



Avigilon Control Center Server User Guide

Version 5.0.2

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Introduction

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 Control Center Server Windows service and the Admin Tool. The Control Center Server Windows service directs video to where it needs to be stored or streamed in the network. While the Admin Tool is the interface that allows you to configure the Control Center Server's 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/>

System Requirements

Recording capacity:	32MB/s Up to 128 cameras *Remote viewing only.	10MB/s Up to 64 cameras *Can view live and recorded images locally
OS	Windows XP SP2, Windows XP SP2 x64, Windows Vista 32-bit or 64-bit, Windows Server 2003 SP2, Windows Server 2008, Windows 7, Windows 8 or Windows Server 2012. A 64-bit operating system is recommended	Windows XP SP2, Windows XP SP2 x64, Windows Vista 32-bit or 64-bit, Windows Server 2003 SP2, Windows Server 2008, Windows 7, Windows 8 64-bit or Windows Server 2012 64-bit

CPU	Intel Quad Core Xeon 2.0 GHz processor	Intel Quad Core Xeon 2.0 GHz processor
System RAM	4 GB DDR2	2 GB DDR2
Video card	n/a	nVidia Quadro FX 570 dual DVI
Network card	1 Gbps Intel Pro/1000 or Broadcom NetXtreme II Server Adapters	1 Gbps
Hard drives	SATA-II 7200 RPM Enterprise Class Hard Drives	SATA-II 7200 RPM Hard Drives

For More Information

Visit Avigilon at <http://www.avigilon.com/> for additional product documentation.

Avigilon Training Center

The Avigilon Training Center provides free online training videos that demonstrate how to set up and use the Avigilon Surveillance System. Register online at the Avigilon Partner Portal site to begin:

<http://avigilon.force.com/login>

Support

For additional support information, visit <http://avigilon.com/support-and-downloads/>.

The Avigilon Partner Portal also provides self-directed support resources - register and login at

<http://avigilon.force.com/login>.

Regular Avigilon Technical Support is available Monday to Friday from 12:00 a.m. to 6:00 p.m. Pacific Standard Time (PST):

- North America: +1.888.281.5182 option 1
- International: +800.4567.8988 or +1.604.629.5182 option 1

Emergency Technical Support is available 24/7:

- North America: +1.888.281.5182 option 1 then dial 9

- International: +800.4567.8988 or +1.604.629.5182 option 1 then dial 9

E-mails can be sent to: support@avigilon.com.

Upgrades

Software and firmware upgrades will be made available for download as they become available. Check <http://avigilon.com/support-and-downloads/> for available upgrades.

Feedback

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

Navigating the Application

The Avigilon Control Center Server software contains two parts: the Control Center Server Windows service and the Admin Tool.

The Control Center Server Windows service runs automatically when your computer starts.

The Admin Tool is used to configure the Control Center Server Windows service. For example, from the Admin Tool you can add licenses, define the network, and configure the backup and storage settings for the Avigilon Control Center.

Control Center Server

The Control Center Server is a Windows service, so it runs automatically in the background.

If required, you can configure the Control Center Server properties in the Services window.

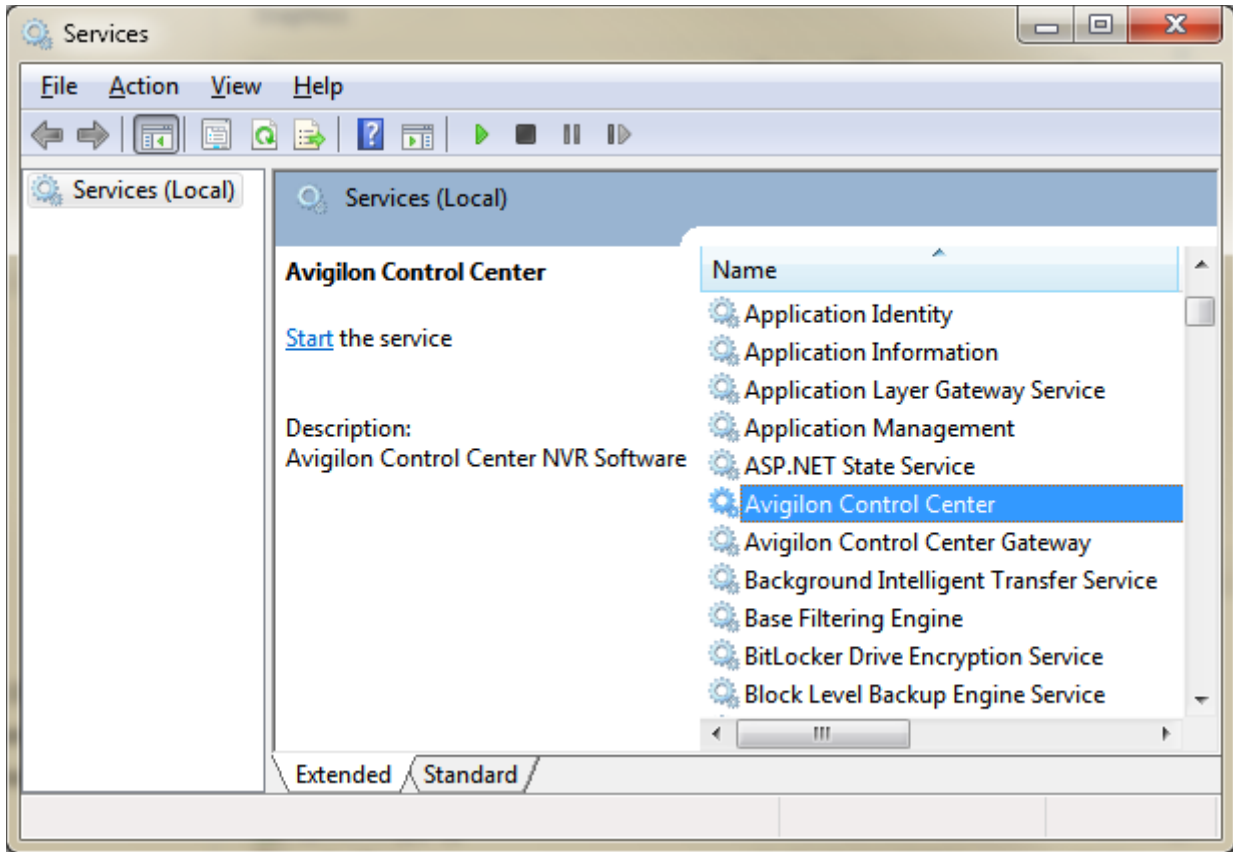


Figure A. Services window

Admin Tool

The Admin Tool is used to configure your Control Center Server settings. From the Admin Tool, you can configure the size of the surveillance data storage space, where files are backed up, the licenses for the Avigilon Control Center, and network ports.

Accessing the Admin Tool

The Admin Tool can be accessed in the following ways:



- In Windows, select **All Programs** or **All Apps > Avigilon > Avigilon Control Center Server > Avigilon Control Center Server Admin Tool**



- Double-click the  shortcut icon on the desktop.

- Double-click the Avigilon Control Center icon in the system tray.

The Avigilon Control Center icon in the system tray changes color depending on the Server software status.

 <p>Figure A. Avigilon Control Center icon: Control Center Server is Running</p>	 <p>Figure B. Avigilon Control Center icon: Control Center Server is Not Running</p>
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Admin Tool Window

From the Admin Tool, you can start up or shut down the Control Center Server at any time. See [Starting Up and Shutting Down the Avigilon Control Center Server](#).

The Admin Tool window contains two tabs: the **General** tab and the **Settings** tab.

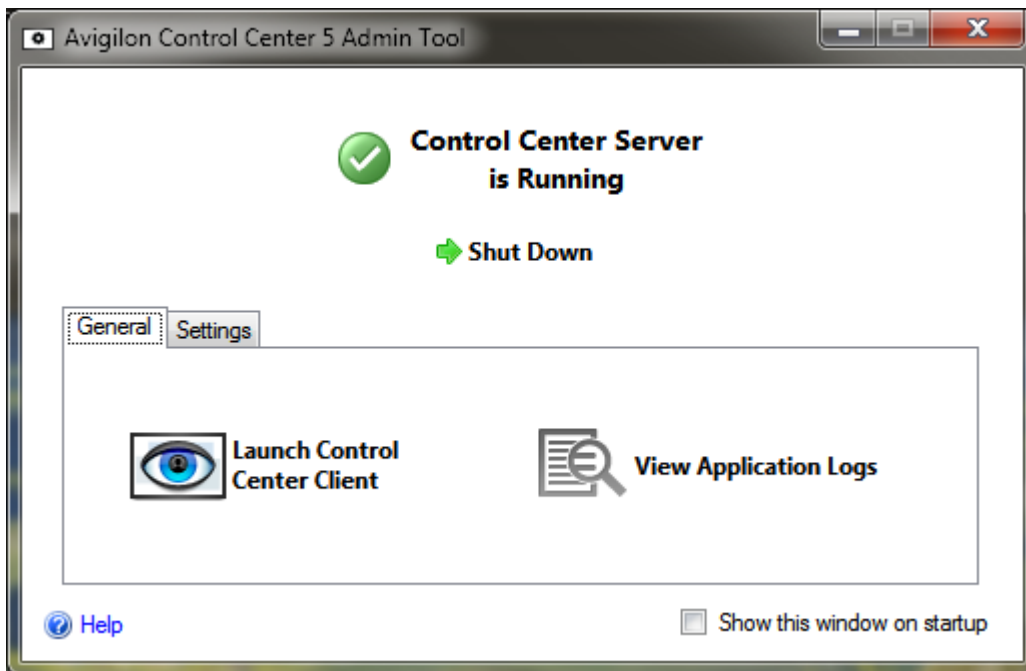




Figure C. Admin Tool, **General** tab

Feature	Description
	<p>Click this button to start the Avigilon Control Center Client software.</p>
	<p>Click this button to view the Control Center Server error logs.</p>

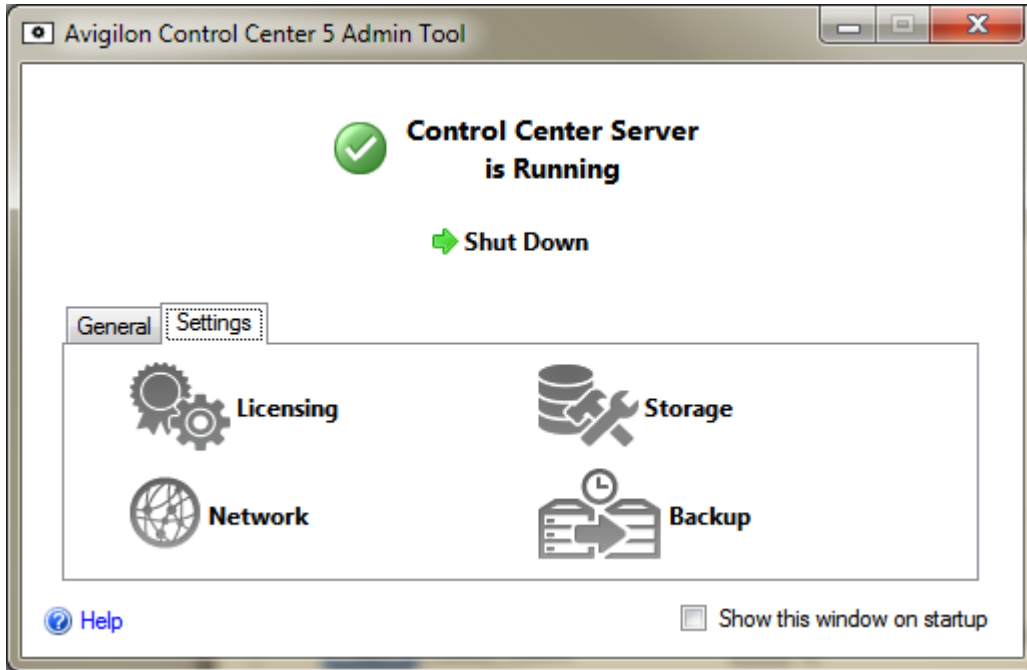






Figure D. Admin Tool, **Settings** tab

Feature	Description
	Click this button to view and add licenses to your Avigilon Control Center system. See Licensing the Server for more information.
	Click this button to define the amount of server space for surveillance data storage. See Configuring the Server Storage Settings for more information.
	Click this button to define the network ports. See Configuring the Server Network Settings for more information.
	Click this button to define where backup files are stored. See Configuring the Server Backup Settings for more information.

