

AVIGILON™

Avigilon Control Center™ 7 System Integration Guide

with LenelS2 Netbox



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Introduction

The Avigilon Control Center (ACC) system integration with LenelS2 NetBox software allows users to use the LenelS2 NetBox interface to access ACC software features. Specifically, users can view live and recorded video, view events, control PTZ devices and export video from the ACC software through the LenelS2 NetBox software.

What's New

- Support for LenelS2 NetBox version 5.6
- Integration software now utilizes Avigilon ACC Web Endpoint Services
- Integration software now utilizes Avigilon Savitar Video Player

Requirements

Vendor	Requirements
Avigilon	Avigilon Control Center Server software 7.14.x or later
Avigilon	Avigilon Control Center Client software 7.14.x or later
Avigilon	Avigilon Web Endpoint software 7.14.x or later
Avigilon	Avigilon Third Party Integration License: ACC6-S2-NETBX
Avigilon	Avigilon LenelS2 Gateway software integration executable: AvigilonLenelS2Gateway.exe
LenelS2 Security	LenelS2 NetBox Hardware 5.6.2 or later
LenelS2 Security	DVR camera channel license
Web Browser	Google Chrome

ACC Server and Client Requirements

Make sure the ACC Server and Client meet the system requirements listed on the Avigilon website: [ACC System Requirements](#).

For More Information

Refer to the specific software documentation for more information about the procedures outlined in this guide.

- *Avigilon Control Center Client User Guide*
- *Avigilon Control Center Server User Guide*
- *LenelS2 Security Help*

Installation

You must install the required software and activate the licenses before you can complete the integration. If you are upgrading the integration, you must uninstall the previous version from the servers and all connected clients before installing the updated version.

Upgrade to Avigilon Control Center 7.x Software



IMPORTANT

If you were running a previous version of the ACC Integration with LenelS2 NetBox, you will have to uninstall that integration before installing the new NetBox 5.6 integration.

If you are uninstalling the previous version of the integration software, you may also want to upgrade the Avigilon Control Center software and the LenelS2 NetBox software to use all of the new features.

Install or upgrade the software components in the following order:

1. LenelS2 NetBox software
2. ACC Server software
3. ACC to NetBox Integration software


Once you have completed the manual uninstall for the previous Integration version continue with the steps outlined below under New Installations.

Install LenelS2 Netbox

Install the LenelS2 NetBox Integration license (ACC6-S2-NETBX) from Avigilon on one of the servers in your Site.

Validate the ACC-LenelS2-Netbox Integration License on the ACC Client

You can validate that the license was installed with the following steps:

1. Open the Avigilon Control Center Client.
2. Click  and select **Site Setup**.
3. Click **License Management**. The License Management dialog box appears.
The dialog box must show Integration Support > Yes or the software was not properly licensed.

Enable Web Endpoint (WEP) Configuration on the ACC Servers

You must enable Web Endpoint (WEP) configuration on the server running ACC before you can add the integration.

1. Make sure that WEP is running on the ACC server.
2. Add `enableAllRoutes: true` and `enableWebRtc: true` to the following file:
`C:\ProgramData\Avigilon\WebEndpoint Config\WebEndpoint.config.yaml`
3. Restart WEP.
4. Edit `C:\Program Files\Avigilon\Avigilon Control Center Web Endpoint\modules\eagle\lib\StaticConfigDefault.js`
5. Locate the `enableWebRtc: false` entry and change the value from `false` to `true`



IMPORTANT

Program files are sensitive to spacing and indentation. Make sure not to introduce extra spaces or indents in the code when editing these files. There should only be one space between the key and the value.

```
enableAllRoutes: true
enableWebRtc: true
```

Enable Web Endpoint (WEP) in the Chrome Browser

Web Endpoint (WEP) uses a self-signed certificate to create a secure connection. All users must accept the certificate in their Chrome browser to access video from LenelS2 NetBox.

1. Navigate to this web address from the Chrome browser: <https://AccServerIpAddress:8443/>
2. Accept the certificate.
3. You should now see the ACC WEP Dashboard if the connection was successful.

