JumpStart 1.0.1



User Manual

020-100781-02



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Introduction

This document provides information and procedures for using the Christie JumpStart client software. You use the JumpStart software to manage tiled displays with up to four video inputs.

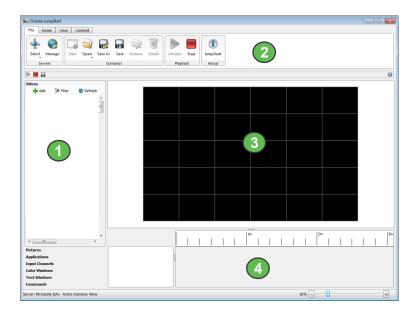
All users should have some understanding of Christie tiled displays and be familiar with Microsoft Windows functionality.

For information about setting up a JumpStart server and connecting it to a display wall, see the JumpStart Operations Guide (020-100803-xx).

About Christie JumpStart

Christie JumpStart allows you to organize and manage content for display on large digital display walls. With Christie JumpStart, you can display multiple media files, Windows applications, and live video inputs on a 5-10 megapixel digital canvas. JumpStart is designed to work with Christie MicroTiles, but can also work with any Christie large-format digital display walls, such as Christie rear-projection and flat panel solutions.

Christie JumpStart Desktop



| | NAME | DESCRIPTION |
|---|--------------|---|
| 1 | Content Pane | Contains the content that you can add to your JumpStart display. |
| 2 | Toolbar | Contains buttons for commonly used tasks. |
| 3 | Canvas | A visual representation of your JumpStart display. On the canvas, you can add, stretch, and remove windows. |
| 4 | Schedule | Schedule the sequence and playback duration of windows. |

The File Toolbar



| ICON | DESCRIPTION |
|----------|---|
| Select | Select a Christie JumpStart server. |
| Manage | Manage the list of JumpStart servers associated with the JumpStart client software. |
| New | Create a new JumpStart scenario. |
| Open | Open an existing JumpStart scenario. |
| Save As | Save a JumpStart scenario with a new name, leaving the existing scenario in place. |
| Save | Save a JumpStart scenario. |
| Rename | Rename a JumpStart scenario. |
| Delete | Delete a JumpStart scenario. |
| Activate | Activate the scenario displayed on the canvas. |

| ICON | DESCRIPTION |
|-----------|--|
| Stop | Stop the active scenario. |
| JumpStart | Opens the About dialog box, showing JumpStart version and third-party licensing information. |

The Home Toolbar



| ICON | DESCRIPTION |
|----------|--|
| Select | Select a Christie JumpStart server. |
| New | Create a new JumpStart scenario. |
| Open | Open an existing JumpStart scenario. |
| Activate | Activate the scenario displayed on the canvas. |
| Stop | Stop the active scenario. |
| Snap | Change the increments of the grid to which you can snap windows for alignment. |

| ICON | DESCRIPTION |
|------------|---|
| Select All | Selects all of the windows on the JumpStart canvas, so that you can move them together or delete all of them. |

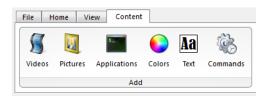
The View Toolbar



| ICON | DESCRIPTION |
|-------------------|---|
| Schedule | Show or hide the schedule. |
| Window Names | Show or hide the name of each window on the canvas. |
| Outputs | Show or hide the grid lines between virtual output devices (ECUs for MicroTiles) or actual output devices (for other displays). |
| ▼ Tile Boundaries | Show or hide the grid lines between actual output devices. NOTE: For non-MicroTiles displays, the Outputs and Tile Boundaries check boxes have the same effect. |
| Grid on Top | Show a grid representing the screens or MicroTiles connected to the JumpStart server on top of the content windows or behind the content windows. |
| Zoom In | Zoom in to the canvas in 5% increments. |
| Zoom Out | Zoom away from the canvas in 5% increments. |
| Fit in Window | Fit the canvas to the current window. |
| 100% | Zoom the canvas 100%. |

| ICON | DESCRIPTION |
|-------------------|--|
| Bring Forward | Move the selected window forward one level. |
| Send Backward | Move the selected window backward one level. |
| Bring to Front | Move the selected window to the front of the canvas. |
| Send to Back | Move the selected window to the back of the canvas. |

The Content Toolbar



| ICON | DESCRIPTION |
|--------------|--|
| Videos | Add a video file to the content panel. |
| Pictures | Add a picture file to the content panel. |
| Applications | Add or remove an application on the content panel. |
| Colors | Add a color box to the content panel. |

| ICON | DESCRIPTION |
|-------------------|--------------------------------------|
| Aa Text | Add a text box to the content panel. |
| Commands | Add a command to the content panel. |

Minimum Hardware Requirements

JumpStart requires the following minimum hardware specifications, for the JumpStart server and for any other computer that you install the JumpStart client software on.

JumpStart Server

- Operating System: Windows 7 (64-bit)
- Framework: .NET 4.0 Full
- Memory: 6GB of RAM or higher
- Storage Space Required for Server Software: 1GB of available disk space
- CPU: 2.4GHz or faster 64-bit processor
- Graphics: DirectX 9 graphics device with WDDM 1.0 or higher drivers
- DVI Capture Devices: Datapath VisionRGB-E2

Client Computer

- Operating System: Windows XP (32-bit), Windows 7 (32-bit or 64-bit)
- Framework: .NET 4.0 Client
- Memory: 2GB of RAM or higher
- Storage Space: 500MB of available disk space

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CPU: Pentium4 2.8GHz single core or faster

Supported Media Formats

| Video Format | File Extension | |
|---------------|---|--|
| QuickTime | .MOV | |
| Windows Media | .AVI, .WMV (NOTE: Digital Video (.DV) and Motion JPEG (MJPEG) are not supported.) | |
| MPEG | .MP4, .MPG, .MPEG | |

| Image Format | File Extension |
|---|----------------|
| Portable Network Graphics | .PNG |
| Graphics Interchange Format | .GIF |
| Animated Graphics Interchange Format | .GIF |
| Joint Photographic Experts Group | .JPEG, .JPG |
| Tagged Image File Format | .TIFF, .TIF |
| Microsoft Bitmap | .ВМР |

Required Filters

The JumpStart server uses the LAV Filter (version 0.45) Microsoft $^{\circledR}$ DirectShow $^{\circledR}$ media splitter and decoder to play video files. Removal or alteration of this software will cause JumpStart to no longer play some video file types. To reinstall this software:

 Insert the JumpStart CD-ROM into the DVD drive of the JumpStart server. Browse to the following location and launch the following executable:

\Prerequisites\LAV Filter\LAVFilters-0.45.exe.