Setup

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

Licensing the Server

After the Avigilon Control Center Server software has been installed, you must apply your software license to the application or the Control Center Server will not run.

Your server can be licensed for the Core, Standard or Enterprise edition. If you are running the Enterprise edition, this procedure is also used to add integration licenses.

Accessing the Server Licensing Settings

1. In the Admin Tool, select **Settings >**



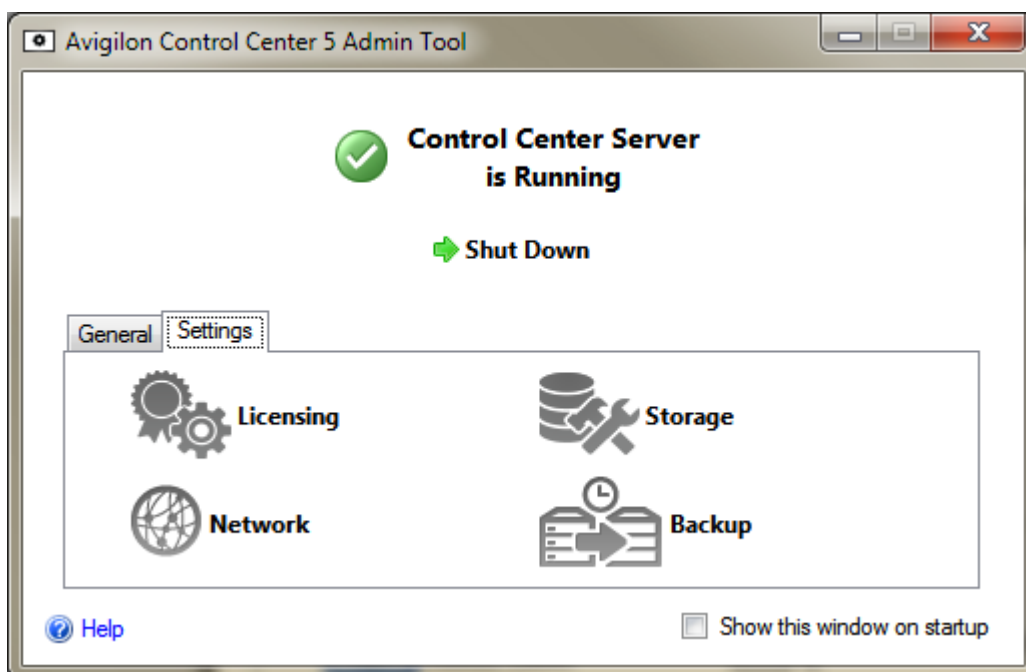


Figure A. Control Center Admin Tool

2. In the License Activation dialog box, you can see the server's license edition and optional license features.

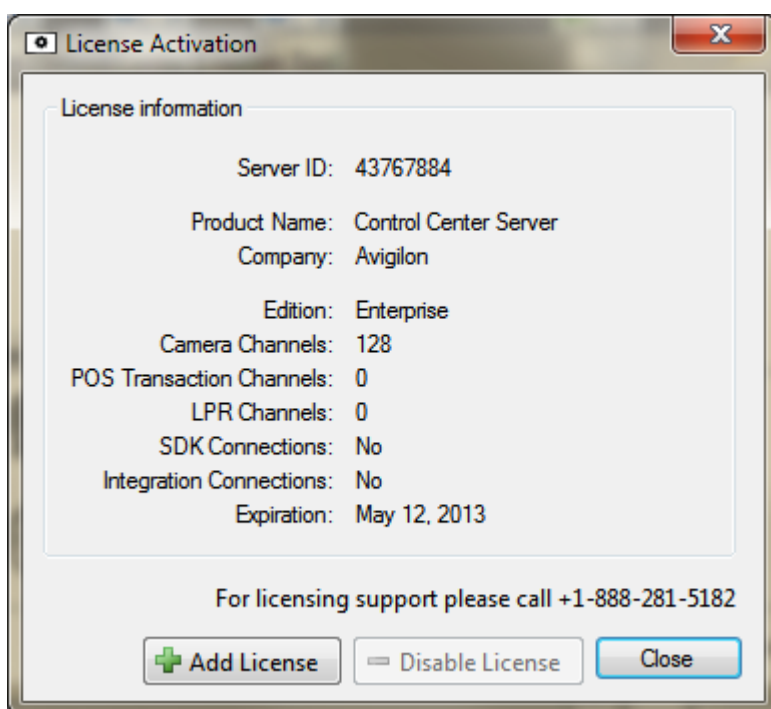


Figure B. License Activation dialog box

The Server ID is unique to each server running the Avigilon Control Center software. If you need help licensing the software, call Avigilon Technical Support and give them the server ID.

If you ever need to upgrade your server hardware, you can disable the license on the current server and reuse the license on the new server. For more information, see [Deactivating a License](#).

Activating a License Over the Internet

If you have internet access, the Admin Tool connects to the internet automatically and helps you activate your license.

1. In the Admin Tool, select **Settings >** .
2. In the License Activation dialog box, click **+** .
3. If an internet connection was detected, click **Internet Activation (Recommended)**.

If an internet connection was not detected, see [Activating a License Manually](#).

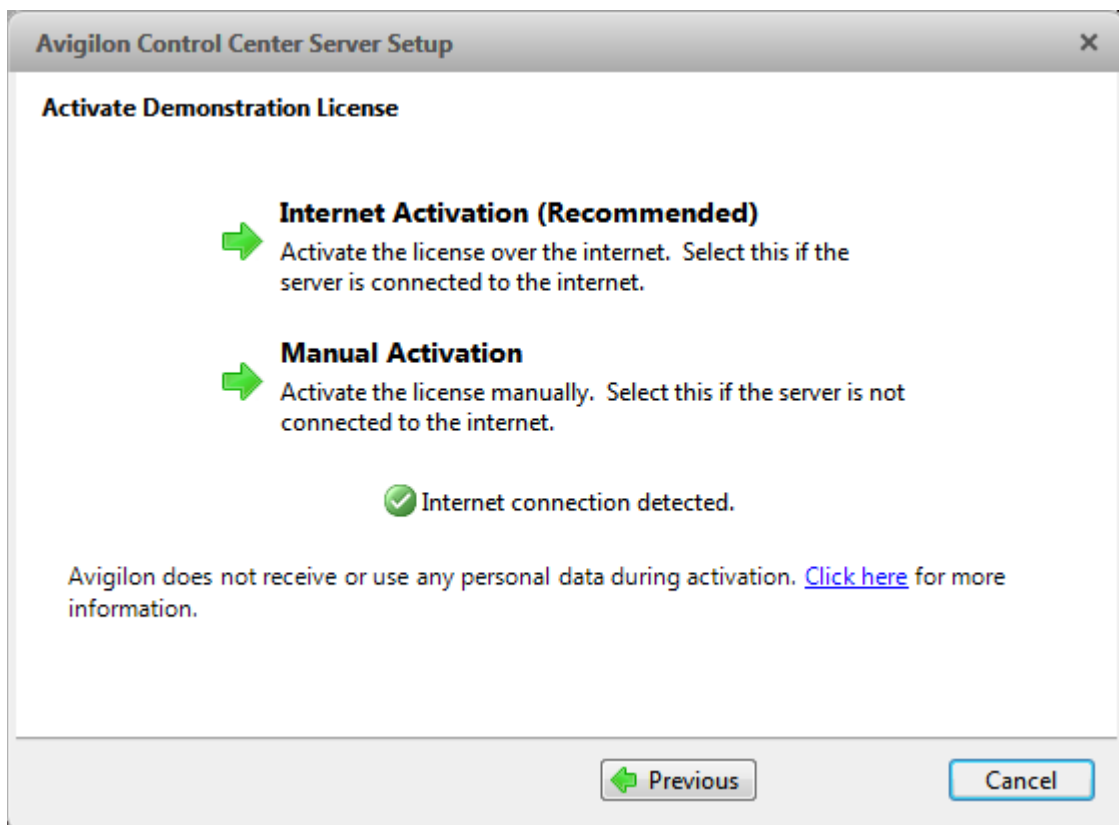
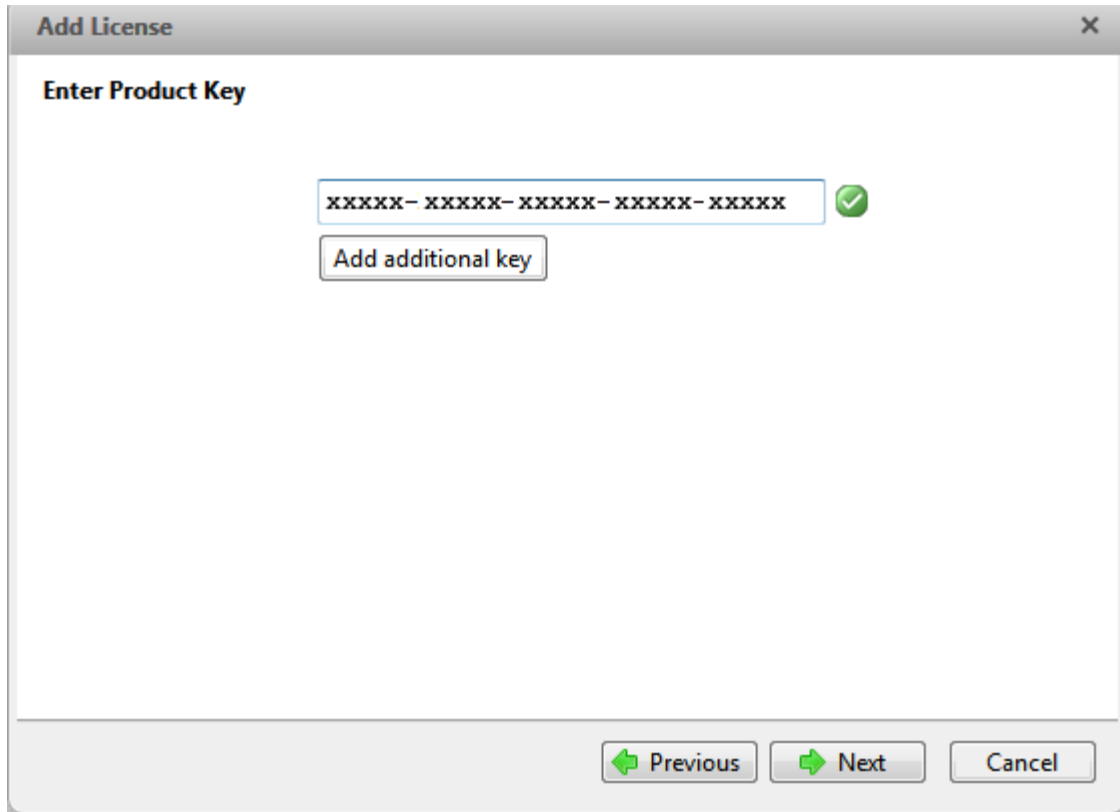


Figure A. Activate Control Center Server page

4. Enter the product key, a check mark will appear if it is valid. If you have multiple product keys, click **Add additional key** and enter the next product key. When all the licenses for this server have been added, click **Next**.



The image shows a software dialog box titled "Add License" with a close button (X) in the top right corner. The main heading inside the dialog is "Enter Product Key". Below this heading is a text input field containing the placeholder text "xxxxx-xxxxx-xxxxx-xxxxx-xxxxx". To the right of the input field is a green checkmark icon, indicating that the entered key is valid. Below the input field is a button labeled "Add additional key". At the bottom of the dialog, there are three buttons: "Previous" with a left-pointing arrow, "Next" with a right-pointing arrow, and "Cancel".

Figure B. Enter Product Key page

5. Complete the Product Registration page to receive product updates from Avigilon, then click **Next**.

The screenshot shows a dialog box titled "Avigilon Control Center Server Setup" with a close button (X) in the top right corner. The main heading is "Activate Demonstration License". Below the heading, there is a paragraph: "To receive product updates, please register the following information. Registration is optional." followed by "* Required Fields". There are two radio button options: "Register to receive updates" (which is selected) and "Don't register to receive updates". Under the selected option, there are several input fields: "*First Name:", "*Last Name:", "*Email Address:", "*Country:", "State:", and "Company Name:". The fields for First Name, Last Name, Email Address, and Country are highlighted in orange, indicating they are required. At the bottom right of the dialog box, there are three buttons: "Previous" (with a left arrow), "Next" (with a right arrow), and "Cancel".

