

March Networks
Command Mobile 1.4

User Guide



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Chapter 1

Setting Up

This chapter contains information on setting up your Command™ Mobile smartphone app.

It contains the following sections:

- “Overview” on page 6
- “Command Mobile Features” on page 6
- “Setting Up Command Mobile” on page 7
- “Setting Up CES” on page 7
- “Setting Up CRS” on page 11
- “Setting Up Recorders” on page 12
- “Port Forwarding” on page 13
- “Configuring Recorders for Port Forwarding” on page 13
- “Specifying the HTTP or HTTPS Port on Command Mobile” on page 15

Overview

March Networks Command™ Mobile is a smartphone app that allows you to view live and recorded video from the cameras added to a Command recording device on your mobile device.

The March Networks Command Mobile smartphone app runs on iPhones, iPads and Android devices and can be downloaded for free from the App Store or Google Play.

Note: The majority of the screenshots in this guide were taken on a mobile device running Android. Command Mobile works almost identically on both Android and iOS platforms, however, some screens may appear differently. Separate procedures are included where there are notable differences.

Command Mobile Features

The Command Mobile App includes the following features:

- Ability to view live and playback (recorded) video (H.264 only)
- Zoom into images to view details (live and playback video)
- View up to 4 live cameras simultaneously
- Quick and easy recorded video search by time and/or date
- PTZ camera control
- Dewarping for select 360° cameras
- Access to System, Logical, and Personal resources from Command
- App is supported on iPhone and iPad (iOS12 or higher) and Android (version 6 or higher).
- **Note:** A minimum of 1 GB RAM is required on the mobile device to run the Command Mobile app.
- Supports: English, French, Spanish, Simplified Chinese, Traditional Chinese, Italian, Portuguese, Finnish.
- Supported recording devices include:
 - R5 recorders:
 - 8000 Series Hybrid NVR — software version 5.8.5 and higher
 - 8724 V Tribrid NVR — software version 5.10.0 and higher
 - 9000 Series IP recorder — software version 5.9.0 and higher
 - RideSafe GT Series Hybrid NVR — software version 5.8.5 and higher
 - RideSafe MT Series IP recorder — software version 5.11.0 and higher
 - RideSafe RT Series IP recorder — software version 5.11.0 and higher
 - Command Recording Server (CRS) — version 2.1.1 and higher
 - Command Enterprise Server (CES) multiple recorder software — version 2.2 and higher

Language

Command Mobile is available in eight languages: English, French, Spanish, Simplified Chinese, Traditional Chinese, Italian, Portuguese, and Finnish. When your mobile device is set to one of the supported languages, Command Mobile launches in that language.

To change the language of Command Mobile, first change the language settings on your mobile device, then open Command Mobile. If Command Mobile is already open, simply close and open the app again to view the new language.

Other Available Publications

Additional March Networks publications are available in PDF from the March Networks Partner Portal website. If you do not have access to the Partner Portal, contact your March Networks representative.

Setting Up Command Mobile

Before installing Command Mobile, ensure that the mobile device you want to install the app on has at least 1 GB of RAM. This is the minimum amount of RAM required to run the app properly.

If you are setting up a user to use Command Mobile, you must ensure that the user has the correct user rights so that they can see all their resources.

You must also ensure that the resources (folders, views, cameras, and recorders) you want to view in Command Mobile are added to the correct Navigation tree in the Command Client. Users connected to a CES can view resources in the System, Logical, and/or Personal tree, users connected to a CRS or a recorder can view resources in the System and/or Personal tree only.

Note: Command Mobile allows you to view folders, views, cameras, and recorders that have been set up in Command Client. You cannot view resources such as alarms, switches, talk channels, and maps (use Command Client to view these resources).

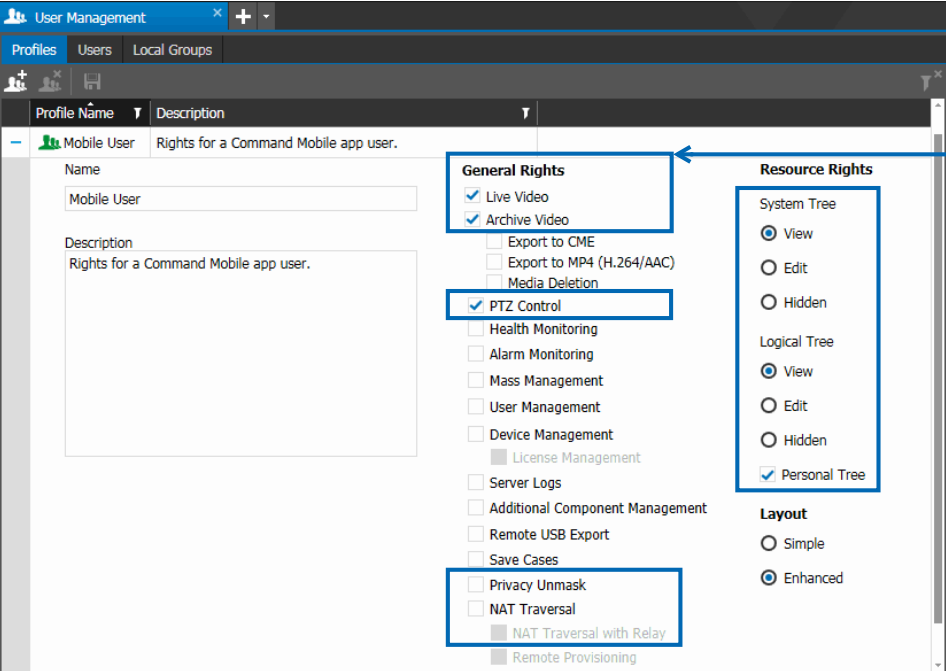
Setting Up CES

Users connecting to a CES through Command Mobile must have the correct user rights and resources set up in Command Client.

CES User Rights

You can set up user rights for Command Enterprise Server using the Command Client interface and accessing the User Management tab. Users must have the correct rights in their user profile and have the applicable resources assigned to their System and Logical territories in their user details.

More information on user profiles and user rights is available from the *Command Enterprise and Client User Guide*.



The screenshot shows the 'User Management' window with the 'Users' tab selected. The 'Mobile User' profile is highlighted. The 'General Rights' section includes checkboxes for 'Live Video', 'Archive Video', 'PTZ Control', 'Export to CME', 'Export to MP4 (H.264/AAC)', 'Media Deletion', 'Health Monitoring', 'Alarm Monitoring', 'Mass Management', 'User Management', 'Device Management', 'License Management', 'Server Logs', 'Additional Component Management', 'Remote USB Export', 'Save Cases', 'Privacy Unmask', 'NAT Traversal', 'NAT Traversal with Relay', and 'Remote Provisioning'. The 'Resource Rights' section includes checkboxes for 'System Tree' (View, Edit, Hidden), 'Logical Tree' (View, Edit, Hidden), and 'Personal Tree' (checked). The 'Layout' section includes radio buttons for 'Simple' and 'Enhanced' (selected).

User Profile

General Rights

Resource Rights (Tree access)

General Rights

The following general rights are applicable to Command Mobile.

Live Video and Archive Video

To view video in Command Mobile, a user requires the **Live Video** general user right, and to view and search recorded video a user requires the **Archive Video** general user right.

If a user has the Live Video right but not the Archive Video right, they can view live video, but they cannot search or view recorded video.

If a user has the Archive Video right but not the Live Video right, they can search and review recorded video, but they cannot view live video.

Note: If a user does not have the Live Video or Archive Video right, the user is able to sign in to Command Mobile, but is unable to view any video (the message **Not Authorized** appears).

NAT Traversal

If recording devices in Command Enterprise are configured for NAT (Network Address Translation) traversal, a user requires the **NAT Traversal** right to access recording devices located behind a router acting as a NAT.

This right allows users to access recording devices using STUN (Session Traversal Utilities for NAT) servers.

More information on using NAT traversal with Command is available from the *Command Enterprise and Client User Guide*.

NAT Traversal with Relay

If a user has the NAT Traversal right, this additional **NAT Traversal with Relay** right becomes available, and allows a user to access recording devices using TURN (Traversal Using Relays around NAT) servers, as well as STUN servers.

More information on using NAT traversal with Command is available from the *Command Enterprise and Client User Guide*.

PTZ Control

If the recorder has PTZ cameras connected, a user also requires the **PTZ Control** general right to control the cameras.

Privacy Unmask

Optionally, the **Privacy Unmask** general right allows the Command Mobile user to view video from cameras that have a privacy mask enabled, without the privacy mask.

Resource Rights

To view resources from the System and/or Logical trees in Command Mobile, a user requires either **View** or **Edit** access to the System and/or Logical tree.

Note: If the user has Hidden access selected for the System or Logical tree resource rights, the user does not have access to that tree.

To view resources from the Personal tree, a user requires resource rights to the Personal tree (check box selected). If the Personal tree check box is not selected, the user does not have access to the Personal tree.

Note: A user must have access to one or more trees (System, Logical, or Personal). If the user does not have access to any, the user is not able to sign in to Command Mobile at all.

User Details

The screenshot shows the 'User Management' interface with the 'Users' tab selected. A table lists users, with 'Mobile User' selected. Below the table, the 'User Information' section displays fields for User Name, Full Name, Email Address, Phone, Position, and Manager. To the right, there are dropdowns for Profile and Status, and a section for Certificate. At the bottom, the 'Available Resources' section is highlighted with a blue box. It contains two columns: 'System' and 'Logical'. Each column has a checkbox and a 'Select All' button. The 'System' checkbox is checked, and the 'Logical' checkbox is unchecked. Arrows point from these checkboxes to the text below the screenshot.