- 2. On the Introduction page, click **Next**.
- 3. On the Select Destination Location page, click **Next**.
- 4. On the Select Components page, click Next.

- 5. On the Select Start Menu Folder page, click **Next**.
- On the Select Additional Tasks page, under the Use LAV Splitter for these file formats section, select the WMV check box. Click Next.
- 7. On the Ready to Install page, click **Install**.
- 8. On the completion page, click Finish.
- From the Start menu, select Programs > LAV Filters > LAV Filter Configuration.
- On the Video Settings tab, select 1 in the Threads for Multi-Threading drop-down list.
- 11. Click Apply. Click OK.

Performance Specifications

JumpStart can play back many different kinds of content in a schedule: pictures, videos, color or text boxes, software applications, and live input. A single scenario can contain up to 60 media windows, and each media window can have up to 3,000 media objects scheduled at different times within it. However, the amount of content which may be played back simultaneously is limited by the JumpStart server's hardware. This section provides guidelines for the amount of content which may be played back simultaneously.

Note that these limits apply to displaying each type of content alone: video or images. If you want to display several videos and image content simultaneously, or run additional applications, performance may degrade before you reach these limits.

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Video

| Video Resolution | Number of Videos in Simultaneous Playback | Number of Videos per Output |
|---|---|--------------------------------|
| 1920 x 1200 (WUXGA) @ 60Hz | 4 | 3 |
| 720 x 480 (Standard Definition) @ 60Hz | 16 | 12 |



Although limitations are provided using standard VESA resolutions, a wide range of non-standard resolutions — common with MicroTiles — are also supported within the equivalent bandwidth.

Images and Color Boxes

Standard Guidelines

When displaying images and color boxes before or after other content in a scenario, JumpStart can display a combined 25 million pixels of images or color boxes simultaneously.

In this instance, individual static images or color boxes should not be larger than 6.25 million pixels. If you exceed this value in a scenario, images, color boxes, or videos may not be displayed correctly.

Here are examples of image combinations that would reach JumpStart's maximum recommended capacity when displaying with other content in a scenario:

- 4 images that are each 2500 by 2500 pixels
- 8 images that are each 1750 by 1750 pixels
- 12 images that are each 1920 by 1080 pixels

Special Case - Static Content

If the images and color boxes remain static throughout the scenario, and are not preceded or succeeded by any other content, JumpStart can

display up to a combined 50 million pixels of images or color boxes simultaneously.

In this instance, individual static images or color boxes should not be larger than 50 million pixels. If you exceed this value in a scenario, images, color boxes, or videos may not be displayed correctly.

Here are examples of image combinations that would reach JumpStart's maximum recommended capacity when they are being shown alone:

- 1 image that is 7000 by 7000 pixels
- 16 images that are each 1750 by 1750 pixels
- 24 images that are each 1920 by 1080 pixels.

Capture Card Limitations

The D2R2-E DVI capture cards in the JumpStart server support capturing of the following resolutions:

- Digital: 640x480 (VGA), 800x600, 1024x768, 1280x1024, 1600x1200, 1920x1080, 1920x1200 (WUXGA)
- Analog: 640x480 (VGA), 800x600, 1024x768, 1280x1024, 1600x1200, 1920x1080, 2048x1536 (QXGA)
- HD Modes: 1080p, 720p, 576p, 480p using a Component HD-DVI connector (HDCP not supported).
- Supported Frequency: Resolution frequency supported up to 60Hz

Resolutions outside of the above list may still be captured by the D2R2-E capture card; however, quality is not guaranteed.



High-bandwidth Digital Content Protection (HDCP) is not supported in JumpStart.

Remote Management

Although you can install the JumpStart client software on as many other computers as you wish, up to 5 users can use the JumpStart client

software concurrently on other computers to connect to one JumpStart server.

Recommendations for Best Results

Use of interlaced video signals connected as an external source to the JumpStart server is not recommended. This could produce visible image artifacts, such as missing lines, especially when viewed up close or if the video is upscaled significantly.

Installation and Setup

This section provides information and procedures for installing and configuring Christie JumpStart.

Install Christie JumpStart

- 1. Insert the installation CD into the computer on which you want to run JumpStart.
- 2. Click Install Products.
- 3. Click Install JumpStart Client.
- 4. If prompted by any Microsoft Windows security warning dialog boxes, click **Run**.
- 5. If you want to continue the installation, read the license agreement and then select **I accept the terms in the license agreement**.
- Click Install.
- 7. When the installation is complete, click **Finish**.

Start Christie JumpStart

- 1. Log on to the computer on which Christie JumpStart is installed.
- 2. Click Start > All Programs > Christie > JumpStart.
- 3. Connect to a server. See Connect to a Server on page 16.
 - or -

Add a server. See Add a Server on page 15.

Close Christie JumpStart

Click the close button in the upper right corner of the JumpStart window.

Uninstall Christie JumpStart

- 1. Click Start > Control Panel.
- 2. Click Programs and Features.
- 3. Right-click Christie JumpStart and select Uninstall.
- 4. Click Yes.

Using JumpStart

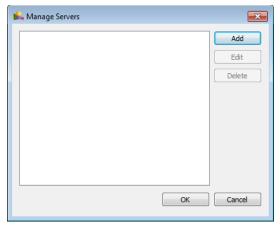
This section provides information and procedures for using Christie JumpStart.

Work with Servers

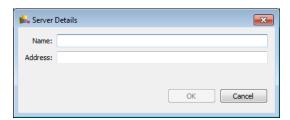
To display content, your display wall must be connected to a JumpStart server. The JumpStart server hosts all media content and it is managed by your JumpStart administrator.

Add a Server

1. On the File tab, click Manage.



2. In the Manage Servers dialog box, click Add.



- In the Server Details dialog box, enter a name for the server in the Name field. Choose a meaningful name so that you can distinguish this JumpStart server from any others you might have.
- Enter the IP address or host name of the server in the Address field.
- 5. Click **OK**. To close the Manage Servers dialog box, click **OK**.