Install the .NET 6.0 Hosting Bundle and LenelS2 NetBox Software

You must download and install the .NET 6.0 Hosting Bundle before you can install the LenelS2 NetBox software.

1. Download and install the .NET 6.0 Hosting Bundle from [Microsoft.com](https://microsoft.com).
2. Install the LenelS2 NetBox to ACC Integration file: `AvigilonLenelS2Gateway.exe`



NOTE

The file must be installed on the same server as ACC.

Configure ACC for Integration with LenelS2 NetBox

You can configure the ACC software for the integration once the required license and software have been installed. See the *Avigilon Control Center Client User Guide* for more information about each of the required configurations.

Add an Integration User in the ACC Software


You must add a user to the ACC Client software specifically for connecting the integration. This is to protect the security of the ACC software. The user will be used to connect the ACC system to the Avigilon integration software. See the *Avigilon Control Center Client User Guide* for instructions on how to add users.

This user must have the following permissions to enable all the integration features:

- View Live Images
 - Use PTZ Controls
 - Lock PTZ Controls
- View Recorded Images

The Avigilon LenelS2 integration user name and password are required to add the ACC Servers to the LenelS2 NetBox application.

Complete the following steps in the ACC Client software:

1. Navigate to the *Setup* tab and select the site.
2. Click the  icon.
3. Click **Add Group** on the Groups page.
4. Select to copy the Standard Users group permissions in the dialog box.
5. Enter a name for the new group in the *Edit Group* dialogue box.
6. Select the recommended permissions for the integration



NOTE

Make sure you only select the required permissions.

7. Click **OK** to save the new group.
8. Select the *Users* tab then click **Add User**.
9. Enter a Username on the *Add/Edit User* dialog box.
10. Complete the following fields in the *Password* section:
 - Password: enter a password for the user.
 - Confirm Password: re-enter the password.
 - Password never expires: you may want to select this checkbox so that you do not need to update the ACC software password for the integration.
11. Navigate to the *Member Of* tab and select the groups you created in step 3. The other two columns display the permissions linked to the selected group.
12. Click **OK**. The user is added to the system.

Assign Logical IDs to Cameras

Assign a logical ID to each camera in the ACC Client software. The integration software only allows you to access cameras with a logical ID. Cameras do not have a logical ID by default so you must assign one.

1. Right-click a camera in the System Explorer in the ACC Client software.
2. Select **Setup**.
3. Click **General** in the camera *Setup* tab.
4. Enter a Logical ID for the camera in the *General* dialog box.



NOTE

The logical ID must be a unique number.

Create Motion Detection Alarms

You can create motion detection alarms by following these steps:

1. Navigate to *Setup* from the top listing in the tree on the left.
2. Select **Alarms** from the main view.
3. Select **Add** and tie the trigger Motion Detection to the camera(s) with a Logical ID created earlier.
4. In *Alarm Recipients* add the administrator and the user created for the integration.
5. Apply the following settings:
 - Priority: 1
 - Schedule: Always
 - Enable alarm (Boolean)

Configure the LenelS2 NetBox Client for Integration with ACC

You can configure the LenelS2 NetBox to use the integration once the Avigilon Control Center configurations are complete. See the LenelS2 NetBox Help for more information about each of the configurations.

Add Avigilon NVR and Cameras to NetBox

Your LenelS2 NetBox web client should display Setup > Video > NVRs > Configure Avigilon NVR in the Table of Contents. Open the Configure Avigilon NVR page and configure the LenelS2 NetBox to connect with the Avigilon Control Center Server.

1. Enter the IP address of the ACC Server.
2. Enter 8443 as the Avigilon Server Port.
3. Enter the Avigilon username and password you created for the integration. See [Add an Integration User in the ACC Software on page 4](#) for more information.
4. Click **Check connection**. A confirmation message will appear if the connection was successful.



NOTE

Your system firewalls might block the connection. Check your firewall settings if you receive an error message.

