

# Orchid Recorder Administrator Guide

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IPConfigure

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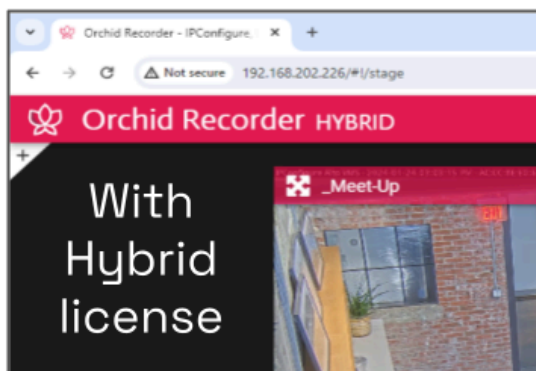
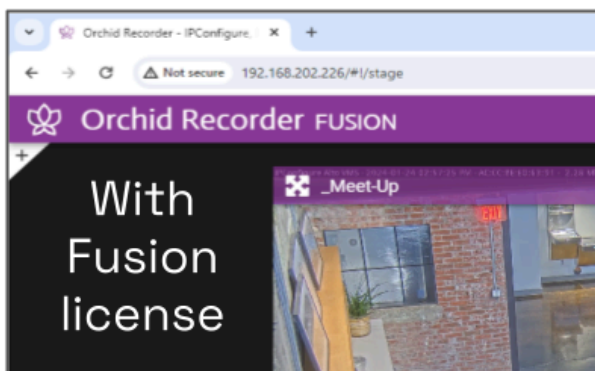
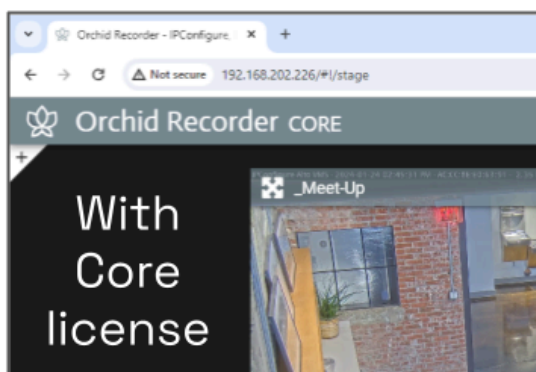
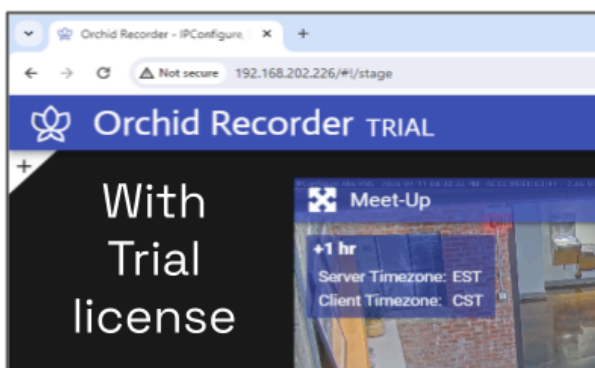
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# Introduction

Thank you for your interest in IPConfigure's Orchid Video Management System. This guide should provide you with everything you need to know as you prepare the system for readiness. We'll begin with an overview of the product and the user guide, then we'll explain how to activate a license, and add users and cameras to get the system up and running. Once that is done, we'll cover the reporting features and other advanced topics to help you manage and understand the system.

- ✿ Beginning in version 23.12, the Orchid Core product name is being replaced by Orchid Recorder. For new users, this will emphasize that the role of the Orchid server is to record all of the video for the system. Existing users will notice that the theme of the user interface will change as different licenses are applied. With just a glance, you will know if the Orchid server is a stand-alone operation, or a registered part of a Fusion or Hybrid system.

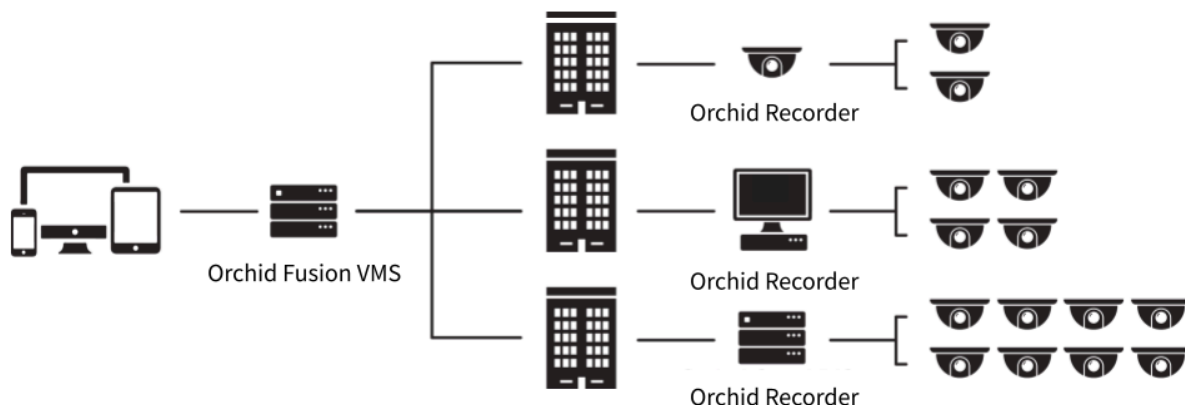


# About the Orchid Product Family

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

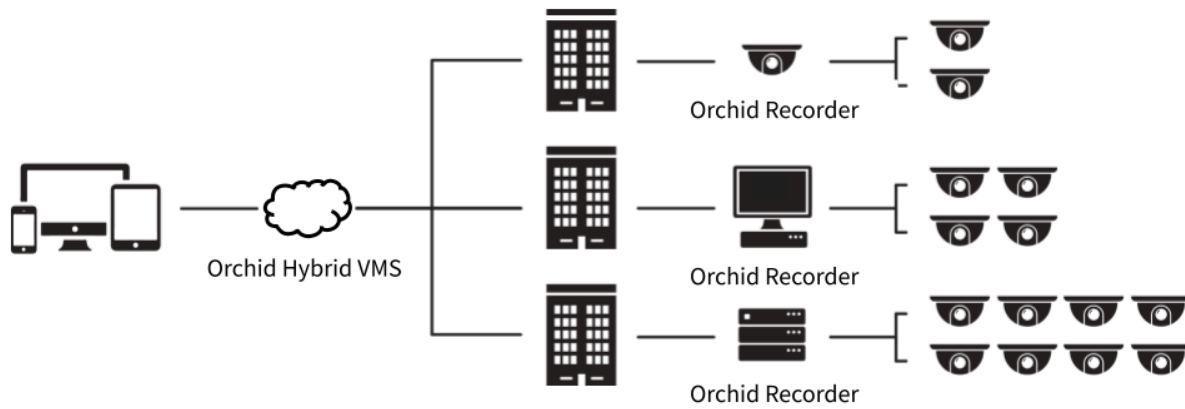
Orchid Fusion/Hybrid VMS is an enterprise software developed to integrate multiple Orchid Recorders from various locations into one seamless management system. Designed to work across a variety of operating systems, camera types and network topologies, Orchid Fusion/Hybrid VMS is the perfect solution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

Orchid Recorder and Orchid Fusion/Hybrid 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 Recorder works on the camera level, Orchid Fusion/Hybrid VMS now works on the camera level and the server level. In Orchid Recorder, the administrator will "register" network cameras, configure camera stream settings, and establish video retention levels for each camera. Orchid Fusion/Hybrid VMS has the power to "register" both cameras and individual Orchid Recorders, resulting in increased management capabilities to an entire network of Orchid Recorders.



## Orchid Fusion and Orchid Hybrid

Orchid Fusion VMS and Orchid Hybrid VMS are nearly identical systems. They are both used to manage multiple Orchid Recorders. Orchid Fusion VMS requires you to have one or more Orchid Recorders and an Orchid Fusion VMS server to manage them. Orchid Hybrid VMS combines on-premise recording with cloud management. So while video is still stored on-site (on an Orchid server), the Hybrid system provides server aggregation, management, and accessibility through the cloud.



# About the Orchid Core VMS Administrator Guide

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The Orchid Recorder Administrator Guide is designed for IPConfigure dealers, integrators, or system administrators and is intended to cover the topics that deal with system administration and features that are not part of everyday operation.

This guide includes information on the following topics:

- Signing into the Orchid Recorder Software
- Getting Started
- Activating the Orchid Recorder Software
- Creating and Managing Users
- Adding and Managing Cameras
- Understanding the Video Retention Policy
- Viewing System Status and System Report
- Audit Logs
- Event Subscriptions
- Advanced Settings
- Version Information
- Advanced Topics
- Additional Support

The Advanced Topics section has been expanded to include a variety of topics related to WebRTC. These topics share some general knowledge on WebRTC, how Orchid Recorder works in WebRTC mode, and troubleshooting tips.

For details on working with the *Stage*, *Timeline Bar*, viewing *Events*, and viewing/recording video, please refer to the [Orchid Recorder User Guide](#).



Your Orchid Recorder may be registered to an Orchid Fusion or an Orchid Hybrid supervisory system. References to those products appear throughout this guide, but may not be applicable to your system.

# How to Sign In

---

Orchid Recorder 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 Recorder.

\* 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

---

Orchid Recorder 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). Beginning in version 23.6, Orchid supports WebRTC retransmission by default. With WebRTC retransmission, the web browser can resend video packets to Orchid to help ensure that packets arrive. This improvement allows WebRTC to provide full-bandwidth video even in marginal network conditions.

WebRTC mode and Low-bandwidth mode are available in the following browsers:

- (Preferred) The latest version of Google Chrome, in a MacOS, Windows, or Linux desktop environment, or on a mobile device
- The latest version of Safari (mobile and desktop)
- The latest version of Mozilla Firefox
- The latest version of Microsoft Edge

All other web browsers support Low-bandwidth mode only. (For a detailed comparison of the two operating modes, please refer to the [Comparing Orchid Recorder Operating Modes](#) section.)

# Signing In

To open Orchid Recorder on a client device, type the IP address of the Orchid Recorder in the web browser address bar. If you are opening Orchid Recorder on the Orchid Recorder itself, you may enter *localhost* in the address bar, or use the Orchid Recorder program link in the system menu or the Desktop icon, if available. (If the default web server port number was changed to a value other than 80, the IP address or *localhost* will need to be followed by a colon and the web server port number. Example: *localhost:81*)

1. You will be prompted to enter a username and password to sign into Orchid Recorder. If you are the Administrator and this is your first time signing in, enter the username *admin* and the password you set when Orchid Recorder was installed. If you are an Orchid Recorder Manager, enter the username and password provided by your Administrator.
2. If you are using a browser that supports WebRTC mode, you will have the option to run Orchid Recorder in Low-bandwidth mode. (Mark the *Low-bandwidth mode* checkbox to run in Low-bandwidth mode.) In all other web browsers, you will sign in using Low-bandwidth mode by default.
3. Press **Sign In**. (You will remain signed in for approximately 30 days.)



\* The username and password are both case sensitive.

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



# Getting Started

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Once you are signed in, you will be ready to work on activating your Orchid Recorder license and configuring the Orchid Recorder system. You'll learn much more about the user interface in the [Orchid Recorder User Guide](#), but for administrative purposes, here's how to find what you need.

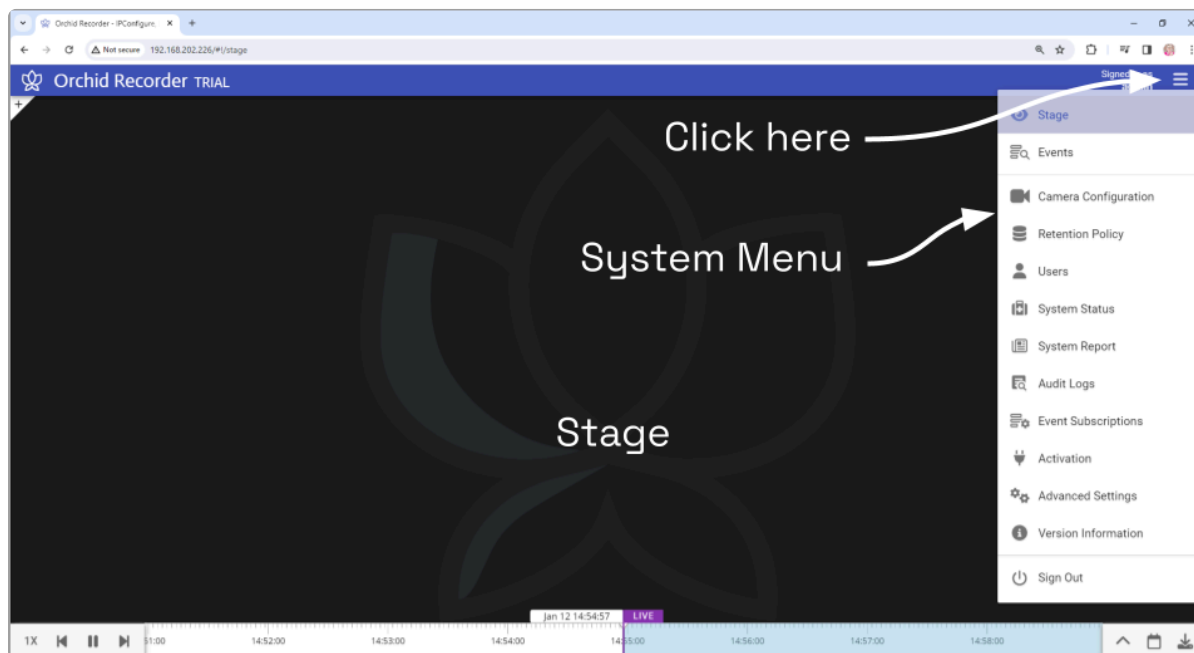
The *System Menu* (accessible from the top-right corner of the screen) is the primary navigation menu and will always be available. It allows the Administrator to access all of the software features like the *Stage*, *Camera Configuration*, *Retention Policy*, etc. For Managers, Viewers, and Live Viewers, the *System Menu* will contain only those items for which the user has permissions. (Access to the *Stage* and Sign Out are exclusively available on the *System Menu* and are available to all users.)

# Accessing the System Menu



This is the *Hamburger* icon.

1. To open the *System Menu*, click on the *Hamburger* icon in the top-right corner of the screen.

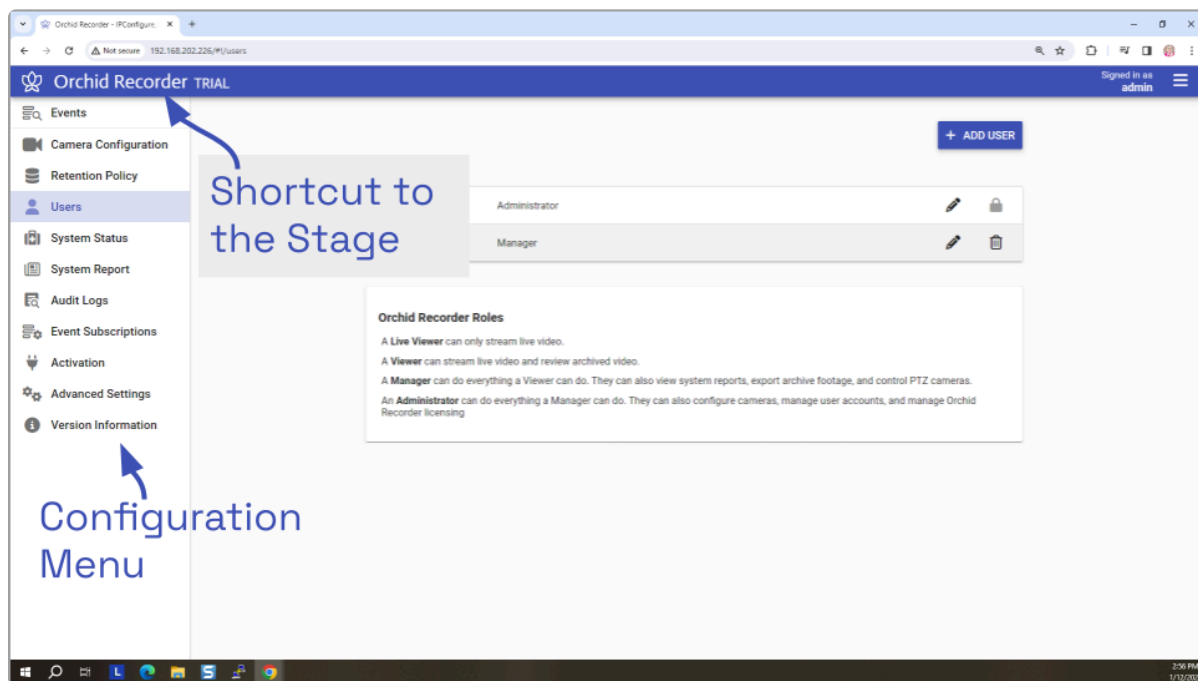


# Accessing the Configuration Menu

1. To open the *Configuration Menu*, go to the *System Menu*, then click on any of the available selections except *Stage* or *Sign Out*.

The *Configuration Menu* is a secondary navigation menu that will not be available when the *Stage* or the *Events* screen is open. It allows the Administrator to access all of the software features except the *Stage* and *Sign Out*. For users without Administrator permissions, the Configuration Menu will contain only those items for which the user has permissions, and will not include the *Stage* and *Sign Out*.

When you are using Orchid Recorder on a PC (and the web browser is set to zero or minimal zoom), once you access the *Configuration Menu*, it will remain visible on the left side of the screen until you return to the *Stage*.



✿ Shortcut: To access the *Stage* quickly, just click on the “Orchid Recorder” portion of the header (as indicated above).

# Activating Orchid Recorder VMS

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In order to increase the number of cameras and features available in Orchid Recorder, it must be activated with a valid *Core*, *Fusion*, or *Hybrid* license.

 An Administrator is the only role with the ability to activate Orchid Recorder.

# About Orchid Recorder VMS Licenses

---

Beginning in version 23.3, there are four main types of licenses available for the Orchid Recorder software: *Trial*, *Core*, *Fusion*, and *Hybrid*. Each license type offers certain capabilities, restrictions, and themes.

- **Trial License**
  - This is our default, out-of-the-box Orchid license.
  - The *Trial* license displays a blue theme.
  - When installed on a Windows x86-64 server or a Linux x86-64 server, the *Trial* license will allow up to four cameras, and up to 128GB of video archives. The *Trial* version can also be linked to an Orchid Fusion or an Orchid Hybrid VMS system.
  - When installed on a Linux ARM embedded server, the *Trial* license will now allow up to four cameras, and up to 128GB of video archives. This *Trial* license type does not support linking to an Orchid Fusion or Orchid Hybrid VMS system.
- **Core License**
  - Going forward, the *Core* license displays a gray theme.
  - The *Core* license offers unlimited archives, but will limit the number of cameras allowed and cannot be linked to an Orchid Fusion or an Orchid Hybrid VMS. When a Core license expires, the Orchid software will continue to work, but you will not qualify for technical support or software upgrades.
- **Fusion License (for Orchid Recorder)**
  - The *Fusion* license displays a purple theme.
  - The *Fusion* license is an Enterprise license. This license will limit the number of cameras allowed, but offers unlimited archives and can be linked to any of our management servers (including a Fusion server, a Hybrid server, or an Alto server). When the *Fusion* license expires, the Orchid server will continue to record, but you will no longer be able to connect to your management server, and you will no longer qualify for technical support or software upgrades.
- **Hybrid License (for Orchid Recorder)**
  - The *Hybrid* license displays a pink theme.
  - The *Hybrid* license is an Enterprise license. This license will limit the number of cameras allowed, but offers unlimited archives and can be linked to a Hybrid management server (only). When the Hybrid license expires, the Orchid server will continue to record, but you will no longer be able to connect to the Hybrid management server, and you will no longer qualify for technical support or software upgrades.



When we talk about providing “unlimited archives,” we mean that we won’t set

an absolute limit on the archives (such as the 128 GB limit on some *Trial* licenses). The archives will only be limited to the available space on the local Orchid server, or the amount of storage that is available on your management server in the cloud.

## Time-Limited Licenses

IPConfigure also offers time-limited versions of the *Core*, *Fusion*, and *Hybrid* licenses. Generally, these will be used as SaaS licenses, and for testing large numbers of cameras or high retention settings (which would be impossible to do with the standard *Trial* license).

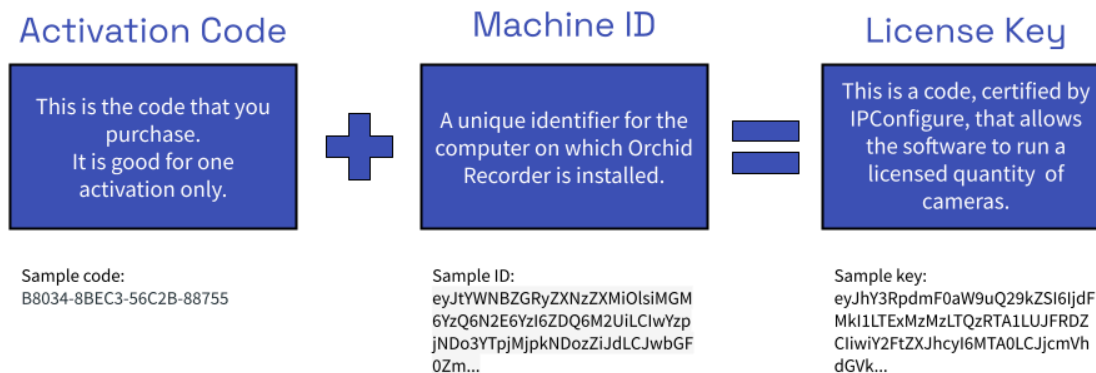
Time-limited licenses are very similar to the standard licenses described above, and allow you to add a certain number of cameras with unlimited video retention. There is an important difference in the way these licenses operate, however, once the timed-limited license expires. Let's look at each of these licenses individually.

- **Core-Timed License**
  - If you have a Core-timed license, and the time limit expires, Orchid Recorder will enter a degraded mode and will stop recording video. Previously recorded video will continue to be accessible in this degraded mode. (See [License Errors](#) for more details.)
- **Fusion-Timed License (for Orchid Recorder)**
  - If you have a Fusion-timed license, and the time limit expires, the Orchid Recorder will enter a degraded mode and will stop recording video. Previously recorded video will continue to be accessible in this degraded mode. At the Fusion server, the Orchid server may remain in the *Servers* list, but you will not be able to view any new video from the degraded Orchid server.
- **Hybrid-Timed License (for Orchid Recorder)**
  - If you have a Hybrid-timed license, and the time limit expires, the Orchid Recorder will enter a degraded mode and will stop recording video. In addition, you will lose all access to the Hybrid management server in the cloud.

# Add a License (Quick Method)

When you purchase a license, you will be given an activation code. As indicated in the diagram below, the activation code is just the starting point in the process of adding a license. This code, after being paired with your Machine ID, will generate a license key. With this quick method, most of the work is done behind the scenes.

\* This quick method of activation requires that the Orchid Recorder has an internet connection.



\* When you add, remove, or update a license, a *Licensed Changed* event will appear on the [System Report](#).

1. Open Orchid Recorder and sign in using an administrator level username and password.
2. Once signed into Orchid Recorder, open the *System Menu* in the top-right corner of the screen and select **Activation**.

\* If Orchid Recorder has not yet been activated, the licensing screen will show that Orchid Recorder is using the Trial Edition.

**Orchid Recorder Activation**

Orchid Recorder has not yet **been activated**.

**Trial License Info**

Edition	Cameras Licensed	Archive Retention	Support Expiration	Activation Code
trial	4/4	128 GB	N/A	N/A

**Registered Cameras / Licensed Cameras**

**Add License**

**+ ADD LICENSE**

- When the *Orchid Recorder Activation* screen appears (above), click the **Add License** button to activate a new license.

**Activation** Use the Online tab

ONLINE OFFLINE

Please provide your Activation Code and a location description.

Activation Code \*

19C36-1E698-67497-E2044

**Enter activation code**

Location

Bowdens Ferry

**Activate license**

CANCEL **ACTIVATE**

- On the *Activation* screen, click the *Online* tab.
- Enter your activation code in the *Activation Code* field. (Sample code: B8034-8BEC3-56C2B-88755)
- Then input a location description that specifies where your Orchid Recorder will be located. Common location descriptions are a shop name, number, or street address.
- Click the **Activate** button to generate your new Orchid Recorder license. If the license creation is successful, a screen will appear that indicates success.





**Orchid Recorder Activation**

Orchid Recorder has **been activated**.

Activation Complete

Edition	Cameras Licensed	Archive Retention	Support Expiration	Activation Code
core	4/8	Unlimited	Sunday, January 19, 2025 UTC	19C36-1E698-67497-E2044

 REMOVE LICENSE  UPDATE LICENSE

This Orchid Recorder has been activated with a *Core* license.

# Add a License (Offline Method)

Use the Offline Activation method if the Orchid Recorder doesn't have an internet connection. This activation method is very similar to the activation method used in older versions of Orchid Recorder.

\* When you add, remove, or update a license, a *Licensed Changed* event will appear on the [System Report](#).

1. Open Orchid Recorder and sign in using an administrator level username and password.
2. Once signed into Orchid Recorder, open the *System Menu* in the top-right corner of the screen and select *Activation*.

\* If Orchid Recorder has not yet been activated, the licensing screen will show that Orchid Recorder is using the Trial Edition.

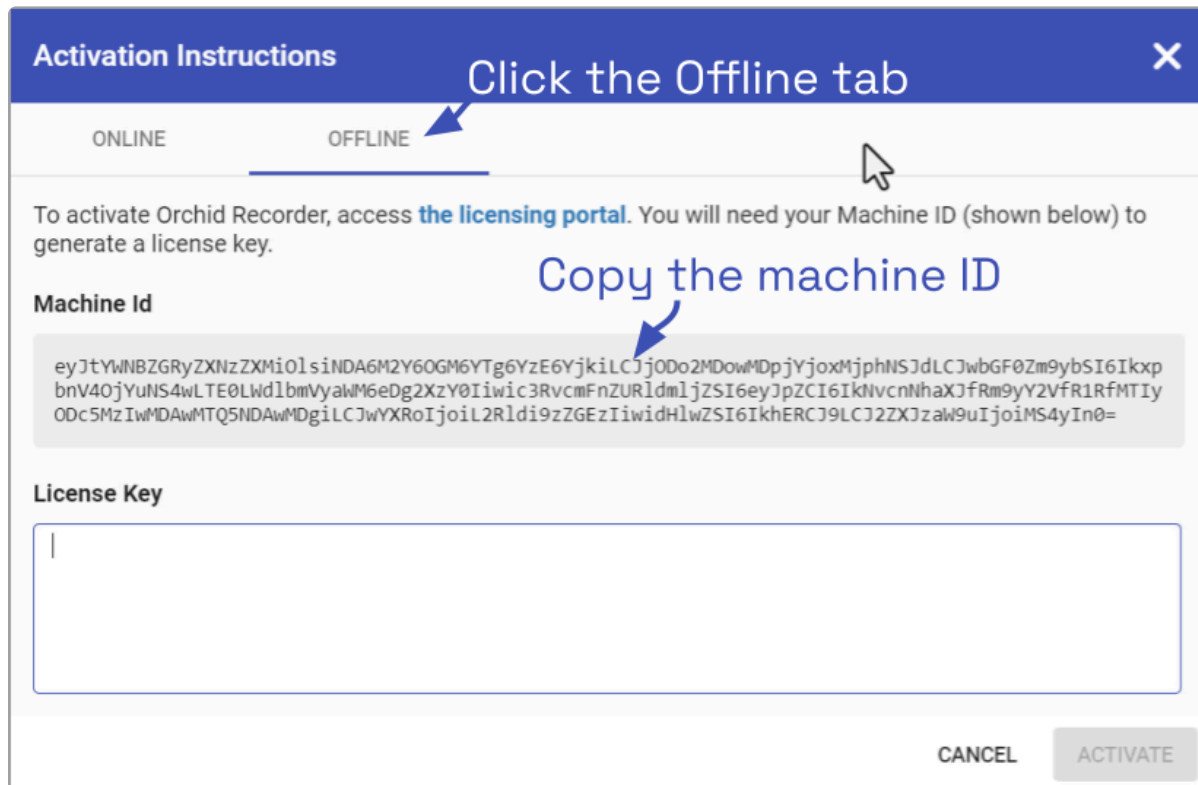
The screenshot displays the 'Orchid Recorder Activation' screen. At the top, it states 'Orchid Recorder has not yet been activated.' Below this is a table titled 'Trial license Info' with the following data:

Edition	Cameras Licensed	Archive Retention	Support Expiration	Activation Code
trial	4/4	128 GB	N/A	N/A

Annotations on the screenshot include:

- An arrow pointing to the 'Cameras Licensed' column with the text 'Registered cameras / Licensed cameras'.
- An arrow pointing to the 'Archive Retention' column with the text 'Trial license Info'.
- An arrow pointing to the '+ ADD LICENSE' button with the text 'Add license'.

3. When the *Orchid Recorder Activation* screen appears (above), click the *Add License* button to activate a new license.



4. On the *Activation Instructions* screen, click the *Offline* tab.
5. Copy your Machine ID. (Click and drag from the beginning to the end of the text string, then click **CTRL+C** to copy it.)
6. Click **CTRL+V** to paste the ID into a text file on a USB drive that you can use on a computer with internet access.
7. Using a computer with internet access, go to the following site:  
<https://www.orchidsecurity.com/activation>.

**VMS Activation**

To generate a license key, enter your Activation Code and Machine ID. Enter a unique Location Description to associate the license key with a physical location.

*Looking to use an add-on, upgrade, or renewal code? [Click here.](#)*

**Activation Code**

**Machine ID**

**Location Description**

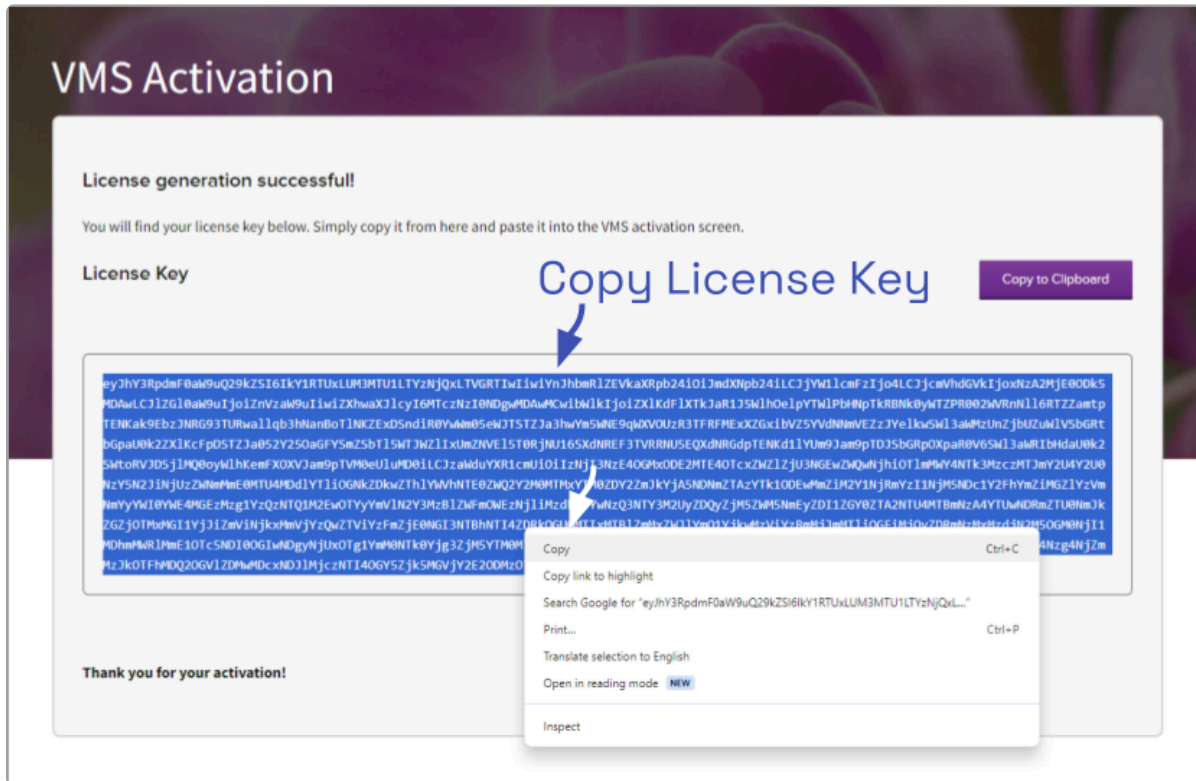
**Activate License**

Annotations on the form:

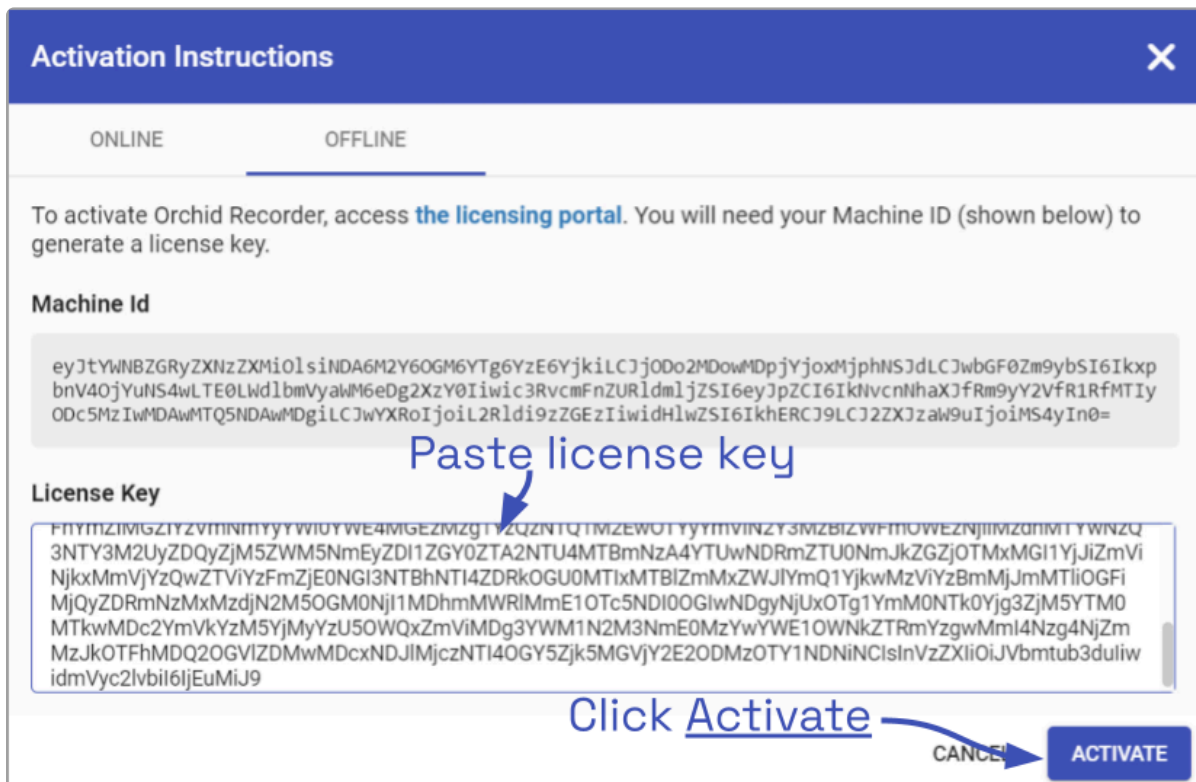
- Enter activation code (points to Activation Code field)
- Paste machine ID (points to Machine ID field)
- Enter location (points to Location Description field)
- Click Activate License (points to Activate License button)

8. Paste your machine ID (from the USB drive) into the *Machine ID* field.
9. Enter the Activation Code that was provided when you purchased your Orchid Recorder license into the *Activation Code* field. (Sample code: B8034-8BEC3-56C2B-88755)
10. Enter a location description that specifies where your Orchid Recorder will be located. Common location descriptions are a shop name, number, or street address.
11. Click the **Activate License** button to generate your new Orchid Recorder license. If the license creation is successful, a screen will appear that indicates success and includes a License Key. (The License Key looks like a paragraph of random text.)

✿ If the activation code has already been used for another machine, then the license generation will fail saying “The provided activation code has already been paired with a different machine ID.” If this happens, you’ll need to either purchase a new Activation Code, or submit a ticket to the IPConfigure Technical Support Team.



- Highlight the license key text and click **CTRL+C** or press the **Copy to Clipboard** button to copy the License Key to a text file on a USB drive, then take it back to the Orchid Recorder.



- Click into the *License Key* field on the *Activation Instructions* screen. Click **CTRL+V** to paste the text into the field.

14. Click the **Activate** button to activate your new license key.

The screenshot displays the 'Orchid Recorder Activation' interface. At the top, a message states 'Orchid Recorder has been activated.' with a blue arrow pointing to it from the text 'Activation Complete'. Below this is a table with license details. The table has a purple header row and one data row. The columns are: Edition, Cameras Licensed, Archive Retention, Support Expiration, and Activation Code. The data row shows: fusion, 4/8, Unlimited, Sunday, January 19, 2025 UTC, and F5E51-C7155-63641-5FE20. A blue arrow points from the text 'Registered Cameras / Licensed Cameras' to the '4/8' value in the 'Cameras Licensed' column. To the right of the table are two buttons: 'REMOVE LICENSE' (orange) and 'UPDATE LICENSE' (purple).

Edition	Cameras Licensed	Archive Retention	Support Expiration	Activation Code
fusion	4/8	Unlimited	Sunday, January 19, 2025 UTC	F5E51-C7155-63641-5FE20

REMOVE LICENSE UPDATE LICENSE

If the activation was successful, you will see a message at the top of your screen saying “Orchid Recorder has been activated.” The Edition, Cameras Licensed, Archive Retention, and Support Expiration fields will all be updated to match the license you purchased. (In the example above, the Orchid Recorder now has a *Fusion* license.)

# Modifying an Existing License (Quick Method)

If you want to add more cameras to the system, upgrade from a *Core* license to a *Fusion* or *Hybrid* license, or simply extend your support agreement, you will need to modify an existing Orchid Recorder license.

\* A valid support agreement is required to install software updates. If your agreement expires, you will be able to install versions of the software that were released before your agreement expired, but you will not be able to install new software updates. (If you attempt to install software that was released after your support expires, your Orchid Recorder will not function properly; contact your IPConfigure sales representative to purchase an upgrade or renewal).

\* If you have an expired, time-limited license, Orchid Recorder will enter a degraded state and will stop recording. (See [License Errors](#) for more details.)

\* If you add, remove, or update a license, a *Licensed Changed* event will appear on the [System Report](#).

1. Open Orchid Recorder and sign in using an administrator level username and password.
2. Once you are signed into Orchid Recorder, open the *System Menu* in the top-right corner of the screen and select **Activation**.

**Orchid Recorder Activation**

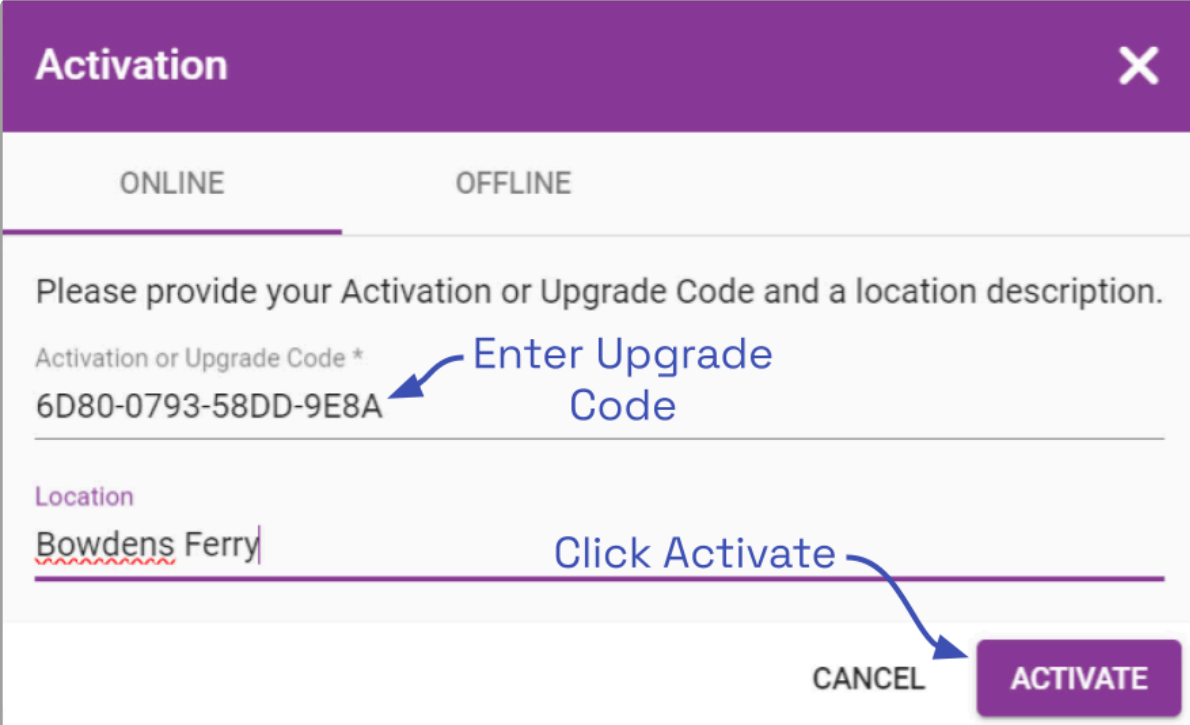
Orchid Recorder has **been activated**.

