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Milestone Systems

XProtect® Mobile client 2020 R2

User manual



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Overview

Get started

This manual is for users who use XProtect Mobile on mobile devices running Android or iOS.

Server and client components of XProtect Mobile (explained)

The free XProtect Mobile app lets you:

- View live video and video recordings
- Play incoming and outgoing audio in live video and video recordings
 - Use the push-to-talk (PTT) feature while you are watching live video from one camera
 - Play back incoming and outgoing audio in playback mode
- Use video push to stream live video with audio from the camera on your mobile device to your XProtect surveillance system
- Create investigations
- Activate actions that trigger events in your video surveillance system
- View videos for alarms that are triggered by various events

XProtect Mobile has five components:

- XProtect Mobile client is a mobile surveillance app that you can install and use on your Android or iOS device. You can use as many installations of XProtect Mobile client as you need. For more information, see *Installing XProtect Mobile Server components (administrators)* on page 12
- XProtect Web Client lets you view live video in your web browser and lets you download recordings
- The XProtect Mobile server is responsible for giving XProtect Mobile client and XProtect Web Client users access to the system
- XProtect Mobile plug-in
- Mobile Server Manager

In addition to acting as a system gateway for XProtect Mobile client and XProtect Web Client, the mobile server can transcode video as the original camera video stream in many cases is too large to fit the bandwidth available for the client users.

XProtect Mobile supports direct streaming in live mode (for XProtect Expert and XProtect Corporate only).

For more information, see *Installing XProtect Mobile Server components (administrators)* on page 12 or the *Administrator manual* of your surveillance system. Download the manual from the Milestone website (<https://www.milestonesys.com/support/help-yourself/manuals-and-guides/>).

XProtect Access and XProtect Mobile (explained)



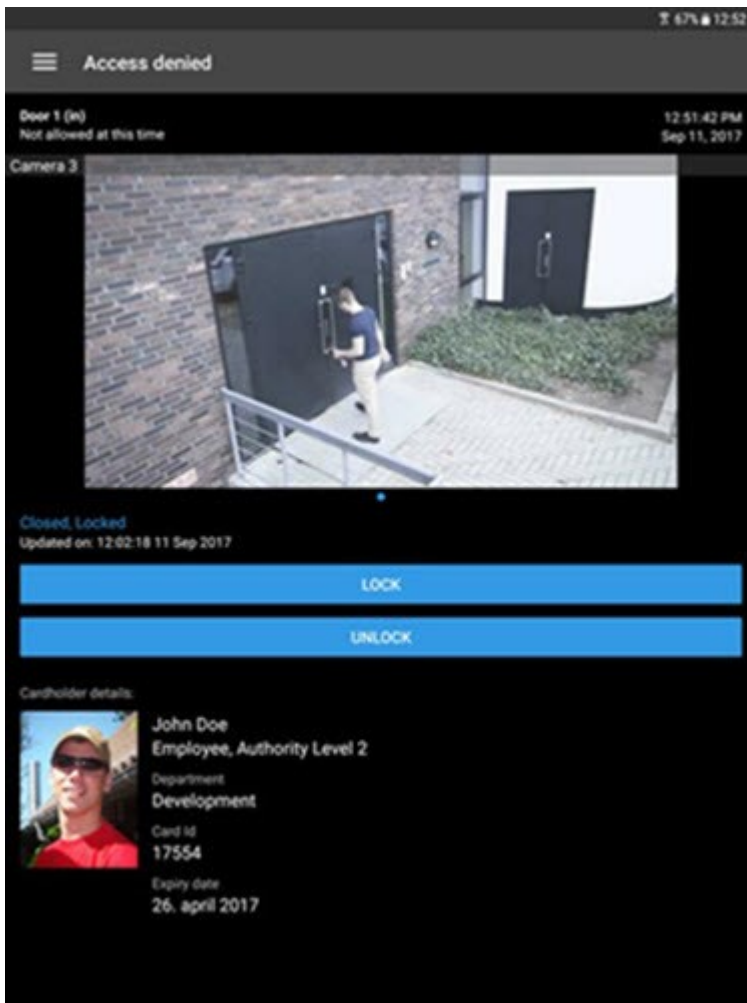
The use of XProtect Access requires that you have purchased a base license that allows you to access this feature within your XProtect system. You also need an access control door license for each door you want to control.

With XProtect Access and the XProtect Mobile app installed on your smartphone or tablet, you get:

- Live monitoring of events at access points
- Operator aided passage for access requests
- Investigation of events at access points
- Centralized overview and control of door states
- Cardholder information

Access requests

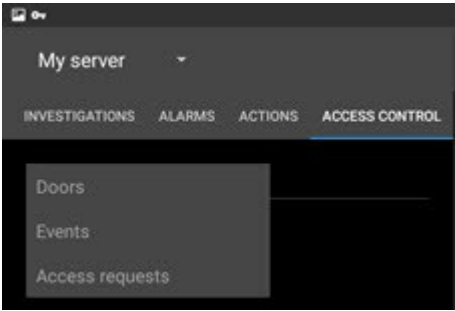
When you get an access request on your device, it may look like this:



Access requests let you:

- View the state of the door, for example **Closed, Locked**
- View live video
- View the cardholder details, for example picture and authority level
- Lock doors and grant access to cardholders by unlocking doors
- Listen to incoming audio in live mode
- Use the push-to-talk (PTT) feature while you are watching live video from one camera

Access requests are listed under **Access requests** for two minutes. After that, they appear only in the **Events** list where you can watch the video recorded when the cardholder tried to gain access.



Requirements and considerations

Before you start (administrators)

To use the XProtect Mobile app for access control purposes, you need:

- A Milestone Care Plus service agreement
- Licenses required for using XProtect Access. This includes a base license and a door license for each door
- An access control system that is configured and integrated with your VMS system
- If you are using one of the products listed below, you must configure the user profiles to enable access control and access requests:
 - XProtect Corporate
 - XProtect Expert
 - XProtect Professional+
 - XProtect Express+
 - XProtect Essential+ (see Configure user profiles on server (administrators) on page 15)
- If you are using one of the products listed below, you must configure the user profiles to enable access control—access requests are enabled by default
 - XProtect Professional
 - XProtect Express (see Configure user profiles on server (administrators) on page 15)
- You must download the XProtect Mobile app from App StoreSM or Google Play and install it on your smartphone or tablet
- In the XProtect Mobile app:
 1. You must specify the server settings of the mobile server (see Connect your mobile device to a mobile server on page 16).
 2. In the server settings, you must enable access request notifications (see Enable access request notifications in XProtect Mobile on page 15).



