

Orchid Fusion/ Hybrid VMS Administrator Guide

23.3 — Last update: 25 April 2023

IPConfigure

Table of Contents

- Introduction 5
 - About the Orchid Product Family 6
 - About the Orchid Fusion/Orchid Hybrid VMS Administrator Guide 8
- How to Sign In 9
 - A Quick Word on Web Browsers and Operating Modes10
 - Signing In.....11
 - Account Settings 18
- Getting Started20
 - Accessing the System Menu21
 - Accessing the Configuration Menu22
- Managing Orchid Core VMS Servers23
 - Add an Orchid Core VMS Server26
 - Refresh Cameras.....28
 - Edit Orchid Core VMS Server Settings.....29
 - Delete an Orchid Core VMS Server31
 - Open an Orchid Core VMS Server32
 - Search / Sort Servers33
 - The Cameras Tab35
 - Add Cameras.....37
 - Multi-stream Capabilities42
 - Edit Camera Stream Settings.....44
 - Camera Settings45
 - Camera Stream Settings48
 - Advanced Settings: Fisheye Dewarping56
 - Advanced Settings: Motion Detection59
 - Working with Camera Streams.....62
 - Cameras with Multiple Lenses67
 - Recovering a Camera69
 - Removing Cameras71
 - Searching for a Camera73
 - The Users Tab74
 - Adding New Orchid Users76
 - Editing Existing Orchid Users.....77
 - Deleting Existing Orchid Users79
 - The Retention Policy Tab80
 - The System Status Tab.....84
 - The System Report Tab88
 - The Activation Tab.....92

Adding a License to Orchid Core VMS (Quick Method)	95
Adding a License to Orchid Core VMS (Offline Method)	98
Modifying an Existing License (Quick Method)	102
Modifying an Existing License (Offline Method)	104
The Advanced Settings Tab	108
Working With Advanced Properties	110
Advanced Properties Search Feature	114
Creating and Managing Users	116
Access the Orchid Fusion/Hybrid VMS Users List.....	117
Add a New Orchid Fusion/Hybrid VMS User.....	118
Edit Existing Users	120
Delete Existing Users	121
Search For a User.....	122
Creating and Managing Camera Groups	123
Access the Orchid Fusion VMS Camera Group List	124
Add a Camera Group.....	126
Add a Camera Sub-Group.....	131
Edit Camera Group.....	133
Delete a Camera Group.....	134
Move a Camera Group.....	135
Find Ungrouped Cameras	136
Camera Group Settings	138
Search for a Camera Group	139
The Maps Feature.....	141
Create a Map.....	142
Edit a Map	148
Delete a Map	150
Creating and Managing Permission Groups	152
Orchid Fusion VMS Default Permission Groups.....	153
Custom Permission Groups.....	154
Tips for Creating Permission Groups	156
Accessing the Permission Groups	157
Add an Administrator Permission Group	159
Add a Permission Group with Individual Members.....	161
Add a Permission Group that Includes a Member Group.....	167
Add a Permission Group for Active Directory	169
Add a Permission Group for Azure Active Directory.....	172
Add a Permission Group for FreeIPA.....	175
Add an “All APPs” Permission Group	178
Add a Permission Group for Selected APPs	180
Edit Permission Group	182

Delete Permission Group	183
Search for a Permission Group	184
Notifications	185
System Alerts.....	187
Adding System Alerts	188
Editing or Deleting a System Alert	196
System Alert Samples	198
Motion Alerts.....	200
Adding Motion Alerts	202
Editing or Deleting a Motion Alert.....	208
Adding Schedules.....	209
Editing or Deleting a Schedule	211
SMTP Servers	212
Add an SMTP Server	214
Editing or Deleting an SMTP Server	216
The Library Feature.....	217
Access the Library Feature	218
Add an Item to the Library	219
Review a Library Item	226
Delete a Library Item	229
Search / Sort Library Items.....	230
Licensing	233
Access the Licensing Feature	234
Download a License Report	236
Upload an Activation Bundle	238
Orchid Fusion VMS APPs.....	240
Access the Orchid Fusion VMS APPs Feature	241
Other Administrator Features.....	243
Sharing Stages.....	244
Managing PTZ Presets	247
Advanced Topics	248
Recovering an Orchid Core VMS Server	249
How Orchid Fusion/Hybrid VMS's Proxy Works	250
Trouble Viewing the Camera Stream in Orchid Fusion VMS	252
Checking for Packet Loss.....	253
About WebRTC	255
Comparing Orchid Fusion VMS Operating Modes	256
Additional Support	258
How to Submit a Support Request.....	259

Introduction

Thank you for your interest in IPConfigure's Orchid Fusion/Hybrid 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 Administrator guide, and a few basics about navigating the software. Then we'll explain how to add Orchid Core VMS servers, users and *Camera Groups*. Once that is done, we'll cover *Permissions*, *Notifications*, *Library*, *Licensing*, and other advanced topics to help you manage and understand the system.



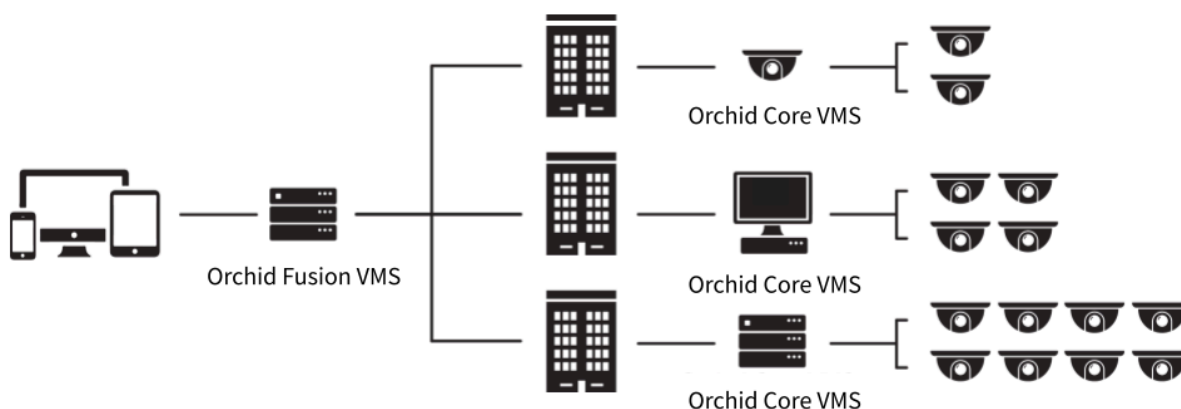
As of March 2021, we have implemented a date-based software version numbering system. From this point forward, the software version number will represent the year and month in which the software was released. For example, version 21.3, the first release with the new numbering system, was released in March of 2021. (Version 2.16 was the last release under the old numbering system.)

About the Orchid Product Family

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

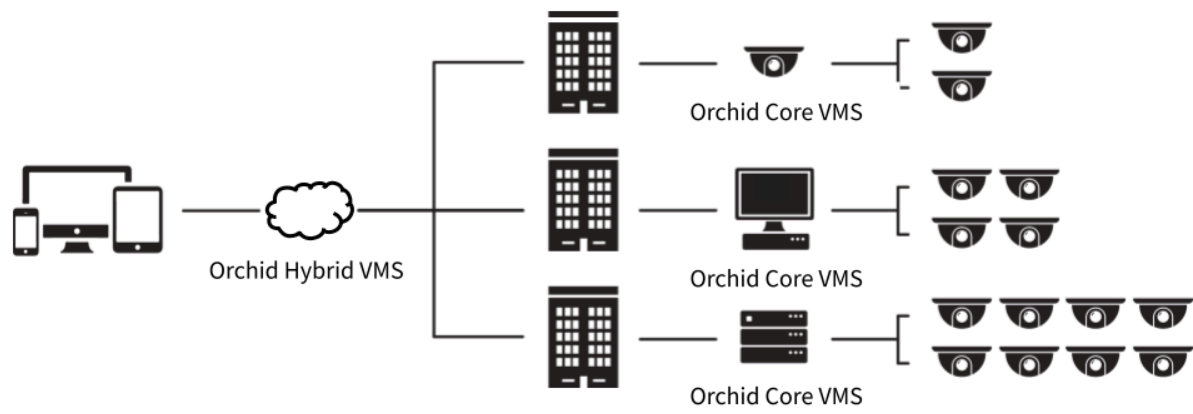
Orchid Fusion VMS is an enterprise software developed to integrate multiple Orchid Core VMS servers from various locations into one seamless management system. Designed to work across a variety of operating systems, camera types and network topologies, Orchid Fusion VMS is the perfect solution for large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

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



Orchid Fusion and Orchid Hybrid

Orchid Fusion VMS and Orchid Hybrid VMS are nearly identical systems. They are both used to manage multiple Orchid Core VMS servers. Orchid Fusion VMS requires you to have one or more Orchid Core VMS servers 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 Fusion/Orchid Hybrid VMS Administrator Guide

The Orchid Fusion/Hybrid VMS 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.

Since this guide will be used for both Orchid Fusion and Orchid Hybrid VMS, you will see screenshots from both systems in the manual.

This guide includes information on the following topics:

- How to Sign into the Orchid Fusion/Hybrid VMS Software
- Getting Started
- Adding and Managing Orchid Core VMS Servers
- Creating and Managing Users
- Creating and Managing Camera Groups
- Managing Stages
- Creating and Managing Permission Groups
- Defining Notifications
- Using the Library
- Licensing
- Orchid Fusion VMS APPs
- Advanced Topics
- Additional Support

For details on everyday tasks regarding the *Stage*, *Timeline Bar*, and viewing/recording video, please refer to the [Orchid Fusion/Orchid Hybrid VMS User Guide](#).

How to Sign In

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

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

A Quick Word on Web Browsers and Operating Modes

Orchid Fusion/Hybrid VMS supports Web Real-Time Communication (WebRTC). This technology allows for viewing full-bandwidth, live and recorded H264 video streams within a web browser (without the need to download a plugin). Beginning in version 23.3, Orchid supports the optional use of WebRTC retransmission. With WebRTC retransmission, the web browser can resend packets of video to Orchid to help ensure that the 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) Google Chrome, version 66 or higher, in a MacOS, Windows, or Linux desktop environment, or on a mobile device
- Latest version of Safari (mobile and desktop)
- Latest version of Mozilla Firefox
- 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 Operating Modes](#) section.)

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

Signing In

Orchid Fusion/Hybrid VMS has several ways to sign in, and will allow mixed authentication modes. So, Administrators may enable multiple sign in modes on the same system.

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

- Google
- Active Directory
- Azure Active Directory
- FreeIPA

✿ Beginning with version 22.9, Orchid Fusion/Hybrid VMS supports Google OAuth2 sign-in. This will replace Google's legacy sign-in (which they are [discontinuing in 2023](#)). For information on formatting your system for this new sign-in method, please refer to the [Orchid Fusion/Hybrid VMS Installation Guide](#), or the [Enabling Google Authentication](#) article in our Knowledge Base.

Accessing the Sign In Screen

Fusion

1. To open Orchid Fusion VMS on a client device, type the IP address of the Orchid Fusion VMS server in the web browser address bar. If you are opening Orchid Fusion VMS on the Orchid Fusion VMS server itself, you may enter `localhost:8080` in the address bar (provided the default port was used). You may also be able to use the Orchid Fusion VMS link in the system menu or the Desktop icon, if available.
2. You will be prompted to sign into Orchid Fusion VMS.

✿ The username and password are both case sensitive.

The image shows the login page for Orchid Fusion. It has a purple background. At the top left is the Orchid logo (a stylized flower) and the text "Orchid Fusion". At the top right is the version number "23.3.0". In the center is a white login box. Inside the box, there are two input fields: "Username" and "Password". The "Password" field has a toggle icon (an eye) to its right. Below the "Password" field are two checkboxes: "Low-bandwidth mode" and "Stay signed in". To the right of these checkboxes is a purple button labeled "SIGN IN". At the bottom right of the purple background is the "IPCONFIGURE" logo.

23.3.0

Orchid Fusion

Username

Password

☐ Low-bandwidth mode

☐ Stay signed in

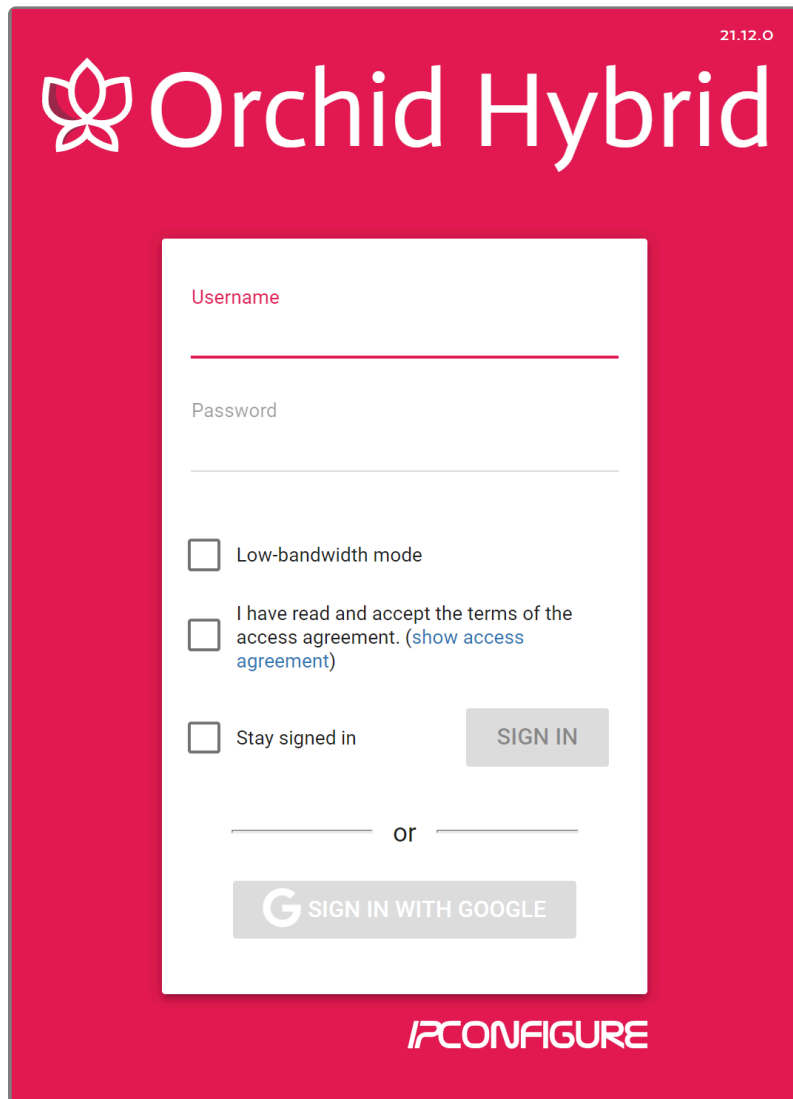
SIGN IN

IPCONFIGURE

Hybrid

1. To open Orchid Hybrid VMS on a client device, type *https://<your-id>.ipconfigure.com* into the web browser address bar (where <your-id> is the system identifier assigned to your Orchid Hybrid VMS system).
2. You will be prompted to sign into Orchid Hybrid VMS.

✿ The username and password are both case sensitive.

The image shows the Orchid Hybrid login interface. At the top, the Orchid logo (a stylized flower) is followed by the text "Orchid Hybrid" in a large, white, sans-serif font. In the top right corner, the version number "21.12.0" is displayed. Below the header, there is a white rectangular box containing the login form. The form has two input fields: "Username" and "Password", each with a red underline. Below these fields are three checkboxes: "Low-bandwidth mode", "I have read and accept the terms of the access agreement. (show access agreement)", and "Stay signed in". To the right of the "Stay signed in" checkbox is a grey button labeled "SIGN IN". Below the checkboxes is a horizontal line with the word "or" in the center. Below this line is a grey button with the Google logo and the text "SIGN IN WITH GOOGLE". At the bottom of the white box, the IPCONFIGURE logo is displayed in a stylized, italicized font.

Standard Sign In

1. Enter your username and password in the fields provided. (This information should be provided to you by your Administrator.) Beginning in version 23.3, all users will have the option to change their own password after they are signed in. Please refer to [Account Settings](#) for more details.
 - a. If you are the Fusion Administrator and this is your first time signing in, enter the username **admin** and the password you set when Orchid Fusion VMS was installed.
 - b. If you are the Hybrid Administrator and this is your first time signing in, enter the user name **admin** and the default Administrator password provided by IPConfigure.

* For improved security, after this initial sign in, Administrators should not use the default *Admin* account. Instead, each Administrator should create an individual User account. If you sign in as the default Administrator, when you sign out, you will automatically sign out any other Administrator users that are signed in with

the default Administrator credentials.

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

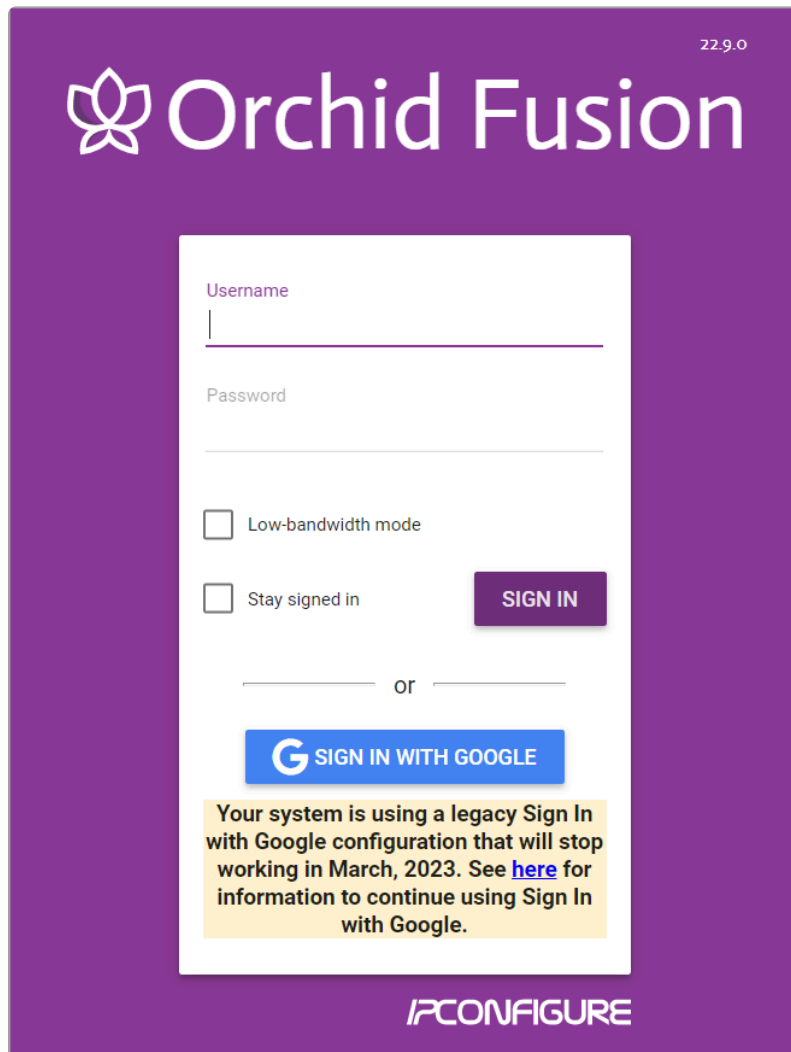
If the checkbox does not appear, you will run in Low-bandwidth mode by default (because the browser you are using does not currently support WebRTC mode).

3. Mark the *I have read and accept...* checkbox to acknowledge that you accept the terms of the access agreement. (You may not see this checkbox.)
4. Mark the *Stay signed in* checkbox if you wish to remain signed in even if you close your browser session or reboot your computer. You will remain signed in for approximately 30 days. (If you leave this box unmarked, the system will automatically sign you out if you close your browser or reboot your computer.)
5. Press *Sign In*.

Sign In with Google

With this method, you will be able to sign into Orchid Fusion/Hybrid VMS using your existing Google credentials (eliminating the need for yet another password). On Fusion systems, this requires that your system administrator has enabled Google Authentication, and an Orchid Fusion VMS user is linked to your Google account. (For more details, please refer to the [Orchid Fusion VMS Installation Guide](#).) On Hybrid systems, this requires that IPConfigure has enabled Google authentication, and an Orchid Hybrid VMS user is linked to your Google account.

- ✿ If you are still using the legacy Google sign-in, the sign-in screen will remind you that you need to reconfigure your system to use the new Google OAuth2 sign-in. Click on the “here” link (shown in the image below) for instructions on how to configure the system for the new Google OAuth2 sign-in.

The image shows the Orchid Fusion login interface. At the top, the Orchid Fusion logo is displayed on a purple background. Below the logo, there is a white login form. The form contains fields for 'Username' and 'Password'. Below these fields are two checkboxes: 'Low-bandwidth mode' and 'Stay signed in'. To the right of the 'Stay signed in' checkbox is a purple 'SIGN IN' button. Below the checkboxes is a horizontal line with 'or' in the center. Below this line is a blue button with the Google logo and the text 'SIGN IN WITH GOOGLE'. At the bottom of the form is a yellow warning box with black text: 'Your system is using a legacy Sign In with Google configuration that will stop working in March, 2023. See [here](#) for information to continue using Sign In with Google.' At the bottom of the purple background, the 'IPCONFIGURE' logo is visible.

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

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

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

Orchid Fusion/Hybrid VMS will open.

Sign In with Active Directory

With this method, you will be able to sign into Orchid Fusion/Hybrid VMS using your existing Active Directory credentials. This requires some configuration which should be performed by the Orchid Fusion VMS Administrator, or by IPConfigure (for Hybrid systems). (For more details on Fusion systems, please refer to the [Orchid Fusion VMS Installation Guide](#).)

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

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

4. Mark the *I have read and accept...* checkbox to acknowledge that you accept the terms of the access agreement. (You may not see this checkbox.)
5. Mark the *Stay signed in* checkbox if you wish to remain signed in even if you close your browser session or reboot your computer. You will remain signed in for approximately 30 days. (If you leave this box unmarked, the system will automatically sign you out if you close your browser or reboot your computer.)
6. Press the **Sign In** button. Orchid Fusion/Hybrid VMS will open.

Sign In with Azure Active Directory

With this method, you will be able to sign into Orchid Fusion/Hybrid VMS using your existing Azure Active Directory credentials. This requires some configuration which should be performed by the Orchid Fusion VMS Administrator, or by IPConfigure (for Hybrid systems). (For more details on Fusion systems, please refer to the [Orchid Fusion VMS Installation Guide](#).)

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

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

2. Mark the *I have read and accept...* checkbox to acknowledge that you accept the terms of

the access agreement. (You may not see this checkbox.)

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

Sign In with FreeIPA

With this method, you will be able to sign into Orchid Fusion/Hybrid VMS using your existing FreeIPA credentials. This requires some configuration which should be performed by the Orchid Fusion VMS Administrator, or by IPConfigure (for Hybrid systems). (For more details on Fusion systems, please refer to the [Orchid Fusion VMS Installation Guide](#).)

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

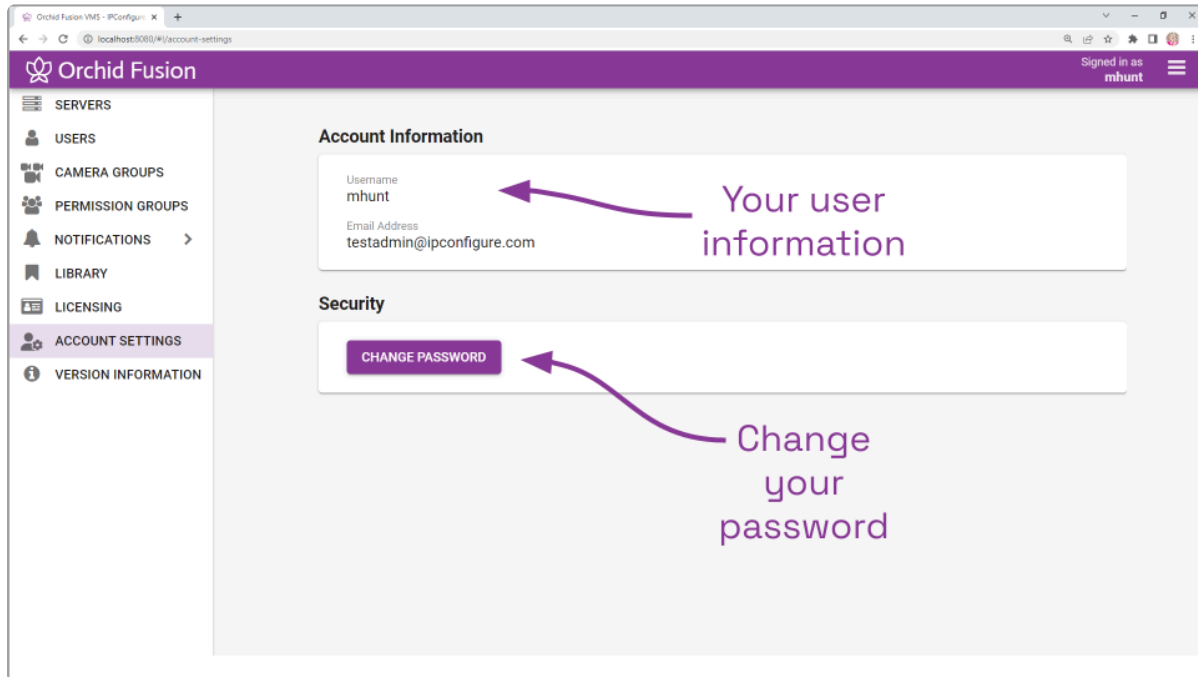
If the checkbox does not appear, you will run in Low-bandwidth mode by default (because the browser you are using does not currently support WebRTC mode).

4. Mark the *I have read and accept...* checkbox to acknowledge that you accept the terms of the access agreement. (You may not see this checkbox.)
5. Mark the *Stay signed in* checkbox if you wish to remain signed in even if you close your browser session or reboot your computer. You will remain signed in for approximately 30 days. (If you leave this box unmarked, the system will automatically sign you out if you close your browser or reboot your computer.)
6. Press **Sign In**. Orchid Fusion/Hybrid VMS will open.

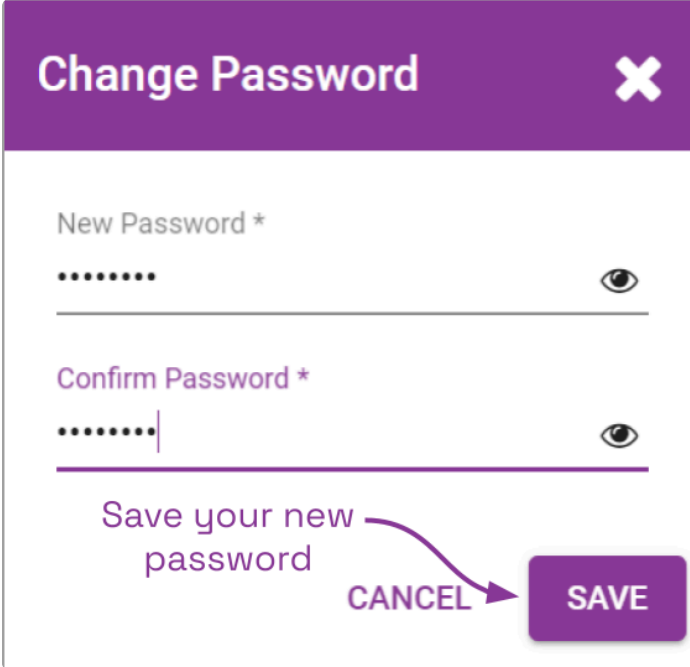
Account Settings

Beginning in version 23.3, you and all of your end-users will each have access to your own Fusion account information. This means that each user will be able to change their own password.

1. To access your account information, go to the *System Menu* and select *Account Settings*. The screen will list your username and your email address (if it was entered into the system).



2. If you want to change your password, press the *Change Password* button.



The image shows a 'Change Password' dialog box with a purple header and a white body. The header contains the title 'Change Password' and a close button (X). The body contains two password fields: 'New Password *' and 'Confirm Password *'. Both fields are masked with dots and have an eye icon to toggle visibility. Below the fields, there is a text prompt 'Save your new password' with a curved arrow pointing to a 'SAVE' button. A 'CANCEL' button is also present, with a straight arrow pointing to the 'SAVE' button.

Change Password

New Password *

Confirm Password *

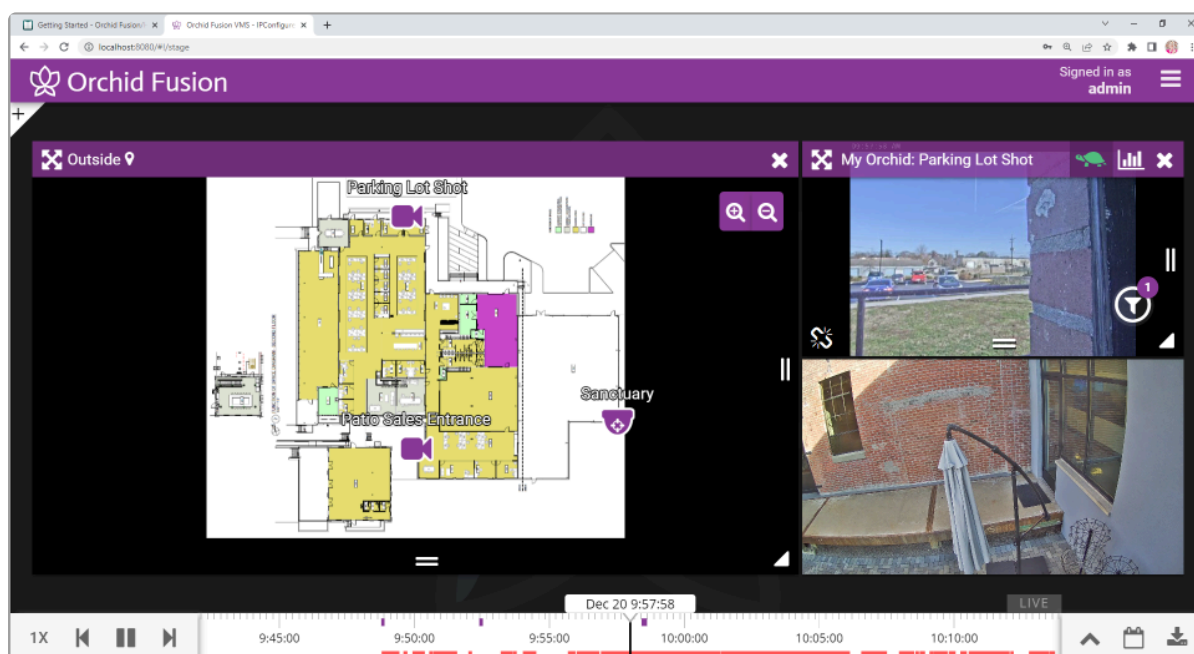
Save your new password

CANCEL SAVE

3. Type your new password into the *New Password* field, then enter it again in the *Confirm Password* field.
4. Press the **Save** button to save your new password.

Getting Started

After you sign in, Orchid Fusion/Hybrid VMS will open at the *Stage* screen where you may begin to configure and use the Orchid Fusion/Hybrid VMS system. Orchid Fusion/Hybrid VMS does not require activation because all of the licensing is dealt with at the Orchid Core VMS level. The license level of each Orchid Core VMS server determines whether that server operates as a standalone VMS server, or if it can be linked to an Orchid Fusion/Hybrid VMS system. So keep in mind that each Orchid Core VMS server you wish to add to the system will require an active Fusion or Trial license. (Trial-licensed systems installed on Linux ARM embedded servers cannot be linked to Orchid Fusion/Hybrid VMS.) Contact your IPConfigure sales representative to purchase a license upgrade or renewal, if needed. (See also, [The Activation Tab](#) or [Licensing](#).)



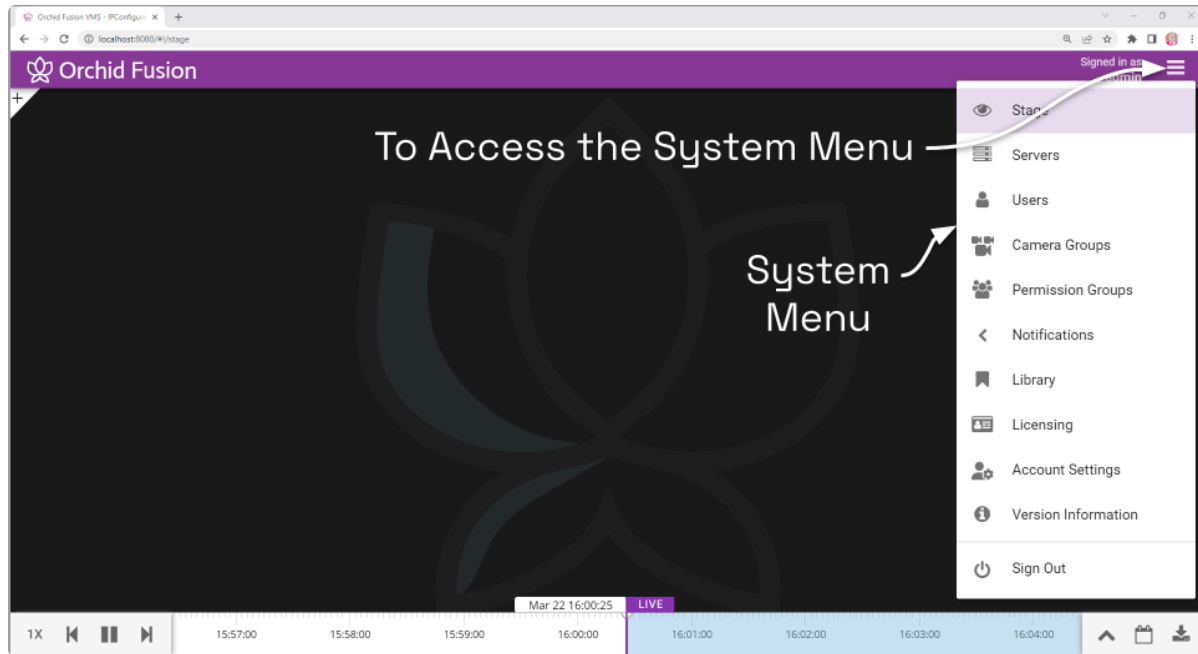
The Orchid Fusion VMS *Stage* (pictured above) shows how you can use the new Maps feature. Check out the section on [Camera Groups](#) to learn more.

Accessing the System Menu



This is the *Hamburger* icon.

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



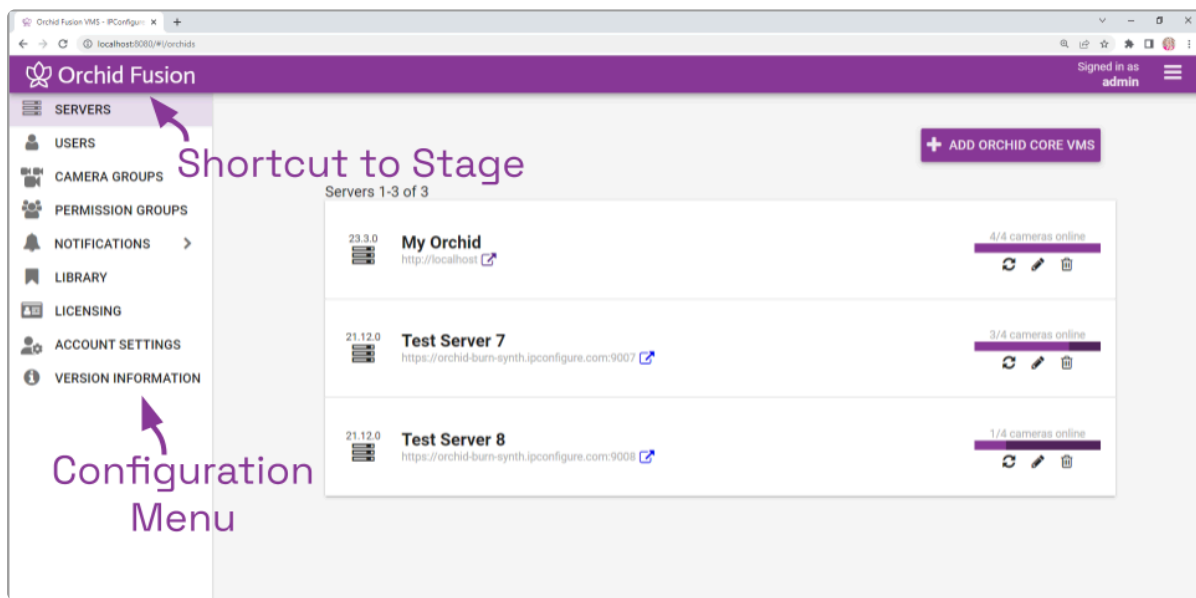
The *System Menu* is the primary navigation menu and will always be available. It allows the Administrator to access all of the software features like the *Stage*, *Servers* (Orchid Core VMS server list), *Users*, *Camera Groups*, *Permission Groups*, *Notifications*, *Library*, *Licensing*, *Version Information*, *APPs*, and *Sign Out*. The *System Menu* contains only those items for which the signed in user has permissions. (Access to the *Stage* and *Sign Out* is available to all users, but only via the *System Menu*.)

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* 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 only contain access to *Version Information*.

When you are using Orchid Fusion/Hybrid VMS 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* or sign out.



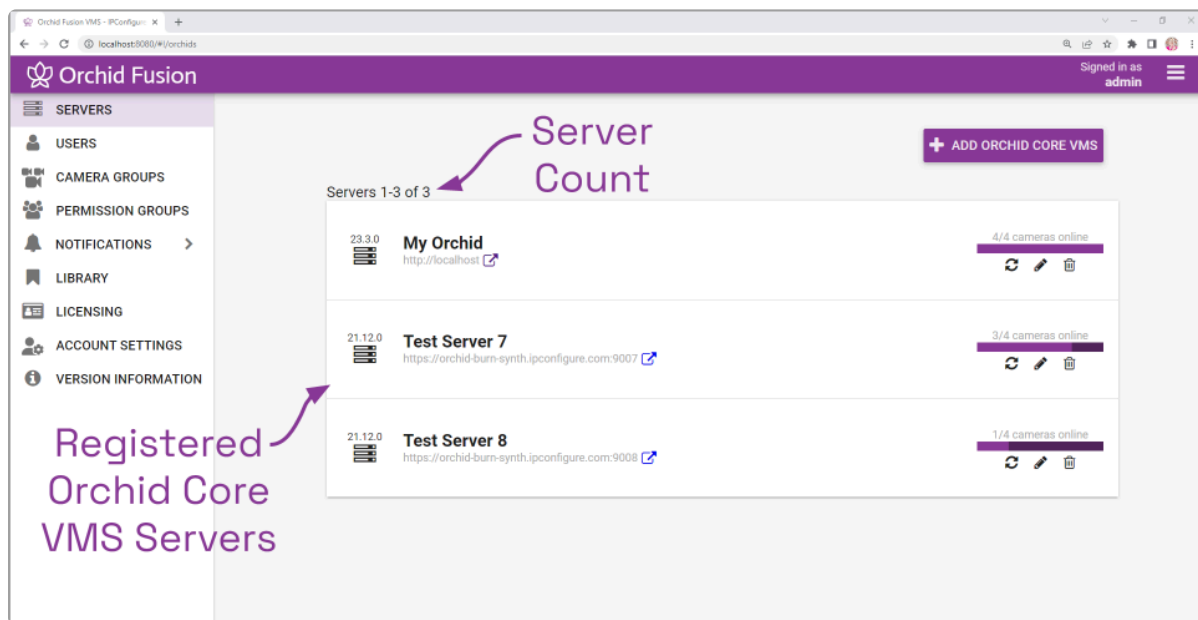
✿ **Shortcut:** If you need to get back to the *Stage* and prefer to bypass the *System Menu*, just click on the Orchid Fusion/Hybrid header.

Managing Orchid Core VMS Servers

The *Servers* screen is a critical part of the Orchid Fusion/Hybrid VMS setup process. This screen provides a list of all of the registered Orchid Core VMS servers. Not only does this screen allow you to add and delete servers, it also offers access to all of the critical administrative features which were previously available only within Orchid Core VMS.

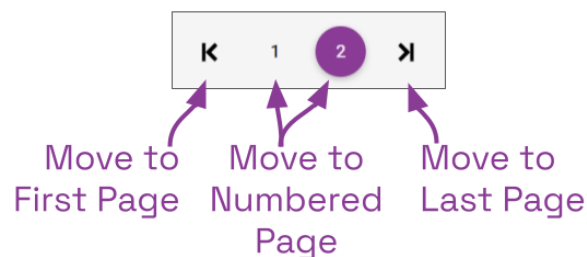
1. To access the *Servers* screen, open the *System Menu* in the top-right corner of the screen, then select *Servers*.

✿ You must be a member of an Administrator group to add and manage servers.

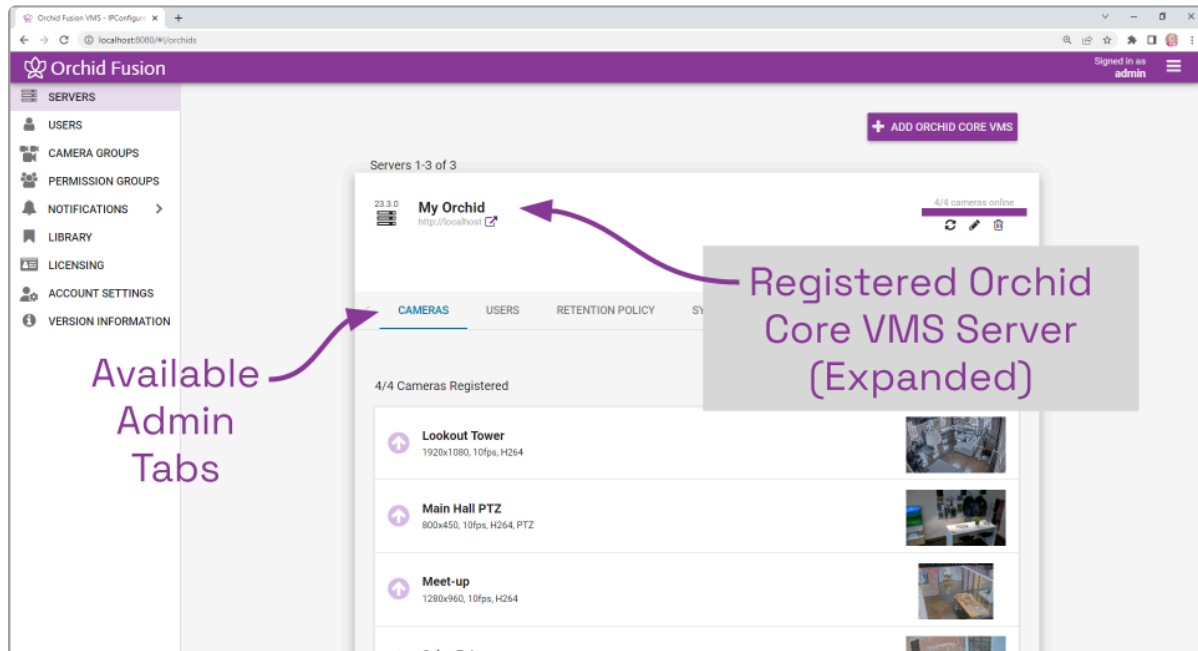


The *Servers* screen lists up to 10 Orchid Core VMS servers per page (by default). If you have more than 10 registered servers, additional pages will be added automatically. This will also activate the server page navigation tools, and the server search and sort features.

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

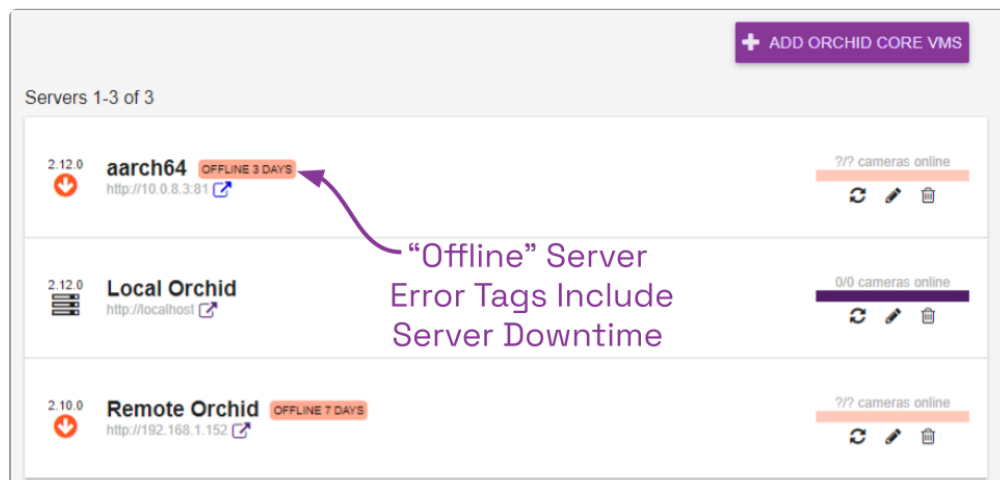


When you click on any server listed, it will expand to display the available administrative tabs, starting with the *Cameras* tab. You can use these tabs to work with the server, performing tasks previously available only within Orchid Core VMS.



Server Error Tags

The *Servers* screen now displays a descriptive error tag for any Orchid Core VMS server that is not in a healthy state. These can help you identify problems quickly and get them resolved.



Error tags include the following:

- **Expiring:** This indicates that the Orchid Core VMS server's license is due to expire in the next 24 hours.
- **Offline:** This indicates that Orchid Fusion/Hybrid VMS is unable to communicate with the Orchid Core VMS server. This server error tag will also indicate how long the server has been offline.

A server may go offline in a variety of situations such as:

- The Orchid Core VMS server is not running
 - The Orchid Core VMS server lost its network connection
 - The Orchid Core VMS server was manually detached from the Orchid Fusion/Hybrid VMS server
- **Unsupported:** The Orchid Core VMS server is running a software version that is older than the required minimum version.
 - **Degraded:** The Orchid Core VMS server is in a degraded state (due to a license error or a storage device error).

Add an Orchid Core VMS Server



This is the *Add* icon.

1. On the *Servers* screen, press the *Add Orchid Core VMS* button to access the *Register an Orchid Core VMS Server* screen.

Register an Orchid Core VMS Server

Server Name *
Orchid Demo 2

Server URL *
https://orchid2.ipconfigure.com

13 / 99

Username *
mhunt

Password *

CANCEL REGISTER

2. To add a new server, enter the Orchid Core VMS server name and the URL.
 - If the Orchid Core VMS server is on the same machine as Orchid Fusion/Hybrid VMS, the URL would be: `http://localhost`.
 - Enter your Orchid Core VMS username and password.
 - Press the *Register* button to add the server to Orchid Fusion/Hybrid VMS.

It may take a moment for Orchid Fusion/Hybrid VMS to add the server successfully. When complete, the new server will appear in the list on the *Servers* screen. If Orchid Fusion/Hybrid VMS fails to add a server, an error message will appear.



Beginning with Orchid Fusion/Hybrid VMS version 2.10.0, if you attempt to add an Orchid Core VMS server with software older than version 2.8.0, you will receive an error like the one pictured below. You will need to upgrade the Orchid Core VMS server software to version 2.8.0 or greater in order to register the server.

Register an Orchid Core VMS Server ✕

Server Name *	Server URL *
Orchid1	http://localhost
7 / 99	
Username *	Password *
orchid	*****

⚠ Orchid Fusion VMS is not compatible with Orchid Core VMS version: 2.6.1. Minimum required version: 2.8.0. ✕

CANCEL REGISTER

Refresh Cameras



This is the *Refresh Cameras* icon.

On the right side of the *Servers* screen, you will notice that for each Orchid Core VMS server, the software will indicate how many of the server's cameras are online (such as 4/4 cameras online, or 8/10 cameras online).



If you observe that one or more cameras are offline, do the following:

1. To see which cameras are offline, click on the server name, or anywhere on the server's entry to expand the entry to list all of the cameras. If a camera is offline, the arrow at the left of the camera name will be red and pointed down. (A thumbnail for the camera may be displayed, but a stream preview will be unavailable.)
2. To get the latest camera status, press the *Refresh Cameras* icon. (If a camera doesn't respond, please refer to the [Advanced Topics](#) section.)

Edit Orchid Core VMS Server Settings



This is the *Edit* pencil icon.

After a server has been added to Orchid Fusion/Hybrid VMS, the Orchid Core VMS server settings can be updated through the *Servers* screen. This feature can be used to simply change the server name, or as a troubleshooting tool (if nothing appears to be working on this server).

1. From the list of registered servers on the *Servers* screen, click the *Edit* pencil to the right of the server you want to edit. The *Update Settings* screen will appear.

Update Test Server 1 Server Settings

Server Name*

Test Server 1

13 / 99

☐ Recover this Orchid Core VMS server

CANCEL

UPDATE

2. To change the name of the Orchid Core VMS server, enter a new server name, then press the *Update* button.
3. If the server doesn't appear to be working or displays that it is unavailable, mark the *Recover this Orchid Core VMS Server* checkbox.

Update Orchid Core VMS Server Settings

Server Name *

Orchid Core VMS

15 / 99

☒ Recover this Orchid Core VMS server

Server URL *

https://orchid-hybrid-278789

Username *

mhunt

Password *

.....

CANCEL UPDATE

Attempt Recovery with Original or New URL

Enter Orchid Core Server Credentials

This feature can help in two (somewhat common) situations:

- If someone has changed the Orchid Core VMS server URL, Orchid Fusion/Hybrid VMS (unaware of that change) will no longer be able to connect to the server.
 - If someone has detached the Orchid Core VMS server from within the Orchid Core VMS software, Orchid Fusion/Hybrid VMS will no longer be able to connect to the server.
4. To attempt to recover the Orchid Core VMS server at the same URL, enter the username and password for any Administrator account on that server.
 5. To attempt to recover the Orchid Core VMS server at a new URL, enter the new URL in the *Server URL* field, then enter the username and password for any Administrator account on that server.
 6. When all entries are complete, press the *Update* button.

✿ This recovery method should preserve all of the permissions that were configured using the original server.

✿ If the server is still unavailable, please refer to the [Advanced Topics](#) section of this guide for additional help.

Delete an Orchid Core VMS Server



This is the *Delete / Trash Can* icon.

1. To remove a server from Orchid Fusion/Hybrid VMS, go to the *Servers* screen and identify the Orchid Core VMS server you want to delete.
2. Click the *Trash Can* icon to the right of the selected server. Orchid Fusion/Hybrid VMS will ask you to confirm that you want to delete the server. Press **Unregister** to confirm. This cannot be undone.



You can re-register the server, if needed, but all of the permissions will need to be re-configured.

Open an Orchid Core VMS Server



This is the *External Link* icon.

Orchid Fusion/Hybrid VMS provides easy access to each of the registered Orchid Core VMS servers. This external link is less critical now because the scope of the *Servers* screen was expanded to include all of the key Orchid Core VMS features. However, this link may still be helpful in some situations.

1. To open a server from Orchid Fusion/Hybrid VMS, go to the *Servers* screen and identify the Orchid Core VMS server you want to access.
2. Click the *External Link* icon to the right of the selected server. Orchid Fusion/Hybrid VMS will load the Orchid Core VMS server which will open to the *Sign In* screen. Sign in with a username and password for that server. (The Orchid Core VMS servers only allow local sign in; Google and other external credentials cannot be used here.)
3. After signing in, you may work with the Orchid Core VMS server as needed. (Please refer to the remainder of this section or the [Orchid Core VMS Administrator Guide](#) as needed.)



Depending on how your network is configured, your Orchid Fusion/Hybrid VMS server may have access to Orchid Core VMS servers that are not accessible from your web browser — so this link may not always work!

Search / Sort Servers

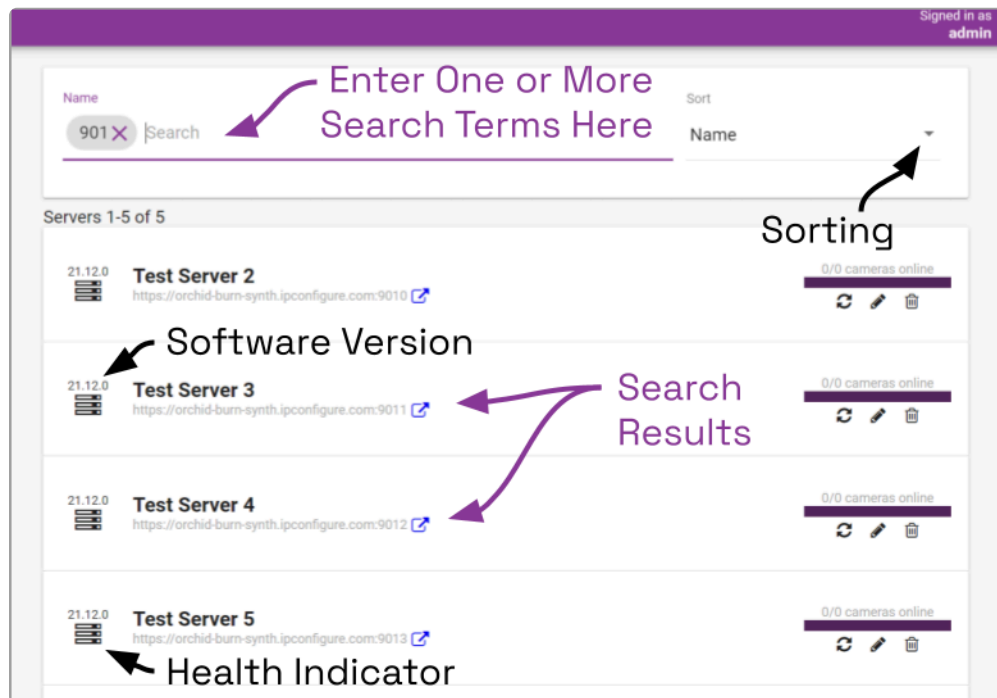
If you have more than 10 registered Orchid Core VMS servers (by default), the *Servers* list will extend beyond one page. When this happens, the software will automatically activate the server search and sort features. Especially useful with large systems, these tools will help you find specific servers quickly.

Server Page Search

The *Search* field will appear at the top of the *Servers* screen. It supports searching by server names, 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 *Servers* screen will update to display all of the servers that contain the tag(s).



Server Page Sort

The *Sort* field will appear to the right of the *Search* field. This feature supports sorting the

Servers list by server name, health, and software version number.

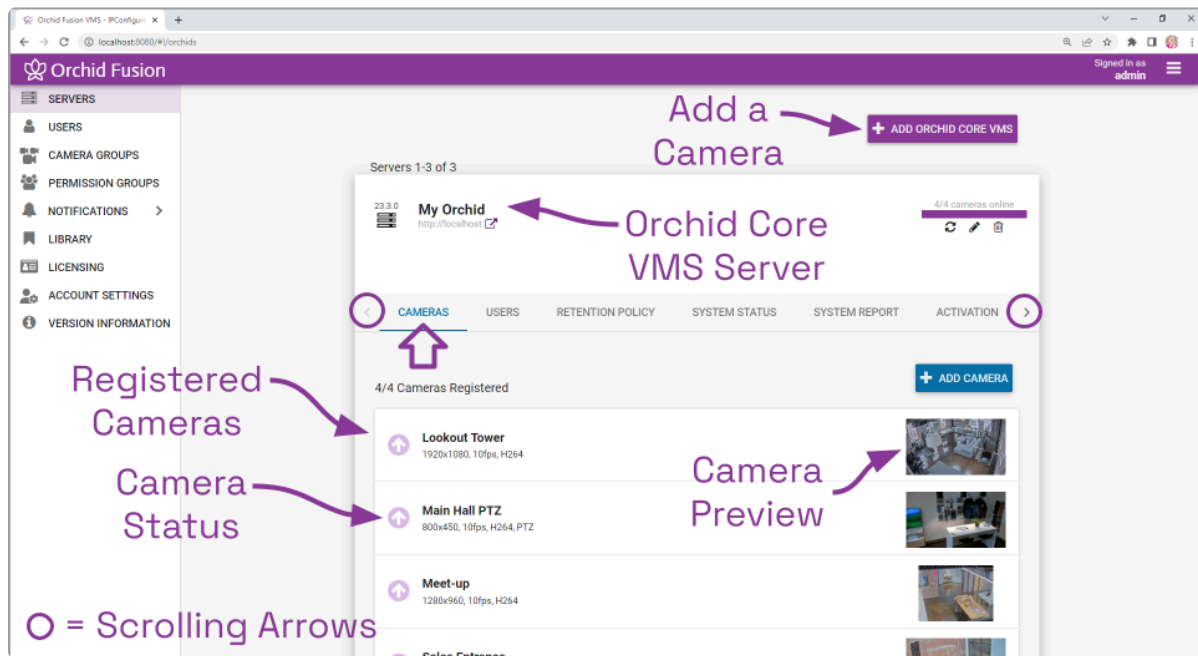
1. Click on the *Sort* drop-down list to select a sort option: *Name*, *Health*, or *Version*. The servers in the list will appear in order per the selected sort option.
 - a. If you sort by *Name*, the servers will appear in alphabetical order by server name.
 - b. If you sort by *Health*, the servers in an error condition will appear first. The remaining “healthy” servers will be sorted by the number of cameras down (with the highest number of cameras down appearing first).
 - c. If you sort by *Version*, the servers will be listed by software version number (oldest to newest).

The Cameras Tab

The *Cameras* tab provides you with a list of all the cameras registered to the Orchid Core VMS server, and allows you to add and delete cameras and configure camera stream settings.

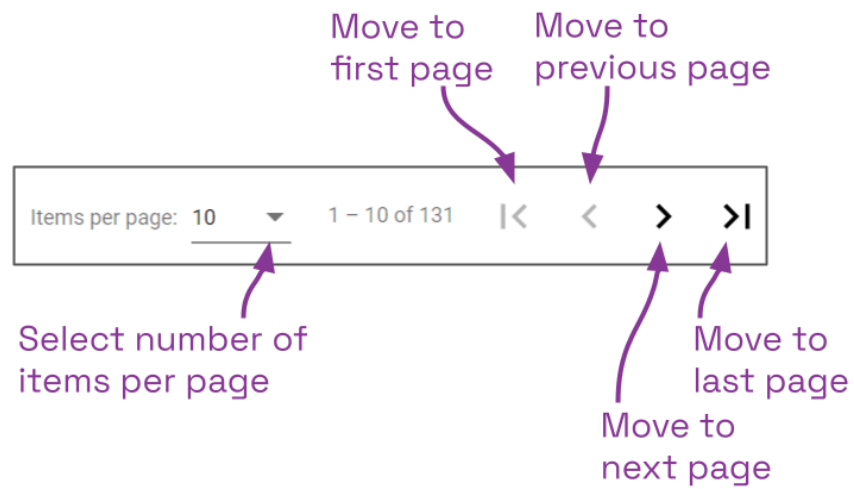
✿ Even though you can work with the cameras within Orchid Fusion/Hybrid VMS, the camera streams will still be recorded on the Orchid Core VMS server.

1. Once you access the *Servers* page, select a server and click on the *Cameras* tab.



The *Cameras* tab opens with a list of cameras that have already been registered, if any. The process for adding most cameras is fairly simple, especially if the camera supports ONVIF auto-discovery.

You may configure the *Camera Configuration* screen to list either 10, 20, or 50 cameras per page. Additional pages are added for you automatically. This will also activate the page navigation tools, and the search feature.



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

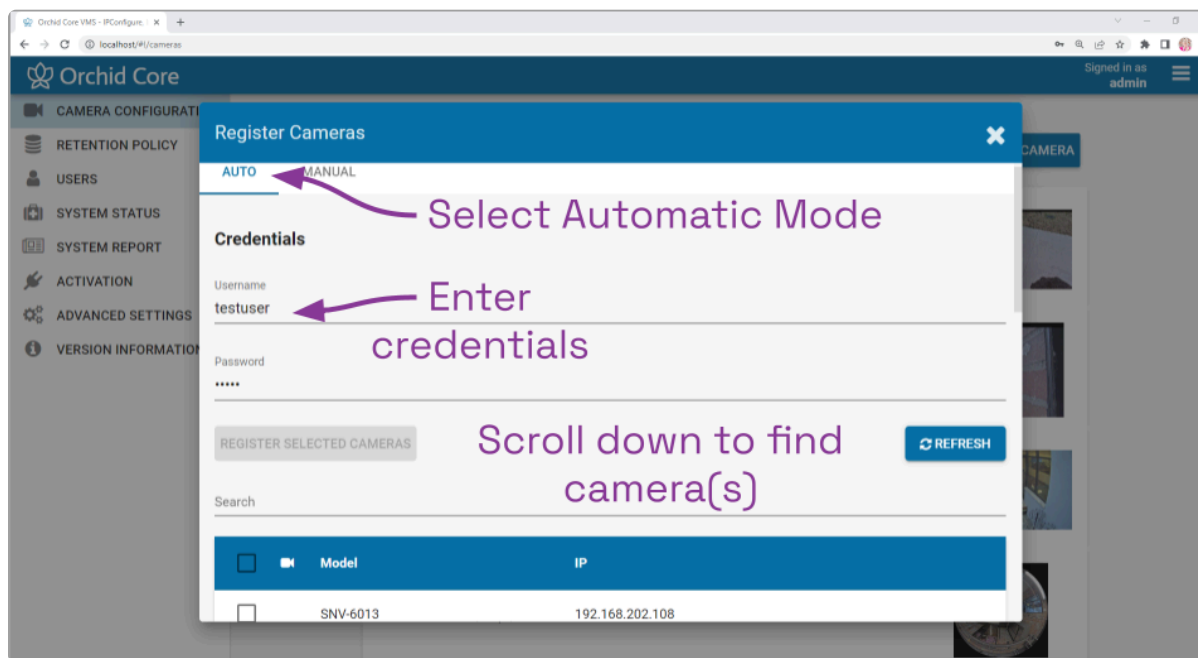
Add Cameras

Adding One or More Cameras (using Auto Mode)

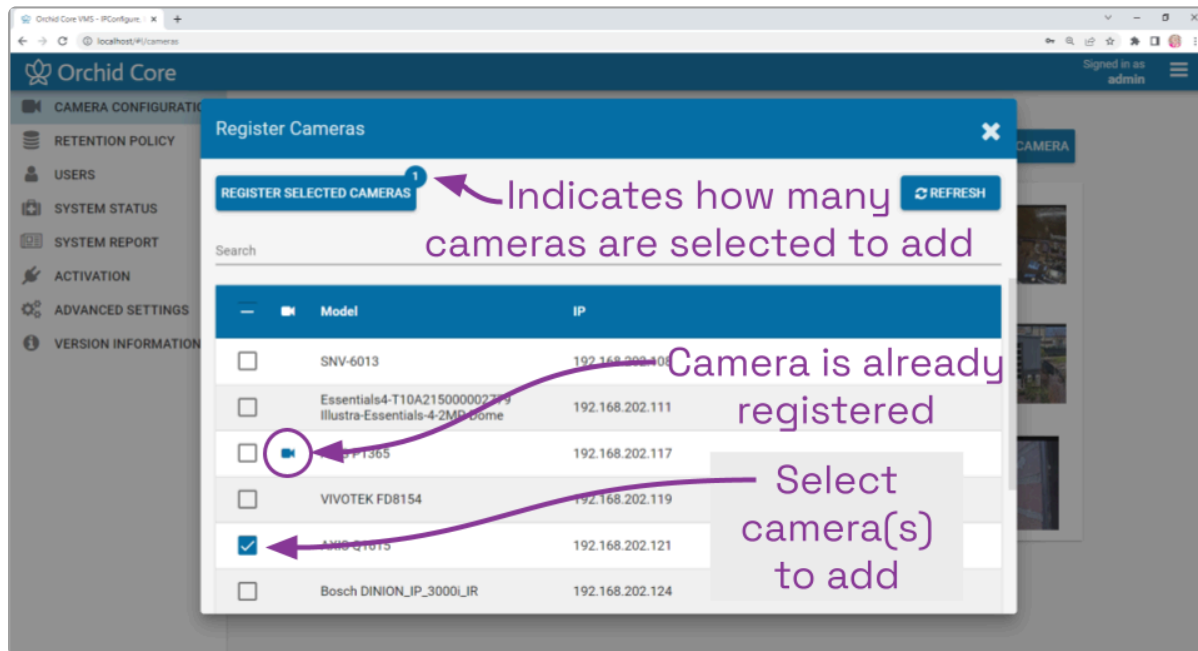
+ This is the *Add* icon.

