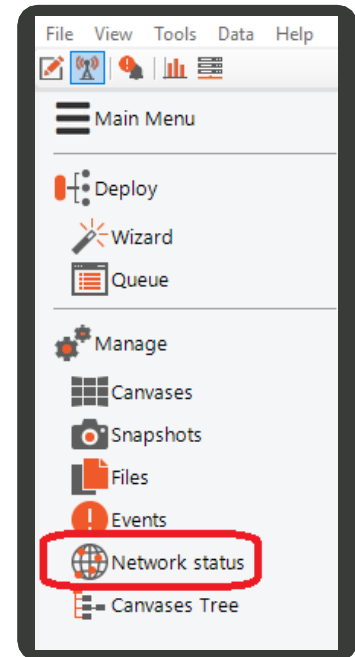
Monitor your network and the connectivity status of your canvases in the **Network Module Network Status** pane.


To monitor your network status

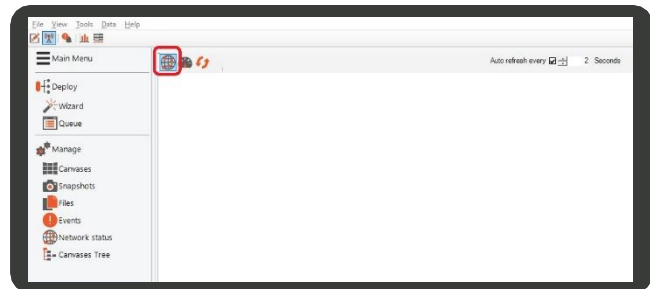
1. Click  (**Network Module**).
2. Click  (Manage). The manage menu appears.




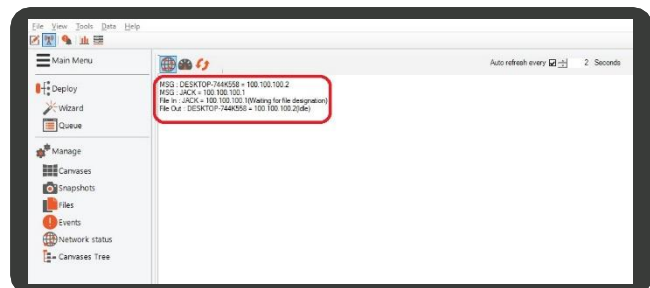
3. In the manage menu, click  (**Network Status**). The network status pane appears.



4. In the network status pane, click  (**Network Status**).



5. Click  (**Refresh**). The network status appears.




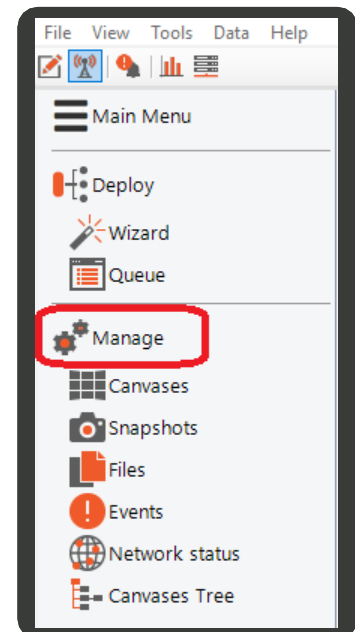
8.1.8 Controlling Network Speed

Control the speed of the network in the **Network Module Network Status** pane.

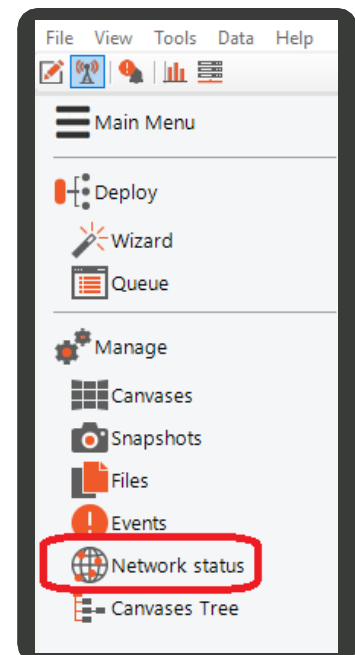
To control the network speed


1. Click  (**Network Module**).

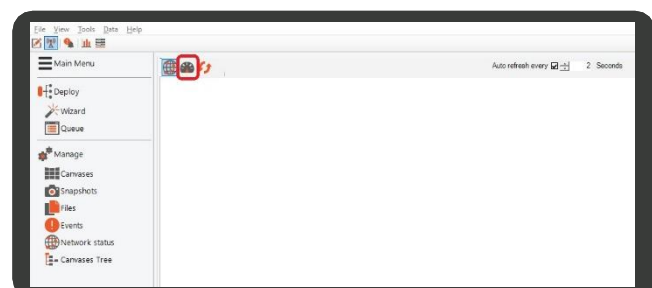
2. Click  (Manage). The manage menu appears.




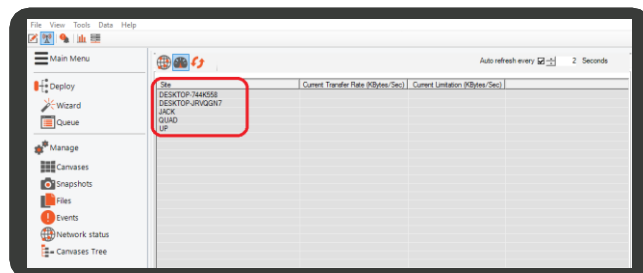
3. In the manage menu, click  (**Network Status**). The network status pane appears.



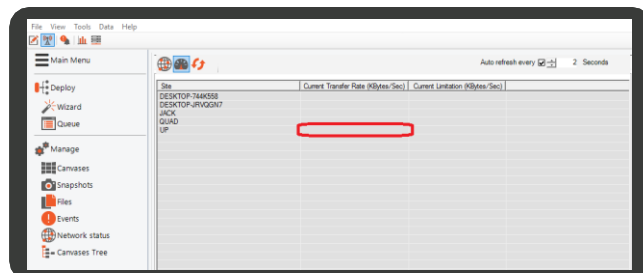
4. In the network status pane, click  (**Traffic Control**).



5. Click  (**Refresh**). The network sites appear.

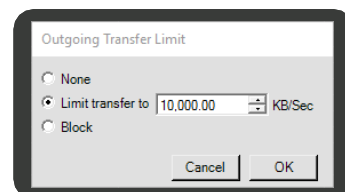


6. Click in a site's **Current Transfer Rate (KBytes/Sec)** to change the transfer rate. The **Outgoing Transfer Limit** appears.

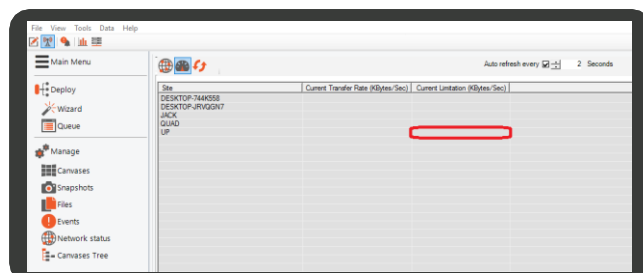


7. Select your required transfer rate, choose either

- **None** - no limit
- **Limit transfer to** - type or scroll to your limit in KB per second
- **Block** - block transfer

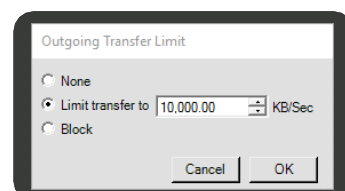


8. Click in a site's **Current Limitation Rate (KBytes/Sec)** to change the transfer rate. The **Outgoing Transfer Limit** appears.




9. Select your required transfer limit, choose either

- **None** - no limit
- **Limit transfer to** - type or scroll to your limit in KB per second
- **Block** - block transfer



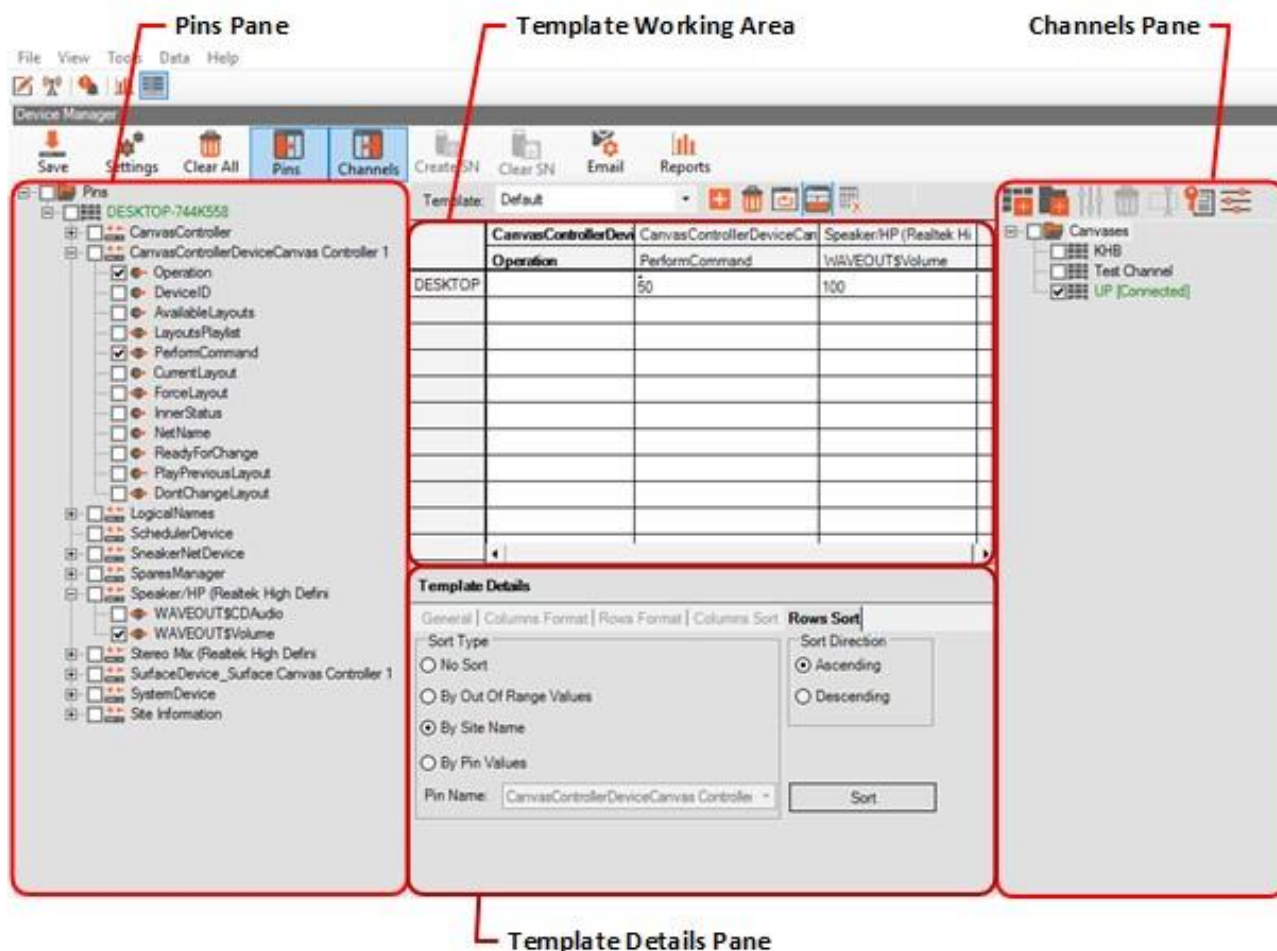
8.2 Managing Players and Canvases

Build templates to receive real time data and manage your devices / players using the  (**Device Manager**). The

Device Manager is presented in tabular form, so you can easily view and control individual and groups of online devices / players, with particular reference to large area digital signage and advertising networks with hundreds of players and attendant displays.

Use the **Device Manager** to remotely execute changes to multiple devices settings and create templates of single or grouped devices actions for future implementation.

The **Device Manager** interface consists of the following main parts:



Pins Pane - Lists the pins groups. Each pins group contains a list of unique pins you can set to manage your canvases.

Template Working Area - Lists selected pins in a table. Each selected pin becomes a column, each canvas is listed in a separate row. You can set the parameters of the pins to suit individual canvases or multiple canvases.

Channels Pane - Lists the Players and their associated canvases. The player must be connected (online) in order to also appear in the Pins pane. Players that are not online will appear as disconnected in the **Channels** pane.

Template Details Pane - View and edit the parameters that have been pinned to the canvases in the template working area.





8.2.1 Working with the Template Toolbar

Use the template toolbar to create and manage your templates.



Use the following toolbar options to manage your templates:


Option	Description
	Opens list of saved templates.
(Create new template)	Creates a new template.

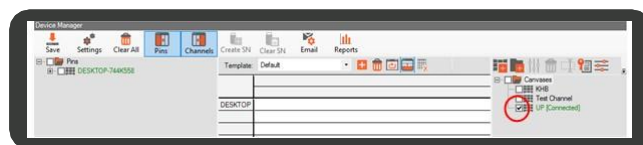
Option	Description
 (Delete selected template)	Deletes the open template.
 (Reload Selected template)	Reloads the open template.
 (Show template details)	Opens the Template Details pane.
 (Export pin details)	Save the table in an in an Excel format on a local drive.




8.2.2 Using Templates to Manage Canvases

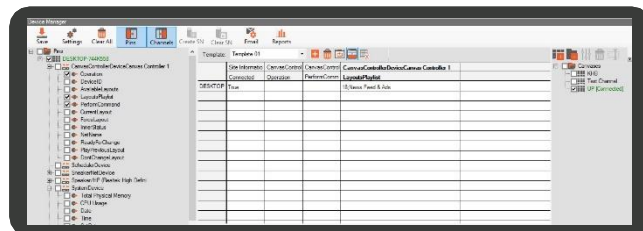
Create templates to control and manage the data your canvases send and receive. The templates allow you to set the same pins to numerous canvases. You can also individualize how each pin interacts with specific canvases.




To create a template

1. In the Mode Toolbar, click  (**Device Manager**).
2. In the **Channels** pane, expand the canvases list to view your list of players and canvases.
3. Select the check boxes of the players and canvases you want to include in your template. Once selected they will appear in the Pins pane and Template Working Area.



4. In the Pins pane, expand the player to expose the  (**Device**) list.
5. Expand a  (**Device**) to expose the individual pins.
6. Select the check box of each pin you want added to the Template Working Area. You can also select the check box next to the  (**Device**) to add all the pins from that group.








7. Create a new name for the Default template:
 - a. In the Command Toolbar, click  (**Show template details**) to open the **Template Details** pane.
 - b. In the **General** tab, click the **Rename Template** button to open the **Rename** dialog box.
 - c. Type a name, then click **OK**.
 - d. Click  (**Save**), then click  (**Show template details**) to hide the details pane.

8.2.3 Arranging Template Details

You can arrange the layout of the template in the **Template Details** pane.

