

Avigilon Video Archive Initialization Guide

AVA-HED1-225TB, AVA-HED1-488TB, AVA-HED1-751TB,
AVA-EXP1-263TB, AVA-EXP1-526TB, AVA-EXP1-789TB

Copyright

© 2021, Avigilon Corporation. All rights reserved. AVIGILON, the AVIGILON logo, AVIGILON CONTROL CENTER and ACC are trademarks of Avigilon Corporation. Other names or logos mentioned herein may be the trademarks of their respective owners. The absence of the symbols ™ and ® in proximity to each trademark in this document or at all is not a disclaimer of ownership of the related trademark. Avigilon Corporation protects its innovations with patents issued in the United States of America and other jurisdictions worldwide (see [avigilon.com/patents](https://www.avigilon.com/patents)). Unless stated explicitly and in writing, no license is granted with respect to any copyright, industrial design, trademark, patent or other intellectual property rights of Avigilon Corporation or its licensors.

This document has been compiled and published using product descriptions and specifications available at the time of publication. The contents of this document and the specifications of the products discussed herein are subject to change without notice. Avigilon Corporation reserves the right to make any such changes without notice. Neither Avigilon Corporation nor any of its affiliated companies: (1) guarantees the completeness or accuracy of the information contained in this document; or (2) is responsible for your use of, or reliance on, the information. Avigilon Corporation shall not be responsible for any losses or damages (including consequential damages) caused by reliance on the information presented herein.

Avigilon Corporation
avigilon.com

PDF-AVAQSG-A

Revision: 5 - EN

20210105

Table of Contents

Introduction	1
System Requirements	1
Important Considerations	1
Step 1: Initial Setup	2
Step 2: Configure System Settings	3
Update System Information	3
Update Date and Time	3
Update Default Passwords	4
Connect to the NVR	4
Enable the SNMP Service	5
Set Up SNMP Notifications	5
Step 3: Partition the Archive	6
Step 4: Configure ACC™ Storage Management	8
Enable ACC Continuous Archive	8
Step 5: Enable ACC Health Status Updates	9
Configure the SNMP Service	9
Configure Network Adapters	9
Test the Connection	10
Adding Storage to a Video Archive	11
Troubleshooting	12
Health Status Troubleshooting	12
For More Information	13

Introduction

The Avigilon Video Archive provides additional storage for video from the Avigilon Control Center (ACC) system.

The Avigilon Video Archive consists of a head unit that hosts the storage controllers and connects to up to 4 Network Video Recorders (NVRs), and an expansion unit that adds capacity to the installed head unit. The initialization steps in this guide describe how to equally partition the total available storage on the Avigilon Video Archive based on how many NVRs are connected.

The Avigilon Video Archive can send health status updates using Simple Network Management Protocol (SNMP) and network adapter connection updates. The initialization steps describe how to configure the SNMP service and network adapters to ensure the health status is reported properly.

System Requirements

- NVRs — NVR4 Premium, NVR4 Standard, NVR4X Premium, or NVR4X Standard
- Operating System — Windows Server 2016
- ACC Server Software — Enterprise Edition version 7.2 or later

Important Considerations

Important: Connect all NVRs to the Avigilon Video Archive before initializing the archive.

- The initialization process partitions the archive. Adding expandable storage or connecting an additional NVR after the archive is initialized may not work as expected.
- If you plan to connect additional NVRs in the future, partition the Avigilon Video Archive for the total expected number of connected NVRs during this initialization process.
- Up to 4 NVRs can be directly connected to the Avigilon Video Archive, however the SNMP service will monitor the primary NVR to send health information. If all of the connected NVRs are part of the same site, you will receive health information for the site through the SNMP service. All 4 NVRs can send network adapter connection updates.

Note: If a step is unsuccessful, retry it. If you encounter any issues, contact Avigilon Technical Support.

Step 1: Initial Setup

Important: Connect a laptop to the Controller A management port on the Avigilon Video Archive head unit using an Ethernet cable.

Do not perform the initial setup and system configuration steps on the NVRs.

