



Orchid Fusion VMS User Guide

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IPConfigure

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Introduction

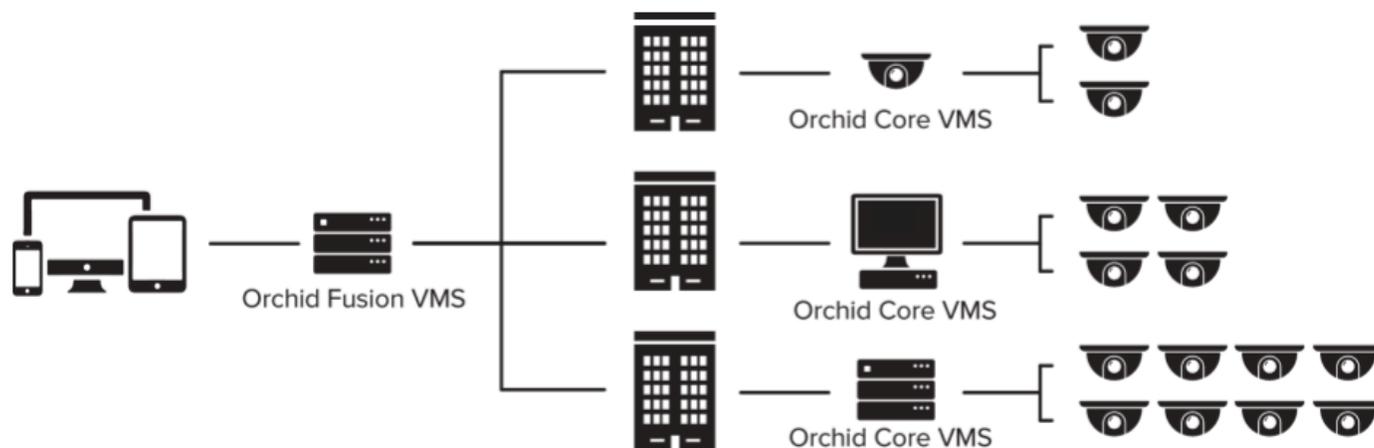
Thank you for your interest in IPConfigure's Orchid Fusion Video Management System. This guide should provide you with everything you need to know as you get started using Orchid Fusion VMS. We'll begin with an overview of the product and the user guide, then we'll review the user interface and dive into specific details for viewing and exporting video.

About the Orchid Product Family

Orchid Core VMS is the foundation of IPConfigure's Video Management System. Orchid Core VMS runs on a single server to collect, record, and store video from network cameras. Accessible via an intuitive web browser interface, Orchid Core VMS allows users to view live and recorded video from virtually any web-enabled device.

Orchid Fusion VMS is an enterprise software developed to integrate multiple Orchid Core VMS servers from various locations into one seamless management system. Designed to work across a variety of operating systems, camera types and network topologies, Orchid Fusion VMS is the perfect solution for large organizations.

Orchid Core VMS and Orchid Fusion VMS have very similar user interfaces, and both systems allow viewing and exporting video, but there is a key difference between the two. While Orchid Core VMS works on the camera level, beginning with version 2.2.0, Orchid Fusion VMS now works on the camera level and the server level. In Orchid Core VMS, the administrator will "register" network cameras, configure camera stream settings, and establish video retention levels for each camera. In version 2.2.0, Orchid Fusion VMS has the power to "register" both cameras and individual Orchid Core VMS servers, resulting in increased management capabilities to an entire network of Orchid Core VMS servers.



About the Orchid Fusion VMS User Guide

The Orchid Fusion VMS User Guide is intended to cover the basic, daily use of the Orchid Fusion VMS software. This guide includes information on the following topics:

- Signing into the Orchid Fusion VMS software
- Navigating the User Interface
- Working with the Stage and the Players
- The Timeline Bar
- Viewing Live and Recorded Video
- Exporting Video

It is important to remember that your system administrator sets up all of the users with permissions to cameras, servers, and abilities. This User Guide assumes that you have all of the available permissions (such as Live, Playback, Export and PTZ). If you do not have all of these permissions, some features may be unavailable to you.

How to Sign In

Orchid Fusion VMS can be accessed easily through most modern web browsers, such as the latest versions of Chrome or Firefox. The latest version of Chrome is recommended. Your browser choice, however, will determine the available operating modes for Orchid Fusion VMS.

* The following web browsers are explicitly *not* supported: Internet Explorer 11, Firefox 52 ESR, and any Google Chrome version older than version 48.

A Quick Word on Web Browsers and Operating Modes

Beginning with version 2.4.0, Orchid Fusion VMS supports Web Real-Time Communication (WebRTC). This technology allows for viewing full-bandwidth, live and recorded H264 video streams within a web browser (without the need to download a plugin). WebRTC mode and Low-bandwidth mode are available in the following browsers:

- (Preferred) Google Chrome, version 66 or higher, in a MacOS, Windows, or Linux desktop environment, or on a mobile device
- Latest version of Safari (mobile and desktop)
- Latest version of Firefox
- Latest version of Edge

All other web browsers support Low-bandwidth mode only. (For a detailed comparison of the two operating modes, please refer to the [Orchid Fusion VMS Administrator Guide](#).)

* Starting with Orchid Fusion VMS version 2.10.0, the FBGST plugin will no longer be supported. The plugin-compatible web browsers (Chrome version 34, and Firefox version 52) have also reached the end of support. If you were previously using either of these web browsers, you should upgrade to the latest version available.

Signing In

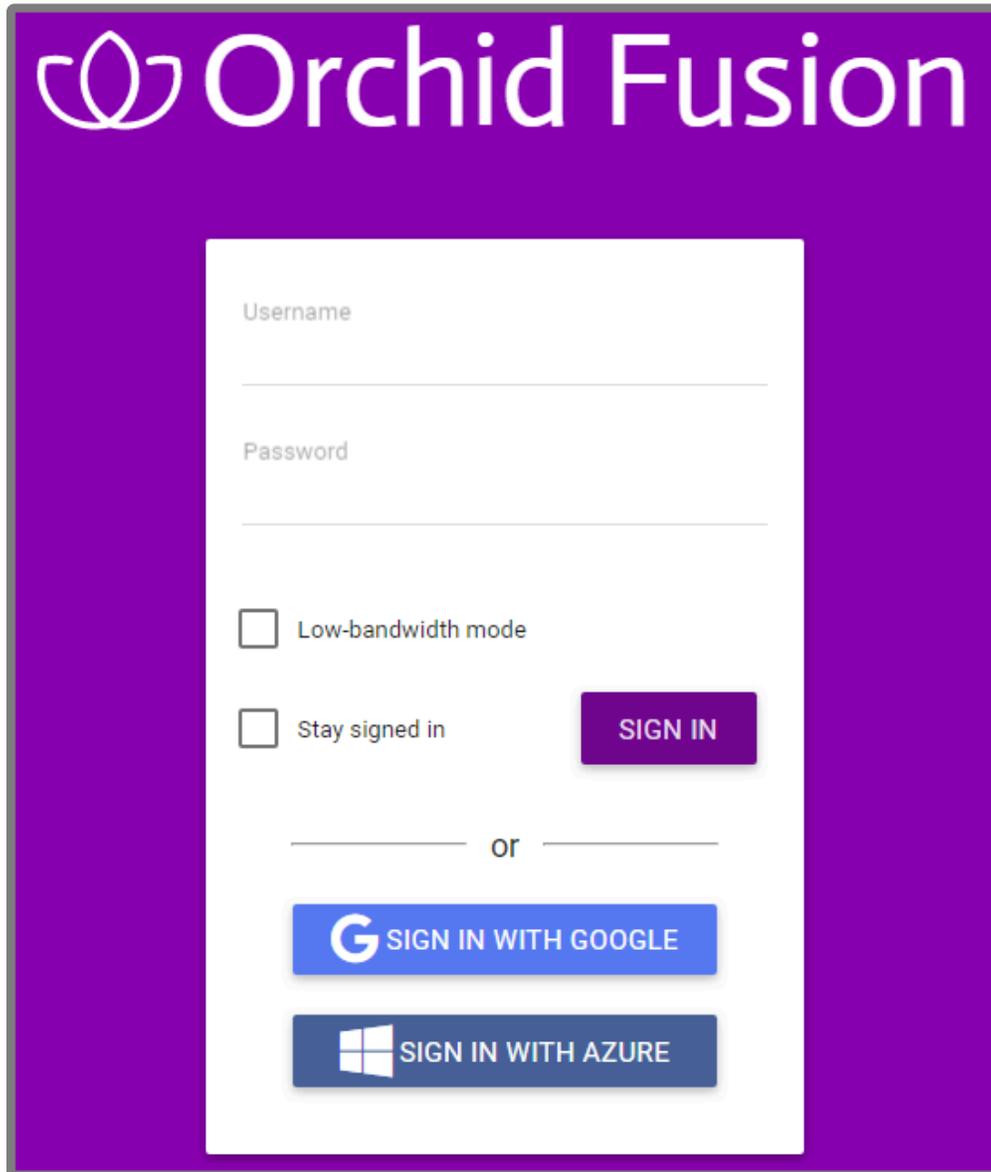
With the release of version 2.10, Orchid Fusion VMS has added more ways to sign in, and will allow mixed authentication modes. So, Administrators may enable multiple sign in modes on the same Fusion server.

Orchid Fusion VMS supports each of the following external authentication providers:

- Google
- Active Directory
- Azure Active Directory
- FreeIPA

Accessing the Sign In Screen

1. To open Orchid Fusion VMS on a client device, type the IP address of the Orchid Fusion VMS server in the web browser address bar. If you are opening Orchid Fusion VMS on the Orchid Fusion VMS server itself, you may type **localhost:8080** in the web browser address bar (where 8080 is the web server port number). You may also use the Orchid Fusion VMS link in the system menu or the desktop icon in Windows, or the Fusion icon in the Applications list in Linux.
2. You will be prompted to sign into Orchid Fusion VMS. (Your Orchid Fusion VMS Administrator should advise you on which method to use.)

The image shows the Orchid Fusion login interface. At the top, there is a purple header with the Orchid Fusion logo and the text "Orchid Fusion" in white. Below the header is a white login form. The form contains two input fields: "Username" and "Password". Below these fields are two checkboxes: "Low-bandwidth mode" and "Stay signed in". To the right of the "Stay signed in" checkbox is a purple "SIGN IN" button. Below the checkboxes is a horizontal line with the word "or" in the center. Below this line are two buttons: a blue "SIGN IN WITH GOOGLE" button and a dark blue "SIGN IN WITH AZURE" button.

* The username and password are both case sensitive; if you have trouble signing in, contact your administrator.

* The *Low-bandwidth mode* checkbox will only be visible if you are using a web browser that supports WebRTC mode.

Standard Sign In

1. Enter your username and password in the fields provided. (This information should be provided to you by your Orchid Fusion VMS Administrator.)
2. If the *Low-bandwidth mode* checkbox appears, you may choose to run in Low-bandwidth mode.
 - a. Mark the box if you want to run in Low-bandwidth mode.

- b. Leave the box unmarked if you want to run in WebRTC mode.

If the checkbox does not appear, you will run in Low-bandwidth mode by default (because the browser you are using does not currently support other operating modes).

3. Mark the *Stay signed in* checkbox if you wish to remain signed in even if you close your browser session or reboot your computer. You will remain signed in for approximately 30 days. (If you leave this box unmarked, the system will automatically sign you out if you close your browser session or reboot your computer.)
4. Press **Sign In**.

Sign In with Google

With this method, you will be able to sign into Orchid Fusion VMS using your existing Google credentials (eliminating the need for yet another password). This requires that your system administrator has enabled Google Authentication, and an Orchid Fusion VMS user is linked to your Google account.

1. If the *Low-bandwidth mode* checkbox appears, you may choose to run in Low-bandwidth mode.
 - a. Mark the box if you want to run in Low-bandwidth mode.
 - b. Leave the box unmarked if you want to run in WebRTC mode.

If the checkbox does not appear, you will run in Low-bandwidth mode by default (because the browser you are using does not support other operating modes).

2. Mark the *Stay signed in* checkbox if you wish to remain signed in even if you close your browser session or reboot your computer. You will remain signed in for approximately 30 days. (If you leave this box unmarked, the system will automatically sign you out if you close your browser or reboot your computer.)
3. Press the **Sign In With Google** button.
4. A Google sign in screen will appear. Select the Google account that you associate with Orchid Fusion VMS. If you are already signed into the selected Google account, Orchid Fusion VMS will open.
5. If you are not already signed into Google, enter your password and press the **Next** button. Orchid Fusion VMS will open.

 Google Sign In is not available using Microsoft Edge.

Sign In with Active Directory

With this method, you will be able to sign into Orchid Fusion VMS using your existing Active Directory credentials. This requires some configuration which should be performed by the Orchid Fusion VMS Administrator.

1. Enter your username using the email style notation <userid>@<domain> (like john.smith@ipconfigure.com).
2. Enter your password.
3. If the *Low-bandwidth mode* checkbox appears, you may choose to run in Low-bandwidth mode.
 - a. Mark the box if you want to run in Low-bandwidth mode.
 - b. Leave the box unmarked if you want to run in WebRTC mode.

If the checkbox does not appear, you will run in Low-bandwidth mode by default (because the browser you are using does not support other operating modes).

4. Mark the *Stay signed in* checkbox if you wish to remain signed in even if you close your browser session or reboot your computer. You will remain signed in for approximately 30 days. (If you leave this box unmarked, the system will automatically sign you out if you close your browser or reboot your computer.)
5. Press the **Sign In** button. Orchid Fusion VMS will open.

Sign In with Azure Active Directory

With this method, you will be able to sign into Orchid Fusion VMS using your existing Azure Active Directory credentials. This requires that some configuration is performed by the Orchid Fusion VMS Administrator.

1. If the *Low-bandwidth mode* checkbox appears, you may choose to run in Low-bandwidth mode.
 - a. Mark the box if you want to run in Low-bandwidth mode.
 - b. Leave the box unmarked if you want to run in WebRTC mode.

If the checkbox does not appear, you will run in Low-bandwidth mode by default (because the browser you are using does not currently support other operating modes).

2. Mark the *Stay signed in* checkbox if you wish to remain signed in even if you close your browser session or reboot your computer. You will remain signed in for approximately 30 days. (If you leave this box unmarked, the system will automatically sign you out if you close your browser or reboot your computer.)
3. Press the **Sign In With Azure** button.
4. A Microsoft sign in screen will appear. Click on the Azure account that you associate with Orchid Fusion VMS. Orchid Fusion VMS will open.

Sign In with FreeIPA

With this method, you will be able to sign into Orchid Fusion VMS using your existing FreeIPA credentials. This requires some configuration which should be performed by the Orchid Fusion VMS Administrator.

1. Enter your username using the email style notation <userid>@<domain> (like

john.smith@ipconfigure.com).

2. Enter your password.
3. If the *Low-bandwidth mode* checkbox appears, you may choose to run in Low-bandwidth mode.
 - a. Mark the box if you want to run in Low-bandwidth mode.
 - b. Leave the box unmarked if you want to run in WebRTC mode.