To arrange the template layout

1. In the Template Toolbar, click the  (**Show template details**) icon to open the **Template Details** pane.
2. Set your template according to the following tabs:
 - **General** tab - Provide a new name for your template.
 - **Columns Format** tab - Click the  and  arrows to change the order of the pin columns.
 - **Rows Format** tab - Click the  and  arrows to change the order of the rows.
 - **Columns Sort** tab - Sort the columns according to invalid values or alphabetically.
 - **Rows Sort** tab - Sort the rows according to invalid values, site name, or pin value.


8.2.4 Setting Up Email for Notifications

Set up the device manager to send email notifications that alert you changes in connectivity status or pin values. The emails can be sent to multiple addresses at once.

8.2.4.1 Sending a Test Message

Send a test email to ensure the system functions correctly.

To send a test message

1. In the Command Toolbar, click  (**Show Email Setting**).
2. In the **General** tab, in the General Details section, set the correct email address and computer source.
3. In the **Test** section, type an email address, then press the **Send Test Message** button.

To send emails, you must first set the correct SMTP details for your email address.

To set your SMTP details



In the Menu Toolbar, click **Data**, then click **Preferences**



In the **Preferences** dialog box, click the **Alerts** tab, then in the **Email Settings** section define the SMTP according to your email settings.

Click **OK**.

8.2.4.2 Adding Contacts

Create a database of contacts, then add the contacts to the pins' properties to ensure they receive email notifications of relevant activities.

To add a contact

1. In the Command Toolbar, click  (**Show Email Setting**).
2. In the **Contacts** tab, click  (**Create new contact**), then set the **Contact Name**, **Email Address**, **Mail Status**, **Message in Body** and **Message in Attachment** fields.

3. Click on the contact, then set the **Default Pin Notification Settings** for this contact.
4. In the **Connected Pins** section, click  to view pins connected to this contact.






Before you can open the **Connected Pins** section, you must return to the Template Working Area to connect this contact to the relevant pins, see [Section 8.2.5.5 \(Sending Email Notifications\)](#).

5. Click  (**Save**).

8.2.4.3 Monitoring Site Connection

You can define how closely you want to monitor the site's connectivity by setting the parameters for sending email notifications.




To monitor the site connection

1. In the Command Toolbar, click  (**Show Email Setting**).
2. In the **Site Connection Monitoring** tab, select one of the following options:
 - **Channels Events** - Will send an email to the selected contacts in all instances where the site connects and / or disconnects.
 - **Connection Failure Alerts** - Will send an email to the selected contacts only in those instances when the site disconnects for a minimum of the set value (in seconds, minutes, hours or days), and resets the connected status only when the connection exceeds the set value.
3. In the **Send Setting** section, set the maximum frequency you want email notifications to be sent.
4. In the **Send Email To** section, click  (**Create new contact**) to select the contacts to whom the email notifications must be sent.
5. Click  (**Save**).

8.2.4.4 Emailing Templates

You can create email templates to send notifications to defined groups of people. Add the template to the pins properties to ensure all relevant contacts always receive important email notifications.


To create an email template

1. In the Command Toolbar, click  (**Show Email Setting**).
2. In the **Email Templates** tab, in the Email Templates pane, click  (**Add Template**).
3. In the **Email Template Details** section, type a name for your template.
4. In the **When To Send** tab, set the parameters values for sending email notifications.
5. In the **Contact Details** tab, click  (**Create new contact**).

6. Double click on the **Contact Name** field, click the down arrow, then select a contact. You can add multiple contacts.



All contacts added to the template must first be added as a contact to the database, see [Adding Contacts](#).

7. In the **Email Templates** box, select a template, then click the **Load Templates** button.
8. Click  (**Save**).



You can now add the template to the email notifications setting. To do this, see [Section 8.2.5.5 \(Sending Email Notifications\)](#).

8.2.5 Configuring and Monitoring Pins

The template working area provides you with a visual overview of health and status of your devices and pins. You also access and set the parameters of your pins through the template working area.



Use the template working area for the following purposes:

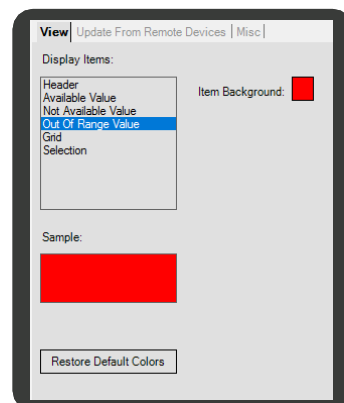
- Receive visual notifications of the status of your devices and pins.
- Set the following for each pin:
 - [Values](#) - Set values for pins whose input and output data can be edited.
 - [Properties](#) - Define parameters for values, set email notifications, save data to a log, and view edited cells.
 - [Schedules](#) - Set playback rules.

8.2.5.1 Monitoring the Pins' Status

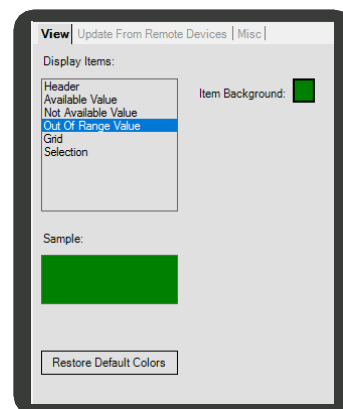
Use the template working area to receive a visual feedback on the health and status of your pins. You can also define the settings of how this feedback should look. In our example, we set the Out of Range Value to green. This means that when a pin's value exceeds the valid range, the cell in template working area will turn green.

To set the visual feedback

1. In the Mode Toolbar, click  (**Device Manager**).
1. In the Command Toolbar, click  (**Settings**).
2. In the **View** tab, in the **Display Items** section, click **Out of Range Value**, then click the **Item Background** color box.
3. In the Color dialog box, select green, then click **OK**.

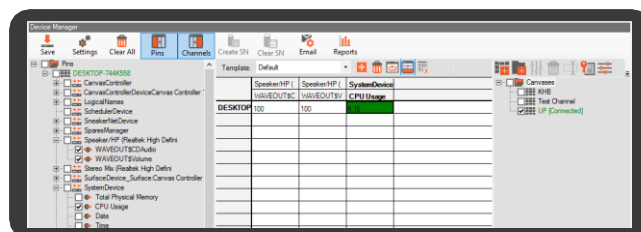


The **Out of Range Value** is now set to green.



4. Click  (**Save**), then click the  (**Settings**) button to return to the Template view.

Pins whose values exceed their set ranges will now appear green in the template working area.






8.2.5.2 Editing Pins Values


Edit the value of a pin in a single cell. For cells with the same value, you can edit multiple cells at the same time, and also copy and paste set value of one cell to another.

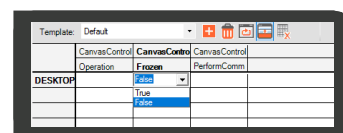
Each pin has one of the following value attributes:




-  (**Output only**) - Provides data that cannot be edited (read only).
-  (**Input only**) - Doesn't provide any data, you need to set the value (write only)
-  (**Output-Input**) - Provides data that can be edited (read and write)

To set the value of a pin in a single cell


1. In the Mode Toolbar, click  (**Device Manager**).
2. Right click on a cell, then type or select a value according to the options available.



To set the value of a pin in multiple cells

1. In the Mode Toolbar, click  (**Device Manager**).
2. Hold the **Ctrl** button, then use your mouse to select the cells.
3. Right click in one of the selected cells to open the values option box, then set the value.
4. Press the **Enter** button or click outside of the cell to implement the new value in the selected cells.

To copy and paste the values to other cells in the same pin column

1. In the Mode Toolbar, click  (**Device Manager**).
2. Right click on the cell you want to copy, then click **Copy Value**.
3. Highlight the cells where you want to set the values, right click, then click **Paste Value**.



Cells that are gray do not have the option to carry that device / pin value.

8.2.5.3 Editing Pin Properties

You can set the following properties for each pin:

- [Valid Values](#) - Define the parameters of a valid value.
- [Email Notifications](#) - Set which contacts must be notified when the values reach defined valid or invalid parameters.
- [Save Values](#) - Store monitoring information for creating activity reports.
- **Edited Cells** - Lists the cells whose properties have been edited.

Once you have set the properties of one pin, you can copy and paste these parameters to other cells in the template working area.



To copy and paste the properties to other cells in the same pin column

1. Right click on the cell you want to copy, then click **Copy Properties**.
2. Press **Ctrl** and highlight the cells where you want to paste the properties, right click, then click **Paste Properties**.

8.2.5.4 Defining Valid Values

You can define the parameters of a valid value for a specific pin. When the pin's value falls outside this definition, it becomes invalid. The cell in the Template Working Area changes color to alert you to an invalid value. You can also set up email notifications to alert personnel to the occurrence of an invalid value.

To define the pins' valid values

1. In the Mode Toolbar, click  (**Device Manager**).
2. In the Template Working Area, right click on the relevant pin, then click **Edit Properties** to open the **Pin Properties** dialog box.
3. In the **Valid Values** tab, select one of the following options:
 - **All Values are Valid**
 - **Valid Range** - Set a range of valid values.
 - **Valid Values List** - Click  (**Add valid value**) to add one or more new valid values.
4. Click **Save** to save and close, or click the **Email Notification** tab.





The cell in the template working area will change color when the value becomes invalid. See [Section 8.2.5.1 \(Monitoring the Pins' Status\)](#) to set the color's definitions for invalid values.


8.2.5.5 Sending Email Notifications

You can set Messenger to email selected contacts or a group of contacts to alert them to the pin's activity. You can define which pin's values will trigger the email alert.

To set email notifications

1. In the Mode Toolbar, click  (**Device Manager**).
2. In the Template Working Area, right click on the relevant pin, then click **Edit Properties** to open the **Pin Properties** dialog box.
3. In the **Email Notifications** tab, select the **Enable Email Notification** check box.
4. In the **Create Message** section, set one or more notification parameters.
5. In the **Message Filter** section, set the value and time filters to limit the number of email notifications.
6. In the **Send Email To** section, click  (**Create new contact**), double click on the **Enter name**, then click the drop-down arrow to select a name from your contact list.
7. In the **Settings** section, select either the default settings or set new criteria for emailing notifications to the contact.
8. To add an email template, in the **Email Templates** box, select a template, then click **LoadTemplate**.
9. Click **Save** to save and close, or click the **Save Values** tab.




An  (**Email Notification**) icon will appear in the relevant cell in the Template Working Area. To remove the email notification, right click on the cell, then click **Remove Email Notification**.


8.2.5.6 Logging Pins Values

Save and store pins' activity. This can then be used for creating activity reports, see [Creating Reports](#).

To save the pin values

1. In the Mode Toolbar, click  (**Device Manager**).
2. In the Template Working Area, right click on the relevant pin, then click **Edit Properties** to open the **Pin Properties** dialog box.
3. In the **Save Values** tab, select the values you want saved.
4. In the **Enable Time Filtering** check box to set a maximum number of saved values for a set period of time.
5. Click **Save**.



Once you have saved an option in the **Save Values** tab, a  (**Saved**) icon will appear in the relevant cell in the Template Working Area. To remove the saved values right click on the cell, then click **Remove Save Option**.

8.2.5.7 Editing Pin Schedules

You can schedule playback rules to each pin using the **Edit Schedule** dialog box.


As an example, we will schedule an audio pin in a speaker device. The audio will be set to silent (Off) during the night and with various volume ranges during the day.

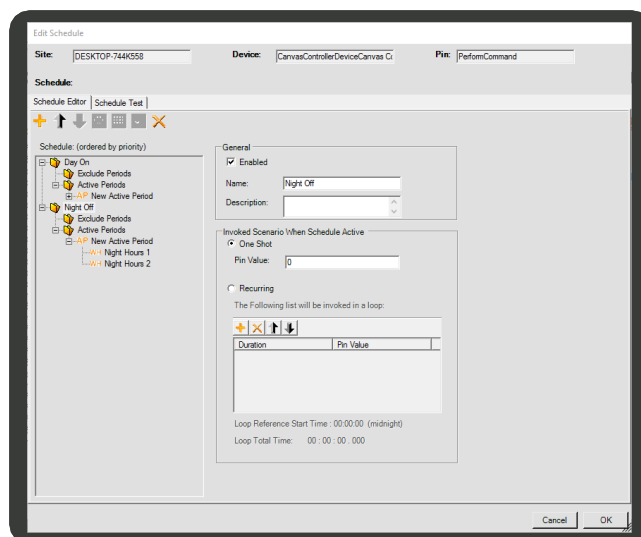
The following illustrates a day and night time schedule workflow:

1. [Set the night time schedule.](#)
2. [Set the day time schedule.](#)
3. [Test the schedule.](#)

To set the night time schedule

1. Right click on the cell whose schedule you want to edit, then click **Edit Schedule** to open the **Edit Schedule** dialog box.

2. In the **Schedule Editor** tab, click  (**Add schedule**).
3. In the **General** section, type a name and description.
4. In the **Invoked Scenario When Schedule Active** section, select **One Shot** to set a single pin value for the entire schedule, then set the value to 0.

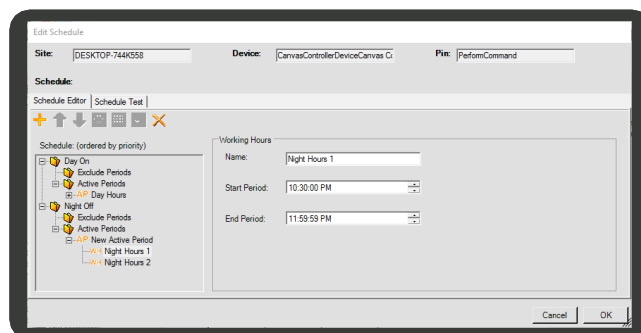


5. In the **Schedule** pane, click **New Active Period** to open the **Active Period** pane.
 - a. Set the active period according to the year, month, day and time. For this example, **No Limit** is selected.
6. In the **Schedule** pane, click **New Working Hour** to open the **Working Hours** pane, then type a name.



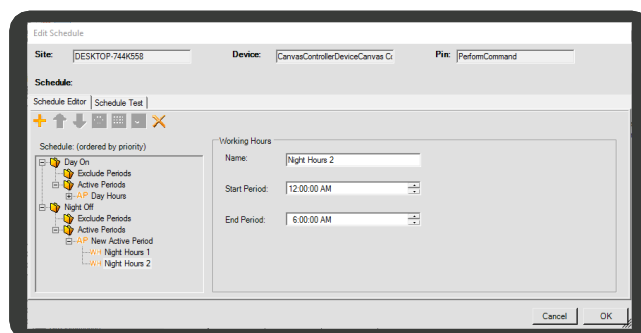
The start period must be earlier than the end period; therefore, a schedule that starts in the evening and ends the next morning must be split into 2 working hours.

