Eagle Eye Application Note - AN058

How to Perform Cloud Video Replication with Eagle Eye Camera Direct

2024-03-22 Revision 1.0

Target Audience

This Application Note is intended for installers and technicians who want to implement Cloud Video Replication on the Eagle Eye Cloud VMS while adding Camera Direct cameras, which are direct-to-cloud and do not require a Bridge/CMVR.

Introduction

Cloud Video Replication allows you to add cameras to an Eagle Eye Cloud VMS account while simultaneously streaming them to a third-party VMS. Camera Direct is a way to add cameras to the Eagle Eye account without the use of an Eagle Eye Bridge/CMVR. By combining these two features, users will be able to offload critical cameras to the cloud while still viewing them on their local VMS.

Background

Cloud Video Replication with Eagle Eye Camera Direct is targeted to users who already have a VMS but need to add a few cameras (four or fewer) to the Eagle Eye Cloud for storage, management, and security. Qualifying cameras must support Eagle Eye Camera Direct and have the ability to provide enough streams for both the Eagle Eye Cloud VMS and the existing third-party VMS.

Eagle Eye Cameras Supported By Eagle Eye Camera Direct

Eagle Eye Camera Direct is currently available with all 4MP fixed-lens Eagle Eye Networks cameras. Please confirm with your sales representative before making a purchase or if you'd like to use Camera Direct with a camera that may not be supported.

How To Add a Camera Direct Camera

To add a Camera Direct camera to the Eagle Eye Cloud VMS:
1. Connect the camera to the internet.
2. Go to the Eagle Eye Cloud VMS and log in with your account credentials.
   a. Note that this can also be done from the Eagle Eye View Mobile App
3. Click on the three dots in the top right, and click on 'Add Camera Direct.'

4. Fill in the details (Camera Name, MAC Address) in the 'Add a Device' pop-up, and click on 'Add Camera.'
   a. Note that from the Mobile App, you have the capability to scan the QR Code from the camera to auto-populate the camera's MAC address to save time.
5. The Camera Direct camera will be added to your Eagle Eye Cloud VMS account. Initially it will be listed as offline, but within a couple minutes it will be marked with a green checkmark.

Note: To access a Camera Direct camera's web interface, you need to be on the same local network as the camera and connect using the camera's web UI. To do this, you'll need the IP address and the credentials of the camera, which are available in the Camera Settings tab.

Firewall Rules and Required TCP Ports

All connections are outbound-only, which means that they never accept inbound connections (so you do not need to set up NAT rules as a general rule).

Camera Direct uses the following TCP ports:
- TCP 80: Used to discover video termination endpoints in the cloud
- TCP 443: Used to discover video termination endpoints in the cloud

- TCP 8181: Used to transfer video to the cloud

Eagle Eye Camera Direct Subnets:
1. dispatch1v1.cameramanager.com
2. dispatch1v1.eagleeyenetworks.com
3. dispatch2v1.cameramanager.com
4. dispatch2v1.eagleeyenetworks.com
5. 192.40.4.124
6. 192.40.5.26

For additional information regarding firewall configuration for secure networks, please refer to the Knowledge Base article on this topic that can be found using the following hyperlink: https://support.een.com/portal/en/kb/articles/firewall-configuration-for-secure-networks.

Cloud VMS Limitations with Camera Direct

License Plate Recognition/Vehicle Surveillance Package (LPR/VSP), 2-Way Audio, Analytics (Line Crossing, People Counting, etc.), and Camera Tunneling are not supported at present. However, Motion Detection and AI-driven functionalities like Smart Video Search and Smart Layouts, along with the Brivo Access integration, all function as expected with Camera Direct.

Adding The Camera Back To The Third-Party VMS

Once the camera is added to the Cloud VMS via Camera Direct, you can add the camera back to your third-party VMS using the user credentials created to add the camera to the Eagle Eye account. You will find the credentials of the camera under camera settings in the Information section.
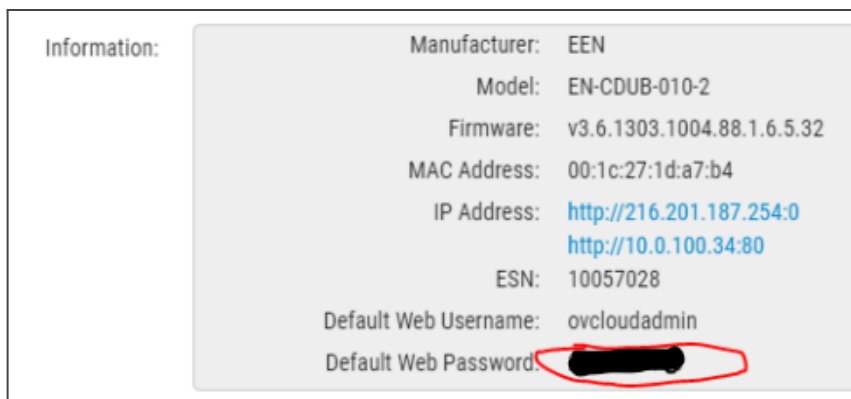
Considerations For Existing Cameras

- If your camera is not new as of November 2023, it may require an update.
- For third-party cameras that now support Camera Direct, you will need to remove them from the third-party VMS and update them with the latest firmware version.
- Once your camera is updated and removed from the third-party VMS, initiate a restart of the camera.
- After the camera restarts, add it to the Eagle Eye Cloud VMS account via Camera Direct.
- Once the camera is online via Eagle Eye Camera Direct, add it back to the third-party VMS using the supplied credentials from Eagle Eye Cloud VMS Camera Settings (see above).