If the checkbox does not appear, you will run in Low-bandwidth mode by default (because the browser you are using does not currently support other operating modes).

4. Mark the *Stay signed in* checkbox if you wish to remain signed in even if you close your browser session or reboot your computer. You will remain signed in for approximately 30 days. (If you leave this box unmarked, the system will automatically sign you out if you close your browser or reboot your computer.)
5. Press **Sign In**. Orchid Fusion VMS will open.

User Interface Overview

After you sign in, Orchid Fusion VMS will open at the *Stage* screen. This is the main viewing area in Orchid Fusion VMS and includes access to the *Camera Bag*, *Timeline Bar*, and the *System Menu*. Orchid Fusion VMS automatically resizes itself for different sized screens and resolutions, so you will enjoy the same user interface on many devices like a desktop computer, tablet, mobile phone, etc.

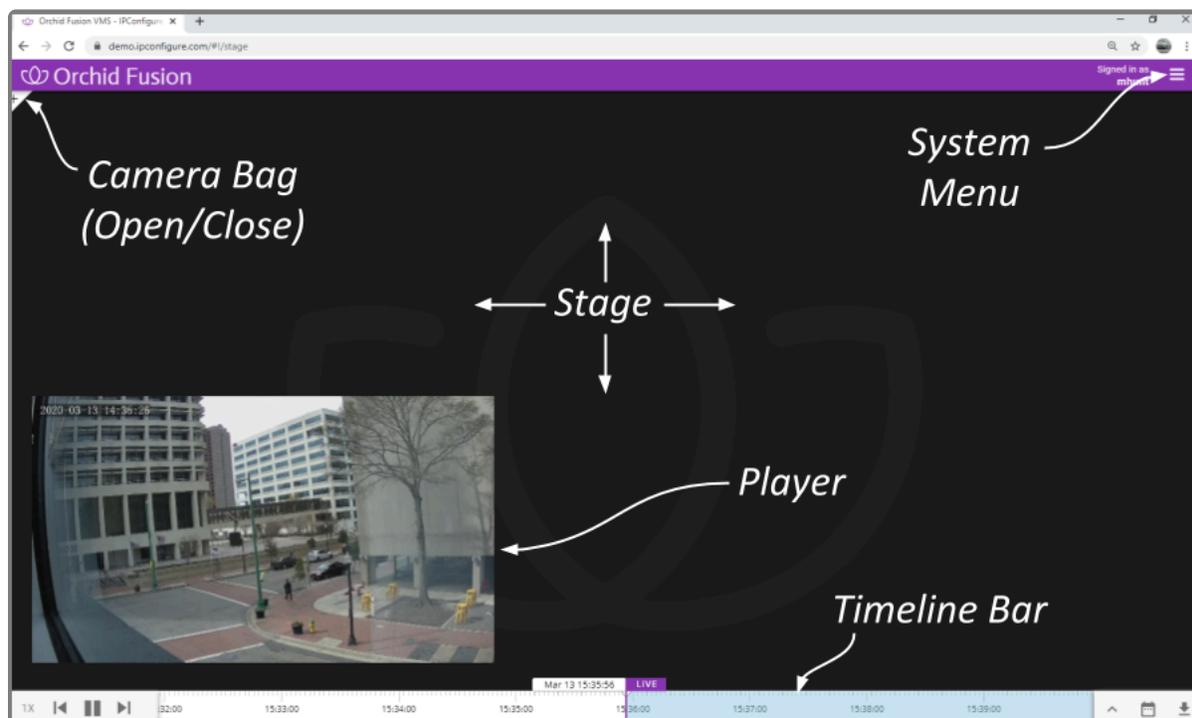
Stage: Where Players are loaded for live and playback viewing.

Camera Bag: The *Camera Bag* is located to the left of the *Stage* and displays a list of the cameras that are available to the Orchid Fusion VMS *Stage*. The cameras (sorted alphabetically by Camera Group and/or server on the Cameras tab) may be added to the *Stage* as Players by either double clicking the thumbnail or dragging the thumbnail directly onto the *Stage*. The *Camera Bag* also includes the *Stages* feature which allows you to create custom display cycles.

Player: A cell on the *Stage* showing live or recorded video from a camera selected from the *Camera Bag*.

Timeline Bar: Shows the current time for all linked Players on the *Stage*. It can be clicked (or clicked and dragged forwards or backwards) to rewind and fast forward the Players. (Depending on your permissions, you may not have access to recorded video and therefore, the *Timeline Bar* will not be displayed.)

System Menu: The menu is located in the top-right corner and will allow you to navigate to other features including administrator features (as permissions allow). Refer to the [Orchid Fusion VMS Administrator Guide](#) for details on administrator features.

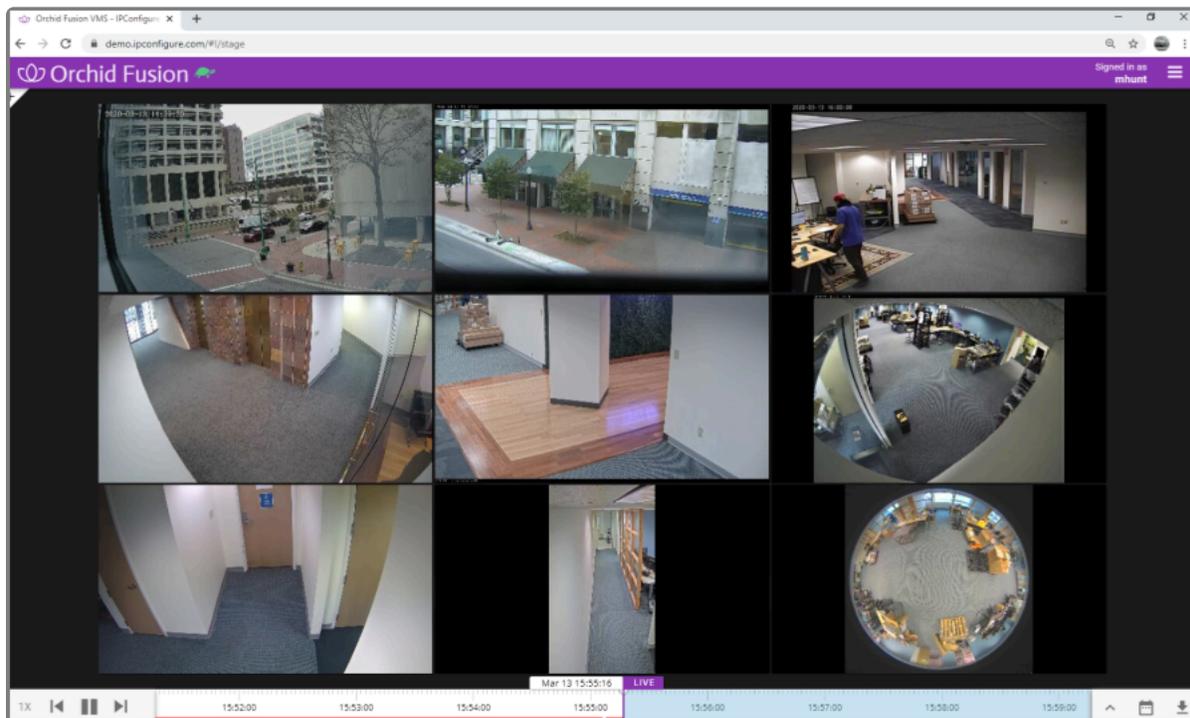


Working with the Stage & Players

The Orchid Fusion VMS *Stage* is intended to be a very flexible workspace and can be rearranged as your needs change. You can populate the *Stage* with *Players* from one or multiple *Camera Groups* or servers, adding and removing *Players* at any time. The *Stage* will automatically adjust the size of the *Players* if you need to add more to the *Stage*, and you can resize and reposition the *Players* at will.

✿ As long as the cameras are configured to record, Orchid Core VMS will acquire and store video footage even when the *Players* are not visible on the *Stage*.

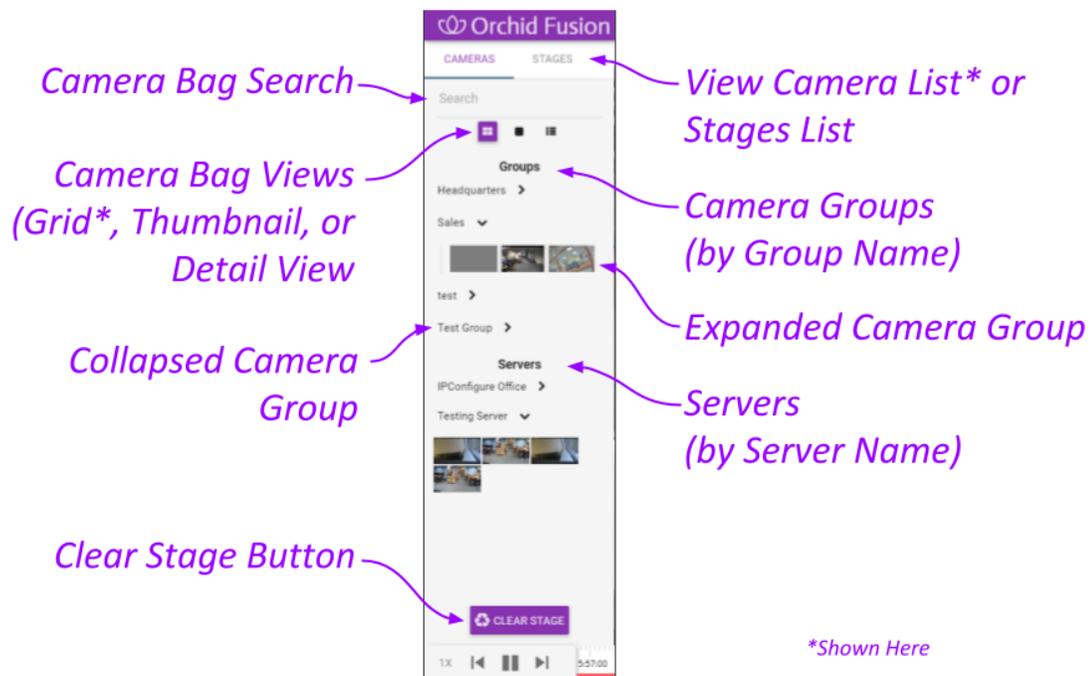
✿ The *Stage/Player* configuration is saved in your current browser upon signing out.



Camera Bag Basics

The *Camera Bag* in Orchid Fusion VMS works much like the *Camera Bag* in Orchid Core VMS, but with some notable additions. This *Camera Bag* is divided into two tabs: the *Cameras* tab and the *Stages* tab. The primary tab, the *Cameras* tab, contains each of the available cameras, sorted alphabetically by Server, by *Camera Group*, or by *Camera Group* and Server (as set by an Administrator). Each of the *Camera Groups* and servers in the list can be expanded to display all of the associated cameras. There are three different “views” available to display varying amounts of camera information. The *Cameras* tab also includes a search feature to help locate specific servers or cameras.

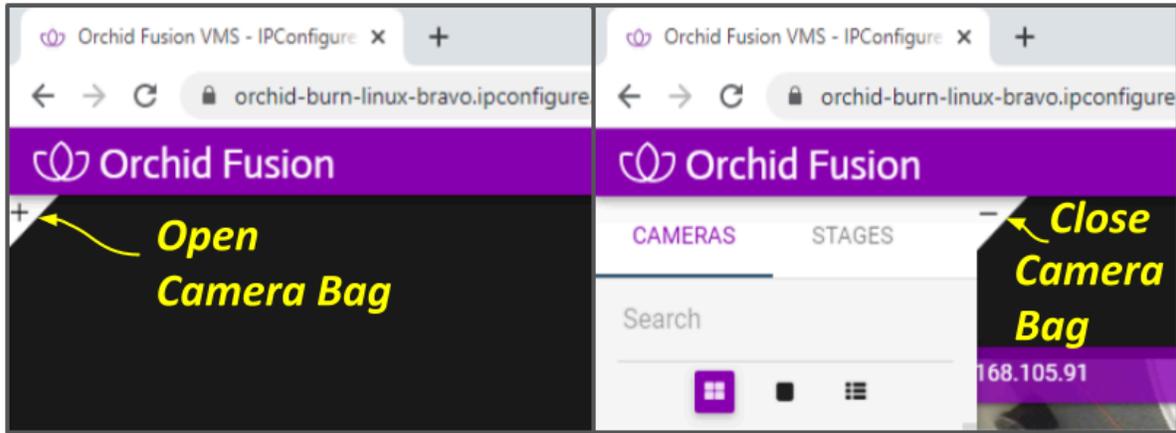
The *Stages* tab provides a way to save custom layouts. These layouts can be selected on demand, or they can be added to an automated display sequence that will update at selected intervals. (We’ll provide more details in the next topic.)



Opening and Closing the Camera Bag

+	This is the Show Camera Bag icon
-	This is the Hide Camera Bag icon

1. To open (or close) the *Camera Bag*, click on the **Show/Hide ±** icon in the top-left corner of the **Stage**. (This icon toggles between *Show* and *Hide*.)
 - a. Click the **Show** icon to open the *Camera Bag*.
 - b. Click the **Hide** icon to close the *Camera Bag*.

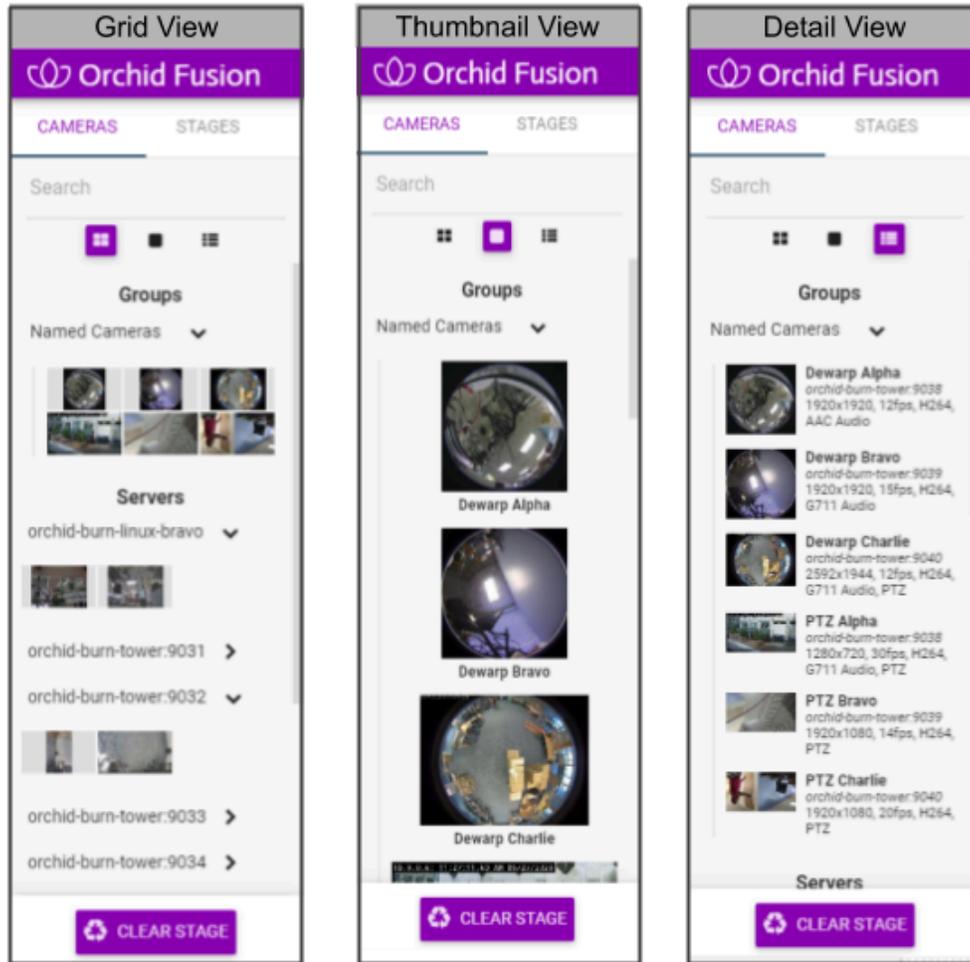


When the *Camera Bag* is open to the *Cameras* tab, you may review camera info for each *Camera Group* or *Server*, add new *Players* to the *Stage*, and clear the *Stage*.

