

# avigilon Control Center Server User Guide

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avigilon Control Center Server



### **Product Information**

#### What Is the ACC Server Software?

The Avigilon Control Center (ACC) Server software is a video management system that allows users to manage and monitor their surveillance cameras. It consists of two parts: the Windows service and the Admin Tool.

# **System Requirements**

The system requirements for the ACC Server software are as follows:

- Operating System (OS): Windows Server 2012 R2/2016 / 2019, Windows 8.1 (64-bit), or Windows 10 (64-bit)
- Processor: 64-bit (dual-core, 1.9 GHz)
- Memory: Recommended: 8 GB DDR4, Minimum: 4 GB DDR3
- Storage: Recommended: SATA-III 7200 RPM, Minimum: SATA-II 7200 RPM Enterprise Class

#### **Avigilon Certified Solution**

The Avigilon Certified Solution is a recommended option for full server performance. It includes HD Video Appliances or NVR Workstations that come preloaded and configured with ACC video management software. These workstations have high-performance recording capacity and support high-resolution monitors. They also offer a throughput of up to 400 Mbps and include Avigilon warranty and support. Additionally, they provide access to Avigilon SDT (Storage Design Tool) for calculating storage requirements.

#### **ACCTM Server Software Requirements**

When installing the ACC software, it is important not to install it on servers running Active Directory or DNS services, as these services can severely impair ACC functionality.

### **Getting Help**

If you need assistance with a feature or task, you can visit <u>help.avigilon.com/acc</u> or access the in-product help by clicking "Help" in the bottom-left corner of the Admin Tool.

# **For More Information**

For additional product documentation, software, and firmware upgrades, you can visit <u>support.avigilon.com</u>. If you require technical support, you can contact Avigilon Technical Support at <u>support.avigilon.com/s/contactsupport</u>.

# **Product Usage Instructions**

### **Getting Started**

The Avigilon Control Center Server software consists of two parts: the Windows service and the Admin Tool. Follow the instructions below to get started:

#### **Windows Service**

- 1. The Windows service runs automatically when your computer starts.
- 2. If required, you can configure the service properties in the Services window.

# **Using the Admin Tool**

The Admin Tool is used to configure the Windows service and manage the Avigilon Control Center System. Follow the instructions below to use the Admin Tool:

# **Starting Up and Shutting Down**

- 1. To start the server software, follow the startup procedure specified in the user manual.
- 2. To shut down the server software, follow the shutdown procedure specified in the user manual.

# Starting the ACC Client Software

- 1. To start the ACC Client Software, follow the startup procedure specified in the user manual.
- 2. You can now view live and recorded images locally using the ACC Client Software.

## **Viewing Application Logs**

To view application logs, follow the procedure specified in the user manual.

### **Resetting the Administrator Password**

If you need to reset the administrator password, follow the password reset procedure specified in the user manual.

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#### What Is the ACC Server Software

The ACC Server software is the application that captures and records surveillance data from Windows-based network cameras and encoders. The captured data is then sent to the ACC Client software for you to review. For Avigilon Hardened OS appliances, the ACC Server software is built-in. Refer to your video infrastructure documentation for details. The ACC Server software contains two key parts — the Windows service and the Admin Tool. The Windows service directs video to where it needs to be stored or streamed in the network. The Admin Tool allows you to configure the system administrative settings.

There are three editions of the Server software available: Core, Standard and Enterprise. The edition of the Server software determines how many cameras can be connected to the system and the number of simultaneous client connections. The edition of the Server software also determines what features are available in the ACC Client software.

### **System Requirements**

#### Note:

Network video recording and retention times vary according to the number of cameras, camera resolution, estimated percent of motion, continuous recording settings and predefined retention period. For full server performance, use the Avigilon certified solution options.

# **Avigilon Certified Solution**

- Servers NVR Premium, Standard, or Value
  - o Optimized for video surveillance applications in a 24/7/365 environment.
    - o ACC software is preinstalled, configured and enhanced for optimal system compatibility.
    - o Certified for the Avigilon surveillance environment ACC software, LPR, Web Endpoint, Analytics,
    - HDSM™ and 1-30 MP cameras.
    - o High throughput of up to 1800 Mbps.
    - o Documented network architecture for a wide-variety of applications.
    - o Avigilon warranty and support included.
    - o Access to Avigilon System Design Tool (SDT) to calculate storage requirements.
- Workstations HD Video Appliance or NVR Workstation
  - o Preloaded and configured with ACC video management software.
    - o High-performance recording capacity.
    - o Supports high resolution monitors.
  - o Throughput of up to 400 Mbps.
    - o Avigilon warranty and support included.
    - o Access to Avigilon SDT to calculate storage requirements.