You can also add a server directly without the Manage Servers dialog box. To do this, on the **File** or **Home** tabs, click **Select** and then click **Add & Connect**.

Connect to a Server

On the File or Home tabs, click Select and select a server from the list.

Edit a Server Name or IP Address

- 1. Click File > Manage.
- 2. In the Manage Servers dialog box, select a server.
- Click Edit.
- In the Server Details dialog box, edit the server name in the Name field.
 - or -

Edit the server IP address or name in the Address field.

5. Click **OK**. To close the Manage Servers dialog box, click **OK**.

Delete a Server

- 1. Click File > Manage.
- In the Manage Servers dialog box, select the server you want to delete.
- Click **Delete**.
- 4. When prompted to confirm, click **Yes**.
- 5. Click **OK**. To close the Manage Servers dialog box, click **OK**.

Work with the Canvas

The canvas is a graphical representation of your JumpStart display wall. You add windows to the canvas. A group of windows, along with the schedule of when and for how long they are displayed, makes up a scenario.

Change Viewing Options

- 1. Click the View tab.
- 2. Select or clear these check boxes to change viewing options on the canvas:
 - **Schedule**: Select to show the Schedule pane in the lower right corner of the JumpStart application window. When the Schedule pane is visible, you can change the size of the canvas relative to the schedule pane. Move your pointer over the split bar between the canvas and the schedule pane until a double-headed arrow appears, and then drag the split bar up or down.
 - Window Names: Select to show the window names on top of each window.
 - **Outputs**: Select to show lines separating the outputs (your ECUs) that are connected to your JumpStart server.
 - **Tile Boundaries**: Select to show the grid separating each MicroTile connected to your JumpStart server.
 - **Grid on Top**: Select to show the grid lines over top of the windows. Clear to show the windows on top of the grid lines.

Change the Zoom Level on the Canvas

To change the zoom level of the canvas in the JumpStart window, do one of the following:

 Move the slider at the bottom of the JumpStart window to the right or left.

- Click the plus or minus signs near the slider at the bottom of the JumpStart window.
- Click the View tab and then click Zoom In or Zoom Out.
- Use the wheel button on the mouse to zoom in and out.
- To fit the canvas to the window, click the View tab and then click
 Fit in Window.
- To view the canvas at 100 percent of its size, click the View tab and then click 100%.

Work with Scenarios

Scenarios are how you organize and display content on your wall using JumpStart. A scenario is a collection of windows that you want to show on your display wall, along with the order and timing of when and for how long they appear. You start and stop a scenario, much like you would with a play list in a media player.

You cannot schedule scenarios to begin at a particular time. However, if a scenario is playing when the JumpStart server software restarts, JumpStart restarts that scenario. This feature allows a running scenario to be automatically restarted when the JumpStart server reboots (for example, after a power outage).

You must activate a scenario to view it on your display wall. You can create as many scenarios as you want, but can only have one active at a time.

Create a Scenario

- On the **File** tab, click **New**. A new, empty scenario grid appears on the JumpStart canvas.
- 2. Expand one of these lists in the left pane:
 - Videos
 - Pictures
 - Applications
 - Input Channels

- Color Windows
- Text Windows
- 3. Click and drag content windows from the lists in the left pane to the canvas in the right pane. As you are developing your scenario, you can have more than 60 windows on your canvas, but cannot exceed 60 when you save or activate the scenario.
- 4. Repeat Step 3 to add additional windows to the canvas.
- 5. Click Save.
- 6. Enter a name for the scenario in the **Scenario Name** field.
- Click OK.

Save a Scenario

- 1. Click Save on the File ribbon or the quick-launch toolbar.
- 2. Enter a name for the scenario in the **Scenario Name** field.
- 3. Click OK.



If you save a scenario and specify the name of an existing scenario, that scenario will be overwritten. Note also that the scenarios are stored on the JumpStart server, not on your other computer, if you are using the JumpStart client software on another computer.

A scenario can contain up to 60 windows. If the scenario you are editing has more than 60 windows, you will not be able to save it.

Activate a Scenario

Click **Activate** on the **Home** or **File** ribbons, or on the quick-launch toolbar. If you have made changes to the scenario since the last time you saved it, you are prompted to save the scenario.

Stop a Scenario

Click **Stop** on the **Home** or **File** ribbons, or on the quick-launch toolbar.



If you have access to the keyboard that is connected to the JumpStart server, you can also stop the currently running scenario by pressing Ctrl-Shift-T on that keyboard.

The user account used by the JumpStart server software does not have Microsoft Windows administrative permissions on the JumpStart server. Because of this, any applications that require administrative permissions to close them cannot be closed when a JumpStart scenario ends.

Rename a Scenario

- 1. Click the File > Rename.
- 2. Enter a name in the **Scenario Name** field.
- Click OK.

Delete a Scenario

- 1. Click **File > Delete**.
- Click OK.

Work with Content

Christie JumpStart can show windows that have videos, pictures, applications, input channels, and color and text content on your display wall. For videos, pictures, applications, and input channels, you need to add the source content to JumpStart before you can add them to a scenario.

The items you can add to a scenario are shown in the panels to the left side of the canvas.

Add Media Files to the JumpStart Server

When you add videos and pictures to JumpStart, the content files must be located on the hard drive of the JumpStart server or on another

mounted drive (such as a USB drive or network drive). Also, any applications that you add must be ones that are installed on the JumpStart server. If you are using the JumpStart client software on another computer, you cannot add content directly from that computer using JumpStart.

By default, the JumpStart software opens the appropriate media folder on the JumpStart server hard drive when adding content (for example, the default Pictures folder for pictures). However, you can store media files anywhere on the hard drive. You can also store content on another mounted drive, as long as you can ensure connectivity when playing scenarios.

Add Files With USB

- Store the files you want to add on a USB flash drive or portable hard drive.
- Connect the flash or portable drive to the USB port on the JumpStart server.
- 3. When the drive is mounted, copy the files to a location on the JumpStart server's hard drive.

Add Files Over a Network

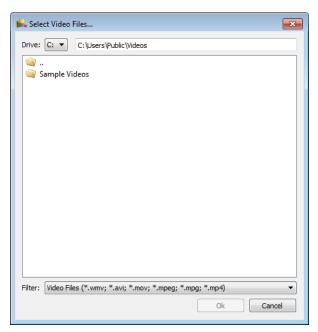
If the computer where your media files are stored is on the same network as the JumpStart server, you can share those folders with the JumpStart server and copy the files over your network. For more information, see your Microsoft Windows help.

