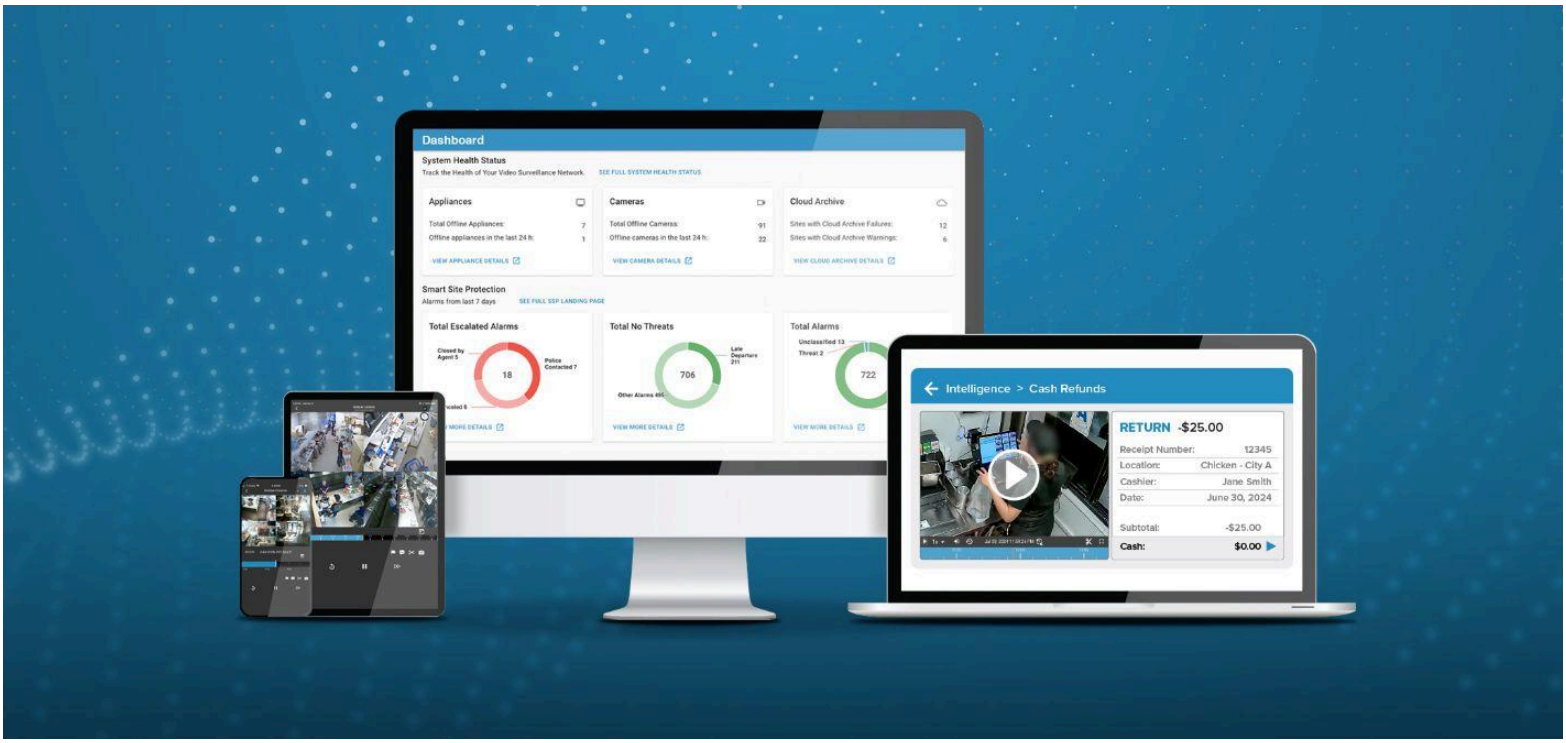

Envysion®

a Motorola Solutions Company

Quick Tips Guide

Welcome to your Envysion Installation.
Here is a Quick Tips Guide to get you started.

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Required Installation Equipment Checklist:

IP Only Set Up:

- ☐ Monitor
- ☐ Keyboard
- ☐ Cat 5/Cat 6 patch cables (min 3')
- ☐ Cable manufacturing tools
- ☐ RJ45 connectors
- ☐ Cable tester
- ☐ Punch down tools
- ☐ Basic hand tools (Screwdriver, hammer, pliers, torx security driver & bits, etc.)
- ☐ Caulk and caulk gun
- ☐ Blank Faceplates
- ☐ Battery powered drill & bits
- ☐ Cat 5 / Cat 6 cable (as needed)

Analog/Hybrid Set Up:

- ☐ Monitor
- ☐ Keyboard
- ☐ Cat 5/Cat 6 patch cables (min 3')
- ☐ Volt meter
- ☐ Spot monitor
- ☐ Basic hand tools (Screwdriver, hammer, pliers, torx security driver & bits, etc.)
- ☐ BNC connectors
- ☐ Cable crimper
- ☐ Siamese cable
- ☐ Cat 5 / Cat 6 cable (as needed)
- ☐ Caulk and caulk gun
- ☐ Battery powered drill & bits

EnVR Types

The EnVR is what records video onsite. There will be NO BNC ports on the back of the EnVR. We have 2 main form factors for the EnVR rack and tower. Towers look like a basic desktop pc from the front, and racks blend into the other equipment in the rack. The device with the BNC ports on the back will be an Encoder.

Email - envysion.installationsupport@motorolasolutions.com
Phone - **877-258-9441 Option 2** (M-F 6a - 6p MT)

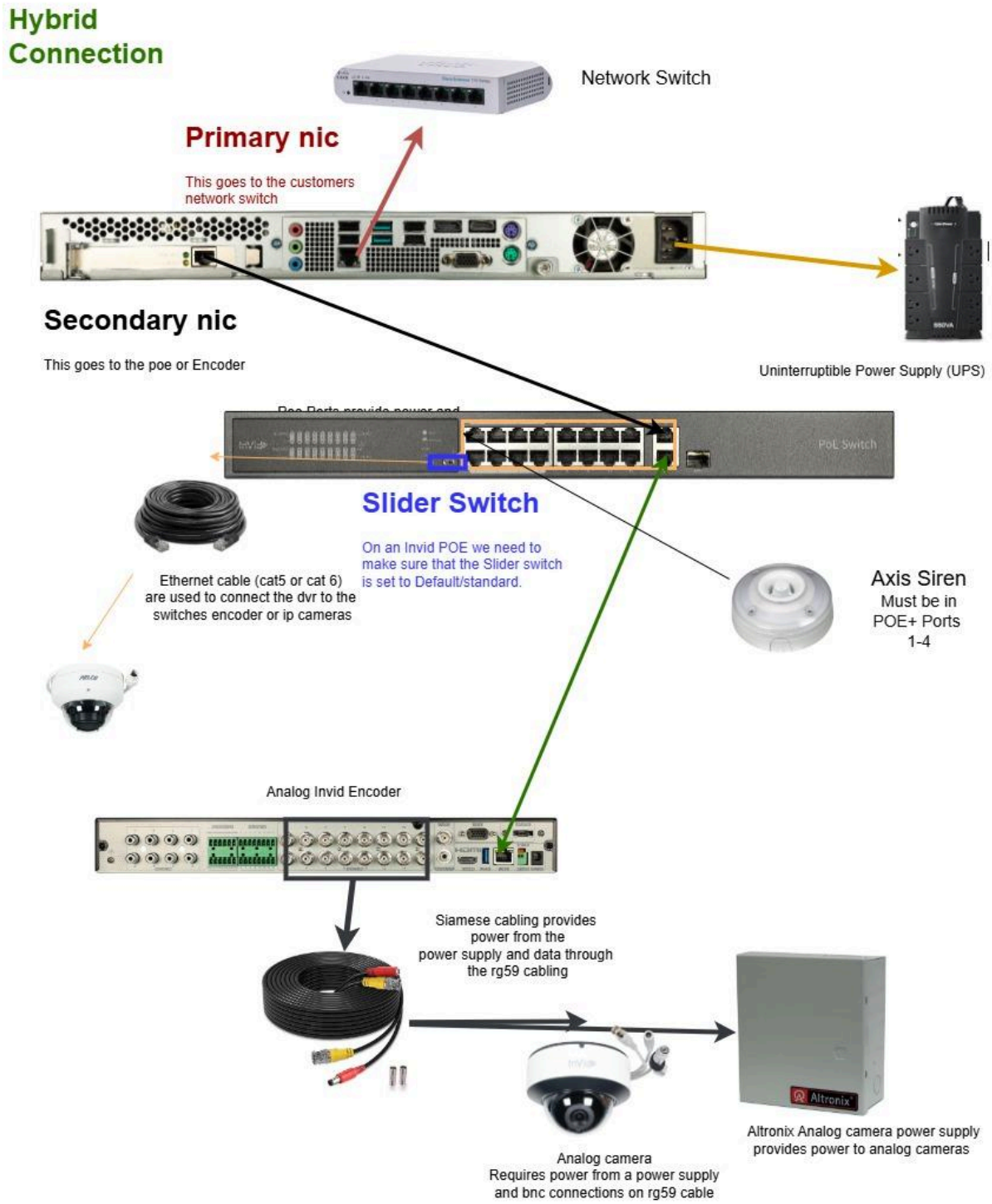
	Power Cord
	Secondary Nic
	Primary Nic
	Display Port
	HDMI Port
	VGA Port
	Audio Port (3.5mm)

EnVR Rack Form Factor (1u)

EnVR Tower Form Factor

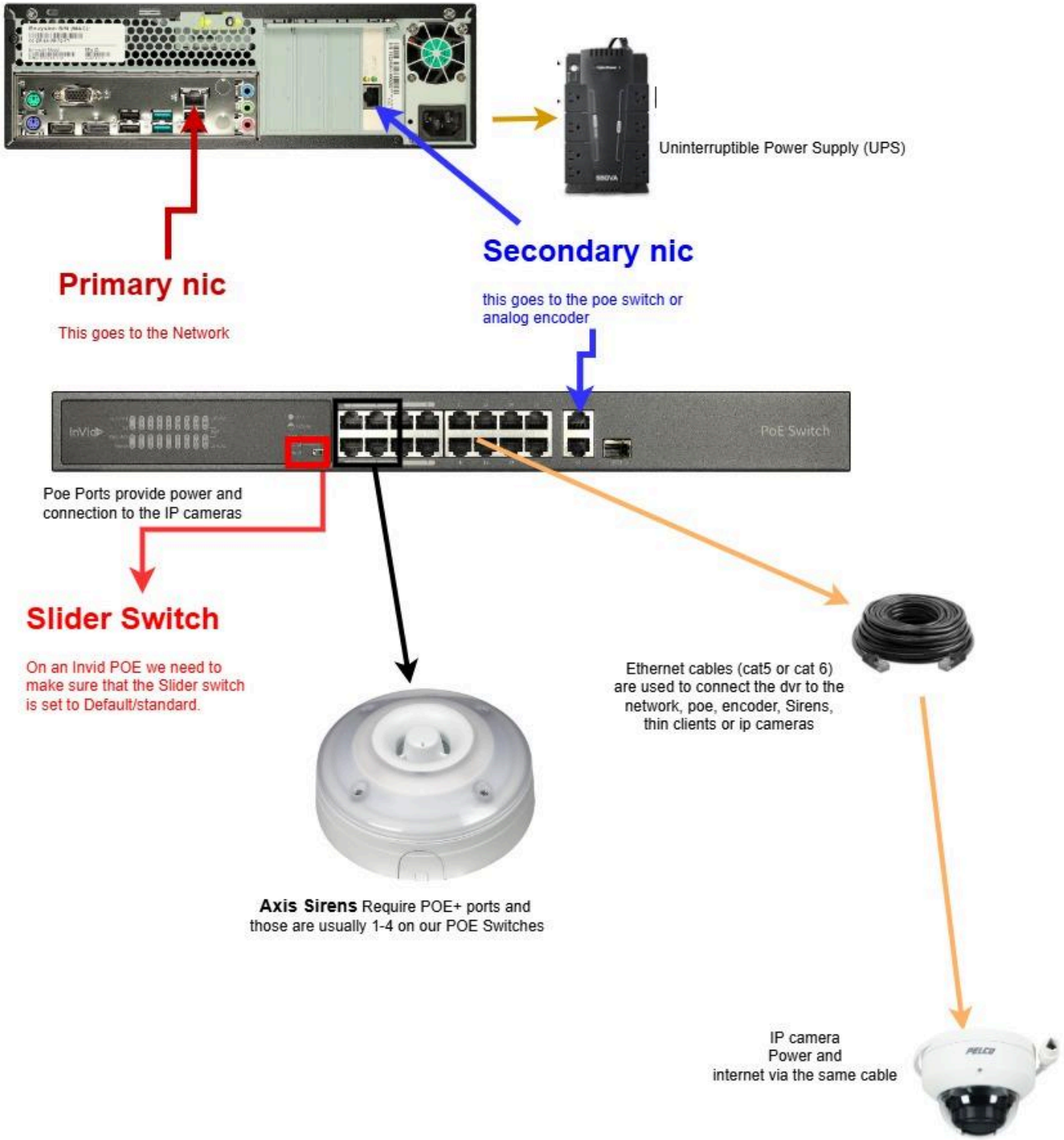
Cabling Path Setups:

Hybrid Setup: This setup is for sites that will have both the analog camera setup and the IP camera setup. There are several ways to make it operational, we will have to verify the cabling path for each site.



