



Costar Camera Utility

User Manual

Table of Contents

Overview	5
Show or Hide Columns	5
Filter Cameras.....	6
Filter Cameras by Tag.....	6
Search for Cameras	7
Camera Status Indicators.....	7
Installation and Setup.....	8
System Requirements.....	8
Installing the Application	8
Log in for the First Time	8
NTP Server Setup	9
Select the Default Viewer Browser	9
Set up Global Camera Users	10
Advanced Settings	11
Default Port	11
Maximum Log File Size.....	12
Network Time-out.....	12
Software Update Time-out	12
Maximum No. of Discovery Threads.....	12
Reboot Timeout for HW/FW Upgrade.....	13
Retry HW/FW Upgrade, if Failed.....	13
Compare Settings after Discovery	13
Camera Discovery.....	14
Discover Cameras.....	14
Discovery Settings	15
Discover Cameras by IP Range.....	16
Add a Camera Manually.....	16
Import Cameras from a CSV.....	17
Delete Cameras	17
Export the Camera List to CSV	17

Passwords.....	18
Set Password	18
Set Passwords Using a CSV.....	19
Password Storage Settings.....	19
Clear the Password Cache	19
Reset an AV Costar Camera Password.....	20
Reset a CohuHD Costar Camera Password.....	20
Use Camera Credentials When Discovering Cameras.....	20
User Management.....	21
Change the Administrator's Password	22
Add or Edit a User	22
Delete a User	23
Set a Temporary Password for a User.....	23
Camera Network Settings	24
Set a Subnet and Gateway	24
Set a Camera Name	24
Change MTU Settings.....	25
Lock IP Settings	25
Set a Static IP for a Camera	26
Set Static Addresses for Multiple Cameras	26
Use Auto Assignment for IP Addresses.....	27
Enable or Disable DHCP.....	27
Camera Firmware and Updates	28
Update a Camera from a File.....	28
Update AV Costar Camera Hardware.....	29
CohuHD Costar Preferred Firmware Settings.....	29
Upgrade CohuHD Costar Cameras from Preferred Firmware.....	30
Upgrade Cameras from a Registered Package	30
Add Registered Packages.....	30
Remove Registered Packages.....	30
Camera Details	31
Set a Camera Name and Description	31
Set Contact Info for a Camera	32

Set Camera Tags	32
Create New Tags	32
Apply Tags to Cameras	32
Edit Tags	33
Delete Tags	33
Camera Management	34
Modify Camera Settings	34
Set Camera Date and Time	35
Open a Camera Browser	35
Restart Cameras	35
Reset Cameras to Factory Defaults	36
Compare Settings	36
Download a Camera Log	36
Perform License Upgrades	37
Generate a Mac Address List	37
Issue HTTP Commands to Cameras	37
Flush Registers	37
SD Card Settings	38
Set OSD Positioning	38
Export OSD Settings to CSV	38
Import OSD Settings from CSV	38
Backup and Restore Cameras	39
Backup Camera Settings	39
Restore Camera Settings	39
Camera Security	40
Enable 802.1x Authentication	40
Change the Connection Protocol	40
Generate a Self-signed Certificate	40
Upload a Certificate	41
Open a Camera Browser	42
Camera Map and Locations	43
Add a Camera to the Map	44
Set a Camera Location in the List View	44

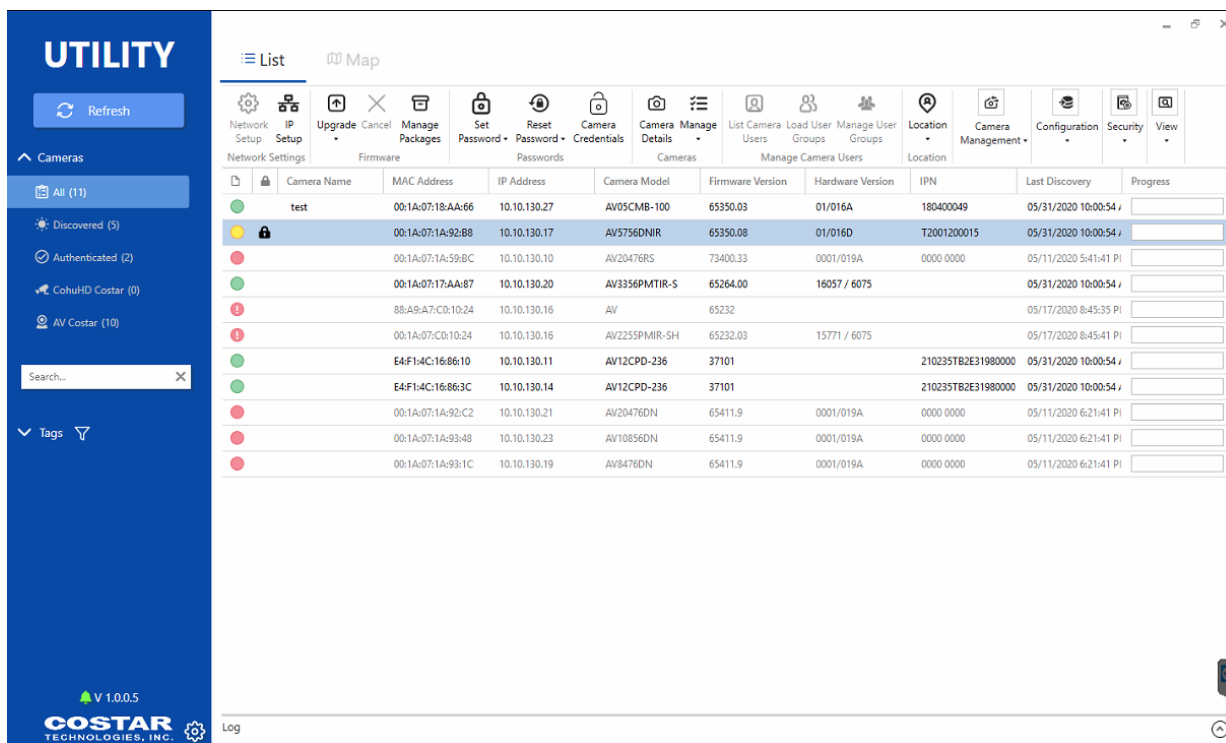
Move a Camera on the Map.....	44
Remove a Camera from the Map.....	44
Show All Cameras on the Map.....	45
Troubleshooting	46
Open the Camera Log.....	46
Reset the Camera Database.....	46
Camera Settings Reference.....	47
Image Settings	47
Exposure Settings	48
Codec Settings	49

Overview

The Camera Utility helps you organize and manage your network of both AV Costar™ and CohuHD Costar cameras, without requiring a video management system.

The Utility discovers the cameras on your network and stores authentication credentials, making it easy to find, update, and optimize your cameras. You can change settings and update multiple cameras simultaneously, making it easier to manage your camera.

You can even arrange your cameras on a map, helping you find the right camera location and angle when you need it.



The screenshot displays the 'UTILITY' interface for camera management. On the left is a navigation sidebar with a 'Refresh' button and a list of camera categories: 'All (11)', 'Discovered (5)', 'Authenticated (2)', 'CohuHD Costar (0)', and 'AV Costar (10)'. The main area shows a 'List' view of cameras. A toolbar at the top includes icons for Network Setup, IP Setup, Upgrade, Cancel, Manage Packages, Set Password, Reset Password, Camera Credentials, Camera Details, Manage Cameras, List Camera Users, Load User Groups, Manage User Groups, Location, Camera Management, Configuration, Security, and View. Below the toolbar is a table of camera details.

Camera Name	MAC Address	IP Address	Camera Model	Firmware Version	Hardware Version	IPN	Last Discovery	Progress
test	00:1A:07:18:AA:66	10.10.130.27	AV05CMB-100	65350.03	01/016A	180400049	05/31/2020 10:00:54	
	00:1A:07:1A:92:B8	10.10.130.17	AV5756DNIR	65350.08	01/016D	T2001200015	05/31/2020 10:00:54	
	00:1A:07:1A:59:BC	10.10.130.10	AV20476RS	73400.33	0001/019A	0000 0000	05/11/2020 5:41:41 PI	
	00:1A:07:17:AA:87	10.10.130.20	AV3356PMTIR-S	65264.00	16057 / 6075		05/31/2020 10:00:54	
	88:A9:A7:C0:10:24	10.10.130.16	AV	65232			05/17/2020 8:45:35 PI	
	00:1A:07:C0:10:24	10.10.130.16	AV2255PMIR-SH	65232.03	15771 / 6075		05/17/2020 8:45:41 PI	
	E4:F1:4C:16:86:10	10.10.130.11	AV12CPD-236	37101		210235TB2E31980000	05/31/2020 10:00:54	
	E4:F1:4C:16:86:3C	10.10.130.14	AV12CPD-236	37101		210235TB2E31980000	05/31/2020 10:00:54	
	00:1A:07:1A:92:C2	10.10.130.21	AV20476DN	65411.9	0001/019A	0000 0000	05/11/2020 6:21:41 PI	
	00:1A:07:1A:93:48	10.10.130.23	AV10856DN	65411.9	0001/019A	0000 0000	05/11/2020 6:21:41 PI	
	00:1A:07:1A:93:1C	10.10.130.19	AV8476DN	65411.9	0001/019A	0000 0000	05/11/2020 6:21:41 PI	

Show or Hide Columns

You can customize the columns that appear in the Camera Utility at any time.

1. Click **View » Show/Hide Columns**.
2. Select or deselect the columns that you want to see.

Filter Cameras

By default, Camera Utility sorts your cameras into 4 categories. Click a category to see a subset of your cameras; click **All** to show all your cameras.

Filters apply to both the map and list views.

- **Discovered** — includes cameras that the Camera Utility discovered organically. This list excludes cameras that you add manually, import from a list, or add by range.
- **Authenticated** — includes cameras that are authenticated. This can show you the cameras that you can fully manage with the Camera Utility
- **CohuHD Costar** — shows only CohuHD Costar cameras.
- **AV Costar** — shows only AV Costar cameras.

