Avigilon Control Center™
Server User Guide

Version 6.14
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What is the Avigilon Control Center™ Server?

The Avigilon Control Center Server software is the application that captures and records surveillance data from network cameras and encoders. The captured data is then sent to the Avigilon Control Center Client software for you to review.

The Avigilon Control Center 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 is 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 Avigilon Control Center Client software. Visit the Avigilon website for an overview of the features available with each edition license: [http://avigilon.com/products/avigilon-control-center/editions/](http://avigilon.com/products/avigilon-control-center/editions/)

System Requirements

**NOTE:** Network video recording throughput and retention times can 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** — HD NVR Premium, HD NVR Standard or HD NVR Value
  - Optimized for video surveillance applications in a 24/7/365 environment.
  - ACC software is preinstalled, configured and enhanced for optimal system compatibility.
  - Certified for the Avigilon surveillance environment — ACC software, LPR, Mobile Gateway, Analytics, HDSM™ and 1-30MP cameras.
  - High throughput of up to 1670 Mbps.
  - Documented network architecture for a wide-variety of applications.
  - Avigilon enhanced warranty and premium support included.
  - Access to Avigilon System Design Tool (SDT) to calculate storage requirements.

- **Workstations** — HD Video Appliance or NVR Workstation
  - Preloaded and configured with ACC video management software.
  - High-performance recording capacity.
  - Supports high resolution monitors.
  - Throughput of up to 336 Mbps.
  - Avigilon warranty and support included.
  - 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.

<table>
<thead>
<tr>
<th>System Requirement</th>
<th>Servers</th>
<th>Workstations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recording capacity:</td>
<td>256 Mbps up to 120 cameras</td>
<td>80 Mbps up to 60 cameras</td>
</tr>
<tr>
<td></td>
<td><em>Remote viewing only.</em></td>
<td><em>Can view live and recorded images locally</em></td>
</tr>
<tr>
<td></td>
<td>A 64-bit operating system is recommended</td>
<td>A 64-bit operating system is recommended</td>
</tr>
<tr>
<td>CPU</td>
<td>x86 64 bit dual-core (1.9 GHz)</td>
<td>Intel quad-core CPU (2.0 GHz)</td>
</tr>
<tr>
<td>System RAM</td>
<td>4 GB DDR3</td>
<td>4 GB DDR3</td>
</tr>
<tr>
<td>Video Card</td>
<td>n/a</td>
<td>PCI Express, DirectX 10.0 compliant with 256 MB RAM</td>
</tr>
<tr>
<td>Network Card</td>
<td>1 Gbps</td>
<td>1 Gbps</td>
</tr>
<tr>
<td>Hard Drives</td>
<td>SATA-II 7200 RPM Enterprise Class Hard Drives</td>
<td>SATA-II 7200 RPM Hard Drives</td>
</tr>
</tbody>
</table>

* For all Windows versions, it is recommended that the latest Microsoft service pack be deployed.

### For More Information

Visit Avigilon at [avigilon.com](http://avigilon.com) for additional product documentation.

### Technical Support

To contact Avigilon Technical Support, go to [avigilon.com/contact-us](http://avigilon.com/contact-us).

### Upgrades

Software and firmware upgrades will be made available for download as they become available. Check for available upgrades at: [avigilon.com/support-and-downloads](http://avigilon.com/support-and-downloads).

### Feedback

We value your feedback. Please send any comments on our products and services to feedback@avigilon.com.
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.

![Services window](image)

Figure 1: 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 shortcut icon on the desktop.

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 11.

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

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Eye Icon]</td>
<td>Click this button to launch the Avigilon Control Center Client software.</td>
</tr>
<tr>
<td>![File Icon]</td>
<td>Click this button to view the Avigilon Control Center Server error logs.</td>
</tr>
</tbody>
</table>

### Settings

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Database Icon]</td>
<td>Click this button to define the amount of server space allocated to surveillance data storage. For more information, see <em>Configuring the Server Storage Settings</em> on the next page.</td>
</tr>
<tr>
<td>![Network Icon]</td>
<td>Click this button to define the network ports. For more information, see <em>Configuring the Server Network Settings</em> on page 10.</td>
</tr>
<tr>
<td>![Backup Icon]</td>
<td>Click this button to define where backup files are stored. For more information, see <em>Enabling Storage Management</em> on page 10.</td>
</tr>
</tbody>
</table>
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.

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 above

NOTE: If possible, place the Config Volume and the Data Volume on separate drives apart from the OS drive (C:\ by default).
1. In the Storage dialog box, select the drive for storing the Config Volume and click **Set Config Volume**.

![Figure 2: The Storage dialog box](image)

**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.
   a. In the Add Data Volume dialog box, enter the preferred data volume size.
   b. 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 8.

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* on page 8.

### Enabling Storage Management

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.

1. In the Admin Tool, select **Settings** > ![Settings Icon].

2. In the Storage Management dialog box, select the **Enable Storage Management** check box 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**.

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** > ![Settings Icon].

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.
Using the Admin Tool

In addition to configuring the server, the Admin Tool can also be used to start up and shut down the Avigilon Control Center Server software, launch the Client software, and display the Application Logs.

Starting Up and Shutting Down

The Avigilon Control Center Server software automatically starts when Windows starts, but it can be manually shut down and started through the Admin Tool.

Starting Up the Server Software

- In the Admin Tool, click Start Up.

When the Avigilon Control Center Server has started properly, the Admin Tool displays this message:

    Control Center Server is Running.

Shutting Down the Server Software

When the Avigilon Control Center Server is shut down, all video recording is stopped until the Avigilon Control Center Server is started again.

- In the Admin Tool, click Shut Down.

When the Avigilon Control Center Server has shut down properly, the Admin Tool displays this message:

    Control Center Server is Not Running.

Starting the Avigilon Control Center Client

The Avigilon Control Center Client software can be launched from the Admin Tool.

- In the Admin Tool, select General > .

If the Client software is not installed, the Admin Tool will prompt you to install it.

Viewing Application Logs

You can view the Avigilon Control Center application error logs through the Admin Tool. This can assist in diagnosing problems with your system.
1. In the Admin Tool, select **General**.
2. In the Application Logs dialog box, double-click an error to view the details.
3. Click **OK** to close the dialog box.
Appendix

Resetting the Administrator Password

To reset the administrator password for accessing the Avigilon Control Center Client, you must delete all existing user and group account information from the server Config Volume.

**Tip:** You can avoid this procedure if you have a user account that has all the same permissions as an administrator. You can use this user account to reset the administrator password in the Avigilon Control Center Client software.

1. In the Admin Tool, click **Shut Down**. If you have multiple servers in your site, you need to shut down all the servers in your site.

2. Select **Settings**.

3. In the Storage dialog box, make note of the drive that holds the Config Volume.

4. Access the Config Volume drive and navigate to the
   `AvigilonConfig\Db\DirectoryShared\Users` folder.
   
   For example, `D:\AvigilonConfig\Db\DirectoryShared\Users`.

5. Delete all the files in this folder. If you have multiple servers in your site, you need to delete this folder from every server in your site before you do the last step.

   The server automatically resets all the user and group settings back to the factory default.

6. In the Admin Tool, click **Start Up**. Repeat for each server in your site.

Once all the servers have come back online, you can log into the site using the default administrator credentials:

- **Username:** administrator
- **Password:** <leave blank>

To add users and groups to the server, see *The Avigilon Control Center Client User Guide*. 