

AVIGILON™



Upgrade to Avigilon Unity Video Software

Upgrade Guide

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Contents

- Upgrading from ACC 7 to Avigilon Unity Video 4
- System Requirements 5
- Upgrade Licensing 6
- Before Upgrading on Servers 8
 - Integration Support 8
 - ACC-ACM Unification and Integration 8
 - Windows OS Support Changes 9
- Backing Up Site Settings 10
- ACC 7 to Avigilon Unity Video Upgrade 11
 - Upgrading from ACC 7 to Avigilon Unity Video Software (Windows) 12
 - Software Rollback 12
 - Upgrading from ACC 7 to Avigilon Unity Video Software on Air-Gapped Computers (Windows) 13
 - Launching the Software Manager Included in the Custom Bundle 13
 - Upgrading from ACC 7 to Avigilon Unity Video Software on an AI NVR, ENVR2 PLUS, or AIA2 14
- Configuring Ports 15
 - Avigilon Unity Video Client 15
 - Avigilon Unity Video Server (Common Ports) 16
- Configuring the Server Network 18
- Recommended Post-Upgrade System Verification 19
- Upgrading Your Organization to the Full Unity Experience 20
- Restoring ACC 7 Software on a Computer 22
- More Information & Support 23

Upgrading from ACC 7 to Avigilon Unity Video

If you are upgrading from ACC 7 to a Avigilon Unity Video system, we strongly recommend reviewing the *Initial System Setup* to review best practices.



IMPORTANT

To minimize downtime, check that you have the proper licenses and ensure that you perform a backup before upgrading.

System Requirements



Ensure that the server and client meet the requirements specified in the Avigilon Unity Video datasheet (hardware, Windows version, and others).

Avigilon Unity Video requires Windows 10 build 1607, Windows Server 2016 or later. For a full list of system requirements, see www.avigilon.com.

Upgrade Licensing

Avigilon Unity Video is a paid major version upgrade and customers running ACC 7 will require Smart Plan licenses to use the software. Note that Core editions are eligible for free upgrades to Unity. To determine upgrade licensing requirements for your system, use the Check Upgrade Eligibility checker (for more information, see below). Before upgrading, ensure that the number of camera channels equals the number of Smart Plan licenses.

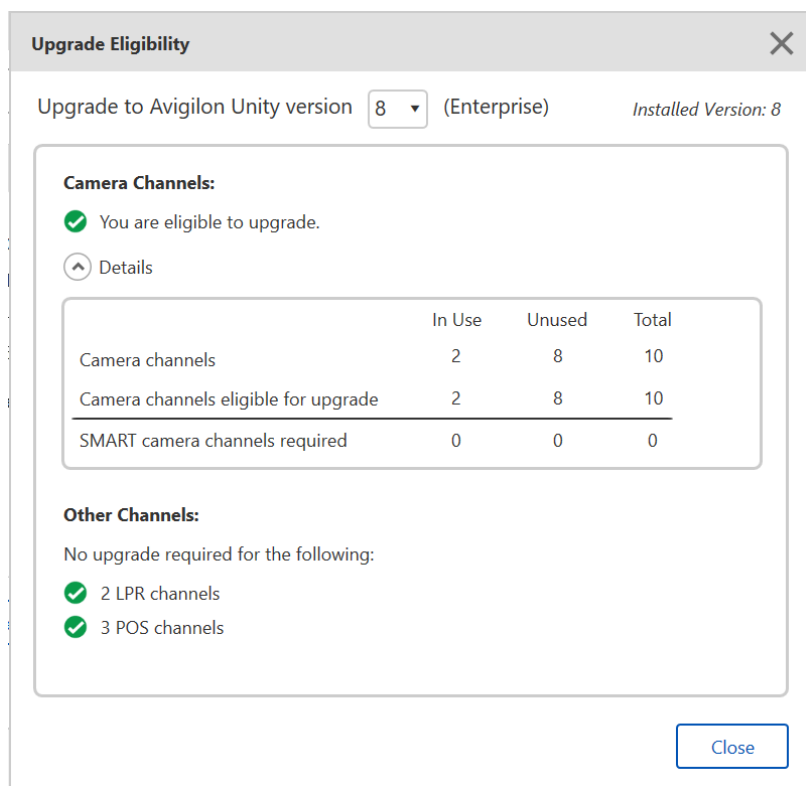
To use the Upgrade Eligibility checker:

1. In the New Task menu , click **Site Setup**.
2. Select a site, then click .
3. Click **Check Upgrade Eligibility** to display the Upgrade Eligibility pop-up.

