Avigilon Cloud Services
User Guide

Avigilon Corporation
avigilon.com

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Introduction

Avigilon Cloud Services enables a modern cloud-connected user experience, accessible from a web browser. It lets Avigilon Control Center (ACC) sites connect to the cloud and take advantage of capabilities and features that provide centralized access across distributed systems. Avigilon Cloud Services simplifies management of physical security systems for multi-site facilities and distributed security systems from anywhere.
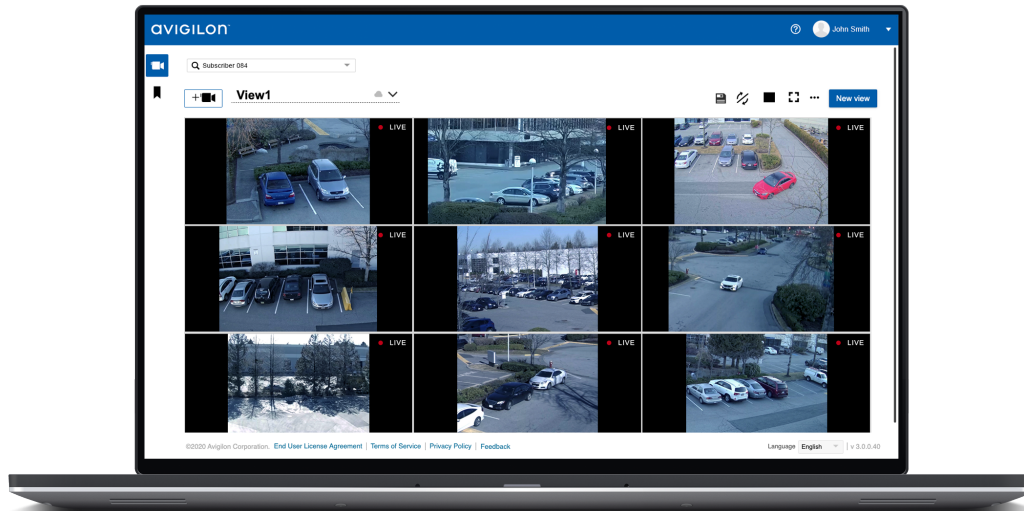
What's in this guide?

- Connecting an ACC site to Avigilon Cloud Services.
- Monitoring live and recorded video.
- Managing bookmarks.
- Viewing Saved Views and creating personalized views.
- Managing your profile.

System Requirements

Software Requirements

- ACC Server software version 7.6 or later
- ACC Web Endpoint Service version 7.6 or later

Supported Cameras

- Avigilon H5A, H5SL and H5M cameras
- Avigilon H4A and H4SL cameras
- Avigilon H4 Fisheye cameras without dewarp
- Avigilon H4 Pro cameras
- Avigilon HD Multisensor cameras
- Avigilon pan, tilt, and zoom (PTZ) cameras

- Avigilon Multihead cameras
- Avigilon HD Pro cameras
- ONVIF® Profile S cameras
- Analog cameras with the use of an Avigilon analog encoder or an ONVIF encoder

  ONVIF is a trademark of Onvif, Inc.

Currently all cameras must use H.264 format. H.265 video streaming is only supported on Safari® browsers. Avigilon Edge Solution (ES) cameras and video dewarp are not supported.

Supported Browsers

The following browsers are supported on Windows 10, macOS®, and Chromebook™ devices:

- Google Chrome™ browser version 72.0 or later
- Safari browser version 12.1 or later
- Microsoft Edge browser version 80.0.361 or later

Browsers on mobile devices are currently not supported.

Supported Devices

- ACC Mobile 3 app version 3.18 or later available on the App Store and the Google Play™ store

The minimum device requirements are:

	Android	**iOS**
Platform	Android version 5.0 or later	iPad with iOS 10 or later
		iPhone with iOS 10 or later
		iPod touch with iOS 10 or later
Processor	n/a	64-bit (Apple A7 or later)

Bandwidth Requirements

Streaming Video

The number of streams you can view at the same time depends on your download bandwidth and other activity on your ACC server or appliance, including other users who may be streaming or downloading video.

For example, a 3 MP camera running at 6 fps requires 1-3 Mbps depending on the video quality. Each user viewing a camera will take up a concurrent stream. For example, a 3 MP camera running at 6 fps requires 1-3 Mbps depending on the video quality. Each user viewing a camera will take up a concurrent stream.

In addition to the streaming capacity of the hardware used to run the ACC software, you may also be limited by your internet service provider's download speed.

Downloading Video

Downloading video uses upload bandwidth and is affected by other network activity, including the number of people trying to stream or retrieve video at the same time.

If users try to stream and download video at the same time, the users streaming video will be given priority.

If you have an upload speed of 5 Mbps, only one user can download high quality video from one 3 MP camera running at 6 fps. Up to 5 users could concurrently download low quality video from the same camera.

Connecting ACC™ to the Cloud

> **Note:** If your ACC site was previously connected to Avigilon Cloud Services as a standalone site and you are now moving to a registered organization, first disconnect the site from the cloud. See *Disconnecting ACC from the Cloud* on page 13.

This section describes how to connect your ACC site to Avigilon Cloud Services so users can view video from their browser or mobile device.

Before Connecting Your ACC Site

- Check the *System Requirements* on page 7.
- Ensure your ACC site has Internet access.
- Ensure that each ACC Server is version 7.6 or later and that the ACC Web Endpoint Service is installed and running.
- If you have a multi-server site, add all servers to the site before connecting to Avigilon Cloud Services. Otherwise you will have to disconnect the individual servers from Avigilon Cloud Services before reconnecting the ACC site.

Registering Your Organization

Administrators should register their organization in Avigilon Cloud Services. This organization can include one or more ACC sites and provides users with access to cameras across all sites.

1. In your browser, go to cloud.avigilon.com.
2. Select a region* then click **Register now**.
3. Enter the organization name and your contact information. Click **Submit**.
4. A registration email will be sent. Complete your registration:
    a. In the email, click the registration link. This link is only valid for 24 hours.

       If the link expires, register your organization again.

    b. Create a password. This password is unique to Avigilon Cloud Services and does not need to match your ACC password.

    c. Select your **Preferred communication language**. This sets the language for emails from Avigilon Cloud Services.

    d. Click **Submit**, then click **Sign In** and enter your credentials.

Adding a Site to Your Organization

1. After the named organization has been created, get an activation code in Avigilon Cloud Services:

   a. In the Sites tab, click **Add site**.

   b. Enter the site name, address, and select a Primary Contact who will receive email notifications about the site.

   c. Click **Add**. A code is displayed.

2. Copy the code and enter it in the ACC Client software:

   a. In the New Task menu ☰ , click **Site Setup**.

   b. Click the site name, then click **Avigilon Cloud Services** ☁ .

   c. Click **If you have an activation code, click here.**.

   d. Enter the activation code and click **Connect**.

Adding Users to Avigilon Cloud Services

After the ACC site is connected, an ACC administrator can enable users to access Avigilon Cloud Services. Users imported from Active Directory or ACM™ can also be enabled, however these users will have a unique password for Avigilon Cloud Services that may differ from their ACC password.