1. From the list of registered cameras on the server's *Cameras* tab, press the *Add Camera* button to access the *Register Cameras* screen. The software will open the *Register Cameras* screen in *Auto* mode by default. This screen displays a list of all the cameras Orchid Core VMS was able to auto-discover.

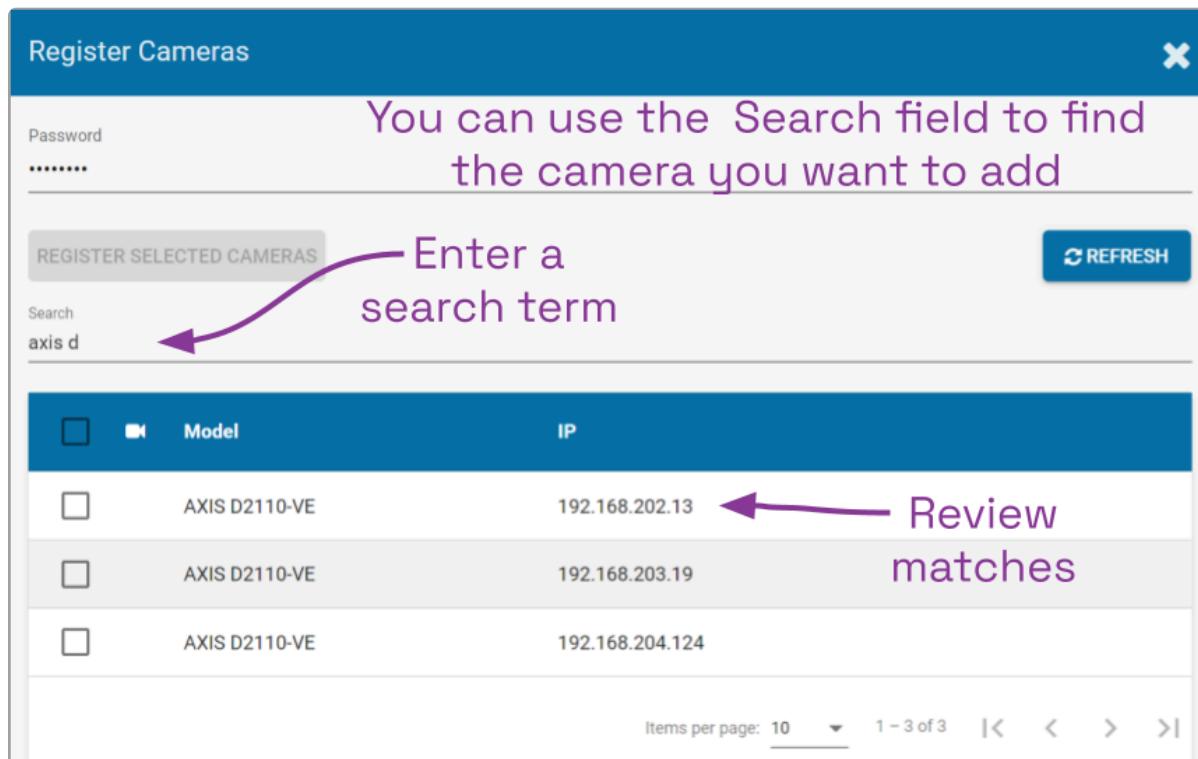
✿ In order for Orchid Core VMS to auto-discover cameras, they must support ONVIF auto-discovery and be located on the same network subnet. If you have cameras that are not automatically discovered, they can always be added manually.



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.



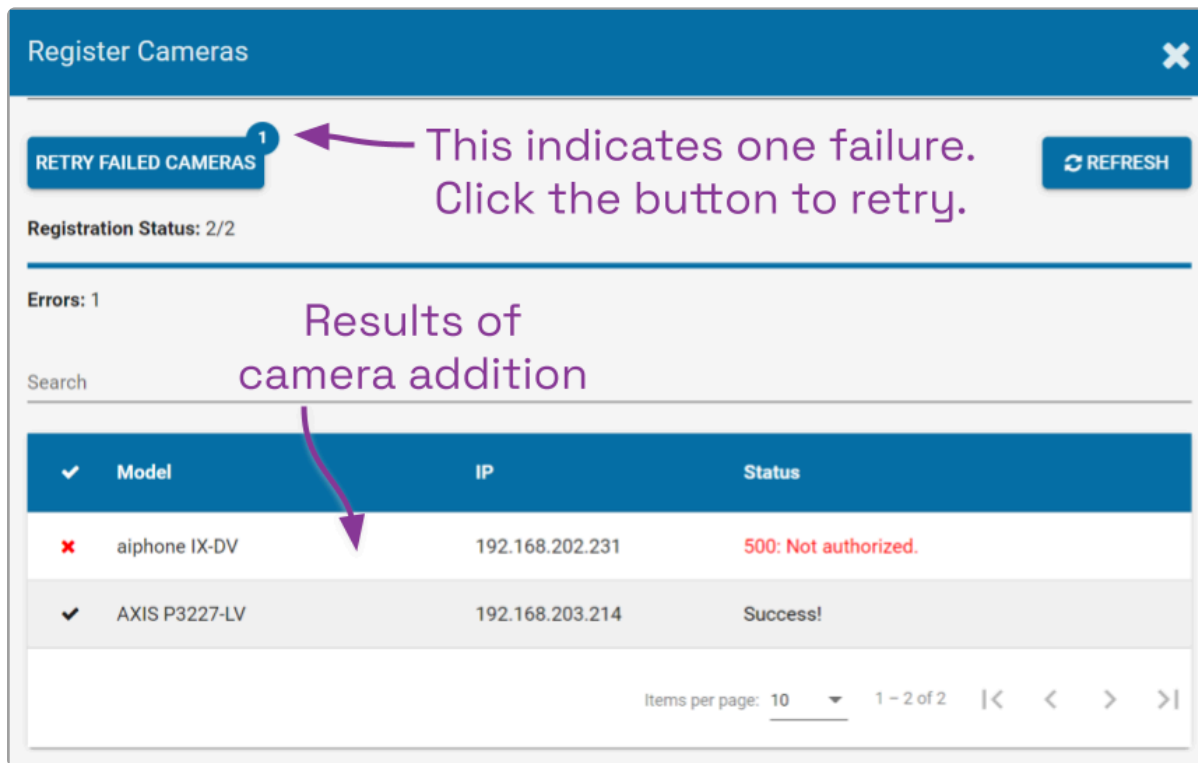
5. If there are a lot of available cameras, you may want to use the search feature to find the cameras you're looking for.
 - a. Click into the *Search* field and enter a term for the search. This search only allows for one search tag, but you may use a multiple-term search tag, and it may contain words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



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 the Orchid Core VMS server.

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



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 Fusion/Hybrid VMS.) You should also review or edit the camera stream settings. (Please refer to the next several sections for details on stream settings.)

✿ If these newly added cameras will use similar stream settings, you may 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 of the [Orchid Core VMS Administrator Guide](#) for additional help.

Adding a Single Camera (in Manual Mode)

If Orchid Core VMS cannot autodiscover a camera, it can be added manually.

1. At the server's *Cameras* tab, press the **Add Camera** button to access the *Register Cameras* screen. The *Register Cameras* screen will open in Auto mode.
2. Select **Manual** mode.

Register Cameras

AUTO MANUAL

Select Manual Mode

Register Camera

Driver ONVIF ONVIF Discovery URL http://192.168.1.1/onvif/device_service Enter Camera Details

Camera Name * Fish Eye Cam

Credentials

Username admin 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 Core VMS is ONVIF.

4. Enter the ONVIF Discovery URL, or the RTSP Stream URL (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 the Orchid Core VMS server.
6. Enter the username and password that is setup on the camera being added.

✿ For some ONVIF cameras (if you're working in an Orchid version older than 22.12), a separate username and password needs to be created specifically for ONVIF. (Please refer to the *Advanced Topics* section of the [Orchid Core VMS Administrator Guide](#) for more information.)

7. Press the **Register** button to add the camera to the Orchid Core VMS server.
When complete, Orchid Core VMS will add the new camera to the list of registered cameras. If Orchid Core VMS fails to add a camera, an error message will appear explaining the issue.
8. Once the camera has been added, review or edit the camera stream settings. (Please refer to the next several sections for details on stream settings.)

✿ If you have any trouble adding cameras, please refer to the *Advanced Topics* section of the [Orchid Core VMS Administrator Guide](#) for additional help.

Multi-stream Capabilities

When you add a camera to Orchid Core VMS, 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. Beginning in version 21.12, Orchid Core VMS 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 Core VMS server (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) 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 an Orchid Core VMS server, 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 Core VMS or Orchid Fusion/Hybrid VMS. 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 server's *Cameras* tab, 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.)

Five Points
640x480, 15fps, H264

Camera Information

Camera Name: Five Points
Camera Model: AXIS Q3505 Mk II
Primary Stream Status: running
NTP Settings: Uses NTP settings from DHCP server
Time Zone: Unknown Time Zone

Primary Stream RTSP URL: rtsp://192.168.203.90/onvif-media/media.amp?profile=profile_1_h264&sessiontimeout=1206&strea...
Primary Stream Proxy RTSP URL: rtsp://orchid-hybrid.ipconfigure.com:5129/service/orchid-proxy/2a0d1f8a-1108-4033-a841-b0...

Recording Statistics

Streams

Status	Mode	Name	Configuration
↑	+	Primary-stream_fab39946	640x480, 15fps, H264 Continuous recording
-	-	profile_1.jpeg	1280x720, 30fps, JPEG Continuous recording with motion detection
↑	+	FivePoints	2560x1440, 30fps, H264 Secondary: Recording

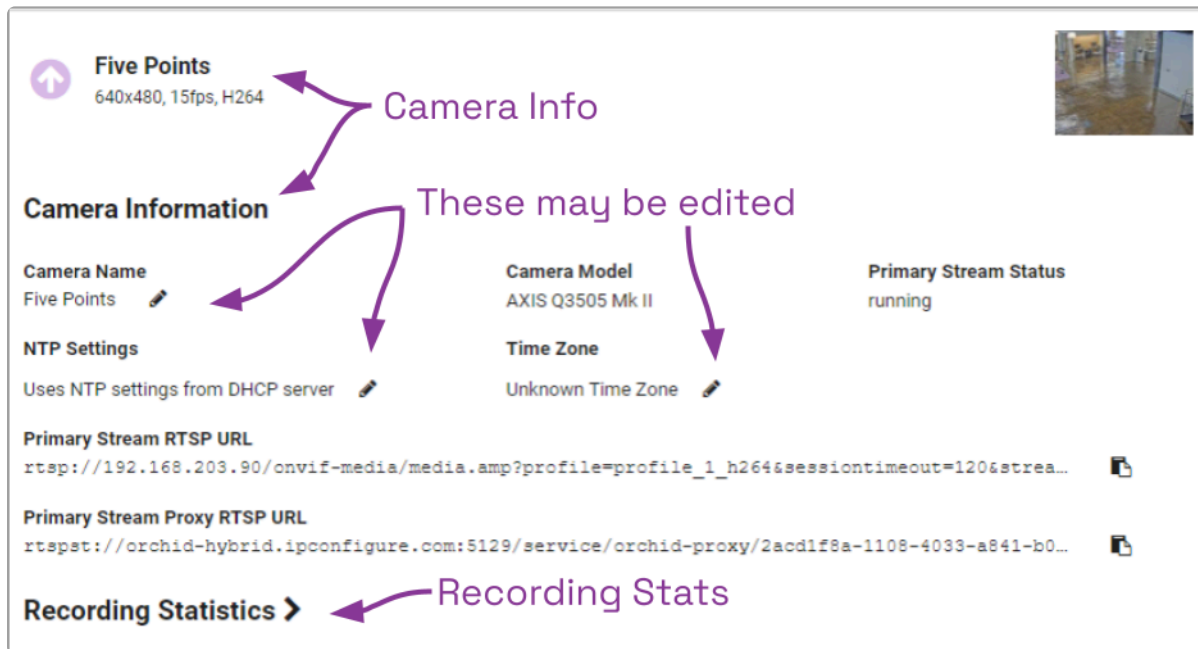
Advanced Settings

FISHEYE DEWARPING MOTION DETECTION

Actions

DELETE CAMERA RECOVER CAMERA

Camera Settings

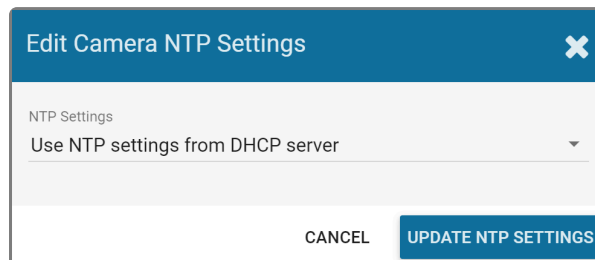


1. To change the camera name, click the **Edit** pencil to the right of the camera name. Enter a new name in the *Camera Name* field and press the **Update Camera** button.

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.)

Beginning in version 21.6, Orchid Core VMS will display the NTP settings and the Time Zone setting next. (If the camera was installed while using an earlier version of Orchid, you won't see these settings. To remedy this, you need to [recover](#) your camera.)

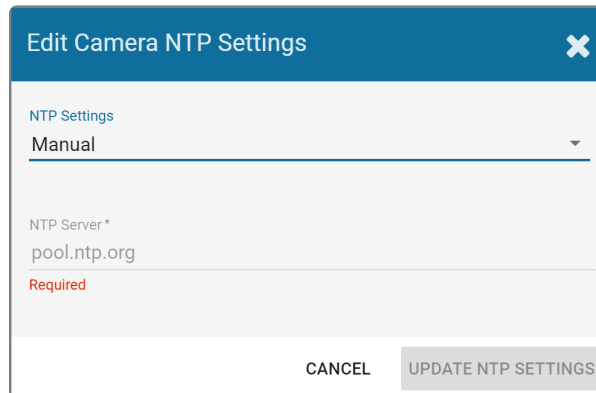
2. To change the NTP settings, click the **Edit** pencil to the right of the NTP settings.



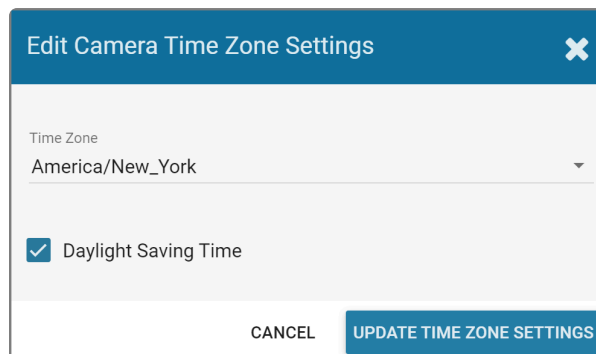
By default, the system will pull the Network Time Protocol (NTP) from the Dynamic Host Configuration Protocol (DHCP) server; this helps to ensure that all of the cameras on the network are using the same system clock.

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.

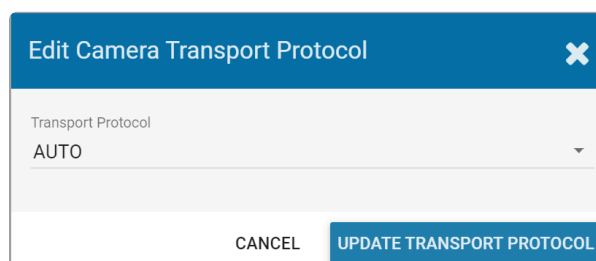


4. If you need to change the time zone for the camera, do the following:
 - a. Click the *Edit* pencil to the right of the Time Zone.
 - b. Use the *Time Zone* drop-down list to select the appropriate time zone.
 - c. Mark the *Daylight Saving Time* checkbox if your region observes daylight saving time.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



Beginning in version 22.3, the system 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 Core VMS server.

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





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:
 - a. Use the drop-down list to find the setting you want to use. Available settings include: AUTO, UDP, UDP_MCAST, HTTP, AND TCP.
 - b. 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 Core VMS 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 Core VMS is recording.
- The Primary Stream Proxy RTSP URL represents the video that Orchid Core VMS is showing on the Stage. (For more details, please refer to the section titled *How Orchid Fusion/Hybrid VMS's Proxy Works*, and the two topics that follow it.)

Recording Statistics

	This is the <i>Expand</i> icon (used to view the list of Recording Statistics).
	This is the <i>Condense</i> icon (used to close the list of Recording Statistics).

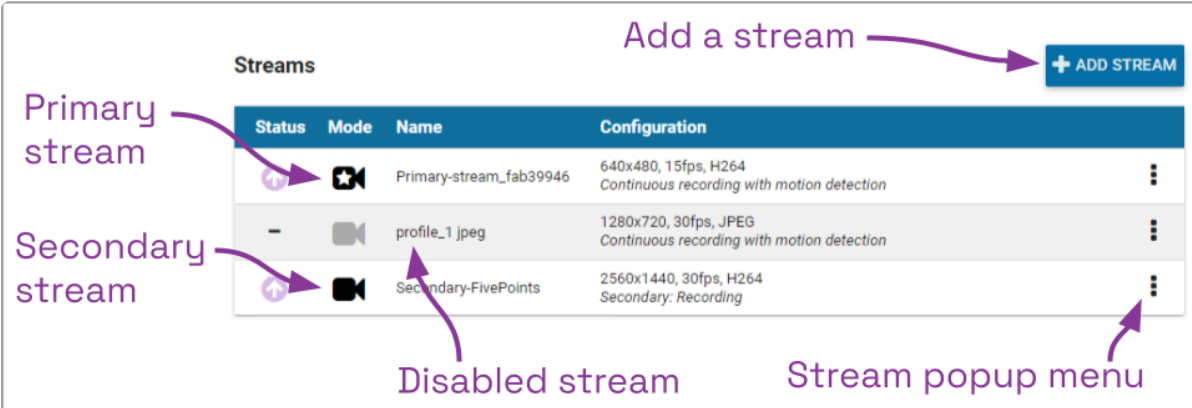
The Recording Statistics section can be expanded to show the average percentage of packet loss and the average bit rates for the Primary recording stream. These values are typically used for troubleshooting. (For more details, please refer to the [Orchid Core VMS Administrator Guide](#).)

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 Core VMS to record video from the camera. Beginning in version 21.12, Orchid Core VMS and Orchid Fusion/Hybrid VMS support 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 a table titled "Streams" with columns: Status, Mode, Name, and Configuration. There are three rows of stream data. Annotations with arrows point to specific elements:

- Add a stream:** Points to a "+ ADD STREAM" button in the top right.
- Primary stream:** Points to the first row, which has a Primary camera icon in the Mode column.
- Secondary stream:** Points to the second row, which has a Secondary camera icon in the Mode column.
- Disabled stream:** Points to the third row, which has a Disabled camera icon in the Mode column.
- Stream popup menu:** Points to the vertical ellipsis menu icon at the end of the third row.

Status	Mode	Name	Configuration
		Primary-stream_fab39946	640x480, 15fps, H264 Continuous recording with motion detection
-		profile_1 jpeg	1280x720, 30fps, JPEG Continuous recording with motion detection
		Secondary-FivePoints	2560x1440, 30fps, H264 Secondary: Recording

- 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.

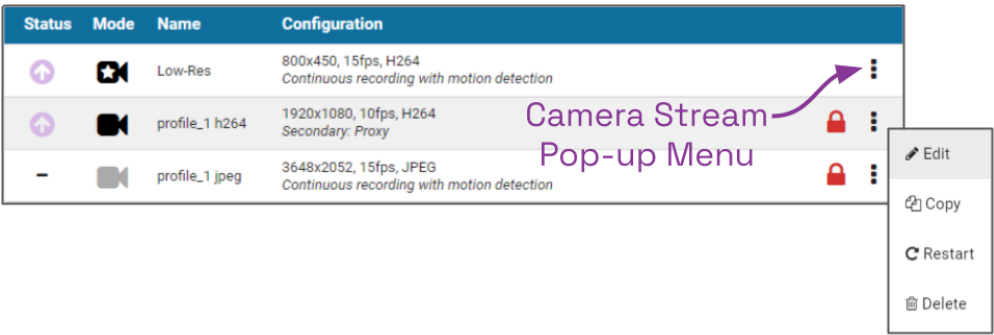
* The system allows only one Primary stream per camera at a time. However, multiple stream profiles from the same camera can be used as the Primary

stream if the camera is added multiple times. This feature 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 Stream</i> 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 then click the *Edit* pencil icon. After clicking the *Edit* 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.

✿ The *Motion Style* setting (pictured below) will only be available on Axis, Hanwha, and Vivotek cameras.

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 Core VMS 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 Core VMS 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 Core VMS 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 Core VMS server.
- **Continuous Recording with Motion Adaptive Frame Rate:** Orchid Core VMS 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 Core VMS will provide live video from the camera but will not record video.
- **Recording Only When Motion Detected:** Orchid Core VMS will only record video from the camera when motion is detected. This may result in a reduction in disk usage on the Orchid Core VMS server, 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

If you choose a *Recording Style* with motion detection, and you are using an Axis, Hanwha, or Vivotek camera, Orchid Core VMS will allow you to select either camera-based or server-based motion detection for each camera stream. (For more details on these *Motion Styles*, please refer to the [Orchid Core VMS Administrator Guide](#).)

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* (the default).
 - 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 based on the camera and may require some experimentation. (For more details on *Camera Events*, please refer to the [Orchid Core VMS Administrator Guide](#).)



If you are using an Axis, Hanwha, or Vivotek camera, and the *Motion Style* drop-

down list appears to be unavailable, you should try [recovering](#) the camera.

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 'Primary-stream_fab39946'. 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 15, and the 'Frame Rate During Non-Motion' is set to 1.00. A purple arrow points to the 'Frame Rate During Non-Motion' slider with the text 'Additional Settings'. The 'Video Settings' section includes 'Encoder' (H264), 'Bit Rate' (350), 'Frame Rate' (with a note: 'These values can be manipulated above while Motion Reduction is selected.'), 'GOV Length' (with a note: 'These values can be manipulated above while Motion Reduction is selected.'), 'Profile' (High), 'Resolution' (640x480), and 'Quality' (80). The 'Low-bandwidth Settings' section has 'Decode all frames' set to 'Disabled'. At the bottom are 'CANCEL' and 'UPDATE STREAM' buttons.

- * If you are using 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.

- 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 Core VMS only supports H264 video. In Low-bandwidth mode, Orchid Core VMS 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, bit rates 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 Core VMS 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 Core VMS 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 Core VMS 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 Fusion/Hybrid VMS 2.10, audio control is no longer supported at the Player/Stage level. However, the Orchid Core VMS server is still recording audio for those cameras that support it, and this audio will be available in exported video files. Future versions of Fusion/Hybrid will support audio over WebRTC.

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 Core VMS supports “None” (audio is disabled), G711, and AAC (recommended if audio is desired).
- **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.



Low-bandwidth Settings

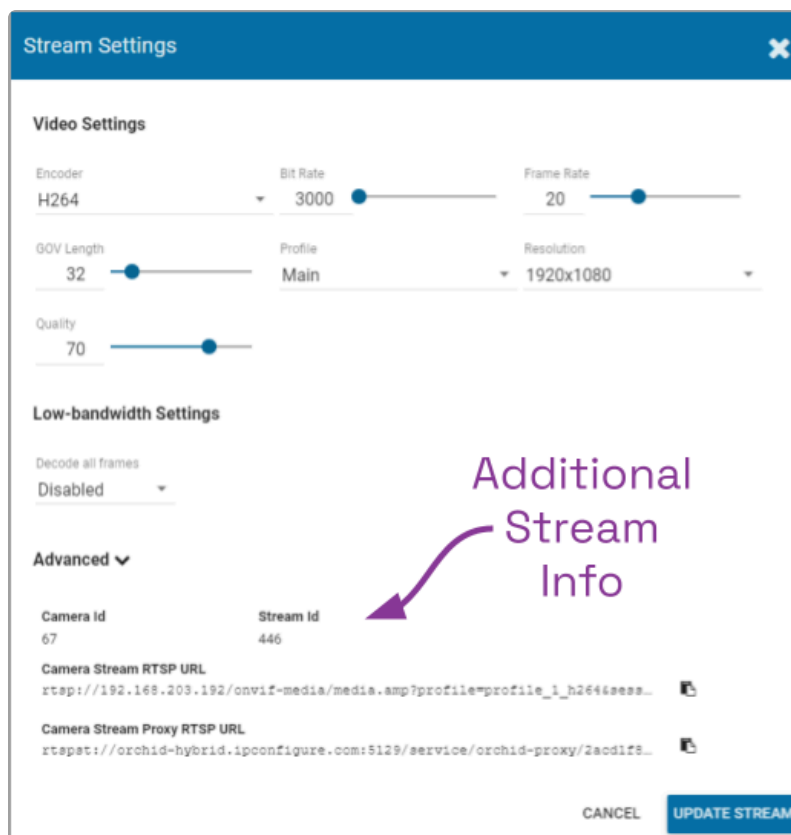
- **Decode all frames:** This setting applies to viewing Live video in Low-bandwidth mode. When Decode all frames is *disabled*, Orchid Core VMS will display only full frames (per the configured GOV length) when viewing live video in Low-bandwidth mode. When Decode all

frames is *enabled*, Orchid Core VMS 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 Core VMS server. (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.

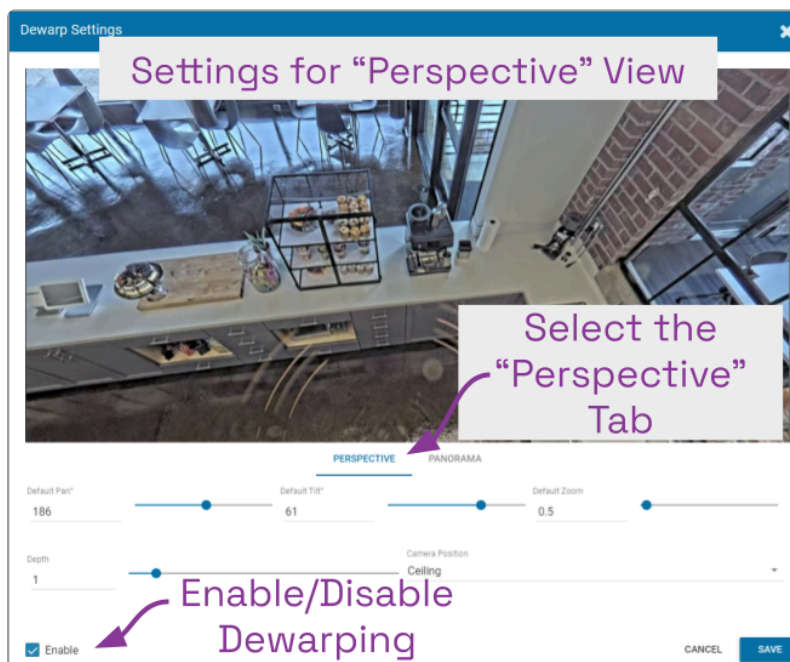
Advanced Settings: Fisheye Dewarping

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.)

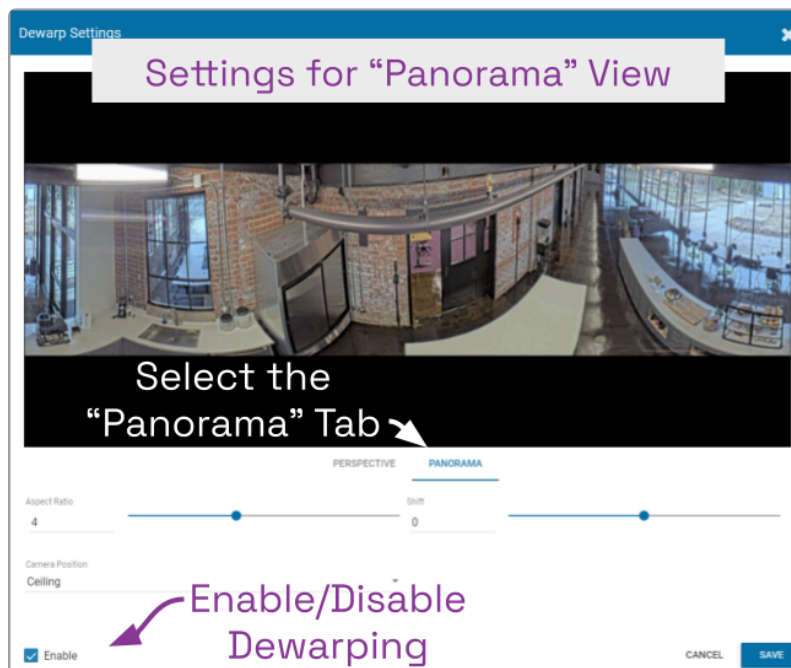
3. Mark the *Enable* checkbox to activate the *Dewarp Settings* (both *Perspective* and *Panorama*) for this camera. (If this is not marked, Dewarping features will not be available at the Player.)
4. Use the *Default Pan* slider to move the camera to the right and left to set the default view.
5. Use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

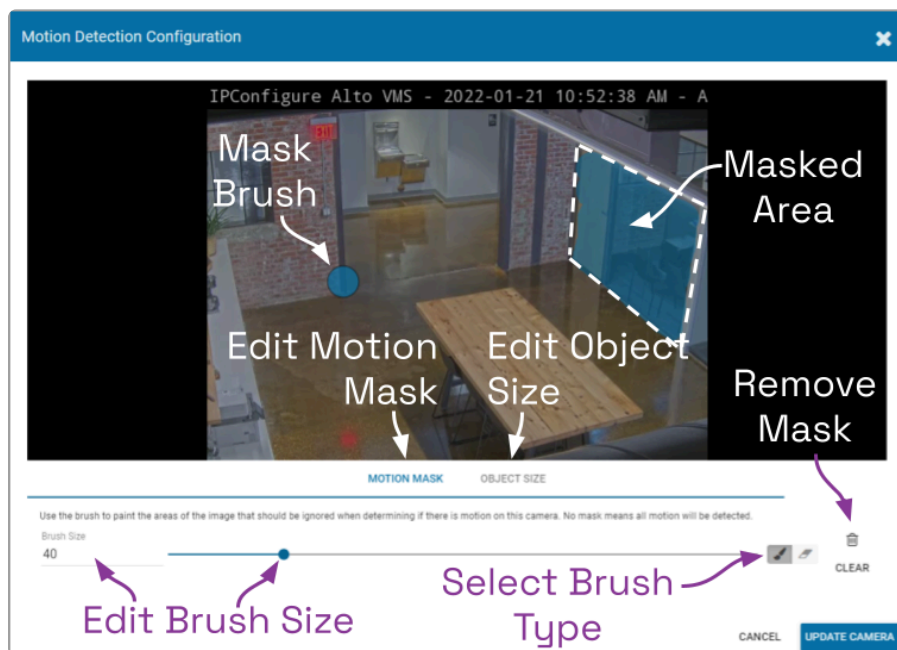
The *Camera Configuration* screen includes *Motion Detection Settings* which allow you to apply camera-specific motion detection settings. These settings allow you to define areas that motion detection will ignore. The *Motion Detection Configuration* screen provides two tools to reduce the number of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

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

* If you want to select specific areas for motion event monitoring, you need to use the *Smart Search* feature. Please refer to the [Orchid Fusion/Hybrid User Guide](#) for more details.

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.

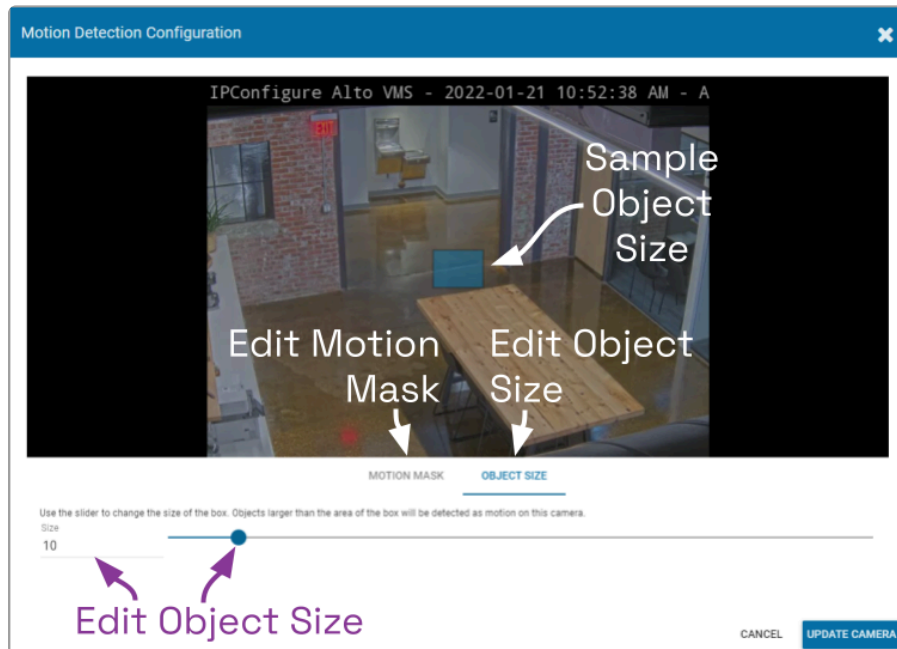
Object Size

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 × 10, 20 × 5, 30 × 3, 45 × 2 and so on (each of which have an area of 100 or less).



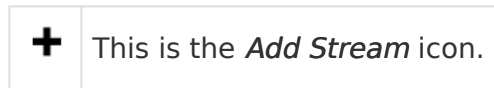
2. Adjust the *Object Size* using either of the following methods.
 - a. Click in the *Size* field and enter a new number or use the up and down arrows to increase and decrease the area.
 - b. Click and drag the slider to increase and decrease the area.
3. To activate motion detection for objects of 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.

Working with Camera Streams

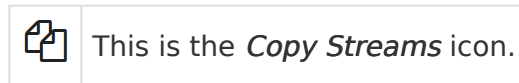
Add a Stream



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

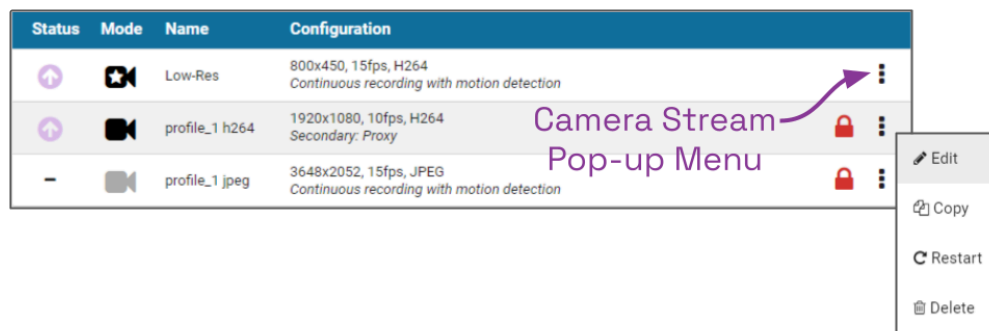
1. From the *Camera Information* screen, press the *Add Stream* button to add a new stream for the selected camera. The *Stream Settings* screen will open, allowing you to enter and modify the settings for the stream.
2. When all settings have been entered, press the *Add Stream* button to add the new profile to the *Streams* list for the selected camera.

Copy Stream to Cameras



This feature is a great shortcut to 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 *Cameras* tab, 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 for the stream you want to copy, then click the *Copy Stream to Cameras* icon.



- * RTSP cameras have a limited number of settings that can be edited in Orchid Core VMS. The pop-up menus for these cameras will not display the *Copy Stream* icon, and these cameras 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 Core VMS 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 Core VMS 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.)

Copy Low-Res to Cameras

☐ Copy all settings

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

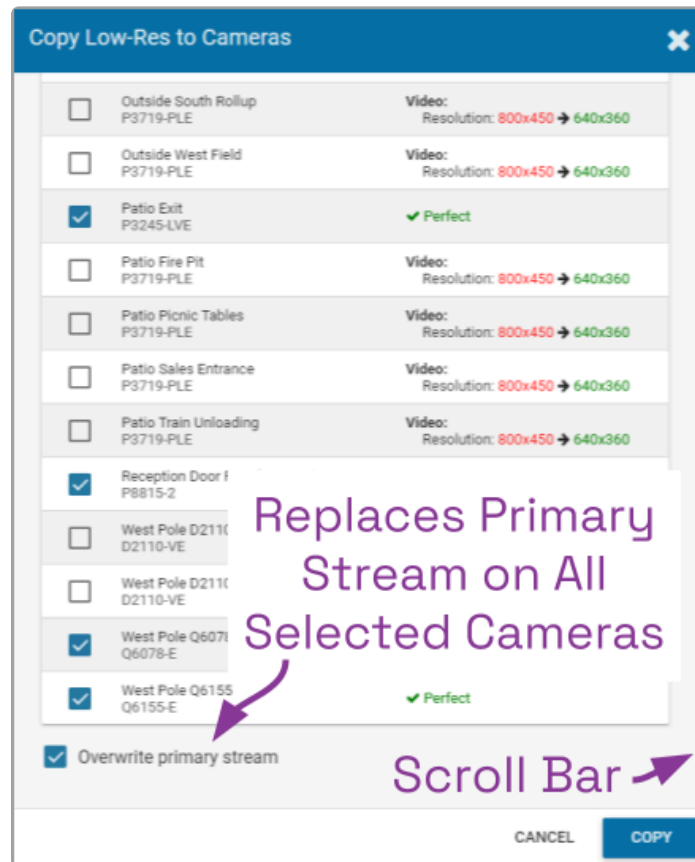
The stream settings will be adapted as shown to work with the chosen cameras.

☒ Show only perfect copies

Camera	Best Match	Only
<input checked="" type="checkbox"/> Benevolent Meet-up P3245-LVE	Perfect	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> East Pole Q6215-LE	Perfect	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Experience Center 180 P3807-PVE	Perfect	<input checked="" type="checkbox"/>

CANCEL COPY

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.

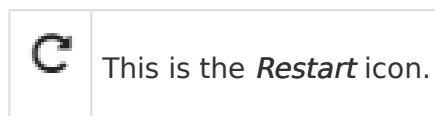


- Mark the *Overwrite primary stream* checkbox if you want these stream settings to replace the existing primary stream settings on every camera selected. Leave the *Overwrite primary stream* checkbox unmarked if you simply want to add this as a new stream option for each of the selected cameras. (When left unmarked, Orchid Core VMS 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.

Restarting a Stream



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 / Trash Can* 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.

Status	Mode	Name	Configuration	
		Low-Res	800x450, 15fps, H264 Continuous recording with motion detection	Stream
		profile_1 h264	1920x1080, 10fps, H264 Secondary: Proxy	Pop-up Menu
-		profile_1 jpeg	3648x2052, 15fps, JPEG Continuous recording with motion detection	Locked Stream

2. Click the stream's pop-up menu, then click the **Trash Can** icon. The software 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.

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 is added to the system 3 times. Each has a similar (but different) camera name, and each has a different primary stream selected.

Same IP, Different Names

Different Streams

Status	Mode	Name	Configuration
-	profile_1 h264	2560x1440, 12fps, H264	Continuous recording with motion detection
-	profile_1 jpeg	2560x1440, 30fps, JPEG	Continuous recording with motion detection
-	profile_2 jpeg	2560x1440, 30fps, JPEG	Continuous recording with motion detection
-	profile_3 h264	2560x1440, 30fps, H264	Continuous recording with motion detection
-	profile_3 jpeg	2560x1440, 30fps, JPEG	Continuous recording with motion detection
-	profile_4 h264	2560x1440, 30fps, H264	Continuous recording with motion detection
-	profile_4 jpeg	2560x1440, 30fps, JPEG	Continuous recording with motion detection
-	profile_multiview h264	2560x1440, 30fps, H264	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.

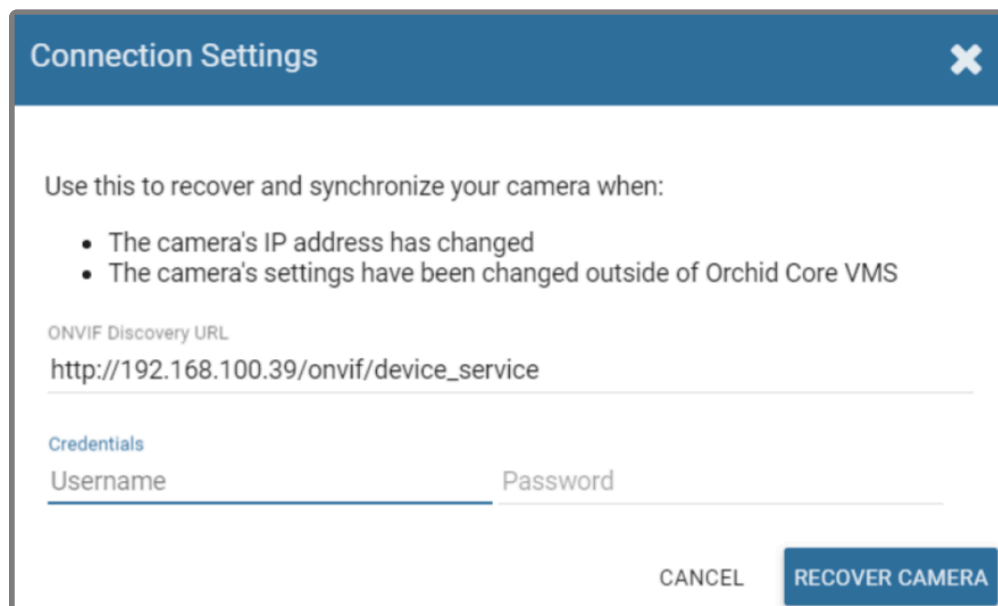


Recovering a Camera

If someone edits camera settings (including the IP address) directly at the camera, Orchid Core VMS may be unaware of the new settings and may lose its connection with the camera. For Orchid Core VMS versions 2.2.2 and above, Orchid Fusion/Hybrid VMS provides access to 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, the ability to select either server-based or camera-based motion detection (on certain cameras) was introduced in Orchid version 21.3. For cameras that were installed in earlier versions of Orchid, this new ability may not appear available. Recovering the camera will enable the camera-based motion detection option (by connecting to the metadata capabilities of the camera). Similarly, camera stream settings for NTP and Time Zone that were introduced in Orchid version 21.6, may not appear on cameras that were installed in older versions of Orchid. The *Recover Camera* feature will remedy this. Please refer to [Edit Camera Stream Settings](#) for more details about camera-based motion detection, NTP Settings, and TimeZone settings.

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.



Connection Settings

Use this to recover and synchronize your camera when:

- The camera's IP address has changed
- The camera's settings have been changed outside of Orchid Core VMS

ONVIF Discovery URL

Credentials

CANCEL 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

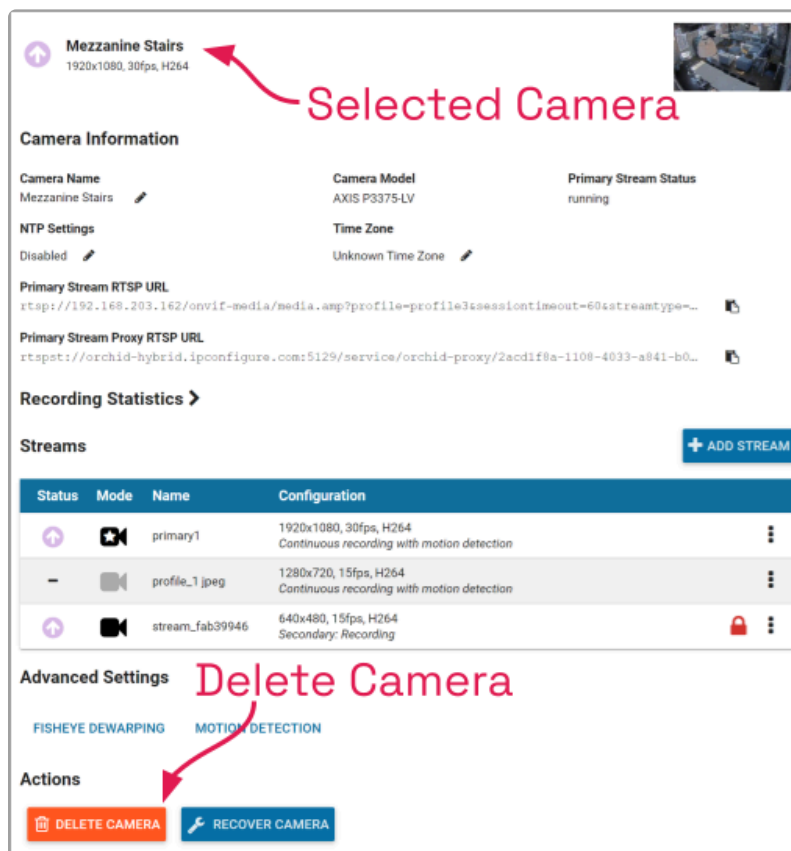
will also pull the camera settings from the camera.)

- ✿ 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 Cameras

Removing a Single Camera

1. To remove a single camera, do either of the following:
 - a. From the list of registered cameras on the server's *Cameras* tab, position the cursor over the 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 Selected** button at the bottom of the list. The software 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). The software will ask you to confirm that you want to delete the camera. Press **Delete** to confirm. Removal may take a few moments.

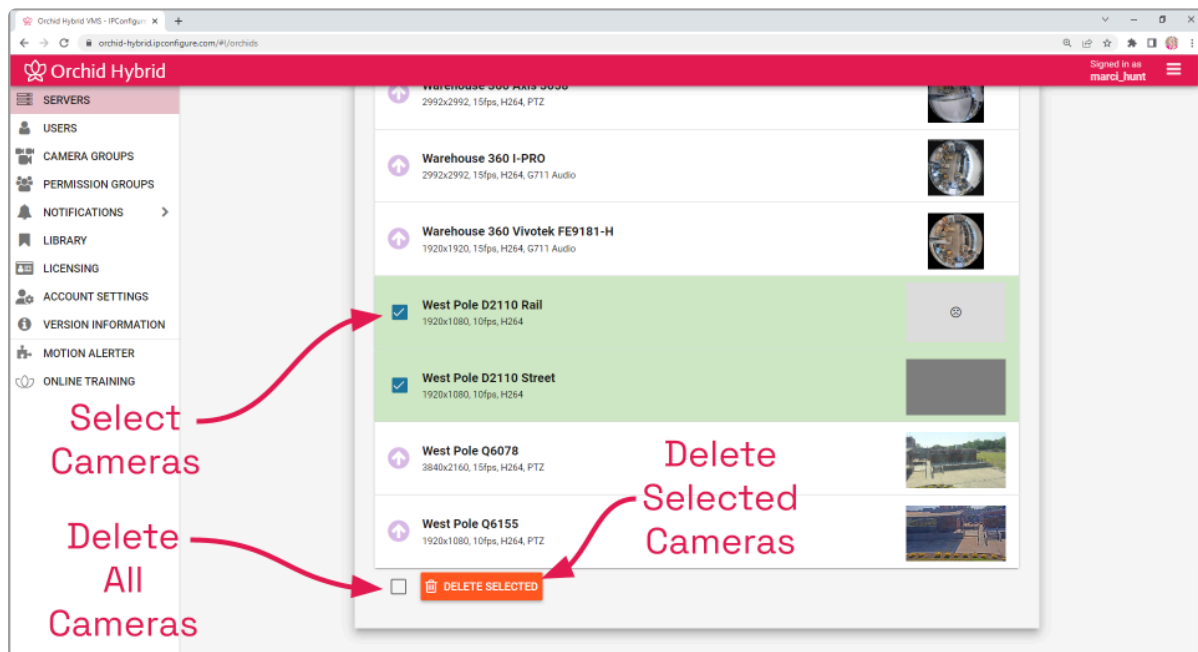


Removing Multiple Cameras

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

1. From the list of registered cameras on the server's *Cameras* tab, first select the cameras you want to delete. (For each camera you want to delete, position the cursor over the

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 on the **Delete Selected** button at the bottom of the list. The software 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 Selected** checkbox at the bottom of the list, then click on the **Delete Selected** button. The software 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.

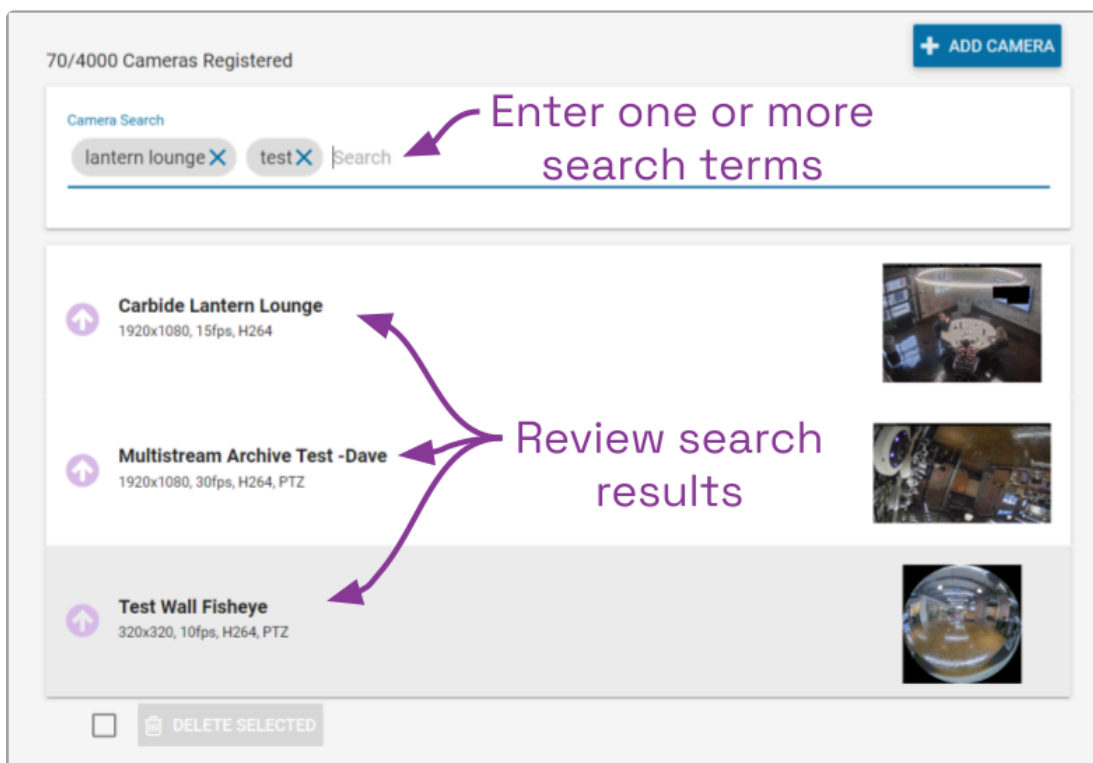
Searching for a Camera

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.

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).



The Users Tab

The Users tab allows Administrators to manage users registered to the selected Orchid Core VMS. Each Orchid Core VMS is configured with one administrator user by default; this user is created during installation and cannot be removed. Additional users may be created with varying levels of access (determined by each user's role).

About Orchid Core VMS User Roles

There are four different user roles in Orchid Core VMS, 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, and use the *Save Frame* feature.
- **Manager:** A *Manager* can view live and recorded video, use the *Smart Search* feature, use the *Save Frame* feature, 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 Core VMS, including activating Orchid Core VMS, 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 Core VMS Users List

1. Sign in to Orchid Fusion/Hybrid VMS as an Administrator.
2. Open the *System Menu* in the top-right corner of the screen and select *Servers*.
3. Click on (and expand) the server you want to work with. Then click on the *Users* tab.

The Orchid Core VMS Users screen lists all of the users that have been added, and their assigned roles. Descriptions of the four roles appear at the bottom of the screen.

Orchid Fusion VMS - IPConfigure

Signed in as admin

SERVERS

USERS

CAMERA GROUPS

PERMISSION GROUPS

NOTIFICATIONS

LIBRARY

LICENSING

ACCOUNT SETTINGS

VERSION INFORMATION

CAMERAS

USERS

RETENTION POLICY

SYSTEM STATUS

SYSTEM REPORT

ACTIVATION

Add an Orchid Core VMS User

ADD USER

Search

Users 1-30 of 32

Username	Role	Actions
A_User	Viewer	[Edit] [Delete]
admin	Administrator	[Edit] [Lock] [Delete]
B_User	Viewer	[Edit] [Delete]
C_User	Viewer	[Edit] [Delete]
D_User	Viewer	[Edit] [Delete]

Current Users

Delete User

Edit User

Locked Admin User

Adding New Orchid Users



This is the *Add* icon.

1. Click the **Add User** button in the top-right corner of the Orchid Core VMS 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. Select a role for the new user from the *Role* drop-down list. (The role can be updated by an administrator at any time.) Available roles for Orchid Core VMS server users are listed at the bottom of the *Users* screen.
4. Enter the password for the new user into the two fields labeled *Password* and *Confirm Password*.
5. Mark the *Create on all Orchid Core VMS Servers* checkbox if you want this new user to have access to all of the Orchid Core VMS servers registered in Orchid Fusion/Hybrid VMS.
6. Click the **Add User** button at the bottom of the screen to create the new Orchid Core VMS user. The new user will now appear in the *Users* list for this server (or for all of the Orchid Core VMS servers, if selected in step 5).

Editing Existing Orchid Users



This is the *Edit* pencil icon.

Nothing is set in stone for Orchid Core VMS 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.

User_X5 from Extra Server

Username * Edit Any Available Field User_X5 Role Manager

Password Confirm Password

☐ Replicate changes across all Orchid Core VMS servers

Make Change on all Orchid servers

CANCEL UPDATE USER

2. Edit any of the available fields, as needed.
3. If this user exists on multiple Orchid Core VMS servers, mark the *Replicate changes across all Orchid Core VMS servers* checkbox if you want your changes to cascade to all of those servers. (For example, you could push a password change to all the servers.)
4. If you want to create this user on all of the other registered Orchid Core VMS servers, mark the *Replicate changes across all Orchid Core VMS servers* checkbox and the *Also create new users* checkbox. You will be required to enter an administrator password.

User_X5 from Extra Server

Username * User_X5 Edit Any Available Field Role Manager

Password * Confirm Password

☒ Replicate changes across all Orchid Core VMS servers ☒ Also create new users

Save Changes for this User on all Orchid Core VMS Servers

Save Changes for this User and Add User Across All Orchid Core VMS Servers

CANCEL UPDATE USER

5. Click the **Update User** button. If you didn't mark the *Replicate* checkbox, all of the changes will be saved. If you did mark the *Replicate* checkbox, a summary of changes will appear.

Replication Strategy for User_X5

The following changes will be applied:

Server	Existing User Details	Action
<input checked="" type="checkbox"/> Desktop Server		User will be added
<input checked="" type="checkbox"/> Extra Server	User_X5 Viewer	User will be updated

CANCEL REPLICATE USER

6. Click the **Replicate User** button to implement the changes.

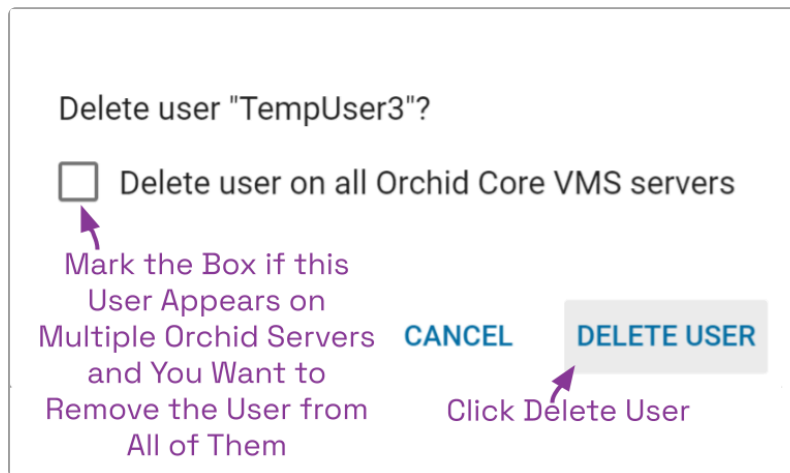
* If you try to change your own password, Orchid Core VMS will automatically sign you out.

Deleting Existing Orchid Users



This is the *Delete / Trash Can* icon.

1. To delete an existing Orchid Core VMS user, click the *Trash Can* icon to the right of the username.
2. Orchid Fusion/Hybrid VMS will ask you to confirm that you would like to remove the user. (If you are deleting an Orchid Core VMS user that exists on multiple Orchid Core VMS servers, you may delete that user from all of the servers by marking the *Delete user on all Orchid Core VMS servers* checkbox.)



3. Click the *Delete User* button to confirm you want the user removed.
 - a. If you did not mark the checkbox in step 2, the user will be erased right away.
 - b. If you marked the checkbox in step 2, you will receive a summary of the servers from which the user will be removed. Click the *Delete User* button again to confirm.

The Retention Policy Tab

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

About Video File Retention

To maintain a system for video file retention, Orchid Core VMS determines how much disk space is available on the server. By default, Orchid Core VMS 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 Core VMS 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 Core VMS 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.

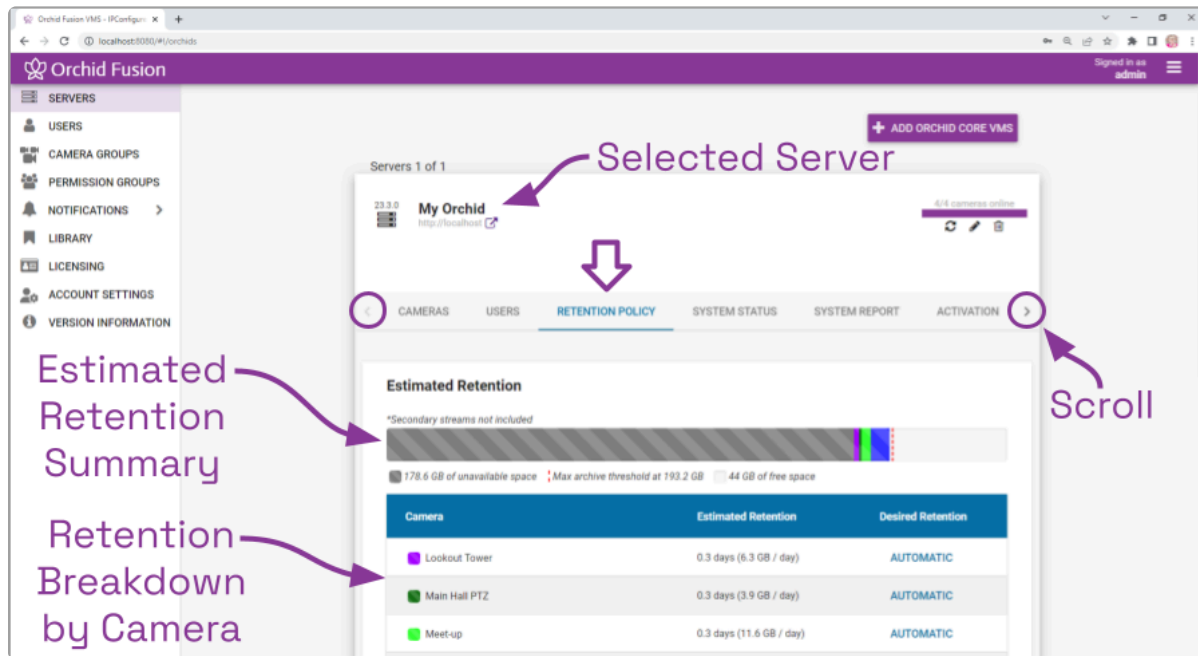
In some applications, there may be cameras for which increased file retention is critical. For these cameras, the Administrator may set specific, minimum retention settings. In these cases, the retention settings for the remaining cameras will be adjusted automatically to share the remaining balance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

When disk usage reaches the retention limit, Orchid Core VMS 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

1. From the *Servers* page, select a server and click on the *Retention Policy* tab.



At the top of the *Retention Policy* tab, Orchid Core VMS 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 Core VMS 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 Core VMS. 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 Core VMS 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 Core VMS or any other program.