7. Set the start and end periods for the first New Working Hour as shown in the image.





8. In the **Schedule** pane, click **New Active Period**, then click  (Add working hours) to add a New Working Hour.

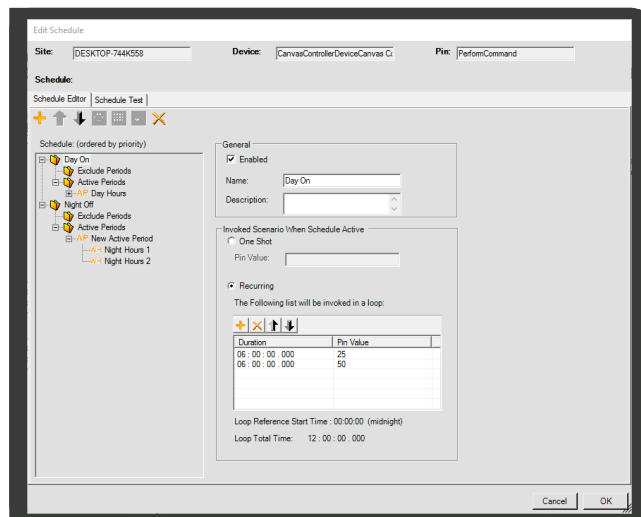
9. Click the new **New Working Hour**, then type a name and set the start and end times as shown in the image.



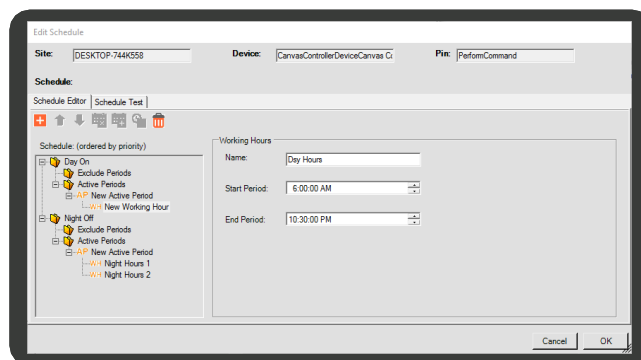
The Night Off schedule is now set from 10:30pm to 6:00am the following day.

To set the day time schedule

1. In the **Schedule Editor** tab, click  (Add schedule).
2. In the **General** section, type a name and description.
3. In the **Invoked Scenario When Schedule Active** section, select **Recurring** to set multiple pin values that will be invoked in a loop, according to the set duration.
 - a. Click  (Add), then set the duration and pin value, as shown in the image.



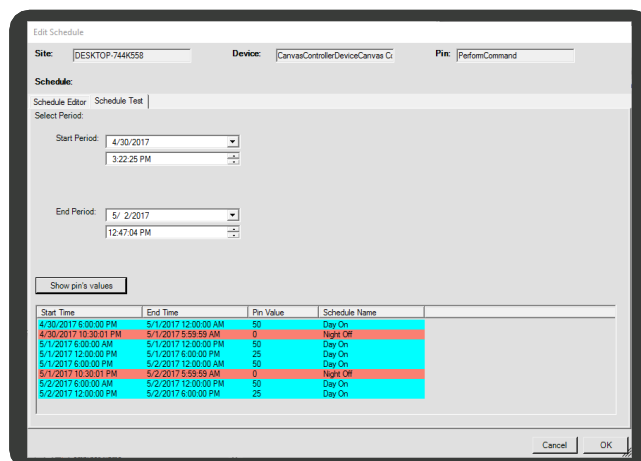
4. In the **Schedule** pane, click **New Working Hour** to open the **Working Hours** pane, then type a name and set the start and end times as shown in the image.




Ordered by priority - If the set working hours clash between different schedules, priority will be given to the schedule listed first in the **Schedule** pane.

To test the schedule

1. In the **Schedule Test** tab, set the start and end boxes for the period you want to test.
2. Click the **Show pin's values** button to view your complete schedule.



A  (**Schedule**) icon will now appear in the relevant cell in the Template Working Area. To remove the schedule, right click on the cell, then click **Remove Schedule**.

To copy and paste the schedule to other cells

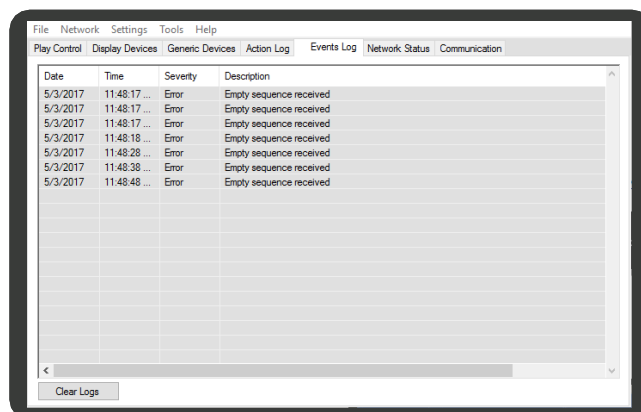
1. Right click on the cell you want to copy, then click **CopySchedule**.
2. Press **Ctrl** and highlight the cells where you want to paste the schedule, right click then click **Paste schedule**.

8.2.6 Setting Up Canvas Events

The Player logs events such as errors and warning, as shown in the image. You can set up Messenger to monitor these transmission errors on the Player. This is done by setting up the pins to log events and record when they have been unsuccessful.

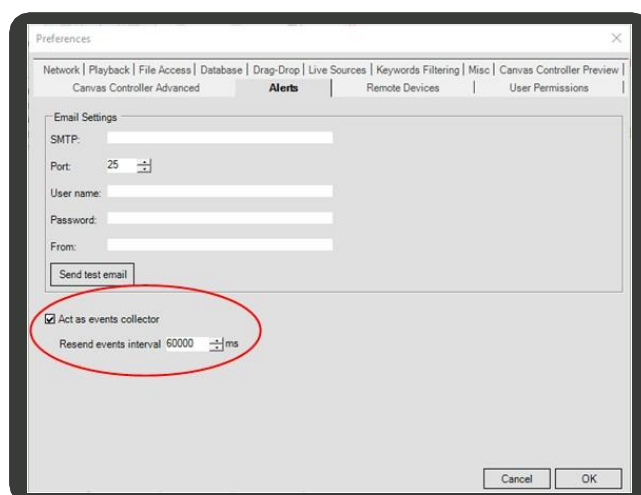
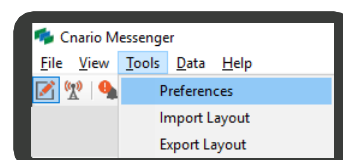
Use the following work flow to collect and view the events log in Messenger:

1. [Set up the events collector](#).
2. [Set the log events pin](#) in the **Device Manager**.
3. [View the canvas events](#) in the **Network Module**.






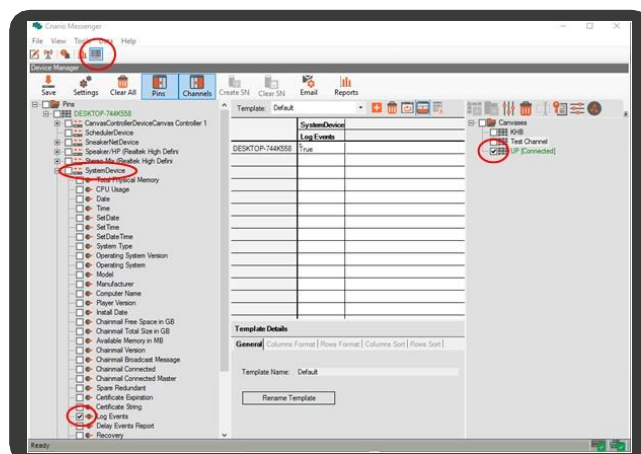
To set up the events collector




1. In the Menu Toolbar, click **Tools**, then **Preferences** to open the **Preferences** dialog box.
2. In the **Alerts** tab, select the **Act as events collector** check box, then set the Resend events interval.
3. Click **OK**.

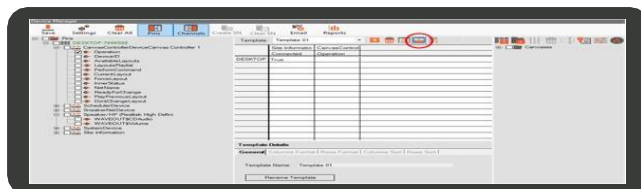


To set the log events pin




1. In the Mode Toolbar, click  (**Device Manager**).
2. In the **Channels** pane, select a canvas.
3. In the Pins pane, expand the player to expose the  (**Device**) list.
4. In **SystemDevices**, select the **Log Events** pin.
5. Click  (**Save**) if you have added the pin to an existing template.

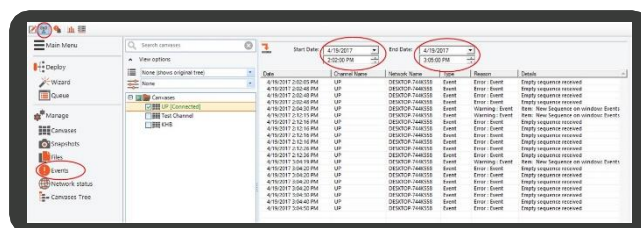


6. If you have created a new template rename it to Log Events.
 - a. In the Command Toolbar, click  (**Show template details**) to open the **Template Details** pane.
 - b. In the **General** tab, click the **Rename Template** button to open the **Rename** dialog box.
 - c. Type a name, then click **OK**.
 - d. Click  (**Save**), then click  (**Show template details**) to hide the details pane.



To view the canvas events

1. In the Mode Toolbar, click  (**Network Module**), then click the  **Channel Events** to view the messages.
2. Set the Start and End Dates and time, then click  (**Query Events**).






8.2.7 Creating Reports

Create customized and detailed reports of played items. Use the report module to deliver comprehensive playback accountability.




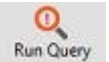

You can create 2 types of reports in the **Device Manager**:

- **Sites Report** - Details sites' connection and / or disconnection activity.
- **Pins Value Report** - Uses the saved data (to save your data, see [Section 8.2.5.6 \(Logging Pins Values\)](#)) to create reports detailing occurrences of valid or invalid values.

To create a site report

1. In the Command Toolbar, click  (**Show History Reports**).
2. In the **Save Definitions** tab, in the **Sites Reports** section, select one of the following options:
 - **Channels Events** - Includes in the report all instances where the site connects and / or disconnects.
 - **Connection Failure Alerts** - Includes in the report only in those instances when the site disconnects for a minimum of the set value (in seconds, minutes, hours or days), and resets the connected status only when the connection exceeds the set value.
3. In the **Query Sites Connections** tab, in the **Data Limits** section, set the start and end dates and times for data you want included in the report.
4. In the **Sites** section, select the check boxes of the sites you want included in the report, then click  (**Run Query**) to display the data in the **History Data** section.
5. Click  (**Create Excel**) to save the data on a local drive.

To create a pins value report

1. In the Command Toolbar, click  (**Show History Reports**).
2. In the **Save Definitions** tab, in the **Pins Values Report** section, select the **Enable pins value saving** check box.
3. In the **Current Status** tab, click the  (**Get all pins that are currently being saved**) icon to list all the pins with saved values.
4. Remove the pins whose values you do not want in the report:
 - a. Click on the pin you want deleted, then click  (**Remove saving from all selected pins**).
5. In the **Query Pins Values** tab, in the **Data Limits** section, set the start and end dates and times for data you want included in the report.
6. In the **Sites** section, select the check boxes of the sites with the pins you want included, then in the **Pins** section, select the pins whose values you want included.
7. Click  (**Run Query**) to display the data in the **History Data** section.
8. Click  (**Create Excel**) to save the data on a local drive.

8.2.8 Maintenance

Keep your system running smoothly by:

- Maintaining the health of your system - Clean up and discard unused files and layouts and set scheduled restarts.
- Monitoring content - Create a template that allows you to monitor and control display layouts, items, windows and other content parameters.

8.2.8.1 Maintaining the Health of Your System

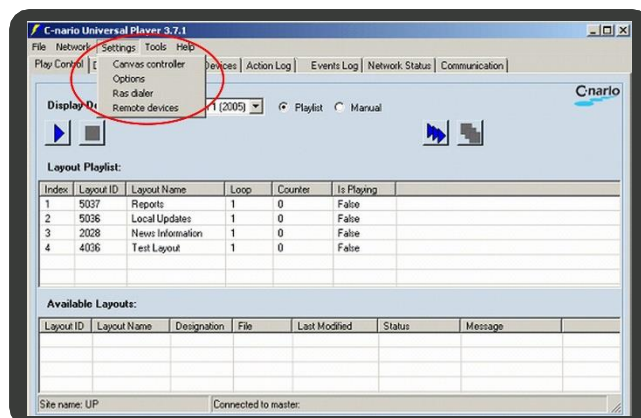
Keep your system running smoothly by ensuring unused files and layouts are deleted and by scheduling regular restarts for your players.

8.2.8.1.1 Auto-Deleting Unused Media Files

Set the Player to automatically delete media items that are no longer connected to an existing layout. This will help you maintain a clean hard drive and lower your memory usage. This is particularly important for dynamic layouts with content that is regularly updated.

To enable the auto-delete

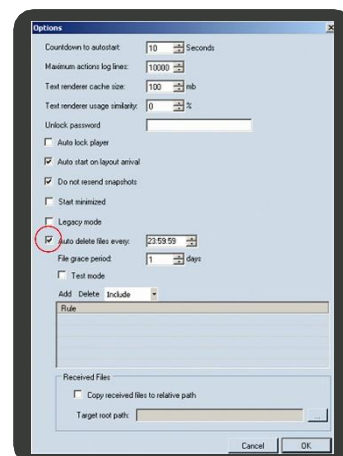
1. In the Player, in the Menus Toolbar, click **Settings**, then click **Options**.



2. In the Options dialog box, select the **Auto delete files every** check box, then type or set the frequency you want the unused files to be deleted. The default frequency is set at one a day (every 24 hours).
3. Set the **File grace period** (in days).



The **File grace period** provides an addition delay between when the files are identified as being eligible for deletion and deleting them from the hard drive.

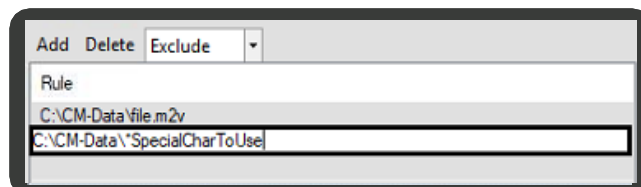


4. Select the **Test mode** check box to activate the Auto delete without actually deleting the media files.



Test mode allows you to see which files will be deleted, without the risk of deleting these items.

5. Add a rule to indicate which items must always be excluded from the 'auto-delete' (optional)
 - a. In the drop-down box, select **Exclude**, then click **Add**.
 - b. In the **Rule** pane, type the location and name of the item(s) you want excluded from the deletion process.
6. Click **OK**.



8.2.8.1.2 Deleting Unused Layouts

You can manually delete unused layouts from the player to save space and memory. The layouts are deleted from the canvas. The canvas is then synced with the player.



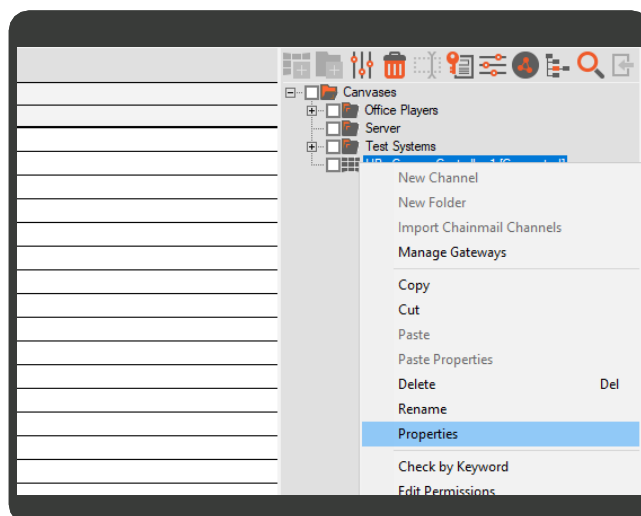
Before you can delete the layout from the canvas, you must first set the Auto-delete option in the Player, see [Section 8.2.8.1.1 \(Auto-Deleting Unused Media Files\)](#).

