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Avigilon Control Center™ System Integration Guide

for Edesix VideoManager

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Introduction

The Avigilon Control Center (ACC) system integration with Edesix VideoManager allows VideoManager to pass live streams and recordings from body-worn cameras to ACC. You can connect ACC to VideoManager, using VideoManager's ONVIF-compliant interface.

You need one camera channel in ACC to connect to VideoManager.

> **Important:** The connection between ACC and VideoManager is unencrypted and must be secured. This may be done by segmenting your network, having a VPN tunnel between ACC and VideoManager, or by some other applicable measures to secure the connection between ACC and VideoManager.

Requirements

Vendor	Requirements
Avigilon	ACC Server software 7.14.0 or later
Avigilon	ACC Client software 7.14.0 or later
Avigilon	ACC 7 Standard or Enterprise edition license
Edesix	VideoManager 15 or later

Make sure the ACC Server and Client meet the system requirements listed on **avigilon.com/products/acc/system-requirements**.

For More Information

For more information about the procedures outlined in this guide, refer to the following documents:

- *Avigilon Control Center Client User Guide*
- *Avigilon Control Center Server User Guide*
- *Edesix VideoManager Administrator Guide*

Configuring VideoManager

VideoManager must be configured to stream video outputs of body-worn cameras and to enable ONStream, VideoManager's ONVIF interface, before connecting to ACC.

Configuring Streaming

Body-worn cameras must be configured on VideoManager's web interface to live stream before connecting to ACC.

The high-level steps to configure live streams on VideoManager are:

1. Configure firewalls — This step is only necessary if VideoManager is configured to use anything other than its default port or if VideoManager is set up on a public network.
2. Configure the VideoManager public address.
3. Create a WiFi profile which can be used for streaming.
4. Assign a body-worn camera to a user, and begin streaming footage.

To learn more about configuring live streams on VideoManager, see the **VideoManager Administration Guide**.

Configuring ONStream

ONStream enables body-worn cameras to send a live stream to VideoManager over WiFi. ONStream must be configured on the VideoManager web interface before connecting to ACC.

To configure ONStream on the VideoManager web interface:

1. Click **Admin** in the top menu.
2. Click **Connectivity** in the left panel.
3. Click **ONStream**.
4. Toggle **ENABLE ONSTREAM** to ON.
5. From the **VIDEO CODEC** drop-down list, select which codec will be used to compress the live streams between body-worn cameras and ACC. The options are MPEG4 or H264.
6. From the **AUDIO CODEC** drop-down list, select either AAC or G.711 μ-law.
7. From the **AUTHENTICATION MODE** drop-down list, select whether additional credentials must be entered when VideoManager is connecting to ACC.
   - **None** — No additional authentication is required.
   - **Basic** — You will be prompted to create login credentials. You will need these credentials when configuring ACC.

8. From the **MULTI DEVICE MODE** drop-down list, can select whether VideoManager presents itself as a single multi-channel encoder, or multiple encoders.

- **Off** — Select this if ACC will be used with 16 or fewer body-worn cameras.
- **IP addresses** — Select this if ACC will be used with more than 16 body-worn cameras. With this, you must also configure multiple IP addresses on your host computer.

9. In the **RTSP PORT** field, enter the port number that VideoManager will use to pass streams to ACC. By default, it is 554.

> **Tip:** You may need to change the default port if any software on the same machine as VideoManager is using port 554. This may also be the case if there are other RTSP cameras connected to the system.

10. Toggle **ALLOW HISTORIC FOOTAGE FETCH** to **ON** to enable the ONVIF Profile G interface. This allows ACC to access and copy all footage on VideoManager.

> **Note:** This process will not start until you configure ACC to retrieve historic footage from VideoManager.

> **Important:** Enabling this option will permit ACC to retrieve restricted footage as well.

11. Click **Save Settings**.

Creating and Resetting Outputs

Outputs determine how streams from individual users and body-worn cameras on VideoManager are mapped onto channels in an ONVIF compatible multi-channel encoder. There must be one output for every user or body-worn camera that will stream to ACC.

1. Click **Admin** in the top menu.
2. Click **Connectivity** in the left panel.
3. Click **ONStream**.
4. Under Outputs, click **Create**. The Create ONStream Outputs window opens.
5. Enter the required number of outputs and click **Confirm**.

> **Tip:** If VideoManager and the PC running VideoManager have been configured to host multiple IP addresses, you can only add a limited number of outputs for each configured IP address and the ACC system licences (e.g. 16 outputs for each configured IP address).