If you have enabled the **Operator login required** option, the access control system will not be available in XProtect Mobile client. For more information, see the administrator manual of your surveillance system.

Requirements for listening to audio

To listen to incoming audio from the cameras in your VMS system through a mobile device, you must have:

- A microphone attached to a camera



When a camera in your surveillance system has a microphone attached, you can play audio without any additional settings needed. The audio icon on the camera toolbar shows whether the audio feature is available.

- Sufficient user rights



Access to the incoming audio feature may be restricted depending on your user rights. Ask your system administrator if in doubt.

- HTTP or HTTPS with CA certificate connection

If you want to use HTTPS connection, a digital certificate from a certificate authority (CA) must be installed on your XProtect Mobile server. You cannot listen to audio through your mobile device if you use a self-signed certificate.



CAs issue digital certificates that verify the identities of users and websites that exchange data on the internet. Examples of CAs are companies like Comodo, Symantec, and GoDaddy. To learn how to edit a certificate on the XProtect Mobile server, see the administrator manual of your surveillance system.

Requirements for using push-to-talk

To use the push-to-talk (PTT) feature on your mobile device in your VMS system, you must have:

- Cameras that have speakers attached
- Sufficient user rights



Access to the push-to-talk feature may be restricted depending on your user rights. Ask your system administrator if in doubt.

- Allowed the XProtect Mobile app to use the microphone of your mobile device
- HTTP or HTTPS with CA certificate connection

If you want to use HTTPS connection, a digital certificate from a certificate authority (CA) must be installed on your XProtect Mobile server. You cannot use the push-to-talk feature through your mobile device if you use a self-signed certificate.

Requirements for using video push

To use video push and to stream video with audio, you must allow the XProtect Mobile app to access the camera and microphone of your mobile device.

Requirements for direct streaming

XProtect Mobile supports direct streaming in live mode (for XProtect Expert and XProtect Corporate only).

You can use direct streaming to monitor more than 100 concurrent live video streams at Full HD 30 FPS. To do this, you must:

- Use cameras that support the H.264 codec or the H.265 codec
- Allow direct streaming on your mobile device (see Buttons and settings overview on page 22)

For more information, see the administrator manual of your surveillance system.

Installation

Installing XProtect Mobile Server components (administrators)

This information is primarily for system administrators. For more information, see the administrator manual of your surveillance system. Download the manual from the Milestone website (<https://www.milestonesys.com/support/help-yourself/manuals-and-guides/>).

You can install the XProtect Mobile Server component when you install version 2013 and all later versions of XProtect products:

- XProtect Corporate
- XProtect Expert
- XProtect Professional+
- XProtect Express+
- XProtect Essential+
- XProtect Professional
- XProtect Express
- Milestone Husky
- Milestone Arcus

To get the most out of XProtect Mobile, make sure you're using the latest version of your VMS product. Information about the products is available on the Milestone website (<https://www.milestonesys.com/solutions/platform/product-index/>).

You can also download XProtect Mobile Server for free from the download page on the Milestone website (<https://www.milestonesys.com/downloads/>).

Where to install the XProtect Mobile Server component

Install the XProtect Mobile Server component on the computer that runs your surveillance system, or on a dedicated computer.

If you plan to have more than 10 cameras in your system showing video simultaneously, Milestone recommends that you install XProtect Mobile Server on a dedicated computer.

You can install XProtect Mobile server in various ways:

XProtect product	Installation method	
	Installation on the same computer as the VMS	Installation on a dedicated computer
<ul style="list-style-type: none"> • XProtect Professional • XProtect Express 	Complete a Typical installation of the XProtect Professional VMS software. This installation includes the XProtect Mobile Server.	Run the separate XProtect Mobile Server installer.
<ul style="list-style-type: none"> • XProtect Corporate • XProtect Expert • XProtect Professional+ • XProtect Express+ • XProtect Essential+ 	Complete a Single Computer installation of the XProtect VMS software. This installation includes the XProtect Mobile Server.	Run the separate XProtect Mobile Server installer.

Installing the XProtect Mobile plug-in component

You should install the XProtect Mobile plug-in on all computers that run the Management Client or Management Application:

1. Run the XProtect Mobile installer.
2. Choose a **Custom** installation and select the plug-in (32-bit or 64-bit). It is safe to install both.
3. Restart Management Client or Management Application.

Operating systems

XProtect Mobile supports the following operating systems for mobile devices:

Operating system	Devices
Google Android 5.0 and later	Smartphones and tablets with Android installed
iOS 11 and later	iPhone, iPad, and iPod Touch

Install XProtect Mobile on a mobile device

On your mobile device, download the free XProtect Mobile application from Google Play or App StoreSM.

Finding the app in the stores is easy. Just search for "XProtect Mobile" and then install it. Afterwards, a Milestone logo icon is available on your device. To start XProtect Mobile, tap the icon.



By default, a Milestone demo server installs. Use the server to test the app. The server is just for testing, so there are some things you can't do. For example, you can't use pan-tilt-zoom controls.

You can't delete or edit the demo server, but you can hide it from the server list. To hide the server, go to **Settings**, under **General**, enable the **Hide demo server** setting.

To view videos from your cameras, connect the app to one or more mobile servers (see [Connect your mobile device to a mobile server](#) on page 16).

Configuration

Configure user profiles on server (administrators)

You must enable certain user rights to ensure that users of XProtect Mobile can use access control and can view and respond to access requests on their smartphones or tablets. Depending on your VMS system, the setup differs slightly.

In Management Client:

1. Expand **Security** and select **Roles**.
2. Select the role that you want to modify.
3. In **Role Settings**, click the **Access Control** tab.
4. If not already selected, select these check boxes:
 - **Use access control** - required to view access control features in XProtect Mobile
 - **Receive notifications** - required to receive access request as push notifications
5. For each required role, repeat the steps above.
6. Save the changes.