Selecting a Camera Bag View

	This is the Grid View icon.
	This is the Thumbnail View icon.
	This is the Detail View icon.

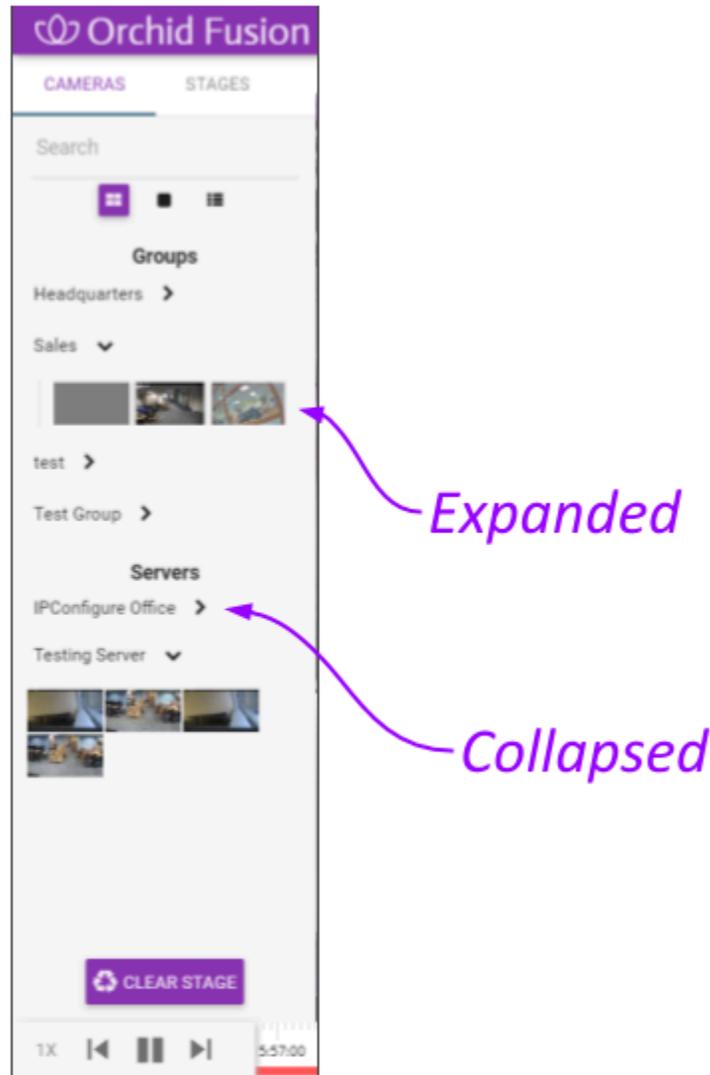
1. When you open the *Camera Bag* to the *Cameras* tab, you will have the option to select one of three views:
 - a. Click on the **Grid View** icon to view the *Cameras* tab in a simple, picture-only view. For each *Camera Group* or registered Orchid Core VMS server, the software will display a table populated with small thumbnails for each of the cameras assigned to the *Camera Group* or registered to that server. (Position the cursor over any thumbnail to view the camera name.)
 - b. Click on the **Thumbnail View** icon to view the *Cameras* tab with large thumbnails. For each *Camera Group* or registered Orchid Core VMS server, the software will display large thumbnails and camera names for each of the cameras assigned to the *Camera Group* or registered to that server.
 - c. Click on the **Detail View** icon to view the most detailed version of the *Cameras* tab. For each *Camera Group* or registered Orchid Core VMS server, the software will display small thumbnails and selected stream settings for each of the cameras assigned to the *Camera Group* or registered to that server.



Expanding/Collapsing Camera Groups and Server Lists

	This is the Expand icon for a <i>Camera Group</i> or a <i>Server</i> .
	This is the Collapse icon for a <i>Camera Group</i> or a <i>Server</i> .

When all of the *Camera Groups* and servers are listed in a collapsed state, the *Cameras* tab provides a nice, clean view of all the *Camera Groups* and registered servers. In order to add cameras to the *Stage*, however, the *Camera Group* or server list must be expanded.



1. To expand the *Camera Group* or server listing and display the associated cameras, click on the **Expand** icon (right arrow). The right arrow will turn into a down arrow that points to the cameras assigned to the selected *Camera Group* or server.
2. To collapse the *Camera Group* or server listing and hide the associated cameras, click on the **Collapse** icon (down arrow). The cameras will disappear and the down arrow will switch back to a right arrow.

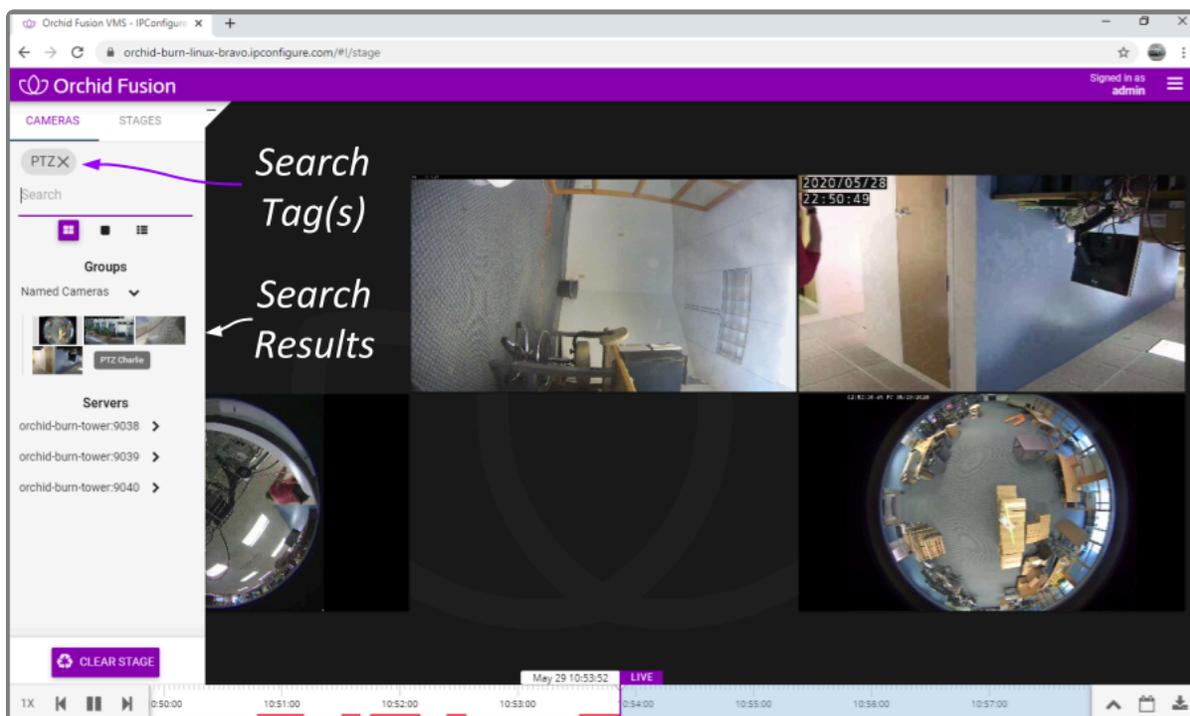
(For more information on *Camera Groups*, please refer to the [Orchid Fusion VMS Administrator Guide](#).)

Using the Search Feature

The *Camera Bag Search* feature provides a quick way to find specific cameras, *Camera Groups*, and servers and is especially handy for large systems. The system supports searching with single and multiple search tags, and searches against camera names, *Camera Group* names, Orchid Core VMS Server names, and camera stream properties.

- ✿ For best results, camera names should be descriptive and unique, and similar naming conventions should be followed across all of the Orchid Core VMS servers.

1. Click into the *Search* box to start your search.
2. Type in one or more search tags.
 - a. A single search tag with multiple words will initiate a search for camera names, *Camera Group* names, server names, and stream properties that include both words.
 - b. Multiple, single-word search tags will initiate a search for camera names, *Camera Group* names, server names, and stream properties that include at least one of those tags.
3. Press **Enter**. The *Cameras* tab will update to display all of the cameras, *Camera Groups*, or servers that contain the tag(s).



4. To clear the *Search* box and return the *Cameras* tab to its original state, click on the **X** to the right of each search tag.

Clearing the Stage

1. To remove all of the Players from the *Stage*, press the **Clear Stage** button (at the bottom of the *Cameras* tab).

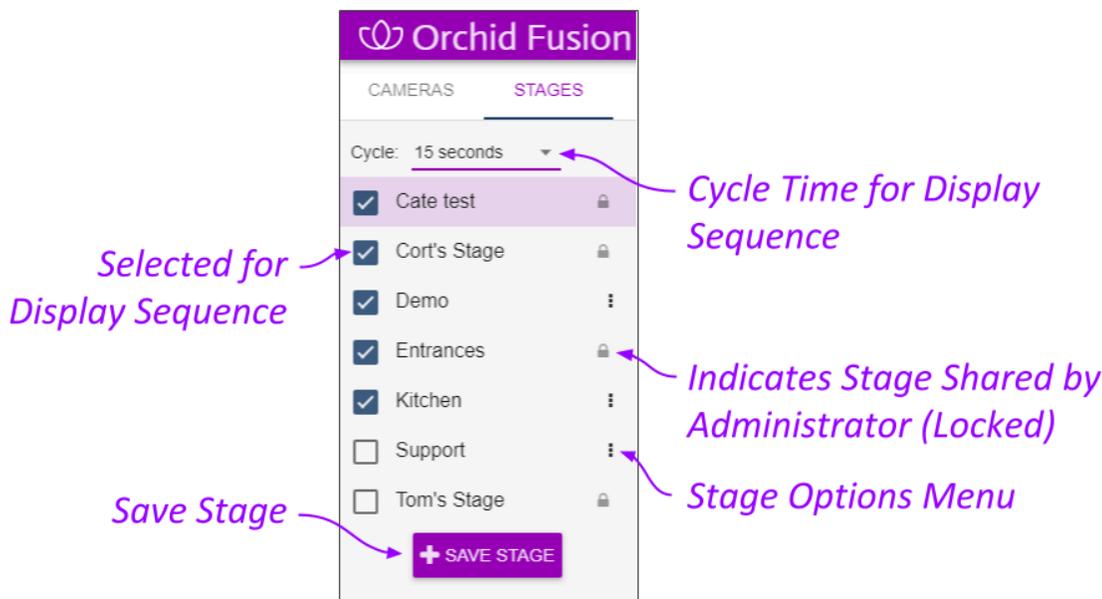
The Stages Feature

The *Stages* tab appears in the *Camera Bag* and provides an efficient way to organize and monitor all of your important cameras. All you have to do is configure and save a number of custom camera layouts. (These stages will be associated with your user account.) You will then be able to view these stages manually or through an automated sequence that runs like a slideshow.

Creating Stages

1. The first step is planning your stages. Decide which cameras you want displayed together on the *Stage* at one time.
2. Open the *Camera Bag* to the *Cameras* tab.
3. Start adding your cameras to the *Stage* in desired groupings.
4. When you have filled the *Stage* as desired, click on the *Stages* tab.
5. Click the **Save Stage** button.
6. Enter a name for the *Stage* and click the **Save Stage** button. The new *Stage* is added to the list. (Stages are listed in alphabetical or numerical order by *Stage* name.)
7. To create another *Stage*, return to the *Cameras* tab.
8. Click the **Clear Stage** button to remove the previous *Stage*.
9. Then repeat steps 3 through 6 to create another *Stage*.

You can now click on any of the listed *Stages* and your predefined layout will appear on the *Stage*.



 If a *Stage* includes a PTZ camera (with or without presets), keep one thing in mind. When

you add a camera to the *Stage*, you are adding the camera, not the camera's position. So when you view a *Stage*, the PTZ camera may or may not be in the same position as when it was added to the *Stage*.

Cycling the Stages

1. If you want the software to display the *Stages* in sequence automatically, first select the *Stages*. Mark the checkbox next to each of the *Stages* you want to appear in the sequence.
2. Then use the *Cycle* drop-down list to select an interval for the sequence. This setting determines how long each *Stage* will appear on the screen before the next one takes its place. Selections include: *Disabled* and timed sequences ranging from 5 to 120 seconds.

The sequence will begin to run as soon as the *Cycle* is selected (as long as *Stages* have already been saved). As the *Stages* change, the software will highlight the name of the *Stage* currently on-screen. When the automated sequence is running, you will still be able to manipulate the timeline (like switching between live and recorded video and jumping to motion events) as permissions allow. You may want to disable the sequence if you need to focus on one specific Player or event.

Stage Options

Each of the *Stages* has its own menu (on the right edge of the list). Click on the icon to access the menu and do any of the following:

- If you make a change to the cameras or layout of your *Stage*, select **Update** from the menu to save it.
- To change the name of the *Stage*, select **Rename** from the menu.
- To eliminate one of the *Stages*, select **Remove** from the menu.
- If you are an Administrator, you can select **Share** from the menu to share the *Stage* with other users. The *Stage* will be visible to all users with access to at least one camera in the *Stage*. (Shared *Stages* do not override the *Permission Groups*; users will not see any cameras they wouldn't normally see.)
 - In your *Stages* list, a *world* icon indicates that a *Stage* is shared. (The users with which the *Stage* is shared will see a lock icon that indicates the *Stage* has been shared by an administrator.)
 - Select **Un-share** to reclaim the *Stage* for your use only.

Editing a Stage

You can change the *Stages* that are associated with your user account anytime.

