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Avigilon Control Center™ 5 System Integration Guide

Video and Event Viewer for OnGuard® Access Control Systems

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INT-LENEL-F

Revision: 6 - EN

20170622

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Introduction

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

Requirements

Vendor	Requirements
Avigilon	ACC Server software 5.10 and later
Avigilon	ACC Client software 5.10 and later
Avigilon	Lenel integration NVR license: `ACC5-LENL-ONGRD` If you are also using the Alarm Gateway integration, this one license will work for both integrations.
Avigilon	Avigilon integration executable file: `OnGuard Avigilon Accessory Add-On.msi`
Lenel	OnGuard version 7.2 and 7.3. To connect to an older version of the OnGuard software, contact Avigilon Technical Support for compatible versions of the integration software.
Lenel	OnGuard Digital Video License: `SWS-DV` or `SWG-DV`
Lenel	8 Camera Channel Device License: `DV-CH-8UP`

For More Information

For more Information about the procedures outlined in this guide, refer to the following specific software documentation:

- *Avigilon Control Center Client User Guide*
- *Avigilon Control Center Server User Guide*
- *OnGuard Alarm Monitoring User Guide*
- *OnGuard VideoViewer User Guide*
- *OnGuard Installation Manual*

Installation

The required software can be obtained by contacting Avigilon Technical Support –
http://avigilon.com/support-and-downloads/.

Servers

- Add the Lenel Integration NVR licence (`ACC5-LENL-ONGRD`) to an Avigilon Control Center Server in the Site. The integration will be able to access all cameras in the Site that the server is connected to.
- Install **Microsoft DirectX® 9.0c** on each server using the Avigilon Lenel Integration.
- Install the Avigilon Lenel executable (**OnGuard Avigilon Accessory Add-On.msi**) on the Lenel server running the communications server.

Client

- Install **Microsoft DirectX® 9.0c** on each client computer.
- Install the Avigilon Lenel executable (**OnGuard Avigilon Accessory Add-On.msi**) on the client computers that are running the OnGuard software. This is the same installation package installed on the 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 Admin Tool.
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.

Avigilon Configuration

Once the required licence and software have been installed, configure the Avigilon cameras for use in the OnGuard software.

All Avigilon camera settings are configured in the Avigilon Control Center Client software. See the *Avigilon Control Center Client User Guide* for more information.

Assigning Logical IDs to Cameras

In the Avigilon Control Center Client software, assign a logical ID to each camera. The integration software only allows you to access cameras with a logical ID. By default, cameras do not have a logical ID.

1. In the ACC 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 unique number.

Adding an Integration User in Avigilon Control Center Software

To protect the security of the Avigilon Control Center system, add a user in the ACC Client software specifically for connecting the integration. The user you add will be used to connect the ACC system to the Avigilon integration software. See the *Avigilon Control Center Client User Guide* for more details.

To use all the integration features, the user must be added to a group with the following permissions:

- View live images
    - Use PTZ controls
    - Lock PTZ controls
- View recorded images

In the ACC Client software, complete the following steps:

1. In the Setup tab, select the site then click .
2. In the Groups tab, click .
3. In the following dialog box, select to copy the **Standard Users** group permissions.
4. In the Edit Group dialog box, give the new group a name then select the recommended permissions for the integration.

    Make sure only the required permissions are selected.

5. Click **OK** to save the new group.
6. Select the Users tab then click .
7. In the Add/Edit User dialog box, enter a **User Name:**.

8. In the Password area, complete the following fields:

    - **Password:** enter a password for the user.

    - **Confirm Password:** re-enter the password.

    - **Password never expires:** you may want to select this check box so that you do not need to update the ACC password for the integration.

9. Select the Member Of tab and select the check box beside the group you created earlier in this procedure.

    The other two columns display the permissions linked to the selected group.

10. Click **OK**. The user is added to the system.

OnGuard Configuration

After the Avigilon cameras have been configured for use in the OnGuard software, configure OnGuard to interact with the Avigilon Control Center servers and add the Avigilon cameras into the OnGuard software.