Figure C. Product Registration page

6. The Admin Tool connects to the Avigilon licensing server and activates the license. When the *Activation Succeeded* message appears, click **Finish**.

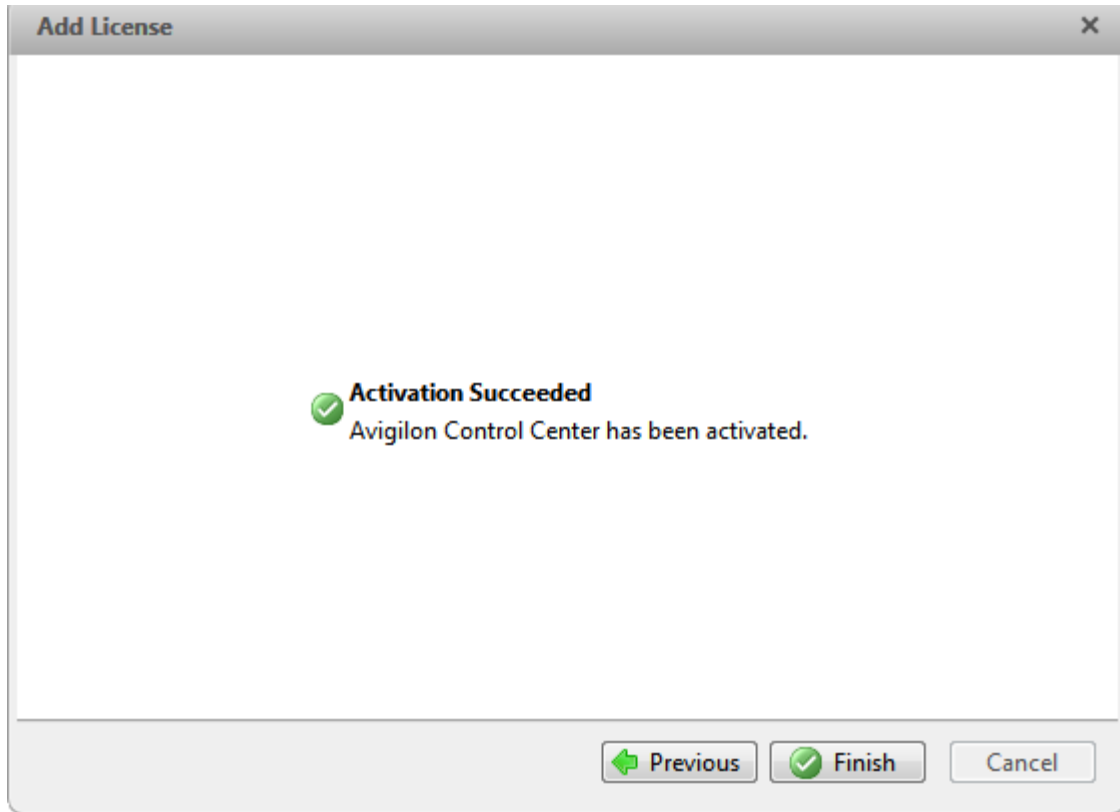


Figure D. Internet Activation Successful page

Activating a License Manually

If your server does not have internet access, you can activate your license manually by downloading the license file and activating the license on a computer with internet access.

1. In the Admin Tool, select **Settings >** .
2. In the License Activation dialog box, click .
3. If an internet connection was not detected, click **Manual Activation**.

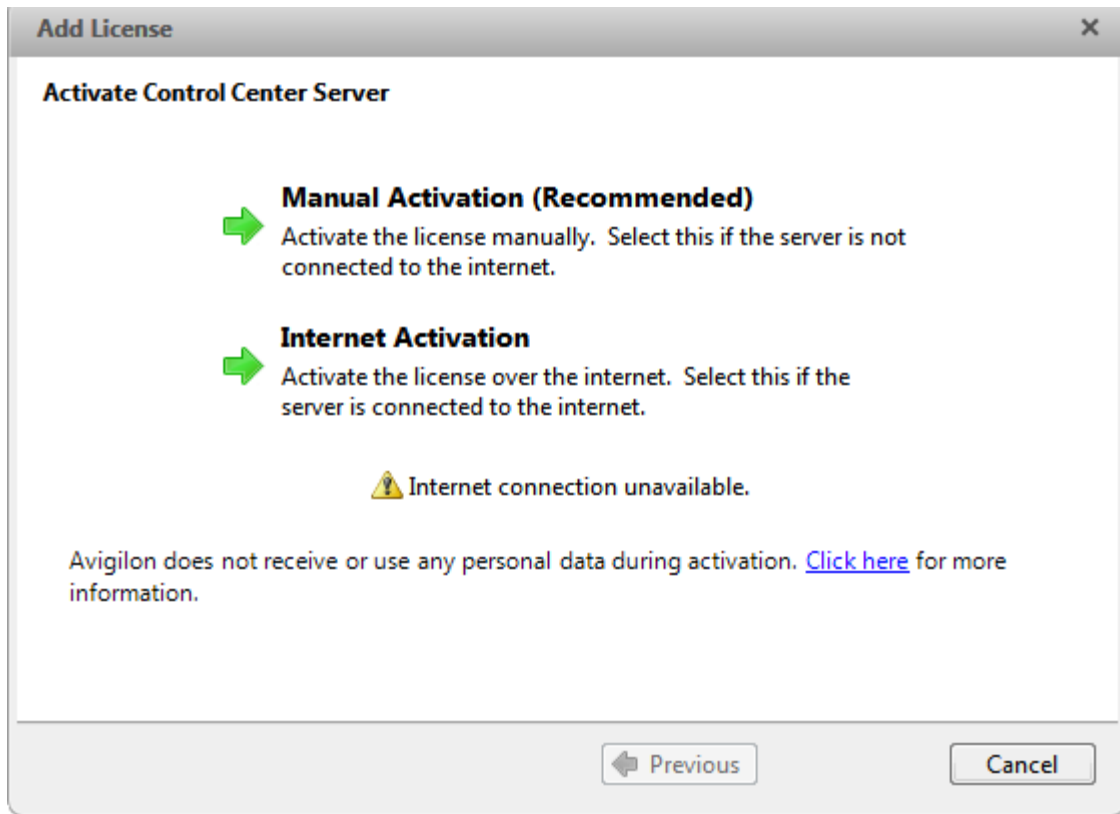


Figure A. Activate Control Center Server page

4. Click **Step 1: Generate Activation File**.

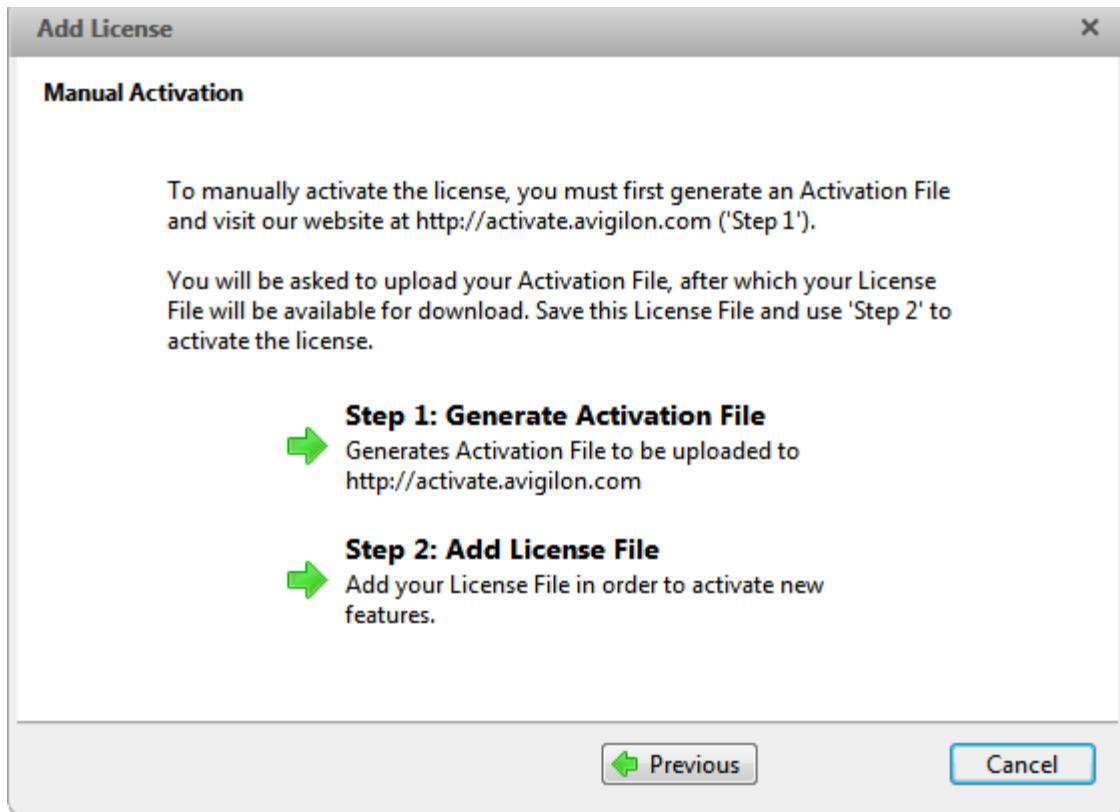


Figure B. Manual Activation page

5. Enter the product key, a check mark will appear if it is valid. If you have multiple product keys, click **Add additional key** and enter the next product key. When all the licenses for this server have been added, click **Next**.