### **ACC™** Server Software Requirements

### Important:

Do not install the ACC software on servers running Active Directory or DNS services. These services can severely impair ACC functionality.

### **ACC Server Software**

System Requirement	Recommended	Minimum
Recording capacity:	256 Mbps up to 120 cameras *Remote viewing only.	
OS*	Windows Server 2016	Windows Server 2012 R2 / 2016 / 201 9, Windows 8.1 (64-bit) or Windows 10 (64-bit)
Processor	Intel® Xeon® E5 v3 (6 cores, 1.9 GHz)	x86 64-bit (dual-core, 1.9 GHz)
Memory	16 GB DDR4	4 GB DDR3
Storage	SATA-III 7200 RPM Enterprise Class	SATA-II 7200 RPM Enterprise Class

# **ACC Server Workstation**

System Requirement	Recommended	Minimum
Recording capacity:	80 Mbps up to 60 cameras  *Can view live and recorded images locally	
OS*	Windows 10 (64-bit)	Windows 8.1 (64-bit) or Windows 10 (64-bit)
Processor	8th Generation Intel Celeron® CPU or hig her	Intel Quad-core (2.0 GHz)
Memory	8 GB DDR4	4 GB DDR3
Video	NVIDIA® Quadro P620	PCI Express®, DirectX 10.0 compliant with 256 MB RAM
Storage	SATA-III 7200 RPM	SATA-II 7200 RPM

Run Windows Update before launching the ACC software.

# **Getting Help**

If you want to learn more about a feature or how to accomplish a task, visit <a href="help.avigilon.com/acc">help.avigilon.com/acc</a> or see our inproduct help.

• In the bottom-left corner of the Admin Tool, click Help.

# **For More Information**

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

# **Technical Support**

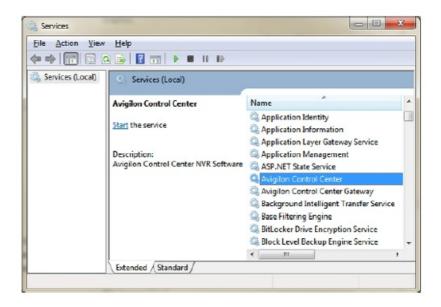
Contact Avigilon Technical Support at <a href="mailto:support.avigilon.com/s/contactsupport">support.avigilon.com/s/contactsupport</a>.

# **Getting Started**

- The Avigilon Control Center Server software contains two parts: the Windows service and the Admin Tool. The Windows service runs automatically when your computer starts.
- The Admin Tool is used to configure the Windows service. From the Admin Tool you can define the network and configure the backup and storage settings for the Avigilon Control Center System.

#### **Windows Service**

- The Avigilon Control Center Server software includes a Windows service that runs automatically in the background.
- If required, you can configure the service properties in the Services window.



#### **Admin Tool**

The Admin Tool is used to configure your Avigilon Control Center Server settings. From the Admin Tool, you can configure the size of the surveillance data storage space, the file backup location, and network ports.

### **Accessing the Admin Tool**

The Admin Tool can be accessed in the following ways:

- From the Start menu, select All Programs or All Apps > Avigilon > Avigilon Control Center Server > Admin Tool
- Double-click the desktop shortcut icon

### **Admin Tool Window**

- From the Admin Tool, you can start up or shut down the Avigilon Control Center Server at any time. For more information, see Starting Up and Shutting Down on page 17.
- The Admin Tool window contains two tabs: the General tab and the Settings tab. The following tables describe what options are available in each tab.

# General

Icon	Description
•	Launch the Avigilon Control Center Client software.
	View the Avigilon Control Center Server error logs.

## **Settings**

Icon	Description
9	Define the amount of server space allocated to surveillance data storage. For more informati on, see Configuring the Server Storage Settings on the next page.
*	Define the network ports. For more information, see Configuring the Server Network Settings on page 14.
	Define where backup files are stored. For more information, see Enabling Storage Managem ent on page 13.

# **System Settings**

Complete the following procedures to configure the Avigilon Control Center Server to fit your requirements.

# **Configuring the Server Storage Settings**

- You must configure the server storage settings so the Avigilon Control Center Server software knows how much space is allocated for storing surveillance data, and where it is located.
- If the Admin Tool detects that there is no existing storage configuration, it will launch the Set Up Storage Configuration dialog box.