Changing Desired Retention Settings

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

21.12.0 IPConfigure Headquarters
https://orchid.ipconfigure.com

47/48 cameras online

CAMERAS USERS **RETENTION POLICY** SYSTEM STATUS SYSTEM REPORT ACTIVATION

Estimated Retention

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
3DXtremes Entry Ramp	0.0 days (17.2 GB / day)	AUTOMATIC
_QuadView	0.0 days (41 GB / day)	AUTOMATIC
Alphone IX-DV 2	500.0 days (21.4 GB / day)	500 X
Armistead Refuse Park	0.0 days (10.4 GB / day)	AUTOMATIC
Belligerent Meet-up	0.0 days (1.8 GB / day)	AUTOMATIC
Café du centre d'expérience PTZ	0.0 days (4.9 GB / day)	AUTOMATIC

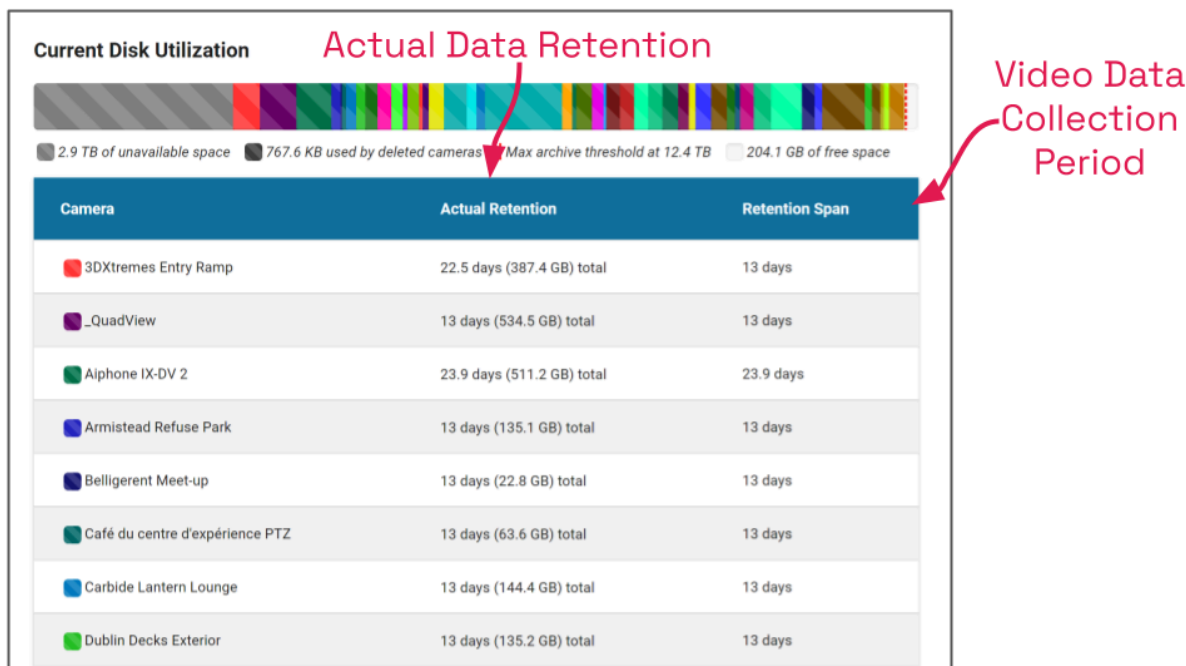
Summary and Warning

Some Custom Settings Cannot Be Supported

- Repeat steps 1 and 2 for each camera that requires minimum retention settings.
- 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.)
- Once all settings have been entered, press the **Save Configuration** button at the bottom of the list.
- 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* tab 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, let's say that one of the cameras has an actual retention reading that is 0.5 days (compared to the others which have 3.6 or more). The *Retention Span* should confirm that the system has been monitoring the camera for about the same amount of time as the other cameras.

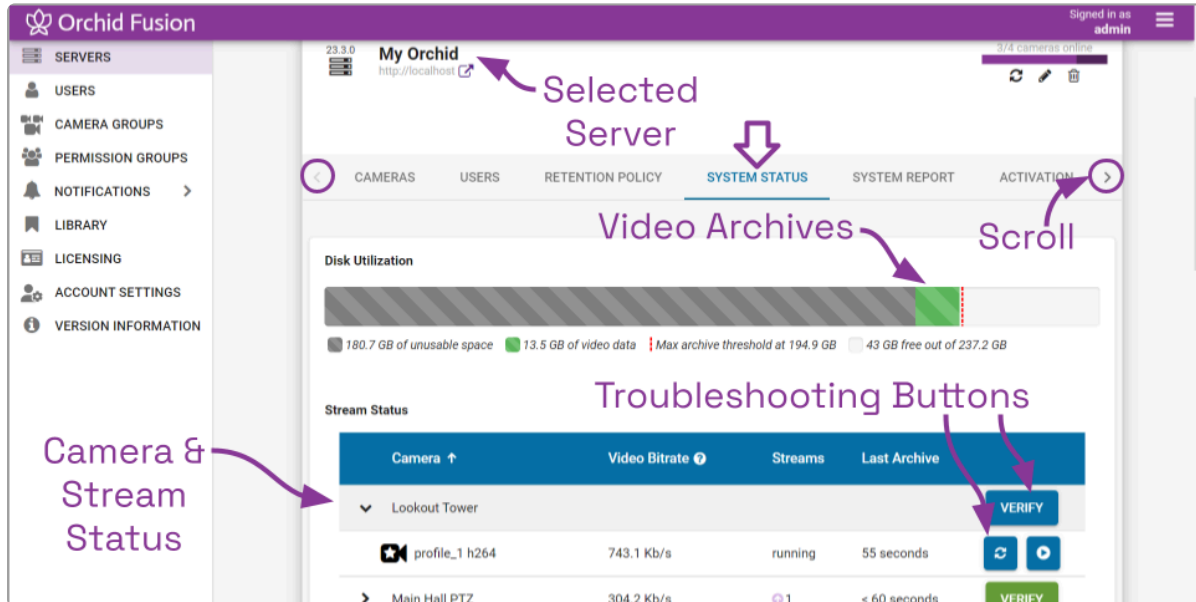
You may also use this breakdown to determine if any of the cameras are using excessive disk space. If this is the case, you can then take steps to re-configure the camera (by changing either the minimum desired retention settings or the camera stream settings) and fix the problem.

The System Status Tab

The *System Status* tab 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 Core VMS.

Accessing the System Status Report

- Once you access the *Servers* page, select a server and click on the *System Status* tab.



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 Core VMS 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 Core VMS 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 Core VMS. To make space for new video, the oldest videos are automatically deleted as the *Cleaner Threshold* is reached.
- **Cleaner threshold:** By default, Orchid Core VMS 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 Core VMS 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 Core VMS*

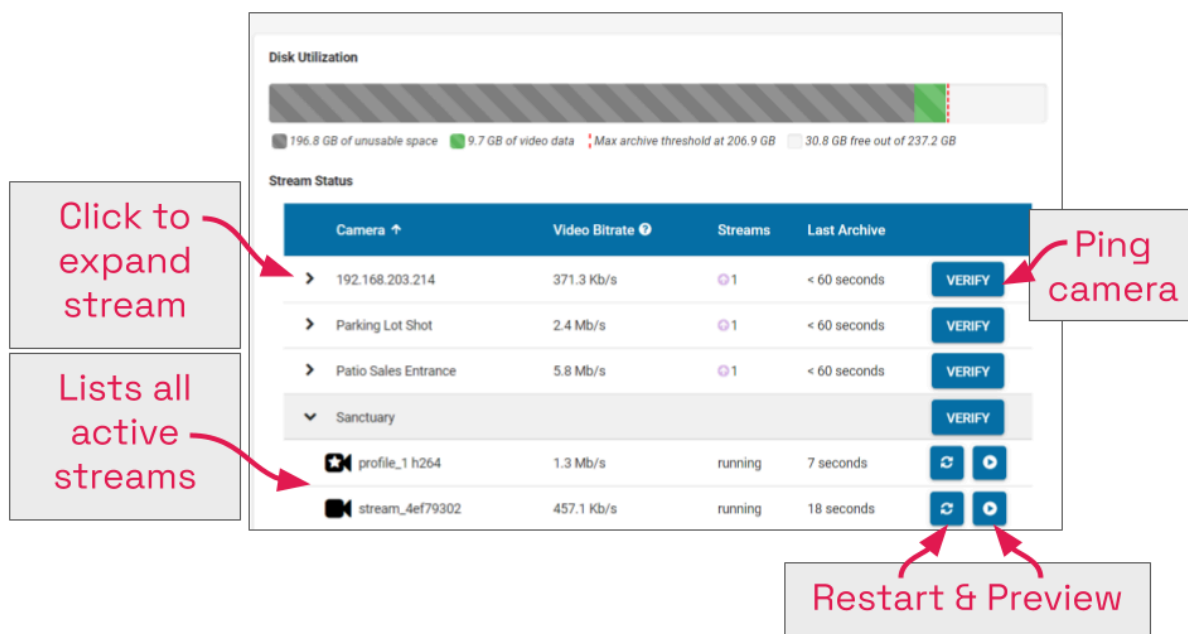
Archives Storage Location section in the [Orchid Core VMS Installation Guide](#).

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* tab provides a list of all the cameras in Orchid Core VMS. 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.

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



Stream Status

Camera	Video Bitrate	Streams	Last Archive	
192.168.203.214	371.3 Kb/s	1	< 60 seconds	VERIFY
Parking Lot Shot	2.4 Mb/s	1	< 60 seconds	VERIFY
Patio Sales Entrance	5.8 Mb/s	1	< 60 seconds	VERIFY
Sanctuary				VERIFY
 profile_1 h264	1.3 Mb/s	running	7 seconds	 
 stream_4ef79302	457.1 Kb/s	running	18 seconds	 

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 Core VMS over the last 15 minutes. This provides an indication as to how fast the 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. A stream can have the following statuses:

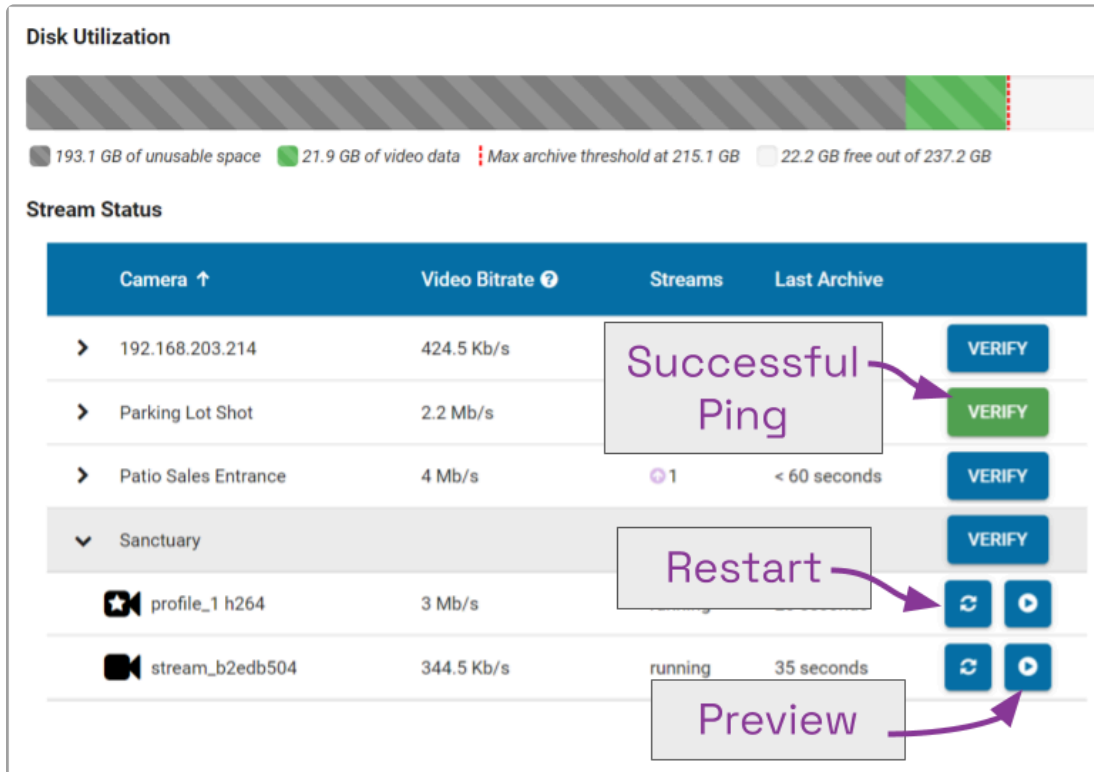
- **Running:** The stream is currently active and running properly without any errors. It is actively recording and saving video (if configured to do so).
- **Restarting:** The stream is restarting automatically and should be active again within a few seconds.
- **Idle:** The camera is not responding after being restarted by Orchid Core VMS 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 Core VMS has never saved an archive for the camera stream, the software will display *Never* in the *Last Archive* column. Orchid Core VMS 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.

Troubleshooting the Camera Stream Status

	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).

If there are any issues with the streams, 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).



- **Verify:** Pings the camera and confirms whether or not Orchid Core VMS can communicate with the camera successfully. The **Verify** button will turn green if the ping is successful; the button will turn red if Orchid Core VMS 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 Core VMS is receiving video from the camera stream without navigating 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.

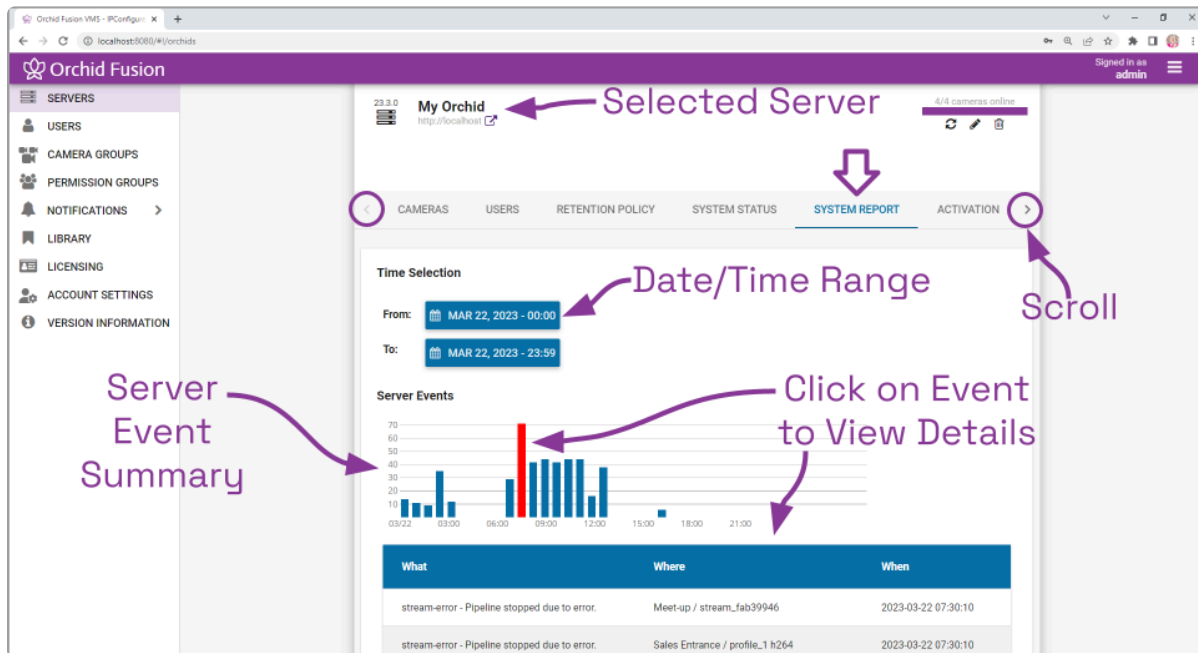
(Please refer to the [Advanced Topics](#) section for additional help.)

The System Report Tab

The *System Report* tab allows Administrators 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 Core VMS system log.

Accessing the System Report

1. From the *Servers* screen, select a server and click on the *System Report* tab.



Working with the Server Events and Stream Statistics

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 will display 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 Core VMS server was started. (System provides the time.)
- **Stop:** The Orchid Core VMS server was stopped. (System provides the time.)
- **License Changed:** The Orchid Core VMS license has been added, removed, or updated.
- **Entered Degraded State:** The Orchid Core VMS server 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 [Orchid Core VMS Administrator Guide](#) for more details.)
- **Trusted Issuer Created:** This indicates that Orchid Fusion/Hybrid VMS has registered (added) this Orchid Core VMS server.
- **Trusted Issuer Removed:** This indicates that the Orchid Fusion/Hybrid VMS server has detached from this Orchid Core VMS server.

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.
 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 Core VMS. For each stream, Orchid Core VMS 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 only includes motion the system was instructed to detect, using either server-based or camera-based motion detection. Keep in mind that server-based motion detection may be further defined using the advanced [Motion Detection](#) settings.)

Stream Statistics

Camera / Stream	MB Recorded	Video Recorded	Motion Recorded
3DXtremes Entry Ramp / profile_1 h264	11,008	15 hours, 12 minutes, and 19 seconds	21 minutes, and 15 seconds
„QuadView / profile_multiview h264	34,142	15 hours, 22 minutes, and 4 seconds	3 minutes, and 56 seconds
Alphone IX-DV 2 / Stream_0	14,057	15 hours, 22 minutes, and 19 seconds	12 minutes, and 19 seconds
Armistead Refuse Park / profile_2 h264	6,780	15 hours, 22 minutes, and 4 seconds	10 minutes, and 6 seconds
Armistead Refuse Park / profile_3 h264	49	1 minute, and 38 seconds	0 seconds
Armistead Refuse Park / profile_4 h264			
Belligerent Meet-up / profile_1 h264			5 minutes, and 27 seconds
Belligerent Meet-up / stream_fab39946			
Café du centre d'expérience PTZ / profile_1 h264	2,517	15 hours, 22 minutes, and 49 seconds	1 hour, 47 minutes, and 20 seconds
Carbide Lantern Lounge / profile_1 h264	7,767	15 hours, 22 minutes, and 57 seconds	56 minutes, and 13 seconds
Dublin Decks Exterior / profile_1 h264	1,441	15 hours, 22 minutes, and 36 seconds	10 minutes, and 34 seconds
Dumpsters / profile_4 h264	13,548	15 hours, 22 minutes, and 10 seconds	10 minutes, and 5 seconds
Easterly Field / profile_1 h264	1,952	15 hours, 22 minutes, and 39 seconds	57 seconds
Elevated Sidewalk / profile_1 h264	11,649	15 hours, 14 minutes, and 6 seconds	7 minutes, and 38 seconds

Displays Statistics
for Each Active
Camera 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 Core VMS 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 Core VMS.

- * 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, and you need to view the time difference, click the *Clock* icon (that would appear next to the software name in the Orchid Fusion/Hybrid VMS screen header).

Log Export

Format:

☒ gzip ← Select Log Format

☐ text

☐ Specify Range ← Select Date Range

[EXPORT LOGS](#)

1. Select the format you wish to use for the log export:
 - a. gzip: This option will download the latest log from Orchid Core VMS 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.

The Activation Tab

The *Activation* tab allows you to review current license information for the Orchid Core VMS server, and provides a means to add or update a license.

About Orchid Core VMS Licenses

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

- **Trial License**
 - This is our default, out-of-the-box Orchid license.
 - 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.
 - When installed on a Linux ARM embedded server, the *Trial* license will allow unlimited cameras and archives, but the *Trial* version cannot be linked to an Orchid Fusion or an Orchid Hybrid VMS.
- **Core License**
 - 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 Core VMS)**
 - 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 Core VMS)**
 - 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 your 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

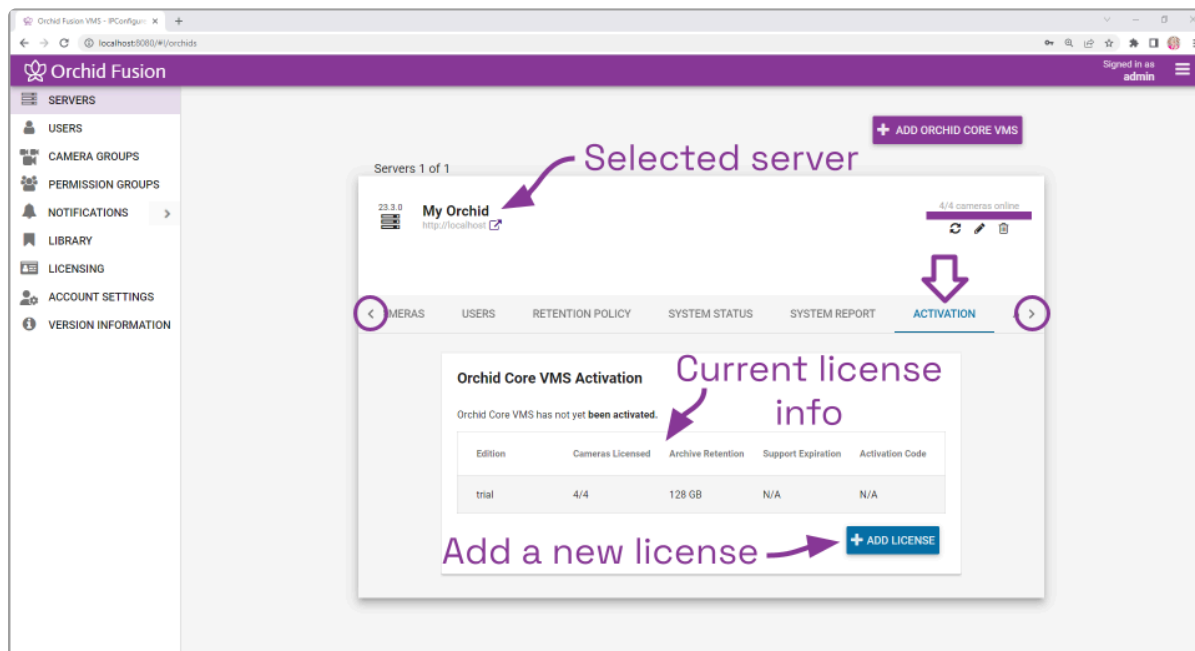
IPConfigure also offers time-limited versions of the *Core*, *Fusion*, and *Hybrid* licenses. Generally, these will be used as SaaS licenses, and for testing large numbers of cameras or high retention settings (which would be impossible to do with the standard *Trial* license).

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 time-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 Core VMS will enter a degraded mode and will stop recording video. Previously recorded video will continue to be accessible in this degraded mode.
- **Fusion-Timed License (for Orchid Core VMS):**
 - If you have a Fusion-timed license, and the time limit expires, the Orchid Core VMS 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 Core VMS):**
 - If you have a Hybrid-timed license, and the time limit expires, the Orchid Core VMS 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.

Accessing the Activation Tab

1. Once you access the *Servers* screen, select a server and click on the *Activation* tab.



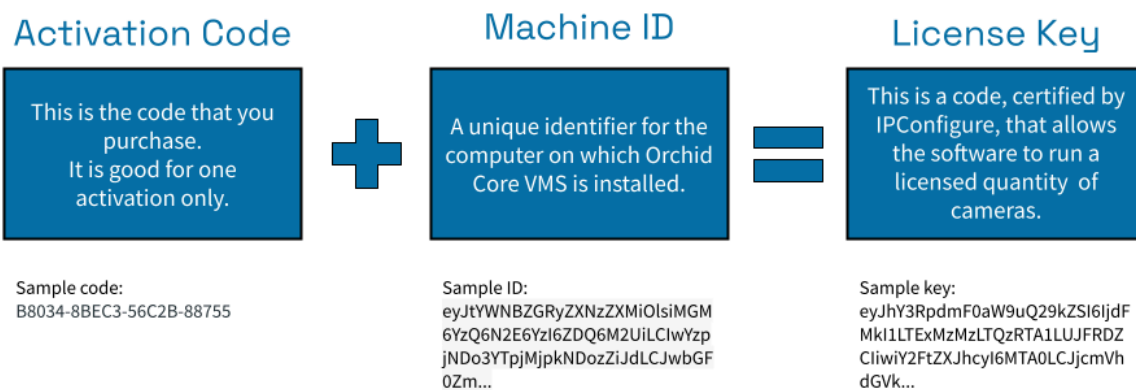
- Beginning in version 21.12, Orchid Fusion/Hybrid VMS includes the *Licensing* feature that allows you to check the license status for all of your Orchid servers at once. You may also use the *Licensing* feature to perform bulk license updates. Please refer to the [Licensing](#) section for more details.

Adding a License to Orchid Core VMS (Quick Method)

+ This is the *Add* icon.

When you purchase a license for Orchid Core VMS, 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 Core VMS server has an internet connection.



* When you add, remove, or update a license, a *Licensed Changed* event will appear on the *System Report*.

* If Orchid Core VMS has not yet been activated, the licensing screen will show that Orchid Core VMS is using the *Trial* edition.

Orchid Core VMS Activation

Orchid Core VMS 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

1. At the *Orchid Core VMS Activation* screen (above), click the **Add License** button to activate a new license.

Activation ✕

Please provide your Activation Code and a location description.

Activation Code* Enter Activation Code

7FFB0-510E1-AD114-A3CC4

Location

1334 Main Street

Activate License

OFFLINE ACTIVATION CANCEL **ACTIVATE**

2. On the *Activation* screen, enter your activation code in the *Activation Code* field. (Sample code shown above.)
3. Then input a location description that specifies where your Orchid Core VMS server will be located. Common location descriptions are a shop name, number, or address.
4. Click the **Activate** button to generate your new Orchid Core VMS license. If the license creation is successful, a screen will appear that indicates success.



Orchid Core VMS Activation

Orchid Core VMS has been activated. **Activation Complete**

Edition	Cameras Licensed	Archive Retention	Support Expiration	Activation Code
fusion	4/16	Unlimited	Saturday, February 13, 2021 UTC	7FFB0-510E1-AD114- A3CC4

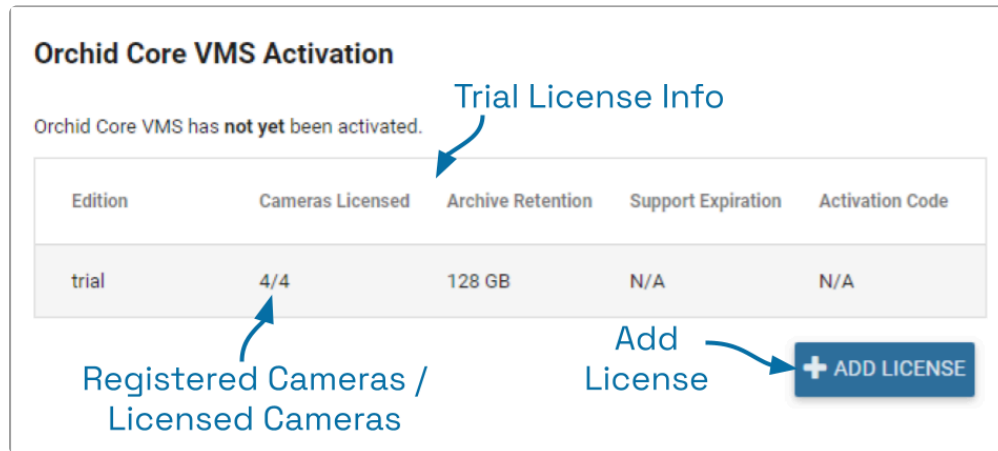
Thank you!

**Registered Cameras /
Licensed Cameras**

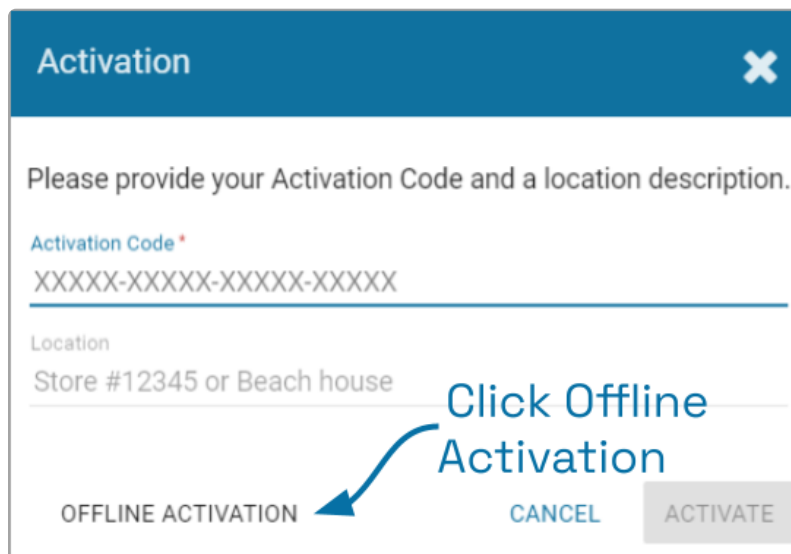
 UPDATE LICENSE  REMOVE LICENSE

Adding a License to Orchid Core VMS (Offline Method)

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



1. At the Orchid Core VMS *Activation* screen (above), click the **Add License** button to activate a new license.



2. At the *Activation* screen, click the **Offline Activation** button.

Activation Instructions

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

Copy Machine ID

Machine Id

```
eyJtYWNBEGRyZXNzZXMiOlsIMDA6ZmY6N2U6MWU6MmE6N2EiLCI3NDpkZT0yYjo4ZDplZDowZSIsImU0OmQ1OjNkOmQ2OjQxOmQmIiwia2IjA6ZGU6ZjE6YjY6YVQ6MzkiXSwicGxhdGZvcml0iJXaW5kb3dzIE5UOjYyMiAoQnVpbGQgOTIwMCK6QU1ENjQiLCJzdG9yYWdlRGV2aWNlIjpw7ImkIjoIRTIwMzQyMzNIMEw5OFMlLCJwYXRoIjoixFxcXC5cXEM6IiwidHlwZSI6IkhERCJ9LCJ2ZXJzaW9uIjoIMs4yIn0=
```

License Key

CANCEL **ACTIVATE**

3. At the *Activation Instructions* screen, copy your Machine ID. (Click and drag from the beginning to the end of the text string, then click **CTRL+C** to copy it.)
4. 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.
5. 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

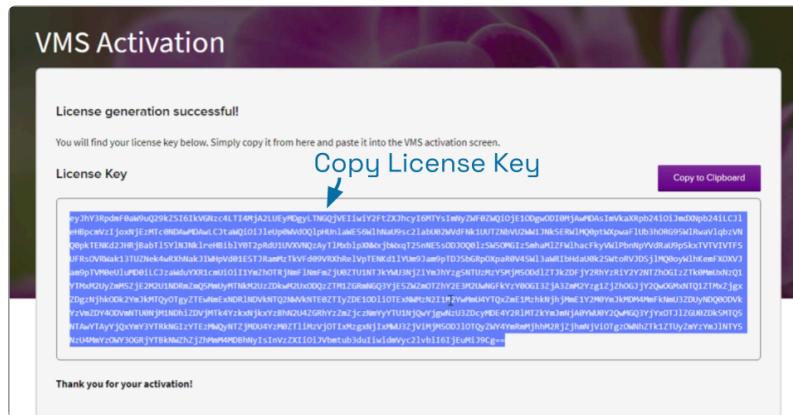
Machine ID

Location Description

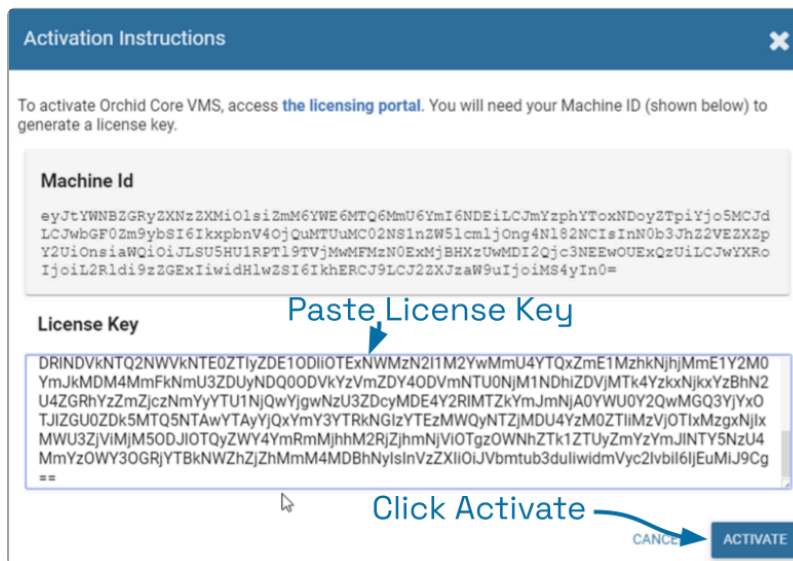
Activate License

6. Once the *VMS Activation* screen loads, enter the Activation Code into the *Activation Code* field. This code was provided to you when you purchased your license for Orchid Core VMS. (Sample code shown above.)
7. Paste your Machine ID into the *Machine ID* field.
8. Input a location description that specifies where your Orchid Core VMS server will be located. Common location descriptions are a shop name, number, or address.
9. Click the **Activate License** button to generate your new Orchid Core VMS 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.



10. Select the text in the *License Key* field, then click **CTRL-C** to copy the License Key to a text file on a USB drive.
11. Close the *VMS Activation* screen and return to the Orchid Core VMS server.
12. Click into the *License Key* field on the *Activation Instructions* screen. Click **CTRL+V** to paste the text into the field (as pictured below).



13. Click the **Activate** button to activate your new license key. If the activation was successful, you will see a message at the top of your screen saying “Orchid Core VMS has been activated.”

Orchid Core VMS Activation

Orchid Core VMS has been activated.

Activation Complete

Edition	Cameras Licensed	Archive Retention	Support Expiration	Activation Code
fusion	4/16	Unlimited	Saturday, February 13, 2021 UTC	EF778-28206-A2082- 3FB5D

Thank you!

Registered Cameras /
Licensed Cameras

UPDATE LICENSE REMOVE LICENSE

The *Edition*, *Cameras Licensed*, *Archive Retention*, and *Support Expiration* fields will all be updated to match the license you purchased.

Modifying an Existing License (Quick Method)



This is the *Edit* pencil icon.

If you want to add more cameras to the system, or simply extend your support agreement, you will need to modify an existing Orchid Core VMS 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 Core VMS server will not function properly; contact your IPConfigure sales representative to purchase an upgrade or renewal).



If you have an expired, time-limited license, Orchid Core VMS will enter a degraded state and will stop recording. (See the *License Errors* topic in the [Orchid Core VMS Administrator Guide](#) for more details.)



If you add, remove, or update a license, a *Licensed Changed* event will appear on the *System Report*.

1. Once you access the *Servers* screen, select a server and click on the *Activation* tab.


Orchid Core VMS Activation


Orchid Core VMS has been activated.

Edition	Cameras Licensed	Archive Retention	Support Expiration	Activation Code
fusion	4/16	Unlimited	Saturday, February 13, 2021 UTC	7FFB0-510E1-AD114- A3CC4

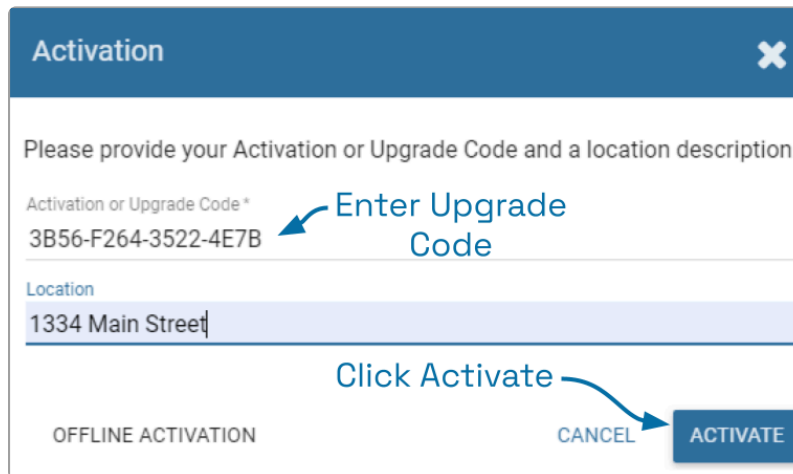
Thank you!

Update License

 UPDATE LICENSE

 REMOVE LICENSE

2. When the *Orchid Core VMS Activation* screen appears (above), click the *Update License* button.



The image shows the 'Activation' window in the Orchid Core VMS Administrator. It has a blue header with the title 'Activation' and a close button. The main text asks the user to provide an 'Activation or Upgrade Code' and a 'Location description'. There are two input fields: the first contains the code '3B56-F264-3522-4E7B' and the second contains '1334 Main Street'. Below the fields are two buttons: 'CANCEL' and 'ACTIVATE'. Annotations with blue arrows point to the code field with the text 'Enter Upgrade Code' and to the 'ACTIVATE' button with the text 'Click Activate'.

Activation

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

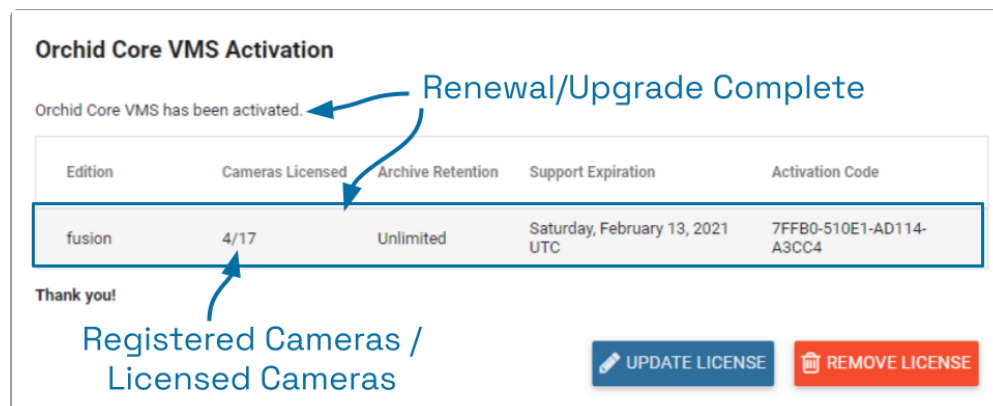
Activation or Upgrade Code*
3B56-F264-3522-4E7B

Location
1334 Main Street

OFFLINE ACTIVATION

CANCEL ACTIVATE

3. When the *Activation* screen appears, enter your *Renewal/Add-On* code into the *Activation or Upgrade Code* field.
4. In the *Location* field, enter a description that specifies where your Orchid Core VMS server will be located. Common location descriptions are a shop name, number, or address.
5. Click the **Activate** button. The *Orchid Core VMS 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 Core VMS Activation' screen after a successful activation. It features a message 'Orchid Core VMS has been activated.' and a table with license details. Annotations with blue arrows point to the message with the text 'Renewal/Upgrade Complete' and to the '4/17' value in the 'Cameras Licensed' column with the text 'Registered Cameras / Licensed Cameras'. At the bottom, there are two buttons: 'UPDATE LICENSE' and 'REMOVE LICENSE'.

Orchid Core VMS Activation

Orchid Core VMS has been activated.

Edition	Cameras Licensed	Archive Retention	Support Expiration	Activation Code
fusion	4/17	Unlimited	Saturday, February 13, 2021 UTC	7FFB0-510E1-AD114-A3CC4

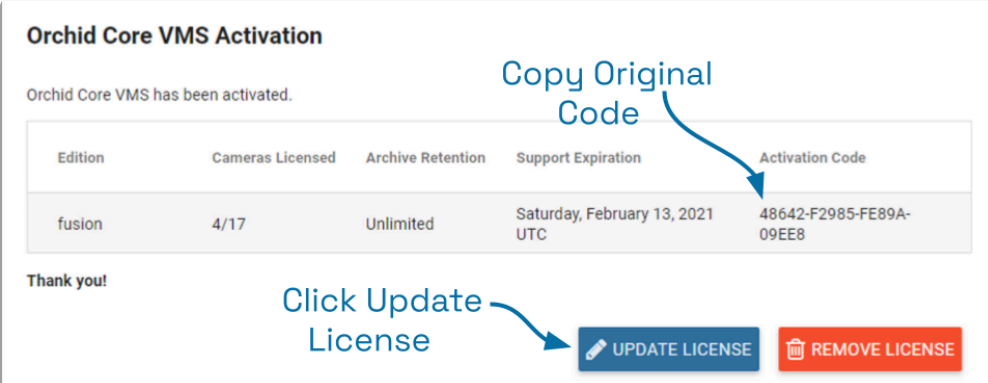
Thank you!

UPDATE LICENSE REMOVE LICENSE

Modifying an Existing License (Offline Method)

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

1. Once you access the *Servers* screen, select a server and click on the *Activation* tab.



Orchid Core VMS Activation

Orchid Core VMS has been activated.

Edition	Cameras Licensed	Archive Retention	Support Expiration	Activation Code
fusion	4/17	Unlimited	Saturday, February 13, 2021 UTC	48642-F2985-FE89A-09EE8

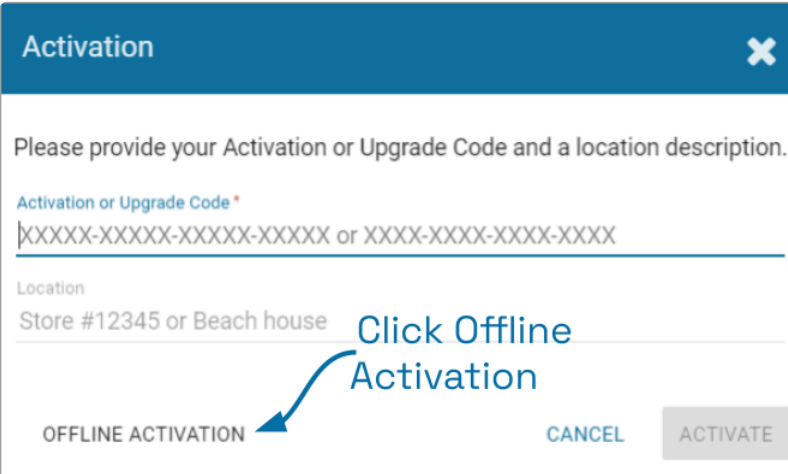
Thank you!

Click Update License

UPDATE LICENSE REMOVE LICENSE

Copy Original Code

2. When the *Orchid Core VMS 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.)
3. Open a new text file and click **CTRL_V** to paste the original activation code into the text file.
4. Save this text file on a USB drive that you can use on a computer with internet access.
5. Click the **Update License** button to begin the upgrade/renewal process.



Activation

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

Activation or Upgrade Code *

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

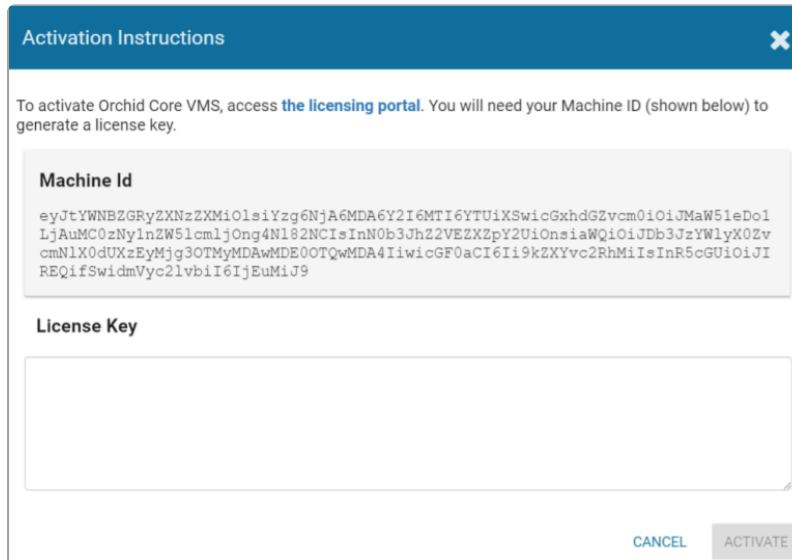
Location

Store #12345 or Beach house

Click Offline Activation

OFFLINE ACTIVATION CANCEL ACTIVATE

6. On the *Activation* screen, press the *Offline Activation* button.



Activation Instructions

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

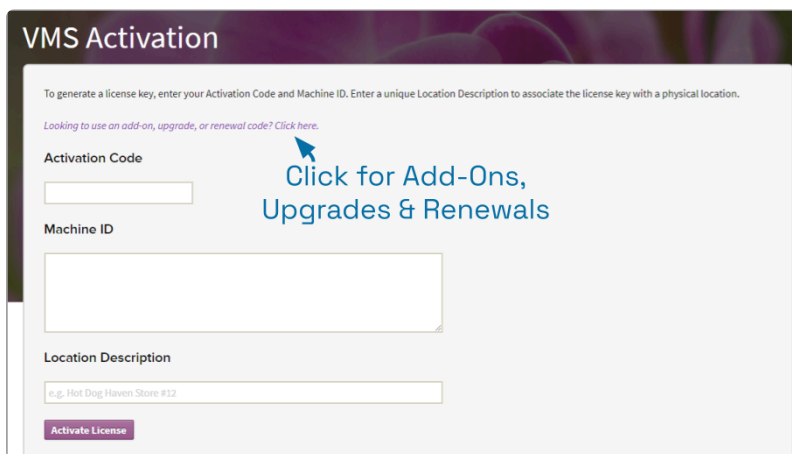
Machine Id

eyJtYWNBZGRyZXNzZXMiOlsiYzg6NjA6MDA6Y2I6MTI6YTU1KSwicGxhdGZvcml0iJMaW5leDo1LjAuMC0zNy1nZW51cm1jOng4N182NCIsInN0b3JhZ2VEZXZpY2UiOmsiaWQiOiJDb3JzYWlyX0ZvcmlNIX0dUXzEyMjg3OTMyMDAwMDE0OTQwMDA4IiwicGF0aCI6Ii9kZXVvc2RhMiIsInR5cGU0iJlREQifSwidmVyc2lvbiI6IjEuMiJ9

License Key

[CANCEL](#) [ACTIVATE](#)

7. 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. The *VMS Activation* screen will appear.



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

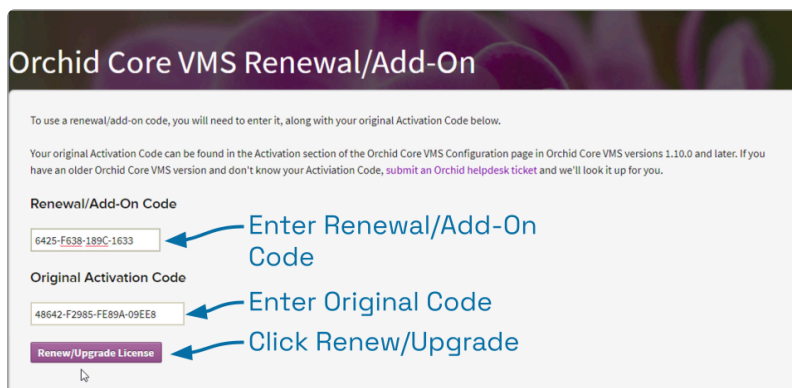
Machine ID

Location Description

[Activate License](#)

Click for Add-Ons, Upgrades & Renewals

8. 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.



Orchid Core VMS Renewal/Add-On

To use a renewal/add-on code, you will need to enter it, along with your original Activation Code below.

Your original Activation Code can be found in the Activation section of the Orchid Core VMS Configuration page in Orchid Core VMS versions 1.10.0 and later. If you have an older Orchid Core VMS version and don't know your Activation Code, [submit an Orchid helpdesk ticket](#) and we'll look it up for you.

Renewal/Add-On Code

Original Activation Code

[Renew/Upgrade License](#)

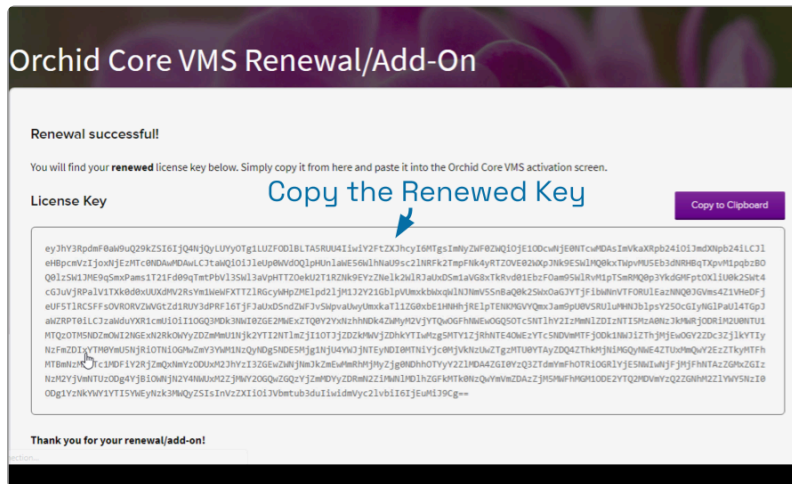
Enter Renewal/Add-On Code

Enter Original Code

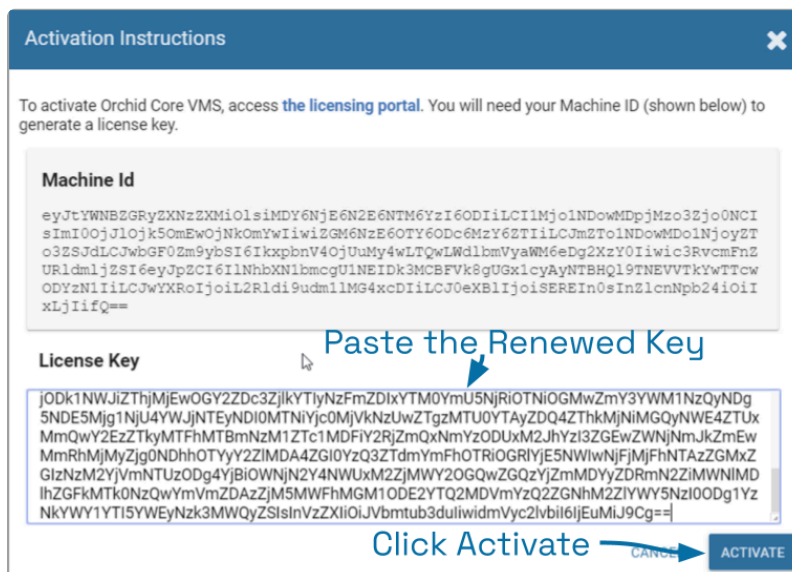
Click Renew/Upgrade

9. 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.

10. Then go to the *Renewal/Add-On Code* field and enter the code that you just purchased.
11. Press the *Renew/Upgrade License* button. If successful, the system will generate a *Renewed* license key.



12. Once the renewal is successful, select the text in the *License Key* field, and click **CTRL-C** to copy the License Key text. Use the **CTRL+V** command to paste it onto the USB drive.
13. Close the *Renewal/Add-On* screen on the internet-connected computer.
14. Take the USB drive back to the Orchid Core VMS server and return to the *Activation Instructions* screen.



- Copy the *Renewed* license key text from the USB drive and paste it into the *License Key* field.
- Click the **Activate** button to activate your new license key. If the activation was successful, you will see a message at the top of your screen saying “*Orchid Core VMS has been activated.*”

Orchid Core VMS Activation

Orchid Core VMS has been activated. ← New License has been Activated

Edition	Cameras Licensed	Archive Retention	Support Expiration	Activation Code
fusion	4/18 ← Registered Cameras / Licensed Cameras	Unlimited	Saturday, February 13, 2021 UTC	48642-F2985-FE89A-09EE8

Thank you!

✎ UPDATE LICENSE 🗑 REMOVE LICENSE

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

The Advanced Settings Tab

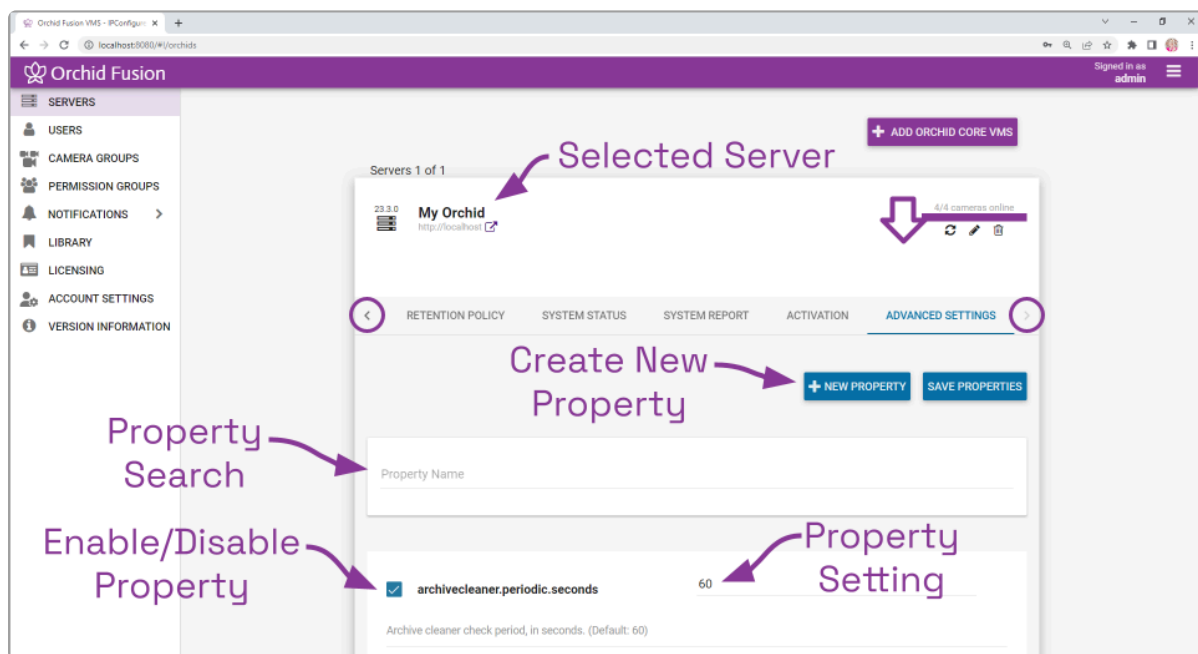
The *Advanced Settings* tab provides Administrators with direct access to the Orchid Core VMS properties file, allowing for quick and easy modifications for many of the properties.

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

Accessing the Advanced Settings Tab

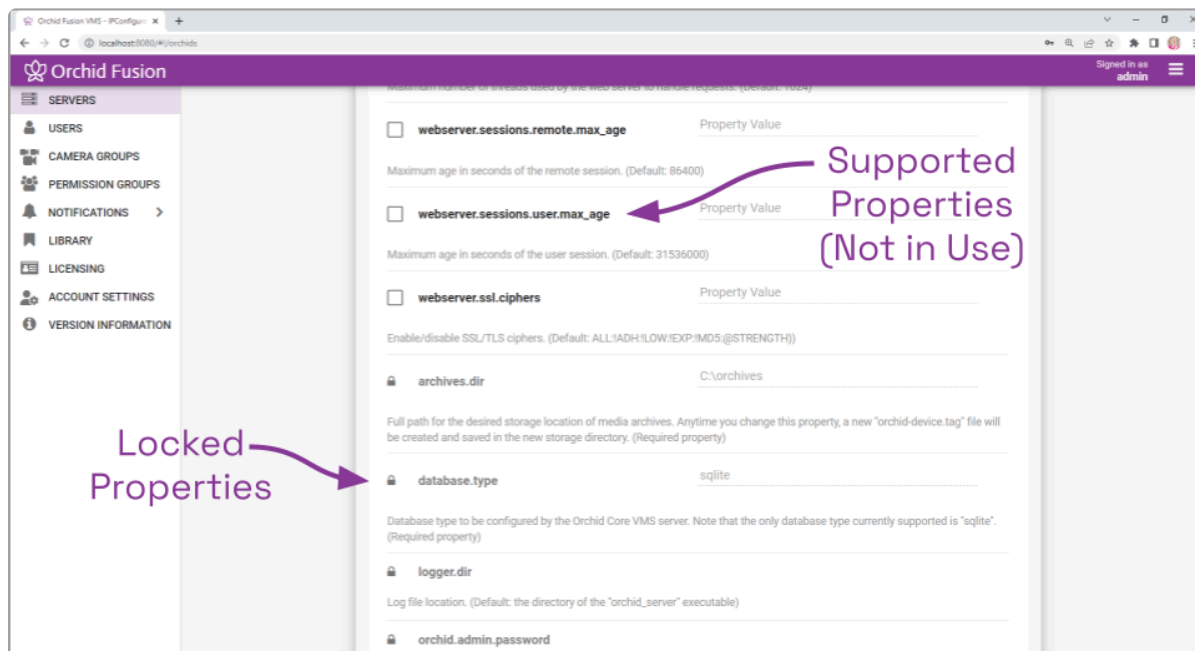
1. Once you access the *Servers* screen, select a server and click on the *Advanced Settings* tab. (You may have to use the Admin tab scroll button to see the *Advanced Settings* tab.)

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.



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 Core VMS Configuration Settings* section (both of which are in the [Orchid Core VMS Installation Guide](#)).

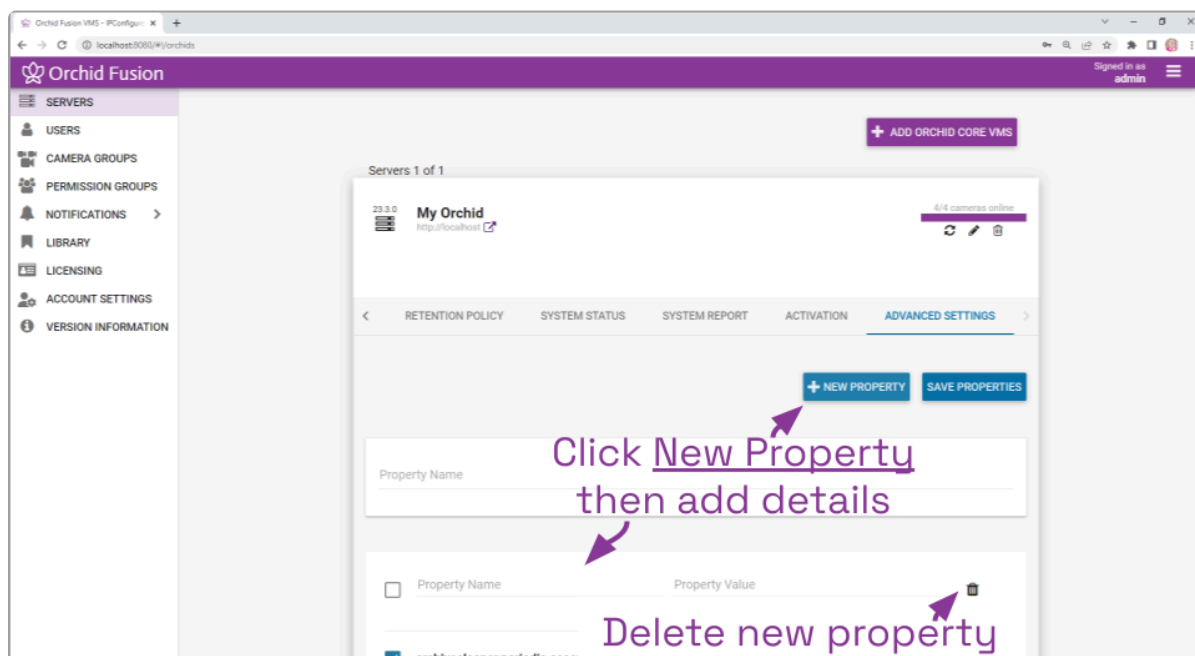
Working With Advanced Properties

	This is the <i>Add</i> icon (for adding new properties).
	This indicates 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.

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.

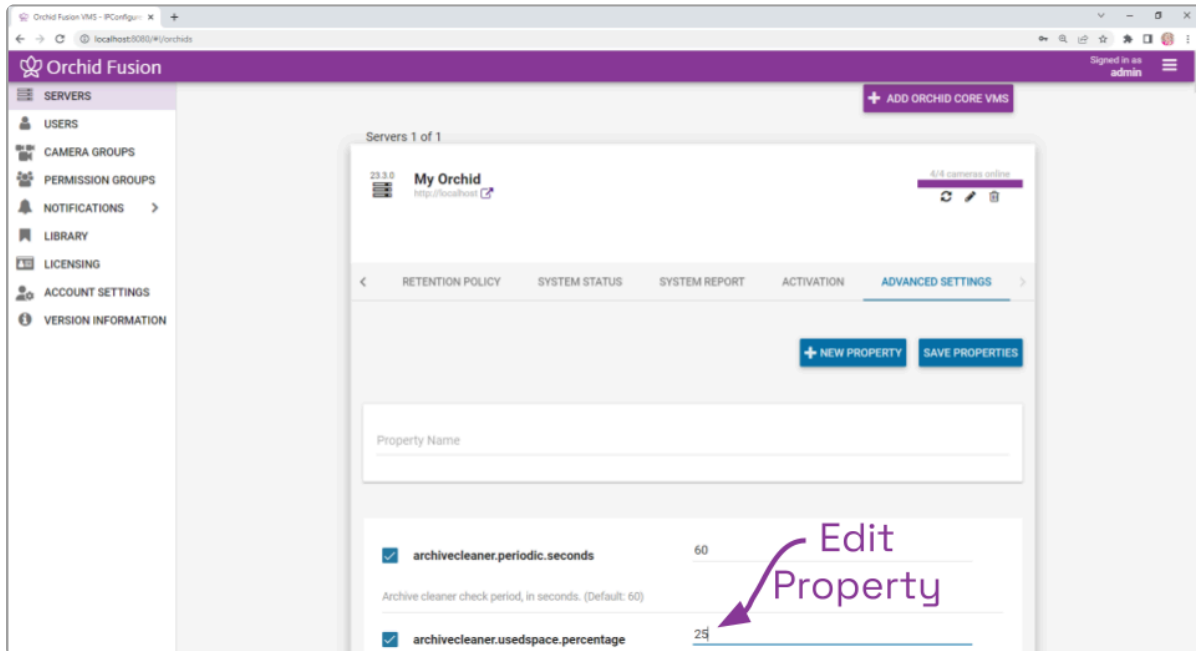


2. Mark the checkbox to activate the new property. (The property must be enabled and saved in order to be added to the Properties list.)
3. Enter a name for the new property in the *Property Name* field. [Property names are not allowed to contain colons (:), equals signs (=), blank spaces, or control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

Activating a New Property

1. To activate an unused property, click the checkbox to add a mark.
2. Click into the *Property Value* field 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).

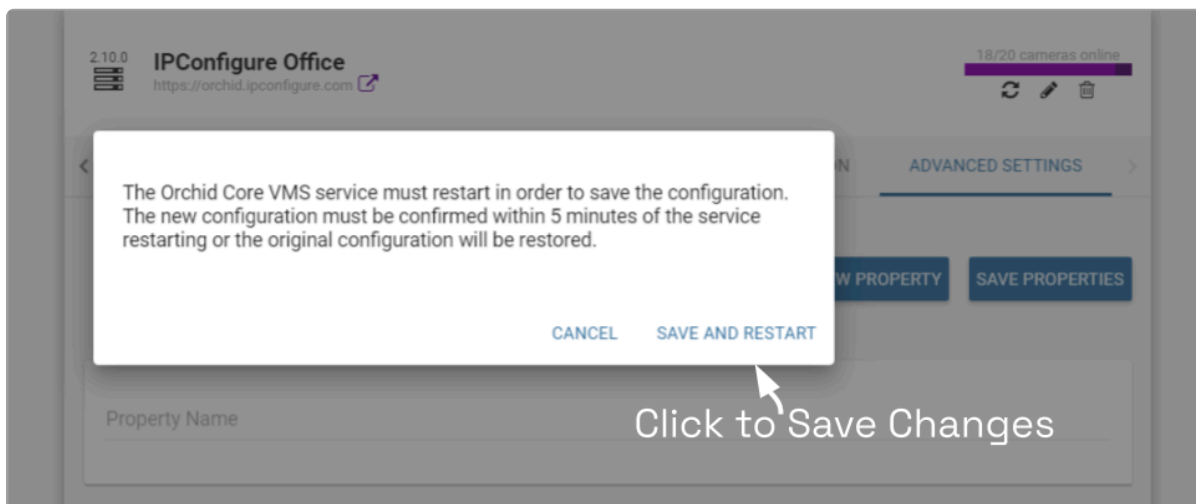
De-Activating a Property

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).