In the ACC Client:

1. In the New Task menu ☰ , click **Site Setup**.

2. Click the site name, then click **Users and Groups** 👥 .

3. Select a user, then click **Edit User**.

4. Enter an email address if not already specified. This will be the username in Avigilon Cloud Services.

5. Select the **Connect** checkbox and click **OK**.

   The user will receive an email invitation with a registration link that expires within 24 hours.

Signing In to Avigilon Cloud Services

Users can sign in with their Avigilon Cloud Services credentials at cloud.avigilon.com and on the ACC Mobile 3 app.

> **Note:** When you connect to Avigilon Cloud Services, two user groups are automatically created:
>
> - Cloud Administrators
> - Cloud Viewers

By default, these user groups have access rights to view all cameras in Avigilon Cloud Services and cannot log in to the ACC Client. Update these groups' access rights according to your organization's policies.

Do not assign ACC users to be members of these groups.

Giving Users Additional Privileges

Avigilon Cloud Services administrators can manage sites, users, and view the System Health dashboard. Avigilon Cloud Services managers can also view dashboards without site or user management privileges. For more information, see *User Roles* on page 46. You can elevate users to be an administrator or manager.

In Avigilon Cloud Services:

1. On the Organization Management page > Users tab, select a user.
2. In the **Role** drop-down list, select Administrator or Manager.
3. Click **Save**.

* Avigilon Cloud Services Regions

Selecting the default region or USA will host your organization and accounts on Microsoft Azure servers in the United States. Selecting Asia Pacific or Oceania will host your account in Australia. All other options will host your account in Canada. Note that all users must select the same region to log in to their accounts.

Using the Cloud Platform

With Avigilon Cloud Services, you can:

- View live and recorded video.
- Access ACC Saved Views. These views are read-only and display only the first 9 cameras when viewed in the web client.
- Create personal Saved Views. These are only available in the Avigilon Cloud Services web client and cannot be shared between users.
- Control PTZ cameras using mouse controls. Activate existing PTZ presets and tours from the web client. New presets and tours created in the web client will be saved to the ACC site.
- If your user account has the appropriate permissions in the ACC site, you can also:
  - Activate digital outputs. If a digital output is associated with a camera in the ACC client, it can be triggered from the cloud platform.
  - Create, view, and manage bookmarks in the web client. Changes are synchronized between the ACC site and web client.
  - Download MP4 video clips and snapshots to a local drive.

Disconnecting ACC from the Cloud

> **Note:** An Internet connection is required.

You can disconnect your site from Avigilon Cloud Services at any time. Cloud users will no longer have access to cameras or video from the site.

1. In the New Task menu ☰ , click **Site Setup**.

2. Click the site name, then click **Avigilon Cloud Services** ☁ .

3. Click **Disconnect**.

4. To confirm, click **Yes**.

   A success message is displayed and your site is disconnected.

   Synchronized cloud users are deleted from the ACC site.

5. Click **Close**.

You can confirm the status of your connection on the ACC Site Health page.

Self-Activating an ACC Site

If you only have one site, the easiest method to connect to the cloud is self-activation from the ACC Client. This creates an unregistered organization that has the same name as the site.

> **Tip:** Self-activating an ACC site limits you to viewing cameras from one site at a time. For access to additional features, or if you have multiple ACC sites, create a registered organization. See *Connecting ACC™ to the Cloud* on page 10.

Enable the Administrator Account

In the ACC Client:

1. In the New Task menu ☰ , click **Site Setup**.
2. Click the site name, then click **Users and Groups** 👥 .
3. Select a user with ACC administrator privileges to register the site in Avigilon Cloud Services, then click **Edit**.
4. Enter an email address if not already specified. This will be the username in Avigilon Cloud Services.
5. Select the **Connect** checkbox and click **OK**.

Cloud-Connect Your ACC Site

1. In the Site Setup tab, click **Avigilon Cloud Services** ☁ .
2. Select the administrator user enabled above. Verify that their email address is displayed and correct.
3. Click **Connect**.
4. A registration email will be sent. Complete your registration:
    a. In the email, click the registration link. This link is only valid for 24 hours.

       If the link expires, register your organization again.

    b. Create a password. This password is unique to Avigilon Cloud Services and does not need to match your ACC password.

    c. Select your **Preferred communication language**. This sets the language for emails from Avigilon Cloud Services.

    d. Click **Submit**, then click **Sign In** and enter your credentials.

Adding Users to Avigilon Cloud Services

In the ACC Client:

1. In the New Task menu ☰ , click **Site Setup**.

2. Click the site name, then click **Users and Groups** 👥 .

3. Select a user, then click **Edit User**.

4. Enter an email address if not already specified. This will be the username in Avigilon Cloud Services.

5. Select the **Connect** checkbox and click **OK**.

   The user will receive an email invitation with a registration link that expires within 24 hours.

Signing In to Avigilon Cloud Services

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> By default, these user groups have access rights to view all cameras in Avigilon Cloud Services and cannot log in to the ACC Client. Update these groups' access rights according to your organization's policies.
>
> Do not assign ACC users to be members of these groups.

Getting Started

Registering Your User Account

When an Administrator invites you to Avigilon Cloud Services platform, you'll receive an email invitation from the Avigilon Cloud Services Team.

1. In the email, click the registration link. This link is only valid for 24 hours.

   If the link expires, contact your administrator to disable and re-enable cloud access for your ACC user account.

2. Create a password. This password is unique to Avigilon Cloud Services and does not need to match your ACC password.

3. Select your **Preferred communication language**. This sets the language for emails from Avigilon Cloud Services.

4. Click **Submit**, then click **Sign In** and enter your credentials.

Changing Organizations

If you have access to multiple Avigilon Cloud Services organizations, you can switch between them.

1. In the top-right corner, click your name.

2. Click **Switch Organization**, then select an organization.

Signing In

> **Note:** If an incorrect password is entered three times, the account will be locked for 30 minutes. Click **Reset Password** to change your password and access your account.

1. Go to cloud.avigilon.com.

2. Select the **Default** region unless told otherwise.

3. Enter your email and password.

4. Click **Submit**.

   You are signed in.

Signing Out

- In the top-right corner of your browser, click your name and select **Sign Out**.

Video

Viewing Live Video

You can view live video on the Views page from cameras in sites you have access to. If you already have saved views, see *Opening a View* on page 33.

1. Select an image panel, and then click ＋❚◀ .

   The camera list is displayed, and the selected image panel is outlined in blue.

   For more information, see *Camera List* on page 35.

   > **Tip:** You can hover your mouse over a camera name to display a snapshot of the video.

2. Select the camera you want to view.

   The camera is added to the image panel and its live video is displayed.

3. While the camera list is displayed, you can continue to select image panels and then select cameras to add to those panels.

Changing Video Quality

By default, the player always uses the **LOW** quality setting in order to conserve bandwidth. You can change the player's video quality for the current player session. Select **AUTO** quality to see more detail. Select **LOW** quality if you have a slower internet connection.

1. In the bottom-right corner of the video player, click 🎛 .
2. Select the **Video Quality**.

   The video quality is updated. The video quality will revert back to the default setting after you close or navigate away from the player.