To manually delete a layout

1. In the Mode Toolbar, click  (**Device**

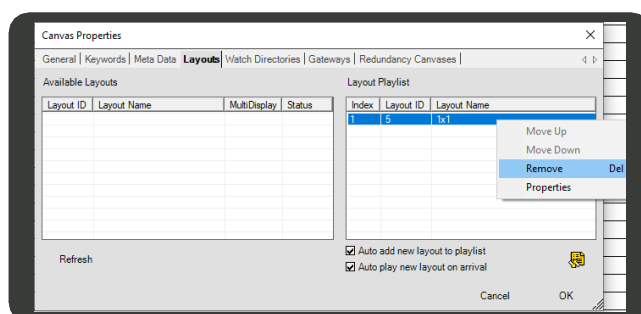
Manager).


2. In the **Channels** pane, right click on the canvas / player where the layout is located, then click **Properties**.



3. In the **Canvas Properties** dialog box, click the **Layouts** tab.

4. In the **Layout Playlist** pane, right click on the layout you want to delete, then click **Remove**.



5. Click  (**Sync**), then click **OK**.


8.2.8.1.3 Scheduling Regular Restarts

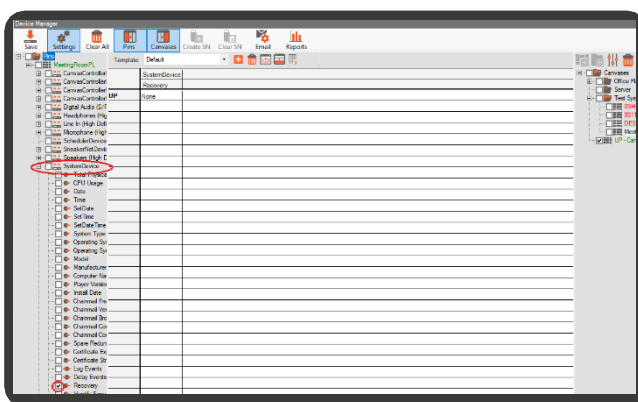
You can schedule regular restarts to refresh your player. You can choose how frequently you want your system to be restarted.

The following work flow illustrates how to schedule a daily restart for your player:

1. [Set the Recovery pin.](#)
2. [Add a schedule to the Recovery pin.](#)
3. [Add an active period to the schedule.](#)
4. [Add a working hour to the active period.](#)
5. [Save the template settings](#)

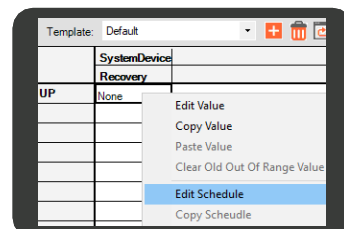
To set the recovery pin


1. In the Mode Toolbar, click  (**Device Manager**).
2. In the **Channels** pane, select the player(s) for which you want to set scheduled restarts.
3. In the Pins pane, expand the player to expose the **(Device)** list.
4. Expand **SystemDevice**, then select the **Recovery** pin.

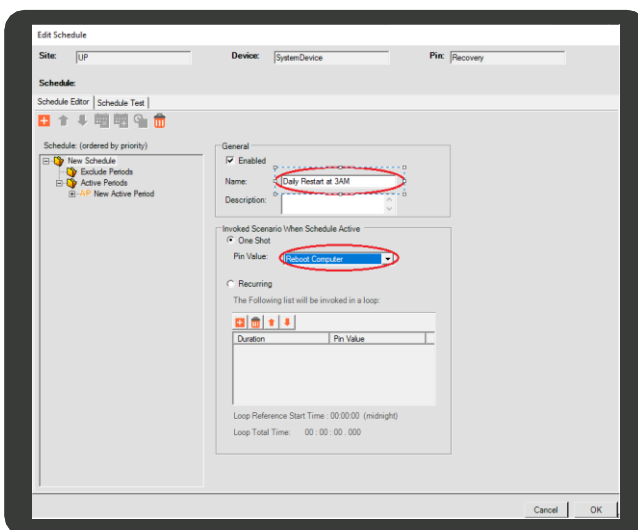


To add a schedule to the recovery pin

1. In the Template working area, right click on the pin, then select **Edit Schedule**.

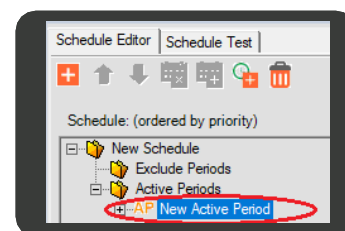


2. In the Edit Schedule dialog box, click  (**Add Schedule**).
3. Type a name for the new schedule
4. In **Pin Value**, select **Reboot Computer**.

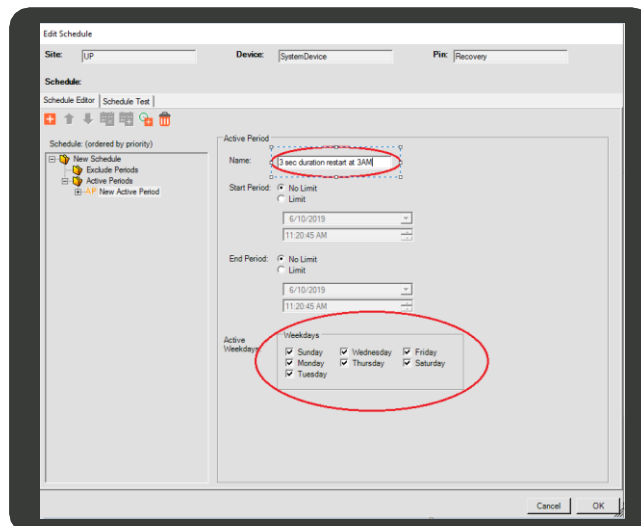


To add a new active period

1. In the **Schedule** pane, click on **New Active Period**.

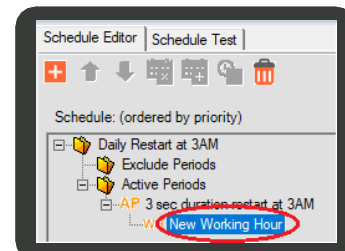


2. In the **Active Period** pane, type a name for the active period, then select the days of the week you want to restart your player. In this example, the player will reboot every day.



To add a new working hour

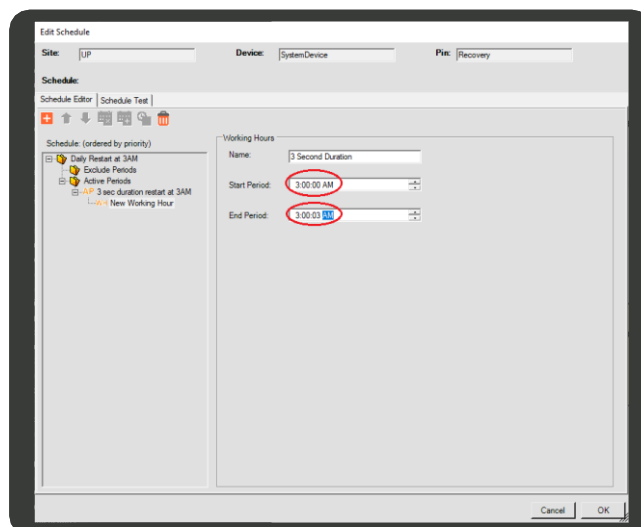
1. In the **Schedule** pane, expand the **New Active Period**, then click the **New Working Hour**.



2. In the **Working Hours** pane, type a name, then type or set the **Start** and **End Periods**.







It is very important to set a short duration (~ 3 seconds) between the start and end periods to prevent the player from restarting multiple times.



3. Click **OK**.

To save your settings

1. Click  (**Save**) to save the changes to the template.
2. If this is a new template, you will need to rename the default template:
 - a. In the Command Toolbar, click  (**Show template details**) to open the **Template Details** pane.
 - b. In the **General** tab, click the **Rename Template** button to open the **Rename** dialog box.
 - c. Type a name, then click **OK**.
 - d. Click  (**Save**), then click  (**Show template details**) to hide the details pane.

8.2.8.2 Maintaining Your Playlist



You can set values for playlist parameters (such as Available Layouts, Layouts Playlist, Current Layout, etc.). This will provide you with an overall view of your players and playlists, and will provide visual notifications if the parameters of any playlist fall outside of their set valid values.

The work flow example below illustrates how to create a template to monitor your playlist parameters, and set visual alerts when a value, such as the wrong layout being played, falls outside of its valid value range.

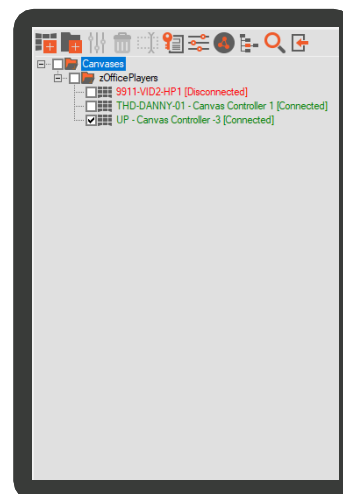
The work flow consists of the following main procedures:

1. Select the players.
2. Create a new template.
3. Select the pins to define the template parameters.
4. Set the valid value for the CurrentLayout pin / column.
5. Set the Email notification to send alerts when incorrect values are played.
6. Save your template.

To select the players


1. In the Mode Toolbar, click  (**Device Manager**).
2. In the Command Toolbar, click  (**Settings**), then set the color for your **Out of Range Value** and return to the template view, see [Section 8.2.5.1 \(Monitoring the Pins' Status\)](#) for more information.

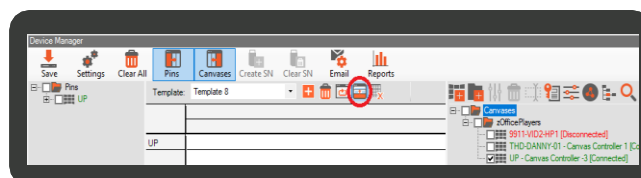
3. In the **Channels** pane, select one or more players.





4. Click  (**Create new template**).


To create and name a new template

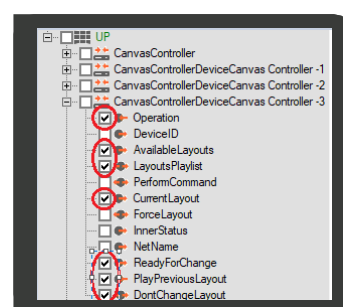
1. In the Command Toolbar, click  (**Show template details**) to open the **Template Details** pane




2. In the **General** tab, click the **Rename Template** button to open the **Rename** dialog box.
3. Type a name, then click **OK**.
4. Click  (**Save**), then click  (**Show template details**) to hide the details pane.

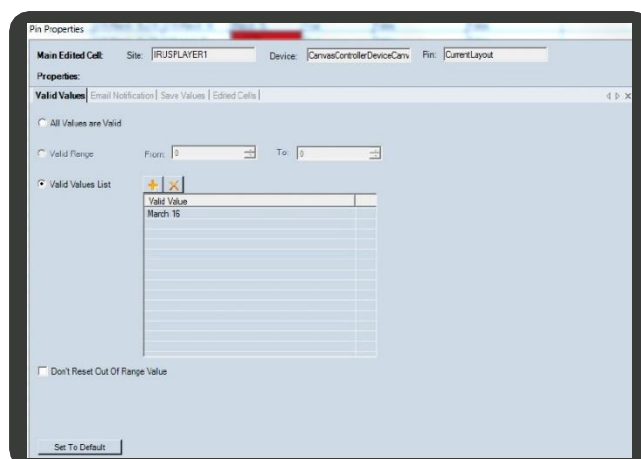
To select the pins to define the template parameters

1. In the Pins pane, expand the player to expose the  (**Device**) list.
2. Expand the **CanvasControllerDevice**, then select the **Operation**, **Available Layouts**, **Current Layout** pins, and other playlist pins you want to monitor.



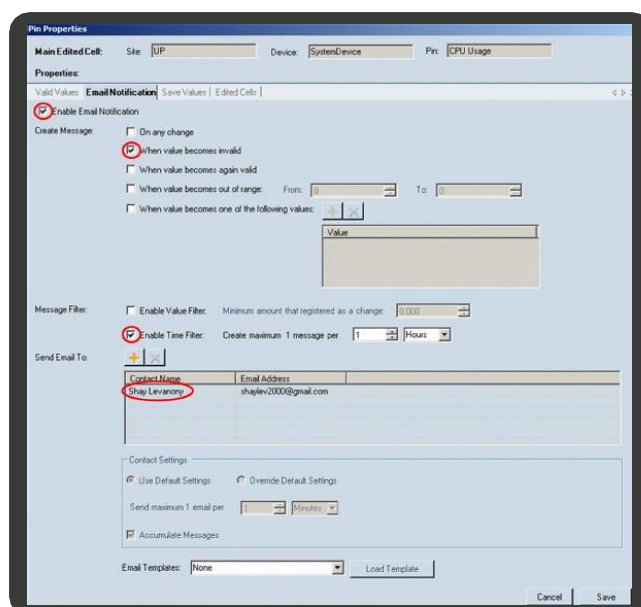
To set the valid value for the CurrentLayout pin


1. In the template, highlight the cells in the **CurrentLayout** column, right click on the column, then select **Edit Properties**.
2. In the **Valid Values** tab, select **Valid Values List**.
3. Click  (**Add valid value**), then type the valid value.



To set the email notifications

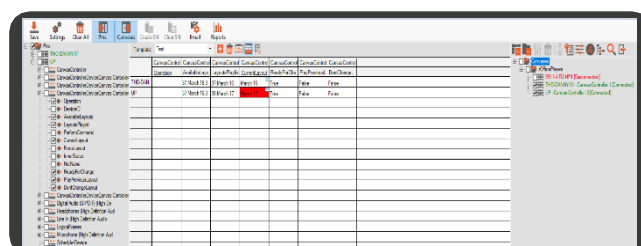
1. In the **Email Notification** tab, select the **Enable Email Notification** check box, then select the **When value become invalid** check box.
2. Select a **Message Filter** (optional).
3. In **Send Email To**, add contact and / template, see [Section 8.2.5.5 \(Sending Email Notifications\)](#)



5. Set the valid values for the other playlist pins.
6. Click  (**Save**) to save your template.

You can now monitor your playlist status by viewing the Template working area.

In our example, only March 16 layouts are valid. Therefore, a layout from a different month that is currently playing on a player will be considered invalid and will be highlighted in red, as shown in the image.