The Upgrade Eligibility pop-up provides information about the current number of camera channels and Smart Plan licenses in use on the site. It will also indicate if additional Smart Plan licenses are required before upgrading to Avigilon Unity.

The Upgrade Eligibility pop-up provides a summary of:


- The number of camera licenses in use
- The number of Smart Plan licenses in use, and if applicable, the additional number of licenses required.




Upgrade Eligibility

Upgrade to Avigilon Unity version (Enterprise) *Installed Version: 8*

Camera Channels:



 You are eligible to upgrade.

 Details

	In Use	Unused	Total
Camera channels	2	8	10
Camera channels eligible for upgrade	2	8	10
SMART camera channels required	0	0	0

Other Channels:

No upgrade required for the following:

-  2 LPR channels
-  3 POS channels

[Close](#)



NOTE

All feature licenses do not require an upgrade to work in Avigilon Unity Video software.

If any of the Smart Plans expire after the Avigilon Unity release date (2 October 2023), you are eligible for a free upgrade to Avigilon Unity Video software.

If the Smart Plan has expired prior to the release date, you must buy a new Smart Plan with a part number corresponding to your edition.

Before Upgrading on Servers



IMPORTANT

Avigilon Unity Video does not support the following devices:

- ES HD Recorder (VMA-RPO)
- ES Analytics Appliance (VMA-RPA)
- H4ES Cameras (x.xC-H4A-xxG-B1)

Before performing an upgrade, you must remove the above devices from your sites.

See also the *Initial System Setup and Workflow Guide* to review best practices. Contact Customer Support if you have any questions before upgrading.

It is recommended that you perform the following checks before upgrading:

- Ensure that you have the necessary licenses. For more information, see [Upgrade Licensing on page 6](#).
- Perform a system health check on every server. For more information, see *Site Health* in the *Sites* section of the *Client Guide*.
- Ensure that the servers are on ACC 7 software. To view the version of a server, go to Site Setup > select the server.
- Back up server settings for each server in the site. For more information, see [Backing Up Site Settings on page 10](#).
- If you integrate Avigilon Unity Video with Active Directory, ensure that IP port 389 UDP (or the customized IP port) is open between each Avigilon Unity Video server and every AD Domain Controller). For more information, see [Configuring Ports on page 15](#).
- Ensure that the anti-virus software is properly configured. Sometimes anti-virus software prevents file access and communication such as recorded video data. Consult your IT network or security contact about adding ACC folders, files and applications to the anti-virus exclusion list. There are security implications. For more information, see the *Configuring Endpoint Security Settings* section of the *Initial System Setup Guide*.
- Ensure that all servers are synchronized with the same time zone, date, time.
- Ensure all servers are set to sync to the same time in the NTP server.

Integration Support

If you use any ACC software integrations, you may need to upgrade the integration software to a version supported by Avigilon Unity Video. Consult avigilon.com/integrations to determine which integrations and specific versions are supported and available for Avigilon Unity Video.

ACC-ACM Unification and Integration

Avigilon Access Control Manager™ (ACM) software should be upgraded to ACM 6.36 or newer to support the latest ACC-ACM unification features.

Windows OS Support Changes

Avigilon Unity Video supports:

- Windows 10 (Build 1607) or later
- Windows Server 2016 or later
- 64-bit versions of Windows for components.

For a full list of system requirement, see [Avigilon Unity Video System Requirements](#).



Backing Up Site Settings

It is strongly recommended that you back up settings, files and data in the event that you need to roll back and restore your Avigilon servers.



NOTE

Backup files can be restored only on sites that are running the same or later version of the Avigilon Unity Video Server software.

1. In the New Task menu , click **Site Setup**.
2. Click .
3. Select the server that you want to back up. Site settings are automatically included in the backup file.
4. Select the **Encrypt the backup file**. check box, and enter and confirm a password.
5. Click **OK**.
6. Select a save location and click **Save**.