Name	Status	User Name	Profile	System Territory	Logical Territory	Type	Certificate
Mobile User	Enabled	Mobile User	Mobile User	System	Logical	Local User	None

User Information

User Name: Mobile User
 Full Name: Mobile User
 Email Address: mobile@example.com
 Phone: 555-123-4567
 Position: Manager
 Manager: J. Smith

Profile: Mobile User
Status: ☒ Enabled
Certificate: None
 Logoff when certificate is removed
Password: [Change](#) ☐ Force change on next login

Available Resources

System [Select All](#)

☒ System

Logical [Select All](#)

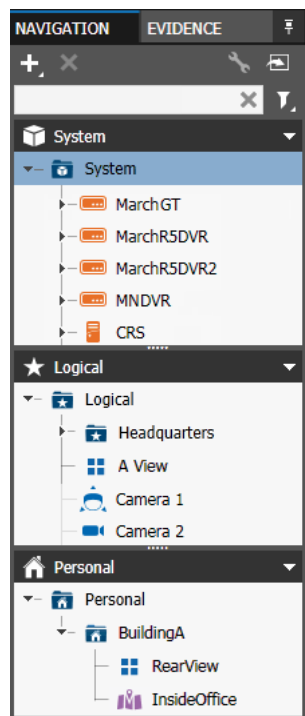
☐ Logical

System Territory Rights
(Root System folder access shown)

Logical Territory Rights
(Root Logical folder access shown)

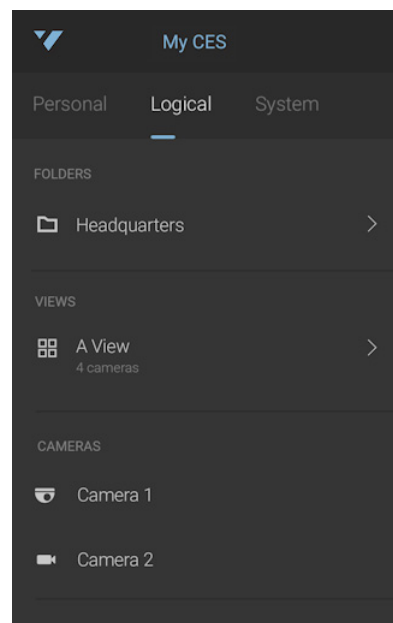
CES Resources

In Command Mobile, users with full rights can access the System, Logical, and Personal tree resources (folders, views, cameras, and recorders) from a CES.



**Command Client
Navigation Panel for CES**

Resources from the System, Logical, and/or Personal tree are available in Command Mobile with applicable user rights



**Logical resources from CES
viewed in Command Mobile**

Note: A user can tap the Personal, Logical, or System title to switch between the available resources.

Note: Resources from the System tree are available in Command Mobile 1.2 and greater. Resources from the Logical and Personal tree are available in any version.

Setting Up CRS

You must set up user rights and available resources for users connecting to a CRS through Command Mobile.

CRS User Rights

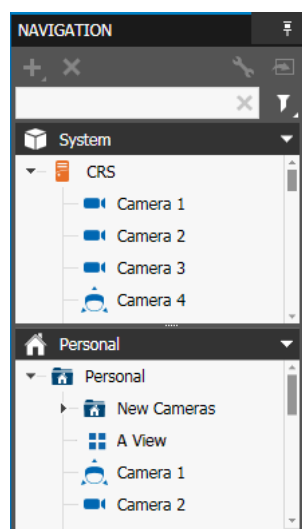
CRS user rights are set up in the Command Config software application. A CRS user must have Live video playback rights to view video, and Playback video rights to view recorded video. If the CRS has PTZ cameras connected, a user also requires the **PTZ** user right to control the cameras.

See the *Command Recording Server Configuration Guide* for more information on setting up users for CRS.

CRS Resources

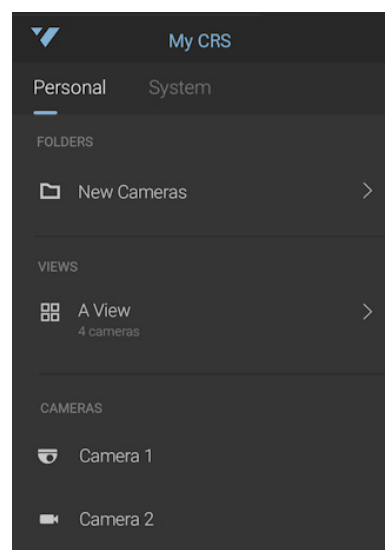
Resources from the recorder for CRS (folders, views, and cameras) are set up in the System and Personal trees in Command Client.

Note: When accessing a CRS using Command, there is no Logical tree available. Users who access a CRS using Command Mobile can access the System and Personal tree views only.



Command Client
Navigation Panel for CRS

Resources from the CRS's
System and/or Personal tree
are available in Command
Mobile with applicable
user rights



Personal resources from CRS
viewed in Command Mobile

Note: Resources from the System tree are available in Command Mobile 1.2 and greater. Resources from the Personal tree are available in any version.

Setting Up Recorders

You must set up user rights and available resources for users connecting to a recorder through Command Mobile.

Recorder User Rights

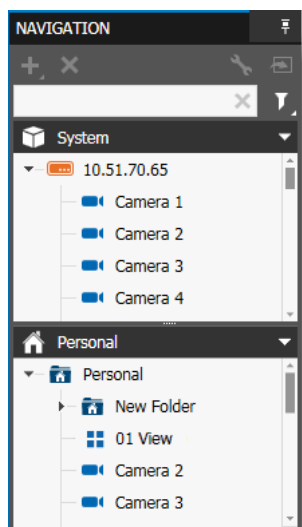
If you can connect directly to a recorder, you automatically have the right to view any live or recorded video available to you. User passwords for recorders are set up using the Provisioning Interface using the *setsecure* command. See the *Provisioning Interface Technical Instructions* for more information.

Note: You cannot access a recorder directly unless the *setsecure* command is implemented on the recorder.

Recorder Resources

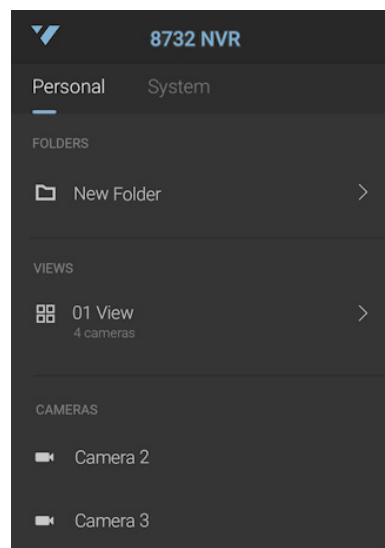
Resources from the recorder for Command Mobile (folders, views, and cameras) are set up in the System and Personal trees in Command Client.

Note: When accessing a recorder using Command Client or Command Mobile, there is no Logical tree available. Users who access a recorder using Command Mobile see the System and Personal tree views only.



Command Client
Navigation Panel for Recorder

Resources from the recorder's
System and/or Personal tree
are available in Command
Mobile with applicable
user rights



Personal resources from recorder
viewed in Command Mobile

Note: Resources from the System tree are available in Command Mobile 1.2 and greater. Resources from the Personal tree are available in any version.

Port Forwarding

If you are not using a VPN to remotely access your recorders with Command Mobile, you may have to consider port forwarding when connecting to your devices through a firewall or router.

The following table shows the default ports required for network communication between recorders and Command Mobile in a standard March Networks solution installation.

Default Ports

Destination	Source	Port Used (TCP)	Purpose
8000, 9000, RideSafe Series	Command Mobile	443	SSL Encrypted for authentication, data transport, and video streaming.
8000, 9000, RideSafe Series	Command Mobile	8080	Pre-authentication
CRS	Command Mobile	443	SSL Encrypted for authentication, data transport, and video streaming.
CRS	Command Mobile	80	Pre-authentication

For more information on network communication, see the *Network Communications and Design Application Note* available from the March Networks Partner Portal website.

Configuring Recorders for Port Forwarding

When a recorder does not reside in the local network and does not have a public IP address, using port forwarding can be a way to allow remote clients to connect to it.

Command Mobile supports the direct connection to R5 and CRS recorders using port forwarding, but some configuration is required.

To configure a recorder for port forwarding

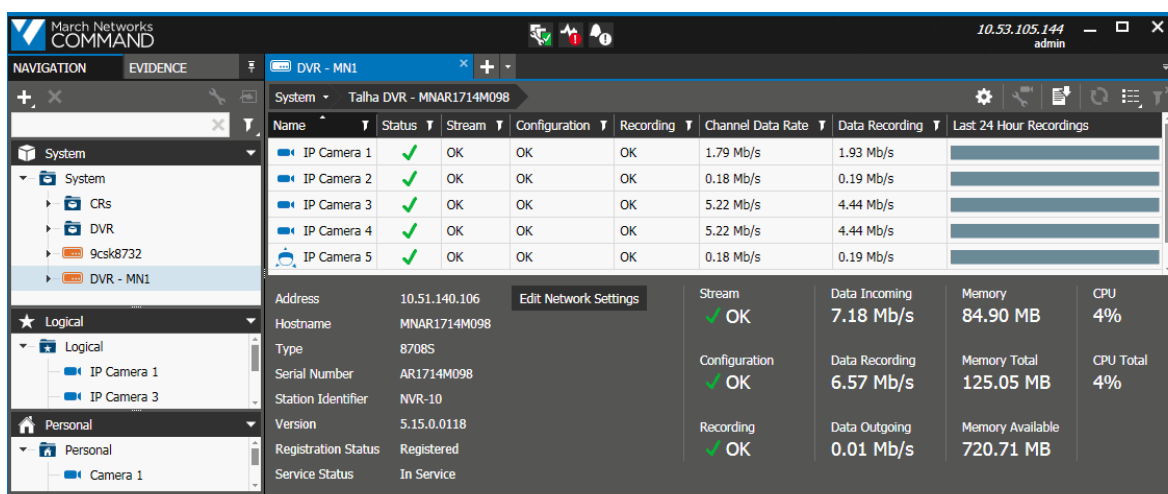
- 1 Launch the Command Client user interface on your computer and log in to the CES where the recorder is registered or log in to the recorder directly.

Note: You must have Administrator privileges to configure port forwarding.