By default the software will assign most of the available storage to the Primary Data Volume for storing recorded video.

- If the recommended configuration is acceptable, click Finish
- If you want to change the configuration click Change Storage Configuration. For more information, see Changing the Storage Configuration on the next page.

### **Erasing Storage Configuration**

### Note:

If you choose to erase all stored data, be aware that all recorded surveillance data and server settings will be lost.

- 1. Open the Storage dialog box. For more information, see Accessing the Server Storage Configuration below.
- 2. Click Erase All Data.
- 3. Click Yes.
- 4. You will need to create a new storage configuration before you can start up the Avigilon Control Center Server again. For more information, see Changing the Storage Configuration on the next page.

### **Accessing the Server Storage Configuration**

1. In the Admin Tool, click Shut Down.

The Avigilon Control Center Server must be shut down before the storage configuration can be viewed or edited.

- 2. In the Settings tab, click
- 3. In the Storage dialog box, you can see the current storage configuration.

### **Setting Up the Initial Server Storage Configuration**

When the Admin Tool detects that there is no existing storage configuration, it will launch the Set Up Storage Configuration dialog box with the recommended storage configuration.

By default the software will assign most of the available storage to the Primary Data Volume for storing recorded video.

- If the recommended configuration is acceptable, click Finish
- If you want to change the configuration click Change Storage Configuration. For more information, see Changing the Storage Configuration below.

# **Changing the Storage Configuration**

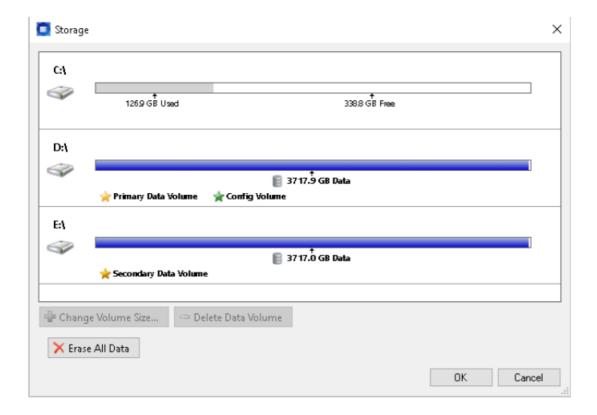
You may need to change the storage configuration in the following situations:

- If you are unsatisfied with the storage configuration suggested by the application, click Change Storage Configuration to define the storage settings to fit your needs.
- If you recently chose to Erase All Data, you must reset the Storage configuration before you can continue.

## Complete the following procedure in the Storage dialog box:

If the Storage dialog box is not already open, see Accessing the Server Storage Configuration on the previous page.

- Note: Place the Config Volume and the Data Volume on separate drives apart from the OS (C:\ by default).
- 1. In the Storage dialog box, select the drive for storing the Config Volume and click Set Config Volume.



Note: Some of the buttons in the figure may not be available if the drive cannot accommodate the setting.

- 2. To add a data volume, select the drive and click Add Data Volume.... The button is not available if the drive already has a data volume.
  - In the Add Data Volume dialog box, enter the preferred data volume size.

### **WARNING**

Adding a Primary Data Volume value that is substantially larger than the Secondary Data Volume value, or adding a Secondary Data Volume value that is substantially larger than the Primary Data Volume value may lead to recordings being deleted earlier than the time specified in your retention policies.

#### Note:

ACC Server will show a warning message if either the Primary Data Volume value or the Secondary Data Volume value is set to a substantially larger value than the other.

- · Click OK.
- 3. To delete a Secondary Data Volume, select the drive and click Delete Data Volume. Deleting a data volume will erase all recorded data from that drive.

#### Note:

You cannot delete a Primary Data Volume, you can only erase all data. For more information, see Erasing the Storage Configuration below.

4. If you are not satisfied with the location of the Primary Data Volume, select the drive you prefer and click Set Primary Data Volume. The Primary Data Volume contains the database that indexes the surveillance data.

#### Note:

The drive must have a data volume before it can be set as the Primary Data Volume.

5. When you are satisfied with the storage configuration, click OK.

### **Erasing the Storage Configuration**

#### Note:

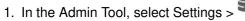
If you choose to erase all stored data, be aware that all recorded surveillance data and server settings will be lost.

- 1. Open the Storage dialog box. For more information, see Accessing the Server Storage Configuration on page 10
- 2. Click Erase All Data.
- 3. When the confirmation dialog box appears, click Yes.
- 4. You will need to create a new storage configuration before you can start up the Avigilon Control Center Server again. For more information, see Changing the Storage Configuration.