WARNING

Do not save the configuration backup on the machine you are trying to upgrade. It is highly recommended that you store the configuration backup on removable media, like a USB.

The backup file is saved in Avigilon Settings File (.avs) format.

ACC 7 to Avigilon Unity Video Upgrade



IMPORTANT

To avoid losing data, first upgrade to ACC 7 before upgrading to Avigilon Unity Video. Also, ensure you have sufficient Smart Assurance Plans before proceeding with the upgrade of the software.

On Windows, the Software Manager makes it easy to upgrade all of your applications at the same time while retaining existing configuration and data. With this installer, each previously installed application will be upgraded including add-ons and select camera firmware. To upgrade on Linux, see [Upgrading from ACC 7 to Avigilon Unity Video Software on an AI NVR, ENVR2 PLUS, or AIA2 on page 14](#).



NOTE

If you have a system with Microsoft Windows 7 or Windows Server 2012, you should upgrade the operating system before proceeding with the Avigilon Unity Video software upgrade.

Methods of upgrading include:

- Upgrading an internet-connected ACC7 Server using the Software Manager Install or Upgrade Applications option.
- Updating an offline or air-gapped ACC7 Server using the Software Manager *Custom Bundle* option. Air-gapped servers are systems that are not physically connected to the internet and to local area networks.



IMPORTANT

After upgrading, you will need to purchase Smart Assurance Plan licenses to upgrade existing ACC7 licenses, or new Unity channel licenses to use Avigilon Unity Video beyond the 30-day grace period.



NOTE

- Avigilon Additional Search Options and Face Recognition require **Server** and **Analytics Add-on**.
- License Plate Recognition requires the **Unity Server** and **LPR Add-on**.
- **Unity Server** includes the Essential Device Firmware package, which is a selection of firmware supporting the most common Avigilon cameras. There is also an option to download the Complete Device Firmware package, which includes all camera firmware. Specific individual camera firmwares can be downloaded from the Partner portal.

Upgrading from ACC 7 to Avigilon Unity Video Software (Windows)




WARNING

While the Software Manager preserves your configuration and data, it is advisable to create backups as a precautionary measure. For more information on backing up, see [Backing Up Site Settings on page 10](#).



NOTE

To minimize interruption during the upgrade, verify your internet connection and avoid connecting to a VPN.

1. From a computer connected to the internet, download the Software Manager from [Software Downloads](#). Depending on your security settings, to launch the installer you may need to copy the Software Manager to another drive.
2. Launch the  **Software Manager**.
3. Click **Install or Upgrade Applications**.
4. (Optional) To view what is new in Avigilon Unity Video, click **View release notes**. Only applications that were previously installed on the computer will be upgraded. To select a different version, click the **Version** drop-down list, and then select the version that you want. Click **Yes** to accept the risk of installing an older version.
5. Click **Next** to display the Install Location screen.
6. Click **Next** to display the Licenses screen.
7. Click **Next** to display the Select Software Options screen.
8. Click **Next**, and review and agree to the license agreement, and then click **Next**.
9. Review the Confirmation screen, and click **Install** to start the upgrade. If a software rollback occurs during the upgrade process, see [Software Rollback below](#). After the upgrade is complete, a Results screen displays the applications that have been successfully upgraded.
10. Click **Finish** to exit the **Software Manager**.
11. Ensure licenses are reactivated.

Software Rollback

In the event of a software rollback, you can do one of the following:

- Check your internet connection to ensure that the download is not being interrupted, and try running the Software Manager again. If the installation still fails to install all the components, download the logs to share with Avigilon Customer Support.
- Choose to download the custom bundle. For more information, see [Upgrading from ACC 7 to Avigilon Unity Video Software on Air-Gapped Computers \(Windows\) on the next page](#).
- Resort to reinstalling ACC 7 applications. For more information, see [Restoring ACC 7 Software on a Computer on page 22](#).


Upgrading from ACC 7 to Avigilon Unity Video Software on Air-Gapped Computers (Windows)

To upgrade air-gapped computers without an internet connection, you can download a custom bundle on a computer with an internet connection. Then you can transfer the custom bundle to air-gapped computers.