Add Videos to the Content Pane

Click the Videos panel and then click Add.

- or -

Click the Content tab and then click Videos.

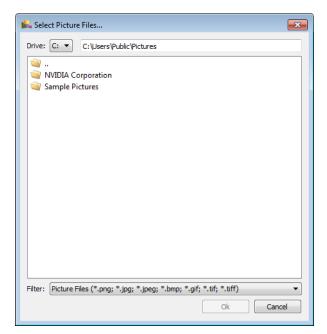


- 2. In the Select Video Files dialog box, navigate to the folder you want. Remember that this dialog box shows you files stored on the JumpStart server, not on your computer.
- 3. Select the video file(s) that you want to add. To select more than one, hold down Ctrl while you click the files. To select a range, click the first file, hold down Shift, and then click the last file.
- 4. Click OK.

Add a Picture to the Content Pane

- 1. Click the **Pictures** panel and then click **Add**.
 - or -

Click the Content tab and then click Pictures.



- In the Select Picture Files dialog box, navigate to the folder you want. Remember that this dialog box shows you files stored on the JumpStart server, not on your computer.
- 3. Select the image file.
- Click OK.

Add an Application to the Content Pane

You can add software applications to a scenario if they are installed on the JumpStart server. When you activate a scenario with an application, that application is started on the JumpStart server and becomes visible on the display wall.

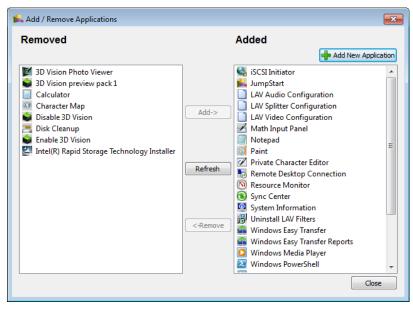
The Windows user account used by the JumpStart server software does not have Microsoft Windows administrative permissions on the JumpStart server. Because of this, any applications that require administrative permissions to close them cannot be closed when a JumpStart scenario ends.

As with any other type of window, you can change the location and size of an application window on the JumpStart canvas. However, some

applications have desktop locations or window sizes that are preset, and will therefore not appear at the location or with the window size that you have specified on the canvas.

- 1. Click the **Applications** panel and then click **Add**.
 - or -

Click the **Content** tab and then click **Applications**.

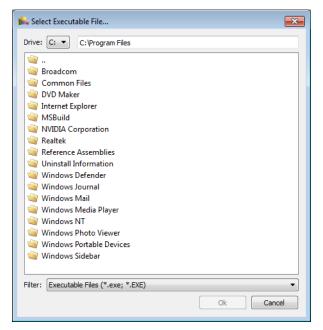


The Add / Remove Applications dialog box shows all applications that are accessible on the JumpStart server. The **Removed** column shows the applications that are not listed on the Applications panel. The **Added** column shows the applications that are listed.

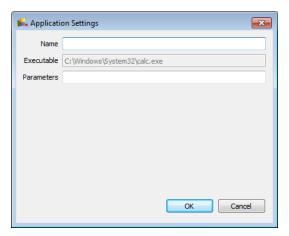
2. To show an application on the Applications panel, select it in the Removed column and then click the **Add** button. To make it not visible, select it in the Added column and then click the **Remove** button. To select multiple applications, hold down Ctrl and click. To select a range, click the first one, hold down Shift, and click the last one.

When you remove an application from the Applications panel, it does not remove it from the JumpStart server.

 If you want to use an application that is installed on the JumpStart server but does not appear in this list, you can add it. Click Add New Application.



- 4. In the Select Executable File dialog box, navigate to the folder you want and select the executable (*.exe) file. If you are using the JumpStart client on another computer, remember that this dialog box shows you files stored on the JumpStart server, not on your computer.
- Click Add.



- 6. In the Application Settings dialog box, specify a Name and any Parameters to pass to the application when it is run, as you would use when executing the command from a command-line interface. (Refer to the application's user documentation for this information.) Make sure you enclose an individual parameter with spaces in double quotes (for example, path or file names that contains spaces). We recommend that you test launching the application with the parameters before adding it to JumpStart.
- 7. Click **OK**. The added application appears in the Added column.

Add an Input Channel to the Content Pane

The Input Channel panel shows the input channels that are installed on the JumpStart server. If you have the model of server with no DVI inputs, then this tab is empty.

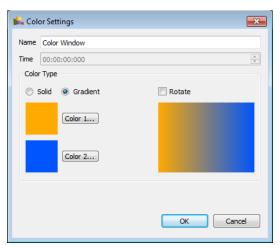
If you have the model of server with 4 DVI inputs, then this list of channels is dynamically updated based upon what channels are connected. To refresh this list, click **Refresh**.

Add a Color Window to the Content Pane

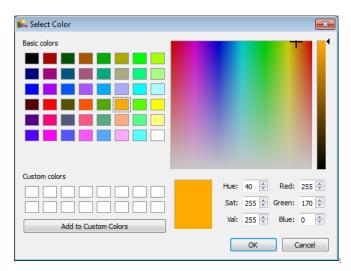
When you add a color window to the Color Windows panel, it acts as a template. You select the properties you want initially. After you add a window to a scenario by dragging it from this panel, you can change the color settings for that window and that scenario only.

- 1. Click the Color Windows panel and then click Add.
 - or -

Click the Content tab and then click Colors.



- In the Color Settings dialog box, enter a Name for the color window.
- 3. Under Color Type, select one of the following options:
 - To make the window 1 continuous color, select Solid. Click Color 1.



In the Select Color dialog box, select the color that you want and click **OK**.

- To make the window a gradual transition between 2 colors, select Gradient. Click Color 1 and select the color you want to start with on the left or top. Click Color 2 and select the color you want to end with on the right or bottom. To have the gradient transition from left to right (default), clear the Rotate check box. To have the gradient transition from top to bottom, select the Rotate check box.
- 4. When you are finished specifying the color settings, click **OK**. The new window appears on the Color Windows panel.

