

Avigilon Control Center™ 6 System Integration Guide

with S2 NetBox®



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Introduction

The Avigilon S2 Integration allows the S2 NetBox system to utilize Avigilon surveillance technology. Integration features include:

- Viewing live video from Avigilon cameras and control of PTZ devices in the S2 NetBox software
- Viewing recorded video from Avigilon cameras in the S2 NetBox software
- Viewing motion events from the Avigilon Control Center in the S2 NetBox software

Requirements

Vendor	Requirements
Avigilon	Avigilon Control Center Server Software 6.x or later
Avigilon	Avigilon Third Party Integration License: ACC6-S2-NETBX
Avigilon	Avigilon S2 Gateway software integration: <code>AvigilonS2Gateway.exe</code> The file can be downloaded at: http://avigilon.com/support-and-downloads/for-software/acc-integration-and-plug-in-downloads/
S2 Security	S2 NetBox Hardware 4.9
S2 Security	DVR camera channel license
Internet Explorer	Internet Explorer 11

For More Information

For more detailed information about the procedures outlined in this guide, refer to the specific software documentation.

- *Avigilon Control Center Client User Guide*
- *Avigilon Control Center Server User Guide*
- *S2 Security Help*

Installation

Upgrading to Avigilon Control Center 6.x Software

If you are upgrading to the Avigilon Control Center 6 software from version 5 and to the latest version of the integration software, be aware that the Avigilon Control Center software uses a new default port number (38880) for server communication. Avigilon Control Center software provides the ability to organize multiple servers into Sites and share settings between servers. To use this feature effectively, you must upgrade all servers in your Site before upgrading the integration.

WARNING — The upgrade does not keep your previous integration settings. You will need to configure the integration again.

Server

Install the following on the same network:

NOTE: If you are upgrading the integration, it is recommended that you uninstall the previous Avigilon S2 Gateway software integration first to avoid potential version conflicts.

1. Install the S2 NetBox system.
2. Install the Avigilon Control Center Server software and the Avigilon S2 Gateway software integration on the same server.

Checking the Avigilon License

After you have installed all the required software, check that the Avigilon license was applied correctly.

1. Open the Avigilon Control Center Client.
2. Select the Settings tab and click **Licensing**. The License Activation dialog box appears.

The dialog box must say *Integration Connections: Yes* or the software was not properly licensed.

Configuration

Set up the S2 NetBox system to receive video streams from the Avigilon Control Center Server.

Adding an Integration User in the ACC™ Software

To protect the security of the Avigilon Control Center Server, add a user to the ACC software specifically for connecting to the integration. See the *Avigilon Control Center Client User Guide* for details about 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 S2 integration user name and password is required to add the Avigilon Control Center Servers to the S2 NetBox application.