Filter Cameras by Tag

You can filter the camera list using tags that you assigned to your cameras. When you select multiple tags, the Camera Utility shows cameras with *all* of the tags you select.

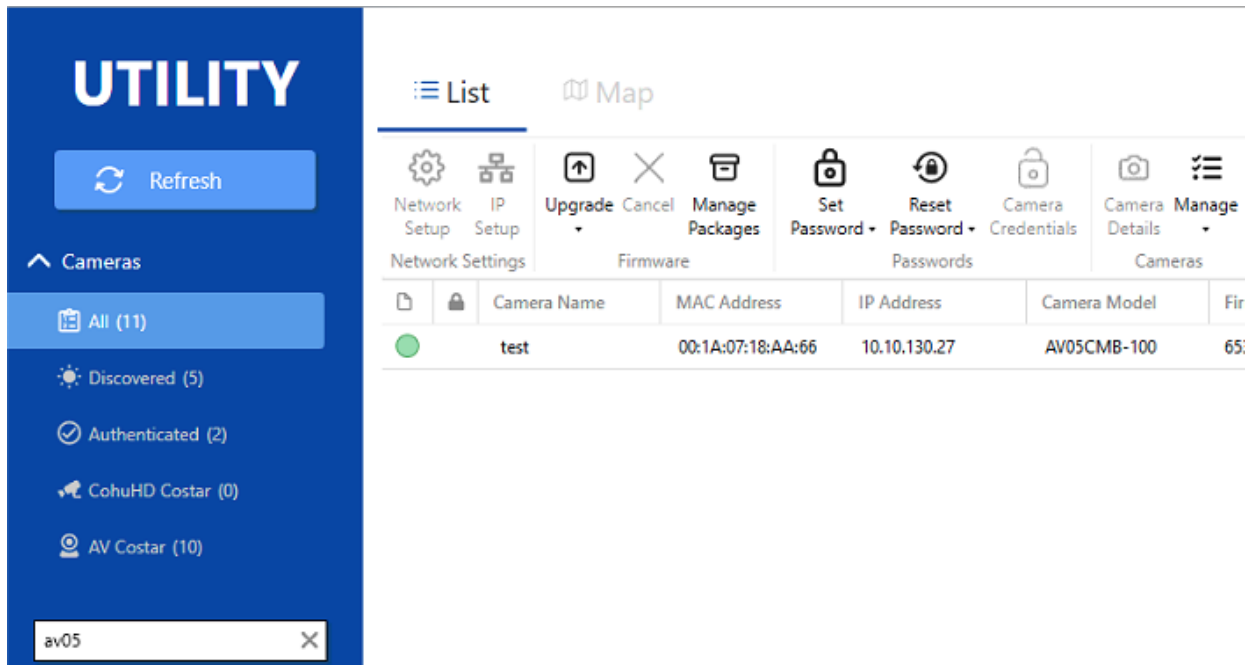
Filters apply to both the map and list views.

1. Click ▼.
2. Select the tag(s) for the cameras you want to show in the list.
3. Click **Apply Tags**.

You can clear your filter by clicking ✕ or by de-selecting the tags in your filter.

Search for Cameras

You can search for cameras by model number. Enter a whole or partial model number in the search bar to show only cameras matching the model number search. Delete your search to return to the complete list.



Camera Status Indicators

The Camera Utility provides the status of each camera in the list or on the map.

- — The camera is online and authenticated.
- — The camera is online, but inaccessible. You may need to provide a username and password to authenticate with this camera or wait for a firmware/hardware update to complete.
- — The camera is offline or otherwise unreachable on the network.

NOTE: If all of your cameras appear ●, your computer may not be connected to the network, or you may need to run the discovery process again.

Installation and Setup

System Requirements

Component	Requirement
OS	Microsoft® Windows® 7, Windows 10 32bit or above
Processor	Intel® Core™ i3 or above
RAM	4GB or above
Storage	512GB or above
Minimum Display Resolution	1024 x 768 px

Installing the Application

When installing the application, you can change both the installation directory and the database directory. The database directory contains not only the local database of cameras and settings, but also any logs you download, backups you take, etc. Take note of the database directory; if you download logs or backup camera settings, you may need to access it later.

Default Installation Directory: *C:\Program Files\Costar\Utility*

Default Database Directory: *C:\Users\<your_user>\AppData\Local\Costar\Utility*

1. Double-click the Camera Utility installer.
2. Determine the installation location.
3. Set the database location — this is where the Camera Utility stores logs, camera backups, etc.
4. Click **Install**.


Log in for the First Time

When logging in for the first time, you'll use the default credentials — user/password: *admin*. When you log in for the first time, you'll set a new password for the *admin* user. You can change the Primary User's password in Global Settings.

1. Double-click the Camera Utility installer.
2. Enter *admin* for both the user and password.
3. Enter a new password.
4. Click **Login**.
5. Select and provide answers to two security questions. If you forget your *admin* user's password, you can use these questions to gain access to your account.
6. The utility begins discovering cameras over the client system's network interface(s). In general, we recommend that you let the discovery process run, but you can cancel the camera discovery process if you want to manually add cameras, or you want to define the IP range containing your cameras.


NTP Server Setup

Set an NTP server in Global Settings, making it an option when changing date-time settings for a camera.

1. Click  and select **Global Settings**.
2. Click **Date/Time**.
3. Enter your NTP server.
4. Click **Save**.

Select the Default Viewer Browser

You can determine the default browser that opens when you go to a camera's settings or video. By default, the Camera Utility uses Internet Explorer®, which supports the widest range of AV Costar and CohuHD Costar cameras. You may want to select a different browser if you have newer cameras, or if you only use CohuHD Costar cameras.

1. Click  and select **Global Settings**.
2. Click **Browser**.
3. Select the browser that you want to use when opening camera settings or viewing video.
4. Click **Save**.

Set up Global Camera Users

You can store up to three username and password combinations for your cameras. If you enable the *Use global password(s) during authentication* setting, the Camera Utility attempts to authenticate cameras using the Primary, Second, and Third global users when you discover or add new cameras.

The Camera Utility *admin* user is the default Primary user.

1. Click **⚙️** and select **Global Settings**.
2. Click **Users/Passwords**.
3. Enter Username and Password combinations for your *Primary*, *Second*, and *Third* users.
4. Enable *Use global password(s) during authentication* to use these credentials to authenticate when discovering cameras.
5. Click **Save**.

The screenshot shows a window titled "Utility - Settings" with a sidebar on the left containing the following menu items: Discovery, Users/Passwords (highlighted), Date/Time, Browser, Advanced, CahuHD Costar Firmware, and AV Costar Firmware. The main area contains the following fields and controls:

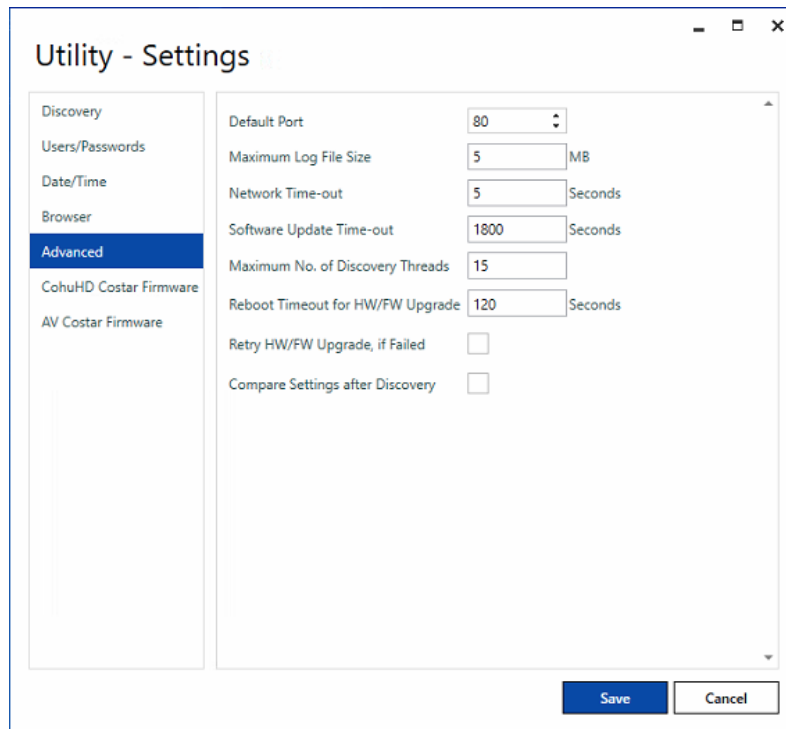
- Primary Username:
- Primary User Password:
- Second Username:
- Second User Password:
- Third Username:
- Third User Password:
- Use global password(s) during authentication

At the bottom right, there are two buttons: "Save" and "Cancel".


Advanced Settings

Advanced settings are available to *admin*-level users and provide ways to customize the Camera Utility to better fit your network and needs.

NOTE: This section does not include preferred firmware packages for AV Costar or CohuHD Costar cameras. See **Camera Firmware and Updates** for information about firmware setup.




Default Port

6. Click  and select **Global Settings**.
7. Click **Advanced**.
8. Change the *Default Port*.
9. Click **Save**.

Change the port the Camera Utility uses to discover and connect to your cameras. You should only change this setting if you use a non-standard port to connect to your cameras.


Maximum Log File Size

When the Camera Utility's log file reaches the size set here, the log rolls over to a new file. Use this setting to change the maximum file size, and therefore, how often the file rolls over.

1. Click  and select **Global Settings**.
2. Click **Advanced**.
3. Change the *Maximum Log File Size*.
4. Click **Save**.


Network Time-out

Determines the time-out when attempting to contact a camera for non-discovery purposes — changing settings, watching video, etc. If a camera times out when you attempt to use it, the Camera Utility will mark it offline.