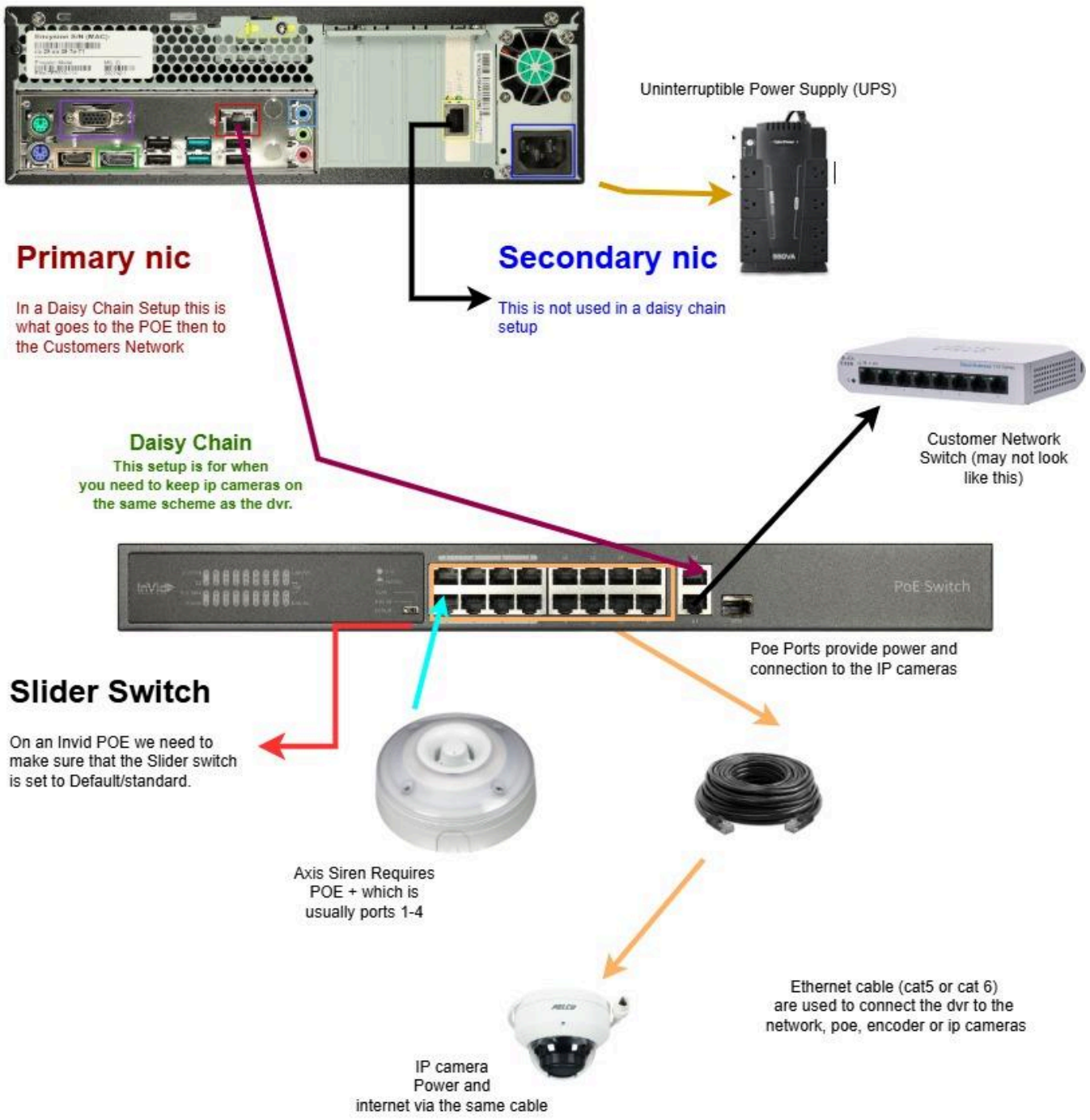
IP Only Setup

This setup supports IP cameras only, there are 2 technical setups for this depending on the site and current settings of the cameras. (If the cameras are set to the primary NICs IP they need to be plugged in “daisy chained”.)



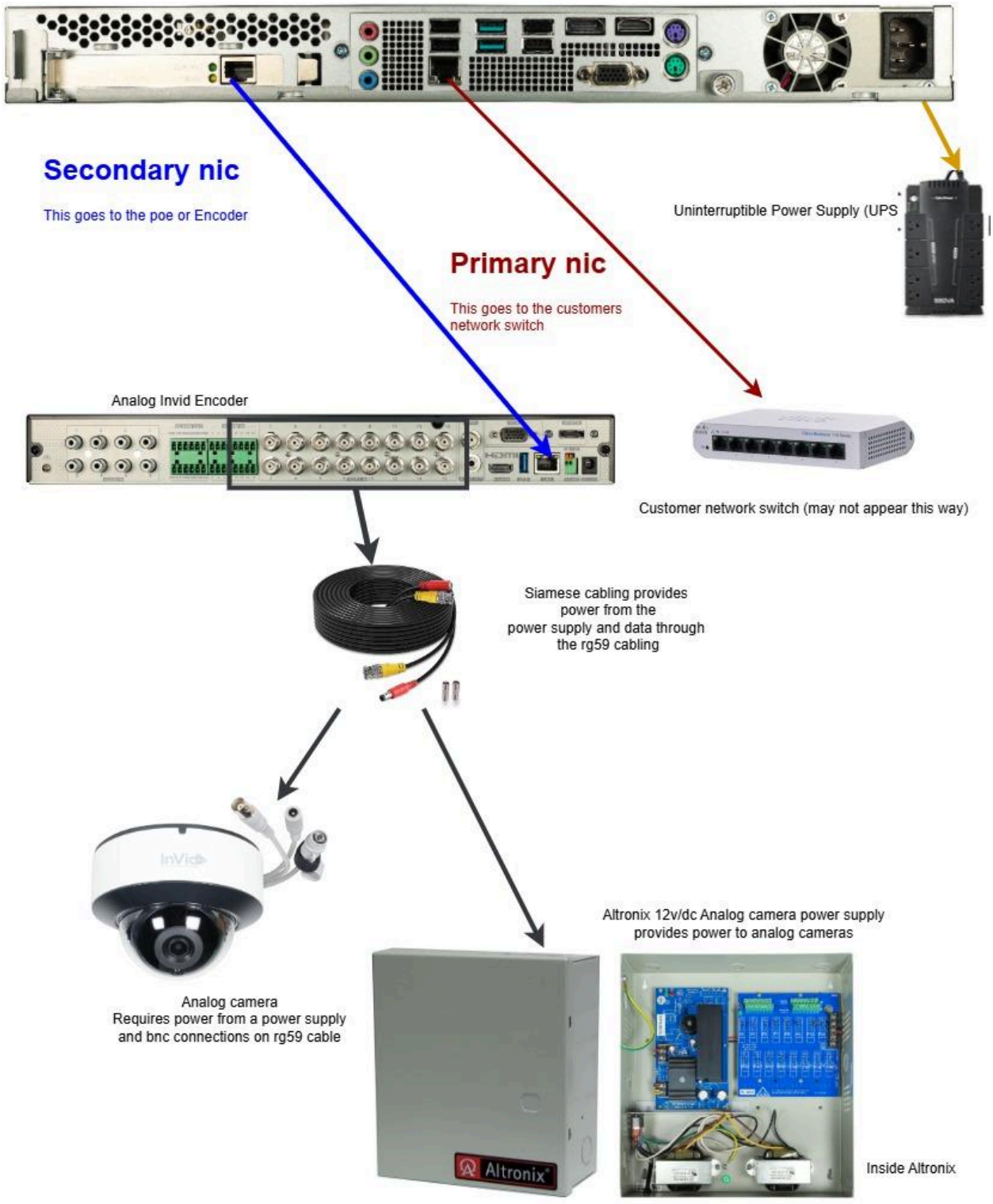
IP Only Daisy Chain

This setup is for when you must keep the cameras on the same ip scheme as the dvr. If for some reason you also need an encoder plug that into the unused 2nd NIC.



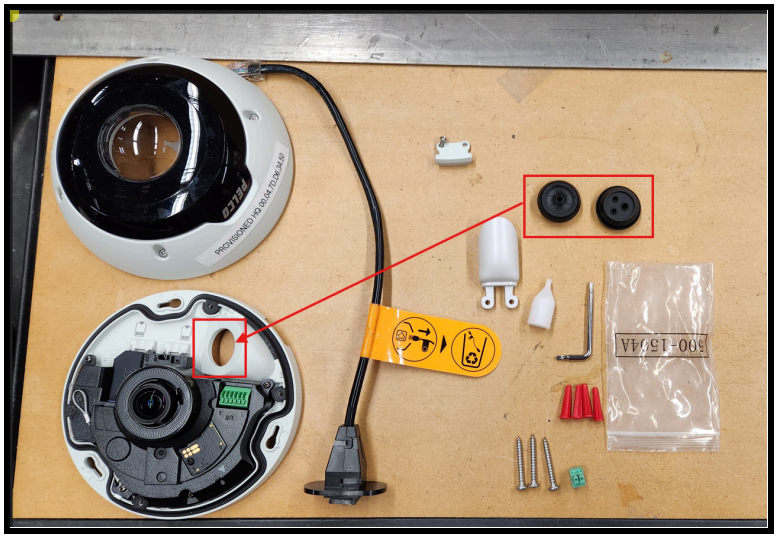
Analog Camera Setup

This setup will likely be more present with retrofits, but is meant to cover analog cameras and their connections to the dvr.



Cameras with Grommets

There are several cameras now that have rubber grommets that have to be placed into the base of the camera in order to seal it. The following pictures are of the Pelco 360 camera, but there are others out there. If there is a large opening in the base of the camera look in the box for a rubber grommet to seal.



Analog Audio

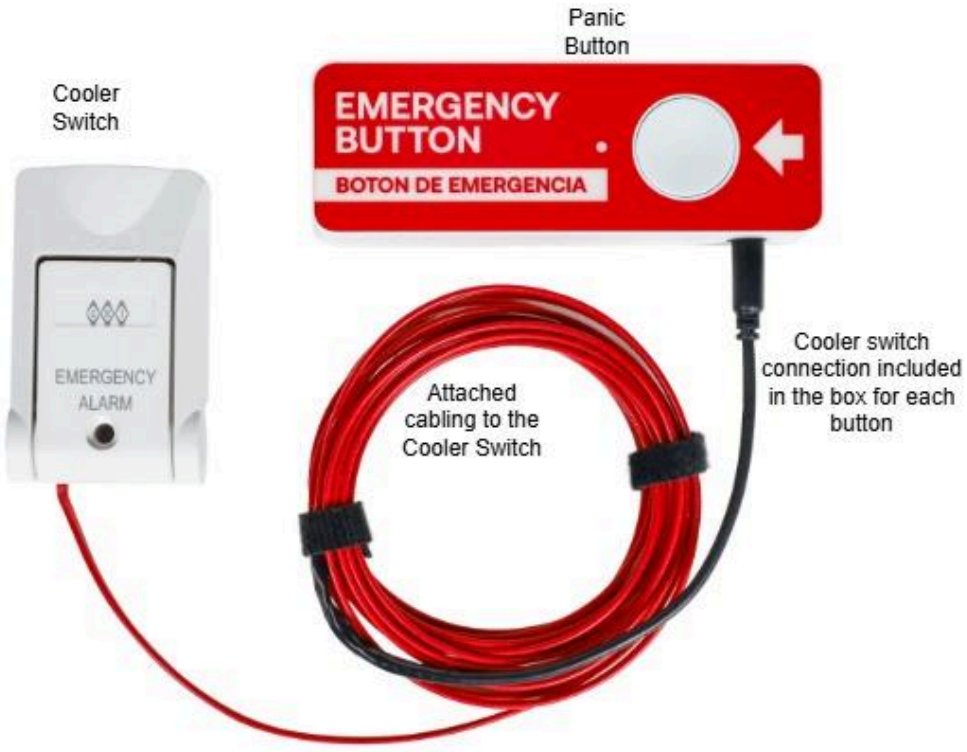
Analog Audio is installed to record audio on either ip or analog cameras.
(Wire type 22 AWG 2 Conductor Stranded Shielded Plenum Cable or Cat5E)

Monitor

The monitor can be used as the customer's PVM to see cameras and for Troubleshooting. Some installs being done will come with a Monitor or Monitors will be provided by the customer. The DVR connections limit this to **two (VGA & HDMI or Display port)** only two of these monitors can be used at a time on any of the older models, **Gen13+ can use all 3.**

To have more than two Monitors a **Thin Client/Decoder** will be needed (**Connections below**)
Setting up the Hanwa Decoder

Panic Buttons



Panic buttons will require a size 00 Philips screw driver , 2 industrial AA batteries, and Industrial Strength Velcro (not covering the screw holes)

Call Envysion to get these set up in the application. 877-258-9441 option 2 for installs

Panic Button Install Videos:

Panic Button Install without the Cooler Switch

Cooler Panic Button & Switch Pre-Install & Setup

Cooler Panic Button & Switch Quick Connection Install

Cooler Panic Button & Switch Full Install

SmartAlarm™ Siren

This siren is a deterrent device that makes loud noises and has flashing lights. Requires a Gen8+ EnVr.

Axis Siren Customer View

Axis Siren Side View

Sirens require POE+ to operate as expected. Connected with Ethernet cabling.