Focusing the Camera

Sometimes a camera may not be focused. Instead of calling for support, you can reset the focus from the video player.

1. In the bottom-right corner of the video player, click 🎛 .
2. Click **AUTO**.

Video Streaming Timeout

Continuous video streaming in Avigilon Cloud Services may timeout after a specific period of user inactivity. This inactivity duration may differ if you have a restrictive firewall configuration. Click **Resume** to continue streaming video.

Viewing Recorded Video

> **Tip:** In the top-right corner, click ⤢ to sync video from all players in a view.
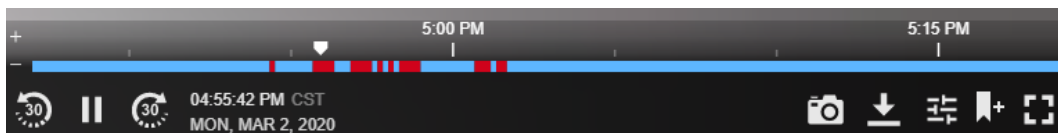
Using the Timeline

The timeline lets you search recorded video from a particular camera.

- Open the video player for the camera.

  For more information, see *Viewing Live Video* on the previous page.

  A timeline appears when you hover over the video player.

  Markers show the time and date. The blue bands represent recorded video. The red bands represent a recorded motion event.

  - **To use one timeline for all video players in a View**, in the top-right corner, click ⤢ to sync video.

  - **To search recorded video**, drag the white marker along the timeline or click the date to select when to view video.

  - **To increase or decrease the time range**, scroll over the timeline or click ➕ / ➖ on the left side of the timeline. You can increase the time range up to several days.

  - **To jump backwards or forwards in time**, click the left or right side of the timeline. The video will play from the time selected.

  - **To return to live video**, click REC ✕ in the upper-right corner of the player window.

  - **To hide the timeline**, move your mouse away from the video player window.

Selecting a Date

You can view recorded video from a certain date and time using the video player.

1. At the bottom of a video player, click the date and time.

   A calendar is displayed.
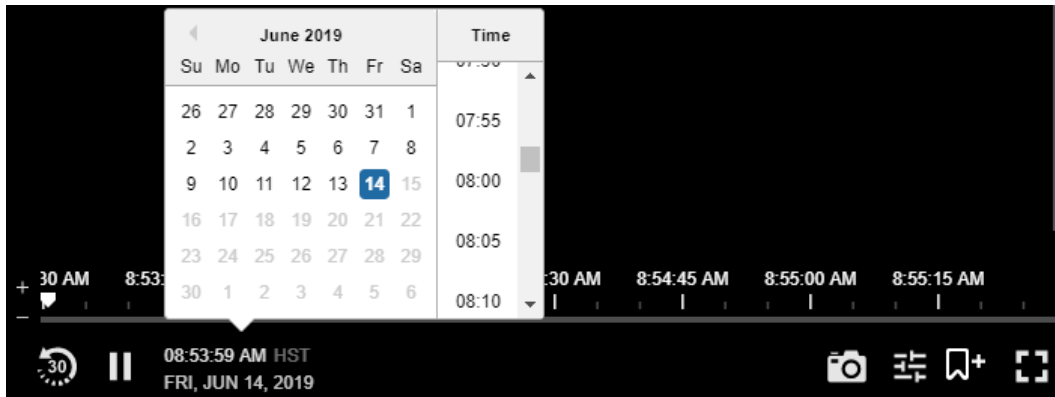
2. Select a date and time.

   The player will display recorded video from that time.

Using a PTZ Camera

PTZ controls are available when viewing live video from a PTZ camera on the Views page.

1. In the video player, click or to display the PTZ controls.
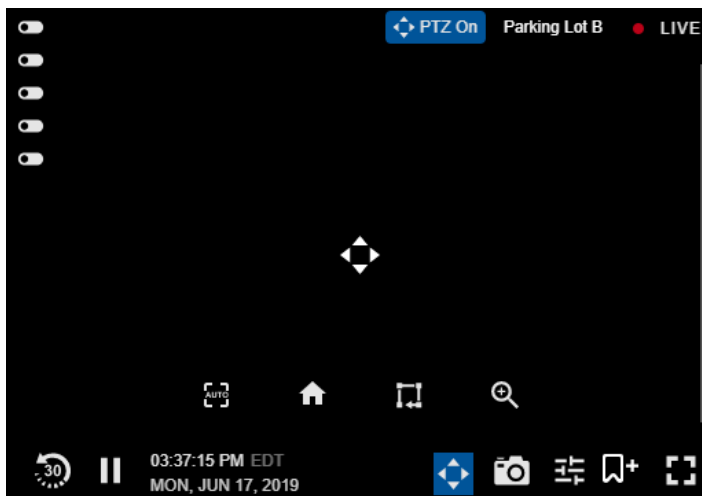
   The camera's PTZ controls are overlaid on the video and manual pan and tilt controls are enabled.
   For more information on using manual pan and tilt controls, see *Moving a PTZ Camera* on the next

page.

Control	Description
AUTO	Auto-focus the PTZ camera.
🏠	Go to the Home position.
⤶	Display the Presets list where you can move to a preset, or create and delete presets. You can also access the Tours list where you can run, create, and delete tours.
🔍	Display the Zoom controls.

2. To hide the PTZ controls, click or PTZ On .

Moving a PTZ Camera

As you move the PTZ camera's field of view, the camera's recording will move with the changing field of view.

Analytic rules with PTZ cameras can only be used at the Home position of the PTZ camera. Moving the camera will disable analtyics rules until the PTZ has moved back to the home position. For more information, see *Go To Home Position* on the next page.

> **Tip:** PTZ controls like click-to-center and continuous panning will also function when other PTZ controls are open, such as the Zoom or Preset controls.

Click-to-Center

1. Click or PTZ Off to display the PTZ controls and enable manual pan and tilt controls.
2. If click-to-center is supported by your camera, click anywhere on the video image to center the camera on that point.

   The camera's live video moves to center on the selected point.

Continuous Panning

1. Click or PTZ Off to display the PTZ controls and enable manual pan and tilt controls.

2. Drag your mouse from the center in the direction you want the camera to pan. The farther the mouse is from the center of the player, the faster the camera will move.
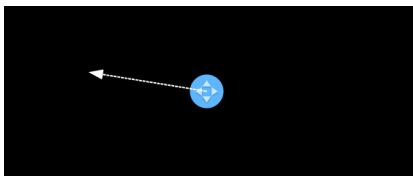
The camera's live video moves as directed.

While the camera is panning, you can drag in other directions to adjust the camera movement.

3. Release the mouse button to stop panning.

Keyboard PTZ Controls

Using the PTZ keyboard controls is ideal for small adjustments to the PTZ camera position. Each keystroke will move the camera a small amount.

1. Click or to display the PTZ controls and enable manual pan and tilt controls.

2. Use the keyboard keys to control and pan and tilt movements of the camera. You can tap the key to make a small movement or hold it down to move faster. The table below lists the different PTZ control keys.

PTZ Control	Keyboard Keys		Number Pad Keys
Move left	←	`A`	4
Move right	→	`D`	6
Move up	↑	`W`	8
Move down	↓	`S`	2
Zoom in	+		+
Zoom out	−		−

Focusing a PTZ Camera

You can automatically adjust the focus of your PTZ camera. Click to have the PTZ camera automatically focus on the scene.