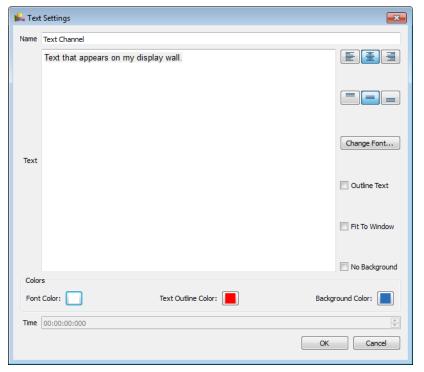
Add a Text Window to the Content Pane

When you add a text window to the Text Windows panel, it acts as a template. You select the properties you want initially. After you add a window to a scenario by dragging it from this panel, you can change the text settings for that window and that scenario only.

1. Click the **Text Windows** panel and then click **Add**.

- or -

Click the **Content** tab and then click **Text**.



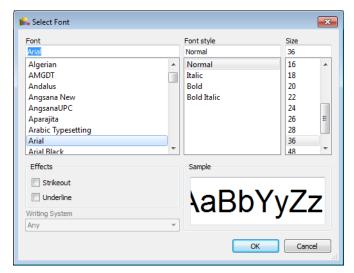
- 2. In the Text Settings dialog box, enter a **Name** for the text window.
- In the **Text** box, enter the text you want to appear in the text window.
- 4. Select the color scheme you want to use by clicking one of these 3 buttons. When you click one of these buttons, a Select Color-style dialog box appears:
 - Font Color: Select the color of the text itself.
 - Text Outline Color: Select the color of the border around the text.
 - Background Color: Select the color of the window background.

In the Select Color dialog box, select the color that you want and click **OK**.

5. To change the horizontal alignment of the text in the window, click the left, center, or right alignment buttons. To change the vertical

alignment of the text in the window, click the top, center, or bottom buttons.

6. To change the font used in the text, click **Change Font**.



In the Select Font dialog box, specify the font, style, size, and effects you want to use.

The fonts shown are the ones installed on the computer that you are using. If you are using the JumpStart client software on another computer, ensure that the JumpStart server has the same fonts installed on it.

Click OK.

- 7. Select the other text options:
 - Outline Text: Select to use a different color to outline the text.
 - **Fit to Window**: Select to make the text scale up and down as you change the size of the window on the canvas.
 - **No Background**: Select to make the background of the text box transparent instead of colored.
- 8. When you are finished specifying the text settings, click **OK**. The new window appears on the Text Windows panel.

Remove Content

When you remove content such as videos or pictures from the JumpStart client software, you do not delete the files from the JumpStart server's hard drive. When you remove color or text boxes, you do delete them permanently. To remove content:

- 1. Click a content panel in the left pane.
- 2. Right-click an item and select Remove.
- 3. When prompted to confirm, click Yes.

Work with Windows

Windows are what you use to organize content in JumpStart. Each window points to an individual media file, input channel or application. Windows can also contain text or color. A group of windows on the JumpStart canvas, along with the schedule of when and for how long they are displayed, makes up a scenario.

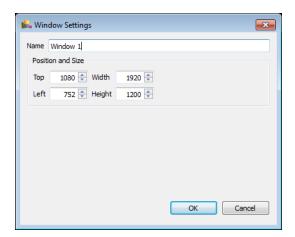
Resize a Window

To resize a window with your mouse:

- Click a window on the canvas.
- 2. Click, hold, and drag a handle to resize the window.
- 3. To maintain aspect ratio (keep the height and width proportional to each other) while resizing, hold down Shift and click, hold, and drag a handle.

To enter specific height and width values for a window:

1. Right-click a window on the canvas and select **Settings**.



- 2. Increase or decrease the Width value.
- 3. Increase or decrease the **Height** value.
- 4. Click OK.

Move a Window

To move a window with your mouse, click and drag a window on the canvas.

To enter specific values for the location of a window:

- 1. Right-click a window on the canvas and select **Settings**.
- In the Windows Settings dialog box, increase or decrease the Top value.
- Increase or decrease the Left value.
- 4. Click OK.

You can have the windows snap to an invisible grid so that you can easily line them up. To change the increments of that grid:

- Click the Home tab.
- 2. Click **Snap**, and select one of these options:
 - Off: Turns the snap feature off.
 - Small: Sets the snap increment to 8 pixels.
 - Medium: Sets the snap increment to 24 pixels.

• Large: Sets the snap increment to 48 pixels.

Rename a Window

- 1. Right-click a window on the canvas and select **Settings**.
- In the Windows Settings dialog box, enter a name in the Name field.
- 3. Click OK.

You can also double-click the window name in the schedule, or right-click the window name and click **Rename**. Then, type a new name.

Change the Window Order

By default, JumpStart displays the windows in a scenario in the order in which you added them. For example, if you drag a blue color window onto the canvas and then a red color window that overlaps it, the red one will appear to be on top of the blue one because the red one was added later.

You can change the order in which the windows are displayed by JumpStart by clicking and dragging them in the schedule pane. To have a window displayed on top of other windows, drag it up in the list of windows in the schedule pane. To have it displayed underneath other windows, drag it down in this list.

You can also change the window order as follows:

- 1. Click a window on the canvas.
- 2. On the View tab, click one of these buttons:
 - **Bring Forward**. Moves the window one position toward the top in the window order.
 - Send Backward. Move the window one position toward the bottom in the window order.
 - Bring to Front. Move the window to the top of the window order.
 - Send to Back. Move the window to the bottom of the window order.

Show or Hide Window Names

- 1. Click View.
- Select Window Names to show window names.
 - or -

Clear Window Names to hide window names.

Delete a Window

- Right-click a window on the canvas and select **Delete Window**, or click a window on the canvas and press the **Delete** key.
- 2. When prompted to confirm, click Yes.

Work with Commands

You can add commands to scenarios. You can also send commands from another device to the JumpStart server, as long as the server is connected to the other device using Ethernet or serial communication. There are two types of commands that you can include:

- Serial commands directed at a JumpStart server to start or stop a scenario
- Serial commands directed at other devices, such as projectors

JumpStart Commands

The JumpStart server supports two serial commands, one for starting a scenario and another for stopping a scenario. Typically you will invoke these commands on one JumpStart server. However, if your installation has more than one JumpStart server, you can send these commands from one server to another one. You can also send these commands to a JumpStart server from any other device capable of sending a serial command.