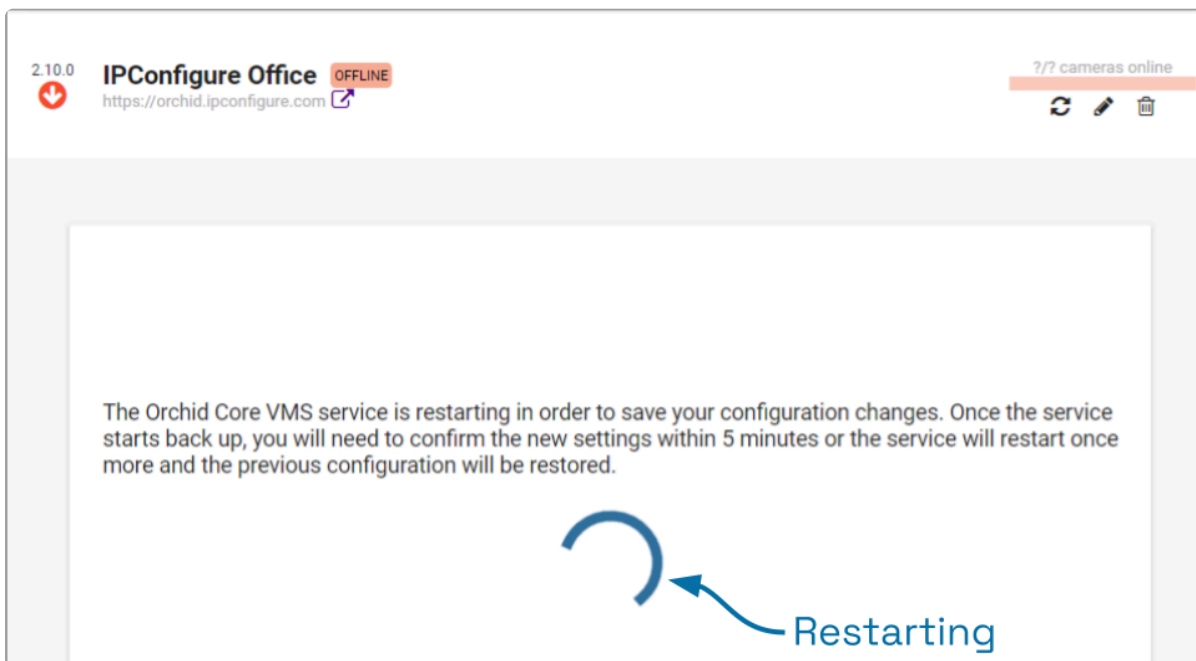
Saving Changes to Advanced Properties

Anytime you make changes to these properties, the Orchid Core VMS 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.)



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 Core VMS service will automatically restart within the next five minutes and the previous configuration will be restored.

CONFIRM PROPERTIES

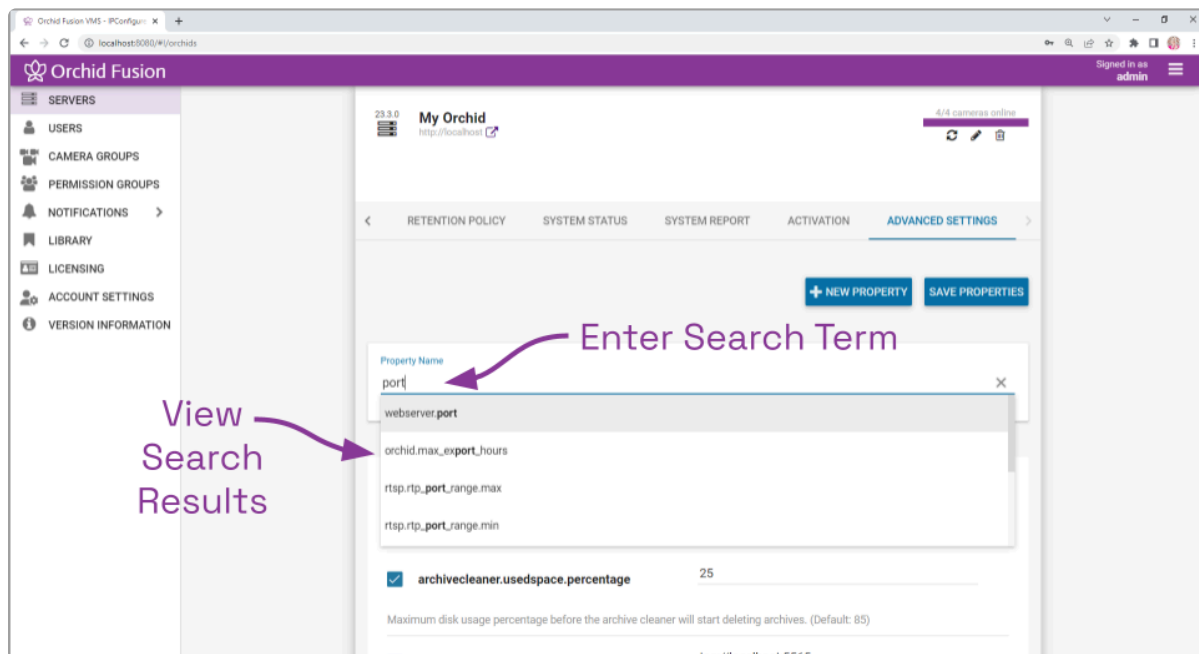
Click Within 5
Minutes to Keep
Changes

Advanced Properties Search Feature

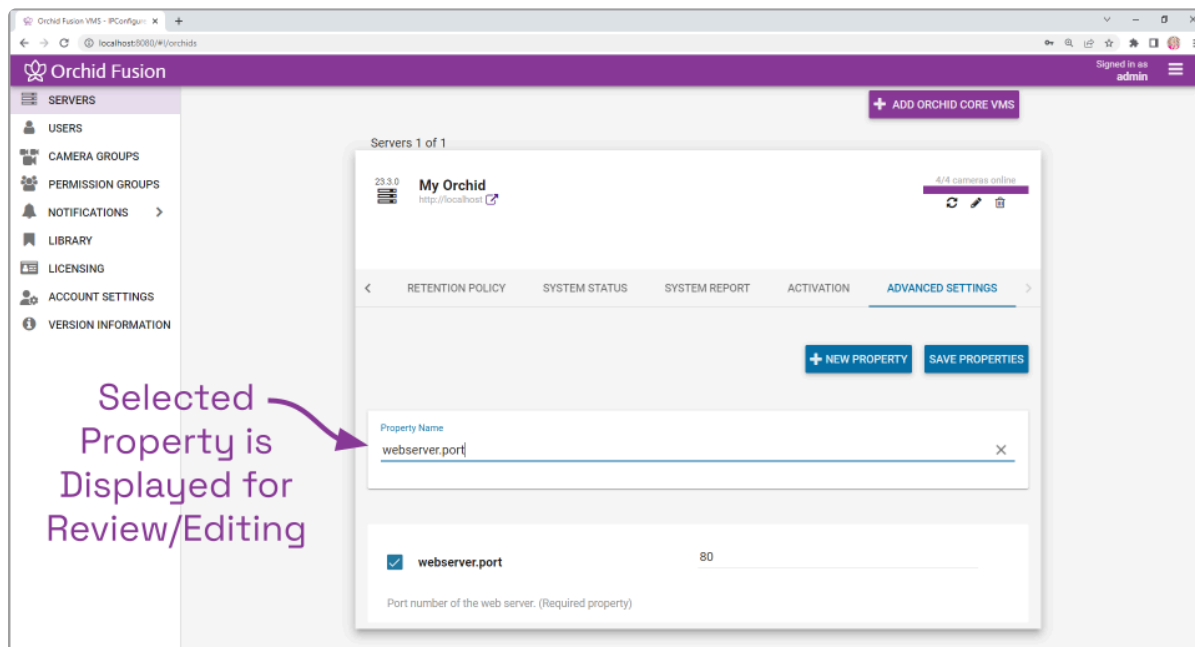
If you need to find a specific property quickly, the *Advanced Settings* screen includes a search feature. The *Property Name* field appears at the top of the screen and supports a single-term search.

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 *percent* 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, clear the *Property Name* field by clicking the X at the right end of the field.

Creating and Managing Users

Once installation is complete, Orchid Fusion/Hybrid VMS is configured with one (Fusion/Hybrid) administrator user by default; this user is created during installation and cannot be removed. Additional users for Orchid Fusion/Hybrid VMS can be created with varying levels of privileges through the *Users* option in Orchid Fusion/Hybrid VMS's *System Menu*.

Permissions for Fusion/Hybrid users are handled using a combination of the *Users* and the *Permission Groups* features. Any Fusion/Hybrid user that is configured in the system will be able to sign into Orchid Fusion/Hybrid VMS. The user will not have access to any cameras or video, however, until the Administrator assigns them as a member of one or more *Permission Groups*. (Please refer to the [Permission Groups](#) section for details regarding planning and creating *Permission Groups*.)

Orchid Fusion/Hybrid VMS provides the Administrator with the ability to manage Orchid Core VMS users as well. Permissions for these users are still handled using four basic roles: Administrator, Manager, Viewer, and Live Viewer. Orchid Core VMS users are handled as part of Orchid server management. Please refer to [The Users Tab](#) section for details.

* You must be a member of an Administrator group to create and manage users.

* After initial sign in, Administrators should not use the default Admin account. Instead, each Administrator should create an individual User account as part of an Administrator group. If you sign in as the default Administrator, when you sign out, you will automatically sign out any other Administrator users that are signed in with the default Administrator credentials.

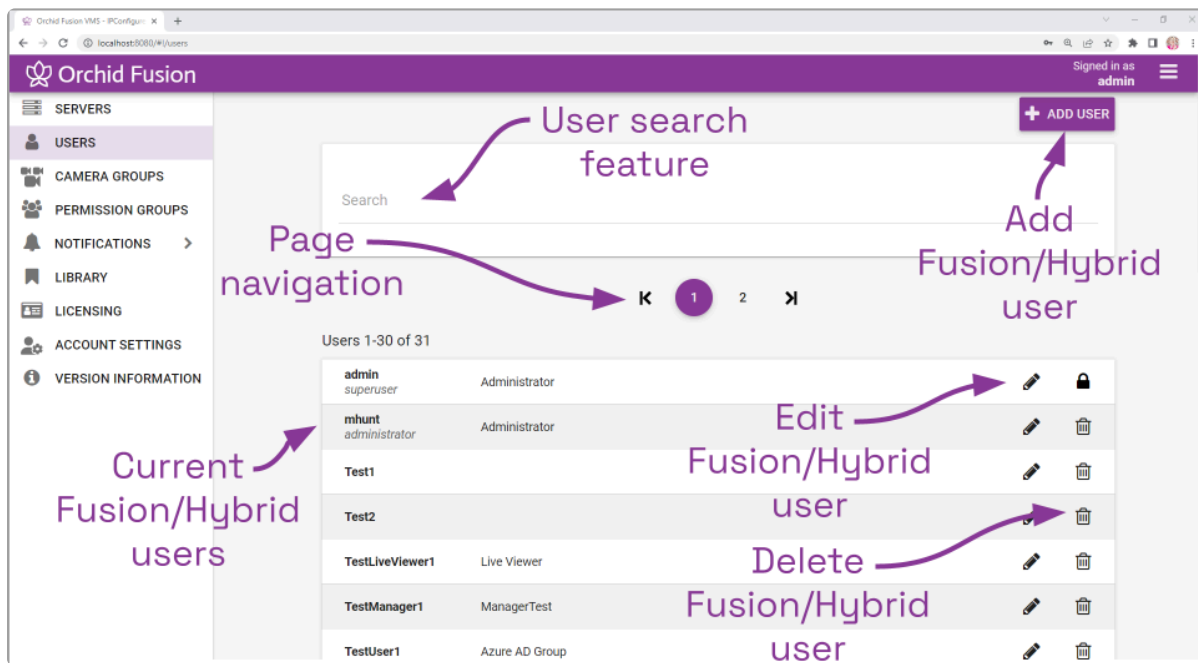
* Beginning in version 23.3, Fusion allows all end-users to change their own passwords. Administrators will still need to assign user passwords to give users initial access.

* If Orchid Fusion/Hybrid VMS is configured to work with one of the external authentication options (such as Active Directory, Azure Active Directory, or FreeIPA), the *Users* list may include locally added Fusion/Hybrid users, but won't list individual users from the external authentication sources. This is because all of the external users originate as users that already exist in the external system. (Orchid Core VMS user lists will still appear and Administrators will have the ability to add and manage those users.)

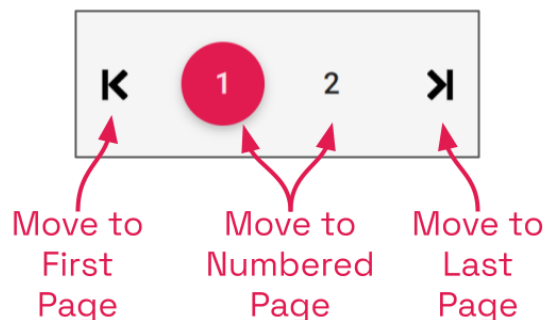
Access the Orchid Fusion/Hybrid VMS Users List

1. Open the *System Menu* in the top-right corner of the screen and select *Users*.

The Orchid Fusion/Hybrid VMS *Users* screen will list all of the Fusion/Hybrid Users that have been added and the *Permission Groups* to which they are assigned.



The *Users* screen lists up to 30 Orchid Fusion/Hybrid VMS users per page (by default). If you have more than 30 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 top and bottom of the screen. These will allow you to move easily from page to page.

Add a New Orchid Fusion/Hybrid VMS User



This is the *Add* icon.

1. Click the **Add User** button in the top-right corner of the Fusion/Hybrid *Users* list. A *New User* screen will open.

2. Enter the username you would like to set for the new user in the *Username* field.
3. Enter an email address for the new user. (The email address is not a required field, but it is critical if the user will be signing in via Google authentication. In such cases, the email field must match the user's Google email address for successful sign in. The system will only allow one user per email address.)
4. Click in the *Groups* field to select all of the *Permission Groups* that apply to the new user. These selections will determine what the user will have access to. As soon as you select a *Permission Group*, another list will appear so you can make another selection (if needed). If you have not yet configured any *Permission Groups*, you can leave this field blank for now (see notes below).
 - a. Press *Esc* if you don't need to make another selection.
 - b. To remove a *Permission Group*, click the *X* to the right of the *Permission Group* name.

* These *Permission Groups* are established using the *Permission Groups* selection on the *System* menu. For more details, please refer to [Permission Groups](#).

* The software provides two locations at which you may assign user permissions. With the *User* feature, you assign user permissions (indirectly) by selecting the *Permission Group(s)* to which the user belongs. With the *Permission Groups*

feature, you assign users as members of *Permission Groups* with specific abilities and access. While you don't have to select any *Permission Groups* immediately upon adding a user, until you do, the new user will not have access to any features, servers or video.

5. Enter the password for the new user into the two fields labeled *Password* and *Confirm Password*.
6. Click the **Add User** button at the bottom of the screen to create the new Orchid Fusion/Hybrid VMS user.

The new user will now appear in the *Users* list and will have immediate access to Orchid Fusion/Hybrid VMS.

✿ Beginning in version 23.3, Fusion allows all end-users to change their own passwords. After their initial sign-in, users may go to the [Account Settings](#) screen to make changes.

Superuser Status

Orchid Fusion/Hybrid VMS also allows the creation of a Superuser. A user with Superuser status can only be modified by himself/herself. Superuser status is reserved for users that are assigned to an administrator permission group, and can only be set through the configuration file. Creating a Superuser in Orchid Hybrid VMS must be performed by IPConfigure Support staff. (For more details on creating a Superuser in Orchid Fusion VMS, please refer to the [Orchid Fusion VMS Installation Guide](#).)

Edit Existing Users



This is the *Edit* pencil icon.

Nothing is set in stone for Orchid Fusion/Hybrid VMS 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. While the password can be updated, the username 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.

TempUser1 from Orchid Hybrid VMS

Username * TempUser1 9 / 30 Email Address

Groups Viewer X Search for a Group

Password Confirm Password

CANCEL UPDATE USER

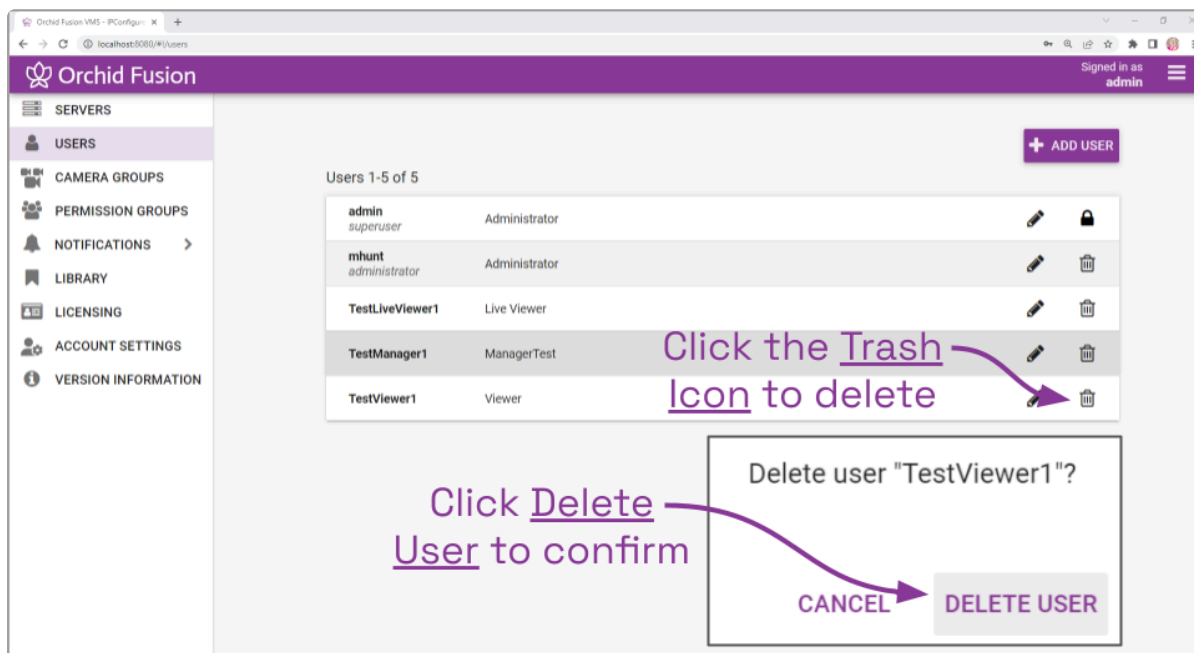
Make Changes and Click Update User

Delete Existing Users



This is the *Delete / Trash Can* icon.

1. To delete an existing user, click the *Trash Can* icon to the right of the username.
2. Orchid Fusion/Hybrid VMS will ask you to confirm that you would like to remove the user.
3. Click the *Delete User* button to confirm you want the user removed. It will be permanently erased.



Search For a User

If you have more than 30 registered Orchid Fusion/Hybrid VMS 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 will initiate a search for Usernames that include the tag.
 - b. Multiple, single-term search tags will initiate a search for Usernames 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).

The screenshot shows the 'Users' management interface. At the top right is a red button labeled '+ ADD USER'. Below it is a search bar with a placeholder 'Username' and a search icon. A red arrow points to the search bar with the text 'Enter One or More Search Terms Here'. Below the search bar, it says 'Users 1-10 of 10'. A table lists six users with their usernames, roles, and edit/delete icons. A red arrow points to the table with the text 'Review Search Results'.

Username	Role	Actions
chris_uiterwyk administrator	Administrator	
jake_foytik administrator	Ben Test, Administrator	
JNagy	APPs - All APPs, SPEED	
kieran_kelley administrator	Administrator	
laura_kelly administrator	Administrator	
railyard	Railyard	

Creating and Managing Camera Groups

Administrators have the ability to create *Camera Groups*. These *Camera Groups* add convenience and flexibility for the User, and allow you to further customize the Orchid Fusion/Hybrid VMS system.

Using *Camera Groups* adds dimension to the *Camera Bag*. In earlier software versions, when you open the *Camera Bag*, you find that all of the cameras are sorted by server. With the addition of *Camera Groups*, you can also view the cameras sorted by *Camera Groups*. You may even select *Camera Groups* as your sole viewing option, if desired.

The *Camera Groups* feature simplifies the user experience in a variety of situations, especially in large systems, or in systems with similarly configured facilities. For example, let's say your Orchid Fusion/Hybrid VMS system has several registered Orchid Core VMS servers. These servers cover retail locations with the same basic footprint and setup. You could configure *Camera Groups* that represent common areas from each retail location, like entrances, loading docks, merchandise checkouts, etc. Now when you go to the *Camera Bag*, selecting common cameras for the *Stage* is simple because they are already assembled in a *Camera Group*. (Combine this with the *Stages* feature for increased benefit.)

Beginning in version 21.9, you can now associate Maps with your *Camera Groups*. The Maps feature allows Administrators to configure a layout for each *Camera Group* that pinpoints where cameras are located. These Maps may then be added to the *Stage* by Administrators and others, providing an easy way for users to identify the cameras that they want to monitor.

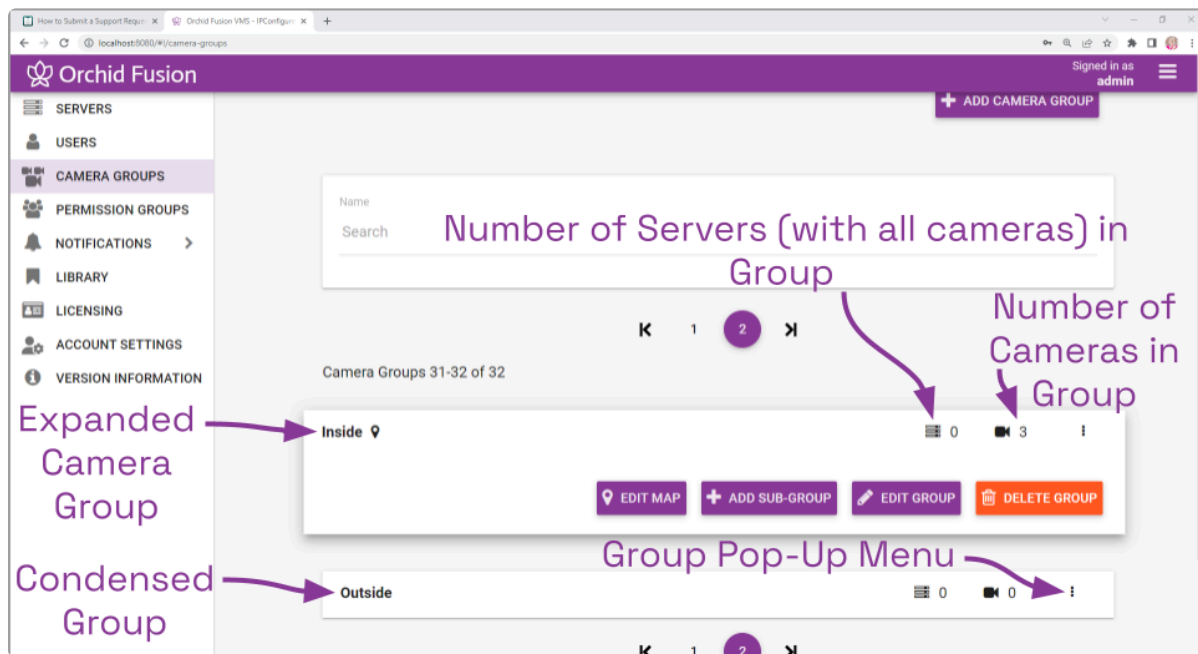


You must be a member of an Administrator group to add and manage *Camera Groups*.

Access the Orchid Fusion VMS Camera Group List

1. Open the *System Menu* in the top-right corner of the screen and select *Camera Groups*.

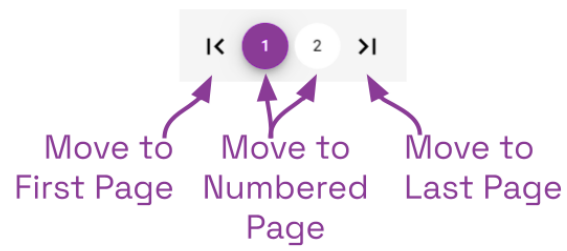
The Orchid Fusion/Hybrid VMS *Camera Groups* screen will appear. This screen displays a list of all the current *Camera Groups* and gives you the ability to add, edit, and delete them.



A quick look around...








- Click on any row that represents a *Camera Group* to expand or collapse the *Camera Group* details.
- For a top-level *Camera Group*, the number of cameras in the *Camera Group* includes the cameras in the top-level *Camera Group*, plus the number of cameras in each Sub-Group.
- For each *Camera Group* or Sub-Group, this screen also lists the number of servers in the group (if all of the server's cameras were selected).
- You can use the buttons or the pop-up menus to manage each top-level *Camera Group*.
- You can use the pop-up menus to manage each of the Sub-Groups.
- If the Map icon appears next to the group name, this means that a Map is available for this *Camera Group*.

The *Camera Groups* screen lists up to 30 *Camera Groups* per page (by default). If you have more than 30 *Camera Groups*, additional pages will be added automatically. This will also activate the page navigation tools and the search feature.

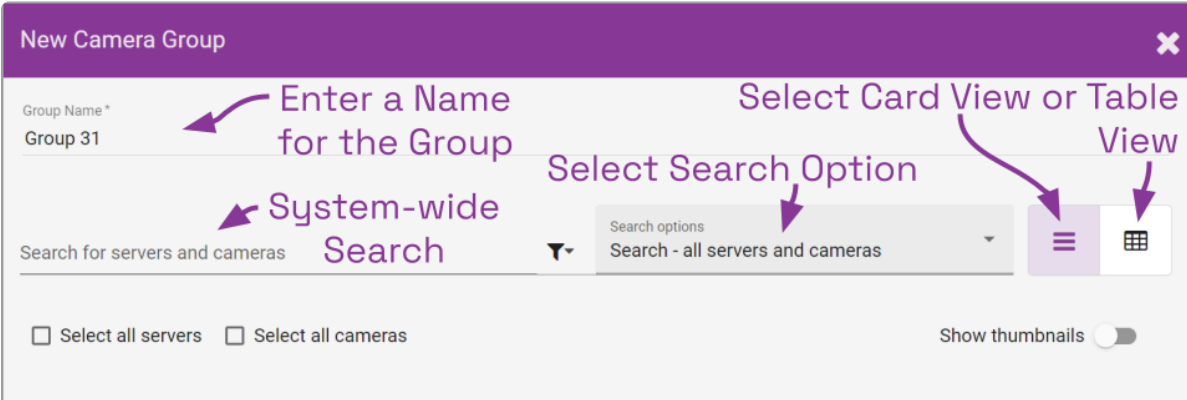


The navigation tools will appear at the top and bottom of the screen. These will allow you to move easily from page to page.

Add a Camera Group

	This is the <i>Add</i> icon.
	This is the <i>Filter</i> icon.
	This is the <i>Card View</i> icon.
	This is the <i>Table View</i> icon.
	This indicates how many of the server's cameras have been selected for the group.
	This indicates how many cameras are available on the server.
	This indicates that all of the cameras on the server have been selected.

1. Click the **Add Camera Group** button in the top-right corner of the *Camera Groups* screen. A *New Camera Group* screen will open.



The screenshot shows the 'New Camera Group' dialog box. Annotations with arrows point to the following elements:


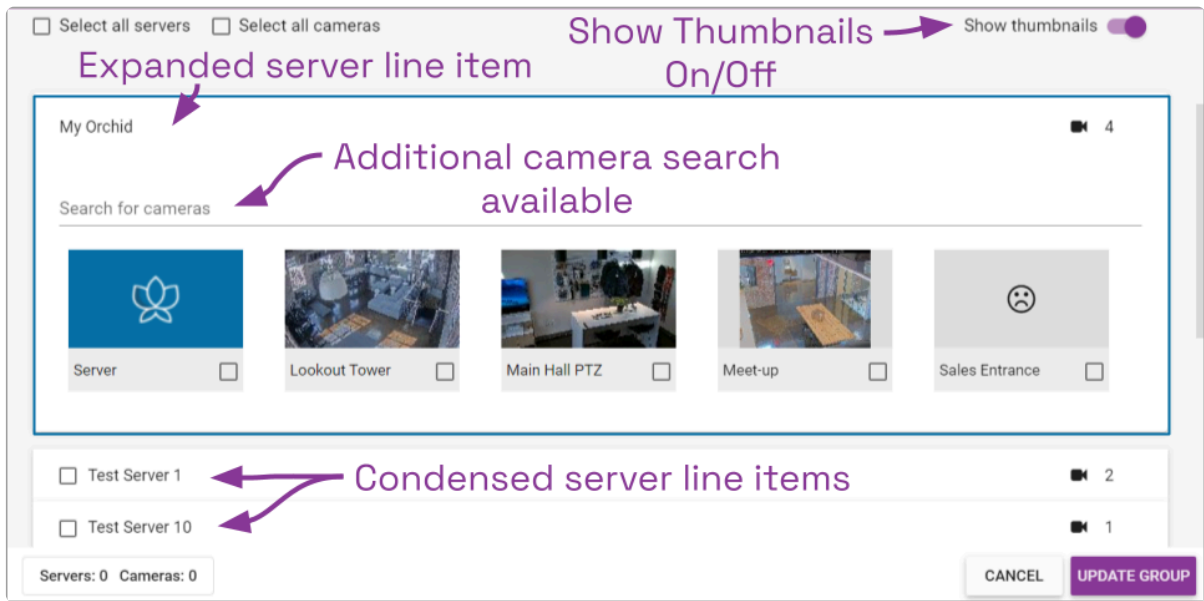

- Enter a Name for the Group:** Points to the 'Group Name' field, which contains 'Group 31'.
- Select Card View or Table View:** Points to the view toggle buttons (three horizontal lines for Card View and a grid for Table View).
- Select Search Option:** Points to the 'Search options' dropdown menu, which is currently set to 'Search - all servers and cameras'.
- System-wide Search:** Points to the 'Search for servers and cameras' text.

At the bottom of the dialog, there are two checkboxes: 'Select all servers' and 'Select all cameras', both of which are currently unchecked. To the right of these is a 'Show thumbnails' toggle switch, which is currently turned off.

This screen has been redesigned with some additional tools to help you find what you need. These changes are a lifesaver for large systems and may eliminate the need to scroll through pages of servers and cameras.

2. Start by entering a name for the new *Camera Group*.
3. If you have a large number of servers and cameras, you may want to use the search feature. The main elements of the search feature are:
 - Search field

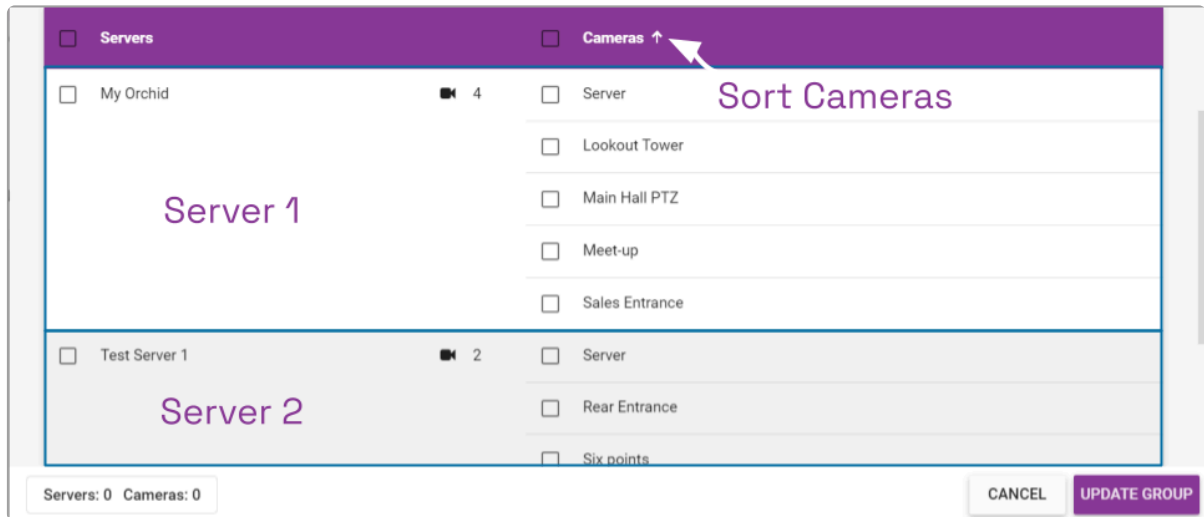
- Search options
 - View selection
- Click in the *Search for servers and cameras* field and enter one or more search terms. Press **Enter** after each one.
 - By default, the search will show you all of the matching servers and cameras. There are actually three *Search options* that determine what the system will search for.
 - Select *Search-all servers and cameras* if you want the search results to show any matching servers and cameras.
 - Select *Search-servers only* if you want the search results to be limited to matching servers.
 - Select *Search-cameras only* if you want the search results to be limited to matching cameras.
 - Now select your viewing option by clicking on the *Card view* or *Table view* button.

Button	Description
	The <i>Card View</i> provides the most options.
	Each server (with all of its cameras) is contained in a separate line item. Each line item may be expanded (to show all of the associated cameras), or condensed to hide them.
	<i>Card View</i> allows you to perform an additional camera search on each server.
	You have the ability to view camera thumbnails (when the line item is expanded).
	
	The <i>Table View</i> offers a well-organized view of the available servers and cameras.
	One by one, the servers are listed in the left column, with the associated cameras listed

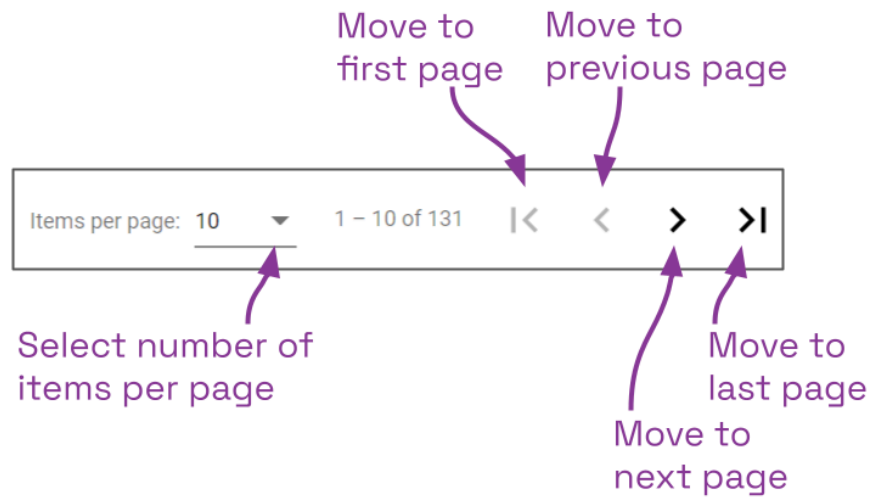
in the right column.

Servers are displayed in rows of alternating color for easy identification.

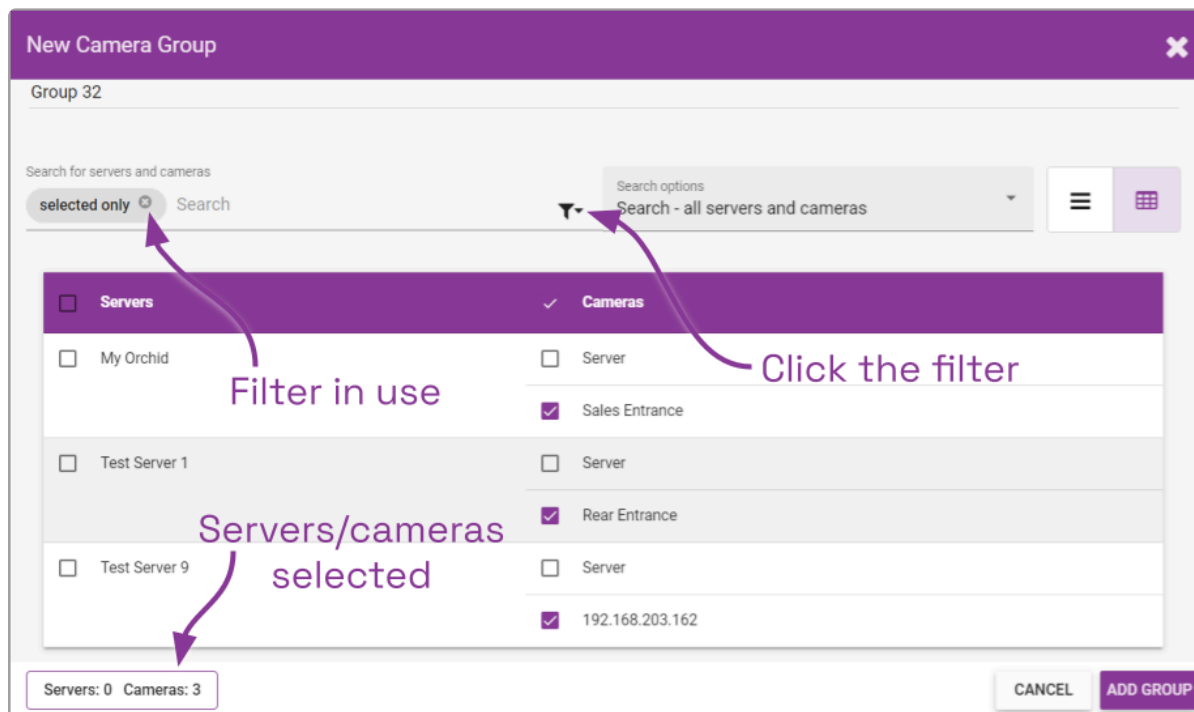
With *Table View*, you have the ability to sort the servers and the cameras alphabetically, in ascending or descending order. Just click the arrow to the right of the *Servers* checkbox or the *Cameras* checkbox to change the sort order.



7. Now that you can see all of the servers and cameras (or at least the ones you have asked to see), it's time to select the servers and cameras you want to add to the *Camera Group*.
8. You have the option to select all of the listed servers (with all of the cameras) for the group.
 - a. Mark the *Select all servers* checkbox (if you are in *Card View*).
 - b. Mark the *Servers* checkbox (if you are in *Table View*).
9. You have the option to select all of the listed cameras for the group.
 - a. Mark the *Select all cameras* checkbox (if you are in *Card View*).
 - b. Mark the *Cameras* checkbox (if you are in *Table View*).
10. To select an individual server or camera for the group, mark the checkbox representing the server or camera. Do this for each item you want to select for the group.
11. Use the page navigation tools at the bottom of the screen to view additional servers and cameras, as needed.



- Use the *Items per page* drop-down list to set the number of rows you want to view per screen. One row is equal to one server, expanded or condensed (in *Card View*), or one row (in *Table View*). Available selections include 10, 20, 30, and 50.
 - Refer to the count to determine which rows are listed on the current screen, and how many total rows are available. (Remember: The number of available rows will change as you use different search terms to narrow the list of servers and cameras.)
 - 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.
12. To de-select a server/camera, unmark the checkbox to the left of the server or camera name.
 13. If you want to do a final review of the servers/cameras you have selected for the *Camera Group*, click on the **Filter** icon, and then click *Selected only*. This view will display only those cameras and servers that have been selected for the group.



The system will also keep track of the number of servers and cameras that have been selected for the *Camera Group*. Look for this in the lower-left corner of the *New Camera Group* dialog.

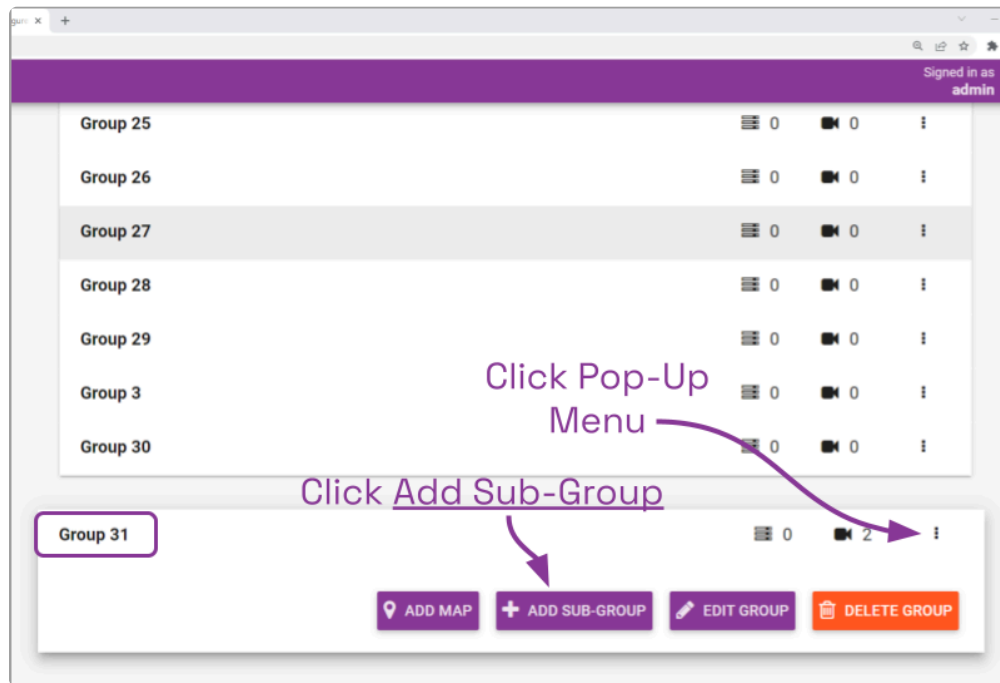
14. When you have selected all of the servers and cameras you want, click the **Add Group** button to save the new group. The new *Camera Group* will appear in the *Camera Groups* screen.

Add a Camera Sub-Group



This is the *Add* icon.

1. Once you have added a *Camera Group*, you may add Sub-Groups. First, click on the *Camera Group* row to expand the *Camera Group* details.



2. To add a Sub-Group for a top-level Group, open the *New Camera Group* screen by doing either of the following:
 - a. Click the *Add Sub-Group* button at the bottom of the *Camera Group* details.
 - b. Click the pop-up menu to the right of the *Camera Group* name and select *Add Sub-Group*.
3. To add a Sub-Group to a Sub-Group, open the *New Camera Group* screen by clicking the pop-up menu to the right of the Sub-Group and selecting *Add Sub-Group*.

New Camera Group

Group Name*
Group 1 Sub Group 1

Search for servers and cameras

Search options
Search - all servers and cameras

☐ Select all servers ☐ Select all cameras

Show thumbnails ☐

Test Server 9

Search for cameras

☐ Server ☐ 192.168.202.73 ☒ 192.168.203.16 ☒ 192.168.203.162 ☐ 192.168.203.164

Servers per page: 10 11 - 11 of 11

Servers: 0 Cameras: 2

CANCEL ADD GROUP

4. Use the *New Camera Group* screen to configure the Sub-Group. (It works just like adding a top-level *Camera Group*).
5. Click the **Add Group** button to add the Sub-Group.

Here's an example of a *Camera Group* with two Sub-Groups:

Group 1

My Orchid:

Lookout Tower Main Hall PTZ

Top-Level Group

Group 1 Sub Group 1 > Sub-Group 1

Group 1 Sub Group 2 > Sub-Group 2

ADD MAP ADD SUB-GROUP EDIT GROUP DELETE GROUP

Edit Camera Group



This is the *Edit* pencil icon.

You can rename or change the cameras in a *Camera Group* at any time. You will use very similar processes to edit a top-level *Camera Group* and a Sub-Group.

1. To edit a top-level *Camera Group*, click on the *Camera Group*'s pop-up menu and select *Edit Group*, or expand the *Camera Group*, then click on the *Edit Group* button.
2. To edit a Sub-Group, click on the *Camera Group*'s pop-up menu and select *Edit Group*.
3. When you have finished making changes, click the *Update Group* button.

The screenshot shows the 'Edit Camera Group' dialog box. The title bar is purple with a close button (X). The main area has a light gray background. At the top, there's a 'Group Name*' field with the text 'Inside'. Below it is a search bar for servers and cameras with a 'selected only' filter and a search button. To the right of the search bar is a 'Search options' dropdown set to 'Search - all servers and cameras'. Below the search bar are two checkboxes: 'Select all servers' (unchecked) and 'Select all cameras' (checked). To the right of these is a 'Show thumbnails' toggle switch. The main content area is titled 'My Orchid' and shows a search bar for cameras. Below the search bar are four camera selection buttons: 'Server' (unchecked), 'Lookout Tower' (checked), 'Main Hall PTZ' (checked), and 'Meet-up' (checked). At the bottom left, there's a status bar showing 'Servers: 0 Cameras: 3'. At the bottom right, there are two buttons: 'CANCEL' and 'UPDATE GROUP'. Purple arrows and text annotations are overlaid on the image: one arrow points to the 'Group Name' field with the text 'Make changes as needed'; another arrow points to the 'Lookout Tower' camera button with the same text; a third arrow points to the 'UPDATE GROUP' button with the text 'Click Update Group'.

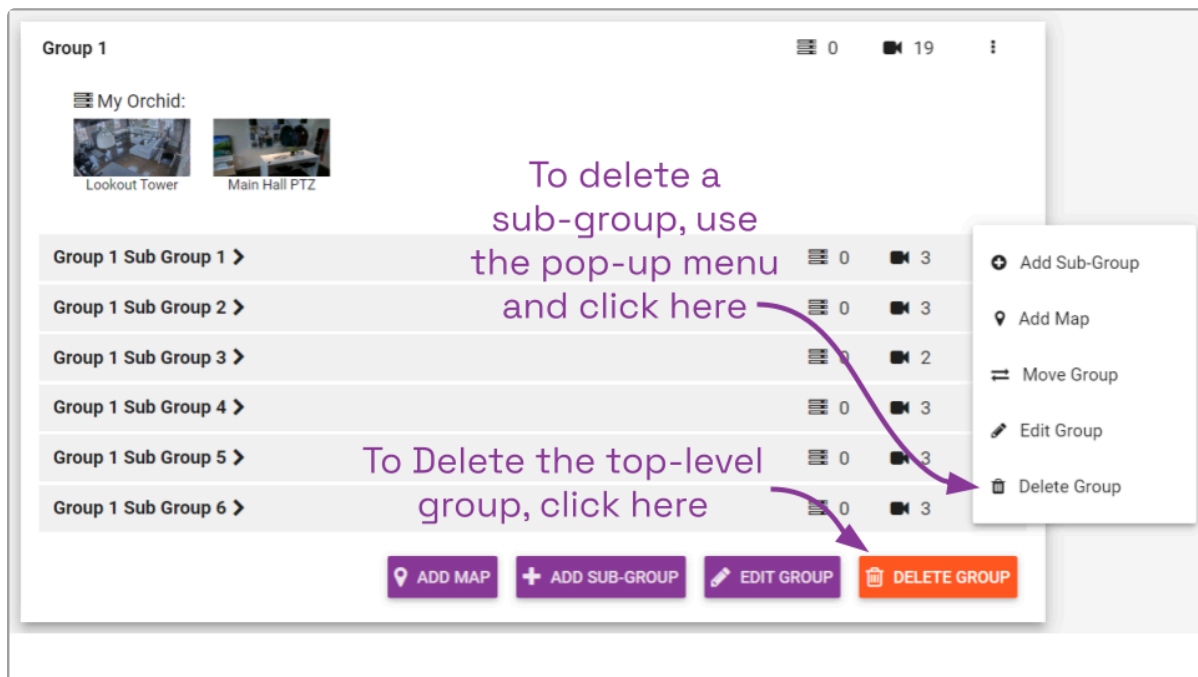
Delete a Camera Group



This is the *Delete / Trash Can* icon.

You can delete a *Camera Group* at any time. You will use very similar processes to delete a top-level *Camera Group* and a Sub-Group.

1. To delete a top-level *Camera Group*, click on the *Camera Group*'s pop-up menu and select **Delete Group**, or expand the *Camera Group*, then click on the **Delete Group** button. The system will ask you to confirm the deletion; click **Delete Group** again to remove the *Camera Group*.
2. To delete a Sub-Group, click on the Sub-Group's pop-up menu and select **Delete Group**. The system will ask you to confirm the delete process; click the **Delete Group** button to remove the Sub-Group.



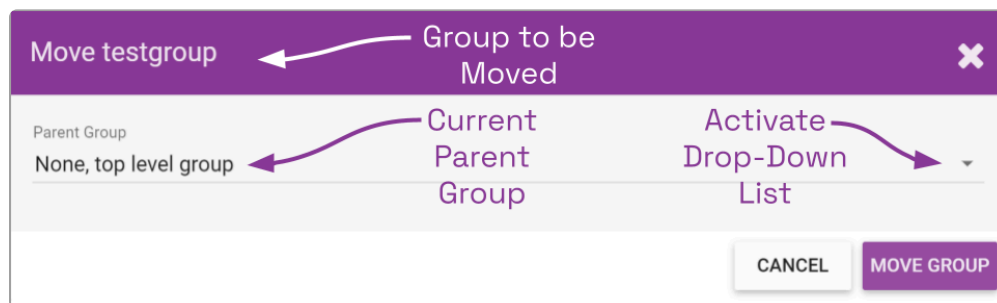
Deleting a *Camera Group* will also delete any of that *Camera Group*'s Sub-Groups.

Move a Camera Group

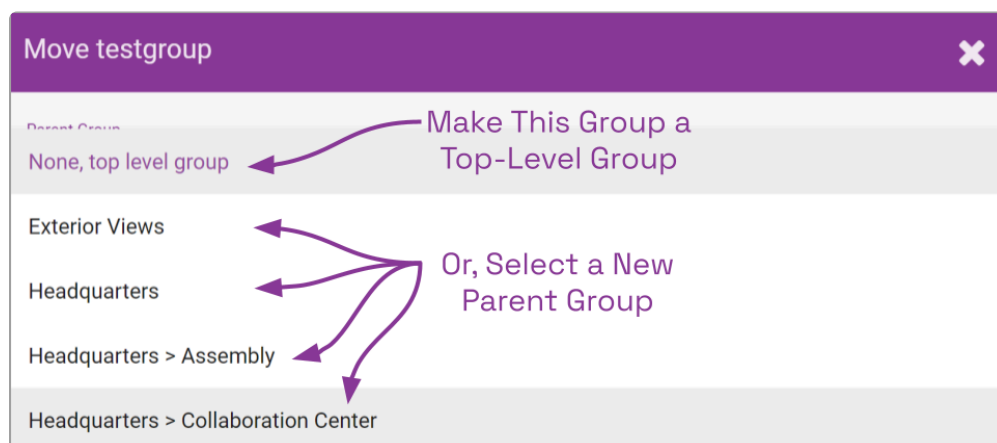
If you decide you need to re-organize your *Camera Groups*, you can do this pretty easily with the *Move Group* feature. This feature essentially just allows you to select a new parent *Camera Group* for an existing *Camera Group*. In doing so, you can transfer Sub-Groups to different top-level *Camera Groups*, turn top-level *Camera Groups* into Sub-Groups, and turn Sub-Groups into top-level *Camera Groups*.

1. To move a *Camera Group*, click on the *Camera Group*'s pop-up menu and select **Move Group**.

When the *Move* screen appears, check the *Parent Group* field. If you are moving a top-level *Camera Group*, the *Parent Group* field will display *None, top level group* (since the *Camera Group* currently does not have a parent). If you are moving a Sub-Group, the *Parent Group* field will display the name of the parent.



2. To make a move, click the *Parent Group* drop-down list to see available selections.



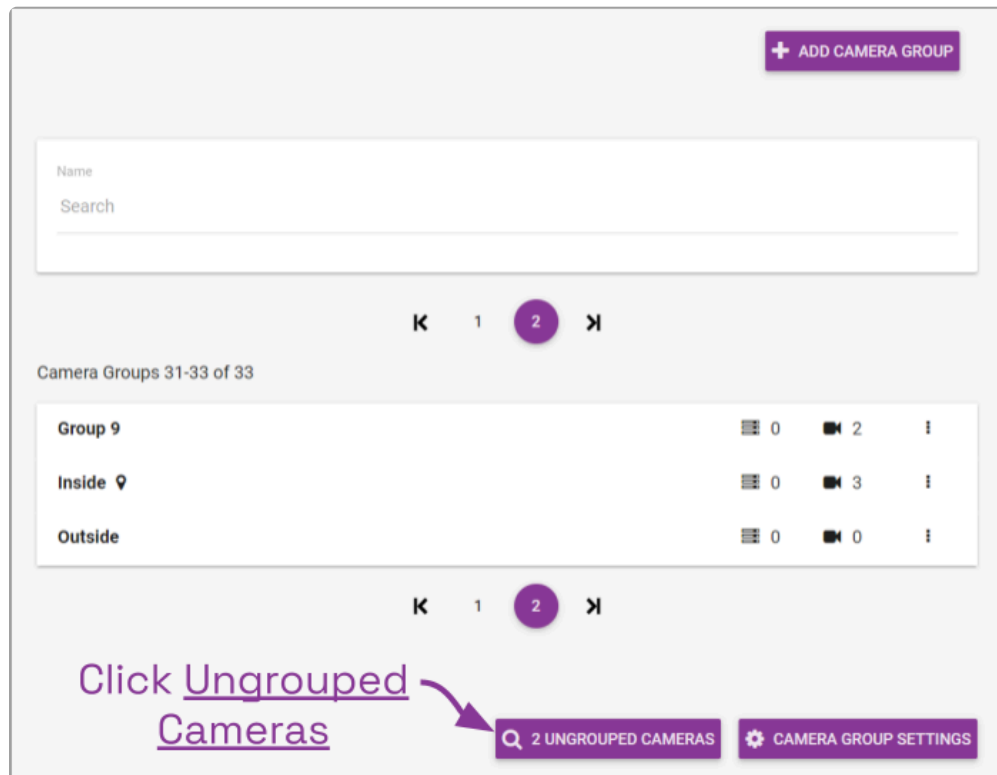
3. Select one of the available *Camera Groups* as the new parent *Camera Group*, or select *None* to make this a top-level *Camera Group*.
4. Once you've made your selection, click the **Move Group** button to complete the move.

Find Ungrouped Cameras



This is the icon that will search for *Ungrouped Cameras*.

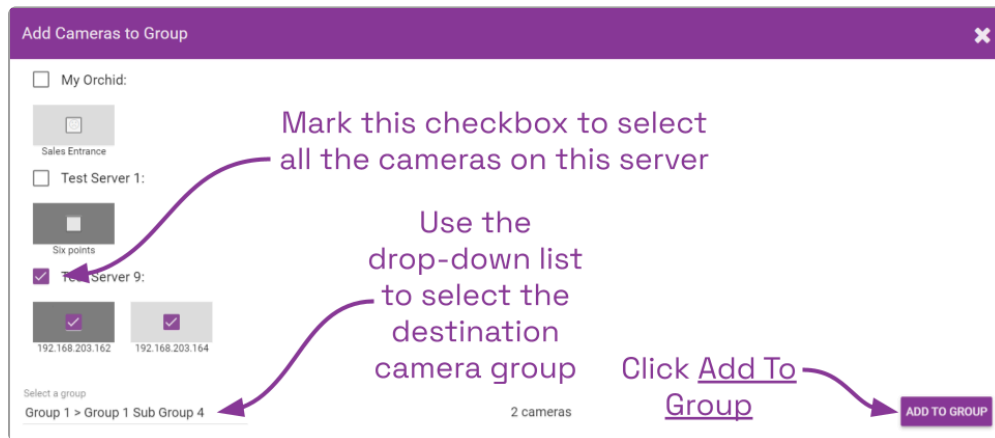
As you add and delete *Camera Groups*, Orchid Fusion/Hybrid VMS will keep track of cameras that have not been assigned to a *Camera Group*. Accessing this list is easy and will help you complete your *Camera Groups*.



* *Camera Groups* are optional and not every camera has to be added to a *Camera Group*. Be aware however, that if you have ungrouped cameras, and you have elected not to view servers in the *Camera Bag*, those ungrouped cameras will not be eligible for the *Stage*.

1. To view the list of ungrouped cameras, click the *Ungrouped Cameras* button at the bottom of the *Camera Groups* screen. (Notice that the button indicates how many cameras are ungrouped.)

The *Add Cameras to Group* screen will display all of the unassigned cameras by server. Use this screen to quickly assign cameras to the appropriate groups (as needed).



2. Select the cameras you want to assign to a group.
 - a. Mark the checkbox next to a server name to select all of its unassigned cameras for a group.
 - b. Mark individual checkboxes to pick and choose your cameras.
3. Use the *Select a group* drop-down list to select the *Camera Group* to which the selected cameras will be assigned. (The number of cameras slated for addition will be displayed next to the group name.)
4. Click the **Add to Group** button to complete the *Camera Group* assignment.

Camera Group Settings



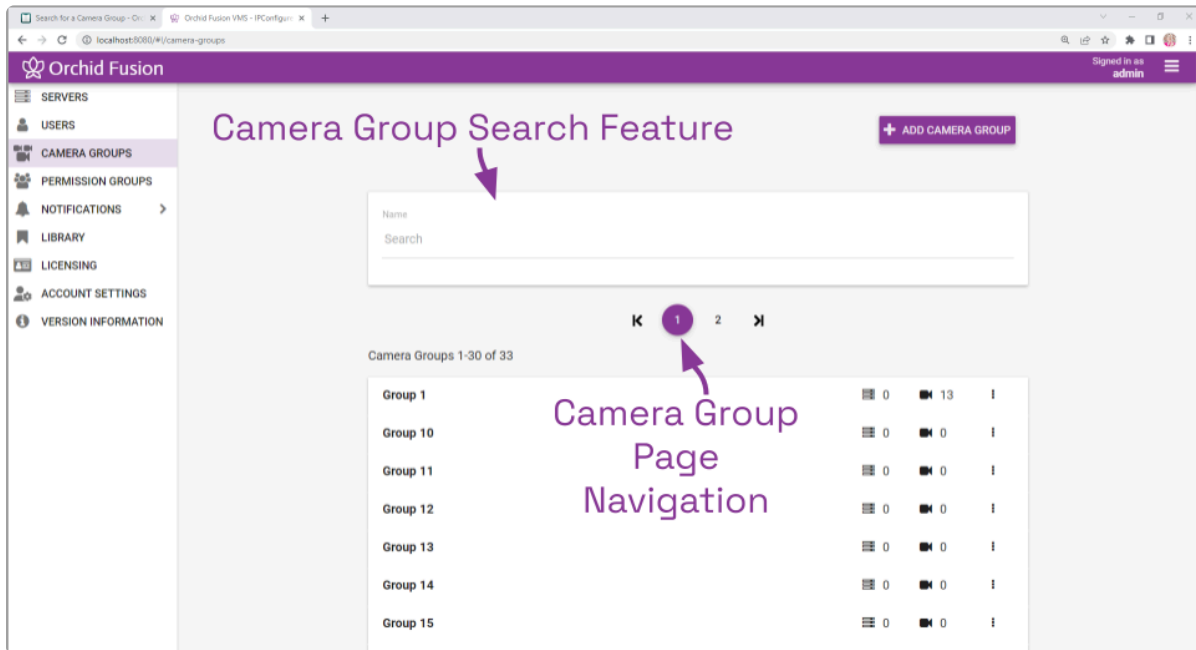
This is the *Camera Group Settings* icon.

1. Click the *Camera Group Settings* button at the bottom of the *Camera Groups* screen.
2. Mark the *Show Servers in Bag* checkbox if you want the Servers to be displayed in the *Camera Bag* with the *Camera Groups*.
3. Leave the box unmarked if you want the *Camera Bag* to display *Camera Groups* only.
4. To save your settings, click the *Update Settings* button.

The screenshot shows a modal dialog box titled "Camera Group Settings" with a purple header bar containing a close button (X). The main content area is white and contains a single checkbox labeled "Show Servers in Bag", which is currently checked. At the bottom right of the dialog, there are two buttons: a light gray "CANCEL" button and a purple "UPDATE SETTINGS" button.

Search for a Camera Group

If you have more than 30 *Camera Groups* (by default), the *Camera Groups* list will extend beyond one page. When this happens, the software will automatically activate the search feature. Especially useful with large systems, this feature will help you find specific *Camera Groups* quickly.



Search the Camera Groups List

The *Search* field will appear at the top of the *Camera Groups* screen. It supports searching by camera group names, 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 *Camera Groups* screen will update to display all of the groups that contain the tag(s).

Enter One or More Search Terms Here

Camera Groups 1-7 of 7

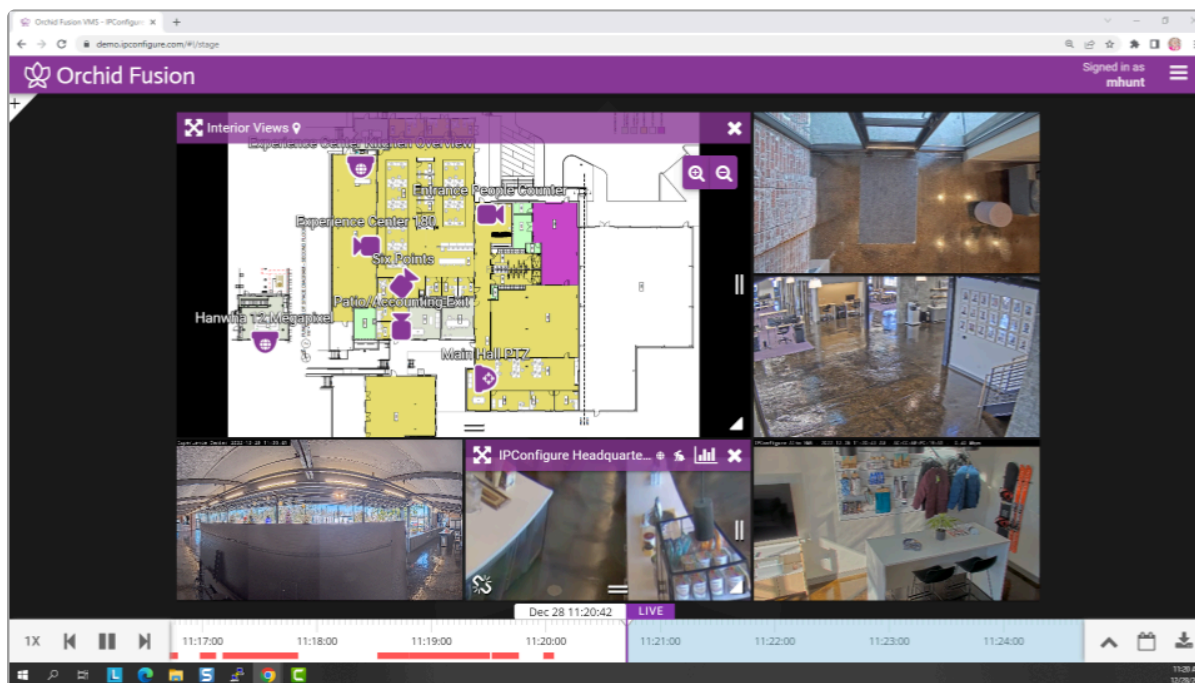
Group Name	0	0	:
Group 13	0	0	:
Group 23	0	0	:
Group 3	0	0	:
Group 30	0	0	:
Group 31	0	1	:
Inside ♀	0	3	:
Outside	0	0	:

Review Search Results




3 UNGROUPED CAMERAS CAMERA GROUP SETTINGS

The Maps Feature

New in version 21.9, the Maps feature adds another valuable tool to the *Camera Bag*. Maps make it easy for users to identify and select cameras for the *Stage*. As an Administrator, you will have the ability to create a Map for any *Camera Group*. You simply import a Map image, then add cameras and position them on the Map.