WARNING

While the Software Manager preserves your configuration and data, it is advisable to create backups as a precautionary measure. For more information on backing up, see [Backing Up Site Settings on page 10](#).

1. From a computer connected to the internet, download the Software Manager from [Software Downloads](#). Depending on your security settings, to launch the installer you may need to copy the Software Manager to another drive.
2. Launch the  **Software Manager**.
3. Click **Create a Custom Bundle**.
4. (Optional) To view what is new in Avigilon Unity Video, click **View release notes**. To select a different version to download, click the **Version** drop-down list, and then select the version that you want. Click **Yes** to accept the risk of installing an older version.
5. Click **Next** to display the Download Location screen.
6. Review the Confirmation screen, and click **Download** to begin the download.
7. After the download is complete, click **View Custom Bundle** to view the custom bundle contents or click **Finish** to exit the Software Manager.

You can now copy the custom bundle to a USB storage device to install Avigilon Unity Video on another system. For more information, see [Launching the Software Manager Included in the Custom Bundle below](#).

Launching the Software Manager Included in the Custom Bundle

After copying a custom bundle to a USB, you can use the bundle to upgrade another system without internet access.

1. Launch the  **AvigilonUnitySetup.exe** in the custom bundle folder.



IMPORTANT

Do not launch the Software Manager from any other location.

2. Click **Run**.
3. Select **Install or Upgrade Applications using a Custom Bundle**.
4. Click **Next** to display the Install Location screen.
5. Click **Next** to display the Select Software Options screen.
6. Click **Next**, and review and agree to the license agreement, and then click **Next**.
7. Review the Confirmation screen, and click **Install** to start the upgrade.

After the upgrade is complete, a Results screen displays the applications that have been successfully upgraded.

8. Click **Finish** to exit the **Software Manager**.

After successfully installing Avigilon Unity Video, apply for licenses for each of the installed products within 30 days.

Upgrading from ACC 7 to Avigilon Unity Video Software on an AI NVR, ENVR2 PLUS, or AIA2

Software on AINVR, ENVR2 PLUS, and AIA2 appliances can be upgraded to Unity Video on the Server Management page.

1. From a workstation connected to the internet:
 - a. Navigate to [Software Downloads](#).



NOTE

To download firmware you must have, or create an account and be logged into the Community.

- b. Search for the appropriate product (AI NVR, ENVR2 PLUS, or AIA2), and download the Unity Video firmware version.
2. To launch the Server Management page from the ACC7 Client, in the site tree, select the server, and click the **Server Management** button.



NOTE

You may be prompted to sign in with the device's administrator account credentials.

3. In the Upgrade Firmware pane, click **Drop '.fp' file here or click to upload**, and navigate to the location of the saved firmware package (.fp) file.
4. Click **OK** to confirm you want to continue. An upload progress indicator appears. Wait until the file is uploaded and verified.



IMPORTANT

You can cancel a firmware upgrade that is in progress only during the upload and verification phase. Click Cancel upload before the file has uploaded.

After the file is verified, the firmware upgrade automatically starts. The device will reboot several times during the upgrade. The Web UI Communication Lost message appears while the device is rebooting. When the device has rebooted, the connection to the Server Management page is restored in your web browser.



NOTE

If an error occurs during the upload phase or the upgrade process or if the firmware becomes corrupted, you are prompted to remove the file.

Configuring Ports

Configure the network to allow client computers, servers, services and devices to communicate. The following tables list ports that need to be opened for specific system components. Be sure to check your firewall to enable these ports to be used in the Avigilon Unity Video system.