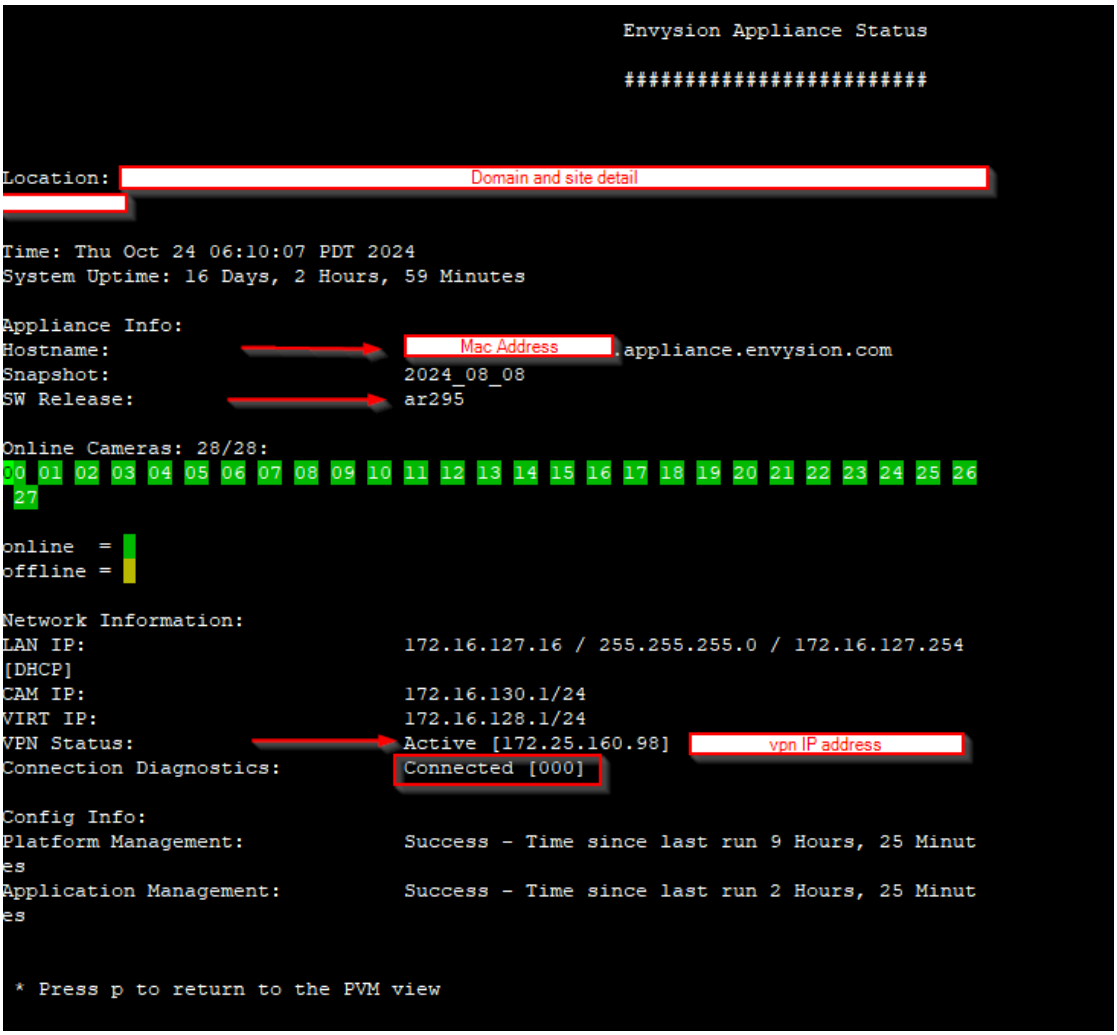
Call Envysion to get these set up in the application.
877-258-9441 option 2 for installs

Siren Install Video

Siren Provisioning Guide Video

Locally Setting IP Address to Static or DHCP if needed

- **Plug a USB keyboard into the back of the EnVR**
- **Plug in a monitor into the EnVR.**



- Press Ctrl-Alt-F3 to bring up a “Notice To Users” and a login prompt

[Setting the EnVR to Static - Video Walkthrough]

When typing the password the screen will not show characters and you cannot use the 10-Key pad

System Log In

case-sensitive username: **ipadmin**

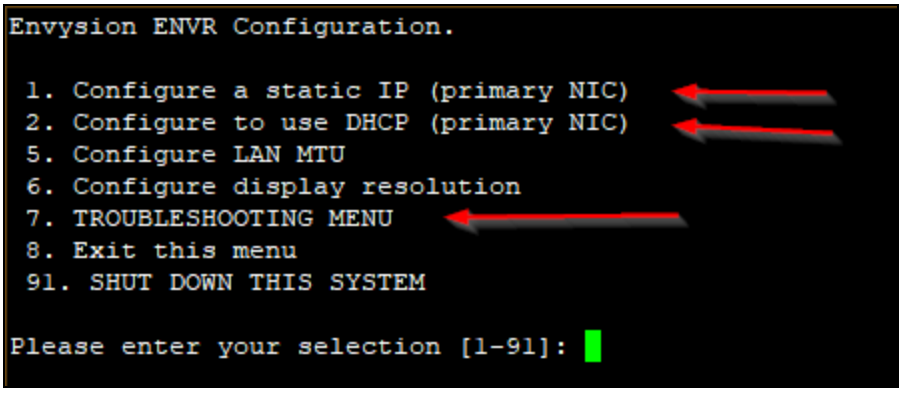
password: **Security.(last 4 digits of the MAC)**

*EXAMPLE:(**Security.fa98**)*

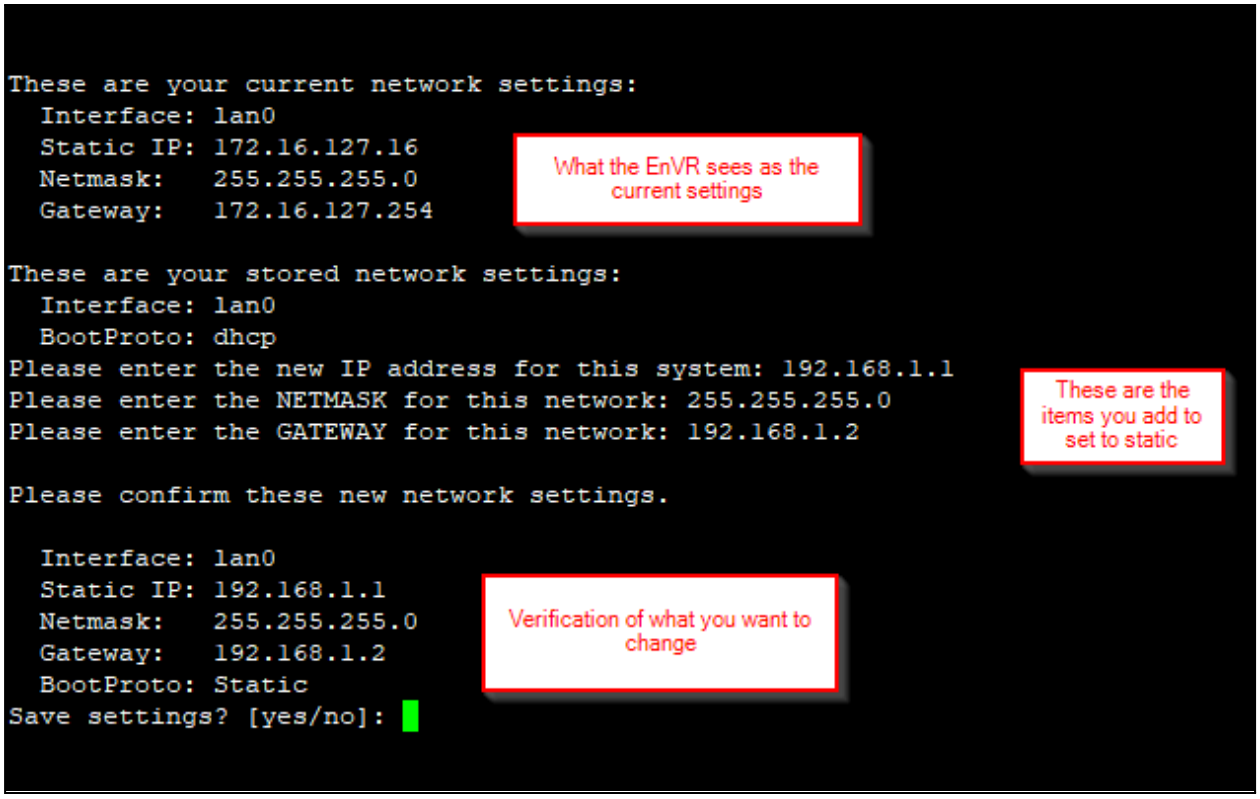
Type 1 and press <Enter> to choose “Configure a static IP(primary NIC)”.

<OR>

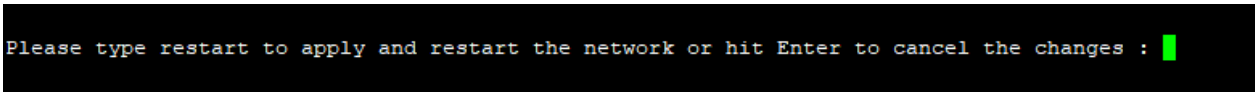
Type 2 and press <Enter> to choose “Configure to DHCP”



Enter the static IP information



Once IP information is entered, confirm the information is correct, and type “yes” and press <Enter> to save the settings.



If no conflicts are found, type “restart” to complete. This will restart only the internet adapter settings, not the whole DVR.

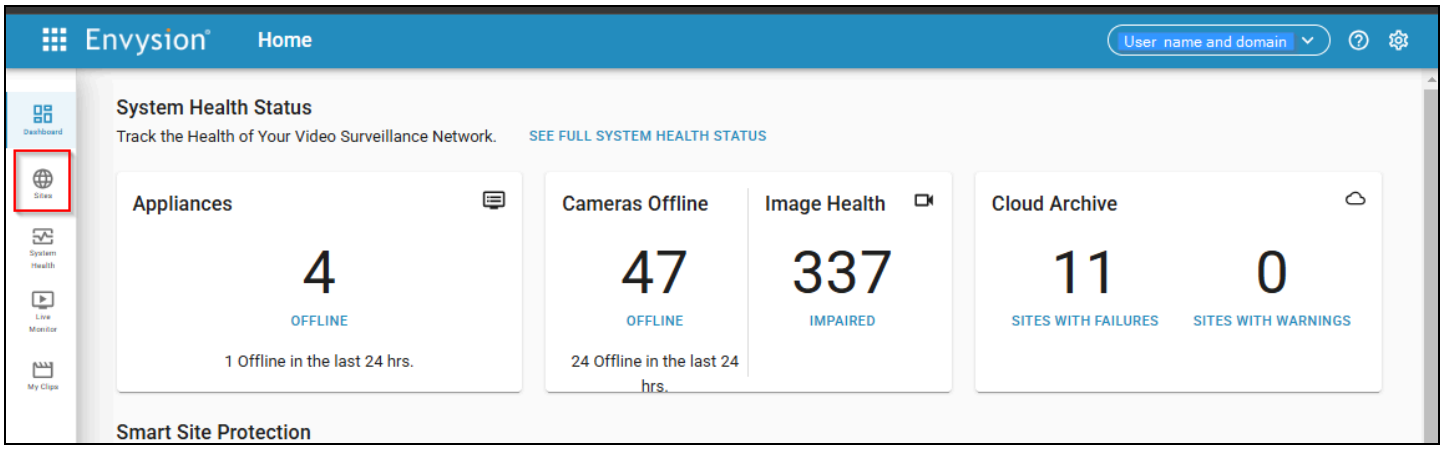
Device Manager (DM) - Camera Provisioning

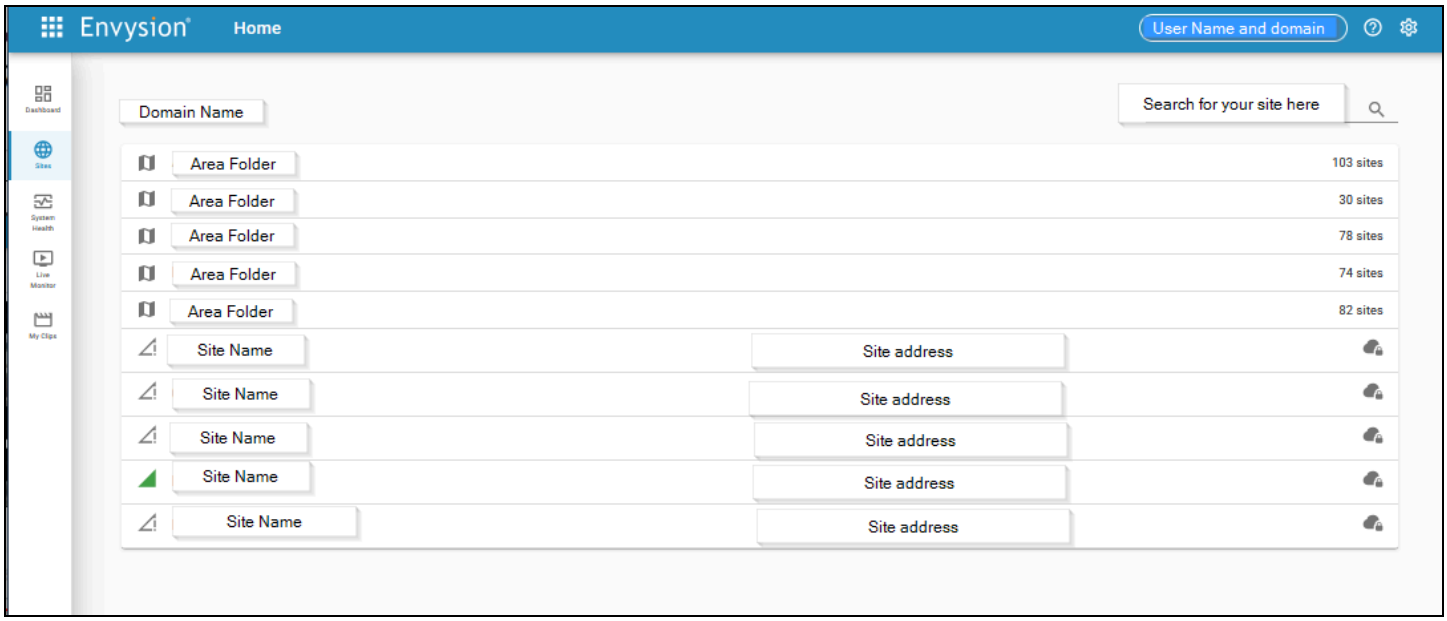
Add New Cameras & Channels to Envysion App

If you are replacing an existing camera please skip to Replace Camera Walkthrough (Page 20)

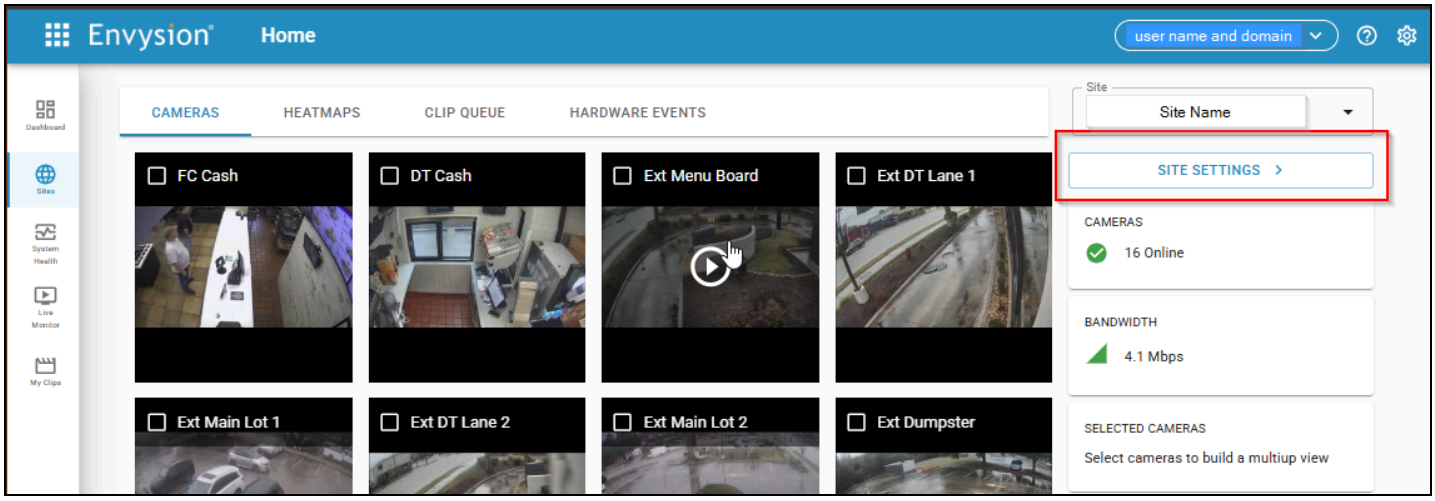
Adding New Managed Cameras - Video Walkthrough

Log into Envysion App, Navigate to your site page.