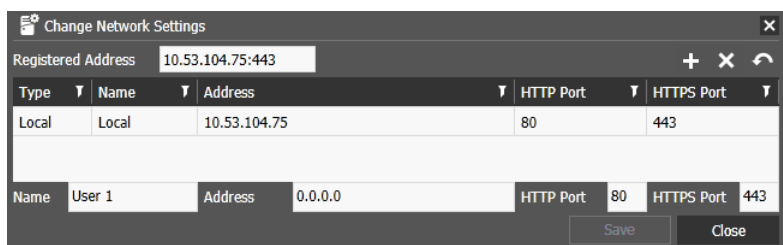
For more information on using Command Client, see the *Command Enterprise and Client User Guide* (CES) or the *Command Professional and Client User Guide* (single recording device).

- 2 In the **System** tree, select the recorder (CRS or R5 recorder).


- 3 On the **Navigation** toolbar, click the **Open in Tab**  button.
A device tab opens in the **Workspace** with the name of the selected device.

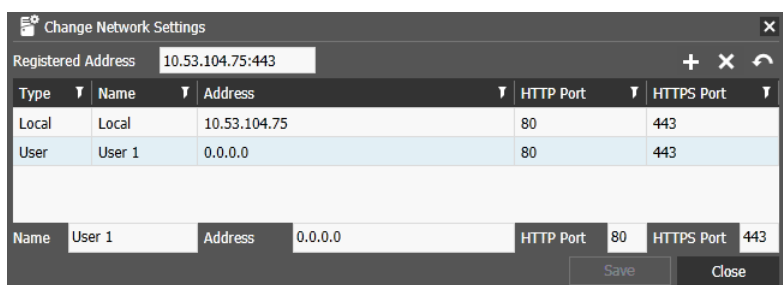


- 4 Click the **Edit Network Settings** button.
The **Change Network Settings** dialog box appears.



The **Registered Address** for the device appears at the top of the dialog box, and a list of address zones appears below it.

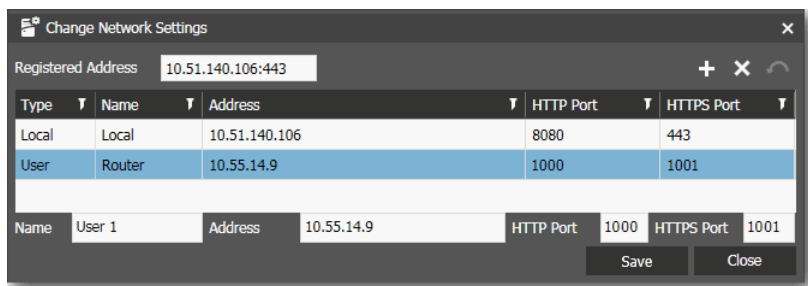
- 5 Click the **Add Zone**  button to add a user defined address zone to the list.
A new entry appears in the list, and the fields at the bottom of the list become editable.



6 In the new entry, enter:



- **Name:** a name to identify the new address
- **Address:** the IP address of the router used for port forwarding
- **HTTP Port:** the number of the port used for HTTP traffic
- **HTTPS Port:** the number of the port used for HTTPS traffic

When a valid address is entered, the **Save** button becomes available.



7 Click **Save**.

Notes:

- To remove a User address zone, select the zone in the list and click the **Delete Zone**  button.
- To revert any changes you made, click the **Cancel Change**  button.

8 Click **Close**.

When connecting to the recorder (R5 or CRS), Command Mobile verifies all the interfaces and extracts the HTTPS port matching the information related to the current connection. In the case of the connection through a forwarded port, Command Mobile finds the network interface that matches the current address and HTTP port and extracts the corresponding HTTPS port.

Specifying the HTTP or HTTPS Port on Command Mobile

You can add the HTTPS port or the HTTP port to the IP address of the CES or recorder in the following format:

`<IP address>:<port>`

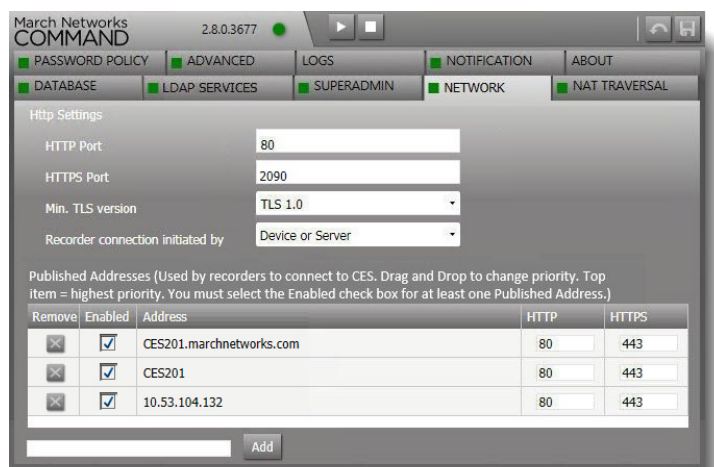
Note: Adding the HTTPS port requires version 1.2 or greater of Command Mobile.

Command Mobile automatically identifies whether the port is HTTP or HTTPS. If the port is not specified, Command Mobile tries to connect to both default ports (443 for HTTPS and 80 for HTTP), and uses the first port that is available.

Connecting to a CES Behind a Firewall

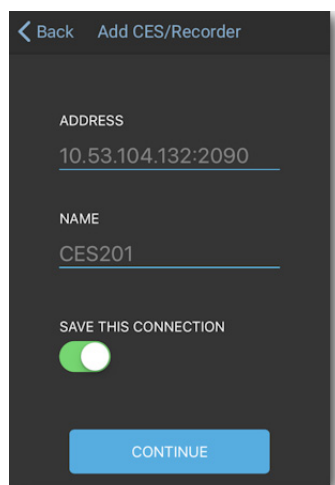
The ability to specify the HTTPS port is important when connecting to a CES that is behind a firewall and uses port forwarding. To connect to the CES, you need to specify the HTTPS port that it uses to get around the firewall. You cannot connect to a port forwarded CES using only the HTTP port.

- 1 You can identify what the port number for the CES is by opening the **Command Enterprise Console**, which is available on the computer where Command Enterprise is installed (default path is Start > Programs > March Networks > Command Enterprise > CES Configuration).
- 2 Click the **Network** tab, which allows you to configure port settings and addresses for Command. In the following illustration, the HTTPS port for the CES is set to 2090.



Note: To accommodate a CES behind a firewall, ensure that the firewall is configured to forward the same HTTPS port to CES as configured locally in the **Network** tab. In this example, the firewall forwards HTTPS port 2090 to CES HTTPS port 2090. Forwarding the same HTTP port is not required.

- 3 To connect to this CES in Command Mobile (version 1.2 or greater), you must specify this HTTPS port when adding the CES, in the format <IPAddress>:<port>. In this case, it is 10.53.104.132:2090.



When the HTTPS port is specified in the CES address (in Command Mobile 1.2 or greater), the connection to the CES from Command Mobile is successful.

Chapter 2

Getting Started

This chapter describes the Command Mobile user interface. It contains procedures for setting up and getting started with Command Mobile.

It contains the following sections:

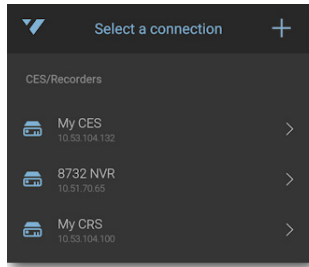
- “Main Screens” on page 18
- “Icon Quick Reference” on page 21
- “Getting Started” on page 23
- “Adding a CES or Recorder Connection” on page 23
- “Connecting to a CES or Recorder” on page 25
- “Refreshing the Resource list” on page 27
- “Editing a CES or Recorder Connection” on page 27
- “Deleting a CES or Recorder Connection” on page 28
- “Searchlight Resources” on page 30

Main Screens

Navigate through the screens to view your available resources. The folders, views, cameras, and recorders you see depend on your user rights and what is set up in Command Client. For example, if there are no views set up, you do not see the Views section. If you do not have the user right to view the System tree, the System title does not appear.

Select a Connection

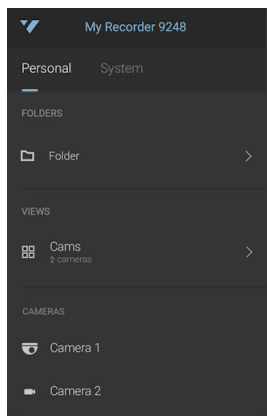
This initial screen contains the list of recording devices you can connect to and view their cameras (CES, CRS, and recorder). You can edit this list in Command Mobile by adding or removing devices.



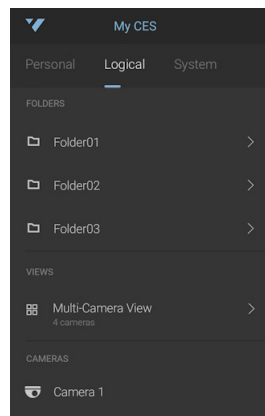
CES/Recorder List

Resource Screens

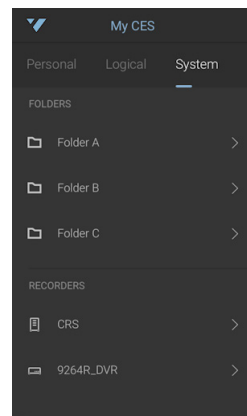
- **Personal** - The list of resources (folders, views, cameras) available to you (under the user name you sign in as), available for CES/CRS/recorders.
- **Logical** - The list of resources (folders, views, cameras) available to all users (with appropriate user rights) who connect to a CES.
- **System** - The list of resources (folders, recorders, cameras) available to all users (with appropriate user rights) who connect to a CES.