Edition	Cameras Licensed	Archive Retention	Support Expiration	Activation Code
fusion	4/8	Unlimited	Sunday, January 19, 2025 UTC	F5E51-C7155-63641-5FE20

Update License

REMOVE LICENSE UPDATE LICENSE

3. When the *Orchid Recorder Activation* screen appears (above), click the **Update License** button.



The image shows a purple 'Activation' dialog box with a close button (X) in the top right corner. It has two tabs: 'ONLINE' (selected) and 'OFFLINE'. The main text says 'Please provide your Activation or Upgrade Code and a location description.' Below this, there are two input fields. The first is labeled 'Activation or Upgrade Code \*' and contains the code '6D80-0793-58DD-9E8A'. A blue arrow points to this field with the text 'Enter Upgrade Code'. The second field is labeled 'Location' and contains the text 'Bowdens Ferry'. A blue arrow points to the 'ACTIVATE' button with the text 'Click Activate'. At the bottom right, there are two buttons: 'CANCEL' and 'ACTIVATE'.

**Activation**

ONLINE OFFLINE

Please provide your Activation or Upgrade Code and a location description.

Activation or Upgrade Code \*

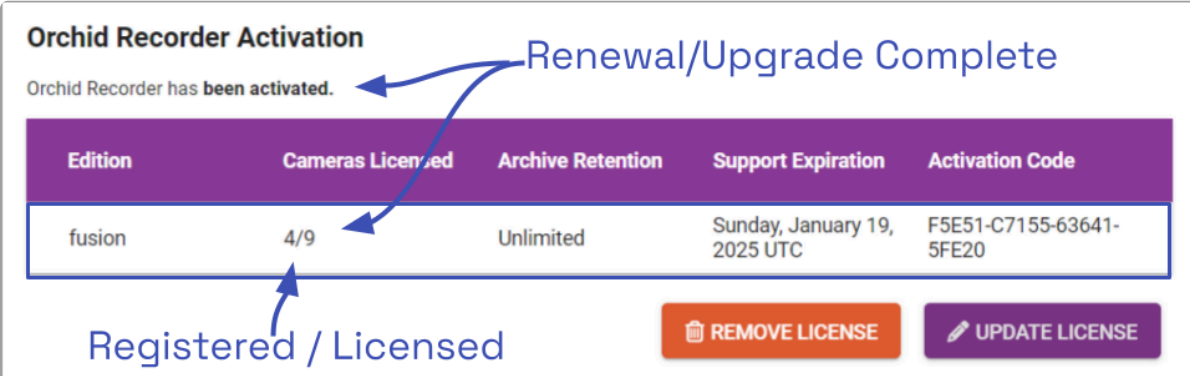
6D80-0793-58DD-9E8A

Location

Bowdens Ferry

CANCEL ACTIVATE

4. When the *Activation* screen appears, click the *Online* tab.
5. Enter your *Renewal/Add-On* code into the *Activation* or *Upgrade* Code field.
6. In the *Location* field, enter a description that specifies where your Orchid Recorder will be located. Common location descriptions are a shop name, number, or street address.
7. Click the **Activate** button. The Orchid Recorder *Activation* screen should appear and should display updated license information. (In this case, the number of licensed cameras has increased.)



The image shows the 'Orchid Recorder Activation' screen. At the top, it says 'Orchid Recorder has been activated.' with a blue arrow pointing to it from the text 'Renewal/Upgrade Complete'. Below this is a table with five columns: 'Edition', 'Cameras Licensed', 'Archive Retention', 'Support Expiration', and 'Activation Code'. The table has one row of data: 'fusion', '4/9', 'Unlimited', 'Sunday, January 19, 2025 UTC', and 'F5E51-C7155-63641-5FE20'. A blue arrow points to the '4/9' value with the text 'Registered / Licensed'. At the bottom right, there are two buttons: 'REMOVE LICENSE' and 'UPDATE LICENSE'.

**Orchid Recorder Activation**

Orchid Recorder has been activated.

Renewal/Upgrade Complete

Edition	Cameras Licensed	Archive Retention	Support Expiration	Activation Code
fusion	4/9	Unlimited	Sunday, January 19, 2025 UTC	F5E51-C7155-63641-5FE20

Registered / Licensed

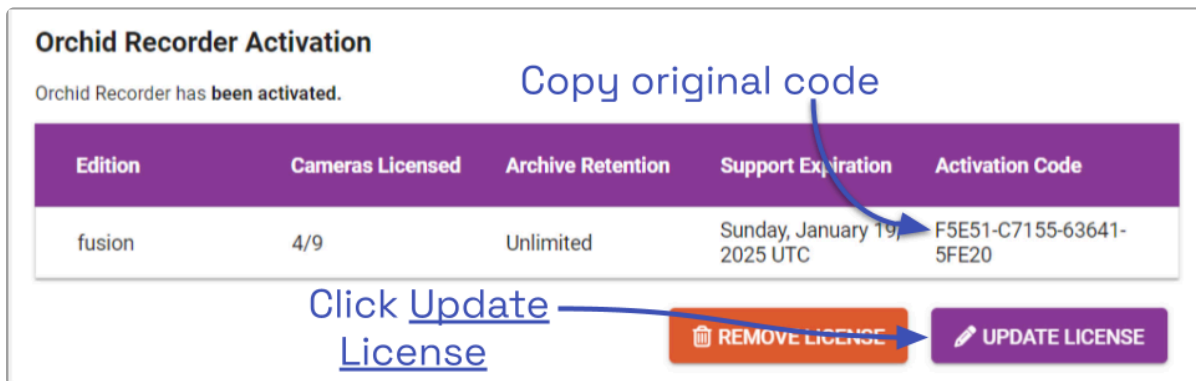
REMOVE LICENSE UPDATE LICENSE



# Modifying an Existing License (Offline Method)

Use the Offline renewal/upgrade method if the Orchid Recorder doesn't have an internet connection. This renewal method is very similar to the activation method used in older versions of Orchid Recorder.

1. Open Orchid Recorder and sign in using an administrator level username and password.
2. Once signed into Orchid Recorder, open the *System Menu* in the top-right corner of the screen and select **Activation**.



3. When the *Orchid Recorder Activation* screen appears (above), click and drag over your original activation code to select it, then click **CTRL+C** to copy the code. (You will need this code later.)
4. Open a new text file and click **CTRL+V** to paste the original activation code into the text file.
5. Save this text file on a USB drive that you can use on a computer with internet access.
6. Press the **Update License** button.

**Activation**

ONLINE OFFLINE [Click Offline](#)

Please provide your Activation or Upgrade Code and a location description.

Activation or Upgrade Code \*

XXXXXX-XXXXXX-XXXXXX-XXXXXX or XXXX-XXXX-XXXX-XXXX

Location

Store #12345 or Beach house

CANCEL ACTIVATE

- At the *Activation* screen, click the *Offline* tab.

**Activation Instructions**

ONLINE OFFLINE

To activate Orchid Recorder, access [the licensing portal](#). You will need your Machine ID (shown below) to generate a license key.

**Machine Id**

eyJtYWNhZGRyZXRzZXMiOlsinda6M2Y6OGM6YTg6YzE6YjkiLCJjODo2MDowMDpjYjoxMjphNSJdLCJwbGF0Zm9ybSI6IkpbnV40jYyNS4wLTE0LWdlbmVyaWM6eDg2XzY0Iiwic3RvcnFnZURldmJzSI6eyJpZCI6IknvcnNhaXJfRm9yY2VfR1RfMTIyODc5MzIwMDAwMTQ5NDAwMDgiLCJwYXRoIjoilL2Rldi9zZGZzIiwidHlwZSI6IkhERCj9LCjZ2XjZaw9uIjoims4yIn0=

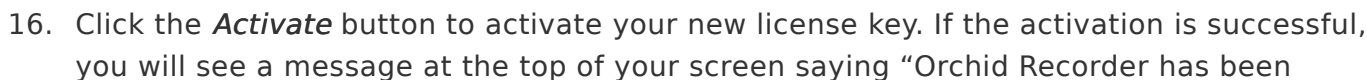
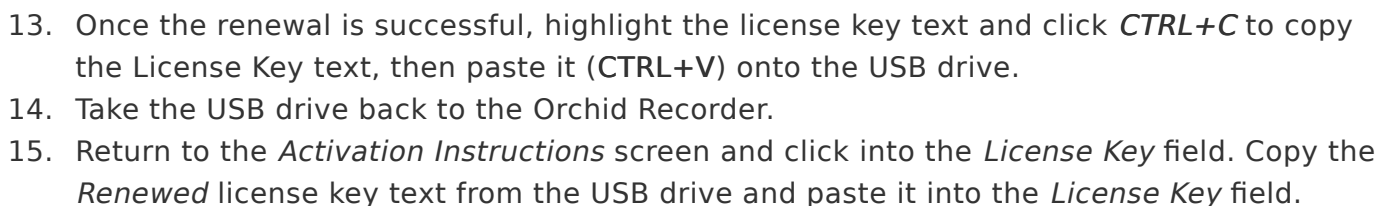
**License Key**

CANCEL ACTIVATE

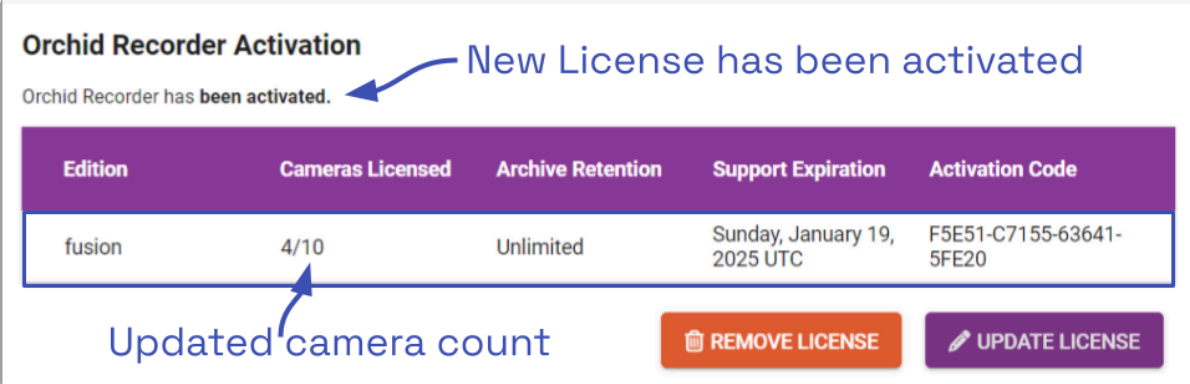
- When the *Activation Instructions* screen appears, this is your cue to take your USB drive and find a computer with internet access. Open a web browser and go to [www.orchidsecurity.com/activation](http://www.orchidsecurity.com/activation). The *VMS Activation* screen will appear.

- Click on the link that says: “Looking to use an add-on, upgrade, or renewal code? Click here.” The *Renewal/Add-On* screen will appear.

- Once you reach the *Renewal/Add-On* screen, go to the *Original Activation Code* field and copy the original code from the USB drive and paste it into this field.
- Go to the *Renewal/Add-On Code* field and enter the code you just purchased.
- Press the ***Renew/Upgrade License*** button. If successful, the system will generate a *Renewed* license key.



activated.”



The screenshot shows the 'Orchid Recorder Activation' screen. At the top, it says 'Orchid Recorder has been activated.' with a blue arrow pointing to it from the text 'New License has been activated'. Below this is a table with license details. The table has five columns: Edition, Cameras Licensed, Archive Retention, Support Expiration, and Activation Code. The data row shows 'fusion' for Edition, '4/10' for Cameras Licensed (with a blue arrow pointing to it from the text 'Updated camera count'), 'Unlimited' for Archive Retention, 'Sunday, January 19, 2025 UTC' for Support Expiration, and 'F5E51-C7155-63641-5FE20' for Activation Code. At the bottom right, there are two buttons: 'REMOVE LICENSE' (orange) and 'UPDATE LICENSE' (purple).

Edition	Cameras Licensed	Archive Retention	Support Expiration	Activation Code
fusion	4/10	Unlimited	Sunday, January 19, 2025 UTC	F5E51-C7155-63641-5FE20

**REMOVE LICENSE** **UPDATE LICENSE**

The Orchid Recorder *Activation* screen should display updated information in the appropriate fields (to match the add-on, upgrade, or renewal you purchased).

# Creating and Managing Users

---

Once installation and activation are complete, Orchid Recorder is configured with one administrator user by default; this user is created during installation and cannot be removed. Additional users can be created with varying levels of privileges through the *Users* option in Orchid Recorder's *System Menu*.

✿ An Administrator is the only role with the ability to create and manage users.

# About Orchid Recorder VMS User Roles

---

There are four different User roles in Orchid Recorder, each with a different level of access:

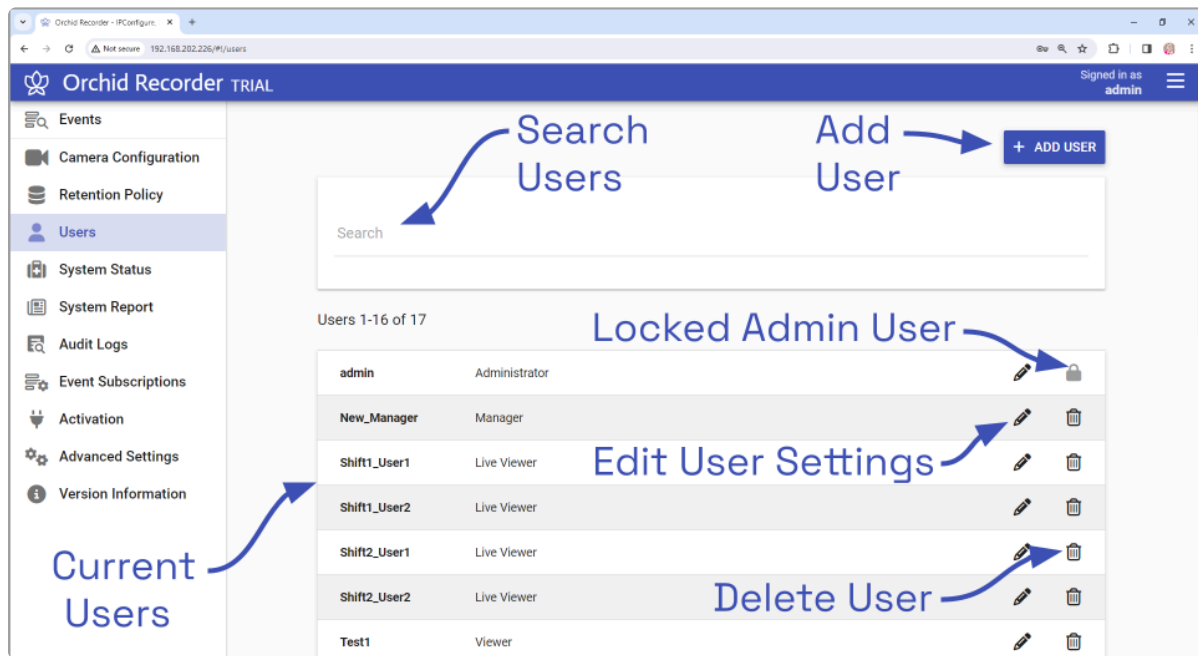
- **Live Viewer:** A *Live Viewer* is only able to view live video.
- **Viewer:** A *Viewer* is able to view live and recorded video, use the *Smart Search* feature, use the *Save Frame* feature, and view *Events*.
- **Manager:** A *Manager* can view live and recorded video, use the *Smart Search* feature, use the *Save Frame* feature, view *Events*, export video, view System Reports, and control PTZ Players. (The Manager is not able to create or manage users or cameras.)
- **Administrator:** An *Administrator* is able to do everything within Orchid Recorder, including activating Orchid Recorder, adding new users and cameras, resetting passwords, and viewing System Reports.

User roles are set when you create new users, however, an Administrator may change the role of an existing user by clicking the *Edit* pencil icon. Find out more about editing users later in this section.

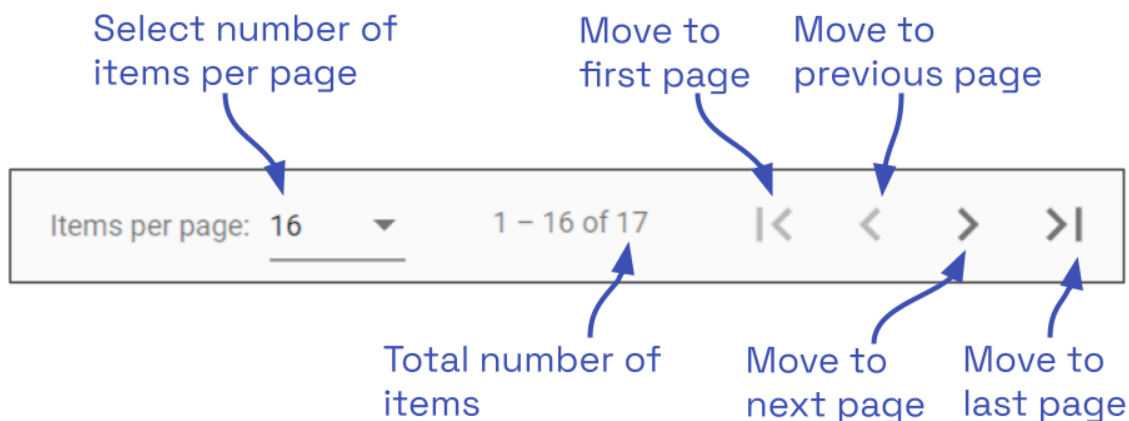
# Access the Orchid Recorder VMS Users List

1. Sign in to Orchid Recorder as an Administrator.
2. Open the *System Menu* in the top-right corner of the screen and select *Users*.

The Orchid Recorder *Users* screen lists all of the users that have been added, their assigned roles, and descriptions of each of the four possible User roles. (You may have to scroll down to view the list of Orchid roles.)



The *Users* screen lists up to 16 Orchid Recorder users per page (by default). If you have more than 16 users, additional pages will be added automatically. This will also activate the page navigation tools, and the search feature.



The navigation tools will appear at the bottom of the screen. These will allow you to move easily from page to page.



# Adding a New User



This is the *Add* icon.

1. Click the *Add User* button in the top-right corner of the Orchid Recorder *Users* screen.
2. A *New User* screen will open. Enter the username you would like to set for the new user in the *Username* field.

3. Enter the password for the new user into the two fields labeled *Password* and *Confirm Password*.
4. Select a role for the new user from the *Role* drop-down list. (The role can be updated by an administrator at any time.)
5. Click the *Add User* button at the bottom of the screen to create the new Orchid Recorder user.

The new user will now appear in the list of users and will immediately have access to Orchid Recorder.

# Editing Existing Users



This is the *Edit* pencil icon.

Nothing is set in stone for Orchid Recorder users and almost all of the user settings can be updated, as needed. The only user that cannot be completely edited is the default admin user (which has a *Lock* icon in place of the *Trash Can* icon). While the password can be updated, the username and role cannot be changed.

1. To edit a user, click the *Edit* pencil icon to the right of the user you want to update. The *User* screen will open.
2. Edit any of the available fields, as needed.
3. Click the *Update User* button. All of the changes will be effective immediately.

Viewer\_1 from Orchid Recorder

Username \* Role

Viewer\_1 Manager

Password Confirm Password

CANCEL UPDATE USER



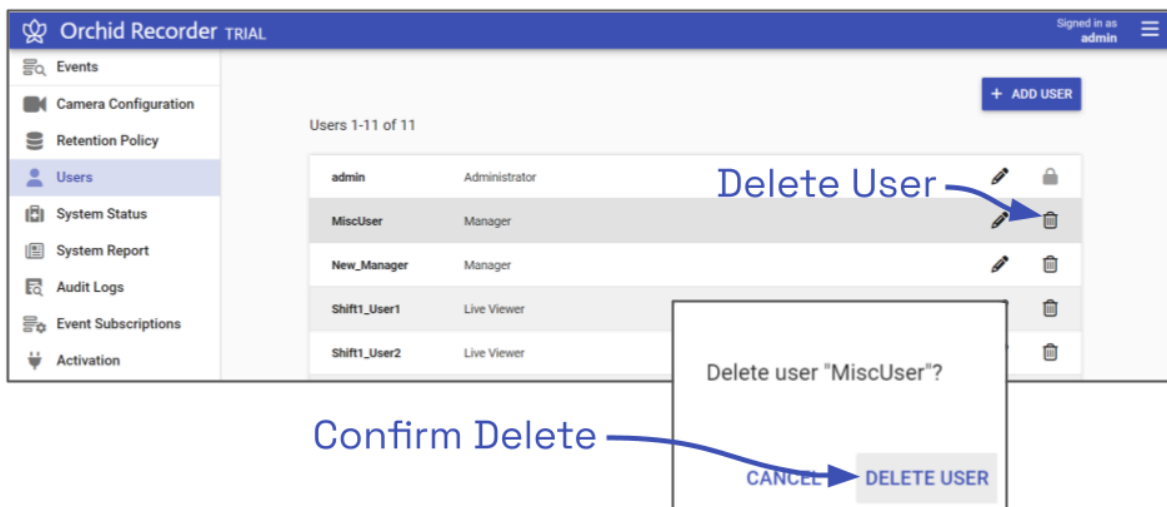
If you try to change your own password, Orchid Recorder will automatically sign you out.

# Deleting Existing Users



This is the *Delete* icon.

1. To delete an existing user, click the *Delete* (Trash Can) icon to the right of the username. Orchid Recorder will ask you to confirm that you would like to remove the user. Once you confirm you want the user removed, it will be permanently erased.



# Searching for a User

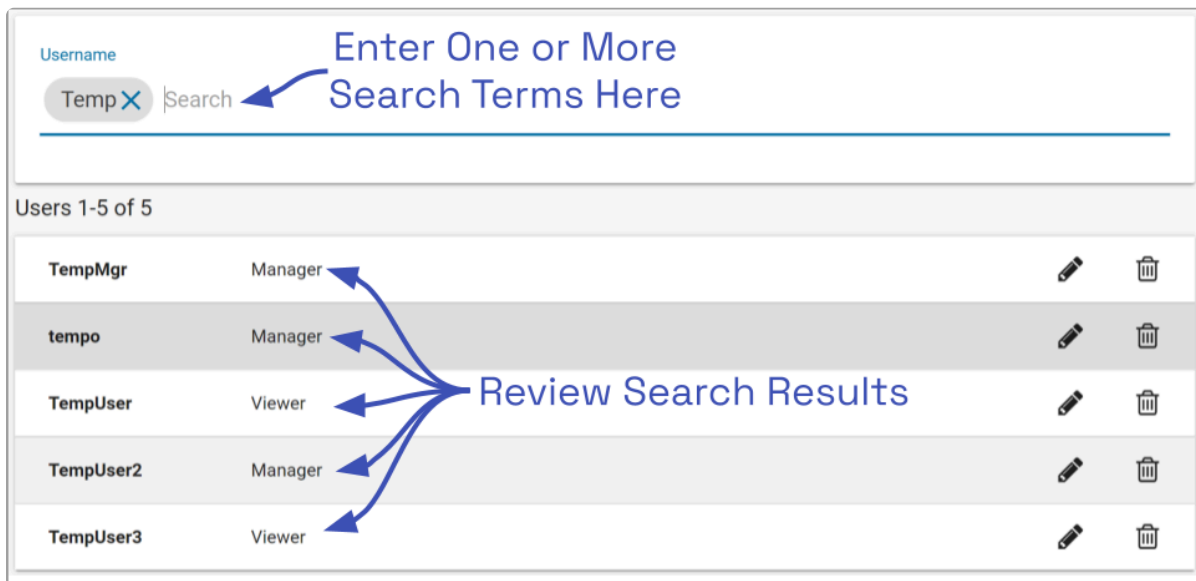
If you have more than 30 registered Orchid Recorder users (by default), the *Users* list will extend beyond one page. When this happens, the software will automatically activate the user search and page navigation. Especially useful with large systems, these tools will help you find specific users quickly.

## Search the Users List

The *Search* field will appear at the top of the *Users* screen. It supports searching by usernames, using single and multiple search tags.

1. Click into the *Search* field to start your search.
2. Type one or more search tags (clicking *Enter* after each).
  - a. A single search tag with multiple terms (words or numbers) will initiate a search for results that include all of the terms in the tag.
  - b. Multiple, single-term search tags will initiate a search for results that include at least one of those tags.

Each time you press *Enter*, the *Users* screen will update to display an alphabetical list of all of the users that contain the tag(s).

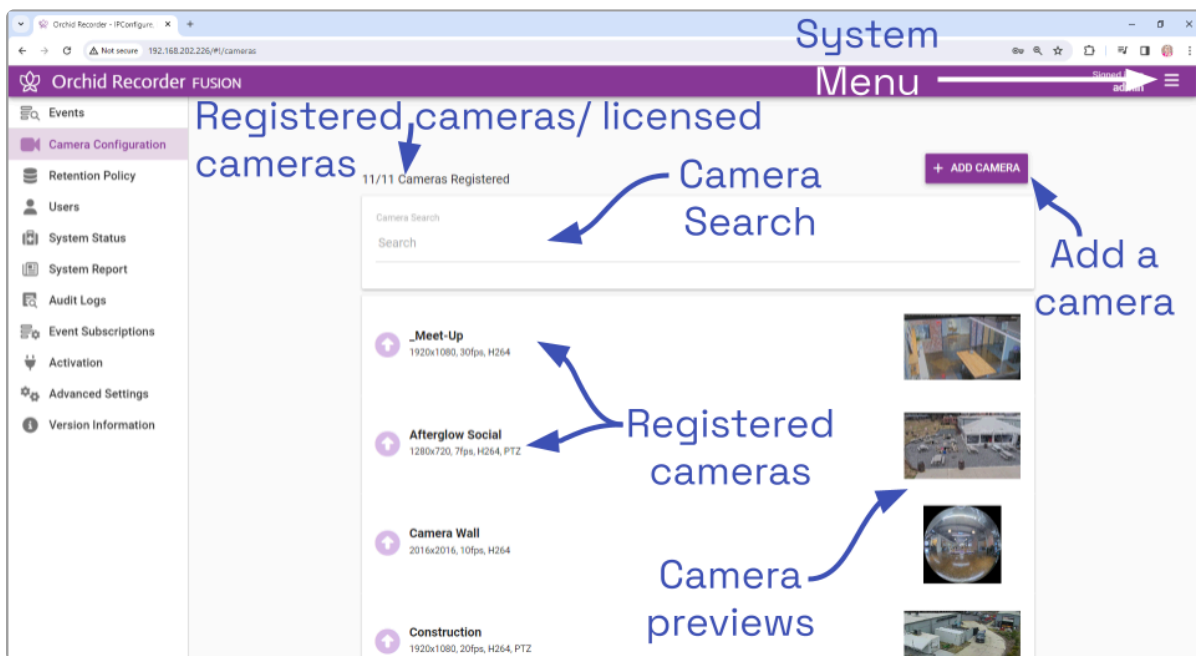


# Adding and Managing Cameras

The *Camera Configuration* screen is an important part of the Orchid Recorder setup process. This screen provides a list of all of the registered cameras (in alphabetical order by camera name) and a preview of each video stream. It is also the starting point for adding cameras, editing camera settings, and deleting cameras.

1. To access the *Camera Configuration* screen for Orchid Recorder, open the *System Menu* in the top-right corner of the screen, then select *Camera Configuration*.

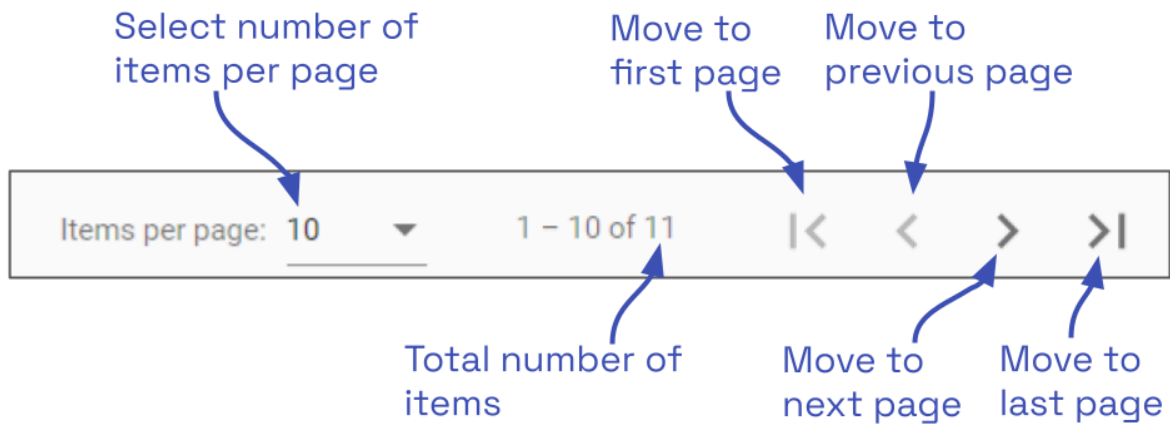
✿ An Administrator is the only role with the ability to add and manage cameras.



The *Camera Configuration* screen will open with a list of cameras that have already been registered, if any. The process for adding most cameras is typically pretty simple, especially if the camera supports ONVIF auto-discovery.

If you have more than 10 cameras, the system will activate the page navigation tools and the camera [search](#) feature.

You may configure the *Camera Configuration* screen to list either 10, 20, 30, 40, or 50 cameras per page. Additional pages are added for you automatically.



The navigation tools will appear at the bottom of the screen. These will allow you to move easily from page to page.

# Adding One or More Cameras (using Auto Mode)



This is the *Add* icon.

1. From the list of registered cameras on the *Camera Configuration* screen, press the *Add Camera* button to access the *Register Cameras* screen. Orchid Recorder will open the *Register Cameras* screen in *Auto* mode by default. This screen displays a list of all the cameras Orchid Recorder was able to auto-discover.



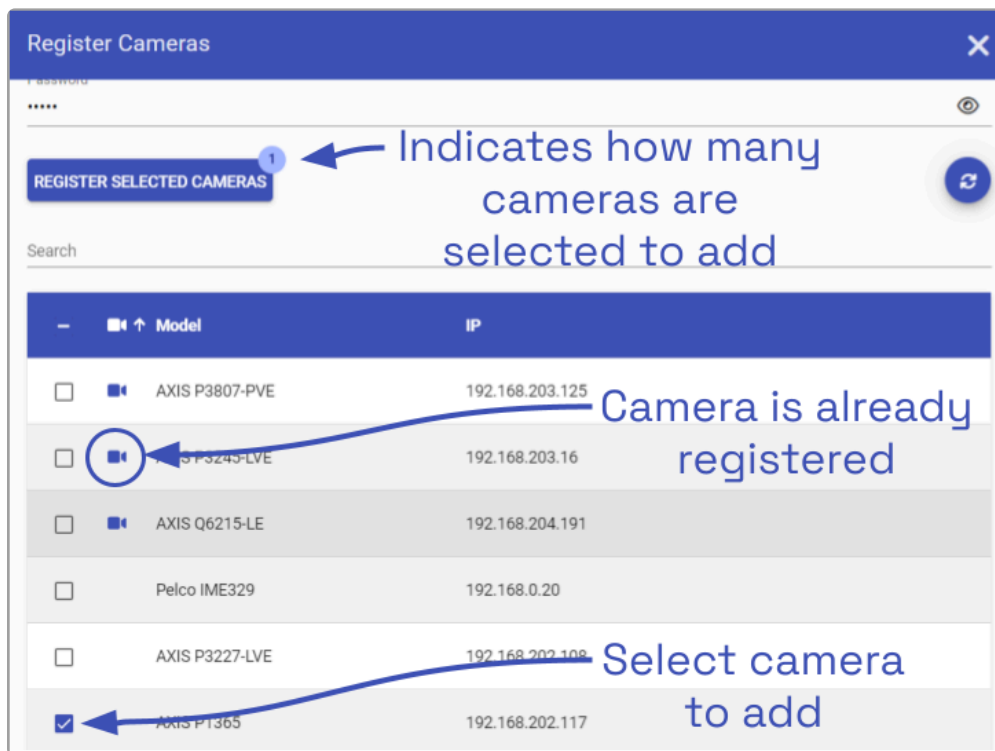
In order for Orchid Recorder to auto-discover cameras, they must support ONVIF auto-discovery and be located on the same network subnet. If you have cameras that are not automatically discovered, they can always be added [manually](#).

The screenshot shows the 'Register Cameras' interface. At the top, there are two tabs: 'AUTO' and 'MANUAL'. An arrow points to the 'AUTO' tab with the text 'Select Automatic mode'. Below the tabs is a 'Credentials' section with 'Username' and 'Password' fields. The 'Username' field contains 'testuser', and an arrow points to it with the text 'Enter credentials'. The 'Password' field is masked with dots. Below the credentials section is a button labeled 'REGISTER SELECTED CAMERAS'. To the right of this button is a circular refresh icon. Below the button is a search bar. At the bottom is a table with columns for a checkbox, a camera icon, 'Model', and 'IP'. The table contains two rows: one for 'Pelco IME329' with IP '192.168.0.20' and one for 'AXIS P3227-LVE' with IP '192.168.202.108'. An arrow points to the table with the text 'Scroll down to find camera(s)'.

	Model	IP
<input type="checkbox"/>	Pelco IME329	192.168.0.20
<input type="checkbox"/>	AXIS P3227-LVE	192.168.202.108

2. Enter the ONVIF username and password that is setup on the camera(s) you would like to add.
3. Scroll down to see which cameras are available. (You may sort this list by camera model, IP address, or registration state. Just click the appropriate column header: the *camera* icon, *Model*, or *IP*.)
4. To add a new camera, mark the checkbox next to the camera.
  - a. You may select multiple cameras as long as they all use the same ONVIF username and password.

- b. Notice that each time you mark another camera, the *Register Selected Cameras* button will indicate how many cameras have been selected to add.



5. If there are a lot of available cameras, you may want to use the *Search* feature to find the cameras you're looking for.
- Click into the *Search* field and enter a term for the search (which should include the camera model or a portion of the IP address). This search only allows for one search tag, but you may use a multiple-term search tag, and it may contain words or numbers. (For example, you could search for a specific camera brand name and model, or you could search using a segment of the camera's IP address.)



Register Cameras

Username  
testuser

Password  
\*\*\*\*\*

REGISTER SELECTED CAMERAS

Search  
axis d

You can use the Search field to find the camera you want to add

Enter a search term

Review matches

	Model	IP
<input type="checkbox"/>	AXIS D2110-VE	192.168.202.87
<input type="checkbox"/>	AXIS D2110-VE	192.168.204.124
<input type="checkbox"/>	AXIS D4100-E	192.168.205.42
<input type="checkbox"/>	AXIS D2110-VE	192.168.205.68

6. Review your search results and select cameras, as needed.
7. Once you have made all of your selections, press the **Register Selected Cameras** button to add the cameras to Orchid Recorder.

Depending on the number of cameras being added, it may take a few minutes for Orchid Recorder to add them successfully. When complete, Orchid Recorder will show a list of all cameras that were successfully and unsuccessfully added. If Orchid Recorder fails to add a camera, an error message will appear.

Register Cameras

**Credentials**

Username  
testuser

Password  
.....

**RETRY FAILED CAMERAS**

Registration Status: 1/1

Errors: 1

Search

✓	Model	IP	Status
✗	AXIS P1365	192.168.202.117	500: Not authorized.

8. If you receive an error, you may use the **Retry** button to try the addition again. (In the example above, since the error was *Not authorized*, you might try entering different credentials, then click the **Retry** button.)
9. Go to each of the newly added cameras and enter a unique, descriptive name for each one. (Good camera names are important because they are searchable in Orchid and Orchid Fusion/Hybrid VMS.) You should also review or [edit the camera stream settings](#).

✿ If these newly added cameras will use similar stream settings, use the [Copy Stream to Cameras](#) feature to configure multiple cameras at once.

✿ If you have any trouble adding cameras, please refer to the [Advanced Topics](#) section for additional help.

# Adding a Single Camera (in Manual Mode)

**+** This is the *Add* icon.

In the event that Orchid Recorder cannot auto-discover a camera, it can be added manually.

1. At the *Camera Configuration* screen, press the *Add Camera* button to access the *Register Cameras* screen. Orchid Recorder will open the *Register Cameras* screen in Auto mode.
2. Select *Manual* mode.

Register Cameras

AUTO **MANUAL** Select Manual Mode

**Register Camera**

Driver ONVIF ONVIF Discovery URL http://192.168.204.65/onvif/device\_service

Camera Name \* Exper Center PTZ Enter Camera Info

**Credentials** Enter Credentials

Username testuser Password

CANCEL REGISTER

3. Select the appropriate driver (*ONVIF* or *RTSP*) from the drop-down list.

\* While the Generic RTSP driver is available when adding cameras manually, this is not always guaranteed to work due to the way different manufacturers handle RTSP streams. The recommended driver to use with Orchid Recorder is ONVIF.

\* Starting in version 22.9, Orchid Recorder now supports generic RTSP cameras that use the new H.265 compression standard.

4. Enter the ONVIF Discovery URL, or the RTSP Stream URI (depending on the driver you specified) to match the correct address for the camera being added. Consult with the camera manufacturer's user guide, as needed, for the correct syntax of the address.

5. Enter a unique name for the camera. This will allow you to distinguish the camera from other cameras set up within Orchid Recorder.
6. Enter the username and password that is setup on the camera being added.

✿ Beginning in version 22.12, Axis cameras will no longer require a separate username and password in order to work with ONVIF. (If you're working in an older version of Orchid, please refer to the [Advanced Topics](#) section for more information.)

7. Press the **Register** button to add the camera to Orchid Recorder.

When complete, Orchid Recorder will add the new camera to the list of registered cameras. If Orchid Recorder fails to add a camera, an error message will appear explaining the issue.

8. Once the camera has been added, you should review or [edit the camera stream settings](#).

✿ If you have any trouble adding cameras, please refer to the [Advanced Topics](#) section for additional help.

# Multi-stream Capabilities

When you add a camera to Orchid Recorder, that camera should come with a Primary stream (which will be used for recording), and several inactive streams, by default. Each of these streams will have different settings such as recording style, resolution, and frame rate. Orchid Recorder and Orchid Fusion/Hybrid VMS support multiple active streams. This means that Administrators may enable a Secondary stream for each camera (with different stream settings), to accommodate different recording and viewing requirements. This provides Users with a variety of streams to choose from when viewing video on the *Stage*.

✳ The use of Secondary streams is optional. Additional recording streams will cause an increase in video storage requirements. Consider evaluating your system's capabilities before implementing secondary recording streams. Check out the "Tips" section below for more information.

## Use Cases for Secondary Streams

Assigning secondary streams may be useful from a couple of perspectives, both centered around the amount of data that needs to be processed for viewing and recording video.

### Viewing Video

More and more, users want to record video at higher resolutions (such as 1080p, or even higher at 3, 4, or 5 megapixels). With a single, Primary stream, the system is forced to record at this high resolution and decode the video for remote viewing at the same time. That's a lot of data to move. But are those high resolutions really needed on the *Stage*? If the *Stage* is displaying 20 or 30 Players, those Players are going to be relatively small, and in this case, high resolution is essentially wasted. With a Primary and a Secondary stream, you have the ability to choose a lower resolution stream for the *Stage*, while saving the high resolution stream for recorded video.

### CPU Usage

In some situations, the Orchid Recorder (the recording server) is also used as an on-site viewing workstation. When the server is recording a large number of high resolution video streams, while simultaneously trying to display all of that high resolution video, it takes a lot of computer horsepower to do it. (The more horsepower required, the more expensive the server will be.) If the computer could decode and display lower resolution video for the *Stage*, the server would not need to be quite as powerful, and would be less costly. Primary and secondary streams allow us to view lower resolution video on the *Stage*, while still recording high resolution video to the archives.

## Tips for Secondary Streams

Here are some important things to consider when using Primary and Secondary streams.

- If you decide to use Primary and Secondary streams, and plan to record both, keep in mind that both of these streams will consume some amount of disk space.
  - The IPConfigure Design Tool (at [calculator.ipconfigure.com](http://calculator.ipconfigure.com)) may be used to estimate the amount of disk space you will need to accommodate the Primary and Secondary streams you are planning to configure. The key parameters to select for each calculation are: number of cameras, image resolution, frames per second, and number of days of storage.
- If you decide to enable secondary streams, consider adding “primary” and “secondary” to the stream names (which will make them easier to identify in places like the *System Report*.)
- Motion detection can only be performed on Primary streams.
  - Primary streams may be configured with any of the five available Recording Styles.
  - Secondary streams must be configured with one of the following Recording Styles: Continuous Recording Without Motion Detection or Proxy Only (no video will be recorded).
- Since high-resolution camera streams are more likely to cause problems, it may be best to assign lower resolution streams as Primary streams. (The Primary stream will be used by default when adding a camera to the Stage.)
- Beginning in version 22.3, when you export video:
  - You will be able to select which stream to export.
  - If you do not make a selection, the system will export the stream with the highest resolution.

# Edit Camera Stream Settings

After a camera has been added to Orchid Recorder, settings such as the stream resolution and frame rate can be updated through the camera stream's configuration. While this is true for most cameras, cameras added using the RTSP driver (old cameras and cameras that don't support ONVIF) cannot be edited through Orchid Recorder. You will need to access those cameras directly to edit settings. (Refer to the camera manufacturer's documentation for more details.)