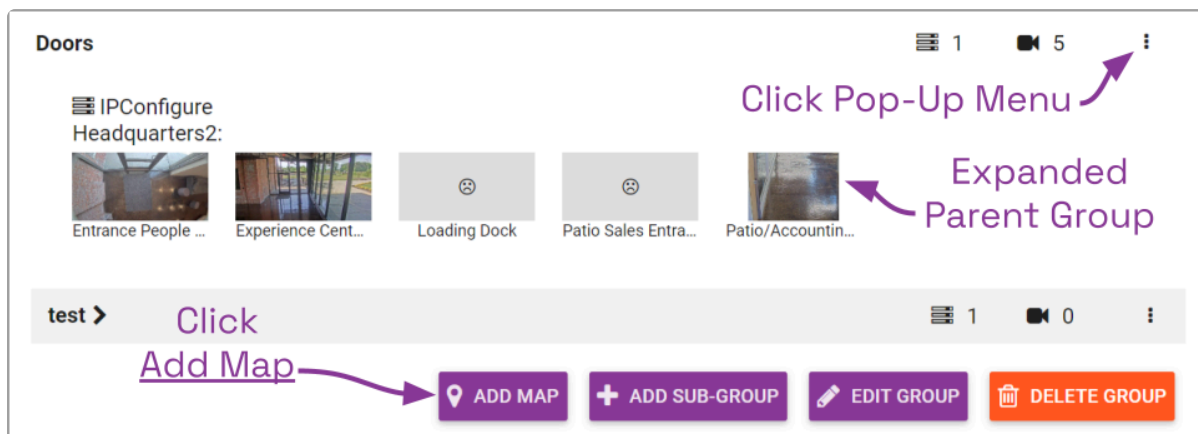


Create a Map

	This is the <i>Map</i> icon.
	This is the <i>Show Camera Bag</i> icon
	This is the <i>Hide Camera Bag</i> icon

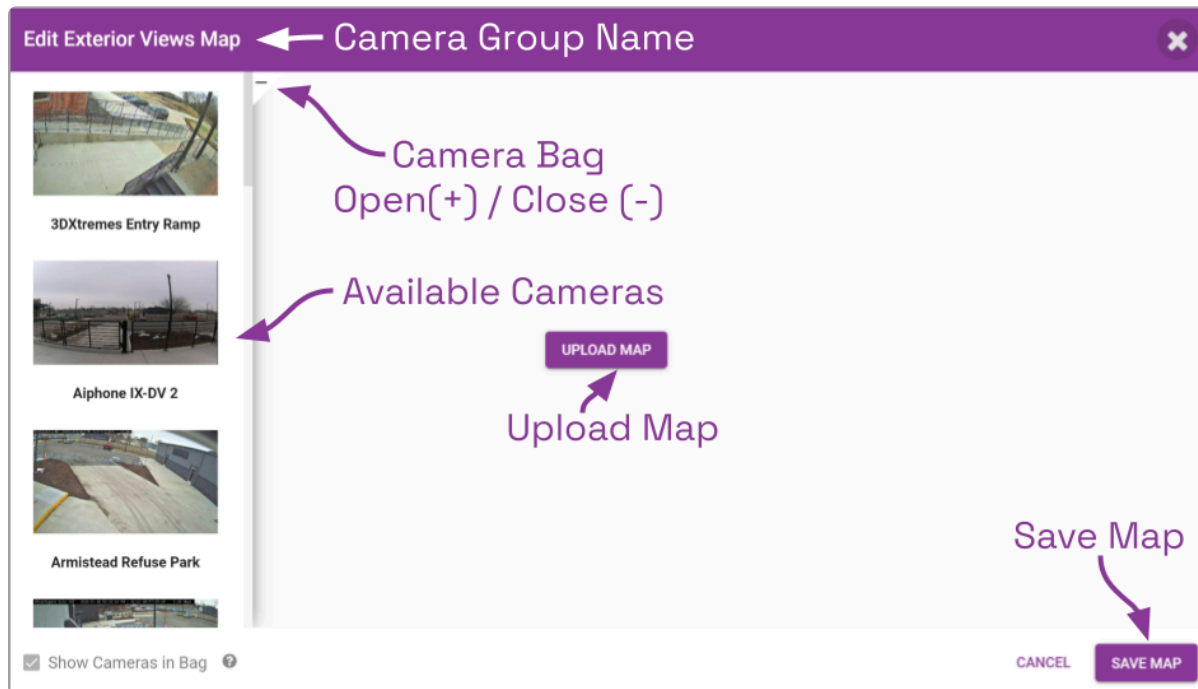
Adding a Map File

1. To create a new map, start by reviewing your camera groups and sub-groups. When you find a group that needs a map, click on it to expand it.

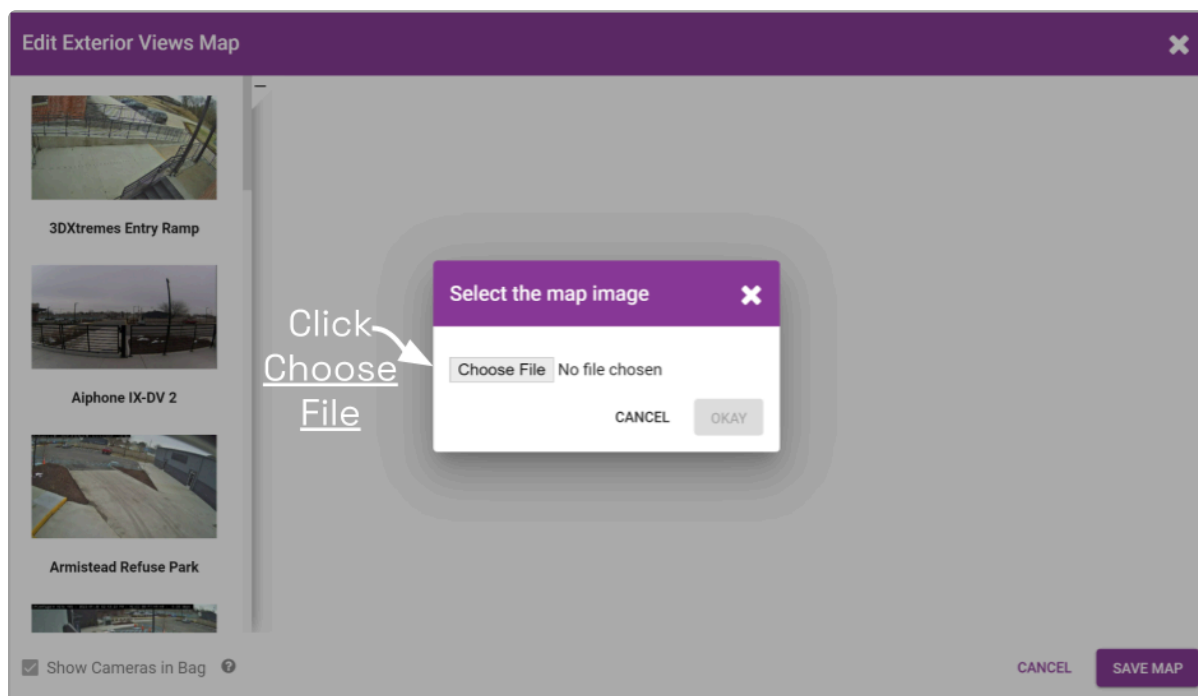


2. To add a map to a top-level group, do either of the following:
 - a. Click the **Add Map** button at the bottom of the group screen, or
 - b. Click on the pop-up menu and select *Add Map*.
3. To add a map to a sub-group:
 - a. Click on the pop-up menu and select *Add Map*.

The *Edit Map* screen will appear. You'll notice that all of the cameras associated with the selected group will appear in a *Camera Bag* along the left edge of the screen. This is very similar to the *Camera Bag* you see on the *Stage*, except this one represents this camera group exclusively, and only shows cameras that have not been added to the Map yet. You may open and close the *Camera Bag* using the + and - icons.

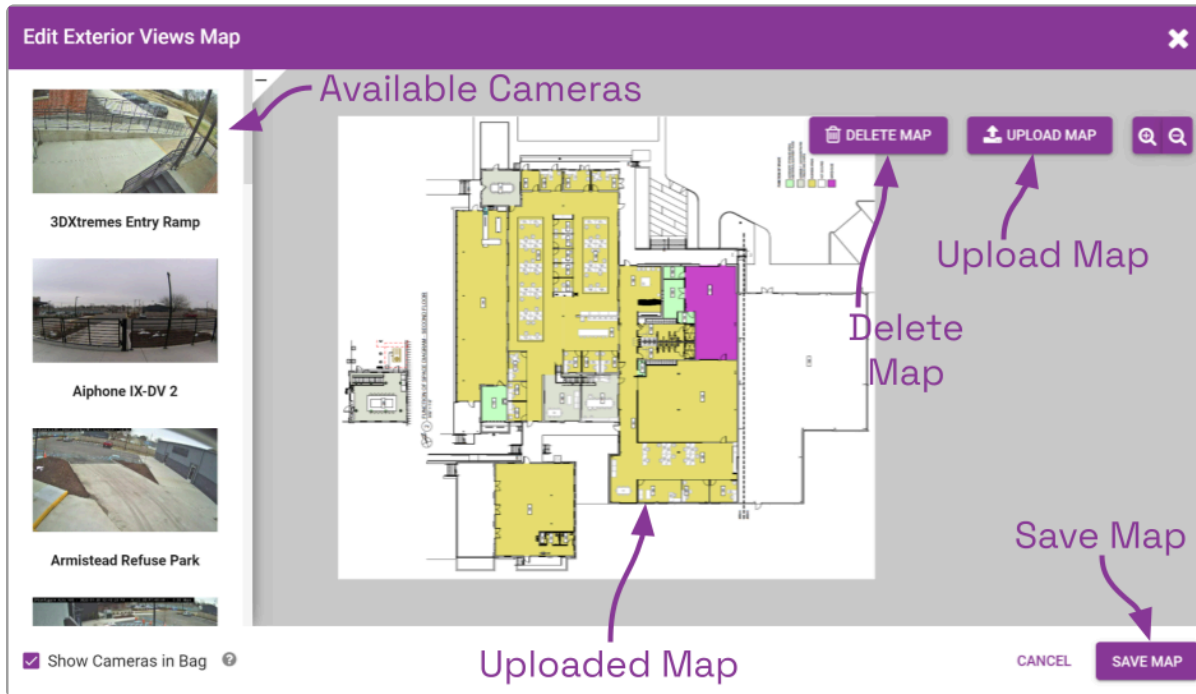


4. To add the Map graphic, click the *Upload Map* button. The *Select* screen will appear.












5. Click the *Choose File* button. Navigate to the folder that contains the image file you want to use as the Map. (You must select either a *PNG* file or a *JPG* file.)
6. When you find the file, click on it, then click the *Open* button.
7. On the *Select* screen, click *OK*.

The selected Map will now be displayed on the screen.



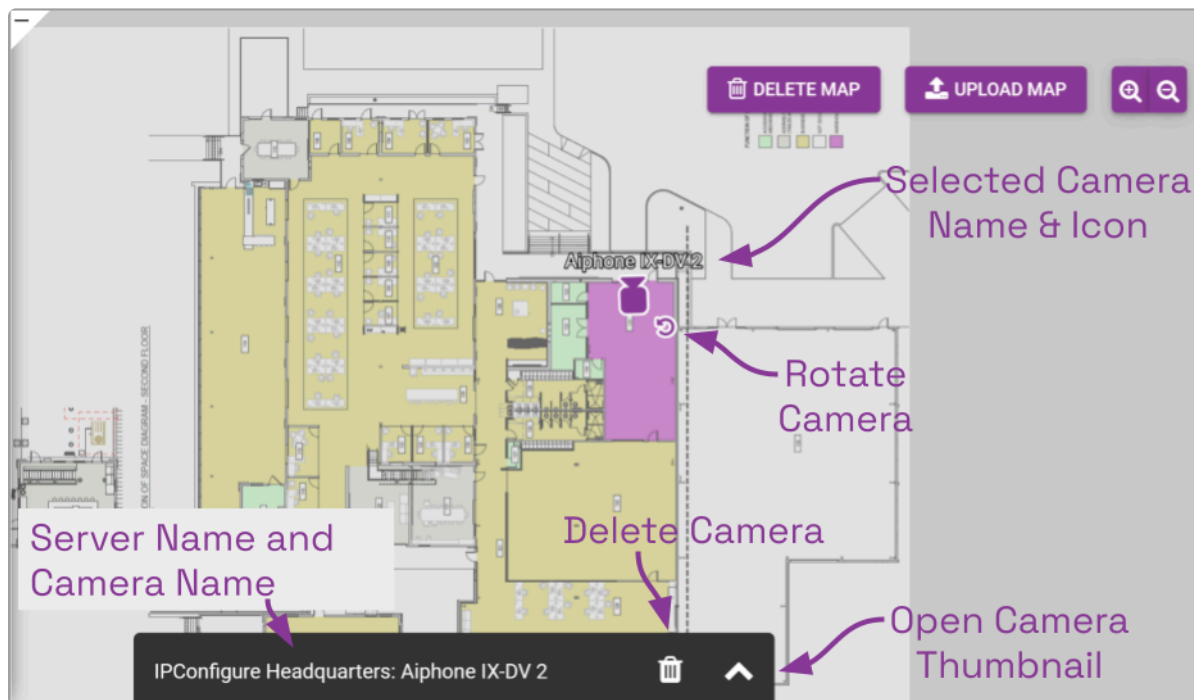
Configuring the Map

	This is the standard <i>Camera</i> icon.		This is the <i>Rotate</i> icon.
	This is the Dewarp <i>Camera</i> icon.		This is the <i>Zoom In</i> icon.
	This is the PTZ <i>Camera</i> icon.		This is the <i>Zoom Out</i> icon.
	This is the <i>Expand</i> icon.		This is the <i>Delete</i> icon.
	This is the <i>Condense</i> icon.		

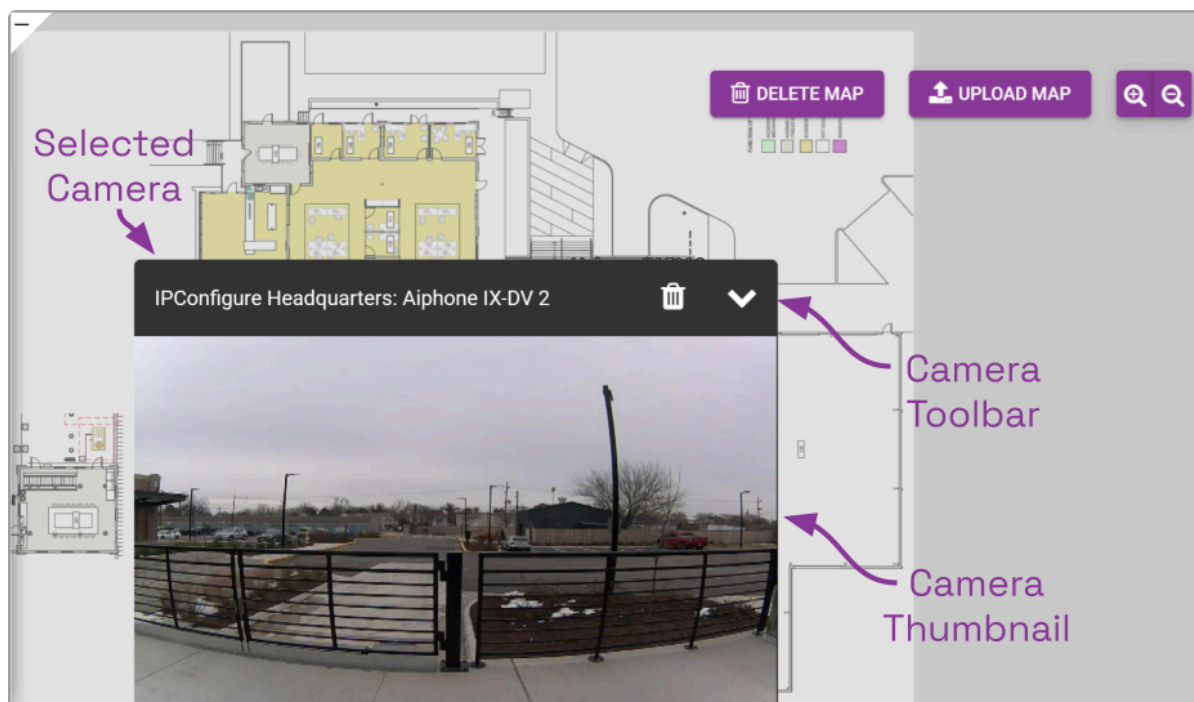
Now that you have added the Map, you may start adding and positioning cameras.

1. To add a camera to the Map, do either of the following:
 - a. Double-click one of the thumbnails in the *Camera Bag*, or
 - b. Click and drag one of the thumbnails from the *Camera Bag* to the Map.

The camera will be removed from the *Camera Bag* and will be placed on the Map. The camera toolbar will appear at the bottom of the Map. Now you can work with the camera until it is positioned perfectly.



2. To get the camera's position just right, you may want to view a thumbnail of the camera. To do this, just click the *Expand* icon on the camera toolbar.



Now you can see exactly what the camera sees. (This should help you place the camera in the right spot on the Map.)

3. If you need to minimize the thumbnail so you can see the entire map, click the *Condense* icon.
4. Use the *Zoom In* and *Zoom Out* icons to zoom in and out of the Map. (You can also click

and drag the Map to reposition it.)

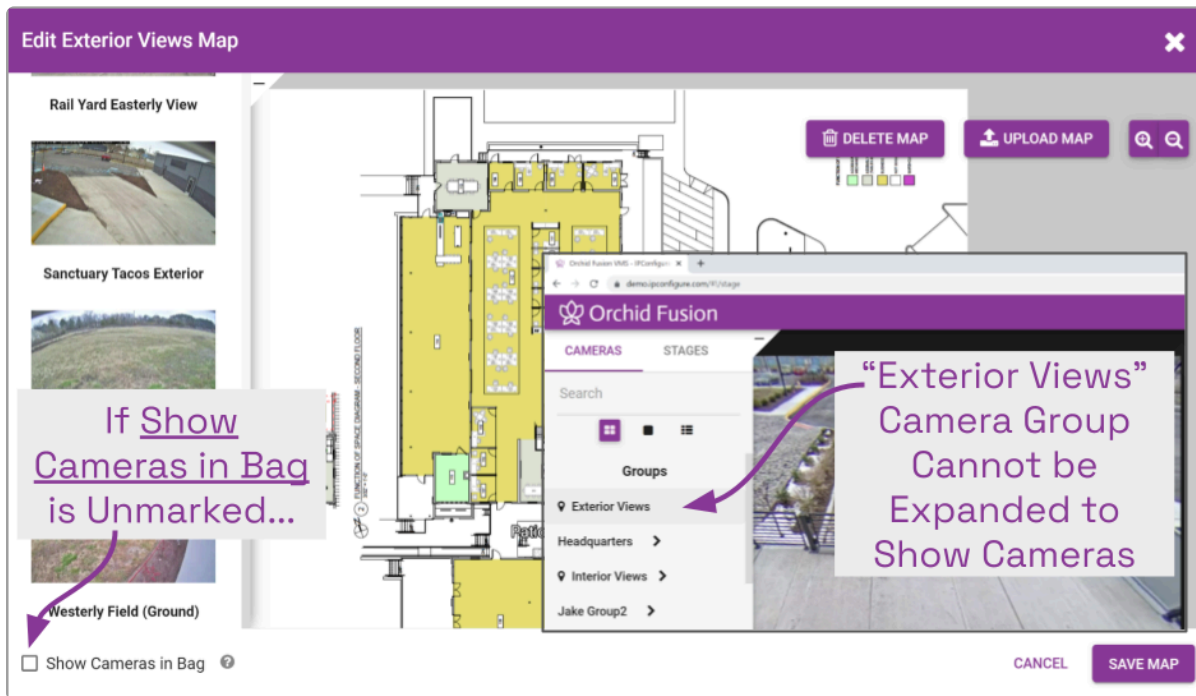
5. To move the camera, just click and drag the **Camera** icon to another position on the Map.
6. You can also use the **Rotate** icon to spin the camera until it is pointed in the right direction.
7. To work with a different camera, click on it first, then you can move it, rotate it, or delete it.
8. To remove a camera from the Map, first click on the camera you want to remove. Then click the **Delete** icon on the camera toolbar. You will be asked to confirm the delete.
9. Repeat steps 1 through 6 to add more cameras to the Map.
10. When you have completed the Map, click the **Save Map** button.

The Map will now be associated with this *Camera Group*, and will be available for use on the *Stage*.












Setting Camera Visibility

The Map screen includes one more setting that you will want to consider. This will determine if the cameras in this *Camera Group* will be visible in the *Camera Bag* on the *Stage*.

1. Mark the *Show Cameras in Bag* checkbox if you want these cameras to be visible in the main *Camera Bag*. When marked, users will be able to select these cameras directly from the *Camera Bag* (for the *Stage*), or from the Map (when it is on the *Stage*).
2. Leave the *Show Cameras in Bag* checkbox *unmarked* if you don't want these cameras to be visible in the main *Camera Bag*. When unmarked, users must add the Map to the *Stage* first, and then select cameras from the Map.

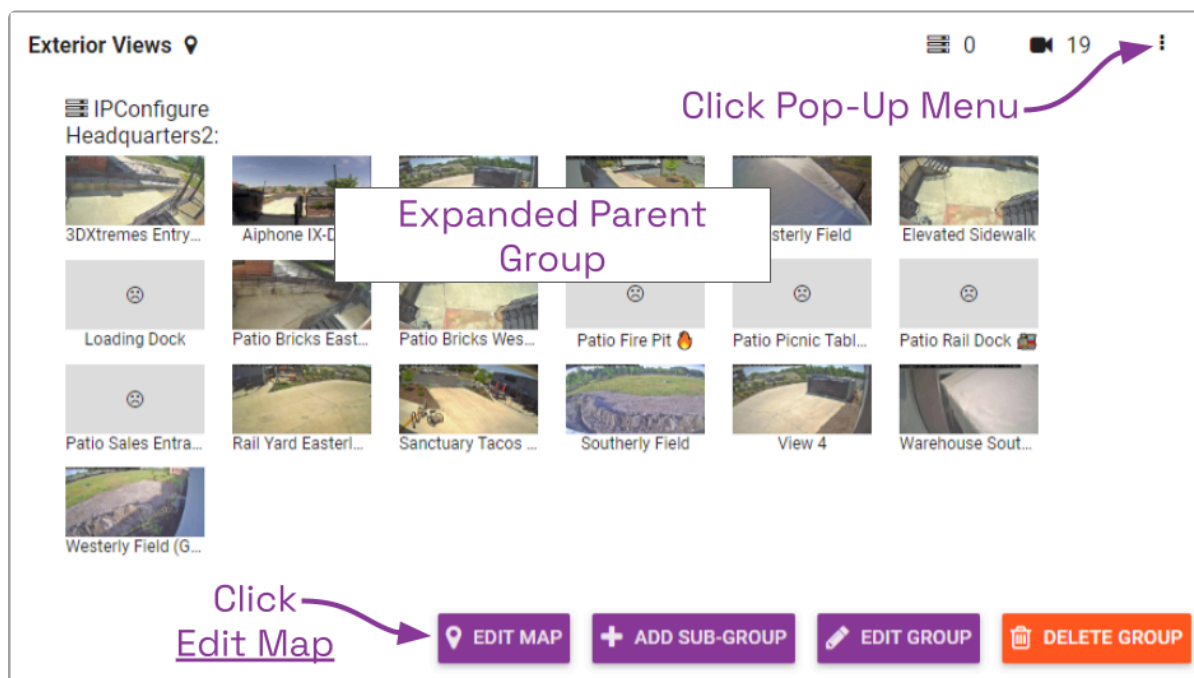


Edit a Map

	This is the Map icon.		This is the Rotate icon.
	This is the Show Camera Bag icon		This is the Upload Map icon.
	This is the Hide Camera Bag icon		This is the Zoom In icon.
	This is the standard Camera icon.		This is the Zoom Out icon.
	This is the Dewarp Camera icon.		This is the Delete icon.
	This is the PTZ Camera icon.		

You can make changes to your Maps at any time.

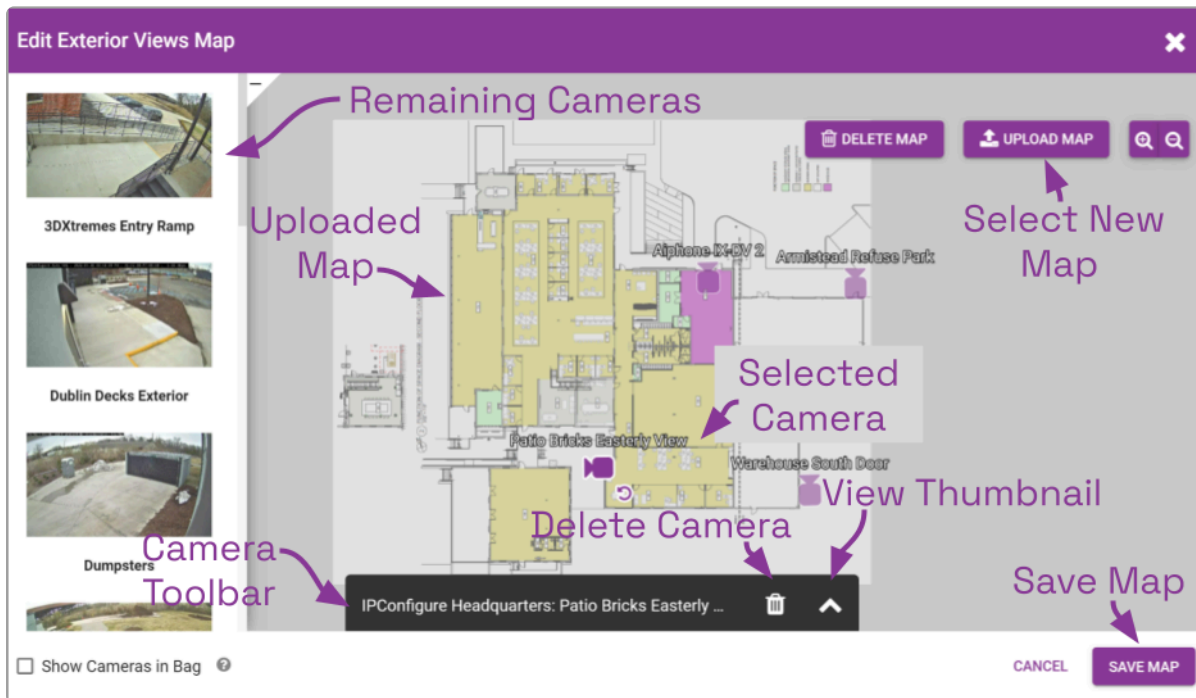
1. To edit a Map, click on the *Camera Group* to expand it.



2. To edit a map for a top-level group, do either of the following:
 - a. Click the **Edit Map** button at the bottom of the group screen, or
 - b. Click on the group's pop-up menu and select **Edit Map**.
3. To edit a map for a sub-group:

- a. Click on the sub-group's pop-up menu and select *Edit Map*.

The *Edit Map* screen will appear.






Using the *Edit* screen, you can:

- Add any of the group's remaining cameras
 - Double-click one of the available thumbnails, or
 - Click & drag one of the thumbnails to a specific location.
- Reposition cameras
 - Click & drag to move the *Camera* icon to another location.
 - Click & drag the *Rotate* icon to adjust the *Camera* icon's point of view.
- Delete cameras
 - Click on the *Camera* icon.
 - Then click the *Delete* icon on the camera toolbar (and confirm).
- Replace the Map image
 - Click the *Upload Map* button.
 - Then click the *Choose File* button to select a new Map image.
 - This will replace the background image but keep the cameras in position.
- Change the *Show Cameras* setting
 - Mark the box to show this group's cameras in the main *Camera Bag*.
 - Un-mark the box to hide the cameras in the main *Camera Bag*.

4. After all of your changes are complete, click the *Save Map* button.

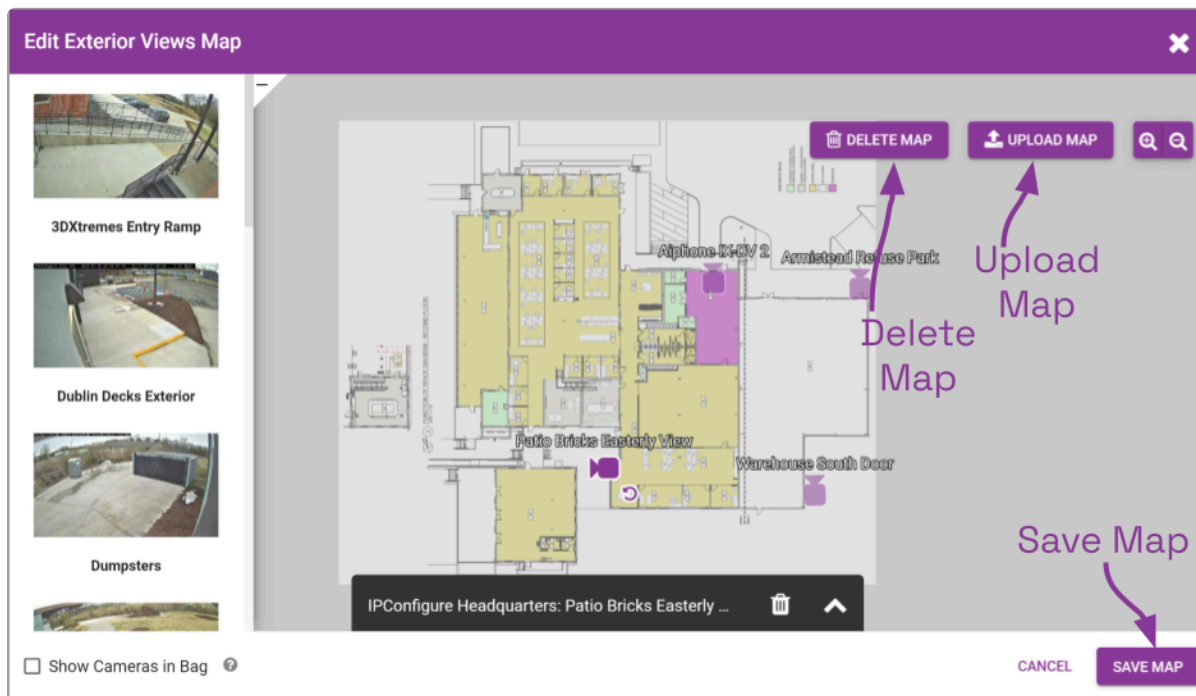
Delete a Map

	This is the <i>Map</i> icon.
	This is the <i>Delete</i> icon.
	This is the <i>Upload Map</i> icon.

You have a couple of options for removing a Map, but first, you need to open the *Edit Map* screen.

1. Click on the *Camera Group* to expand it.
2. To remove a map for a top-level group, do either of the following:
 - a. Click the *Edit Map* button at the bottom of the group screen, or
 - b. Click on the group's pop-up menu and select *Edit Map*.
3. To remove a map for a sub-group:
 - a. Click on the sub-group's pop-up menu and select *Edit Map*.

The *Edit Map* screen will appear.



4. To remove a Map and send all of the cameras back to the *Camera Bag*, click the *Delete Map* button. After you confirm the delete, there is no turning back. (You don't have to save the Map to complete the delete process.)
5. To replace the current Map image with a new background image, click the *Upload Map*

button, then select the new Map image. Once you confirm the new image, the system will replace the background image, while keeping all of the camera icons in place. (You don't have to save the Map to complete this process.) You may need to adjust camera positions based on the new Map.

Creating and Managing Permission Groups

Orchid Fusion VMS allows Administrators to set granular permissions through the *Permission Groups* feature. This means that Administrators may create custom permission sets, and will be able to:

- Define groups of users, each with different permissions
- Add *Permission Groups* as “users” of other *Permission Groups* (nested groups)
- Assign combinations of individual abilities (Live, Playback, PTZ, and Export)
- Grant and revoke permissions at both the server and camera levels

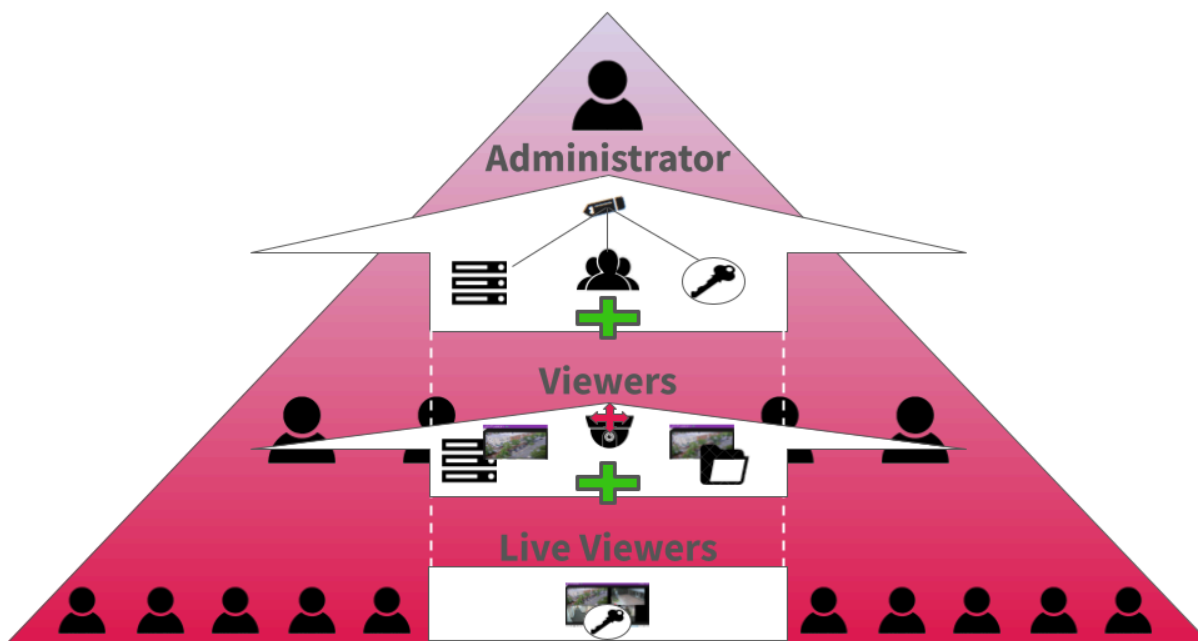
Using *Permission Groups* can decrease the Administrator’s workload by eliminating the need to enter every detail for each user, and reducing the need for future maintenance. A solid permission strategy, however, will require some planning.

✿ You must be a member of an Administrator group to add and manage *Permission Groups*.

✿ To configure Orchid Fusion VMS to work with Active Directory, Azure Active Directory, or FreeIPA, the Administrator will first need to edit the Orchid Fusion VMS properties file. (Please refer to the [Orchid Fusion VMS Installation Guide](#) for detailed instructions.) To create *Permission Groups* for any of these external authentication providers, please refer to the following: the [Add a Permission Group for Active Directory](#) section, the [Add a Permission Group for Azure Active Directory](#) section, or the [Add a Permission Group for FreeIPA](#) section.

Orchid Fusion VMS Default Permission Groups

Orchid Fusion/Hybrid VMS is configured with three default *Permission Groups*: Live Viewer, Viewer, and Administrator. As indicated in the next diagram, these *Permission Groups* have increasing levels of permissions, and by design, the fewest number of people should have the most permissions. This represents what may be the simplest and best permissions structure for Orchid Fusion/Hybrid VMS. In theory, you could just add members to each of these *Permission Groups* and be done. However, this diagram assumes that the default *Permission Groups* are sufficient and that all of the users should have access to all Orchid Core VMS servers and cameras (which may not apply in your organization).



In some organizations, *Permission Groups* may need to be restricted to certain abilities, servers and cameras. While these requirements may complicate the planning process for permissions, once a plan is in place, Orchid Fusion/Hybrid VMS has the tools to make it happen. Refer to the *Tips* section for general suggestions on creating *Permission Groups*, and the remainder of this section for instructions on how to configure *Permission Groups*.

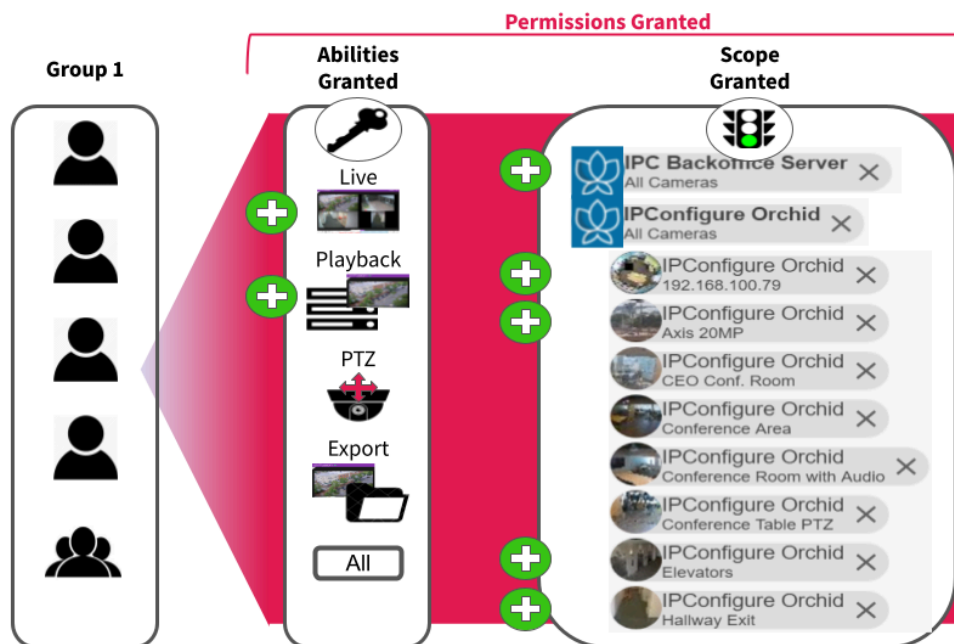
Custom Permission Groups

While you may want to utilize the Orchid Fusion/Hybrid VMS Default Permission Groups, you also have the option of creating new, custom Permission Groups with defined abilities and server/camera access. For each Permission Group, there are several abilities that can be granted or revoked individually. These are as follows:

- **Live:** View live video.
- **Playback:** View archive video.
- **Export:** Export archive video.
- **PTZ:** Control PTZ cameras.
- **All:** All of the above.

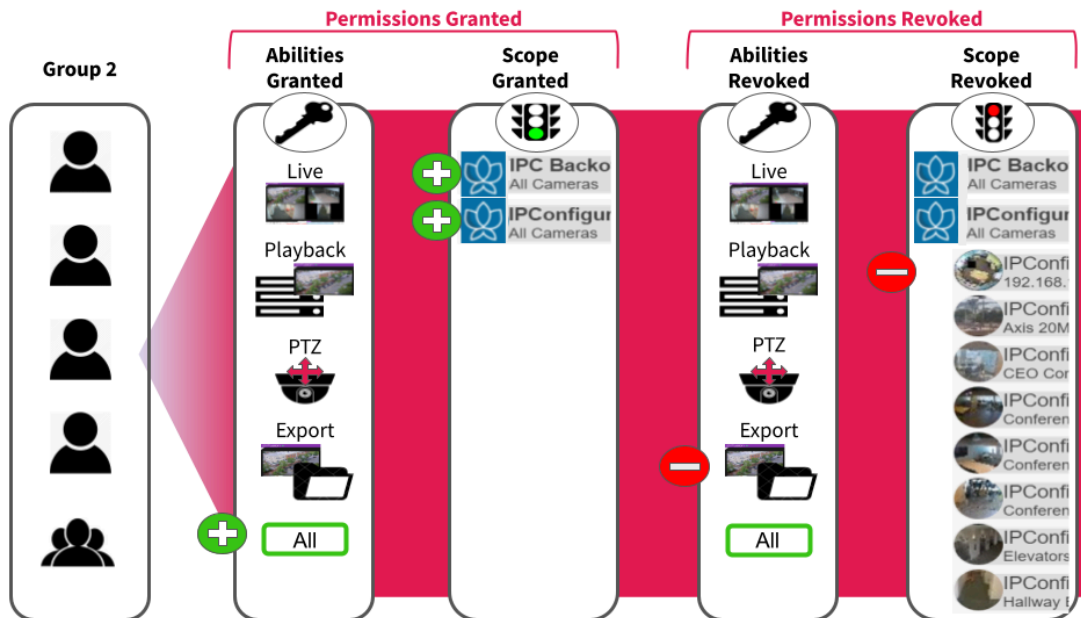
Once the abilities have been selected, they can then be applied to some or all of the servers and cameras, as needed. This is a powerful combination that can be used in a variety of situations, like dividing your organization into territories to be monitored by different *Permission Groups*, or for restricting user access to secure areas.

The diagram below shows a simple example in which a *Permission Group* (with both individual members and a member *Permission Group*) is granted two abilities; these abilities are extended to one Orchid Core VMS server (with all of its cameras), and a few cameras on a second Orchid Core VMS server. In Orchid Fusion/Hybrid VMS, this was accomplished using one permission set. Check out the next example to see what you can do when you start adding permission sets.



The next diagram shows a more complex example (but it's still easy to set up in Orchid Fusion/Hybrid VMS). With one permission set, all of the abilities are granted to the *Permission Group*

and these abilities are extended to two Orchid Core VMS servers (*All Servers/All Cameras*). But in this example, there needs to be one exception. To do that, another permission set is created to revoke permissions on one ability on one camera.



When you grant and revoke permissions, it is important to remember what that will mean to future system additions. In the example above, only one ability on one camera has been revoked. If you add a camera or an Orchid Core VMS server to the system, it will automatically have all of the permissions (because it is covered by the *All Servers/All Cameras* selection, and is not specifically chosen for a revoked permission).

Let's look at this example another way. Instead of using the revoke feature, we could grant all of the abilities to almost all of the cameras (by selecting the cameras one by one). In this case, if you add a camera or an Orchid Core VMS server to the system, it will not automatically have all of the permissions (because it is not covered by an *All Servers/All Cameras* selection, or specifically chosen for granted permissions).

Tips for Creating Permission Groups

- Develop a plan for permissions before you start. Ask some basic questions:
 - Who needs to have access to everything? That will be your Administrator group.
 - Who are your Users and what do they need access to during the course of a normal day?
 - Are there any abilities that need to be off-limits to some users?
 - Are there any servers or cameras that need to be off-limits to some users?
- Consider using a few standard *Permission Groups* that may cover a majority of users. (Orchid Fusion VMS Default *Permission Groups*, as discussed, include the following: Administrator, Viewer, and Live Viewer. These can be used as is, modified, ignored, or deleted.)
- Limit the Administrator group to as few members as possible.
- Refer to your organization's existing hierarchy or Active Directory to help determine permission levels for different users.
- Don't over-do it on permissions; grant users the least amount of permissions required to complete job duties.
- Try to design things so that each user is only in one *Permission Group*.
- If a user is a member of more than one *Permission Group*, remember that a permission granted in one *Permission Group* will override a permission revoked in another *Permission Group*.
- If you create a permission set that grants some abilities to *All Servers*, *All Cameras*, that permission set will automatically apply to any new camera you add to the system.
- The *Permissions Revoked* feature is especially useful when you have a large system of servers and cameras and just one (or a few) that need more restricted access. Instead of granting permissions to a large number of servers and cameras by selecting them one by one, grant the permission to *All Servers*, *All Cameras*, then revoke access to a select few.
- The system will allow some strange permission combinations, but it will typically give you hints to avoid them. For example, a *Permission Group* may have export abilities without playback abilities; this means a user can select and export a segment of recorded video without actually being able to view it until after it's exported.

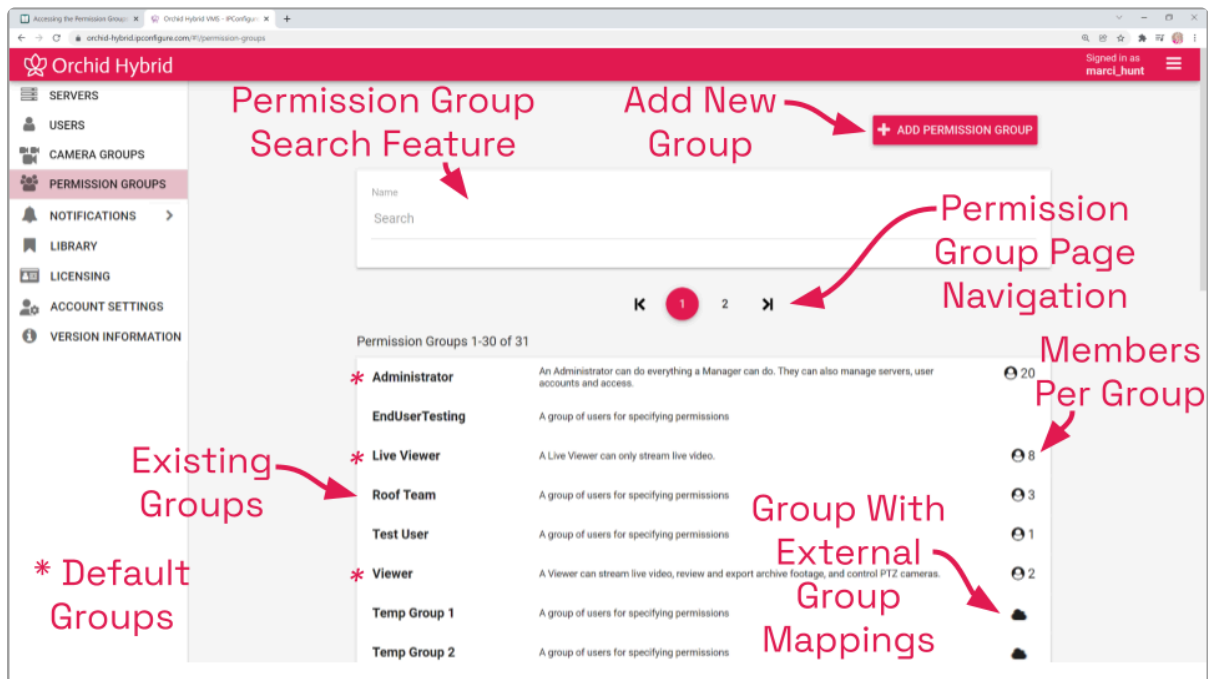
Accessing the Permission Groups

1. Open the *System Menu* in the top-right corner of the screen and select *Permission Groups*.

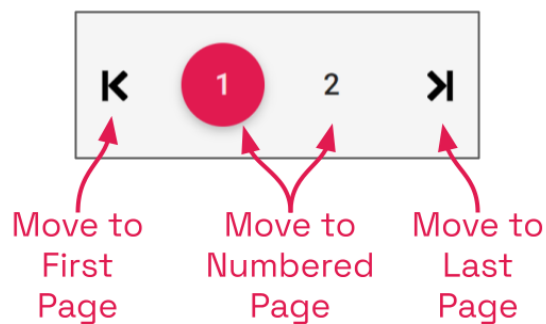
The *Permission Groups* screen will initially include three Orchid Fusion/Hybrid VMS Default *Permission Groups*. Once you start creating new *Permission Groups*, they will appear here as well. For each one, Orchid Fusion/Hybrid VMS displays a description of the *Permission Group*, and the number of members that are currently assigned to it.

✿ You may use the default *Permission Groups* or add new ones as necessary.

✿ When configured for Active Directory, Azure Active Directory, or FreeIPA, this list will not indicate how many members are in each *Permission Group*. (For more details on *Permission Groups* that use external group mapping, please refer to the *Add a Permission Group* section for the appropriate authentication provider.)



The *Permission Groups* screen lists up to 30 *Permission Groups* per page (by default). If you have more than 30 *Permission Groups*, 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 top and bottom of the screen. These will allow you to move easily from page to page.

Add an Administrator Permission Group

+ This is the *Add* icon.

1. Click the *Add Permission Group* button in the top-right corner of the *Permission Groups* list. A *New Permission Group* screen will open.

2. Enter a name and a description for the new *Permission Group* in the *Group Name* and *Group Description* fields.
3. Select a member for the new *Permission Group* by clicking on *Search for a User* to open a drop-down list of Orchid Fusion/Hybrid VMS users. Find and click on a member. As soon as you select a member, another list will appear so you can make another selection (if needed).
 - a. Press *Esc* if you don't need to make another selection.
 - b. To remove a member, click the *X* to the right of the member name.

* Available members (or Orchid Fusion/Hybrid VMS users) are established with the *Users* feature found on the *System* menu. For more details, please refer to *Users*. Other potential members may come from authentication providers the system has been configured to use.

* The software provides two locations at which you may assign user permissions. With the *User* feature, you assign user permissions (indirectly) by selecting the *Permission Group(s)* to which the user belongs. With the *Permission Groups* feature, you assign users as members of *Permission Groups* with specific abilities and access. While you don't have to select any members immediately upon adding a *Permission Group*, until you do, the *Permission Group* will essentially be inactive.

4. If members of this *Permission Group* will include other *Permission Groups*, click on *Search for a Group* to open a drop-down list of existing *Permission Groups*. Find and click on a

Permission Group. As soon as you select a *Permission Group*, another list will appear so you can make another selection (if needed).

- a. Press *Esc* if you don't need to make another selection.
- b. To remove a *Permission Group*, click the *X* to the right of the *Permission Group* name.

✿ If you add a *Permission Group* as a member of this *Permission Group*, the member *Permission Group* will automatically inherit the permissions of the main *Permission Group*. (This is probably not a common selection for an Administrator group.)

5. Since this *Permission Group* is an Administrator group, mark the Administrator Group checkbox. In addition to all-server access and video abilities, this *Permission Group* will be able to add and delete Orchid Core VMS servers, *Users*, and *Permission Groups*. (No other settings will be required.)
6. Once all settings are complete, press the *Save Group* button.

Temp Admin Group A group of Admin users for specifying permissions 2

Members
TempUser7, marci_hunt

Member Groups ⓘ
None

✓ **Administrator Group**

DELETE GROUP EDIT GROUP

Marked as an Administrator Group, This Group Has Access to Everything in Orchid Fusion VMS

Add a Permission Group with Individual Members



This is the *Add* icon.

1. Click the *Add Permission Group* button in the top-right corner of the *Permission Groups* list. A *New Permission Group* screen will open.

2. Enter a name and a description for the new *Permission Group* in the *Group Name* and *Group Description* fields.
3. Select a member for the new *Permission Group* by clicking on *Search for a User* to open a drop-down list of Orchid Fusion/Hybrid VMS users. Find and click on a member. As soon as you select a member, another list will appear so you can make another selection (if needed).
 - a. Press *Esc* if you don't need to make another selection.
 - b. To remove a member, click the *X* to the right of the member name.



Available members (or Orchid Fusion/Hybrid VMS users) are established with the *Users* feature found on the *System* menu. For more details, please refer to *Users*. Other potential members may come from authentication providers the system has been configured to use.

- ✿ The software provides two locations at which you may assign user permissions. With the *User* feature, you assign permissions (indirectly) by selecting the *Permission Group(s)* to which the user belongs. With the *Permission Groups* feature, you assign users as members of *Permission Groups* with specific abilities and access. While you don't have to select any members immediately upon adding a *Permission Group*, until you do, the *Permission Group* will essentially be inactive.

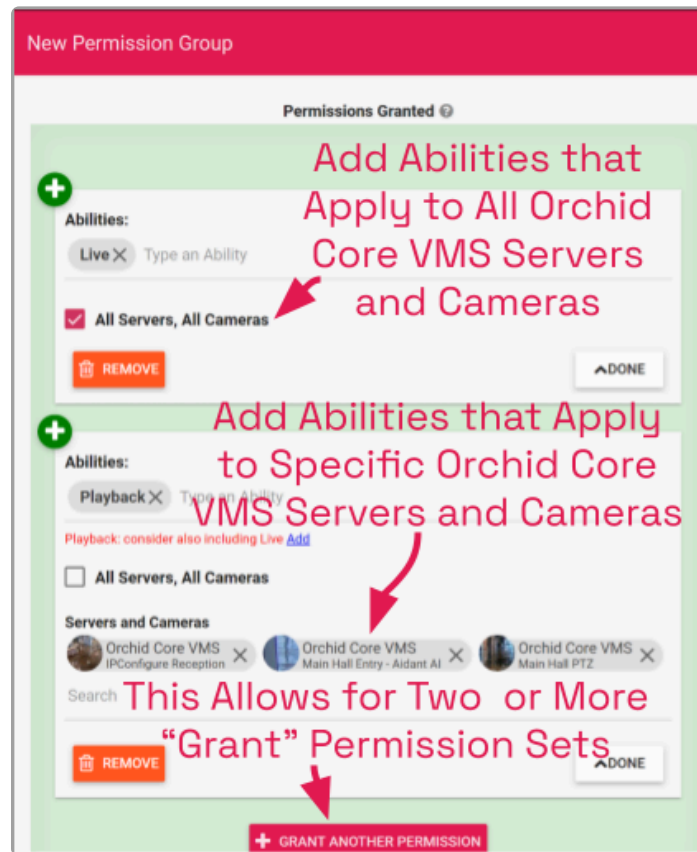
By default, each new *Permission Group* will be granted *Live* abilities for *All Servers*, *All Cameras*.

4. To assign specific, limited permissions for this *Permission Group*, use the *Permissions Granted* and *Permissions Revoked* features.
5. After all of the permissions are set, press the *Save Group* button.

Permissions Granted

The *Permissions Granted* feature provides a way to grant custom combinations of abilities to selected servers and cameras. In the example below, the *Permission Group* is given the ability to view live video on all servers and cameras. With the addition of another permission set, this same *Permission Group* will be able to playback video from all of the cameras on one of the servers, and one camera on a second server.

1. Go to the *Permissions Granted* box.

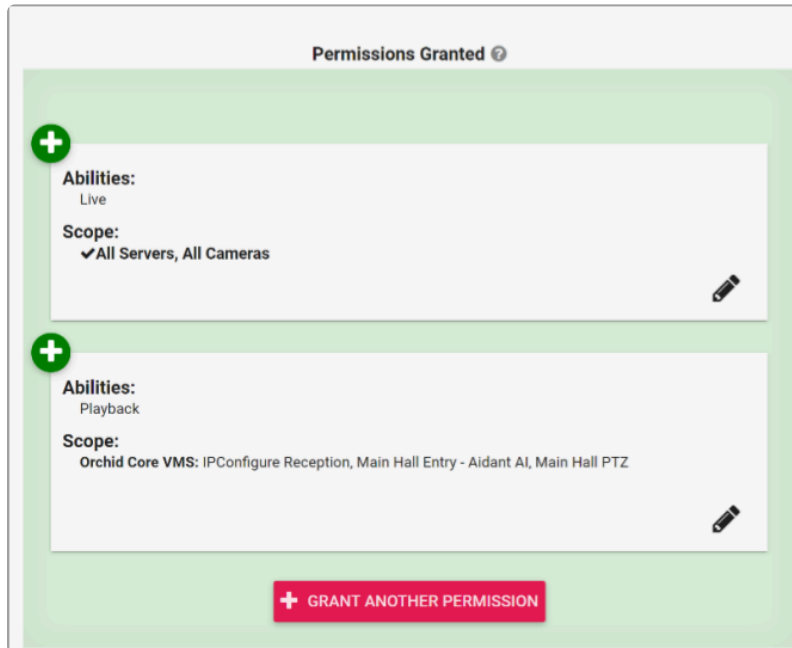


2. Select an ability for the new *Permission Group* by clicking on *Type an Ability* to open a drop-down list of abilities. Available selections include the following: *Live*, *Playback*, *Export*, *PTZ*, and *All* (which includes the other four abilities).
3. Click on the ability you want to grant. As soon as you select an ability, another list will appear so you can make another selection (if needed).
 - a. Press *Esc* if you don't need to make another selection.
 - b. To remove an ability, click the *X* to the right of the ability name.
4. Mark the *All Servers, All Cameras* checkbox if you want this permission set to apply to all of the registered Orchid Core VMS servers and associated cameras. You may also select this option if you want this permission set to apply to most of the servers and cameras; you may use a *Revoke* permission set in conjunction with this one to eliminate the unwanted servers and cameras. Keep in mind how this will impact cameras and servers that are added to the system later. (If marked, proceed to step number 7. If left unmarked, proceed to step 5.)

✿ If you create a *Permission Group* that uses the *All Servers, All Cameras* selection, that *Permission Group* will automatically have the same access to any new cameras you add to the system.

5. Select specific servers and cameras for this permission set by unmarking the *All Servers, All Cameras* checkbox; then click on *Search for an Orchid or Camera* to open a drop-down list of registered servers and cameras. (Orchid Core VMS servers will be represented by

- an Orchid Core VMS logo; individual cameras will be represented by a thumbnail.)
6. Click on a server or camera. As soon as you select a server or camera, another list will appear so you can make another selection (if needed).
 - a. Press **Esc** if you don't need to make another selection.
 - b. To remove a server/camera, click the **X** to the right of the server/camera name.
 7. When the permission set is complete, press the **Done** button.



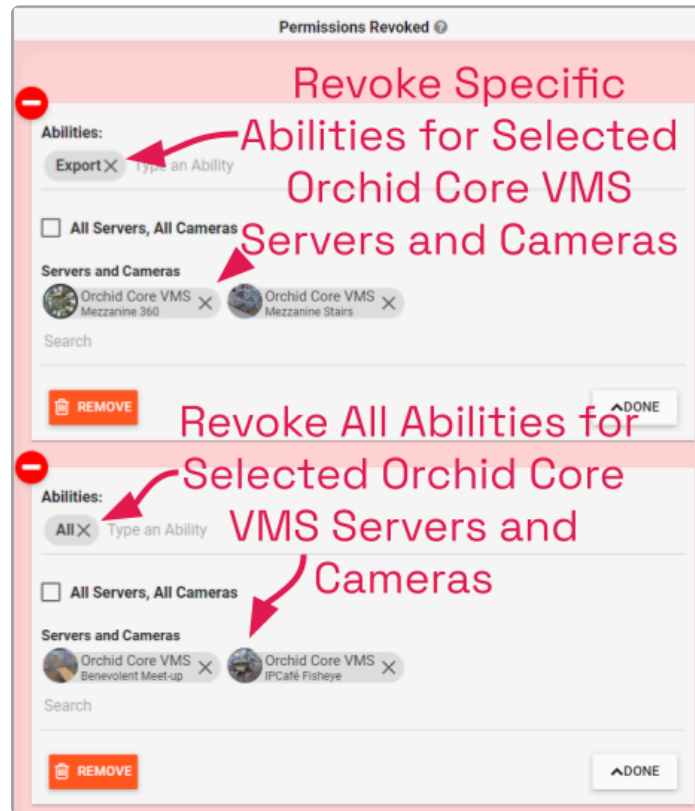
8. If you need to add another permission set for this *Permission Group*, click the **Grant Another Permission** button, then repeat steps 1 through 8.
9. To edit a permission set, click the **Edit** pencil that corresponds to the set you want to edit.
10. To delete a permission set, click the **Remove** button. (The set will be removed immediately.) If you don't see the **Remove** button, enter edit mode first by clicking the **Edit** pencil.

Permissions Revoked

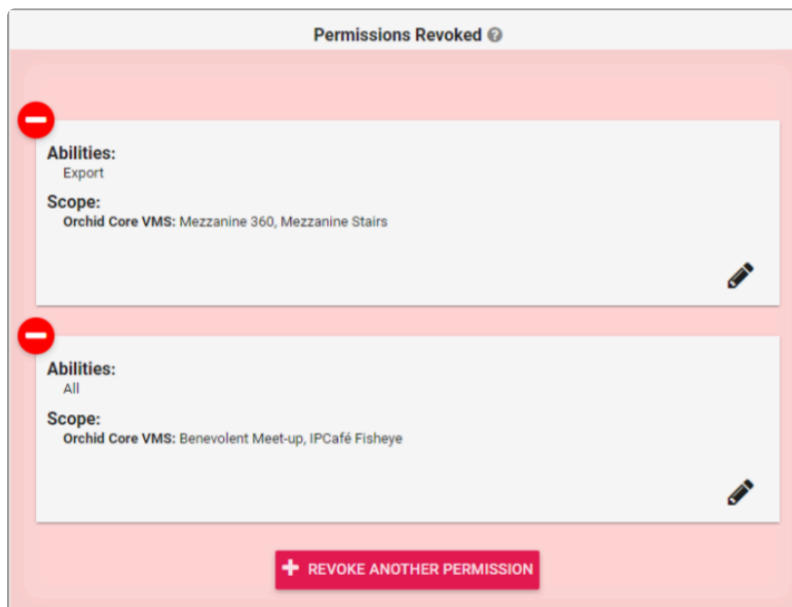
The *Permissions Revoked* feature provides a way to eliminate the *Permission Group's* ability to do certain things for selected servers and cameras. This can be a great shortcut especially when, for example, there is only one camera out of many that requires some restricted access. In the sample below, the *Permission Group's* ability to view recorded video and export video has been revoked on two cameras. By adding another permission set, this *Permission Group* will lose all abilities for another camera.

✿ Although not shown here, this *Permission Group* was granted *All abilities on All Servers, All Cameras*. *Permissions Revoked* settings will override *Permissions Granted* settings. Keep in mind how these settings will impact cameras and servers that are added to the system later.

1. Go to the *Permissions Revoked* box.



2. Select the ability you want to take away from the *Permission Group* by clicking on *Type an Ability* to open a drop-down list of abilities. Available selections include the following: *Live*, *Playback*, *Export*, *PTZ*, and *All* (which includes the other four abilities).
3. Click on the ability you want to eliminate. As soon as you select an ability, another list will appear so you can make another selection (if needed).
 - a. Press *Esc* if you don't need to make another selection.
 - b. To remove an ability from the revoked list, click the *X* to the right of the ability name.
4. Mark the *All Servers, All Cameras* checkbox if you want this permission set to apply to all of the registered Orchid Core VMS servers and associated cameras. (If marked, proceed to step 7. If left unmarked, proceed to step 5.)
5. Select specific servers and cameras for this permission set by unmarking the *All Servers, All Cameras* checkbox; then click on *Search for an Orchid or Camera* to open a drop-down list of registered servers and cameras. (Orchid Core VMS servers will be represented by an Orchid Core VMS logo; individual cameras will be represented by a thumbnail.)
6. Click on a server or camera. As soon as you select a server or camera, another list will appear so you can make another selection (if needed).
 - a. Press *Esc* if you don't need to make another selection.
 - b. To remove a server/camera from the revoked list, click the *X* to the right of the server/camera name.
7. When the permission set is complete, press the *Done* button.



8. If you need to add another revoked permission set for this *Permission Group*, click the **Revoke Another Permission** button, then repeat steps 1 through 8.
9. To edit a permission set, click the **Edit** pencil icon that corresponds to the set you want to edit.
10. To delete a permission set, click the **Remove** button. (The set will be removed immediately.) If you don't see the **Remove** button, enter edit mode first by clicking the **Edit** pencil.

Add a Permission Group that Includes a Member Group

+ This is the *Add* icon.