After connecting your laptop to the Avigilon Video Archive, do the following:

- Download the Avigilon Video Archive Initialization Tools zip file from [avigilon.com/support/infrastructure/ava/](https://www.avigilon.com/support/infrastructure/ava/) and extract the files.
- Configure the IP address of laptop:
 1. In the Network & Internet settings, select **Ethernet > Change adapter options**.
 2. Right-click the network that is connected to the archive and select **Properties**.
 3. Select **Internet Protocol Version 4 (TCP/IPv4)** and then click **Properties**.
 4. Select **Use the following IP address** and enter:
 - IP address — 10.0.0.24
 - Subnet mask — 255.255.255.0
 - Default gateway — 10.0.0.1
 5. Click **OK** and then **Close**.

Step 2: Configure System Settings

1. Launch a browser and go to **https://10.0.0.2**. If a security warning displays, click **Continue to this website**.
2. Click **Get Started**.
3. Read and **Accept** the Commercial Terms of Sale and End User License Agreement.
4. Specify a new *Username* and *Password* for the system. Click **Apply** and then click **Continue**.

Note: The password must be a complex password that contains upper and lower case letters, a number, and a symbol.

5. After the Avigilon Video Archive's web interface launches, click **System Settings**.

All tabs that are marked with an asterisk, except the Ports tab, must be completed before you can continue. Ports will be configured automatically in *Step 3: Partition the Archive* on page 6.

Update System Information

In the **System Information** tab:

1. Update the **System Name**, **System Contact**, **System Location**, and **System Information** fields.
This information appears in the ACC Site Health page if SNMP notifications are enabled.
2. Click **Apply** and then **OK** to save your changes.
3. Click **OK** to close the dialog box.

Update Date and Time

In the **Date and Time** tab:

1. Ensure the **Date** and **Time** match the ACC Server time.

Important: A loss of data could occur if the Avigilon Video Archive date and time is not synchronized with the ACC Server time.

2. To synchronize the time with a Network Time Protocol (NTP) server, select the check box and enter the **NTP Server Address** and **NTP Time Zone Offset**.
3. Click **Apply** and then **OK** to save your changes.
4. Click **OK** to close the dialog box.

Update Default Passwords

Tip: This step is not required for the user you created when logging in. This step is required for any additional users the Video Archive has other than the newly created user.

In the **Manage Users** tab:

1. Select a user.
2. Enter a new password in the **Password** and **Confirm Password** fields.

Note: The new password must be a complex password that contains upper and lower case letters, a number, and a symbol.

3. Click **Apply** and then **OK** to save your changes.
4. Click **OK** to close the dialog box.
5. Repeat steps 1-4 for each user marked with an asterisk.

Connect to the NVR

In the **Network** tab:

If the NVR uses Dynamic Host Configuration Protocol (DHCP):

1. Under Controller B, select **DHCP** in the Source drop-down list.
2. Click **Apply** and then **OK** to save your changes.
3. Click **OK** to close the dialog box.

If the NVR has a static IP address:

1. Under Controller B, assign an IP address for the controller. Enter the **IP Address**, **IP mask**, and **Gateway** values.
2. Click **Apply** and then **OK** to save your changes.
3. Click **OK** to close the dialog box.

Enable the SNMP Service

In the **Services** tab:

1. Select the **Simple Network Management Protocol (SNMP)** check box.
2. Click **Apply** and then **OK** to save your changes.
3. Click **OK** to close the dialog box.

Set Up SNMP Notifications

In the **Notifications** tab:

1. Select the **SNMP** tab.
2. In the **Notification Level** drop-down list, select **Informational/Resolved**.
3. In the **Read Community** field, enter `AvigilonCommunity`. This field is case sensitive.
4. In the **Trap Host 1 Address** field, enter the IP address for the primary NVR that is connected to the Avigilon Video Archive. Repeat for up to 3 NVRs.

Note: If 4 NVRs are connected to the Avigilon Video Archive, only the NVRs assigned in this step will receive SNMP health status information.

5. Click **Apply** and then **OK** to save your changes.
6. Click **OK** to close the dialog box.

Step 3: Partition the Archive

Note: Complete the following steps on the primary NVR that is connected to the head unit of the Avigilon Video Archive.