Go To Home Position

If your PTZ camera has a Home preset position configured, you can click to move the camera to the Home position.

For more information on configuring the Home position, see *Creating a Preset* on the next page. Select the **Set as Home** checkbox while creating a preset to make it the Home position.

> **Note:** Analytic rules with PTZ cameras can only be used at the Home position of the PTZ camera. Make sure that the field of view of the Home preset includes any areas that require analytic rules.

PTZ Preset Positions

You can control PTZ camera movement by directing the camera to move to preset positions. You can also manage your presets by creating and deleting them.

Click ⬚ to open the Presets list.

Moving to a Preset Position

1. With the Presets list open, scroll through the list to find the preset you want to move to.

2. Click the Preset.

   The camera's live video will move to the selected preset position.

Creating a Preset

1. Use the camera's PTZ controls to move the camera's field of view to the desired preset position. For more information on moving the camera, see *Moving a PTZ Camera* on page 20, and *PTZ Camera Zoom Controls* on page 24.

2. Click ⬚ to open the Presets list.

3. Click **Create New Preset** at the bottom of the Presets list.

4. Enter a descriptive name for the new preset.

5. Click ✓ to save the new preset or click ✕ to discard the preset.

   If you want this preset to be the Home position, select the **Set as Home** checkbox.

> **Note:** You cannot edit a preset. If you want to modify an existing preset you will have to delete it and create a new preset.

Deleting a Preset

1. With the Presets list open, scroll through the list to find the preset you want to delete.

2. Click 🗑 for that preset.

The selected preset is deleted and removed from the Presets list.

PTZ Tours

You can control PTZ camera movement by directing the camera to run a PTZ tour. Tours allow the PTZ camera to automatically move between a series of preset positions and can be set to pause at each preset for a specific amount of time. The tour will repeat until manually stopped or other PTZ controls are used.

> **Note:** The PTZ tour will stop when you or any other user uses the PTZ controls for that camera.

Click to open the list of presets, then click **Tours** to open the list of tours.

Running a PTZ Tour

1. With the Tours list open, scroll through the list to find the tour you want to run.

2. Click the Tour.

   The camera's live video will move through the preset positions configured with the tour.

3. To stop the tour, click **Stop Tour** or use any other PTZ control.

Creating a Tour

1. Use the camera's Presets list to create all of the preset positions that you will need for this tour. For more information on creating presets, see *Creating a Preset* on the previous page.

2. Click to open the list of presets, then click **Tours** to open the list of tours.

3. Click **Create Tour** at the bottom of the Tours list.

   The Tour Builder dialog box is displayed.

4. Enter a descriptive name for the new tour in the **Tour Name** field.

5. In the **Pause Duration** field, enter the amount of time the tour will pause before it repeats. Tours will repeat until manually stopped or other PTZ controls are used by any user.

6. Select a **Tour Mode** from the drop-down list:

   - **Sequential**: The PTZ camera will go to each preset in the set order.
   - **Random**: The PTZ camera will go through the list of presets in a random order.

7. If you want this tour to run automatically after a set amount of time that the PTZ camera has been idle, select the **Set as default tour** checkbox. Set the time the camera should be idle before it will automatically run in the **Idle Start Time** field.

   The tour will automatically start after the PTZ camera has been idle for the set time.

> **Note:** Setting the current tour as the default tour will automatically remove this setting from the previous tour that was set as default.

8. Click **Add Another Preset** to add a preset to the Tour Builder.

   a. Select the **Preset** to add from the drop-down list.

   b. In the **Speed** field, enter how fast you want the PTZ camera to move to this preset. The higher the %, the faster the camera will move.

   c. In the **View Time** field, enter the amount of time you want the PTZ camera to stay at this preset position before moving to the next preset. The View Time is 10 seconds by default.

   d. Repeat this step until you have added all of the presets for this tour.

9. To remove the preset from a tour, click 🗑 for that preset.

10. To re-order a preset in the tour, click ↑ or ← for that preset. The preset order only affects tours that use Sequential mode.

11. Click **Save** to save the tour.

Editing a Tour

1. Click ⬜ to open the list of presets, then click **Tours** to open the list of tours.

2. Click ✏ for the tour you want to edit.

3. Edit the tour settings and options. For more information on the tour settings, see *Creating a Tour* on the previous page.

4. Click **Save** to save the tour.

PTZ Camera Zoom Controls

You can control the PTZ camera zoom with the PTZ controls. Zoom in to see more detail or zoom out to see more of the surrounding scene.

Click 🔍 to open the zoom controls.
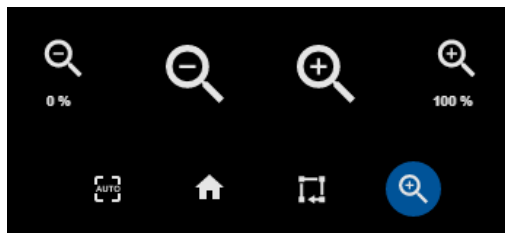
Zoom Control	Description
Zoom all the way out	Click 🔍 0 % to zoom all of the way out. This can be used to reset the PTZ zoom to the default view after zooming in on an object in the scene.
Zoom all the way in	Click 🔍 100% to zoom all of the way in. This can be used to quickly zoom in to the maximum zoom to see more detail in the scene.
Zoom out	Click 🔍 to zoom out by 5% increments.
Zoom in	Click 🔍 to zoom in by 5% increments.
Zooming with the mouse wheel	Use the mouse wheel to adjust the zoom in and out by scrolling the wheel forwards and backwards.
Dragging to zoom	If the camera supports drag to zoom, you can click and drag a green rectangle on the video image to define the area you want to zoom in and see.

Triggering a Digital Output

> **Note:** The proper permissions in the ACC site are needed.

All users can trigger available digital outputs from a camera's video player.

Digital outputs are only available while viewing live video.

1. Hover over the player to display the Digital Outputs ⬤ .

   Hover over a toggle to see the output name.

2. Click ⬤ next to the output you want to trigger:
   - If the output mode is set to **Pulse**, the output will stop after the specified pulse duration.
   - If the output mode is set to **Hold**, click ⬤ again to stop the digital output.

Downloading Video

> **Note:** The proper permissions in the ACC site are needed.

You can download an MP4 video from a specific date and time from any camera you have access to in a video player. You can use the video for further investigation or archive it.

1. In the video player, click ⬇.

   The Download video dialog box is displayed.

2. Using the camera's local time, select the date and start time.
3. In the **Duration:** box, enter how long the video should be. The maximum duration is 60 minutes.
4. Set the Quality to **High** to download a high resolution clip or **Low** to download a low resolution clip.
5. Click **Submit**.

Downloading a Snapshot

> **Note:** The proper permissions in the ACC site are needed.

If you notice something interesting while monitoring live or recorded video, you can download a PNG snapshot of the video player to your computer. You can use the image as evidence in an investigation, or share it across your team to raise awareness of a person of interest.

- In the video player, click 📷 .

  A snapshot is downloaded.