1. Click  and select **Global Settings**.
2. Click **Advanced**.
3. Change the *Network Time-out* period, in seconds.
4. Click **Save**.


Software Update Time-out

Set a timeout when uploading a firmware or hardware update to a camera. This is different from the *Reboot Timeout*. This timeout aborts hardware/firmware updates if hardware/firmware file uploads do not complete within the specified time.

1. Click  and select **Global Settings**.
2. Click **Advanced**.
3. Change the *Software Time-out* in seconds.
4. Click **Save**.

Maximum No. of Discovery Threads


Determines the number of addresses that the Camera Utility can search at a time. Increasing the number of threads can increase discovery speed but will cause it to consume more bandwidth and CPU.

1. Click  and select **Global Settings**.
2. Click **Advanced**.
3. Change the *Maximum No. of Discovery Threads*.
4. Click **Save**.

Reboot Timeout for HW/FW Upgrade


The camera update process can take several minutes, and typically requires cameras to restart. This setting determines the maximum time that the Camera Utility will wait when performing a camera update before marking a camera offline and alerting you to a failure in the firmware or hardware update process.

If a camera times-out during an upgrade, you can engage the discovery process again after a few more minutes. If it's still offline, there may have been a problem with the update.

1. Click  and select **Global Settings**.
2. Click **Advanced**.
3. Enable or Disable *Reboot Timeout for HW/FW Upgrade*.
4. Click **Save**.


Retry HW/FW Upgrade, if Failed

Enable if you want the Camera Utility to retry camera upgrades if they fail on the first try — due to a timeout, or another failure reported by the camera.

1. Click  and select **Global Settings**.
2. Click **Advanced**.
3. Enable or Disable *Retry HW/FW Upgrade, if Failed*.
4. Click **Save**.

Compare Settings after Discovery

Enable if you want to be notified of changes to camera settings between discovery intervals. If there have been changes to the camera that you did not make through the Camera Utility, the Camera Utility will highlight the camera and settings that have changed between discovery intervals.

1. Click  and select **Global Settings**.
2. Click **Advanced**.
3. Enable or Disable *Retry HW/FW Upgrade, if Failed*.
4. Click **Save**.

Camera Discovery

The Camera Utility automatically discovers cameras over your network interface(s) whenever you log in, and over a time interval. You can change the Camera Utility's discovery settings and manually discover or remove cameras.

The discovery process only adds cameras to the list; it does not remove cameras that are offline or unresponsive. When you retire cameras, you can manually remove them from the list.

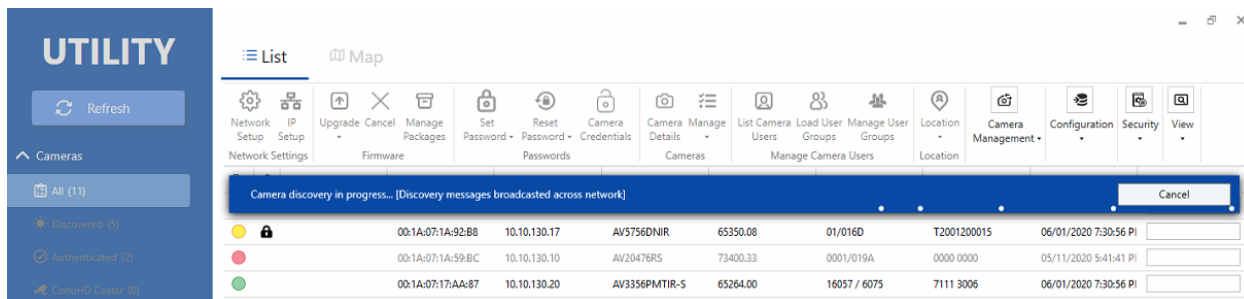
In general, you will have to authenticate with newly discovered cameras to use cameras after they are discovered to fully manage cameras in your list. You can set up default Primary, Second, and Third users to automatically authenticate against cameras.

You can also manually add cameras to your list, which may be helpful if you add cameras between discovery intervals, or if network complexities prevent the Camera Utility from discovering your cameras — like cameras on a WAN.

Discover Cameras

If you disabled automatic discovery, or you don't want to wait for the next discovery interval, you can click **Refresh** to run a discovery process at any time.

When you discover cameras, the Camera Utility attempts to try your Primary, Second, and Third credentials. If those three password sets fail, you'll need to authenticate with the camera manually.




The screenshot shows the Camera Utility interface. On the left is a sidebar with a 'UTILITY' header and a 'Refresh' button. Below it is a 'Cameras' section with a list of camera statuses: 'All (11)', 'Discovered (3)', 'Authenticated (2)', and 'Control Center (0)'. The main area shows a 'Camera discovery in progress...' dialog box with a 'Cancel' button. Below the dialog is a table of discovered cameras.

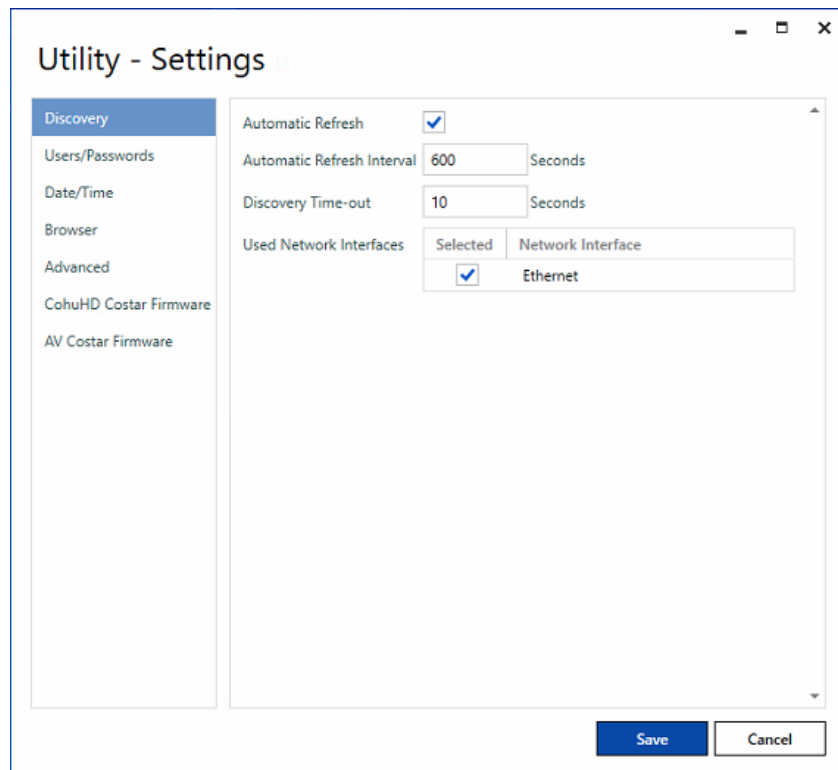
Icon	MAC Address	IP Address	Model	Serial Number	Manufacturer	Location	Discovery Date	Discovery Time
Yellow circle with lock	00:1A:07:1A:92:B8	10.10.130.17	AV5756DNIR	65350.08	01/016D	T2001200015	06/01/2020	7:30:56 PM
Red circle	00:1A:07:1A:59:BC	10.10.130.10	AV20476RS	73400.33	0001/019A	0000 0000	05/11/2020	5:41:41 PM
Green circle	00:1A:07:17:AA:87	10.10.130.20	AV3356PMTIR-S	65264.00	16057 / 6075	7111 3006	06/01/2020	7:30:56 PM

Discovery Settings

Discovery settings determine how often, and over what network interfaces, the Camera Utility searches your network for new cameras. You cannot use other functions in the Camera Utility while discovering cameras, so you may want to lengthen the Automatic Refresh Interval to prevent the camera utility from interrupting you or other users.

Automatic discovery will not remove cameras from the list.

1. Click .
2. Click Global Settings and select Discovery.
3. Change your Settings:
 - a. **Automatic Refresh:** Disable to prevent automatic camera discovery. You will have to manually engage camera discovery.
 - b. **Automatic Refresh Interval:** Determine how often to re-discover cameras.
 - c. **Discovery Time-out:** Determine when to quit discovery. If the Camera Utility does not receive a response from an address within this interval, it determines that a camera is not present.
 - d. **Used Network Interfaces:** Determines the NICs the utility will use when searching for cameras.
4. Click **Save**.



Discover Cameras by IP Range

You may need to add cameras manually if they are on a VLAN that is not naturally accessible to broadcast discovery, or if you've added cameras to your network and have disabled automatic discovery.

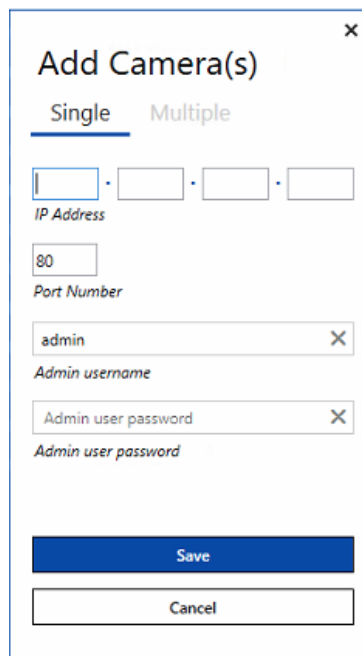
The duration of the discovery process depends on the IP range you provide — the broader the IP range, the longer the discovery process takes.

1. Click **Manage » Add Camera(s)**.
2. Click **Multiple**.
3. Enter the *Starting IP Address* and *Ending IP Address*.
4. Click **Discover**.

Add a Camera Manually

You may need to add cameras manually if your cameras are on a VLAN or WAN that is not naturally accessible to broadcast discovery, or if you've added cameras to your network and have disabled automatic discovery.

1. Click **Manage » Add Camera(s)**.
2. Enter the camera's *IP address*.
3. Enter the camera's *Port*, if different from the default.
4. Enter the camera's *Admin username* and *password*. This ensures that the camera is accessible when you add it.
5. Click **Discover**.