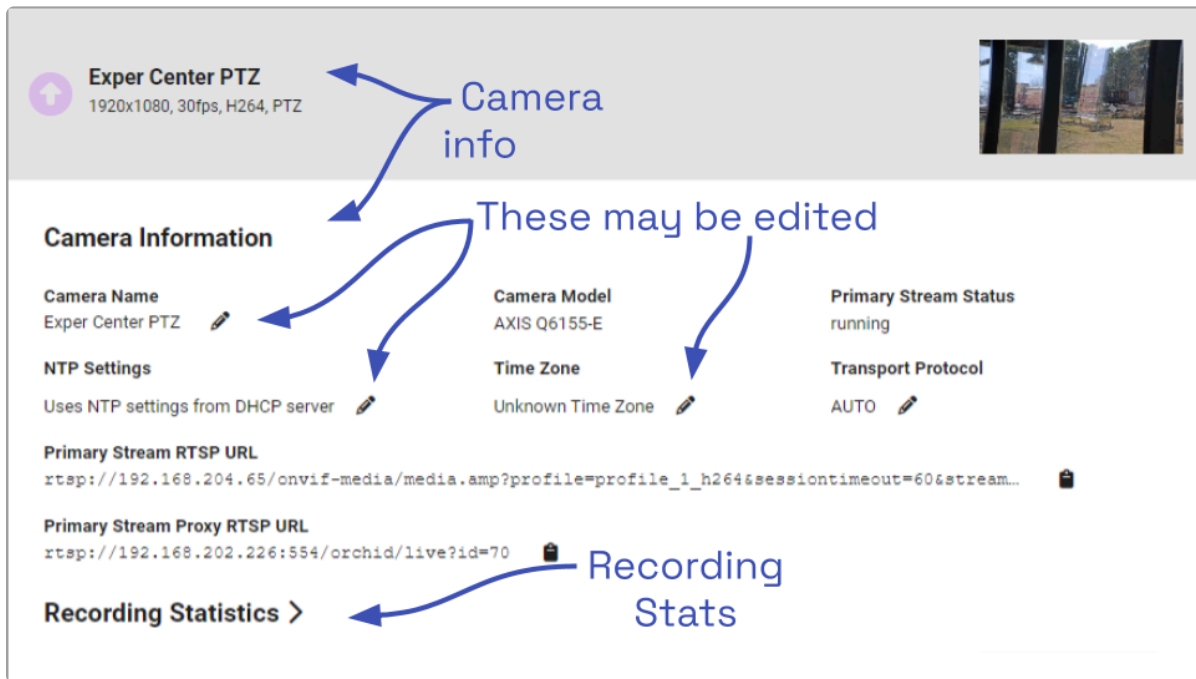
1. From the list of registered cameras on the *Camera Configuration* screen, click the name of the camera you want to edit. (The list will expand to display all of the information for the selected camera. This includes the camera name, IP address, and all of the available streams.)

The screenshot displays the 'Camera Configuration' screen for a camera named 'Exper Center PTZ'. The interface includes a camera preview, a 'Camera Information' section with fields for name, model, and status, and a 'Streams' table. Annotations with arrows point to various elements:

- Camera Info**: Points to the camera name and model fields.
- Recording Stats**: Points to the 'Recording Statistics' section.
- Primary Stream**: Points to the 'profile\_1 h264' stream entry in the table.
- Secondary Stream**: Points to the 'profile\_1 jpeg' stream entry in the table.
- Advanced Settings**: Points to the 'Advanced Settings' section.
- Recover Camera**: Points to the 'RECOVER CAMERA' button.
- Delete Camera**: Points to the 'DELETE CAMERA' button.
- Add a Stream**: Points to the '+ ADD STREAM' button.
- Stream Pop-up Menu**: Points to the three-dot menu icon next to a stream entry.

Status	Mode	Name	Configuration
+	📹	profile_1 h264	1920x1080, 30fps, H264 Continuous recording with motion detection
-	📹	profile_1 jpeg	1920x1080, 30fps, JPEG Continuous recording with motion detection

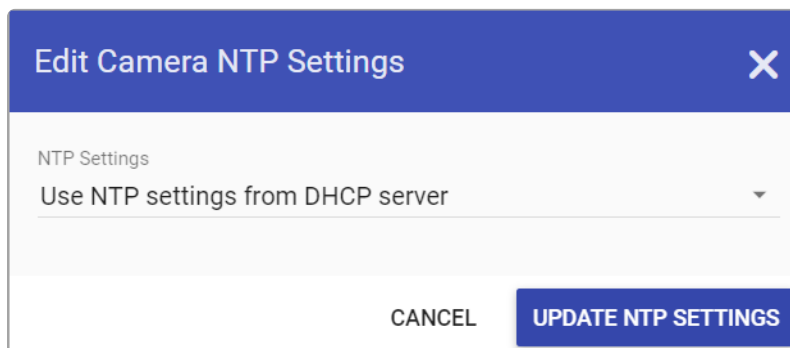
# Camera Settings



1. To change the camera name, click the **Edit** pencil to the right of the camera name. Enter a new name in the *Camera Name* field and press the **Update Camera** button. (Remember: The cameras are listed in alphabetical order by camera name.)

This screen also displays the camera model and the status of the Primary camera stream. These settings are informational and cannot be altered here; please refer to the [System Status](#) section for status descriptions.

2. To change the NTP settings, click the **Edit** pencil to the right of the NTP settings. (If you don't see the NTP settings, the camera was likely installed in an older version of Orchid. To remedy this, you need to [recover](#) your camera.)

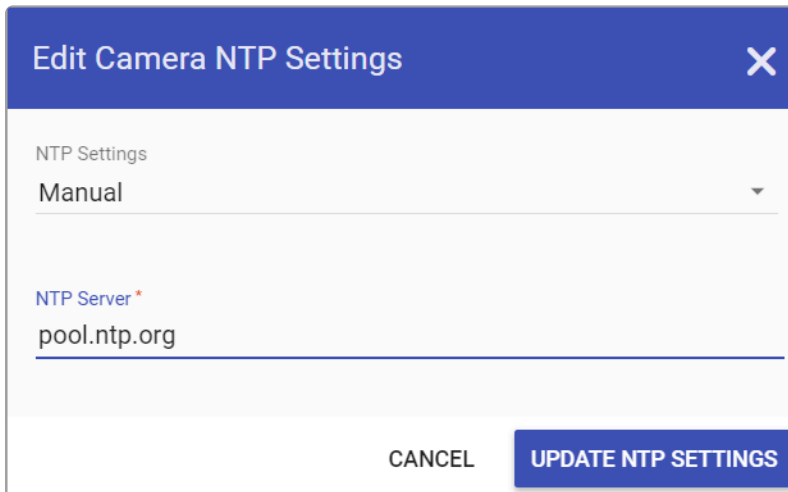


By default, the system will pull the Network Time Protocol (NTP) from the Dynamic Host Configuration Protocol (DHCP) server. If the default is used for all of the cameras, this ensures that all of the cameras on the network are using the same system clock as the Orchid software

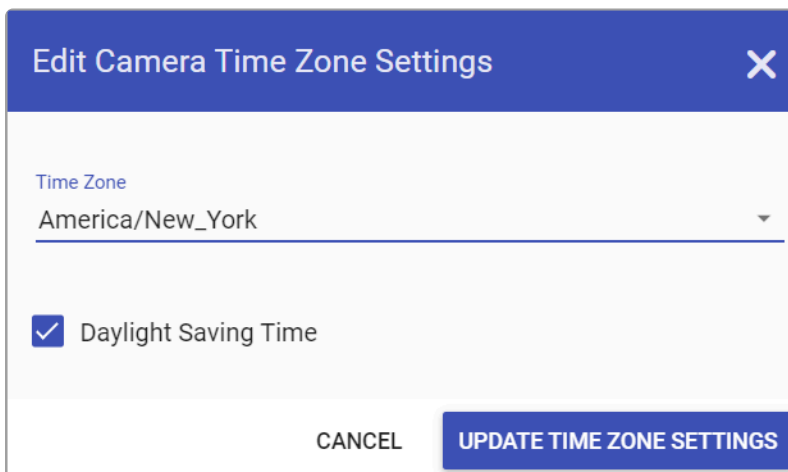


itself.

3. If you need to use a different server, do the following:
  - a. Use the *NTP Settings* drop-down list to select *Manual*.
  - b. Enter the name of the server you want to use.
  - c. When all settings are complete, click the *Update NTP Settings* button.



4. If you need to change the time zone for the camera, do the following:
  - a. Click the *Edit* pencil to the right of the Time Zone.
  - b. Use the *Time Zone* drop-down list to select the appropriate time zone.
  - c. Mark the *Daylight Saving Time* checkbox if your region observes daylight saving time.
  - d. When all settings are complete, click the *Update Time Zone Settings* button.



Beginning in version 22.3, Orchid Recorder will display the Transport Protocol setting. This gives you a chance to specify how the video will be transported from the camera to the Orchid Recorder.

5. To change the Transport Protocol setting, click the *Edit* pencil to the right of the Transport

Protocol setting.

Edit Camera Transport Protocol

Transport Protocol

AUTO

CANCEL

UPDATE TRANSPORT PROTOCOL

The *Edit Camera Transport Protocol* screen will appear. By default, the system will use the AUTO setting. This means that the system will attempt to connect using UDP and will automatically rollover to TCP if it cannot establish a connection.


6. If you want to select a different setting, do the following:
- Use the drop-down list to find the setting you want to use. Available settings include: AUTO, UDP, UDP\_MCAST, HTTP, AND TCP.

After you make your selection, click the *Update Transport Protocol* button.

The Primary Stream RTSP URL status fields are typically used for troubleshooting. These allow for a comparison of the video coming from the camera and the video as received by Orchid Recorder to determine where a problem might be occurring.

- The *Primary Stream Camera RTSP URL* (which contains the camera’s IP address) represents the video stream that Orchid Recorder is recording.
- The *Primary Stream Proxy RTSP URL* represents the video that Orchid Recorder is showing on the *Stage*. (For more details, please refer to the [Advanced Topics](#) section.)

## Recording Statistics

	This is the <i>Expand</i> icon (used to view the Recording Statistics and Advanced information).
	This is the <i>Condense</i> icon (used to close the Recording Statistics and Advanced information).

1. Click the *Expand* icon to open the Recording Statistics section. This section will show the statistics that indicate how the Primary recording stream is performing.

Recording Statistics ▾		
The following statistics are based on the primary stream.		
Average Window	Packet Loss	Bitrate
1m	0%	1.5 Mb/s
5m	0%	1.4 Mb/s
15m	0%	1.4 Mb/s
Last Video File Written		
01/22/2024, 02:15:13 PM EST - 10.2 MB		

The top section provides the average packet loss percentage over periods of the last 1 minute, 5 minutes, and 15 minutes. It's important to be aware if packet loss is occurring because it may impact the quality of archived video. These averages are updated about every 5 seconds and will mostly be used for troubleshooting. For more information on analyzing the packet loss percentages, please refer to the section on [Checking for Packet Loss](#).)




The top section also displays the average bitrates over the same periods of time. These indicate how much video data is being transferred, per second, from the camera to the Orchid Recorder. You may notice that the average bitrates provided here do not match the bitrates that have been configured under Stream settings. This is not unusual and should not cause concern. These bitrate values reflect the reality of your system, and can be used as a reference in making adjustments to the configured bitrate.

✿ For Players in live WebRTC mode, the bitrates (from camera to server) and the bitrates (from server to client) should be about the same. The packet loss statistics, however, may be different.

The Recording Statistics feature also provides information about the last video file that has been written to the system for this camera stream. This statistic is updated about once per minute. If the camera is configured to record continuously, and the last video file is more than 1 minute old, the system may not be recording this camera stream.

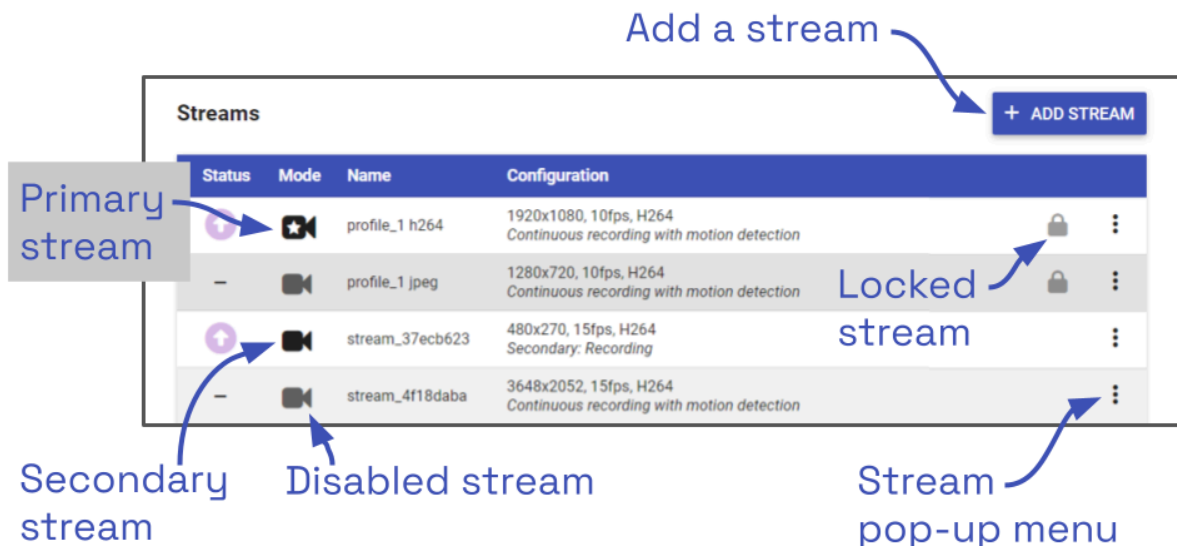
2. Click the **Condense** icon to close the list of Recording Statistics.

# Camera Stream Settings

	This is the <i>Camera</i> icon that represents the Primary Stream.
	This is the <i>Camera</i> icon that represents the Secondary Stream (if applicable).
	This is the <i>Camera</i> icon that represents a disabled camera stream.

## Streams

A camera stream is a profile with all of the basic settings used by Orchid Recorder to record video from the camera. Orchid Recorder supports multiple active streams. Each of the available camera streams will be either a Primary stream, a Secondary stream, or a Disabled stream. You can identify them (and assign them) as described below.



The screenshot shows the 'Streams' management interface. It features a table with columns: Status, Mode, Name, and Configuration. The table lists four streams. Annotations with arrows point to specific elements:

- Add a stream**: Points to the '+ ADD STREAM' button in the top right corner.
- Primary stream**: Points to the Primary Camera icon in the 'Mode' column of the first row.
- Locked stream**: Points to the lock icon in the 'Configuration' column of the second row.
- Secondary stream**: Points to the Secondary Camera icon in the 'Mode' column of the third row.
- Disabled stream**: Points to the Disabled Camera icon in the 'Mode' column of the fourth row.
- Stream pop-up menu**: Points to the three-dot menu icon in the 'Configuration' column of the fourth row.

Status	Mode	Name	Configuration
	profile_1 h264	1920x1080, 10fps, H264 Continuous recording with motion detection	
-	profile_1 jpeg	1280x720, 10fps, H264 Continuous recording with motion detection	
	stream_37ecb623	480x270, 15fps, H264 Secondary: Recording	
-	stream_4f18daba	3648x2052, 15fps, H264 Continuous recording with motion detection	

- To reassign a stream, click the *Camera* icon located in the *Mode* column to the left of the name of the stream you want to change. A pop-up menu will appear.
  - Click on the Primary *Camera* icon to make this the Primary stream. (The original Primary stream will become disabled.)
  - Click on the Secondary *Camera* icon to make this the Secondary stream. (You may have more than one Secondary stream. Keep in mind, however, that each stream that is set to record video will consume additional storage space.)
  - Click on the Disabled *Camera* icon to make this an inactive stream.

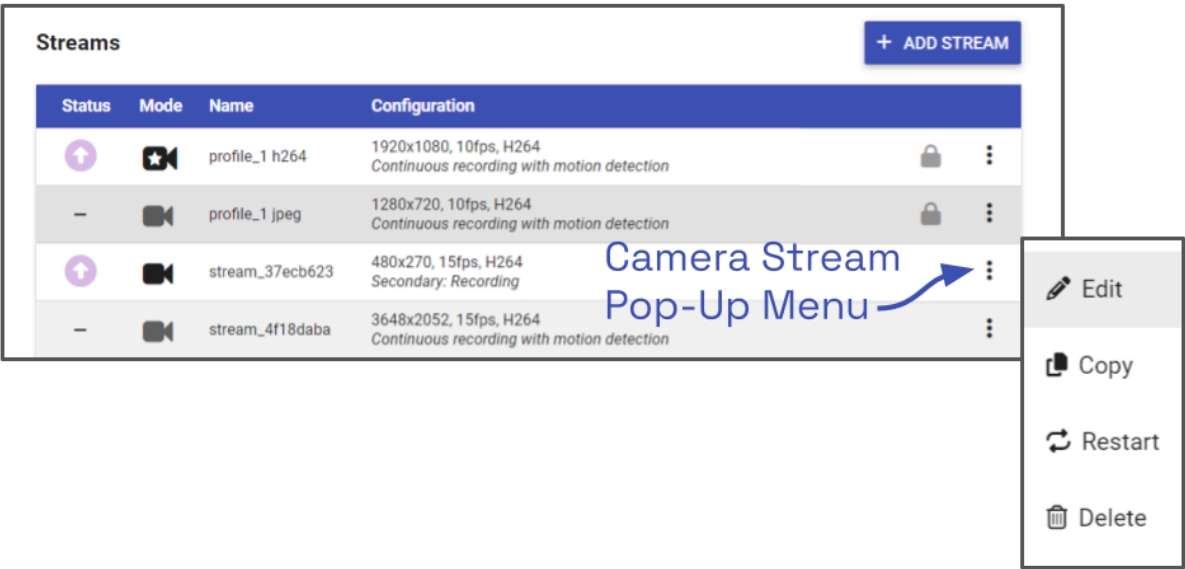
\* The system allows only one Primary stream per camera at a time. However,





multiple stream profiles from the same camera can be used as the Primary stream if the camera is added to Orchid Recorder multiple times. (This is especially useful for cameras with [multiple lenses](#).)

Camera Stream Pop-Up Menu

To the right of each camera stream, you'll find a pop-up menu.

2. Click on the menu to work with each camera stream. (The contents of the pop-up menu will vary based on the stream.)



	This is the <i>Edit</i> pencil icon. Click this icon to make changes to the stream settings.
	This is the <i>Copy</i> Stream icon. Click this icon to copy these stream settings to other camera streams.
	This is the <i>Restart</i> icon. Click this icon to refresh the connection to this camera stream. This option is not available on inactive streams.
	This is the <i>Delete</i> icon. Click this icon to delete the camera stream. This option is not available on locked streams.

3. To edit a stream, click the stream’s pop-up menu and click the *Edit* pencil icon. A screen will appear with all of the stream settings available for editing.

✿ If you are editing a JPEG stream, available settings may be limited.

**Stream Settings**

**Edit Stream Settings**

Name\*  
profile\_1 h264

Recording Style: Continuous recording with motion detection  
Motion Style: Server

**Video Settings**

Encoder: H264  
Bit Rate: 22  
Frame Rate: 7  
GOV Length: 1  
Profile: High  
Resolution: 1280x800  
Quality: 7

**Audio Settings**

Encoder: none

CANCEL UPDATE STREAM

4. Review or change the stream name so users can easily identify the camera stream. (This is especially helpful on Primary and Secondary streams.)
5. Review or change the *Recording Style* for the camera stream. (Review the information below before making a selection.)

### Recording Style

Orchid Recorder offers five different recording styles to choose from. These recording styles will impact video availability (as shown in the descriptions and table below). (Secondary streams are limited to the following recording styles: Continuous Recording without Motion Detection, and Proxy Only.)

- **Continuous Recording with Motion Detection:** Orchid Recorder will continuously record video from the camera and perform motion detection. This is the default and recommended setting. (This recording style is not available on Secondary streams.)
- **Continuous Recording without Motion Detection:** Orchid Recorder will continuously record video from the camera, but will not perform motion detection. This option offers a modest reduction in CPU load on the Orchid Recorder.
- **Continuous Recording with Motion Adaptive Frame Rate:** Orchid Recorder will record at a higher frame rate while motion is detected, and a different (slower) frame rate while no motion is detected. These frame rates are user-selectable (as shown in the screenshot following the table). (Due to the way H264 compresses video, this recording style typically shows significant savings in disk usage only for inexpensive cameras with noisy sensors, or cameras in low-light environments.) (This recording style is not available on Secondary streams.)

- **Proxy Only:** Orchid Recorder will provide live video from the camera but will not record video.
- **Recording Only When Motion Detected:** Orchid Recorder will only record video from the camera when motion is detected. This may result in a reduction in disk usage on the Orchid Recorder, however, motion detection accuracy may vary and result in video loss. (This recording style is not available on Secondary streams.)

	Continuous recording with motion detection (Default)	Continuous recording without motion detection	Continuous recording with motion adaptive frame rate	Proxy only, no video will be recorded	Recording only when motion is detected
Recording and playback are available	Yes	Yes	Yes	No	Yes (When motion is detected)
Live view is available in low-bandwidth mode	Yes	No	Yes	No	Yes
Thumbnail previews are available	Yes	Yes	Yes	No	Yes

### Motion Style

In Orchid Recorder, you are now able to select server-based motion detection (the default), or camera-based motion detection.

Server-based motion detection means that the Orchid Recorder software will determine if motion occurs in the recorded video. Starting in version 22.6, the Orchid Recorder will analyze all video keyframes for changes that would indicate motion. With this *Motion Style*, you may take advantage of Orchid's advanced *Motion Detection* settings that permit you to select which regions of the camera view are eligible for motion detection, and the minimum object size that qualifies for motion detection.

Camera-based motion detection means that one of the camera's metadata events will be used to detect motion. This can be accomplished in a variety of ways, and will vary by camera. Typically these metadata events will come from the camera's built-in motion detection scheme. In other instances, the camera's I/O port may be connected to an external passive infrared (PIR) sensor that will detect motion. In any case, the camera-based motion detection feature can provide better support for very high resolution cameras, especially, 360-degree cameras. Any adjustments to the camera-based motion detection will have to be performed through the camera's web interface.

6. Use the *Recording Style* drop-down list to select a new recording style.
7. If you select a recording style that includes motion detection, you may need to make additional selections.
  - a. Use the *Motion Style* drop-down list to select a motion style. Options include *Camera* and *Server*.
    - i. If you select the *Camera* motion style, use the *Camera Event* drop-down list to select the criteria the camera will use to detect motion. Available selections will vary by camera, and selecting the appropriate event may require some experimenting.

Refer to the table below for some common ONVIF camera events.

Camera Type	Event	Description
Axis	<i>RuleEngine/VMD3/vmd3_video_1</i> , <i>VideoSource/MotionAlarm</i> , <i>RuleEngine/MotionRegionDetector/Motion</i>	These three event types will work for camera-side motion detection. They differ slightly with the data types used in their message data, but all three use the VMD engine because they are only available if VMD is installed and running. If in doubt, select <i>RuleEngine/VMD3/vmd3_video_1</i> .
Axis	<i>VideoAnalytics/MotionDetection</i>	This is for cameras with built-in motion detection that pre-dates VMD support. The three Axis events listed above are preferred, if available.
Axis	<i>Device/Sensor/PIR</i>	Use this event type only if you know for certain that PIR sensors are built into your camera. Almost all cameras report this, even cameras that are not equipped with PIR sensors.
Axis	<i>Device/IO/Port</i> , <i>Device/IO/VirtualPort</i>	For cameras using external PIR sensors, this is usually the event that corresponds to movement (e.g. closed circuit = no motion, and open circuit = motion). The difference between <i>Port</i> and <i>VirtualPort</i> depends on how your PIR sensor has been configured. If unsure, try both.
Hanwha	<i>VideoSource/MotionAlarm</i>	Use this event type for camera-based motion detection on Hanwha cameras.
Vivotek	<i>VideoSource/MotionAlarm</i> , <i>VideoAnalytics/Motion</i>	Both of these sources provide events during motion, with small differences. <i>VideoSource/MotionAlarm</i> sends a single event based on all windows configured, while <i>VideoAnalytics/Motion</i> returns a single event for each configured motion window.



- \* If camera-based motion detection does not appear to be an available option, perform the [Recover Camera](#) procedure on each camera, as needed.

8. If you select the *Continuous recording with motion adaptive frame rate* recording style, you will need to set both the *Frame Rate During Motion* and the *Frame Rate During Non-Motion*. (The *Frame Rate During Motion* will dictate the available settings for the *Frame Rate During Non-Motion*. Allowable settings for the *Frame Rate During Non-Motion* range from 1 up to a setting that is less than or equal to the *Frame Rate During Motion*.)

The screenshot shows the 'Stream Settings' dialog box. The 'Name' field is 'profile\_1 h264'. The 'Recording Style' is 'Continuous recording with motion adaptive frame rate' and the 'Motion Style' is 'Server'. The 'Frame Rate During Motion' is set to 7, and the 'Frame Rate During Non-Motion' is set to 1.00. A blue arrow points to the 'Frame Rate During Non-Motion' slider, which is labeled 'Additional Settings'. The 'Video Settings' section includes 'Encoder' (H264), 'Bit Rate' (22), 'Frame Rate' (These values can be manipulated above while Motion Reduction is selected.), 'GOV Length' (These values can be manipulated above while Motion Reduction is selected.), 'Profile' (High), 'Resolution' (1280x800), and 'Quality' (7). The 'Audio Settings' section is empty. At the bottom, there are 'CANCEL' and 'UPDATE STREAM' buttons.

- \* If you selected server-based motion detection, you may use the advanced [Motion Detection](#) settings on the *Camera Configuration* screen to further customize motion detection.

9. If you are editing a Secondary stream, you will notice that the *Recording Style* drop-down list will only offer two options: *Recording* and *Proxy*. The *Recording* setting will provide continuous recording without motion detection, and the *Proxy* setting will provide live video only.

**Stream Settings**

Name\*  
stream\_5938edda

Secondary Recording Style  
Recording

**Video Settings**

Encoder: H264    Bit Rate: 800    Frame Rate: 10

GOV Length: 10    Profile: High    Resolution: 1280x720

Quality: 50

**Audio Settings**

Encoder: G711    Bit Rate: 64    Sample Rate: 8

CANCEL    UPDATE STREAM

10. Continue to review and change camera stream settings for video, audio and bandwidth as needed. Refer to the definitions below for help in selecting settings.

\* You may need to use the scroll bar to view the additional settings in the lower portion of the screen.

### Video Settings

Each camera type reports its own default values provided by the camera manufacturer. Use those default values unless otherwise noted.

- **Encoder:** The type of compression used for the camera's video. In WebRTC mode, Orchid Recorder only supports H264 video. In Low-bandwidth mode, Orchid Recorder supports JPEG, MPEG4, and H264 (recommended). (Available selections depend on the camera.)
- **Bit Rate:** The target data size (in kilobits per second) of the compressed video. Increasing this value will typically improve image quality at the expense of increased disk usage and reduced retention. In WebRTC mode, bitrates of 2000 kbps or less tend to work best. The default value is recommended.
- **Frame Rate:** The number of frames per second transmitted within the video stream. Most Orchid Recorder users are best served by values between 7 and 12. Higher frame rates provide more video detail at the expense of reduced video retention and increased bandwidth usage.
- **GOV Length:** When using H264 compression, this value specifies how often the camera sends a full image frame (instead of a "change frame" which only describes differences

between frames). For example, if this is set to 15, Orchid Recorder will send a full image frame once every 15 frames. Be aware of how this setting may impact video quality. As the GOV length decreases, the system will need to send more keyframes of video (within the set bit rate). This may result in a loss of quality for those keyframes. The default value is recommended.

- **Profile:** When using H264 compression, this specifies an H264 Profile of either Baseline, Main, or High. Higher profiles offer better compression (which means increased retention and lower bandwidth usage) at the expense of increased CPU utilization when decoding video. The highest available profile is recommended.
- **Resolution:** The resolution of video transmitted by the camera. Higher values increase video detail at the expense of reduced video retention and increased bandwidth usage. Most Orchid Recorder users are best served by resolutions between 1280×720 and 1920×1080.
- **Quality:** This value affects how much the video is compressed. Higher values increase video quality at the expense of increased storage requirements (and thus reduced video retention). The default value is recommended.

✿ Beginning with version 23.3, Orchid includes improved support for cameras that use dynamic frame rates and GOV intervals.

#### Audio Settings (if supported)

Beginning in Orchid Recorder version 23.6, audio control is supported at the Player/Stage level in WebRTC mode. If selected, the Orchid Recorder will record audio for those cameras that support it. This audio will be available on the *Stage* (in WebRTC only), and in exported video files.

These audio settings will appear on the screen only if the camera supports audio and will determine how the Orchid server records the audio. Each camera type reports its own default settings. Use those default values unless otherwise noted.

- **Encoder:** The type of compression used by the camera's audio. Orchid Recorder supports "None" (audio is disabled), G711 (recommended), and AAC.
- **Bit Rate:** The target data size (in kilobits per second) of the compressed audio. The default value is recommended.
- **Sample Rate:** Affects the quality of recorded sound. The default value is recommended.

✿ The Dewarp/MP4 export file type does not support G.711 audio.

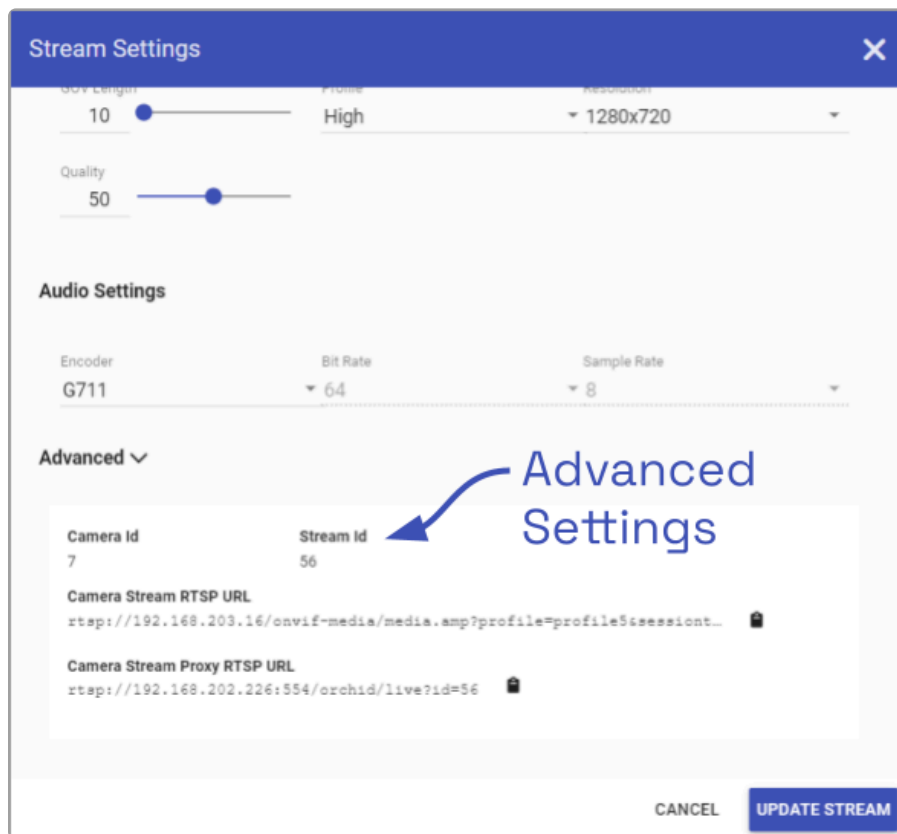
#### Low-bandwidth Settings

- **Decode all frames:** This setting applies to viewing Live video in Low-bandwidth mode. When *Decode all frames* is disabled, Orchid Recorder will display only full frames (per the

configured GOV length) when viewing live video in Low-bandwidth mode. When *Decode all frames* is enabled, Orchid Recorder will display every available frame from the camera (regardless of GOV length) when viewing live video in Low-bandwidth mode, assuming sufficient bandwidth exists. *Decode all frames* is disabled by default because enabling this setting will increase CPU use on your Orchid Recorder. (For more details on Low-bandwidth mode, please refer to the [Advanced Topics](#) section.)

### Advanced

The last section on the screen provides additional information about the camera stream. This includes the Camera ID, the Stream ID, and the URLs, all of which may be helpful for troubleshooting the camera stream.



11. Click the **Expand** icon to view the Advanced stream information.
12. Click the **Condense** icon to close the Advanced stream information.
13. Once the stream settings have been updated, click the **Update Stream** button to save the new stream settings. It may take a few seconds for the settings to change based on the camera being updated.
14. You may review the impact that the stream settings have on video playback for each camera. Simply click on the corresponding thumbnail to watch a current live video feed.

✿ Beginning in version 23.3, Orchid Recorder supports forensic timestamps. These will be enabled by default, but Administrators can disable or customize them by

editing the appropriate properties. Please refer to the [\*Advanced Settings\*](#) topic for more details.

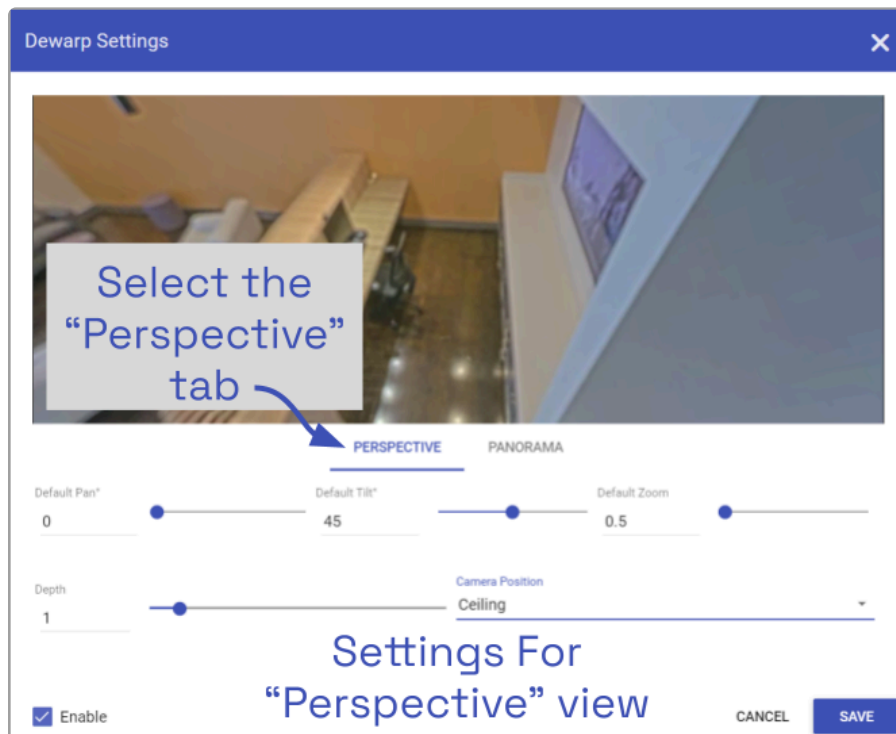
# Advanced Settings: Fisheye Dewarping

The *Camera Configuration* screen includes *Fisheye Dewarping* which allows you to manipulate video from fisheye cameras for display on the Player. This feature provides three viewing options: *Off*, *Perspective*, and *Panorama*. This means that you can view the standard fisheye view, or one of two “flattened” views.

For any fisheye camera, the *Dewarp Settings* allow you to enable or disable the dewarping features, and set a default view for the associated Player.

## Perspective

1. At the *Camera Configuration* screen, click the camera you want to edit. Then click the *Fisheye Dewarping* link to open the *Dewarp Settings* screen.
2. Select the *Perspective* tab.



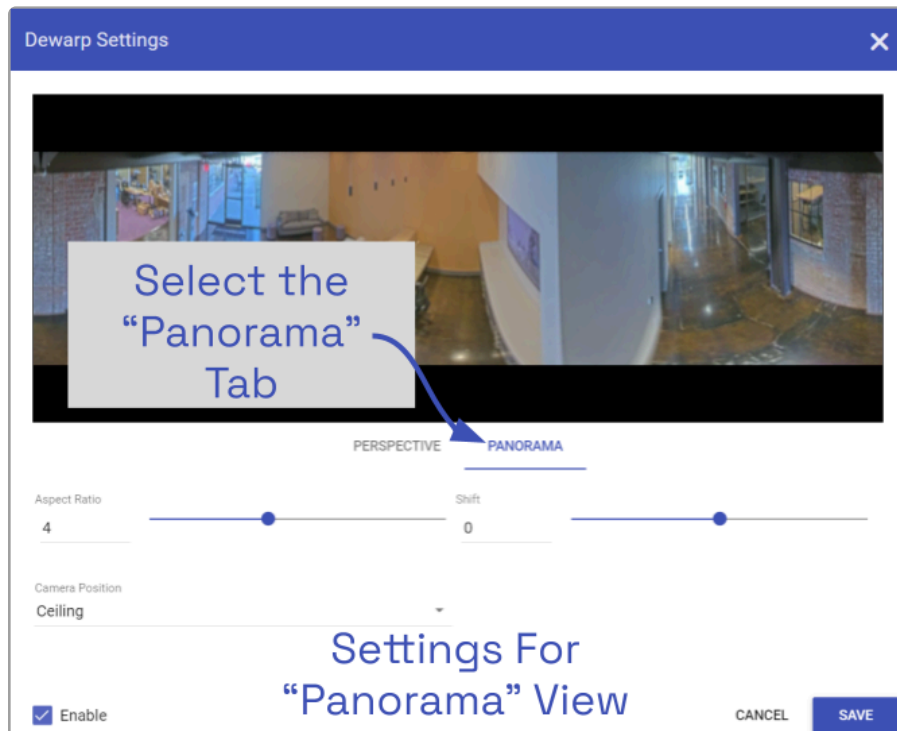
Use the *Perspective* screen to enter settings for the *Perspective* view of the selected camera. The *Perspective* view is a flattened version of the available video from the fisheye camera for which you select a portion of the image as the default view to be displayed on the Player. (The *Perspective* view can also be changed at the Player, but that will not change the default.)

3. Mark the *Enable* checkbox to activate the *Dewarp Settings* (both *Perspective* and *Panorama*) for this camera. (If this is not marked, Dewarping features will not be available at the Player.)
4. Use the *Default Pan* slider to move the camera to the right and left to set the default view.

5. Use the *Default Tilt* slider to move the camera up and down to set the default view. (Be aware that it is possible to tilt the view beyond the capability of the camera; if this happens, portions of the screen will appear black.)
6. Use the *Default Zoom* slider to zoom into or out of the image to set the default view. (Be aware that it is possible to zoom beyond the capability of the camera; if this happens, portions of the screen will appear black.)
7. Use the *Depth* slider to stretch or compress the image height to set the default view. (This can cause extreme image distortion at the bottom and top ends of the scale. The default value is likely the best setting.)
8. Use the drop-down list to select the camera's mounting location as Ceiling, Floor, or Wall. (This setting will impact how the software displays the camera image.)
9. Press the *Save* button to save your settings, or *Cancel* to exit without saving.

## Panorama

1. Select the *Panorama* tab.



Use the *Panorama* screen to enter settings for the default *Panorama* view of the selected camera. The *Panorama* view is a flattened version of the available video from the fisheye camera. This view displays the entire image and cannot be altered at the Player.

2. Mark the *Enable* checkbox to activate the *Dewarp Settings* (both *Perspective* and *Panorama*) for this camera. (If this is not marked, Dewarping features will not be available at the Player.)
3. Use the *Aspect Ratio* slider to change the amount of Player area the image will fill. You

might take some time to experiment with this setting, but the points below describe how it works.

- a. At the high end of the scale, the image will fill the length of the Player, but the height of the image will be condensed.
  - b. At the center of the scale, the image will fill the length of the Player, and the height of the image will be at its least distorted.
  - c. As you move from the center of the scale to the low end, the height of the image will stretch toward the top and bottom of the Player.
  - d. From the point that the image fills the Player, if you continue to move to the bottom of the scale, the image width will shrink until the image disappears.
4. Use the *Shift* slider to adjust the center point of the image. (If there is a certain part of the image that you prefer at the center of the Player, use the slider to make this adjustment.)
  5. Use the drop-down list to select the camera's mounting location as Ceiling, Floor, or Wall. (This setting will impact how the software displays the camera image.)
  6. Press the **Save** button to save your settings, or the **Cancel** button to exit without saving.