6. Select the type of output to be created:

  - **Device** — Streams will correspond to the body-worn camera specified, regardless of the operator using the body-worn camera. Enter the body-worn camera serial number. VideoManager will suggest serial numbers which match the one entered.

  - **Operator** — Streams will correspond to the operator specified, regardless of the body-worn camera used to stream footage. Enter the username of an operator on VideoManager.

7. Click **Save Settings**.

> **Important:** If you need to change the number of outputs after creating the outputs, the created outputs need to be reset. Existing outputs will not be affected if the total number of outputs is raised. However, if the new number of outputs is lesser than the previous number, some outputs will be deleted to match the new number.
>
> 1. Click **Admin** in the top menu.
> 2. Click **Connectivity** in the left panel.
> 3. Click **ONStream**.
> 4. Under Outputs, click **Reset**.
> 5. Enter the new required number of outputs and click **Confirm**.

Configuring the ACC System

Once VideoManagr is configured, you need to configure ACC to connect to VideoManager. Connecting VideoManager to ACC requires one camera channel in ACC.

1. In the New Task menu ☰ , click **Site Setup**.

2. Click the site name, then click **Connect/Disconnect Devices** 📹 .

3. If ACC automatically discovers VideoManager, it will be displayed in the Discovered Devices area. If not, add VideoManager to ACC manually:

    a. In the site Setup tab, click 📹 .

    b. In the top-left corner, click **Find Device...**.

    c. From the **Device Type:** drop-down list, select ONVIF.

    d. In the **IP Address** field, enter the VideoManager public address or domain name.

    e. In the **Control Port:** field, change the port to 8101. It is same for all the instances of VideoManager.

    f. If a username and password was configured in the VideoManager web interface, select the **Apply credentials to all uninitialized devices.** check box and enter the username and password as configured in the VideoManager web interface.

    g. Click **OK**. VideoManager is recognized by the system and appears in the Discovered Devices list.

4. In the Discovered Devices pane, select the discovered VideoManager instance and click **Connect...**. If successful, VideoManager will appear in the Connected Devices pane.

You can now view the outputs that were configured on VideoManager in ACC.

> **Note:** Outputs assigned to users in the VideoManager web interface will appear as cameras in ACC.

Verifying the Integration

After the integration is installed and configured, you can view the live streams in ACC.

ACC can download recordings or live streams from VideoManager like from any other device. ACC can simultaneously download recordings from different body-worn cameras streaming to one VideoManager. After the initial connection with VideoManager, ACC will retrieve recordings automatically from VideoManager from the past three days to initialize the timeline.

> **Note:** When ACC fetches the latest video recordings from VideoManager, it only requests videos from the last 3 days. When connecting ACC to VideoManager for the first time, or if ACC is disconnected from VideoManager for too long, older videos may not be synchronized to ACC.

> **Tip:** ACC may not retrieve longer videos from VideoManager because of the way videos are streamed to VideoManager. To ensure longer videos are retrieved in ACC, you need to configure the advanced settings file in the VideoManager web interface. Navigate to **Admin**, click **System**, open the advanced settings file and add `download.oldestFirst=true` in the file. Save the file and restart the VideoManager service.

> **Important:** Audio is not supported in ACC for recorded videos downloaded from VideoManager over the ONVIF Profile G interface.

To view the live streams or recordings, you can manually drag and drop the relevant output from the menu in the left into the viewing pane. If the ACC Mobile application has been configured, you can also view the outputs on your mobile phone. For more information, see the *ACC Mobile 3 User Guide* for iOS or Android on **help.avigilon.com**.

> **Note:** Once connected, the video streams for the outputs will show `Device not streaming` in the viewing pane until the body-worn camera record button is pressed. Other channels will show `Invalid channel` in the viewing pane.

Triggering ACC Alarms When a Body-worn Camera Starts Streaming

You can create alarms to send alerts when a body-worn camera starts live streaming, and to prompt the live streams to appear automatically in the ACC system viewing pane.

1. In the New Task menu ☰ , click **Site Setup**.
2. Select the site which contains the devices connected to VideoManager.
3. Click **Alarms** 🔔 .
4. Click **Add**.
5. Choose **Motion Detection** as the trigger source for your alarm.
6. Click **Next**.
7. Select which device will be involved in the alarm.
8. Select the same device to link to the alarm, and select the **View linked devices when alarm is triggered** check box.
9. Complete the alarm configuration and select the **Enable alarm** check box.

When the specified device starts to live stream, an alarm will be raised in ACC and the live stream will appear.

> **Note:** Alarms can be received and managed through the ACC Mobile application. For more information, see the *ACC Mobile 3 User Guide* for iOS or Android on **help.avigilon.com**.