Personal Resources



Logical Resources



System Resources

Comparing Resource Screens

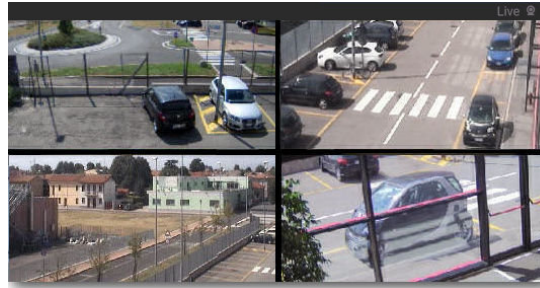
Screen	Possible Resource Types	Who can View (with user rights)	Device
Personal	Folders, views, cameras	Exclusive to one user	CES and recorders
Logical	Folders, views, cameras	All users	CES only
System	Folders, recorders, cameras	All users	CES and recorders

Camera Screens

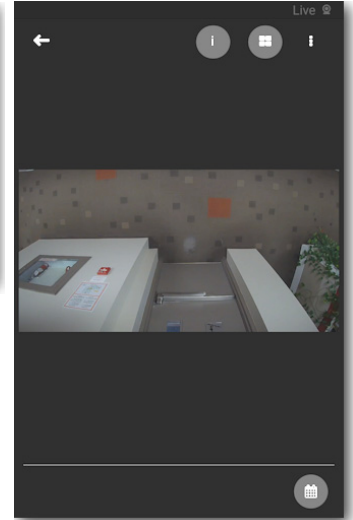
The following screens allow you to view cameras. See “Viewing Live Video” on page 32.



3 camera view live - portrait



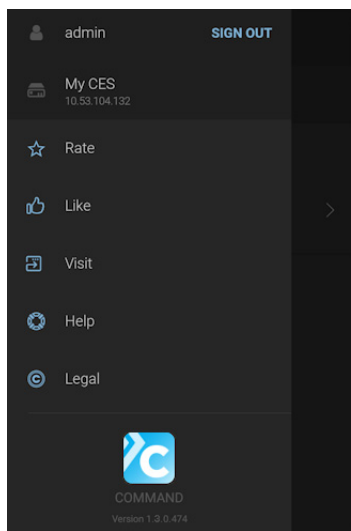
4 camera view live - landscape



1 camera portrait - with option icons showing

Side Navigation Screen

The following screen allows you to sign out of the current device or access other app information.



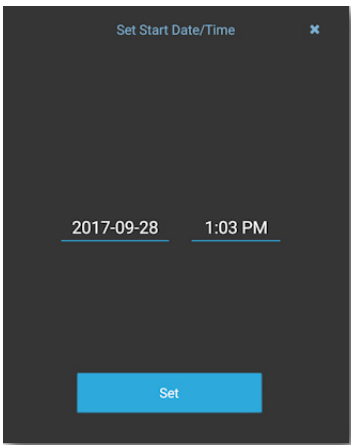
Side navigation

Sign Out of current device

Links to documentation and training, legal information, version information, and more

Search for Recorded Video

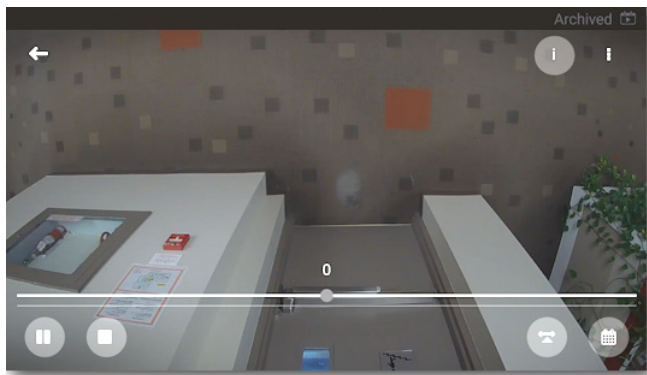
The following screen allows you to set a start time to search for recorded video. See “Viewing Recorded Video” on page 34.



Set time and date to begin recorded video playback

Scan Recorded Video












The following screen allows you to pause and quick scan recorded video. See “Viewing Recorded Video” on page 34.














Recorded video icons and timeline slider

Icon Quick Reference

The following table shows the available icons for Command Mobile.

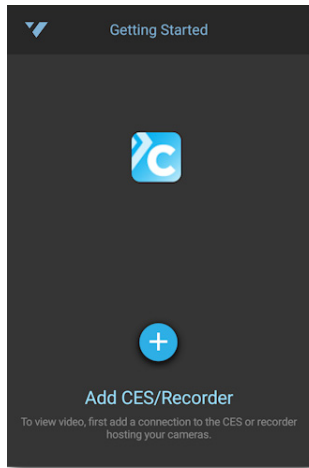
Icon	Purpose	Description
	Command Mobile icon	This is the Command Mobile app icon that appears on the home screen of your mobile device. Tap this icon to open the Command Mobile app.
	Opens side navigation	Tap this icon to open the side navigation, which slides from the left and provides navigation information and links.
	Add CES or recorder	Tap this icon to add a new recording device connection to Command Mobile (CES, CRS, recorder).
	Back	Tap this icon to return to a previous screen.
	Switch between Personal, Logical, and System resource lists	Tap this icon to switch between showing the: <ul style="list-style-type: none"> Personal list of resources - folders, views, and cameras associated with your user name (other users cannot see the Personal list). Logical list of resources - folders, views, and cameras available to all users with applicable rights. System list of resources - recorders, folders, and cameras available to all users with applicable rights. Note: The Logical list is only available when logged into a CES.
	Sign out of current device	Tap this icon to sign out of the current device and display the CES/Recorders list where you can connect to a different device (CES/CRS/recorder).
	Search for recorded video	Tap this icon to set the start date and time for recorded (archived) video search. This opens the screen where you can set the start time and date for your video search.
	Display info about the camera(s)	Tap this icon to overlay camera information over the current camera view.
	Switch camera view from grid to single view	When you are viewing multiple cameras in a grid, tap this icon to view each camera in a single view.
	Switch camera view from single to grid	When viewing a camera (from a multi-camera view) in a single view, tap this icon to return to the grid view.
	Display PTZ preset views	Tap this icon to display the list of available preset PTZ views for a PTZ camera.

Icon	Purpose	Description
	High quality video	Tap this icon to view the highest quality video available from the camera.
	Medium quality video	Tap this icon to view medium quality video from the camera.
	Low quality video	Tap this icon to view the lowest quality video available from the camera.
	Switches the icon display	Tap this icon to switch the display between: <ul style="list-style-type: none"> - Info icon and camera view icon  - High (H), Medium (M), and Low (L) video quality icons 
	Next screen / Previous screen	When viewing multiple cameras, tap this icon to move to the next screen or back to the previous screen.
	Back	When viewing video, tap this icon to return to the navigation screen.
	Pause	When viewing recorded video, tap this icon to pause the image.
	Stop - Go to Live	When viewing recorded video, tap this icon to stop and return to live video.
	Timeline slider	When viewing recorded video, tap this icon to display the slider that allows you to move backward and forward in the video (up to 10 minutes each way).

Getting Started

When Command Mobile is first installed, the **End User License Agreement** screen is displayed. Scroll to read the agreement. You must select the check box stating that you have reviewed, understood, and agree to comply with the policy. When the check box is selected, you must tap **I Agree** to accept the terms of the license agreement before you can use Command Mobile.

After the license agreement, you are presented with the **Getting Started** screen:



After initial install, tap **Add CES/Recorder**


To view video, you must connect to a recording device with cameras for you to view.

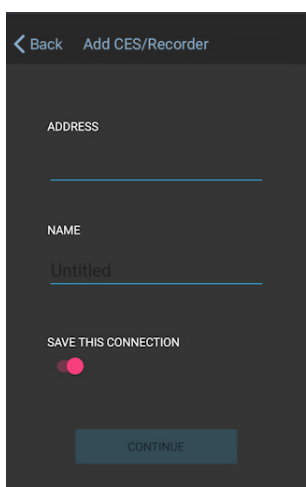
From this screen, tap **Add CES/Recorder** to display the Add CES/Recorders screen. Follow the steps in the next section, “Adding a CES or Recorder Connection”.

Adding a CES or Recorder Connection

To view video, you must connect to the CES, CRS, or recorder that is hosting your cameras.

To add a CES or Recorder

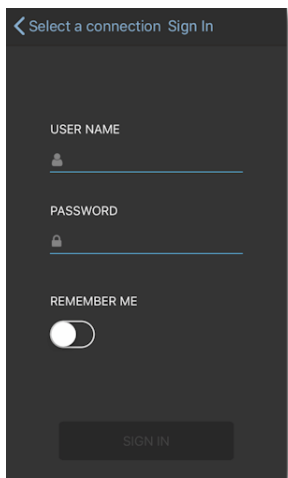
- 1 From the **Select a connection** screen with the list of CES/Recorders, tap  .
The **Add CES/Recorder** screen appears.



- 2 Enter the IP address or hostname of the recording device you want to access. This can be:
 - a single recorder (a 9000 Series, 8000 Series, or RideSafe Series recorder)
 - CRS, recording software that supports up to 128 cameras
 - CES, enterprise software that allows access to multiple recording devices

Note: See “Command Mobile Features” on page 6 for supported software versions.
- 3 Enter a name for the CES or recorder.

This is a descriptive name that helps you identify the device when you want to sign in to it.
- 4 If you choose the **Save this Connection** option (enabled by default), the **Address** and **Name** are added to your list on the CES/Recorders screen, so that you can sign in again without re-entering this information.
- 5 Tap **Continue** to display the **Sign In** page.



- 6 Enter the user name and password for the recording device you are adding.
- 7 If you choose the **Remember Me** option, the **User Name** and **Password** are saved, so that you can sign in again without re-entering this information.

Follow the steps in the next section, “Connecting to a CES or Recorder” on page 25 to connect to the device after you have added it.

Connecting to a CES or Recorder

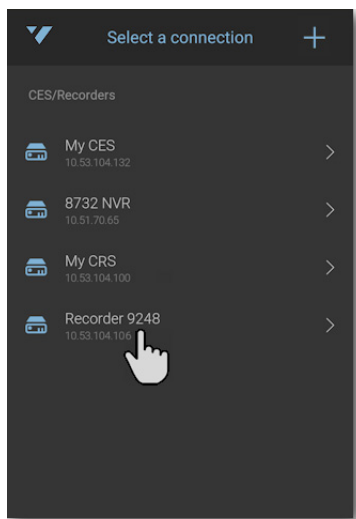
To connect to a device, you can enter your user name and password, or you can use fingerprint access or face recognition if either feature is set up and available on your mobile device.

Note: Command Mobile allows you to view the System tree (recorders, folders, and cameras), the Logical tree (folders, views, and cameras in the CES only), and the Personal tree (folders, views, and cameras associated with your user name) of Command Client. You cannot view resources such as alarms, switches, talk channels, and maps (use Command Client to view these resources).