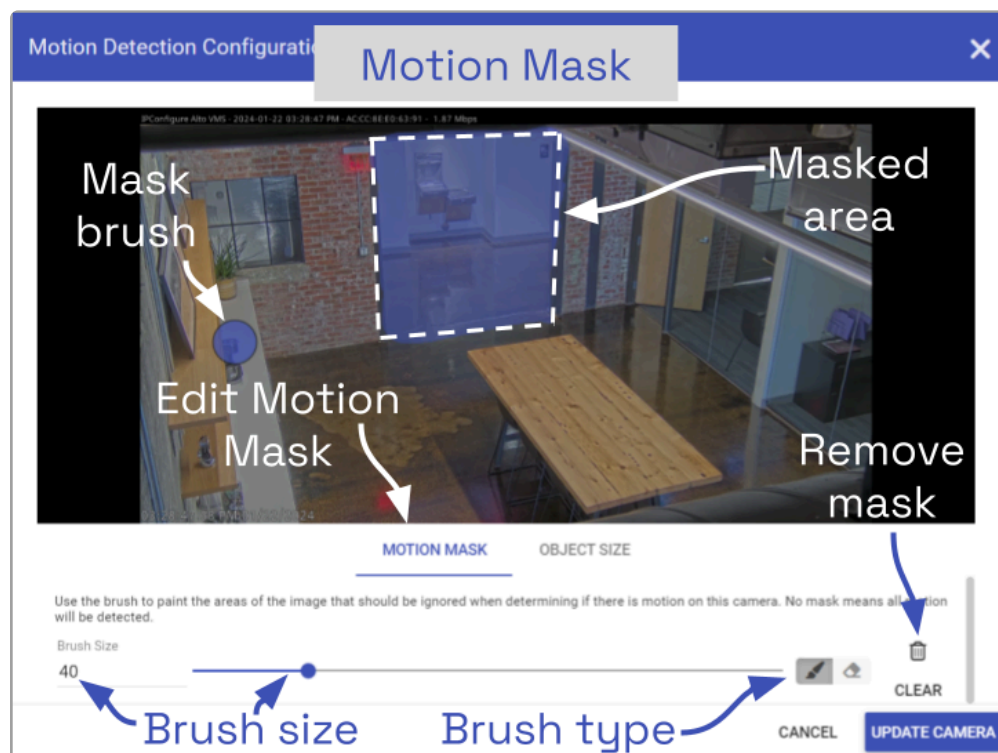
# Advanced Settings: Motion Detection

The *Camera Configuration* screen includes *Motion Detection* Settings which allow you to apply camera-specific motion detection settings. The *Motion Detection Configuration* screen provides two tools to reduce the number of “nuisance” motion captures: *Motion Mask* and *Object Size*.

\* These settings will only apply on cameras that are configured to use server-based motion detection.

## Motion Mask

1. At the *Camera Configuration* screen, click the camera you want to edit. Click the *Motion Detection* link to open the *Motion Detection Configuration* screen.
2. Select the *Motion Mask* tab (just underneath the video image). Use this screen to change the way motion detection is applied to the selected camera.



By default, all cameras are set to detect motion. When motion is detected, a motion event is recorded and will appear on the *Timeline Bar* (which is intended to make video review easier). But sometimes, the camera captures too much motion. There may be objects in the video, like trees, banners, or balloons, that move constantly, increasing the number of motion events to such a degree that it actually makes video review more tedious.

The *Motion Mask* tool allows you to “paint” over one or more areas of the video image, making

those areas invisible to motion detection. (You will still see all of the video, but the motion capture feature will ignore the masked area.)

3. Select the *Brush Type*.
  - a. The paint brush will add a masked area to the video image. This area will be ignored by the motion detection feature.
  - b. The eraser will remove masked area from the video image. This area will now be evaluated during motion detection.
4. Adjust the *Brush Size* using either of the following methods.
  - a. Click in the *Brush Size* field and enter a new number or use the up and down arrows to increase or decrease the size of the brush.
  - b. Click and drag the slider to increase or decrease the size of the brush.
5. Position your cursor over the video image and you'll see a blue circle (the mask paint brush) or a pink circle (the mask eraser). (Adjust the brush size if needed.)
6. Click and drag the brush across the video image to change the masked area.
  - a. If you selected the paint brush, you will add masking to the image.
  - b. If you selected the eraser, you will remove masking from the image.
7. To remove the entire mask, click the **Clear** button.
8. To save the mask (or the cleared image), click the **Update Camera** button.

✿ Due to the variability of the video image that comes with PTZ cameras, the *Motion Mask* feature should not be used with PTZ cameras.

✿ There are some circumstances that will inhibit motion detection. If the motion enters and exits the video image very quickly, the system may not see enough of the frames to detect the motion. If this becomes an issue, you may want to consider reducing the stream GOV setting (which results in more keyframes), or enable the *Decode all frames* option. Keep in mind, however, that this will put additional load on the server.

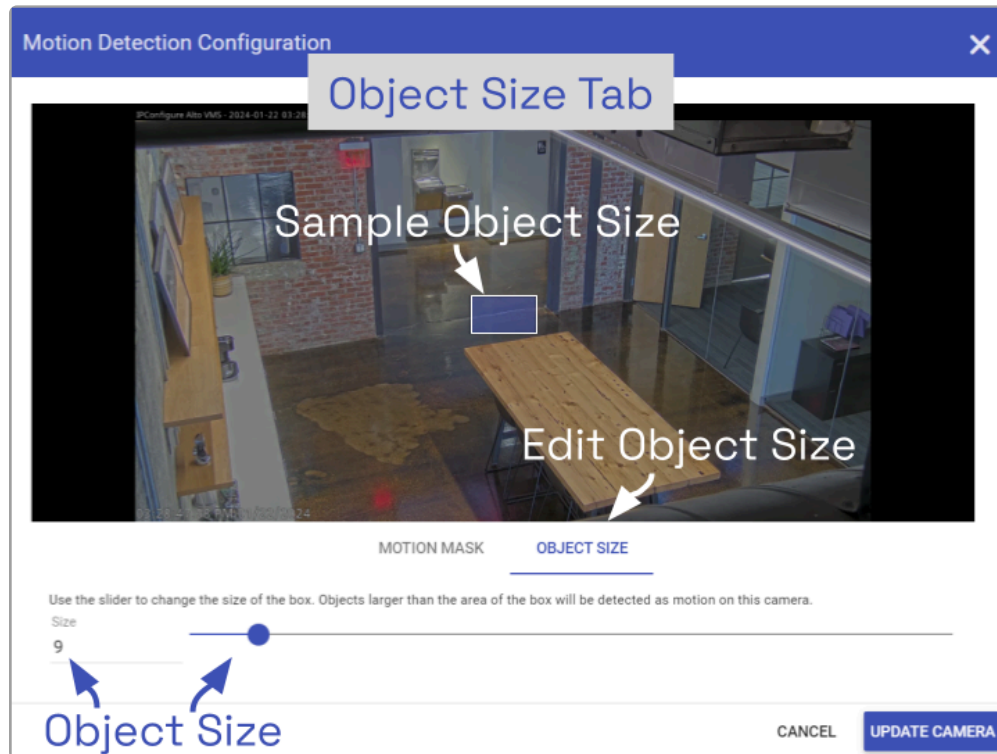
## Object Size

The *Object Size* tool allows you to modify motion detection based on area. This tool instructs the software to ignore the movement of any objects with a smaller area than the selected object size (like small animals and robot vacuum cleaners). (You will still see all of the video, but the motion capture feature will ignore the small stuff.)

1. Select the *Object Size* tab (just underneath the video image). Notice the blue square in the center of the video image. This represents the defined object area. Objects of equal or lesser area will be ignored by motion detection.

For example, if the selected object size (area) is 100, the software will ignore objects with an

area of 100 or less. This includes objects that are  $10 \times 10$ ,  $20 \times 5$ ,  $30 \times 3$ ,  $45 \times 2$  and so on (each of which have an area of 100 or less).

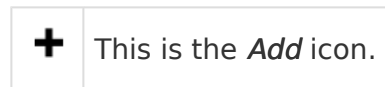


2. Adjust the *Object Size* using either of the following methods.
  - a. Click in the *Size* field and enter a new number or use the up and down arrows to increase and decrease the area.
  - b. Click and drag the slider to increase and decrease the area.
3. To activate motion detection for objects of all sizes, set the *Size* to zero.
4. To save the *Object Size* settings, click the *Update Camera* button.

✿ When selecting the *Object Size*, it may be better to keep it small. As this selection gets larger, the system ignores more motion events (which may be detrimental to your overall objective).

✿ The *Motion Mask* and *Object Size* tools can be used together to completely customize motion detection for each camera.

# Add a Stream



Usually you will not need to add a stream unless your camera does not come configured with any streams by default.

1. From the *Camera Information* screen, press the **Add Stream** button to add a new stream for the selected camera. Orchid Recorder will open a screen in which you will need to enter and modify the settings for the stream.

Stream Settings

Name \*

Recording Style: Continuous recording with motion detection

Motion Style: Server

Video Settings

Encoder: H264

Bit Rate: 0

Frame Rate: 30

GOV Length: 10

Profile: High

Resolution: 160x90

Quality: 50

Audio Settings

CANCEL ADD STREAM

2. When all settings have been entered, press the **Add Stream** button to add the new profile to the *Streams* list for the selected camera.

# Copy Stream to Cameras



This is the *Copy Streams* icon.

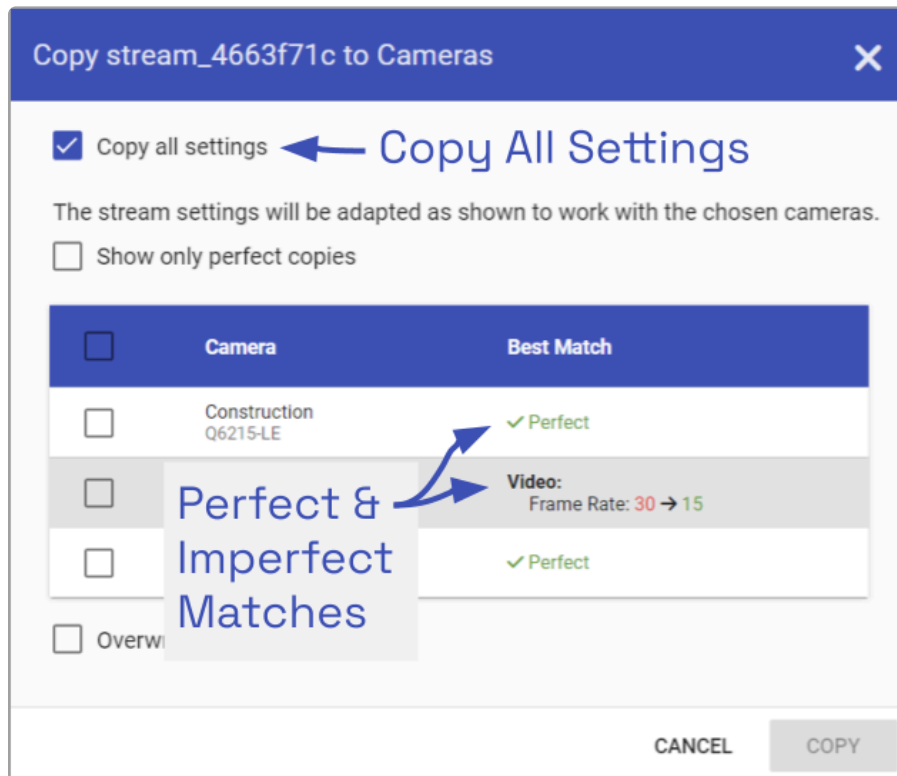
This feature is a shortcut you may use if you have multiple, similarly configured cameras to set up. Once you complete a stream settings profile for one camera, you can copy all (or part) of that profile to one or more cameras with one click. This shortcut is especially useful if you have added multiple cameras at once (using Auto mode).

1. From the list of registered cameras on the *Camera Configuration* screen, click the name of the camera you want to use as a model.
2. Then add or edit a camera stream that contains the settings you would like to copy to other cameras.
3. Once your template profile is complete, click the pop-up menu for the stream you want to copy, then click the *Copy Stream to Cameras* icon.

Streams				+ ADD STREAM	
Status	Mode	Name	Configuration		
—		profile_1 h264	1280x800, 7fps, H264 Continuous recording with motion detection		
—		profile_1 jpeg	640x360, 10fps, H264 Continuous recording with motion detection		
		stream_2f842218	1920x1080, 30fps, H264 Continuous recording with motion detection	Camera Stream Pop-Up Menu →	
—		stream_4663f71c	1920x1080, 30fps, H264 Continuous recording with motion detection		

\* RTSP cameras have a limited number of settings that can be edited in Orchid Recorder. The pop-up menu for these cameras will not display the *Copy Stream* icon and are not eligible for the *Copy Stream* feature.

A screen will appear that will allow you to edit and complete the profile transfer to selected cameras.

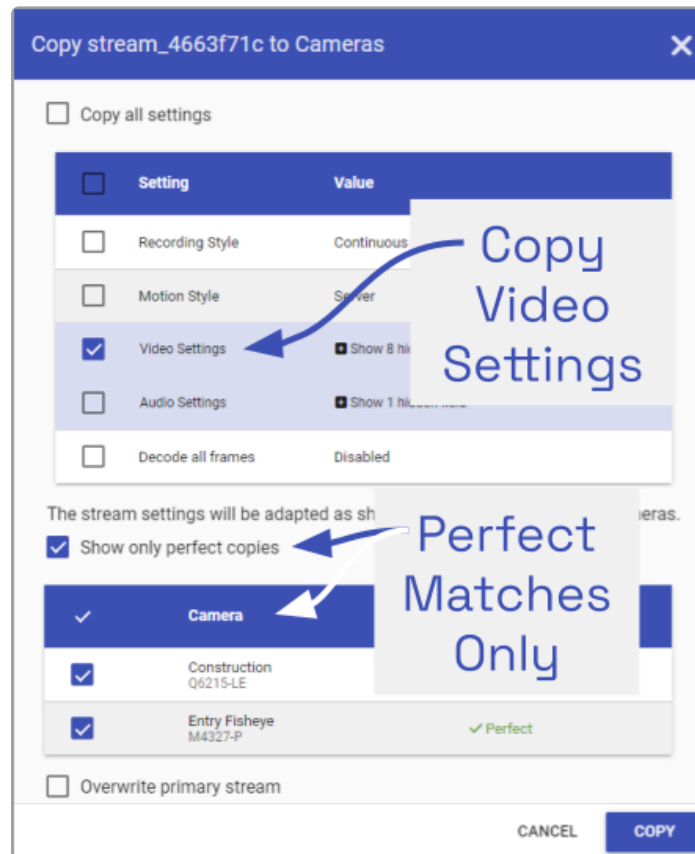


The screen lists all of the cameras that have been added to the system. It also provides comments to show which cameras are good candidates for the stream settings (which may help you decide if you want to copy all of the settings to all of the cameras.) For each camera that is not a perfect match, Orchid Recorder will pick the stream setting that is the closest match and indicate how the stream settings will be modified for that camera.

There are several reasons why profile matches might not be perfect. For instance, maybe the “model” camera is configured to use a higher resolution than is supported by the target cameras. In this case, Orchid Recorder will choose the closest available resolution on the target cameras.

The appearance of this screen will change as different settings are selected. Depending on how many cameras have been added and which settings are selected, you may need to scroll down to see all of the cameras and settings.

4. Mark the ***Copy all settings*** checkbox to copy all of the stream settings. (These will be copied to all of the cameras selected in the lower half of the screen.)
5. Leave the ***Copy all settings*** checkbox unmarked if you want the ability to choose which settings will be copied.
  - a. Mark the ***Setting*** checkbox if you decide to copy all of the settings anyway.
  - b. Mark the checkbox for any of the individual categories that you want to copy (including ***Recording Style***, ***Video Settings***, ***Audio Settings***, and ***Decode all frames***).
  - c. You may expand the ***Video*** and ***Audio Settings*** categories to select individual settings within each, if needed. (Click on the ***+Show hidden fields*** link to expand the list and the ***-Hide fields*** link to condense the list.)



6. Mark the *Show only perfect copies* checkbox if you want the software to list only those cameras that can implement the new profile settings exactly. (This checkbox will not appear if there are no camera streams that are a perfect match.)
7. Mark the *Camera* checkbox if you want to copy settings to all of the cameras in the list. Leave the *Camera* checkbox unmarked if you want the ability to choose which cameras will receive the stream settings.

**Copy stream\_4663f71c to Cameras**

Setting	Value
<input type="checkbox"/> Recording Style	Continuous recording with motion detection
<input type="checkbox"/> Motion Style	Server
<input checked="" type="checkbox"/> Video Settings	Show 8 hidden fields
<input type="checkbox"/> Audio Settings	Show 1 hidden field
<input type="checkbox"/> Decode all frames	Disabled

The stream settings will be adapted as shown to w cameras.

☐ Show only perfect copies

Camera	Best Match

☐ Overwrite primary stream

CANCEL COPY

- Mark the **Overwrite primary stream** checkbox if you want these stream settings to replace the existing primary stream settings on every camera selected. Leave the **Overwrite primary stream** checkbox unmarked if you simply want to add this as a new stream option for each of the selected cameras. (Orchid Recorder will not record from this new stream.)

**✿ IMPORTANT:** If you are copying a Secondary stream, leave the **Overwrite primary stream** checkbox unmarked. The copied stream will be added to each of the selected cameras as an inactive stream. You may then reassign the stream as a Primary or Secondary (active) stream.

- Once your selections are complete, click the **Copy** button to send the stream settings to the selected cameras. It may take a few minutes for the settings to change based on the number and type of cameras being updated.
- When the copy process is complete, click the **Done** button.



# Cameras with Multiple Lenses

There are some camera models that have multiple lenses or offer multiple camera views (such as 180- or 360-degree cameras). To take advantage of this capability, you will need to do the following:

1. Add this camera to the system one time for each available lens.
2. Edit the properties for each of the cameras as follows:
  - a. For ease of identification, provide similar but unique camera names. (For example: Tower1East, Tower1West, and Tower1North.)
  - b. To ensure that you are able to view video from each of the available lenses, select a different primary stream for each of the cameras you added.

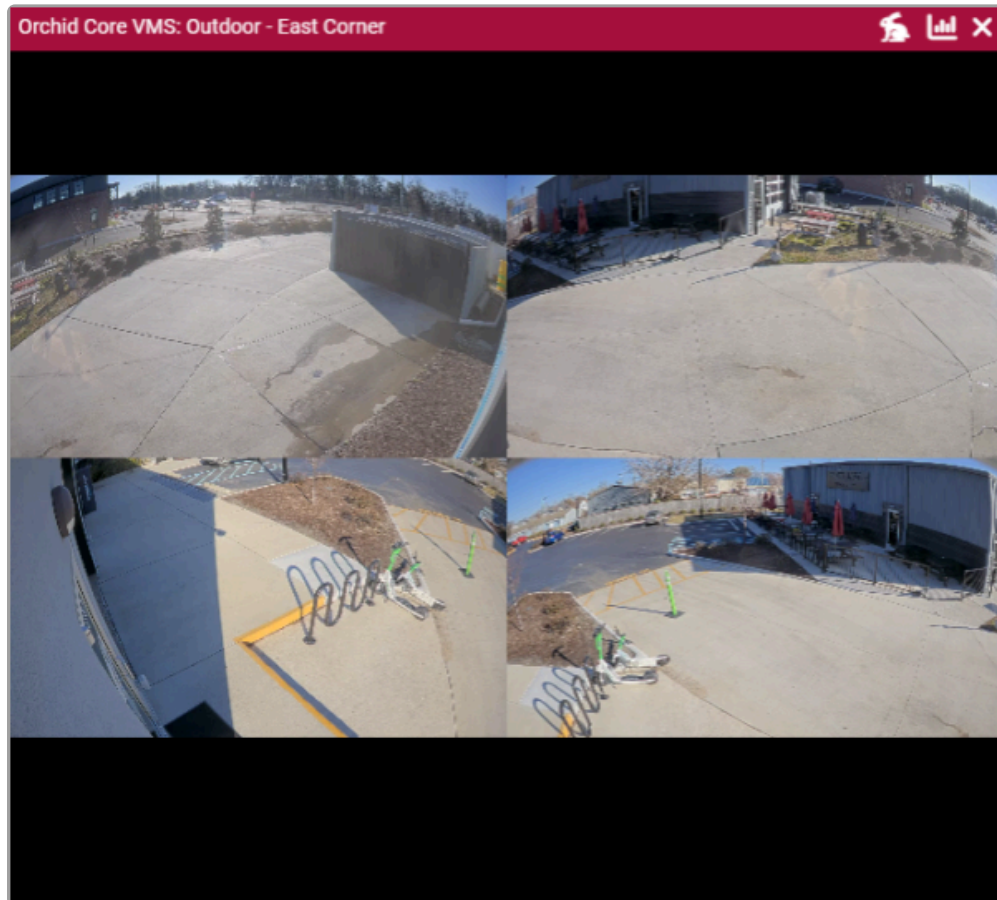
In the example below, a multi-lens camera has been added to the system 3 times. Each has a similar (but different) camera name, and each has a different primary stream.

**Same IP, different names**

**Different streams**

Status	Mode	Name	Configuration
—	📹	profile_1_h264	3840x2160, 15fps, H264 Continuous recording with motion detection
—	📹	profile_1_jpeg	3840x2160, 15fps, JPEG Continuous recording with motion detection
—	📹	profile_2_h264	3840x2160, 15fps, H264 Continuous recording with motion detection
—	📹	profile_2_jpeg	3840x2160, 15fps, JPEG Continuous recording with motion detection
—	📹	profile_3_h264	3840x2160, 15fps, H264 Continuous recording with motion detection
—	📹	profile_3_jpeg	3840x2160, 15fps, JPEG Continuous recording with motion detection
—	📹	profile_4_h264	3840x2160, 15fps, H264 Continuous recording with motion detection
—	📹	profile_4_jpeg	3840x2160, 15fps, JPEG Continuous recording with motion detection

✿ If you find a Camera Stream profile called “multiview” (or something similar) in the list of stream names, select that as the Primary stream if you want to view/record all of the views as one stream. When you add this Player to the Stage, it will display all available views as one Player.



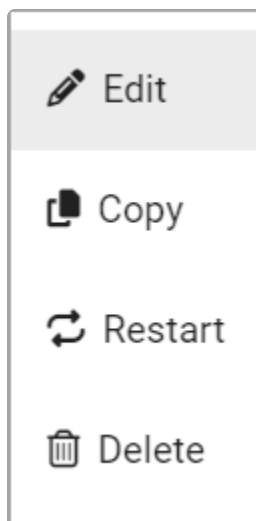
# Restarting a Stream

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This is the *Restart* icon.

1. To restart a camera stream, go to the *Streams List* for a given camera and identify the stream you want to restart. (This will be either a Primary or a Secondary stream.)



2. Click the stream's pop-up menu, then click the *Restart* icon. The software will reset the connection to the camera stream.

# Removing a Stream



This is the *Delete* icon.

1. To remove a single camera stream, go to the *Streams List* for a given camera and identify the stream you want to delete.

Streams				<a href="#">+ ADD STREAM</a>	
Status	Mode	Name	Configuration		
—		profile_1 h264	1280x800, 7fps, H264 Continuous recording with motion detection		
—		profile_1 jpeg	640x360, 10fps, H264 Continuous recording with motion detection		
		stream_2f842218	1920x1080, 30fps, H264 Continuous recording with motion detection		
—		stream_4663f71c	1920x1080, 30fps, H264 Continuous recording with motion detection		

2. Click on the stream's pop-up menu, then click the *Trash Can* icon. Orchid Recorder will ask you to confirm that you want to delete the stream. Press *Delete* to confirm. This cannot be undone.



A red *Lock* icon indicates that the stream cannot be deleted. This locked state is dictated by the camera and cannot be changed.

# Recovering a Camera



This is the *Recover Camera* icon.

If someone edits camera settings (including the IP address) directly at the camera, Orchid Recorder may be unaware of the new settings and may lose its connection with the camera. Orchid Recorder helps fix this problem with the *Recover Camera* feature.

The *Recover Camera* tool may also be used to activate features on cameras that were installed using earlier versions of Orchid. For example, recovering the camera may enable the camera-based motion detection option (by connecting to the metadata capabilities of the camera). Similarly, recovering the camera may enable the camera stream settings for NTP and Time Zone. Please refer to the [Edit Camera Stream Settings](#) for more details about camera-based motion detection, NTP Settings, and TimeZone settings.

\* The *Recover Camera* feature is only available on ONVIF cameras.

1. To recover a camera, click the name of the camera you want to recover from the list of registered cameras on the *Camera Configuration* screen.
2. Press the *Recover Camera* button at the bottom of the expanded camera entry. The *Connection Settings* screen will appear.

The screenshot shows a dialog box titled "Connection Settings" with a close button (X) in the top right corner. Inside the dialog, there is a section titled "Use this to recover and synchronize your camera when:" followed by two bullet points: "The camera's IP address has changed" and "The camera's settings have been changed outside of Orchid Recorder". Below this, there is a field for "ONVIF Discovery URL" with the value "http://192.168.203.125/onvif/device\_service". Underneath, there are two input fields: "Username" and "Password". The "Username" field is currently empty, and the "Password" field has a toggle icon (an eye) to its right. At the bottom of the dialog, there are two buttons: "CANCEL" and "RECOVER CAMERA".

3. To refresh the camera settings, simply enter the credentials for the camera, then press the *Recover Camera* button. (The software will pull the camera settings directly from the camera.)

4. To reconnect with the camera, replace the camera's IP address (with the new one) in the camera's URL field. Then enter the credentials for the camera and press the **Recover Camera** button. (The software will reconnect with the camera at its new IP address, and will also pull the camera settings from the camera.)

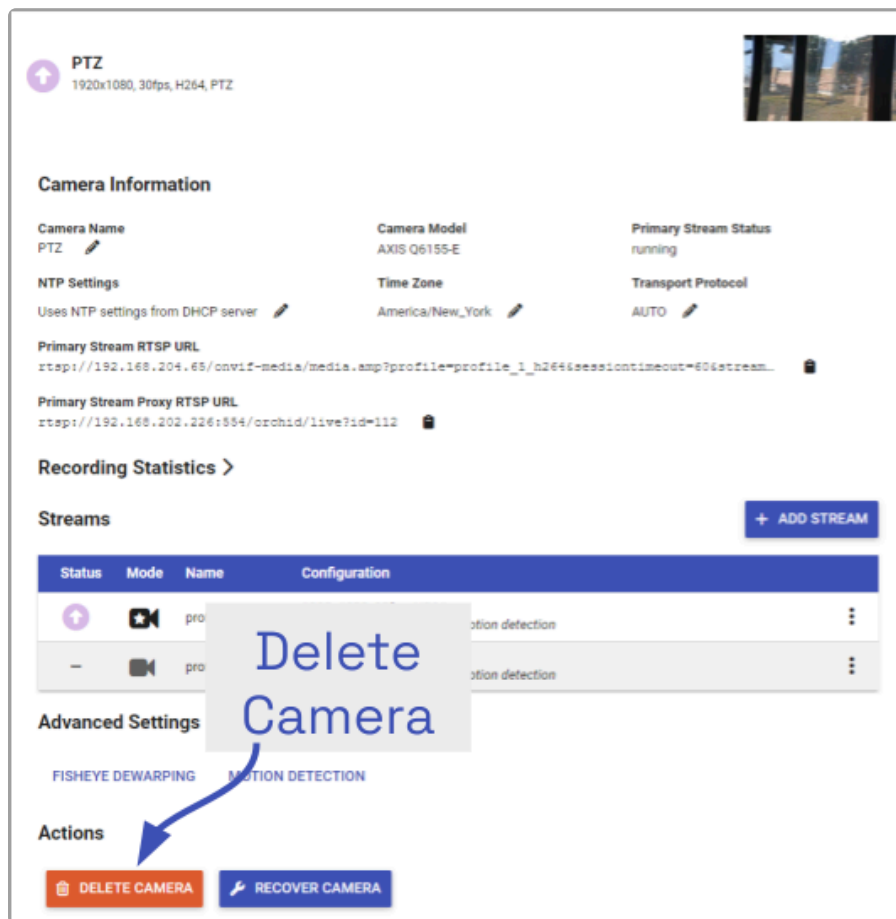
✿ Beginning in version 22.6, the Recover Camera feature no longer requires the replacement camera to have the same MAC address. So if you have to replace a camera, you may use the Recover Camera feature to add the new camera to the system.

# Removing a Camera



This is the *Delete* icon.

1. To remove a single camera, do either of the following:
  - a. From the list of registered cameras on the main *Camera Configuration* screen, position the cursor over the Up arrow to the left of the camera you want to delete; the arrow will change into a checkbox. Mark the checkbox, then press the *Delete* button at the bottom of the list. Orchid Recorder will ask you to confirm that you want to delete the camera. Press *Delete* to confirm. Once a camera is removed, it is no longer available for viewing, playback, recording, export, etc. This cannot be undone.
  - b. From the camera's settings screen, click the *Delete Camera* button (located at the bottom of the screen). Orchid Recorder will ask you to confirm that you want to delete the camera. Press *Delete* to confirm. Removal may take a few moments.



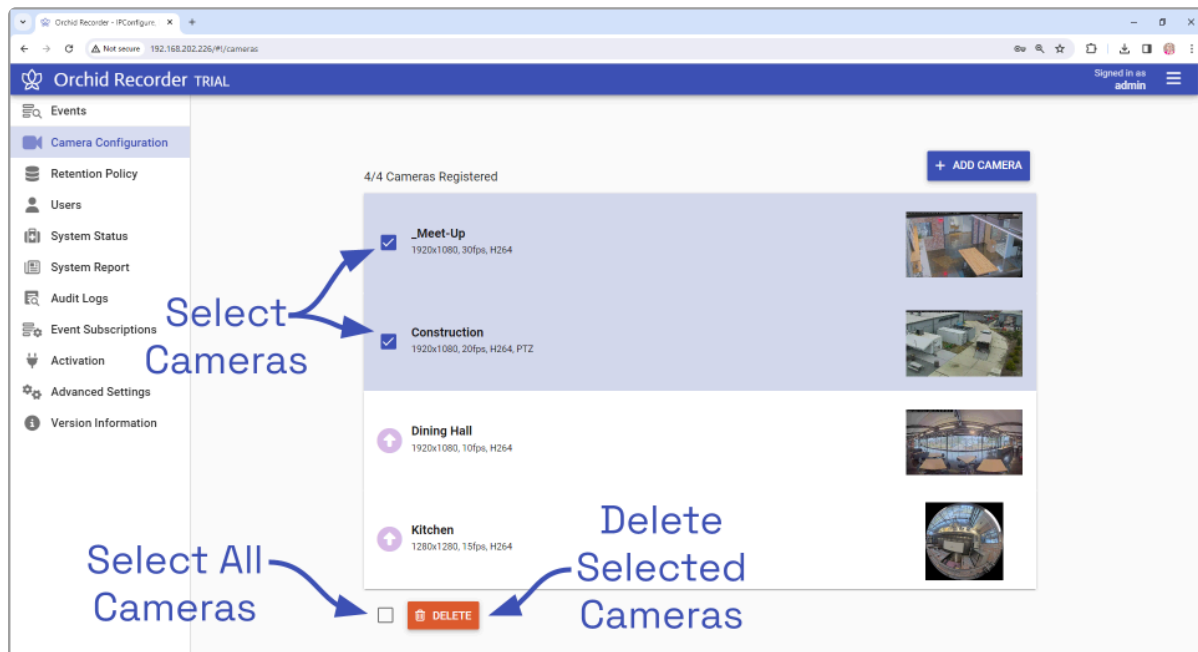
# Removing Multiple Cameras



This is the *Delete* icon.

Multiple cameras can be removed from Orchid Recorder at the same time, if needed.

1. From the list of registered cameras on the main *Camera Configuration* screen, first select the cameras you want to delete. (For each camera you want to delete, position the cursor over the Up arrow to the left of the camera name; the arrow will change into a checkbox. Mark the checkbox.)



2. Once your selections are complete, click the *Delete* button at the bottom of the list. Orchid Recorder will ask you to confirm that you want to delete the cameras. Press the *Delete* button to confirm. Once the cameras are removed, they are no longer available for viewing, playback, recording, export, etc. This cannot be undone.
3. To delete ALL of the cameras in the list of registered cameras, mark the *Delete* checkbox at the bottom of the list, then click on the *Delete* button. Orchid Recorder will ask you to confirm that you want to delete the cameras. Press the *Delete* button to confirm. Once the cameras are removed, they are no longer available for viewing, playback, recording, export, etc. This cannot be undone.



# Searching for a Camera

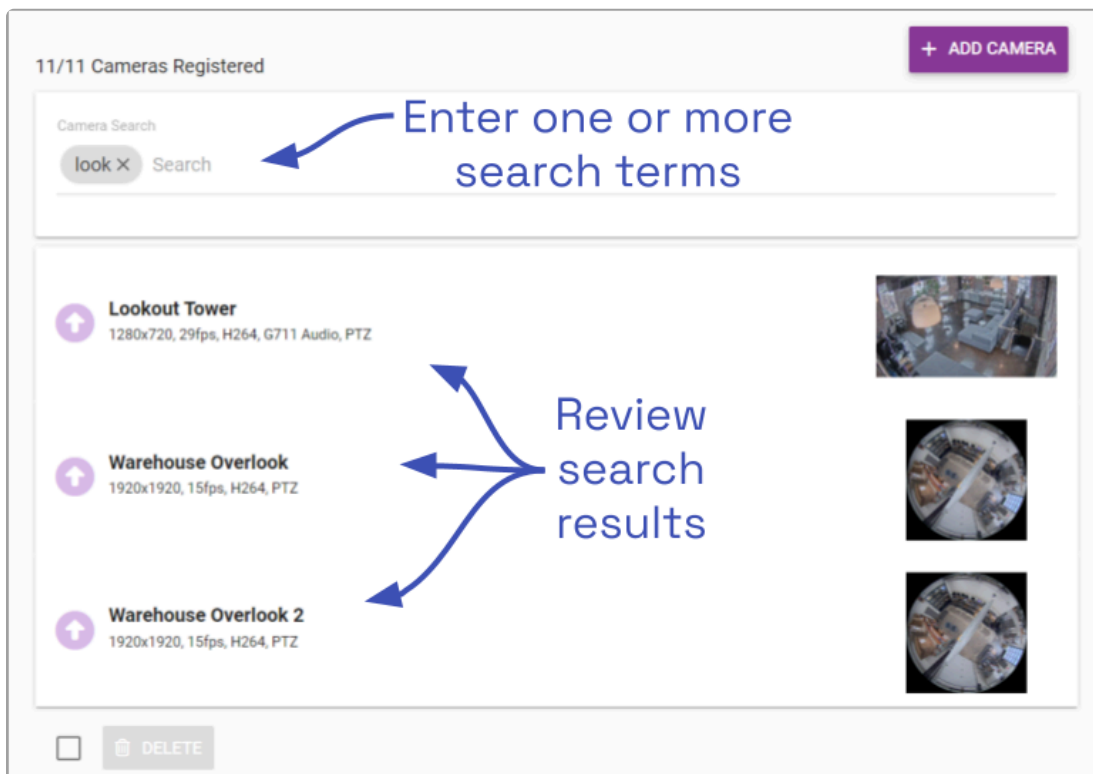
If you have more than one page of registered cameras, the software will automatically activate the camera search and page navigation. Especially useful with large systems, these tools will help you find specific cameras quickly.

## Search the Cameras List

The *Camera Search* field will appear at the top of the *Camera Configuration* screen. It supports searching by the camera name, using single and multiple-word search tags.

1. Click into the *Search* field to start your search.
2. Type one or more search tags (clicking *Enter* after each).
  - a. A single search tag with multiple terms (words or numbers) will initiate a search for results that include all of the terms, in order.
  - b. Multiple, single-term search tags will initiate a search for results that include at least one of those tags.

Each time you press *Enter*, the *Camera Configuration* screen will update to display a list of all of the cameras that contain the tag(s).



# Retention Policy

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The *Retention Policy* feature in Orchid Recorder allows Administrators to manage video archive retention on a stream by stream basis as well as review current and projected disk utilization.

✿ An Administrator is the only role with access to the *Retention Policy*.

# About Video File Retention

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To maintain a system for video file retention, Orchid Recorder determines how much disk space is available on the server. By default, Orchid Recorder will retain videos until your hard disk is 85% full (the *Cleaner Threshold*), at which point it will begin deleting the oldest videos to make room for new videos. The available video storage space is divided among all the cameras that have been added to Orchid Recorder based on equal days of retention; however, based on individual camera settings, this doesn't mean that each camera will require the same amount of server storage space.

If no camera-specific retention settings have been entered, Orchid Recorder will grant each camera the same number of days of video retention. Since each camera may have different settings (such as recording style, frame rate, etc.), and those settings impact video file size, the amount of space required for the same number of days will vary.

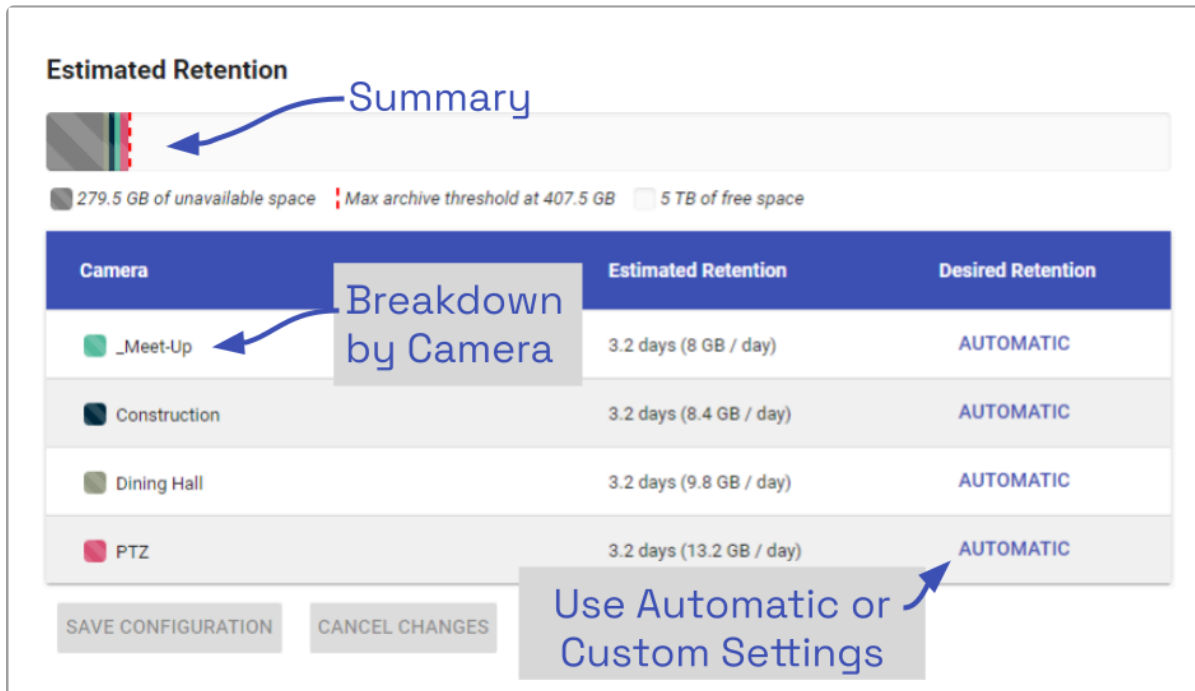
In some applications, there may be cameras for which increased file retention is critical. For these cameras, the Administrator may set specific, minimum retention settings. In these cases, the retention settings for the remaining cameras will be adjusted automatically to share the remaining balance of available storage before the *Cleaner Threshold* is met.

When disk usage reaches the retention limit, Orchid Recorder will create free space by removing the oldest archives first. The system will ensure, however, that the minimum desired retention settings that have been set are maintained, assuming sufficient disk space is available.

To change the 85% *Cleaner Threshold* setting, use the [Advanced Settings](#) feature.

# Accessing the Retention Policy

- To access the retention settings for Orchid Recorder, open the *System Menu* in the top-right corner of the screen, then select *Retention Policy*.



At the top of the *Estimated Retention* section, Orchid Recorder displays a summary of estimated server space usage. Use the cursor to hover over the colored regions of the summary graphic to view the estimated server space usage for each camera.

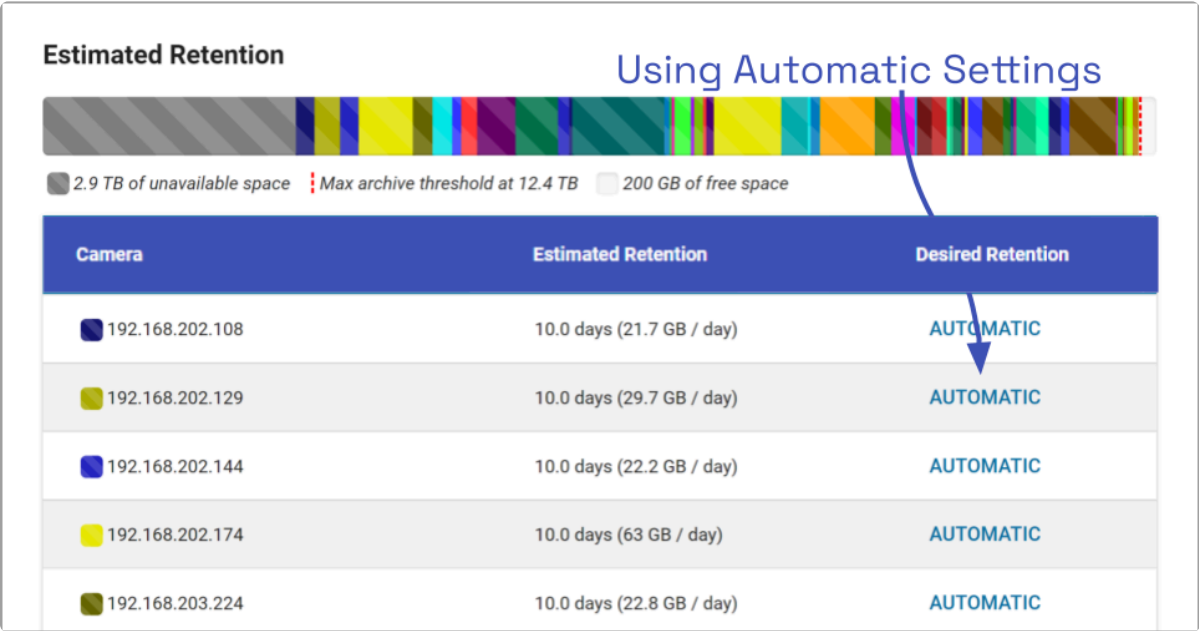
- **Unavailable space:** This space on the disk is marked in grey. It is already in use by other applications and is unavailable to Orchid Recorder for storing video.
- **Video data:** This space on the disk is marked in various bright colors representing each camera. This space is filled with videos that are managed by Orchid Recorder. To make space for new video, the oldest videos are continuously and automatically deleted as the *Cleaner Threshold* is reached.
- **Cleaner Threshold:** By default, Orchid Recorder will attempt to make sure that no more than 85% of your disk space is used. This threshold is marked on the bar by a red dotted line. To change the 85% *Cleaner Threshold* setting, use the [Advanced Settings](#) feature.
- **Free space:** This disk space is not in use by Orchid Recorder or any other program.