Video Player Controls

The following table describes each video player control. Available controls may vary based on whether you are viewing live or recorded video.

Control	Description
⟲30	Skip back 30 seconds.
⏸	Pause video.
▶	Play video.
30⟳	Skip forward 30 seconds.
✜	View PTZ controls.
📷	Download a snapshot of the video.

Control	Description
	Configure the video player's settings.
	Download video.
	Create a bookmark of the selected video.
	Go to fullscreen mode.
	Exit fullscreen mode. You can also press Esc.
	Zoom in on the timeline. You can also hover over the timeline and scroll.
	Zoom out on the timeline. You can also hover over the timeline and scroll.
	Trigger a digital output. Hover over this control to see the digital output name.
Camera name	View player and connection details. Click to pin player details to the video player.
Click to Jump	Jump backward and forward by clicking the left or right side of the timeline.
Scroll to Zoom	Zoom the video in and out.
Drag to Move	While zoomed in, you can click and drag to move the video's field of view.

Bookmarks

Adding a Bookmark

> **Note:** The proper permissions in the ACC site are needed.

Bookmark recorded video to find and review an event later. Bookmarked video can be protected from scheduled data cleanup so that the video is never deleted.

1. Find the point in the recorded video timeline that you want to start the bookmark and click ▌+ .

    The Create Bookmark dialog box appears with the selected Start time and End time.

2. In the **Cameras** pane, select the cameras to include.

    You can only bookmark multiple cameras from the same site.

3. Enter a **Name** and **Description**.

4. Enter the **Duration** of the bookmark.

    This will automatically update the End time. You can also update the End time to specify the duration of the bookmark.

5. To protect the bookmarked video from being deleted, under Protect bookmark, select **Yes**.

> **IMPORTANT:** Protected bookmarks are never automatically deleted. Be aware that protected bookmarks take up storage space and can become your oldest stored video. Protected bookmarks should be manually deleted when they are no longer needed. For more information, see *Protecting and Unprotecting a Bookmark* below.

6. Click **Save**.

Protecting and Unprotecting a Bookmark

Protecting bookmarks prevents them from being deleted. Protected bookmark can become the oldest stored video on your server. Unprotected bookmarks on the other hand may be deleted by scheduled or automatic data cleanup.

1. On the Bookmarks page, expand a site.

2. Next to a bookmark, click ✏ . The Edit a Bookmark page is displayed.

3. Under Protect bookmark, select **Yes** or **No**.

4. Click **Save**.

> **Note:** Too many protected bookmarks may fill available storage on your server and may impact normal operation. Delete protected bookmarks that are no longer needed or set them as unprotected so they will be automatically deleted.

Searching for a Bookmark

1. On the Bookmarks page, expand a site.

2. On the right, select a date range. The date range refers to the bookmark video Start Time, not Date Created.

3. In the **Bookmark name or description** box, search for a bookmark.

   Only matching results within the date range are displayed.

Viewing Bookmarked Video

1. On the Bookmarks page, expand a site.

2. Click a Bookmark Name to view the bookmarked video and details.

3. Use the timeline and player controls to review the video.

   For more information, see *Viewing Recorded Video* on page 18.

4. If the bookmark is linked to multiple cameras, select the camera to view from the **Cameras** list to the left of the video player.

5. To edit the bookmark, click **Edit**.

   For more information, see *Editing a Bookmark* on the next page.

Editing a Bookmark

1. On the Bookmarks page, expand a site.

2. Next to a bookmark, click ✏ . The Edit a Bookmark page is displayed.

   You can also edit a bookmark when you are viewing that bookmark.

3. Make any changes needed to the bookmark.

   For more information about the editable options, see *Adding a Bookmark* on page 28.

Deleting a Bookmark

1. On the Bookmarks page, expand a site.

2. Next to a bookmark, click 🗑 .

3. Click **OK**.

   The bookmark is removed from the bookmarks list.

Views

Adding a View

> **Note:** Views are unique to each user and are not shared between users. Changes will not appear in the ACC site.

Create new views to help monitor related groups of cameras from a single view.

1. In the top-right corner, click **New view**. This clears cameras from the current view.

2. Set up the view to your requirements:

   - Set the view layout to the desired number of video panels.
   - Add and change the camera feeds in the view.
   - If necessary, make this view a favorite or default view.
   - Save and name the new view.

   Once it has been saved, this view can be used any time you sign in to your account.

Changing the Layout

You can change the number of image panels displayed on the Views page by changing the layout. You can have up to nine image panels in a single layout. Choose the number of image panels that makes sense for the scene you're viewing.

> **Note:** Changing the layout will not remove cameras from your view.

- In the top-right corner, select a Layout.
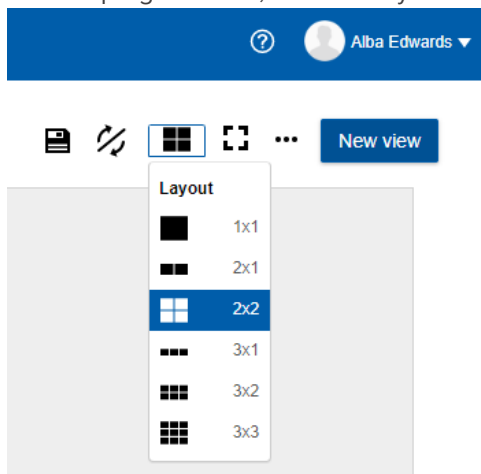
Changing a Camera in a View

Use the camera list to change the camera displayed in an image panel.

You can review recorded video for a disconnected camera by adding that camera to a view and using the timeline controls to find the recorded video. For more information, see *Viewing Recorded Video* on page 18.

1. Select an image panel, and then click .

   The camera list is displayed, and the selected image panel is outlined in blue.

   > **Tip:** You can hover your mouse over a camera name to display a snapshot of the video.

2. Select the camera you want to view.

   The camera is added to the image panel and its live video is displayed.

3. While the camera list is displayed, you can continue to select image panels and then select cameras to add to those panels.

Removing a Camera from a View

If a camera requires maintenance or you no longer need to see its video, you can remove the camera from an image panel.

1. Select an image panel, and then click .

   The camera list is displayed, and the selected image panel is outlined in blue.
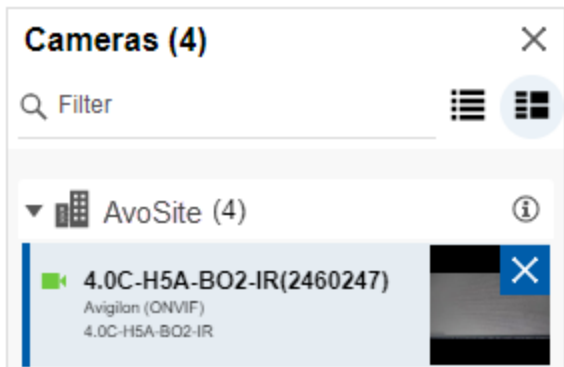
2. Next to the selected camera, click **X**.

   The camera is removed from the image panel.

Saving a View

> **Note:** Views are unique to each user and are not shared between users. Changes will not appear in the ACC site.

Save views for each area in your site so you can monitor your site effectively. When a view is saved, it will appear in the Views drop-down list so you can access it later.