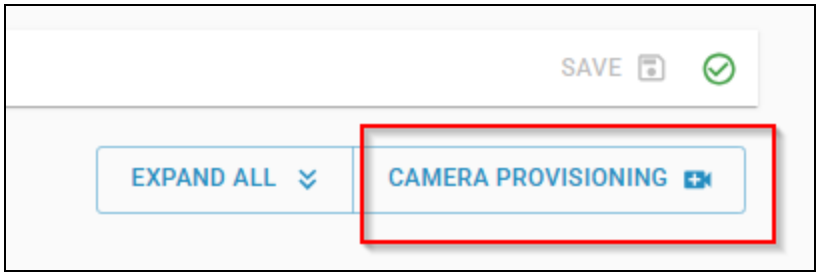




Navigate to Site Settings



Click on the camera provisioning button in the top right corner

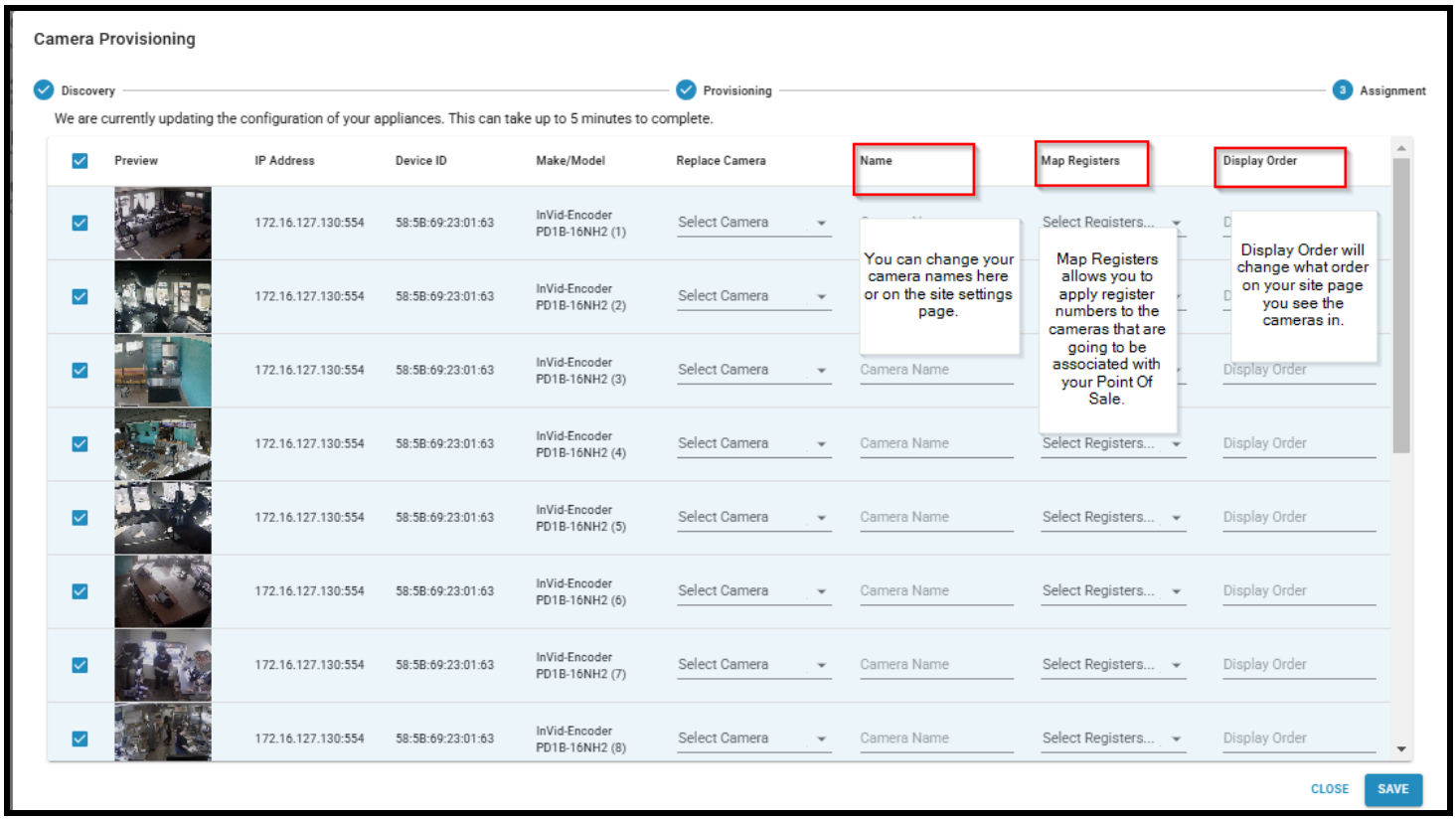


This will take you to the camera provisioning page and scan the network for any onvif or supported cameras currently plugged in and online.

Select the new camera(s) to provision to the site, if they are pre-existing you will need to have the user and password. If you need to keep your ip address click the clipboard icon on each camera, if you need to keep your password set the profile to record only. If the site you are using has a single EnVR hit next. If the site has multiple EnVRs, a list of those EnVRs

will appear. Select a single EnVR to add cameras to, then select Next.

IP Address	Device ID	Make/Model	Recording Device	Desired IP	Profile	Current Password
172.16.126.132	00:04:7D:D5:97:9C	Pelco IMF82-1ES	EnVR 3	Desired IP	Managed	Current Password
172.16.126.133	00:04:7D:4B:CA:C4	Pelco IFV523-1ERS	EnVR 3	Desired IP	Managed	Current Password
172.16.127.130	00:04:7D:4A:49:7D	Pelco IFV523-1ERS	EnVR 2	Desired IP	Managed	Current Password
172.16.127.135	58:5B:69:1C:1D:79	Invid-1 PAR-P5TXIR28-LC	EnVR 1	Desired IP	Managed	Current Password
172.16.127.136	58:5B:69:1C:1F:41	Invid-1 PAR-P5TXIR28-LC	EnVR 1	Desired IP	Managed	Current Password
172.16.127.139	00:04:7D:4B:CA:CB	Pelco IFV523-1ERS	EnVR 3	Desired IP	Managed	Current Password
172.16.127.140	E4-30-22-7B-5D-0D	Samsung QNO-8080R	EnVR 1	Desired IP	Managed	Current Password
172.16.127.141	E4-30-22-73-B7-EC	Samsung QNO-8080R	EnVR 1	Desired IP	Managed	Current Password
172.16.127.142	E4-30-22-73-B7-EA	Samsung QNO-8080R	EnVR 1	Desired IP	Managed	Current Password
[illegible]	[illegible]	Samsung	EnVR 1	Desired IP	Managed	Current Password



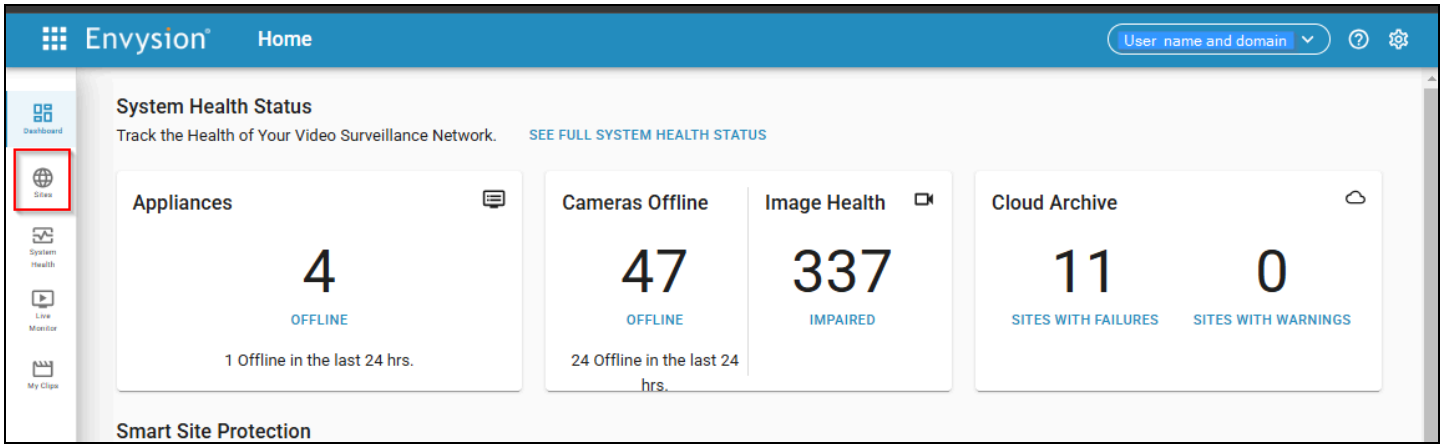
When done with this info hit save on the bottom right corner of the box.

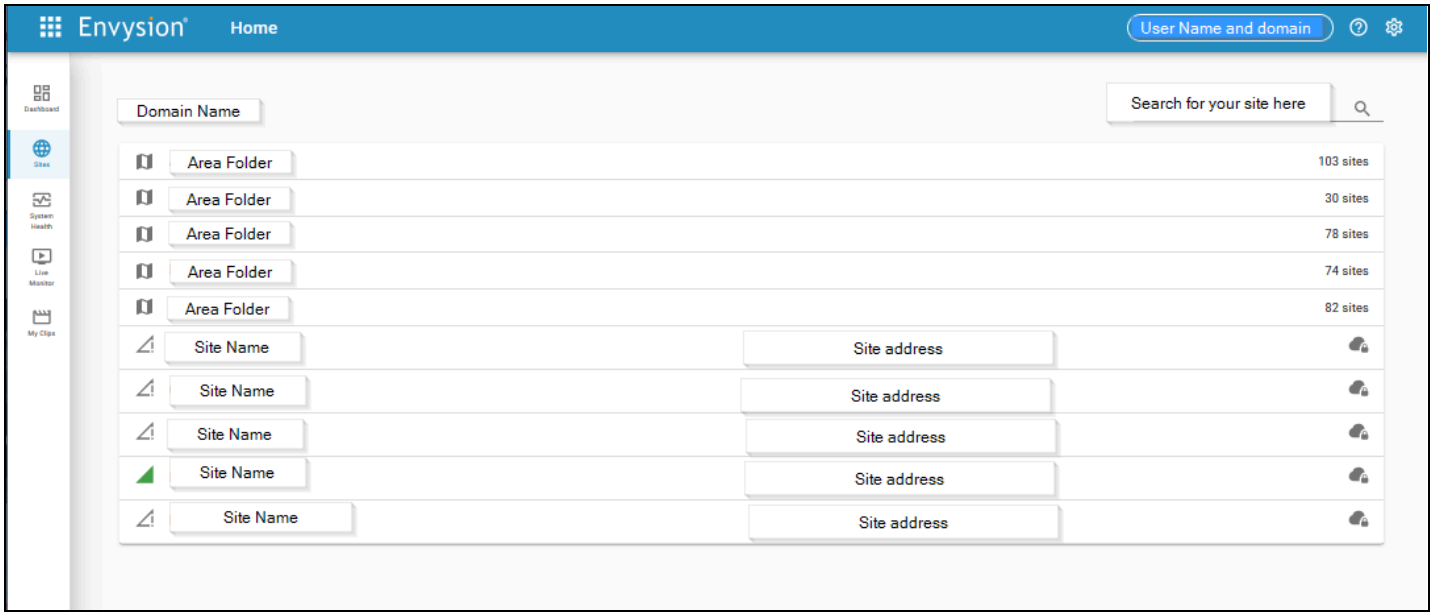
Replacing Camera(s) and Channel(s) on the Envysion App

*****The replace camera functionality is critical to maintain Cloud Archive, Smart Site Protection, and Point of Sale Integration continuity*****

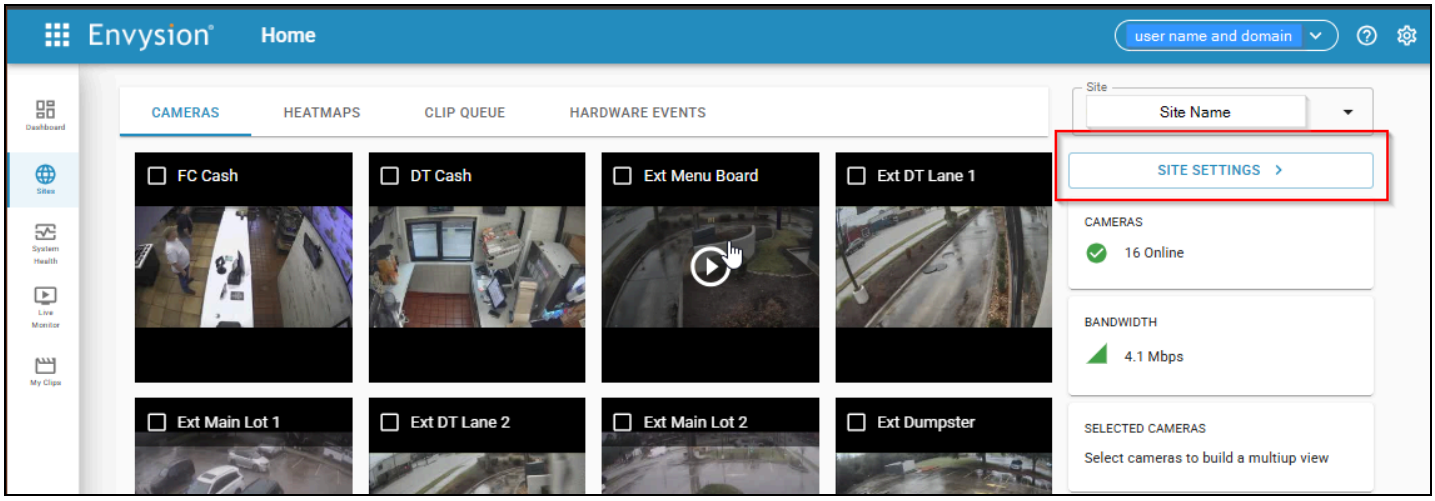
Video Walkthrough Replace Camera

Log into Envysion App, Navigate to your site page.