# Changing Desired Retention Settings

If you decide that you need to set some specific retention settings, keep a few things in mind.

- The amount of space in which Orchid Recorder may store video files is limited, regardless of what you may attempt to enter as desired retention settings.
- As custom desired retention settings are entered, Orchid Recorder will automatically re-distribute the remaining available space to the remaining cameras (that are using the Automatic retention settings).
- Increasing the cameras’ desired retention settings to inflated numbers may not be realistic, and may result in an error message.
- Keep it simple and let Orchid Recorder do most of the work. Instead of decreasing some settings and increasing others, keep the Automatic settings for most cameras, and increase the desired retention on cameras that are most critical to the operation.

The following screenshots depict a series of retention scenarios.



**Estimated Retention Summary**

2.9 TB of unavailable space Max archive threshold at 12.4 TB 200 GB of free space

Camera	Estimated Retention	Desired Retention
192.168.202.108	9.7 days (21.7 GB / day)	AUTOMATIC
192.168.202.129	9.7 days (29.7 GB / day)	AUTOMATIC
192.168.202.144	20.0 days (22.2 GB / day)	20 <input type="text"/> x
192.168.202.174	9.7 days (63 GB / day)	AUTOMATIC
192.168.203.224	9.7 days (22.8 GB / day)	AUTOMATIC
192.168.204.176	9.7 days (22.8 GB / day)	AUTOMATIC

Note How Custom Settings Impact Estimated Retention



**Estimated Retention Summary and Warning**

Your current configuration is not possible given your maximum archive threshold. You can save these changes, but you must proceed at your own risk.

Camera	Estimated Retention	Desired Retention
192.168.202.108	0.0 days (21.7 GB / day)	AUTOMATIC
192.168.202.129	0.0 days (29.7 GB / day)	AUTOMATIC
192.168.202.144	1,000.0 days (22.2 GB / day)	1000 x
192.168.202.174	0.0 days (63 GB / day)	AUTOMATIC
192.168.203.224	0.0 days (22.8 GB / day)	AUTOMATIC
192.168.204.176	0.0 days (22.8 GB / day)	AUTOMATIC

Some Custom Settings Cannot Be Supported



1. To edit the minimum Desired Retention setting for any given camera, click on the corresponding *Automatic* button.
2. Type in a new setting to represent the number of days of video that will be kept for this camera. The remaining estimated retention will automatically be recalculated for all cameras that do not have a manually specified retention setting.

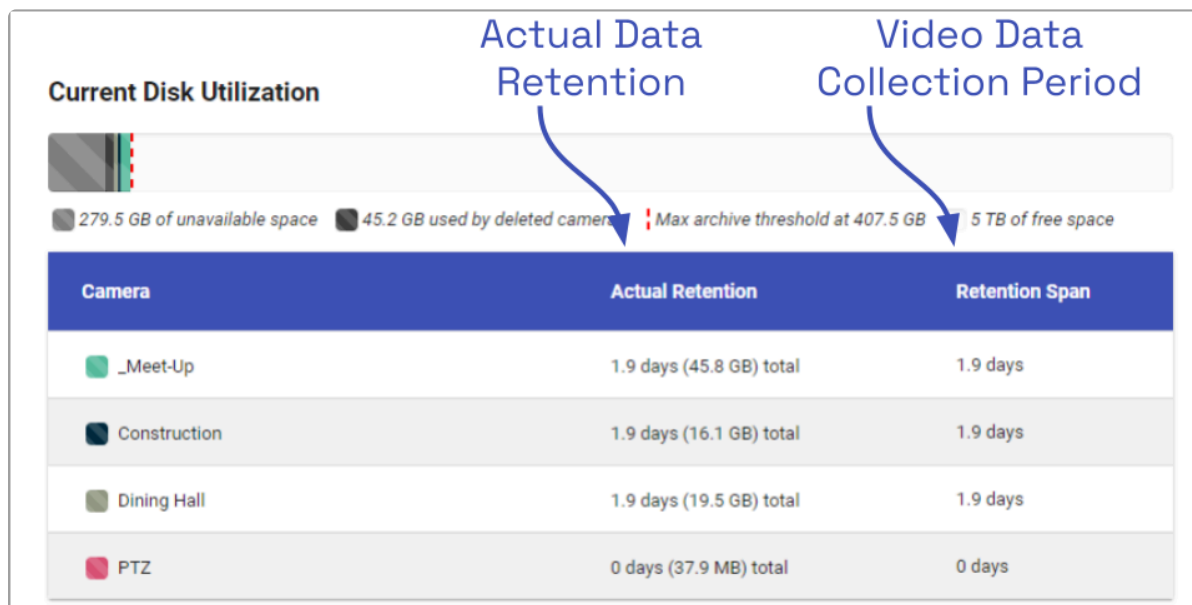
If your new setting requires more storage than is physically available on your disk, Orchid

Recorder will flag an error (as pictured previously). To fix this, you'll need to reduce the desired retention to an acceptable level or add more available storage.

3. Repeat steps 1 and 2 for each camera that requires custom, minimum retention settings.
4. To undo the last setting you changed, press the ***Cancel Changes*** button at the bottom of the list. (You can only use this feature before you save the new configuration.)
5. Once all settings have been entered, press the ***Save Configuration*** button at the bottom of the list.
6. To quickly change any setting back to *Automatic*, click the *X* button next to the setting and then press the ***Save Configuration*** button.

# Reviewing the Current Disk Utilization

The bottom half of the *Retention Policy* screen displays how the server space is actually being used. Use the cursor to hover over the colored regions of the summary graphic to view the actual server space usage for each camera.



The *Current Disk Utilization* section displays a summary of actual server space usage which includes unavailable space (space used by the operating system and other files), space occupied by video files, and a buffer of free space. It then provides a usage breakdown by camera. This information can be very helpful in diagnosing retention issues.

The *Actual Retention* column shows how many days worth of video is being stored per camera. It also includes how much disk space each camera is consuming. The *Retention Span* column shows the number of days over which the video files have been recorded. This data point is especially helpful for those cameras that are set to record only when motion is detected. (For example, look at the “dewarp” camera above. At first glance, the actual retention reading might cause concern. The *Retention Span* confirms that the system has been monitoring the camera for about the same amount of time as the other cameras.)

You may also use this breakdown to determine if any of the cameras are using excessive disk space. If this is the case, you can then take steps to re-configure the camera (by changing either the minimum desired retention settings or the camera stream settings) and fix the problem.



# View the System Status

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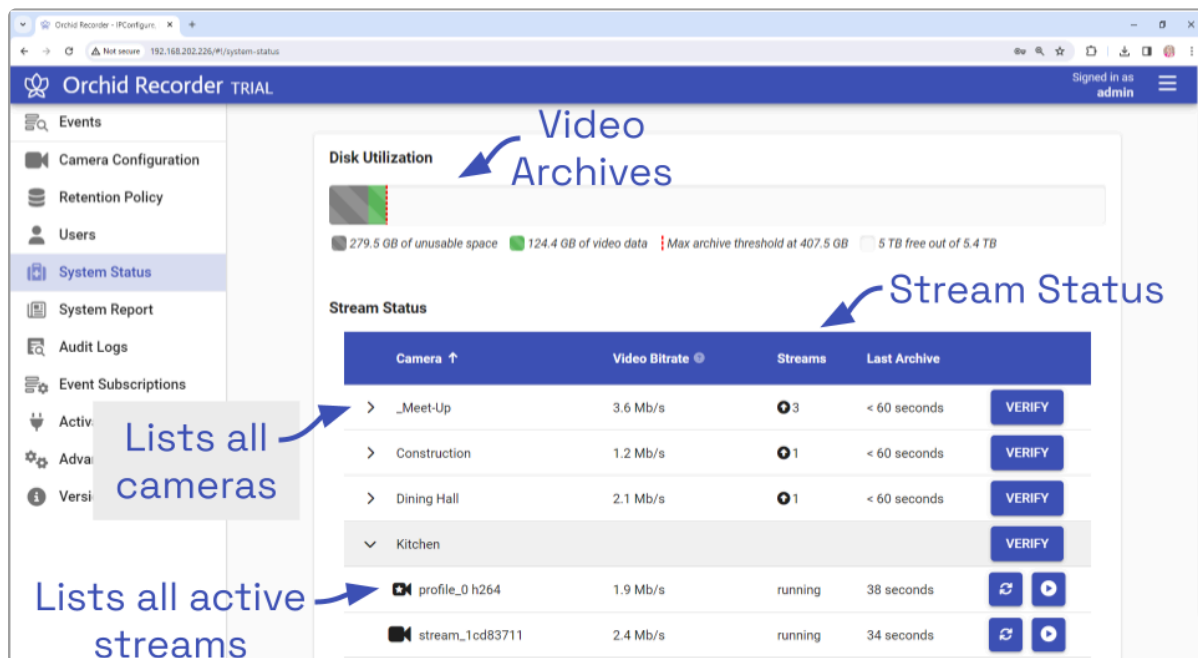
The *System Status* feature in Orchid Recorder provides an overview of the current disk utilization of the video archives folder, and it allows you to check the status of the active streams running in Orchid Recorder.



Administrators and Managers are the only roles with the ability to access the *System Status*.

# Accessing the System Status Report

- To access the *System Status* report, open the *System Menu*, then select *System Status*.



The *Disk Utilization* section summarizes how the server space is being used. If the overall amount of total disk space appears low, this may indicate that your recording drive(s) have gone offline and Orchid Recorder is recording to some other location.







- **Unavailable space:** This space on the disk is marked in grey and is already in use by other applications; it is unavailable to Orchid Recorder for storing video.
- **Video data:** This space on the disk is marked in green. This space is filled with videos that are managed by Orchid Recorder. To make space for new video, the oldest videos are automatically deleted as the *Cleaner Threshold* is reached.
- **Cleaner threshold:** By default, Orchid Recorder will attempt to make sure that no more than 85% of your disk space is used. This threshold is marked on the bar by a red dotted line. To change the 85% *Cleaner Threshold* setting, use the [Advanced Settings](#) feature.
- **Free space:** This disk space is not in use by Orchid Recorder or any other program.

By default, the video archives folder can be found in the following locations:

- In Linux: /orchives
- In Windows: C:\orchives

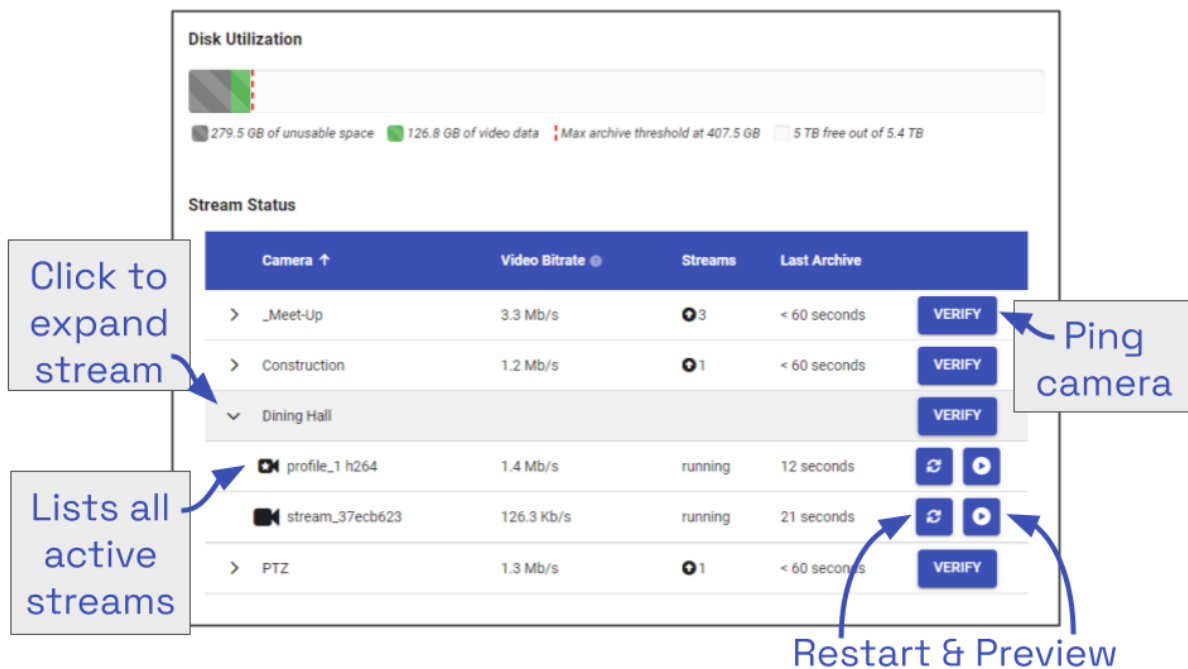
To change the location of the archives folder, please refer to the *Changing the Orchid Recorder Archives Storage Location* section in the [Orchid Recorder Installation Guide](#).

# Reviewing the Stream Status Section

	This is the <i>Expand</i> icon (used to view camera stream details).
	This is the <i>Condense</i> icon (used to close the camera stream details).
	This is the <i>Camera</i> icon that represents the Primary Stream.
	This is the <i>Camera</i> icon that represents a Secondary Stream (if applicable).
	This is the <i>Restart</i> icon (used to restart the camera stream).
	This is the <i>Preview</i> icon (used to view a preview image from the camera stream).

The *Stream Status* section of the *System Status* report provides a list of all the cameras in Orchid Recorder. For each camera, the system provides the video bitrate, the current status, the number of active streams, and how long ago the last archive was saved.



- To view complete camera status details, click on the *Expand* icon next to the desired camera.



**Disk Utilization**

279.5 GB of unusable space 126.8 GB of video data Max archive threshold at 407.5 GB 5 TB free out of 5.4 TB

**Stream Status**

Camera ↑	Video Bitrate	Streams	Last Archive	
> _Meet-Up	3.3 Mb/s	3	< 60 seconds	VERIFY
> Construction	1.2 Mb/s	1	< 60 seconds	VERIFY
▼ Dining Hall				VERIFY
 profile_1 h264	1.4 Mb/s	running	12 seconds	Restart Preview
 stream_37ecb623	126.3 Kb/s	running	21 seconds	Restart Preview
> PTZ	1.3 Mb/s	1	< 60 seconds	VERIFY

Click to expand stream

Lists all active streams

Ping camera

Restart & Preview

Each camera will display a Primary stream, and may also list one or more Secondary streams. The video bitrate will be listed for each of these streams.

The *Video Bitrate* field will display the average video bitrate received by Orchid Recorder over the last 15 minutes. This provides an indication as to how much video data is being transferred to Orchid. (This is the same bitrate information available within each camera's settings. Providing this data on the *System Status* screen makes it easier to identify one or more cameras that may have exceedingly high bitrates which may be causing system errors.)

A defined stream status will also be provided for each of the active streams. Available stream statuses are:

- **Running:** The stream is currently active and running properly without any errors. It is actively recording and saving video (if configured to do so).
- **Restarting:** The stream is being restarted automatically and should be active again within a few seconds.
- **Idle:** The camera is not responding after being restarted by Orchid Recorder multiple times and the camera status should be manually verified.
- **Stopping:** The camera stream has been shut down and is in the process of writing the video file. (This will typically happen because another stream has been selected as the primary stream.)

The *Last Archive* field will typically display the amount of time that has passed since the last archive was saved. If Orchid Recorder has never saved an archive for the camera stream, the software will display *Never* in the *Last Archive* column. Orchid Recorder writes video archives every minute, so any camera whose *Last Archive* is more than a minute old will be flagged in red, as this indicates video may not be recording.

For details on how to troubleshoot the camera/camera stream, please proceed to the next topic.

# Troubleshooting the Camera Stream Status



This is the **Restart** icon (used to restart the camera stream).



This is the **Preview** icon (used to display a preview image from the camera stream).

The *Stream Status* section also provides several methods for troubleshooting the camera stream. You can troubleshoot using the **Verify**, **Restart**, and **Preview** options. You'll find the **Verify** button at the right end of each of the listed cameras. The **Restart** and **Preview** buttons are at the right end of each camera stream (so you'll need to expand the camera entry to see them).

**Disk Utilization**

279.5 GB of unusable space 126.8 GB of video data Max archive threshold at 407.5 GB 5 TB free out of 5.4 TB

**Stream Status**

Camera ↑	Video Bitrate ●	Stream	Last Archive
> _Meet-Up	3.3 Mb/s		
> Construction	1.2 Mb/s		
▼ Dining Hall			
📹 profile_1 h264	1.4 Mb/s	running	44 seconds
📹 stream_37ecb623	125 Kb/s	running	53 seconds
> PTZ	1.4 Mb/s	🕒 1	< 60 seconds

- **Verify:** Pings the camera and confirms whether or not Orchid Recorder can communicate with the camera successfully. The **Verify** button will turn green if the ping is successful; the button will turn red if Orchid Recorder is unable to connect to the camera. If the ping command is unsuccessful, the camera's IP address may have been changed directly at the camera. If this is the case, obtain the new IP address and use the [Recover Camera](#) feature to reconnect.
- **Restart:** Closes and restarts the camera stream. You can then use the **Preview** button to verify that Orchid Recorder is receiving video from the camera stream without having to navigate back to the *Stage*.
- **Preview:** View a live feed of the camera stream. If you are able to see moving video from the camera's feed, then the server and the camera are properly connected.

(Please refer to the [Advanced Topics](#) section for additional help.)

# Viewing the System Report

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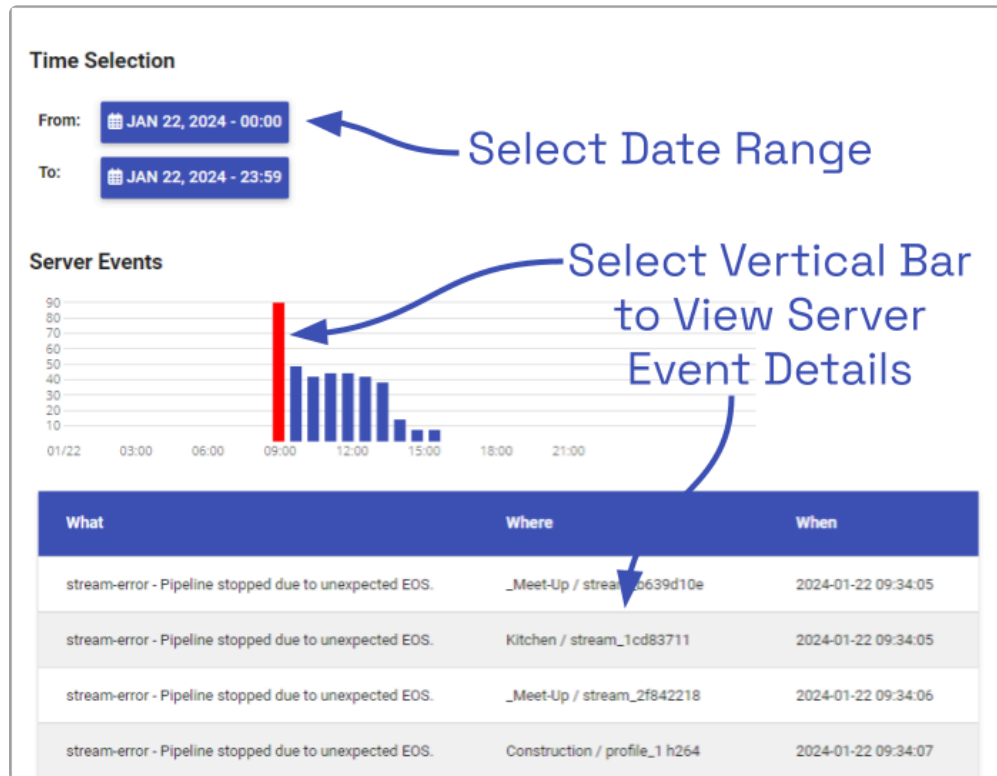
The *System Report* feature in Orchid Recorder allows Administrators and Managers to view various types of events (such as camera streams starting and stopping) and camera stream statistics during a specified time period. This report also provides access to the Orchid Recorder system log.



Administrators and Managers are the only roles with the ability to access the *System Report*.

# Accessing the System Report

To access the *System Report* for Orchid Recorder, open the *System Menu* in the top-right corner of the screen, then select *System Report*.





# Working with the Server Events and Stream Statistics

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By default, the *System Report* will provide a report for the current date (from 12:00 AM to 11:59 PM).

1. To select a new date range for the report, use the *From* and *To* buttons to select the new dates/times for the report in the pop-up calendar and then press the *Go* button. As soon as new dates are chosen, the report will update the *Server Events* and *Stream Statistics* sections.

The *Server Events* graph displays the date and time along the x-axis and the number of events that occurred on the y-axis. For each time period on the *Server Events* graph, a vertical bar will appear if at least one event occurred during that time frame.

Server events include the following:

- **Start:** The Orchid Recorder was started.
- **Stop:** The Orchid Recorder was stopped.
- **License Changed:** The Orchid Recorder license has been added, removed, or updated.
- **Entered Degraded State:** The Orchid Recorder has entered a state in which it will not operate normally. No new video will be recorded and no existing video will be deleted. (Refer to the [Advanced Topics](#) section for more details.)
- **Trusted Issuer Created:** This indicates that Orchid Fusion/Hybrid VMS has registered (added) this Orchid Recorder.
- **Trusted Issuer Removed:** This indicates that the Orchid Fusion/Hybrid VMS server has detached from this Orchid Recorder.

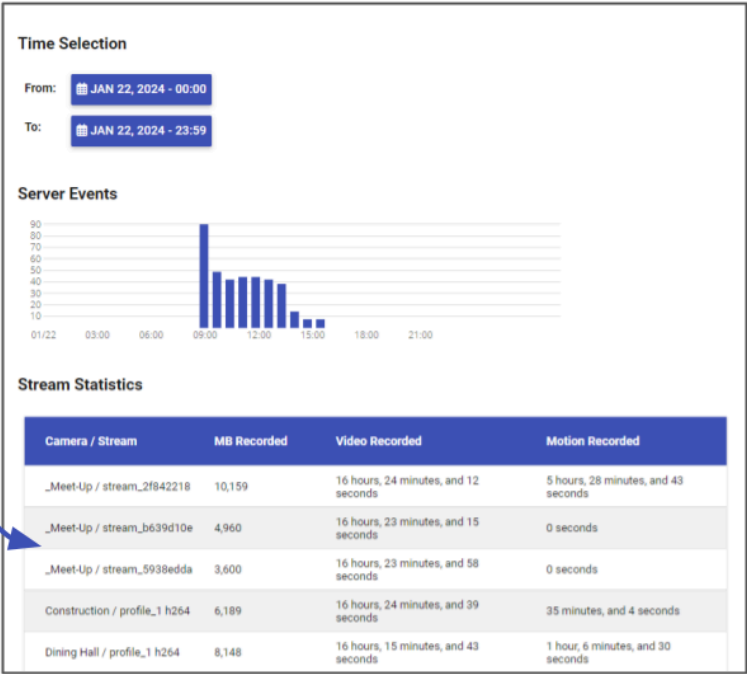
Stream events include the following:

- **Stream-starting:** The stream was started. (System provides the stream name and time.)
  - **Stream-error:** The stream posted an error. (System provides the stream name, time, and error message.)
  - **Failover Failed:** The stream encountered a storage device failure. (System provides the stream name and time.)
2. To view specific details on server events, click on any of the vertical bars. (The selected bar will appear in red.) The server event details for the selected time period will appear in a table beneath the graph. Event details include the date and time.
  3. If there are multiple events within a selected time period, you may double-click on the vertical bar to zoom in for more detail on the time frame.

The *Stream Statistics* section lists each of the active camera streams in Orchid Recorder. For

each stream, Orchid Recorder will show how many megabytes of video was recorded, the length of the recorded video, and how much of the recorded video contained motion. (The motion reported here will include both server-based and camera-based motion detection. Keep in mind, however, that server-based motion detection may be further defined using the advanced [Motion Detection](#) settings.)

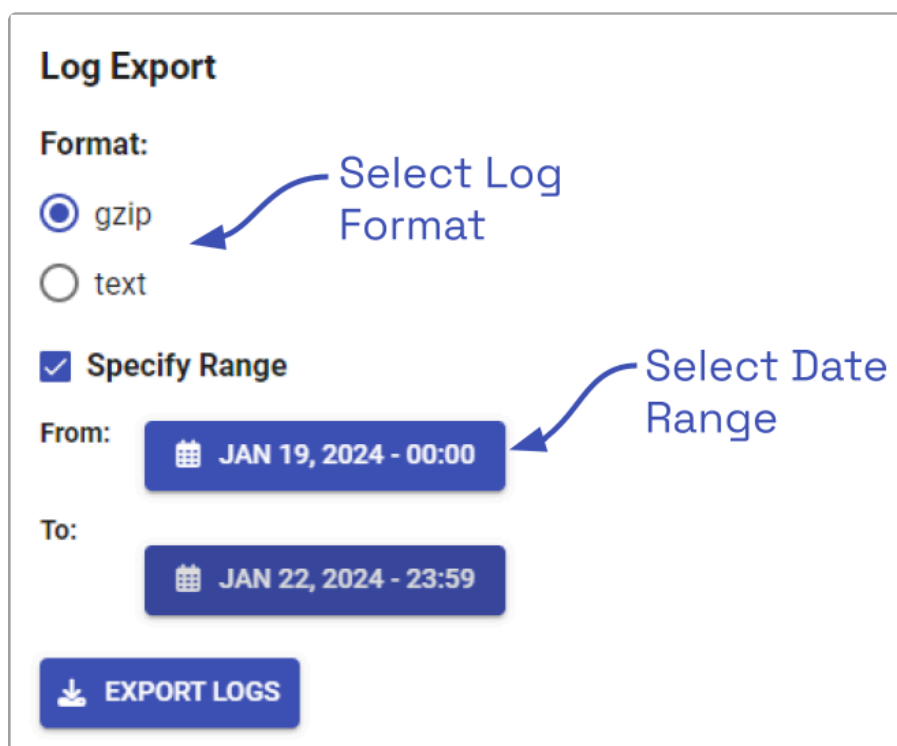
View Stats  
for Each  
Stream



# Working with the Log Export

The bottom half of the *System Report* includes the *Log Export* feature. This feature allows you to view and export Orchid Recorder system logs into a compressed file or plain text. These logs contain advanced troubleshooting information and are useful when trying to diagnose issues with Orchid Recorder.

\* The *Timeline Bar* displays the time on the client machine while system reports and logs are based on the server time. If there is a discrepancy, click the *Clock* icon (next to the software name in the image below) to view the time gap.



The screenshot shows the 'Log Export' section of the Orchid Recorder interface. It includes a 'Format' section with radio buttons for 'gzip' (selected) and 'text'. Below this is a checked 'Specify Range' checkbox. Under 'Specify Range', there are 'From' and 'To' date/time pickers. The 'From' picker shows 'JAN 19, 2024 - 00:00' and the 'To' picker shows 'JAN 22, 2024 - 23:59'. At the bottom is a blue button with a download icon and the text 'EXPORT LOGS'. Two blue arrows with text labels point to the 'gzip' radio button and the 'From' date picker, with the labels 'Select Log Format' and 'Select Date Range' respectively.

1. Select the format you wish to use for the log export:
  - a. gzip: This option will download the latest log from Orchid Recorder into a compressed file, allowing it to be viewed on other computers. The gzip-compressed file can be extracted using the gunzip command on Linux or a utility such as 7-zip on Windows.
  - b. text: This option will display the log within the browser without downloading any files. This file is likely to be very large when a narrow date range is not specified.
2. To specify a date/time range for the log, mark the *Specify Range* checkbox. Then use the *From* and *To* buttons to select the start and end dates/times.
3. Once your selections are complete, click the *Export Logs* button.

# Viewing the Audit Logs

---

The *Audit Logs* feature in Orchid Recorder allows Administrators to monitor user interactions with the Orchid system, which can be an important part of facility security. If you want to make sure that employees are using the video surveillance tools properly, and focusing in the right areas, this feature will help. The *Audit Logs* provide information on things such as logging in and out, camera viewing, event subscriptions, PTZ camera control, and exporting video.



Administrators are the only roles with the ability to access the *Audit Logs*.

# Accessing the Audit Logs

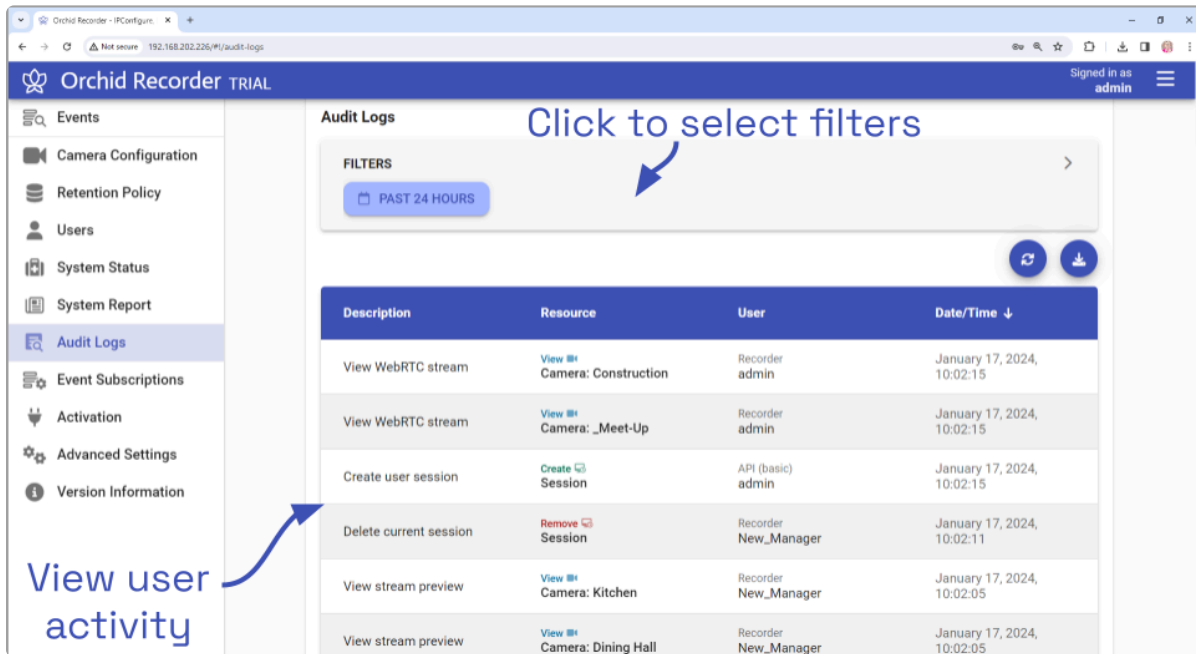
To access the *Audit Logs* for Orchid Recorder, open the *System Menu* in the top-right corner of the screen, then select *Audit Logs*. The *Audit Logs* screen will appear.

The screenshot shows the Orchid Recorder web interface. The left sidebar contains a menu with items: Events, Camera Configuration, Retention Policy, Users, System Status, System Report, **Audit Logs** (highlighted), Event Subscriptions, Activation, Advanced Settings, and Version Information. The main content area is titled "Audit Logs" and includes a "FILTERS" section with a "PAST 24 HOURS" button. Below the filters is a table of audit logs. Annotations with arrows point to various features: "Click to select filters" points to the filter button; "Refresh the list" points to a circular refresh icon; "Sort the list" points to a dropdown arrow in the table header; "Export the list" points to a download icon; and "View user activity" points to the "Audit Logs" menu item in the sidebar.

Description	Resource	User	Date/Time ↓
View WebRTC stream	<a href="#">View</a> Camera: Construction	Recorder admin	
View WebRTC stream	<a href="#">View</a> Camera: _Meet-Up	Recorder admin	
Create user session	<a href="#">Create</a> Session	API (basic) admin	
Delete current session	<a href="#">Remove</a> Session	Recorder New_Manager	January 17, 2024, 10:02:11
View stream preview	<a href="#">View</a> Camera: Kitchen	Recorder New_Manager	January 17, 2024, 10:02:05
View stream preview	<a href="#">View</a> Camera: Dining Hall	Recorder New_Manager	January 17, 2024, 10:02:05

# Working with the Audit Logs

By default, the *Audit Logs* screen will provide a comprehensive list of activity from the last 24 hours. The top of the *Audit Logs* screen may be used to select one or more filters to narrow the scope of the log. The bottom portion of the screen is used to display all of the selected log activity.



## The Audit Log List

	Click this icon to update/refresh the <i>Audit Log</i>
	Click this icon to download the <i>Audit Log</i> list currently displayed on the screen

The *Audit Log* displays all of the user actions that fulfill any of the applied filters. For each entry, the system provides a description, resource, user, and the date and time. Here are a few of the most common entries:

- **Create user session:** A user has signed into the system.
- **Delete current session:** A user has signed out of system.
- **View WebRTC stream:** The user added a Player (in WebRTC mode) to the *Stage*, or changed the Player mode to WebRTC.
- **View LBM stream:** The user added a Player (in Low-bandwidth mode) to the *Stage*, or changed the Player mode to Low-bandwidth mode.
- **Move PTZ:** The user moved a PTZ camera to a new position.

- **Export video:** The user exported video from a specific Player.
- **Confirm server properties update:** The user saved changes to the Orchid configuration file.

Description	Resource	User	Date/Time ↓
View WebRTC stream	View  Camera: Dining Hall	Recorder admin	January 17, 2024, 11:51:11
View WebRTC stream	View  Camera: Construction	Recorder admin	January 17, 2024, 11:51:11
View WebRTC stream	View  Camera: _Meet-Up	Recorder admin	January 17, 2024, 11:51:11

Sort the list

Click on any entry to expand it

View Stream: stream\_2f842218

Recorder admin

Date/Time Jan 17, 2024, 11:51:11

Client	Request	Metrics
<b>User:</b> admin <b>Authentication Type:</b> user-session <b>Address:</b> 10.0.202.6 <b>User Agent:</b> Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/120.0.0.0 Safari/537.36	<b>Resource:</b> stream_2f842218 <b>Parent Resource:</b> _Meet-Up <b>URI:</b> GET /service/streams/webrtc?sid=QSjf4vxaQRYOdqd <b>Time:</b> January 17, 2024, 11:51:11 <b>Response Status:</b> 101	<b>Video Playback Start Time:</b> January 17, 2024, 11:51:11 <b>Video Playback End Time:</b> January 17, 2024, 11:51:28 <b>Request Count:</b> 1 <b>Stream Session Duration:</b> 17 seconds

1. Use the scrollbar on the far right side to scroll up and down through the list.
2. Click on any entry to expand it and view details.
  - a. Click on the entry again to collapse it.
3. To refresh the list (with the most current activity), click the **Refresh** icon.
4. To return to the top of the *Audit Log*, click the **Return to Top** icon.
5. To export the log currently displayed on-screen, click the **Export** icon. (The *Audit Log* will be saved as a .CSV file.)

## Sorting the Audit Log

You can sort the *Audit Log* by the date and time of the entries, so you can start your review with the newest events or the oldest events.

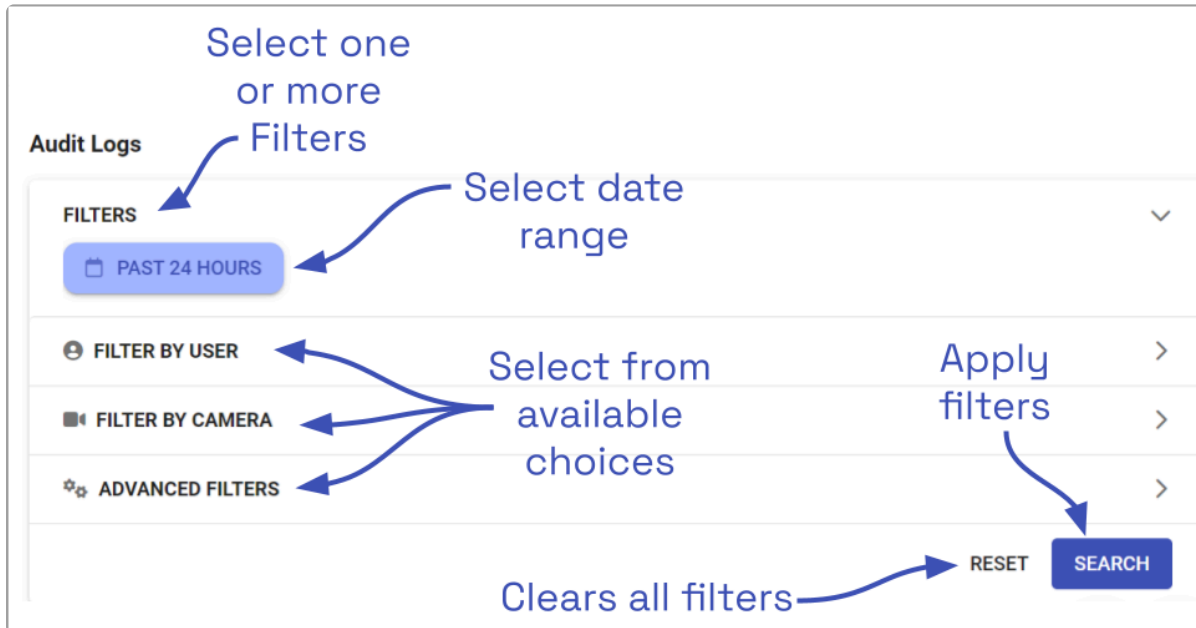
1. To sort the list, click the arrow icon at the top of the *Date/Time* column.
  - a. Each time you click the icon, the sort order will switch between ascending and descending.

## Filtering the Audit Log

The *Audit Log* may be filtered to display only the activities that you specify. You may filter the list using any one or more of the four filter types. These include a date/time filter, user filter, camera filter, and an advanced filter.

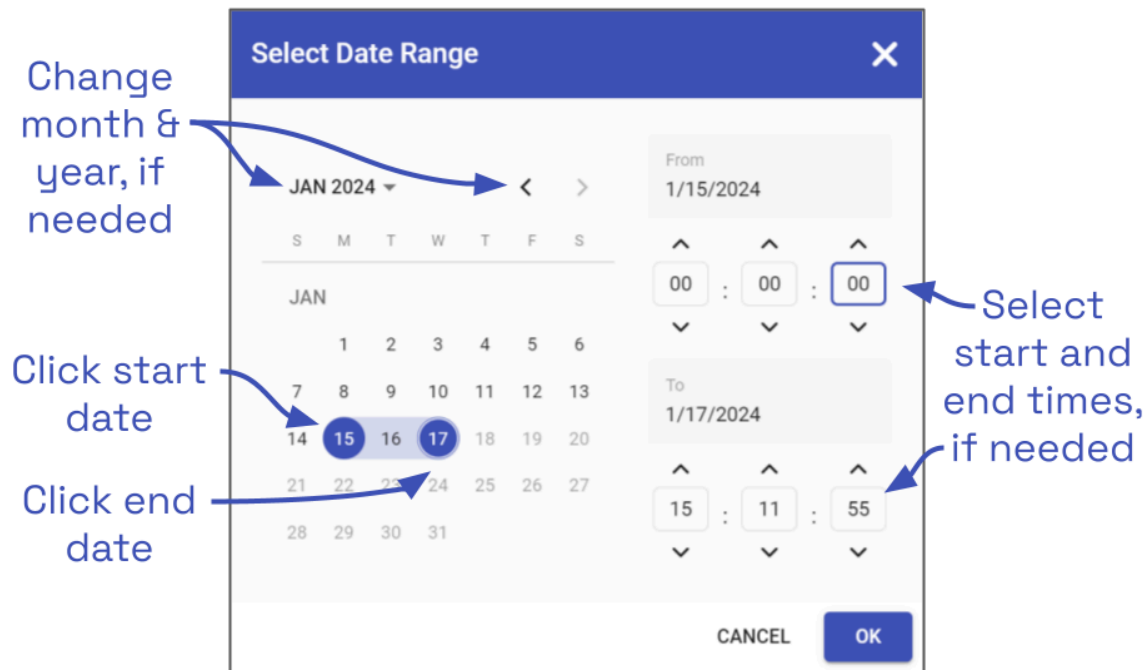
- \* Keep in mind that some filter combinations will not return results. For example, if you search for a specific user and a specific camera, the system will only return results for activity that meets both of those filter criteria.

