



ADPRO XO Client Software

User Manual

For FastTrace 2 Series and
iFT Series

Installing the XO Client Software on Your PC

There are several ways to install the XO client on your PC:

- Using the stand-alone client installer, which you can download from the Xtralis Security Solutions Support site www.xtralissecurity.com.
- Using the device's web page, if you have a connection to your XO device but no internet connection. If you use the device's web page, you need to add the device's web page to the trusted sites in Internet Explorer. Furthermore, your PC must have an IP address in the same network range as the XO device.

System Requirements for the Client PC

Hardware

The hardware requirements for the client PC are:

- CPU: Core 2 Duo, 1.6 GHz
- 2 GB RAM
- Graphics card that is compatible with DirectX 7.

Xtralis recommends to use a graphics card that allows YUV surfaces and hardware stretching. If not, the XO client software will force the graphics card to GDI mode, which will increase CPU load.

- It is recommended to install the latest drivers of your graphics card.
For NVIDIA cards, check www.nvidia.com.
For ATI/AMD cards, check ati.amd.com.
- If necessary, you can always force the client into GDI mode (not recommended, because of CPU load). Add the line 'gdi=1' in the [General] section of the hydra.ini file. The default location for this file is:
C:\Users\username\AppData\Roaming\Hydra\
(where *username* is the name of the Windows user that is currently logged on).



Caution!

These minimum system requirements enable you to configure the XO device from the XO client software. However, if you want to use HD cameras in optimal quality, these minimum requirements will prove insufficient. Please take into account that double resolution, on average, results in 4 times more performance.

Xtralis advises to test the settings to make sure that your PC can handle your configuration.

Software

- Operating system: Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10
- Internet Explorer 8 or above
- DirectX 7 drivers

Installing the XO Client Software Using the Installer



Note

The procedure below describes how to install the XO client software **on a new system**.

To install the XO client software using the XO client's installer, proceed as follows:

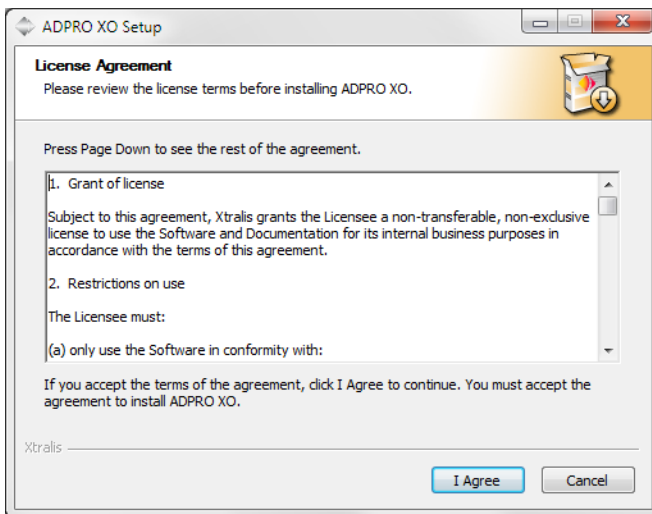
1. Download the installer from the Xtralis Security Solutions Support website www.xtralissecurity.com. Type **32689** in the **Keywords** box and search, or filter on **Product = XO/XOa**, and then on **Information Type = Software Setup**.



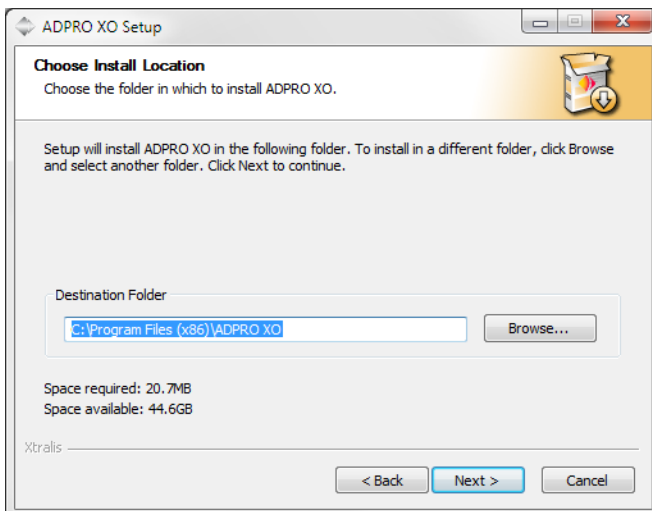
Note

Your virus scanner may block this download. Disable your virus scanner temporarily if this occurs. Remember to switch it back on after installation.

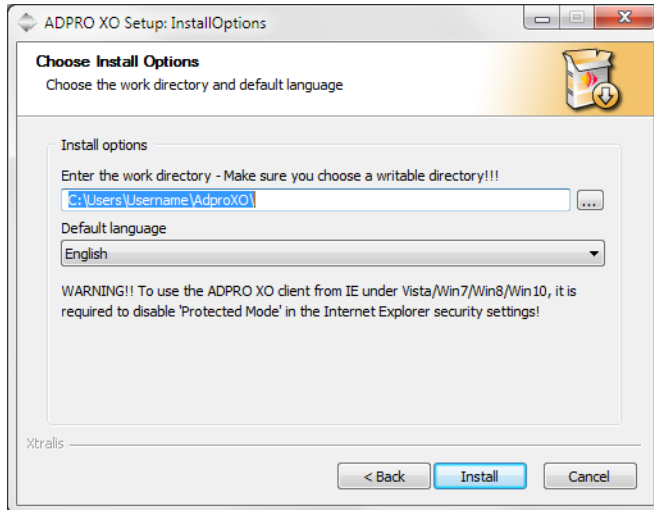
2. Unzip the downloaded file and then double-click the .exe file to start the installer.
3. The following warning message may appear:
Do you want to allow the following program from an unknown publisher to make changes to this computer?
In this case, click **Yes** to start the installation.



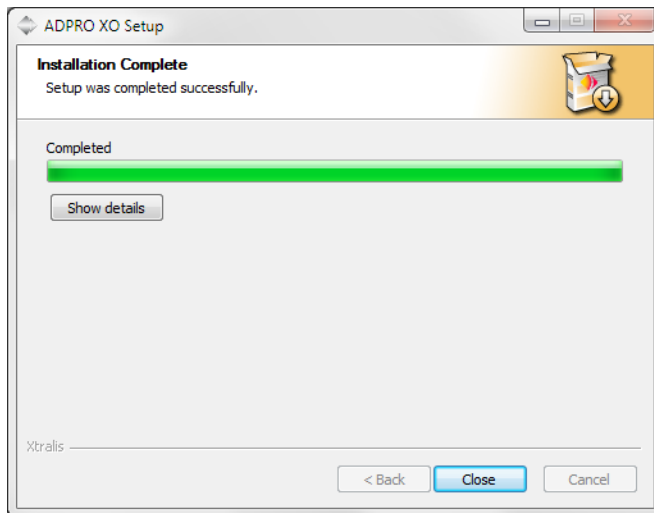
4. Click **I Agree** to agree with the terms of the license agreement.