To connect to a CES or recorder

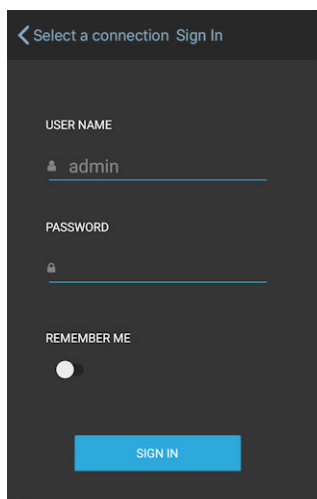
- 1 From the **CES/Recorders** screen, tap the CES or recorder you want to connect to.

Note: See “Adding a CES or Recorder Connection” on page 23 for how to add devices to this list.

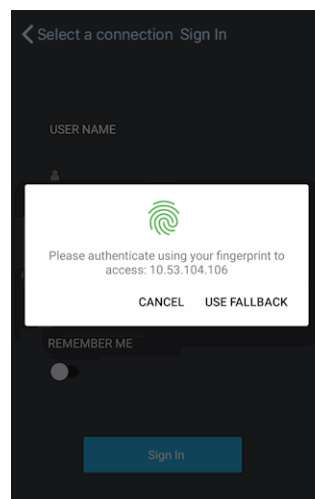


The **Sign In** screen appears.

Note: If you have fingerprint access set up on your mobile device, and you also have the **Remember Me** setting turned on for that device, a fingerprint access message appears and you can sign in with your fingerprint. If you have face recognition access, and the **Remember Me** setting, you can sign in with face recognition.



Sign In
screen

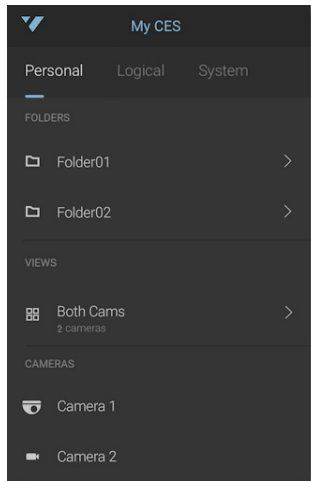


Fingerprint
access screen

- 2 Enter your user name and password and tap **Sign In**. If supported, you can use fingerprint access or face recognition access.

If you do not have fingerprint or face recognition access and you select **Remember Me**, your user name and password are already entered the next time you want to sign in, so you just click **Sign In**.

The available resources from that device appear: folders, views, cameras, and/or recorders.



Depending on your user rights and the device you are accessing, you see different results when you access a recording device.

First access - the first time you access the device, or if you do NOT select **Remember Me**:

- By default the Personal resource list appears.
- If you do not have any resources in the Personal list, or you do not have the user rights to view it, the Logical resource list appears (CES only).
- If you are accessing a CRS/recorder (which does not have a Logical list), and/or you do not have any resources in the Logical or Personal list, and/or you do not have the user rights to view the Logical or Personal list, the System resource list appears.

Repeated access - after set up and initial access of the device, with **Remember Me** selected:

- The device remembers which resource list you last accessed, and opens to that list the next time you connect to the device.

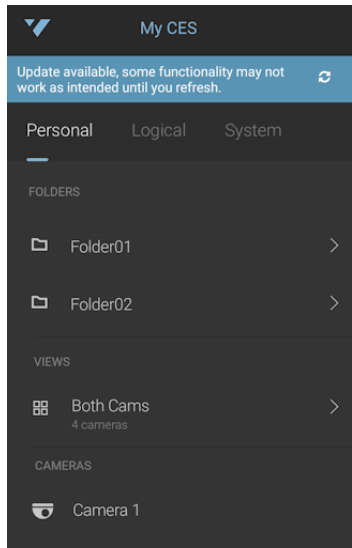
This allows you quick access to the last resources you were working on for that device.

You can switch to view the resources from any available resource list by tapping the title.

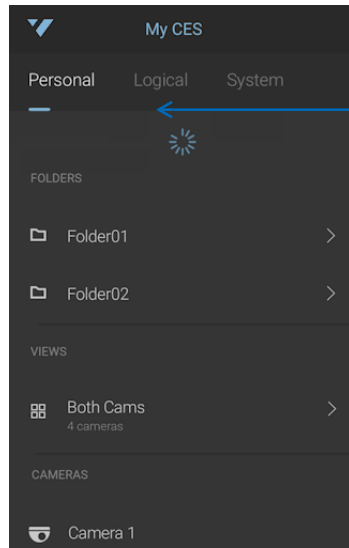
See “Viewing Video” on page 31 for information on accessing the resources.

Refreshing the Resource list

If a change to your resources is made through the Command Client, you are prompted to update by Command Mobile. You can also refresh the view manually by swiping down anywhere on the list of resources (below the line indicating whether Personal, Logical or System resources are displayed), until you see the refresh timer icon.



Refresh prompt message





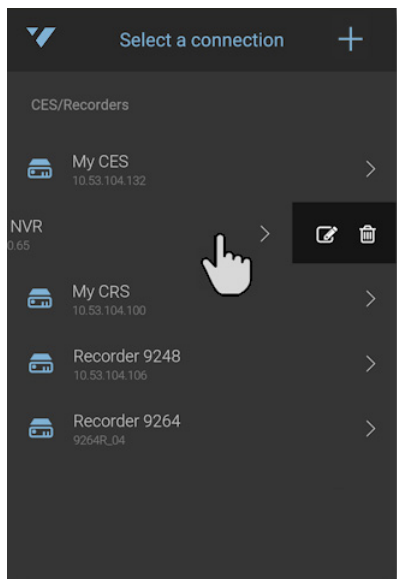
Swipe below this line to refresh the resource list. The refresh timer icon appears.


Editing a CES or Recorder Connection

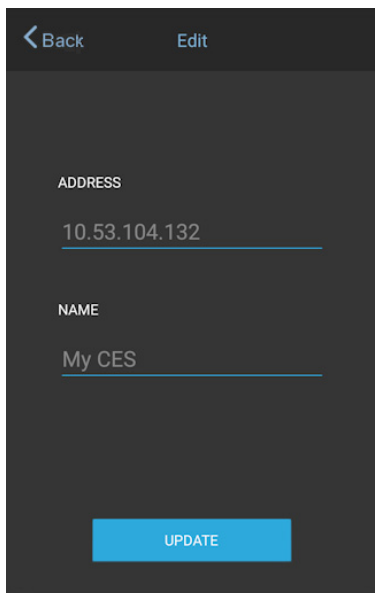
You can change the IP address and/or name of an existing device in the CES/Recorders list.

- 1 Swipe from right to left on the name of the device you want to edit.

The   icon slides into view to the right of the device name.





- 2 To edit the connection information, tap the  icon.
The **Edit** screen appears.

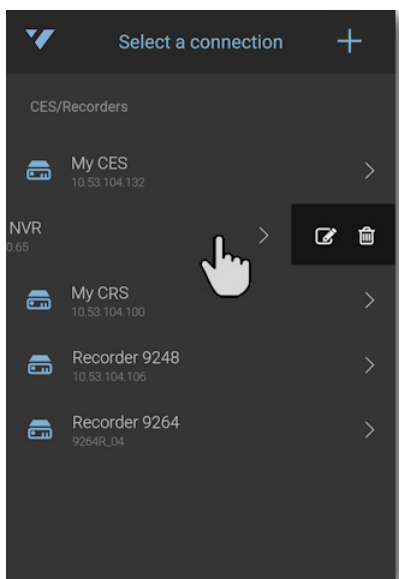



- 3 Change the **Address** and/or the **Name** of the device.
- 4 Tap **Update**.

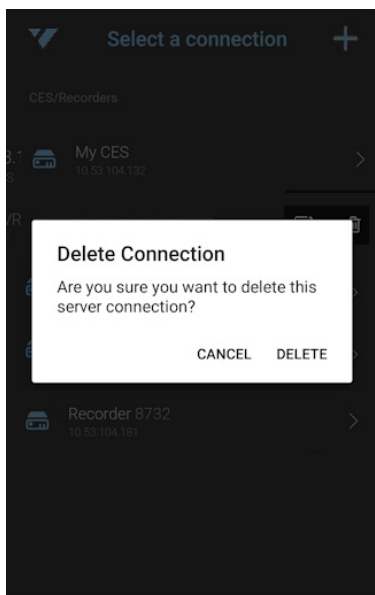
Deleting a CES or Recorder Connection

You can delete a device connection from the CES/Recorders list.

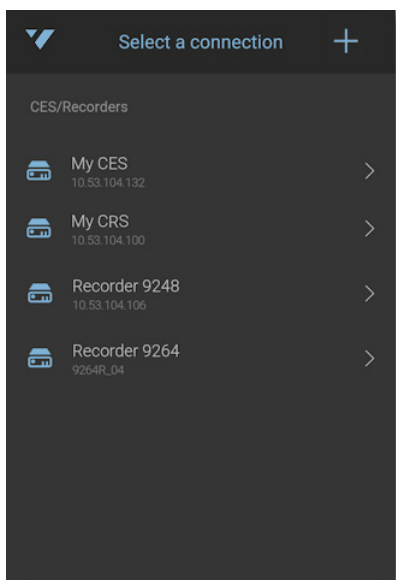
- 1 Swipe from right to left on the name of the device you want to delete.
The   icon slides into view to the right of the device name.



- 2 To delete the device connection from the list, tap the  icon.
A message asks you to confirm the deletion.



- 3 Tap **Delete**.
The **CES/Recorders** list reappears, and does not contain the connection you deleted.