1. Click the *Add Permission Group* button in the top-right corner of the *Permission Group* list. A *New Permission Group* screen will open.

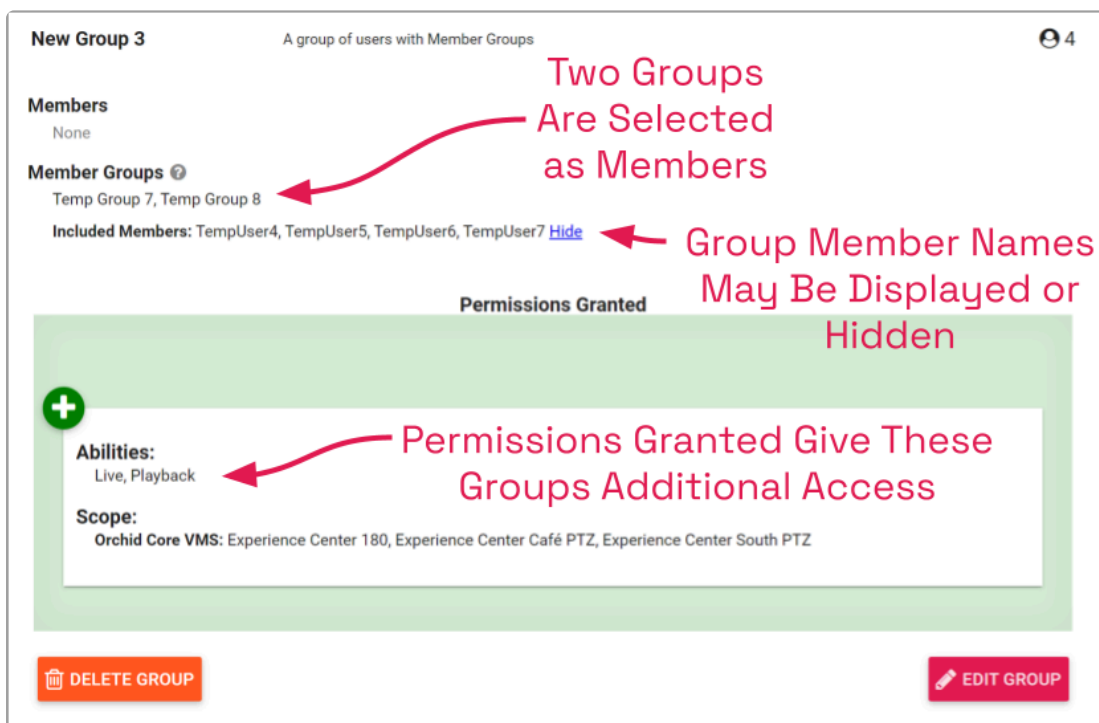
2. Enter a name and a description for the new *Permission Group* in the *Group Name* and *Group Description* fields.
3. To add member *Permission Groups* to this *Permission Group*, click on *Search for a Group* to open a drop-down list of existing *Permission Groups*. Find and click on a *Permission Group*. As soon as you select a *Permission Group*, another list will appear so you can make another selection (if needed).
 - a. Press *Esc* if you don't need to make another selection.
 - b. To remove a *Permission Group*, click the *X* to the right of the *Permission Group* name.

✿ When you add a *Permission Group* as a member *Permission Group*, it will automatically inherit the permissions of the main *Permission Group*.

✿ The software provides two locations at which you may assign user permissions.

With the *User* feature, you assign user permissions (indirectly) by selecting the *Permission Group(s)* to which the user belongs. With the *Permission Groups* feature, you assign users as members of *Permission Groups* with specific abilities and access. While you don't have to select any members immediately upon adding a *Permission Group*, until you do, the *Permission Group* will essentially be inactive.

4. To assign specific, limited permissions for this *Permission Group*, use the *Permissions Granted* and *Permissions Revoked* features.
5. After all of the permissions are set, press the *Save Group* button.
6. When the *Permission Group* appears in the *Permission Groups* list, click *Show Members* to display all of the users in the member *Permission Group*, or *Hide* to conceal them.



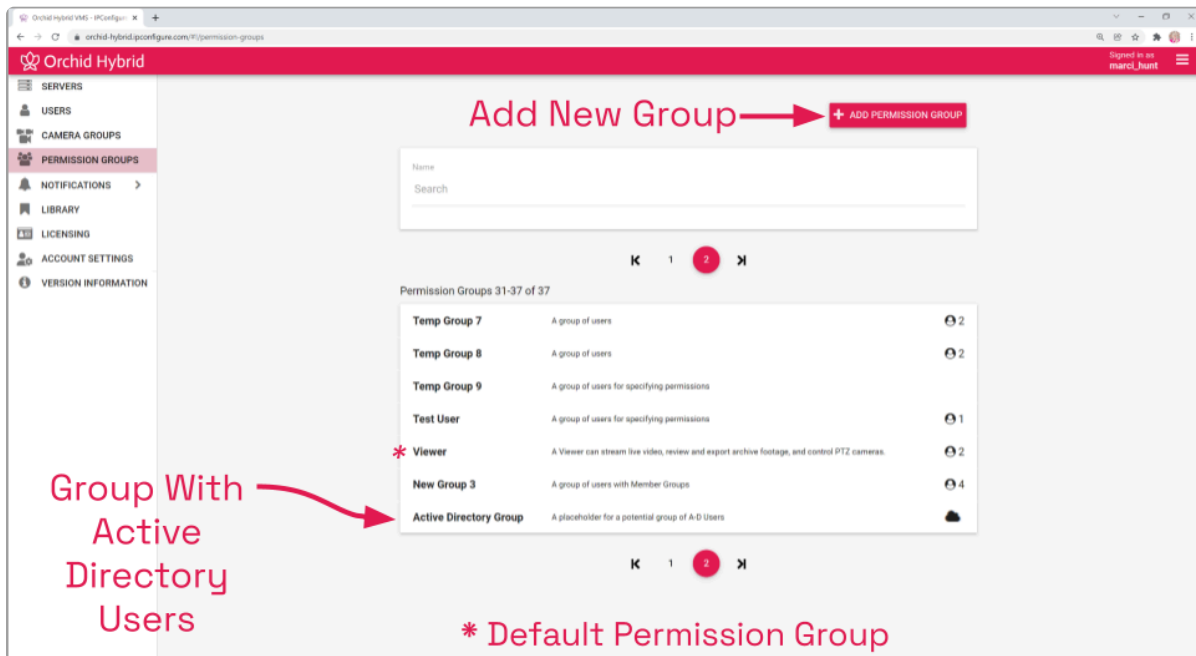
Permission Groups may contain a combination of individual members, member *Permission Groups*, and external groups.

Add a Permission Group for Active Directory

+ This is the *Add* icon.

The *Permissions Group* screen lists all of the *Permission Groups* that have been added. For each of these *Permission Groups*, Orchid Fusion/Hybrid VMS displays a description of the *Permission Group*. If the Fusion/Hybrid configuration file has been modified to add the Active Directory server(s), you may add *Permission Groups* that pull users from your Active Directory.

* For details on modifying the Orchid Fusion VMS configuration file to add the Active Directory server(s), please refer to the [Orchid Fusion VMS Installation Manual](#). On Orchid Hybrid VMS systems, IPConfigure Support personnel will modify the configuration file to permit Active Directory authentication.



* You may use the default *Permission Groups* or add new *Permission Groups* as you deem necessary.

1. Click the **Add Permission Group** button in the top-right corner of the *Permission Groups* list. A *New Permission Group* screen will open.

2. Enter a name and a description for the new *Permission Group* in the *Group Name* and *Group Description* fields.
3. Click on *External Group Mapping*.
4. Click in the *Domain* field and enter the name of the domain in which your target Active Directory users exist.
5. Click in the *Group* field and enter the name of the group in which your target Active Directory users exist.
6. Click the **Add** icon to add this new external group. As soon as you add the new external group, another prompt will appear so you can enter another group (if needed).
 - a. If you don't have any additional external groups to add, simply click in the white space to the right of the *Domain* and *Group* fields.
 - b. To remove an external group mapping, click the *Delete/Trash Can* icon to the right of the group name.

* Available members for an Active Directory *Permission Group* include all of the users that are already defined in your Active Directory. For more details, please refer to your Active Directory documentation.

* You may add external groups from Active Directory, Azure Active Directory, and FreeIPA to the same *Permission Group*, if desired.

7. If this *Permission Group* is going to have all of the permissions that an Administrator has (like adding and deleting Orchid Core VMS servers, *Users*, and *Permission Groups*), mark the *Administrator Group* checkbox. (If marked, no other settings will be required.)
8. If this *Permission Group* is going to have specific, limited permissions, use the *Permissions Granted* and *Permissions Revoked* features.

9. After all of the permissions are set, press the *Save Group* button.

The screenshot shows the 'Active Directory Group' configuration page. At the top, the group name 'Active Directory Group' is displayed next to a description: 'A placeholder for a potential group of A-D Users'. Below this, there are sections for 'Members' (currently 'None'), 'Member Groups' (currently 'None'), and 'External Group Mappings' (listing 'ipcad.test \ Test1' and 'ytho.ipcad.test \ Test2'). A large green box titled 'Permissions Granted' contains a list of permissions. The first permission is expanded, showing 'Abilities: Live, Playback' and 'Scope: All Servers, All Cameras'. At the bottom, there are two buttons: 'DELETE GROUP' and 'EDIT GROUP'. Red arrows and text annotations highlight key elements: 'Group Name and Description' points to the group name and description; 'Selected Active Directory Groups' points to the 'External Group Mappings' section; and 'Permissions Granted to the Selected Active Directory Groups' points to the expanded permission entry.

Active Directory Group A placeholder for a potential group of A-D Users

Members
None

Member Groups ?
None

External Group Mappings ?
ipcad.test \ Test1
ytho.ipcad.test \ Test2

Permissions Granted

Abilities:
Live, Playback

Scope:
✓ All Servers, All Cameras

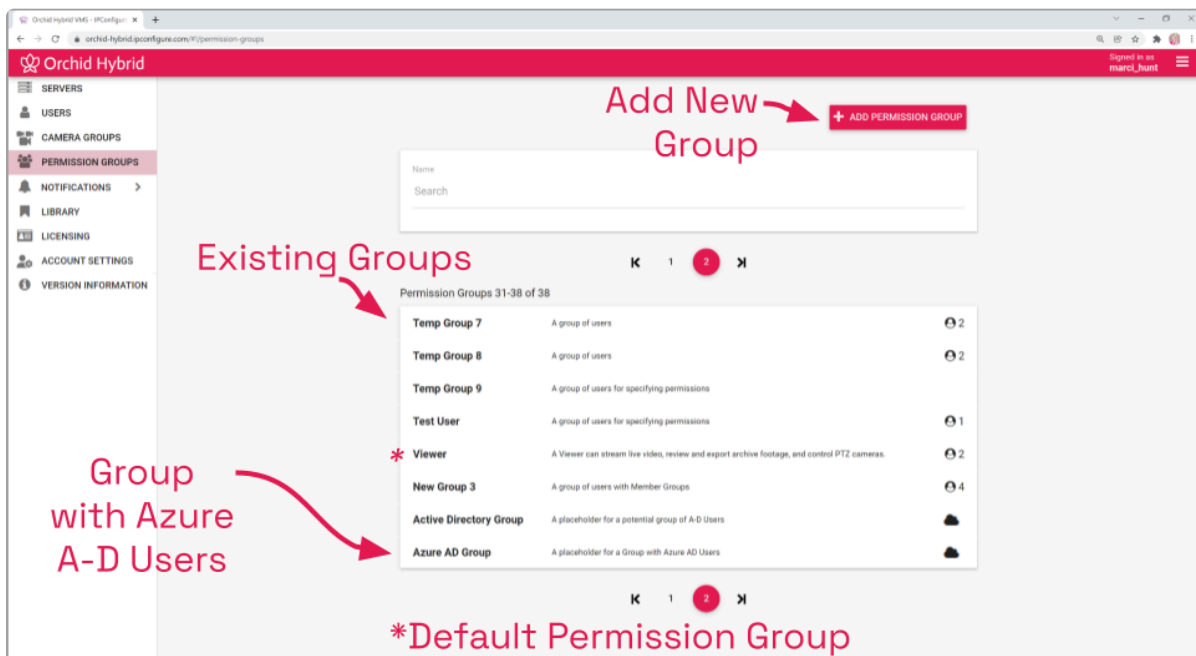
DELETE GROUP **EDIT GROUP**

Add a Permission Group for Azure Active Directory

+ This is the *Add* icon.

The *Permissions Group* screen lists all of the *Permission Groups* that have been added. For each of these *Permission Groups*, Orchid Fusion/Hybrid VMS displays a description of the *Permission Group*. If the Fusion/Hybrid configuration file has been modified to add the Azure Active Directory properties (clientid, clientsecret, endpoint, and domain), you may add *Permission Groups* that pull users from your Azure Active Directory.

* For details on modifying the Orchid Fusion VMS configuration file to add the Azure Active Directory properties, please refer to the [Orchid Fusion VMS Installation Manual](#). On Orchid Hybrid VMS systems, IPConfigure Support personnel will modify the configuration file to permit Azure Active Directory authentication.



* You may use the default *Permission Groups* or add new *Permission Groups* as you deem necessary.

1. Click the *Add Permission Group* button in the top-right corner of the *Permission Groups* list. A *New Permission Group* screen will open.

The screenshot shows the 'New Permission Group' form. The 'Group Name' field contains 'Azure AD Group' and the 'Group Description' field contains 'A placeholder for a Group with Azure AD Users'. The 'Members' section has a search bar and a list of 'Member Groups'. One group is listed: '1 EXTERNAL GROUP MAPPING'. Below this, there is a table with columns for 'Domain' and 'Group'. The 'Domain' column contains 'orchidsecurity.com' and the 'Group' column contains 'IpconfigureTesters'. There is a '+' icon to the right of the 'Group' field. Below the table, there is a checkbox for 'Administrator Group'. The 'Permissions Granted' section has a green header and a list of abilities: 'Live', 'Playback', 'PTZ', and 'Type an Ability'. There is a checkbox for 'All Servers, All Cameras' and a 'REMOVE' button. The 'Permissions Revoked' section has a red header and a 'REVOKE PERMISSION' button.

2. Enter a name and a description for the new *Permission Group* in the *Group Name* and *Group Description* fields.
3. Click on *External Group Mapping*.
4. Click in the *Domain* field and enter the name of the domain in which your target Azure Active Directory users exist.
5. Click in the *Group* field and enter the name of the group in which your target Azure Active Directory users exist.
6. Click the **Add** icon to add this new external group. As soon as you add the new external group, another prompt will appear so you can enter another group (if needed).
 - a. If you don't have any additional external groups to add, simply click in the white space to the right of the *Domain* and *Group* fields.
 - b. To remove an external group mapping, click the *Delete/Trash Can* icon to the right of the group name.

* Available members for an Azure Active Directory *Permission Group* include all of the users that are already defined in your Azure Active Directory. For more details, please refer to your Azure Active Directory documentation.

* You may add external groups from Active Directory, Azure Active Directory, and FreeIPA to the same *Permission Group*, if desired.

7. If this *Permission Group* is going to have all of the permissions that an Administrator has (like adding and deleting Orchid Core VMS servers, *Users*, and *Permission Groups*), mark the *Administrator Group* checkbox. (If marked, no other settings will be required.)
8. If this *Permission Group* is going to have specific, limited permissions, use the *Permissions Granted* and *Permissions Revoked* features.

9. After all of the permissions are set, press the *Save Group* button.

The screenshot shows the 'Azure AD Group' configuration interface. At the top, the title 'Azure AD Group' is followed by a subtitle 'A placeholder for a Group with Azure AD Users'. Below this, there are sections for 'Members' (showing 'None'), 'Member Groups' (showing 'None'), and 'External Group Mappings' (showing two mappings: 'orchidsecurity.com \ FusionTesters' and 'orchidsecurity.com \ IpconfigureTesters'). A large green box labeled 'Permissions Granted' contains a list of permissions. The first permission is 'Abilities: Live, Playback, PTZ' with a scope of 'All Servers, All Cameras'. At the bottom, there are two buttons: 'DELETE GROUP' and 'EDIT GROUP'. Red arrows point from text annotations to specific parts of the interface: 'Group Name and Description' points to the subtitle, 'Selected Azure Active Directory Groups' points to the 'External Group Mappings' section, and 'Permissions Granted to the Selected Azure Active Directory Groups' points to the first permission entry.

Azure AD Group A placeholder for a Group with Azure AD Users

Members
None

Member Groups ?
None

External Group Mappings ?
orchidsecurity.com \ FusionTesters
orchidsecurity.com \ IpconfigureTesters

Permissions Granted

Abilities:
Live, Playback, PTZ

Scope:
✓ All Servers, All Cameras

DELETE GROUP **EDIT GROUP**

Group Name and Description

Selected Azure Active Directory Groups

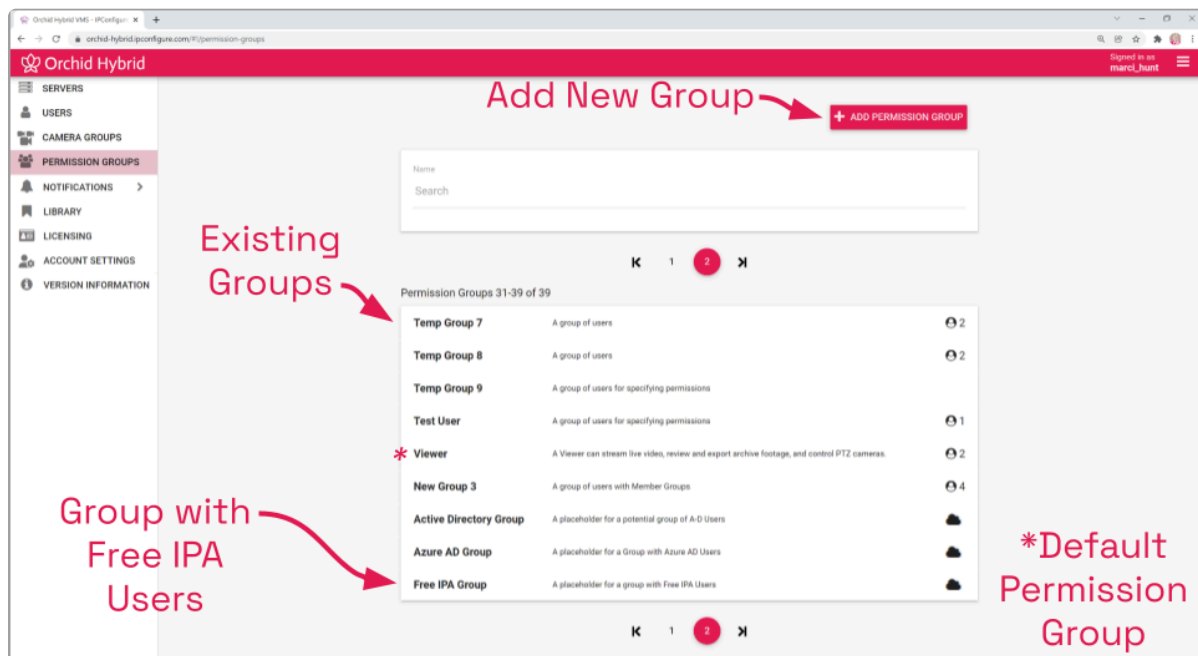
Permissions Granted to the Selected Azure Active Directory Groups

Add a Permission Group for FreeIPA

+ This is the *Add* icon.

The *Permissions Group* screen lists all of the *Permission Groups* that have been added. For each of these *Permission Groups*, Orchid Fusion/Hybrid VMS displays a description of the *Permission Group*. If the Fusion/Hybrid configuration file has been modified to add the FreeIPA servers property, you may add *Permission Groups* that pull users from FreeIPA.

* For details on modifying the Orchid Fusion VMS configuration file to add the FreeIPA property, please refer to the [Orchid Fusion VMS Installation Manual](#). On Orchid Hybrid VMS systems, IPConfigure Support personnel will modify the configuration file to permit Free IPA authentication.



* You may use the default *Permission Groups* or add new *Permission Groups* as you deem necessary.

1. Click the **Add Permission Group** button in the top-right corner of the *Permission Groups* list. A *New Permission Group* screen will open.

2. Enter a name and a description for the new *Permission Group* in the *Group Name* and *Group Description* fields.
3. Click on **External Group Mapping**.
4. Click in the *Domain* field and enter the name of the domain in which your target FreeIPA users exist.
5. Click in the *Group* field and enter the name of the group in which your target FreeIPA users exist.
6. Click the **Add** icon to add this new external group. As soon as you add the new external group, another prompt will appear so you can enter another group (if needed).
 - a. If you don't have any additional external groups to add, simply click in the white space to the right of the *Domain* and *Group* fields.
 - b. To remove an external group mapping, click the **Delete/Trash Can** icon to the right of the group name.

* Available members for a FreeIPA *Permission Group* include all of the users that are already defined in your FreeIPA directory. For more details, please refer to your FreeIPA documentation.

* You may add external groups from Active Directory, Azure Active Directory, and FreeIPA to the same *Permission Group*, if desired.

7. If this *Permission Group* is going to have all of the permissions that an Administrator has (like adding and deleting Orchid Core VMS servers, *Users*, and *Permission Groups*), mark the *Administrator Group* checkbox. (If marked, no other settings will be required.)
8. If this *Permission Group* is going to have specific, limited permissions, use the *Permissions*

Granted and *Permissions Revoked* features.

9. After all of the permissions are set, press the **Save Group** button.

The screenshot shows the 'Free IPA Group' configuration interface. At the top, the group name 'Free IPA Group' and its description 'A placeholder for a group with Free IPA Users' are displayed. Below this, there are sections for 'Members' (None), 'Member Groups' (None), and 'External Group Mappings' (example.com \ FusionUsers, example.com \ FusionUsers2). A large green box labeled 'Permissions Granted' contains a list of permissions: 'Abilities: Live, Playback' and 'Scope: All Servers, All Cameras'. At the bottom, there are two buttons: 'DELETE GROUP' and 'EDIT GROUP'. Red arrows point from text labels to specific elements: 'Group Name and Description' points to the group name and description, 'Selected FreeIPA Groups' points to the 'External Group Mappings' section, and 'Permissions Granted to the Selected FreeIPA Groups' points to the 'Permissions Granted' box.

Free IPA Group A placeholder for a group with Free IPA Users

Members
None

Member Groups ⓘ
None

External Group Mappings ⓘ
example.com \ FusionUsers
example.com \ FusionUsers2

Permissions Granted

Abilities:
Live, Playback

Scope:
✓ All Servers, All Cameras

DELETE GROUP **EDIT GROUP**

Add an “All APPs” Permission Group

+ This is the *Add* icon.

Orchid Fusion/Hybrid VMS supports custom applications through the *APPs* feature. When the *APPs* feature is activated, you will have the ability to create a *Permission Group* to define who will have access to one or all of your custom applications. Any users that are in an Administrator Group will automatically have access to the *APPs*. All other users will need to be given specific access.

* The *APPs* feature requires additional configuration. Please refer to the [Orchid Fusion VMS APPs](#) section for more details. On Orchid Hybrid VMS systems, IPConfigure Support personnel will modify the configuration file to activate the *APPs* feature.

1. Click the **Add Permission Group** button in the top-right corner of the *Permission Groups* list. A *New Permission Group* screen will open.

The screenshot shows the 'New Permission Group' dialog box with the following fields and annotations:

- Group Name:** 'APPs - All APPs' (Annotated: 'Enter Group Name and Description')
- Group Description:** 'A group of users with access to All APPs' (Annotated: 'Enter Group Name and Description')
- Members:** 'TempUser7' and 'TempUser9' (Annotated: 'Select Group Members')
- Member Groups:** 'Administrator Group' (unchecked) and 'All Apps' (checked) (Annotated: 'Designate This as an All APPs Group')
- Permissions Granted:** 'All Servers, All Cameras' (checked) (Annotated: 'Leave Blank to Keep APPs and Abilities Separate')
- Permissions Revoked:** 'Need to revoke access to cameras or features?' (Annotated: 'Leave Blank to Keep APPs and Abilities Separate')

2. Enter a name and a description for the new *Permission Group* in the *Group Name* and *Group Description* fields.
3. Select a member for the new *Permission Group* by clicking on the *Search for a User* field; this will open a drop-down list of Orchid Fusion/Hybrid VMS users. Find and click on a user. As soon as you select a member, a list will appear so you can make another selection (if needed).

- a. Press *Esc* if you don't need to select another member.
- b. To remove a member, click the *X* to the right of the member name.

* The software provides two locations at which you may assign user permissions. With the *User* feature, you assign user permissions (indirectly) by selecting the *Permission Group(s)* to which the user belongs. With the *Permission Groups* feature, you assign users as members of *Permission Groups* with specific abilities and access. While you don't have to select any members immediately upon adding a *Permission Group*, until you do, the *Permission Group* will essentially be inactive.

4. Click on the *Search for a Group* field to add a Member Group as a member of this group. As soon as you enter a Member Group, a prompt will appear so you can enter another Member Group (if needed).
 - a. Press *Esc* if you don't need to select another Member Group.
 - b. To remove a Member Group, click the *X* to the right of the Member Group name.
5. If this *Permission Group* is going to have access to all of your custom applications, mark the *All APPs* checkbox.
6. If this *Permission Group* is going to have specific, limited permissions to abilities and cameras, use the *Permissions Granted* and *Permissions Revoked* features (but it might be less complicated to leave these blank, essentially keeping standard permissions and *APP* permissions separate).

* When you grant a user permission to an *APP*, the system accounts for the cameras that the user has access to, so there may be no need to grant and revoke standard permissions again. By default, each new *Permission Group* will be granted *Live* abilities for *All Servers*, *All Cameras*. If you want to keep your typical permissions separate from the *APPs* permissions, *make sure no abilities are selected*.

7. After all of the permissions are set, press the *Save Group* button.

Add a Permission Group for Selected APPs

+ This is the *Add* icon.

* The APPs feature requires additional configuration. Please refer to the [Orchid Fusion VMS APPs](#) section for more details. On Orchid Hybrid VMS systems, IPConfigure Support personnel will modify the configuration file to activate the APPs feature.

1. Click the **Add Permission Group** button in the top-right corner of the *Permission Groups* list. A *New Permission Group* screen will open.

The screenshot shows the 'New Permission Group' dialog box with the following fields and annotations:

- Group Name:** 'APPs - Motion Alerter' (Annotated: 'Enter Group Name and Description')
- Group Description:** 'A group of users with access to the Motion Alerter APP' (Annotated: 'Enter Group Name and Description')
- Members:** 'TempUser1 X' and 'TempUser2 X' (Annotated: 'Select Group Members')
- Search for a User:** (Annotated: 'Select Group Members')
- Member Groups:** (Annotated: 'Select One or More Specific APPs')
- Search for a Group:** (Annotated: 'Select One or More Specific APPs')
- Apps:** 'Motion Alerter X' (Annotated: 'Select One or More Specific APPs')
- Search for an App:** (Annotated: 'Select One or More Specific APPs')
- Permissions Granted:**
 - Abilities:** 'Type an Ability' (Annotated: 'Leave Blank to Keep APPs and Abilities Separate')
 - ☒ All Servers, All Cameras
 - REMOVE** button
 - ADONE** button
- Permissions Revoked:**
 - Need to revoke access to cameras or features?
 - + REVOKE PERMISSION** button
- CANCEL** and **SAVE GROUP** buttons at the bottom right.

2. Enter a name and a description for the new *Permission Group* in the *Group Name* and *Group Description* fields.
3. Select a member for the new *Permission Group* by clicking on the *Search for a User* field; this will open a drop-down list of Orchid Fusion/Hybrid VMS users. Find and click on a user. As soon as you select a member, a list will appear so you can make another selection (if needed).
 - a. Press *Esc* if you don't need to select another member.
 - b. To remove a member, click the *X* to the right of the member name.

* The software provides two locations at which you may assign user permissions. With the *User* feature, you assign user permissions (indirectly) by selecting the

Permission Group(s) to which the user belongs. With the *Permission Groups* feature, you assign users as members of *Permission Groups* with specific abilities and access. While you don't have to select any members immediately upon adding a *Permission Group*, until you do, the *Permission Group* will essentially be inactive.

4. Click on the *Search for a Group* field to add a Member Group as a member of this group. As soon as you enter a Member Group, a prompt will appear so you can enter another Member Group (if needed).
 - a. Press *Esc* if you don't need to select another Member Group.
 - b. To remove a Member Group, click the *X* to the right of the Member Group name.
5. If this *Permission Group* is going to have access to specific custom applications, click on the *Search for an APP* field. As soon as you select an *APP*, a prompt will appear so you can select another *APP* (if needed).
 - a. Press *Esc* if you don't need to select another *APP*.
 - b. To remove an *APP*, click the *X* to the right of the *APP* name.
6. If this *Permission Group* is going to have specific, limited permissions to abilities and cameras, use the *Permissions Granted* and *Permissions Revoked* features (but it might be less complicated to leave these blank, essentially keeping standard permissions and *APP* permissions separate).

✿ When you grant a user permission to an *APP*, the system accounts for the cameras that the user has access to, so there may be no need to grant and revoke standard permissions again. By default, each new *Permission Group* will be granted *Live* abilities for *All Servers*, *All Cameras*. If you want to keep your typical permissions separate from the *APPs* permissions, *make sure no abilities are selected*.

7. After all of the permissions are set, press the *Save Group* button.

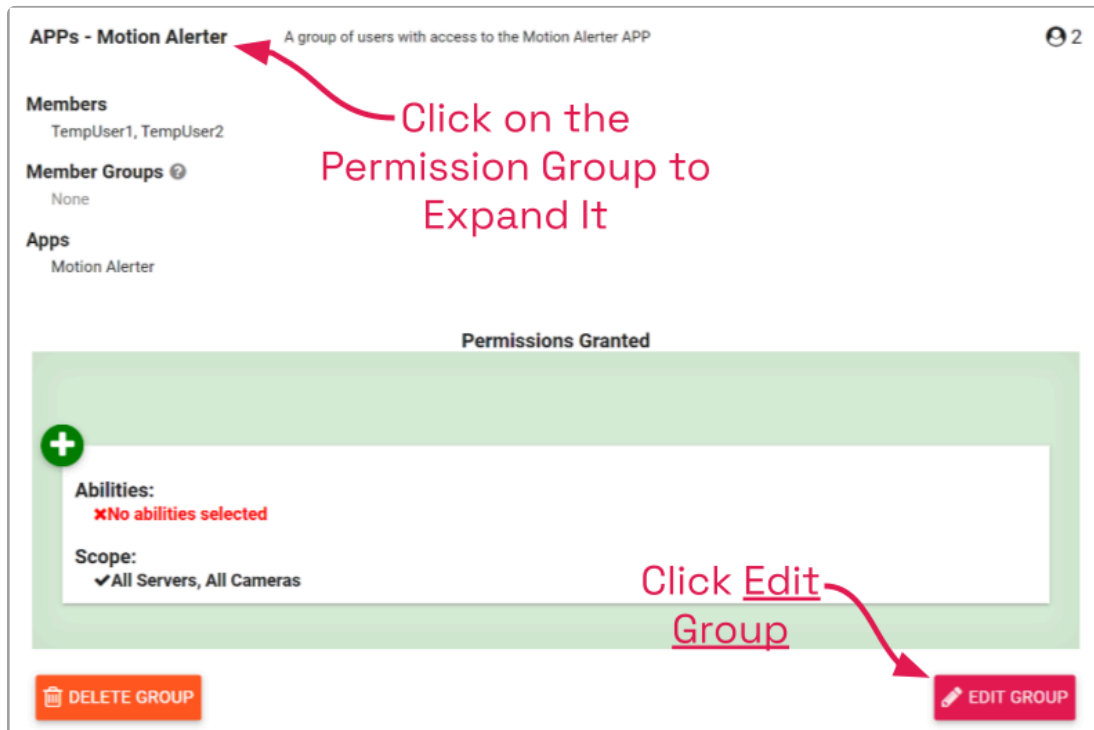
Edit Permission Group



This is the *Edit* pencil icon.

The *Permission Groups* can be changed at any time through the *Permission Groups* screen.

1. Click on one of the *Permission Groups* in the *Permission Groups* list. The entry will expand to display all of the *Permission Group* settings.



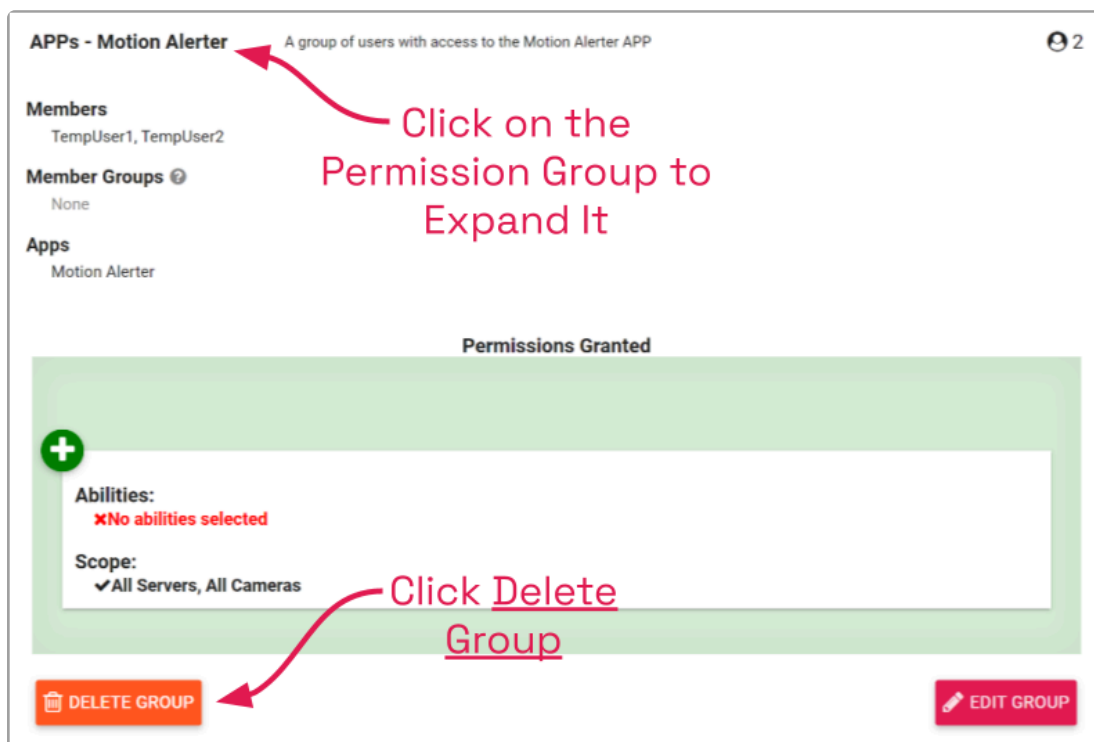
2. To edit the *Permission Group*, click the *Edit Group* button at the bottom of the expanded entry. The *Edit Group* screen will open.
3. Edit any of the available fields, as needed.
4. Click the *Save Group* button. All of the changes will be effective immediately.

Delete Permission Group



This is the *Delete / Trash Can* icon.

1. Click on one of the *Permission Groups* in the *Permission Groups* list. The entry will expand to display all of the *Permission Group* settings.



2. To delete the *Permission Group*, click the **Delete Group** button at the bottom of the expanded entry.
3. The software will ask for confirmation before deleting the *Permission Group*.
4. Click the **Delete** button. The *Permission Group* will be deleted immediately.

Search for a Permission Group

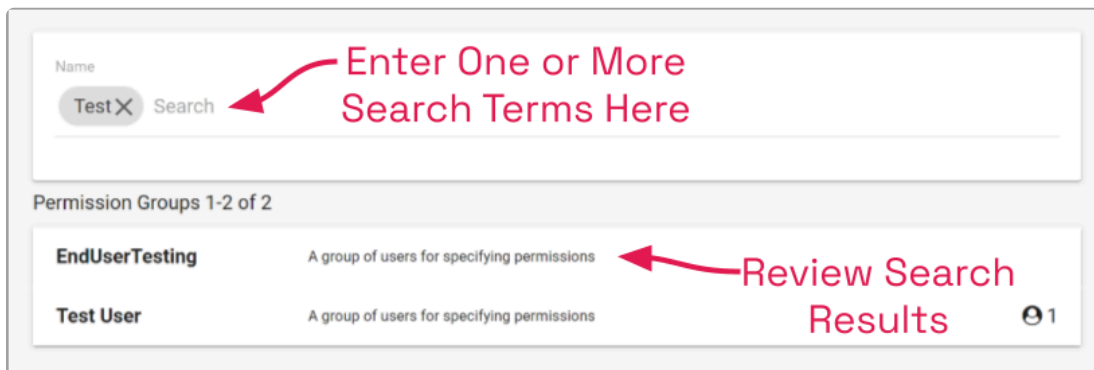
If you have more than 30 *Permission Groups* (by default), the *Permission Groups* list will extend beyond one page. When this happens, the software will automatically activate the search feature. Especially useful with large systems, this feature will help you find specific *Permission Groups* quickly.

Search the Permission Groups List

The *Search* field will appear at the top of the *Permission Groups* screen. It supports searching by permission group names, using single and multiple search tags.

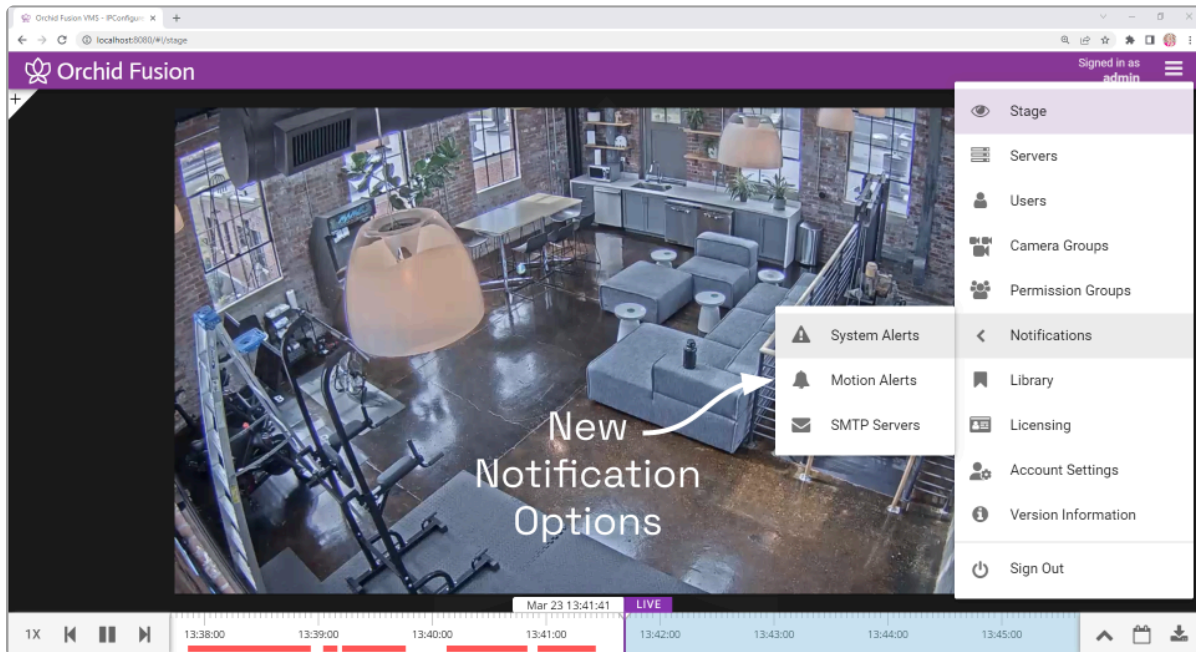
1. Click into the *Search* field to start your search.
2. Type one or more search tags (clicking *Enter* after each).
 - a. A single search tag with multiple terms (words or numbers) will initiate a search for results that include all of the terms in the tag.
 - b. Multiple, single-term search tags will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

Each time you press *Enter*, the *Permission Groups* screen will update to display all of the groups that contain the tag(s).



Notifications

Orchid Fusion/Hybrid VMS Administrators have the ability to configure *Notifications*. This feature helps you minimize video loss and potential security issues by alerting you to events as they happen. A *Notification* will send an email alert to selected recipients when a defined trigger event occurs. Beginning in version 22.6, Orchid Fusion/Hybrid VMS supports two major types of *Notifications*: *System Alerts* and *Motion Alerts*.



You may already be familiar with our original *Notifications*, now called *System Alerts*. Using *System Alerts*, Orchid Fusion/Hybrid may be configured to monitor for a camera or server becoming unavailable, a server error, or an I/O error. Each *System Alert* will be comprised of one or more trigger events and one or more actions.

The *Motion Alerts* are the newest addition to the *Notifications* feature. Using *Motion Alerts*, users can receive video clips by email for motion events that occur during a configured schedule. This is a great way to monitor what's going on after hours, or when no one is on-site. Each *Motion Alert* will include one or more cameras, and a custom monitoring schedule.

✿ Use of the *Notifications* feature is optional, but recommended by IPConfigure, because it can help to minimize gaps in video availability and security by identifying problems quickly.

If you are taking the time to configure *Notifications*, you should consider setting a custom, public URL for the Fusion server. This public URL will be displayed in *Notification* emails. To set this public URL, you'll need to edit the Fusion configuration file. For details, please refer to the *Fusion Server Settings* section of the [Orchid Fusion VMS Installation Guide](#).

- ✿ On Orchid Hybrid VMS systems, IPConfigure Support personnel will need to configure the SMTP server and set a public URL.

System Alerts

System Alerts are designed to notify you when there is an equipment problem or video processing error that may result in a loss of video footage. More specifically, the system may be configured to look for cameras or servers that become unavailable, server errors, or I/O errors. If any of these events occur, the system will send an email to selected recipients.

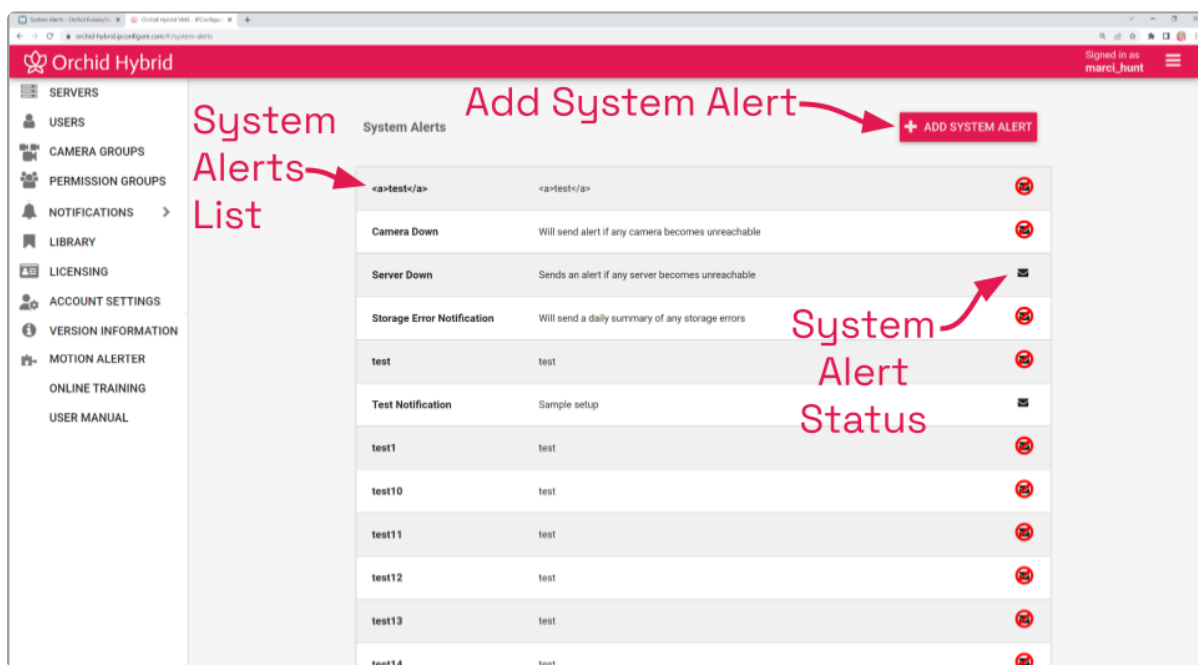
In many cases, a single, somewhat global *System Alert* will fulfill your needs. Other situations, however, may demand more flexibility. The *System Alert* feature manages these additional demands by allowing customized scope (one or more cameras, one or more servers), combinations that use multiple triggers and actions, as well as multiple SMTP servers (if necessary).

✿ The use of *System Alerts* is optional, but recommended by IPConfigure, because it can help to minimize gaps in video availability by identifying problems quickly.

Accessing the System Alerts

1. Open the *System Menu* in the top-right corner of the screen, select *Notifications*, and then select *System Alerts*.

The Orchid Fusion/Hybrid VMS *System Alerts* screen will appear. This screen displays a list of all the current *System Alerts*, and gives you the ability to add, edit, and delete them.



- Click on any row that represents a *System Alert* to expand or collapse the *System Alert* details. (When expanded, you may elect to edit or delete the *System Alert*.)

Adding System Alerts



This is the *Add* icon.

As mentioned earlier, you may configure one or more *System Alerts*, depending on your needs. We'll cover each of the basic options step-by-step to show what's available.

If you are trying to decide whether to create just one or multiple *System Alerts*, you'll need to have an understanding of how they work. An *Immediate Email* alert is pretty simple; if a valid trigger event occurs, the system will send an email with details on the trigger event. If you set up a *Daily Email Digest* alert, the system will send a daily summary of the trigger events that have been defined within that *System Alert* (even if none of the trigger events occurred). For example, assume you have a *System Alert* that monitors for *Server Unreachable* events only. During the day, two *Camera Unreachable* events occur, but no *Server Unreachable* events occur. Your next *Daily Email Digest* will report that "No notifications were sent today" because it is only monitoring for *Server Unreachable* events. (As an added benefit, the *Daily Email Digest* will confirm that the alert system is working, even when no events occur.)

You'll also want to consider what recipients want or need to know. While front line people may want to be alerted each time a camera goes down, upper level personnel may only want to know if a server goes down (which is obviously a larger problem). In this situation, you would need to configure at least two *System Alerts*: one *Immediate* alert that covers cameras (and perhaps servers), and one *Immediate* alert for servers.

You may, instead, have upper level personnel that prefer to receive a daily summary (that covers all types of issues). In this situation, you can simply add a *Daily Email Digest* action item to any or all of the defined *System Alerts*.



The *System Alert* dialog has several key sections: the description (at the top), one or more *Triggers*, and one or more *Actions*. You may need to use the scroll bar along the right edge of the dialog to view and work with each of these elements.

1. Click the *Add System Alert* button at the top-right corner of the *System Alerts* list. The *New System Alert* screen will open.

New System Alert

Name/Subject *
Sample Alert

Description
Just an example of how an alert might look

Enter Name and Description

Triggers

Trigger Event
Camera Unreachable

A notification will be sent when a camera becomes unreachable for 5 minutes.

Before another notification will be sent, the camera must be online for at least 5 minutes.

Cameras that become unreachable because a server becomes unreachable will not send notifications.

☒ Any Camera

Excluding These Cameras

Search

☐ Enabled

CANCEL SAVE SYSTEM ALERT

2. Enter a name for the *System Alert* in the *Name/Subject* field. (Emails sent for this *System Alert* will use this *Name/Subject* as the email subject.)
3. Enter a general definition for the *System Alert* in the *Description* field.
4. Scroll down to the *Triggers* section to continue.

Triggers

In the *Triggers* section, you may select one or more events that may initiate a *System Alert*. (Notice that by default, the *New System Alert* dialog includes a *Camera Unreachable* trigger, a *Server Unreachable* trigger, and a *Server Error* trigger. Scroll down to view all of these and remove any triggers that you don't wish to use.)

Camera Unreachable/Server Unreachable Trigger

1. Click on the *Trigger Event* drop-down list and select *Camera Unreachable* or *Server Unreachable*. The settings for the *Camera Unreachable* and *Server Unreachable* triggers are very similar.

New System Alert

Triggers

Trigger Event
Camera Unreachable

A notification will be sent when a camera becomes unreachable for 5 minutes.

Before another notification will be sent, the camera must be online for at least 5 minutes.

Cameras that become unreachable because a server becomes unreachable will not send notifications.

☒ Any Camera

Excluding These Cameras

Search

REMOVE

^ DONE

Trigger Event
Server Unreachable

☐ Enabled

CANCEL SAVE SYSTEM ALERT

- Determine how long the camera/server must be unreachable before an alert is sent. Enter this number in the first minutes field.
- Determine how long the camera/server must be back online before another unreachable event may qualify as a trigger. Enter this number in the second minutes field. (These timing settings help to eliminate nuisance alerts.)
- Mark the *Any Camera* checkbox if you want to be alerted when any camera goes offline. (Mark the *Any Server* checkbox if you want to be alerted when any server goes offline.) Then you can click into the *Search* field if you want to exclude any cameras (or servers).
- Unmark the *Any Camera* (*Any Server*) checkbox if you prefer to select specific cameras (or servers) for the alert. Then click in the *Search* field to identify those cameras (or servers).
- Click the **Remove** button if you want to delete this trigger.
- Click the **Done** button if you want to save this trigger.
- If you would like to define another alert trigger, scroll to the next default trigger (if applicable), or click the **Add Another Trigger** button. (You may add multiple triggers, just keep in mind that they will all be sent to selected recipients. You may have to scroll down to find this button.)
- If you are finished with trigger settings, remove any unwanted triggers, then scroll down to the *Actions* section to continue.

Server Error Trigger

- Click on the *Trigger Event* drop-down list and select *Server Error*.

New System Alert

Trigger Event
Server Error

A notification will be sent as soon as possible when a server restarts, enters degraded mode due to a storage error or license expiration, or stops writing video files. Notifications will be sent no more than once every 5 minutes.

☒ Any Server

Excluding These Servers
Search

REMOVE

When This Trigger Is Complete

^ DONE

Trigger Event
Server Error

A notification will be sent as soon as possible when a server restarts, enters degraded mode due to a storage error or license expiration, or stops writing video files. Notifications will be sent no more than once every 5 minutes.

☒ Any Server

☐ Enabled

CANCEL SAVE SYSTEM ALERT

If you select a *Server Error* trigger, there are three events that will cause the system to send an alert.

- A selected Orchid server restarts
 - A selected Orchid server enters a degraded state (due to storage device error or license error). (This event can only be detected on Orchid servers running Orchid version 2.4.0 or greater.)
 - At least one of an Orchid server's cameras has a problem. (It is running and configured for Continuous Recording or Motion Adaptive Frame Rate, but no new video archives have been written in the last 3 minutes.)
2. Determine how long you want the system to wait (in minutes) before sending any other *Server Error* alert, then enter this number in the minutes field.
 3. Mark the *Any Server* checkbox if you want to be alerted when a *Server Error* occurs on any server. Then you can click into the *Search* field if you want to exclude any servers.
 4. Unmark the *Any Server* checkbox if you want to select specific servers for the alert. Then click in the *Search* field to identify those servers.
 5. Click the **Remove** button if you want to delete this trigger.
 6. Click the **Done** button if you want to save this trigger.
 7. If you would like to define another alert trigger, scroll to the next default trigger (if applicable), or click the **Add Another Trigger** button. (You may add multiple triggers, just keep in mind that they will all be sent to selected recipients. You may have to scroll down to find this button.)
 8. If you are finished with trigger settings, remove any unwanted triggers, then scroll down to the *Actions* section to continue.

* For more information on the Orchid degraded state, please refer to the [Orchid Core VMS Administrator Guide](#).

* For a more detailed review of *Server Error Notifications*, please refer to the [Understanding Server Error Notifications](#) knowledge base article on our website.

I/O Error Trigger

1. Click on the *Trigger Event* drop-down list and select *I/O Error*.

The screenshot shows the 'New System Alert' dialog box with the following configuration and annotations:

- Trigger Event:** A dropdown menu showing 'I/O Error'. An annotation 'Select Trigger Type' points to this dropdown.
- Description:** 'A notification will be sent as soon as possible when video files cannot be written to disk due to insufficient storage throughput. Notifications will be sent no more than once every 5 minutes.' An annotation 'Selectable Timing' points to the '5 minutes' field.
- Any Server:** A checked checkbox. An annotation 'Select All Servers or Specific Servers' points to this checkbox.
- Excluding These Servers:** A section with a 'Search' field.
- Buttons:** 'REMOVE' (trash icon), 'DONE' (up arrow icon), and 'ADD ANOTHER TRIGGER' (plus icon). An annotation 'When This Trigger Is Complete' points to the 'DONE' button.
- Footer:** 'Add Another Trigger?' points to the 'ADD ANOTHER TRIGGER' button. The 'Actions' section shows 'Trigger Action' with an 'Enabled' checkbox.
- Bottom Right:** 'CANCEL' and 'SAVE SYSTEM ALERT' buttons.

If you select the *I/O Error* trigger, the system will send an alert if it detects that video files (for a selected server) cannot be written to the disk fast enough to complete the write. (This event can only be detected on Orchid servers running Orchid version 2.4.0 or greater.)

2. Determine how long you want the system to wait (in minutes) before sending any other *I/O Error* alert, then enter this number in the *minutes* field.
3. Mark the *Any Server* checkbox if you want to be alerted when an *I/O Error* occurs on any server. Then you can click into the *Search* field if you want to exclude any servers.
4. Unmark the *Any Server* checkbox if you want to select specific servers for the alert. Then click in the *Search* field to identify those servers.
5. Click the **Remove** button if you want to delete this trigger.
6. Click the **Done** button if you want to save this trigger.

7. If you would like to define another alert trigger, scroll to the next default trigger (if applicable), or click the **Add Another Trigger** button. (You may add multiple triggers, just keep in mind that they will all be sent to selected recipients. You may have to scroll down to find this button.)
8. If you are finished with trigger settings, remove any unwanted triggers, then scroll down to the *Actions* section to continue.

✿ For a more detailed review of *I/O Error Notifications*, please refer to the [Understanding I/O Error Notifications](#) knowledge base article on our website.

Actions

In the *Actions* section, you will select which alert type will be generated by the *System Alert* and to whom the alert will be sent.

1. Click on the *Trigger Action* drop-down list to select one of two options: *Immediate Email* or *Daily Email Digest*.

If you select *Immediate Email*, a *System Alert* will be sent each time a valid trigger event occurs.

If you select *Daily Email Digest*, a *System Alert* will be sent at the same time each day (at a selected time). This alert will summarize all of the alerts that were sent in the previous 24-hour period that pertain to this *System Alert*. This alert will be sent even if no triggered alerts occurred (so you can tell that the system is working).

The screenshot shows the 'New System Alert' configuration window. It has a red header bar with the title 'New System Alert' and a close button. The main content area is white and contains several sections:

- Actions:** A green plus icon is on the left. The 'Trigger Action' is set to 'Daily Email Digest'. To the right, the 'Send Digest At (EDT)' is set to '16 : 00'. A red arrow points to this field with the text 'Timing for Daily Digest'.
- Description:** A paragraph states: 'A daily email containing a digest of all triggered events will be sent to Orchid Hybrid VMS Users, Permission Group members, and any additional email addresses provided.'
- Users:** A search bar contains 'marci_hunt' with a red 'X' icon. A red arrow points to it with the text 'Select Internal Recipients'.
- Permission Groups:** A search bar with the text 'Search for a Group'.
- Emails:** A search bar contains 'SampleUser@ipconfigure.com' with a red 'X' icon. A red arrow points to it with the text 'Select External Recipients'.
- SMTP Server:** A dropdown menu shows 'Orchid Cloud SMTP Server'. A red arrow points to it with the text 'Select SMTP Server'. Below it, the 'SMTP From-Address' is 'noreply@example.com'.
- Buttons:** An orange 'REMOVE' button is on the left. A red arrow points to it with the text 'When Action Settings Are Complete'. A 'DONE' button is on the right. A red arrow points to it with the text 'When System Alert is Complete'.
- Footer:** A red '+ ADD ANOTHER ACTION' button is in the center. At the bottom, there is a 'CANC' button and a red 'SAVE SYSTEM ALERT' button.
- Enabled:** A checkbox labeled 'Enabled' is at the bottom left.

2. If you select *Daily Email Digest*, use the *Send Digest At* field to define the send time for the daily alert.
3. Once the trigger action is selected, you need to select the recipients for the alert.
 - a. Click in the *Search for a User* field to select individual users as recipients.
 - b. Click in the *Search for a Group* field to select entire *Permission Groups* as recipients.
 - c. Click in the *Type an Email* field to enter the email addresses for external recipients.
4. The last action setting allows you to select the SMTP Server that will send the alert. If only one SMTP server was configured, it will already be selected for you. If you need to select a different one, click on the *SMTP Server* drop-down list to select it. (Remember: IPConfigure Support will need to configure your SMTP server if you are working in Orchid Hybrid VMS.)
 - a. If you want to include a custom return email address with the alert, click in the *SMTP From-Address* field to enter it.
5. Click the **Remove** button if you want to delete this action.
6. Click the **Done** button if you want to save this action.
7. Click the **Add Another Action** button to define another action. (You may add multiple actions if, for example, you want to define both an *Immediate Email* and a *Daily Email Digest*, or if you are using different SMTP servers. You may have to scroll down to find this button.)
8. Mark the *Enabled* checkbox to activate the *System Alert*. (Remove the mark from the *Enabled* checkbox to deactivate the *System Alert*.)
9. When you are finished with all of the settings, click the **Save System Alert** button to keep this *System Alert*. This new *System Alert* will now appear in the *System Alerts* list.

System Alert Status

1. To view the status of any of the *System Alerts*, hover the cursor over the **Notification** icon at the right end of the *System Alert* entry.

✿ Each *System Alert* requires at least one completely defined trigger and one defined action (including at least one recipient with an email address). If any of these elements are missing, the *System Alert* will be listed, but will display an error. Most of these incomplete *System Alerts* will result in no alerts being sent. If the incomplete *System Alert* is a *Daily Email Digest*, a daily alert will be sent that says no alerts were sent.

Editing or Deleting a System Alert

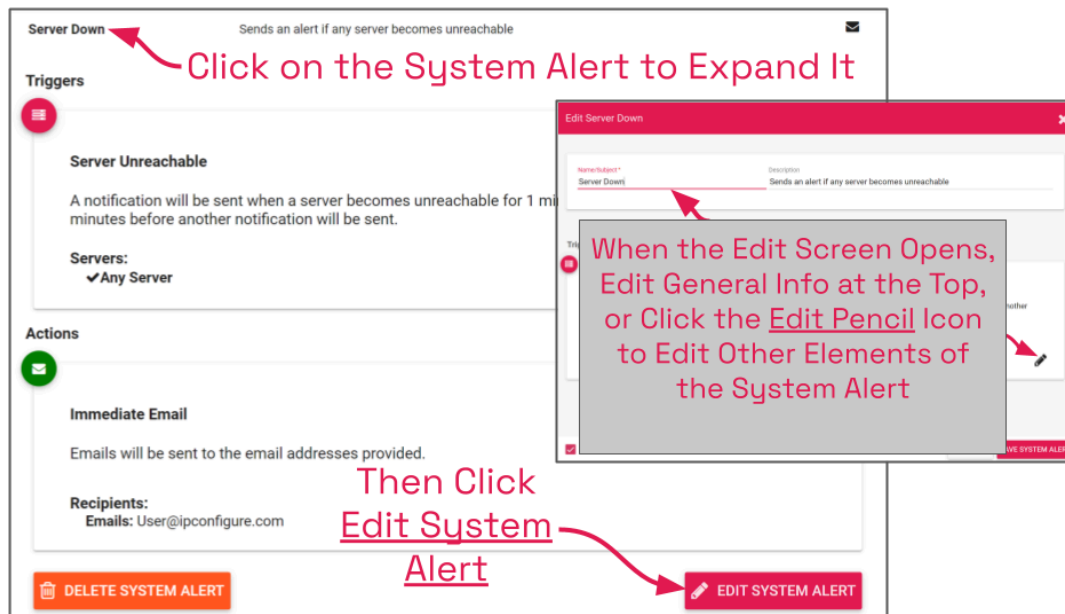
Editing a System Alert



This is the *Edit* pencil icon.

The *System Alerts* can be changed at any time through the *System Alerts* screen.

1. Click on one of the *System Alerts* in the *System Alerts* list. The entry will expand to display all of the *System Alert* settings.



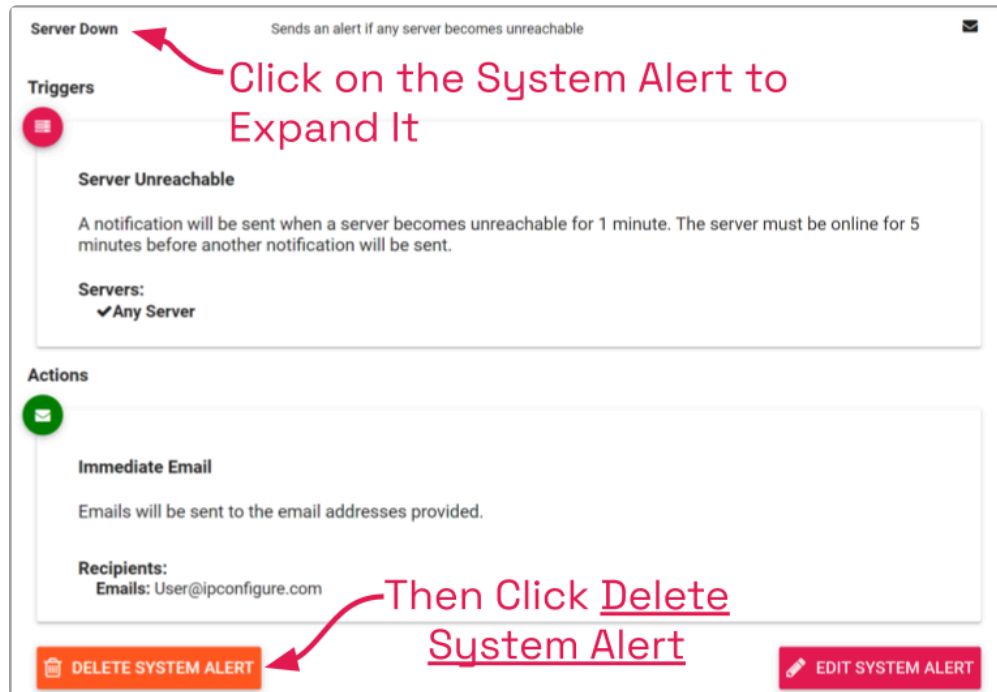
2. To edit the *System Alert*, click the *Edit System Alert* button at the bottom of the expanded entry. The *Edit* screen will open.
3. Edit any of the available fields, as needed.
 - a. The general details (name, description, enable/disable) are immediately available for editing.
 - b. To edit one of the triggers, click the *Edit* pencil icon at the lower-right corner of the trigger listing.
 - c. To add another trigger, click the *Add Another Trigger* button.
 - d. To edit one of the actions, click the *Edit* pencil icon at the lower-right corner of the action listing.
 - e. To add another action, click the *Add Another Action* button.
4. When all changes are complete, click the *Save System Alert* button. All of the changes will be effective immediately.