The syntax of these commands is as follows:

• (SCN+STRT scenarioname), where scenarioname is the name of a scenario that is available on the JumpStart server that you are sending the command to. This starts the scenario.

 (SCN+STOP scenarioname), where scenarioname is the name of a scenario that is available on the JumpStart server that you are sending the command to. This stops the scenario.

Serial Commands to Other Devices

You can include commands to other devices, as long as the JumpStart server sending the command is connected to that device using Ethernet or serial communication. When defining the command, you must use a valid command that the device will recognize, and you must know the IP address and port number of the device.

For information on the syntax of commands for your device, see the documentation for that device.

For example, to instruct a Christie M Series projector to power on, you would send the command (PWR1) to the projector. To have the projector show a grid test pattern, you would send $(ITP\ 1)$.

Best Practices When Sending Commands

Make sure that you carefully analyze the interactions between the commands that you define, particularly if your installation has more than one JumpStart server.

Note that a JumpStart server cannot run more than one scenario at a time. When you start a scenario, any previously running scenario on that server is stopped. Also, when the JumpStart client software instructs the JumpStart server to start a scenario, the server sends acknowledgement back to the client software to indicate success or failure.

Therefore, if you run a scenario that starts another scenario immediately, the JumpStart server might return an error message because the first scenario was stopped before the acknowledgement of its starting could be sent back.

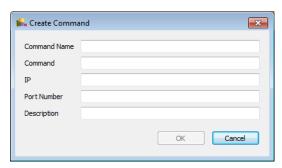
If you are starting one scenario from another, we recommend spacing the commands apart on the schedule rather than placing the commands at time zero.

Create a Command

To create a command:

- Click the Commands panel and then click Add.
 - or -

Click the **Content** tab and then click **Commands**.



- 2. In the Create Command dialog box, specify a **Command Name**.
- Specify a **Command**. For information on JumpStart command syntax, see *JumpStart Commands* on page 34. For information on serial command syntax, see the documentation for the device that you want to send the command to.
- 4. Specify an **IP** address for the JumpStart server or other device.
- 5. Specify a **Port Number** that the device will be listening on. For another JumpStart server, this is normally 3002.
- 6. Specify a **Description** (optional).
- 7. Click OK.

After you have added a command to the Commands panel, you can view its properties by hovering the pointer over it.

To rename a command, double-click it in the Commands panel or right-click and click **Rename**. Type the new name and press **Enter** or click away.

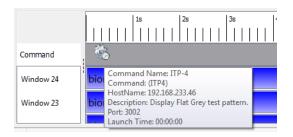
To edit a command, right-click it in the Commands panel and select **Edit**.

To delete a command, right-click it in the Commands panel and select **Remove**.

Add a Command to a Scenario

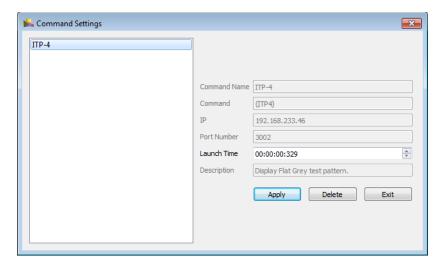
To add a command to a scenario, drag it from the Commands panel to the canvas. It appears on the timeline. To view a command's properties, hover the pointer over it.

You can also add a command to a scenario by right-clicking in a command row under the timeline, clicking **Add**, and then selecting a command name. Only the first 5 commands in the Commands panel are listed.



Work With Commands on the Timeline

After you have added a command to a scenario by dragging it onto the canvas, you can change the launch time for the command by dragging it back and forth on the timeline. You can also do this by right-clicking the command icon and selecting **Settings**.



In the Command Settings dialog box, specify a different **Launch Time** and click **Apply**.

To remove the command from the scenario completely, click **Delete**.

When you are finished with this dialog box, click Exit.

Work with the Schedule

You use the schedule to define when and how frequently content appears in a scenario. You can also use the schedule pane to change the order in which content is displayed (which windows are on top and which are underneath). For more information, see *Change the Window Order* on page 33.

Show or Hide the Schedule Pane

- 1. Click the View tab.
- 2. Select **Schedule** to show the schedule pane.

- or -

Clear **Schedule** to hide the schedule pane.

Resize the Schedule Pane

Move your pointer over the split bar between the canvas and the schedule pane until a double-headed arrow appears, and then drag the split bar up or down.

Change the Schedule Time Interval

Right-click the time ruler in the schedule.



2. Select one of the following options:

3. **Auto**, **Seconds**, **Minutes**, or **Hours**. Auto (selected by default) changes the units to match the longest duration you have added to the canvas.

Change the Time Duration of a Window

- 1. Right-click a time line in the schedule pane and select **Settings**.
- 2. In the Settings dialog box, increase or decrease the time. The time field is of the format HH:MM:SS:TT (hours: minutes:seconds:tenthousandths of a second). Click in a segment and type a number or use the arrows to increase or decrease the value.
- Click OK.

Move Content Within the Schedule

You can have up to 3,000 pieces of content displayed within a window in the schedule. To add additional content to existing windows on the canvas, drag the content from the Content pane into the window in the schedule.

You can also rearrange content in the Schedule pane by dragging the content forward or back within one window, or by dragging the content from one window to another.

Work with Windows on the Canvas

After you add a color or text window to a scenario by dragging it from the Text Windows panel, you can change the color or text settings for that window and that scenario only.

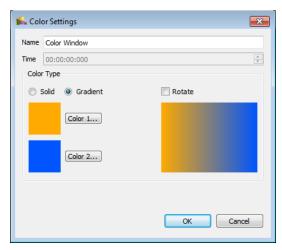
Change Color Window Properties on the Canvas

Note that these changes do not affect the properties of the color window on the panel, only in this scenario.

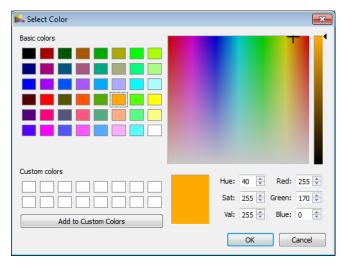
1. Click the **Color Windows** panel and then click **Add**.

- or -

Click the Content tab and then click Colors.



- 2. In the Color Settings dialog box, enter a **Name** for the color window.
- 3. Under Color Type, select one of the following options:
 - To make the window 1 continuous color, select Solid. Click Color 1.