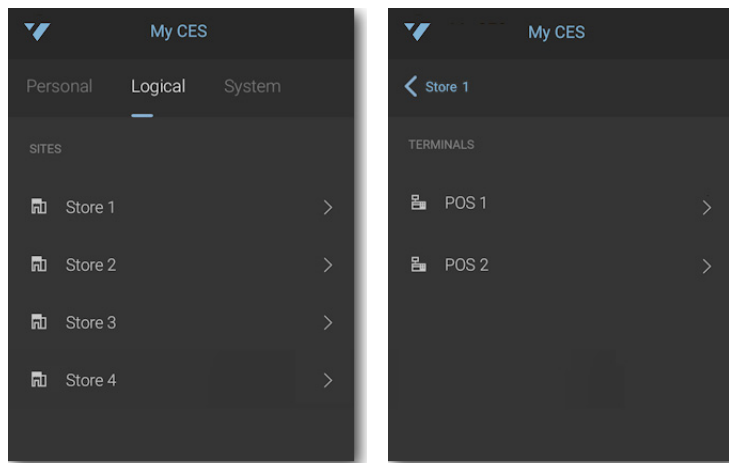


Searchlight Resources

If you are using March Networks Searchlight™, you have access to additional resources: Sites and Terminals. Depending on whether you are using Searchlight for Retail or Banking, your resources are slightly different.

Searchlight for Retail

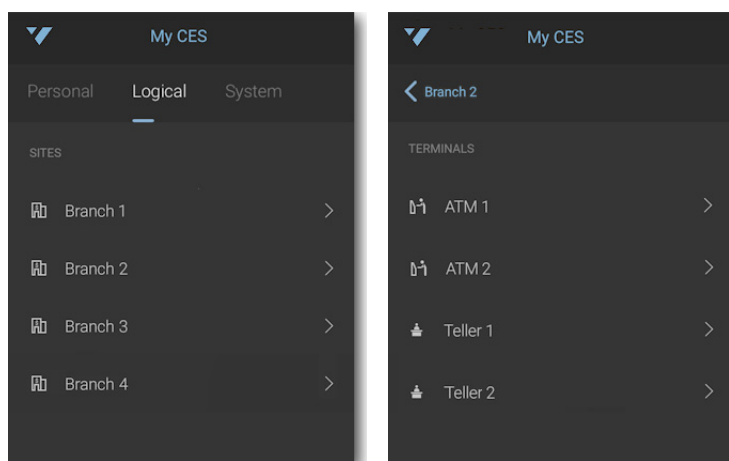
If you are using Searchlight for Retail, your Sites are usually a list of store locations. When you tap on a site, you can access a list of POS (Point of Sales) terminals for each site. Each POS terminal can have one or more cameras associated to it.



For more information, see the *March Networks Searchlight for Retail User Guide*.

Searchlight for Banking

If you are using Searchlight for Banking, your Sites are usually a list of bank branches. When you tap on a site, you can access a list of ATM and Teller terminals for each site. Each terminal can have one or more cameras associated to it.



For more information, see the *March Networks Searchlight for Banking User Guide*.

Chapter 3

Viewing Video

Command Mobile allows you to view live and recorded video. This chapter describes how to access and view video.

It contains the following topics:

- “Viewing Live Video” on page 32
- “Viewing Recorded Video” on page 34
- “Displaying Video Information” on page 36
- “Pinch to Zoom” on page 37
- “Changing Video Quality” on page 38

Viewing Live Video

You can view live video from connected cameras.

Notes:

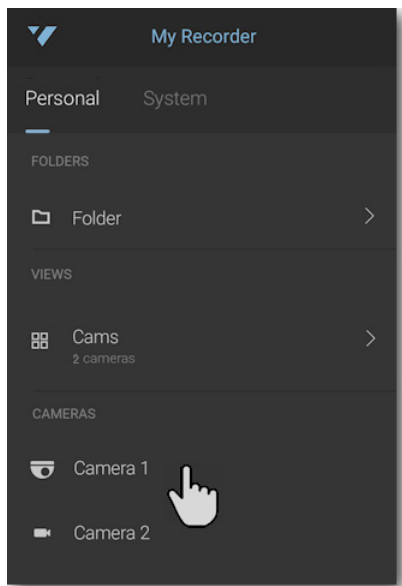
- In Command Mobile, if a camera has a privacy mask (or privacy patch) applied to it, video from that camera displays the mask unless you have the Privacy Unmask user right (see “Privacy Unmask” on page 8). Privacy masks in Command Mobile are always black.
For Oncam cameras on an Android platform, if a privacy mask is configured the video is completely masked with a “Blocked for Privacy” message.
On any camera, if the configured privacy patch covers more than 80% of the image, the video is completely masked with a “Blocked for Privacy” message.
- If you view video from a camera that is connected through NAT traversal, or a view that contains at least one camera connected through NAT traversal, the default video quality is Medium.
You can change the quality of the video after you open it, as described in “Changing Video Quality” on page 38.
For more information on NAT traversal, see the *Command Enterprise and Client User Guide*.

To view live video

- 1 Open Command Mobile and connect to the CES or recorder you want to view video from (see “Getting Started” on page 23).

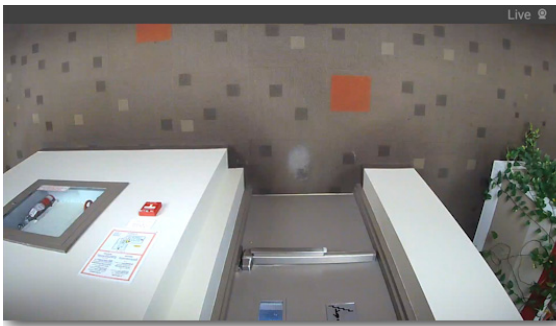
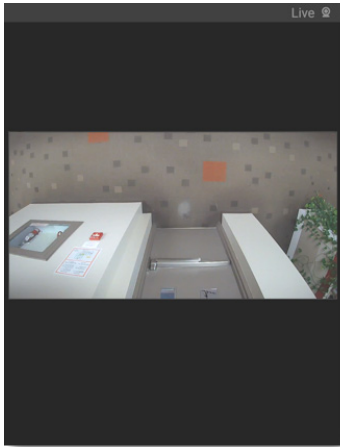
If you connect to a CES, by default the personal resource list is displayed (if available), with your user name at the top. The personal list contains the resources from your Personal tree in Command Client. You can tap the title to change to the Logical list (the resources from your Logical tree in Command Client) or the System list (the resources from the System tree in Command Client).

If you connect to a CRS or single recorder, the Personal or System resource lists are available.



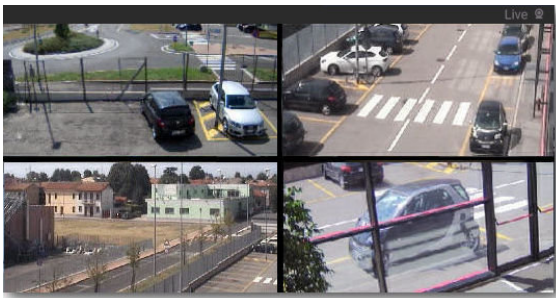
- 2 Tap the camera or camera view you want to display.

The video appears. It changes to portrait or landscape mode as you move your mobile device.



Single camera in Landscape mode

Note: In portrait mode, a maximum of 3 videos display on one screen. In landscape mode, a maximum of 4 videos display on one screen. If you are displaying a view with more cameras, swipe to the next screen to display the additional cameras.




View in Landscape mode

View in Portrait mode

- 3 Tap the video image to display the option icons.

When the view is open you can tap  to see each video as a single camera.

Note: When you open a view with multiple cameras, the videos are all live. To search for recorded video, you must display each video separately.

Tap  to return to the multiple camera view.

Tip: Sometimes the video from a camera cannot be displayed. There are various reasons for this, so Command Mobile displays a message to help you diagnose the situation. For example, if you are connected to a CES which contains recorders that are not supported in Command Mobile, cameras from these recorders could appear in a multi-camera view. In this case, video does not show, but the message *Channel from unsupported recorder* appears.


Viewing Recorded Video

You can set the starting point for viewing recorded (archived) video playback.

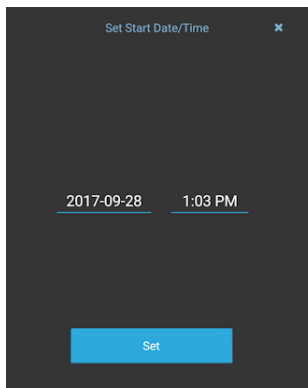
When the recorded video is started, you can use the timeline slider to move back and forth in the recorded video.

Note: In Command Mobile, if a camera has a privacy mask (or privacy patch) applied to it, video from that camera displays the mask unless you have the Privacy Unmask user right (see “Privacy Unmask” on page 8). Privacy masks in Command Mobile are always black. For Oncam cameras on an Android platform, if a privacy mask is configured the video is completely masked with a “Blocked for Privacy” message. On any camera, if the configured privacy patch covers more than 80% of the image, the video is completely masked with a “Blocked for Privacy” message.

To search recorded video

- 1 Open a single camera, or select a single video from a view and tap to display the icons.
- 2 To set a date and time for the starting point of the video, tap .

The **Set Start Date/Time** screen appears.

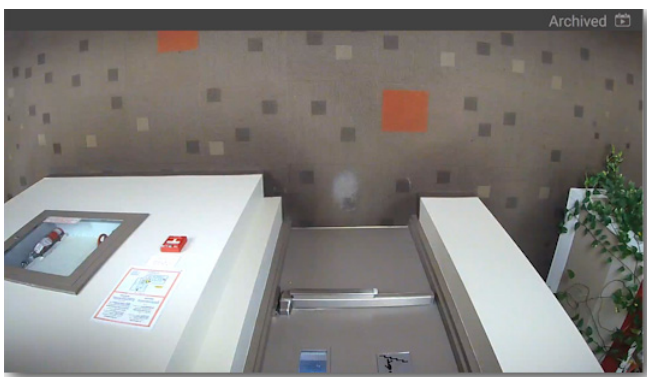


- 3 Tap the date to set the date of the recorded video you want to view. Tap the time to set the start point of the recorded video you want to view. Each displays a new screen that allows you to pick the precise start of your video.

Note: Date and time selection screens are from the device OS (Android or iOS).