In Management Application:

1. Expand **Advanced Configuration**.
2. Expand **Users**.
3. Right-click **Users** and select **Properties**. A window appears.
4. On the **Access Control Management** tab, make sure the **Use access control** check box is selected.
5. Click **OK**.


Enable access request notifications in XProtect Mobile



To receive notifications from your VMS, you have to purchase a Milestone Care Plus license. Access request notifications are enabled by default.

In addition to the security settings on the server, you must also enable access request notifications in the server settings in XProtect Mobile. You must do this for all servers that the app is connected to.

1. Open your XProtect Mobile app, and then do the following:

- Android - In the list of servers, go to the server that you want to connect to, tap , and then tap **Edit**
- iOS - In the list of servers, in the upper right-hand corner, tap **Edit**, and then tap the server that you want to connect to

2. Under **Notifications**, enable the **Receive notifications** option.

3. Tap **Notification settings** and enable **Access requests**.

4. Tap **Done**.

If you disable **Access requests**, you will not be notified about any access requests and the list of access requests will disappear from the XProtect Mobile app.

Select a language for the app

By default, the XProtect Mobile app uses the language of your device. For example, if your device uses French, XProtect Mobile client displays in French.

To use a different language, change the language of your device. Then, restart the XProtect Mobile app to apply the change.



To use XProtect Mobile client in a specific language, your device must support that language.




Connect your mobile device to a mobile server

You can connect devices that are running Google Android or Apple iOS.

Requirements:

- Get network and user details from your system administrator
- You have installed and opened the app
- If you want to use HTTPS connection, a digital certificate from a certificate authority (CA) must be installed on your XProtect Mobile server. You cannot connect to the mobile server through your XProtect Mobile app if you use a self-signed certificate. If in doubt, ask your system administrator

Connect to a server that you have not used before

1. Tap **Add server** to scan the local network for mobile servers.
2. You can choose to add the server manually by tapping **Add server manually**.
 - Enter a name for the server, its IP address, and user login credentials, and then tap  to save. The server name shows in the list of servers on your device, and it can be anything you want. The user must be set up in the surveillance system
3. Optionally, you can also do the following:
 - By default, the connection uses HTTP. To use HTTPS, select the **Secure connection** check box
 - To always connect to this mobile server when you start XProtect Mobile, set this server as your default server
 - Android - Tap  to set the server as default. The server that is currently selected as default is indicated by a  icon
 - iOS - On the server settings screen, enable the **Default server** setting
 - To be notified when alarms trigger or when there is a problem with a device, select the **Receive notifications** check box (see [Enable or disable notifications](#) on page 20)

Connect to a server that you have used before

1. Tap **Add server** to scan the local network for mobile servers.
2. The **Already Added Servers** group lists the servers that you have connected to before. Tap one or more servers, and then tap **Save**.
3. Enter your login credentials for XProtect Mobile Server, and then tap **Connect**.



To avoid having to enter your credentials the next time you connect, select the **Save credentials** check box.

Connect by entering the unique identifier for the server



This connection method uses the Address book service and requires a Milestone Care Plus subscription package.

Ask your system administrator for the unique identifier for the server.

1. Tap **+** or **Add server** to scan the local network for mobile servers, and then tap **Add server with ID**.
2. Enter the identifier, and then tap **Save**.
3. Enter your login credentials for XProtect Mobile Server, and then tap **Connect**.



To avoid having to enter your credentials the next time you connect, on the server settings screen, enable the **Save credentials** setting.

Connect from an email



This connection method uses the Address book service and requires a Milestone Care Plus subscription package.

Your system administrator can send you an email that contains a unique identifier for the server. Use the identifier to connect your mobile device to a mobile server.

1. On your mobile device, find the email from your system administrator.
2. If XProtect Mobile is not installed, tap **Download XProtect Mobile** to go to the store where you can download it.
3. When XProtect Mobile is installed on the device, tap **Add your server to XProtect Mobile**.
4. Tap the mobile server to connect to it.
5. Enter your login credentials for the mobile server, and then tap **Connect**.

Connection settings for a mobile server

When you add a mobile server to your XProtect Mobile app you must configure the following settings:


Setting	Description
Name	The name of the server. The name displays in the list of servers on your device and can be anything you want.
Address	The IP address of the computer where XProtect Mobile Server is running. If you don't know the IP address, you can insert the host name of the computer.

Setting	Description
Port	<p>The port number that XProtect Mobile client uses to communicate with the server. The default port is 8081. For secure connections, the default port is 8082.</p> <p>If you edit the port number, you must also edit the corresponding port number on the server side. Otherwise, the XProtect Mobile app and server cannot communicate.</p>
Secure connection	Indicates whether the mobile server that you connect to uses an HTTPS connection. If in doubt, ask your system administrator.
User name	Your user name.
Password	Your password. The user name and password can be based on either XProtect basic users, which are set up in Management Client or Management Application, or domain users.
Save credentials	Indicate whether you want XProtect Mobile to remember your user name and password for the next time you open the app.
Default server	Indicate whether to log in to this server when you open XProtect Mobile.
Receive notifications	Indicate whether you want to receive notifications.
Notification settings	<p>Indicate the type of notifications that you want to receive:</p> <ul style="list-style-type: none"> • All alarms - You will be notified when any alarm is triggered, regardless of the alarm's owner or source • My alarms - You will be notified when an alarm that you own is triggered, or when someone assigns an alarm to you • Disable Alarms - You will not be notified when events trigger alarms. However, you will be able to see those alarm events listed under Alarms

View and edit connections to mobile servers

You can view and change settings for your connections to mobile servers if you, for example, want to change to a secure connection or select another server as the default server.

1. On the **Servers** screen:

- **Android** - In the list of servers, tap  for the relevant server, and then tap **Edit**
- **iOS** - Tap **Edit**, then **Server connections**, and then tap the relevant server

2. View or edit the settings:

- **Automatic connection** - Enables the Smart Connect feature. This allows you to connect to the mobile server even if its address has changed. Your system administrator needs to set it up on the server
- **Secure connection** - Use HTTPS when you connect. By default, the connection uses HTTP



If you want to use HTTPS connection, a digital certificate from a certificate authority (CA) must be installed on your XProtect Mobile server. You cannot connect to the mobile server through your XProtect Mobile app if you use a self-signed certificate. If in doubt, ask your system administrator

- **User details** - The login credentials
- **Save credentials** - Remember the login credentials
- **Default server** - Always connect to this mobile server when you start XProtect Mobile

3. To add addresses manually, tap **Server connections**, then **Add address**, and enter the IP address and port number.