Avigilon Unity Video Client

Default Port	Transport	Protocol	Services	Network Scope	Direction	Encrypted	Optional
38880	TCP	HTTPS	API	Unity Server	Outbound	Yes	No
38881	TCP	HTTPS	API, Media	Unity Server	Outbound	Yes	No
38883	UDP Multicast 239.255.255.0	Custom	Server Discovery	Unity Server	Inbound	No	Yes - Disable via Client Network Settings > Turn off site discovery.
51000-55000	UDP	RTP/RTCP	Media	Unity Server	Both	No	Yes - Used by LAN mode site connections.
443	TCP	HTTPS	Unity Cloud Services	Internet	Outbound	Yes	Yes - Required for cloud-connected sites.
443	TCP	HTTPS	Usage Analytics	Internet	Outbound	Yes	Yes - Opt-in. Enable/disable via client general settings.
443*	TCP	HTTPS	Usage Analytics	Internet	Outbound	Yes	Yes - Opt-in. Enable/disable via client general settings.
443	TCP	HTTPS	Licensing (Online)	Internet	Outbound	Yes	Yes - Used for online license activation.

*Port required when upgrading ACC 7 to Avigilon Unity Video

Avigilon Unity Video Server (Common Ports)

For information on how to configure the server network, see [Configuring the Server Network on page 18](#). For a list of communication ports for Unity Cloud, see the [Unity Cloud User Guide](#).


Default Port	Offset	Transport	Protocol	Services	Endpoints	Direction	Encrypted	Optional
38880	Base Port	TCP	HTTPS	API	Unity Server, Clients	Both	Yes	No
38881	+1	TCP	HTTPS	API, Media	Unity Server, Clients	Both	Yes	No
38882	+2	UDP	Custom	Clustering	Unity Server	Both	No	No
38883	+3	UDP Multicast 239.255.255.238	WS Discovery	Server Discovery	Unity Server	Both	No	Yes
38884	+4	UDP	NTP	Avigilon Device Time Synchronization	Avigilon Devices	Inbound	No	Yes - Devices must be configured to use external NTP if blocked.
38980	+100*	TCP	TLS	Database Replication	Unity Server	Both	Yes	No
38981	+101*	TCP	TLS	Database	Unity Server	Both	Yes	No
38982	+102*	TCP	HTTPS	Clustering (Gossip)	Unity Server	Both	Yes	No
38983	+103*	TCP	MQTT	Clustering (MQTT)	Unity Server	Both	Yes	No
3702		UDP Multicast 239.255.255.250	WS-Discovery	Onvif Device Discovery	Unity Server	Both	No	Yes
51000-55000		UDP	RTP/RTCP	Media	Clients, Devices	Both	No	Yes
59595		UDP Multicast 239.255.255.0	HTTP	Pelco device driver (SOAP)	Pelco Cameras	Inbound	No	Yes - Only active when connecte

Default Port	Offset	Transport	Protocol	Services	Endpoints	Direction	Encrypted	Optional
								d to Pelco (SOAP) devices
8443		TCP	HTTPS	Web Endpoint REST API (Windows Only)	Integration, Unity Mobile Clients, Browser Clients	Inbound	No	Yes
443		TCP	HTTPS	Web Endpoint REST API, Administrative Web UI (Appliance Only)	Integration, Unity Mobile Clients, Browser Clients	Inbound	No	Yes
1900		UDP Multicast 239.255.255.250	SSDP	Web Endpoint (Appliance Only)	SSDP Clients	Both	No	Yes
Random Ephemeral		TCP	SSDP	Web Endpoint (Windows Only)	SSDP Clients	Inbound	No	Yes
49152		TCP	SSDP	Web Endpoint (Windows Only)	SSDP Clients	Inbound	No	Yes
5353		UDP	MDNS	Web Endpoint	MDNS (Bonjour) Clients	Both	No	Yes
443		TCP	HTTPS, AMQP	Unity Cloud	Internet (AUC), WebRTC Signalling (Aby, Pubnub)	Outbound	Yes	Yes - Required for cloud connected sites.

*Ports required when upgrading ACC 7 to Avigilon Unity Video

Configuring the Server Network

The server communicates with the Avigilon Unity Video 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 Unity Video 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 Unity Cloud and your Avigilon Unity Video Service can cause unexpected behavior. To prevent differences in Unity Cloud time and Unity Server time, configure your server or appliance to synchronize with a network time protocol (NTP) time server.

Recommended Post-Upgrade System Verification

After signing in to the Avigilon Unity Video Client software:

- Verify that the necessary licenses are up-to-date.
- Verify all end-users are able to log in, including mobile.
- Verify recorded videos are accessible.
- Verify functionality for customized rules, alarms, analytics and other configurations.
- Verify all cameras are online.
- Confirm that camera firmware is up-to-date.