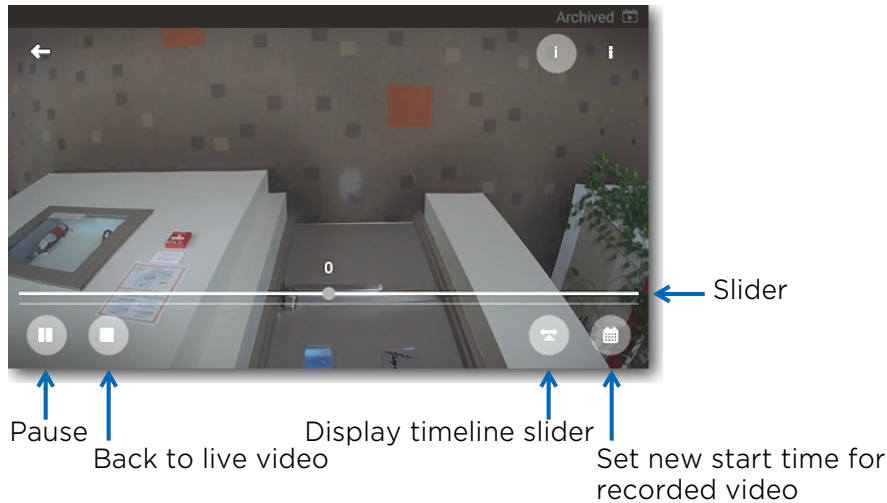
- 4 When you have your desired date and time, tap **Set**.

The recorded video starts to play at the date and time you set. **Archived** is displayed at the top of the screen.



Note: If you are viewing a single camera from a View in archived mode, and you tap or swipe to view the next or previous camera in the View, the video reverts to live mode.

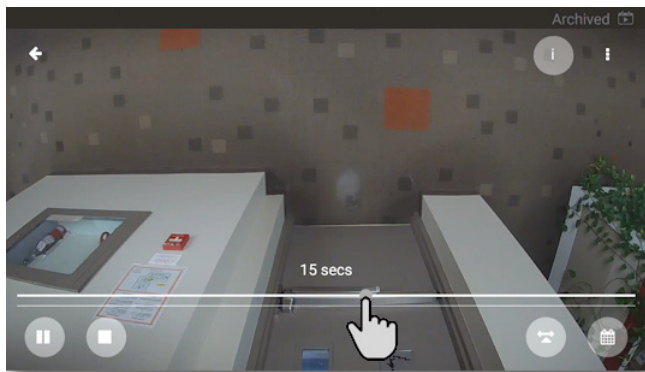
- 5 Tap the screen to view the recorded video option icons.



You can tap to stop and view a single frame of video. You can tap to stop viewing recorded video and return to live video.

- 6 To hide or show the timeline slider, tap .

With the slider showing, you can slide left and right to move the video back and forward in time, up to 10 minutes at a time each way.



This allows you to quickly scan for incidents caught on the video.

Displaying Video Information

Command Mobile allows you to display the following information about the video from each camera you are viewing:

- Camera name
- Frame rate and data rate
- Date and time

Camera name

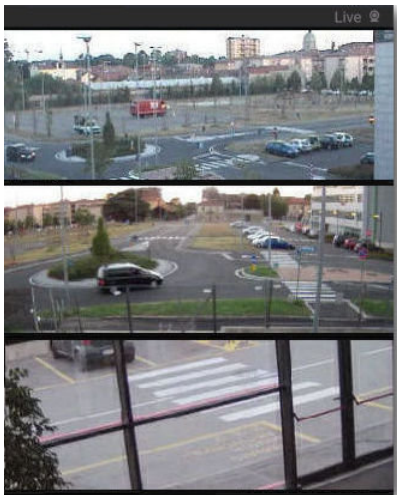



Frame rate & data rate

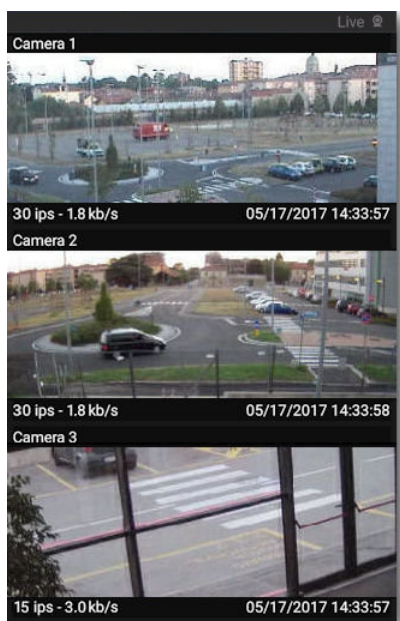
Date and time


To show video information

- 1 From the resource list, tap to open a camera or camera view.
The video appears.



- 2 Tap the screen to view the option icons, then tap . The text is displayed at the top and bottom of the video image.



- 3 Tap  again to hide the information.

Pinch to Zoom

You can zoom in and out on any live or recorded video that appears in a single camera view. You cannot zoom in on a camera in a grid, but when you switch from grid view to single view, pinch to zoom becomes available.

Note: If you are viewing video from a live PTZ camera, see “Using PTZ Cameras” on page 42 for information about zooming with a live PTZ camera.

To zoom in, touch the screen with two fingers and drag your fingers apart. To zoom out, drag your fingers together.

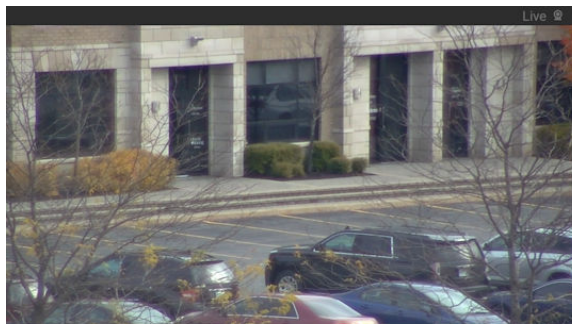
When zoomed in, you can use your fingers to pan around the camera view (up/down, left/right, diagonal) to see the desired portion of the video.

When zoomed in, you can double-tap the screen to return to normal view (no zoom).

No Zoom



Zoomed In



Zoom Level - switching from live to recorded video


Zoom level is preserved when viewing the same camera between archive and live view.

For example, if you zoom into the video image of a camera, then switch between live and archive video, the zoom level remains the same.

If you select a different camera, the zoom returns to normal view (no zoom).


Zoom Level - cameras from a View in single mode

Zoom level is preserved in each camera when viewing cameras from a grid view in single view.

For example, in a view with multiple cameras, switch to single view (tap ).

Use your fingers to change the zoom level on one of the cameras.

You can swipe to any different camera in the view, and when you swipe back to the first camera, it displays the same zoom level.

You can return to multi-view (tap , so that cameras are in normal view with no zoom), then switch back to single view, and the cameras are in the same zoom level.

When you close the view, the zoom levels in single view are reset and appear without zoom the next time you open the view.

Zoom Level - rotation

Zoom level returns to default (no zoom) when you rotate a camera from landscape to portrait view or from portrait to landscape view. Pinch to re-apply the desired zoom level.

Zoom Level - privacy masks

When viewing a camera with a privacy mask applied, slightly different zoom rules apply. When viewing a camera with a privacy mask, the zoom level returns to default (no zoom) when:

- Quality is changed (high, medium, or low)
- Switching from live video to recorded video (or recorded to live)
- Changing the date or time when viewing recorded video
- Switching from multi-view to single view and from single view to multi-view

Changing Video Quality

Depending on your needs, you can adjust the quality of the live and recorded video you are viewing from the default setting to High, Medium, or Low quality video. This allows you to adjust the video quality to achieve the best quality and frame rate depending upon the available bandwidth.

These settings are applicable whether you are in WiFi or Cellular mode.

The ability to change the video quality is useful in a scenario where recorded video is reviewed remotely. An investigator can use the low resolution video quality to search recorded video for an incident of interest. It is faster to retrieve the video when in the low setting. When the investigator finds the incident, they can use the high resolution video, which takes longer to retrieve, but displays better image quality.

The default settings for video quality are:

- Phone — High for single camera view and Medium for multi-camera views
- Tablet — High for all views
- Phone or Tablet using NAT traversal — Medium for any view with NAT traversal connected camera

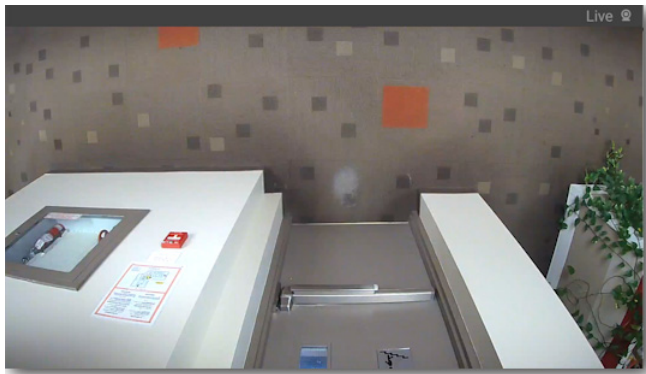
Settings for Video Quality:


	Setting	Resolution	Stream (IP) or Frame Rate (analog)
IP Cameras	High	Per stream	Encoder 1 as configured on camera configuration page
	Medium	Per stream	Encoder 2 if configured or else Encoder 1 as configured on camera configuration page
	Low	Per stream	R5 recorder: Thumbnails only. CRS: Key frames from the medium quality video stream.
Analog Cameras	High	Full	Up to 30fps (NTSC)/ 25 fps (PAL) based on customer configuration
	Medium	Full	Less than 30fps (NTSC)/ 25 fps (PAL) based on customer configuration
	Low	Full	Thumbnails only

To change video quality

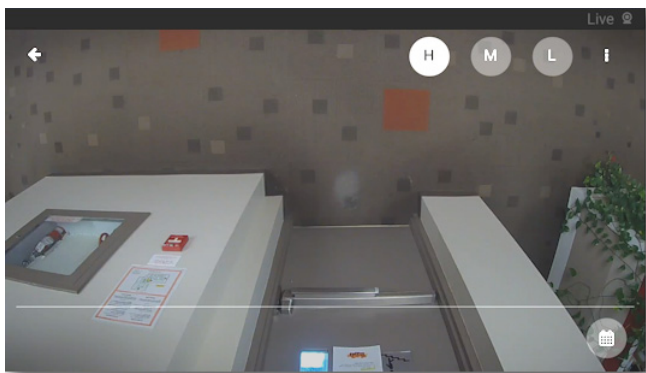
- 1 Tap to open a camera or camera view.