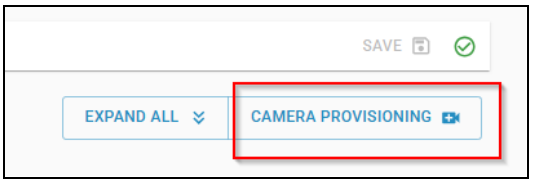




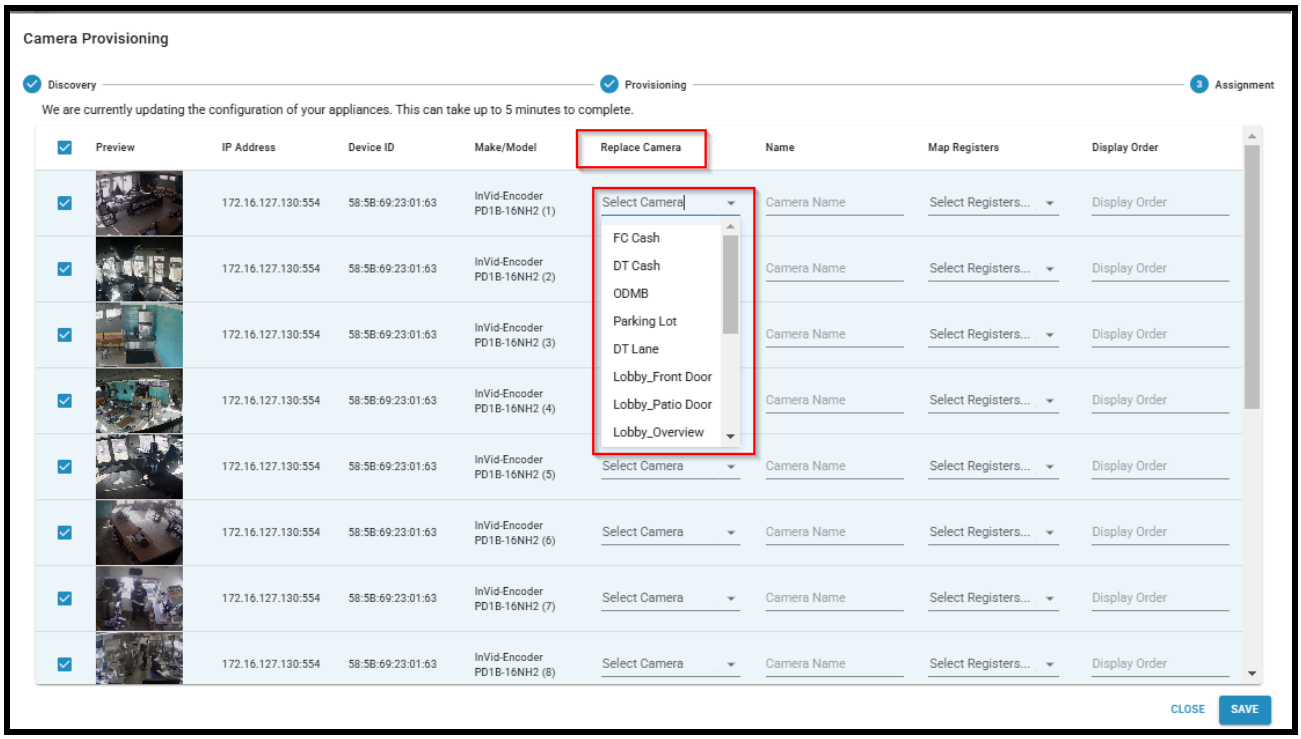
Navigate to Site Settings



Click on the camera provisioning button in the top right corner



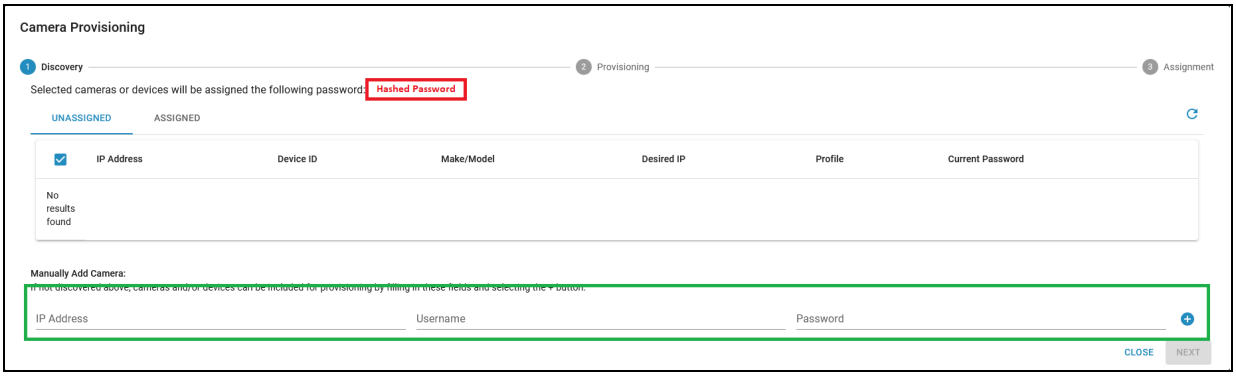
Select appropriate camera(s) to replace from drop down

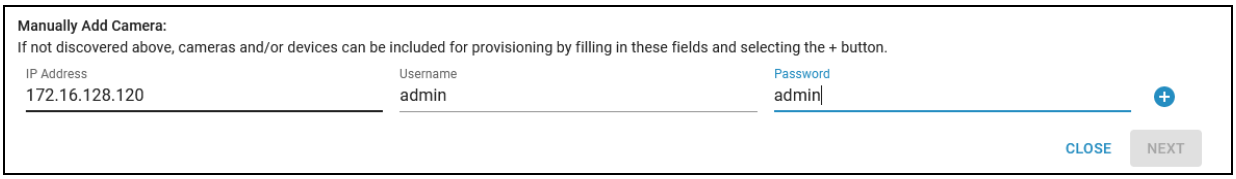


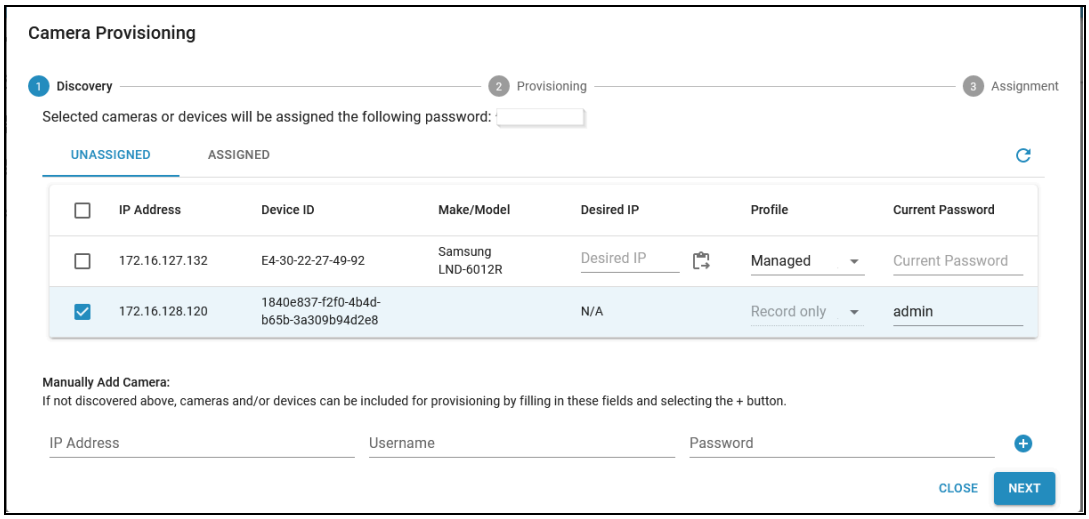
Then hit save

Manually Adding Camera Steps:

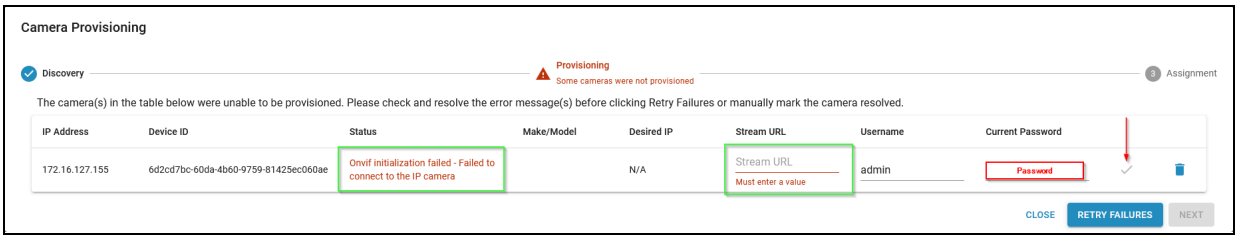
[Manually Provisioning a Camera not discovered by Device Manager]
[Manually Provisioning Unmanaged Cameras]
If you have cameras that are not found but you know the IP for you can **Manually** add them in Device Manager





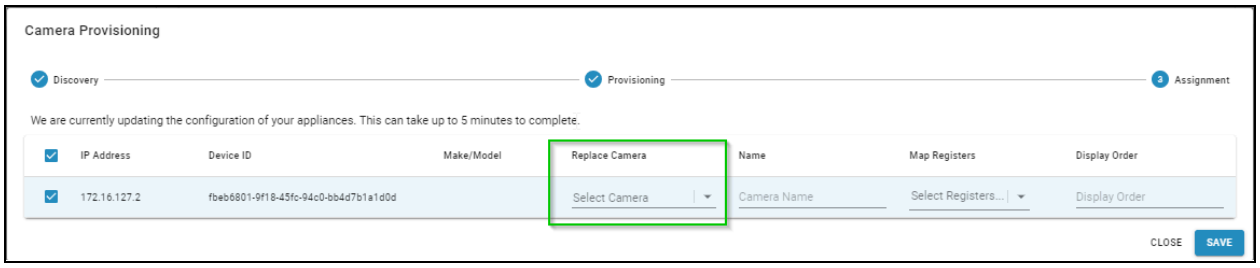


Then Hit Next



Some of the statuses will say something like **Unsupported Camera Make** if you see this you will need to add the RTSP URL for the camera type and click the checkmark button to continue.

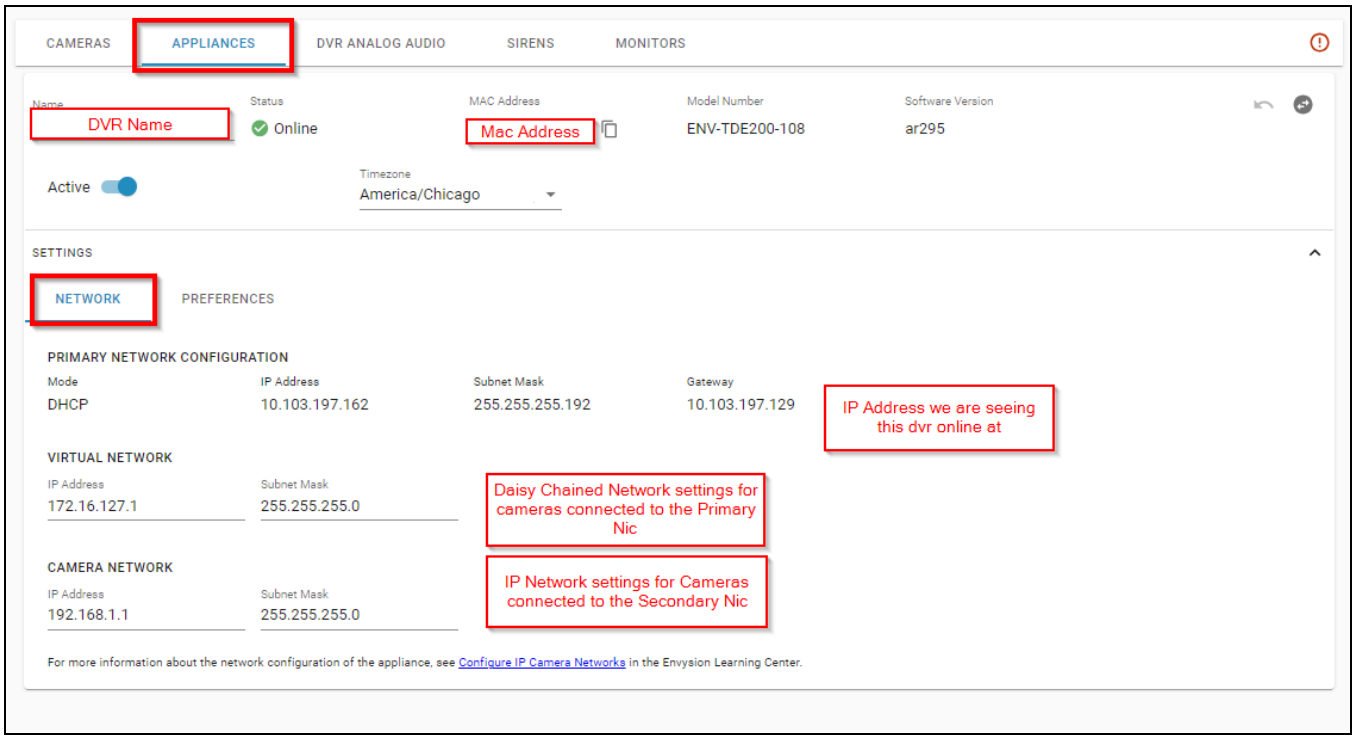
Replace the cameras in Order with the replace camera dropdown. (green box)



Then hit Save.

