Avigilon Control Center™ System Integration Guide

for Software House C•CURE® 9000
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Introduction

The Avigilon Control Center (ACC) system integration with the Software House C•CURE 9000 software allows users to use the C•CURE 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 C•CURE 9000 software.

What's New

- Added abilities for supported PTZ cameras.
  - Click-to-Center provides the ability to click anywhere on the live video image to center the camera to that point.
  - Drag-to-Zoom provides the ability to click and drag to create a green box to define the area you want to zoom in and see.
- Support for Software House C•CURE 9000 version 2.80.

Be aware that the video analytics features only apply to cameras that support self-learning video analytics.

Requirements

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avigilon</td>
<td>ACC Server software 6.0.0.24 or later, or ACC Server software 7.0.0.30 or later</td>
</tr>
<tr>
<td>Avigilon</td>
<td>ACC Client software 6.0.0.24 or later, or ACC Client software 7.0.0.30 or later</td>
</tr>
<tr>
<td>Avigilon</td>
<td>ACC Third Party Integration license: ACC6-SWHS-CCURE</td>
</tr>
<tr>
<td>Avigilon</td>
<td>Avigilon integration executable file: AvigilonCCUREIntegration.exe</td>
</tr>
<tr>
<td>Software House</td>
<td>C•CURE 9000 version 2.5/2.6/2.7/2.8</td>
</tr>
<tr>
<td>Software House</td>
<td>C•CURE Integration Software License: CC9000-AVIGILON</td>
</tr>
</tbody>
</table>

ACC Server and Client Requirements

Make sure the ACC Server and Client meet the system requirements listed on the Avigilon website: avigilon.com/support-and-downloads/for-software/acc/system-requirements/.
Upgrading the Integration Software

If you are upgrading the integration software from the previous version, you may also want to upgrade the Avigilon Control Center software and the C•CURE 9000 software to use all of the new features.

Upgrade the software components in the following order:

1. C•CURE 9000 software
2. ACC Server software
3. ACC to C•CURE 9000 integration software

After the latest version of each software has been installed, the previous version of the ACC to C•CURE 9000 integration software should be automatically removed.

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
- C•CURE Help
- C•CURE Server Management Application User Guide
- C•CURE Licensing User Guide
Installation

All C•CURE 9000 services and components must be turned off before the integration can be installed. The Avigilon integration software with C•CURE 9000 must be installed on either a server or client that is connected to your C•CURE 9000 system.

Integration upgrades can be installed on any machine that was previously running the integration.

Servers

Install the following on any server in your network.

- Install the following on the same server:
  - C•CURE 9000 server software
  - Avigilon integration for C•CURE 9000.
- ACC Server software
- One ACC Server in the Site must have the integration license.

Client

- Install the C•CURE 9000 client software on any workstation that requires access to the C•CURE 9000 system.
- Install the Avigilon integration for C•CURE 9000 on each client workstation that requires access to video from the Avigilon system.

Silent Installation

It is possible to perform an unmanned, or silent, installation of the integration software. If a silent installation is not required, simply run the integration installer and follow the onscreen prompts.

To perform a silent installation, enter the following commands into a Command Prompt window:

**Tip:** The logging command is optional.

To install the integration, enter the following string:

```
<name of the installer.exe> /s /l=\<preferred log directory>
```

Shortcuts are automatically added to Avigilon\Avigilon CCure Integration

For example:
AvigilonCCureIntegration.exe /s /l=c:\temp\install.log

- To uninstall the integration, enter the following string:
  `<name of the installer.exe> /s /l=<preferred log directory> MODIFY=FALSE REMOVE=TRUE UNINSTALL=YES`
  AvigilonCCureIntegration.exe /s /l=C:\temp\install.log MODIFY=FALSE REMOVE=TRUE UNINSTALL=YES

- To upgrade the previous integration, enter the following string:
  `<name of the upgrade installer> /s /l=<preferred log directory>`
  AvigilonCCureIntegration.exe /s /l=c:\temp\install.log

**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. 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.

**Checking the License in C•CURE**

Checking the License in C•CURE License Manager:

1. In the C•CURE License Manager, select the **C•CURE 9000** tab.
2. Check that **Avigilon Control Center** is listed in the Licensed Features list.

    1. In the C•CURE Administration Station or the C•CURE Monitoring Station, select **Help > About**.
    2. In the About C•CURE dialog box, select the License tab.
    3. In the Options list, check that **Avigilon Control Center** is listed.

**Enabling the Integration in C•CURE**

After you check the licenses, you must enable the integration in the C•CURE software.
1. Open the C•CURE Server Configuration Application.
2. Select the Services tab.
3. If the CrossFire Service and Server Component Framework are not running, click Start.
4. In the Extension Services list, find the Avigilon Video Driver Service then select the Enabled check box and click Start.

The service status should change to Running.
Avigilon Configuration

Once the required licence and software have been installed, configure the ACC software for the integration. See the *Avigilon Control Center Client User Guide* for more information about each of the required configurations.