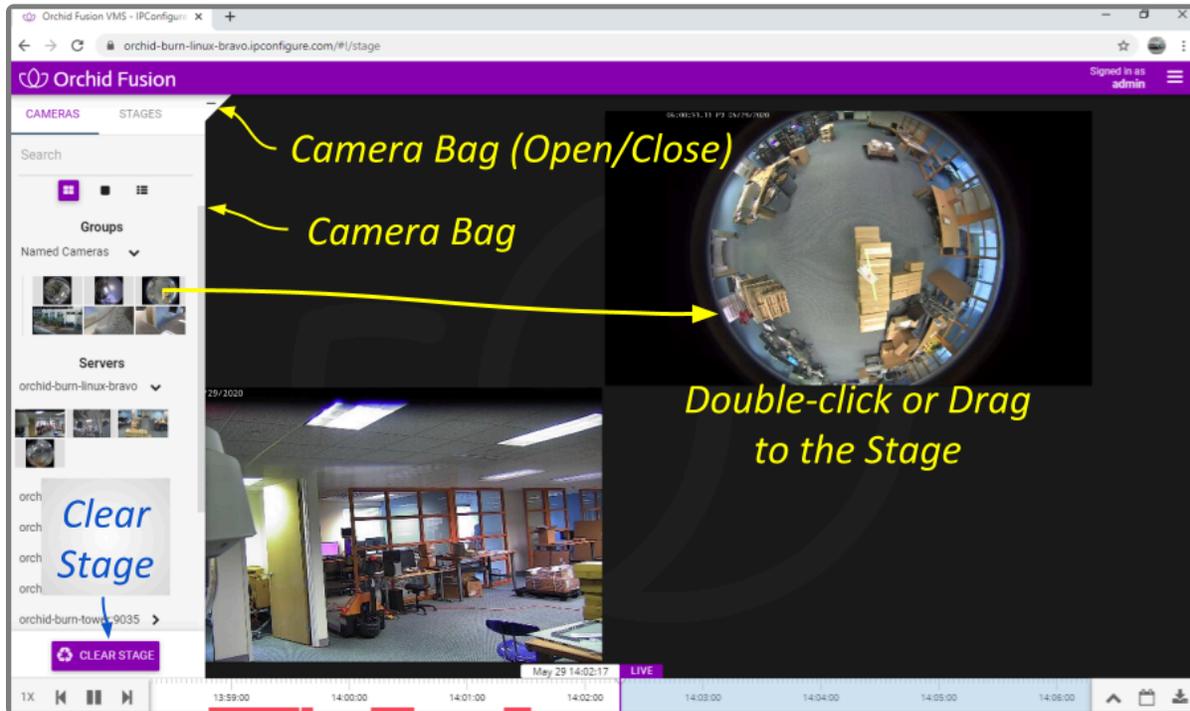
- Select the *Stage* on the *Stages* tab.
- To remove a Player, click the **X** in the top-right corner of the Player.
- To rearrange the Players, drag them around the *Stage* as needed.

- To add a Player, switch over to the *Cameras* tab to select it.
- To save your changes, switch back to the *Stages* tab.
- Click the menu associated with the *Stage* and click **Update**.

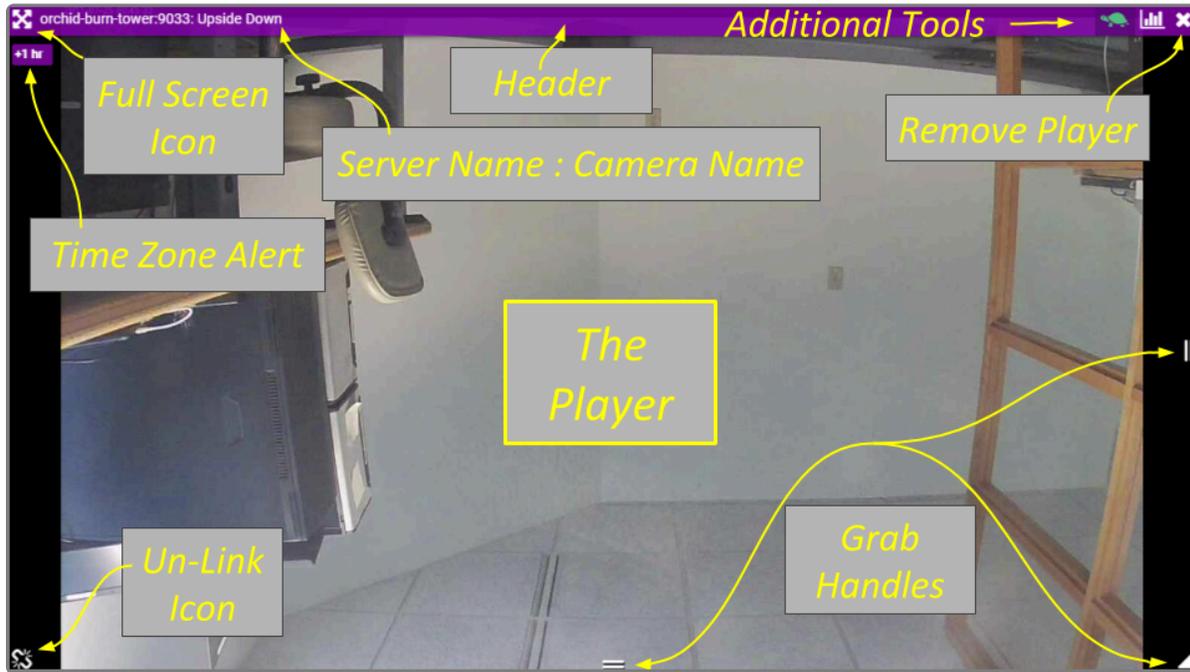
 If the Administrator has created and shared a *Stage*, it will appear in your list as locked; you cannot make changes to or remove this *Stage*. (These shared *Stages* do not override the *Permission Groups*; you will not see any cameras you don't have permission to see.)

Adding/Removing Players

1. To add a Player to the *Stage*, do either of the following:
 - a. Double-click a thumbnail in the *Cameras* tab, or
 - b. Click and drag a thumbnail from the *Cameras* tab to an available position on the *Stage*.



Once a Player has been added to the *Stage*, it can be moved around and resized as needed. Notice that if you position the mouse over the Player, the header, grab handles, and **Link/Un-Link** icon will appear (as in the image below). Additional tools may appear depending on general conditions, camera type, camera configuration, and your permissions.

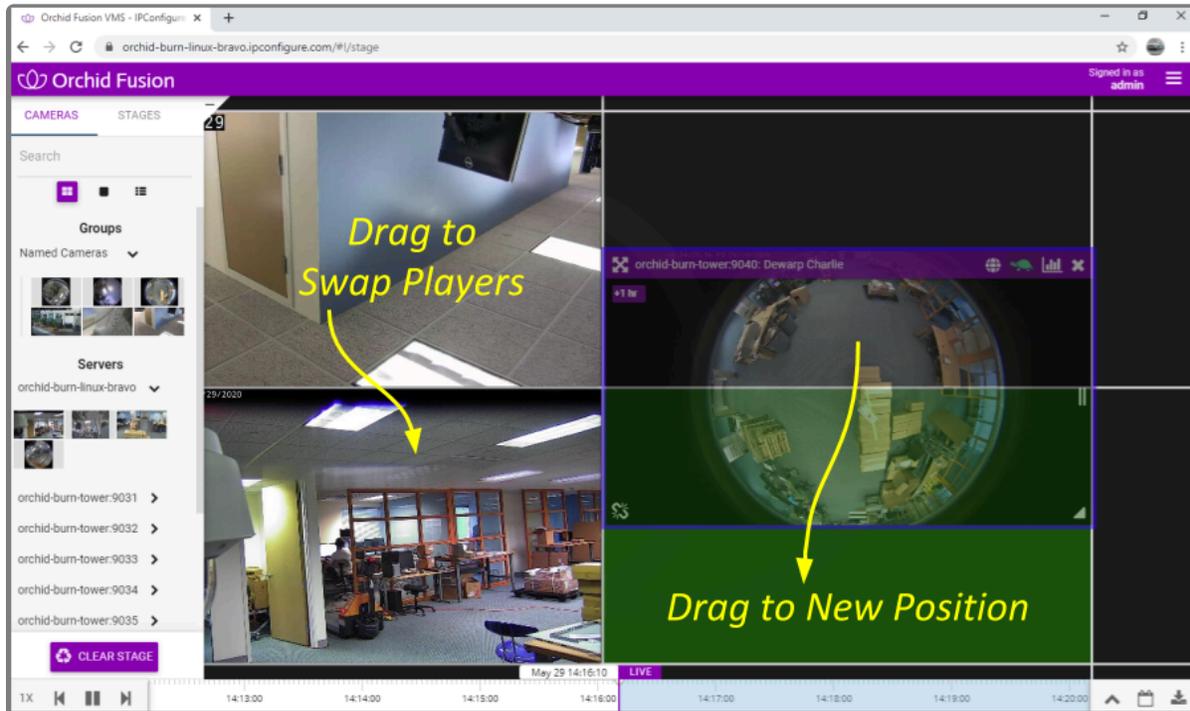


While your Orchid Fusion VMS server may or may not be configured to limit the number of Players allowable on the *Stage*, the amount of data the client and server can handle before performance starts to degrade will vary from system to system. If video appears choppy or slow, try reducing the number of Players on the *Stage*.

2. To remove a Player from the *Stage*, position the mouse over the Player; this will activate the grab handles and the image header. Click on the **X** in the top-right corner of the Player to remove it.
3. To clear all of the Players from the *Stage*, use the **Clear Stage** button (pinned to the bottom of the *Camera Bag*).

Moving/Dragging Players

1. To move a Player into another area of the Stage, click and drag the Player to an available position (which will appear in green). If you move the Player into a cell already occupied by another Player, the two Players will switch positions.



Resizing Players

	This handle allows you to adjust the height of the Player.
	This handle allows you to adjust the height and width of the Player at the same time.
	This handle allows you to adjust the width of the Player.

1. To resize a Player on the *Stage*, position the mouse over the image; this will activate the grab handles and the image header.
2. Click and drag the grab handles on the edges of the image to increase and decrease the size of the Player. (When you increase the size of a Player, you cannot overtake another Player; that space will appear in red. Try re-positioning Players to create some empty space into which you can then resize/expand.)

Increasing Player to Full-Screen



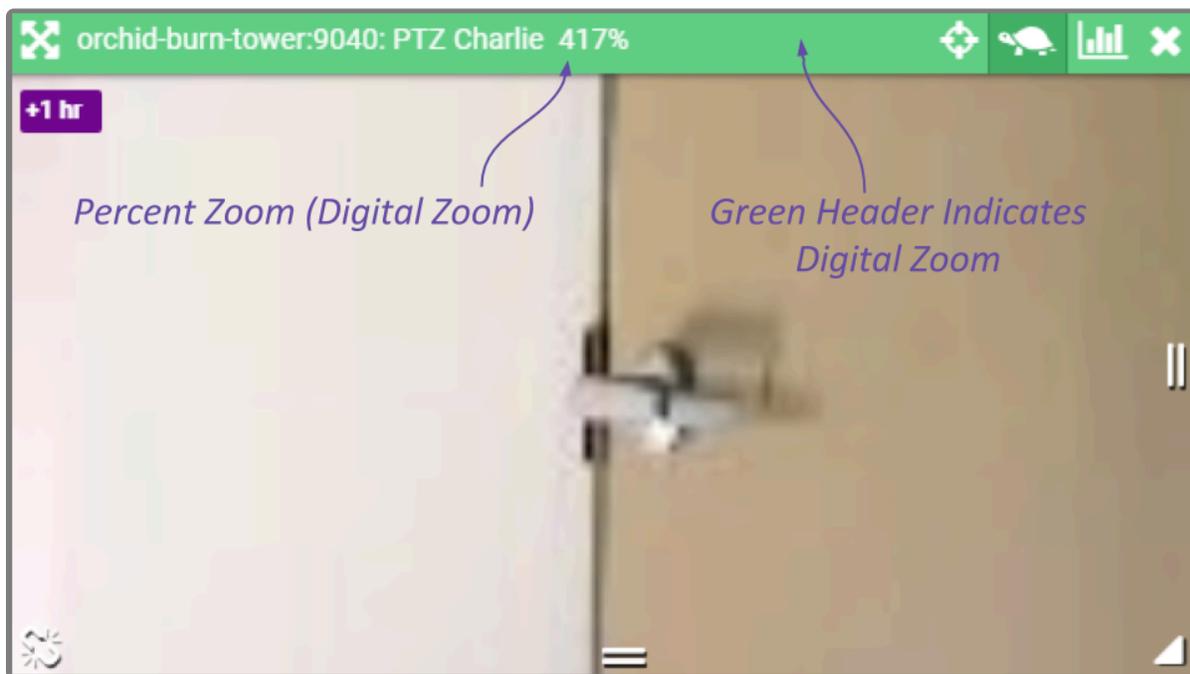
This is the **Full-screen** icon.

1. To resize a Player to full-screen, position the mouse over the image; this will activate the grab handles and the image header.
2. Click on the **Full-screen** icon in the header. The selected Player will now cover the entire *Stage*.
3. To reduce the Player to its original size and position, click on the **Full-screen** icon again. (Any Players that were previously on the *Stage* will still be there.)

Using Digital Zoom

Orchid Fusion VMS gives you the ability to use digital zoom to get a close-up view of any Player when viewing live or recorded video on the *Stage*.

1. To use digital zoom, position the mouse over any Player; this will activate the grab handles and the image header.
2. On a computer, roll the mouse wheel up (away from you) to zoom in to the image. (Notice that the image header will turn green, and it will display the percent of digital zoom.)
3. On a mobile device, you may use the pinch-to-zoom method to zoom in and out of the image.
4. To view other areas of the image while zoomed in, click on the image and drag it around.



5. Roll the mouse wheel down (toward you) to zoom out. When you return to the normal view (at 100%), the image header will return to purple.

* Digital zoom can change the way you view video on the *Stage*, but it has no impact on recorded video.

Controlling a PTZ Player



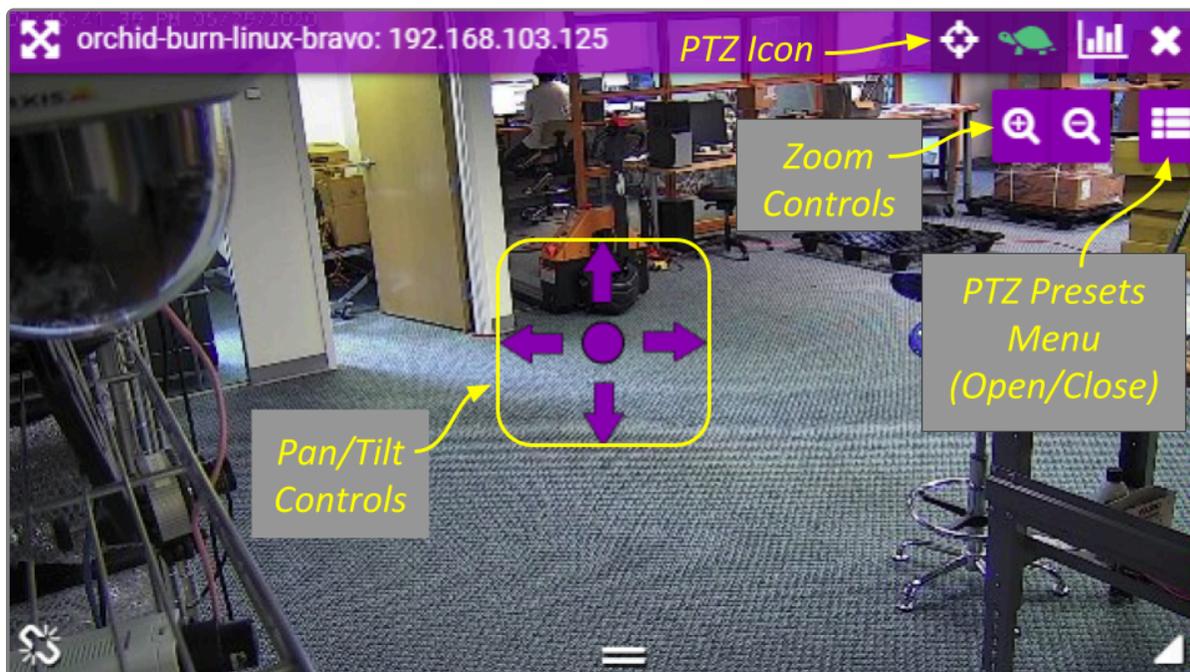
This is the PTZ icon.