The video appears.



- 2 Tap the screen to view the option icons, then tap .
- 3 The video quality icons appear.

The icon in the lighter color is the current selection.



High video quality
is currently selected

- 4 Tap one of the non-selected icons to change the video quality.

If you make a change to the video quality in a single camera, this change appears in all the single cameras that you open during the session. For example, if you change the quality to medium when you open Camera A, when you open Camera B it is at medium quality as well.

If you make a change to the video quality of a multi-camera view, this change appears in all the multi-camera views that you open during the session. For example, if you change the quality to low when you open View A, when you open View B it is at low quality as well.

Changes to the video quality remain for the current session of the CES or recorder you are logged into. When you sign out of the CES or recorder, the settings return to their defaults.

Chapter 4

Using PTZ Cameras and Dewarping

Command Mobile allows you to use PTZ cameras with preset views and to dewarp applicable panoramic cameras that support 360° views.

This chapter contains the following topics:

- “Using PTZ Cameras” on page 42
- “PTZ Preset Views” on page 43
- “Dewarping Oncam 360° Cameras” on page 45

Using PTZ Cameras

You can use Command Mobile to control cameras that physically pan, tilt, and zoom (PTZ cameras). This allows you to adjust the field of view of a PTZ camera or to move to a preset view of a particular location.

If pre-configured, you can select preset views for a PTZ camera, so that you can instantly move to a desired view.

Required User Rights

When using a PTZ camera connected to a CES, you require the **PTZ Control** general user right to control a PTZ camera. For more information, see “Setting Up CES” on page 7 or the *Command Enterprise and Client User Guide*.

When using a PTZ camera connected to a CRS, you require the **PTZ** user right to control a PTZ camera. For more information, see “Setting Up CRS” on page 11 or the *Command Recording Server Configuration Guide*.

To control a PTZ camera

- 1 Connect to the camera you want to view, as described in “Viewing Live Video” on page 32. The camera must be a PTZ camera.

Note: You can only control a PTZ camera when viewing live video. If you are viewing archive video from a PTZ camera, you can still pinch to zoom in on the recorded video.

- 2 When the video from the PTZ camera appears, there is an **Enable PTZ** icon in the center of the image.

Note: The **Enable PTZ** icon disappears if you do not use it. Tap the image to view it again.



- 3 Tap the **Enable PTZ** icon to take control of the camera.
Note: If another user is already controlling the camera, you may get a message informing you that control of the camera is unavailable. You can try again at a later time.
- 4 To move the camera, gently swipe your finger across the video image on the screen. Swiping to the left pans the camera view to the right, swiping to the right pans the camera view to the left. Swiping up (from bottom of image to top), tilts the camera view down, and vice versa. You can use your finger gestures to pan the camera in any direction the physical camera can move.
- 5 To zoom the camera image, use the pinch-to-zoom gesture.

- When you are finished, you can tap the image to show the **Disable PTZ** icon. This allows other users uncontested access to control the camera.



Note: If you do not tap the Disable PTZ icon, PTZ control is automatically released after 20 seconds of inactivity.

PTZ Preset Views

Preset views are a combination of the current camera's position, zoom, and focus. These settings are saved so that you can instantly recall them.

Preset views are set up in the Administrator Console (for an R5 recorder) or in the Command Config (for a CRS).

The number of presets available and the configuration of the presets is determined by what is set up in the Administrator Console or Command Config. For example, if 25 presets are configured for a PTZ camera on an R5 recorder, Command Mobile shows all 25 presets in a list for users to access.

Note: You require the PTZ user right to access PTZ presets (see "Required User Rights" on page 42).

R5 Recorder Setup

For R5 recorders, preset views are configured using the Administrator Console software. For more information on setting up preset views for R5 recorders, see the *Administrator Console User Manual*.

CRS Setup

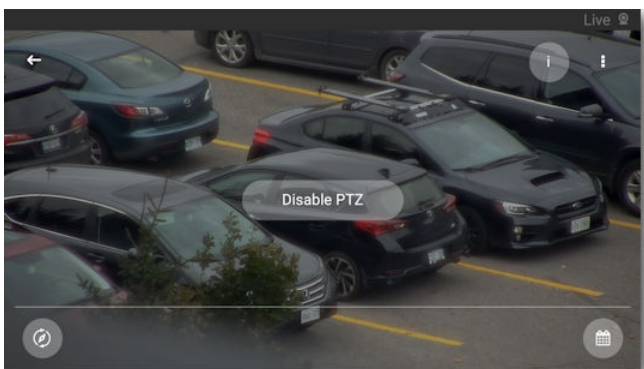
For the CRS, preset views are set up using the Command Config software. A preset view must be marked as a favorite to launch it using Command Mobile. For more information on setting up preset views as favorites in Command Config, see the *Command Recording Server Configuration Guide*.

To access presets on a PTZ camera

- Connect to the PTZ camera and tap the **Enable PTZ** icon, as described in "Using PTZ Cameras" on page 42.

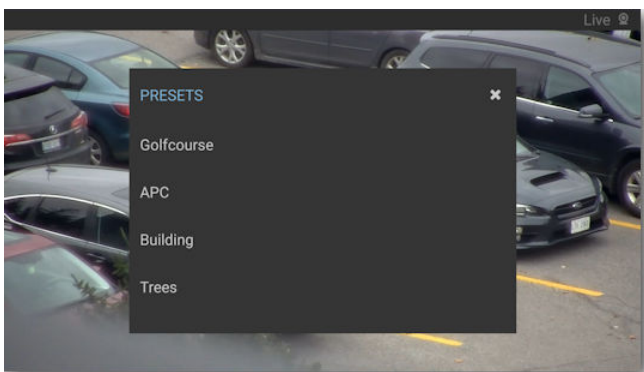
- 2 When you have successfully enabled the PTZ control, tap the image again to display the PTZ controls.

At the bottom left of the screen is the **PTZ Presets** icon.

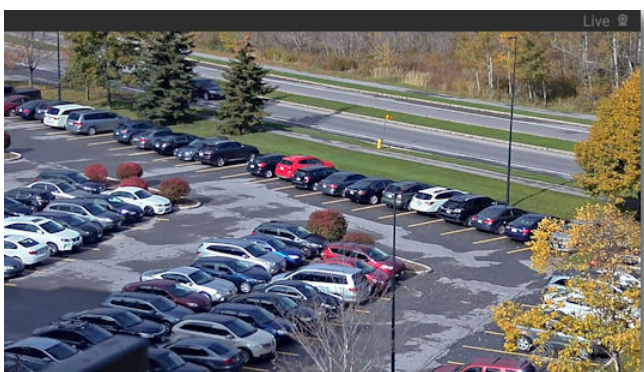


- 3 Tap the **PTZ Presets** icon to display the list of available presets for that camera.
Note: If no presets are configured for the camera, a message is displayed to inform you.

If there are presets configured for the camera, a list of available presets is displayed.



- 4 Tap the name of the desired preset.
The camera moves to show you the pre-configured view.



Dewarping Oncam 360° Cameras

Certain panoramic cameras with special lenses support 360° views. When you view the images from these cameras, they have a distorted appearance (often referred to as a fisheye view). To view the images without this distortion, you must use lens dewarping.

This feature is currently supported for Oncam 360° cameras.

This feature allows you to dewarp the image and navigate around the entire 360° view using pinch to zoom and swiping with your fingers. You can dewarp live or recorded (archive) video.

You cannot dewarp a camera in a grid, but when you switch from grid view to single view, it becomes available.

When the camera view is closed, the video channel reverts to the default 360° view.

Note: The view provided by the camera differs depending on where the camera is mounted. A camera mounted on the ceiling (or floor) provides a 360° view, whereas a camera mounted on the wall provides a 180° view.

To dewarp an Oncam 360° camera

- 1 Connect to the Oncam 360° camera, as described in “Viewing Live Video” on page 32 or “Viewing Recorded Video” on page 34.
- 2 When you have successfully connected, the video image appears. The edges of the image are rounded, and the image is warped.



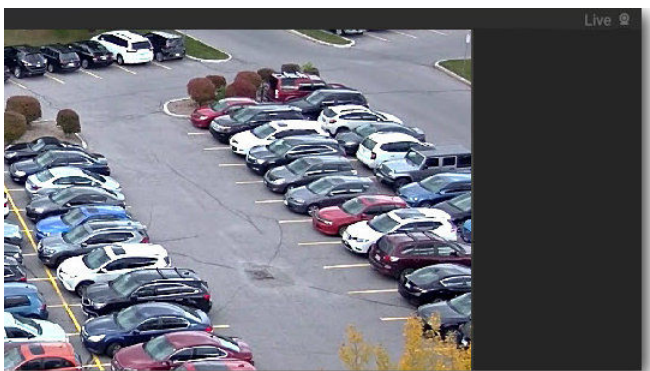
- 3 To view the video without the warped effect, use your fingers to pinch and zoom in on the part of the video that you are interested in. As you zoom into the image, the area in focus is dewarped.

When you zoom into the center of the image, it fills the screen in a dewarped view.



Center of image, dewarped

- 4 When you pan around the image, you can view the sides of the video in dewarped view as well (part of the screen shows as black when you are dewarping the edge of the image).



Side of image, dewarped

- 5 Continue using your fingers to swipe around the image to see all the details in dewarped view.

Company Overview

March Networks® helps organizations transform video into business intelligence through the integration of surveillance video, analytics, and data from business systems and IoT devices. Companies worldwide use our software solutions to improve efficiency and compliance, reduce losses and risk, enhance customer service and compete more successfully. With deep roots in video security and networking, March Networks is also recognized as the leader in scalable, enterprise-class video management and hosted services. We are proud to work with many of the world's largest financial institutions, retail brands, cannabis operators and transit authorities, and deliver our software and systems through an extensive distribution and partner network in more than 70 countries. Founded in 2000, March Networks is headquartered in Ottawa, Ontario, Canada. For more information, please visit www.marchnetworks.com.

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