Adding Avigilon Servers

1. Open the OnGuard System Administration software.
2. Select **Video** > **Digital Video**.
3. Select the **Video Recorder** tab.

4. Select **Add** to configure a new server.
5. In the **Name** field, enter a name for the server.
6. In the **Video Recorder Type** drop down list, select Avigilon Control Center.
7. In the **Workstation** field, enter the name of the OnGuard server running the communications server.
8. In the **Use IP Address of Video Recorder** field, enter the Avigilon server IP address.

   Make sure you enter the IP address of the Avigilon Control Center Server that the integration license is installed on or the integration will not work.

9. In the Port field, enter the Avigilon server port number.

   The Port field can be left blank if you are using the default Avigilon port number (38880).

10. Enter the server's User Name and Password. Use the Avigilon username and password you created for the integration. For more information, see *Adding an Integration User in Avigilon Control Center Software* on page 3.

11. In the World Time Zone drop down list, select a time zone.

12. Click **OK** to save the settings.

13. When the Full Download dialog box appears, click **OK**.

14. When the Monitor Zone Assignment dialog box appears, assign the server to a zone and click **OK**.

15. Repeat this procedure for each Avigilon server in your installation.

Adding Individual Cameras

1. In the OnGuard System Administration software, select **Video > Digital Video** then select the **Camera** tab.

2. Click **Add**.

3. Enter a **Name** for the camera and select the server it will use from the **Recorder** drop down list.

4. In the **Channel** field, enter the logical ID you assigned to the camera in the Avigilon Control Center Client software. For more information, see *Assigning Logical IDs to Cameras* on page 3.

5. If you want motion alarm events to be displayed, select the **Display Motion Detection Alarms** check box.

6. Leave the **PTZ controlled by Matrix Switches** field empty.

   If you have a PTZ camera, the PTZ controls are automatically enabled in the OnGuard software.

7. Click **OK**.

8. Repeat this procedure for each Avigilon camera.

Adding All Cameras on a Server

1. In the **Video Recorder** tab, right-click the connected Avigilon server and select **Import From Recorder**.

2. In the following dialog box, select all the cameras you want to import.

   NOTE: Only cameras with logical IDs are listed. For more information, see *Assigning Logical IDs to Cameras* on page 3.
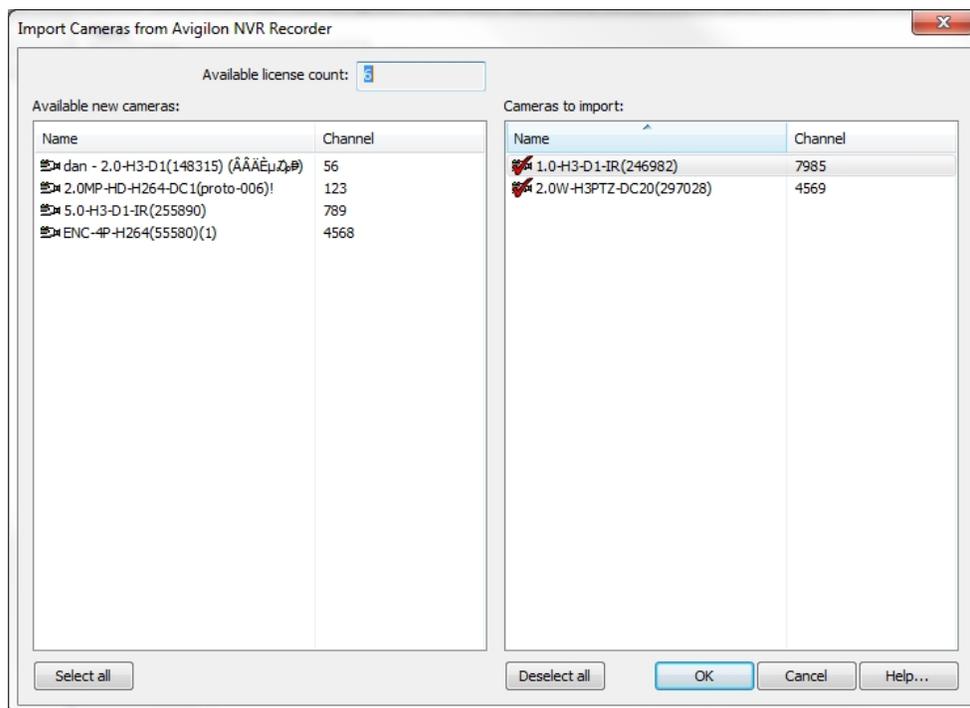
- ○ Click a camera on the Available list to add it to the Import list.
- ○ Or, click **Select all** to add all available cameras to the Import list.
- ○ Click **Deselect all** to empty the Import list.
3. When you've added all the cameras you want to the Import list, click **OK**. You will see a confirmation dialog box when all the cameras have imported successfully.