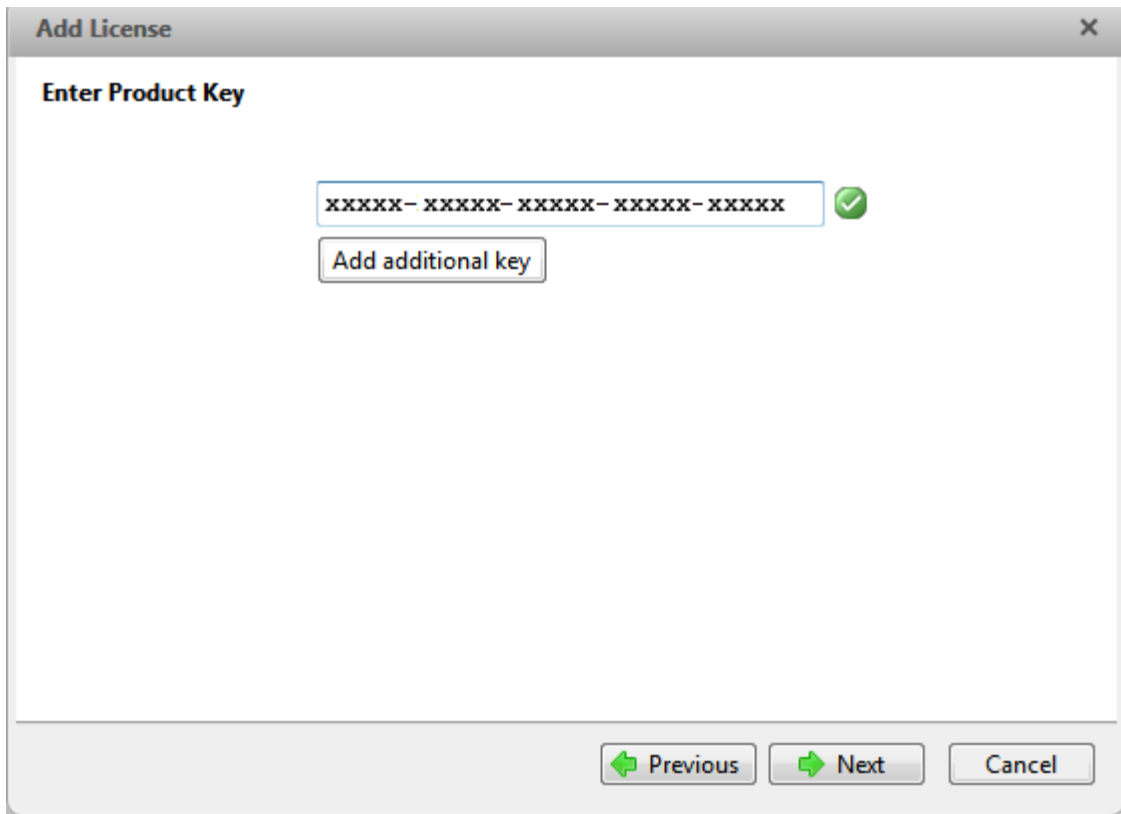


Figure C. Enter Product Key page

6. Select the location and file name for the activation file, then click **Next**.

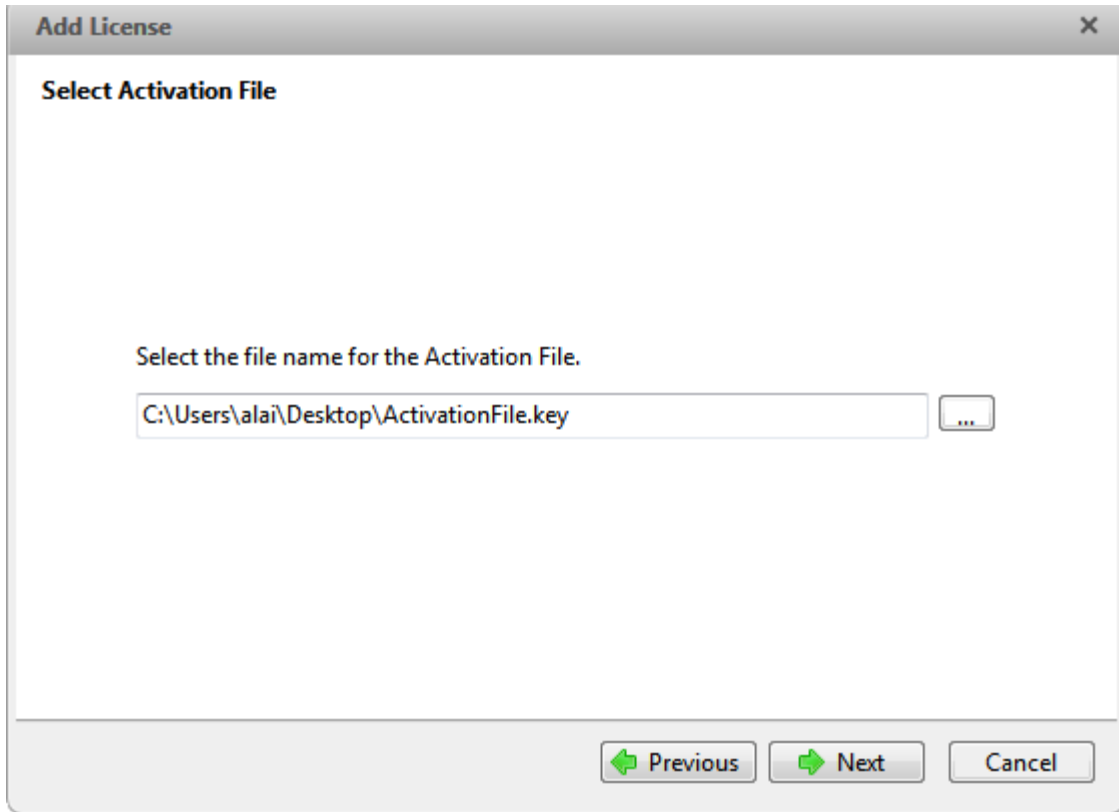


Figure D. Select Activation File page

7. The activation file is saved at the location you specified, then click **Next**.

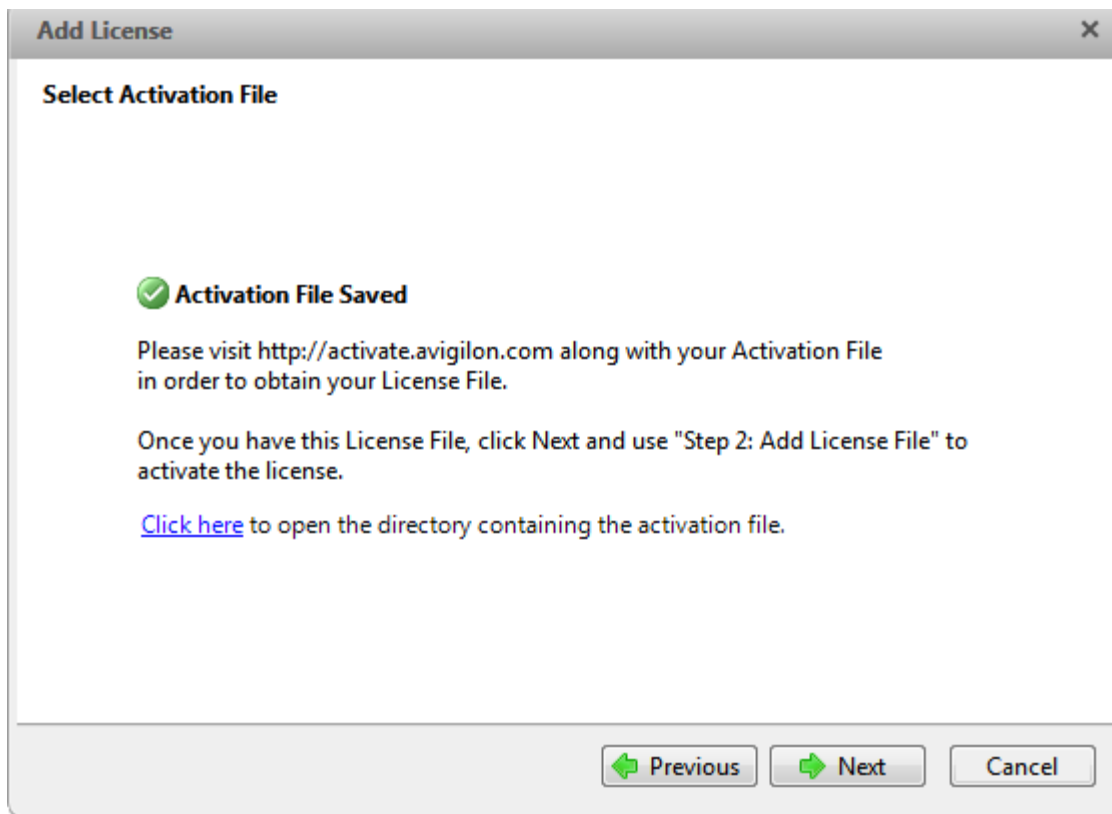


Figure E. Activation File Saved page

8. Copy the saved activation file to a computer with internet access.
9. Open a web browser and go to <http://activate.avigilon.com>.
10. Browse to the location of your activation file then click **Upload**.

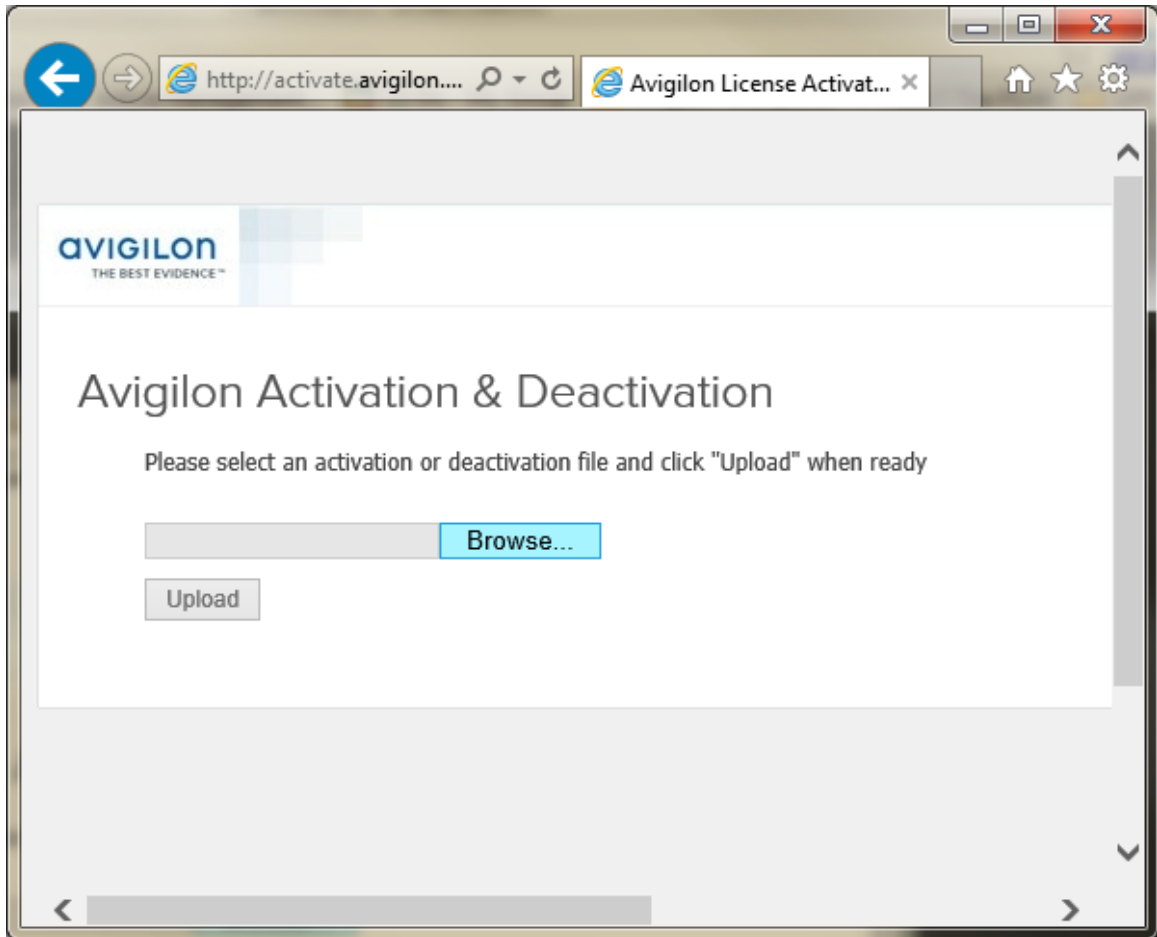


Figure F. Activation Website

The activated license file should download automatically. If not, allow the download to occur when you are prompted.