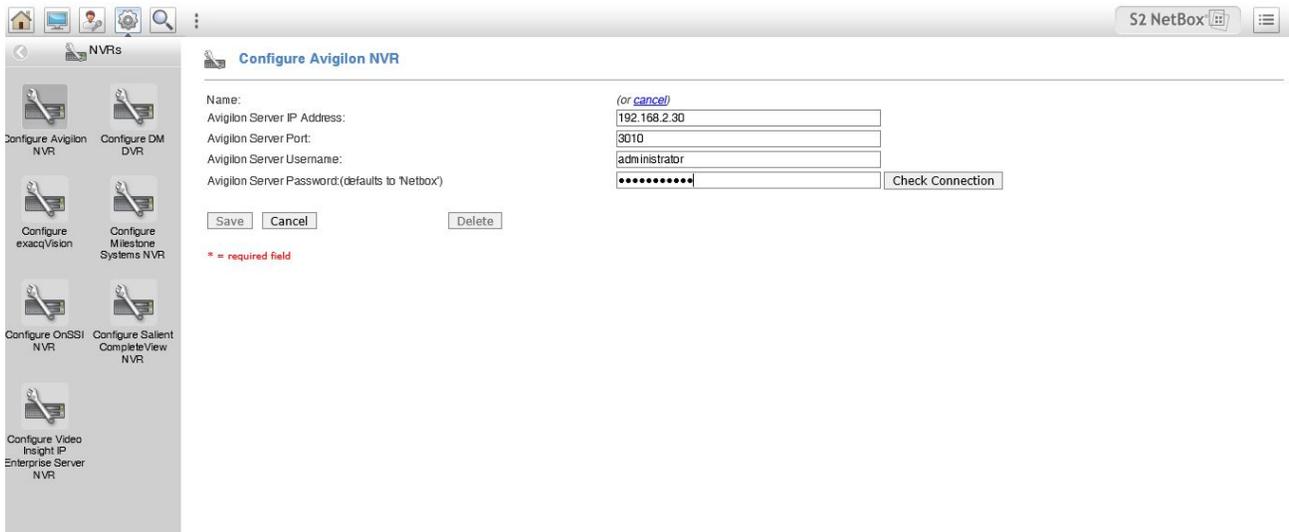
Assigning Logical IDs to Cameras

In the Avigilon Control Center Client software, assign a logical ID to each camera. The S2 NetBox software will only detect cameras with a logical ID. By default, cameras do not have a logical ID.

1. In the Avigilon Control Center Client software, right-click a camera in the System Explorer and select **Setup**.
2. In the camera Setup tab, click **General**.
3. In the General dialog box, enter a **Logical ID** for the camera. The logical ID must be a unique number.

Configuring the ACC Software in the S2 NetBox Client

Your S2 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 S2 NetBox to connect with the Avigilon Control Center Server.



1. Enter the IP address of the Avigilon Control Center Server.
2. Enter **3010** as the Avigilon Server Port.
3. Enter the Avigilon username and password you created for the integration. See Adding an Integration User in Avigilon on page 3.
4. Click **Check connection**.

You have made a successful connection when the following message appears:
This Avigilon NVR can be configured for network controller integration.

If you receive an error message instead, check if your firewall is blocking the connection.

Click **Save**.

5. Click **List NVR Cameras** link at the bottom of the **Discovered Information** section. A list of cameras will appear. These names cannot be changed here.
The camera's name can be changed in the Avigilon Control Center Client software, in the camera's **Setup: General** dialog box. see the *Avigilon Control Center Client User Guide* for more information.
6. Verify that the camera list is correct and complete. To connect or disconnect cameras from an Avigilon server, see the *Avigilon Control Center Client User Guide*.

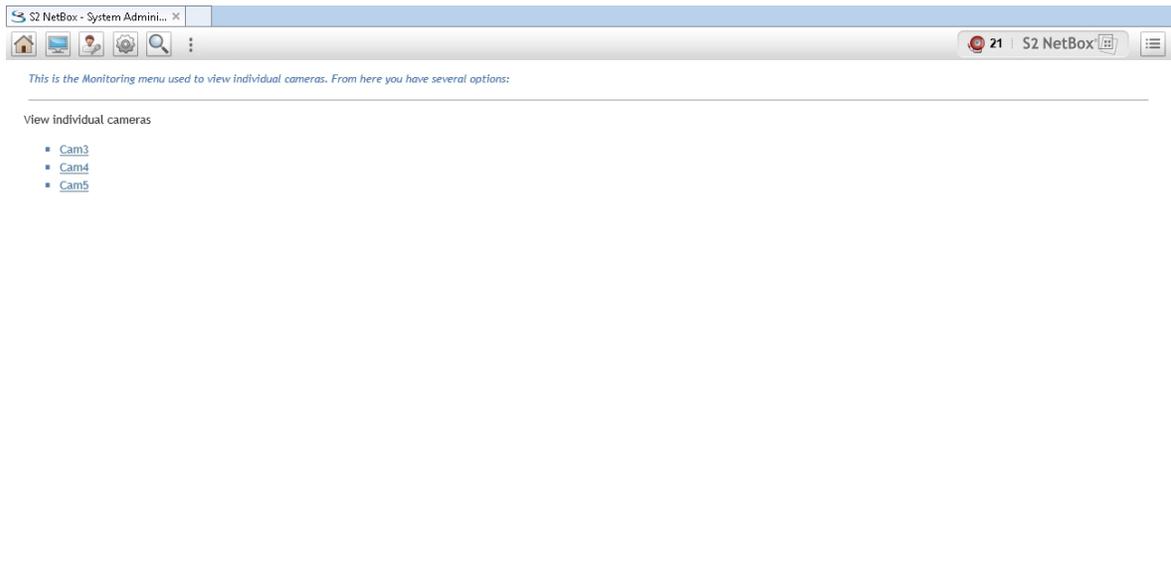
NOTE: Whenever you make changes to the Avigilon Control Center camera connections, you need to update the Avigilon NVR configuration in the S2 NetBox software.