Add Camera(s) [X]

Single Multiple

[] . [] . [] . []
IP Address

80
Port Number

admin [X]
Admin username

Admin user password [X]
Admin user password

Save

Cancel

Import Cameras from a CSV

You can import a list of cameras from a CSV file. If you exported your camera list from the Camera Utility previously, this may be a helpful way to configure multiple workstations or recover your camera list if you have to reset the Camera Utility database.

1. Click **Manage »Import Cameras from CSV**.
2. Select the CSV containing your cameras.
3. Click **Open**.

Delete Cameras

You may want to remove cameras from the list when you decommission them. If you remove a camera that is still on your network, the Camera Utility will find it again during the next discovery interval.

1. Select the cameras you want to delete.
2. Click **Manage »Delete Camera**.
3. Confirm your Selection.


Export the Camera List to CSV

You can export your list of cameras to provide a snapshot of your camera list and configuration. You may want to export your camera list to configure multiple workstations.

1. Click **Manage »Export to CSV**.
2. Select the CSV containing your cameras.
3. Click **Open**.

Passwords


Managing passwords across your cameras can take time and effort. The Camera Utility provides methods to authenticate with, and set passwords for, multiple cameras.


Cameras with a  require a username and password. Cameras in the list indicate whether or not they are authenticated and online:

 — The camera is online and authenticated.

 — The camera is online, but you may need to provide a username and password to authenticate with this camera.

 — The camera is offline or otherwise unreachable on the network.

 — The camera is password protected and you have provided credentials in the utility.

 — The camera is password protected, but you have not provided credentials in the utility.

Set Password

The *Set Password* function just helps you authenticate with one or more cameras. If you select multiple cameras, the Camera Utility expects that you're using the same password for each camera.

If you want to authenticate with multiple cameras, and those cameras have different passwords, use the *Input CSV* feature.

1. Select the cameras you want to authenticate in the Camera Utility.
2. Click **Set Password** » **Input Password**.
3. Enter and confirm your password.
4. Click **Set Password**.

Set Passwords Using a CSV

Setting passwords with a CSV is a simple way to authenticate with multiple cameras that may have different passwords. Password CSVs are newline delimited and has two headings: *user* and *password*.


```
user,password  
my_name,my_password
```

The order of passwords in your file corresponds to the cameras that you select. For example, if you select five cameras in the Camera Utility, line 2 (the first non-heading line in your CSV), applies to the first of the cameras that you selected in the list.

1. Select the cameras you want to authenticate in the Camera Utility.
2. Click **Set Password » Use CSV**.
3. Select your CSV file.
4. Click **Open**.

Password Storage Settings

By default, the Camera Utility stores passwords, so that you do not need to re-authenticate when you access a camera. You can change the way passwords are stored to increase security, but you will have to enter passwords for your cameras more often.

1. Click  and select **Global Settings**.
2. Click **Password Storage**.
3. Determine how the Camera Utility stores passwords:
 - a. **Save to Database:** Camera passwords persist when you close and restart the Camera Utility.
 - b. **Save to Application Cache:** Camera passwords persist as long as the Camera Utility is open. When you close and restart the Camera Utility, you must provide credentials for your cameras again.
 - c. **One Time Use:** You must authenticate every time you access a camera.

Clear the Password Cache

If your global password storage setting is *Save to Application Cache*, you can clear camera credentials from the cache without having to close and restart the application. You may want to clear the password cache to test changes to a camera's credentials. You might want to clear cache for all of your cameras when ending a shift or letting someone else use the Camera Utility on your client machine.

1. Select the cameras you want to clear cached credentials for.
2. Click **Clear Cache**.

Reset an AV Costar Camera Password

You can reset a camera's password if you cannot remember it. This process requires you to generate a file and contact AV Costar.

NOTE: During the camera reset process, it is important that you do not power cycle, restart, or otherwise alter the camera. Restarting the camera will prevent the key file that unlocks the camera unusable.

1. Select the camera that you want to reset a password for.
2. Select **Reset Password »Create Nonce/Magic Code File**.
3. Save the file to a location you can quickly access. Do not change the filename or type.
4. Email support@arecontvision.com with your Nonce/Magic file. AV Costar Support will send you a key file to unlock the camera.
5. Select the camera in the list and click **Reset Password »Reset Password Using Key File**.
6. Select the key file that you received from AV Costar Support and click **Open**.
7. Set a new password for the camera.

Reset a CohuHD Costar Camera Password

You cannot reset a password for a CohuHD Costar camera through the Camera Utility.

Use Camera Credentials When Discovering Cameras

The **Camera Credentials** feature lets you both update camera credentials for multiple cameras and try a specific set of credentials on any new cameras that you discover.

When you use this feature, the *Status Message* column shows whether or not the cameras authenticated successfully.

1. Select any cameras that you want to update credentials for.
2. Click **Camera Credentials**.
3. Enter the *username* and *password* that you want to try for both the selected cameras and any cameras found during discovery.
4. Click **Begin Discovery**.


User Management

You can add users and grant permissions to the Camera Utility itself, which may help when multiple people use the same client to access cameras. Camera Utility users can belong to three user groups — admin, user, and viewer. Only users with *admin* permissions can modify users or update Camera Utility settings.

Feature	Admin	User	Viewer
Camera discovery	x	x	x
Filter Cameras	x	x	x
Upgrade Firmware/Hardware	x		
Edit Camera Details	x		
Manage Camera Users	x		
Manage Camera Location	x		
Set Camera Date and Time	x		
Compare Camera Settings	x	x	
Edit Network Settings	x		
Revert to Factory Default	x		
Open Web Browser	x	x	x
Reboot Camera	x	x	
Back up Configuration	x	x	
Restore Configuration	x		
Manage Camera Utility Users	x		
Perform Camera Diagnostics	x	x	
Execute HTTP Commands	x		


Change the Administrator's Password

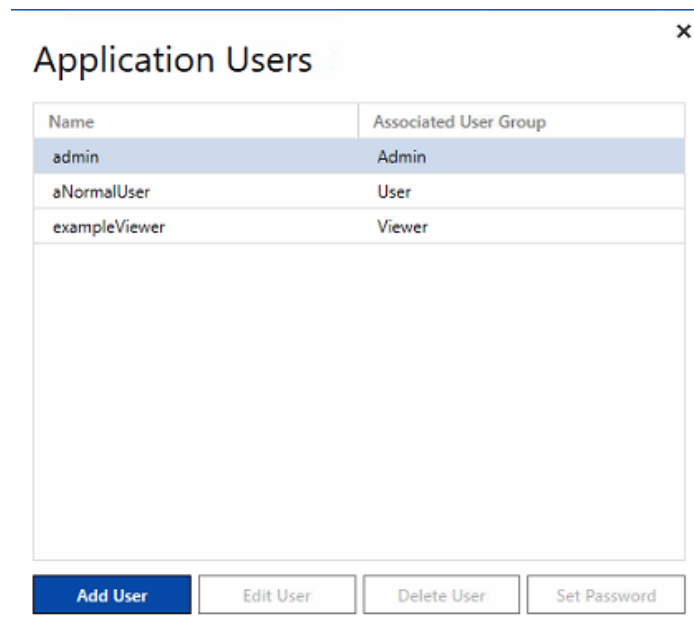
You can change your administrator username and password whenever you are logged in with *admin* privileges.

1. Click  and click **Global Settings**.
2. Click **Users/Passwords**.
3. Change the *Primary Username* and *Password*.
4. Click **Save**.


Add or Edit a User

As an *admin* user, you can add other users to the Camera Utility. Use different logons and permission to track who does what in your camera system.

1. Click  and click **Application User Settings**.
2. Click **Add User** or select the user you want to edit and click **Edit User**.
3. Enter a *Username*.
4. Select the User Group for the new user:
 - *Admin*: Has full permissions to the Camera Utility
 - *User*: Can restart and back up cameras, but cannot change camera settings
 - *Viewer*: Can only use the application to find and view cameras
5. Enter and confirm a password for the new user.
6. Click **Save**.




Delete a User

1. Click  and click **Application User Settings**.
2. Select the user you want to delete.
3. Click **Delete User** and confirm.

Set a Temporary Password for a User

If a user forgets their password, you can give them a temporary password. When the user logs in with the temporary password you provide, the Camera Utility will have them reset their password, ensuring security.

1. Click  and click **Application User Settings**.
2. Select the user you want to set a password for.
3. Click **Set Password**.
4. Enter a temporary password and click **Set Password**.

Camera Network Settings

The Camera Utility never assumes settings for your cameras. It discovers cameras and displays their settings. You can change network settings for cameras discovered by the Camera Utility.

Set a Subnet and Gateway

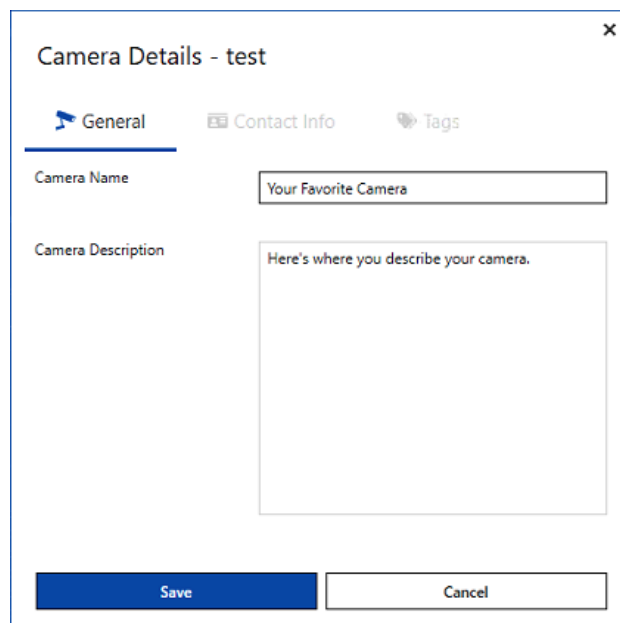
You can set or change the subnet and gateway for a camera if when you disable DHCP.