5. Accept or modify the installation folder. Click **Next**.



6. Accept or modify the default work folder (= the folder for storing snapshots and downloaded recordings). Also select your preferred language. Click **Install**.



7. When the installation is completed, click **Close** to exit the installation Wizard.

Before you can add an XO device and connect to it using the client, your PC must have an IP address in the same network range as the XO device.

Installing the XO Client Software via the XO Device's Web Page

Internet Explorer Settings



Note

If you will install the XO client software via the XO device's web page, the preferred browser is Internet Explorer. If you cannot use Internet Explorer, try any other internet browser. In this case, you have to install the MeadCo Neptune plugin. You can download the plugin from www.meadco.com/Neptune/Download.

Installation



Note

The procedure below describes how to install the XO client software **on a new system**.

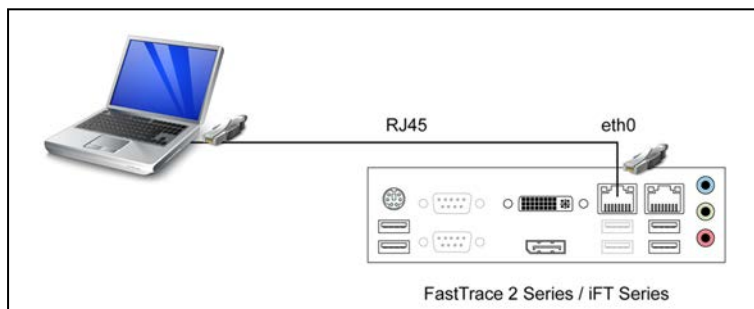
To install the XO client software via the XO device's web page, proceed as follows:

1. Connect your PC to the XO device's eth0 port with an RJ45 network cross cable or via the network switch/router on the eth0 port.

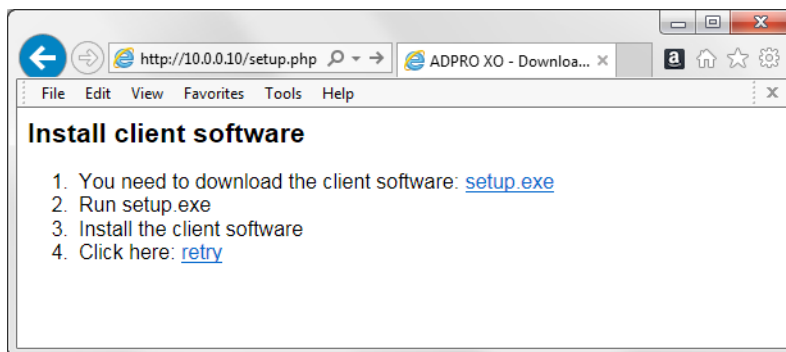


Note

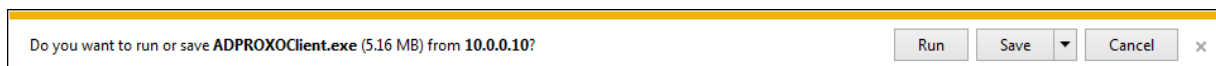
The illustration below shows an ADPRO device with a MiTAC PH10LU motherboard. To locate the eth0 port on your device, see the *Hardware Installation Manual* of your XO device (FastTrace 2 Series: 21790; iFT Series: 27817). The iFT Series models are all equipped with a MiTAC motherboard.



2. Open Internet Explorer and enter the XO device's IP address, followed by /setup.php
For example:
`http://10.0.0.10/setup.php`



3. Click **setup.exe**.



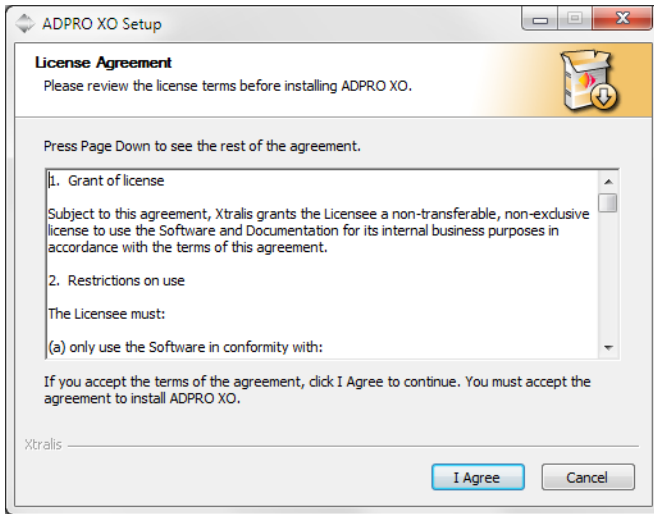
4. Click **Run** to start the installation.



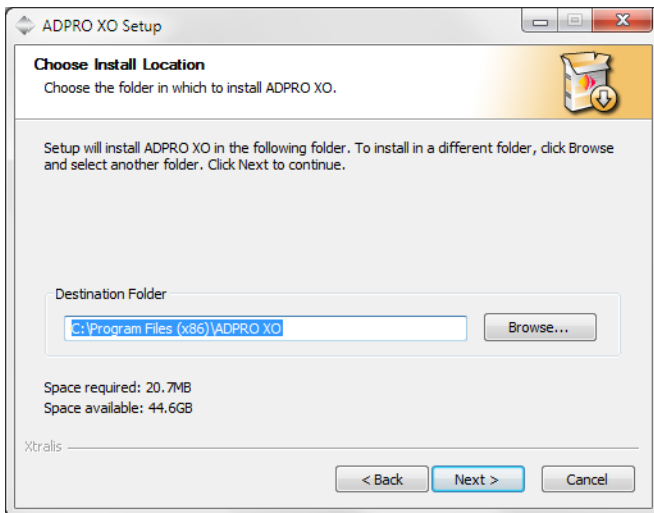
Note

Your virus scanner may block this download. Disable your virus scanner temporarily if this occurs. Remember to switch it back on after installation.

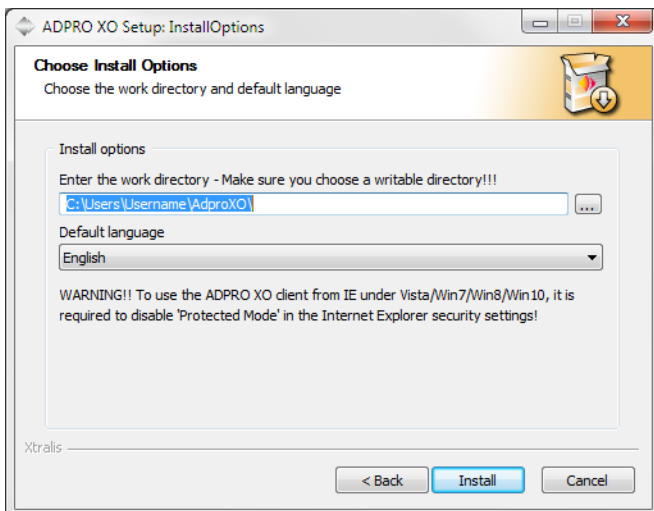
- 5. The following warning message may appear:
Do you want to allow the following program from an unknown publisher to make changes to this computer?
In this case, click **Yes** to start the installation.