Pan-Tilt-Zoom (PTZ) cameras can be controlled from the Orchid Fusion VMS *Stage*. This gives you the ability to focus on specific areas when viewing live video. (You cannot use PTZ controls on recorded video.)

✿ PTZ zoom actually controls the camera, and therefore also controls live video feed and the video that is recorded.

✿ The permissions required to control PTZ cameras are not available to all users.

1. To control a PTZ Player, position the mouse over the image; this will activate the grab handles and the image header.
2. Click on the **PTZ** icon in the header. (This icon will only be available if the camera supports pan-tilt-zoom.) This will activate the camera's PTZ controls which will appear as an overlay on the Player. This will also activate the *PTZ Presets Menu* (if supported by the camera and Orchid Core VMS, and at least one preset exists).



3. To initiate a continuous motion in one direction, click and drag the mouse in that direction. (The farther you drag the mouse, the faster the camera will move.)
4. The Click-to-center option allows you to re-center the image at a specific point. (This feature is only available on cameras that support it. This feature is also limited by the camera's range of motion.)

5. To make small movements in one direction, click once on any arrow (in the direction you want the camera to move).
6. To Zoom in and out, use the mouse wheel or click the + and – buttons in the top-right corner of the Player.
7. Click on the **PTZ** icon again to deactivate the PTZ controls.

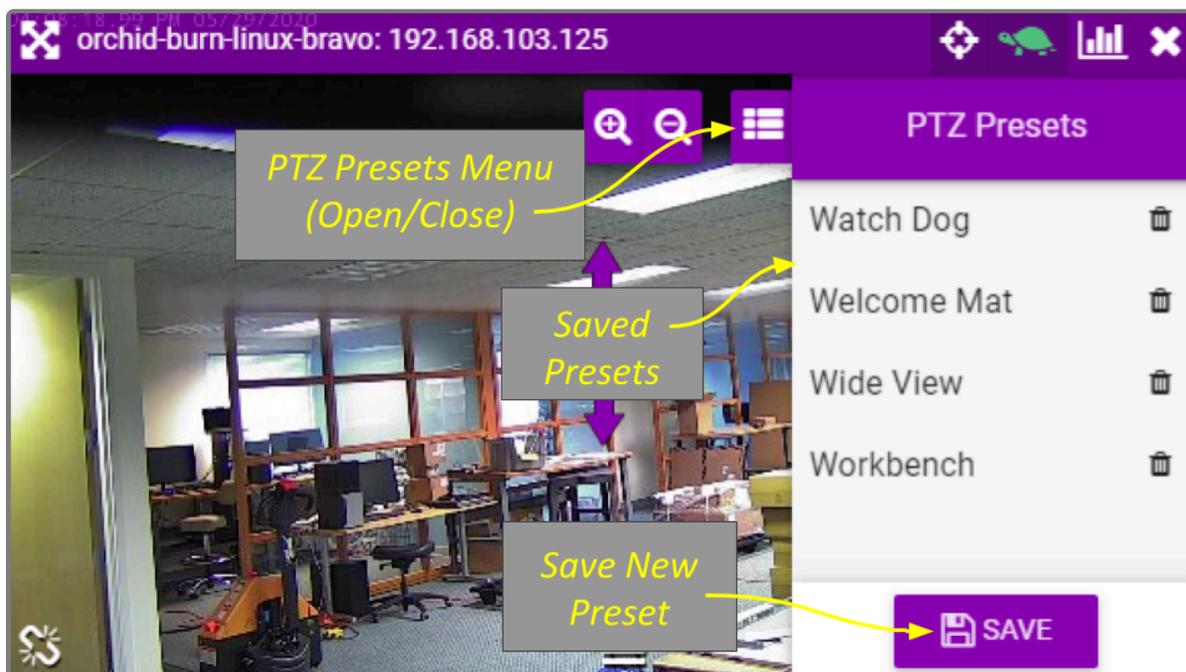
PTZ Presets

Beginning with version 2.6.0, Orchid Fusion VMS includes PTZ presets (available on compatible ONVIF cameras). These presets allow you to move a camera quickly to one or more preset positions (increasing the utility of the camera and your video monitoring system).

* The *PTZ Presets Menu* will only be available if the camera supports presets, the camera is registered to an Orchid Core VMS server running Orchid version 2.2.2 or greater, the PTZ controls are active, and an Administrator has saved at least one preset for the camera.

* The permissions required to control PTZ cameras are not available to all users.

1. To access the *PTZ Presets Menu*, first activate the PTZ controls, then click on the **PTZ Presets Menu** icon in the top-right corner of the Player. A list of existing presets (saved by an Administrator) will appear.



2. To select a different preset view, click on any of the presets in the list. The camera will respond by moving to the selected position.

3. If you are an Administrator, you may add new presets. To add a new preset, first use the pan, tilt, and zoom controls to situate the camera in the desired position. Then click the **Save Preset** button. Enter a unique name for the new preset, then click the **Save Preset** button again.
4. If you are an Administrator, you may delete presets. To delete a preset, click the **Trash Can** icon, then click the **Delete** button.

Joystick Support

Orchid Fusion VMS supports most USB joysticks. Simply connect a USB joystick and activate PTZ mode.

- Move the joystick right or left to move the camera to the right or left.
- Move (push) the joystick away from you to point the camera up.
- Move (pull) the joystick toward you to point the camera down.
- To zoom in, twist the joystick handle to the right. To zoom out, twist the joystick handle to the left.

Controlling a Player with Dewarping



This is the **Dewarping** icon.

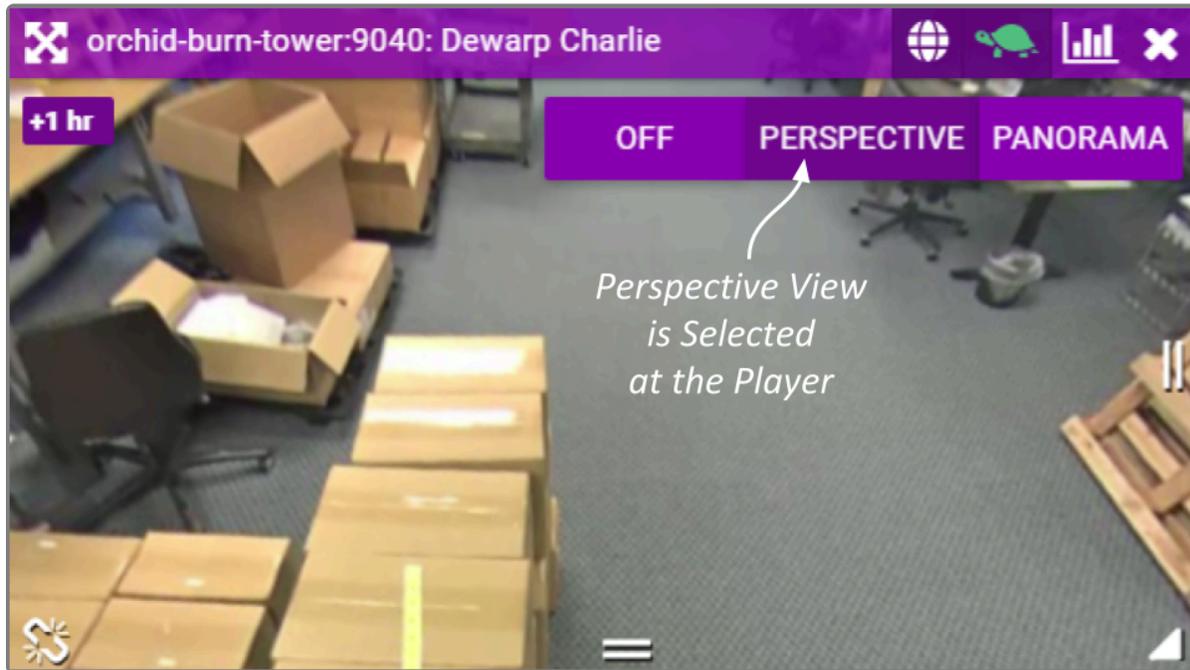
Beginning with version 2.10, Orchid Fusion VMS supports dewarping on fisheye cameras. This means that you will be able to select one of three viewing options for live or recorded video at the Player. Viewing options include the standard fisheye view, a Perspective view, and a Panorama view.

✿ In order to use the Dewarping feature, the Orchid Core VMS server must be running version 2.8 or greater.

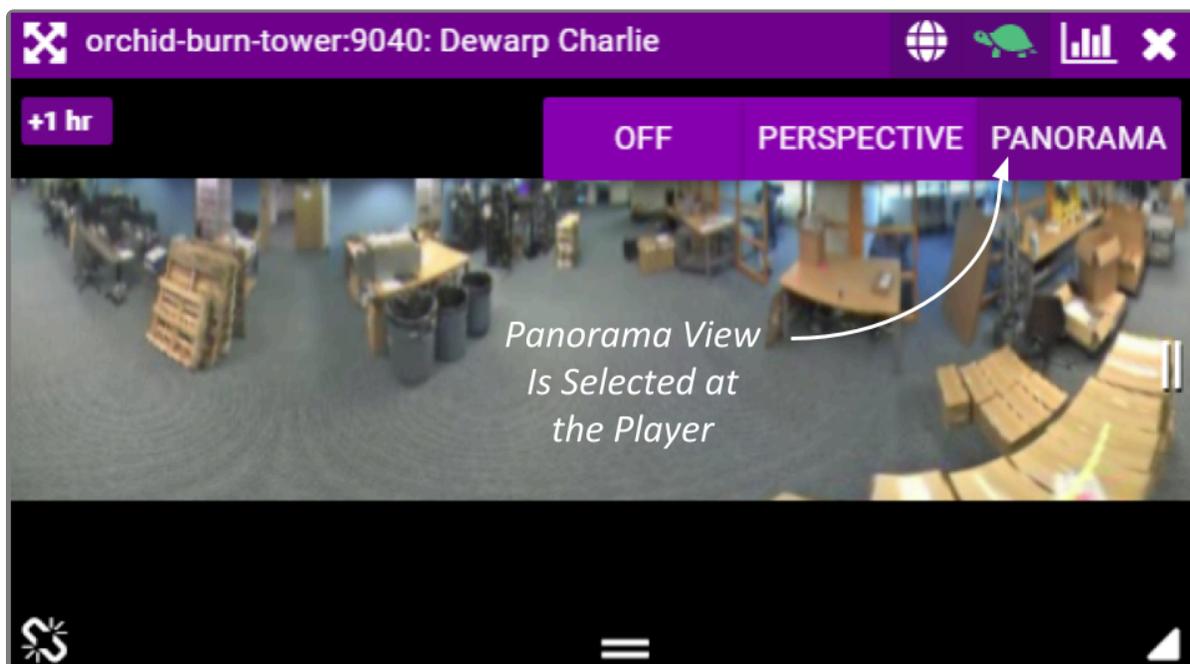
1. To control a Dewarping Player, position the mouse over the image; this will activate the grab handles and the image header.
2. Click on the **Dewarping** icon in the header. (This icon will only appear on fisheye cameras, and only if the dewarping feature has been enabled by the Administrator.) This will activate the camera's Dewarping toolbar which will appear as an overlay on the Player.



3. To view the camera in its native fisheye format, click the **OFF** button on the Dewarping toolbar (as in the image above).
4. To view the camera in the Perspective format, click the **PERSPECTIVE** button on the Dewarping toolbar (as in the image below).



5. When the Player is on the *Stage* in Perspective mode, you can click a point inside the Player and drag it around to change the view. (You can click and drag to change this view even if the Dewarping toolbar has been closed.)
6. To view the camera in the Panorama format, click the **PANORAMA** button on the Dewarping toolbar (as in the image below).



The Panorama view is a static image that displays a flattened version of the entire fisheye camera view.

✿ Each time you switch to Perspective view from one of the other views, you will return to the

default Perspective view (which has been set by the Administrator).

7. Click on the **Dewarping** icon again to deactivate the Dewarping toolbar.

Viewing Player Statistics



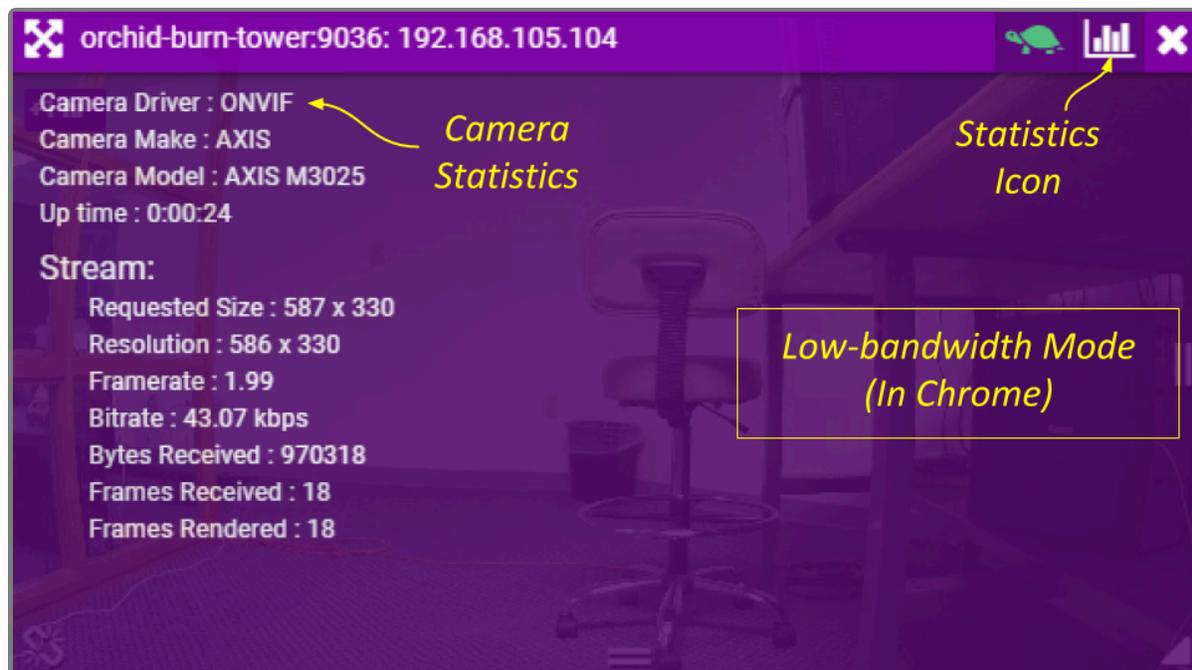
This is the **Statistics** icon.