Enable or disable notifications

If you have configured events and alarms in your surveillance system, XProtect Mobile can send you a notification when events trigger alarms, or when something goes wrong with a device or server. If you have the app open, XProtect Mobile displays the notification in the app.

Enable or disable notifications

By default, notifications are enabled when you add a server. These notifications are delivered when you have the XProtect Mobile app open.

1. Open XProtect Mobile, and then do the following:

- Android - In the list of servers, go to the server that you want to connect to, tap , tap **Edit**, and then under **Notifications**, enable or disable **Receive notifications**
- iOS - In the list of servers, in the upper right-hand corner, tap **Edit**. Tap the server that you want to connect to, and then under **Notifications**, enable or disable **Receive notifications**



If you disable **Receive notifications**, you will receive server status notifications only.

2. To specify the alarms that you will be notified about, tap **Notifications settings**, and then do one of the following:

- Enable **Alarms**:
 - Select **All alarms** - You will be notified when any alarm is triggered, regardless of the alarm's owner or source
 - Select **My alarms** - You will be notified when an alarm that you own is triggered, or when someone assigns an alarm to you
- Disable **Alarms** - You will not be notified when events trigger alarms. However, you will be able to see those alarm events listed under **Alarms**

3. Tap **Done**.

Enable push notifications




Push notifications are available only if you have purchased a Milestone Care Plus license.

If you want XProtect Mobile to notify you even when you don't have the app open, enable push notifications. Push notifications are sent to your mobile device. Settings for notifications on your mobile device determine how you are notified. For example, it can display a banner or play a distinctive sound.

1. Open XProtect Mobile and follow the steps above to enable notifications.



2. To enable push notifications:

- Android - On the **Servers** page, tap , then under **General**, enable the **Push notifications** setting
- iOS - Go to the settings of your device. Tap **XProtect Mobile**, then tap **Notifications**. Enable the **Allow Notifications** setting

Buttons and settings overview

This topic lists and describes buttons and settings in the XProtect Mobile app. If you see something in the app that you're not sure how to use, you can look it up here.

After you start the app, the **Servers** screen contains the following settings:


Name	Description
Add server	Scan the local network for available mobile servers.
Add server with ID	Add a server using a unique server identifier. This connection method uses the Address book service and requires a Milestone Care Plus subscription package.
Add server manually	Enter a name for the server, its IP address, and user login credentials.
 (Android) More (iOS)	<ul style="list-style-type: none"> • Edit - Edit settings for the server • Delete - Delete the server from the list • Connect - Connect to the server
 (Android) Settings (iOS)	<p>View or change:</p> <ul style="list-style-type: none"> • General settings: <ul style="list-style-type: none"> • Stay awake - Enable to keep the screen awake while streaming video • Hide demo server - Enable to hide the demo server from the server list • Provide anonymous usage data - Enable to help us deliver excellent services to you • Push notifications - Enable to receive push notifications










Name	Description
	<ul style="list-style-type: none"> • Video quality settings: <ul style="list-style-type: none"> • Frames per second - Lower FPS will reduce the bandwidth usage • Optimize bandwidth or image quality - Enable to reduce bandwidth usage. Disable to increase image quality • Use lower video resolution - Enable to allow for higher FPS rates • Allow direct streaming on device - Allow to improve the video quality. Direct streaming is only available if enabled on the server • Controls settings: <ul style="list-style-type: none"> • Autohide video controls - Hide the video controls after a period without activity • Default PTZ controls - Select the preferred default setting for the PTZ control <p>Find more information about using the XProtect Mobile app by tapping the Help link.</p>

After you log in to a server, the top bar in Android and the bottom tabs in iOS can contain the following options:
















The options are available only if you have been given permission to view them, which happens in Management Client or Management Application.














Name	Description
Views (Android)  (iOS)	Display and preview available views. Select the view that you want to view video from (live or recorded). You can also create investigations.
Actions (Android)	Access outputs and events to activate them.







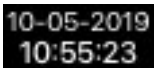






Name	Description
 (iOS)	
Investigations (Android)  (iOS)	View investigations created in XProtect Web Client or XProtect Mobile client.
 (Android)  (iOS)	<p>Video push lets you use the camera on your mobile device to stream video with audio to your surveillance system.</p> <p>On the Video push screen, go to  (Android) or Settings (iOS) to view or change:</p> <ul style="list-style-type: none"> • Video resolution - Select the resolution of the video stream to push • Automatic image quality - Enable to adjust the image quality automatically. If you disable the setting, then you can set the image quality to Low, Medium, or High • Location data - Add location data to the video stream <p>(XProtect Corporate, XProtect Expert, XProtect Professional+, XProtect Express+, and XProtect Essential+ only)</p>
Alarms (Android)  (iOS)	View and react to alarms.
 (Android)  (iOS)	Filter camera views. By default, all views are selected.
	<p>Search for a view or a specific camera.</p> <ul style="list-style-type: none"> • Enter ptz to find all your PTZ cameras • Enter audio to find all your cameras that have microphones attached • Enter ptt to find all your cameras that have speakers

In live mode, you can use these buttons to do the following:

Name	Description
 (Android)  (iOS)	View a list of actions for the selected camera.
 (Android)  (iOS)	Go to PTZ mode. Shows PTZ controls on the screen so you can pan, tilt and zoom in on the selected camera. Dimmed for non-PTZ cameras.
 (Android)  (iOS)	View the PTZ preset positions on the selected camera (for PTZ cameras only).
 (Android)  (iOS)	<p>Take a snapshot of the current frame. Snapshots are saved as follows:</p> <ul style="list-style-type: none"> Snapshots are saved to your device's SD card at: /mnt/sdcard/Milestone (Android). Snapshots are saved to your device's Photo Library and it can be accessed by tapping Photos on your device (iOS). <p>You cannot change save locations.</p>
 (Android)  (iOS)	Start or stop listening to incoming audio from cameras that have microphones attached.
	Start or stop using the push-to-talk (PTT) feature with cameras that have speakers.
 (Android)  (iOS)	Switch from live mode to playback mode.