9. Reading Reports

You can create customized, detailed report listings of played items, delivering comprehensive playback accountability. There are three steps to creating reports:

The work flow example below illustrates the steps required to create reports:

1. **Assign customer to items** - Only content that has a customer assigned to it is reportable.
2. **Set the Request Properties** - In the **Remote Channel Playlog Feedback** tab, you can set Messenger to retrieve this information from the player.
3. **Retrieve the Report** - Tailor your report to include specific information in the **Play Report Request** tab.

9.1 Creating and Assigning Customers to Content Items

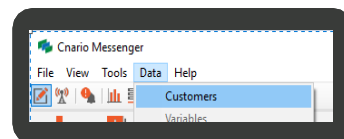
In order to collect activity reports you must assign at least one customer to the content item(s). Once you have assigned a customer to a content item either in the library or in a playlist, the player will log information based on the item's exposure.



This can also be done retroactively. For example, if you assign a customer to a content item that has already played, you can still retrieve an activity report detailing the item's exposure prior to being assigned a customer.

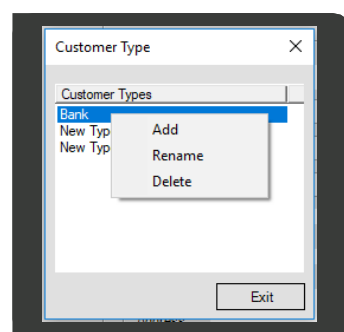
To assign the customer to a content item, first add the customer to the customer list. You then access and assign this customer to a content item through the **Playback Properties** dialog box.

To add customers to the customer list

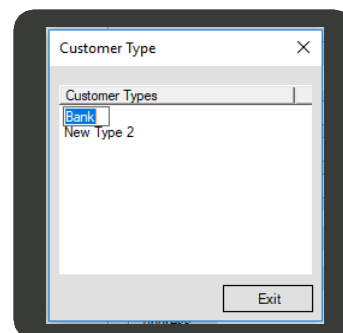
1. In the Menu Toolbar, click **Data**, then click **Customers**. The **Customers** library opens.




2. Click  (**Add new customer**).
3. In **Name**, type the customer's name.
4. In **Type**, select a type of customer, or click  (**Browse**) to create a new Type in the **Customer Type** dialog box:
 - a. Right click inside the **Customer Type** dialog box, then click **Add** to add a new type to the list.



- b. Double click on the new customer type to change the name.
- c. Click **Exit**.

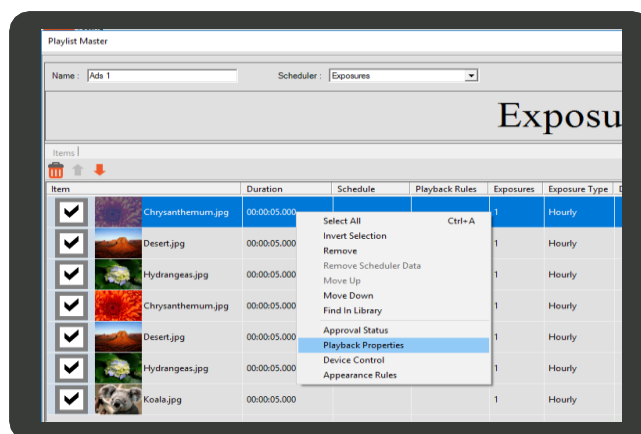


5. Enter the customer's contact details.
6. Click  (**Save**), then click **OK**.

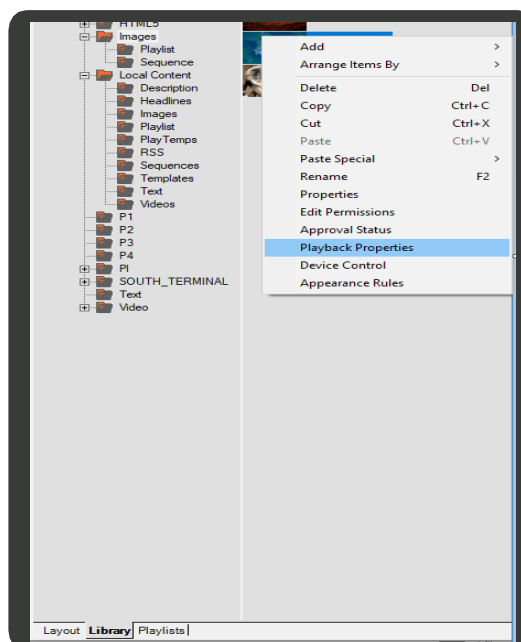
To assign customers to a content item

1. Open the properties dialog box for the content item located in one of the following locations:

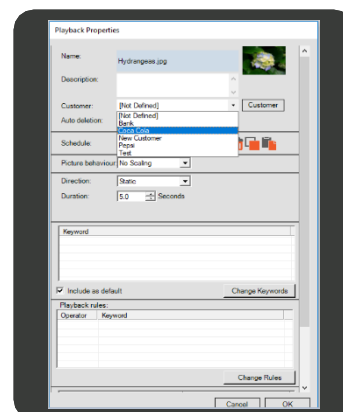
- **Playlist Master** - Right click on the content item, then click **Playback Properties**.



- **Library** - Right click on the content item thumbnail, then click **Playback Properties**.




2. In **Customer**, select a customer or click the Customer button to add a new customer to the customer list.
3. Click **OK**.

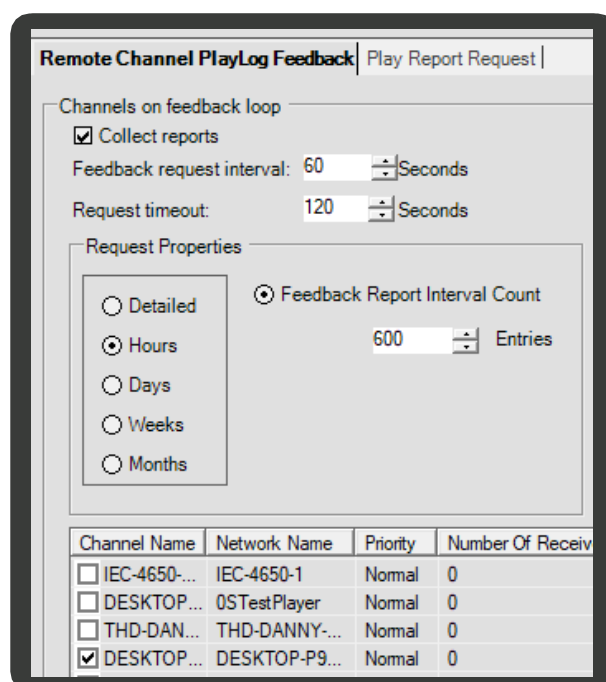
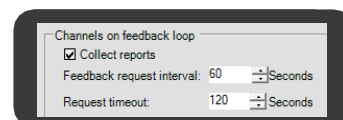


9.2 Setting the Report Properties

The player will log all exposure activities of items with assigned customers. You can retrieve this data by setting the request properties in Messenger.

To set the report properties

1. In the Mode Toolbar, click  (**Reports Module**).
2. In the **Remote Channel Playlog Feedback** tab, select the **Collect Reports** check box to activate the reports.
3. Set the **Feedback request interval** to define the frequency of the request to receive data.
4. Click on the canvas from which you want to retrieve the activity data, then in **Request Properties** select one of the following detail levels:
 - **Detailed** - Reports on any exposure activity. This is the most detailed level available.
 - **Hours** - Reports the sum of hourly exposure.
 - **Days** - Reports the sum of daily exposure.
 - **Weeks** - Reports the sum of weekly exposure.
 - **Months** - Reports the sum of weekly exposure. This is the least detailed level available.



Appendix A. Complex Playlist Example

The following example will demonstrate the Playlist CI capabilities in making very complicated scheduling requirements into an easy to use daily operation.

A.1 The Challenge

Consider the following case - An audio system for branches of a retail shop.

The requirements are as follow:

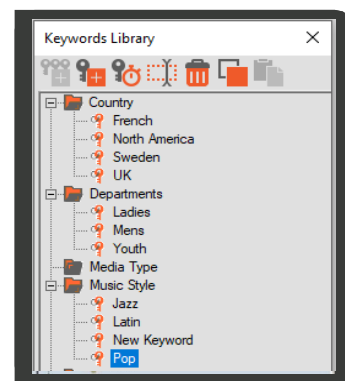
- Stores are in four countries - France, America, Sweden and the UK
- Stores have three departments - Men, Women and Youth, except the UK store that has only Men and Women.
- Two types of music:
 - General - Plays in all stores
 - Per-country music - Plays only in their country stores.
- There are two styles of music:
 - Jazz and Rock & Pop
 - North America has also Latin music
- Each store has two players, one for the Youth department and the other for all the rest of the store. Rock&Pop music should play only Youth department


The solution should provide an easy-to-use daily operation of such system, in which adding a music item is a simple action, and validity of what will play is possible.

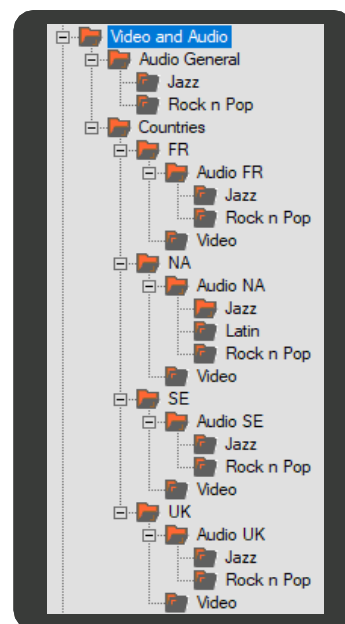
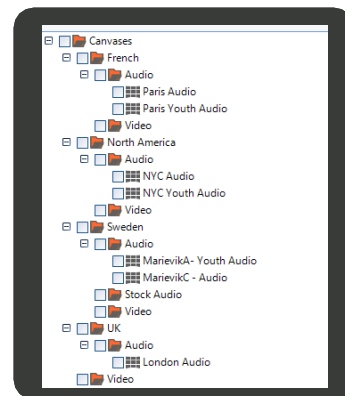
A.2 The Solution

To set the required playlist according to country and department

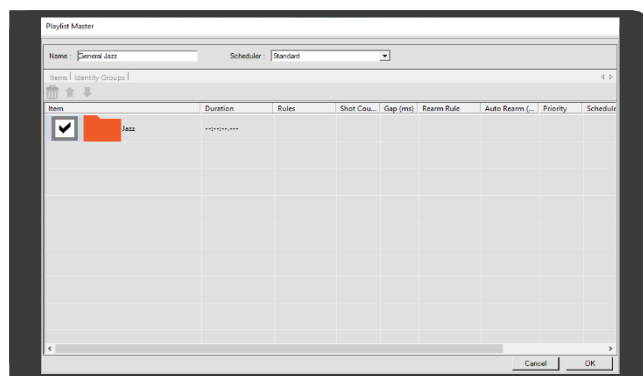
1. In the **Keywords Library**, set the keywords as shown in the image (see [Adding Keywords to the Keywords Library](#)).



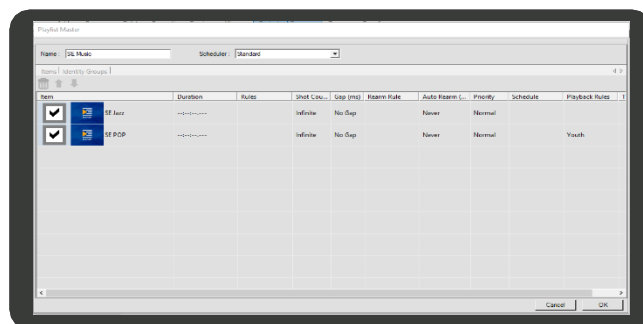
2. Assign the relevant keywords to each canvas as shown in the image.
 - a. In the **Channels** pane, right click on the relevant canvas, then click **Properties** to open the **Canvas Properties** dialog box.
 - b. Click the **Keywords** tab, then click the **Change Keywords** button to open the **Keywords** dialog box.
 - c. Select the check boxes of the relevant keywords, then click  (**Add Keyword to Item**).
 - d. Click **OK**.
3. In the **Library** tree structure, in each of the folders, place the relevant music according to the country and style.



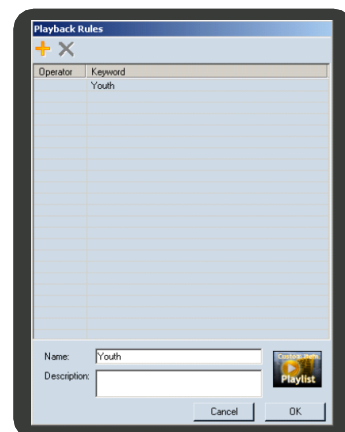
4. Create the following playlist masters:
 - a. **Style Playlists** - One for each style folder (General Jazz, General R&P, FR Jazz, FR R&P) In each one of the playlists drag and drop the relevant music folder.



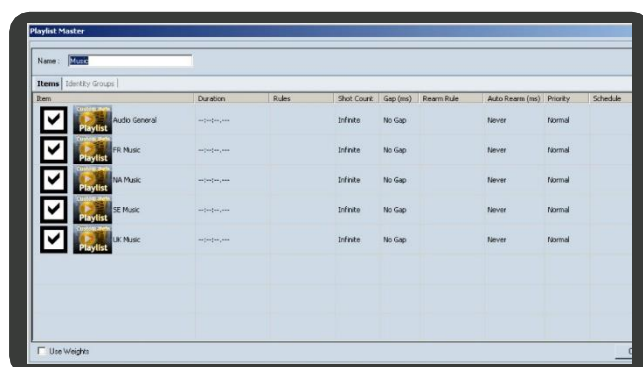
- b. **Country Playlist** - One for each country (France, America, Sweden, UK and one General). In each one, drag the style playlists of the relevant country, as shown in the image of the Sweden playlist.



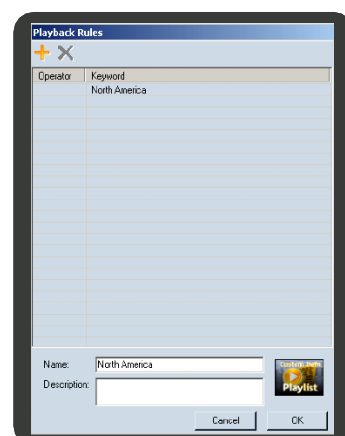
- i. For the R&P playlist, assign a playback rule of youth department only.



- c. **Main Playlist Master** - Create a main Playlist Master and drag to it all the country playlists

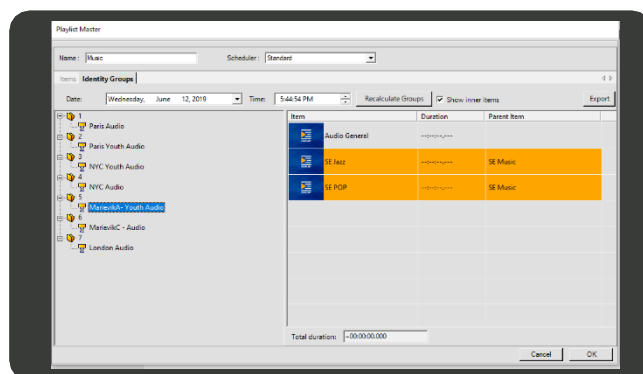


- i. For each playlist (except the General playlist) assign a Playback rule to play in the relevant country only.