1. Select the camera you want to change network settings for.
2. Click **Network Setup**.
3. Change *IP Configuration* to *Static IP*.
4. Set your *Subnet* and *Gateway*.
5. Click **Save**.

Set a Camera Name

Set a camera name to help you better recognize it in the list and to represent its purpose — ex. *West Entry Fixed*.

1. Select the camera you want to rename.
2. Click **Network Setup**.
3. Change the *Camera Name*.
4. Click **Save**.



The screenshot shows a dialog box titled "Camera Details - test" with a close button (X) in the top right corner. The dialog has three tabs: "General" (selected), "Contact Info", and "Tags". Under the "General" tab, there are two main sections: "Camera Name" and "Camera Description". The "Camera Name" section has a text input field containing "Your Favorite Camera". The "Camera Description" section has a larger text area containing the placeholder text "Here's where you describe your camera.". At the bottom of the dialog, there are two buttons: "Save" (highlighted in blue) and "Cancel".

Change MTU Settings

The *Maximum Transmission Unit* (MTU) is the maximum packet size that the camera will send. Change MTU settings to optimize network traffic.

1. Select the camera you want to change MTU settings for.
2. Click **Network Setup**.
3. Change *MTU Settings* to *On*.
4. Use the slider to set the *MTU* size.
5. Click **Save**.

Lock IP Settings

Because you can set or change some network settings by selecting multiple cameras, the *Lock IP* setting can be a helpful way of preventing inadvertent changes to the camera's network settings. This setting only prevents changes to the camera's network settings from the Camera Utility; it *does not* prevent users from changing settings directly from the camera.

1. Select the camera that you want to prevent changes to.
2. Click **Network Setup**.
3. Change *Lock IP* to *On*.
4. Click **Save**.

Set a Static IP for a Camera

You can set the static IP address for a single camera. If you select multiple cameras, you can set a range of IP addresses or upload a CSV list of addresses.

1. Select the camera that you want to set an address for.
2. Click **IP Setup**.
3. In **Use IP Address**, enter IP address that you want to set for this camera.
4. Click **Save**.

IP Setup [X]

Use IP Address : 10 · 10 · 130 · 2

Use IP Range :

Use auto-assignment

Use DHCP

Range Selection

Subnet Base	10	·	10	·	130	·	0
Range Start	10	·	10	·	130	·	1
Range End	10	·	10	·	130	·	254
Broadcast	10	·	10	·	130	·	255

OK **Cancel**

Set Static Addresses for Multiple Cameras

You can select multiple cameras and set static IP addresses for all of them. Your cameras will be addressed from the range you provide. The Camera Utility assigns addresses to cameras in the order that they appear in your list; addresses are assigned in ascending order — e.g., if the last octet of *Range Start* is 100, then the first camera is addressed ending in 100, the next ending in 101, etc.

Range start and end are inclusive. The first camera in your selection will receive the Range Start address, and the Range End is the last address assigned.

1. Select the cameras that you want to set addresses for.
2. Click **IP Setup**.
3. Select **Use IP Range** and enter:
 - *Subnet Base* address — the subnet that you want to address your cameras on
 - The *Range Start* — the first address in the range, inclusive
 - The *Range End*
 - The *Broadcast Address*
4. Click **Save**.

Use Auto Assignment for IP Addresses

Auto Assignment assigns IP addresses in the 169.254.0.0 – 169.254.255.255 range, per IANA standards. This can be helpful for bench testing, or automatically addressing cameras without a DHCP server.

1. Select the cameras that you want to set addresses for.
2. Click **IP Setup**.
3. Enable **Use auto-assignment**.
4. Click **Save**.

Enable or Disable DHCP

You can enable DHCP for multiple cameras. If you disable DHCP, you can have the camera keep the address that it has already been assigned or assign a new static IP address.

1. Select the cameras that you want to set addresses for.
2. Click **IP Setup**.
3. Enable **Use DHCP**.
4. Click **Save**.

Camera Firmware and Updates

You can perform individual ad-hoc firmware upgrades for cameras using the Camera Utility. In these cases, you simply maintain your own firmware files on your client system and upload them to cameras when you perform firmware updates. However, it is strongly recommended that you take advantage of the Camera Utility's *Registered Package* or *Preferred Version* (for CohuHD Costar cameras) features, to better track and control firmware updates on your camera network.

Registered Packages are a list of firmware files that you trust. When you register a firmware package, the Camera Utility copies the firmware to its database, making it available from the menu — you won't have to remember where you downloaded files from, or parse filenames to figure out firmware versions. The Camera Utility maintains that information for you, making it much easier to selectively update cameras to appropriate versions.

Preferred Versions are a CohuHD Costar feature that lets you set the RISE, RISE2, and CORE firmware versions that you want to maintain on your network and a firmware download location for firmware, so you don't have to maintain your own firmware library or manually search for firmware when you want to upgrade cameras. When you upgrade a camera, the Camera Utility automatically finds the appropriate firmware from your download location, using the versions that you set.

When using Preferred Versions, you can also select multiple CohuHD Costar cameras without worrying about models or current versions. The Camera Utility will find the right firmware packages and perform upgrades for you.

Update a Camera from a File

You can perform an ad-hoc update for any camera. When updating cameras in this way, you must download firmware yourself, and know where your firmware files are.

1. Select the cameras you want to update. You can only select cameras of the same type or series.
2. Click **Upgrade » Choose File**.
3. Select your firmware/hardware file and click **Open**.
4. Click **OK** to upload firmware and begin the upgrade.

The upgrade process may take several minutes, and the camera will restart.

Update AV Costar Camera Hardware

Some AV Costar cameras are FPGA-upgradeable. You can perform a hardware upgrade to unlock camera capabilities.

1. Select the cameras you want to update. You can only select cameras of the same type or series.
2. Click **Upgrade » Hardware Upgrade**.
3. Select your hardware file and click **Open**.
4. Click **OK** to begin the upgrade.

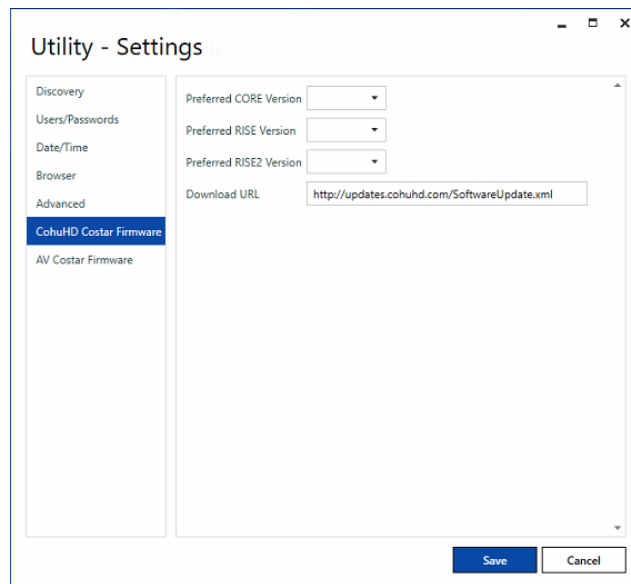
The upgrade process may take several minutes, and the camera will restart.

CohuHD Costar Preferred Firmware Settings

CohuHD Costar firmware is organized by version — while individual cameras might have different hardware packages, all cameras align with versions, making it easier to track firmware updates and features across a diverse network of cameras without having to download and maintain a library of firmware packages on your client system.

You can set the preferred versions for CORE, RISE, and RISE2 cameras, and a download location for your firmware. When you update cameras, the Camera Utility finds the correct firmware version for your camera from the download location automatically. You must be connected to the internet to use the default URL.

1. Click **⚙** and select **CohuHD Costar Firmware**.
2. Set the Preferred **CORE**, **RISE**, and **RISE2** versions.
3. Set the **Download URL**.
4. Click **Save**.



Upgrade CohuHD Costar Cameras from Preferred Firmware

If you set up preferred versions CohuHD Costar products, you can select and upgrade multiple CohuHD Costar cameras without regard to original camera version or series. The Camera Utility will automatically download the correct firmware for your camera and preferred version.

The upgrade process may take several minutes.

1. Select the cameras you want to upgrade.
2. Click **Upgrade » Preferred Firmware**.

Upgrade Cameras from a Registered Package

Registered packages are files that you selected for use with your cameras and are stored by the Camera Utility. The firmware upgrade process may take several minutes, and the camera will restart.

1. Select the cameras you want to update.
2. Click **Upgrade » Choose Registered**.
3. Click **OK** to upload firmware and begin the upgrade.

Add Registered Packages

Add firmware/hardware package files to the Camera Utility, creating a record of the trusted firmware and hardware versions for your cameras.

1. Click **Manage Packages**.
2. Click **Add**.
3. Find your package file and click **Open**.

Remove Registered Packages

Removing packages makes them unavailable when you or another user attempts to upgrade cameras in the Camera Utility.

1. Click **Manage Packages**.
2. Select the package you want to remove and click **Remove**.
3. Confirm your selection.

Camera Details

The Camera Details menu helps you organize your cameras in the Camera Utility, and lets you add cameras outside the discovery process.

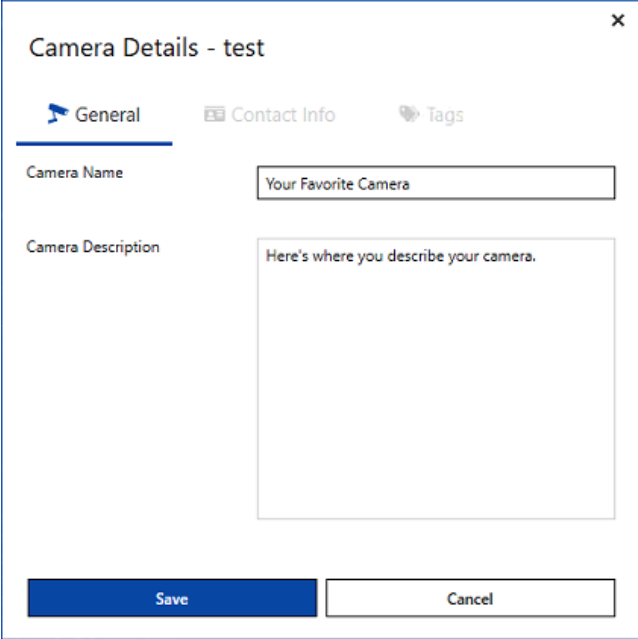
Camera Details do not affect camera-side settings. These settings only help you organize and identify cameras within the Camera Utility.