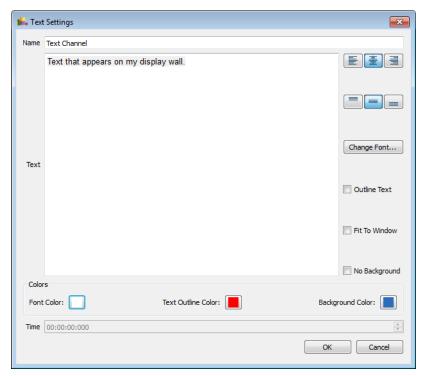
In the Select Color dialog box, select the color that you want and click **OK**.

- To make the window a gradual transition between 2 colors, select Gradient. Click Color 1 and select the color you want to start with on the left or top. Click Color 2 and select the color you want to end with on the right or bottom. To have the gradient transition from left to right (default), clear the Rotate check box. To have the gradient transition from top to bottom, select the Rotate check box.
- 4. When you are finished specifying the color settings, click **OK**. The new window appears on the Color Windows panel.

Change Text Window Properties on the Canvas

Note that these changes do not affect the properties of the text window on the panel, only in this scenario.

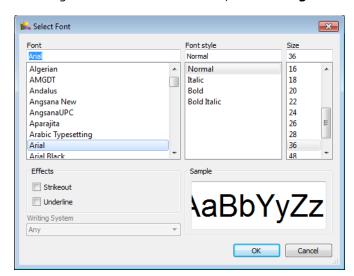
 Right-click the text window's time line in the schedule pane and click **Settings**.



- 2. In the Text Settings dialog box, enter a **Name** for the text window.
- In the **Text** box, enter the text you want to appear in the text window.
- 4. Select the color scheme you want to use by clicking one of these 3 buttons. When you click one of these buttons, a Select Color-style dialog box appears:
 - Font Color: Select the color of the text itself.
 - **Text Outline Color**: Select the color of the border around the text.
 - Background Color: Select the color of the window background.

In the Select Color dialog box, select the color that you want and click **OK**.

To change the horizontal alignment of the text in the window, click Left, Center, or Right Align. To change the vertical alignment of the text in the window, click Top, Center, or Bottom Align.



6. To change the font used in the text, click **Change Font**.

In the Select Font dialog box, specify the font, style, size, and effects you want to use. If you are using the JumpStart client software on a laptop or other computer, remember that the available fonts are those that are installed on the JumpStart server, not on your client computer.

Click OK.

- 7. Select the other text options:
 - **Outline Text**: Select to use a different color to outline the text.
 - **Fit to Window**: Select to make the text scale up and down as you change the size of the window on the canvas.
 - **No Background**: Select to make the background of the text box transparent instead of colored.
- 8. When you are finished specifying the text settings, click **OK**.

Add Color or Text Windows as New Channels

If you have made changes to color or text windows in a scenario and want to re-use them as channels in other scenarios, you can add them to your list of available channels.

- Right-click a color or text window time line in the schedule and select Add as Channel.
- In the Color Settings or Text Settings dialog box, specify the settings you want for this new channel. JumpStart suggests a new window name in the **Name** field. Use that one, or enter a new one.
- 3. Click **OK**. If you have selected a window name that is already in use, you are prompted to overwrite.

Advanced Features

Schedule Scenario Restarts

JumpStart is designed for continuous usage. However, if you have a scenario with videos that are meant to remain synchronized, they may become offset over the course of a long scenario. Because of this, we recommend that you do not run such a scenario continuously for longer than 24 hours.

If you have a scenario that is becoming offset in this way, you can restart MediaServer (the application on the JumpStart server that manages and serves content) at an off-peak time, such as overnight, using the Windows Task Scheduler.

If MediaServer is running a scenario when it restarts, it automatically restarts that scenario. However, MediaServer will not automatically restart a running scenario more than 3 times within 30 minutes. Therefore you should not schedule MediaServer restarts less than 30 minutes apart.

To schedule a restart of MediaServer:

 From the Start menu, select Control Panel. From the View by drop-down list, select Small Icons or Large Icons.

- Click Administrative Tools. Double-click Task Scheduler.
- In the Task Scheduler window, select Action > Create Task.
- 4. In the Create Task dialog box, on the **General** tab, enter an appropriate **Name** and **Description** for the task.
- 5. Click the **Triggers** tab, and follow these steps:
 - a. Click New. In the New Trigger dialog box, from the Begin the task drop-down list, select On a schedule.
 - b. Under Settings, click **Daily**. Specify the date when you want the task to be run for the first time, and the time of day when you want the task to be run. Enter how often you want the task run, in days, in the **Recur every** box.
 - c. Click OK.
- 6. Click the **Actions** tab, and follow these steps:
 - a. Click New. In the New Action dialog box, from the Action drop-down list, select Start a program.
 - b. In the **Program/script** box, enter **TASKKILL**.
 - c. In the Add arguments box, enter /F /IM Mediaserver.exe. Click OK.
 - d. Click **New**. In the New Action dialog box, from the **Action** drop-down list, select **Start a program**.
 - e. Beside the Program/script box, click Browse.
 - f. In the Open dialog box, locate the mediaserver.exe file (for example, C:\Program Files (x86)\Christie Digital Systems\Mastersuite\Christie\Jetty\mediaserver.exe). Click Open.
 - q. Click OK.
- 7. Click the **Settings** tab, and follow these steps:
 - a. Ensure that the **If the running task does not end when requested, force it to stop** check box is selected.
 - Ensure that the Allow task to be run on demand check box is selected.
 - c. Clear all other check boxes on the Settings tab.

- d. From the If the task is already running, then the following rule applies drop-down list, select Stop the existing instance.
- 8. Click **OK**. The new task appears in the Task Scheduler window.
- 9. To test the task, right-click it and select **Run** from the context menu.

Automatic Schedule Restarts

If the JumpStart server is turned off or loses power for any reason, the MediaServer application restarts automatically when the server is rebooted.

If MediaServer is running a scenario when it restarts, it automatically restarts that scenario. However, MediaServer will not automatically restart a running scenario more than 3 times within 30 minutes.

Troubleshooting

This section provides information and known issues with JumpStart and how to resolve them.