5. Click **Save**.
6. Click the **List NVR Cameras** link at the bottom of the *Discovered Information* section to view the list of cameras.



NOTE

You are not able to edit the camera names on this page. Camera names must be edited from the ACC Client software. See the *Avigilon Control Center Client User Guide* for instructions on editing camera names.

7. Verify that the camera list is correct and complete. See the *Avigilon Control Center Client User Guide* for instructions on how to connect or disconnect cameras from an Avigilon server.



IMPORTANT

You must update the Avigilon NVR configuration in the LenelS2 NetBox software whenever you make changes to the ACC camera information and connections.

8. Navigate to the *Configure Avigilon NVR* page and click *Check Connection* to download the updated camera connections. This will update the integration.
9. Click **Save**.

Add and Link Video Motion Events

Follow these instructions to setup a Video Motion Events:

1. Navigate from Setup > Alarms > Events and click **Add**.
2. Enter a Name for the event: Video Motion Event.
3. Select **Always** from the Enabled Timespec drop-down list.
4. Select a priority number for the event from the *Priority* drop-down list. 1=High and 20=Low.
5. Select the camera from the *Camera* drop-down list. This camera will be displayed on the Monitoring Desktop when the event is activated.
6. Select the **Multiple activations display multiple alarms** option as the Alarm Mode.
7. Click **Save**.
8. Navigate from Setup > Alarms > Virtual Inputs.
9. Select a Camera from the *Name* drop-down list where the video alarm is linked.
10. Select the Event you added in step 1.
11. Click **Always Armed and Enabled** to enable the event.
12. Navigate from Monitor > Monitoring Desktop.
13. Check the Activity log for video events and click the **Video** icon to play the video of the recorded event.

Configure Network Settings

You can configure Network Settings if required however you might need to contact LenelS2 Support to complete additional steps.

Configure the LenelS2 NetBox for DNS

1. Navigate from Configuration > Site Settings > Network Settings.
2. Enter the necessary IP addresses, FQDN, and Port numbers.



IMPORTANT

You will need to contact LenelS2 Support if you are deploying this in an environment that is dependent on DNS naming. LenelS2 Support can assist you by allowing the NetBox database to ignore the empty IP address in the API traffic.

Configure the LenelS2 NetBox for HTTPS Only

1. Navigate from Configuration > Site Settings > Network Settings.
2. Change the Web Server SSL Requirement field to HTTPS only.
3. Click **Save**.



IMPORTANT

You will need to contact LenelS2 Support if the **HTTPS only** setting is applied in an environment with HTTPS was not properly configured.

Use the Integration Features

You are ready to use the integration once you have installed and configured the integration between your ACC system and LenelS2 NetBox. You can monitor live video, use PTZ operations, and view the recorded video from the cameras connected to your ACC system all from within the LenelS2 NetBox system.