11. Complete the product registration page to receive product updates from Avigilon, then click **Register**.

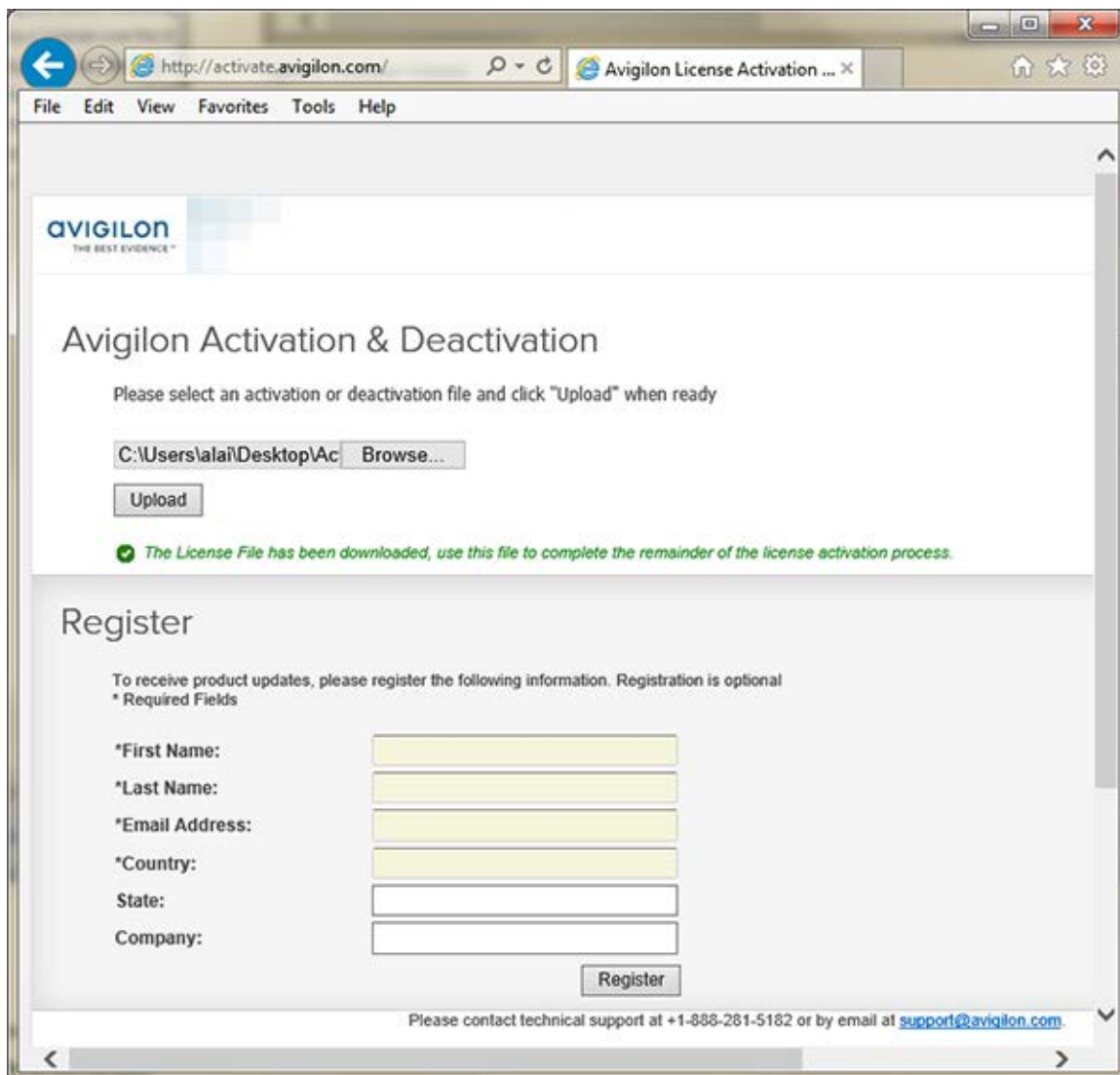


Figure G. Registration Website

12. Copy the downloaded license file onto the server you are activating.
13. Click **Step 2: Add License File**.

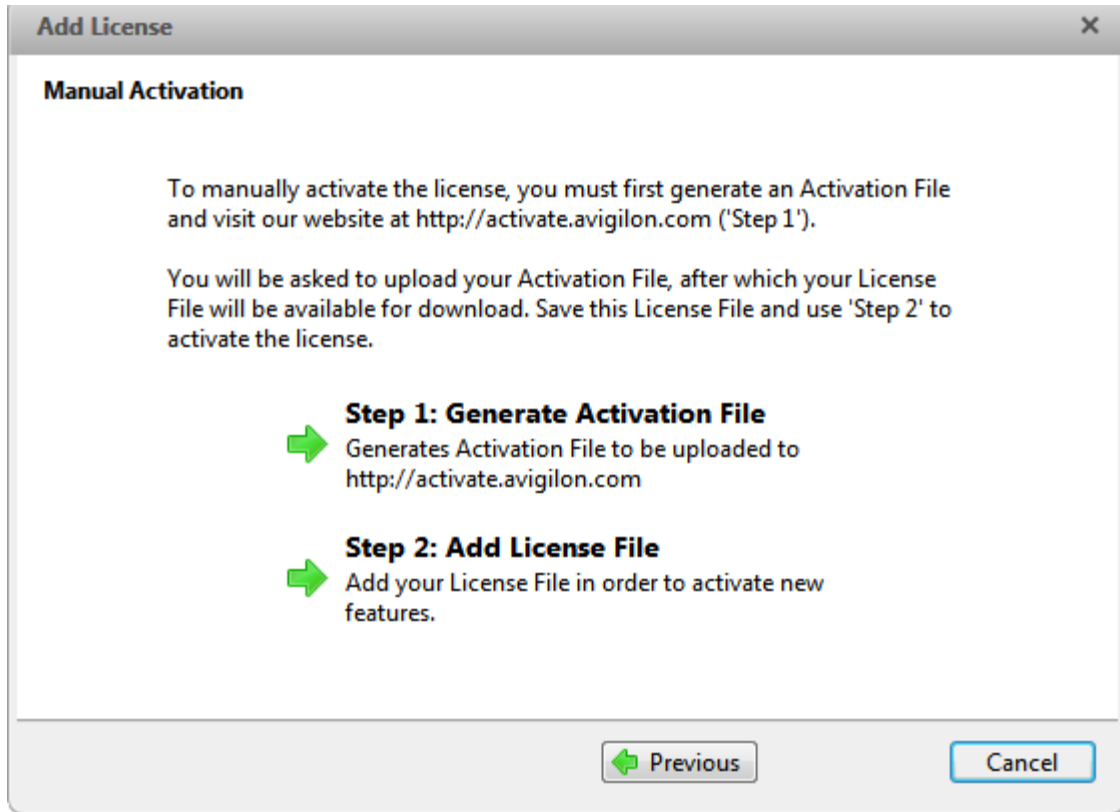


Figure H. Manual Activation page

14. Enter the location of the license file then click **Next**.

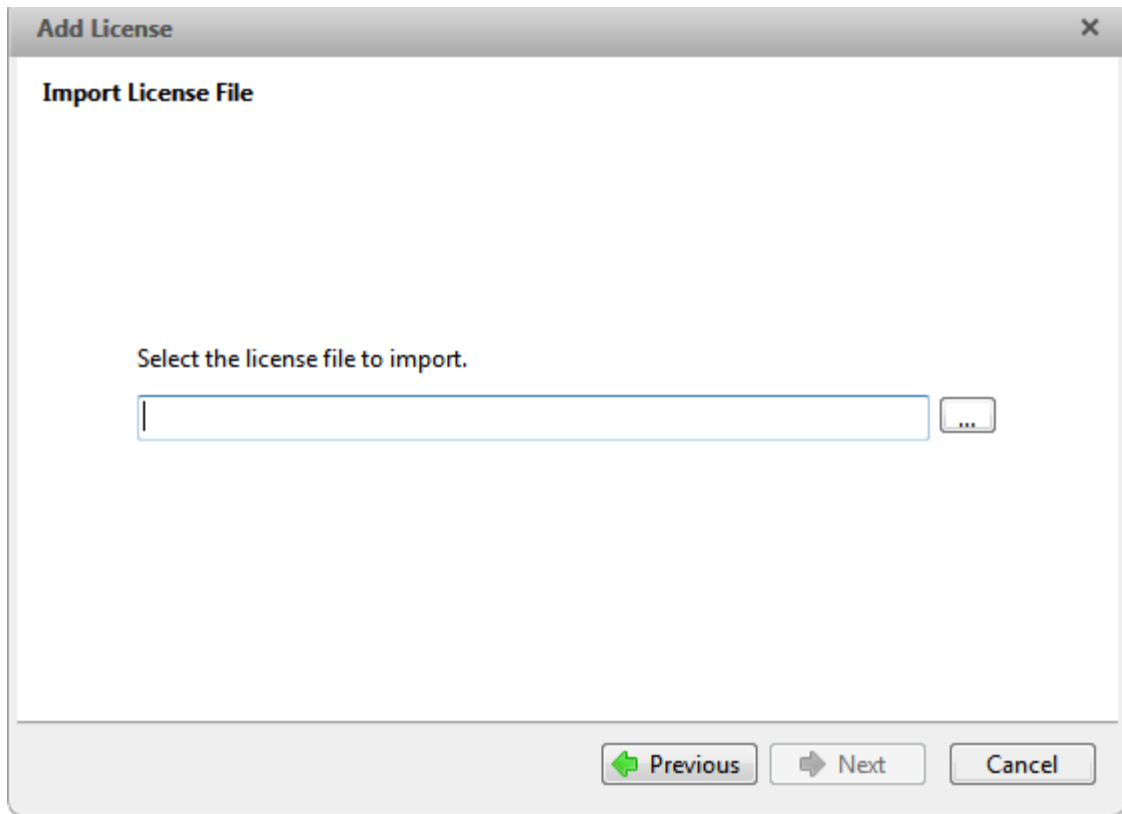


Figure I. Import License File page

15. When the *Activation Succeeded* message appears, click **Finish**.

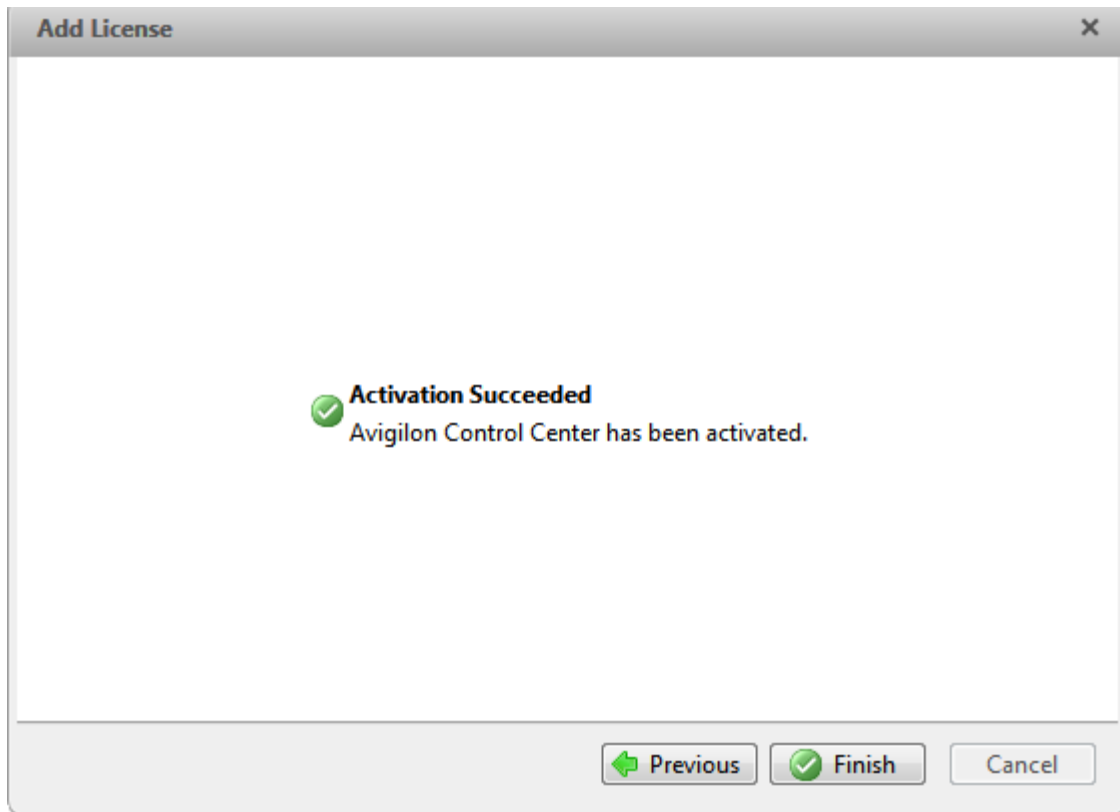


Figure J. Manual Activation Successful page


Configuring the Server Storage Settings

You must configure the server storage settings so the Avigilon Control Center Server software knows how much space is for storing surveillance data, and where it should be 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 Control Center Server must be shut down before the storage configuration can be viewed or edited.