Orchid Fusion VMS provides access to Player statistics in Low-bandwidth mode and WebRTC mode. This feature provides a variety of details and is typically used for troubleshooting.

1. To view Player statistics, position the mouse over the Player; this will activate the grab handles and the image header.
2. Click on the **Statistics** icon in the top-right corner of the Player. The Player statistics will appear as an overlay on the Player.
3. Click on the **Statistics** icon again to remove the statistics overlay.

 Statistics available in WebRTC mode will vary and depend on the web browser in use.

If you are running Orchid Fusion VMS in Low-bandwidth mode, the software will provide a few details about the camera and the viewing performance. This includes the Frame Rate, Bitrate, Bytes Received, Frames Received and Rendered, and the Up time (amount of time the camera has been on the *Stage* in the current session).



If you are running Orchid Fusion VMS in WebRTC mode, in addition to providing details pertaining to the camera and video quality, the software will display a wealth of other statistics. (For more details, please refer to the [Orchid Fusion VMS Administrator Guide](#).)

orchid-burn-tower:9036: 192.168.105.104

Camera Driver : ONVIF
 Camera Make : AXIS
 Camera Model : AXIS M3025
 Up time : 0:03:44

Camera Statistics

Stream:
 Resolution : 1920 x 1080
 Framerate : 5.03
 Bitrate : 2863.47 kbps
 ICE Connection State : connected
 Connection State : connected
 Packets Received : 61916
 Packets Lost : 150
 Fraction Packet Loss : 0.00
 Frames Received : 1546
 Frames Decoded : 1258
 Frames Dropped : 288
 Bytes Received : 83882904
 Connection : 192.168.105.13:50329 (udp, host) -> 10.0.8.8:60615 (udp, prflx)
 DTLS State : connected

Video Statistics

Local Candidates ▼
 10.0.8.8:60615 (udp, prflx)

Remote Candidates ▼
 192.168.105.13:50329 (udp, host)

WebRTC Statistics

Advanced ▼

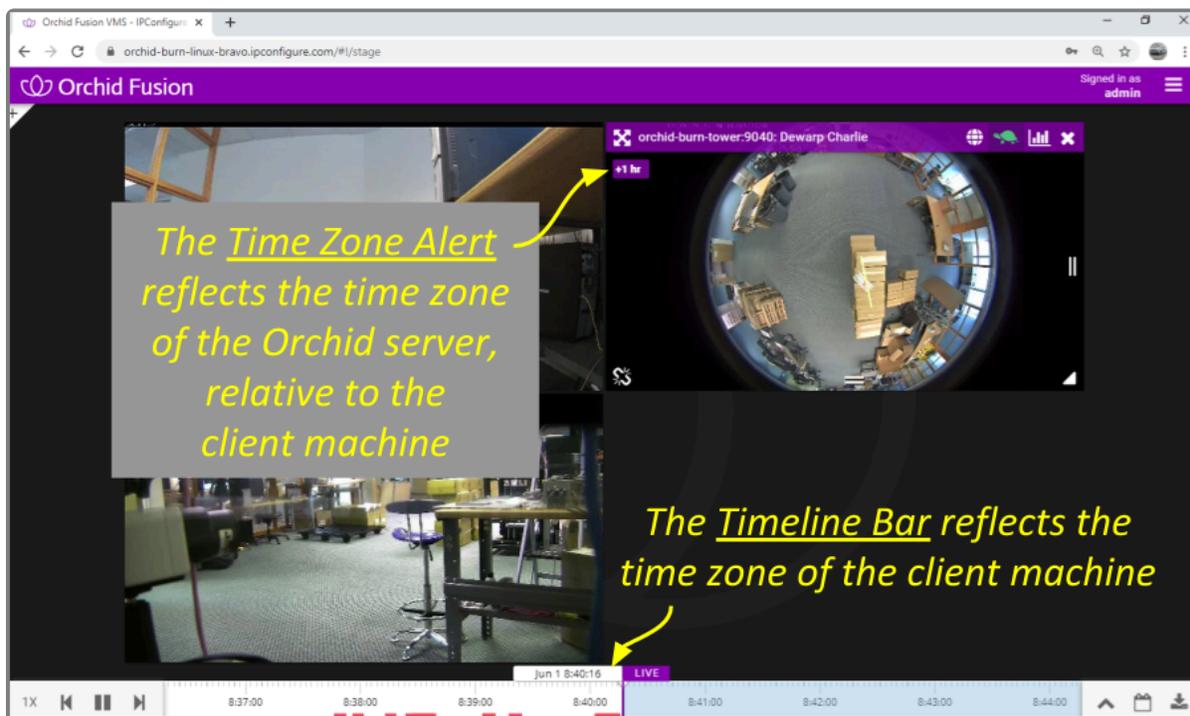
WebRTC Mode (In Chrome)

- * The Player statistics are often used to diagnose video viewing and recording issues. For example, if the packet loss statistic steadily increases over a period of 30 seconds or more, this indicates a network issue that will prevent the software from successfully viewing video from the camera. Please refer to the [Orchid Fusion VMS Administrator Guide](#) for more details.

Time Zone Alert

Orchid Fusion VMS provides a small overlay on the Player if the system detects that the client machine and the Orchid Core VMS server (the recording server) are in different time zones. This Time Zone Alert serves as a reminder that may become important as you review and potentially report on the video.

As you review video, remember that the *Timeline Bar* will reflect the time zone for the client machine (that is, the computer you are using). If the Time Zone Alert overlay appears, it will reflect the time zone of the Orchid Core VMS server, relative to your client machine. In the example pictured below, the Time Zone Alert is “+1 hr.” This means that the Orchid Core VMS server is one hour ahead of the client machine. The time at the *Timeline Bar* reads 7:36, and the time at the Orchid Core VMS server is 8:36.



✿ This overlay will only appear if there is a difference in the two time zones.

1. To view specific time zone information, position your cursor above the overlay. The overlay will expand to display the time zone for both the Orchid Core VMS Server and the Client (as in the image below).



Changing Player Mode

	This icon represents Low-bandwidth mode.
	This icon represents WebRTC mode.

If you are running Orchid Fusion VMS in Low-bandwidth mode or WebRTC mode, you will have the ability to run individual Players in Low-bandwidth or WebRTC (full-bandwidth) mode.

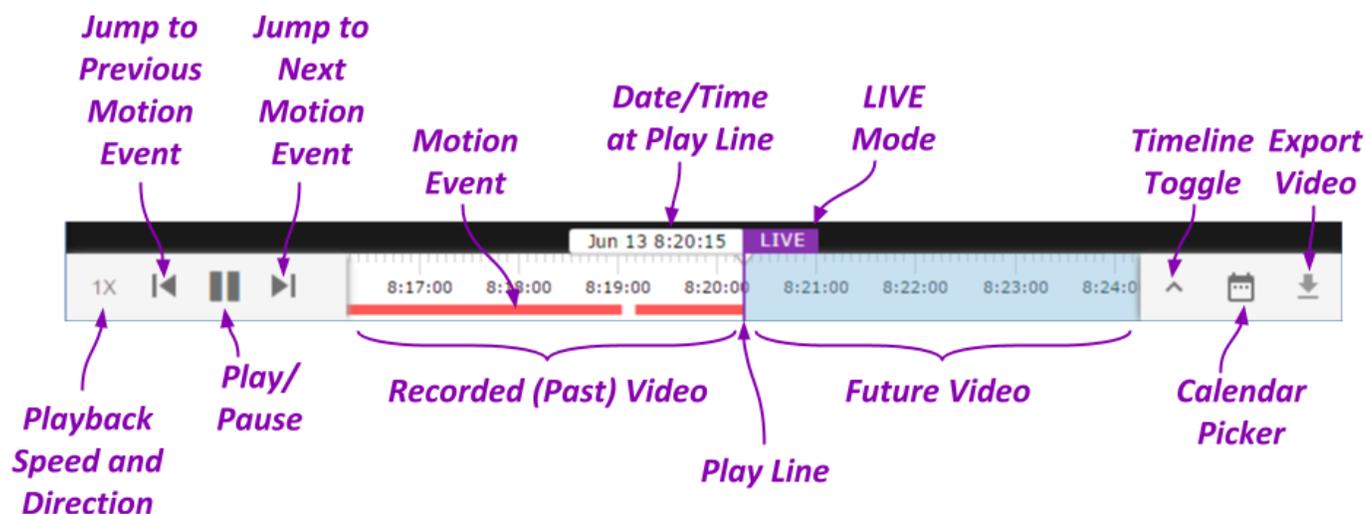
1. To view or change the Player mode, position the mouse over the Player; this will activate the grab handles and the image header.
2. The header will display one of the icons shown above. The ***tortoise*** represents Low-bandwidth mode and the ***hare*** represents WebRTC mode.
3. To change modes, simply click on the mode icon.

Timeline Bar Overview

The *Timeline Bar* is an essential tool for transitioning between live and recorded video, searching for specific portions of video, and exporting video. The diagram below will help you become familiar with the *Timeline Bar*.

One important point to remember is that the *Timeline Bar* represents all of the linked Players on the *Stage* (meaning all of the Players for which you are not currently performing an in-cell search). So if you pause the *Timeline Bar* at June 15 at 8:00 AM, each of the linked Players will display video from that point in time (as long as there is video available).

(See also [Viewing Video](#) and [Exporting Video](#).)



About Motion Events

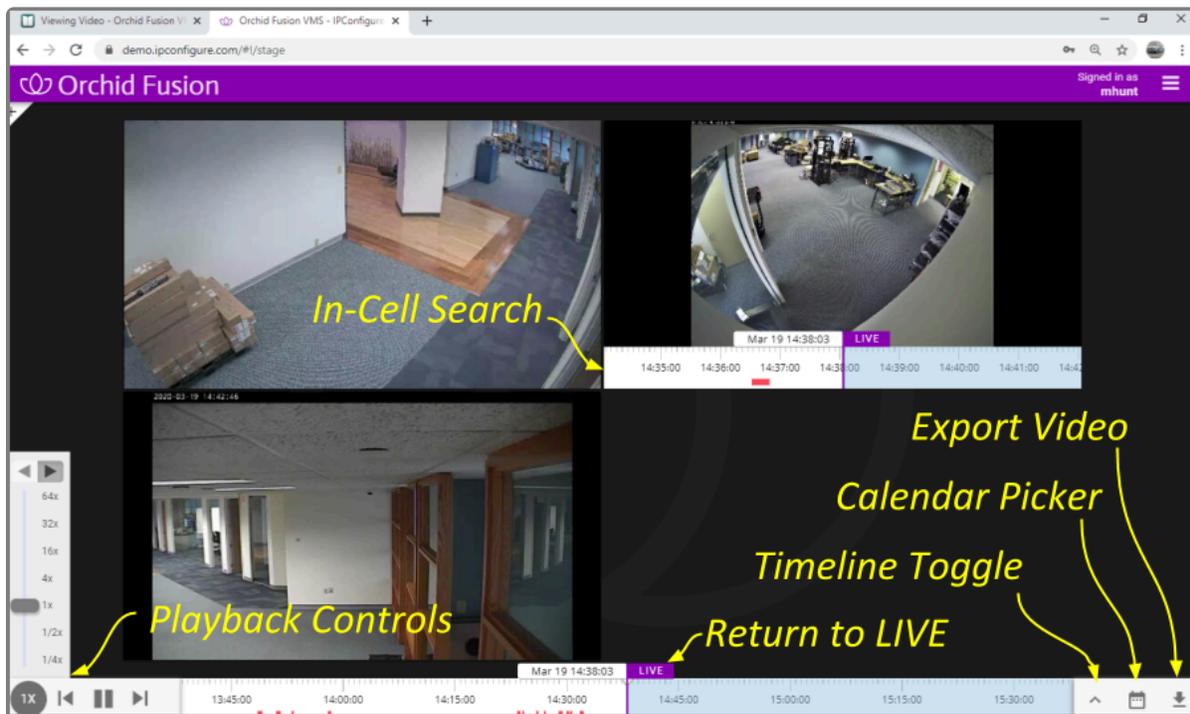
A motion event will occur when the software detects movement in the video. When this happens, the software marks the event on the *Timeline Bar* with a red bar. This bar will remain on the *Timeline Bar* as long as the motion continues.

- The *Previous Motion Event* and *Next Motion Event* playback controls allow you to jump backward and forward from one motion event to the next .
- When a Player is in full-screen mode, the motion events for that Player are the only motion events displayed on the *Timeline Bar*.
- During an in-cell search, the in-cell search *Timeline Bar* displays motion events for that Player only; the main *Timeline Bar* displays motion events for all of the Players still linked to the main *Timeline Bar*.

 By default, motion detection is enabled for all cameras. However, your system administrator may have altered or disabled motion detection for cameras on your system.

Viewing Video

The *Stage* screen provides various options for viewing live and recorded video. These options, along with the functionality of the *Timeline Bar* and the adjacent tools will vary depending on the permissions of the signed-in user.



Tips on Viewing Video

1. Add the Players you want to view to the *Stage*.
2. If you want to view live video on all of the linked Players, make sure the *Timeline Bar's* **LIVE** icon appears in purple. If the **LIVE** icon is grey, click on it to return to live mode.
3. Click anywhere in the white region of the *Timeline Bar* to view recorded video on all of the linked Players (as permissions allow).
 - a. Use additional clicks to make small adjustments to the position of the play line.
 - b. Click and drag the mouse to the right to go further into the past.
 - c. Roll your mouse wheel up/down to, respectively, zoom in/out on the *Timeline Bar*.
4. A red line on the *Timeline Bar* indicates motion detection for all of the linked Players. (Unlinked Players will have their own in-cell *Timeline Bar* with motion detection indicators.) Use the playback controls on the *Timeline Bar* to jump to the previous and next motion events.

 The permissions required to view recorded video are not available to all users.

 If you are attempting to view recorded video and the Player on the *Stage* displays an error icon, this will indicate that Orchid Fusion VMS was unable to retrieve video data. This typically means that there is no recorded video for the selected time period.

Basic Playback Controls

	This icon is used to jump back to the previous motion event.
	This icon will toggle back and forth (allowing you to play and pause video).
	This icon is used to jump forward to the next motion event.

1. Click one of the **Playback** icons to jump to a previous motion event, pause/play video playback, or jump to the next motion event.

 Like most playback controls, the **Play** and **Pause** icons toggle back and forth.

Playback Speed Control



This is the ***Playback Speed*** icon.