Set a Camera Name and Description

Setting a camera name and description can help you better identify cameras within the Camera Utility. The name appears in the list, the camera description appears when you hover over a camera.

It is strongly recommended that you set a name and description describing where the camera is positioned and its purpose — ex. Front Door Outside.

1. Select a camera.
2. Click **Camera Details**.
3. Enter a *Camera Name* and *Camera Description*.
4. Click **Save**.



The screenshot shows a dialog box titled "Camera Details - test" with a close button (X) in the top right corner. Below the title bar are three tabs: "General" (selected), "Contact Info", and "Tags". Under the "General" tab, there are two input fields: "Camera Name" with the text "Your Favorite Camera" and "Camera Description" with the placeholder text "Here's where you describe your camera.". At the bottom of the dialog box are two buttons: "Save" and "Cancel".

Set Contact Info for a Camera

Contact information can help you identify the person to contact in if a camera malfunctions or fails.

1. Select a camera.
2. Click **Camera Details » Contact Info**.
3. Enter information for the camera's point of contact.
4. Click **Save**.

Set Camera Tags

Camera tags provide a sorting and filtering mechanism in the Camera Utility and on the map. You can use tags to group your cameras in useful ways.

You can filter cameras using multiple tags, but the list only shows cameras with *all* tags.

Create New Tags

You can apply tags to cameras while creating a new tag.

1. Select the cameras that you want to apply tags to.
2. Click **Camera Details » Tags**.
3. Click **New Tag**.
4. Enter the name of your new tag.
5. Click **Save**.
6. Click **Save** again to exit the dialog.

Apply Tags to Cameras

If you've already created a tag, you can apply it to other cameras.

1. Select the cameras that you want to apply tags to.
2. Click **Camera Details » Tags**.
3. Click **New Tag**.
4. Select or de-select the tags that you want to apply to your cameras.
5. Click **Save**.

Edit Tags

Editing a tag changes the name of a tag but does not remove it from cameras.

1. Select one or more cameras.
2. Click **Camera Details » Tags**.
3. Click the tag that you want to edit and click **Edit Tag**.
4. Enter a new name for the tag.
5. Click **Save**.
6. Click **Save** again to exit the dialog.

Delete Tags

Deleting a tag removes it from any cameras that it's currently applied to, and from the Camera Utility itself — you will no longer be able to apply the tag to cameras unless you create it again.

1. Select one or more cameras.
2. Click **Camera Details » Tags**.
3. Click the tag that you want to delete and click **Delete Tag**.
4. Click **Yes** to delete the tag.
5. Click **Save** again to exit the dialog.

Camera Management

You can change settings for your cameras through the Camera Utility, making it easier to manage your cameras remotely.

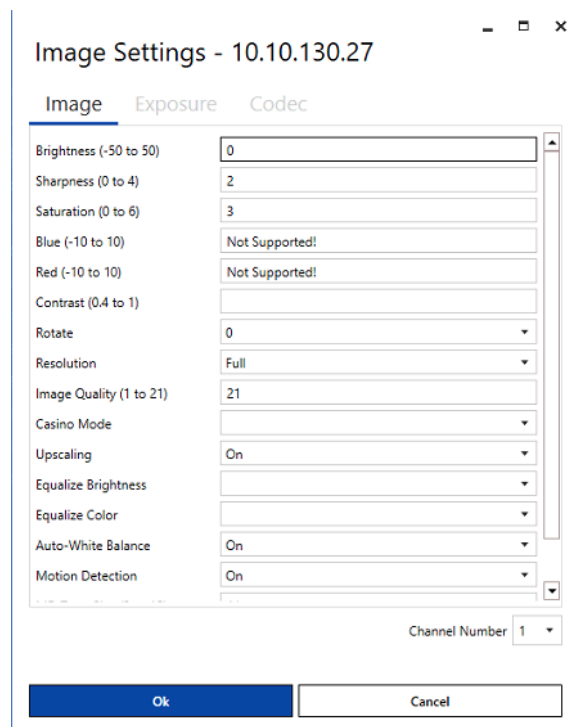
Modify Camera Settings

You can change some cameras' settings through the Camera Utility. Settings that you change through the camera utility are not picked up by the Compare Settings feature.

The Camera Utility shows settings for the full range of both AV Costar and CoHuHD Costar cameras. Not all settings are applicable to each camera. The Camera Utility notes which settings are not applicable to the camera you select. Settings that are empty are not set.

See the Reference for more about the individual settings you can modify.

1. Select the camera you want to modify.
2. Click **Camera Management** » **Modify**.
3. Update your camera settings:
 - a. Click **Image** to change settings for your camera's image.
 - b. Click **Exposure** to change settings relating to lightness, darkness, and illumination.
 - c. Click **Codec** to change video compression settings.
4. Click **OK** to save and exit the dialog.



Set Camera Date and Time

When updating date-time settings, you can select multiple cameras to set the same date-time settings for multiple cameras. If you want two cameras to have different time settings, you cannot select them together.

Date and time values do not update automatically in the Camera Utility. Click **Refresh Date/Time List** to see updated values and date-times for the cameras you select.

NOTE: You cannot set the camera's time zone using the Camera Utility. If you need to change a camera's time zone, you must open a browser and change the setting on the camera itself.

1. Select one or more cameras.
2. Click **Camera Details » Date and Time Settings**.
3. Select the source of date-time values for your camera:
 - a. **NTP:** set the camera to use NTP server that you set in the Camera Utility Global Settings.
 - b. **PC:** Set the camera clock to the date-time on your PC. This only synchronizes your PC time to the camera time once. Your PC will not act as an NTP server for the camera when you set PC time on the camera.
4. Click **Save**.

Open a Camera Browser

You can use the Browser to view video from a camera or to change settings that are not available through the Camera Utility. The Browser feature opens in the Default Browser that you set in the Camera Utility's Global Settings.

If you change settings for a camera through the browser, and you have the Compare Settings option turned on, the Camera Utility will notify you of changes at the next discovery interval.

1. Select the cameras that you want to open browser windows for.
2. Click **Camera Details » Browser**.

Restart Cameras

It may take several minutes for a camera restart, interrupting video and recording.

1. Select the cameras you want to restart.
2. Click **Camera Details » Reboot Camera**.
3. Click **Yes** to restart the camera.

Reset Cameras to Factory Defaults

If you've made changes to a camera in error, or you experience unrecoverable problems with a camera, you can use the *Factory Default* feature to return a camera to its out-of-box settings. You can choose to reset the camera's image settings, or both image and network settings to their out of box states.

You may want to back up your camera settings before you reset to factory defaults, so that you can restore the correct settings to your camera later.

When you reset a camera, it must restart. This process may take several minutes.

1. Select one or more cameras.
2. Click **Camera Details » Factory Default**.
3. Select whether you want to reset *Image Settings Only* or *Image and Network Settings*.
4. Click **Done**.

Compare Settings

If you enabled the *Compare Settings* option in the Camera Utility's Global Settings, you can verify changes to your camera's settings whenever the Camera Utility re-discovers cameras.

1. Select one or more cameras.
2. Click **Camera Details » Compare Settings**.
3. Verify changes to camera settings and click **Done**.

Download a Camera Log

The camera log contains a list of operations and errors. You may want to check the log to find motion events, check the list of users who accessed a camera, etc.

Logfiles download to the database directory you set when you first installed the Camera Utility. Logfiles default to `C:\Users\<your_user>\AppData\Local\Costar\Utility\CameraLogs`

1. Select the camera you want to download a logfile from.
2. Click **Camera Management » Camera Log**.
3. Click **Yes** to download the logfile.

Perform License Upgrades

Cameras that support Video Analytics features require active analytic licenses. While licensing features may vary by camera, you can modify and upload licenses for all of your Costar cameras using the camera utility.

While you can generate a MAC address list to request new licenses, you must update licenses for cameras individually.

1. Select the camera you want to update.
2. Click **Camera Management » License Upgrade**.
3. Select the license file that you want to upload to the camera.
4. Click **OK**.

Generate a Mac Address List

Analytic licenses are tied to your cameras' MAC addresses. When updating licenses for multiple cameras, you can export a list of the MAC addresses for the cameras you want to update. While you can use this list to request new licenses, you cannot update camera licenses in bulk. This feature just provides a list of the cameras you want to update and the MAC addresses for those cameras.

1. Select the cameras you want to update license for.
2. Click **Camera Management » Generate MAC Address List**.
3. Enter the name and directory where you want to save the list.
4. Click **OK**.

Issue HTTP Commands to Cameras

If you're familiar with the AV Costar camera API, you can send API commands directly to your cameras using the HTTP Command feature.

1. Select the camera you want to issue commands to.
2. Click **Camera Management » HTTP Command**.
3. Enter the command you want to issue. Enter the query parameters and values only.
4. Click **Done** when you've finished issuing commands to the camera.

Flush Registers

This is a debugging feature for AV Costar MegaIP® series cameras. You may need to flush register values or export them when troubleshooting an issue with your camera.

1. Select a camera.
2. Click **Camera Management » Flush Registers**.

SD Card Settings

For cameras that can record to a local SD card, you can modify SD card settings through the Camera Utility.

1. Select the camera you want to modify SD Card settings for.
2. Click **Camera Management » SDCard Settings**.
3. Modify recording schedules or event-based recording.
4. Click **Done** when you are finished modified your settings.