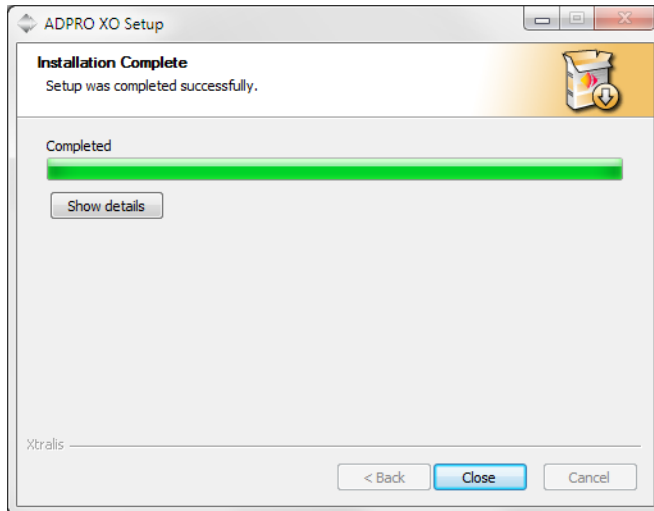
- 6. Click **I Agree** to agree with the terms of the license agreement.



- 7. Accept or modify the installation folder. Click **Next**.



- Accept or modify the default work folder (= the folder for storing snapshots and downloaded recordings). Also select your preferred language. Click **Install**.




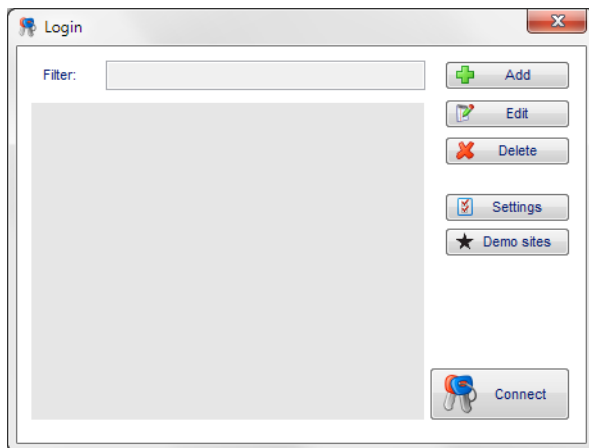
- When the installation is completed, click **Close** to exit the installation Wizard.

Launching and Initial Configuration

Launching the XO Client

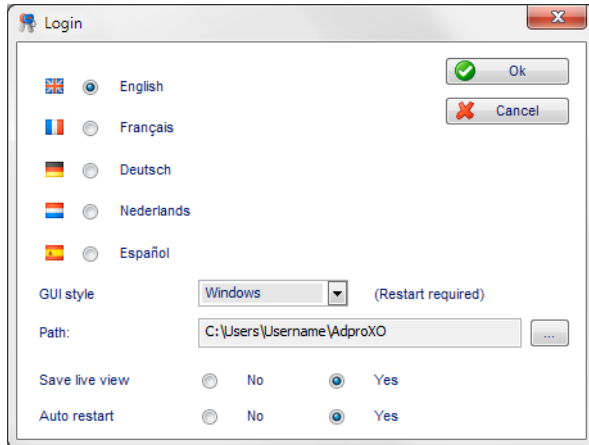
To launch the XO client, proceed as follows:

- On the desktop, double-click the XO client icon . If the icon is not available, you can press **Start** and choose **All Programs > ADPRO XO > AdproXO**. The following window appears:



The **Login** window displays all your XO devices so that you can quickly connect to them. When using the XO client for the first time, the list is empty.

2. To set up how the client launches, click **Settings**.



3. Provide the following information:

Item	Description
English, Français...	Select the desired language for the application.
GUI style	Select a style to change the appearance of the application. The changes will only take effect after you restart the client software.
Path	If required, change the default work folder (= the folder for storing snapshots and downloaded recordings).
Save live view	Set this option to Yes if you want to show the last used camera matrix in the live view. If you set it to No , the live view window is empty when you start the client, and you have to select the cameras for the live view matrix each time you start the client.
Auto restart	Set this option to Yes if you want the login window to reappear when you close the client software. This allows you to quickly connect to another XO device.

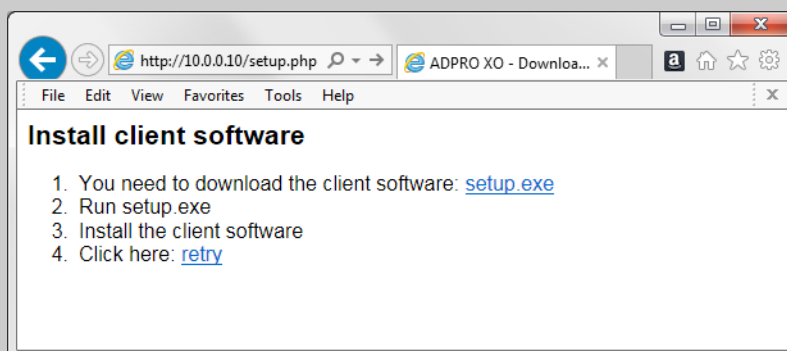
4. Click **OK** to save the settings.
5. If you have changed the **GUI style**, close the **Login** window, and then restart the client application for the changes to take effect.

You can now add an XO device and connect to it.

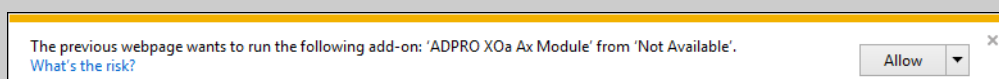


Note

If you have installed the client via the XO device's web page, it may occur that the internet browser is opened instead of the login screen. If this is the case, just click **Retry**.



If you receive a warning message such as the one below (at the bottom of the browser window), click **Allow** to continue:



Adding an XO Device to the XO Client



Note

The system stores the list of XO device connections added to your XO client in the HydraSiteConfig.xml file. You can reuse this list on a different PC (or for another PC user), so you do not have to add all XO devices again.

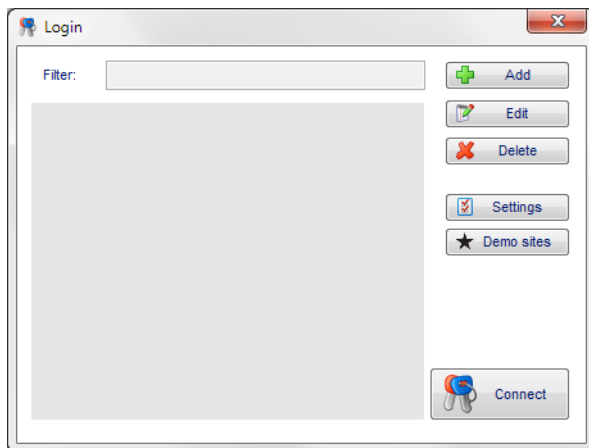
Adding a device to the XO client means that you define and store a set of connection parameters for the device, such as the IP address, ports, and a user ID or username and password. This allows for a 'one-click' connection to a device.