1. To filter the *Audit Log*, click in the *Filters* field to expand it.

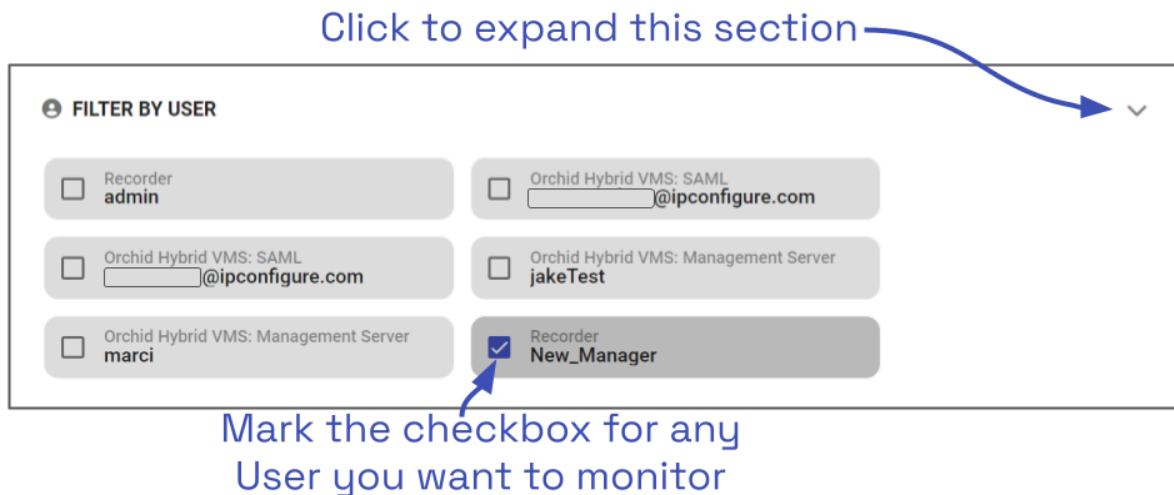


2. To filter the list by date:
  - a. Click on the *Past 24 Hours* button. The *Select Date Range* dialog will open.
    - i. Click on the filter start date, then the end date.
    - ii. Then edit the start and end times, if needed.
    - iii. Click *OK*, when done. (The filter start and end dates will now appear on the button.)
  - b. Click the *Search* button to apply the filter and review the results.
3. To return the date filter to the last 24 hours, click the *X* on the date filter button, then click *Search* or *Refresh*.





4. To filter the list by User:
  - a. Click on the *Filter by User* section to expand it.
    - i. Mark the checkbox next to any User that you want to monitor. (You may select more than one.)
  - b. Click the **Search** button to apply the filter and review the results.
5. To clear the User filter, click the **X** on each User filter button, or unmark each User checkbox. Then click **Search** or **Refresh**.



6. To filter the list by camera:
  - a. Click on the *Filter by Camera* section to expand it.
    - i. Mark the checkbox next to any camera that you want to monitor. (You may select more than one.)
  - b. Click the **Search** button to apply the filter and review the results.
7. To clear the camera filter, click the **X** on each camera filter button, or unmark each

camera checkbox. Then click *Search* or *Refresh*.

**FILTERS** ▼

**FILTER BY USER** ▶

**FILTER BY CAMERA** ▶

☐ 192.168.202.76 ☐ 192.168.202.77 ☐ 192.168.203.16 ☐ 192.168.203.116

☐ 192.168.203.125 ☐ 192.168.203.227 ☐ 192.168.204.191 ☐ 192.168.205.97

☐ \_Meet-Up ☐ Bathrooms ☐ Construction ☒ Dining Hall

☐ Kitchen ☐ Kitchen Sink ☒ Meet-Up

**ADVANCED FILTERS** ▶

8. To filter the list using advanced filters:
  - a. Click on the *Advanced Filters* section to expand it.
    - i. Mark the checkbox next to any authentication type that you want to monitor. (You may select more than one.)
  - b. Click the *Search* button to apply the filter and review the results.
9. To clear the advanced filter, unmark each checkbox, then press *Search* or *Refresh*.

**Audit Logs**

**FILTERS** ▼

**FILTER BY USER** ▶

**FILTER BY CAMERA** ▶

**ADVANCED FILTERS** ▶

**Authentication Type**

☐ All ☒ Recorder ☐ Orchid Hybrid VMS

☐ API (basic) ☐ API (token)

10. To clear all filters, click the *Reset* button.
11. Click the *Search* button to view the updated list.

**Audit Logs**

**FILTERS** ▼

📅 PAST 24 HOURS

Camera Dining Hall ✕ Camera Meet-Up ✕

👤 FILTER BY USER >

📹 FILTER BY CAMERA >

⚙️ ADVANCED FILTERS >

Click to clear all filters

RESET SEARCH

# Defining and Managing Event Subscriptions

Beginning in version 23.6, Orchid Recorder Administrators have the ability to define *Event Subscriptions*. *Event Subscriptions* use the power of ONVIF camera events and external systems to detect activity that may require attention. In very simple terms, Orchid is *subscribing* to a data point so that it receives an update when the data point has news. When the update is received, Orchid will incorporate the video that coincides with the event, if configured to do so.

There are two types of subscriptions: *ONVIF* and *External*. An *ONVIF* subscription uses one of the camera's event "topics" as the trigger. (These are available on cameras that support ONVIF metadata streams.) Available topics will vary by camera but may include things like device errors, motion detection, and temperature changes. So, if a camera has an event topic called *Video Source/MotionAlarm*, you could create a subscription that alerts you when that camera detects motion.

An *External* subscription uses input from outside of the VMS (such as an alarm system or access control system). Using webhooks, Orchid will be configured to receive event information from the external system each time the event occurs in the external system. So, let's say you have an access control system with card readers at each of your exterior doors. Using this feature, you can create a subscription for each card reader. Then, every time someone swipes their card, the external system will send event information to Orchid, and a new event will appear in the list for that card reader.

While Orchid is currently capable of handling these *External* events, they may require a varying amount of additional configuration. Some external systems will be able to send data directly to Orchid in one of three supported formats. Other external systems, however, may require additional software to convert their data into an acceptable format for Orchid. (All of this additional work should be performed by your system administrator or integrator.)

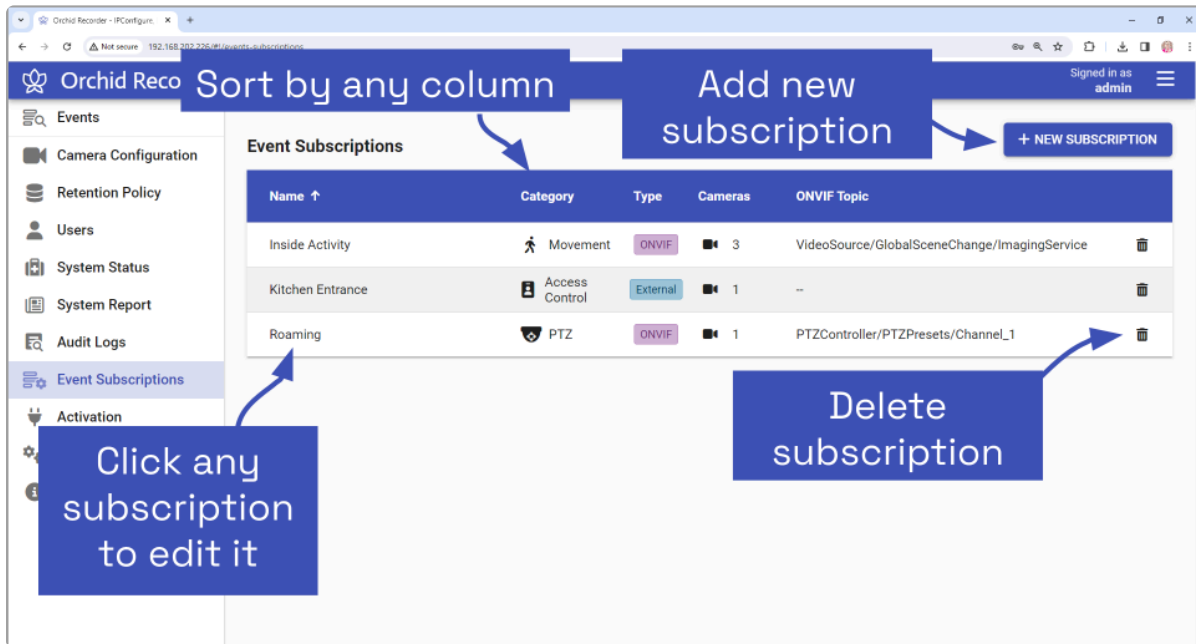
✿ The use of *Event Subscriptions* is optional, but recommended by IPConfigure, because it can help to identify important video quickly.

For information on viewing the actual list of events, please refer to the [Orchid Recorder User Guide](#).

# Access the Event Subscriptions List

1. Open the *System Menu* in the top-right corner of the screen, then select *Event Subscriptions*.

The Orchid Recorder *Event Subscriptions* screen will appear. This screen displays a list of all of the current *Event Subscriptions*, and gives you the ability to add, edit, sort, and delete them.



2. You may click on any row to open the subscription window for review or editing.

\* Much like archived video, as the system reaches the archive threshold, the oldest *Events* will be removed from the list.







## Sort the List

Category ↑

The arrow icon (available for each column in the list) allows you to sort the list.

1. To sort the list, first determine which property you want to use for the sort. Available options are as follows: Name, Category, Type, Camera, and ONVIF Topic.
  - a. **Name:** This option will sort the list by *Event Subscription* name.
  - b. **Category:** This option will sort the list by category. (More details on categories are available below.)
  - c. **Type:** This option will sort the list by subscription type (*ONVIF* or *External*).
  - d. **Camera:** This option will sort the list by the number of cameras associated with the subscription.

- e. **ONVIF Topic:** This option will sort the list by the ONVIF event type associated with the subscription. This field will be blank for *External* events.
2. Click the arrow next to the column heading you wish to sort by. (Each time you click the icon, the order will switch between ascending and descending.)

Name ↑	Category	Type	Cameras	ONVIF Topic
Inside Activity	 Movement	ONVIF	 3	VideoSource/GlobalSceneChange/
Kitchen Entrance	 Access Control	External	 1	--
Roaming	 PTZ	ONVIF	 1	PTZController/PTZPresets/Channe






Each time you click the arrow, the sort order will change












## About Subscription Categories

Each subscription will be assigned to a category. Orchid uses these categories to further classify subscriptions, making them easier to identify and sort in the *Events* list.

### Predefined Categories


The table below provides a general description of each of the predefined categories. These categories and definitions are merely suggestions. System Administrators may interpret and apply these categories differently.

Icon	Category	Description
	Access Control	Events that originate in an access control system
	Alarm	Events that are tied to specific alarm inputs
	Camera Problem	Events that trigger when the camera has a problem
	Camera Tampering	Events that indicate the camera could be compromised
	Door	Events that focus on entrances/exits

	Item	Events that may indicate an item has been left behind or has appeared
	Lights	Events that occur when lights are turned on or off
	Motion	Events that occur when an object does not remain still
	Movement	Events that occur when an object appears to go from one point to another
	Noise	Events that occur when sound is detected
	People	Events that occur when people are detected
	PIR	Events that occur due to the input from a PIR sensor
	POS	Events that focus on point-of-sale activity
	PTZ	Events that occur when a PTZ camera changes positions
	Vehicle	Events that occur when a vehicle is detected
	Wildlife	Events that occur when an animal is detected

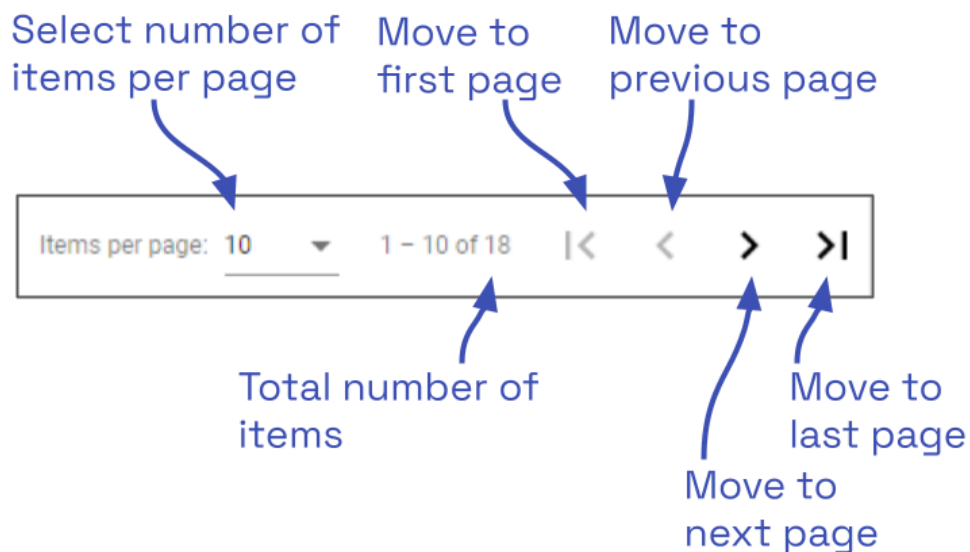
## Custom Categories

Ten custom categories are also available. These will be displayed as numbered icons (from 1 to 10).

	Custom	Administrators may use these custom categories to represent more site-specific events.
---	--------	--

## Page Navigation

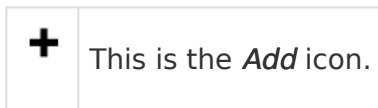
If you have more than 20 *Event Subscriptions*, page navigation tools will automatically appear at the bottom of the list. These navigation tools will help you move from page to page.



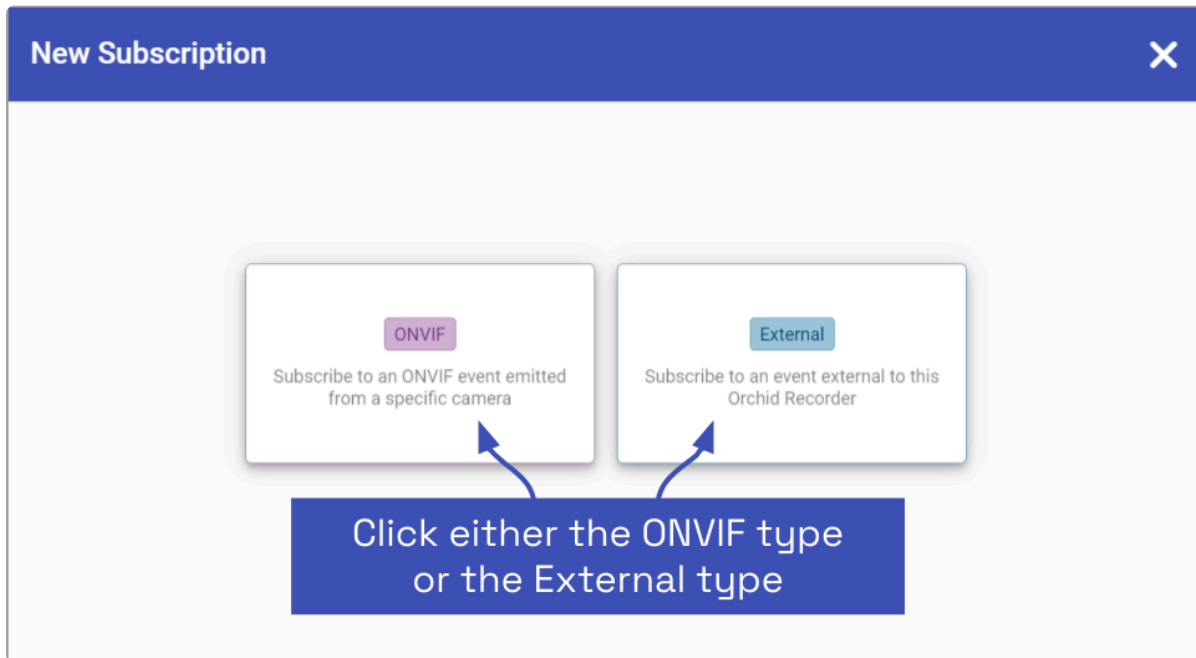
1. Use the Items per page drop-down list to set the number of subscriptions you want to view per screen. Available selections include 10, 20, and 50.
2. Refer to the count to determine which subscriptions are listed on the current screen, and how many total subscriptions are registered to this system.
3. Use the navigational arrows to move to a different screen. From left to right you can: go to the first page, go to the previous page, go to the next page, and go to the last page.



# Adding an Event Subscription



1. To add a subscription, click the **New Subscription** button in the top-right corner of the *Events Subscription* screen. A *New Subscription* screen will open.



2. Start by selecting the subscription type. Click on *ONVIF* or *External*. (Remember: An *ONVIF* subscription relies on information from a camera; an *External* subscription uses input from an external system.)

From here, you will need to follow the instructions for the subscription type that you select.

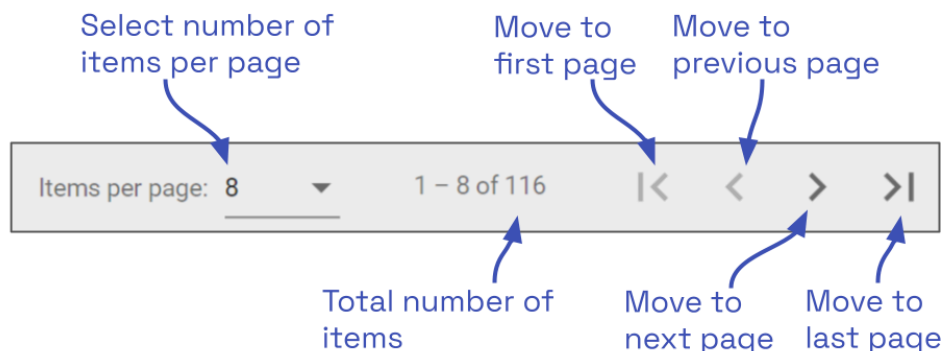
# Adding an ONVIF Subscription

- Once you select the *ONVIF* type, enter a name for the subscription. You may want to use a name specific enough that you can easily identify it in the list (such as *Receiving Entrance Motion*).

The screenshot shows the 'Edit Subscription' form with the following fields and annotations:

- Subscription name \***: A text field containing 'test18'. An annotation 'Enter a name' points to this field.
- Category**: A drop-down menu showing 'Vehicle'. An annotation 'Select a category' points to this field.
- Source camera**: A section with a header and a grid of camera thumbnails. The first thumbnail is labeled 'Construction'. An annotation 'Select the camera that will generate the event' points to this thumbnail.
- ONVIF Topic \***: A text field containing 'VideoSource/GlobalSceneChange/ImagingService'. An annotation 'Select the camera's ONVIF topic' points to this field.
- A **NEXT** button is located at the bottom right.

- Next, use the drop-down list to select a category. The category will provide additional information about the subscription and will improve sorting. (Refer back to the earlier [topic](#) for category definitions.)
- Next, select the source camera. This is the camera that will generate an event whenever the ONVIF topic is triggered.
  - Click on the source camera thumbnail to select it.
  - You may need to scroll down or move to another page to find the camera you want to use. (Use the paging toolbar, if needed.)



- Below the cameras, use the last drop-down list to select the ONVIF topic. The drop-down list should include all of the data points available from the selected camera. Select the

one that will be used to trigger the event.

✿ If you don't see any ONVIF topics available, or you don't see what you expected, the system may not recognize the ONVIF camera events. To remedy this, perform the [Recover Camera](#) procedure on each camera, as needed.

5. Click **Next**.
6. Now, you may select one or more associated cameras. Consider selecting cameras adjacent to the source camera that may provide video relevant to the event.
  - a. The source camera will be preselected. (This camera may be de-selected, if desired.)
  - b. Having associated cameras is optional, but an event notification with video is a win-win.
  - c. Video available in the *Event Viewer* will be limited to the cameras you select here.

**New Subscription** [X]

1 Information — 2 **Associated Cameras** Optional — 3 Review

Select cameras to associate with this event. Only selected cameras will appear in the Event Viewer.

Construction    \_Meet-Up

Select cameras that can provide additional, relevant video (if needed)

BACK NEXT

7. When you're finished selecting cameras, click **Next**.
8. The last step is to review your selections.
  - a. If you need to change anything, click on the step you want to return to (*Information* or *Associated Cameras*).
  - b. When you are satisfied with your settings, click **Save Subscription**. The new subscription will be added to the *Event Subscriptions* list.


## New Subscription ✕

Information

Associated Cameras  
Optional


3 Review

### Information

Name	Category	Type	Source camera	ONVIF Topic
test18	 Vehicle	ONVIF	Construction	VideoSource/Glob...

### Associated Cameras

Construction





Review subscription settings

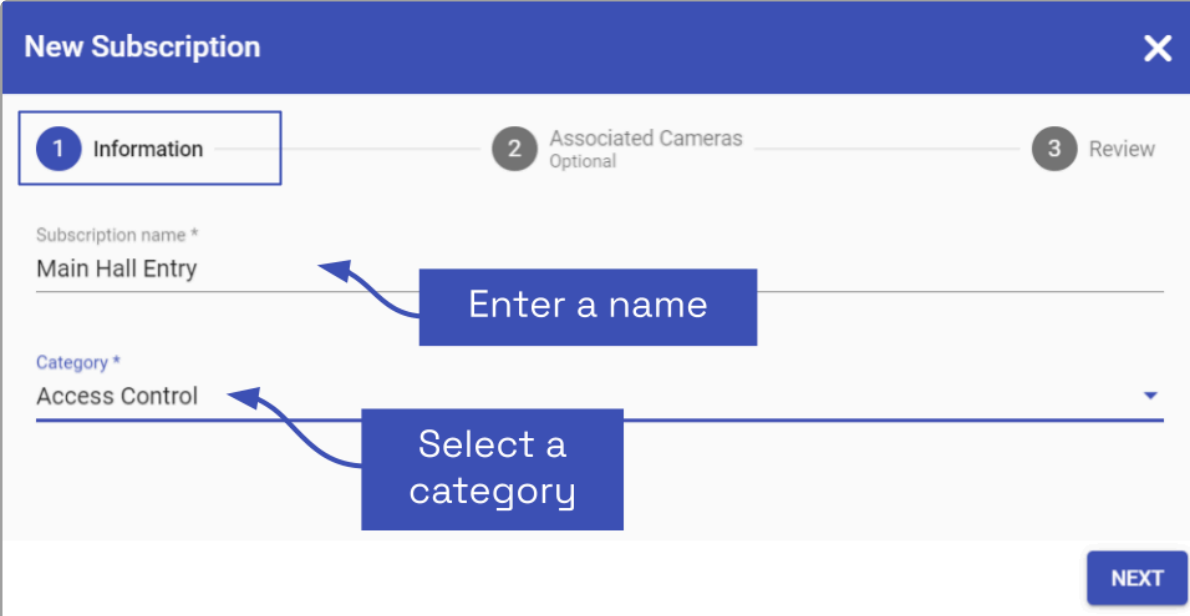
BACK

SAVE SUBSCRIPTION

# Adding an External Subscription

	This is the <i>Copy</i> icon.
	This is the <i>Help</i> icon.

1. Once you select the *External* type, enter a name for the subscription. You may want to use a name specific enough that you can easily identify it in the list (such as *Receiving Entrance Swipe*).



**New Subscription** [X]

1 Information — 2 Associated Cameras Optional — 3 Review

Subscription name \*  
Main Hall Entry

Category \*  
Access Control

Enter a name

Select a category

NEXT

2. Next, use the drop-down list to select a category. The category will provide additional information about the subscription and will improve sorting. (Refer back to the earlier [topic](#) for category definitions.)
3. Click **Next** to continue.

The next screen will allow you to select one or more associated cameras.

**New Subscription** [X]

1 Information 2 **Associated Cameras** Optional 3 Review

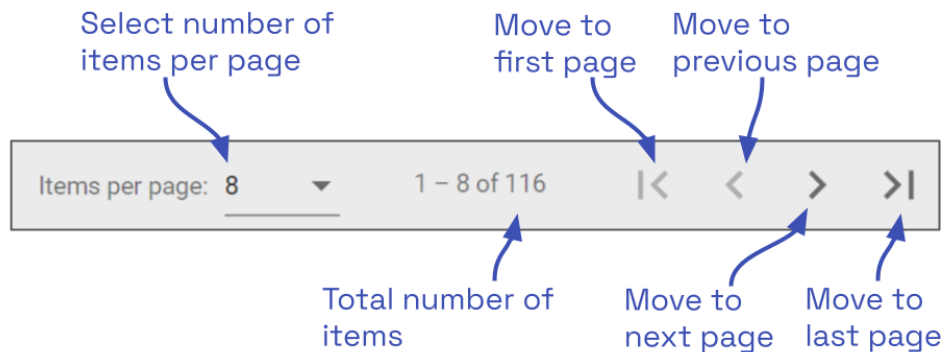
Select cameras to associate with this event. Only selected cameras will appear in the Event Viewer.

\_Meet-Up Construction Dining Hall Kitchen

Select associated cameras

BACK NEXT

4. Select cameras that may provide video relevant to the event.
  - a. Adding associated cameras is optional, but adding video to an event notification makes for a powerful combination.
  - b. Video available in the *Event Viewer* will be limited to the cameras you select here.
  - c. You may need to scroll down or move to another page to find the camera you want to use. (Use the paging toolbar, if needed.)



5. When you're finished selecting cameras, click **Next**.

**New Subscription**

Information Associated Cameras Optional 3 Review

**Information**

Name	Category	Type
Main Hall Entry	Access Control	External

**Associated Cameras**

\_Meet-Up

Review your settings

BACK SAVE SUBSCRIPTION

6. The last step is to review your selections.
  - a. If you need to change anything, click on the step you want to return to (*Information* or *Associated Cameras*).
  - b. When you are satisfied with your settings, click **Save Subscription**. The new subscription will be added to the *Event Subscriptions* list.

When you save the *External* subscription, the system creates a Webhook API URL that contains the subscription ID. The external system will need this URL to send updates to Orchid.

7. For the next step, click on the new external subscription in the list. The configuration dialog for the subscription will open.

**Main Hall Entry**

Information

Name	Type
Main Hall Entry	External

Webhook API URL ?

Main Hall Entry

<http://192.168.202.226/service/events/metadata/external/23>

Associated Cameras

\_Meet-Up

Copy this URL for use in the external system

CLOSE



As you can see, the Webhook API URL for this subscription has been created.

8. Click the **Copy** icon to copy the Webhook API URL.
9. Now you can paste the URL into the webhook settings on the external system. This tells the external system where to send the event data.
10. Click on the **Help** icon for additional information on the proper format for the POST being sent by the external system.

\* Be aware that some external systems will be able to send updates to Orchid directly, using the proper format. Other systems, however, will need additional configuration in order to format the POST so that it is compatible with Orchid. This may require additional software or code that works between the external system and Orchid.



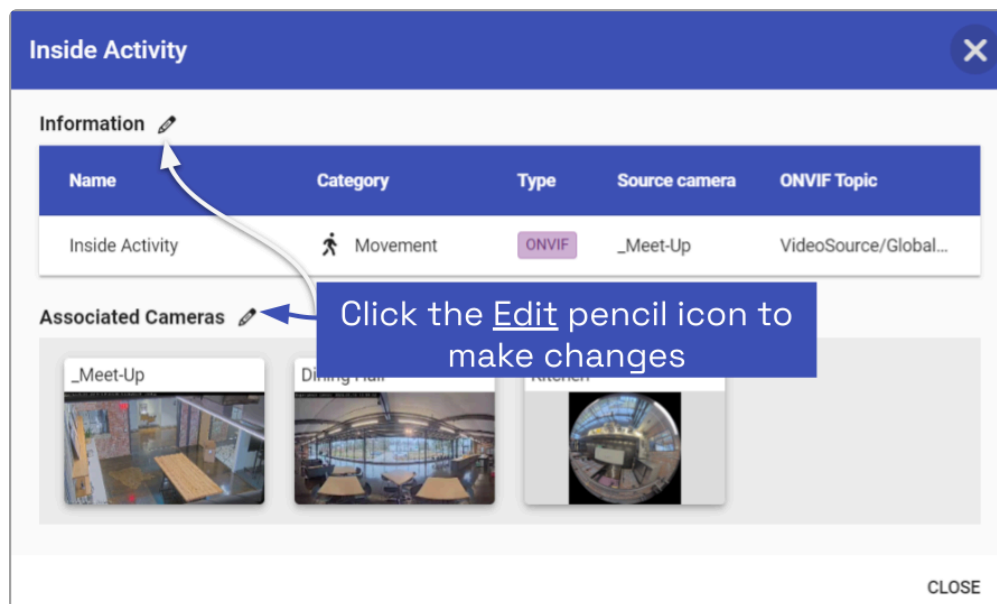
# Editing and Deleting an Event Subscription

	This is the <i>Edit</i> pencil icon.
	This is the <i>Delete</i> trashcan icon.

## Editing an ONVIF Event Subscription

Editing a subscription is pretty simple. The only item that cannot be changed is the subscription type. (If you find that you've made an error regarding the subscription type, you'll need to delete the subscription and add a new one with the correct type.)

1. To edit a subscription, go to the *Event Subscriptions* list, then click anywhere on the row to open it.



2. Click on the *Edit* pencil icon for the *Information* section if you need to change the name, category, source camera, or ONVIF topic. The *Edit* screen will open.
  - a. Edit settings, as needed.
  - b. When changes are complete, click *Next*.
  - c. You will then have an opportunity to edit the associated cameras. Click *Next* to continue.
  - d. When your review is complete, click *Save Subscription*.
3. Click on the *Edit* pencil icon for the *Associated Cameras* section if you need to add or remove cameras.
  - a. Click on a camera thumbnail to select it or de-select it.
  - b. When changes are complete, click *Next*, then *Save Subscription*.

## Editing an External Event Subscription

The only item that cannot be changed is the subscription type. (If you find that you've made an error regarding the subscription type, you'll need to delete the subscription and add a new one with the correct type.)

1. To edit a subscription, go to the *Event Subscriptions* list, then click anywhere on the row to open it.

**Kitchen Entrance** [X]

**Information** [Edit]

Name	Category	Type
Kitchen Entrance	Access Control	External

**Webhook API URL** [?]

`http://192.168.202.226/service/events/metadata/external/3` [Copy]

**Associated Cameras** [Edit]

Kitchen [Thumbnail]

Click the Edit pencil icon to make changes

CLOSE

2. Click on the *Edit* pencil icon for the *Information* section if you need to change the name or category. The *Edit* screen will open.
  - a. Edit settings, as needed.
  - b. When changes are complete, click **Next**.
  - c. You will then have an opportunity to edit the associated cameras. Click **Next** to continue.
  - d. When your review is complete, click **Save Subscription**.
3. Click on the *Edit* pencil icon for the *Associated Cameras* section if you need to add or remove cameras.
  - a. Click on a camera thumbnail to select it or de-select it.
  - b. When changes are complete, click **Next**, then **Save Subscription**.

## Deleting an Event Subscription

1. To delete a subscription, go to the *Event Subscriptions* list, then click the **Delete** icon at the far right end of the row.

2. Click the **Delete** button to complete the process.

# Advanced Settings

---

Administrators can now edit many of the Orchid configuration file settings from within the software. (This means that you may be able to eliminate the extra steps that used to be associated with editing the configuration file.)

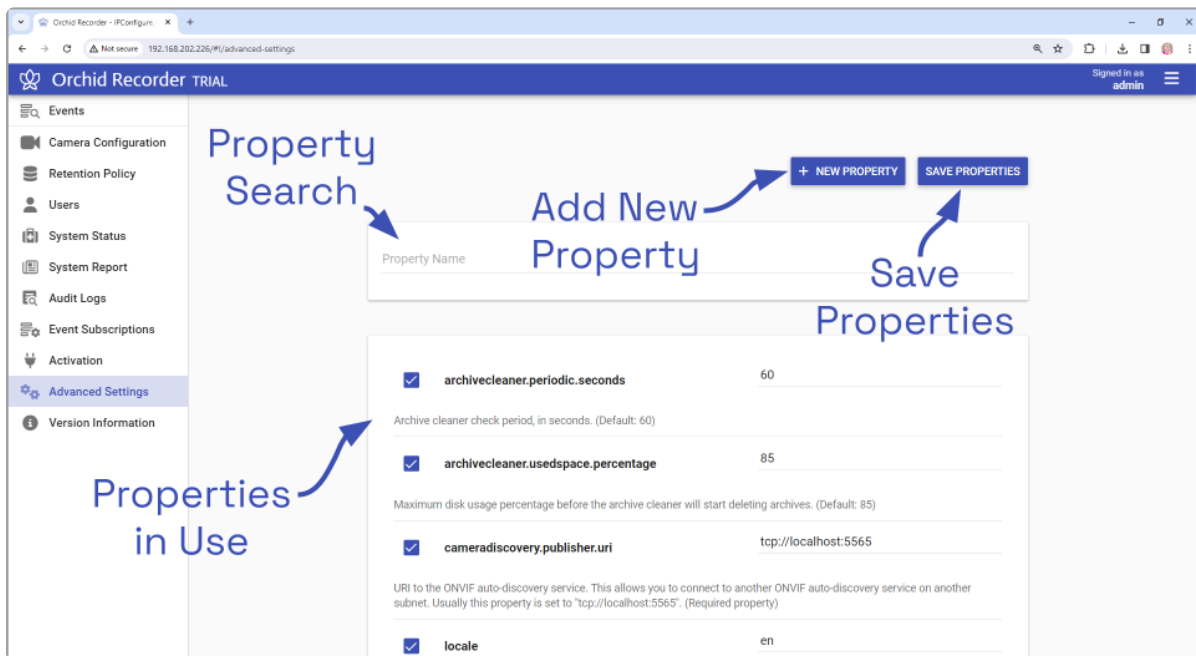


An Administrator is the only role with the ability to access the *Advanced Settings* feature.

# Accessing the Advanced Settings

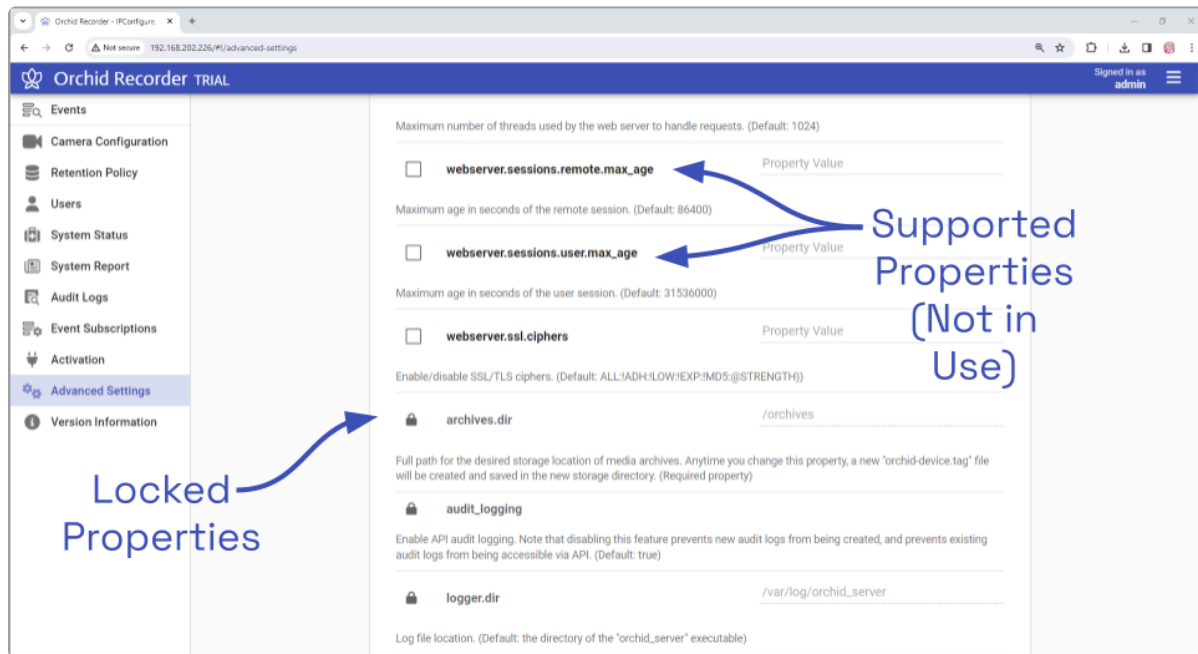
1. To access the *Advanced Settings* screen, open the *System Menu* in the top-right corner of the screen, then select *Advanced Settings*.

The *Advanced Settings* screen lists all of the supported configuration properties, and allows you to add and edit properties. A *marked* checkbox indicates that the setting is currently in use.



If you scroll down toward the bottom of the list you will find properties that are unmarked and locked (as in the image below).




An *unmarked* checkbox indicates that the setting is supported, but is not currently being used. A *locked* setting represents a setting that is critical for system reliability and stability. These settings can only be changed by editing the configuration file directly.



✿ Administrators have the ability to Lock some of the properties that would normally be available through *Advanced Settings*. (See below.)

For details on how to edit the locked properties, please refer to the *How to Edit a Configuration File* section (for the appropriate operating system), and the *Orchid Recorder Configuration Settings* section (both of which are in the [Orchid Recorder Installation Guide](#)).

# Editing Properties

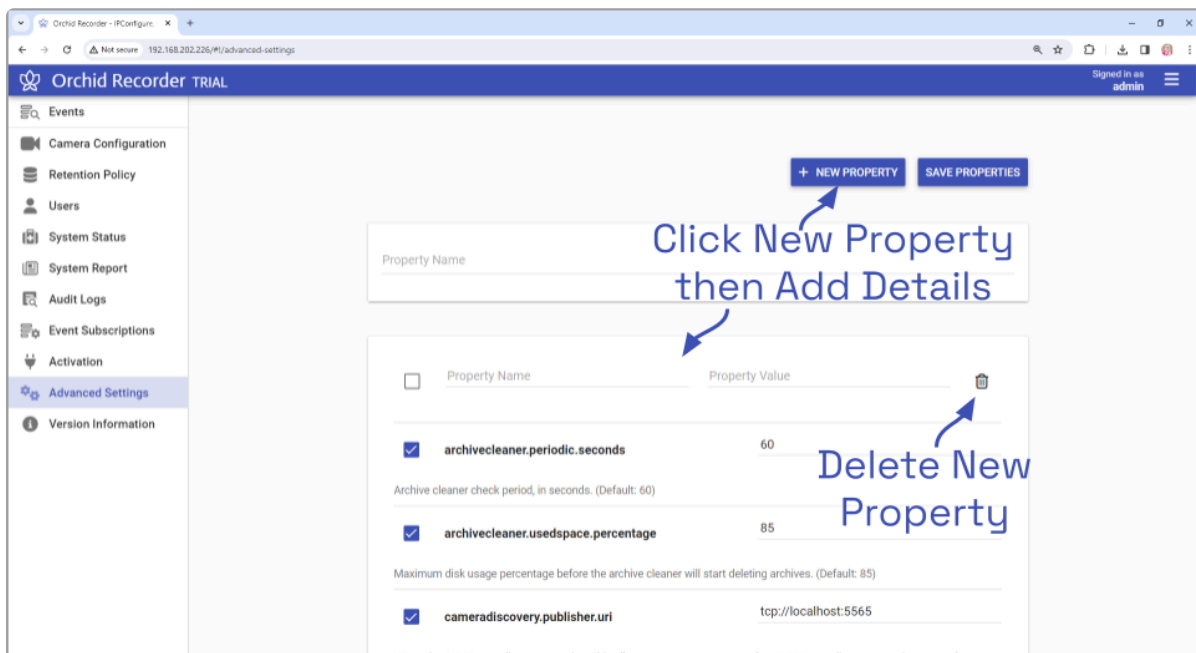
	This indicates that the property is in use.
	This indicates that the property is supported, but not in use.
	This indicates that the property must be changed by editing the Configuration file directly*.

\*For details on how to edit the Configuration file in [Windows](#) or [Linux](#), please refer to the Orchid Recorder Installation Guide.

## Creating a New Property

The Advanced Settings feature allows Administrators to add new, undocumented properties to the Configuration file.

1. Click the **New Property** button at the top of the *Advanced Settings* screen. A new, blank property field will appear at the top of the list.

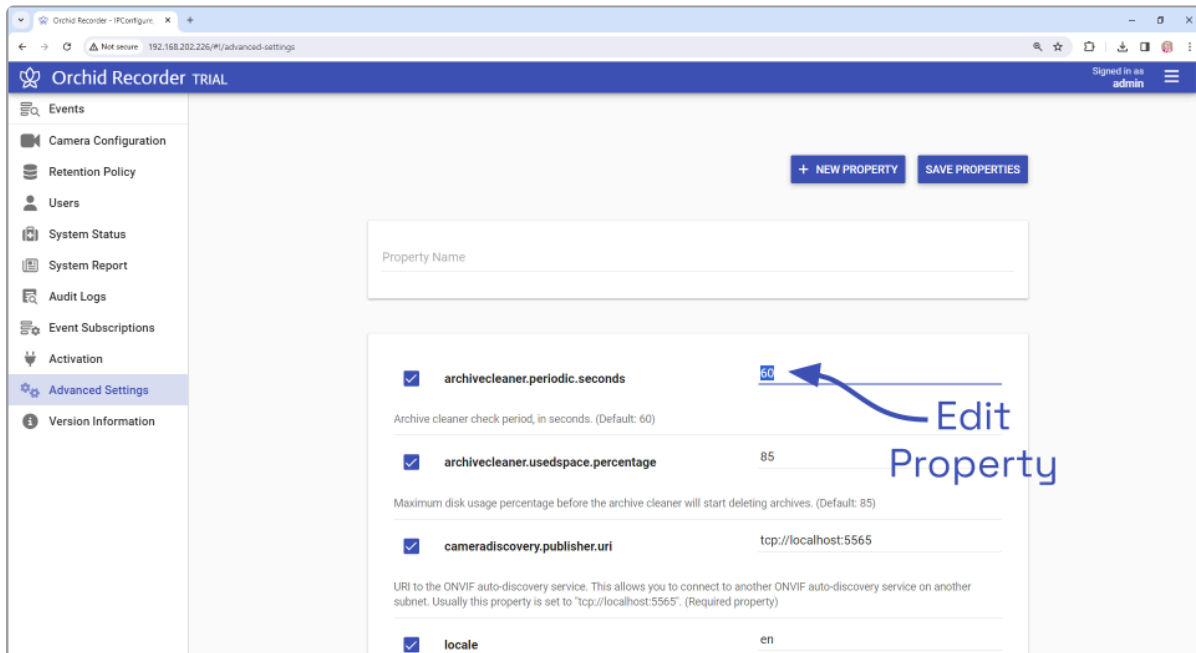


2. Mark the checkbox to activate the new property. (The property must be enabled and saved in order to be added to the Properties list.)
3. Enter a name for the new property in the *Property Name* field. [Property names are not allowed to contain colons (:), equals signs (=), blank spaces, or control characters.]
4. Click the **Tab** key to move to the *Property Value* field.