From this point, forward every item placed in the relevant folders will be played according to the required rules.

5. Validate your settings:
 - a. Open the **Main Playlist Master**, then select the **Identity Groups** tab.
 - b. Select the **Show Inner Items** check box, then click **Recalculate Groups** to open the seven identity groups (2 for each country [youth and general], except the UK which doesn't have a youth department).



Appendix B. XML Scripting and Parsing

B.1 Introduction

XML parsing is a general name for a set of commands added to the newest version of **Advanced Web Feed Reader**. It creates a simpler way of writing scripts based on the .xml standard.

B.2 XML File Sample

For example, suppose you have the following .xml file:

```
<?xml version="1.0" encoding="utf-8"?>
<Highlight Name="Sharon" Country="Israel">
  <active>
    <Instruments>
      <Instrument>
        <symbol>629014</symbol>
        <name>TEVA</name>
        <percentagechange>0.34</percentagechange>
        <last>20510.000</last>
        <totvolmoney>14648.573</totvolmoney>
        <nameheb>teva</nameheb>
        <ID>883</ID>
      </Instrument>
    </Instruments>
  </active>
</Highlight>
```

To export all the values and all the attributes of the xml to tags, it will require a very simple script:

```
LOAD XmlFile, "C:\\file.xml"
STRTOXML Xml1, XmlFile
XMLEXPORTCHILDRENTOTAGS Xml2, Xml1, "/Highlight/active/Instruments/Instrument"
XMLEXPORTATTRIBUTEESTOTAGS Xml2, Xml1, "/Highlight"
END
```

As a result of this script all of the values in the path - `"/Highlight/active/Instruments/Instrument"` will be exported to tags, and all the attributes in the path - `"/Highlight"` will also be exported to tags.

This is a fairly simple .xml file, the .xml functions can also handle complex files with ease.

B.3 XML Parsing Commands

```
1. DIM <variable name>, <"LOCAL"/>"ITEM"/>"WINDOW"/>"GLOBAL">, <Initial Value>
```

This function defines a string variable in different scopes:

B.3.1 Scope Parameter

The following are the various scope parameters:

- **LOCAL** - The variable will be redefined each time the script will invoke this line.
- **ITEM** - A shared variable on the custom item level (it will be defined once for this custom item).

- **WINDOW** - A shared variable on the window level.
- **GLOBAL** - A variable that will be defined once for all the instances of the webby.

If there are variables with the same name in different scopes – web feed reader will search for variables in the above order.

B.3.2 Command List

```
DIMXML <variable name>, <"LOCAL"/"ITEM"/"WINDOW"/"GLOBAL">
Defines XML type variables.
XMLTOSTR <target>, <source>
```

Converts .xml variables from the source to string variables at the target variable.

```
STRTOXML <target>, <source>
```

Converts string variables from the source to .xml variables at the target variable.

B.4 Xpath in the Web Feed Reader

All the following functions have these parameters - <Xpath>, <Xpath param1>, <Xpath param2>.

Xpath is a standard syntax to get a specific node from an .xml, there is a small change in the web feed reader Xpath, added for convenience of use:

Each %% found in the Xpath is replaced with XpathParam.

For example, if the Xpath is "/XML[%%]" and the first parameter is "1" the resulting Xpath will be "/XML[1]".



A detailed explanation and tutorial about Xpath can be found on the Internet - <http://www.w3schools.com/Xpath/default.asp>

```
XMLSELECTFIRSTNODE <target>, <source>, <Xpath>, <Xpath param1>, <Xpath param2>
```

Selects the first node that matches the Xpath filter. The result will be inserted to the target parameter. Source variable should be XML format.

```
XMLSELECTNODES <target>, <source>, <Xpath>, <Xpath param1>, <Xpath param2>
```

Selects all the nodes that match the Xpath filter and inserts them under the root node. The result will be inserted into the target parameter. Source variable should be in .xml format.

```
XMLGETATTRIBUTE <target>, <source>, <Xpath>, <Xpath param1>, <Xpath param2>,
<default value>
```

Retrieves the .xml attribute value at the specific Xpath. The result will be inserted into the target parameter. Source variable should be in .xml format. Target will be string type. If the attribute is not found in the specific path, a default value will be inserted into the target variable.

```
XMLSETATTRIBUTE <Target>, <Source>, <Xpath>, <XpathParam1>, <XpathParam2>
```

Sets an .xml attribute value inside the .xml target parameter at a specified Xpath. The source should contain the new value of the attribute, source should be a string type; target variable should be in .xml format.

```
XMLINSERT <Target>, <Source>, <Xpath>, <XpathParam1>, <XpathParam2>
```

Inserts the .xml contained in the in the source variable into the target variable, under the node specified by the path.

XMLEXPORTCHILDRENTOTAGS <Tar-get>, <Source>, <Xpath>, <XpathParam1>, <XpathParam2>...<suffix>

Selects the first node that matches the Xpath filter. The result will be inserted into the target parameter (that includes all the children of the selected node) and will be exported to text tags. Source and target parameters should be .xml type. Adds the suffix to the tags names.

XMLEXPORTATTRIBUTESSTOTAGS <Tar-get>, <Source>, <Xpath>, <XpathParam1>, <XpathParam2>...<suffix>

Selects the first node that matches the Xpath filter. The result will be inserted into the target parameter; in addition, all the attributes of the selected node will be exported to text tags. Source and target parameters should be XML. Adds the suffix to the tags' names.

TICKSTOSTR <Target>, <Source>, <Format>

Target - String variable- the result will be inserted into the target.

Source - Contains time ticks; for example, you can send the variable TNOW.

Format - Formats the display time for the string.

For example:

TimeStr, TNOW, "yyyy-MM-dd"



For more examples of formats, you can look at the documentation of Type Date.ToString in .NET:

<http://authors.aspalliance.com/aspxtreme/sys/demos/datetimeformats.aspx>

<http://msdn.microsoft.com/en-us/library/az4se3k1.aspx>

XMLSORT <target>, <source> , <Xpath>, <Xpath param1> , <Xpath param2> ... <SortAccording>, <"STRING"/"NUMERIC">

Sort all nodes in Xpath according to a given parameter (SortAccording) and put them under the root node. The result will be inserted into the target parameter. Source and target variables should be .xml. Each %% found in the Xpath will be replaced with XpathParam. Sort can be done comparing NUMERIC values or STRING values.

For example, to sort according to numeric node value:

XMLSORT Xml2, Xml1, "/XML/Weather/State", "MaxTemp/text()", "NUMERIC"

Sorting according node attribute:

XMLSORT Xml2, Xml1, "/XML/Weather/State", "@Name", "STRING"

XMLISEMPTY <source> , <Target Tag>

If the .xml source variable is empty, then jump to target tag.

B.5 Samples

The samples are working on the following .xml:

```
<XML>
- <Weather>
- <State Name="New York" Country="USA">
  <MaxTemp>100</MaxTemp>
  <MinTemp>80</MinTemp>
  <Wind>NW</Wind>
```

```

</State>
- <State Name="Washington" Country="USA">
  <MaxTemp>80</MaxTemp>
  <MinTemp>60</MinTemp>
  <Wind>E</Wind>
</State>
- <City Name="Jerusalem" Country="ISRAEL">
  <MaxTemp>40</MaxTemp>
  <MinTemp>20</MinTemp>
  <Wind>S</Wind>
</City>
- <City Name="Tel Aviv" Country="ISRAEL2">
  <MaxTemp>100</MaxTemp>
  <MinTemp>80</MinTemp>
  <Wind>W</Wind>
</City>
- <Region Name="North" Country="ISRAEL">
  <MaxTemp>80</MaxTemp>
  <MinTemp>60</MinTemp>
  <Wind>N</Wind>
</Region>
- <Region Name="South" Country="ISRAEL">
  <MaxTemp>120</MaxTemp>
  <MinTemp>80</MinTemp>
  <Wind>NE</Wind>
</Region>
</Weather>
</XML>

```

B.5.1 Xpath Samples

Sample 1 - `/XML/Weather/City[MaxTemp>50]/MaxTemp/text()` - will get the maxTemp of the cities that have MaxTemp above 50. In the sample above 100.

Sample 2 - `/XML/Weather/City[*]/MaxTemp/text()` - will return a list of all the maxTemp of all the cities available. In the sample above:40,100

Sample 3 - `/XML/Weather/City[@Name='Tel Aviv']/MaxTemp/text()` -

Return the maxTemp of city, its attribute name equals Tel Aviv.

In the sample above - 100

Sample 4 - `/XML/Weather/City[@Name='Tel Aviv' or @Name='Jerusalem']/MaxTemp/text()`

Return the maxTemp of the city, its attribute name equals Tel Aviv or Jerusalem.

Sample 5 - Using wild card* sample, select all attributes:

`/XML/Weather/City[@Name='Tel Aviv' or @Name='Jerusalem']/attribute::*`

Sample 6 - select all attribute name:

`/XML/Weather/City/attribute::Name`

Sample 7 Compare date - If you have two dates in this format yyyy-mm-dd you can use the following to compare the dates:

```
translate(@mydate , '-','') > translate('2009-11-12','-','')
```

The translate replace '-' character with empty char (= remove the '-')

and the comparison is done with numbers.



Xpath allows you to use "" to sign strings. Do **not** use this option as it is not supported by webby. Use 'MyString' to sign strings instead.

B.6 Web feed reader script samples

B.6.1 Select maxTemp of city number 2: Option 1

```
LOAD XmlFile,"C:\\3.xml"
DIMXML Xml1,"ITEM"
DIMXML Xml2,"ITEM"
DIMXML Xml3,"ITEM"
STRTOXML Xml1,XmlFile
XMLTOSTR MyStr,Xml1
XMLSELECTNODES Xml2,Xml1,"/XML/Weather/City[2]"
XMLTOSTR MyStr,Xml2
XMLSELECTFIRSTNODE Xml3,Xml2,"/root/City/MaxTemp"
XMLTOSTR MyStr,Xml3
```

B.6.2 Select maxTemp of city number 2: Option 2

```
LOAD XmlFile,"C:\\3.xml"
DIMXML Xml1,"ITEM"
DIMXML Xml2,"ITEM"
DIMXML Xml3,"ITEM"
STRTOXML Xml1,XmlFile
XMLTOSTR MyStr,Xml1
XMLSELECTFIRSTNODE Xml2,Xml1,"/XML/Weather"
XMLTOSTR MyStr,Xml2
XMLSELECTFIRSTNODE Xml3,Xml2,"City[2]/MaxTemp/text()"
XMLTOSTR MyStr,Xml3
END
```

B.6.3 Get attribute value + sample of use %% in the Xpath

```
LOAD XmlFile,"C:\\3.xml"
DIMXML Xml1,"ITEM"
DIMXML Xml2,"ITEM"
DIMXML Xml3,"ITEM"
STRTOXML Xml1,XmlFile
XMLTOSTR MyStr,Xml1
XMLSELECTFIRSTNODE Xml2,Xml1,"/XML/Weather"
XMLTOSTR MyStr,Xml2
XMLGETATTRIBUTE MyAttribute,Xml2,"City[%%]/@Country","2","attribute not found"
END
```

B.6.4 Set XML Attribute

```
LOAD XmlFile, "C:\\3.xml"
DIMXML Xml1, "ITEM"
DIMXML Xml2, "ITEM"
DIMXML Xml3, "ITEM"
DIM CityIndex, "ITEM", "0"
INC CityIndex, "1"
STRTOXML Xml1, XmlFile
XMLTOSTR MyStr, Xml1
XMLSELECTFIRSTNODE Xml2, Xml1, "/XML/Weather"
XMLTOSTR MyStr, Xml2
XMLSETATTRIBUTE Xml2, "replace israel", "City[%@]/@Country", "1"
XMLTOSTR MyStr, Xml2
END
```

B.6.5 Insert XML

XMLINSERT - This will insert the city 'Tel Aviv' at the end of the .xml document

```
LOAD XmlFile, "C:\\3.xml"
DIMXML Xml1, "ITEM"
DIMXML Xml2, "ITEM"
DIMXML Xml3, "ITEM"
STRTOXML Xml1, XmlFile
XMLTOSTR MyStr, Xml1
XMLSELECTFIRSTNODE Xml2, Xml1, "/XML/Weather/City[2]"
XMLTOSTR Str2, Xml2
XMLTOSTR Str1, Xml1
XMLINSERT Xml1, Xml2, "/XML/Weather"
XMLTOSTR MyStr, Xml1
END
```

B.6.6 Export XML to Tags

There are two ways to export .xml to tags:

1. Export children of the selected node to tags

If this is the selected node:

```
<City Name="Jerusalem" Country="ISRAEL">
    <MaxTemp>40</MaxTemp>
    <MinTemp>20</MinTemp>
    <Wind>S</Wind>
</City>
```

Three tags will be created:

- **XML.Weather.City.MaxTemp** - will contain 40
- **XML.Weather.City.MinTemp** - will contain 20
- **XML.Weather.City.Wind** - will contain S

Example of Web feed reader script:

```
LOAD XmlFile, "C:\\3.xml"
DIMXML Xml1, "ITEM"
DIMXML Xml2, "ITEM"
DIMXML Xml3, "ITEM"
STRTOXML Xml1, XmlFile
XMLTOSTR Str1, Xml1
XMLSELECTFIRSTNODE Xml2, Xml1, "/XML/Weather/City[2]"
XMLEXPORTCHILDRENTOTAGS Xml3, Xml2, "." (-> '.' Select the current node)
XMLTOSTR Str2, Xml2
XMLTOSTR Str1, Xml1
END
```

Another option for the same result:

```
LOAD XmlFile, "C:\\3.xml"
DIMXML Xml1, "ITEM"
DIMXML Xml2, "ITEM"
STRTOXML Xml1, XmlFile
XMLTOSTR Str1, Xml1
XMLEXPORTCHILDSTOTAGS Xml2, Xml1, "/XML/Weather/City[2]"
XMLTOSTR Str2, Xml2
XMLTOSTR Str1, Xml1
END
```

2. Export to tags all attributes of selected node

For this selected node:

```
<City Name="Jerusalem" Country="ISRAEL">
    <MaxTemp>40</MaxTemp>
    <MinTemp>20</MinTemp>
    <Wind>S</Wind>
</City>
```

Two tags will be created:

- XML.Weather.City.Name - will contain Jerusalem
- XML.Weather.City.Name - will contain ISRAEL

Example of Web feed reader script:

```
LOAD XmlFile, "C:\\3.xml"
DIMXML Xml1, "ITEM"
DIMXML Xml2, "ITEM"
DIMXML Xml3, "ITEM"
STRTOXML Xml1, XmlFile
XMLTOSTR Str1, Xml1
XMLSELECTFIRSTNODE Xml2, Xml1, "/XML/Weather/City[1]"
XMLEXPORTATTRIBUTESTOTAGS Xml3, Xml2, "." (-> '.' select the current node)
XMLTOSTR Str2, Xml2
XMLTOSTR Str1, Xml1
END
```

Appendix C. Web Feed Reader Scripting

C.1 Web Feed Reader Tags

Web Feed Reader Tags are the names of parts of the content making up the **Web Feed Reader** item, and how they will be referred to when making up the display of the window.