Deleting a System Alert



This is the *Delete / Trashcan* icon.

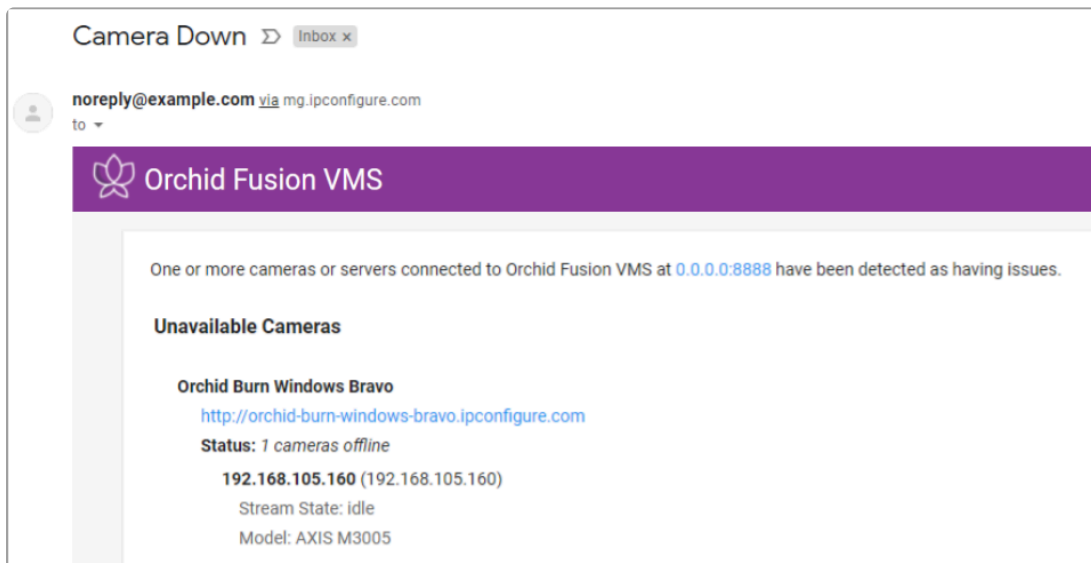
1. Click on one of the *System Alerts* in the *System Alerts* list. The entry will expand to display all of the *System Alert* settings.



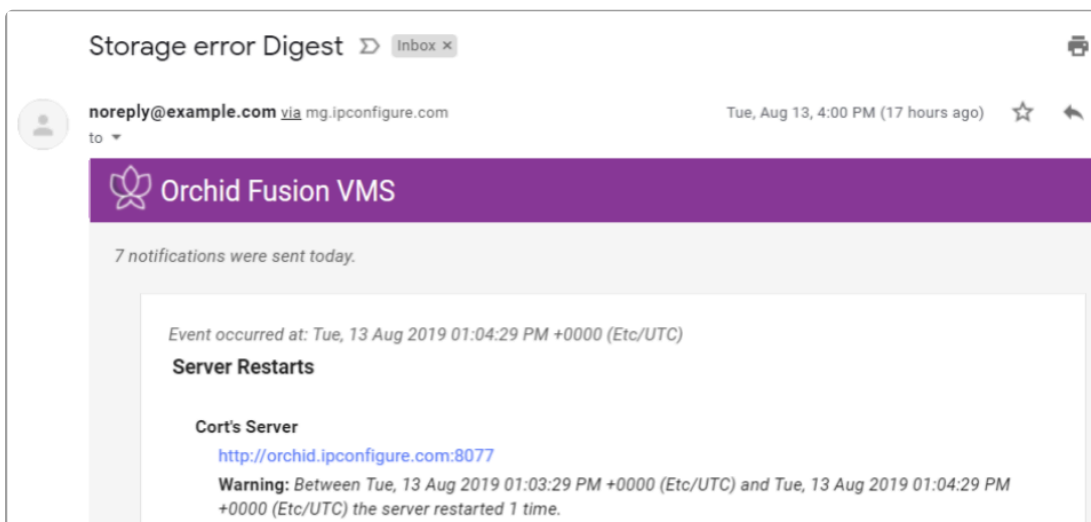
2. To delete the entire *System Alert*, click the *Delete System Alert* button at the bottom of the expanded entry.
3. Click the *Delete* button to confirm. The *System Alert* will be deleted immediately.

System Alert Samples

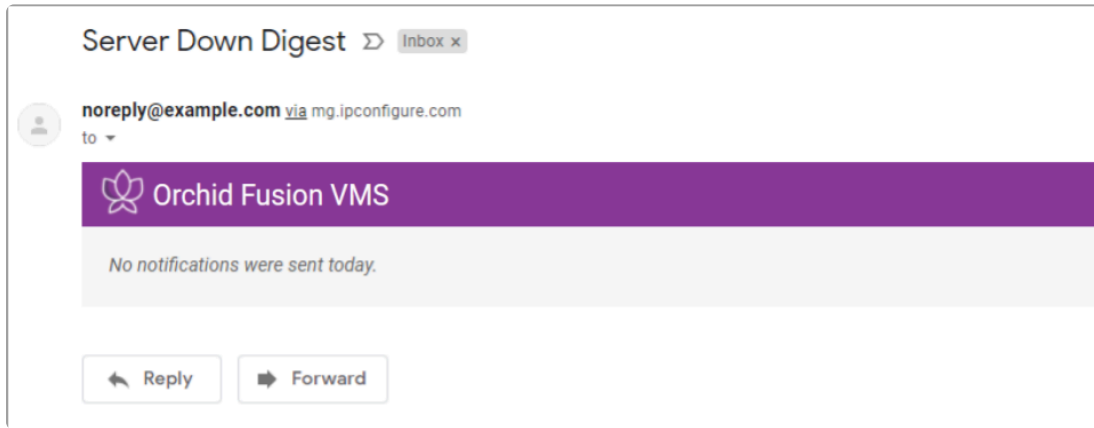
The following is an example of an *Immediate Email* alert for a *Camera Unreachable* trigger event. It lists the camera's IP address, along with the camera type. It also includes a link to the Orchid Core VMS Server (on which the camera is registered).



The following is the top section of a sample *Daily Email Digest* alert that shows multiple *Server Restarts* and *Server Degraded* events. The alert includes event timing and server information.



The following is an example of a *Daily Email Digest* alert with no *System Alerts* to report



Motion Alerts

Motion Alerts are designed to notify you when motion is detected that may negatively impact facility security. More specifically, the system may be configured to monitor one or more cameras for any motion events that occur during a specified time period (based on a user-defined schedule). If any of these events occur, the system will send a video clip (via email) to selected recipients.

The *Motion Alert* feature allows you to create one *Motion Alert* for each registered Orchid server. For each alert, you will select one or more cameras, a monitoring schedule, email recipients, and timing settings. All of these elements are required for the Motion Alert to be sent.

Beginning in version 22.12, Orchid Fusion VMS permits Administrators to configure email templates for the *Motion Alert* emails. This new capability allows Administrators to customize the email subject (using plain text only), and the email body (using HTML, XML, or TXT). For more details, please refer to the Knowledge Base Article [Custom Motion Alert Email Templates](#).

In version 23.3, Orchid Fusion VMS has improved the resiliency of motion alert email notifications when exported video is not accessible. If Fusion is unable to retrieve the video clip for an actionable motion alert, it will send an email. Instead of the video clip, however, this email will include an error message advising the user to go check Fusion for the video.

* The *Motion Alerts* feature will detect motion based on each camera's settings. Server-based motion detection (with or without *Advanced Motion Detection* settings) and camera-based motion detection (if available) are all supported. (For more details on these camera settings, please refer to the [Camera Stream Settings](#) section.)

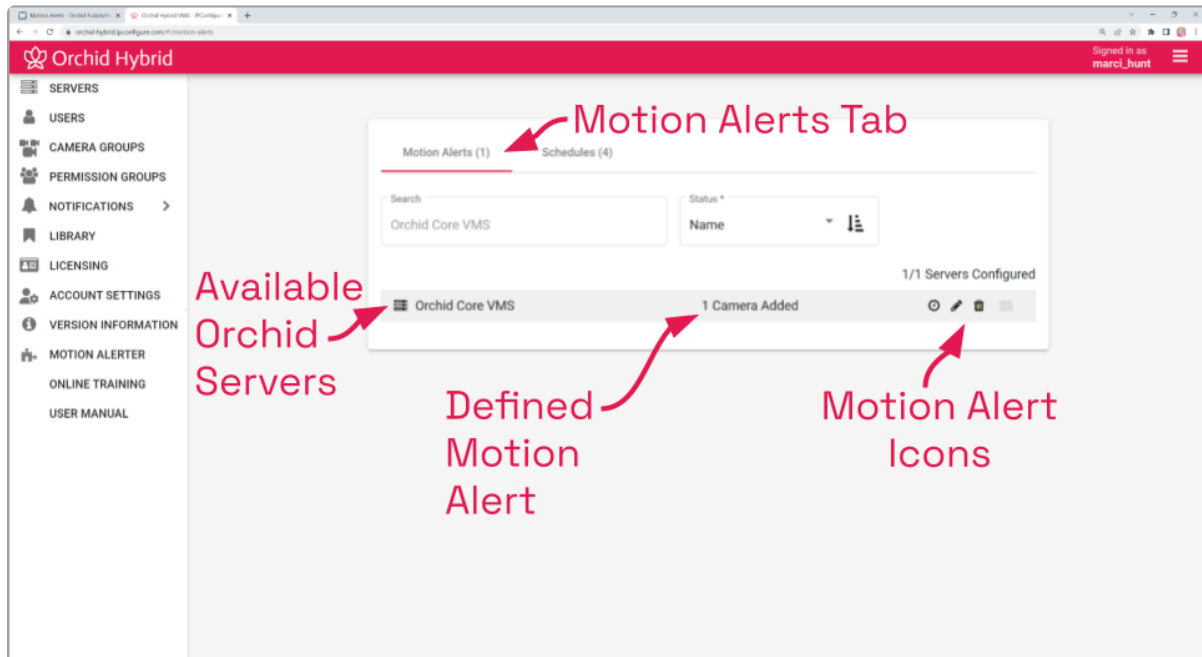
* The use of *Motion Alerts* is optional, but recommended by IPConfigure, because it can help to identify potential security issues quickly.

Accessing the Motion Alerts

1. Open the *System Menu* in the top-right corner of the screen, select *Notifications*, and then select *Motion Alerts*.

When you access *Motion Alerts*, you'll notice that there are two tabs available for you to work with: the *Motion Alerts* tab and the *Schedules* tab. Use the *Motion Alerts* tab to add, edit, and delete *Motion Alerts*. Use the *Schedules* tab to create monitoring schedules (which may be

assigned to one or more Orchid servers).



Adding Motion Alerts

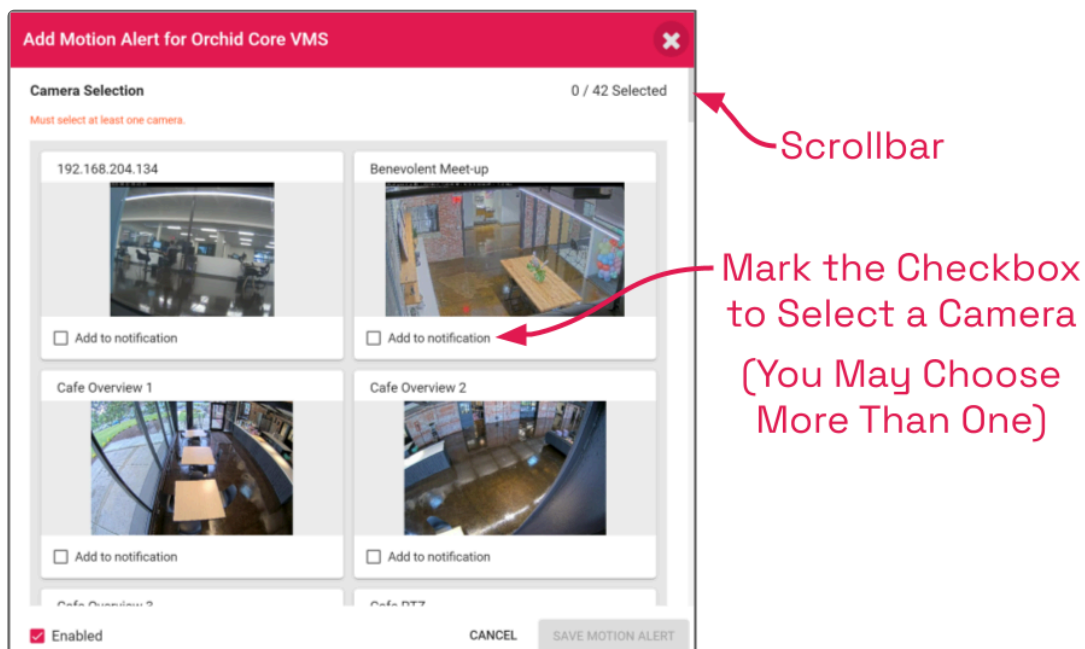
When you access the *Motion Alerts*, you'll notice that there are two tabs available for you to work with. We'll start with the *Motion Alerts* tab to specify cameras, recipients, and other settings for a *Motion Alert*.

As you prepare to configure the *Motion Alert*, you'll need to consider which cameras you want to monitor during the scheduled time period. Generally speaking, you should select cameras that normally don't see any motion during the selected time period (such as after hours, at night, or maybe on the weekend). If you select any cameras that typically detect a lot of motion, your recipients are likely to receive a lot of emails. (This may cause some issues with your email server if tons of emails are being sent.)

- * The *Motion Alert* dialog has several key sections: camera selection (at the top), schedule selection, Email configuration, and alert configuration. You may need to use the scroll bar along the right edge of the dialog to view and work with each of these elements.

1. In the *Motion Alerts* list, find the server that you want to work with.
2. If the server doesn't have a *Motion Alert* configured yet, click the **Add Notification** button at the right end of the server entry.

The *Add Motion Alert* screen will open.

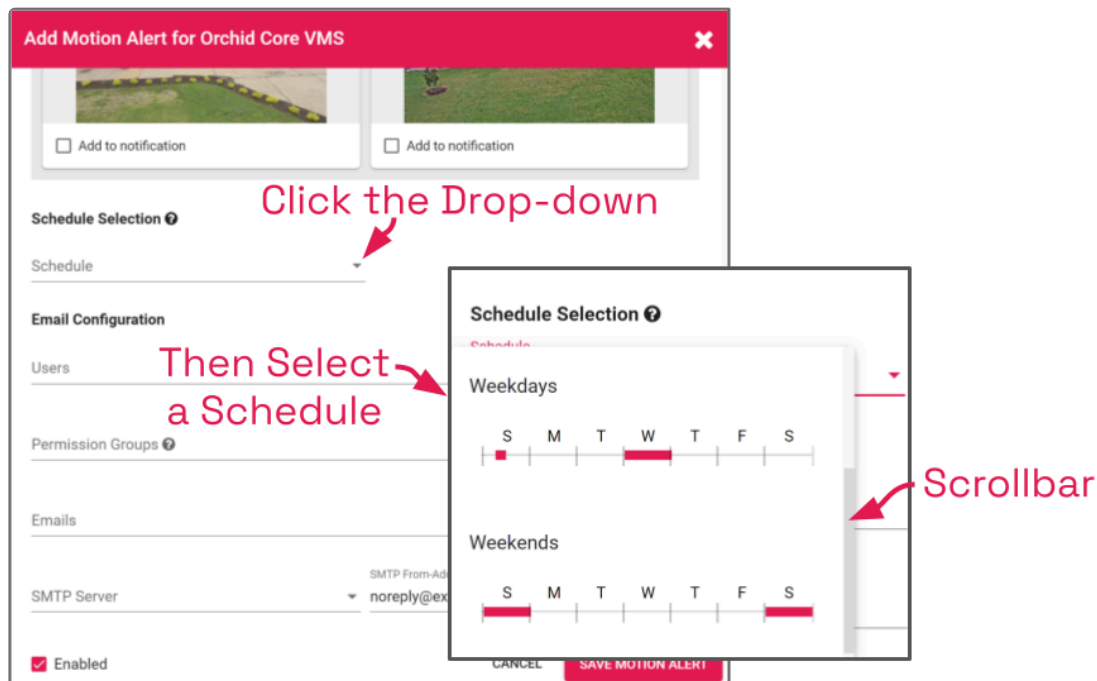


Camera Selection

1. First, you'll need to mark the check box for each of the cameras you want to monitor throughout the scheduled period.
2. Once you have your cameras, scroll down past the camera section.

Schedule Selection

1. Next, use the *Schedule Selection* drop-down list to select the desired monitoring period. (If the schedules have not been configured yet, you may come back to this later. Keep in mind, though, that until the schedule is selected, no *Motion Alerts* will be sent.)



Email Configuration

1. Once the schedule is selected, you need to select the recipients for the alert.
 - a. Click in the *Users* field to select individual Orchid users as recipients.
 - b. Click in the *Permission Groups* field to select entire *Permission Groups* as recipients.
 - c. Click in the *Emails* field to enter the email addresses for external recipients.

2. Use the *SMTP Server* drop-down list to select the SMTP server that will send the emails.
 - a. If you want to include a custom return email address with the alert, click in the *SMTP From-Address* field to enter it.

Alert Configuration

The last section will allow you to enter some timing settings that will help to avoid nuisance alerts and set the maximum length of the video clips.





1. Determine how long the detected motion must last before an alert is sent. Enter this number in the first *seconds* field. (If the detected motion is shorter than this setting, no

Motion Alert will be sent.)

2. Determine how long the system will wait before another detected motion event (on the same camera) will trigger an alert. Enter this number in the next *seconds* field. (These timing settings help to eliminate nuisance alerts.)
3. In the last field, enter a maximum length for the video clips that the system will send. (IPConfigure recommends that the video clips be limited to 10 to 30 seconds.)
4. Mark the *Enabled* checkbox to activate the *Motion Alert*. (Remove the mark from the *Enabled* checkbox to deactivate the *Motion Alert*.)
5. When you are finished with all of the settings, click the **Save *Motion Alert*** button. This new *Motion Alert* will now appear in the *Motion Alerts* list.

✿ Each *Motion Alert* requires at least one camera, a selected schedule, one recipient, a selected SMTP server, and configuration settings. If any of these elements are missing, the *Motion Alert* will be listed, but will display an error. Incomplete *Motion Alerts* will result in no alerts being sent.

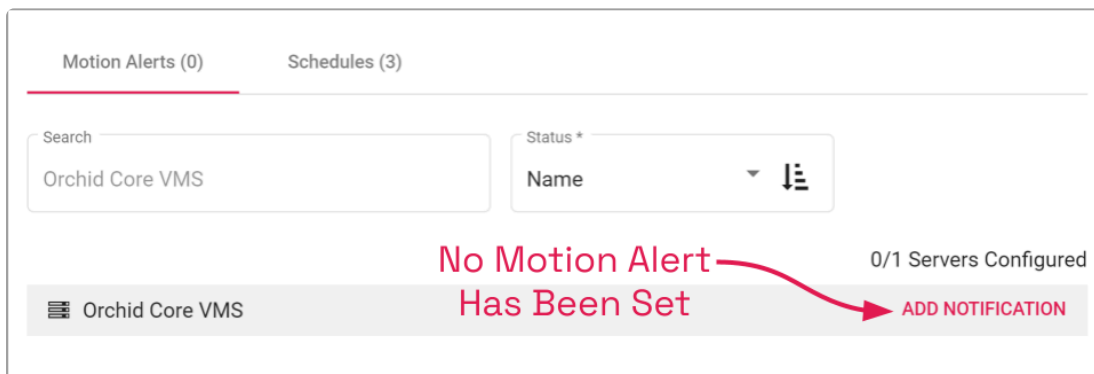
Motion Alert Icons

	Hover your cursor over the <i>Clock</i> icon to view the <i>Schedule</i> graphic. (If this icon is greyed out, no schedule has been selected.)
	Click the <i>Edit</i> pencil icon to edit the <i>Motion Alert</i> .
	Click the <i>Trashcan</i> icon to delete the <i>Motion Alert</i> .
	Hover your cursor over the <i>Notification</i> icon to view the status of the <i>Motion Alert</i> . (If this icon is greyed out, the <i>Motion Alert</i> is disabled.)

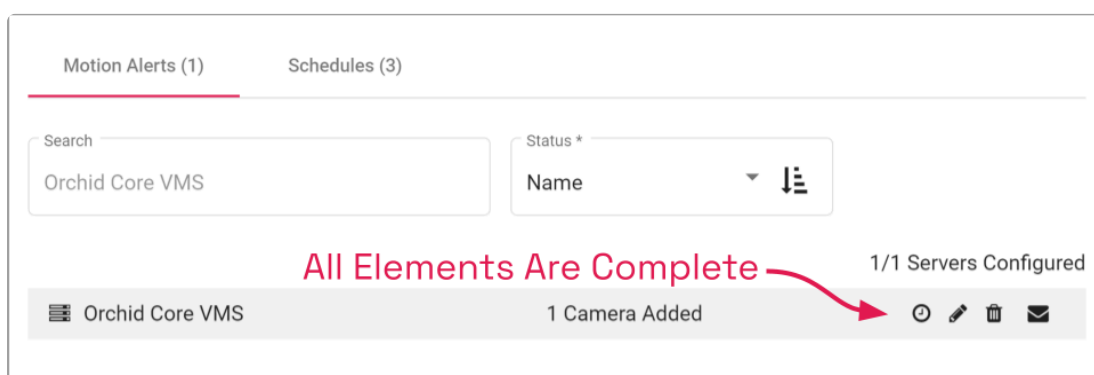
Motion Alert Status Examples

Each of the registered Orchid servers will appear in the *Motion Alerts* list, even if no *Motion Alerts* have been configured. Check the icons at the right end of each entry to determine the status of the *Motion Alert*.

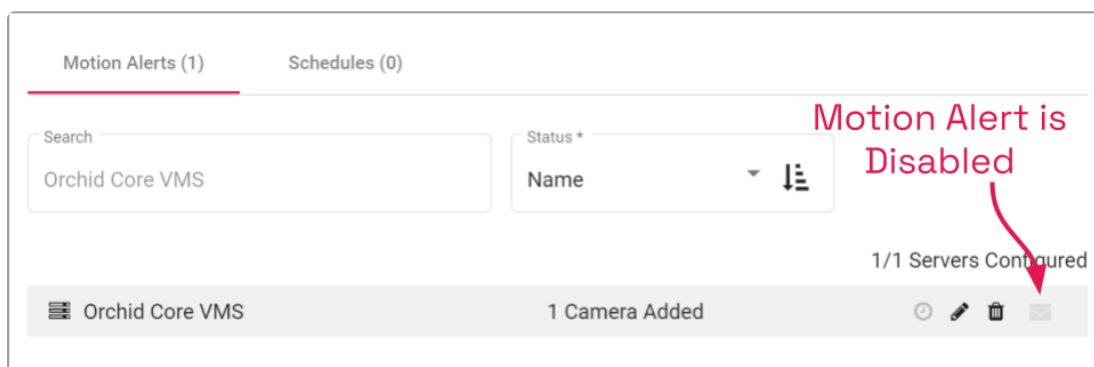
The example below shows an Orchid server that does not have a *Motion Alert*.



The example below shows an Orchid server that has a *Motion Alert* that is enabled and properly configured.



The example below shows an Orchid server with a disabled *Motion Alert*.



The example below shows an Orchid server that has a *Motion Alert*, but it has an error. (In this case, no SMTP server was selected.)

The screenshot shows the 'Motion Alerts (1)' tab selected. A search bar contains 'Orchid Core VMS'. A status dropdown is set to 'Name'. Below the search bar, a table lists the alert for 'Orchid Core VMS' with the note '1 Camera Added'. To the right of the table, it says '1/1 Servers Configured'. A red 'X' icon is visible in the table's action column, and a red arrow points to it with the text 'Something's Not Right'.

The example below shows an Orchid server that has a *Motion Alert*, but no Schedule has been selected.

The screenshot shows the 'Motion Alerts (1)' tab selected. A search bar contains 'Orchid Core VMS'. A status dropdown is set to 'Name'. Below the search bar, a table lists the alert for 'Orchid Core VMS' with the note '1 Camera Added'. To the right of the table, it says '1/1 Servers Configured'. A red arrow points to the text 'No Schedule Has Been Selected' which is positioned above the table's action column.

Editing or Deleting a Motion Alert

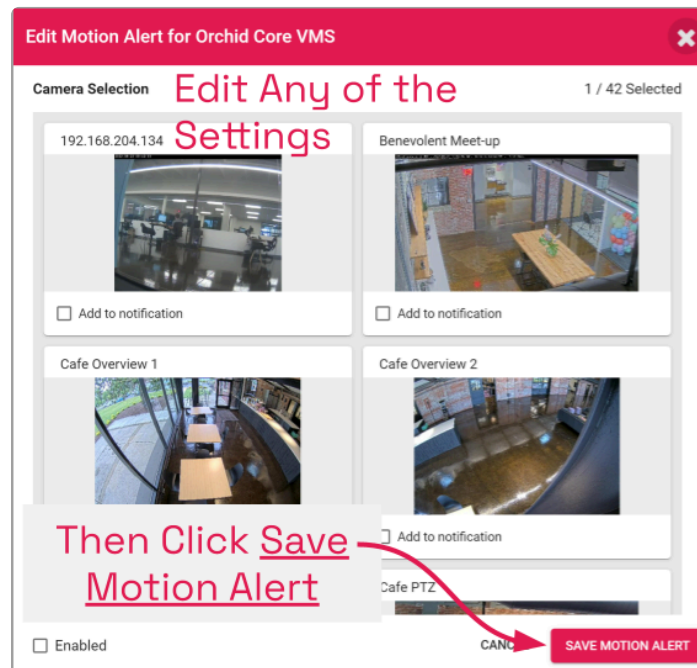
Editing a Motion Alert



This is the *Edit* pencil icon.

The *Motion Alerts* can be changed at any time through the *Motion Alerts* screen.

1. Open the *System Menu* in the top-right corner of the screen, select *Notifications*, and then select *Motion Alerts*.
2. Find the *Motion Alert* you want to change, then click on the *Edit* pencil icon at the right end of the entry. The *Edit Motion Alert* screen will open.



3. Edit any of the available settings, as needed.
4. When all changes are complete, click the *Save Motion Alert* button. All of the changes will be effective immediately.

Deleting a Motion Alert



This is the *Delete / Trashcan* icon.

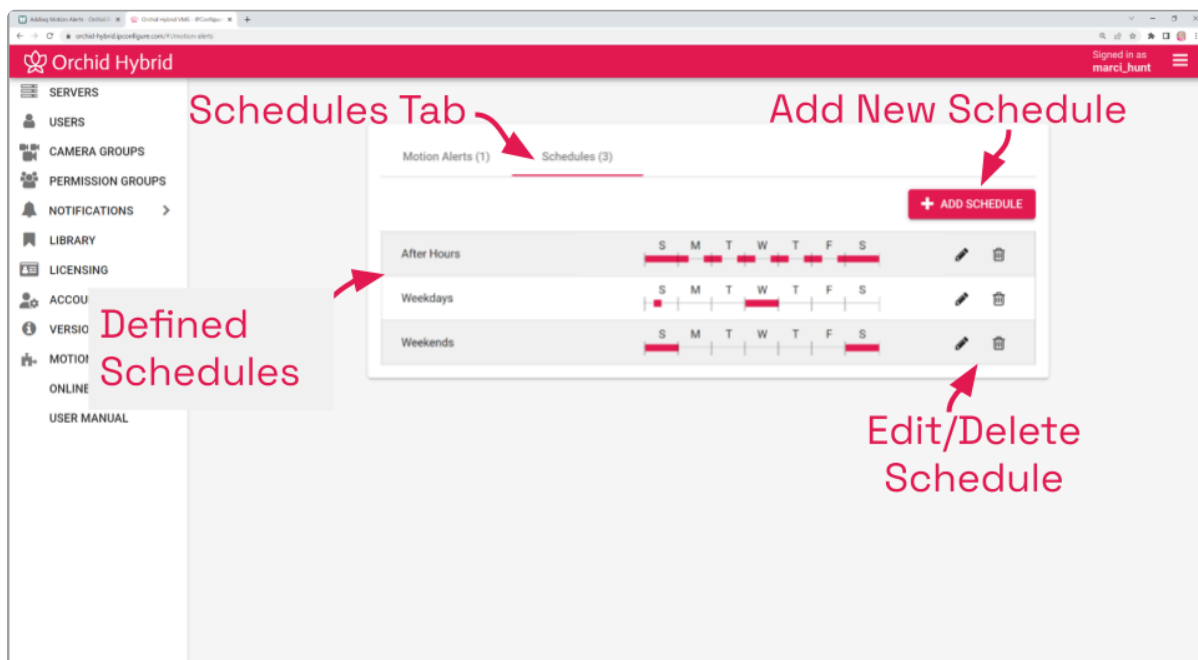
1. First, find the *Motion Alert* you want to remove, then click on the *Delete* icon at the right end of the entry.
2. Click the *Delete* button to confirm. The *Motion Alert* will be deleted immediately.

Adding Schedules

+	This is the <i>Add</i> icon.
×	This is the <i>X</i> icon (used to remove a time slot from the <i>Schedule</i>).

The *Schedules* tab is the second tab associated with the *Motion Alerts* feature. Use this tab to define the intervals during which the system will monitor the *Motion Alerts* you have configured. (You may apply any *Schedule* to multiple Orchid servers. This comes in handy when you have multiple locations with similar security needs.)

As you prepare to configure a *Schedule* for each Orchid server (as needed), you'll need to consider which time slots might need extra security monitoring (such as after hours, at night, or maybe on the weekend).



1. To create a new schedule, click the *Add Schedule* button.

The screenshot shows the 'Create Schedule' form with the following annotations:

- Enter Schedule Name:** Points to the 'Name *' field containing 'Sample Schedule'.
- Schedule Graphic:** Points to the weekly timeline graphic showing days S, M, T, W, T, F, S.
- Click + Then Enter Stop & Start Times:** Points to the '+' icon next to the Sunday entry.
- Click x To Remove Time Range:** Points to the 'x' icon next to the Sunday time range (00:00 - 08:00).
- Scrollbar:** Points to the vertical scrollbar on the right side of the form.
- Click + To Include Additional Days:** Points to the '+' icon next to the Monday entry.
- When Schedule is Complete:** Points to the 'SAVE' button at the bottom right.

2. First, enter a name for the *Schedule*.

Under the Name field, you'll notice that there is a weekly timeline. This timeline graphic will update as you make changes to the *Schedule*.

3. For each day of the week that you want the system to monitor for motion events, do the following:
 - a. Click the **+** icon to the right of the day of the week.
 - b. Click in the *Start* field to select the time the system should start monitoring. Scroll up and down the list until you find the start time you want, then click on it to select it. (Times will be listed using a 24-hour clock.)
 - c. Click in the *Stop* field to select the time the system should stop monitoring. Scroll up and down the list until you find the end time you want, then click on it to select it.
 - d. If you want to select another time period for the same day, click the **+** icon again. Then select the start and end times.
4. After you have selected all of the monitoring periods, click the **Save** button to save the *Schedule*. The new *Schedule* will appear in the list.

* The times that you select for the schedules are automatically assigned to the Orchid server's time zone. So if you are on the West Coast of the U.S. creating schedules for an East Coast Orchid, the times you select will represent the Orchid server's local time (which in this case would be Eastern Standard Time).

Editing or Deleting a Schedule

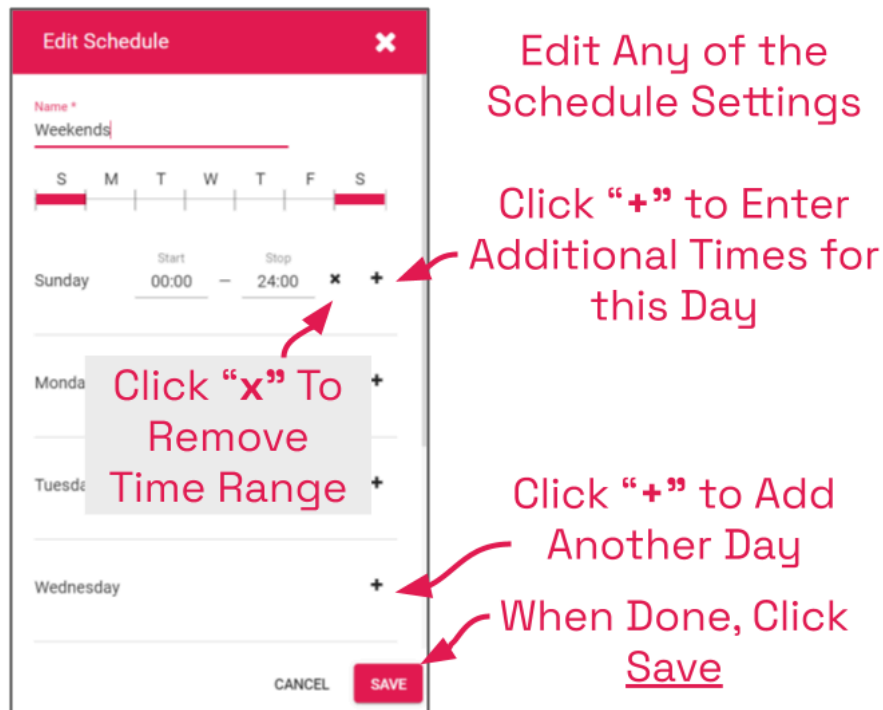
Editing a Schedule



This is the *Edit* pencil icon.

A *Schedule* can be changed at any time through the *Schedules* tab.

1. Open the *System Menu*, select *Notifications*, and then select *Motion Alerts*.
2. Click on the *Schedules* tab.
3. Find the *Schedule* you want to change, then click on the *Edit* pencil icon at the right end of the entry. The *Edit Schedule* screen will open.



4. Edit any of the available settings, as needed.
5. When all changes are complete, click the *Save* button. All of the changes will be effective immediately.

Deleting a Schedule



This is the *Delete / Trashcan* icon.

1. First, find the *Schedule* you want to remove, then click the corresponding *Delete* icon.
2. Click the *Delete* button to confirm. The *Schedule* will be deleted immediately.

SMTP Servers

Before any email alerts can be sent, at least one Simple Mail Transfer Protocol (SMTP) Server must be configured. Generally, only one SMTP server is required, but this will depend on how (and perhaps to whom) you want to send alerts. If you, for example, want to send alerts to both internal and external recipients, you may also want these to be routed through different servers. In this case, you would need more than one SMTP server.

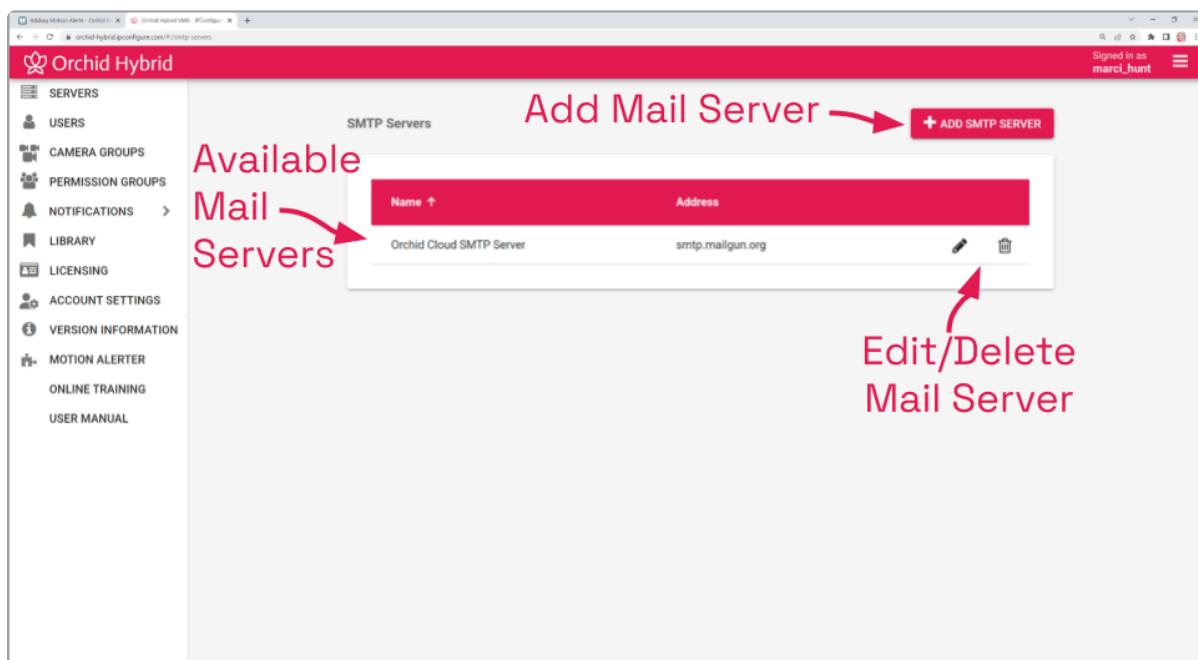
* This section only applies if you are working in Orchid Fusion VMS. In Orchid Hybrid VMS systems, all SMTP server configuration must be performed by IPConfigure Support personnel.

* If you don't currently have access to an SMTP server, you might try mailgun (which is easy to set up and inexpensive to use).

Accessing the SMTP Servers

1. Open the *System Menu* in the top-right corner of the screen, select *Notifications*, and then select *SMTP Servers*.

The Orchid Fusion/Hybrid VMS *SMTP Servers* screen will appear. This screen displays a list of all the current *SMTP Servers*, and gives you the ability to add, edit, and delete them.



- To view the configuration details for an SMTP Server, click on any row that represents an SMTP Server.

- ✿ If you are using Orchid Hybrid VMS, do not attempt to edit or delete the *SMTP Server* selection. This will be set by IPConfigure Support and should remain as the default.

Add an SMTP Server

+	This is the <i>Add</i> icon.
>	This is the <i>Expand</i> icon (used to access the Advanced SMTP settings, if needed).

1. Click the *Add SMTP Server* button in the top-right corner of the *SMTP Servers* screen. The *New SMTP Server* screen will open.

The screenshot shows the 'New SMTP Server' form with the following fields and annotations:

- SMTP Server Name ***: Labeled 'Enter SMTP Server Name' with an arrow pointing to the text 'Sample Custom Server'.
- SMTP Server Address ***: Labeled 'Enter SMTP Server Address' with an arrow pointing to the text 'sample.smtp.com'. An 'Enable TLS' checkbox is located to the right of this field.
- SMTP Username**: Labeled 'Enter the Server Credentials' with an arrow pointing to the text 'demo@smtp.ipconfigure.com'.
- SMTP Password**: Labeled 'Enter the Server Credentials' with an arrow pointing to the password field.
- CUSTOM SETTINGS (ADVANCED) >**: Labeled 'Send Test Message' with an arrow pointing to the 'SEND TEST EMAIL' button.
- Buttons**: 'SEND TEST EMAIL' (with a help icon), 'CANCEL', and 'SAVE SMTP SETTINGS'.
- Annotation**: 'When Server Settings are Complete' with an arrow pointing to the 'SAVE SMTP SETTINGS' button.

2. First, enter a name for the new SMTP Server.
3. Then enter the address for the new server. (Example: smtp.mailgun.org) If you don't specify a port number in the address, the system will use default port number 587.
4. Mark the *Enable TLS* checkbox if you need to add Transport Layer Security. (In order to use TLS, the SMTP Server you are adding must support a secure connection.)
5. Next, enter the credentials that allow you to use the selected mail server (SMTP username and password).
6. If you need to add custom settings for the SMTP server, click the *Expand* icon to access the *Custom Settings (Advanced)* fields.
 - a. Use the *Key* field and the *Value* field to enter necessary info.
 - b. Click the + icon to finalize the custom setting.
 - c. Click the *Trashcan* icon to delete a custom setting.

* These custom settings are being made available in the unlikely event they will be needed. If you'd like to learn more about these custom settings, please reference this public resource: <https://javaee.github.io/javamail/docs/api/com/sun/mail/smtp/package-summary.html>

7. If you want to verify the SMTP server, click the *Send Test Email* button.

- a. Enter the email address for the test message, then click the ***Send*** button.
8. Once all the settings have been entered, click the ***Save SMTP Settings*** button to save the server.

Editing or Deleting an SMTP Server

* This section only applies if you are working in Orchid Fusion VMS. In Orchid Hybrid VMS systems, all SMTP server configuration must be performed by IPConfigure Support personnel.

Edit an SMTP Server



This is the *Edit* pencil icon.

The *SMTP Server* can be changed at any time through the *SMTP Servers* screen.

1. To edit the *SMTP Server*, click the *Edit* pencil icon at the right end of the server entry. The *Edit* screen will open.

Edit Orchid Cloud SMTP Server ✕

SMTP Server Name * **Edit Any of the Server Settings**
Orchid Cloud SMTP Server

SMTP Server Address * smtp.mailgun.org ☒ Enable TLS

SMTP Username orchid-hybrid@mg.ipconfigure.com SMTP Password

CUSTOM SETTINGS (ADVANCED) >

SEND TEST EMAIL ?

CANCEL SAVE SMTP SETTINGS

Then Click Save SMTP Settings

2. Edit any of the available fields, as needed.
3. Enter the *SMTP* password.
4. Click the *Save SMTP Settings* button. All of the changes will be effective immediately.

Delete an SMTP Server



This is the *Delete / Trashcan* icon.

1. To delete the *SMTP Server*, click the *Trashcan* icon at the right end of the server entry.
2. Click the *Delete* button to confirm. The *SMTP Server* will be deleted immediately.

The Library Feature

The *Library* feature allows for exporting important video clips to the Orchid Fusion/Hybrid VMS server for long-term storage. These clips are automatically made available to all Orchid Fusion/Hybrid VMS Administrators. (With a standard export, the video file is saved to the hard drive of the client machine that performed the export, which may not be readily accessible.)

Beginning in version 21.3, the Orchid Fusion/Hybrid VMS *Library* supports saving these clips to an external cloud storage service. Available options include Box.com, Dropbox, Google Drive, Microsoft OneDrive, and others. With this option, exported clips will be sent directly to the external service for storage and sharing. This functionality requires some additional configuration that is covered in the [Orchid Fusion VMS Installation Guide](#).

Beginning in version 22.3, the Orchid Fusion/Hybrid VMS Library will apply a secure digital signature to each exported clip, by default. This provides a means by which the video's authenticity can be verified. (You may disable this feature, if desired, by editing the Fusion properties file. For more information, please refer to the [Orchid Fusion VMS Installation Guide](#).)

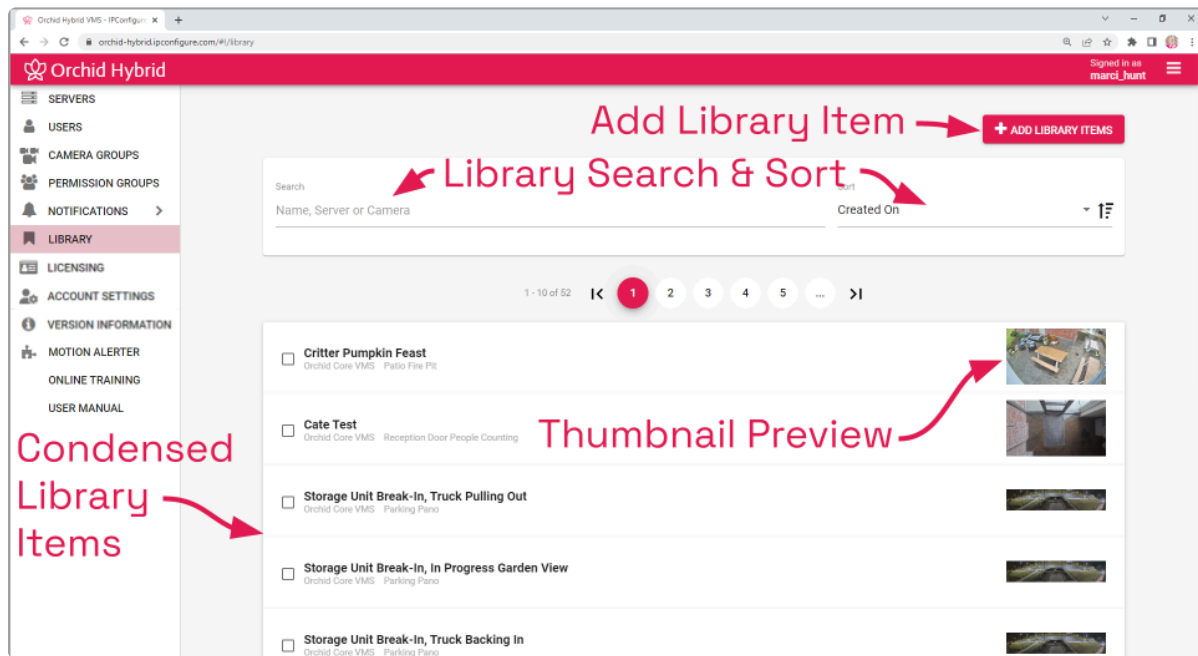
✿ On Orchid Hybrid VMS systems, IPConfigure Support personnel will need to configure the system to work with an external cloud storage service.

✿ You must be a member of an Administrator group to export library items and to access the *Library* feature.



Access the Library Feature

1. Open the *System Menu* in the top-right corner of the screen and select *Library*.

The Orchid Fusion/Hybrid VMS *Library* screen will appear. This screen displays a list of all the *Library* items that have been saved (if any), and gives you the ability to add, search, sort, download, and delete them. (If your *Library* items are being stored in an external cloud storage location, the *Download* button is replaced by an *Open* button.)



Add an Item to the Library

	This is the <i>Add</i> icon.
	This is the <i>Export</i> icon.

There are a couple of ways to add an item to the *Library* (for permanent storage or sharing). The first method is to export the *Library* item directly from the *Stage*, much like you would perform an export to your client device. The second method allows you to add the item from the *Library* screen.

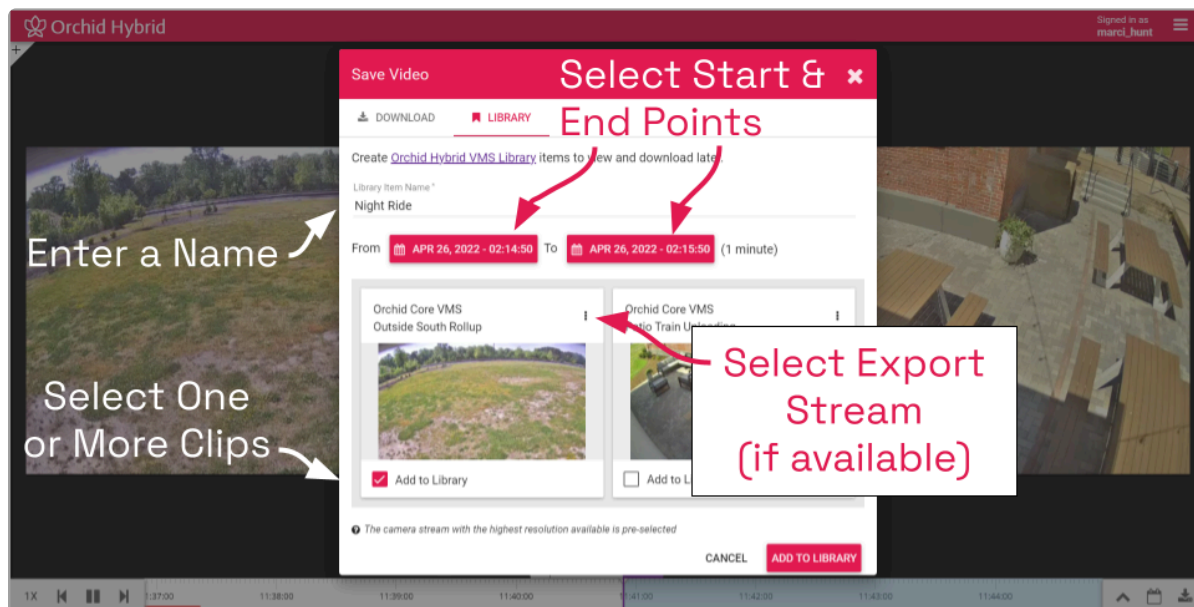
Beginning in version 22.3, when multiple recording streams are available for a selected Player, the system will export the highest resolution stream, by default. The user will also have the ability to choose which stream to export.

Add Library Item via Export

If you want to add an item to the *Library* from the *Stage*, you'll need to start by using the *Export* feature. While the export feature typically saves files to the client system hard drive, with the addition of the *Library*, Administrators will have the option to export video to the Orchid Fusion/Hybrid VMS server hard drive (or to an external cloud storage service, if configured).

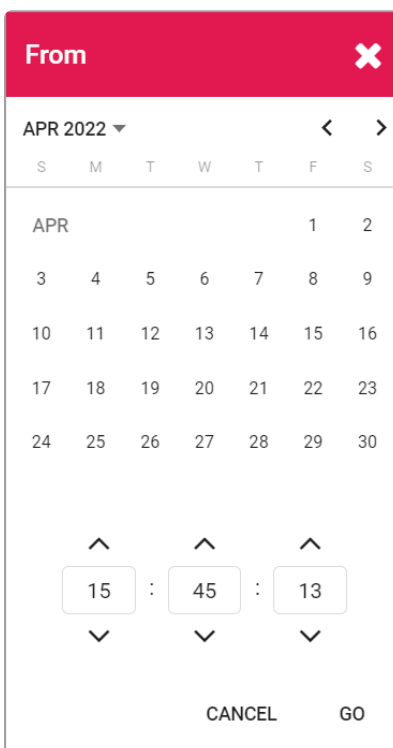
 You may use the Quick Export or the Timeline-based Export method to save an item to the *Library*. (The Quick Export method is described here.)

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



The *Library* tab will display a thumbnail representing each of the Players that were on the *Stage*. For each one, you will see a check box that allows you to select the Player for export.

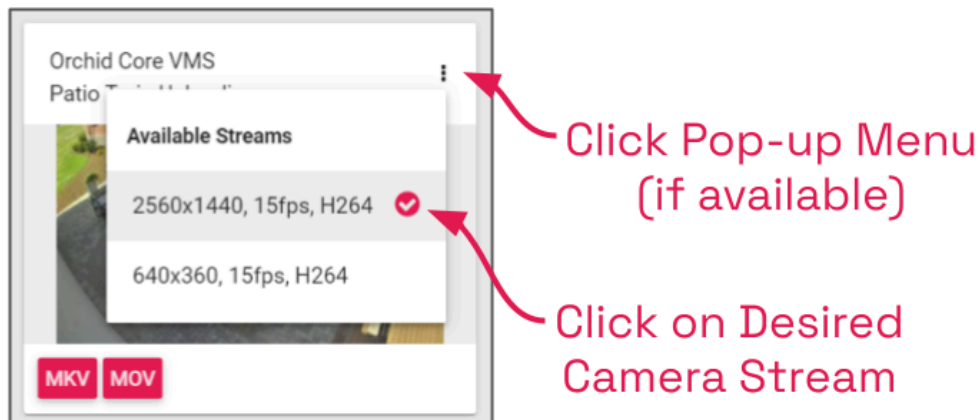
4. First, enter a name for the *Library* item.
5. Click the first *Calendar* button (on the left) to select the date and time at which the video export will start.



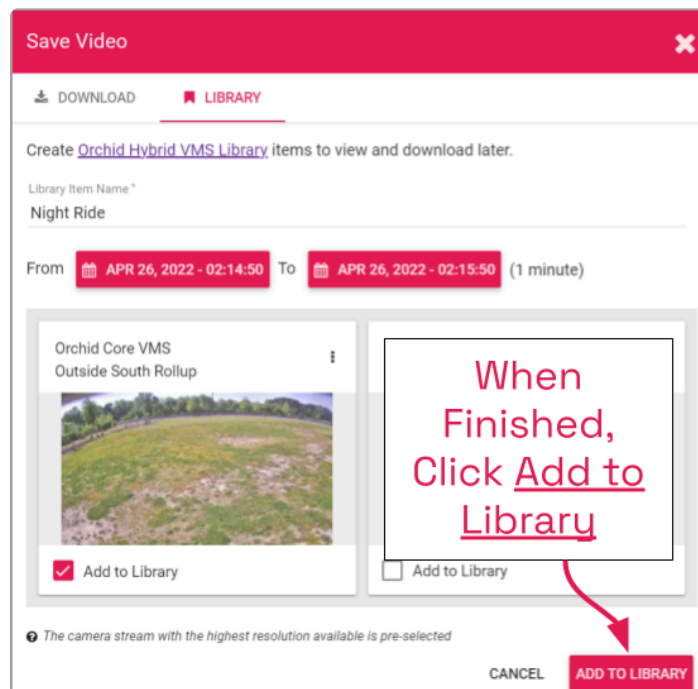
When the calendar opens, you have the ability to select the date and time for the starting point for your video export.

6. Select the date and time, then click **Go**. (You may receive a warning that your selected range exceeds the allowable export duration. For now, proceed to the next step.)
7. Click the second **Calendar** button (on the right) to select the date and time at which the video export will end. Select the date and time, then click **Go**. (The export duration of the selected range will appear on the screen. If a warning still appears, you will need to shorten the export duration by selecting a new start or end time. The maximum allowable export is 48 hours per Player.)
8. Now that you have selected the range, select the Players you want to export by clicking on the check box associated with each Player. (If you select multiple Players, each of these *Library* items will have the same name.)

For some Players, you may also see a pop-up menu (to the right of the camera name). This menu allows you to select which of the camera streams you want to select for the export. (This menu will only be available if multiple recording streams have been configured by the Administrator. If you don't select anything, the system will export the highest resolution stream by default.)



9. If available, click on the pop-up menu, then click on the stream resolution you want to export.
10. Click the **Add to Library** button to begin the export. You will see a message that says the video is being sent to the *Library*.



11. Press the *Cancel* button to exit the *Save* screen without saving video.
12. To access the *Library* from here, do either of the following:
 - a. Click the *Go to Library* link contained in the message (pictured below).
 - b. Go to the *System Menu* and select *Library*.

The selected videos have been sent to the Library. [GO TO LIBRARY](#)

Add Library Item via the Library

1. From the *Library* screen, click the *Add Library Items* button. The *Add Library Items* screen will appear.

The screenshot shows the 'Add Library Items' dialog box. At the top, there is a red header bar with the title 'Add Library Items' and a close button. Below the header, there is a section titled 'Enter a Name' with a text input field containing 'Night Ride Test'. To the right of this section, there is a red arrow pointing to the 'Library Item Name' label. Below the name field, there is a 'From' field with a calendar icon and a date/time picker showing 'APR 26, 2022 - 02:14:50', and a 'To' field with a date/time picker showing 'APR 26, 2022 - 02:15:50' and a duration of '(1 minute)'. A red arrow points to the 'To' field with the text 'Select Start & End Points'. Below the date pickers, there is a 'Server' field with the text 'Orchid Core VMS'. The main area of the dialog box displays a grid of video clips. Each clip has a thumbnail image and a title. The clips shown are 'Benevolent Meet-up', 'East Pole D2110-VE', 'East Pole 6215-LE', 'East Po...', 'Center 180', and 'Experience Center Café PTZ'. Each clip has an 'Add to library' checkbox below it. A red arrow points to the 'Add to library' checkbox for the 'East Po...' clip with the text 'Select One or More Clips'. Another red arrow points to the 'East Pole D2110-VE' clip with the text 'Select Export Stream (if available)'. At the bottom right of the dialog box, there are 'CANCEL' and 'ADD TO LIBRARY' buttons.

2. First, enter a name for the *Library* item.
3. Next, you need to set the start and end times for the video clip.
4. Click the first *Calendar* button (on the left) to select the date and time at which the video export will start.

The screenshot shows the 'From' date and time picker dialog box. It has a red header bar with the title 'From' and a close button. Below the header, there is a dropdown menu for the month, currently showing 'APR 2022'. To the right of the dropdown are navigation arrows. Below the dropdown is a calendar grid showing the days of the month. Below the calendar grid is a time picker with three input fields for hours, minutes, and seconds, separated by colons. The current time is '15 : 45 : 13'. Below the time picker are 'CANCEL' and 'GO' buttons.

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

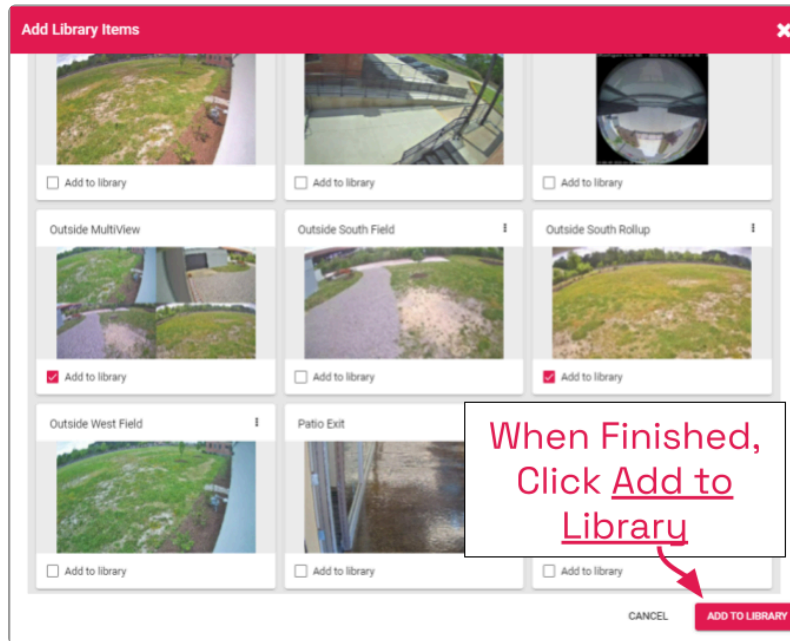
shorten the export duration by selecting a new start or end time. The maximum allowable export is 48 hours per Player.)

7. Next, select the server from which you want to capture video for the *Library*. Once you have selected a server, the screen will display a thumbnail representing each of the Players on the selected server.
8. Select the Players you want to export by clicking on the check box associated with each Player. (If you select multiple Players, each of these *Library* items will have the same name.)

For some Players, you may also see a pop-up menu (to the right of the camera name). This menu allows you to select which of the camera streams you want to select for the export. (This menu will only be available if multiple recording streams have been configured by the Administrator. If you don't select anything, the system will export the highest resolution stream by default.)



9. If available, click on the pop-up menu, then click on the stream resolution you want to export.
10. Click the **Add To Library** button to begin the export. You will be able to watch the progress of the export on the *Library* screen.

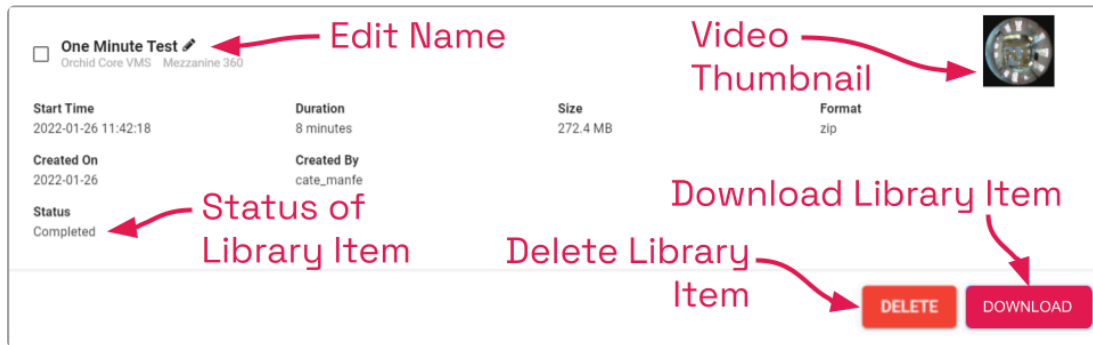


11. Press the *Cancel* button to exit the screen without saving video.

Review a Library Item

After an item has been exported to the *Library*, you may review the details by accessing the *Library* screen.

1. From the list of items on the *Library* screen, click the name of the one you want to review. (The list will expand to display all of the information for the selected item.)



This summary should provide all of the information you need to know about the *Library* item. The Orchid Core VMS server name and the camera name are listed just below the item name. The summary also includes a thumbnail image from the camera. Additional details include the following:

- **Start Time:** This represents the requested start time for the clip. (This may not necessarily reflect the actual start time for the video because there may be missing video. For example, the camera may have been down, or the camera is recording only when motion is detected.)
- **Duration:** The duration represents the length of the exported clip.
- **Size:** This is the size of the exported clip.
- **Format:** The format field displays the file type of the exported clip.
- **Created On:** This is the date on which the clip was exported.
- **Created By:** This shows the Fusion/Hybrid username of the Administrator responsible for the export.
- **Status:** This indicates the status of the export process. Possible status messages include the following:
 - **Pending:** Indicates that the export process is getting ready to begin.
 - **Started:** Indicates the item is being exported to the *Library*.
 - **Completed:** Indicates that the item has been exported successfully.
 - **Failed:** Indicates that the export process was not successful.
 - **Cancelled:** Indicates that the export process was cancelled by the user.

Edit the Item Name



This is the *Edit* pencil icon.

1. To change the item name, click the *Edit* pencil icon to the right of the item name.
2. Enter a new name in the *Rename* field, then click the *OK* button.

A dialog box titled "Rename Library Item" with a red header bar and a close button (X) in the top right corner. The main area has a light gray background. It contains a label "Rename" in red text above a text input field. The input field contains the text "Delivery 1-31" and has a red underline. At the bottom right, there are two buttons: "CANCEL" and "OK".

Download a Library Item



This direct *Download* option is only available if the *Library* items are being stored on the Fusion/Hybrid server.

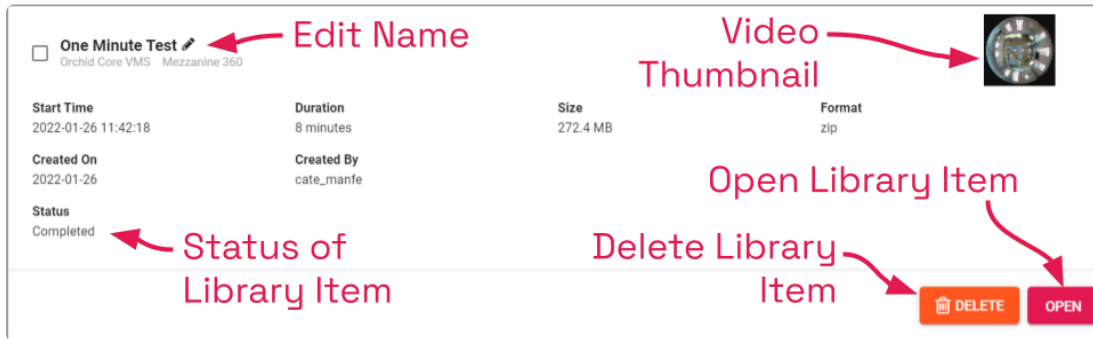
1. To download the *Library* item to your local hard drive, click the *Download* button. Orchid Fusion/Hybrid VMS will begin downloading the file.
2. Go to your *Downloads* folder to find and play the downloaded video.