### **Enabling Storage Management**

#### FOR STANDARD AND ENTERPRISE EDITION

To allow users to archive video from the ACC network video management server, you must enable the Storage Management feature in the Admin Tool and assign a location for the archived files.



- 2. In the Storage Management dialog box, select the Enable Storage Management checkbox to allow the server to archive video files.
- 3. Enter a location for the Archive Folder:. Click [...] to navigate to the preferred folder location. **Tip:** The archive folder can be on any Windows file system that is accessible by the server. A common file system can be referenced by multiple servers to create a centralized video archive.
- 4. Click OK.

#### Tip:

If ACC is running as a specific user account, allow the Modify, Read & execute, and Write permissions for that user account on the archive folder location.

Once Storage Management is enabled, you can archive video on demand. If you have an Enterprise Edition system, you can also set up the Storage Management Continuous Archive feature.

For more information about archiving video, see the Avigilon Control Center Client User Guide.

# **Configuring the Server Network Settings**

The server communicates with the Avigilon Control Center Client software through a range of UDP and TCP ports. The port ranges only need to be changed if the Client software is trying to access two or more servers that are behind the same NAT device (e.g. router), or if there is a port conflict with other software running on the same computer as the Avigilon Control Center Server software.

- 1. In the Admin Tool, select Settings >
- 2. In the Network dialog box, enter a new base port then click OK.
  - The service ports used by the Server software are updated as the base port changes.
  - The RTP port range must be accessible by the Client computer and can be forwarded on any router or network address translation point between the Client and Server.

### Note:

Time differences between Avigilon Cloud Services and your ACC Service can cause unexpected behavior. To prevent differences in Avigilon Cloud Services time and ACC Server time, configure your server or appliance to synchronize with a network time protocol (NTP) time server.

# **Managing Certificates on the ACC Server**

- By default, the ACC server uses a self-signed certificate for verifying client communications. Avigilon recommends using a trusted CA-signed certificate or other intermediate certificate, such as a Windows CA or custom CA certificate. You must be a Windows Administrator to make these changes.
- If you are using a CA-signed certificate, you will need to disable trust of the default Avigilon certificates after setting up your CA-signed certificates to ensure the default certificate can no longer be used.

### Important:

When logging into the server from a client after setting up your certificate, you will need to use the full hostname, including the domain.

### **Generating the Certificate**

- 1. On the Windows machine running the ACC server, open the Certificate Manager. Select Run in the Start menu and enter certlm.msc.
- 2. Navigate to the Personal > Certificates folder.
- 3. Right-click in the folder contents area and select All Tasks > Request New Certificate....
- 4. Click Next.
- 5. In the Select Certificate Enrollment Policy window, select the Active Directory Enrollment Policy and click Next.
- 6. In the Request Certificates window, select the Avigilon Computer checkbox, then expand the Details drop-down arrow and click Properties.
- 7. On the General tab, enter the Friendly Name as AccServerCert.

### Important:

Make sure to enter the correct Friendly Name, AccServerCert, or the ACC server and clients will not recognize the certificate and will fail to connect.

- 8. On the Private Key tab, in the Key options area, fill the Make private key exportable check box.
- 9. If ACC is running as a specific user account, configure permissions on the private key:
  - On the Private Key tab, in the Key permissions area, fill the Use custom permissions check box.
  - Click Set permissions... and add the corresponding user account to the group or user list.
- 10. Click OK.
- 11. On the Request Certificates window, click Enroll. Click Finish when the operation is complete.

#### **Exporting the Certificate and Private Key**

- 1. Using the certlm.msc tool, right-click the new certificate and select All Tasks > Export....
- 2. Click Next.
- 3. Select Yes, export the private key and click Next.
- 4. Leave the Export File Format settings as default and click Next.
- 5. On the Security window:
  - Select the Group or user names (recommended) check box and select the Active Directory group or user

to which you want to assign access to the certificate and private key.

- · Click Add.
- · Click Next.
- 6. Enter the name and location for the exported certificate, or click Browse to navigate to the location where you want to save the exported certificate. Click Next.
- 7. Click Finish to export the certificate and private key.

# **Documents / Resources**



### References

- O Patent Lists Access Advance
- a Redirecting
- Avigilon Support Community
- Avigilon Support Community
- ▲ NVR Camera System & Smart NVR Security Systems

Manuals+,