You can define several connections to the same physical devices, for example for different users (Admin and Technician), or for connecting from an internal and an external network.

To prevent unauthorised access to a device from your PC, you can leave the password setting blank, forcing a user to always manually enter the password when connecting.

To add an XO device to the client, proceed as follows:

1. Launch the XO client.

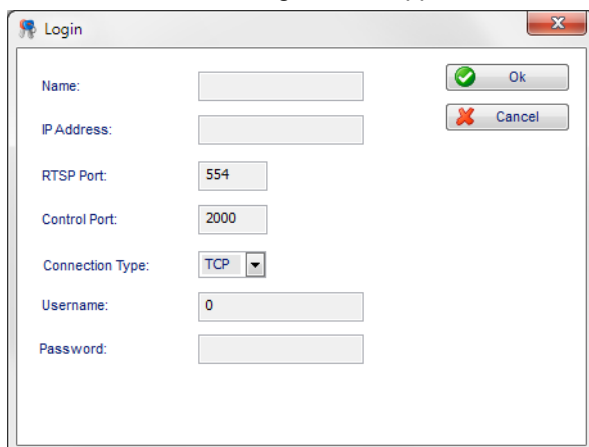


Note


If you have installed the XO client for the first time on this PC, you can add a few demo devices to familiarise yourself with the XO client before adding your own device(s). Access to the demo devices is limited; not all features are available.

Once you have added your own device(s) to the client, you can no longer add the demo devices.

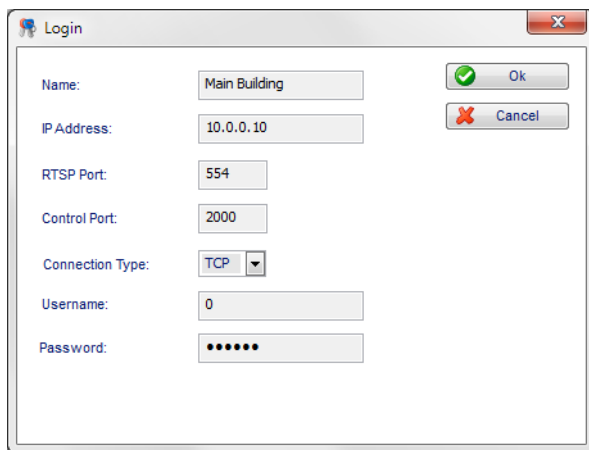
2. If you want to add the demo devices, click **Demo sites**. Continue with the next step to add your own devices.
3. Click **Add**. The following window appears:



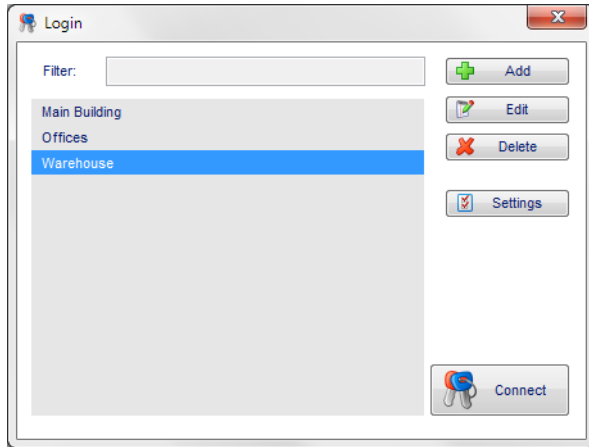
4. Provide the following information:

Item	Description
Name	Type a meaningful name for the XO device.
IP Address	Type the IP address or DNS hostname of the XO device (default IP address is 10.0.0.10). If you are connecting from an external network (via routers/firewalls), make sure to type the external (public) IP address as set in the router's/firewall's network address translation (NAT) table.
RTSP Port Control Port	Type the RTSP port number (default is 554) and the control port number (default is 2000). These values have to correspond with the RTSP/control port numbers as specified in the client software under System > Connections > Ethernet / PPP . For more information, see <i>Network (Ethernet)</i> on page 40. If you are connecting from an external network (via routers/firewalls), make sure to type the external port numbers as set in the router's/firewall's network address translation (NAT) table.
Connection Type	Select the TCP or UDP protocol. UDP is recommended, but TCP may be required if the connection goes through a router that blocks the UDP packets.
Username Password	Enter the user ID/username and password of an existing user to log on to the XO device. The default user ID is 0 and the default password is 666777. <div style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;"> <p> Note Entering a password is optional. If you leave the Password box blank, you have to fill in the password manually each time you connect to the device.</p> </div>

An example of a filled-in screen:


5. Click **OK**. The new XO device appears in the list.

- Repeat for any other XO devices that you want to add.



Demo Devices

If you start from a clean installation of the XO client (no update, no devices added), you can choose to add the demo devices that Xtralis provides. You can use them to familiarise yourself with the XO client before starting with your own devices.

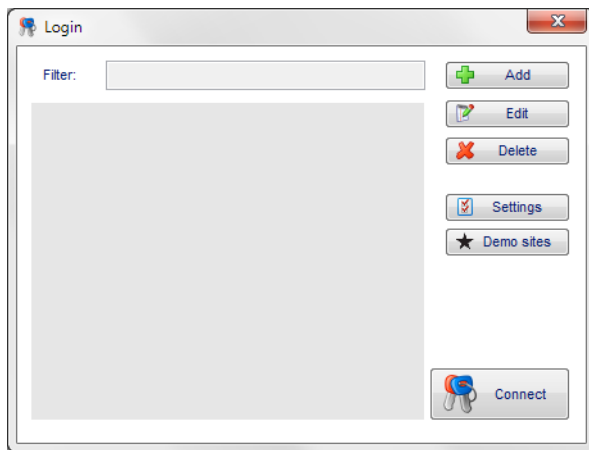
Access to demo devices is limited: the **System** menu is not available.

Note

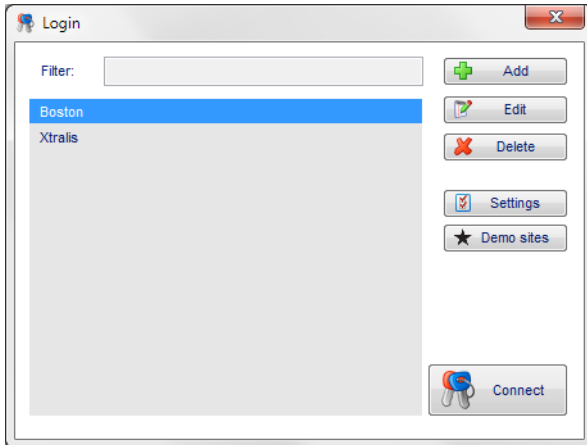
Once you have added your own device(s) to the XO client, you can no longer add demo devices. The **Demo Sites** button will disappear.