The **Camera** tab now displays all the imported cameras. If you are importing a PTZ camera, the camera's configured presets are included with the import.

Testing the Connection

Once the cameras and software have been configured to support the Avigilon Lenel integration, test the connection to confirm that the integration was successful.

1. In the OnGuard System Administration software, select **Video > Digital Video > Camera** tab.
2. Select an Avigilon camera then select the **Display Video** check box.

   If the camera is configured correctly, the live video from the camera is displayed.

If the video from the selected camera does not display, see *Troubleshooting* on page 9.

Using the Integration

Once the Avigilon Lenel integration has been successfully installed and configured, you can view, record and export video from Avigilon cameras in the OnGuard Alarm Monitoring software and the OnGuard VideoViewer software. The video integration features motion detection, camera loss and analytics event data from the Avigilon Control Center software.

For more information, see the *OnGuard Alarm Monitoring User Guide* and the *OnGuard VideoViewer User Guide*.

Troubleshooting

If the following troubleshooting solutions do not resolve your issue, contact Avigilon Technical Support – **http://avigilon.com/support-and-downloads/**

Installation Fails

When you run the `OnGuard Avigilon Accessory Add-On.msi` executable file the first time, the installation fails.

- Run the `OnGuard Avigilon Accessory Add-On.msi` executable file again.

Installation succeeds the second time.

No Video Display in the System Administration Software

When you test the Avigilon Lenel connection in the OnGuard System Administration software, no video appears. The video display box remains blank.

The issue could be a connection problem between the camera and the Avigilon server, or it could be a connection problem between the Avigilon server and the OnGuard software.

To resolve a connection issue between the camera and the Avigilon server, perform the following:

- Check if the camera is turned on.
- Check that the camera is connected to the same network as the server.
- See the sections about connecting and disconnecting cameras in the *Avigilon Control Center Client User Guide* for other possible solutions.

To resolve a connection issue between the Avigilon server and the OnGuard software, check the following:

- Ensure the client computer installation is complete. For more information, see *Servers* on page 2.
- Check that the Avigilon server is turned on.
- Check that the Avigilon server is on the same network as the Lenel server.
- Check that you are connecting to an Avigilon server that is licensed for the integration.
- Check that the Avigilon server's IP address, username and password are entered correctly in the System Administration software.

No Video Display in the Alarm Monitoring Software

When you attempt to view video from an Avigilon camera in the Alarm Monitoring software, no video is displayed. However, when you test the connection in the System Administration software, video successfully displays.

The OnGuard Communications Server may be down or closed.

- To resolve the issue, open the Communications Server. For more information, see the *OnGuard Alarm Monitoring User Guide*.

Recorded Alarm Video Runs Short

When you have an alarm configured to play Double Video on Alarm in the OnGuard software, the recorded video that is displayed is missing the most recent frames of video.

This issue occurs because the Avigilon Control Center software caches the most recent 15 seconds of live video but has not committed it to storage as a recorded video.

To see the full recorded footage, manually open the recorded video for the alarm. For more information, see the *OnGuard Alarm Monitoring User Guide*.

Cannot Launch Video from the Web Video Viewer

When you try to access Avigilon video from the OnGuard Web Video Viewer, you see the following error message:

> *Unable to load video from 'Avigilon'. Please verify that you can access the recorder from your machine or that your viewer is on the same domain as your recorder.*

Check the following:

- Check if you can display video in the OnGuard System Administration software. If not, complete this procedure: *Adding an Integration User in Avigilon Control Center Software* on page 3.
- Check if there is a password assigned to the Avigilon user created for the integration. For more information, see *Adding an Integration User in Avigilon Control Center Software* on page 3.