5. Enter a value for the property.
6. Click the **Tab** key to move to another field.
7. If you decide not to add the new property, just click the **Delete** (Trash Can) icon.
8. If you have no other changes to make, click the **Save Properties** button. Be sure to complete the save (as described later).

## Editing Advanced Properties

1. To change an active property, click into the field displaying the property value.



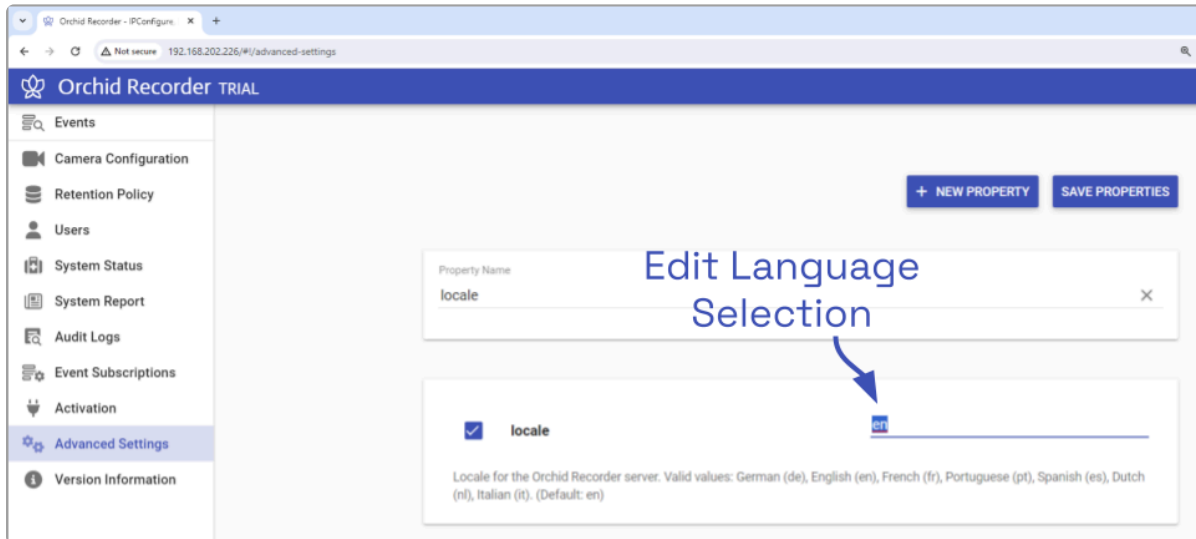
2. Type in a new value.
3. Click the **Tab** key to exit the field or click into another field.
4. If you have no other changes to make, click the **Save Properties** button. Be sure to complete the save (as described later).

## Editing the Locale Property

You may change the user interface language by simply editing the locale property.

1. First, find the **locale** property in the list. (We used the **Search** feature. Learn more about that in the next section.)
2. Make sure the checkbox for the **locale** property is marked.
3. Click into the field displaying the property value.





4. Type in the two-letter language designation that represents the language you want to use. Orchid Recorder now supports the following languages: de (German), en (English), es (Spanish), fr (French), it (Italian), nl (Dutch), pt (Portuguese), and ru (Russian).
5. Click the **Tab** key to exit the field.
6. If you have no other changes to make, click the **Save Properties** button. Be sure to complete the save (as described later).

## Activating a New Property

1. To activate an unused property, click the checkbox to add a mark.
2. Click into the field displaying the property value and enter a new value.
3. Click the **Tab** key to exit the field or click into another field.
4. If you have no other changes to make, click the **Save Properties** button. Be sure to complete the save (as described later).

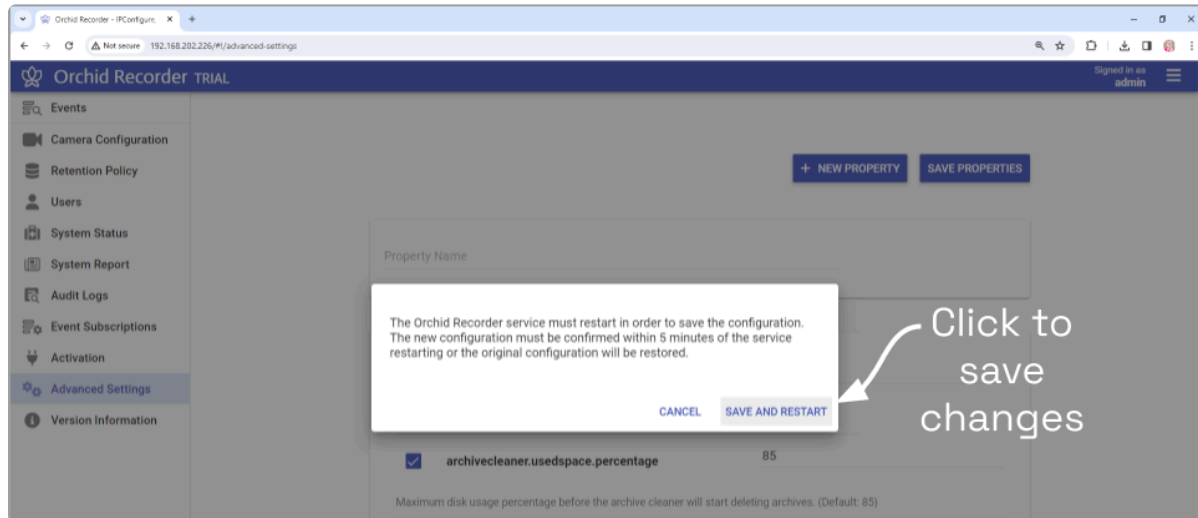
## De-Activating a Property

1. To de-activate a property currently in use, click the checkbox to remove the mark.
2. If you have no other changes to make, click the **Save Properties** button. Be sure to complete the save (as described below).

## Saving Changes to Advanced Properties

Anytime you make changes to these properties, the Orchid Recorder service must be restarted in order for the changes to take effect. Be sure to follow this procedure completely to ensure changes are saved.

1. To save changes, click the **Save Properties** button. You'll receive a message that asks you to confirm changes and begin the restart.



2. Click the **Save and Restart** button to save your changes. The service will restart (as shown in the image below.)

The Orchid Recorder service is restarting in order to save your configuration changes. Once the service starts back up, you will need to confirm the new settings within 5 minutes or the service will restart once more and the previous configuration will be restored.

3. When the restart is complete, you must instruct the system to keep the changes. (You must do this within 5 minutes or the changes will be discarded.) Click the **Confirm Properties** button (shown below) to keep the new settings.

Would you like to keep the advanced settings changes? If you do not confirm, the Orchid Recorder service will automatically restart within the next five minutes and the previous configuration will be restored.

Click Within 5  
Minutes to Keep  
Changes

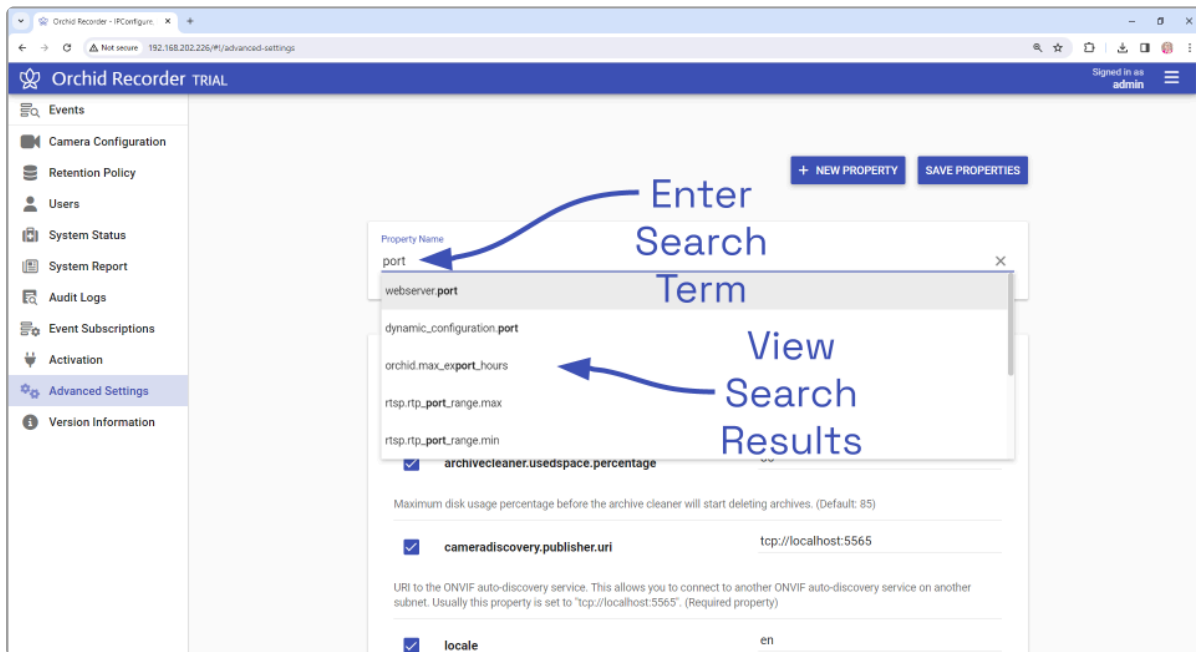
CONFIRM PROPERTIES

# Property Search Feature

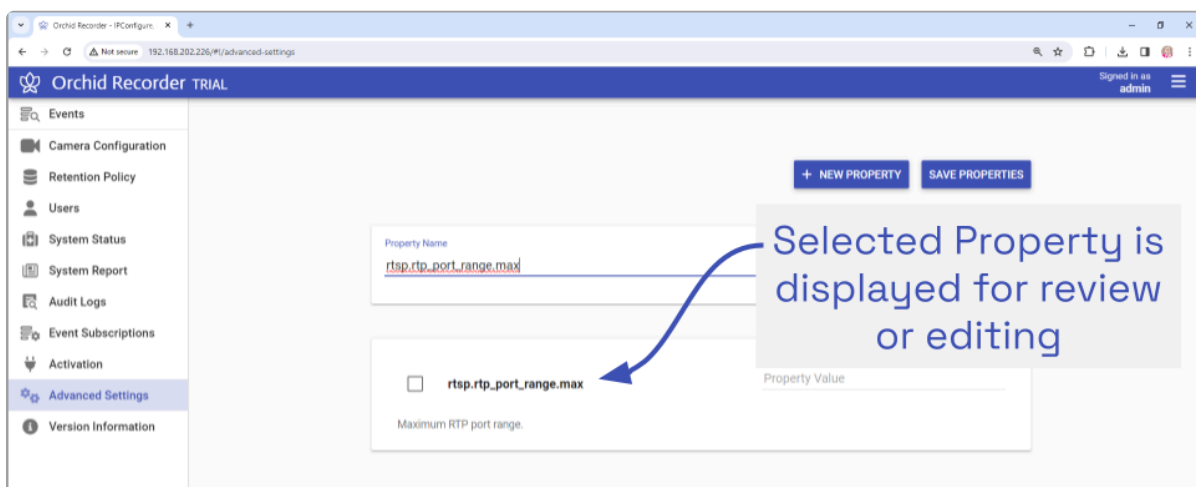
To find a specific property quickly, use the search feature on the *Advanced Settings* screen. The *Property Name* field appears at the top of the screen and supports a single-term search.

1. Click into the *Property Name* field to start your search.
2. Type one word that identifies what you're looking for. (In the example below, we entered *port* as the search term.)

The software will automatically list all of the properties that match the search term.



3. If the list of results contains the property you are looking for, click on that result. The selected property will be displayed for review or editing.



4. If the list of results does not contain the property you are looking for, enter a new search

term in the *Property Name* field.

5. To return to the complete *Advanced Settings* property list, delete the contents of the *Property Name* field.

# Version Information

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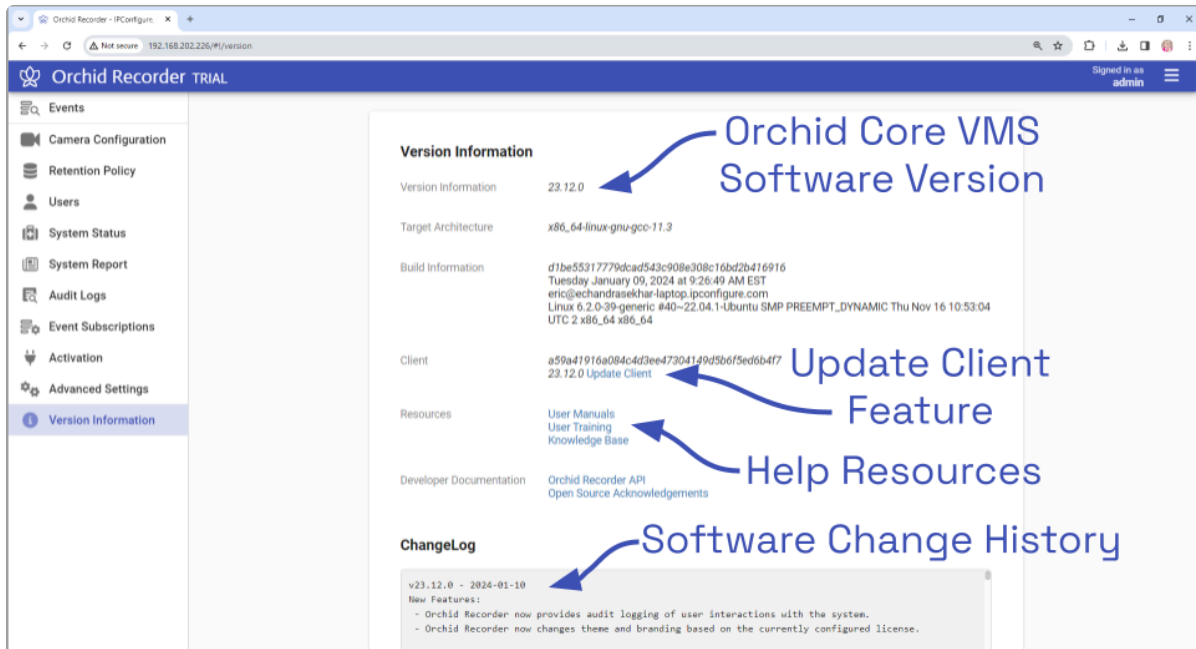
The *Version Information* screen provides very specific information about the Orchid Recorder software that is installed on your server. It also provides access to the *Update Client* feature, help resources, and important information for IPConfigure technology partners.

# Accessing the Version Information Screen



This is the *Hamburger* icon.

1. To access the *Version Information* screen, click on the *Hamburger* icon in the top-right corner of the screen, then select *Version Information*.

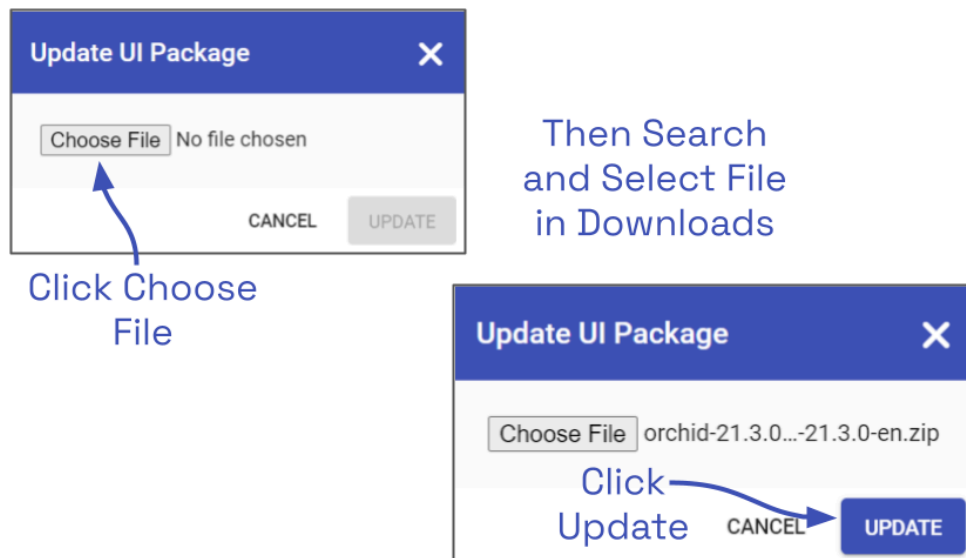


# Update Client Feature

The *Update Client* feature is used to select and apply a different UI Package file to the Orchid Recorder client machine. This would allow for a quick and easy user interface update (without the need for a completely new installer).

## Update Client

1. To view available files, use your web browser to navigate to the following location:  
<https://download.ipconfigure.com/orchid/i18n>
2. If you find a file you need to use, download the file. (The version number named in the file that you download must match the version number of your installed Orchid software in order for the update to work.)
3. In the *Client* section of the *Version Information* screen, click on the *Update Client* link to access the *Update UI Package* screen.



4. Click the *Choose File* button.
5. Locate and select the file that you downloaded, then press *Open*.
6. Click the *Update* button to apply the new file.

✿ In order to view Orchid in another language, the *locale* property must be modified. For details on modifying the *locale* property, please refer to the [Advanced Settings](#) section.

# Advanced Topics

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As you work with Orchid Recorder, you may encounter issues that are not typical of daily operation and should be addressed by an advanced user. Please review these topics if you need extra help. For in-depth explanations and additional topics, we encourage you to check our [Knowledge Base](#).



# Degraded State

In rare cases, Orchid Recorder will experience an event that will cause the system to enter a degraded state. To protect archive data, while in this degraded state, Orchid does not record new video or clean out old video archives.

The two subsections below provide details regarding causes and resolutions for the degraded state.

## Orchid Recorder License Errors

If Orchid Recorder encounters a license error, it will cause the server to enter a degraded state (like that pictured below), and an “Entered Degraded State” event will be logged in the *System Report*.



This can happen if:

- The Orchid Recorder database is moved to a different system after installation, or if multiple hardware components (like hard drives) are replaced on the Orchid Recorder. This causes the licensing information in Orchid Recorder's database to no longer match the system on which Orchid Recorder is installed. (These actions disrupt the Machine ID which is an integral part of the license information.)
- A time-limited license expires.

In this degraded state, Orchid Recorder does not record video but will allow for playback of existing recordings.

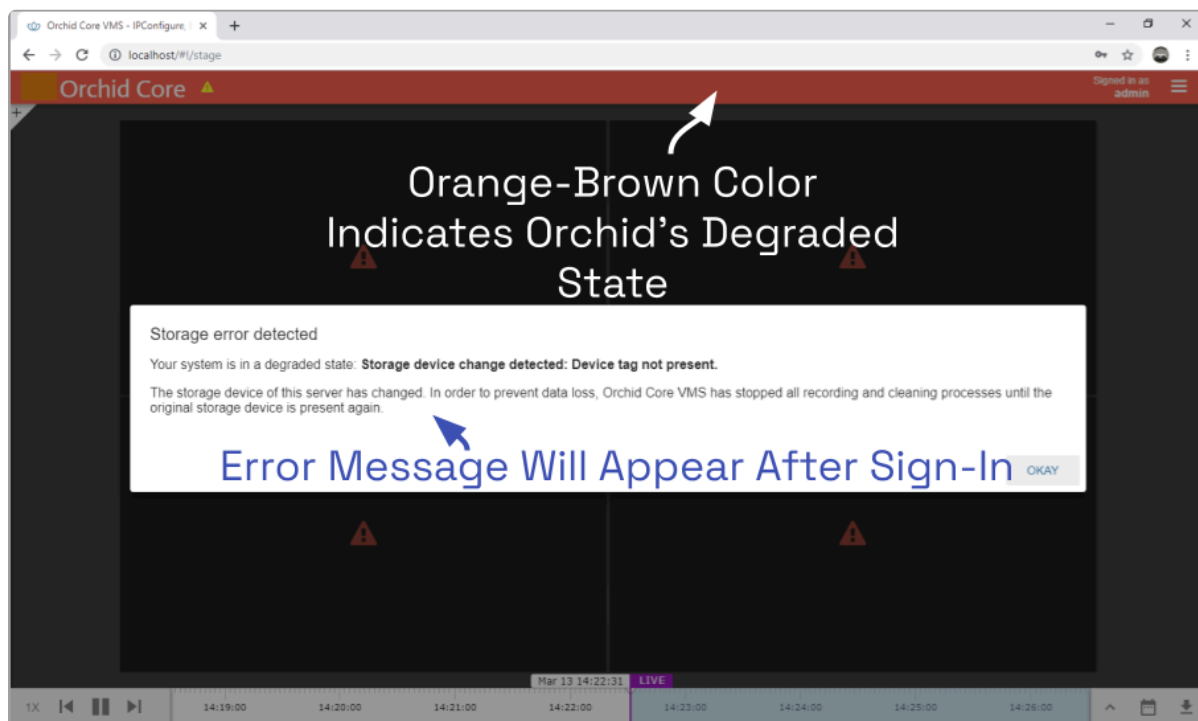
1. If this license error occurs, you will receive an error upon signing in. You can click **OKAY** to continue running Orchid Recorder in this degraded state, but you will see differences in Orchid Recorder's appearance and capabilities:

- a. The dialog header will appear in an orange-brown color which indicates Orchid Recorder is running in a degraded state.
  - b. Orchid Recorder will not record any new video. (Previously recorded video, however, will be available for playback.)
2. Possible solutions include the following:
- a. If the database was moved or there was a hardware failure, contact IPConfigure Technical Support for a new license. Then follow the [Modifying an Existing License](#) procedure to update your license.
  - b. If a time-limited license expired, you may apply an old, non-time-limited license (if you have one), or you may contact IPConfigure to purchase a new license.

## Orchid Recorder Storage Device Errors

Orchid Recorder has a way to alert Administrators and Users that there is a problem with a storage device.

During normal operation, Orchid Recorder periodically checks on the storage device. To do this, Orchid looks for a specific file (orchid-device.tag) that is saved in the defined “archives” directory. If Orchid does not find the file, or if it does not match the original, Orchid interprets this as a storage error. When this happens, the Orchid Recorder will enter a degraded state (like that pictured below), and an “Entered Degraded State” event will be logged in the *System Report*.



This can happen if:

- The Orchid Recorder “archives” folder is moved to a location different than the one

specified in the properties file. This causes Orchid Recorder to lose contact with the orchid-device.tag file (that is stored in the “archives” folder).

- There is an actual hardware failure, in which case, Orchid Recorder will lose contact with the orchid-device.tag file. An alert to the failure of the storage device is critical, especially if the system is configured to store data in an external hard drive or a RAID device.
1. If this storage error occurs, you will receive an error upon signing in. You can click **OKAY** to continue running Orchid Recorder in this degraded state, but you will see differences in Orchid Recorder’s appearance and capabilities:
    - a. The dialog header will appear in an orange-brown color which indicates Orchid Recorder is running in a degraded state.
    - b. Orchid Recorder will disable all communication and recording with the cameras. Neither live streams nor archive video will be available.
  2. Possible solutions include the following:
    - a. If the “archives” folder was moved, edit the properties file (orchid\_server.properties) so that the archives.dir property points to the actual location of the “archives” folder. Then restart the Orchid Recorder service. (For help with these tasks, please refer to the [Orchid Recorder Installation Guide](#).)
    - b. If there was a problem with the storage device, bring the storage device back to working order (to include the “archives” folder with all of the media files and the original orchid-device.tag file).

# Trouble Adding a Camera

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If you're having trouble adding a camera to the system, refer to the list of common issues.

- Make sure all of the cameras are connected to the network.
- If you are adding multiple cameras at once, make sure that they all use the same username and password, and they are all on the same subnet. You may also need to check to see if there are multiple IP addresses assigned to the Orchid Recorder computer. If this is the case, you will likely have to revise the Orchid Recorder properties. Please refer to the Knowledge Base article [Orchid Not Auto-Discovering Cameras](#) for more details.
- If you are adding a camera manually, make sure that the IP address is correct.
- If you can't find a specific camera on the Register Cameras screen, it may not support ONVIF auto-discovery. Switch to Manual mode and add the camera manually.
- If the camera is old or unusual, it may not support the ONVIF standard. In this case, you will need to register the camera manually, and you will need to select the Generic RTSP driver.
  - When you select this driver, Orchid Recorder will automatically populate the RTSP Stream URL field. You'll need to update the IP address portion of that entry. You may also need to check the camera's documentation to ensure the syntax is correct.
  - If you add a camera using the Generic RTSP driver, you will not be able to configure the camera settings in Orchid Recorder. Connect to the camera directly to configure settings.
  - If you need to use the Generic RTSP driver, but it does not appear to be available, check to see if it has been disabled.
- If you're working in an Orchid version older than 22.12, Axis cameras require that a special username and password be set on the camera for use with the ONVIF standard. Please refer to the Knowledge Base article [Configure ONVIF User On Axis Cameras](#) for more details.
- If you are running Orchid Recorder in WebRTC mode, and a newly added camera doesn't produce video, there may be several reasons why the video is not working. (Please refer to the [WebRTC Troubleshooting](#) section for additional help.)

# Trouble Viewing the Camera Stream in Orchid Recorder

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If Orchid Recorder is not receiving a live video stream from a camera:

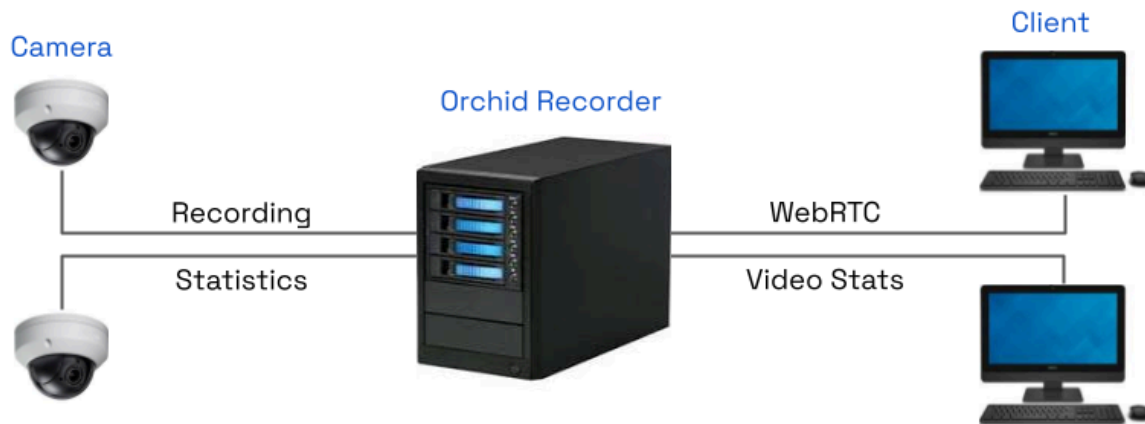
- Try selecting a lower-resolution stream at the Player. (If you haven't already configured Secondary streams, refer to the [Multi-stream Capabilities](#) and [Edit Camera Stream Settings](#) sections for more info. Keep in mind that all Primary and Secondary streams, if they are set to record, will consume additional disk space.)
- Use the [System Status](#) feature in Orchid Recorder to test the camera preview, restart the camera stream, or verify the network connection between the camera and Orchid Recorder. (This may lead you to try the [Recover Camera](#) feature.)
- Perform the check associated with [packet loss](#).
- If you are running Orchid Recorder in WebRTC mode, but one of your Players appears to be stuck in Low-bandwidth mode, check the camera stream settings. Make sure that the Encoder is set to H264. (WebRTC mode does not support JPEG or MPEG4.) (For additional troubleshooting suggestions, please refer to the [WebRTC Troubleshooting](#) section.)

If you have issues with recorded video being unavailable, you may need to check a variety of things:

- Use the *Streams* section of Orchid Recorder's [Camera Configuration](#) feature to make sure that the recording style is set to record video.
- Use Orchid Recorder's [Retention Policy](#) to see how much video is actually being stored for any given camera. For critical cameras, you may need to increase the desired retention setting.
- There may be an issue with the system time setting on the Orchid Recorder. This can occur when the system time is reset (for daylight savings time, for example). To fix this issue, you should restart the Orchid Server service. (Refer to the appropriate [Windows](#) or [Linux](#) section of the [Orchid Recorder Installation Guide](#) for more details.) If that doesn't work, you should restart the computer on which Orchid Recorder is installed.
- There are a small number of ONVIF compatible cameras that display unusual behavior (which can prevent Orchid from being able to record video from these cameras). Using the [Recover Camera](#) feature may resolve the issue with these cameras.
- There may be an issue with packet loss due to network infrastructure. If the packet loss rate is high, Orchid Recorder may not be able to successfully record the video. There are a couple of ways to check for packet loss. Please refer to the next topic for more details.

# Checking for Packet Loss

If video in Orchid Recorder is unavailable or degraded, you may be experiencing packet loss in one of two locations: either between the camera and Orchid Recorder, or between Orchid Recorder and the viewing client. The diagram below indicates which check methods are available to test the different connections.



## Run a Check Using the Recording Statistics

Orchid Recorder provides a way to gauge the performance of the recording stream through the *Camera Configuration* screen. The Recording Statistics feature displays packet loss and bit rate numbers for the video being transmitted from the camera, and also shows when the last video file was recorded.

1. To view the Recording Statistics, go to the *Camera Configuration* screen, click on one of the camera entries, and then click on the **Expand** icon to view the Recording Statistics section.

Expanded Recording Statistics		
Recording Statistics ▾		
The following statistics are based on the primary stream.		
Average Window	Packet Loss	Bitrate
1m	0%	1.7 Mb/s
5m	0%	2.1 Mb/s
15m	0%	2.2 Mb/s
Last Video File Written		
01/16/2024, 04:27:41 PM EST - 15.2 MB		

The Recording Statistics will provide the percentage of packet loss at the recording stream, averaged over three time periods: 1 minute, 5 minutes, and 15 minutes. A comparison of these averages may give you some indication of the transmission quality both currently and over a longer period of time.

The goal, of course, is to have 0% packet loss on the recording stream so that the archived video is not degraded. The presence of packet loss, even a minimal amount, will have some impact on the quality of the archived video. Video degradation may result in some frames being unviewable, and some frames being marred by video artifacts. If packet loss is high enough, the system may not receive enough data to record any video.

When the Recording Statistics show that packet loss is present, review the three averages to assess the situation. If all of the averages are very low, this suggests that the recording stream has intermittent problems with minor levels of packet loss. In another example, if the 1-minute average is high and the 15-minute average is low, this may indicate that the camera stream is currently having an issue, but over longer periods, is likely transmitting without problems. However, if the 15-minute average is high and the 1-minute average is low, this may signal that the camera stream's connection is not sufficient, which may be a more significant problem, prompting further investigation.

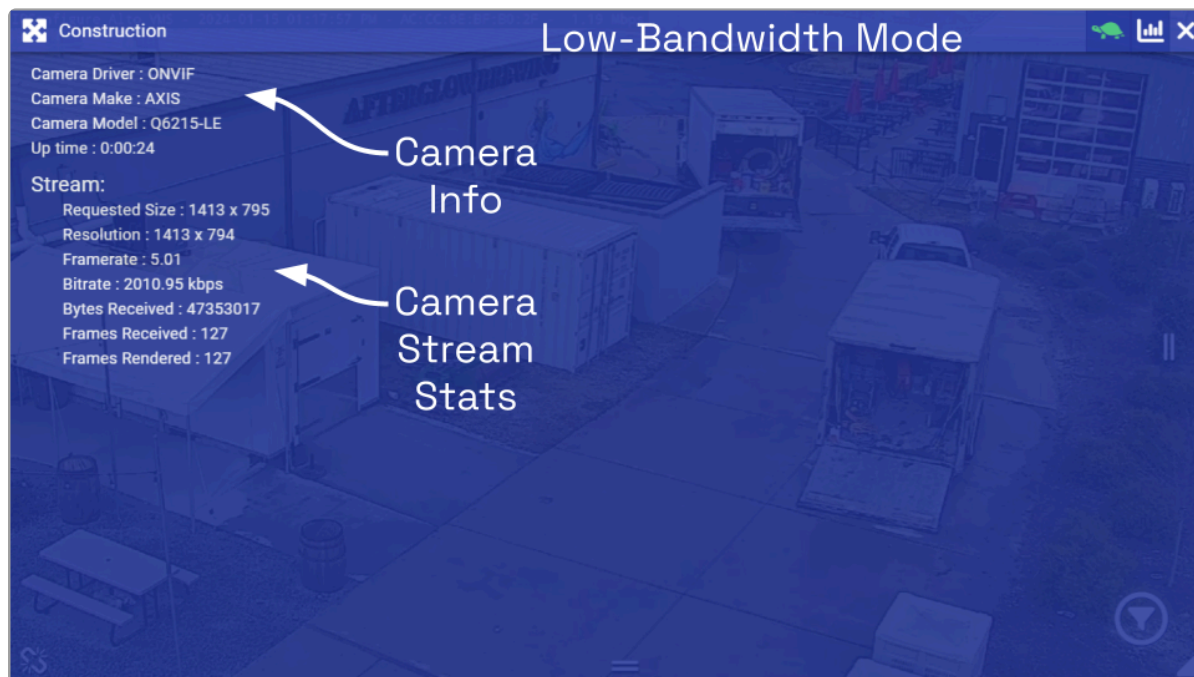
## Run a Check Using Video Statistics

In each of its operating modes, Orchid Recorder will allow you to access statistics for any of the Players on the *Stage*. This may help you in diagnosing issues between the Orchid Recorder and clients.

1. To view Player statistics, position the mouse over the image and click on the ***Statistics*** icon in the header.

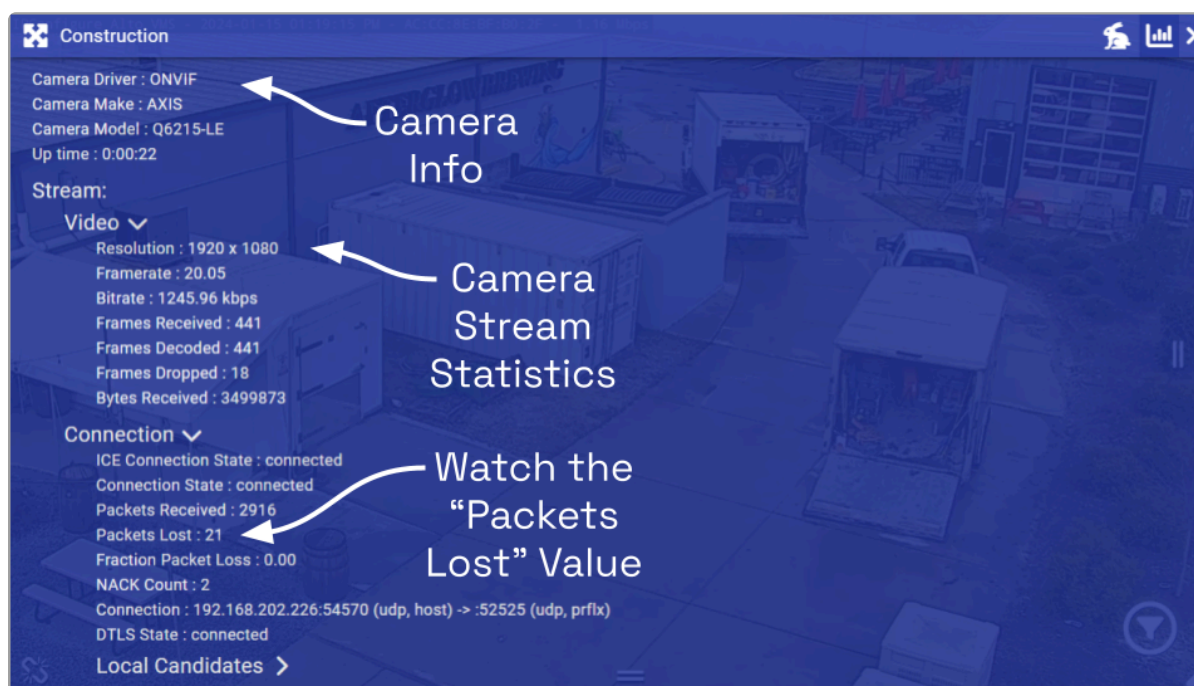
In Low-bandwidth mode, the statistics overlay will display a few details about the camera and performance. A comparison of the frames received and the frames rendered should give some indication of how well the video is decoded.





WebRTC mode delivers an expanded list of statistics, which include frames received, decoded, and dropped, plus packets received, and packets lost. If the packets lost stat increases continuously over a period of 30 seconds or more (versus an isolated burst), there may not be sufficient bandwidth between the Orchid Recorder and the Orchid Recorder client.

In addition, this mode provides data points that can be used to identify the candidate pair that is being used to connect the server and the client, as well as the status of this connection. For more details on these statistics, please refer to the [WebRTC Statistics](#) section.



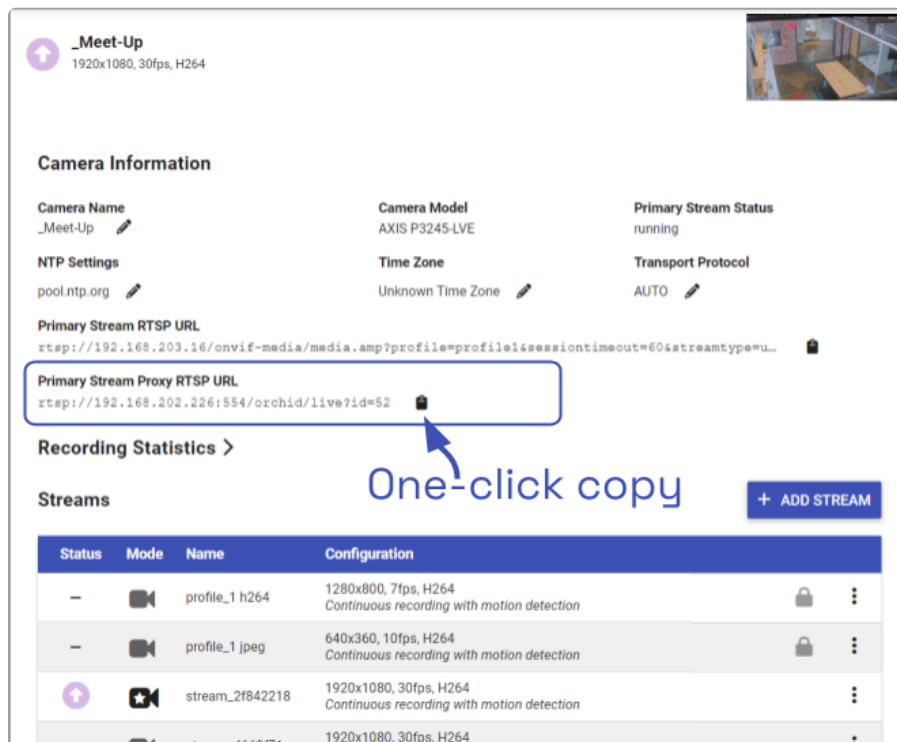


## Run a Check Using VLC

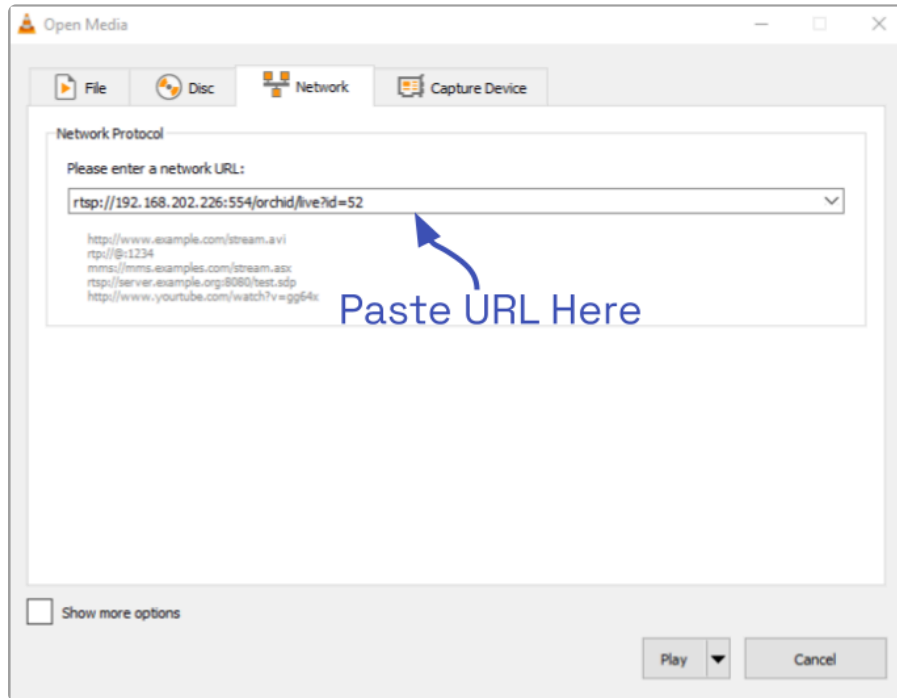
This check provides an alternate method to evaluate the video between the Orchid Recorder and the client using a third party utility. Before starting this test, ensure you have VLC installed on the Orchid Recorder. For installation instructions, please visit VLC's documentation here: [https://wiki.videolan.org/Documentation:Installing\\_VLC/](https://wiki.videolan.org/Documentation:Installing_VLC/)

In this example, we'll check for packet loss between the Orchid Recorder and the viewing client.