2. In the Settings tab, click .

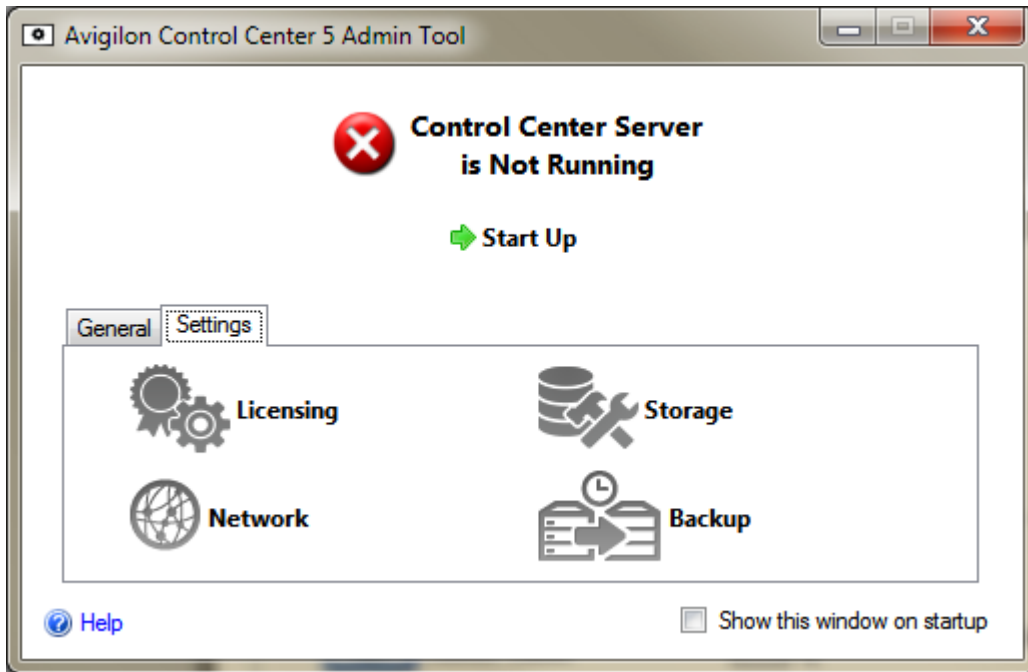


Figure A. Avigilon Control Center Admin Tool

3. In the Storage dialog box, you can see the current storage configuration.

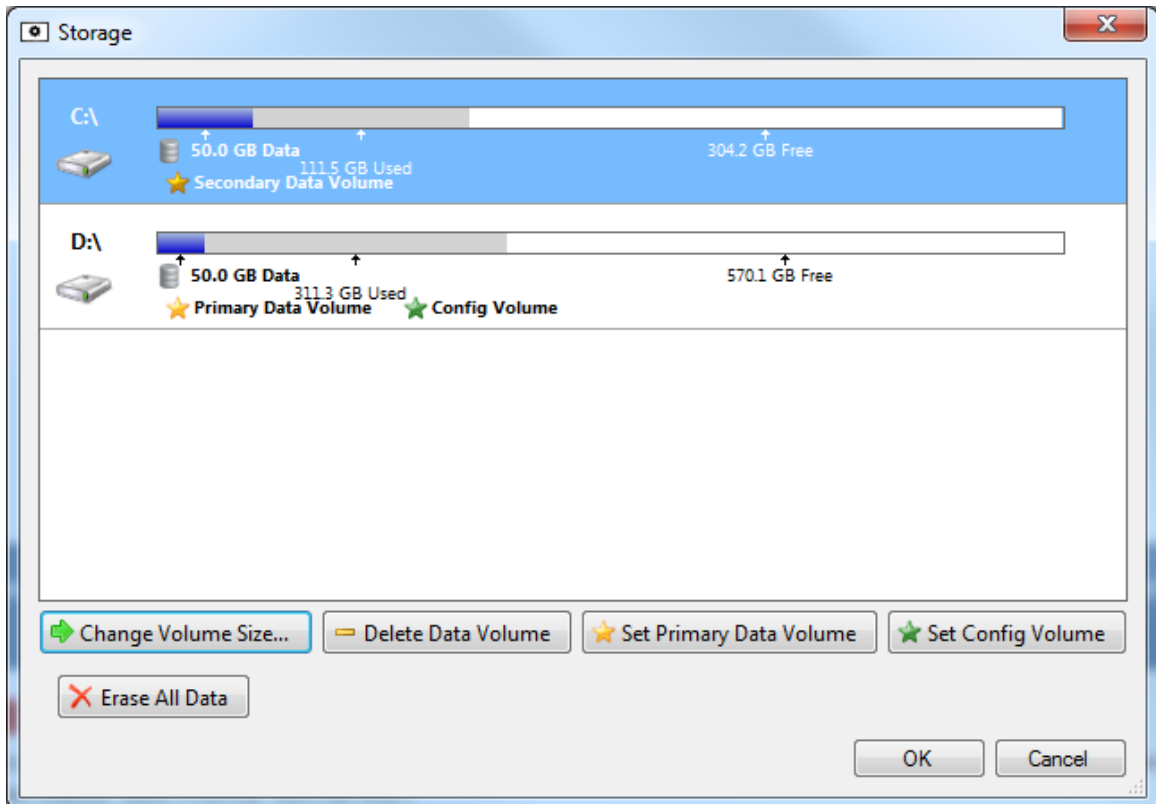


Figure B. Storage dialog box

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**. See [Changing the Storage Configuration](#) for more information.

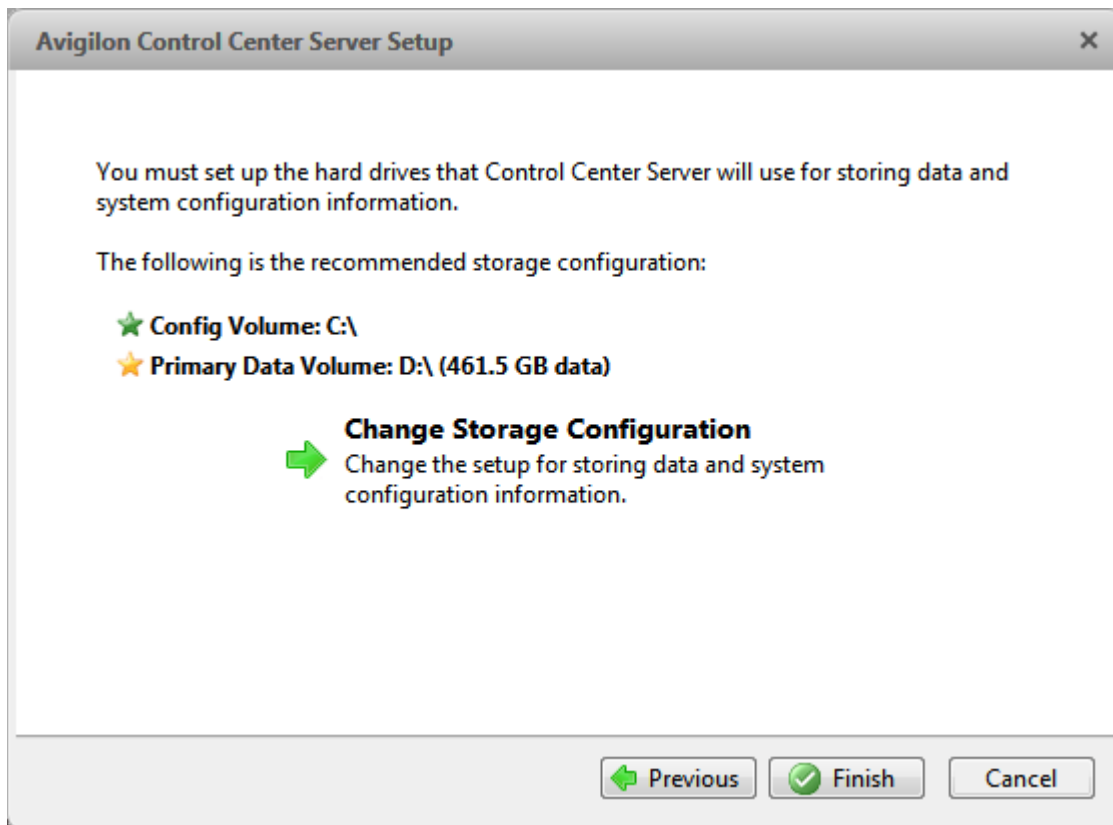


Figure A. Set Up Storage Configuration dialog box

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 may 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](#) for more information.

1. In the Storage dialog box, select the drive for storing the Config Volume and click **Set Config Volume**.

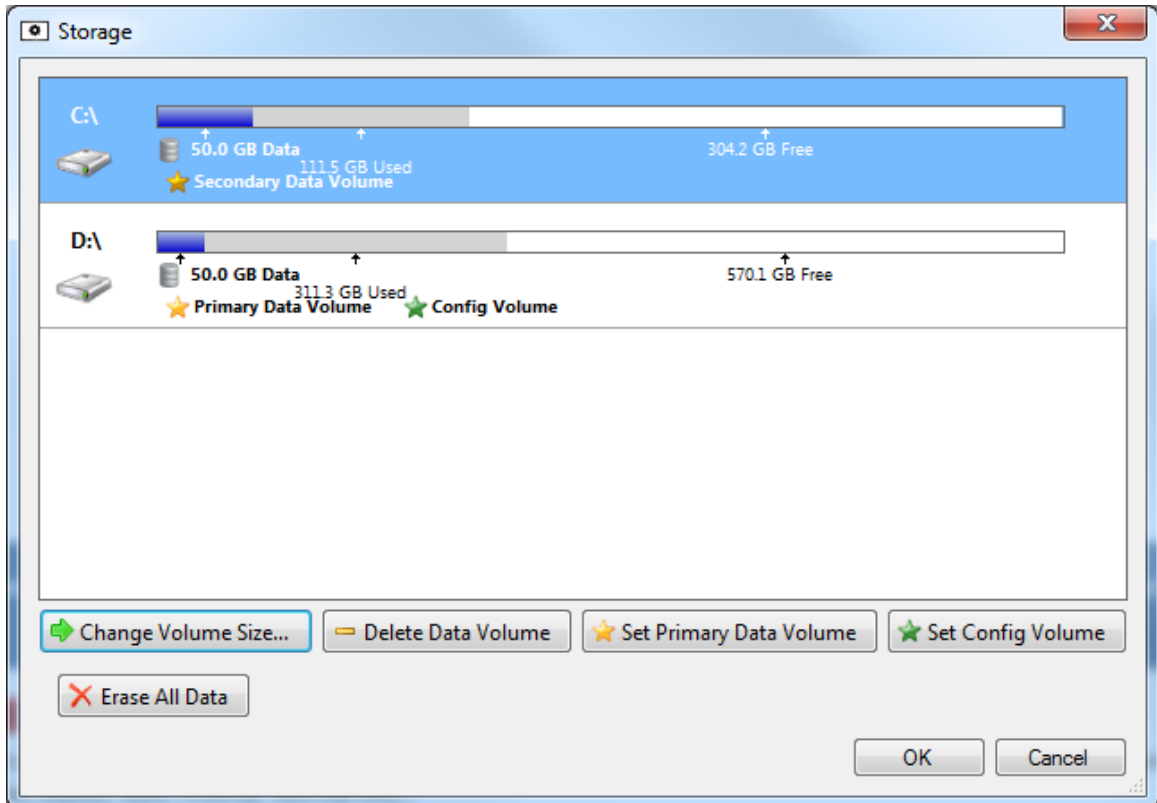


Figure A. Storage dialog box

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 then click **OK**.

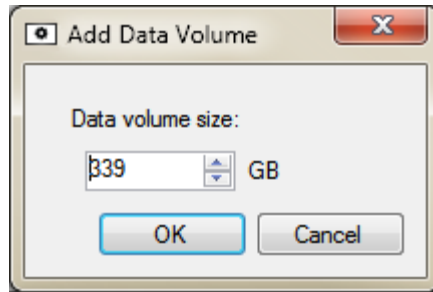


Figure B. Add Data Volume dialog box

- 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. See [Erasing the Storage Configuration](#) for more information.

- 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.

- 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.

- Open the Storage dialog box. For more information, see [Accessing the Server Storage Configuration](#).
- Click **Erase All Data**.
- When the confirmation dialog box appears, click **Yes**.
- You will need to create a new storage configuration before you can start up the Control Center Server again. See [Changing the Storage Configuration](#) for more information.

Configuring the Server Backup Settings

To allow the system to automatically backup recorded video, you must enable it in the Admin Tool and assign a backup location for the backup files.