In playback mode, you can use these buttons to do the following:

Name	Description
 (Android)  (iOS)	View a list of created video recordings.
 (Android)  (iOS)	Turn on and turn off a small picture-in-picture (PiP) for live mode. Tap the button again or double-tap the PiP view to return to live mode.
 (Android)  (iOS)	Create an investigation.
 (Android)  (iOS)	Play a video recording forwards.
 (Android)  (iOS)	Play a video recording backwards.
 (Android)  (iOS)	Pause playing a video recording.
	Go forward to next sequence or go backward to previous sequence.

Name	Description
(Android)   (iOS)	
  (Android)   (iOS)	Go one frame forward or one frame backward in the sequence.
	Go to a specific time in a video recording.
X1	Open a selection of playback speeds.
 (Android)  (iOS)	Play back audio from cameras that have microphones and speakers attached.
 (Android)  (iOS)	Take a snapshot in playback mode.
 (Android)  (iOS)	Go back to live mode.

Streaming video from your mobile device (explained)

Video push lets you stream live video with audio from the camera on your mobile device to your XProtect surveillance system.

This is useful to, for example, collect evidence when you examine an incident.



"When would I want to stream video from my mobile device?"

- A crowd is forming at an entrance, and you want to show the control room
- You have witnessed a crime and want footage of the perpetrator
- You are interviewing a witness and want to record the response
- A guard is handling a situation, and you want to document his actions

Your administrator must set up video push

Before you can use video push, your administrator must do the following in Management Client or Management Application:

- Add a channel to the mobile server
- Add the Video Push Driver as a hardware device
- Enable the microphone related to the camera that you use for video streaming
- Specify the users who can stream video from a device



Video push is available in landscape and portrait mode.

For more information, see the administrator manual for your surveillance system.

Set up video streaming on your mobile device

Settings for Android

On the **Video Push** screen, tap .

On the **Video push settings** screen, specify the following:

- **Video resolution** - The options for setting the resolution of the video stream are **Low**, **Medium**, **High**, or **HD**
- **Automatic image quality** - Enable to adjust the image quality of the video stream automatically
- You can also set the image quality of the video stream to **Low**, **Medium**, or **High**
- **Location data** (XProtect Corporate, XProtect Expert, XProtect Professional+, XProtect Express+, and XProtect Essential+ only) - Enable to include details about where you are while you stream the video. This requires that you turn on location information on your device

Settings for iOS

On the **Video Push** screen, tap **Settings**.

On the **Video push settings** screen, specify the following:

- **Video resolution** - The options for setting the resolution of the video stream are **Low**, **Medium**, **High**, or **HD**
- **Image quality** - Select whether to allow XProtect Mobile to adjust the image quality automatically, or to set it to **Low**, **Medium**, or **High**. By default, the **Automatic** image quality is enabled. This can affect the quality of the video



The XProtect Mobile client will change the compression of the images trying to maintain a stable number of frames per second even on slow connections. This is different from the server-side quality of service, which is used when viewing live video.

- **Location data** (XProtect Corporate, XProtect Expert, XProtect Professional+, XProtect Express+, and XProtect Essential+ only) - Enable to include details about where you are while you are streaming the video

Listening to incoming audio (explained)

XProtect Mobile client supports incoming audio when you:

- View live video (see Viewing live video on page 32)



You can play the incoming live audio from microphones attached to cameras even when there is no live video streaming from these cameras.

- Play back video recordings (see Find and view video recordings on page 37)

The incoming audio is also available in:

- Investigations (see View or create an investigation on page 39)
- Alarms (see View alarms on page 42)
- Access control (see View doors and take action on page 44, Respond to access requests on page 45, Investigate access control events on page 46)

Push-to-talk (explained)

The feature allows you to communicate through the VMS system from the microphone of your mobile device with people near a video camera with audio equipment. You can also listen to the recorded conversations in playback mode.








XProtect Mobile client supports the push-to-talk (PTT) feature:

- While you are watching live video from one camera (see Viewing live video on page 32)
- When you play the recorded outgoing audio in video recordings (see Find and view video recordings on page 37)
- In investigations (see View or create an investigation on page 39)
- In alarms (see View alarms on page 42)
- In access control (see View doors and take action on page 44, Investigate access control events on page 46 and Respond to access requests on page 45)



You must allow XProtect Mobile client app to have access to the microphone of your mobile device (see Requirements for using push-to-talk on page 10).

When the push-to-talk (PTT) feature is available for use, you will see the **Push-to-talk** button on the camera toolbar. Its icon has the following states:

Icon	Description
 (Available)	In live mode, it shows that the push-to-talk (PTT) feature is available and that you fulfilled the necessary requirements for using it. Tap and hold to start using push-to-talk. Release the button to end transmitting audio.
 (Active)	In live mode, it shows that you are currently using the push-to-talk (PTT) feature. The microphone of your mobile device and the speaker of the video camera are in an active state. The blue pulsating circle indicates the sound level.
 (Disabled)	In live mode, it shows that the push-to-talk (PTT) feature is available, but that you did not fulfill the necessary requirements for using it (see Requirements for using push-to-talk on page 10).
 (Android)  (iOS)	 (Android) or  (iOS), it shows that you can listen to incoming and outgoing recorded audio while playing back a video recording and that you can select the audio source that you want to listen to.

Rules for interrupting push-to-talk

Based on the level of your user rights (Administrators or Operators), there are two rules for interrupting a push-to-talk session in live mode:

- Users with the same level of user rights cannot interrupt each other
- Users with a lower level of user rights (Operators) cannot interrupt users with a higher level of user rights (Administrators)

Direct streaming (explained)

XProtect Mobile supports direct streaming in live mode (for XProtect Expert and XProtect Corporate only).

Direct streaming is a video streaming technology that transfers video from an XProtect system to the clients directly in H.264 codec, which is supported by most modern IP cameras. Direct streaming does not require any transcoding and, therefore, removes some of the stress on the XProtect system.