You will need:

- The `ava_setup` folder
- The archive's static or DHCP IP address — this is the IP address configured in *Step 1: Initial Setup* on page 2
- The archive's user name and password

The following steps partition the Avigilon Video Archive.

1. In the `ava_setup` folder, right-click `CreateArchives` and select **Run as administrator**.
2. Enter the archive's **IP Address**, **Username**, and **Password**.
3. Click **Connect**.
4. When the connection is completed, click **Initialize Archive**. The initialization can take up to 30 minutes.
5. In the **Number of Archives** drop-down list, select the number of NVRs that are connected to the archive.

Important: If you plan to connect additional NVRs to the archive in the future, enter the total number of NVRs that will be connected. Adding an NVR to an Avigilon Video Archive after this step will involve adding new drives and migrating existing data, and requires advanced knowledge of the system.

6. Click **Create Archive(s)**. The Avigilon Video Archive may restart.
7. When the Create Archive(s) process is complete, click **Setup**. The Avigilon Video Archive will create and map a new drive on each connected NVR.
8. When the Setup process prompts, restart the NVR.

After the NVR restarts:

1. In the `ava_setup` folder, right-click `CreateArchives` and select **Run as administrator**.
2. Enter the archive's **IP Address**, **Username**, and **Password**.
3. Click **Connect**. Initializing may take a few minutes to complete.
4. Click **Finalize**. Finalizing can take up to 30 minutes to complete.

Note:

Once this procedure has been completed on the primary NVR, you will need to repeat it for each additional NVR that is connected to the Avigilon Video Archive.

[Step 5](#) and [Step 6](#) are only required for the primary NVR. When going through these steps for the other NVRs, you will not be required to select the number of archives or to click Create Archive(s).

Step 4: Configure ACC™ Storage Management

Note: Complete the following steps on each NVR that is connected to the head unit of the Avigilon Video Archive.

In the ACC Admin Tool:

1. Click **Storage Management**.
2. Select the **Enable Storage Management** check box and then browse to the mapped archive drive.
3. Click **OK** to save changes and then click **OK** to confirm.
4. Repeat for each connected NVR.

You can now configure the Continuous Archive feature in the ACC Client software. See *Enable ACC Continuous Archive* below.

Enable ACC Continuous Archive

In the ACC Client:

1. Go to the server Setup tab and click .
2. Select **Enable Continuous Archive** and select the cameras to be archived.
3. In the Options area, define when the archiving is permitted and the minimum number of days before video will be archived.

Note: Set the Archive video older than: parameter to at least one day less than the video data aging setting. This ensures that the video is finished archiving before the local data is deleted.

4. Click **OK**.
5. Repeat for each connected NVR.

For more information, see the *ACC Client Software User Guide*.

Step 5: Enable ACC Health Status Updates

This process enables the ACC Client software to view the health status of the Avigilon Video Archive on the Site Health page.

The SNMP configuration lets the ACC Client software receive health information from the primary NVR that you connected to the Avigilon Video Archive. If the other connected NVRs are in the same site as the primary NVR, you will receive health information for the site. The network adapter configuration lets the ACC Client software receive connection health information for all connected NVRs.

Configure the SNMP Service

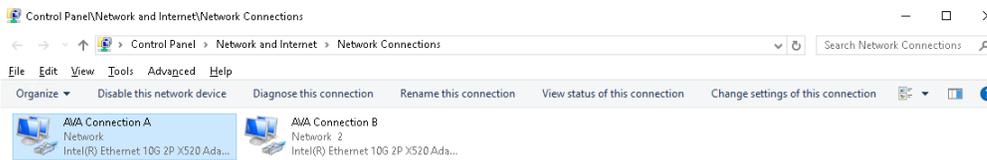
Note: Complete the following steps on the primary NVR that is connected to the Avigilon Video Archive. If all of the NVRs connected to the Avigilon Video Archive are part of the same site, you will receive health information for that site through the SNMP service.