To update the integration, access the Configure Avigilon NVR page and click **Check Connection** to download the updated camera connections then click **Save**.

Monitoring Live video and PTZ Controls

In order to view live video, perform the following steps:

1. Select Monitor > Cameras.
2. Select a camera connected to the Avigilon system.



3. Verify if the live video can be seen from this Avigilon connected camera.
4. If the camera is configured for pan, tilt and zoom (PTZ) the respective action can be performed using the buttons available at the bottom of the browser.

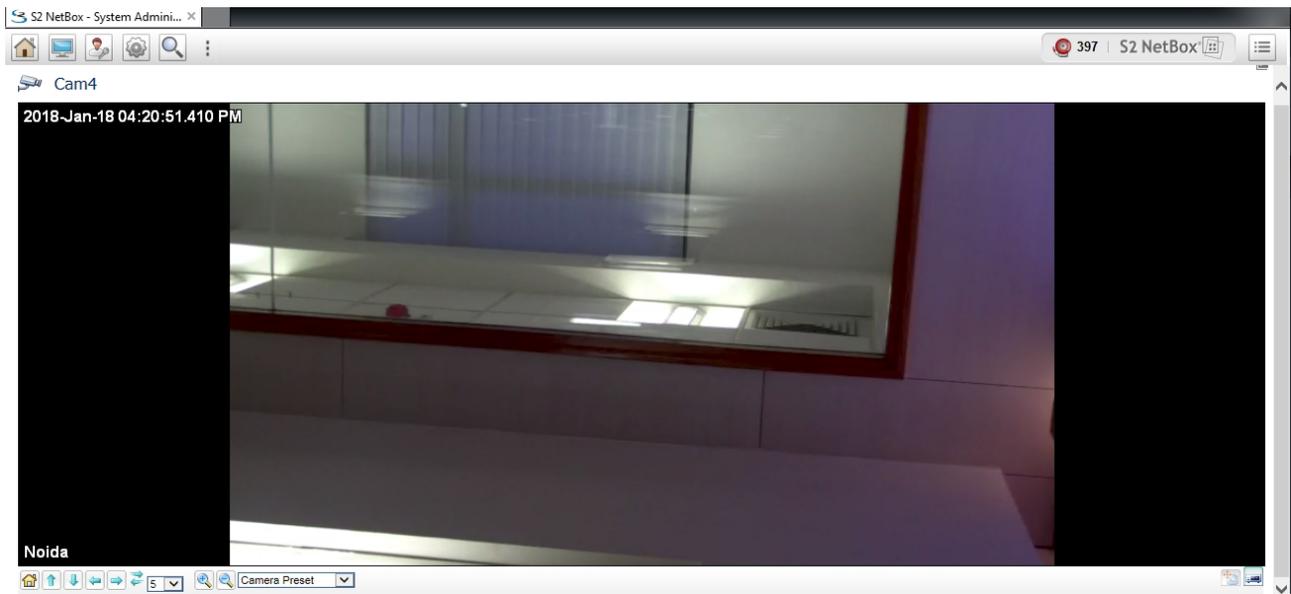
However, If the camera does not have PTZ capabilities, or if the tilt, pan and zoom URLs have not been set up, these controls will not appear.