1. In the Admin Tool, select **Settings** > .

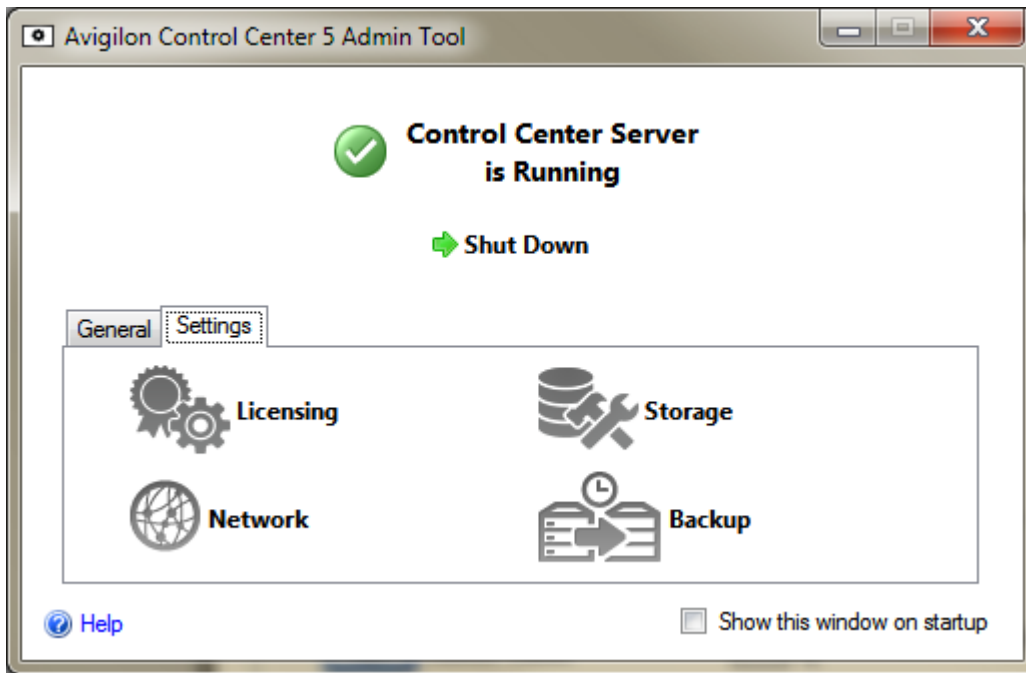


Figure A. Control Center Admin Tool

2. In the Backup dialog box, select the **Enable Backup** check box to allow the server to backup video files.

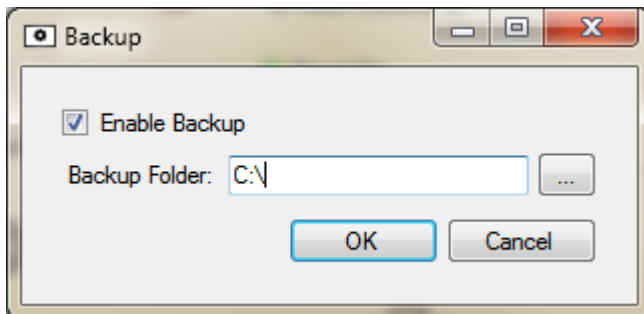



Figure B. Backup dialog box

3. Enter the location of the backup folder. Click **[...]** to browse to the backup folder location.
4. Click **OK**.

To initiate a backup or setup automatic backups, 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** >  .

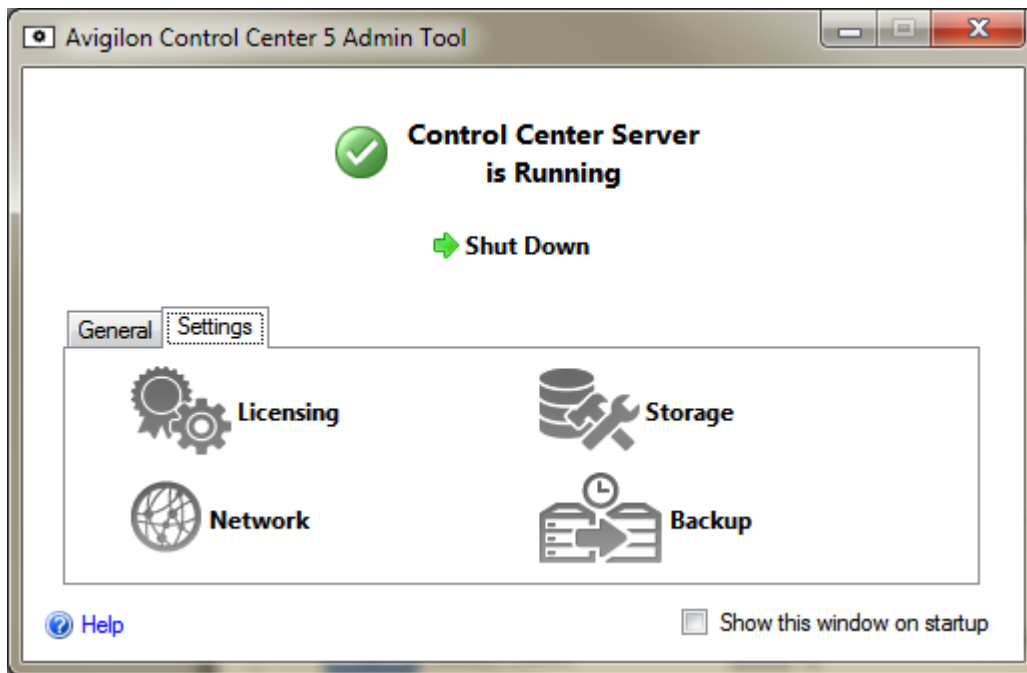


Figure A. Control Center Admin Tool

2. In the Network dialog box, enter the desired base port then click **OK**.

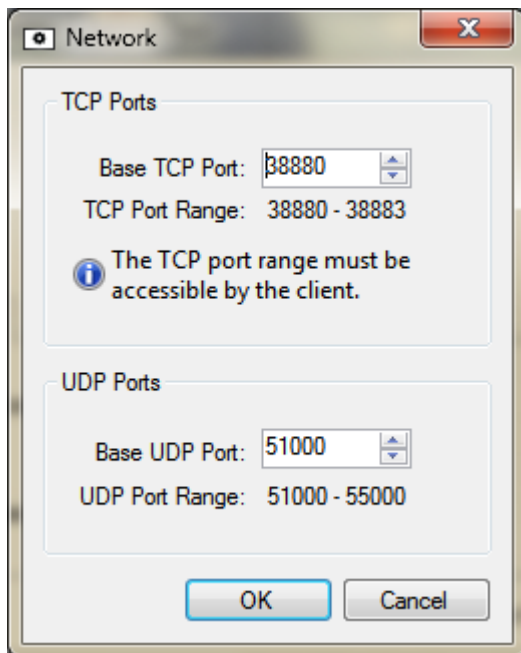


Figure B. Network dialog box

- The UDP and TCP port ranges used by the Server software are updated as the base port changes.
- The TCP 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

Besides configuring the server, the Admin Tool can also be used to start and shut down the Control Center Server software, launch the Client software and display the application logs.

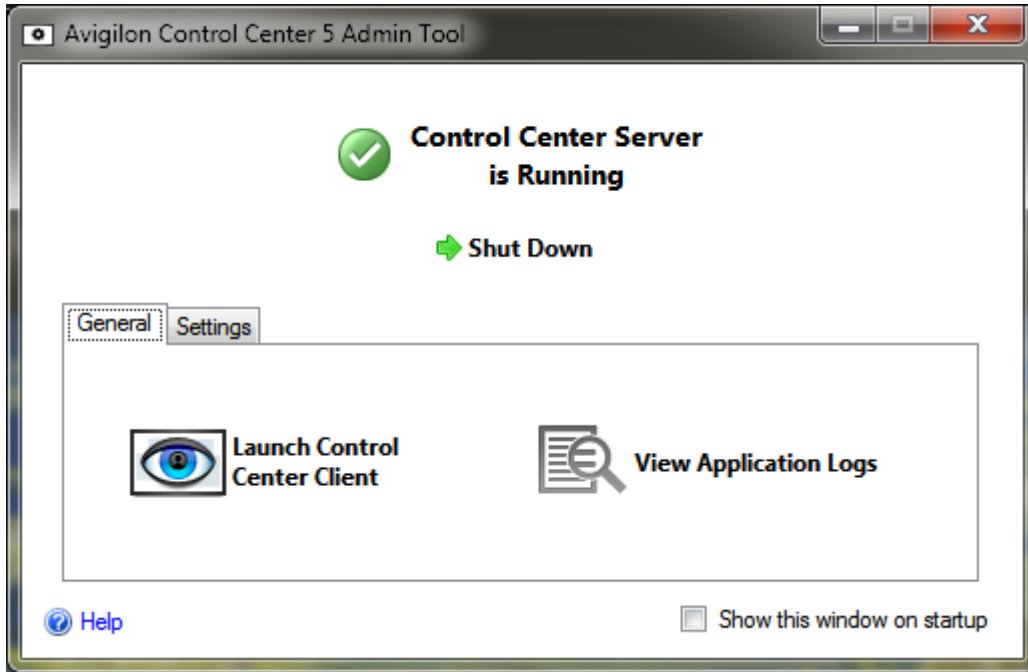
Starting Up and Shutting Down the Avigilon Control Center Server

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

Shutting Down the Control Center Server

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

1. In the Admin Tool, click **Shut Down**.



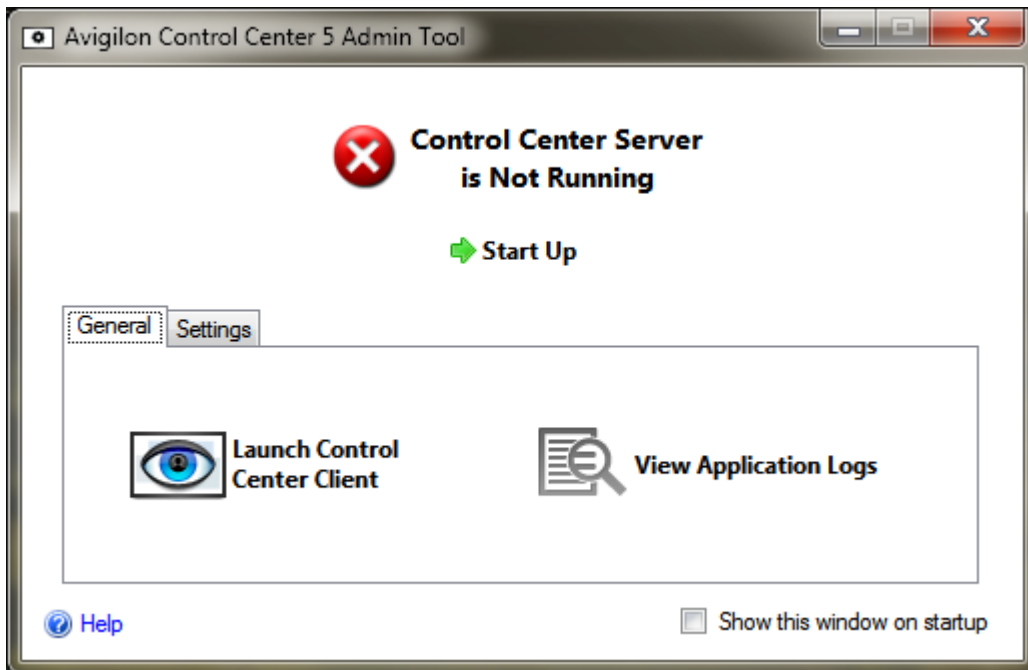
2.

Figure A. Admin Tool: Control Center Server is Running

When the Control Center Server has shut down properly, the Admin Tool will display - *Control Center Server is Not Running*.

Starting up the Control Center Server

1. In the Admin Tool, click **Start Up**.




2.

Figure B. Admin Tool: Control Center Server is Not Running

When Control Center Server has started properly, the Admin Tool will display - *Control Center Server is Running*.

Starting the Avigilon Control Center Client

The Avigilon Control Center Client software can be started through the Avigilon Control Center Admin Tool.

1. In the Admin Tool, select **General** > .

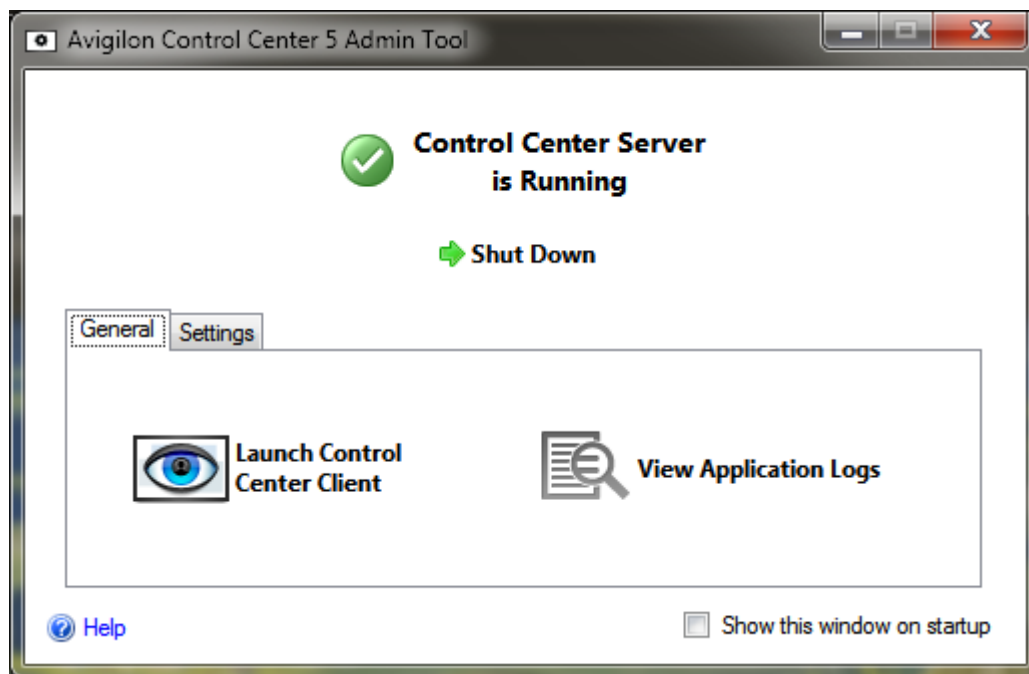



Figure A. Admin Tool

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** > .