1. In the Views page, update or create a new view.

   Set up the view to use the cameras and layout required.

2. *Optional*. Set the view as a favorite or the default view.

3. In the top-right corner, click 🖫 .

   The Save View dialog box is displayed.

4. In the **Name** box, enter a descriptive name for the view.

5. Click **Save**.

   The view is saved.

Opening a View

> **Note:** Up to 9 cameras from a Saved View will be displayed. Other content, like maps or point-of-sale (POS) transactions will not be displayed.

- In the Views drop-down list, select a view. Search for a view by typing.

  - ★ Indicates the view is a favorite.

  - ☁ Indicates the view is saved to your Avigilon Cloud Services platform user account.

To expand your view to the full browser width, in the top-right corner click ⛶ .

To return to the Views page, click ⛶ .

To use one timeline to control all video feeds in a View, in the top-right corner, click ⟳ to sync video.

Updating a View

> **Note:** Views are unique to each user and are not shared between users. Changes will not appear in the ACC site.

If you make a change to a previously saved view, you can overwrite the view with your changes, or save your changes as a new view.

- In the top-right corner, click ▣ .

  The Save View dialog box is displayed.

To overwrite changes:

1. Select the **Replace** option.
2. Click **Save**.

To save as a new view:

1. Select the **Save as** option.
2. In the **Name** box, enter a descriptive name for the view.
3. Click **Save**.

Favoriting a View

> **Note:** To favorite a Saved View, first save the view to your Avigilon Cloud Services account.

If you have a lot of saved views, it can be difficult to find the view you're looking for. You can choose to make a view your default view. Default views are displayed every time you go to the Views page. You can also favorite a view for quick access in the Views drop-down list.

To make a view the default:

- In the top-right corner, click ••• and select **Set as default**.

  The view appears at the top of the Views drop-down list.

To favorite a view:

- In the top-right corner, click ••• and select **Add favorite**.

  The view appears at the top of the Views drop-down list.

Camera List

The camera list displays all of the cameras that you can view from all of the sites you have access to. The camera list provides information about the cameras that are connected and options for displaying the list of cameras.

To show or hide the camera list:

- In the top-left corner, click +'■◣ .

Camera List Item	Description
Cameras heading	The number in parentheses indicates the number of cameras available to view. In the example above there are 10 cameras available.
🔍 Filter	Filter cameras by name.
☰	Switch to a compact list of cameras that does not include camera details or thumbnail images. **Tip:** You can hover your mouse over a camera name to display a snapshot of the video.
▤	Switch to a thumbnail list of cameras that displays camera details and a thumbnail image.
🏢 (Site name)	The name of the site that the cameras are connected to. • The number in parentheses indicates the number of cameras available from that site. • Click ⓘ to view the site details. • Click ˅ or ˄ to expand or collapse the list of cameras for a site.
📁 (Folder name)	The name of the folder that contains cameras. For ACC sites only.
📹 (Camera name)	Indicates the camera has live video that can be viewed.
🎞 (Camera name)	Indicates the camera has recorded video that can be viewed but no live video. Use the timeline controls to find the recorded video for these cameras.
📹 (Camera name)	Indicates the camera has been removed from the site and video is no longer available.
📵 (Camera name)	Indicates the camera is not connected and video is no longer available.

System Health

System Health Dashboard

> **Note:** System Health is only available for registered organizations and Avigilon Blue Connect sites.

Administrators and Managers can view the status of servers and cameras on the System Health Dashboard.

1. Click ⬚ to view the System Health Dashboard.

   The dashboard summarizes the number of server or camera issues per ACC site.

2. Use the top navigation or click a site to view a summary of the device status. For more information, see *Site Details* below.

3. Click a server or camera to see more detailed information. For more information, see *Server Details* on the next page and *Camera Details* on page 39.

4. In the top-left, click ← to return to the previous page.

List View and Card View

Display the Sites page as a list or as cards.

- In the top-right, click ☰ for list view or ⠿ for card view.

Sorting and Filtering Sites

- Use the drop-down list on the right to sort Site results by Name, Number of issues, Servers with issues, Cameras with issues, or Number of devices.

- Begin typing in the 🔍 Filter to search for a site.

Sorting and Filtering Devices

- Click a column heading to sort Server and Camera results.

- Begin typing in the 🔍 Filter to search for results by Device Name, Status, Organization, or IP address.

Site Details

Select the Servers or Cameras tab to view the following information, or select a site on the Sites tab to view only devices from that site.

Name	Description
Device	The device name.
Status	The device connection status.
Duration	The amount of time the device has been in its current status.
Site	The site the device is connected to.
IP address	The device IP address.
MAC address	The device MAC address.

Server Details

Select a server to view its details. If a status is not available, the system will display Unknown.

There are two tabs:

- **Details** — summarizes the server configuration and status.
- **Storage Analysis** — summarizes the number of days of recording and bandwidth used for each camera.

General Information

Name	Description
Server Version	The ACC Server version.
IP Address	The server IP address.
Model	The server's model name. Only available if the server's SNMP service is enabled.
Service Tag	The server's service tag. Only available if the server's SNMP service is enabled.
CPU Load	The percentage of server processing power that is used by the ACC Server software.
Memory Usage	The amount of memory used by the ACC Server software.
System Available Memory	The amount of storage available for video recording.
Up Time	The amount of time the server has been running since it was last rebooted.
Analytics Service	The ACC Analytics Service status, if installed.
Peak Load (Last 3 Days)	The highest percent usage of the ACC Analytics Service over the last 3 days.

Name	Description
Site License Usage	The number of site licenses used for camera, analytics, LPR, Face, and POS channels on the server. Devices that do not generate video streams do not use camera channels.

Licenses

Name	Description
Site Camera Channels	The number of site licenses used for cameras on the server out of the total available channels. Devces that do not generate video streams do not use camera channels.
Site Analytics	The number of site licenses used for analytics on the server out of the total available channels.
Site Failover	The number of site licenses used for failover on the server out of the total available channels.
Site POS Sources	The number of site licenses used for point-of-sale (POS) sources on the server out of the total available channels.
Site LPR6 Channels	The number of site licenses used for license plate recognition (LPR) on the server out of the total available channels.
Site Face Match Channels	The number of site licenses used for face detection on the server out of the total available channels.
Server Camera Channels	The number of server licenses used for cameras on the server out of the total available channels.
Server Analytics	The number of server licenses used for analytics on the server out of the total available channels.
Server Failover	The number of server licenses used for failover on the server out of the total available channels.
Server POS Sources	The number of server licenses used for point-of-sale (POS) sources on the server out of the total available channels.
Server LPR6 Channels	The number of server licenses used for license plate recognition (LPR) on the server out of the total available channels.
Server Face Match Channels	The number of server licenses used for face detection on the server out of the total available channels.

Network Adapters

Name	Description
Adapter Name	The name of the network adapter that is connected to the server.

Name	Description
Status	The operational status of the network adapter.
Link Speed	The maximum speed supported by the network adapter based on its network connectivity. Ensure this is at least 1 Gbps for the camera network.
IP Address	The IP address of the network adapter. Appears empty for network adapters that are disconnected.
Incoming	The bandwidth usage of incoming data.
Outgoing	The bandwidth usage of outgoing data. This includes video streaming to the ACC Client software, ACC Virtual Matrix software, and ACC Mobile 3 application.