1. Click the ***Playback Speed*** icon to increase or decrease the speed at which you review the recorded video. Available selections include the following:
 - a. Slow Motion (at $\frac{1}{4}$ or $\frac{1}{2}$ of the normal speed)
 - b. Actual Speed (at 1x)
 - c. Fast Forward (at 4, 16, 32, or 64 times the normal speed)

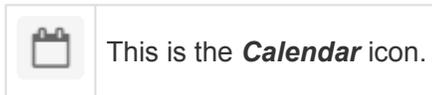
Playback Direction



These are the two ***Playback Direction*** icons.

1. First access the ***Playback Speed*** control.
2. Click one of the ***Playback Direction*** icons to (from left to right) play the recorded video in reverse, or play the recorded video in forward motion.

Calendar Picker

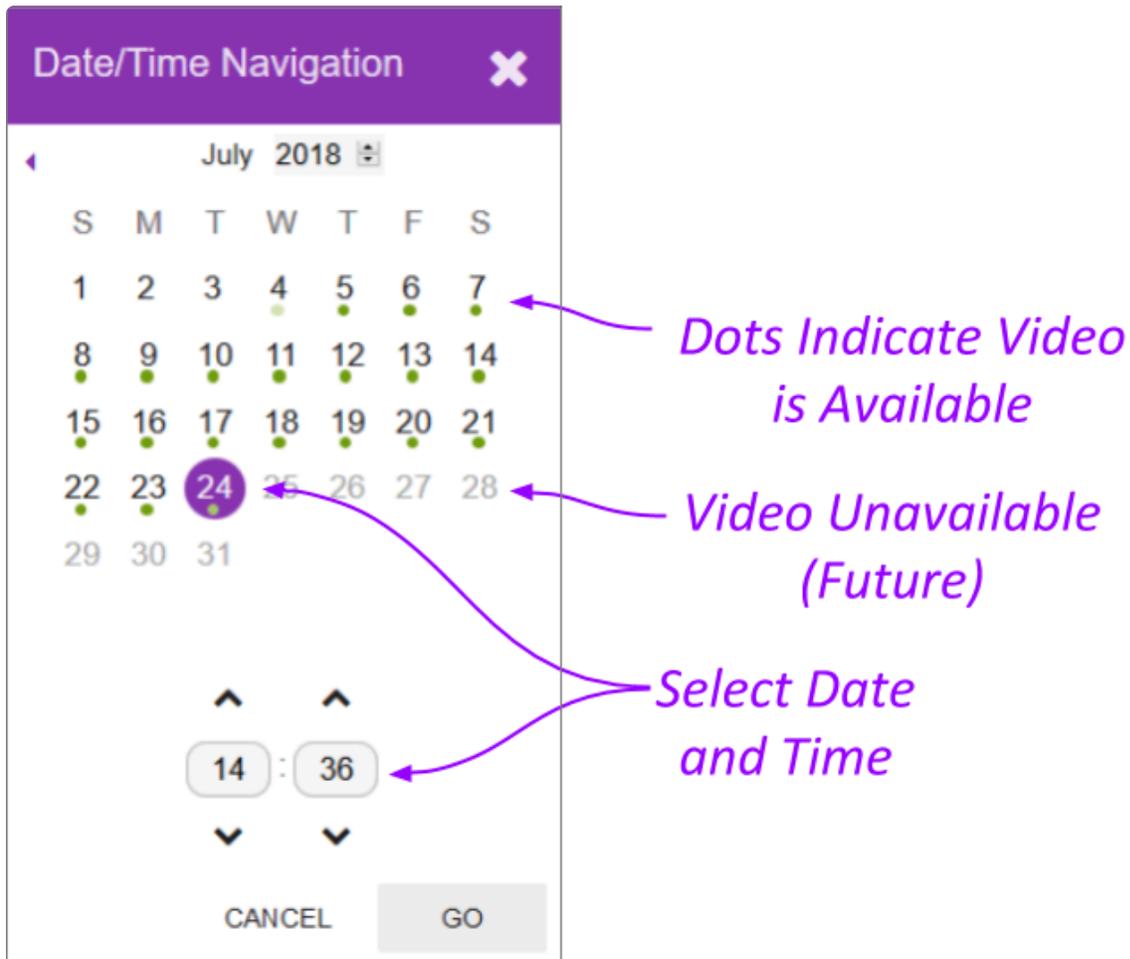


If you need to review video from a specific time period, try using the *Calendar Picker* tool.

1. Click the **Calendar** icon (to the right of the **Timeline Toggle** icon) to open the *Calendar Picker*.

From the *Calendar Picker*, you have the ability to select the date and time for which you want to review video. Green dots (underneath each date) indicate that video is available for the cameras on the *Stage*. In the example below, we see the following:

- Video is unavailable July 1st to the 3rd (either because the video archives have already been overwritten, or the system was not online).
- The dot on July 4th is lighter, indicating that only partial recording is available (due to retention rules, motion-only recording, or other factors, for one or more cameras on the *Stage*).
- Bright dots (July 5th to the 24th) indicate that complete video is available.
- Video is unavailable July 25th to the 31st because those are future dates.

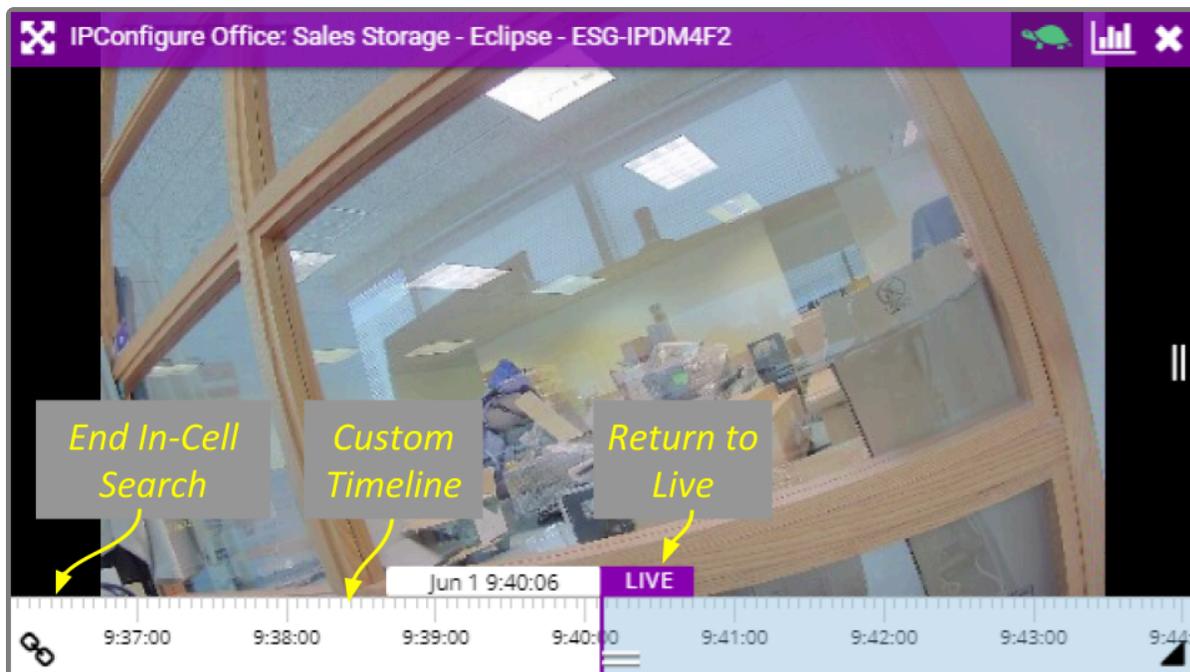


2. Click a different date and time (as needed) from the calendar, then click the **Go** button. The software will jump to the selected date and time on the *Timeline Bar*.

In-Cell Search

	This Link icon is used to end an In-cell search.
	This Un-Link icon is used to start an In-cell search.

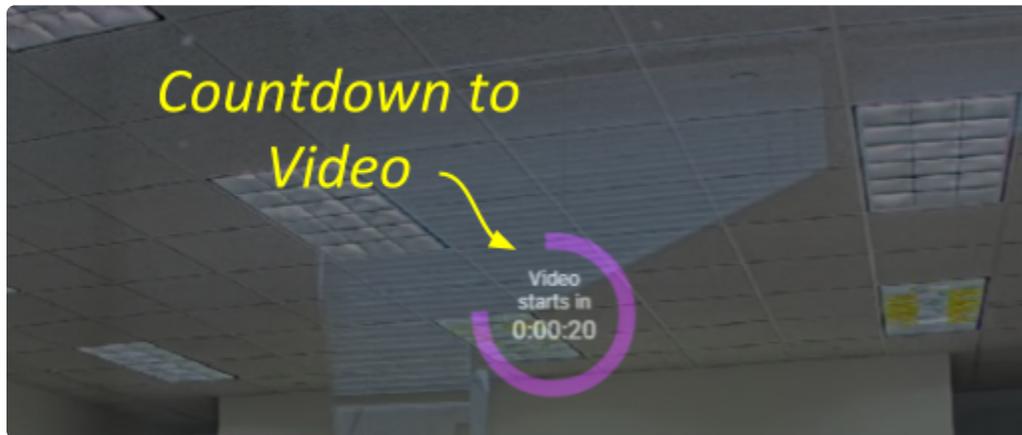
1. To perform an In-cell search, position the mouse over the Player; this will activate the grab handles and the image header.
2. Click the **Un-Link** icon in the bottom-left corner of the Player to open the search **Timeline Bar** for that Player. This essentially detaches the Player from the main **Timeline Bar** and allows you to view video on this Player from a different date/time. (You cannot export video from an in-cell search.)



3. Select the **Link** icon to end the in-cell search and reconnect to the main **Timeline Bar**.

Motion-Only Recording

Orchid Fusion VMS supports a recording style that will record video only when motion is detected. Because of this, when you review recorded footage, some Players will not always display video.



Players associated with this recording style will provide a countdown to the next motion event. (This way, even when no video is displayed, you will know that the camera and the system are still working.)

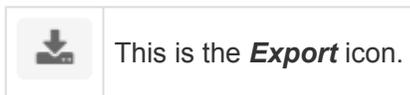
You may see a similar countdown (even on Players using other recording styles) when a Player simply doesn't have any recorded video for the specified time period.

Exporting Video

If you need to export video to a file (for permanent storage or sharing), there are additional tools that will enable you to select and save that video. Beginning with version 2.2.1, Orchid Fusion VMS offers two methods for exporting video. The first method is the quicker of the two, accomplished by simply plugging in a date/time range and selecting a camera stream. The second method is more involved, allowing for looped video review and selection.

 The permissions required to export recorded video are not available to all users.

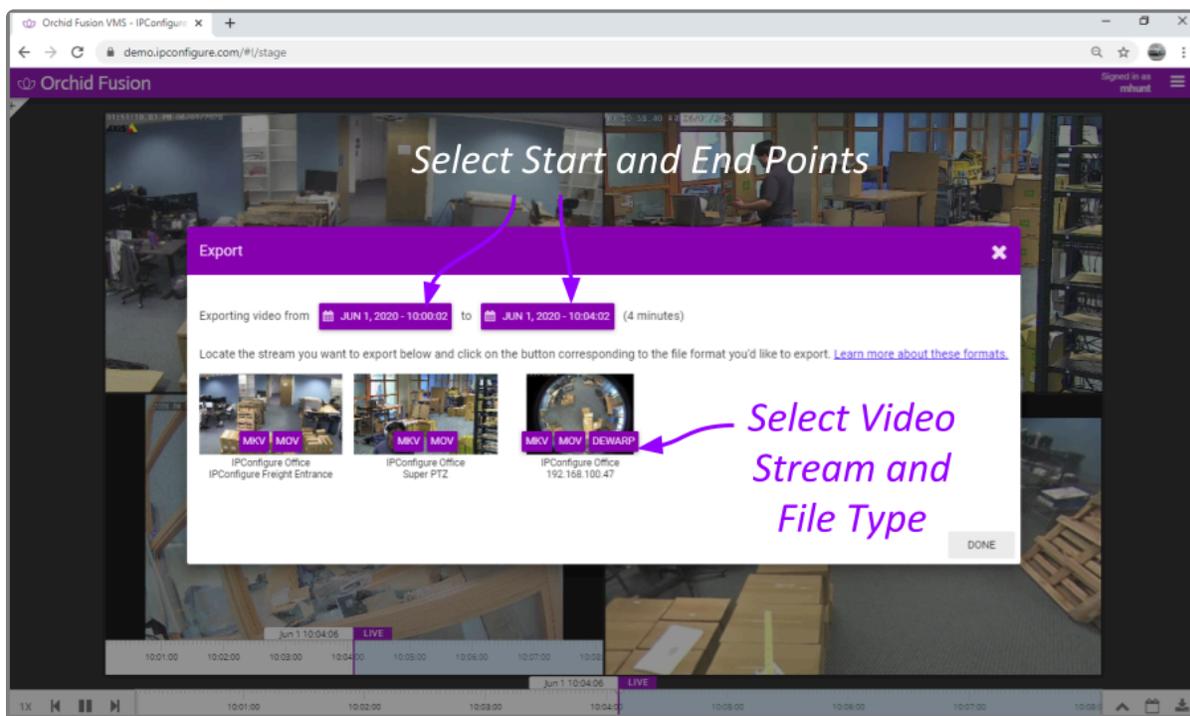
Export by Date/Time Range



If you need video for a specific date and time range, this method is the easiest way to obtain it.

✿ The permissions required to export video may not be available to all users.

1. First, be sure that the Players you need are on the *Stage*.
2. Click the **Export** icon on the *Timeline Bar*. The *Export* screen will appear.