**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 the Avigilon Control Center Software**

To protect the security of the Avigilon Control Center software, 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.

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

- View live images
  - Use PTZ controls
  - Lock PTZ controls
  - Trigger manual recording
- View recorded images
  - Export images
  - Archive images

This user will be used to connect the ACC system to the C-CURE software.

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 Add Group.
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 Add User.
7. In the Add/Edit User dialog box, enter a Username:
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 software 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.
C•CURE Configuration

After the Avigilon Control Center configurations are complete, configure C•CURE to use the integration. See the C•CURE Help for more information about each of the configurations.

Adding Avigilon Servers and Cameras

1. Open the C•CURE Administration Workstation.

![C•CURE Administration Workstation](image)

2. Select the Video tab.

3. In the Video Tree pane, right-click **Company Name** and select **Avigilon Video Server > New**.
4. In the Video Server Editor, give the server a name and description.

![Video Server Editor](image)

5. Enter the username and password you created for the integration. For more information, see *Adding an Integration User in the Avigilon Control Center Software* on page 6.

6. Enter the IP address for the ACC Server with the integration license.

   **Note:** Only one server from an ACC Site should be defined in the C•CURE system.

   If the integration software was installed on the same server as the Administration Workstation software, enter the localhost IP address instead (typically 127.0.0.1).

7. Select the Enable check box then click Connect.
8. Click the Import Cameras button when it becomes enabled.

   **Note:** Only cameras that have logical IDs are imported into the C•CURE system. For more information, see *Assigning Logical IDs to Cameras* on page 6.

9. Click Save and Close.
10. In the C•CURE Server Configuration Application, open the Services tab and restart the Avigilon Video Driver Service.
The new server and all cameras connected to the Site are added to the Video Tree pane of the Administration Workstation.

Adding Server Alarms

You can create a server alarm that is triggered by the ACC Server software online or offline status.

1. Open the C•CURE Administration Workstation.
2. In the Video Tree pane, right-click the Avigilon server and select Edit.
3. In the Video Server Editor, select the Alarms tab then click Add.
4. In the Property column, select Video Server Alarm.
5. In the Values column, select what triggers the alarm — when the server becomes Offline or Online.
6. In the Action column, select how you want C•CURE to respond to the alarm.
7. If you selected Video Camera Action, select the Action Type tab and select the server and camera that will perform the action.
8. In the Schedule column, select when the alarm can be triggered.
9. Click Save and Close.
Adding Camera Alarms

You can add a camera alarm that is triggered by a camera event, like motion detection or video analytics events configured in the ACC software.

1. In the C•CURE Administration Workstation, right-click a camera in the Video Tree pane and select Edit.
2. In the Video Camera Editor, select the Alarms tab then click Add.

3. In the Property column, select Video Camera Alarm or Videoloss.
4. In the Value column, select what triggers the alarm.
   - If you selected the Video Camera Alarm property, select Motion or Analytics.
   - If you selected the Videoloss property, click the Value column setting. When the check box appears, mark the check box for True or clear the check box for False.
5. In the Action column, select how you want C•CURE to respond to the alarm.
6. On the bottom half of the window, select any available options to further define the selected Action setting.
7. In the Schedule column, select when the alarm can be triggered.
8. Click Save and Close.
Using the Integration

Now that the integration has been installed and configured, you can use the C•CURE system to monitor video and alarms detected by cameras connected to the ACC system.

See the C•CURE Help for more information about using the different features in the C•CURE system.

Exporting Video

When you display recorded video in the C•CURE 9000 software, you can also export the video you are watching from the same window.

1. Display recorded video in the C•CURE software.
2. In the recorded video controls area, click Export Video.
3. In the following dialog box, enter the duration of the video export.

4. Select the video export format.
   - **AVI Format** — Audio Video Interleave format can be played in most media players.
     
     If you want the exported video to display the colored classified object bounding boxes, select the Analytics Overlay check box.
   
   - **AVE Format** — Avigilon Native Video format can only be played in the ACC Player software but the export includes all the original video metadata, so it can be searched then re-exported as needed. The analytics overlay is automatically included.

5. Click Export.
Troubleshooting

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

Known Limitations

Listed below are the known limitations of the Avigilon integration with C•CURE 9000. The issues may be resolved in future versions of the integration software.

- Unable to configure or use Preset and Pattern 0 in triggered alarms or events.
- After updating the older integration, the old installation must be manually removed from Windows Add/Remove Program.
- When a server goes offline and online again, there can be a delay before it reconnects.
- There may be a delay when shutting down the integration via the Crossfire Server Component Framework.

Avigilon Integration Software Does Not Install

When you try to install the Avigilon integration with C•CURE, an error message appears. The integration may continue to install but the installation is unsuccessful and you are unable to locate any instance of Avigilon Control Center in the C•CURE system.

This issue typically occurs when the user installing the integration does not have access to the C•CURE database.