If the video management system (VMS) does not support variable speed PTZ, the camera speed drop-down will not appear.

User can also move the camera to predefined locations by selecting presets. For more information on how to add presets, refer to *Avigilon Control Center User Guide*.

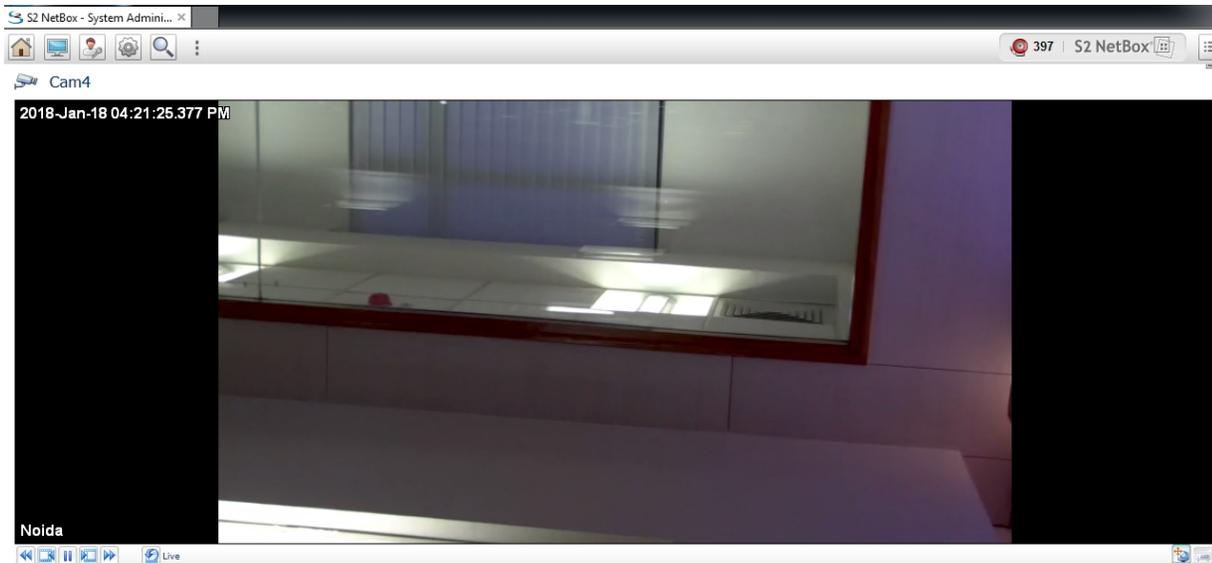
NOTE: Internet Explorer will open various pop-ups for allowing downloading of ActiveX control and allowing domain-level firewall access to stream video. You need to **allow** all of the pop-up requests.

It is possible that if you cancel or deny the firewall access pop-up, it may not come back again. To resolve this, you will have to manually allow Domain Level Access to Internet Explorer. For more information, see *Unable to View Live Video with NetBox* on page 10.



Viewing Recorded Video

To view recorded video, click on the  icon at the bottom right of the S2 NetBox window. The video will now play in record mode. User can play, pause, play, fast forward and fast backward a video using the controls .



User can come back to live mode by clicking on the  icon at the bottom right of the S2 NetBox window.