Then:

- Open specific ports required when upgrading from ACC 7 to Avigilon Unity Video. For more information, see [Configuring the Server Network on the previous page](#).
- Perform a backup of Avigilon Unity Video. For more information, see [Backing Up Site Settings on page 10](#).

Upgrading Your Organization to the Full Unity Experience

After upgrading your organization, you can take advantage of the Unity exclusive features such as the Privilege Management module that lets you centrally manage users across all sites in your organization. When you upgrade, any existing cloud users will continue to have access to your organization. This saves you from having to manually enter users.



WARNING



Customers who are currently using or planning to use the following features should wait to upgrade to a Unity Organization. A future service release is planned to enable these capabilities for Unity Organizations:

- Unity Access (ACM) Unification
- System Health Monitoring by a Partner/Dealer



NOTE

Before upgrading your organization, you must first upgrade all sites to the minimum version of 8.0.4. This means that you cannot have a combination of ACC 7 sites and Avigilon Unity sites in your organization. After upgrading, you will be unable to connect to ACC 7 sites.

1. Log in to Avigilon Unity Video Cloud.
2. Click the  **Support** button, and choose **Get the new Unity experience**.
If your organization consists of a combination of ACC 7 and Avigilon Unity 8.0 or later sites, administrators will view a *Check version* button displayed on the Avigilon Unity page.
3. If displayed, click **Check version**.
You will need to identify the servers with version ACC 7 or earlier. These sites will need to be upgraded to Avigilon Unity before you can continue upgrading your existing cloud users to Unity Cloud. When all sites in your organization have been upgraded to the minimum version of Avigilon Unity 8.0.4, an Upgrade button will appear on the Avigilon Unity page. Only the primary administrator can click the Upgrade button.
4. On the Avigilon Unity page, click **Upgrade**.
 - The primary administrator for your organization is automatically added to the Organization Administrators group, with an Organization Administrators role, and an Organization Management Policy policy. These give the primary administrator the unique privilege to manage users across their entire organization.
 - Only administrators in the Organization Administrators group can view and access the  Privilege Management on the main navigation bar.
 - Other users in your organization can be added to the Organization Administrators group so that they can also manage user access for the organization.



IMPORTANT

Users who have the Organization Administrator role through a policy will be treated as an Administrator. All other users will be treated as a Viewer.

Users in your organization will be added to the Administrators and Standard Users groups.

- Users that previously had the Administrator role will be added to the Administrators group.
- Users that previously had the Device Manager, Responder and Viewer roles will be added to the Standard Users group.
- The Administrators and Standard Users group names can be customized or removed.
- Four default roles will be created using the ACC default group naming convention: Administrators, Power Users, Standard Users and Restricted Users. These roles can be customized or removed. Note that the Administrators role will not contain the unique privilege to manage users across the organization.




NOTE

Following the upgrade, except for the Primary Administrator, all other users are granted the Viewer access role with no access to sites.

5. To give users access rights and access to sites, add them to appropriate user groups before adding the groups to policies.

Restoring ACC 7 Software on a Computer

If a software rollback occurred during the upgrade process using the Software Manager, you can restore ACC 7 files on your computer.

1. Launch the  **Software Manager**.
You will uninstall the installed Avigilon Unity Video components first.
2. Click **Uninstall Applications**, and click **Next**.
3. Click **Uninstall**. This may take a few moments.
A confirmation screen displays all the applications that have been removed.
4. Click **Finish** to exit the Software Manager.
5. Manually reinstall all the ACC 7 applications.
6. Restore your backup settings.
7. Reactivate your License Activation IDs.

More Information & Support

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

Technical Support

Contact Avigilon Technical Support at support.avigilon.com/s/contactsupport.

Third-Party Licenses

- help.avigilon.com/avigilon-unity/video/attribution-report/VSA_FixedVideo.html
- help.avigilon.com/avigilon-unity/video/attribution-report/VSA_Avigilon_ACC.html
- help.avigilon.com/avigilon-unity/video/attribution-report/VSA_Avigilon_ACS.html