If for any reason it fails. Please reach out to us through Email or Phone Call.

Email - envysion.installationsupport@motorolasolutions.com
Phone - 877-258-9441 Option 2

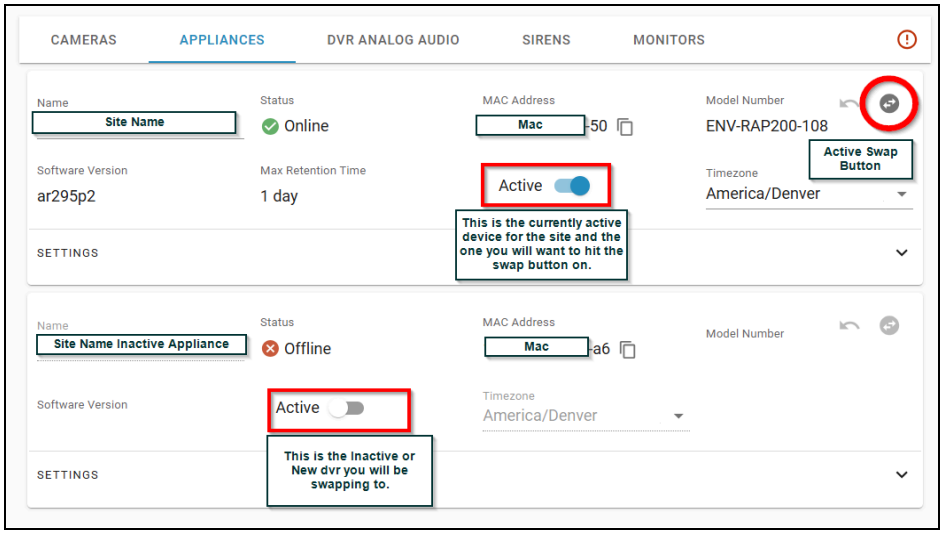


If the cameras are not streaming check the Network settings on the Appliance page. Does the virtual network or Camera network match the ip addresses of the cameras? If not, update them to match and hit save in the top right corner.

Replace a DVR In the Application

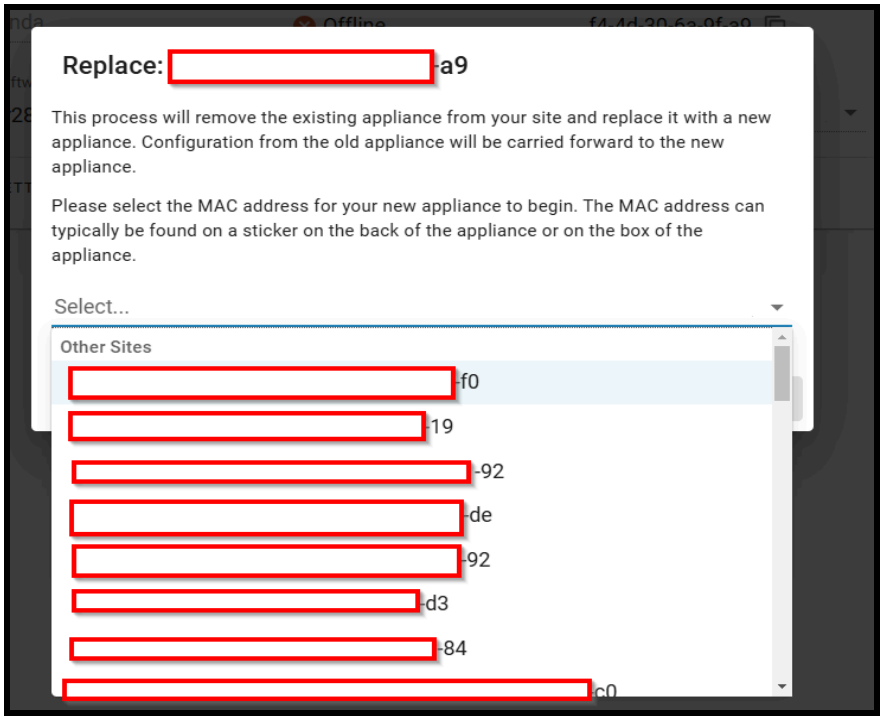
- Log into the Envysion application (https://video.envysion.com)
- Click on Watch Video. And Search for your site.
- Go to Site Settings in the bottom left hand corner of the screen.
- Click on the Appliances tab at the top of the screen.
- The Old DVR Must be the active one and the new DVR Must be Inactive for this to work Properly.
- EnVR Appliance Swap Instruction Video

Click on the active swap icon and start the swap. (Red Circle)



Only inactive appliances from the same domain can be selected. Inactive appliances from the current site are listed first, then appliances from other sites in the domain are listed in alphabetical order. DO NOT change the sliders please.

Once the replacement appliance is selected, click **Replace** to initiate appliance replacement.



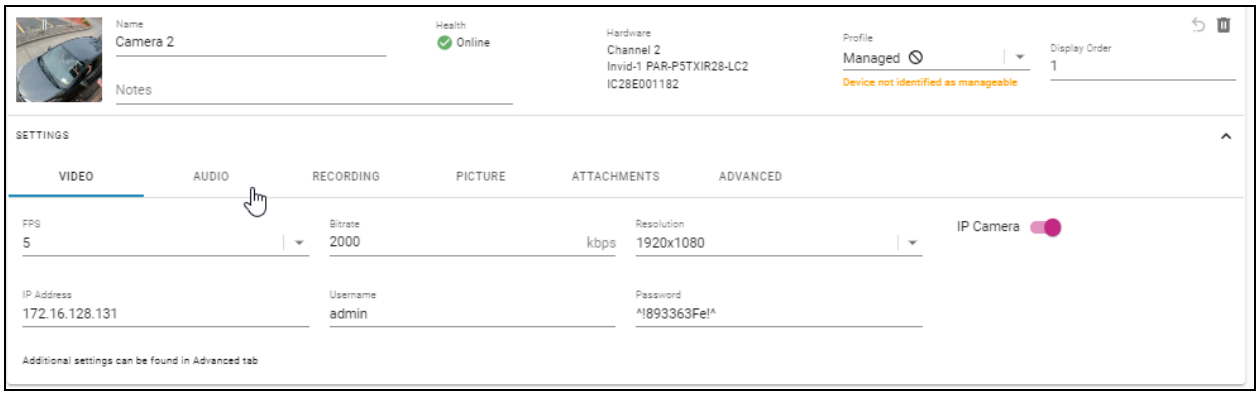
If you do not see the appliance you are trying to switch to here please reach out to us. There is another step on our side that will have to be done first.

If for any reason it fails. Please reach out to us.

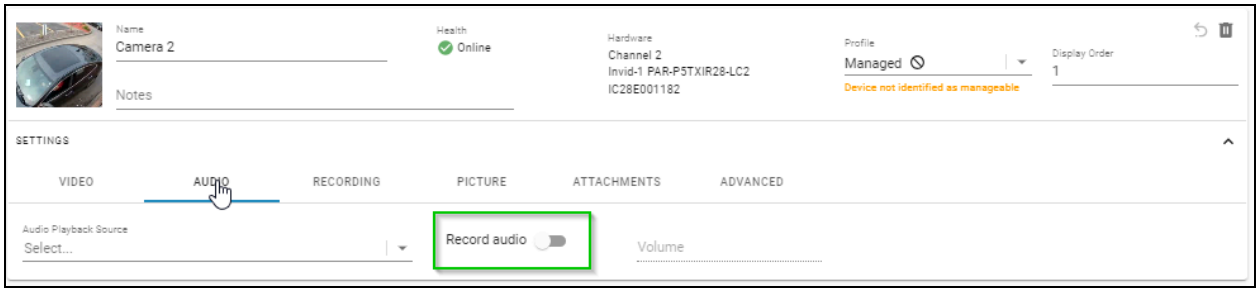
Setting Up Audio In the Application

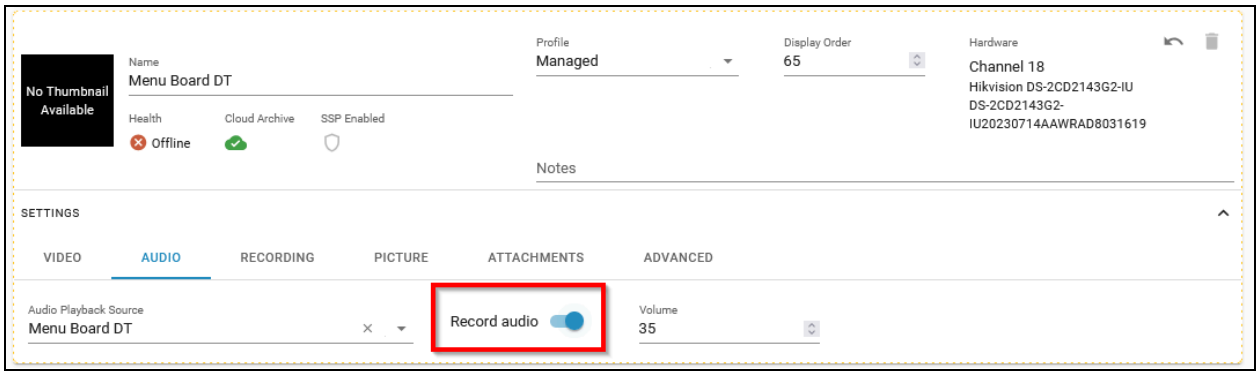
IP (in camera) Audio

There are 2 different types of Audio, Inside the IP camera or Analog audio setup with separate microphones. To set up the In Camera audio expand the settings for the camera and click on the audio tab.



Then click on the Record Audio button. It should bring up the camera name.



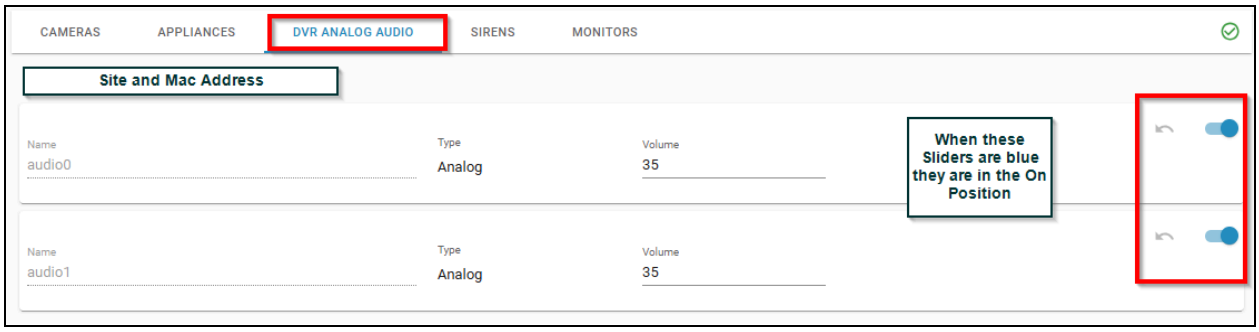


Then hit save at the top of the screen

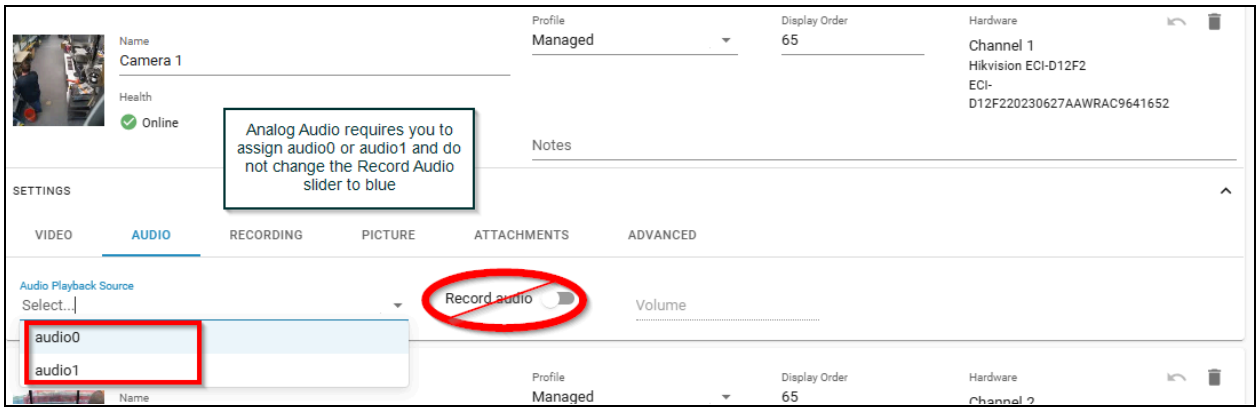
Analog Audio Setup

To set up analog audio in the dvr click on the DVR Analog Audio tab at the top of the screen, and make sure that the sliders are to the right.

You cannot be using both In Camera audio and Analog audio channels at the same time, on the same camera, so make sure in the camera channel that you are not activating the Record Audio Slider.



Then Go into the Cameras and select the audio channel to associate with the camera.