View Motion and Analytic Events

In order to enable Motion and Analytic events, user has to update the settings in AvigilonSdkConfig.cfg. The default location for the file is:

C:\Program Files (x86)\Avigilon\Avigilon to S2 Gateway

If the user wants to make any changes to the applied properties, it should be done in file AvigilonSdkConfig.cfg located at:

C:\Users\<Current_User>\AppData\Local\Temp\Avigilon\AvigilonSdk32\6.6.0.22\SDK

Troubleshooting

If the following troubleshooting solutions do not resolve the issue, contact Avigilon Technical Support: [avigilon.com/support-and-downloads/](https://www.avigilon.com/support-and-downloads/).

Video Does Not Synchronize with S2 NetBox Events

If you have linked Avigilon cameras with S2 NetBox events, video is not recorded for the configured events.

This may be caused by a time difference between the S2 NetBox system and the server where the integration is installed. The S2 NetBox and the integration server can be running in different time zones, but there can be no more than 5 minutes deviation from the Coordinated Universal Time (UTC) setting on the S2 NetBox or a communication error occurs.

Check the time difference between the S2 NetBox system and the integration server:

1. Open the S2 NetBox web client and expand the left menu to **Monitor > Live Monitoring > Activity Log**.
On the Activity Log page, there is a live clock displayed in the top left corner of the page.
2. Compare the clock in the S2 NetBox web client with the clock on the integration server. If there is more than a 5 minute time difference from UTC, correct the server clock to match S2 NetBox. On the integration
 - a. In the Windows Control Panel, click **Date and Time**.
 - b. Manually adjust the minute setting of the server time to match S2 NetBox. Be aware of any time zone difference in the settings.

Permission Changes Not Reflected in S2 NetBox

If you change the integration user's permissions in the Avigilon Control Center Client software, the changes are not reflected in the S2 NetBox. For example, you decide to remove the Use PTZ Controls permission for the integration user. When the integration user logs in to the S2 NetBox system, the PTZ controls are still available.

The integration needs to be rebooted to apply the user changes from the Avigilon Control Center to S2 NetBox. Perform one of the following:

- Reboot the integration gateway service.
 - a. Open the Windows Services window and locate the Avigilon to S2 Gateway Service.
 - b. Select the service and click **Stop**.
 - c. Click **Start**.
- Reconfigure the Avigilon Control Center in S2 NetBox
 - a. In the S2 NetBox web client, open the Configure Avigilon NVR page.
 - b. Click **Delete**.
 - c. Complete *Configuring the ACC Software in the S2 NetBox Client* on page 3.

New Cameras Not Detected by S2 NetBox

After you connect new cameras to the Avigilon Control Center system and update the integration in the S2 NetBox application, the new cameras are not detected.

This issue may occur if the new cameras were not given logical IDs. For more information, see *Assigning Logical IDs to Cameras* on page 3.

Once logical IDs have been given to all the new cameras, open the S2 NetBox application and access the Configure Avigilon NVR page. Click **Check Connection** to download the updated camera connections then click **Save**. All the new cameras should now be added.

Unable to View Video on Internet Explorer

Under IE , Go to security tab. and click Custom tab. Enable the following properties:

1. Download Signed ActiveX controls (not secure)
2. Download Unsigned ActiveX controls (not secure)
3. Run ActiveX controls and plug-ins
4. Script ActiveX controls marked safe for scripting
5. Save changes and Restart IE

Unable to View Camera Due to Digital Signature Error

On selecting a camera to view video, 'The file was blocked because it does not have a valid digital signature' alert is displayed:

1. In Internet Explorer, click on “Tools” in the menu bar and select “Internet Options”.
2. Click on “Advanced tab” and locate “Allow software to run or install even if the signature is invalid” under the “Security” category and check the box.
3. Click Apply and then Ok.
4. Restart Internet Explorer.

Unable to View Live Video with NetBox

After opening the video stream, a black screen appears and no video streaming occurs. In this case, you will have to manually allow Domain Level Access to Internet Explorer using the following steps:

1. Go to **Control Panel > Windows Firewall Settings > Allow an app or feature through Windows Defender Firewall**.
2. Check the box under **Domain** for **Internet Explorer**.