To add demo devices to your XO client, proceed as follows:

- Launch the XO client.



2. Click **Demo Sites**. The system adds the demo devices to the XO client.



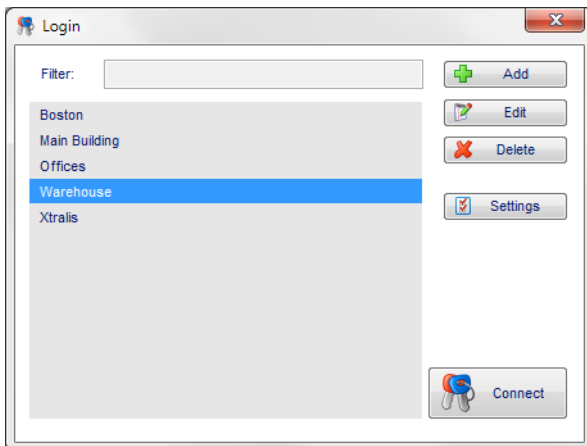
You can connect to the demo devices in the same way as other devices.

Deleting an XO Device

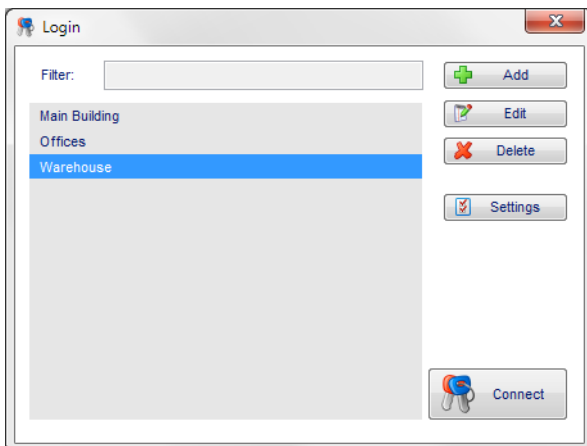
You can delete devices that you no longer use.

To delete an XO device, proceed as follows:

1. Launch the XO client.



2. Click the desired XO device in the list, and then click **Delete**.
3. Click **Yes** to confirm.



Connecting to an XO Device

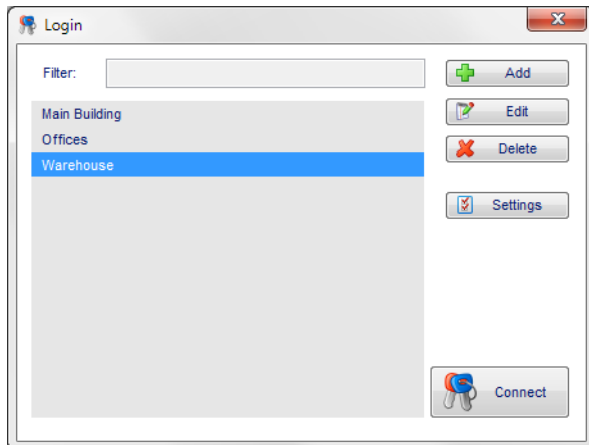
You can connect to an XO device:

- From the **Login** window in the XO client (recommended)
- From Internet Explorer.

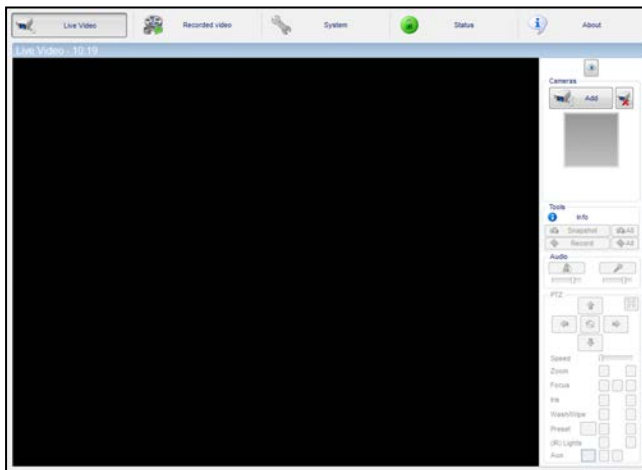
Connecting to an XO Device via the Login Window

To connect to an XO device via the **Login** window, proceed as follows:

1. Launch the XO client. The list of XO devices appears. The system automatically selects the last used XO device.

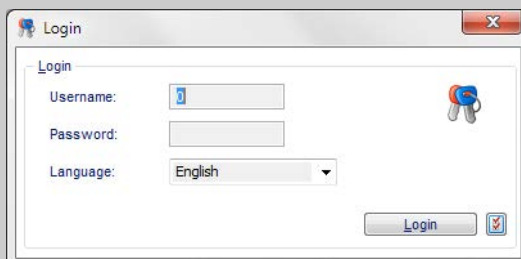


2. Click the desired XO device in the list, and then click **Connect**. Alternatively, double-click the desired XO device in the list. The **Live Video** screen appears:



Note

If you did not specify a password for connecting to the device, the following screen appears:

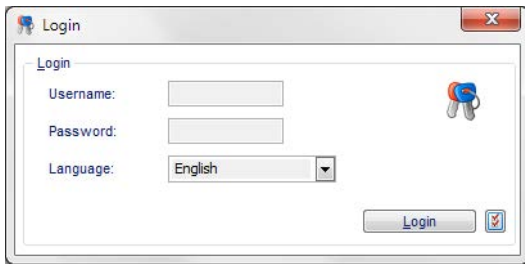


Enter the password and click **Login**.

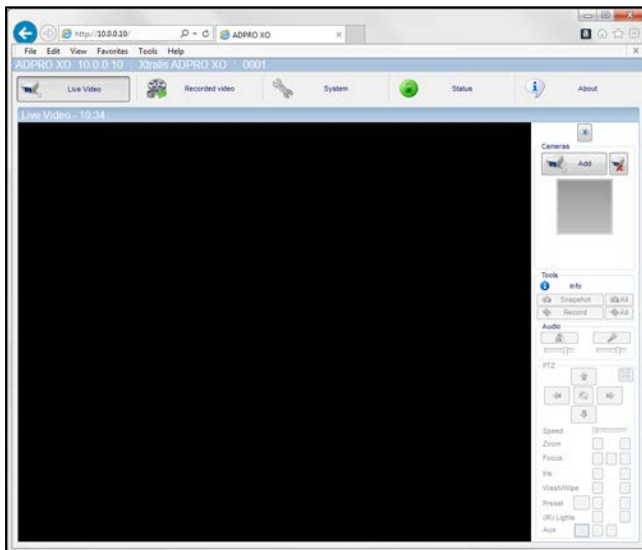
Connecting to an XO Device in Internet Explorer

To connect to an XO device in Internet Explorer, proceed as follows:

1. Open Internet Explorer and type the XO device's IP address in the address bar (the default IP address is 10.0.0.10). The login screen appears:



2. Enter the user ID/username and password of an existing user to log on to the XO device.
3. In the **Language** box, select the desired language for the application.
4. Click **Login**. The **Live Video** screen appears:

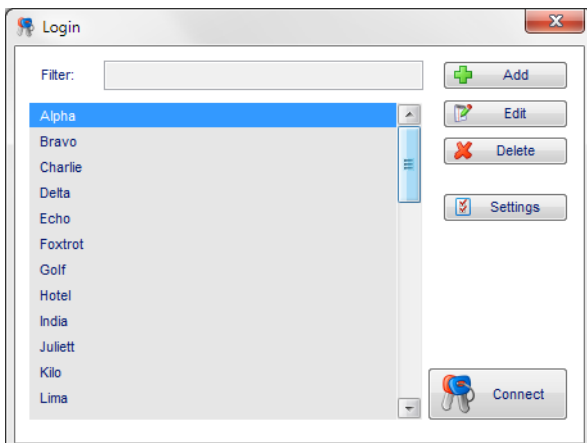


Filtering the Device List

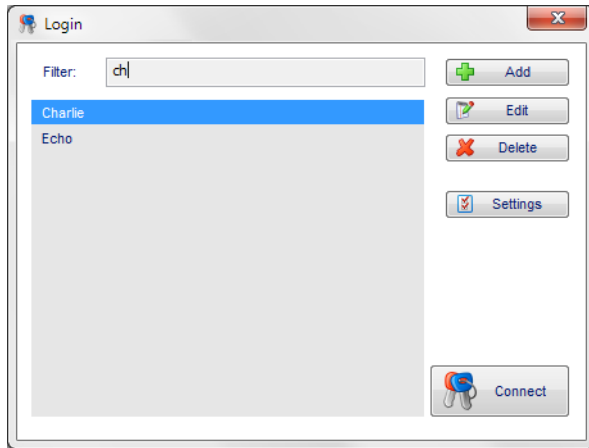
If you have many devices in the list, you can use the filter in the **Login** window to quickly find the desired device and connect to it.

To filter the device list in the **Login** window, proceed as follows:

1. Launch the XO client.



- In the **Filter** box at the top, type a part of the name of the desired device. The system filters the list as soon as you start typing.



- Double-click the desired device in the list to connect to it.



Note

The filter remains active when you close the client window and return to the **Login** window (if **Auto restart** is active), although the filter text is not visible. To remove the filter and display all devices, click in the empty **Filter** box and press **Delete**.

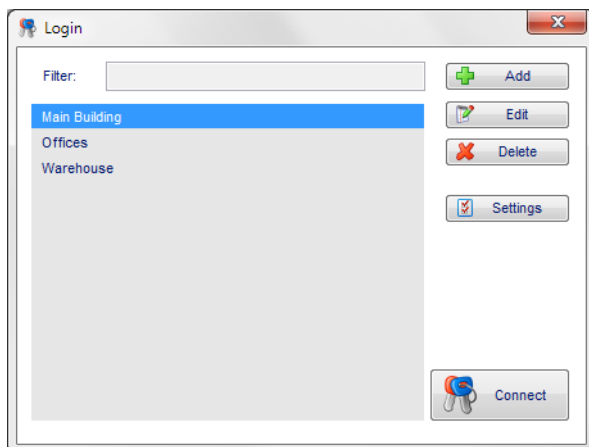
When you close the **Login** window, the system removes the filter. The next time you start the client, the **Login** window will display all devices.

Changing an XO Device

The first time you connect to an XO device, you use the default values. If you have modified any related settings related to the connection using the XO client (IP address, ports, password...), you also have to change these in the **Login** screen.

To change an XO device, proceed as follows:

- Launch the XO client (in its own window).



2. Select the desired XO device in the list, and then click **Edit**.

3. Change the necessary settings.
4. Click **OK** to confirm.

Changing the Work Folder

The work folder is the default folder on your PC where the XO device stores snapshots, local recordings, and downloaded recordings.

The default work folder is `C:\Users\username\AdproXO\` (where *username* is the name of the Windows user that is currently logged on).

For snapshots, local recordings, and downloaded recordings, the system will automatically create subfolders in the work folder for the different XO devices that you manage with your PC. The system does not create these subfolders for the files that you download using the **Transfer** screen; you have to select or create the desired subfolders yourself.

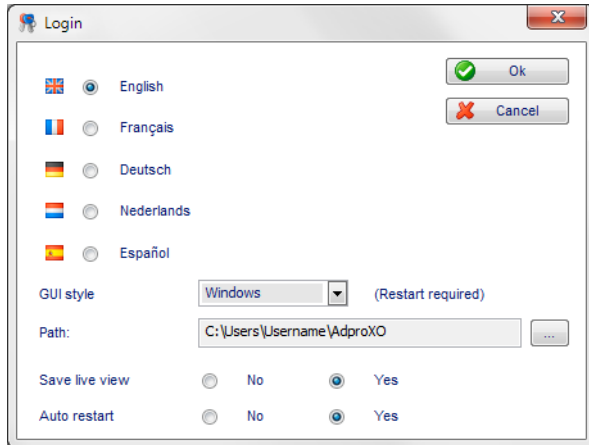
The subfolder name consists of the server unit ID (0001–9999) and the site name of the XO device, as specified in the **CMS Alarm transmission** window. For example:


`C:\Users\username\AdproXO\0001 - MySiteName`

To change the default work folder, proceed as follows:

1. Close the client, and then reopen it from your desktop. **Do not connect** to any device yet.

2. In the **Login** window, click **Settings**.



3. To the right-hand side of the **Path** box, click the  button.
4. Browse to the desired folder, and click **OK** to confirm.
5. Click **OK** to close the **Settings** window.

Watching Live Images

You can watch live images:

- In the **Live Video** screen. For details, see the following sections.
- On an external monitor.
- Via a web browser.

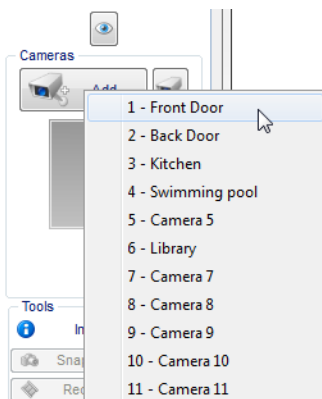
Watching Live Images in the Live Video Screen

The **Live Video** screen allows you to watch live camera images in a matrix view. The matrix view accommodates up to 32 cameras. From the **Live Video** screen you can:

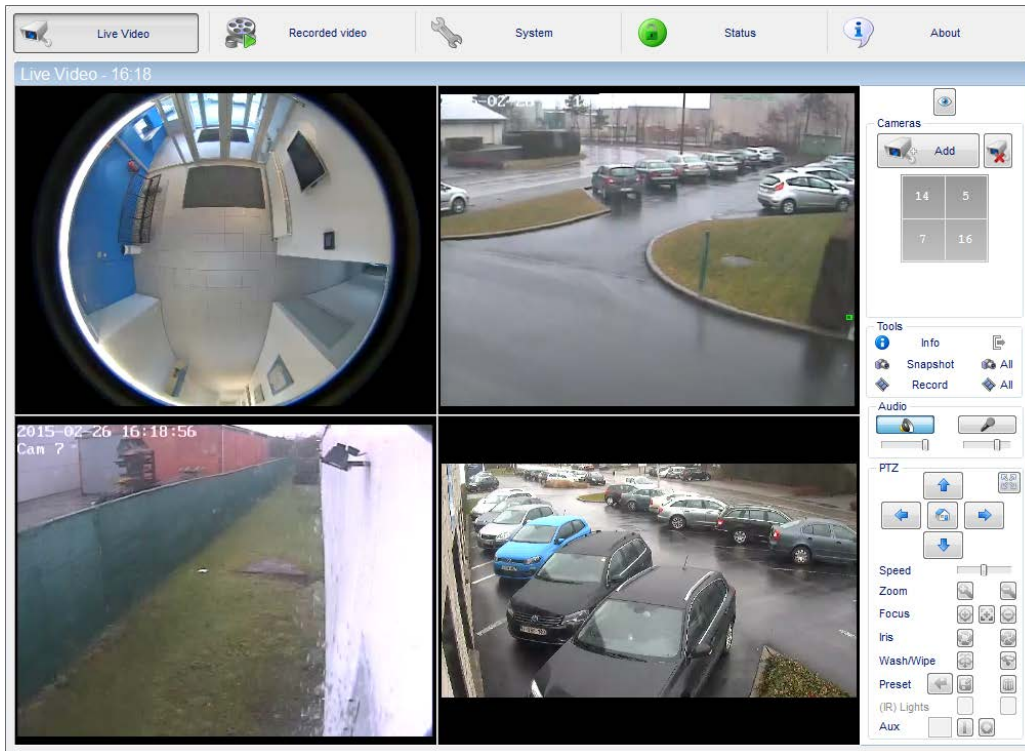
- enlarge one camera image in the matrix to full screen
- change the live view image resolution
- de-warp 360° camera images:
- display analytic bounding boxes:
- display camera information
- activate outputs
- take snapshots
- record video to your PC's hard disk (local recording)
- listen to audio from a camera (if enabled)
- talk back to the site using a microphone
- use the PTZ controls.

To watch live images from the **Live Video** screen, proceed as follows:

1. In the top menu, click **Live Video**.
2. To add a camera to the live view: under **Cameras**, click **Add**, and then click the camera that you want to display.

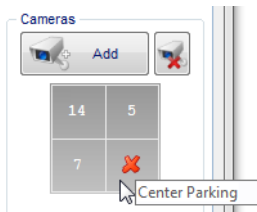



3. Repeat to add more cameras. The system automatically adjusts the live view grid to accommodate for more cameras.

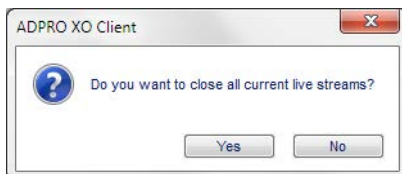


The grey box under **Cameras** displays the selected camera numbers.

4. To remove cameras from the live view, proceed as follows:
- o To remove one camera: under **Cameras**, click the camera number in the grey box.



- o To close all live streams (= remove all camera images from the **Live Video** screen): under **Cameras**, click the  button, and then click **Yes** to confirm when the message below appears.



Note

If you want the system to remember the last used camera matrix in the live view, then set the **Save live view** option in the settings of the **Login** window to **Yes**. If you set it to **No**, the live view window is empty when you start the client, and you have to select the cameras for the live view matrix each time you start the client.

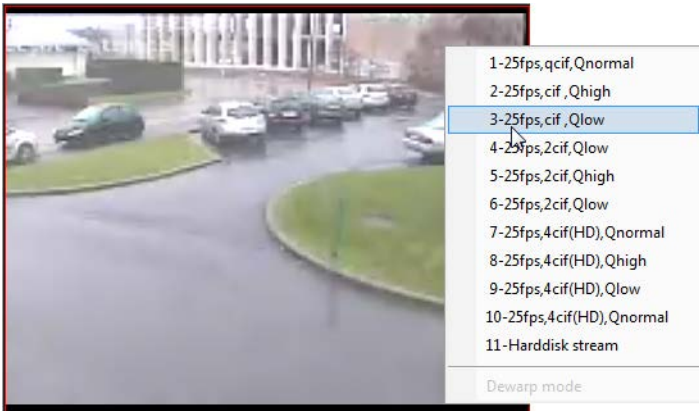
Full Screen View

Double-click a camera image in the matrix to display it at full screen. Double-click again to return to the matrix view.



Changing the Image Quality (Resolution)

You define the default image quality for the live view in the camera setup window (**Video Inputs**). To adjust the quality of the image temporarily in the **Live Video** screen, right-click the camera image and select one of the options. The available options depend on the camera type.



Furthermore, live streaming for **analogue cameras** has certain limitations. For DS40xx A/V cards there is one separate video processor for each group of 4 analogue cameras (video in 1–4, 5–8, 9–12...). If you apply 4CIF to at least one camera within the same group, the following limitations apply to live streaming within this group of cameras (due to processor limits):

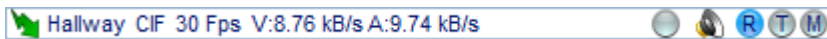
Number of enabled cameras within the same group	Live video resolution
1–2	no limits
3	<ul style="list-style-type: none"> only QCIF or CIF (25 fps) or the same quality as recording (hard disk stream).

Number of enabled cameras within the same group	Live video resolution
4	<ul style="list-style-type: none"> only QCIF (25 fps) or the same quality as recording (hard disk stream).

For DS42xx A/V cards, the limitations are set per camera (and no longer per camera group). If you set recording quality to 4CIF/4SIF, the maximum quality for live viewing is CIF/SIF or QCIF/QSIF. If you set recording quality to 2CIF/2SIF, only CIF/SIF, QCIF/QSIF and 2CIF/2SIF are available for live viewing. In all these cases, the maximum frame rate is 25 fps.

Info Display


Under **Tools**, click **Info** to display the camera information under each camera image:

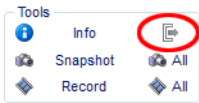


The system displays the following information:


Item	Description
	Video streaming status: <ul style="list-style-type: none"> (green) = video is streaming on this live stream slot (either from camera or NO VIDEO) (red) = no video is streaming (free live stream slot, no camera is assigned).
Hallway	Camera name
CIF	Image size (CIF, 2CIF... or in pixels)
30 Fps	Number of frames per second
V:8.76 kB/s	Video stream transfer speed in kilobyte per second
A:9.74 kB/s	Audio stream transfer speed in kilobyte per second
	Local recording (on hard disk of your PC; for more information, see <i>Local Video Recordings</i> on page 169): <ul style="list-style-type: none"> (blue) = recording locally (grey) = not recording locally.
	Live sound is active. <ul style="list-style-type: none"> = live sound active = live sound not active.
	Recording (on the hard disk of the XO device): <ul style="list-style-type: none"> (blue) = recording (grey) = not recording.
	Tamper detection. A tamper event occurred on the camera, or no video (for example: BNC not connected for analogue camera). <ul style="list-style-type: none"> (yellow) = tampering detected (grey) = no tampering detected.
	Motion detection: <ul style="list-style-type: none"> (green) = motion detected (grey) = no motion detected.