Open a Library Item

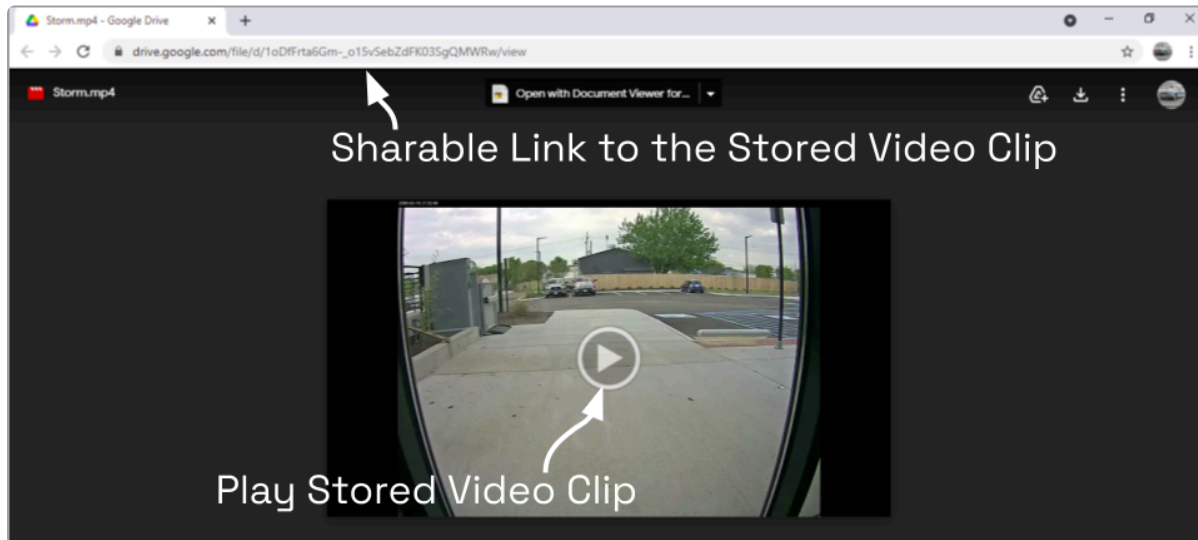


This option is only available if the *Library* items are being stored in an external cloud storage location.

When Library items are being stored in an external cloud storage location, you'll notice that the *Download* button is replaced by an *Open* button.



1. To open the *Library* item, click the *Open* button.

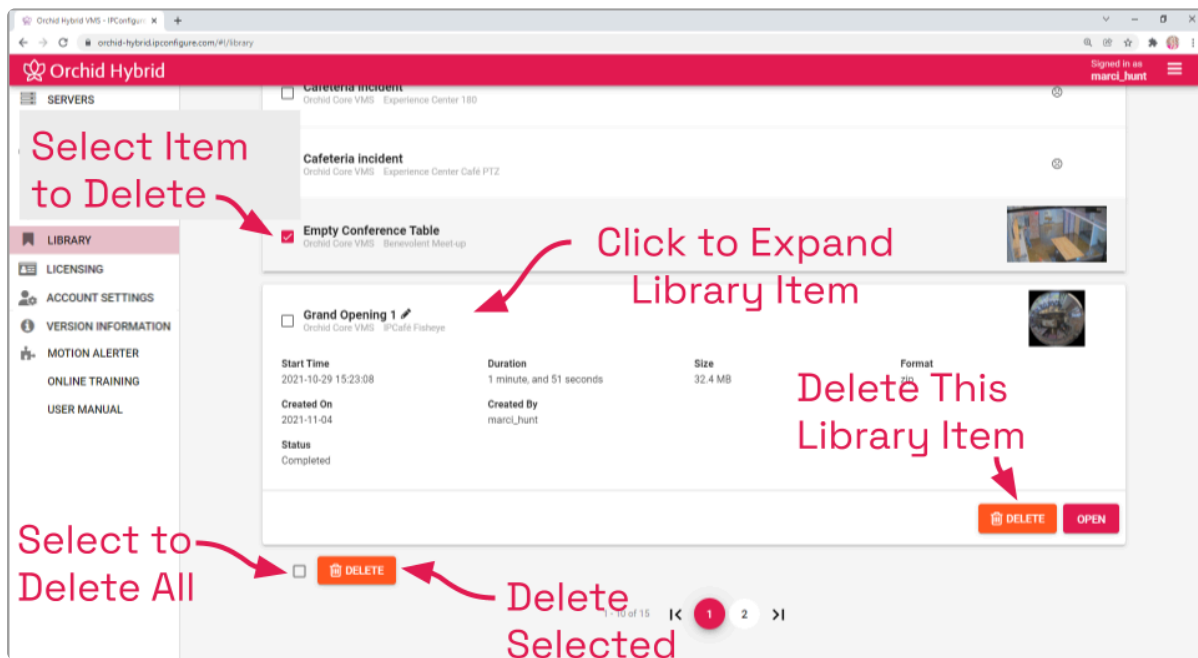


The clip will open in a browser tab provided by the external cloud storage application. (In this example, the chosen application is Google Drive.) Options provided by the cloud storage application may vary, but you will typically be able to view the video, share a link to the video, or download the video to a local storage location.

2. Use the on-screen controls to play or pause the video clip.
3. Copy the link to the video clip to share it with someone else. The recipient will be able to view the clip directly without requiring Fusion/Hybrid or any special permissions.
4. Close the browser tab to close the video clip.

Delete a Library Item

Orchid Fusion/Hybrid VMS offers several ways to delete an item from the Library.



Removing a Single Library Item

1. To remove a single Library item, do either of the following:
 - a. From the list of *Library* items, mark the checkbox of the item you wish to delete, then press the **Delete** button at the bottom of the list. Orchid Fusion/Hybrid VMS will ask you to confirm that you want to delete the item. Press **OK** to confirm.
 - b. From the list of items on the *Library* screen, click the name of the one you want to delete. (The list will expand to display all of the information for the selected item.) Click the **Delete** button at the bottom-right of the expanded item to confirm the delete. Click **OK** to confirm the deletion.

Removing Multiple Library Items

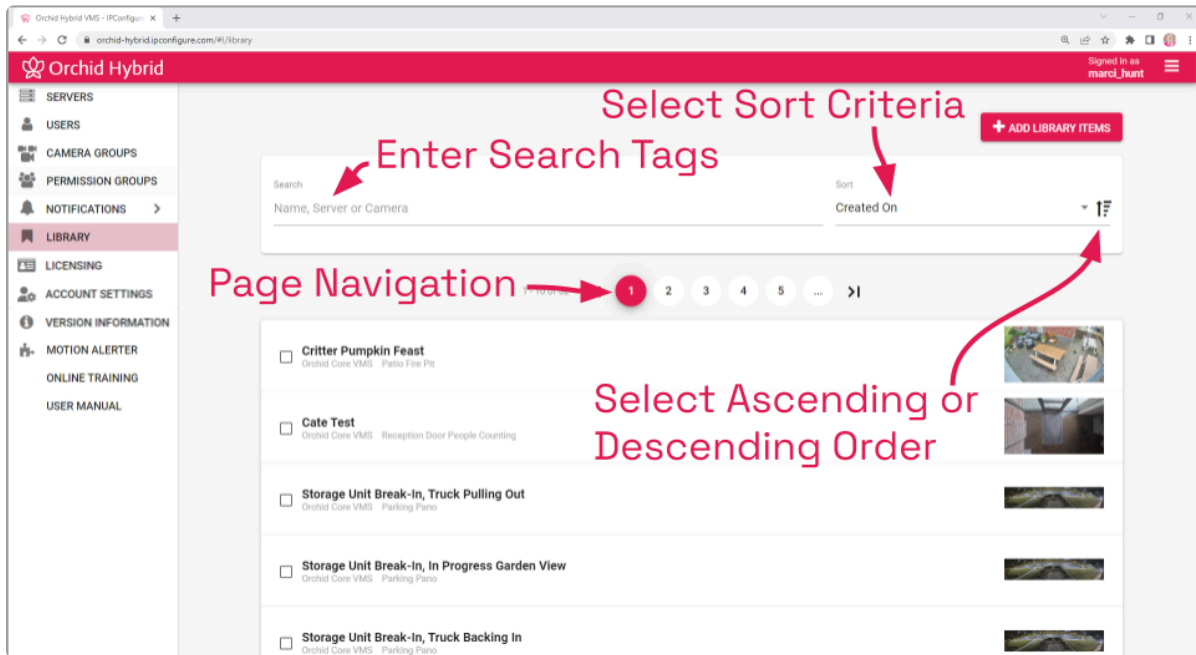
1. To remove multiple *Library* items, mark the checkbox for each of the items you wish to delete, then press the **Delete** button at the bottom of the list. Orchid Fusion/Hybrid VMS will ask you to confirm that you want to delete the selected items. Press **OK** to confirm.

Removing All Library Items

1. To remove all of the *Library* items, mark the checkbox at the bottom of the list, then press the **Delete** button. Orchid Fusion/Hybrid VMS will ask you to confirm that you want to delete the selected items. Press **OK** to confirm.

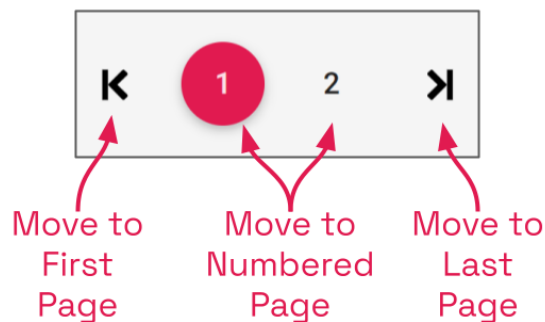
Search / Sort Library Items

If you have a large number of items in the *Library*, the search and sort tools can make it easier to find the items you're looking for.



Page Navigation

If you have more than ten *Library* items, the *Library* screen will automatically activate additional pages and the navigation tools. These navigation tools will help you move from page to page.



1. Use the arrows to move to the previous page or the next page.
2. Use the numbered buttons to move to a specific, numbered page.

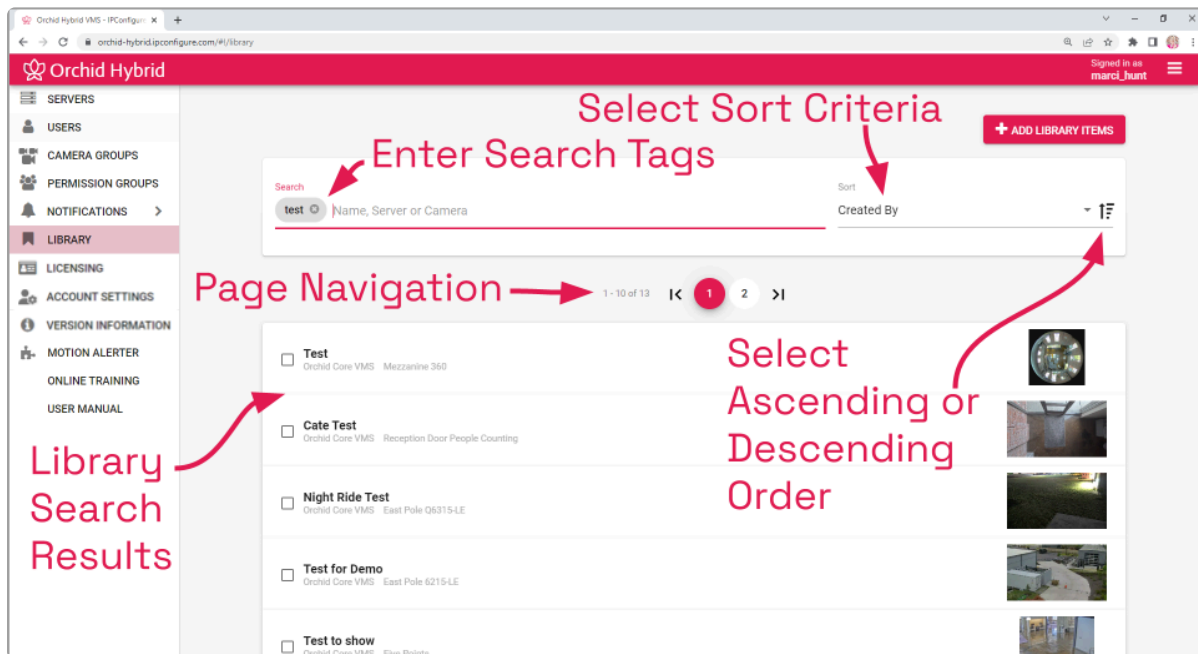
Search the Library

1. Click into the *Search* field to start your search.
2. Type one or more search tags (clicking *Enter* after each one). Search tags can include

words in the item name, the camera name, or the server name.

- 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 *Library* screen will update to display all of the items that contain the tag(s).



Sort the List

<div>Sort</div> <div>Created On</div>	This is the <i>Sort Criteria</i> drop-down list.
	This is the <i>Sort Order</i> icon.

1. Click on the *Sort Criteria* drop-down list to select one of the following sort options: Camera, Created By, Created On, Name, and Server.
 - a. **Camera:** This option will sort the list by camera name.
 - b. **Created By:** This option will sort the list by the users that exported the items.
 - c. **Created On:** This option will sort the list by the dates on which the items were exported.
 - d. **Name:** This option will sort the list by item names.
 - e. **Server:** This option will sort the list by server names.

Camera
Created By
Created On
Name
Server

2. Click on the *Sort Order* icon to view the list in ascending or descending order. (Each time you click the icon, the order will switch.)

Licensing

Beginning in version 21.12, Orchid Fusion/Hybrid VMS allows for bulk license updating. This can be a great timesaver for those sites with a large number of Orchid Core VMS servers.

In earlier versions of Orchid Fusion/Hybrid VMS, no License feature was included; all of the licensing was taken care of at each Orchid Core VMS server. So anytime an Orchid server was nearing end of support, the customer would reach out to IPConfigure to extend the support agreement. For some customers, this meant keeping up with hundreds of servers. With the bulk Licensing feature, this entire process can be streamlined, easing the burden for system Administrators.

The bulk Licensing feature provides the following:

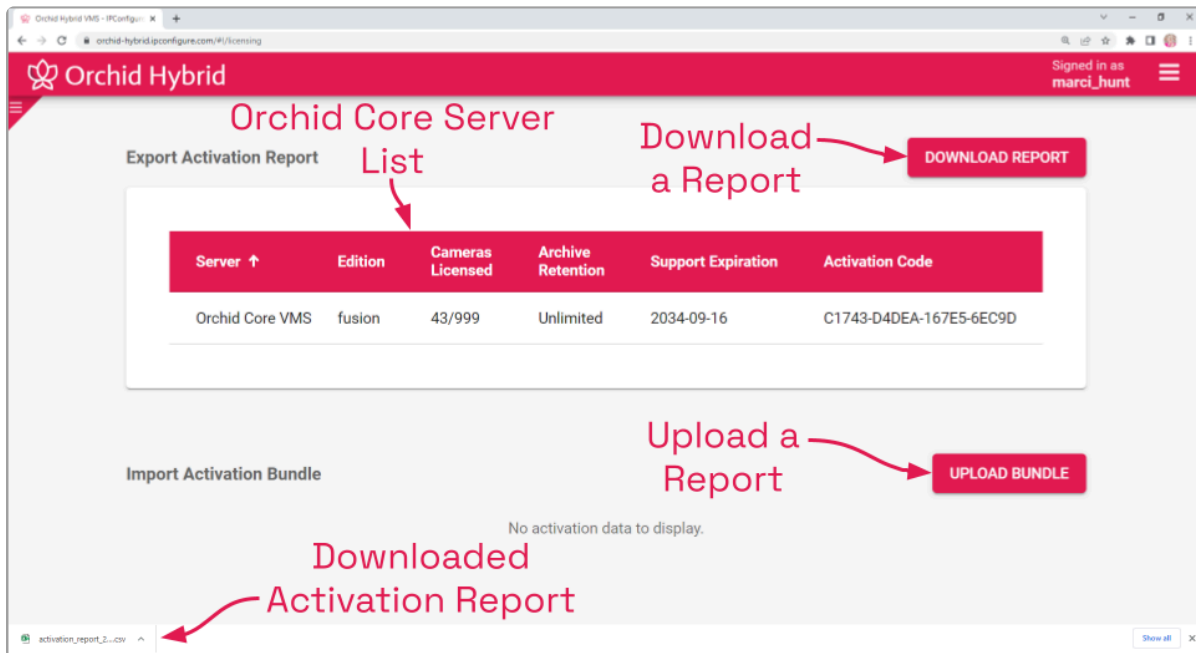
- Ability to review the license information for all of the registered servers
- One-click access to a License report for all registered servers
- Ability to synchronize the renewals for all registered servers
- One-click process for updating all of the registered servers at once

✿ Synchronizing support renewals is not required; you may still update individual servers as they come up for renewal. IPConfigure recommends synchronizing renewals for its time-saving benefits.

Access the Licensing Feature

1. To access the Licensing screen, open the *System Menu* in the top-right corner of the screen and select *Licensing*.

The Orchid Fusion/Hybrid VMS *Licensing* screen will appear. This screen displays a list of all the Orchid Core VMS servers registered to this system. This gives you the ability to review all of the pertinent information for each server, including the number of cameras licensed, and support expiration dates.



In the example above, the system only has one Orchid Core VMS server. You'll notice that the *Import Activation Bundle* section in the bottom half of the screen shows that there is no activation data to display. This simply means that no Activation bundle has been uploaded yet. This example also shows that the *Download Report* button has been pushed; as a result, the downloaded .CSV file can be seen in the status bar at the lower-left corner of the screen.

Sorting

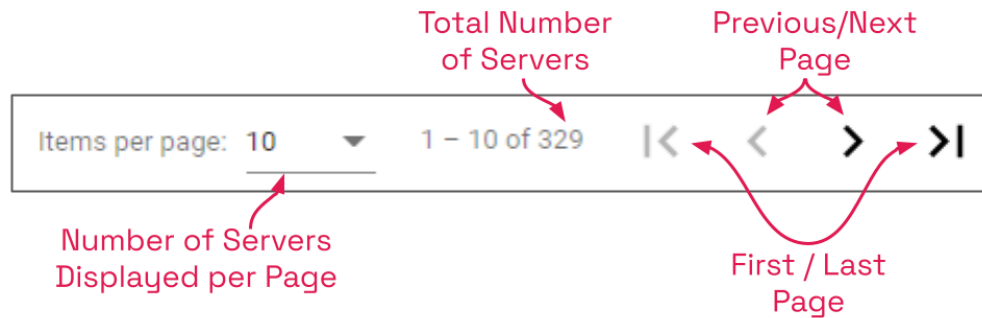
The servers listed on the *Licensing* screen can be sorted by any of the column headings in the report.

1. Position the cursor over any of the column headings. (Notice that an arrow appears to the right of the heading. This indicates whether the list is sorted in ascending or descending order.)
2. Click on a column heading if you want to sort the servers by that parameter (such as *Server name* or *Support Expiration*).

3. Click on the column heading again if you want to change the sort order (to ascending or descending). The sort order will switch each time you click the heading.

Page Navigation

If the system has more than 10 Orchid Core VMS servers, page navigation tools will automatically appear at the bottom of the list.



1. Use the *Items per page* drop-down list to set the number of servers you want to view per screen. Available selections include 10, 20, and 50.
2. Refer to the count to determine which servers are listed on the current screen, and how many total servers 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.

Download a License Report

The *Download* feature provides a way to quickly create a report with all of the important licensing information. This report will be downloaded as a .CSV file that may be used in a variety of spreadsheet programs. This format makes it easy to sort the server list as you see fit (by server name, cameras licensed, support expiration, etc.). This also makes the file easy to share with colleagues and IPConfigure.

Orchid Hybrid

Export Activation Report

Download a Report

Orchid Core Server List

Sorted by Support Expiration

Page Navigation

Server	Edition	Cameras Licensed	Archive Retention	Support Expiration	Activation Code
NSN	fusion	16/999	Unlimited	2020-11-25	82
NSN	fusion	0	Unlimited		16
NSN	fusion	1			16
NSN	fusion	1			16
NSN	fusion	1			16
NSN	fusion	1			16
NSN	fusion	1			16
NSN	fusion	16/26	Unlimited	2022-02-27	82
NSN	fusion	16/26	Unlimited	2022-02-27	28
NSN	fusion	16/26	Unlimited	2022-02-27	46

Items per page: 10 | 1 - 10 of 129 | < > >>

Import Activation Bundle

UPLOAD BUNDLE

1. Click the **Download Report** button to start the download. (Check your status bar or your Downloads folder for evidence of the download.)
2. Open the file using a spreadsheet program. (In the example below, we've opened the file in Google Sheets.)

Downloaded Activation Report

activation_report_2022-01-27_04.17.06_UTC

File Edit View Insert Format Data Tools Extensions Help Last edit was seconds ago

100% \$ % .00 123 Default (Ari... 10 B I A

A1	ACTIVATIONCODE	BRANDEDIT	CAMERACOUN	CAMERASREG	EXPIRES	LICENSEEDITION	LICENSESTATE	ORCHIDID	ORCHIDNAME	RETENTION
1	3F7	fusion	999	16	1656460800000	fusion	NORMAL	003a	NSN	Unlimited
2	879	fusion	26	16	1646006400000	fusion	NORMAL	006fd	NSN	Unlimited
3	0A1	fusion	999	16	1669420800000	fusion	NORMAL	00a2	NSN	Unlimited
4	6C6	fusion	999	17	1670889600000	fusion	NORMAL	038c	NSN	Unlimited
5	416	fusion	999	17	1656460800000	fusion	NORMAL	03ac	NSN	Unlimited
6	192	fusion	999	18	1670889600000	fusion	NORMAL	03e7	NSN	Unlimited
7	D11	fusion	999	16	1670889600000	fusion	NORMAL	0459	NSN	Unlimited
8	CD1	fusion	999	16	1721520000000	fusion	NORMAL	0495	NSN	Unlimited
9	523	fusion	999	17	1646784000000	fusion	NORMAL	0753	NSN	Unlimited
10	980	fusion	999	16	1670889600000	fusion	NORMAL	0913	NSN	Unlimited
11	FC6	fusion	999	18	1670889600000	fusion	NORMAL	0a4c	NSN	Unlimited
12	DC1	fusion	999	26	1656460800000	fusion	NORMAL	0b71	NSN	Unlimited
13	DF1	fusion	999	16	1670889600000	fusion	NORMAL	0bf6	NSN	Unlimited
14	C92	fusion	999	17	1656460800000	fusion	NORMAL	0c67	NSN	Unlimited
15	32E	fusion	999	16	1669420800000	fusion	NORMAL	0d66	NSN	Unlimited
16	232	fusion	999	18	1669420800000	fusion	NORMAL	0d6f	NSN	Unlimited
17	2E3	fusion	99	16	1656460800000	fusion	NORMAL	0da0	NSN	Unlimited
18	56B	fusion	999	24	1703894400000	fusion	NORMAL	0da6	NSN	Unlimited
19	A82	fusion	999	16	1681430400000	fusion	NORMAL	0dc5	NSN	Unlimited
20	8F8	fusion	999	17	1702684800000	fusion	NORMAL	106c	NSN	Unlimited
21										

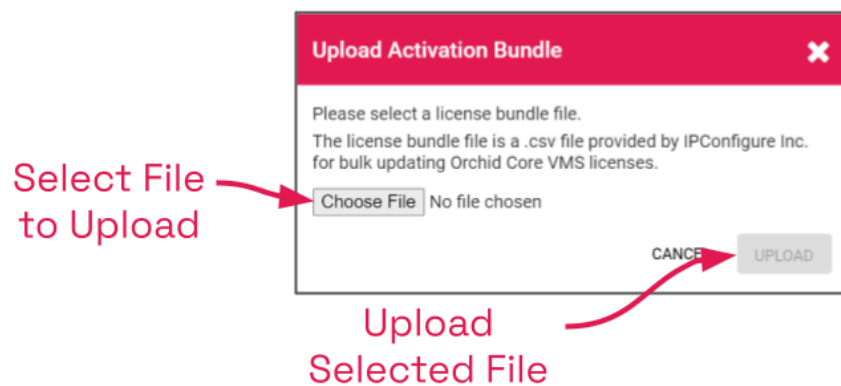
activation_report_2022-01-27_04.17.06_UTC Explore

- Use the spreadsheet to review the data and find out which servers are up for support renewal. (This will be easiest if you sort the servers by Expiration date.)
- After reviewing the data, you should decide how to move forward. You can renew support for the servers that are currently due to expire, or you can synchronize the renewals for all of the Orchid servers in the system.
- To proceed with renewal, forward the activation report and your instructions to your Salesperson at IPConfigure. IPConfigure will prepare new activation codes based upon your request.

Upload an Activation Bundle

The *Upload* feature provides a quick and easy way to apply support renewals for multiple Orchid servers at once. When you purchase one or more license renewals, IPConfigure order fulfillment will send you an Upload Bundle file that contains new activation codes for some or all of your Orchid servers (as requested).

1. Save the Upload Bundle file in a location that you can easily access.
2. Log into Orchid Fusion/Hybrid VMS.
3. Go to the *Servers* screen and select *Licensing*.
4. Click the *Upload Bundle* button. The *Upload Activation Bundle* screen will appear.



5. Click the *Choose File* button to find and select Bundle file.
6. When your file manager application opens, find and select the Bundle file that you saved.
7. Once the file has been selected, click the *Upload* button. The system will apply all of the new activation codes to update all of the specified Orchid servers.

Orchid Fusion

Signed in as mhunt

SERVERS

USERS

CAMERA GROUPS

PERMISSION GROUPS

NOTIFICATIONS

LIBRARY

LICENSING

ACCOUNT SETTINGS

VERSION INFORMATION

Export Activation Report

DOWNLOAD REPORT

Server ↑	Edition	Cameras Licensed	Archive Retention	Support Expiration	Activation Code
IPConfigure Headquarters	fusion	56/4000	Unlimited	2022-10-26	A6CC0-4D300-B8E00-327B3

Import Activation Bundle

Upload a Bundle File

UPLOAD BUNDLE

Upload Results

Status: Successful

CANCEL RETRY CLEAR

Server	Activation Code	Import Status	Last Update ↓
IPConfigure Headquarters	715D-AED4-C66B-6A2A	Success	2022-02-08 13:49:55

As you can see in the example above, the bundle was uploaded successfully, and the listed server was updated with a new activation code.

8. If you want to stop the upload process, click the **Cancel** button.
9. If the status of the upload is unsuccessful, or if some of the server updates didn't perform properly, click the **Retry** button to try again.
10. When you are satisfied with the upload process, you may click the **Clear** button to eliminate all of the information associated with the upload.

Orchid Fusion VMS APPs

Orchid Fusion/Hybrid VMS supports the Application Partner Platform (APP) feature. The *APPs* component allows third-party vendors to customize Orchid Fusion/Hybrid VMS by creating features that live within the Orchid Fusion/Hybrid VMS user interface. This feature is being offered to IPConfigure partners, each of whom must have a digital certificate provided by IPConfigure to develop these *APPs*.

✿ For more information on becoming a partner and creating *APPs*, please go to the IPConfigure [website](#).

To Activate the APPs Feature in Orchid Fusion VMS

Access to the *APPs* feature requires that you modify the Orchid Fusion VMS configuration file. This modification configures the system file path of the installed custom application. Once Orchid Fusion VMS knows where to find the *APPs*, the program will respond by providing the *APPs* option on the *System Menu*.

✿ For more information on configuring the system to support *APPs*, please refer to the [Orchid Fusion VMS Installation Guide](#).

To Activate the APPs Feature in Orchid Hybrid VMS

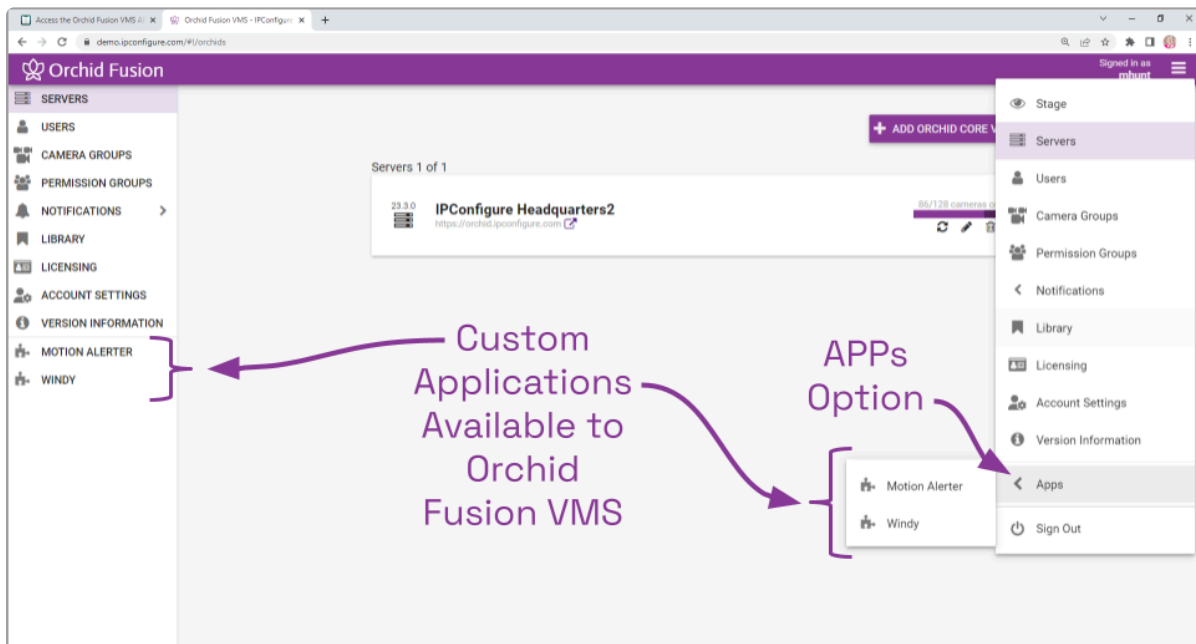
Access to the *APPs* feature requires a modification to the Orchid Hybrid VMS configuration file. This modification must be performed by IPConfigure Support personnel.

Access the Orchid Fusion VMS APPs Feature

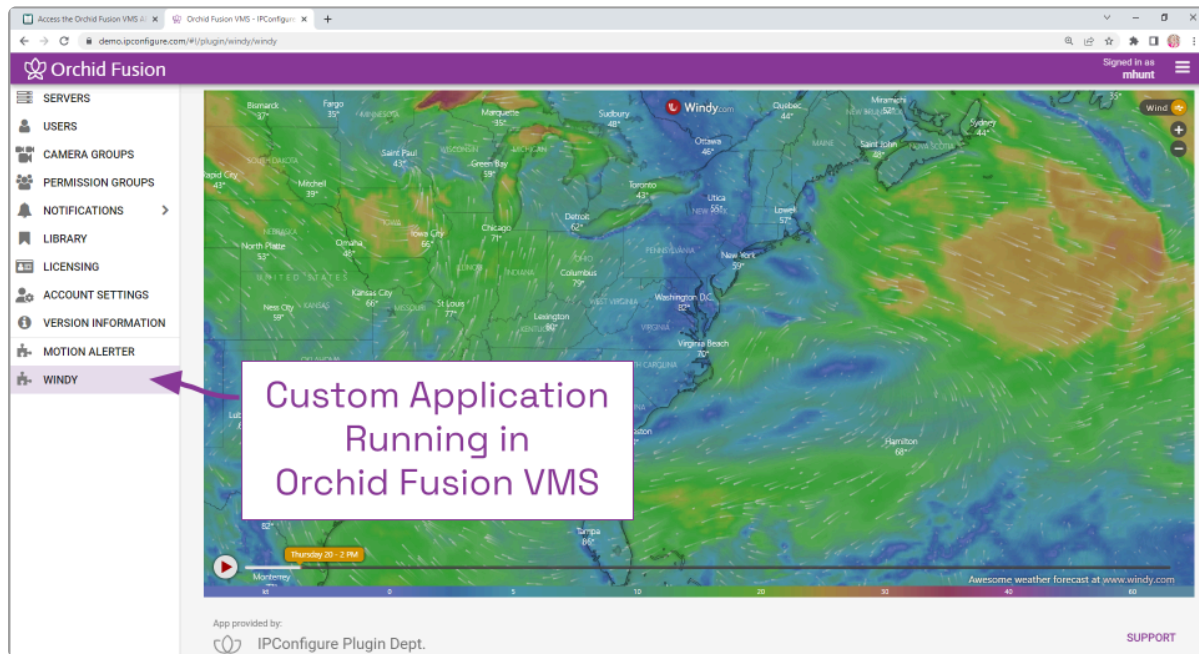
Once the *APPs* feature is activated, you can access your custom applications within Orchid Fusion/Hybrid VMS.

✿ To access the *APPs* feature, you must be a member of an *Administrator Permission Group*, or a *Permission Group* that grants permissions to one or more *APPs*.

1. Open the *System Menu* in the top-right corner of the screen and select *APPs*.
2. The *APPs* sub-menu will appear. This sub-menu will list all of the custom applications that Orchid Fusion/Hybrid VMS finds in the location noted in the Fusion/Hybrid properties file. (Notice that all of your custom applications are now also listed on the *Configuration Menu*, when visible, on the left side of the screen.)





3. Click on one of the custom applications to open it within Orchid Fusion/Hybrid VMS.



Other Administrator Features

There are a couple of features in Orchid Fusion/Hybrid VMS that Administrators have special permissions for. These include the *Stages* feature and *PTZ Presets*. This guide will provide details that pertain solely to Administrators. Please refer to the [Orchid Fusion/Hybrid VMS User Guide](#) for general operating instructions for these features.

Sharing Stages

	This is the <i>World</i> icon.
	This is the <i>Locked</i> icon.

All users have the ability to use the *Stages* feature, create their own *Stages*, and customize the *Stages* cycle. As an Administrator, you have the added ability to share *Stages* with other users. This gives you the opportunity to focus the team's attention in certain areas, if needed, and better manage the monitoring system.

About the Stages Feature

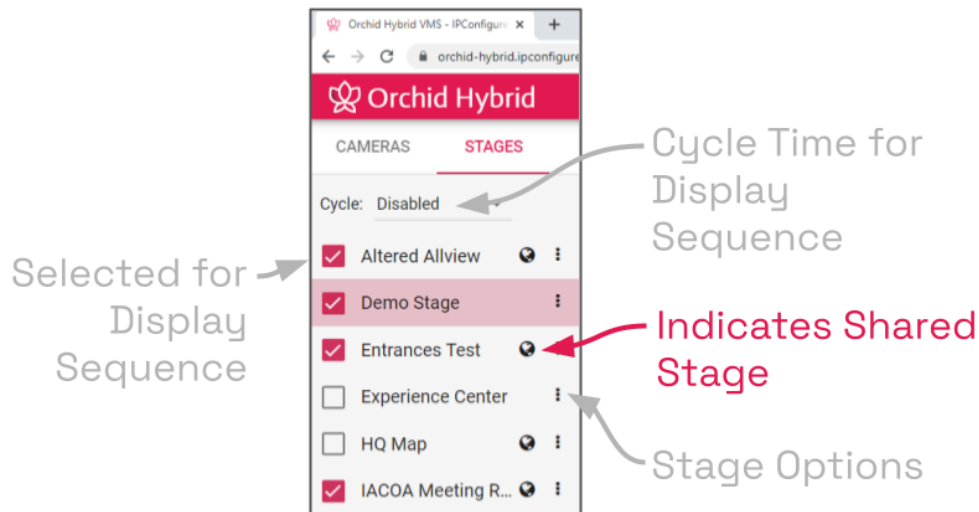
The *Stages* feature allows you to create custom layouts for the *Stage* featuring Players that you select and arrange. You can then view your *Stages* on demand or as part of an automated cycle. This is a great tool for helping you and your monitoring team remain organized and efficient.

When a user creates and saves a *Stage*, it is saved in the user's account. When an Administrator shares a *Stage*, it is visible to every user that has access to at least one of the cameras in the *Stage*. Shared *Stages* do not override the *Permission Groups*; users will not see any cameras they don't have permission to see.

✿ If a *Stage* includes a PTZ camera (with or without presets), keep one thing in mind. When you add a camera to the *Stage*, you are adding the camera, not the camera's position. So when you view a *Stage*, the PTZ camera may or may not be in the same position as when it was added to the *Stage*.

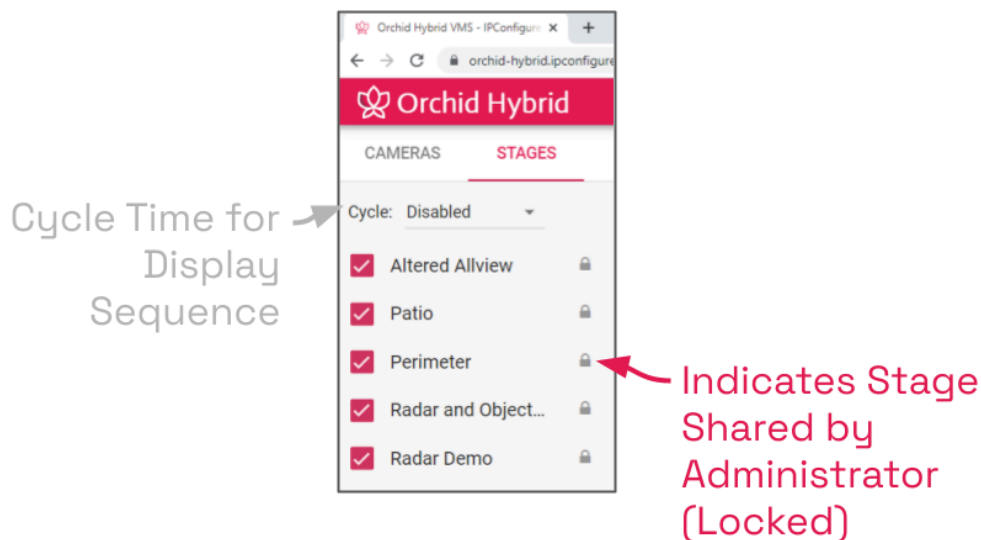
Administrator's View

As an Administrator, when you share a *Stage*, you will see a *World* icon that indicates that it is shared:



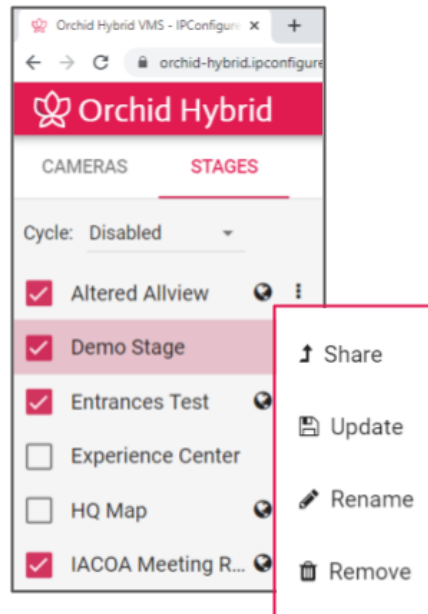
User's View

Users will see a *Lock* icon next to the shared *Stage*. They will not be able to modify or delete the *Stage*:



Sharing a Stage

When you access the *Stages* tab of the *Camera Bag*, you will notice that each of the *Stages* has its own pop-up menu (on the right edge of the list). The Administrator's version of the pop-up menu makes it easy to share a *Stage*.



1. Click on the pop-up menu that corresponds to the *Stage* you want to share.
2. Then click ***Share***.

Revoking a Shared Stage

1. Click on the pop-up menu that corresponds to the *Stage* you want to un-share.
2. Click ***Un-share***.

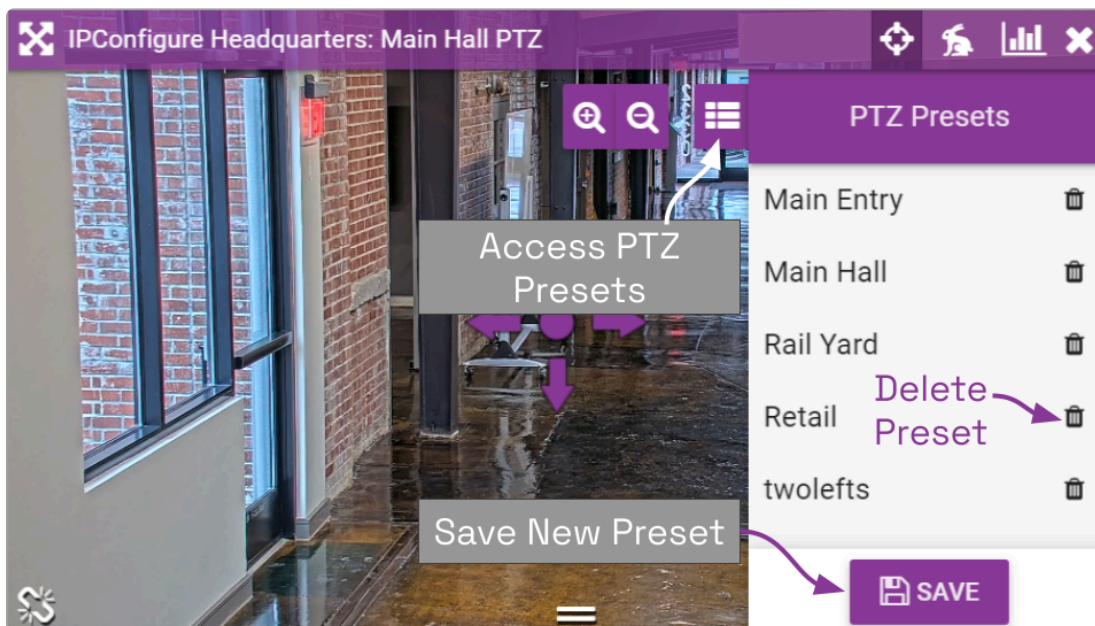
Managing PTZ Presets

All users that have permissions to control PTZ cameras will also have the ability to use the *PTZ Presets*. As an Administrator, you have the added ability to create the *PTZ Presets* that will be available to those other users. This provides you with another tool to focus the team's attention in certain areas, while eliminating the man-hours needed to manually reposition the camera every time.

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

Adding and Deleting a Preset

1. Access the *PTZ Presets Menu* by activating the PTZ controls, then clicking on the *Hamburger* icon at the top-left of the Player. A list of existing *Presets* will appear.



2. To select a different preset view, click on any of the *Presets* in the list. The camera will respond by moving to the selected position.
3. To add a new preset, first use the pan, tilt, and zoom controls to situate the camera in the desired position. Then click the *Save Preset* button. Enter a unique name for the new preset, then click the *Save Preset* button again.
4. To delete a preset, click the *Trash Can* icon (to the right of the preset name), then click the *Delete* button.

Advanced Topics

As you work with Orchid Fusion/Hybrid VMS, 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](#).

Recovering an Orchid Core VMS Server

There are some instances in which an Orchid Core VMS server will become unavailable to Orchid Fusion/Hybrid VMS. When this happens, as long as you have permissions to access the server, you will notice all of the following in relation to the unavailable Orchid Core VMS server:



- Any cameras on the *Stage* will display an error
- The *Users* list will display “Failed to fetch users”
- The *Servers* list will display “Orchid server is unavailable”

The Orchid Core VMS server may be unavailable for a number of reasons, including:

- The Orchid Core VMS server is down
- There is a problem with the network
- There is a password/authentication issue

Possible Fixes

1. The first and easiest potential fix is to *Recover this Orchid Server* (which is documented in the [Edit Orchid Core VMS Server Settings](#) section of this guide).
2. Verify that the logged in user has access to the Orchid Core VMS server.
3. Check the network for broken connections, improper addressing, outages, etc.
4. Check the condition of the Orchid Core VMS server.
5. A less desirable fix is to delete the Orchid Core VMS server and then add it back into the Orchid/Hybrid VMS system. (Refer to the *Adding and Managing Orchid Core VMS Servers* section for instructions on how to delete and add a server.)

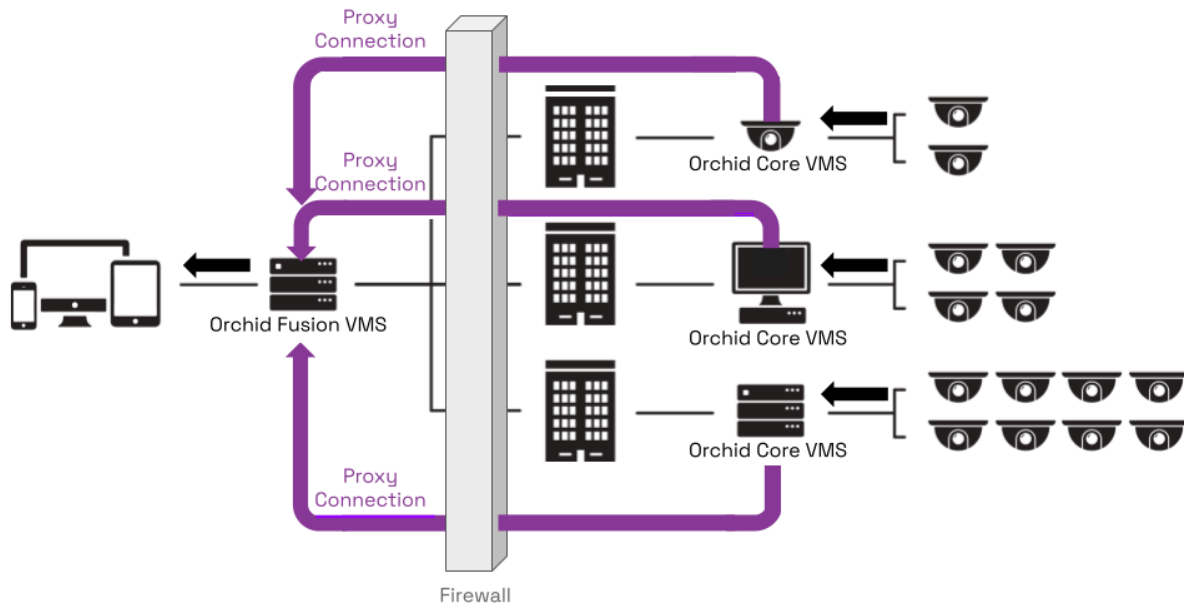


With the last method, you will lose any Orchid Fusion/Hybrid VMS permissions that were configured using the original server.

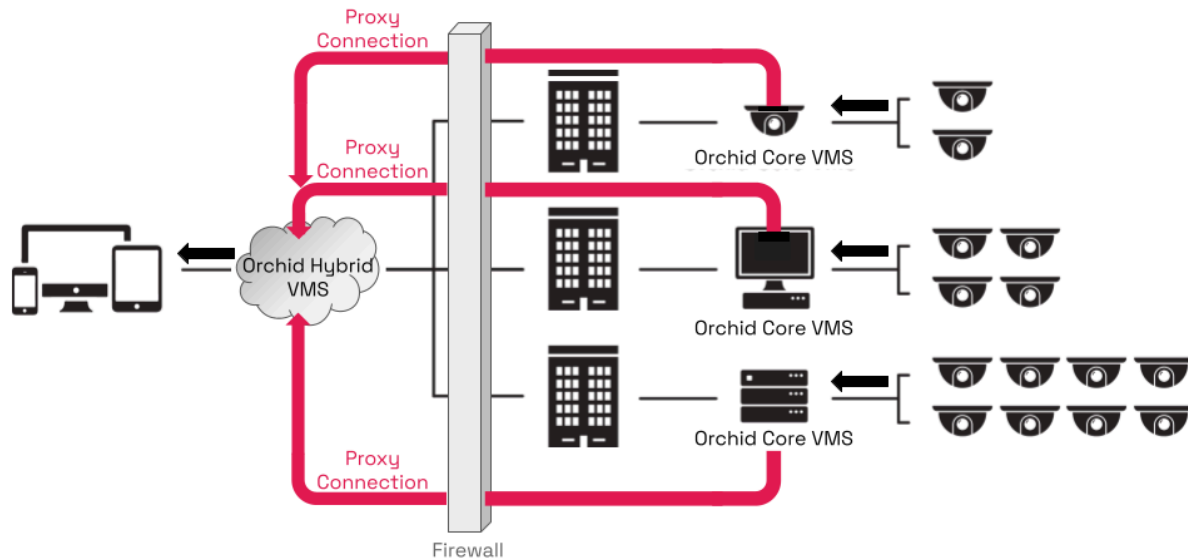
How Orchid Fusion/Hybrid VMS's Proxy Works

The video streams you see in the Orchid Fusion/Hybrid VMS user interface are optimally delivered to your web browser using Orchid Fusion/Hybrid VMS's sophisticated routing engine. When an Orchid Core VMS server is registered in Orchid Fusion/Hybrid VMS, a proxy connection becomes available from the Orchid Fusion/Hybrid VMS server to the Orchid Core VMS server. When an Orchid Core VMS server is not directly accessible to your web browser (because it's behind a firewall, for instance), this connection allows Orchid Fusion/Hybrid VMS to relay all the web and video data from the Orchid Core VMS server, through Orchid Fusion/Hybrid VMS, to your web browser. This method eliminates the need to create and maintain firewall rules to provide access to the Orchid Core VMS servers and cameras.

Fusion



Hybrid



If your web browser can communicate with an Orchid Core VMS server, video is delivered directly from Orchid Core VMS to your client browser. This approach maximizes performance while minimizing bandwidth usage, hosting costs, and custom network configuration.

To Force Proxy Mode

There is a way to force Orchid/Hybrid VMS to use the proxy method even if the situation wouldn't normally require it.

1. Open Orchid Fusion/Hybrid VMS and sign in.
2. Go to the *Stage* screen.
3. Add the following text to the end of the URL in the web browser address bar: `?force-proxy=true`
4. Click the **Reload** button. (The *Enter* key will not do the trick.)

Trouble Viewing the Camera Stream in Orchid Fusion VMS

If Orchid Fusion/Hybrid VMS is not receiving a live video stream from a camera on an available Orchid Core VMS server, the problem is likely due to a problem between the camera and the Orchid Core VMS server.

Possible Fixes

1. Try to refresh the camera in Orchid Fusion/Hybrid VMS. (Refer to the instructions on how to [Refresh Cameras](#).)
2. Try selecting a lower-resolution stream to view video. (If you haven't already configured Secondary streams, refer to the [Multi-stream Capabilities](#) and [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.)
3. Use the [System Status](#) feature to test the camera preview, restart the camera stream, or verify the network connection between the camera and Orchid Core VMS. (This may lead you to try the [Recover Camera](#) feature.) You may also perform the check associated with packet loss (see note below).
4. If the network connection is OK, but you still aren't getting video, physically check the camera to make sure it is intact and connected to power.

✿ For more information, please refer to the next topic.

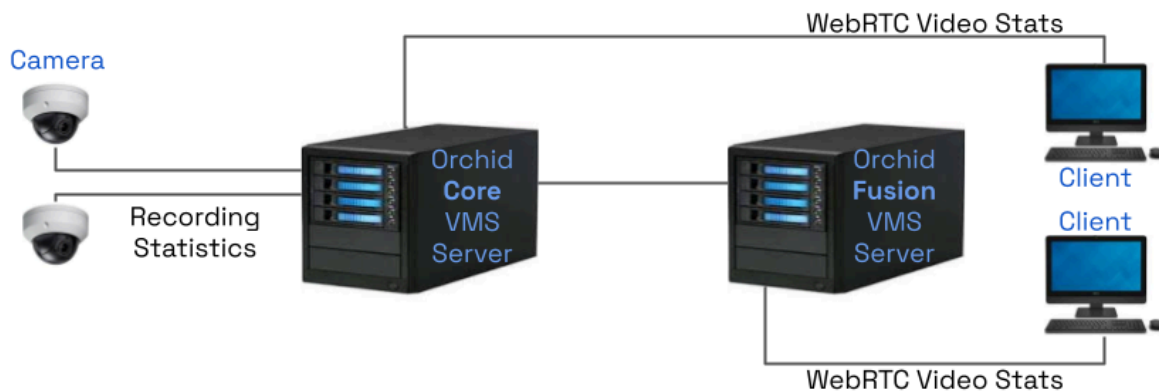
Checking for Packet Loss

If video in Orchid Fusion/Hybrid VMS is unavailable or degraded, you may be experiencing packet loss in one of several locations:

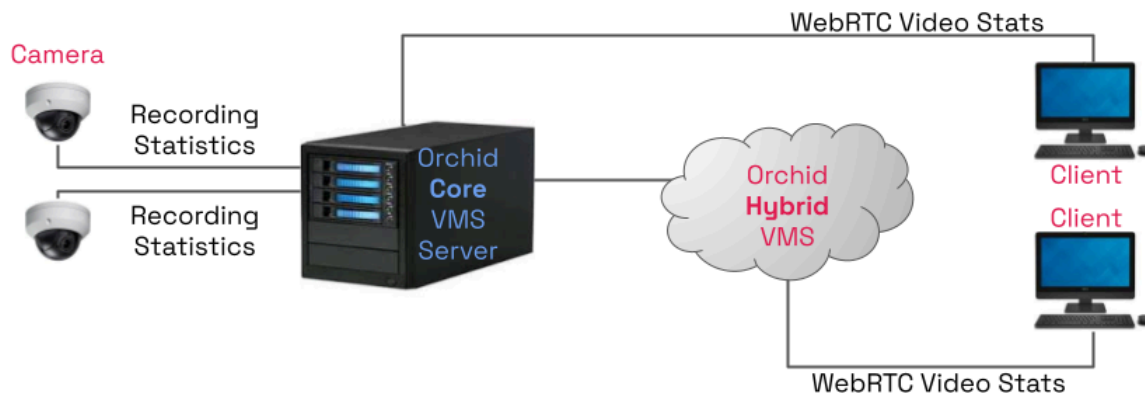
- Between the camera and Orchid Core VMS
- Between Orchid Core VMS and the viewing client
- Between Orchid Core VMS and Orchid Fusion/Hybrid VMS
- Between Orchid Fusion/Hybrid VMS and the viewing client

There are several methods for checking for packet loss. The diagrams below indicate which check methods are available to test the different connections.

Fusion



Hybrid



* For detailed instructions on running the checks for packet loss, please refer to the *Checking for Packet Loss* section in the [Orchid Core VMS Administrator Guide](#).

About WebRTC

Orchid Fusion/Hybrid VMS supports Web Real-Time Communication, or WebRTC. WebRTC provides users with another method for connecting an Orchid Core VMS server with a client, so that the client may view good quality, live and recorded video. Although you may view video in Orchid Fusion/Hybrid VMS, all of that video is coming through (and is stored by) Orchid Core VMS. That's where WebRTC does its magic. For this reason, WebRTC is fully documented in the [Orchid Core VMS Administrator Guide](#) and the [Orchid Core VMS Installation Guide](#) (for software versions 2.2.0 and later). Please refer to these guides for general information, how Orchid Core VMS works in WebRTC mode, troubleshooting tips, and configuration details.


Beginning in version 23.3, Orchid Fusion/Hybrid VMS supports the optional use of WebRTC retransmission. With retransmission, the web browser can resend video packets to Orchid to help ensure that the video is delivered. This improvement allows WebRTC to provide full-bandwidth video even in marginal network conditions. Please refer to the [Orchid Core VMS Installation Guide](#) for instructions on how to enable this feature.

Comparing Orchid Fusion VMS Operating Modes

Orchid Fusion/Hybrid VMS now supports operation in WebRTC mode in addition to the original Low-bandwidth mode. 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 two operating modes.

* With Orchid Fusion/Hybrid 2.10, the FBGST plugin will no longer be supported. The plugin-compatible web browsers (Chrome version 34, and Firefox version 52) have also reached the end of support. If you were using either of these browsers, upgrade to the latest version.

	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 Mozilla Firefox, Microsoft Edge, Safari (desktop and mobile), and Google Chrome (version 66 or higher on a desktop or mobile device)
Network requirements	Works well on slow connections between browser and Orchid server (or Fusion/Hybrid server if proxy method is used).	Prior to version 23.3, WebRTC required a good connection between the web browser and the Orchid Core VMS Server. 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 server	Decoding is done on the client machine
Configuration required for viewing servers behind a firewall	None (assuming the web interface is accessible)	STUN server
Video quality	Frame rate that throttles to match available bandwidth	Native, unthrottled frame rate

Supported video file types	H264, JPEG, MPEG4	H264
Audio support	No	No
PTZ camera support	Yes	Yes
Video statistics	Yes (Minimal)	Yes (Overload)
Mode is selectable (at Sign In and at Player)	Yes	Yes
Mode indicator		

Additional Support

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

- Tier 1 Support: Orchid Fusion/Hybrid VMS System Administrator
- Tier 2 Support: Integrator or Dealer
- Tier 3 Support: IPConfigure Technical Support Resources

IPConfigure's Orchid Fusion/Hybrid VMS Knowledge Base: The [Orchid Fusion/Hybrid VMS Knowledge Base](#) is freely and publicly available on IPConfigure's support website, and includes detailed information for a variety of Orchid Fusion/Hybrid VMS issues. The Knowledge Base covers advanced installation and configuration scenarios.

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

IPConfigure's Telephone Support Line: Customers with an Orchid Fusion/Hybrid VMS 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 Fusion/Hybrid VMS Express Support is complimentary for one year with all new Fusion/Hybrid license purchases (for Orchid Core VMS).

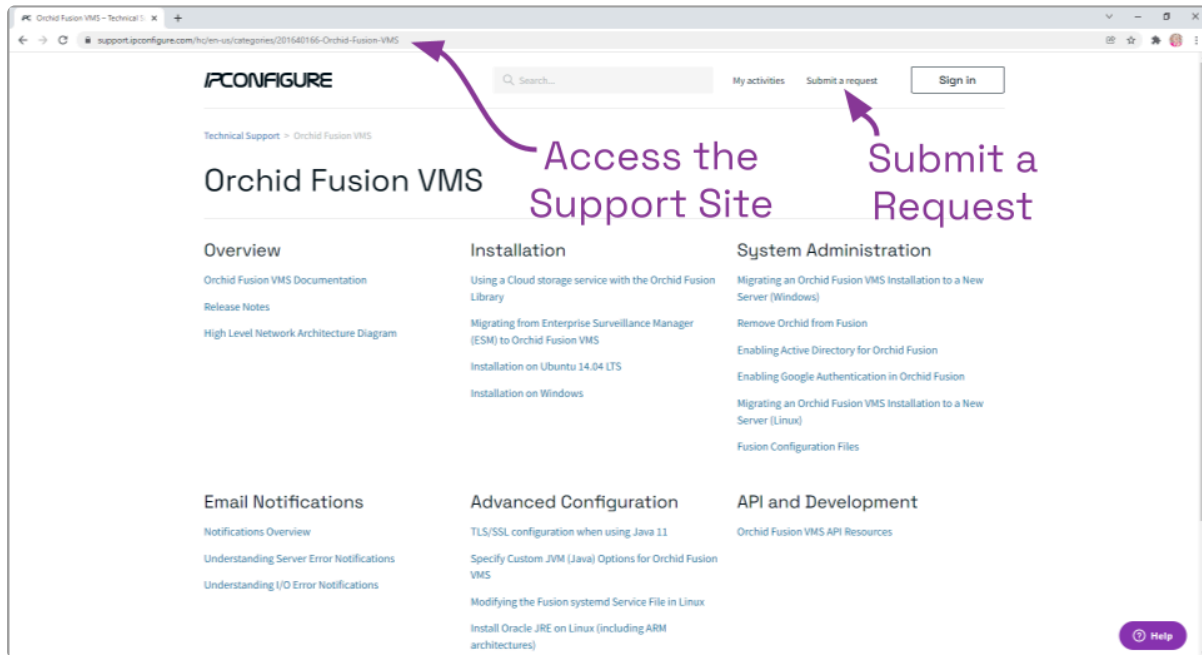
IPConfigure Technical Support Hours

As of December, 2018, IPConfigure's technical support hours are as listed below. For the most up-to-date version of our IPConfigure support schedule, please see support.ipconfigure.com.

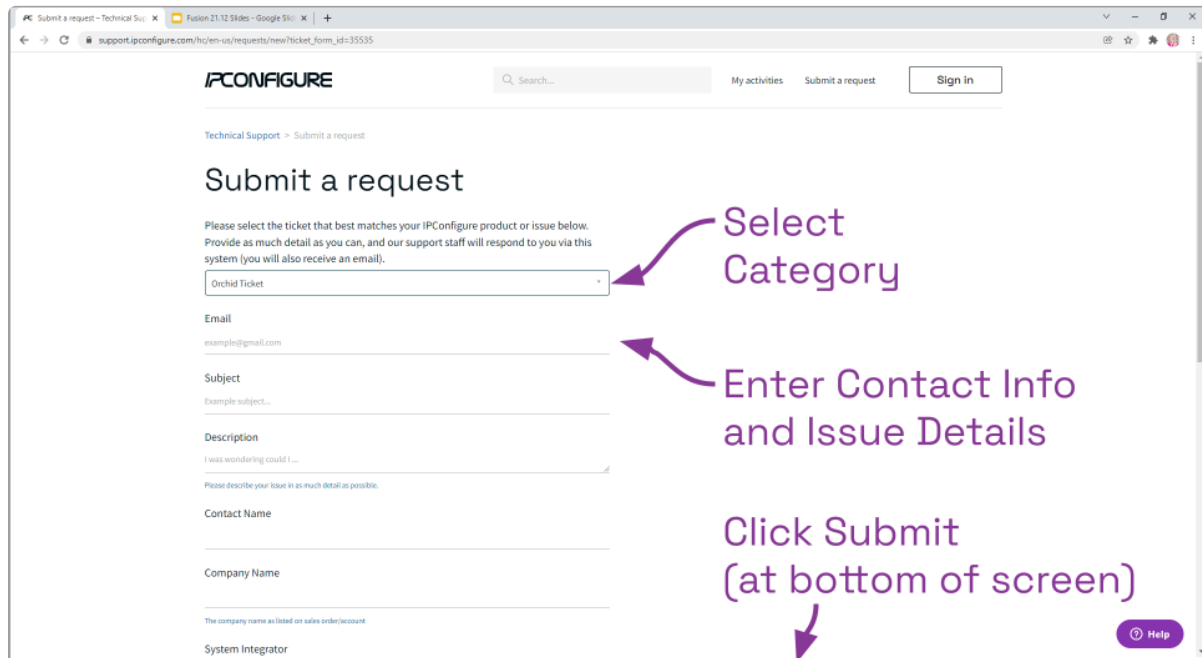
Sunday	Closed
Monday	9:00 AM to 8:00 PM EST
Tuesday	9:00 AM to 12:00 PM, 1:00 PM to 8:00 PM EST
Wednesday-Friday	9:00 AM to 8:00 PM EST
Saturday	Closed

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 Fusion/Hybrid VMS software, and your Orchid Fusion/Hybrid VMS server type. So that IPConfigure's Technical Support Team can best assist you, please

provide as much detail as possible about the problem. Attach screenshots and system logs as necessary.

To find the Orchid Fusion/Hybrid VMS software version number, go to the *System Menu* and select *Version Information*.

5. Mark the *I'm not a robot* checkbox (if available).
6. When all available information has been entered, press the ***Submit*** button at the bottom of the screen.

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

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