Storage Analysis

Name	Description
Camera	The camera name.
Model	The camera model number.
Actual Video Retention	The age of the oldest video stored on the server. Not available for Avigilon Blue Connect devices.
Total Bandwidth	The bandwidth used by the camera in Mbps.
Image Rate	The image rate of the camera in fps.

Camera Details

Select a camera to view its details. If a status is not available, the system will display Unknown.

General Information

Name	Description
IP Address	The camera IP address.
Model	The camera model number.
MAC Address	The camera MAC address.
Firmware Version	The camera firmware version.
Serial Number	The camera serial number.
Device Location	The camera location if assigned.

Name	Description
Logical ID	The camera logical ID if assigned.

Image and Compression

Name	Description
High Bandwidth Stream	
Format	The camera streaming format.
Total Bandwidth	The bandwidth used by the camera in Mbps.
Image Rate	The image rate setting of the camera in fps. A higher Image Rate results in better video quality but more storage and network bandwidth usage.
Image Quality	The image quality setting of the camera. An image quality setting of 1 will produce the highest quality video, require the most bandwidth, and use more storage. The default setting is 6.
Resolution	The camera image resolution.
Keyframe Interval	The number of frames between each keyframe. At least one keyframe per second is recommended.
HDSM SmartCodec	
Enabled	If supported on the camera, whether High Definition Stream Management (HDSM) SmartCodec™ technology is enabled to reduce bandwidth usage.
Bandwidth Reduction	Low, Medium, High, or Custom level of bandwidth savings.
On Motion	The background image quality when motion is detected. An image quality setting of 1 will produce the highest quality background image but will require the most bandwidth.

Audio

If the device does not have a microphone or speaker, or is not ONVIF-compliant, the sytem will display Unknown.

Name	Description
Microphone	Whether a microphone is enabled on the camera.
Speaker	Whether a speaker is enabled on the camera.

Digital Inputs and Digital Outputs

If the device does not have digitial inputs or outputs, or is not ONVIF-compliant, the sytem will display Unknown.

Name	Description
Input #1	A digital input linked to the camera.
Input #2	A digital input linked to the camera.
Output #1	A digital output linked to the camera.
Output #2	A digital output linked to the camera.

Disabling System Health

By default, System Health is available for all Named Organizations and Avigilon Blue Connect sites.

To disable the collection of system health data, contact Avigilon Technical Support.

COVID-19 Dashboard

The Avigilon Cloud Services Reports page displays data from configured ACC events across an organization, site or area over a specified time range. For more information, see the Avigilon COVID-19 Response Technology guide.

Avigilon Cloud Services Administrators or Managers can access the Reports page to gain business insights and access the Entry Control Screen.

Viewing the COVID-19 Dashboard

1. Click **Reports** .
2. Select a site to view information on a per-site level.
3. Select an area to view information on a per-area level.
4. Select a camera to view information on a per-camera level. You can drill down for more event information.

> **Tip:** Select a card to view data for an area over the specified Time Range.

Changing the Time Range

The default time range is the last 60 minutes.

- In the top-left, select a new **Time Range**.

Card Details

Name	Description
Current Occupancy	The number of people in an occupancy area in an organization, site or area at this time.
Peak Occupancy	The total number of entries in an occupancy area in an organization, site or area over time.
Enter / Exit	The total number of people who entered or left an occupancy area over the selected time range.
People Without Masks	The number of detected people without masks in an organization or site over the last 5 minutes.

Name	Description
Social Distancing Violations	Coming soon. The number of detected social distance violations between two people over the last 5 minutes.
Events	The number of events detected by the specified camera over the last 5 minutes. Only displayed when viewing camera details.

Setting the Maximum Occupancy

Specify the maximum occupancy for a site or area to ensure that the Entry Control Screen displays up-to-date data.

1. On the Reports page, select a site or area.

2. In the top-right corner, select ⚙ > **Settings**.

3. Enter the **Maximum Occupancy** and click **Save**.

Displaying the Entry Control Screen

The Entry Control Screen can be displayed on a monitor or tablet at an entrance to let people know if it's safe to enter or if the maximum occupancy has been reached and they should queue.

1. On the Reports page, select a site or area.

2. In the top-right corner, click **Entry Control Screen**.

    The Entry Control Screen will load in a new tab.

> **Tip:** Secure the monitor or tablet to prevent people from interacting with the display.

Manually Updating the Occupancy

You can manually update the current occupancy if a person enters or exits and from an entrance that is not monitored.

1. On the Reports page, select a site or area.

2. In the top-right corner, select ⚙ and update the current occupancy:

   - ![−+ buttons] — Decrease or increase the current occupancy by 1.

   - ![Zero button] — Set the current occupancy to 0.

   - ![Max button] — Set the current occupancy to the maximum occupancy.

   The current occupancy is automatically updated.

Viewing Events

You can get a list of events detected by each camera linked to an occupancy area.

If you don't have any occupancy areas specified, the Default Area will list cameras with Face Mask Detection enabled.

1. On the Reports page, select a site, then an area, then a camera.
2. Enter a time range and select the Event Types to display.

Event Details

Name	Description
Start Time	When the event was triggered.
Event	The type of event.
Direction	The direction of an Enter or Exit occupancy area event.
Number of People	The number of people detected in the event.
Source	Whether the event was detected by a camera or manually entered.

Sites

Adding a Site

Administrators can add ACC sites to their organization.

1. On the Organization Management page, in the Sites tab, click **Add site**.
2. Enter the site name, address, and select a Primary Contact who will receive email notifications about the site.
3. Click **Add**. A code is displayed.
4. Copy the code and enter it in the ACC Client software:

   a. In the New Task menu ☰ , click **Site Setup**.

   b. Click the site name, then click **Avigilon Cloud Services** ☁ .

   c. Click **If you have an activation code, click here.**.

   d. Enter the activation code and click **Connect**.

Deleting a Site

Before you delete a site:

- Disconnect the ACC site in the ACC Client. See *Disconnecting ACC from the Cloud* on page 13.

To delete a site:

1. On the Organization Management page, in the Sites tab, click 🗑 .
2. Click **Delete** to confirm.

Users

User Roles

Avigilon Cloud Services has four user roles: Administrators, Managers, Responders, and Viewers. Each role has access to different features. A user's role applies to all sites that they have access to.

	Administrator	Manager	Responder	Viewer
Monitor Video	✓	✓	✓	✓
Manage Bookmarks	✓	✓	✓	✓
View System Health	✓	✓	—	—
Manage Sites and Users	✓	—	—	—

Syncing ACC and ACS Users

> **Tip:** To simplify access rights and privileges, create and manage users in the ACC Client and sync them to Avigilon Cloud Services.

Users can be created in both the ACC Client and Avigilon Cloud Services and synced from one platform to another.

Users created in Avigilon Cloud Services will not be able to log in to the ACC Client by default. Create users in Avigilon Cloud Services if they are from an external organization and need web and mobile access.

Synced ACC users have the same access to cameras and privileges as defined in the ACC Client.