The direct streaming technology is in contrast to the transcoding setting in XProtect, in which an XProtect system decodes video from the codec that is used on the camera into JPEG files. Enabling the feature results in reduced CPU usage for the same configuration of cameras and video streams. Direct streaming also increases streaming performance for the same hardware – up to five times as many concurrent video streams compared to transcoding.

You can also use the direct streaming feature to transfer video from cameras that support the H.265 codec directly to the XProtect Mobile client.

You can use direct streaming in the single camera view, the grid view and picture-in-picture (PiP).

The video stream falls back from direct streaming to transcoding if:

- The direct streaming feature has been disabled in Management Client or the requirements have not been fulfilled (see Requirements for direct streaming on page 11)
- The codec of the streaming camera is different than H.264 or H.265
- The video cannot start playing for more than four seconds
- The connection to the server or with the camera has been lost
- You use the privacy masking feature during live video

Operation

Log in to the XProtect Mobile app

If your system administrator has set up two-step verification for your user account, you are asked for an additional login step when you log in to the XProtect Mobile app and connect to the server.


The first step is to enter your user name and password. The second step is to enter the verification code that you receive via email.

To log in with two-step verification:

1. Tap the XProtect Mobile app icon.
2. From the list of servers, tap the relevant server.



If you have specified a default server, you won't see the list of servers.

3. You are asked for a verification code, which the system sends to your email address. If in doubt, ask your system administrator for the email address.
4. Open your email program and make a note of the numbers.
5. Enter the code in the XProtect Mobile app and tap  to save.

You are ready to view video.


If you do not use the verification code within a specified expiry period (the default period is five minutes), the verification code times out. Request a new code on the page where you enter the code.

If you exceed the number of allowed code entry attempts (the default number is three), you will be blocked. In that case, you must log out of the XProtect Mobile app and log in again.

Viewing live video

You can view video only on cameras that are set up in views in XProtect Smart Client. You cannot create views in XProtect Mobile. Also, the XProtect Mobile client displays only video. If a view in XProtect Smart Client contains other types of content, such as maps, text, or HTML pages, the content does not display.







When you connect to a server, XProtect Mobile client lists your views.

- Android - To access your views, tap **Views**
- iOS - To access your views, tap 

The list of views offers the following information:



- The type of view. This can be **All Cameras**, **Shared views** that everyone can access, or **Private** views that you have set up in XProtect Smart Client and only you can access
- The name of the view. For example, Building A
- The number of cameras available in the view

Start viewing live video from a camera

1. Tap a view to display the cameras that it contains.
2. Tap the preview image for the camera.
3. Optional. Tap  (Android) or  (iOS) to start playing audio. Tap  (Android) or  (iOS) to stop playing audio (Only for cameras that have microphones attached).
4. Optional. Tap and hold  to start push-to-talk. Release the icon  to end transmitting audio (Only for cameras that have speakers).

Stop viewing live video from a camera, or view another camera

To stop viewing live video:




- Android - Tap 
- iOS - Tap 


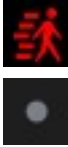
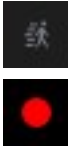

To view video from another camera in the view:

- Swipe right or left

Camera indicators


The camera indicators show you if the camera is detecting motion, recording video, or both. The camera indicators are visible in the camera title bar.

Symbol	Is motion being detected?	Is the video being recorded?
		

Symbol	Is motion being detected?	Is the video being recorded?
		
	☑	⊗
	⊗	☑
	☑	☑

Search for a specific camera

If you have lots of views and cameras, you can find a camera by searching for the camera name.

1. Above the list of views, tap .
2. Enter the name of the camera.

Filter your views


If you want to see a particular type of view only, or if you want to see fewer views, you can apply a filter. All views are displayed when you tap **Filter**, regardless of whether they are shown or filtered. You can always choose to include a view again.

How you filter views depends on the operating system on your device.

1. To filter views:


- Android - In the upper-right corner, tap . If a filter is already applied, the icon has a check mark .
- iOS - In the upper-right corner, tap . If a filter is already applied, the icon is blue .

2. To include or exclude a view, tap the view or use the slider.
3. To apply the filter and return to the list of views:

- Android - In the upper-right corner, tap 
- iOS - In the upper-right corner, tap **Done**



Discard filter selections

If you haven't saved your selections yet, you can discard them:

- Android - In the upper-left corner, tap 
- iOS - Undo your selections manually



Interact with live video in full screen

Use pan-tilt-zoom controls and PTZ presets

If you're viewing video from a pan-tilt-zoom (PTZ) camera, tap  (Android) or  (iOS) to use the PTZ controls. Tap controls once to pan or zoom one step.

If your administrator created PTZ presets for the PTZ camera in Management Client or Management Application, you can use PTZ presets on your device in PTZ mode. PTZ presets are predefined positions in the view.



How you access PTZ presets depends on the operating system on your device.

- Android - Tap 
- iOS - Tap 

From the **PTZ presets** list, select a preset to start using it.

Zoom in or out

You can zoom in or out to get a better look at the video.

- To zoom in, pinch out or tap 
- To zoom out, pinch in or tap 

XProtect Mobile uses digital zoom.

Crop or fit images to the screen

You can resize images to fit them to your screen, or you can crop them. By default, images are fitted to the screen.

The outer parts of images are removed. Tap twice to crop images to fill the screen and preserve the image's aspect ratio.



Display other cameras in the view

If your view contains other cameras, you can swipe right or left to display their video.



Switch to playback mode

If you are recording and something happens that you want to review, you can switch to playback mode to review the footage or start an investigation.

To switch to playback mode:

- Android - Tap 
- iOS - Tap 







To keep an eye on the live video while you are investigating, turn on picture-in-picture by tapping . To turn off the picture-in-picture option, tap  again.

Use picture-in-picture

If you see something that you want to investigate, but you don't want to stop observing the current situation, then you can display the live video in picture-in-picture (PiP) and simultaneously play back the video.

To turn on picture-in-picture (PiP):

1. Switch from live mode to playback mode by tapping  (Android) or  (iOS).
2. Depending on the operating system on your device:

- Android - Tap 
- iOS - Tap 





The incoming audio is not available in PiP.