1. In the Services application, right-click **SNMP Service** and select **Properties**.
2. In the Traps tab, enter `AvigilonCommunity` in the Community name field, and then click **Add to list**.
3. Click **Add...** and enter the IP address `127.0.0.1`. Click **Add**.
4. In the Security tab, click **Add...** in the Accepted community names area.
5. Enter `AvigilonCommunity` and then click **Add**.
6. Ensure **Accept SNMP packets from these hosts** is selected and then click **Apply** to save.

Configure Network Adapters

Note: Complete the following steps on each NVR that is connected to the Avigilon Video Archive. If 4 NVRs are connected, all NVRs will receive network adapter updates. You must have Administrator access.

1. In the ACC Admin Tool, click **Shut Down**. The ACC Server will shut down.
2. In the Network Connections settings, right-click the Ethernet 10G connections and select **Rename**.
3. Enter a descriptive name for each network connection. These names will appear in the ACC Site Health page.



4. In the ACC Admin Tool, click **Start Up**.
5. Repeat on all connected NVRs.

Test the Connection

To verify that the SNMP service and network adapter names were correctly configured:

1. Log in to the ACC Client software.
2. In the New Task menu , click **Site Health**.

The Avigilon Video Archive network adapters are displayed in the **Network Adapters:** section.

The Avigilon Video Archive health status is displayed in the **Array Storage Controllers:** section.

If the Array Storage Controllers: health status is not displayed, check the following:

- The SNMP Service is running on the NVR.
- The SNMP Service was configured as described above.
- The SNMP Service and Notifications were properly configured in *Step 2: Configure System Settings* on page 3.

If the health status is still not displayed on the Site Health page, contact Avigilon Technical Support.

Adding Storage to a Video Archive

Important: We strongly recommend that all NVRs and expanded storage are connected before partitioning the Avigilon Video Archive. This topic describes options for adding storage after the archive has been partitioned and deployed.

If you add expanded storage to the Avigilon Video Archive, you can partition the new storage to be used by new NVRs that are being added at the same time as the storage, or you can expand the storage that is already allocated to existing NVRs. For more information, see the *Avigilon Video Archive Advanced Deployment Guide*.

Note: Adding a new NVR to an Avigilon Video Archive that has already been partitioned and deployed without adding an expansion unit or additional disk packs will result in a loss of data when repartitioning the archive. If you are adding an NVR to a deployed video archive, we strongly recommend you also add additional storage to the archive at the same time to avoid losing data.

There are two ways to expand the storage of your Avigilon Video Archive:

- **Adding an expansion unit.** If you currently only have a head unit deployed, adding an expansion unit will expand the storage capacity of your system.

For more information about installing and connecting your expansion unit to the head unit, see the *Avigilon Video Archive Expansion Unit Installation and Setup Guide*.

- **Adding hard disk packs.** Expansion disk packs are available as a pack of 28 disk drives. Each head unit and expansion unit can hold up to 84 drives, or 3 packs of 28 drives.

For information on installing the disk packs, see the *Avigilon Video Archive Installation and Setup Guide*.

The process of repartitioning the archive to use added storage is the same whether you are adding disk packs or adding an entire expansion unit.

Troubleshooting

- If a step is unsuccessful, retry it.
- If you encounter any issues, contact Avigilon Technical Support.
- It may be helpful to have a copy of the logs when troubleshooting. To access the logs:
 1. Ensure you can view hidden folders:
 - a. In the Control Panel, click **File Explorer Options**.
 - b. In the View tab, select **Show hidden files, folders, and drives**.
 - c. Click **OK**.
 2. In Windows Explorer, go to C:\Users\[username]\AppData\Roaming\Avigilon and click StorageArraySetup.

Health Status Troubleshooting

The ACC Health Status page may show a warning for the Avigilon Video Archive if you do not have the secondary back up power supply connected.

For More Information

For additional product documentation and software and firmware upgrades, visit [avigilon.com/support](https://www.avigilon.com/support).

Technical Support

Contact Avigilon Technical Support at [avigilon.com/contact](https://www.avigilon.com/contact).

Avigilon Video Archive Initialization Tools and documentation is also available from [avigilon.com/support/infrastructure/ava/](https://www.avigilon.com/support/infrastructure/ava/).