For example:

In a News story [Item], you would have:

- A heading,
- Item text
- A Picture

In web feed reader, there are two commands available to export text and images; these provide the exported text / image with a "name" (tag):

```
EXPORTTEXT "Heading",HeadingText
EXPORTTEXT "Item",ItemText
EXPORTIMAGE "Picture",ItemPicture,".jpg"
EXPORTBREAK
```

This will output a single item, made up of a heading, item text, a picture, and break in the end (to allow multiple items). Each of these could go into a "window" on the final image the web feed reader creates, see [Section 7.9.3 \(Windows Editor Tab\)](#). Each window can run a text from the **web feed reader** (heading or item text above), an image from the **web feed reader** (picture above), or a pre-set image or text (for example, for a background).

C.2 Web Feed Reader Scripting

C.2.1 Web Script Commands

Use the following web script commands to create your feed:

- `[CHOP <target var>,<source>,"BEFORE"/"AFTER",<signature>]` - This is used to chop part of a string which resides before or after a constant signature.

For example, to insert a text string that resides between a <a href> mark and an mark in an entire page data in a variable named FullPage:

```
CHOP NewsItem,FullPage,"AFTER","<a href"
CHOP NewsItem,NewsItem,"AFTER",">"
CHOP NewsItem,NewsItem,"BEFORE","</a>"
```



All constants, even a "jump-to" mark should be in quotation marks (""). All content outside the quotation marks is considered a variable. If there is a quotation mark in the signature add a "\" before it to ensure the quotation marks won't count as the end of the signature.

- `[CONCATENATE <target var>,<source1>,<source2>...]` - This is used to link a list of source strings into the target variable.

For example, to create a composite news item:

```
CONCATENATE FullItem,TimeStamp," - ",NewsItem
```

- `[DECODEHTML <Variable to decode>]` - Decodes HTML character-codes
- `[END]` - Ends the script's execution. May appear as many times as necessary in the script. A script **must** terminate with an `[END]` command
- `[EQUAL <param1>,<param2>,<tag to jump to if param1 and param2 are equal>]` - Compares two expressions. If they are equal, it will jump to the designated mark.

For example, to see if the NewsItem variable has data in it, and if not, jump to the finished mark:

```
EQUAL NewsItem, "", "Finished"
```

- `[ERROR <ErrorMessage>]` - Stops execution and returns an error. Items already exported will be ignored.
- `[EXISTS <MainStr>,<SubStr>,<tag to jump to if SubStr exists inside MainStr>]` - Jumps to a designated tag if a substring exists in the main string.

For example, to skip any item with the word "sport" in it:

```
EXISTS NewsItem, "sport", "AvoidSportsTag"
```

- `[EXPORTBREAK]` - Marks the last exported item as a last in a sequence of items that should be displayed together. Mandatory command to come after all EXPORT variant commands in script.
- `[EXPORTFILE <URL to download into a file>,<file extension>]`
- `[EXPORTTEXT "<Tag>",<VariableName>]` - Exports a variable and all its content into a tag. These tags can later be used to be placed on specific windows. This command is almost always mandatory for displaying text from the web.
- `[EXPORTTEXT "<Tag>",<VariableName>]` - Exports a variable and all its content into a tag. These tags can later be placed in specific windows. This command is almost always mandatory for displaying text from the web.
- `[EXPORTIMAGE "<Tag>",<URL to download into a file>,<FileExtension>]` - Exports an image from the web into a tag. These tags can later be used to be placed in specific windows.
- `EXPORTLOCALIMAGE "<Tag>",<FileName>"` - Loads image from local drive.

For example:

```
EXPORTLOCALIMAGE "Image","c:\\1.jpg"
```

- `[FTPGET <target>,<HostName>,<User>,<Password>,<Directory>,<FileName>]` - Performs a GET command to reach a file on an FTP site. As with GET, the target of the command is a variable. FTP sites require user name and password identification, these fields are mandatory.
- `[GET <target var>,<URL>,< encoding >,< seconds >]` Performs a GET command, and retrieves the web-page from the specified address into target var.

For example, to retrieve the main YAHOO page:

```
GET FullPage,"http://www.yahoo.com"
```

- `<seconds>` - (optional). Defines the timeout for the GET command. Used mainly for slow connections.
- `<encoding>` (optional). Sets encoding for the GET command.

For example:

```
LOAD GET FullPage,"http://www.yahoo.com", "windows-1255"
```

- [GOTO <target tag>] - Unconditional goto command. Will resume execution at the specified tag.

For example:

```
GOTO "Paris"
```

- [INC <Numeric variable>,<value to add>] - Increments a numeric value in a variable. Enables counting items.

For example:

```
INC ItemsExported,"1"
```

```
EQUAL ItemsExported,"10","Finished"
```

- [SMALLER <value1>,<value2>,<tag to jump to if value1<value2>] - Enables integer and decimal comparisons.

For example, an equivalent of the above INC scheme:

```
INC ItemsExported,"1"
```

```
SMALLER ItemsExported,"10","LoopAnotherItem"
```

- [LOAD <Variable to load the file into>,<FileName>,<encoding>] - Loads local file into a variable.

For Example:

```
LOAD FullPage,"c:\\xml\\myxmlfile.xml"
```

- [LOAD <Variable to load the file into>,<FileName>,<encoding>] - Loads local file into a variable.

For Example:

```
LOAD FullPage,"c:\\xml\\myxmlfile.xml"
```

- <encoding>- (optional). Sets encoding for the GET command.

For example:

```
LOAD FullPage,"c:\\xml\\myxmlfile.xml","windows-1255"
```

- [LOADDESIGNATION <Variable to load the file into>,<FileName>] - Same as LOAD command, only will look for file within chainmail.
- [EXPORTIMAGEDSIGNATION <Variable to load the file into>,<FileName>] - Enables the exporting of images within chainmail.
- [UNICODE <var to convert>] - Converts a Unicode string in Hebrew into its ASCII equivalent.
- [:MARK] A "jump-to" tag.

For example, an infinite loop:

```
:Loop
```

```
GOTO "Loop"
```


- **TNOW** – Special variable used to display system time and manipulate script with it. Mostly used in conjunction with **SMALLER** command.
- **[SETTAGCOLOR] "@SETTAGCOLOR R=XXX,G=XXX,B=XXX@** - Sets Text color.
- **[SETTAGSHADOWCOLOR] "@SETTAGSHADOWCOLOR R=XXX,G=XXX,B=XXX@** - Sets Shadow color.
- **INDEXOF INDEXOF Index,File,"bc" Index var, Source, "what to look for"** - Returns the first character index of the matching searched value in the string.
- **LASTINDEXOF LASTINDEXOF LastIndex,File,"b" Index var, Source, "what to look for"** - Returns the last character index of the matching searched value in the string.
- **TRIM , TRIM File,File** - Remove spaces from the both edges.
- **TRIMLEFT TRIM File,File** - Remove spaces from the left.
- **TRIMRIGHT TRIM File,File** - Remove spaces from the right.
- **REPLACE REPLACE File,File,"67","a"** - REPLACE *Source,Target,Search for, Replace with*
- **TOLOWER TOLOWER File,File** - Turn all variable chars to lower case.
- **TOUPPER TOUPPER File,File** - Turn all variable chars to upper case.
- **FORMAT** - to format numbers, 1000000 to 1,000,000 or 1 to 01.00 using the format strings, see in <http://msdn.microsoft.com/en-us/library/0c899ak8.aspx>.
- **CHOPRIGHT Target,Source,CharCount** -CharCount should be in ""**CHOPRIGHT File,File,"3"** - Chops # of chars from the right.

CHOPLEFT Target,Source,CharCount CHOPLEFT File,File,"2".- Chops # of chars from the left.

GETLENGTH Target,Source GETLENGTH Length,File - Gets String length.

C.2.2 Web Script Examples

A script that downloads content from the Reuters site:

```
GET FullPage,"http://feeds.reuters.com/reuters/Entertainment/"
:ItemsLoop
CHOP NewsText,FullPage,"AFTER","<title>>"
CHOP NewsText,NewsText,"BEFORE","</title>"
EQUAL NewsText,"","Finished"
EXPORTTEXT "NEWS",NewsText
EXPORTBREAK
CHOP FullPage,FullPage,"AFTER","<title>>"
GOTO "ItemsLoop"
:Finished
END
```

A script that reads text from a local file called Ready.txt:

```
LOAD FullPage,"C:\\Ready.txt"
CONCATENATE A,""
:ItemLoop
CHOP Ready,FullPage,"BEFORE","\\0D\\0A"
EQUAL Ready,"","Finished"
EXPORTTEXT A
```

```
EXPORTTEXT Ready
CHOP FullPage,FullPage,"AFTER","\0D\0A"
GOTO "ItemLoop"
:Finished
EXPORTTEXT "text",A
END
```

A script that downloads weather content including text and files from the Weather site:

```
GET FullPage,"http://rss.weather.com/weather/rss/local/02215?cm_ven=LWO&cm_cat-
t=rss&par=LWO_rss"
CHOP onlyforecast,FullPage,"AFTER",<title><![CDATA[Current"
CHOP image,onlyforecast,"AFTER","src=\"\"
CHOP image,image,"BEFORE","\" alt="
CHOP text,onlyforecast,"AFTER","/>"
CHOP text,text,"BEFORE","For"
CHOP text,text,"BEFORE","&deg"
CONCATENATE text,text," \B0F "
EXPORTTEXT "text",text
EXPORTIMAGE "image",image,".gif"
EXPORTBREAK
END
```

Appendix D. Configuring Messenger for use with Media Manager

In order to work in Media Manager, you must be granted user permission to access the Library folders and content items. These permissions are granted in Messenger.

You can grant two types of users:

- Basic user - can upload content to the web interface.
- Approval user - can approve and decline content uploaded by the basic user.

Use the following work flow to properly configure Messenger and ensure Media Manager users have access to the correct folders.

The work flow consists of the following main procedures:

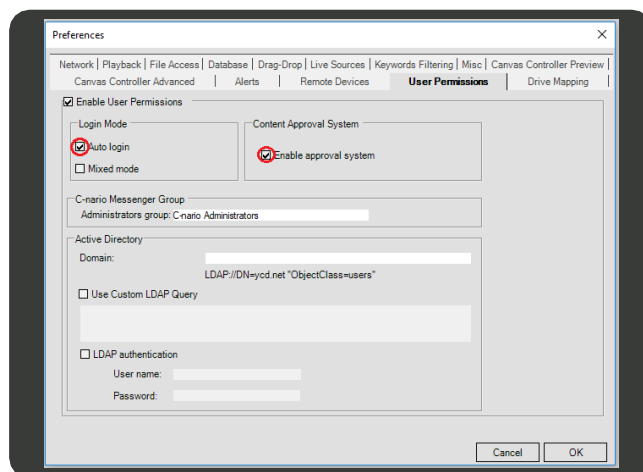
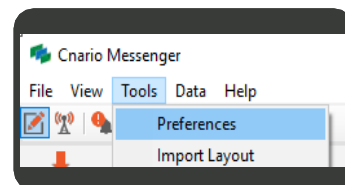
1. [Set the user preferences.](#)
2. [Create Users.](#)
3. [Assign user permission to the library folders.](#)
4. [Assign user permission to the canvases.](#)
5. [Create a layout with a playlist content item.](#)
6. [Assign canvases to the layout.](#)

D.1 Setting the User Preferences

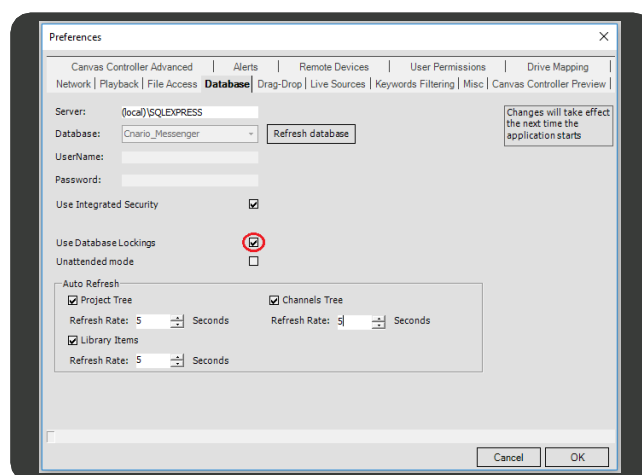
You must configure Messenger to ensure it is in sync with Media Manager. This is done in the **Preferences** dialog box.

To set the user preferences

1. In the Menu Toolbar, click **Tools**, then **Preferences** to open the **Preferences** dialog box.
2. In the **Preferences** dialog box, click the **User Permissions** tab.
3. Select the **Enable User Permissions** check box.
4. In the **Login Mode** section, select the **Auto login** check box to create a basic user.
5. In the **Content Approval System** section, select the **Enable approval system** check box to create an Approval user (optional).



6. In the Database tab, select the **Use Database Lockings** check box.
7. In the **Auto Refresh** section, select the **Project Tree**, **Library Items** and **Channels Tree** check boxes, then type or set the **Refresh Rate** of each one to five seconds.



8. Click **OK**.



You will need to close and restart Messenger to implement the above changes.

D.2 Creating Users

Create the Media Manager users. The users will be able to log into Media Manager, where they can access specific folders in the Library. The users can add new content to the folders, which will then appear on the display.

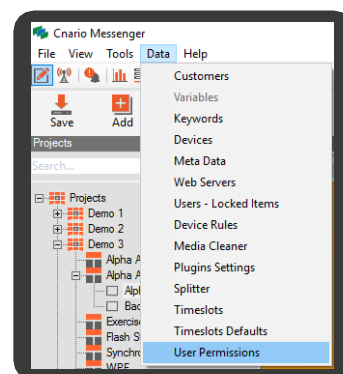
Before you can create users, you first create the role, which acts like a folder (or parent). You then add users to the role. In this way, you can allocate a set of specific permission to this role. The users associated to this role will then inherit the permissions assigned to the role. In this way, you can quickly create a group of users with the same permissions.


Use the following work flow to create roles and users with access to the correct folders:

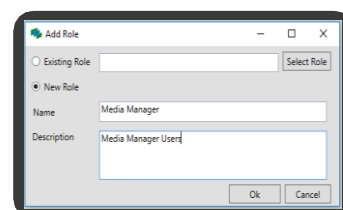
1. Create the role.
2. Add users to the role.


To create a role

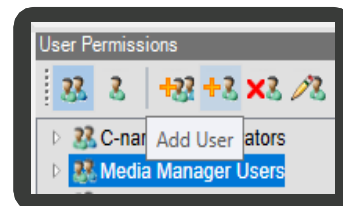
1. In the Menu Toolbar, click **Data**, then click **User Permissions** to open the **User Permissions** dialogbox.



2. In the **User Permissions** pane, click  (**Add Role**).
3. In the **Add Role** dialog box, type a name and description (optional), as shown in the image, then click **OK**.