To move the PiP window, tap and hold, and drag the PiP window to the preferred place on the screen.

Return to live video

To view the live video in full screen:

- Double-tap the PiP window
- Tap  (Android) or  (iOS)

Take a snapshot

When you view live video or play it back, and you find something that's of interest, you can take a snapshot of it.



Snapshots are saved on your mobile device.

- Android - View snapshots on your device's SD card at /mnt/sdcard/Milestone
- iOS - View snapshots in the **Photo Library**



You cannot change save locations.

To take a snapshot in live mode or playback mode:

- Android - Tap 
- iOS - Tap 

Find and view video recordings

In playback mode, you can access recorded video from a camera.

View video recordings from a camera

How you access recordings depends on the operating system of your device.

1. In the view that contains the camera, tap the preview image for the camera.

2. Tap  (Android) or  (iOS).












3. To view a list of recordings from the camera:

- Android - Tap 



- iOS - Tap 

Playing back recorded video





Use the timeline controls to play back recorded video. Controls are shown or hidden depending on what you are doing.

-  - Tap to go to a specific point in time by using the slider
-  - Speed up or slow down the playback
-  (Android) or  (iOS) - Play the video backwards or forwards, and pause the video by tapping  (Android) or  (iOS)
-  (Android) or  (iOS) - Go to the previous or next sequence
-  (Android) or  (iOS) - Go one frame forward or one frame backward in the sequence
-  - Hide or display live video from the camera in a picture-in-picture window (see Use picture-in-picture on page 36)

Playing back audio in video recordings (For cameras that have microphones and speakers attached)

To listen to recorded incoming audio and outgoing audio, tap  (Android) or  (iOS) to open the **Audio sources** list and select the audio device that you want to listen to while playing back the video recording.

The options are:

-  **All sources** - Listen both to the recorded incoming and outgoing audio
-  **Microphone** - Listen to the incoming audio only
-  **Speaker** - Listen to the outgoing audio only
-  **Audio off** (default)



You can play back audio only when there is a video recording and you play the recording forward at normal speed.

Load more recordings

In the **Recent history** (iOS) or **History** (Android) lists, if you don't find the sequence that you want, and more recordings are available, you can load more and keep investigating.

- Android and iOS - Tap **Load more**

View or create an investigation

If you are using investigations in XProtect Web Client, you can use XProtect Mobile to view and create investigations. You can preview video from investigations, but you cannot download it to your mobile device.

View ongoing and completed investigations

How you access investigations depends on the operating system of your mobile device.



You can quickly refresh the list of investigations by swiping down from the top. You need to be at the top of the list, otherwise you will scroll instead.



1. To go to investigations:

- Android - Tap **Investigations**



- iOS - On the **Navigation** pane, tap



2. Optional: On the **Investigations** screen, you can filter investigations:

- **My investigations** - View your investigations
 - **All investigations** - View your investigations and those that other people created. Your administrator must enable you to do this
3. To see the details of an investigation, tap the investigation.
 4. To view the video in the investigation:
 - Tap  (Android) or  (iOS)

Create an investigation

When you create an investigation, the video is saved on the mobile server that you are connected to, not on your mobile device. To view the video on your device, you must connect to the server.

1. Find the camera that recorded the video, then tap the preview image to maximize it.

2. Tap  (Android) or  (iOS), then:

- Android - Tap 

- iOS - Tap 

3. Specify the time to define the period to investigate.
4. Tap **Create**.

Listen to audio in an investigation



If you create an investigation from a camera that has audio devices (microphone and speaker) attached, you can listen to incoming and outgoing recorded audio when you play the recording forward at normal speed (see Find and view video recordings on page 37).

Stream video from your device to your surveillance system

If your system administrator has set up video push in Management Client or Management Application and has enabled you to use video push, you can stream video with audio from your device to your surveillance system. For more information, see Streaming video from your mobile device (explained) on page 27 and Requirements for using video push on page 11.

How you access and use video push depends on the operating system on your device:



1. Access video push:

- Android - In the navigation bar, tap 
- iOS - In the navigation bar, tap 

2. Stream the video from the front-facing or back-facing camera of your device:

- Android and iOS - tap 

3. Start streaming video:

- Android - Tap 
- iOS - Tap 



4. Optional. Start audio in the video push:

- Android and iOS - Tap 

5. Optional. Stop audio in the video push:

- Android and iOS - Tap 

6. Stop recording:


- Android - Tap 
- iOS - Tap 

Bookmark an interesting moment

Bookmarks are available in XProtect VMS products.



If you see something that you will want to investigate later, you can bookmark the moment in the video while you are recording.

To add a bookmark:

- Android - In the upper-right corner, tap 
- iOS - In the upper-left corner, tap **Bookmark**

Investigate the video you streamed

XProtect Mobile records the video that you stream so that you can investigate it.

1. Go to the view with the video push camera.
2. Tap the camera to go to full screen.
3. To play back the recording, tap  (Android) or  (iOS).
4. Use the playback controls to investigate the video.

View alarms




Alarms can be triggered by various events:



- A camera stops working
- A pane of glass gets shattered or broken
- A locker gets broken into
- A blacklisted license plate is seen on camera



To view alarms, ask your system administrator to set up alarms and to give you the sufficient user rights.

To view an alarm:

1. Open **Alarms**:
 - Android - Tap **Alarms**
 - iOS - Tap 
2. From the **All alarms** list, find the alarm that you want to play video for and tap it.
3. View the details of the alarm:
 - Type of the event
 - Time of the occurrence
 - State of the alarm
 - To whom it is assigned
 - Priority of the alarm
4. To play the video:
 - Android - Tap 
 - iOS - Tap 
5. Play the video backward or forward and check when the image that you are seeing was taken.

6. Optional. If the camera has audio devices (microphone and speaker) attached, you can listen to incoming and outgoing recorded audio when you play the video recording forward at normal speed (see Find and view video recordings on page 37).
7. To save the video for later or share it with others:
 - Android - Tap 
 - iOS - 
8. Specify the time to define the period to investigate.
9. Tap **Create**.