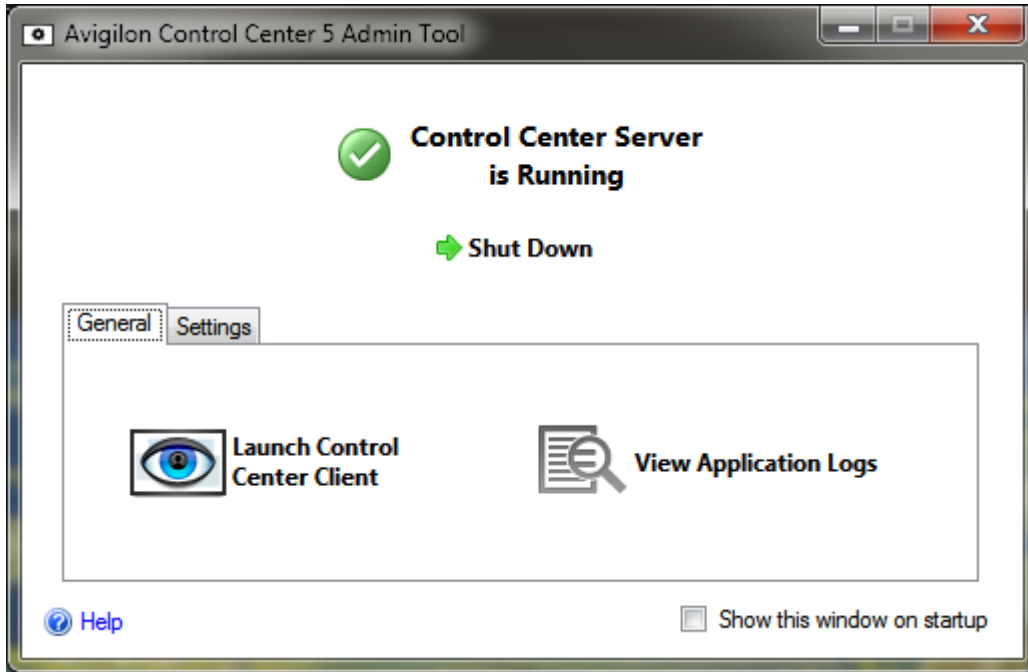


Figure A. Admin Tool

2. The Application Logs dialog box appears. Double-click an error to view the details.

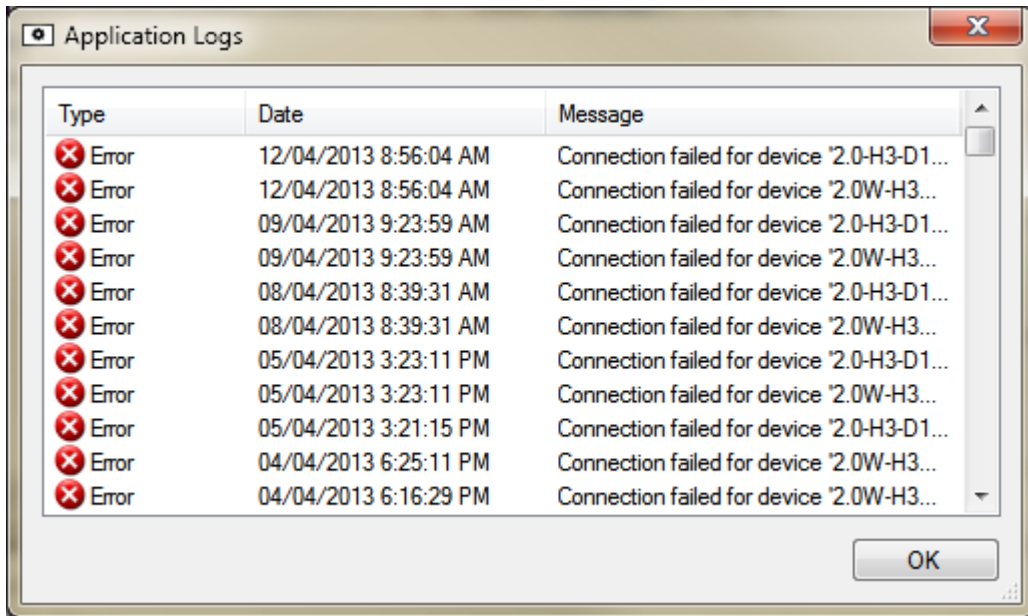


Figure B. Application Logs dialog box

3. Click **OK** to close the dialog box.

Appendix

Resetting the Administrator Password

To reset the administrator password, 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 which drive 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 perform the last step.

The server automatically resets all the users and groups 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 login to the Site using the default administrator password:

- Username: administrator
- Password: <leave blank>

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

Deactivating Licenses

If you are replacing your current server with a new one, you must manually deactivate the license on the old server before the license can be reused on the new server.

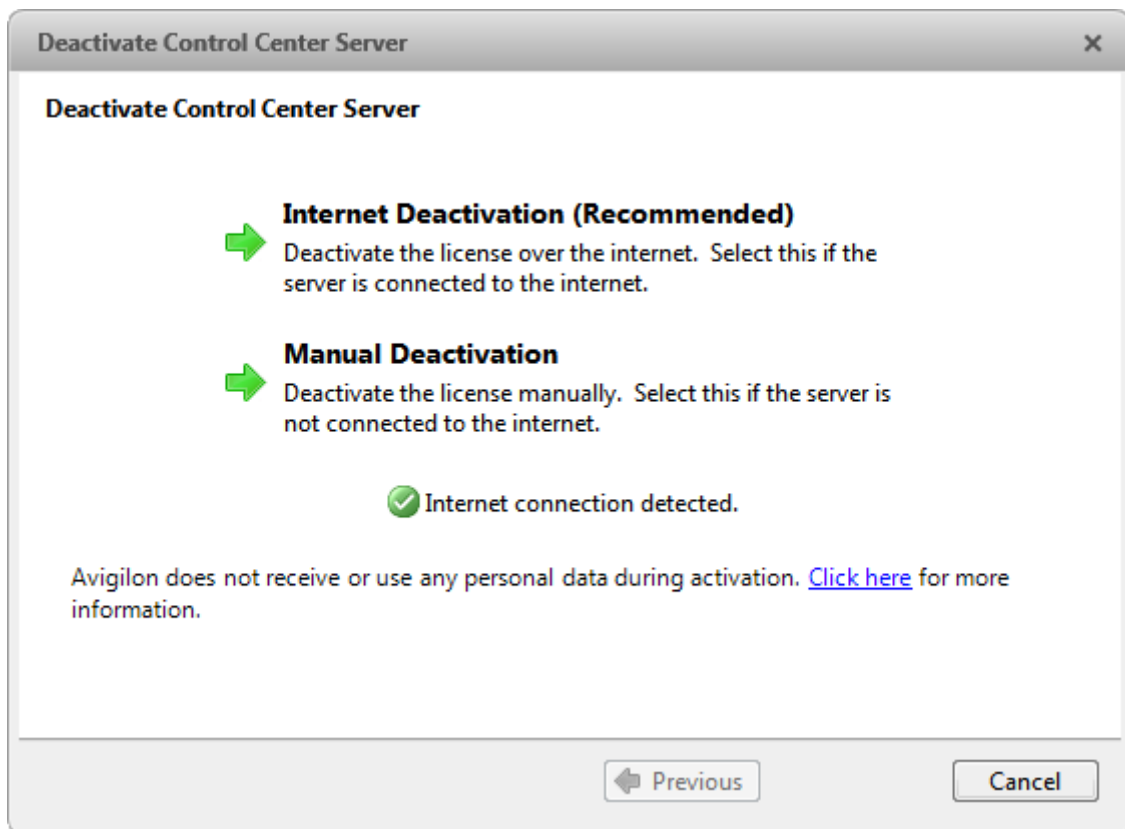
If you are unable to access your old server to deactivate the license, contact Avigilon Technical Support for more information.

Note: You cannot deactivate individual licenses. When you deactivate licenses in the Admin Tool, you are deactivating all the licenses on the server.

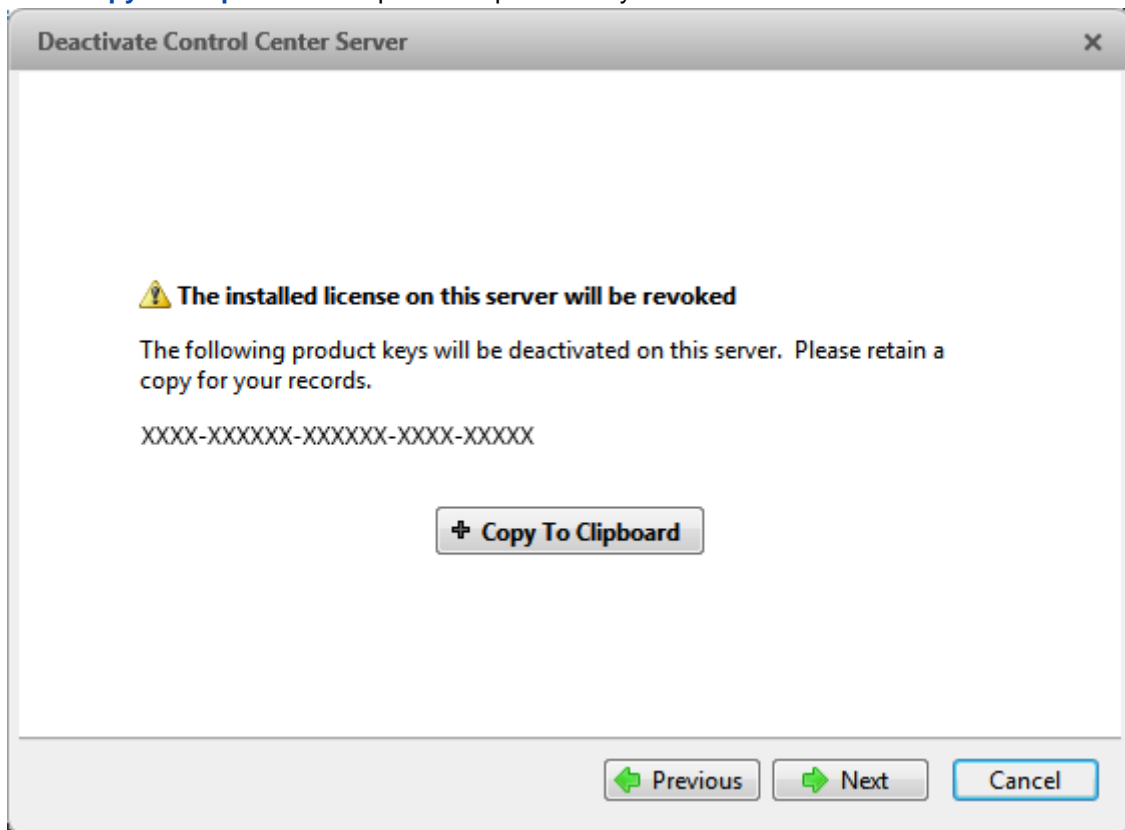


1. In the Admin Tool, select **Settings >**.
2. In the License Activation dialog box, click .
3. Select a deactivation method.

Like the license activation procedure, you have the option of deactivating the license over the internet or manually.



4. Click **Copy To Clipboard** then paste the product key into a text file for reference.



It is recommended that the product key be saved to a flash drive so that you can easily access the product key on the new server.

5. Click **Next**.
 - o If you selected Internet Deactivation, the system will automatically deactivate the server license.
 - o If you selected Manual Deactivation, complete the following steps:
 - a. On the following page, download the `DeactivationFile.key`.
 - b. Copy the saved deactivation file to a computer with internet access.
 - c. Open a web browser and go to <http://activate.avigilon.com>.
 - d. Browse to the location of your deactivation file then click **Upload**.

When you see the confirmation message, the license has been deactivated.

Once a license has been deactivated, you can reuse the product key on the new server. For more information about activating a license on a server, see [Activating a License over the Internet](#).