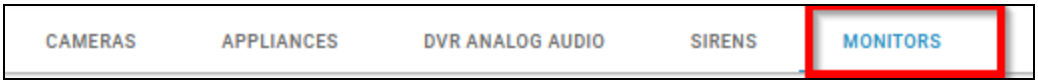


Then hit save at the top of the screen

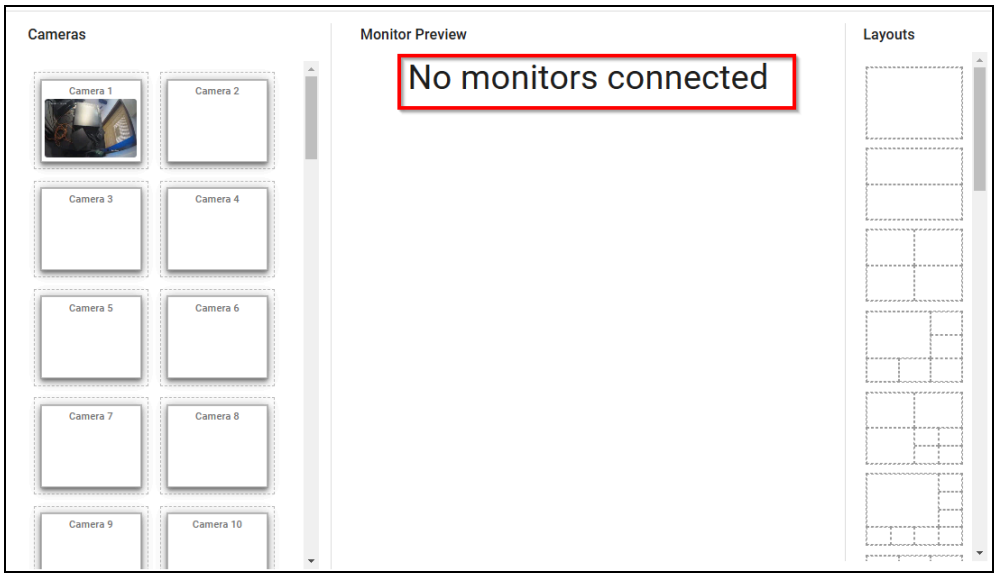
PVM Setup through the App

[Setting up PVM in the app - Video Walkthrough]

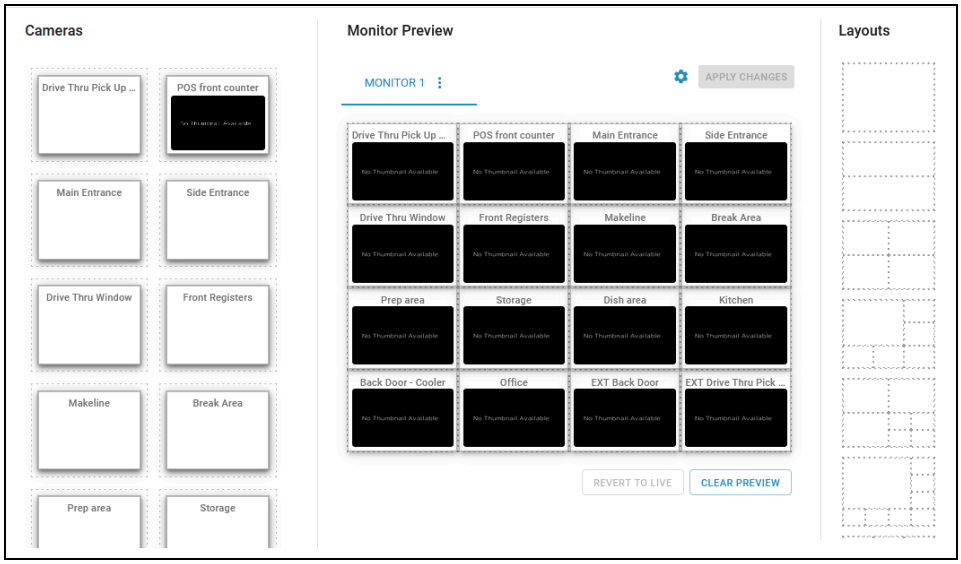
Navigate to “Site settings” on the right side of the site page.. Then at the top of the screen go to the Monitors tab.



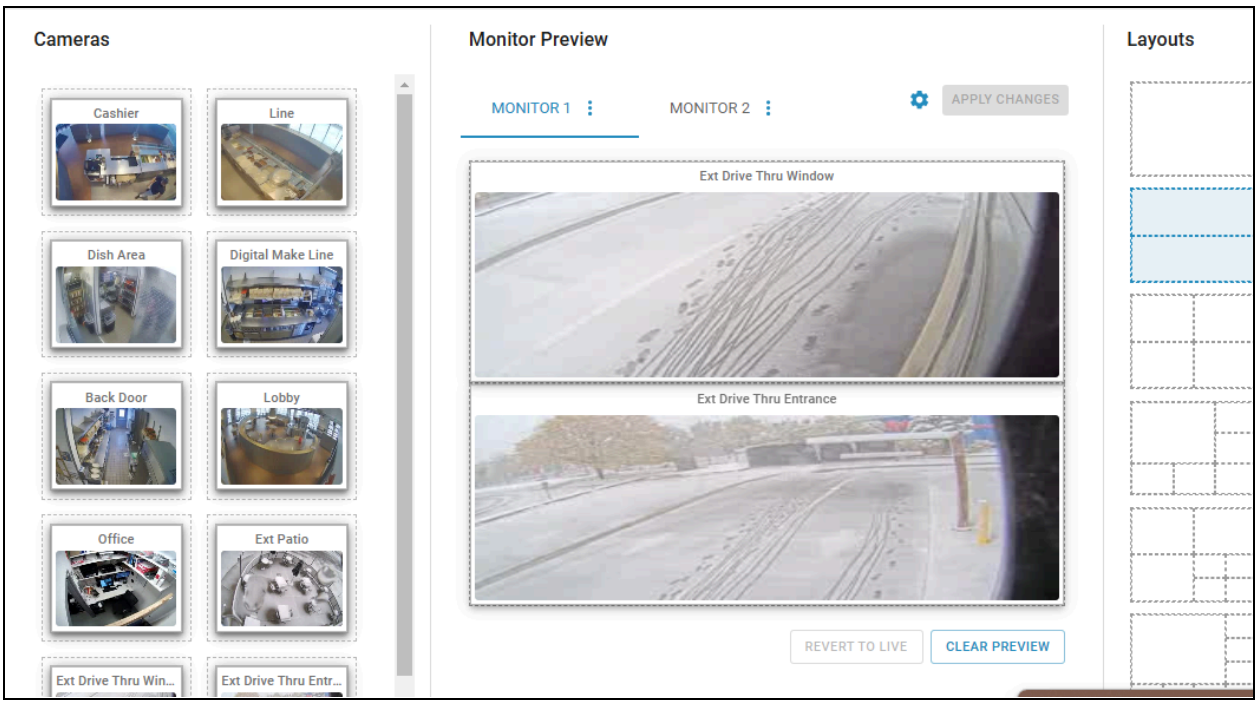
If there is an issue with the EnVR seeing the monitor connection you will see this screen.



Single Monitor:
To change the layout please select the layout desired and Drag/Drop the cameras in the order in which you would like them to appear and hit apply changes.



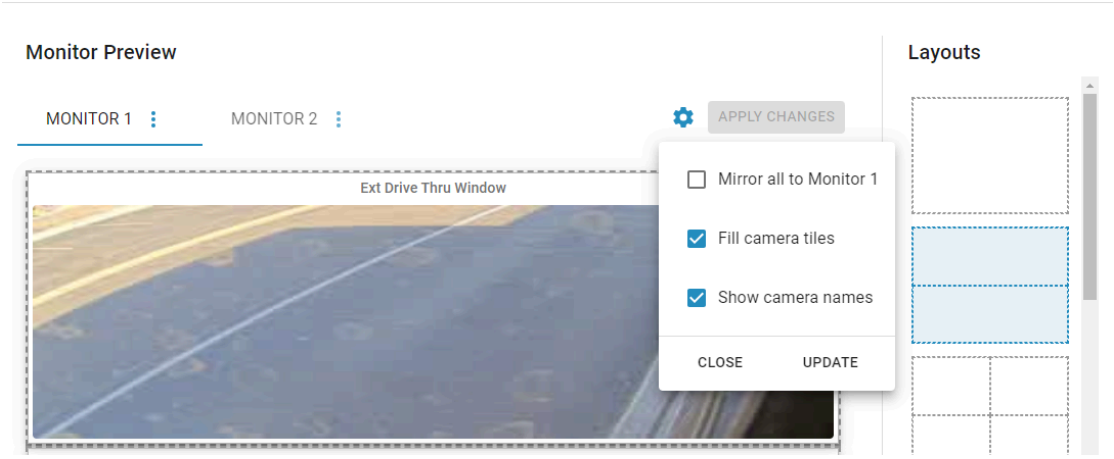
If the site has two monitors and both are detected you will see this screen.



When setting up dual PVM you will toggle through each monitor (1 , 2 &3) and drag/drop each camera to the desired monitor.

Troubleshooting - Mirrored Monitor Views

If you run into the system not being able to apply the setting to the second monitor you will need to go into the gear icon and turn **OFF Mirror all to Monitor** 1 setting



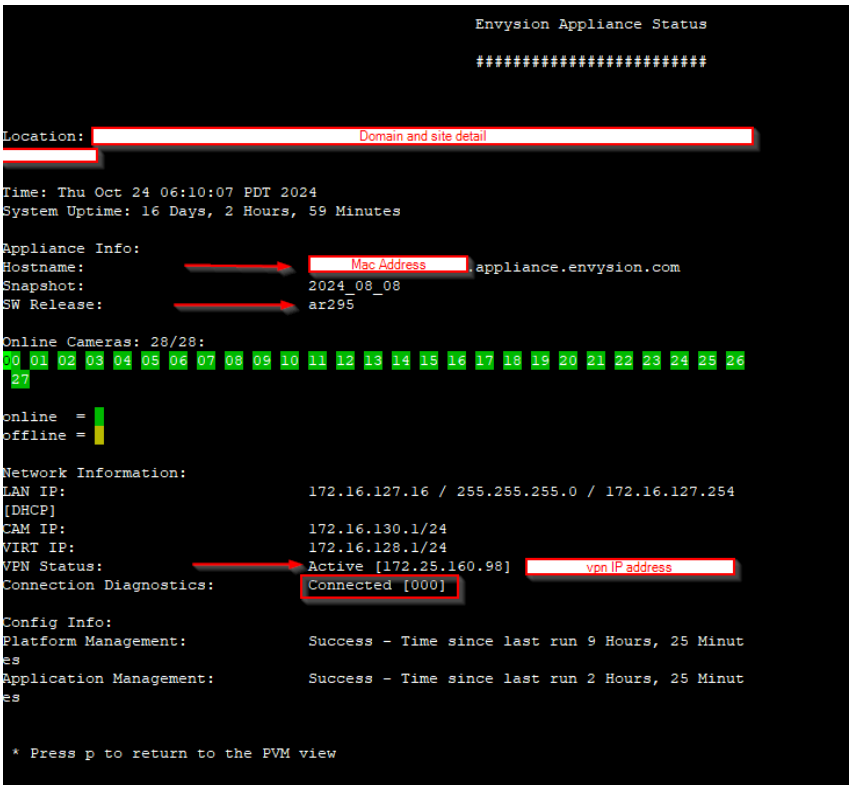
Checking out of a Site

When completing a site we would like you to call us at **877-258-9441 opt 2** to answer a few questions.

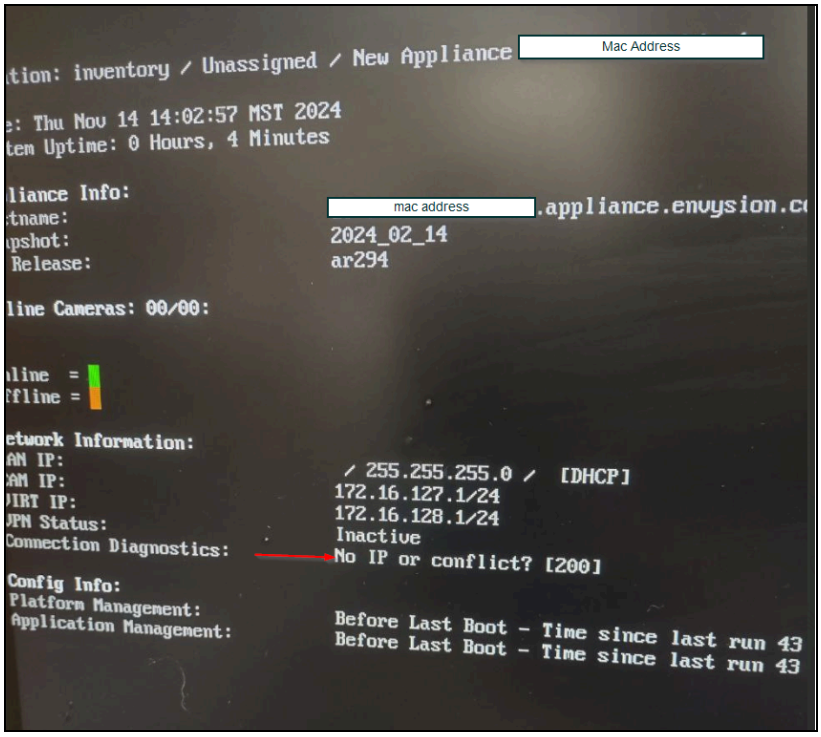
1. What is the Job ID Number, or Store ID Number?
2. What is the Site Name?
3. Is the site using an Encoder or similar device to host Analog cameras?
    a. If yes, where is the power supply for the cameras located?
4. Where is the EnVR located specifically? (i.e. Office in the rack, Network Room mounted on the wall, etc.)
5. What network device is the EnVR NIC1 Primary Motherboard Port plugged into? (This is always a Firewall or Router/Modem not a PoE Switch. With some setups, the EnVR is getting internet through a PoE switch, we still need the Firewall or Router/Modem specifically.)
6. What port on the network device is the EnVR plugged into? (Please specify the port on the Firewall or Router/Modem the primary connection is plugged into.)
7. If there is a PoE switch, how many unused, available PoE ports are remaining? (Not including non-PoE ports, SFP ports or Uplink ports.)
8. Who on site did we verify the installs with? (On-site manager, GC or overseeing manager's full name.)
9. What is the installing technician's full name? (Tech's full name or the overseeing technician's full name.)