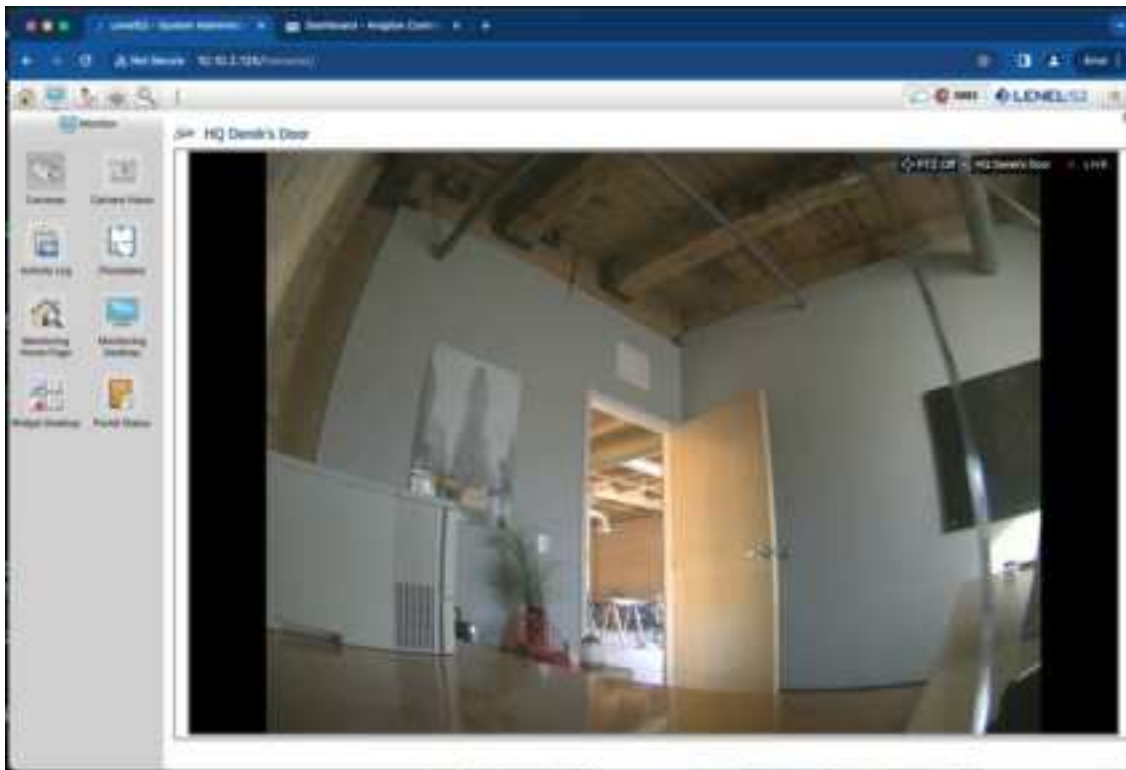
NOTE

See the *LenelS2 NetBox Help* for additional information on using the different features in the LenelS2 NetBox system.

Monitor Live Video

Follow these instructions to view live video:

1. Navigate from Monitor > Cameras.
2. Select one of the cameras connected to the ACC system.
3. Make sure you can see the live video stream from the connected camera.



Use Pan, Tilt, Zoom (PTZ) Controls

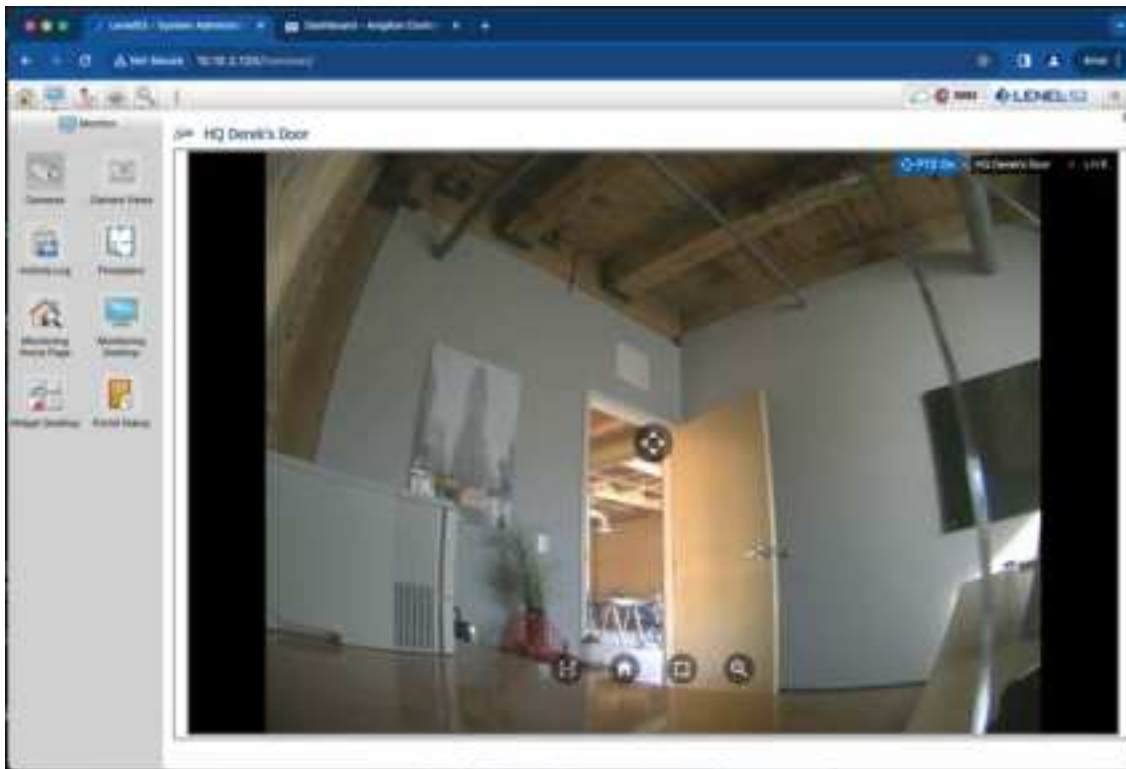
Follow these instructions to use the PTZ Controls:

1. Navigate from Monitor > Cameras.
2. Select one of the cameras connected to the ACC system.
3. Make sure you can see the live video stream from the connected camera.
4. Use the PTZ controls at the top-right corner of the video player.



NOTE

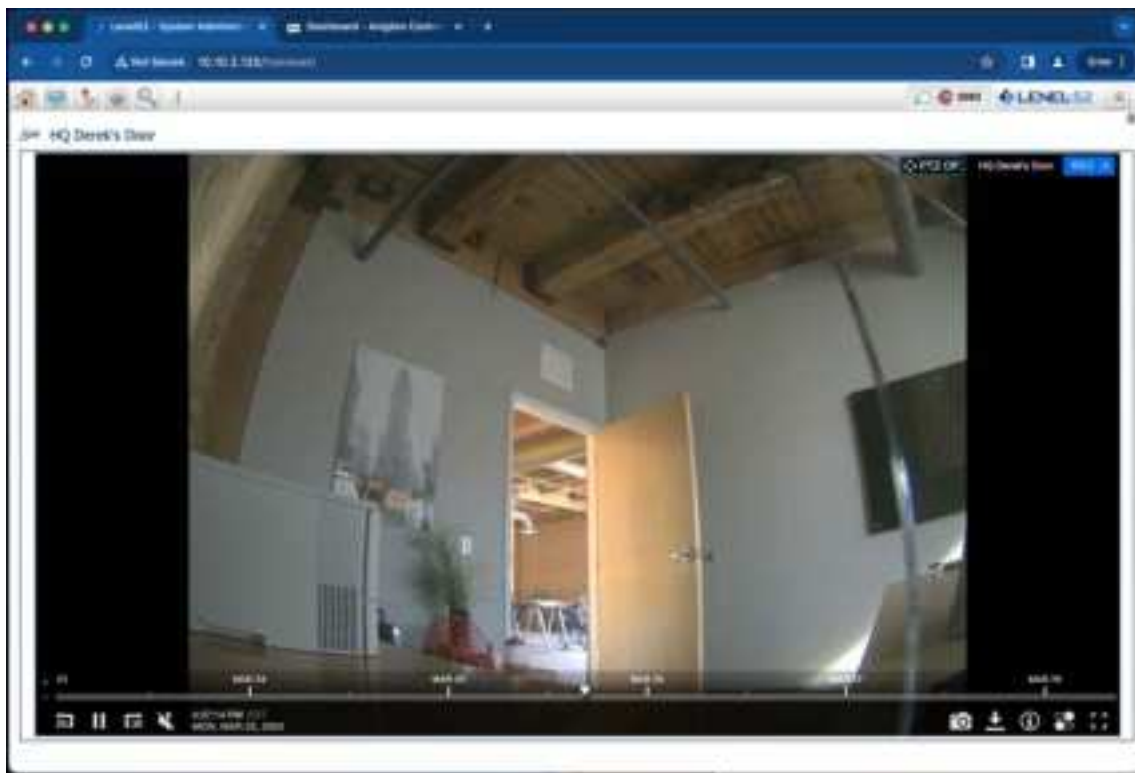
You will not see the PTZ controls on cameras that do not have PTZ capabilities.