I have 1 MicroTile with 1 ECU driving it and cannot set up JumpStart

The JumpStart connection wizard cannot configure your display wall if you have a subarray that is 1 MicroTile being driven by 1 ECU. This is because the DVI output requires a minimum bandwidth of 25 MHz, which is not achievable using 1 MicroTile at native resolution with a refresh rate of 60 Hz, which is what the MicroTiles Setup Wizard uses.

To configure this setup manually, use the WebUI for your Master ECU.

Images on my 1-tile subarray cut off

If you have a subarray that only contains 1 MicroTile, the EDID resolution might be set so that the incoming signal is larger than the native resolution of the MicroTile (720x540 pixels). As a result, images and videos might be cropped. Set the EDID values manually so that all of the incoming signal can be displayed. To configure this setup manually, use the WebUI for your Master ECU.

An application in my scenario isn't closing automatically

Some applications do not close automatically when the scenario that launched them is stopped. Here are possible reasons why this might occur:

 The JumpStart client software does not have Microsoft Windows administrative permissions on the JumpStart server. Because of this, any applications that require administrative permissions to close them cannot be closed when a JumpStart scenario ends. This is true regardless of whether you are running the JumpStart client software on the JumpStart server or on another computer.

- Some applications with splash-screen dialog boxes cannot be closed.
- Some applications that launch multiple window or processes (for example, Adobe Acrobat) cannot be closed.

I have several large videos playing at once and am experiencing performance problems

You can have up to 4 HD videos or 16 SD videos playing simultaneously on your display wall. However, if NVIDIA Mosaic mode is enabled, we recommend that you have fewer videos playing simultaneously. To configure NVIDIA Mosaic mode, right-click the desktop of the JumpStart server and select NVIDIA Control Panel from the context menu.

I have just configured my display wall, and the JumpStart server is not rebooting properly

The JumpStart server has an upper limit of 150 MHz of bandwidth assigned to each ECU. If the display wall mapped to an ECU exceeds this value, the JumpStart server may not interact properly with the display wall. If this occurs, use the WebUI for your Master ECU to manually change your EDID values to bring the bandwidth below 150 MHz.

My desktop looks cropped

Christie ECUs default to a WUXGA (1920x1200) resolution. If your MicroTiles configuration has a native resolution smaller than this, your desktop will be cropped on the right and/or on the bottom, potentially including the Microsoft Windows task bar. If this occurs, use the WebUI to manually configure appropriate EDID settings on the ECU.

I've added an image or video to JumpStart, but no thumbnail picture appears

For some very large files, JumpStart cannot create a thumbnail for them when you add them to JumpStart. Those files should work properly in a scenario.

I'm using interlaced video and don't like image quality

Use of interlaced video signals connected as an external source to the JumpStart server is not recommended. This could produce visible image artifacts, such as missing lines, especially when viewed up close or if the video is upscaled significantly.

My videos are not remaining synchronized

If you have a long scenario with multiple videos that are meant to stay synchronized, but they are starting to become out of synch, you can restart MediaServer (the application on the JumpStart server that manages and serves content) at an off-peak time, such as overnight, using the Windows Task Scheduler. For more information, see *Schedule Scenario Restarts* on page 44.

I'm playing a scenario, but some of my windows are black or white

If the JumpStart server is not displaying content correctly, it may be running low on memory, especially if you are displaying several video or image windows at the same time. Adjust your scenario so that it has fewer windows being displayed simultaneously.

Troubleshooting

JumpStart displayed an out-of-memory error, and isn't working

If the JumpStart server displays an out-of-memory exception error, the JumpStart server software should restart automatically. If it has not restarted (for example, if there are no JumpStart windows open), then you can manually launch the JumpStart server software by double-clicking the Christie JumpStart Server shortcut on the server desktop.

I cannot connect to the JumpStart server or I cannot see any scenarios

If you cannot open or save a scenario or connect to the JumpStart server using the JumpStart client software, confirm the following items:

- The server is powered on and connected to the display wall.
- If you are using the JumpStart client software on another computer, you are connected to the server.
- The server has sufficient hard disk space to operate properly.

If this issue persists, restart the JumpStart server. If this issue recurs after restarting the server, then the Java installation on the JumpStart server may have been upgraded to a more recent version while the Christie Web Server was running. Because the Christie Web Server requires Java, upgrading Java while the Web Server is running will cause the Java installation process to fail.

To upgrade Java safely, or to correct this issue:

- On the JumpStart server desktop, right-click Computer, and click Manage on the context menu.
- In the Computer Management window, double-click Services and Applications, and then double-click Services.
- 3. In the list of services, right-click **Christie Web Server** and then click **Stop**.
- 4. From the **Start** menu, click **Control Panel**. Double-click **Java (32-bit)**.

- On the Java Control Panel, click the Update tab. Click Update Now.
- When the Java update is complete, return to the Services list, rightclick Christie Web Server and then click Start.

Setup and Configuration Issues

Viewing the MicroTiles Connection Wizard

If you are doing initial setup using more than one ECU with JumpStart, Microsoft Windows chooses one of the ECUs as the one driving the primary display. This may not be the ECU you have designated as the Master ECU. As a result, the display wall attached to your Master ECU may be black.

To avoid this, perform initial setup with just the Master ECU connected to the JumpStart server using the DVI video cable.

Using the Corel WinDVD player

JumpStart uses the Corel[®] WinDVD[®] player to play Blu-ray discs. If you uninstall or change this application, you will not be able to play Blu-ray discs. We highly recommend that you not uninstall or change this software application.

Also, to display Blu-ray discs across more than one screen on your wall, you must have NVIDIA[®] Mosaic mode turned on. To configure NVIDIA Mosaic mode, right-click the desktop of the JumpStart server and select **NVIDIA Control Panel** from the context menu.

JumpStart stopped playing a scenario, and I can't see the Windows task bar on my display wall

If JumpStart suddenly stops playing a scenario, then the Mediaserver.exe software that displays content may have ended prematurely. If this happens and you cannot see the Windows task bar to restart the server:

- 1. Connect to the server using the JumpStart client software on another computer.
- 2. Start another scenario in JumpStart.

3. Stop that scenario. The Windows task bar should reappear.

I started a scenario that includes a command to start another scenario, but got an error message

If you start a scenario that contains a command to start another scenario, the JumpStart server might return an error message because the command was located at time zero. When starting one scenario from another, make sure the command is not at time zero, but placed a few seconds into the scenario timeline.

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