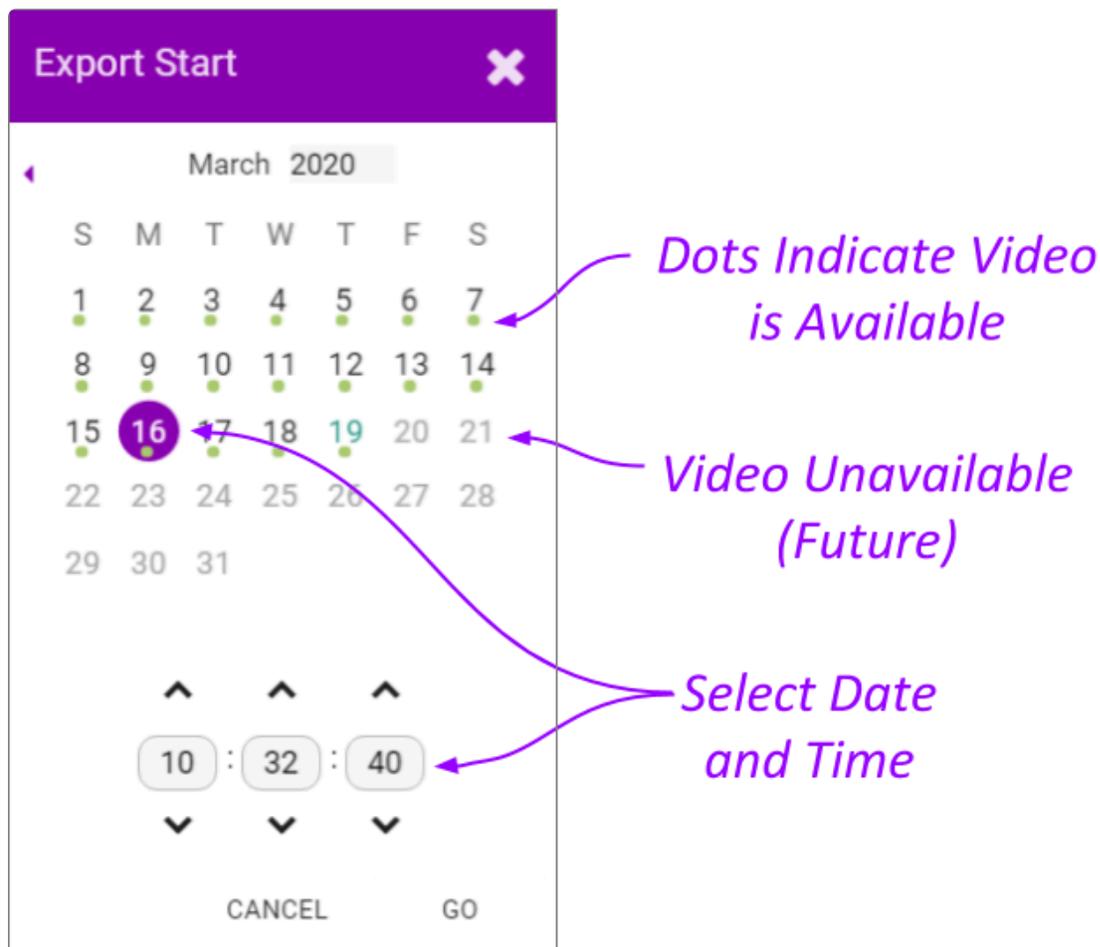
The *Export* screen will display a thumbnail representing each of the Players that were on the *Stage*. For each one, you will also see buttons that represent the video file types. Orchid Fusion VMS supports the following video file types:

- Matroska video files (MKV): this is an open-standard video container that Orchid Fusion VMS uses internally for saving video archives. MKV files are supported by all modern video players, including VLC and Windows Media Player starting in Windows 10. MKV video export is now available using iOS devices.
- QuickTime video files (MOV): this is an older video format that is supported by Mac OS X and older versions of Windows Media Player.
- Dewarp: Starting in version 2.10, Orchid Fusion VMS supports a dewarp file type that provides the

Perspective view from a fisheye camera. This export process actually produces a ZIP file containing an HTML file (the player) and an MP4 file (the video file). This export file type is supported by Google Chrome and Mozilla Firefox. (The dewarp file type is only available if the Orchid Core VMS server is running version 2.8 or greater, and the dewarping feature is supported and enabled on the fisheye camera.)

For more information on these video file types, click the *Learn more about these formats* link (on the **Export** screen).

3. Click the first **Calendar** button (on the left) to select the date and time at which the video export will start.



When the calendar opens, you have the ability to select the date and time for the starting point for your video export. Green dots (underneath each date) indicate that video is available for one or more of the cameras on the *Stage*.

4. Select the date and time, then click **Go**. (You may receive a warning that your selected range exceeds the allowable export duration. For now, proceed to the next step.)
5. Click the second **Calendar** button (on the right) to select the date and time at which the video export will end. Select the date and time, then click **Go**. (The export duration of the selected range will

appear on the screen. If a warning still appears, you will need to shorten the export duration by selecting a new start or end time.)

6. Now that you have selected the range, select the Player you want to export by clicking on the button that represents the video file type you want to export for that Player.
7. Once you select a file type, Orchid Core VMS will begin downloading the video. Check your web browser's list of downloaded files to retrieve the video. The exported video file name is based on the camera name and includes the event date and time in Coordinated Universal Time (UTC).
8. Notice that the *Export* screen is still open. If there were multiple Players on the *Stage* when you selected the video, you may export video from another Player from the same time period. (Follow steps 6 and 7.)
9. Press the **Done** button when you are done exporting this selection of video.

Export by Timeline Selection

	This is the Timeline Toggle icon.
	This is the Export icon.
	This is the Range Selector .

If you need a chance to narrow and review the video that you are exporting, this export option is your best bet. This option involves two basic steps: selecting the video, and exporting the video.

✿ The permissions required to export video may not be available to all users.

1. First, be sure that the Players you need are on the *Stage*.
2. Use the *Calendar Picker*, if needed, to focus your search around a certain date and time.
3. Click the **Timeline Toggle** icon to expand the *Timeline Bar*. There will now be two timelines you can use to identify and select the video you want to export.

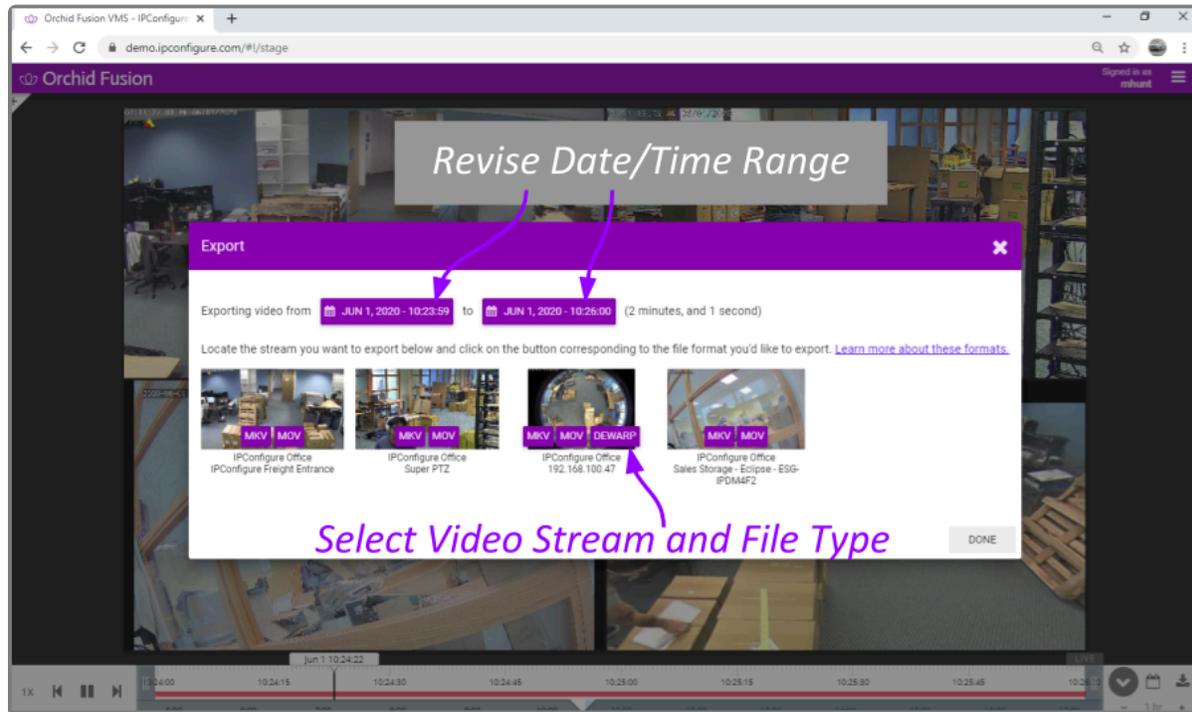


The bottom timeline represents the Coarse Search Area which displays a broad range of time. The top timeline represents the Fine Search Area which is used to pinpoint a specific range of time within the Coarse Search Area. Once that specific range is defined, all of the linked Players will play the selected video in a loop for review.

4. Use the **Range Selector** to increase and decrease the *Timeline Bar* increments and amount of time displayed in the Coarse Search Area.
5. Click and drag the Coarse Adjustment Handles to narrow the video search area. The area between the handles represents the narrowed search area (which is now reflected in the Fine Search Area).
6. Click and drag the Fine Adjustment Handles to further narrow the search and finalize the video

selection for export. Review the final loop as needed. (The default maximum amount of video you can select for export is 1 hour.)

- Once you have selected video, click the **Export** icon to open the export screen.



- You may use the **Calendar** buttons to revise your start and end dates/times, if needed.
- The **Export** screen will display a thumbnail representing each of the Players that were on the **Stage**. To select one of these for export, find the Player you want, then select the file type you want to export. Orchid Fusion VMS supports the MKV, MOV, and Dewarp video file types (as explained earlier).
- Once you select a file type, Orchid Fusion VMS will begin downloading the video. Check your web browser's list of downloaded files to retrieve the video. The exported video file name is based on the camera name and includes the event date and time in Coordinated Universal Time (UTC).
- Notice that the **Export** screen is still open. If there were multiple Players on the **Stage** when you selected the video, you may export video from other Players from the same time period. (Follow steps 9 and 10.)
- Press the **Done** button when you are done exporting this selection of video.

Viewing Exported Video

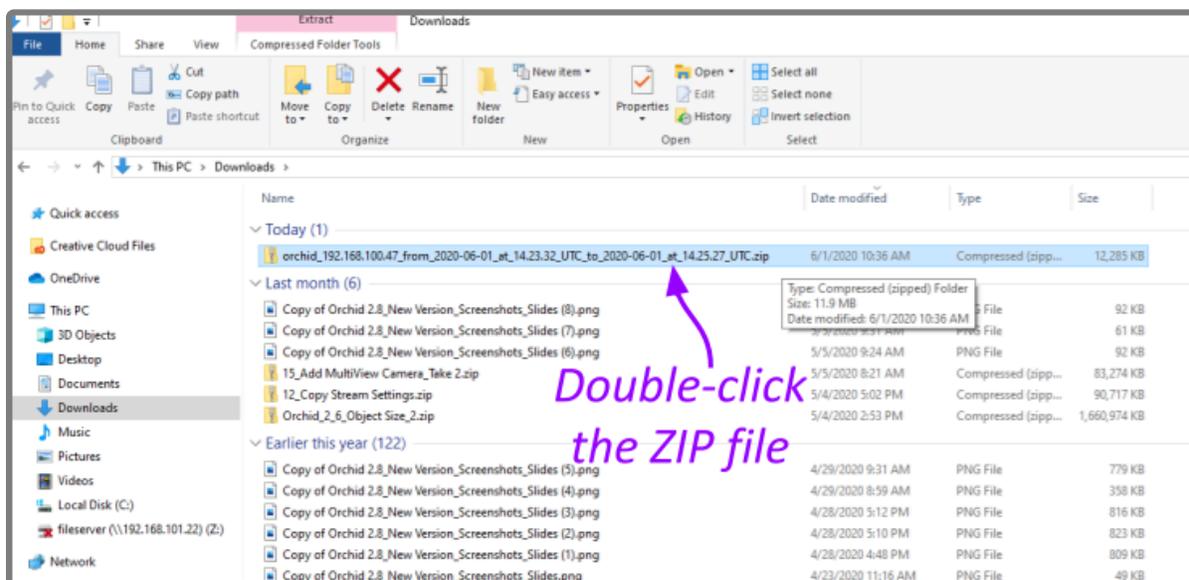
Once you have exported a video clip, go to your *Downloads* folder to find and play the exported video. The sections below will describe the basic viewing process for each of the video file types.

MKV and MOV Files

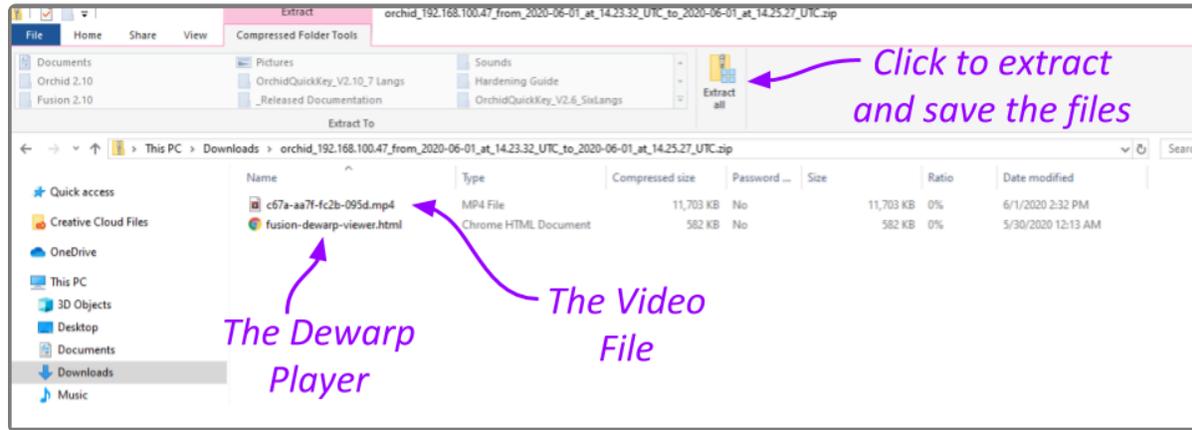
1. In the *Downloads* folder, look for an MKV or an MOV file. The exported video file name is based on the camera name and includes the event date and time in Coordinated Universal Time (UTC).
2. Right-click on the file and select **Open with**.
3. Select a media player from the list, like **VLC Media Player**. The video will open and play.

Dewarp Files

1. In the *Downloads* folder, look for a ZIP file. The exported video file name is based on the camera name and includes the event date and time in Coordinated Universal Time (UTC).



2. Double-click on the ZIP file to reveal the contents of the file. Notice that the ZIP file contains an HTML file (the player) and an MP4 file (the video file).



3. To save and play the video:

- a. Click the **Extract all** button.
- b. Use the **Browse** button to select a folder for saving the player and the media file.
- c. Click **Select Folder**.
- d. Then click the **Extract** button.
- e. When the extraction is complete, navigate to the folder to which you saved the HTML file and the media file.
- f. Double-click on the HTML file to open the *Orchid Core Dewarp Player*.
- g. Click on the **Select File** button.
- h. Navigate to the folder to which you saved the files, then double-click on the MP4 media file. (The file will open and play.)
 - i. Control the video with the **Play** and **Pause** buttons.
 - ii. Close the browser tab to close the player.

* You can play the media file directly by double-clicking on the MP4 file, but this will not produce the dewarped version; you will view the standard fisheye version of the video.

Exporting – Additional Notes

Maximum Export Duration

The maximum amount of video you can select for export is 1 hour by default. This maximum may be changed by editing the Orchid Core VMS configuration file. Be aware, however, that increasing the maximum export duration may have other impacts on the system. For example, this may lead to longer processing times, increased disk utilization, and decreased video retention.

To change the default maximum export duration, the easiest way is for Administrators to use the *Advanced Settings* feature. For more details, please refer to the [Orchid Fusion VMS Administrator Guide](#).

No Archives

“There are no archives in the specified region.” This error indicates that there is no video available for the selected time period. This may mean that the Orchid Core VMS server was not recording video, or that the video archives may have already been overwritten.

No Apparent Response

If Orchid Fusion VMS appears to stop responding after you’ve selected the file type for export, check the following:

- Look for an error icon in the web browser’s address bar. Pop-up blockers may be preventing Orchid Fusion VMS from opening a new page.
- Look in the system tray or in the *Downloads* folder for an indication that the video has been exported.



For additional help with Orchid Fusion VMS, please visit our training site at training.ipconfigure.com.