View Recorded Video

Follow these instructions to view recorded video:

1. Navigate from Monitor > Cameras.
2. Select one of the cameras connected to the ACC system.
3. Make sure you can see the live video stream from the connected camera.
4. Select the date and time for the recorded video segment using the timeline bar at the bottom of the video player.
You can tell that the camera is playing the recorded video because there is a blue REC icon in the top right corner.
5. You can play, pause, fast forward and fast backward a video using the video player controls.
6. You can come back to live mode by clicking on the REC icon at the top right of the video player window.



Troubleshooting

Contact Avigilon Technical Support: avigilon.com/support if the following troubleshooting solutions do not resolve the issue.

Known Limitations

The following are known limitations of the Avigilon integration with LenelS2 NetBox. The issues may be resolved in future versions of the integration software.

- Currently the Avigilon Savitar Video Player is only support in Chrome browser. All users requiring video in LenelS2 NetBox will need to be using Chrome.
- Dewarping with Fisheye cameras is not supported with Web Endpoint (WEP) and the Avigilon Savitar Video Player
- When trying to remove the PTZ controls from the video player overlay in LenelS2 NetBox, there is a known issue whereby having the ACC 7 User's Group permissions "Use PTZ controls" disabled, and "Lock PTZ controls" enabled, the PTZ controls will still be visible in the LenelS2 NetBox video player stream. These PTZ controls will not be functional, but they do remain visible. Try disabling both ACC 7 User's Group permissions "Use PTZ controls" and "Lock PTZ controls" and reopen the PTZ camera view in LenelS2 NetBox to remove the PTZ buttons.

Avigilon Integration Gateway Service Fails During Installation

You will receive an error while installing the Avigilon LenelS2 NetBox Gateway if the Gateway service fails to start. The installation will fail as a result.

Problem 1: The active user does have administrative permissions on the server.

Solution: Run the installation using administrator credentials. Follow these steps:

1. Right-click on the install file and select **Run as Administrator**.
2. Enter the administrator credentials when prompted.

Problem 2: The .NET 6.0 Hosting Bundle was not installed.

Solution: You must download and install the .NET 6.0 Hosting Bundle before you can run the Avigilon Integration Gateway service. You can download the package from [Microsoft.com](https://microsoft.com).

NetBox Displays a White Box Instead of Video

You will not be able to view video properly if the Web Endpoint (WEP) self-signed certificate is not accepted in the Chrome browser. The video player will only show a white box when a user launches video.

Check the section [Install LenelS2 Netbox on page 2](#) for instructions on how to Enable Web Endpoint (WEP) in the Chrome Browser.

Cameras are not Importing

If a camera is not showing up in the device list after you have added the Avigilon server and cameras to the LenelS2 NetBox software.

There are typically two reasons why the camera does not appear in the LenelS2 NetBox software:

Problem 1: The camera does not have a logical ID.

Solution: Perform Assigning Logical IDs to Cameras. See section [Assign Logical IDs to Cameras on page 5](#) for instructions.

Problem 2: The camera is connected to an ACC Server that has not been added to the LenelS2 NetBox software.

Solution: You can fix this by performing one of the following:

- Add the ACC Server to the LenelS2 NetBox software. See section [Add Avigilon NVR and Cameras to NetBox on page 6](#) for instructions.
- Disconnect the camera from its current server from within the ACC Client software and then connect it to the server that is linked to LenelS2 NetBox. You may need to import cameras from the server to LenelS2 NetBox again. See section [Add Avigilon NVR and Cameras to NetBox on page 6](#) for instructions.

More Information & Support

For additional product documentation and software and firmware upgrades, visit support.avigilon.com.

Technical Support

Contact Avigilon Technical Support at support.avigilon.com/s/contactsupport.