Using actions in XProtect Mobile

If your system administrator has given you permission, you can trigger actions if you need to. In the clients, actions are outputs and events that you can activate. For example, you can:


- Start or stop recording
- Switch to a different frame rate
- Trigger SMS and email notifications
- Move PTZ cameras to PTZ preset positions
- Activate hardware output

View and trigger actions

You can view and trigger actions from:



- The list of views
- When viewing live video
- The **Actions** screen

View actions on the Actions screen

1. To view the list of actions that are grouped by **Outputs** and **Events**:
 - Android - Tap **Actions**
 - iOS - Tap 

Trigger an action

1. To trigger an action, do one of the following:

- Android and iOS - In the list of actions, tap the action, and then confirm that you want to trigger it
- Android and iOS - In live mode, on the camera tool bar, tap  (Android) or  (iOS) and select the action that is associated with the camera and that you want to trigger

React to a notification

XProtect Mobile can notify you when something needs your attention even when you're not using the app. For example, the system can notify you when an alarm is triggered.

React now or later

To react immediately, tap the notification to open XProtect Mobile and investigate what happened. When you do this, XProtect Mobile does not store the notification.

If you don't want to react immediately, you can view the notification later:

- Android - Go to the **Notification Area**. Open the notification drawer to see the details
- iOS - Go to the lock screen or the **Notification Center**

View doors and take action

You can check the state of a door, for example **Closed**, **Unlocked**, and view live video or play back recorded video from the cameras monitoring the door. If the cameras have audio devices attached, you can also:


- Listen to incoming audio and use the push-to-talk (PTT) feature in live mode
- Listen to incoming and outgoing audio in playback mode

Based on the state of the door, you can either lock or unlock it.











Lock and Unlock are the standard options, but other commands may be defined in your access control system.

1. Open **Access control**:

- Android - Tap **Access Control**, then tap  and select **Doors**

- iOS - Tap , then tap **Doors**

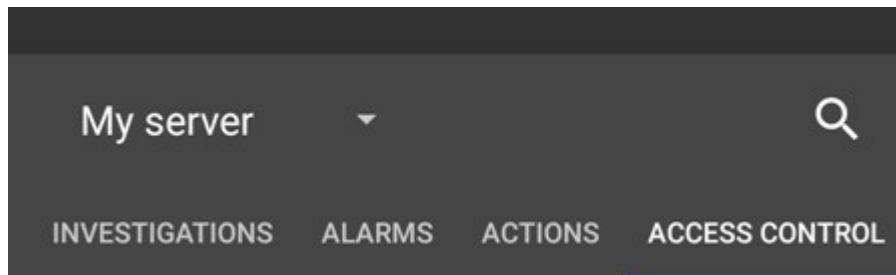
A list of doors appears.

2. Tap the door that you want to view.
3. View video in live mode from the camera monitoring the door.
4. Optional. Tap  (Android) or  (iOS) to start playing incoming audio. Tap  (Android) or  (iOS) to stop playing audio (Only for cameras that have microphones attached).
5. Optional. Tap and hold  to start push-to-talk. Release the icon  to end transmitting audio (Only for cameras that have speakers).
6. If required, **Lock** or **Unlock** the door. The state of the door changes.
7. To play back the video, tap the live image and then tap  (Android) or  (iOS). You can see the video stream in live mode even when you are playback mode.
8. Optional. If the camera has audio devices (microphone and speaker) attached, you can listen to incoming and outgoing recorded audio when you play the video recording forward at normal speed (see Find and view video recordings on page 37).



Respond to access requests

When someone tries to enter a building using a door controller, and access is denied, an access request is sent to your app. Depending on your access control system, you can respond by, for example, unlocking the door to let the person enter.

1. If you are using a VMS system that supports push notifications, open the access request from the notification bar. This example is from an Android tablet. It may look different on iOS.



Or:





1. Open the app and in the list of servers, tap the server that you want to connect to.
2. Open **Access control**:
 - Android - Tap the **Access Control** tab, then tap  and select **Access requests**
 - iOS - Tap , then tap **Access requests**



3. Tap an access request to open it. After opening the access request, you will see:
 - Live video from the cameras at the door
 - Details about the person who tries to enter



After two minutes, access requests disappear from the list. You can find them in the **Events** list.

4. To switch cameras, swipe the live image left. If there are more than two, swipe several times.



5. Optional. Tap  (Android) or  (iOS) to start playing incoming audio. Tap  (Android) or  (iOS) to stop playing audio (Only for cameras that have microphones attached).

6. Optional. Tap and hold  to start push-to-talk. Release the icon  to end transmitting audio (Only for cameras that have speakers).

7. Now you can either **Lock** or **Unlock** the door.

8. To play back the video before or at the time when the cardholder tried to enter:

1. Tap the live image. The live video feed displays in a bigger view.

2. Tap  (Android) or  (iOS) to switch to playback mode. In the changed view, you can still view live video at the top.





3. Optional. If the camera has audio devices (microphone and speaker) attached, you can listen to incoming and outgoing recorded audio when you play the video recording forward at normal speed (see Find and view video recordings on page 37).

Investigate access control events

You may want to check who entered a building during the last hour or who was denied access. Other examples of access control events are **Door controller tampering** and **Door controller power failure**. Such events are defined in the access control system.



By default, all access control events from the last 30 days are displayed.

1. Open **Access control**:
 - Android - Tap the **Access Control** tab, then tap  and select **Events**
 - iOS - Tap , then tap **Events**
2. Optional. If the event is not in the list, tap **Load more** at the bottom of the list to view more events.
3. Tap an event to view details about it. For example, if the event is **Door Locked**, tap **View door** to check the state of the door, or to lock or unlock the door.
4. To play back the video recorded at the time of the event:
 - Android - Tap 
 - iOS - Tap 
5. Optional. If the camera has audio devices (microphone and speaker) attached, you can listen to two-way recorded audio when you play the video recording forward at normal speed (see Find and view video recordings on page 37).



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About Milestone

Milestone Systems is a leading provider of open platform video management software; technology that helps the world see how to ensure safety, protect assets and increase business efficiency. Milestone Systems enables an open platform community that drives collaboration and innovation in the development and use of network video technology, with reliable and scalable solutions that are proven in more than 150,000 sites worldwide. Founded in 1998, Milestone Systems is a stand-alone company in the Canon Group. For more information, visit <https://www.milestonesys.com/>.