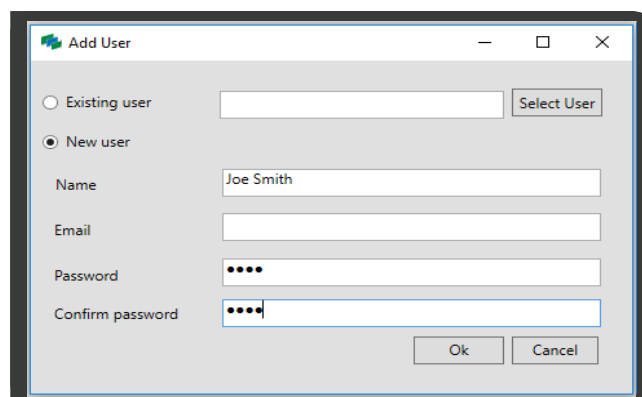
4. In the **User Permissions** pane, click on the Media Manager role you just added, then click  (**Add User**).



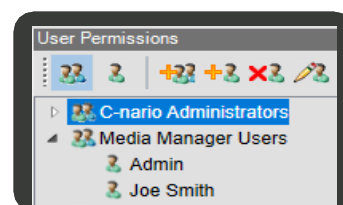
5. In the **Add User** dialog box, select **New User**, then type a **Name** and **Password**.



The password must be a minimum of five characters.





6. Click **OK**. Your user (Joe Smith) will now appear within the role (Media Manager).

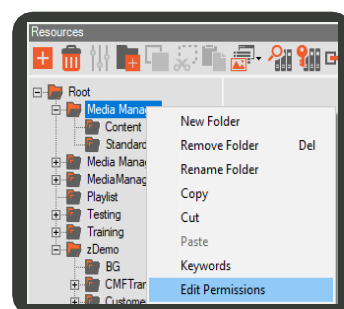
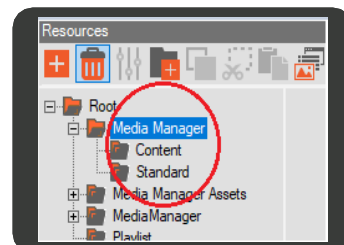
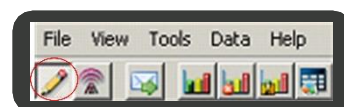


D.3 Assigning User Permission to the Library Folders

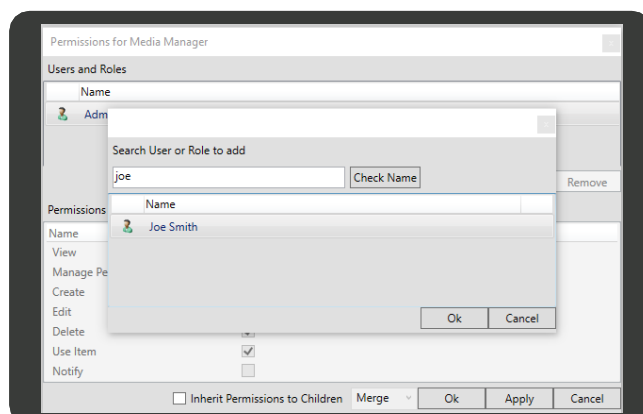
Once you have created your users, you will need to assign them access permission to the correct Library folders.

To assign access permission to the Library folders

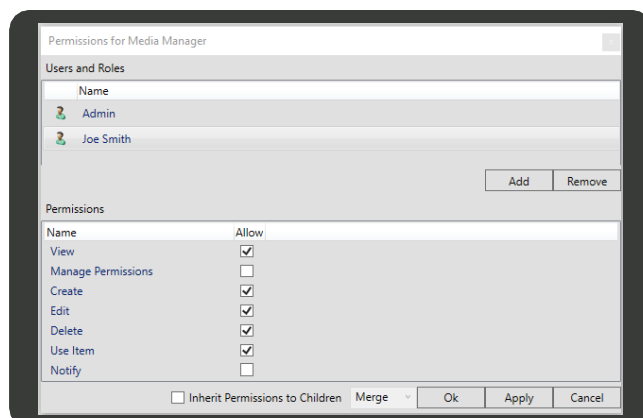
1. In the Mode Toolbar, click  (**Edit Module**).
2. In the Resources pane, in the Library tab, make sure you have the correct folders set up in the library:
 - a. Click , then type a name for the folder. We will use Media Manager for this example.
 - b. Click on the Media Manager folder, then add two more folders.
 - c. Type a name for each new folder, as shown in the image.
3. Right click on the Media Manager folder, then click **Edit Permissions**.



4. In the library folder Permissions dialog box, click **Add**.
5. In the **Search User or Role to add** dialog box, click the **Check Name** button.
6. Scroll down, then click on the user who requires access permission to the folder.
7. Click **OK**.



8. In the **Permissions** pane, select the permissions you want the user to have within the folder, as shown in the image.




9. Click **Apply**, then click **OK**.

D.4 Assigning User Permissions to the Canvases

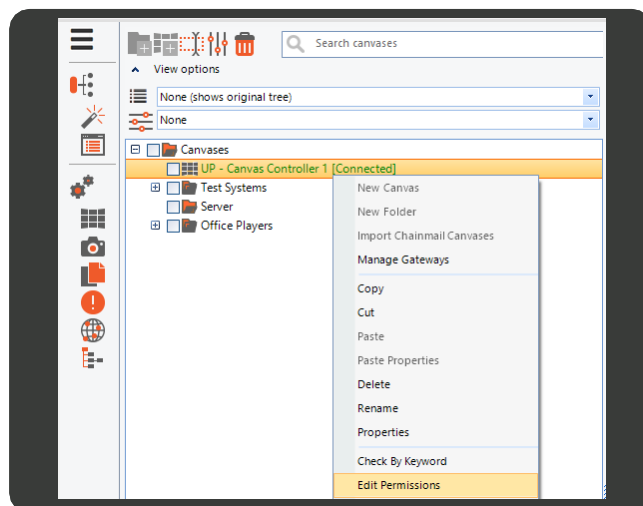
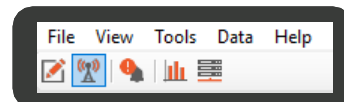
You need to provide the user with access permission to the canvases. This will allow the user to transfer the content to the players.

To grant the user access permission to the canvases

1. In the Mode Toolbar, click  (**Network Module**).

2. In the **Channels** pane, select the check box(es) of the canvas(es) to where you want to send the content.

3. Right click on the canvas, then click **Edit Permissions**.



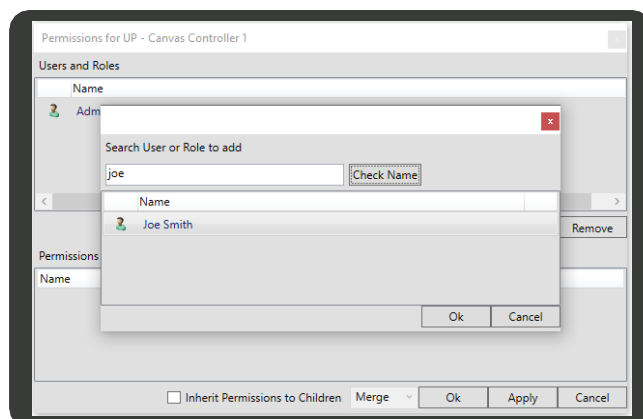
4. In the canvas permissions dialog box, click **Add**.

5. In the **Search User or Role to add** dialog box, click the **Check Name** button.

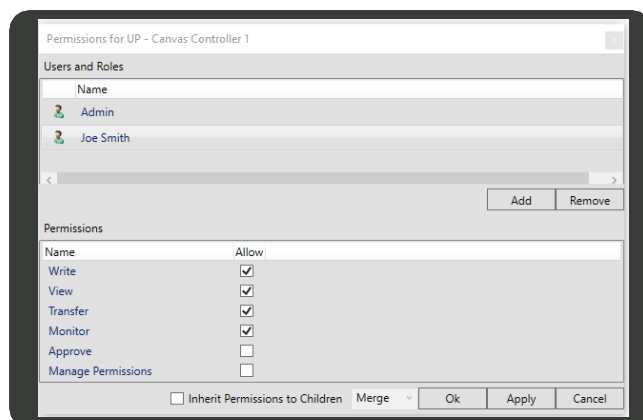
6. Scroll down, then click on the user who requires access permission to the canvas.

7. Click **OK**.

8. Click **Apply**, and click **OK**





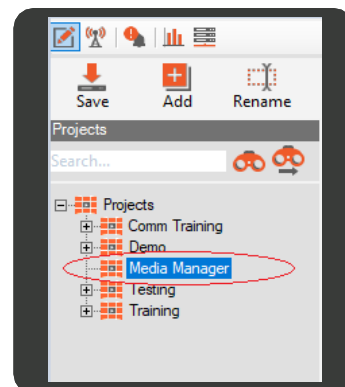
In the **Permissions** pane, select the permissions you want the user to have within the folder, as shown in the image.



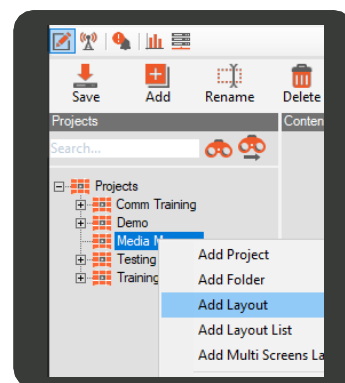
D.5 Creating a Layout and Playlist Content Item

Before you can create a Playlist in Media Manager, you first have to create the corresponding playlist content item in Messenger. The playlist content item in Messenger is created with an empty folder. The user can then add content items to this folder and set the playlist in Media Manager.

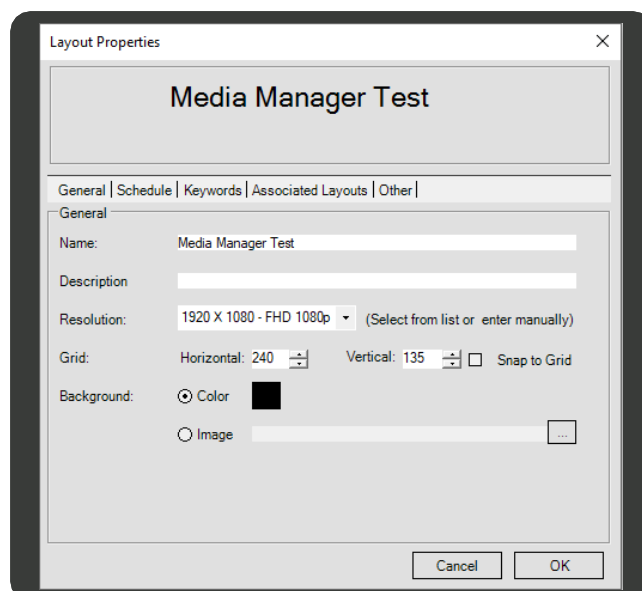
1. In the Mode Toolbar, click  (**Network Module**).
2. Add a new project.
 - a. In the Command Toolbar, click  (**Add**), name the project Media Manager.





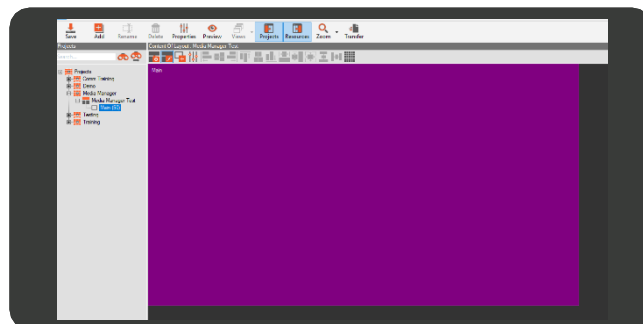
3. Add a layout to the Media Manager project.
 - a. In the **Projects** pane, right click on the **Media Manager** project, then click **Add Layout**.



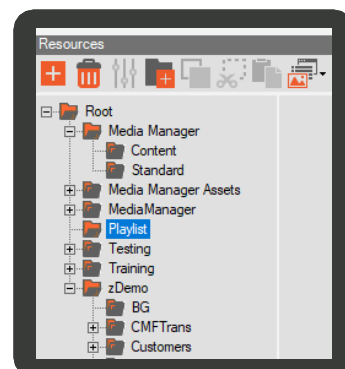
4. In the **Layout Properties** dialog box, type a name for the layout, set the background and resolution, then click **OK**.



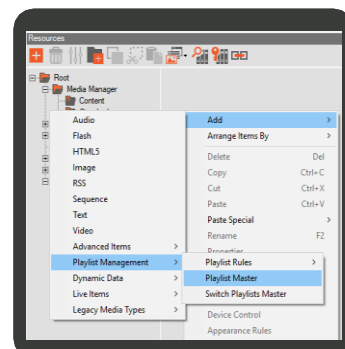
5. Add a window to the layout.
 - a. Click  (**Create a new window**), then drag the edges of the window to match the size of the layout.
 - b. You can rename the window.
 - c. Click  (**Save**).



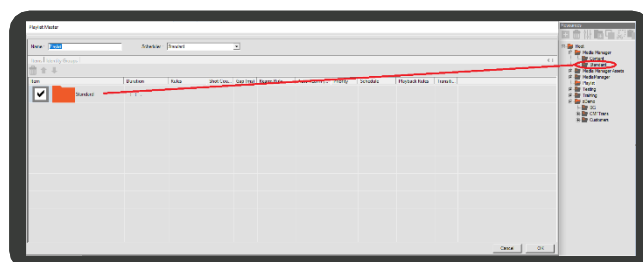
6. In the Library, create a new folder called playlist.




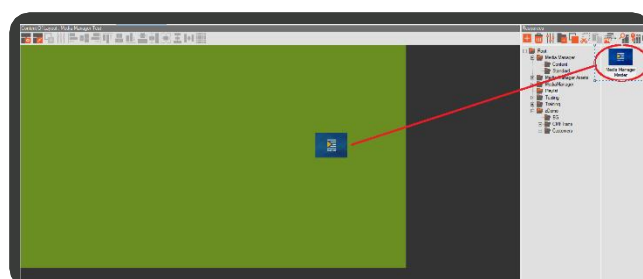
7. Click on the Playlist folder, click  (**Add Item**), click **Playlist Management**, then click **Playlist Master**.




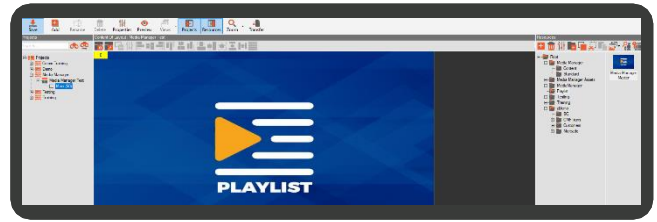
8. In the **Playlist Master** dialog box, type a name, then drag the Standard folder from the Library pane and drop it in the first row of the **Item** column. (See [Section D.3](#) for how to add the Standard folder to the library.)



9. Click **OK**.
10. In the Layout Toolbar, turn off the  (**Toggle Edit mode**), then drag and drop the Playlist Manager Master onto the layout window.



11. Click  (Save) to save the playlist in the layout window.



D.5.1 Assigning Canvases to the Layout

You can assign the layout to one or multiple canvases. This will allow the Media Manager user to transfer updates directly to the appropriate canvases.

To assign the layout to one or more canvases, see [Connecting Layouts to Canvases](#) in [Section 8.1 \(Managing Layout Transfers and Integration\)](#)