Set OSD Positioning

You can update on-screen display positioning for your cameras using the Camera Utility.

Export OSD Settings to CSV

You might want to export your OSD settings to a CSV if you need to factory reset a camera and want to reposition your OSD later.

1. Select the camera(s) you want to export OSD settings from.
2. Click **Camera Management » OSD Export to CSV**.
3. Enter the name of the file you want to export and the location you want to export it to.
4. Click **Done**.

Import OSD Settings from CSV

You can import OSD coordinates from a CSV file. This may help you reposition OSD settings for cameras after performing a factory reset or other changes.

1. Select the camera(s) you want to upload OSD settings to.
2. Click **Camera Management » OSD Import from CSV**.
3. Select the file containing your OSD settings.
4. Click **Done**.

Backup and Restore Cameras

You can backup camera settings to CSV files, which you can use to recover if you ever need to reset a camera to factory settings, or to keep a static log of camera settings.

You can backup settings for multiple cameras. Unlike other lists, if you backup your cameras with network information, you can restore camera in no particular order. If you do not backup cameras with network information including MAC addresses, you can only restore cameras in the original order that they appeared in the list.

Backup Camera Settings

When you back up camera settings, you can exclude unique settings — IP and MAC addresses. If you *do not* exclude these settings, you can restore settings for multiple cameras in no particular order; the Camera Utility will use the MAC Address to recognize cameras.

If opt to exclude these values, and you back up settings for multiple cameras, then you should expect to restore camera settings for your cameras in the order that you backed them up. Without unique fields, the Camera Utility does not know which settings originally belonged to which cameras and will just restore settings for cameras in the list in descending order from rows in your CSV.

1. Select the cameras that you want to back up.
2. Click **Configuration » Backup**.
3. Determine whether or not to *Exclude unique columns (IP, MAC) from csv*.
4. Click **OK**.

Camera backups are stored in your database directory's */Backups* folder. By default, backups are stored under *C:\Users\<your_user>\AppData\Local\Costar\Utility\Backups*.

Restore Camera Settings

You can restore camera settings from backups. Restoring settings overwrites any settings currently on the camera, and, in many cases, requires the camera to restart. If you backed up cameras with MAC and IP fields, you will automatically set static IP address on cameras you restore.

TIP: If you haven't taken a backup, you can create your own CSV with the settings that you want to restore for one or more cameras. You may want to back up a camera for a sample CSV.

1. Select the cameras that you want to restore settings for.
2. Click **Configuration » Restore**.
3. Select the CSV containing your settings. By default, backups are stored under *C:\Users\<your_user>\AppData\Local\Costar\Utility\Backups*.
4. Click **Open**.

Camera Security

By default, AV Costar and CohuHD Costar cameras use HTTP Basic authentication. You can set additional security for your cameras through the Camera Utility.

Both AV Costar and CohuHD Costar cameras support SSL

Enable 802.1x Authentication

1. Select the camera(s) you want to change security settings for.
2. Select **Security » 802.1x Authentication** and select the security protocol you want to use.
3. Enter a *Username* and *Password* for the camera.
4. Upload your *CA Certificate*. Click **Browse** to select your certificate.
5. (Optional) If your *Client Certificate* and *Private Key* are in the same file, click the option to combine the two.
6. Upload your *Client Certificate* and *Private Key*. Click **Browse** to select the files.
7. Enter the client certificate *Password*.
8. Click **Save**.

Change the Connection Protocol

If you already enabled 802.1x Authentication and uploaded certificates for a camera, you can change the authentication protocol for a camera to fit your security needs.

1. Select the camera(s) you want to change security settings for.
2. Select **Security » Connection Protocol**.
3. Select the protocol you want to use.

Generate a Self-signed Certificate

Self-signed certificates use the IP address of the camera and the current time to facilitate HTTPS configuration.

1. Select the camera(s) you want to change security settings for.
2. Select **Security » Generate Certificate**.

If your camera is not already using HTTPS, you can change the connection protocol to HTTPS now.

Upload a Certificate

If you already enabled 802.1x Authentication, you can upload certificates and your key file to the camera.

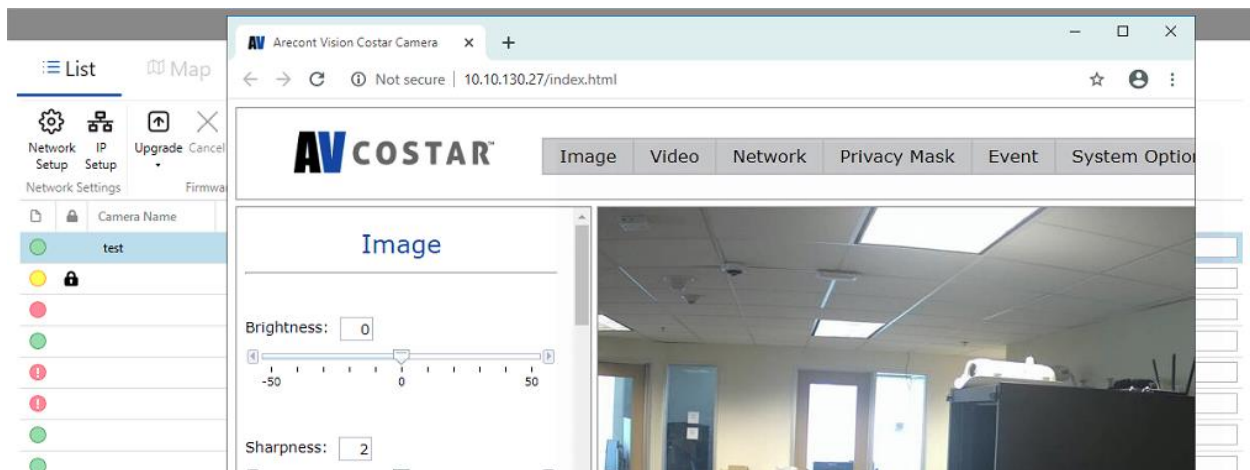
1. Select the camera(s) you want to change security settings for.
2. Select **Security » Upload Certificate**.
3. Indicate the type of certificate that you want to upload.
4. Browse for your certificate and click **Open**.
5. Enter the *username* and *password* for the certificate if your certificate is protected by credentials.
6. Click **Save**.

Open a Camera Browser

Double-click a camera in the list to open a browser and view video from a camera. The Camera Utility uses your Preferred Browser setting to determine which web browser to open when using cameras.

If you provided credentials for a camera, the Camera Utility opens your preferred browser and logs in. You do not have to input credentials a second time.

If you did not authenticate with a camera, you must enter a username and password in the browser to view video.

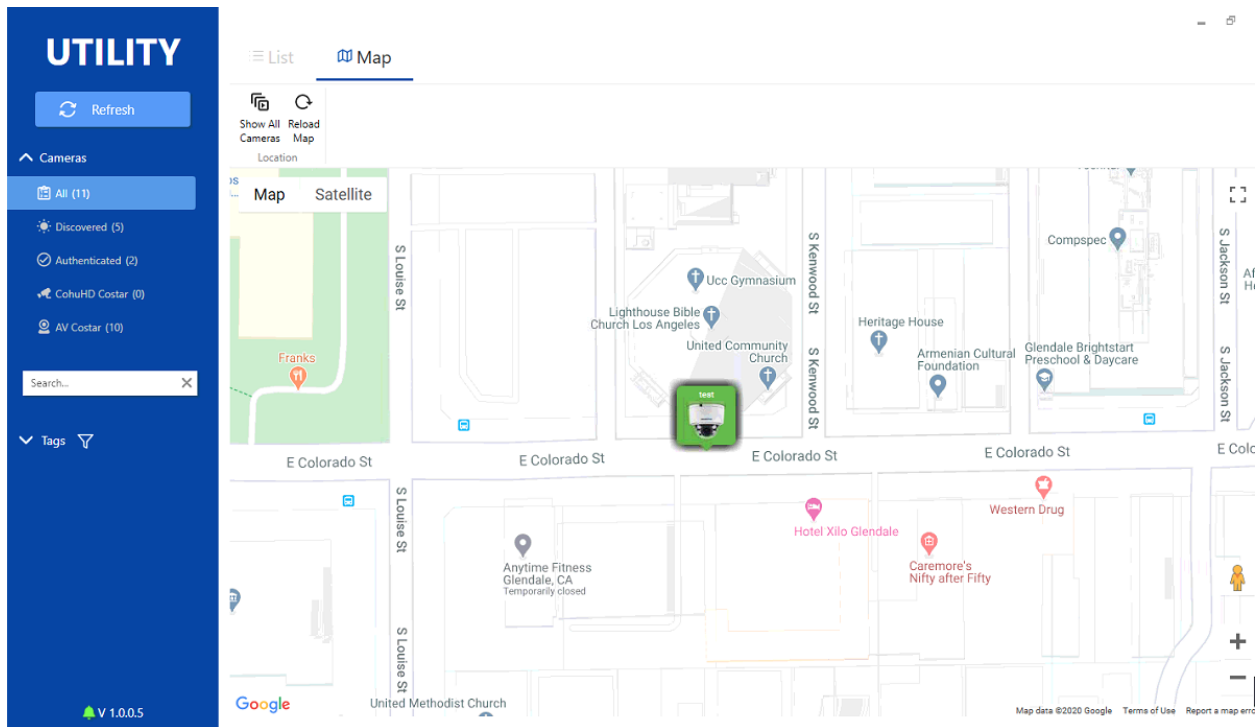


Camera Map and Locations

Click Map to go to the map view. In this view, you can organize your cameras by physical location, helping you and other users better understand where your cameras are and what views they provide. While you can manually set the latitude and longitude of your cameras, the map itself is powered by Google Maps and requires an internet connection.

The camera map is powered by Google Maps and requires an internet connection. You can place cameras on the map to better represent the physical locations of your cameras and to locate the specific view you need.