Depending on their user role, Avigilon Cloud Services users become members of the following ACC user groups when synced:

- **Cloud Administrators** — Administrators and Managers
- **Cloud Viewers** — Viewers and Responders

By default, both of these user groups have access to all cameras. For increased security, remove access to all cameras for these groups.

In the ACC Client:

1. In the New Task menu ☰ , click **Site Setup**.
2. Select a site, then click **Users and Groups** 👥 .
3. In the Groups tab, select the Cloud Administrators group and click **Edit Group**.
4. Remove access to all cameras and click **OK**.
5. Repeat steps 3 - 4 for the Cloud Viewers group.

Creating and Syncing ACC Users to the Cloud

In the ACC Client:

1. In the New Task menu ☰ , click **Site Setup**.
2. Click the site name, then click **Users and Groups** 👥 .
3. Click **Add User**.
4. Enter an email address. This will be the username in Avigilon Cloud Services.
5. Select the **Connect** checkbox and click **OK**.

    The user will receive an email invitation with a registration link that expires within 24 hours.

Creating and Syncing Avigilon Cloud Services Users to an ACC Site

Sync Avigilon Cloud Services users to an ACC site if they need web or mobile access only. Add the user to a new or existing group in the ACC Client to give them access to the cameras they need.

In Avigilon Cloud Services:

1. On the Organization Management page > Users tab, click **Add user**.
2. Enter the user's contact information.
3. Select the user's **Role**. For more information, see *User Roles* on the previous page.
4. Select which sites the user can access.
5. Click **Save**.

    The user will receive an email invitation with a registration link that expires within 24 hours.

In the ACC Cient:

1. In the New Task menu ☰ , click **Site Setup**.
2. Click the site name, then click **Users and Groups** 👥 .
3. Select the ACS user, then click **Edit User**.
4. In the Member Of tab, select the permission groups that should be applied.
5. Click **OK**.
6. Repeat steps 2 - 5 for each site the user has access to.

Resending a Registration Email

If a user does not register within 24 hours, their registration link expires. Administrators can resend an Avigilon Cloud Services invitation.

1. On the Organization Management page > Users tab, select a user.
2. Click **Resend Invite**.

   A new email invitation is sent to the user.

Resetting a User's Password

After 3 failed attempts to sign in, a user will be locked out of their account for 30 minutes. They can click **Reset Password** on the sign in page, or an administrator can reset it.

1. On the Organization Management page > Users tab, select a user.
2. At the bottom of the page, click **Reset Password**.

   A password reset email is sent to the user.

Updating a User

If a user's information or role changes, you can update the user account.

> **Tip:** Filter users by their name, email address, role or site access.

1. On the Organization Management page > Users tab, select a user.
2. Enter the new information.
3. Click **Save**.

Removing a User

To remove a user from Avigilon Cloud Services, you can delete their account.

1. On the Organization Management page > Users tab, click 🗑 next to the user you want to remove.
2. Click **Delete** to confirm.

   The user is removed from Avigilon Cloud Services and their ACC user account's Connect checkbox is cleared.

Updating Your Profile

You can manage your Avigilon Cloud Services user profile and preferences on the Profile settings page.

You can update your:

- Personal information
- Password
- Date and number formats

1. In the top-right corner, click your name.
2. Click **Profile settings**.
3. Select a tab and enter the new information.
4. Click **Save**.

Changing Your Password

For increased security, your password automatically expires after 90 days. You'll receive an email reminder 3 days before it expires.

1. In the top-right corner, click your name.
2. Click **Profile settings**.
3. In the Password tab, enter your **Current password**.
4. Enter a **New Password** and **Confirm new password**. Your new password must be different from your last 3 passwords.

    Your password must contain 8-50 characters and include at least one:

    - Uppercase letter
    - Lowercase letter
    - Number
    - Special character (\$ @ # ! % * ? & + \ < > . _ - ~ : ; = ^] | ' ` { /) (} {)

    Your password cannot include the word "Password".

5. Click **Save**.

    A success message will appear.

Changing the Web Client Language

You can change the web client language at any time from any page. You can also select your language when signing in.

> **Tip:** Once you have changed your language, Avigilon Cloud Services will remember your selection and use it every time you sign in to the platform.

- At the bottom of any page, use the **Language** drop-down list to select a language.

  The language is updated.

Changing Your Preferred Language

Avigilon Cloud Services sends emails regarding your account or subscription. The Preferred communication language setting controls the language used in these emails.

1. In the top-right corner, click your name.
2. Click **Profile settings**.
3. In the Personal Information tab, select a **Preferred communication language**.
4. Click **Save**.

Changing Email Notification Preferences

You can choose whether or not to receive email notifications.

1. In the top-right corner, click your name.
2. Click **Profile settings**.
3. In the Personal Information tab, select whether or not to receive **Email notifications**.
4. Click **Save**.

Changing the Date and Number Formats

By default, Avigilon Cloud Services uses your default browser preferences for date and number formats. To personalize your formats:

1. In the top-right corner, click your name.
2. Click **Profile settings**.
3. In the Dates and Numbers tab, select your preferences.
4. Click **Save**.

Troubleshooting and FAQs

Activation Issues

If your activation code expires, generate a new code:

- On the Organization Management page, in the Sites tab, click   .

  A new activation code is displayed. Use it within 24 hours.

For additional help connecting your ACC site, see the Avigilon Cloud Services Web Client FAQ.

Account Issues

Registration Link Expired

The registration link is only active for 24 hours.

If you are an administrator registering your organization:

- Go to cloud.avigilon.com and register your organization again.

If you are an administrator connecting an ACC site:

1. On the Site Setup page, click **Avigilon Cloud Services** > **Cancel**.
2. Click **Avigilon Cloud Services** again and reconnect your site.
3. Complete your registration and sign in.

If you are a user invited to Avigilon Cloud Services, contact your administrator to update your user account in the ACC Client software:

1. On the Site Setup page, click **Users and Groups**.
2. Select the user and click **Edit**.
3. Clear the **Connect** checkbox and click **OK**.
4. Select the user and click **Edit**.
5. Select the **Connect** checkbox and click **OK** to save.

   The user will receive a new registration email.

Forgot Your Password or Locked Out

If you forgot your password or are locked out of your account, you can reset it from the Sign in page.

1. On the Sign in page, click **Reset Password**.
2. Enter your email and click **Submit**.

   You will receive an email with a link to reset your password. Your new password must be different from your last 3 passwords.

Changed Your Email Address

If your email address changes, contact your administrator to delete your old user account and create a new one using your new email address.

Viewing Player Details

When calling Avigilon Support to troubleshoot an issue, it can be helpful to know about your cloud connection. You can view that information from the video player.

Hover over the video player to display an overlay on the player with the timeline and controls. This overlay shows the camera name and status in the upper-right corner.

- **To view more information**, click the camera name.

  To show and hide the stream and connection information, click **Details**.

- **To hide the information**, click **X**.

> **Tip:** If you have many players open in a view, pin the camera details to see at-a-glance which cameras are displayed.

Other Issues

If buttons or text in Avigilon Cloud Services appear skewed, press **CTRL** + **F5** to clear your cache.