To resolve this issue, uninstall the integration software, then reinstall it through the user account that installed the C•CURE server software.

Avigilon Video Driver Server Not Available

When you try to enable the integration in the C•CURE software (as described in Enabling the Integration in C•CURE on page 4) the Avigilon server component is not listed.

Check that the following integration requirements were met and the integration was installed correctly:

- You have an integration license from Avigilon and Software House.
- Both the ACC Server software and the C•CURE Server software are installed on the same network.
- When you installed the integration software, all C•CURE services and components were turned off.
Camera is not Imported

After you've added the Avigilon server and cameras to the C•CURE software, a camera that you require is not listed in the Video Tree pane.

There are typically two reasons why the camera does not appear in the C•CURE software:

1. The camera does not have a logical ID.
   - Perform Assigning Logical IDs to Cameras on page 6.
2. The camera is connected to an ACC Server that has not been added to the C•CURE software. You can correct this by performing one of the following:
   - Add the ACC Server to the C•CURE software. For more information, see Adding Avigilon Servers and Cameras on page 8.
   - Connect the camera to a server that has already been connected to the C•CURE software.
   
   In the ACC Client software, disconnect the camera from its current server then connect it to the server that is linked to C•CURE. You may need to import cameras from the server to C•CURE again — for more information, see Adding Avigilon Servers and Cameras on page 8.

Cameras Can only Be Imported in Bulk Once

Users may only import cameras in bulk once. After that the cameras need to be imported individually. This is due to a known limitation in the C•CURE integration caused by duplicate names and logical ID's in the site. Importing cameras more than once results in the following error:

Cannot save because another object exists with same configuration.

A workaround would be to remove any duplicate names and logical ID's before another import.

Video Is Displayed But Video Alarms Are Not Occurring

While you monitor video, you observe a motion event but the related alarm does not activate.

The integration service may not have started correctly. Reboot the service:

1. Open the C•CURE Server Configuration Application.
2. Select the Services tab.
3. If the CrossFire Service and Server Component Framework are not running, click Start.
4. In the Extension Services list, find the Avigilon Video Driver Service then select the Enabled check box and click Start.

   The service status should change to Running.
Disabling Video Overlays

By default, video from the ACC system displays a number of overlays. You can disable any overlay that you do not need.

To disable the overlays, you must have access to the computer that the C•CURE 9000 software is installed on and permission to edit the configuration files.

1. Locate and open the AvigilonSdkConfig.cfg file in a text editor. The file is typically located here: C:\Program Files (x86)\Tyco\CCURE Client
2. In the text editor, change the relevant ConfigItem value to 0.
   - Classified object bounding boxes that show video analytics activity:
     <ConfigItem name="DisplayAnalyticsOverlay" type="Boolean" value="1"/>
   - Device name:
     <ConfigItem name="DisplayDeviceNameOverlay" type="Boolean" value="1"/>
   - Device location:
     <ConfigItem name="DisplayCameraLocationOverlay" type="Boolean" value="1"/>
   - Video timestamp:
     <ConfigItem name="DisplayImageTimeOverlay" type="Boolean" value="1"/>
   - Recording indicator:
     <ConfigItem name="DisplayRecordingSymbolOverlay" type="Boolean" value="1"/>
   - Motion activity:
     <ConfigItem name="DisplayMotionOverlay" type="Boolean" value="1"/>
   - License plate recognition:
     <ConfigItem name="DisplayLicensePlateOverlay" type="Boolean" value="1"/>
3. Save the file.
4. Restart the C•CURE 9000 client software.

Next time you watch video in the C•CURE 9000 software, the edited overlays are no longer displayed.
Video in C•CURE 9000 Application is Incomplete or Discolored

Video displayed in the C•CURE 9000 applications appear clipped, incomplete or shows discoloration. This issue typically occurs in complex network environments where UDP traffic between C•CURE 9000 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 show discoloration like in the C•CURE 9000 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. Navigate to the ..\CCure Client program folder.
   The folder is typically located here: C:\Program Files (x86)\Tyco
2. Copy the following files to your desktop:
3. Open the two .config files in a text editor and add the following line after the <appSettings> tag:
   <add key="NetworkConnectionType" value="WAN"/>
4. Save and close the files.
5. Close the following C•CURE 9000 applications if they are open:
   - Administration Workstation
   - C•CURE 9000 Launchpad
   - Monitoring Station
   - Server Configuration
   - Licensing
6. Open the Windows Services console.
   - In the Windows Start menu search bar, enter services.msc.
7. Locate Avigilon Video Driver Service.
8. Right-click the service and select **Stop**.
   Wait for the service to stop.

9. Copy the two files you edited back to the ..\CCure Client folder.
   If you are prompted, allow the system to overwrite the unmodified version of the files in the folder.

10. In the Windows Services console, restart the Avigilon Video Driver Service.
    Video in the C•CURE 9000 applications should now display correctly without issue.