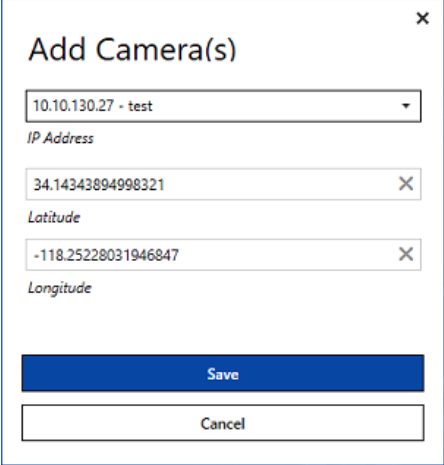
You can also edit any setting in the Map view that you have access to in the list view. Right click a camera for access to all of the menu options available in the list view.



Add a Camera to the Map

You may want to add names to your cameras if you have not already. Cameras are organized by IP address and name in the list; names can make it much easier to find and select the right camera.

1. Click **Map** to go to the map view.
2. Right click the location on the map where you want to place the camera.
3. Select the camera that you want to add to the map.



Add Camera(s) ✕

10.10.130.27 - test ▼

IP Address

34.14343894998321 ✕

Latitude

-118.25228031946847 ✕

Longitude

Save

Cancel

Set a Camera Location in the List View

You can set the exact latitude and longitude of a camera, rather than trying to approximate location on the map. When you set a location in this way, your camera will appear on the map in the location you set.

1. Select the camera you want to set the location for.
2. Click **Location » Set Location**.
3. Enter the *Latitude* and *Longitude*.
4. Click **Save**.

Move a Camera on the Map

If you want to move a camera on the map, you must manually change its latitude and/or longitude values or clear its location and add it again. You cannot drag cameras around the map.

Remove a Camera from the Map

1. Click **Map** to go to the map view.
2. Click the camera you want to remove from the map and select **Clear Location**.
3. Confirm your selection.

Show All Cameras on the Map

Use **Show All Cameras** to set the map boundaries to show all of your cameras. When you click Show All Cameras, the map zooms in or out to a view that fits all of your cameras in your view.

Troubleshooting

Open the Camera Log

The Camera Utility log can help you track problems both with your cameras or the Camera Utility itself.

Click **Log** to access the current logfile.

The screenshot shows a table with camera details and a log window below it. The table has columns for MAC address, IP address, camera name, and other identifiers. The log window shows a list of events with timestamps and descriptions.

MAC Address	IP Address	Camera Name	Other ID	Timestamp
E4:F1:4C:16:86:3C	10.10.130.14	AV12CPD-236	37101	2102357B2E3198000K 06/02/2020 5:00:57 P
00:1A:07:1A:92:C2	10.10.130.21	AV20476DN	65411.9	0001/019A 0000 0000 05/11/2020 6:21:41 P
00:1A:07:1A:93:48	10.10.130.23	AV10856DN	65411.9	0001/019A 0000 0000 05/11/2020 6:21:41 P
00:1A:07:1A:93:1C	10.10.130.19	AV8476DN	65411.9	0001/019A 0000 0000 05/11/2020 6:21:41 P

Log Verbose [Print] [Refresh] [Close]

- 6/2/2020 4:50:58 PM 10.10.130.17-> Costar Utility did not receive authorization from camera.
- 6/2/2020 4:50:58 PM Collecting details of camera 10.10.130.27
- 6/2/2020 4:50:58 PM Collecting details of camera 10.10.130.20
- 6/2/2020 4:50:58 PM Camera discovery workflow finished.
- 6/2/2020 5:00:47 PM Camera discovery workflow begun.
- 6/2/2020 5:00:47 PM CohuRise Discovery messages broadcasted on network interface Ethernet with IP address 10.10.130.13
- 6/2/2020 5:00:47 PM ArecontBroadCast Discovery messages broadcasted on network interface Ethernet with IP address 10.10.130.13
- 6/2/2020 5:00:47 PM ArecontMultiCast Discovery messages broadcasted on network interface Ethernet with IP address 10.10.130.13
- 6/2/2020 5:00:47 PM ArecontContera Discovery messages broadcasted on network interface Ethernet with IP address 10.10.130.13
- 6/2/2020 5:00:47 PM OnvifBCast Discovery messages broadcasted on network interface Ethernet with IP address 10.10.130.13
- 6/2/2020 5:00:47 PM OnvifMCast Discovery messages broadcasted on network interface Ethernet with IP address 10.10.130.13
- 6/2/2020 5:00:58 PM 10.10.130.11->: Something unexpected happened, please try again.
- 6/2/2020 5:00:58 PM 10.10.130.14->: Something unexpected happened, please try again.
- 6/2/2020 5:00:58 PM 10.10.130.17->: Costar Utility did not receive authorization from camera.
- 6/2/2020 5:00:58 PM Collecting details of camera 10.10.130.27
- 6/2/2020 5:00:58 PM Collecting details of camera 10.10.130.20
- 6/2/2020 5:00:58 PM Camera discovery workflow finished.

Logs roll over when they reach a certain size — 5 MB by default. You can access past logs in your database directory's logs folder. By default, this folder is `C:\Users\<your_user>\AppData\Local\Costar\Utility\Logs`.

Reset the Camera Database

If you become unable to log in as the `admin` user or your list of cameras becomes corrupted, you can remove the Camera Utility database and start over.

Deleting the database file removes all cameras, users, and Camera Utility settings. If you reset the database, you will have to reconfigure the Camera Utility as if you reinstalled it. Do not do reset your camera database unless you are prepared to lose all users, cameras, and settings.

If you took camera backups, you can restore your cameras from your backups after you reset the camera database.

1. Go to the Camera Utility database directory. By default, this is `C:\Users\<your_user>\AppData\Local\Costar\Utility\`
2. Delete `CCMDb.db`.
3. Restart the Camera Utility.

Camera Settings Reference

The Camera Utility supports most settings for both AV Costar and CoHuHD Costar cameras. However, the Camera Utility shows all fields for each camera, whether or not they are relevant to your current selection. Where possible, the Camera Utility shows settings that are unsupported. Settings that are empty are not set (or null).

Image Settings

Brightness	Sets brightness for the camera or channel.
Sharpness	Sets sharpness for the camera or channel.
Saturation	Sets color saturation for the camera or channel.
Blue	Sets blue balance for the camera or channel.
Red	Sets red balance for the camera or channel.
Contrast	
Rotate	Sets the rotation of the image in 90 degree increments. 90 and 270 degree rotations are available in newer models.
Resolution	The resolution MJPEGs returned from the camera.
Image Quality	The compression quality of the image. Higher numbers represent greater quality, and lower compression.
Casino Mode	Enable or disable casino mode (1080p models only).
Upscaling	Scales monochrome images to the same size as color images. If upscaling is disabled, the ratio is 1.6 between color images and monochrome images.
Equalize Color	For multi-sensor cameras only. Equalize color across sensors in a multi-sensor camera.
Auto-White Balance	White balance control, on or off.

Motion Detection	Enable or disable motion detection for a camera. Motion detection events can trigger video and appear in the log.
MD Zone Size	Set motion detection zone size, 1 – 16.
Extended Motion Detection	Enable or disable extended motion detection. Extended motion detection increases the number of motion detection zones, which may be helpful for high resolution and 4k cameras.

Exposure Settings

Illumination	Sets illumination for the camera or channel.
Auto Exposure	Enable or disable auto exposure mode.
Lighting	Controls Mains power frequency in Hz, used for indoor lighting compensation.
Bandwidth Savings Mode	Enable or disable bandwidth saving mode.
Exposure Mode	Set the camera's low-light mode.
Short Exposures	Set the shutter time in for the <i>Speed</i> exposure mode, in milliseconds.
Low Light Noise Filter	Set the low light noise filter value, from 1-100.
Day/Night	Sets day/night mode. Cameras default to `auto`, which sets day and night modes automatically. `dual` allows clients to pull both color and grayscale images simultaneously.
Switching Level	The level at which the camera switches from color to monochrome video or back.
Toggle Guard	Fine tunes the transition to/from low-light preventing toggling back and forth at the transition edge.
Focus after D/N switch	Sets the camera to automatically adjust focus after switching between Day and Night modes.

IR Illumination	Turns IR illumination on or off.
Auto Iris	Enable or disable auto iris control.
Enable P-iris	Enable or disable P-iris.
Day Binning	Enables or disables day binning mode for supported cameras.
Night Binning	Enables or disables night binning mode for supported cameras.
SNAPstream	Enable or disable the SNAPstream.

Codec Settings

RTSP Unicast Port	Set the port for RTSP Unicast traffic — 0 – 65535. Default: 554;
Constant Bitrate Control	Set a constant bitrate in kilobits per second, 0 – 65535. When you set this parameter, <i>H.264 Quality</i> is ignored; the camera adjusts quantization parameters automatically to maintain the specified bitrate.
H.264 Quality	The quantization parameter for the H.264 encoder, 16 – 36. Lower numbers indicate a higher quality image. This parameter is ignored if you set a constant bitrate.
Enable Variable Bitrate Limit	Enable variable bitrate control.
Variable Bitrate Limit	Set the maximum bitrate when using variable bitrate control in kilobits per second, 0 – 65535.
Frames per Second	Set the video framerate for the camera.
Enable RTP Multicast	Enable or disable multicast over RTP.
Multicast IP Address	Set the multicast IP address.

Multicast RTP Port

Set the multicast IP port.

**Multicast SAP Destination
IP**

Set the multicast SAP IP address.

COSTAR

TECHNOLOGIES, INC.

© 2020 Costar Technologies, Inc.

All rights reserved. No part of this publication may be reproduced by any means without written permission from Costar Technologies.

The information in this publication is believed to be accurate in all respects. However, Costar Technologies cannot assume responsibility for any consequences resulting from the use thereof.

The information contained herein is subject to change without notice. Revisions or new editions to this publication may be issued to incorporate such changes.