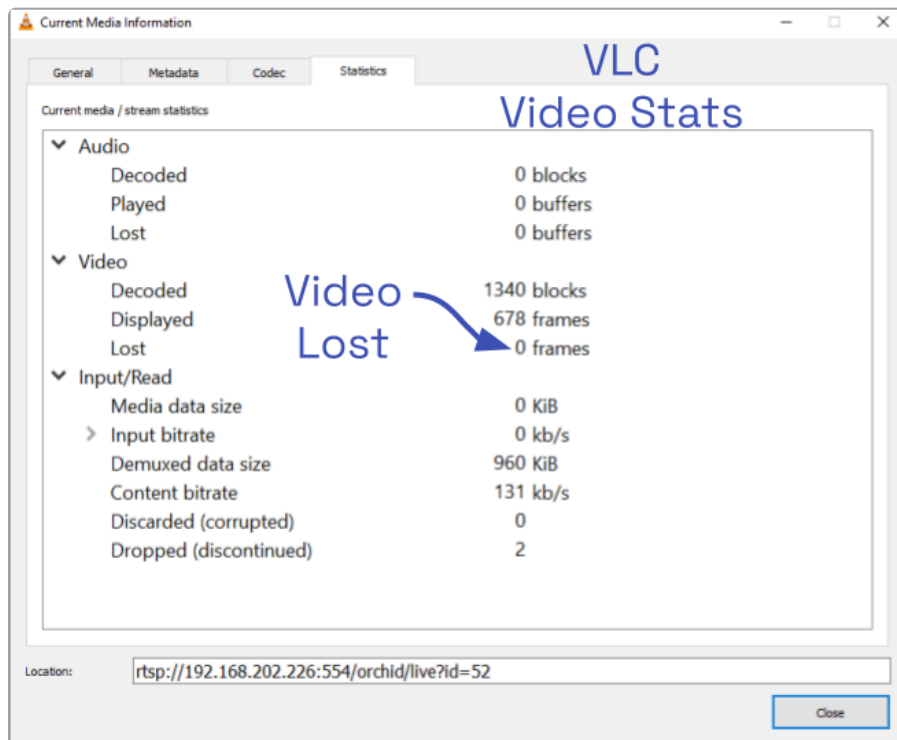
1. To start, you'll need to get the *Primary Stream Proxy RTSP URL* for the camera that is giving you trouble. Go to the [Camera Information](#) screen and click on the *One-click Copy* button to copy the URL.



2. Open VLC on the Orchid Recorder. When VLC opens, click **CTRL+N** on the keyboard to open the *Open Media* window.
3. In the *Please enter a network URL* field, enter the *Primary Stream Proxy RTSP URL* for the camera you want to stream and enter the camera's RTSP credentials — these are the credentials you used when you registered the camera to Orchid Recorder.



4. Click the **Play** button to start streaming the camera in VLC.
5. Right-click on the video in VLC (or the blank black area if the video has not started playing) and select **Tools**, then **Media Information**. The *Current Media Information* window will open.
6. Click the **Statistics** tab. Under the video section, it will list the number of decoded blocks, displayed frames, and lost frames. If the *Lost* frames count is increasing, the video stream is dropping frames.



In this example, only a few frames were lost after streaming for a few minutes. This is acceptable and will not prevent video display. However, if the number of lost frames is steadily increasing over a period of 30 seconds or more (as opposed to an isolated burst), there is a network issue that will prevent our software from successfully displaying video.

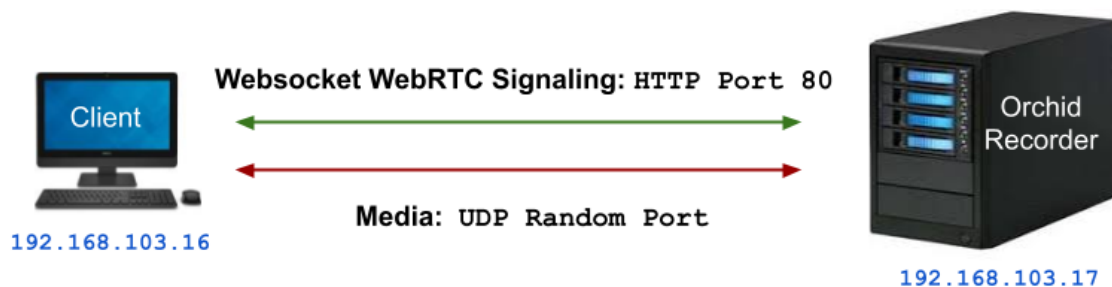
Once network related issues are resolved and VLC is able to stream video from the server without significant frame loss, the Orchid Recorder client will be able to display video.

# About WebRTC

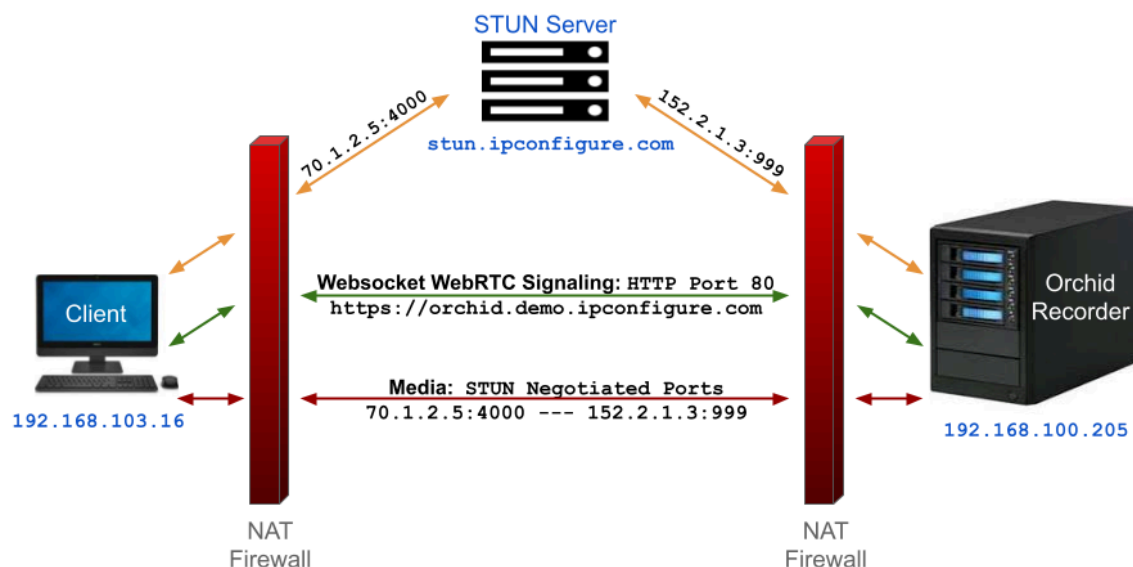
Web Real-Time Communication, or WebRTC, provides users with another method for connecting an Orchid Recorder with a client, so that the client may view good quality, live and recorded video. One of the main benefits of WebRTC is that it allows for viewing full-bandwidth video without requiring the client device to download and use a Plugin. In WebRTC mode, the web browser decodes and renders video using accelerated Graphics Processing Unit (GPU) technology. This method requires fewer resources than software decoding which allows for good quality video for a greater number of Players.

Using Interactive Connectivity Establishment (ICE) and a Session Traversal Utilities for NAT (STUN) server, the system identifies and tests several connection candidates to find the best way to connect the server and client for direct media transfer. With a successful connection, WebRTC is able to break through the barriers that sometimes make cross-network communication difficult.

The diagram below illustrates a simple example of direct media transport. In this case, the server and the client are both on the same network, so there is no barrier to a direct connection.



The next diagram illustrates a more complicated situation. The server and the client are on different networks, and are each protected by a firewall. In this case, ICE identifies the best path for connecting the server and the client. Then a STUN server identifies the public IP addresses of the server and the client, and works out a way for them to connect. The media can then be transported between the server and client using the STUN-negotiated ports.



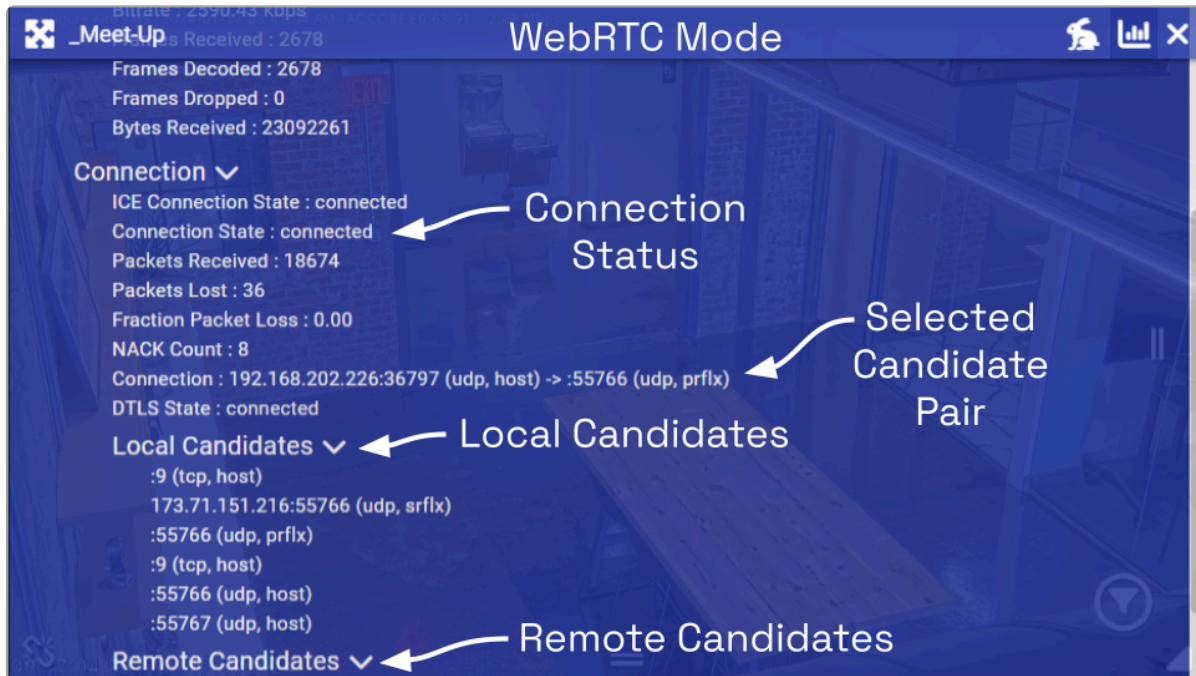
In order to use WebRTC with servers behind a firewall, Orchid Recorder must have access to a STUN server. By default, Orchid Recorder will use `stun.ipconfigure.com`, which is publicly available on the internet. For complete details, please refer to the [Orchid Recorder Installation Guide](#).

Beginning in version 23.6, Orchid Recorder supports WebRTC retransmission by default. With retransmission, the web browser can resend packets of video to Orchid to make sure that the packets arrive. This improvement allows WebRTC to provide full-bandwidth video even in marginal network conditions.

# WebRTC Statistics

In WebRTC mode, Orchid Recorder supplies not only the standard statistics (like those in Low-bandwidth mode), it also supplies WebRTC statistics. These statistics are available as an overlay on any Player and can be used in troubleshooting.

\* Available statistics will vary depending on the web browser in use.



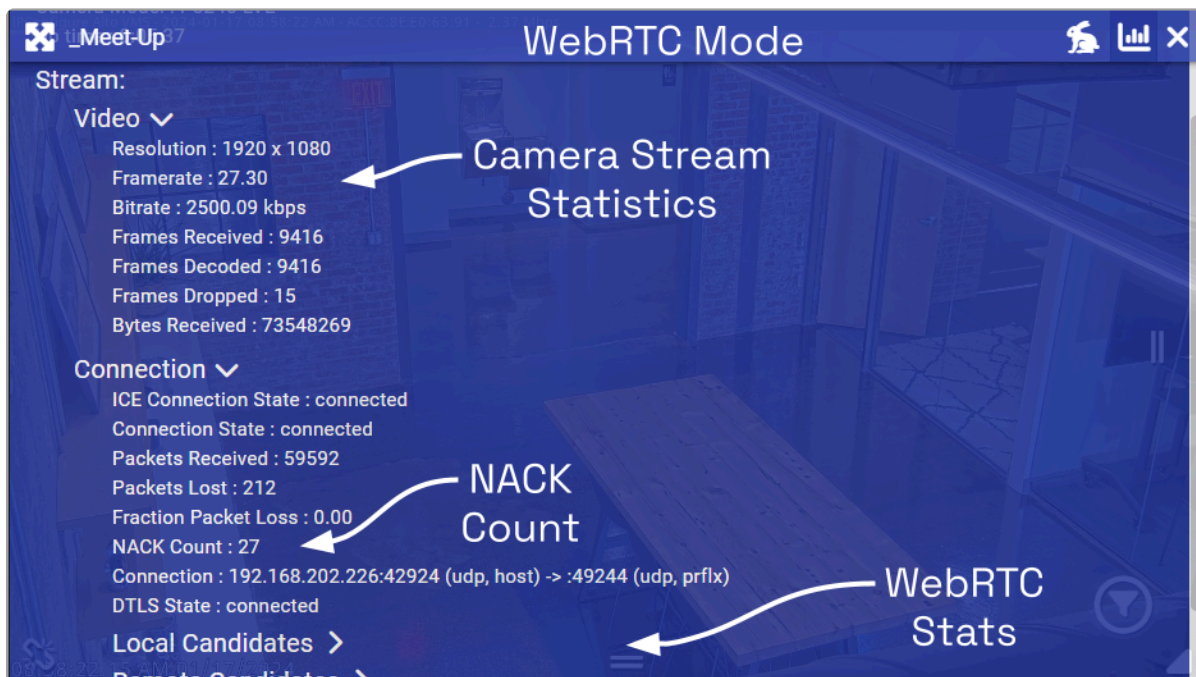
The statistics under the *Stream* heading may include the following:

- **ICE Connection State:** This indicates the state of the ICE connection. When “connected,” ICE has identified the best way to connect the server and client.
- **Connection State:** This indicates if there is a working connection between the server and the client.
- **Packets Received:** This represents the number of video data packets that are transferred from the server to the client.
- **Packets Lost:** This represents the number of video data packets that are dropped during the transfer from the server to the client. (If this number continues to increase, video quality will decrease.)
- **Fraction Packet Loss:** This represents the number of packets lost divided by the number of packets expected.
- **Frames Received:** This is the number of complete video frames that were transferred from the server to the client.
- **Frames Decoded:** This is the number of video frames that the client has decoded.
- **Frames Dropped:** This is the number of video frames that the client could not decode and

were eliminated.

- **Bytes Received:** Total number of bytes transferred from the server to the client.
- **Connection:** This statistic provides the addresses of both the local and the remote candidates in use, which communications protocol is in use at each candidate, and the candidate types.
- **DTLS State:** This provides the status of the attempts to negotiate a secure connection.

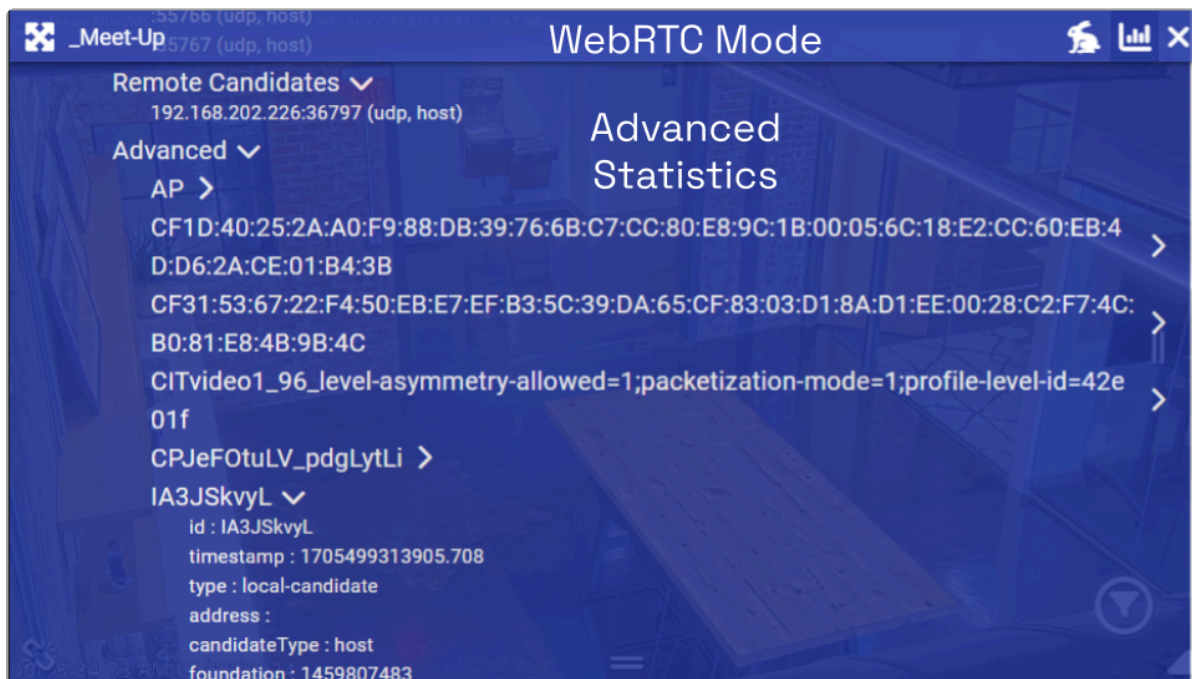
When WebRTC Retransmission is enabled (which is now the default), the WebRTC statistics will also display the NACK count. NACK stands for *negative acknowledgement*. This value indicates how many frames of video the browser expected, but didn't receive. This also indicates how many frames will need to be retransmitted.



Sub-sections of the *Stream* statistics include *Local Candidates* and *Remote Candidates*. These statistics provide insight into the connection candidates that ICE has found and which ones are being used to transport video. Individual entries for the local candidate and remote candidate are presented, and provide the same information as the *Connection* statistic listed above.

The *Advanced* group of statistics provides very detailed information regarding the selected candidate pair, certificates, and video data transport.





For additional details on these and other WebRTC statistics, please refer to documentation that is readily available online. Here's a sample: <https://testrtc.com/webrtc-internals-documentation/>



# WebRTC Troubleshooting

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If you encounter trouble as you are running Orchid Recorder in WebRTC mode, refer to these troubleshooting tips.

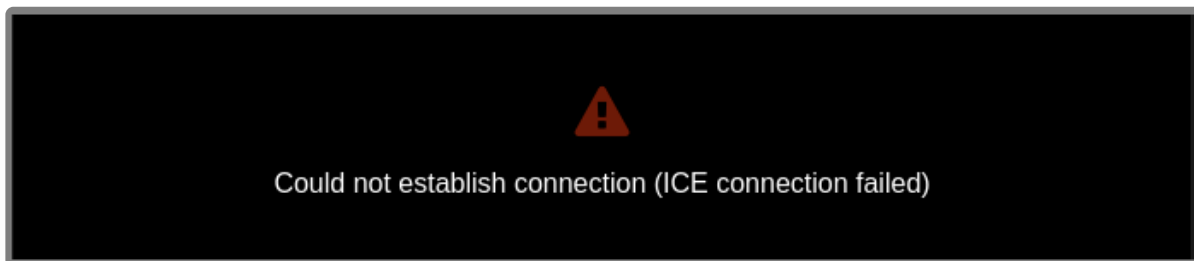
## If you don't have video:

1. Activate the Player statistics to see if the *ICE Connection State* reads *connected*.
2. If the *Ice Connection State* does not read *connected*, then none of the connection candidates worked.
3. Make sure that the STUN server is properly setup and configured. (The Orchid Recorder properties file uses default settings to configure the STUN server. Review these settings and make changes, as necessary, using the [Advanced Settings](#) feature. More detailed information about enabling a STUN server is available in the [Orchid Recorder Installation Guide](#).)
4. If the connection still fails, the network may be incompatible. Switch to Low-bandwidth mode. (See also, *Incompatible Network* later in this topic.)

## If you don't have video, but the *ICE Connection State* is connected:

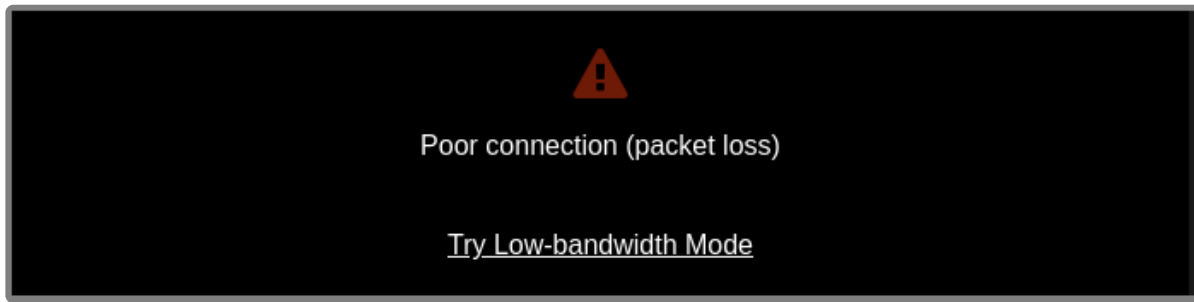
1. Check the *Bytes Received* stat.
2. If the system is receiving bytes, check for Packet Loss.
3. If packet loss exists, try lowering the bitrate (by editing the camera stream settings).
4. Try selecting a lower-resolution stream (if available) to view video.
5. If it's not already enabled, try using WebRTC retransmission. (Please refer to the [Orchid Recorder Installation Guide](#) for instructions.)

## If this error appears, the system was not able to establish an ICE connection:



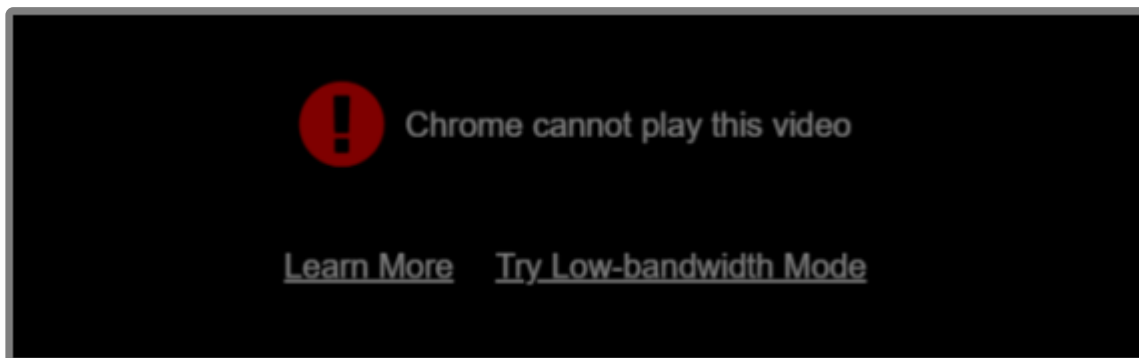
1. You may need to setup a STUN server. (Do this by editing the `webrtc.stun.host` and `webrtc.stun.port` settings using the [Advanced Settings](#) feature.)
2. You should also check your network.

**If this pop-up error message appears on a Player, the system may have already detected a certain level of packet loss:**



1. Decrease the bitrate (by editing the camera stream settings).
2. Decrease the resolution (by editing the camera stream settings or by selecting a lower-resolution stream, if available).
3. If it's not already enabled, try using WebRTC retransmission. (Please refer to the [Orchid Recorder Installation Guide](#) for instructions.)
4. If none of these solve the problem, switch to Low-bandwidth mode.

**If this pop-up error message appears on a Player, the system may not be decoding the video properly:**



1. Decrease the bitrate (by editing the camera stream settings).
2. Decrease the resolution (by editing the camera stream settings or by selecting a lower-resolution stream, if available).
3. If it's not already enabled, try using WebRTC retransmission. (Please refer to the [Orchid Recorder Installation Guide](#) for instructions.)
4. If none of these solve the problem, switch to Low-bandwidth mode.

## Video encoder:

WebRTC does not support JPEG or MPEG4, so it is important to make sure that the camera stream is set properly.

1. Open the *Stream Settings* screen to check the settings.

2. Make sure that the Encoder is set to H264.

## GPU decoding:

The web browser you are using may be utilizing GPU to decode video. Some cameras are not compatible with GPU.

1. If you have tried other fixes, try disabling GPU decoding in your web browser. (Please refer to your web browser documentation for details.)

## Incompatible Network

When viewing WebRTC on a local network, such as when both Orchid Recorder and your web browser are on the same LAN, some browsers require the use of mDNS instead of regular IP addresses. In certain circumstances, mDNS may fail and streaming video over WebRTC will not be possible. This can happen when Orchid Recorder and your web browser are on different local network subnets, and when an operating system doesn't natively support mDNS (such as Windows 7). If this failure occurs, consider disabling the mDNS behavior.

In Chrome, you can disable the mDNS behavior by doing the following:

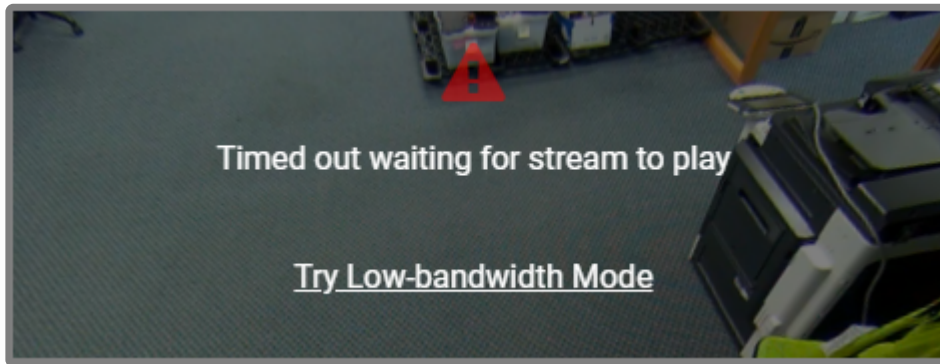
1. Navigate to *chrome://flags*.
2. Search for *mDNS*.
3. At the *Anonymize local IPs exposed by WebRTC* setting, use the drop-down list to select **Disable**.

For a more detailed review of this issue, please refer to the article on the Orchid Recorder knowledge base at [support.ipconfigure.com](https://support.ipconfigure.com).

# Additional Troubleshooting

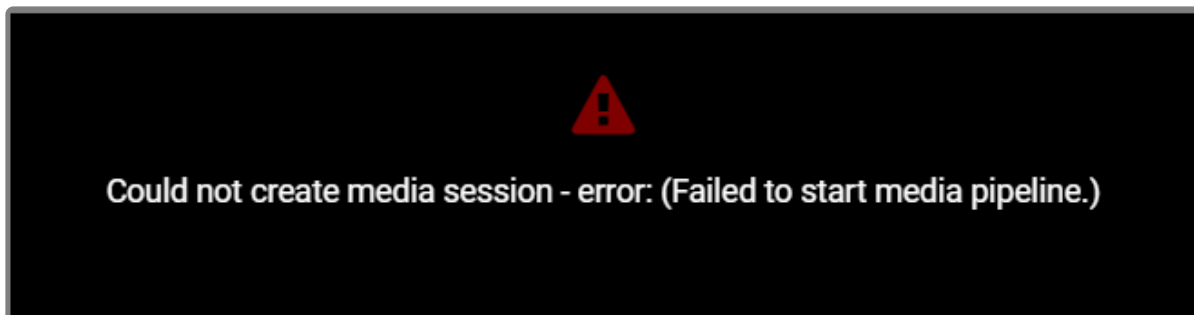
The following are some additional errors that you may encounter in Orchid Recorder.

**If this error appears, it is taking too long for the system to receive enough video data to display the video:**



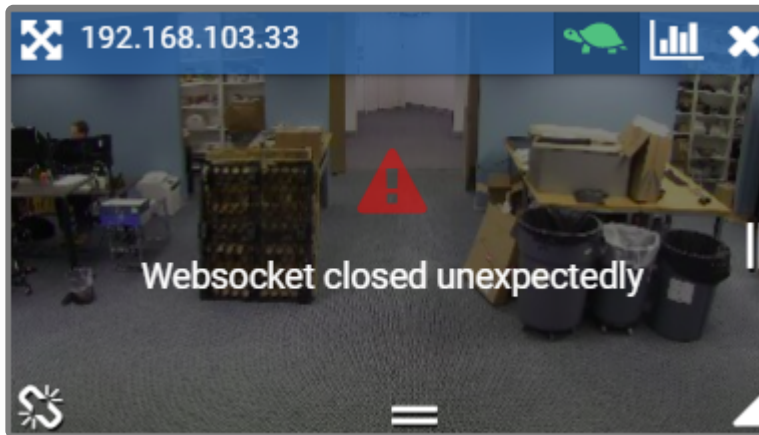
1. Decrease the bitrate (by editing the camera stream settings).
2. Decrease the resolution (by editing the camera stream settings or by selecting a lower-resolution stream, if available).
3. If it's not already enabled, try using WebRTC retransmission. (Please refer to the [Orchid Recorder Installation Guide](#) for instructions.)
4. If none of these solve the problem, switch to Low-bandwidth mode.

**If this error appears, the system can no longer see the camera:**



1. Use the *System Status* feature to check on the camera.
  - a. Click the **Restart** button to attempt to reconnect.
  - b. Click the **Verify** button to see if the camera is still connected to the network.
2. Check to see if the camera has power.

If this error appears, the backend server probably shut down the video stream:




1. Go to the *System Status* screen and use the troubleshooting buttons to check/restart the camera stream.  
(This error is not likely to appear.)

If this error appears, the connection between the client and server has dropped:

### Orchid Recorder Service Unresponsive

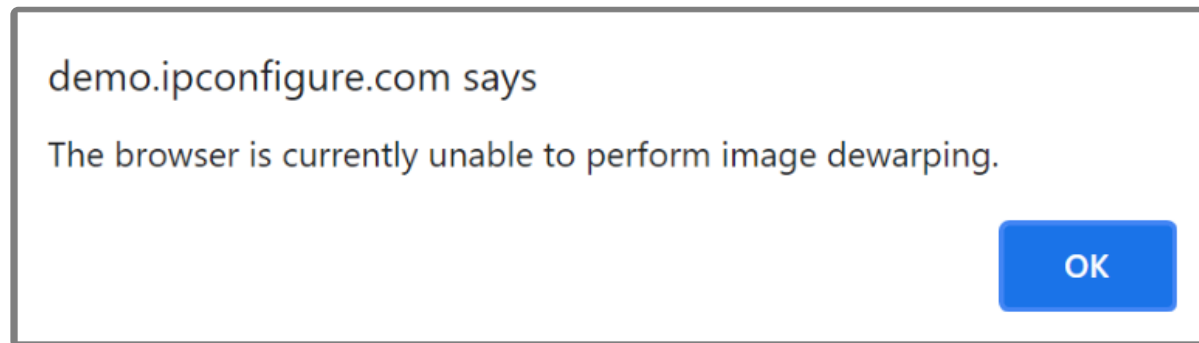
It seems that the Orchid Recorder server is offline or otherwise unreachable. The server should restart itself.

If this error persists or you do not know how to proceed, please open a ticket on our [support portal](#).



1. Press the *Reload* button to refresh the Orchid Recorder page (which may solve the problem).
2. If reloading doesn't solve the problem, contact [Support](#).

**If this error appears, the browser may not have enough resources to draw the dewarped image:**



The process to display a dewarped image on the *Stage* requires extra work from the web browser. If you have more than one dewarped camera on the *Stage*, that extra work is multiplied, making it increasingly more difficult to complete all necessary tasks.

1. Consider switching dewarping *Off* for one or more of the dewarped cameras on the *Stage*.
2. Consider lowering the number of dewarped cameras on the *Stage*.

Another possibility is that the web browser does not support the graphics processing unit (GPU).

1. Try switching to another web browser.

# Comparing Orchid Recorder Operating Modes

Orchid Recorder supports operation in WebRTC mode and the original Low-bandwidth mode. The benefit of WebRTC mode is that it allows for viewing full-bandwidth, live and recorded video streams through a web browser without requiring a plugin. The availability of these operating modes will depend on your web browser and operating system. The table below provides a high-level comparison of the operating modes.

	Low-bandwidth mode	WebRTC mode
Compatible operating systems	Windows, Linux, macOS, iOS, Android	Windows, Linux, macOS, iOS, Android
Compatible web browsers	Most modern web browsers (Microsoft Internet Explorer is not supported)	The latest versions of Google Chrome (desktop and mobile), Mozilla Firefox, Microsoft Edge, and Safari (desktop and mobile)
Network requirements	Works well even on slow connections between the web browser and the Orchid Recorder	Prior to version 23.3, WebRTC required a good connection between the web browser and the Orchid Recorder. Orchid versions 23.3 and greater should work well even if the connection between the web browser and Orchid is marginal (as long as WebRTC retransmission is enabled).
Video decoding	Decoding is done on the Orchid Recorder	Decoding is done on the client machine
Additional configuration required for viewing servers behind a firewall	None (assuming web interface is already accessible)	STUN server
Video quality	Frame rate that throttles to match available bandwidth	Native, unthrottled frame rate
Supported	H264, H.265,	H264

video file types	JPEG, MPEG4	
Audio support	No	No
PTZ camera support	Yes	Yes
Video statistics	Yes (Minimal)	Yes (Overload)
Mode is selectable (at sign in and per Player)	Yes	Yes
Mode indicator		



# Additional Support

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Orchid Recorder users with questions or issues should first contact their Company's Orchid Recorder System Administrator. Barring any internal corporate policies, an Administrator may escalate the technical support request.

- Tier 1 Support: Orchid Recorder System Administrator
- Tier 2 Support: Integrator or Dealer
- Tier 3 Support: IPConfigure Technical Support Resources

IPConfigure's Orchid Recorder Knowledge Base: The [Orchid Recorder Knowledge Base](#) is freely and publicly available on IPConfigure's support website, and includes detailed information for a variety of Orchid Recorder issues. The Knowledge Base covers everything from basic Orchid Recorder usage to advanced installation and configuration scenarios.

IPConfigure's Email-based Trouble Ticket System: Any Orchid Recorder customer with a valid Orchid Recorder Support Agreement can submit trouble tickets using the IPConfigure support website at <http://support.ipconfigure.com>. Orchid Recorder trouble tickets are resolved over email by IPConfigure's highly trained Technical Support Team. (Please see the next topic for instructions.)

IPConfigure's Telephone Support Line: Customers with an Orchid Recorder Express Support Agreement may call IPConfigure's Telephone Support toll-free at 855-440-1077, or direct at 757-520-0587 (during the times listed below). Orchid Recorder Express Support is complimentary for one year with all new Orchid Recorder license purchases.

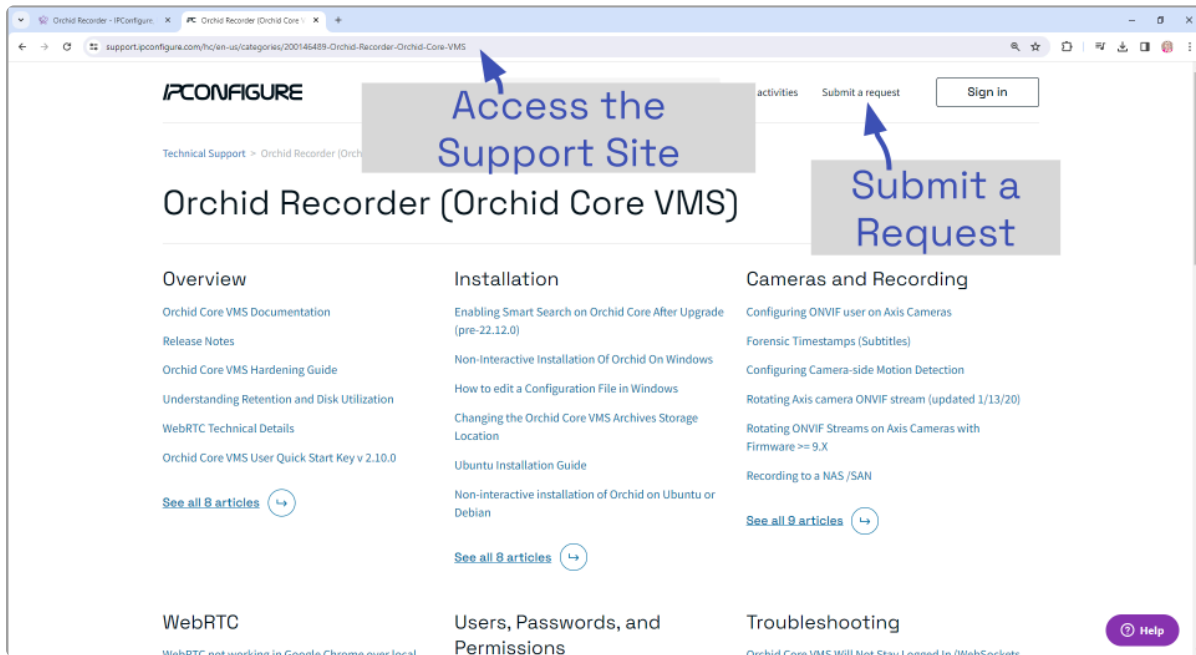
IPConfigure's technical support hours are as listed below. For the most up-to-date version of the IPConfigure support schedule, please see [support.ipconfigure.com](http://support.ipconfigure.com).

## IPConfigure Technical Support Hours

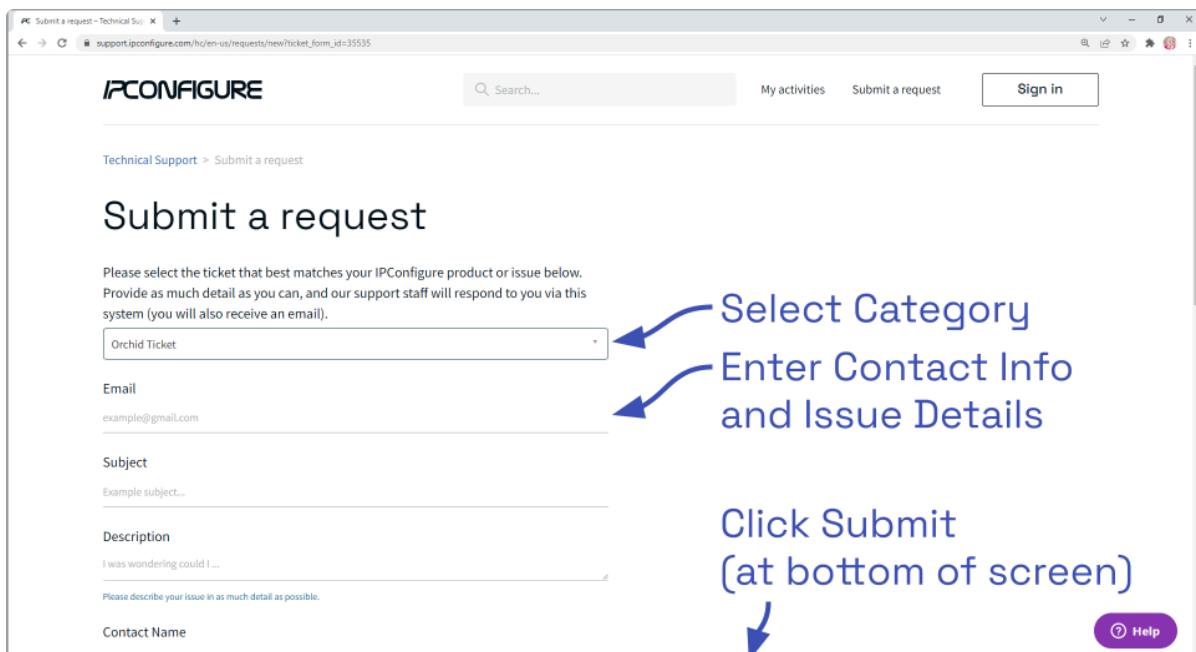
Sunday	Closed
Monday	9:00 AM to 8:00 PM EST
Tuesday	9:00 AM to 12:00 PM, 1:00 PM to 8:00 PM EST
Wednesday	9:00 AM to 8:00 PM EST
Thursday	9:00 AM to 8:00 PM EST
Friday	9:00 AM to 8:00 PM EST
Saturday	Closed

# How to Submit a Support Request

1. Visit our technical support site at: <http://support.ipconfigure.com>
2. Click on the *Submit a request* link in the top-right corner of the screen.



3. When the support request screen appears, use the drop-down list to select the product or issue that best matches your support need.



4. Enter your contact information, a description of your question/problem, the version number of your Orchid Recorder software, your Orchid Recorder type, and IPConfigure SteelFin server serial number (if applicable). Please provide as much detail as possible

about the problem and attach screenshots and system logs (if available).

✿ To find the Orchid Recorder software version number, go to the *System Menu* and select *Version Information*.

5. When all the available information has been entered, press the ***Submit*** button at the bottom of the screen.

The IPConfigure Technical Support Team will respond to your request as soon as possible.

✿ For additional help with Orchid Recorder, please visit our training site at [training.ipconfigure.com](https://training.ipconfigure.com).