  When the Avigilon user does not use a password, the OnGuard System Administration software will still display video from the integration but the OnGuard Web Video Viewer will not.

Video in OnGuard Application is Incomplete or Discolored

Video displayed in the Onguard applications appear clipped, incomplete or shows discoloration.

This issue typically occurs in complex network environments where UDP traffic between Lenel and Avigilon server may be blocked.

To test if this is the issue, install the Avigilon Control Center (ACC) Client software on one of the affected systems, then complete the following steps:

a. In the ACC Client software, login to the site that manages the cameras used in the integration.
b. Display the affected video.

   The video is clipped, incomplete or shows discoloration like in the Onguard applications.

c. Open the Client Settings dialog box, and select the **Site Networking** tab.
d. Select the site that you are logged in to, and change the **Connection Speed:** drop down list setting from

LAN to **WAN**.

    e. Check the displayed video again.

       Video displays correctly, without any of the previously noted issues.

If video displays correctly after you switch to the WAN setting, complete the following steps to resolve the issue:

1. Create a text file and name it `AvigilonLenelIntegrationConfig.cfg`.
2. Enter the following lines into the text file:

```
<?xml version="1.0" encoding="utf-8" standalone="no" ?>
<Root>
 <ConfigItem name="NetworkConnectionType" type="String"
value="WAN">
</Root>
```

3. Save and close the file.
4. Close the following OnGuard applications if they are open:
   - System Administration
   - Video Viewer
   - Alarm Monitoring
5. Open the Windows Services console.
   - In the Windows Start menu search bar, enter `services.msc`.
6. Locate the **LS Client Update** service.
7. Right-click the service and select **Stop**.

   Wait for the service to stop.

8. Copy the `AvigilonLenelIntegrationConfig.cfg` file to the same directory as the integration software on each affected system.

   The folder directory is typically `C:\Program Files (x86)\OnGuard`

9. In the Windows Services console, restart the LS Client Update service.

Video in the OnGuard applications should now display correctly without issue.

Enable/Disable Avigilon Events in the Alarm Monitoring Software

Avigilon events are enabled by default. If you want to turn off these events:

1. Create a text file and name it `AvigilonLenelIntegrationConfig.cfg` or check whether the file already exists in the directory where Lenel OnGuard software is installed in the system (the folder directory is typically `C:\Program Files (x86)\OnGuard`).

2. Enter the following lines into the text file if you are creating a new file otherwise just add the `ConfigItem` tags in the file if it already exists:

```
 <?xml version="1.0" encoding="utf-8" standalone="no" ?>
<Root>
<ConfigItem name="EnableAvigilonEvents" type="Boolean" value="1"/>
<ConfigItem name="EnableMotionEvents" type="Boolean" value="1"/>
<ConfigItem name="EnableAnalyticsEvents" type="Boolean"
value="1"/>
<ConfigItem name="EnableDigitalInputEvents" type="Boolean"
value="1"/>
</Root>
```

3. To enable the events set the value as 1 otherwise set the value as 0 to disable the event.

4. If the `EnableAvigilonEvents` flag value is set to 0 then all the Avigilon Events will be disabled irrespective of the values of the `EnableMotionEvents`, `EnableAnalyticsEvents` and `EnableDigitalInputEvents` flag values.

5. If the `EnableAvigilonEvents` flag value is set to 1 then it depends on the `EnableMotionEvents`, `EnableAnalyticsEvents` and `EnableDigitalInputEvents` flag values whether these events will be enabled or disabled (enabled if set to 1, disabled if set to 0)

6. Save and close the file.

7. Close the following OnGuard applications if they are open:
   a. System Administration
   b. Video Viewer
   c. Alarm Monitoring

8. Copy the `AvigilonLenelIntegrationConfig.cfg` file to the same directory as the integration software on each affected system. The folder directory is typically `C:\Program Files (x86)\OnGuard`.