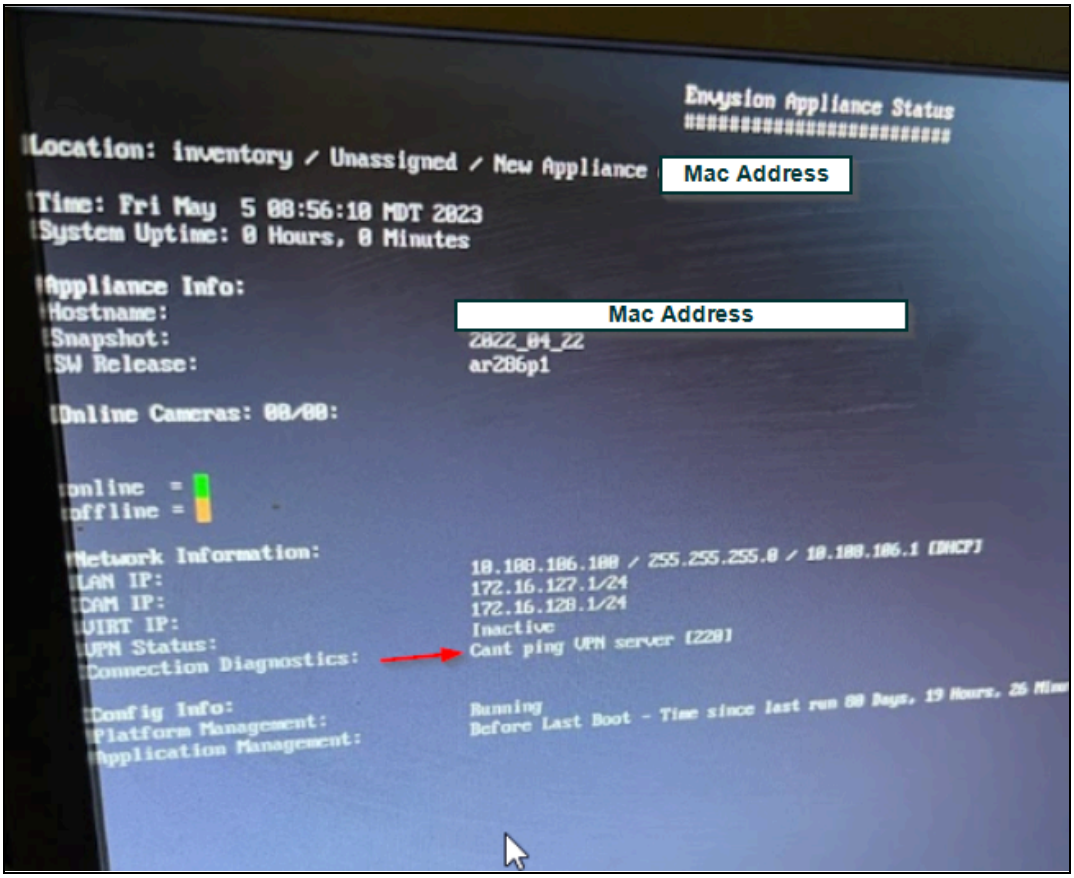
Troubleshooting

There are status codes visible with a monitor connected to the EnVR that will guide us in next steps in the process for troubleshooting when we cannot connect remotely to the unit.

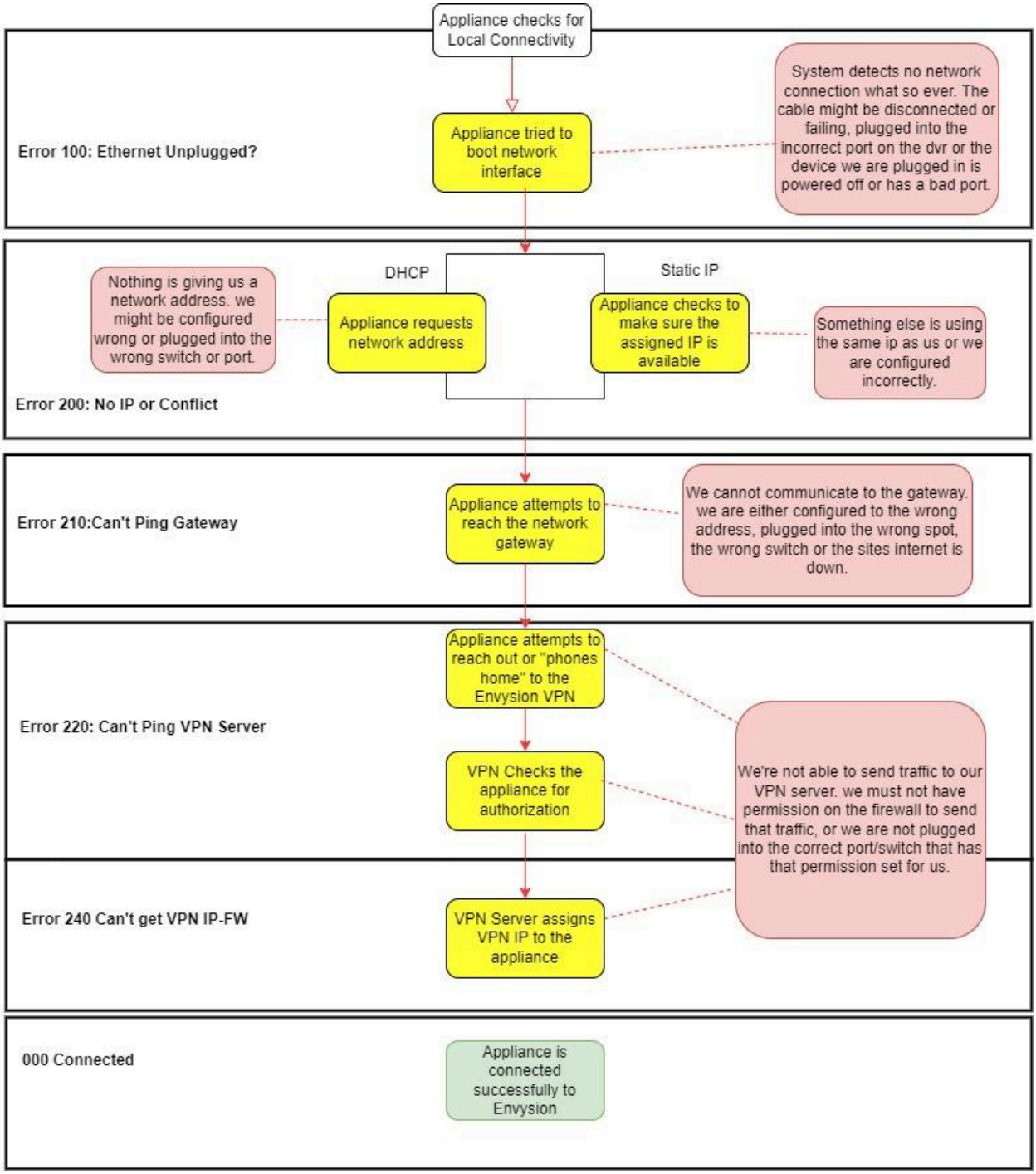


This connection diagnostics status is GOOD


Mac Address
tion: inventory / Unassigned / New Appliance
: Thu Nov 14 14:02:57 MST 2024
tem Uptime: 0 Hours, 4 Minutes
liance Info:
tname:
pshot:
Release:
mac address
.appliance.envysion.c
2024_02_14
ar294
line Cameras: 00/00:
line =
ffline =
etwork Information:
AN IP:
AM IP:
IRT IP:
PN Status:
Connection Diagnostics:
/ 255.255.255.0 / [DHCP]
172.16.127.1/24
172.16.128.1/24
Inactive
No IP or conflict? [200]
Config Info:
Platform Management:
Application Management:
Before Last Boot - Time since last run 43
Before Last Boot - Time since last run 43


Envysion Appliance Status
Location: inventory / Unassigned / New Appliance
Mac Address
Time: Fri May 5 08:56:10 MDT 2023
System Uptime: 0 Hours, 0 Minutes
Appliance Info:
Hostname:
Snapshot:
SW Release:
Mac Address
2022_04_22
ar206p1
Online Cameras: 00/00:
online =
offline =
Network Information:
LAN IP:
CAM IP:
VIRT IP:
VPN Status:
Connection Diagnostics:
10.100.106.100 / 255.255.255.0 / 10.100.106.1 [DHCP]
172.16.127.1/24
172.16.128.1/24
Inactive
Cant ping VPN server [220]
Config Info:
Platform Management:
Application Management:
Running
Before Last Boot - Time since last run

These are just a few examples, here are the steps to the errors you will see: [EnVR Error Codes - Video Walkthrough]



Port and IP Address Configuration for Whitelisting

For a company with highly restricted network access, additional configuration will be required to allow access to Envysion. If your company has a strict corporate firewall, network access list, or proxy server that blocks all Internet access, please have your network administrator add rules to permit the following ports and/or IP addresses to allow access to Envysion.

APPLIANCE connection from store location requires the following:
TCP port 443 and UDP port 22799 to the following IP addresses:

- 3.227.250.16/28 3.227.250.16 – 3.227.250.31
- 98.142.144.0/20 98.142.144.1 – 98.142.159.254
- 2620:C3:E000::/44

TCP port 443 (IP addresses are set by Amazon Web Services and may change without notice – last updated June 11, 2024)

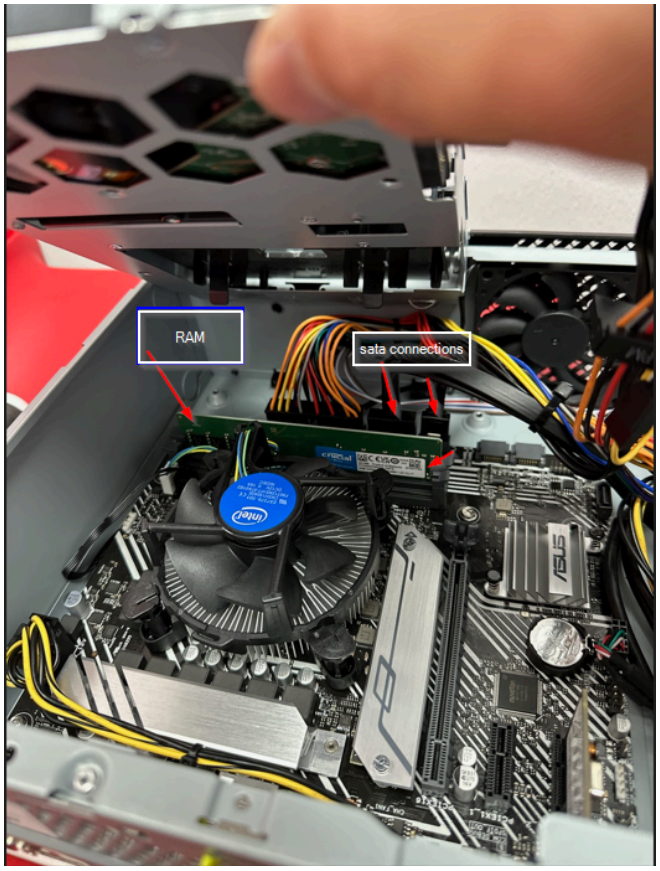
- 18.34.0.0/19 18.34.0.1 – 18.34.31.254
- 16.15.192.0/18 16.15.192.1 – 16.15.255.254
- 54.231.0.0/16 54.231.0.1 – 54.231.255.254
- 52.216.0.0/15 52.216.0.1 – 52.217.255.254
- 18.34.232.0/21 18.34.232.1 – 18.34.239.254
- 16.15.176.0/20 16.15.176.1 – 16.15.191.254
- 16.182.0.0/16 16.182.0.1 – 16.182.255.254
- 3.5.0.0/19 3.5.0.1 – 3.5.31.254
- 44.192.134.240/28 44.192.134.241 – 44.192.134.254
- 44.192.140.64/28 44.192.140.65 – 44.192.140.78

Additional Services:
HTTP Proxy and OpenVPN application access from our system to the specified IP ranges above.

User access:
User access to the web application requires TCP port 443 to the addresses *.envysion.com and *.appliance.envysion.com. The IP addresses these names resolve to, may change over time.

Physical Connection Troubleshooting

If you do not see anything on the monitor, not even the boot up screens, then we will need to reseat (remove and reinsert) the RAM chips and Sata Connections (both ends) Inside of the dvr. Reseating Hardware in The EnVR



If EnVR fails out of box:

Immediately contact Envysion Install Support in order to request replacement EnVR for the site. Please be ready to troubleshoot further as we may need to reseat the ram and sata cables, or check the ip setup. A monitor and keyboard are necessary for these checks. We will have to determine that it is DOA to set up the replacement.

Contact Us:

1. Email Us
2. Call Us: Monday - Friday 6a - 6p MT
   877-258-9441 Option 2
3. Virtual Learning Center

Appendix: Helpful Resources

- Page 11:
  - Setting up the Hanwa Decoder
- Page 12:
  - Panic Button Install without the Cooler Switch
  - Cooler Panic Button & Switch Pre-Install & Setup
  - Cooler Panic Button & Switch Quick Connection Install
  - Cooler Panic Button & Switch Full Install
- Page 13:
  - Siren Installation Video
  - Siren Provisioning Guide Video
- Page 14:
  - Setting the EnVR to Static
- Page 17:
  - Video Walkthrough Adding Managed Cameras
  - Video Walkthrough Replace Camera
- Page 22:
  - Manually Adding a Camera that the Device Manager did not find.
  - Manually Adding Cameras That Are Found By Device Manager but not Managed
- Page 24:
  - EnVR Appliance Swap Instruction Video
- Page 27:
  - Video Walkthrough Setting up PVM in the app.
- Page 31:
  - EnVR Error Codes
- Page 33:
  - Reseating Hardware in The EnVR

Additional Video Resources:

- Cat 5 / Cat 6 Termination Video || Cat5/6 Step By Step Instruction Guide
- BNC Crimp Connector Video || BNC Compression Connector Video || BNC Step by Step Instruction Guide
- CCTV Camera Spot Monitor and Tester Video
- Ethernet Cable Tester Video
- Multimeter Usage Instruction Video || Multimeter Step by Step Instruction Guide
- Pelco Camera Soft Reset Video Walkthrough || Pelco Camera Hard Reset Video Walkthrough