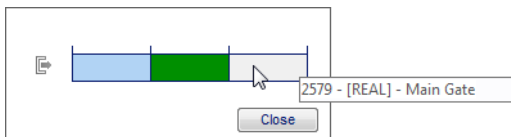
Activating Outputs

You can manually activate outputs via the live view of a camera. The  button then becomes available under **Tools** when you click the camera image in the live view:

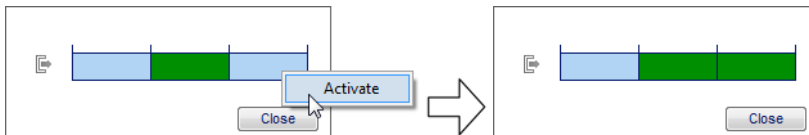


To activate/deactivate an output from the **Live Video** window, proceed as follows:

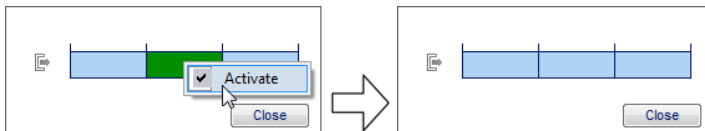
1. In the **Live Video** window, click the camera image to which the output is associated.
2. Under **Tools**, click the  button. A popup window appears with a status bar for the outputs on the selected camera. Idle outputs are blue, active outputs are green. When you place the mouse cursor over an output, the system displays the output number and name.



3. To activate an output, right-click the desired output in the status bar, and then click **Activate**. The output bar colours green.



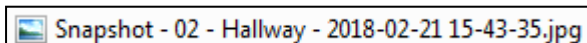
4. To deactivate an output, right-click the desired output in the status bar, and then click **Activate**. The output bar colours blue.



5. Click **Close**.

Taking Snapshots

You can take a snapshot of the live video streams, either of one selected camera only, or of all the cameras in the live view. By default, the system saves the snapshots in .jpg format in the work folder, in the subfolder for this XO device. If the subfolder does not exist yet, the system will create it. You can specify any other folder if you wish. The snapshot's filename contains the camera number and name, followed by a date stamp in the format *year-month-day hours-minutes-seconds*.



You can also immediately print the snapshot(s).

To take a snapshot of the live view, proceed as follows:

1. You have the following options:
 - To take a snapshot of only one camera image, click the desired image in the matrix (a thin red border appears around the selected image), and then click **Snapshot**.

- o To take a snapshot of all cameras in the live view, click **All**. The following screen appears:



2. Proceed as follows:

Button	Description
	Click the arrow buttons to navigate to the different snapshots. These buttons are only available if you have taken a snapshot of all cameras in the live view.
	Save the snapshot that is currently displayed.
	Save all snapshots. This button is only available if you have taken a snapshot of all cameras in the live view.
	Print the snapshot that is currently displayed to a printer of your choice.
	Print all snapshots to a printer of your choice. This button is only available if you have taken a snapshot of all cameras in the live view.

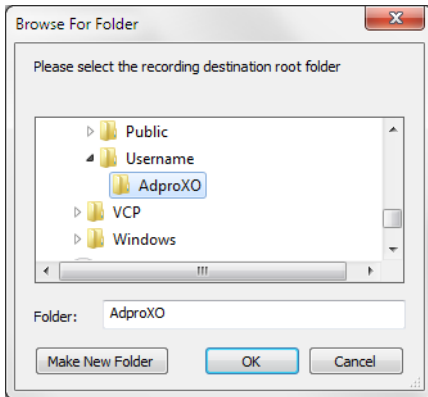
Local Video Recordings



Besides the automatic recordings as defined in the recording conditions, you can start recording manually from the live view, either for one selected camera only, or for all the cameras in the live view. The system stores these recordings on the hard disk of your PC (instead of the XO device's hard disk). By default, the system saves the recordings in .hbox format in the work folder, in the subfolder for this XO device. If the subfolder does not exist yet, the system will create it. You can specify any other folder you wish, and the system will automatically create a subfolder in it. The recording's filename name contains the camera number and name, followed by a date stamp in the format *year-month-day hours-minutes-seconds*.

01 - IP Office - 16-11-25 11-33-41.hbox

To record the live images to your local hard disk, proceed as follows:

1. To record from only one camera, click the desired camera image, and then click **Record**.
Alternatively, to record from all cameras in the live view, click **All**. The following screen appears:







2. Select a different folder if desired, and then click **OK**. Remember that the system stores the recording in a subfolder of the indicated folder; you do not have to select or create the subfolder itself.
The system starts recording. The local recording icons in the information bar turn blue  for the selected cameras.
3. To stop recording, click **Record/All** again. The local recording icons turn grey .

Audio, Listening


You can listen to audio from an audio-enabled camera in the live stream. You can listen to only one camera at once.

To listen to audio from a camera in the live view, proceed as follows:

1. Click the desired camera in the live view. A thin red border appears around the selected camera image. The system plays the sound from the selected camera.
2. To mute the sound: under **Audio**, click . The button changes appearance to indicate that sound is muted: .
3. To unmute the sound, click .
4. To adjust the volume, drag the slider under the  button.








Note

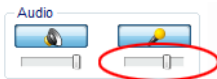
If the audio button is unavailable , the camera does not support audio, or the camera's audio settings are incorrect. The **Send live audio stream** checkbox has to be selected for the camera.

Audio, Talkback

If you connect a microphone or headset to the client PC, you can use it to talk to the person on site via a loudspeaker (audio output) associated with the camera.

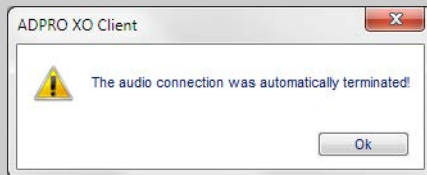
To talk back to a person on the monitored site, proceed as follows:

1. In the **Live Video** window, click the desired camera view. A thin red border appears around the selected camera image.
2. Under **Audio**, use the microphone button as follows:
 - If full duplex mode is off (default), click and hold the microphone button . The button changes colour . Talk through the microphone that is connected to the MIC input of the client PC. When finished, release the microphone button.
 - If full duplex mode is on, click the microphone button  once. The button changes colour . Talk through the microphone. When finished, click the microphone button again.
 - To adjust the input volume, use the volume slider under the  button.



Note

If you do not click the microphone button to stop talkback in full duplex mode, the system automatically terminates the audio out connection after 10 minutes. The following message appears:










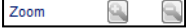







Click **OK** to close the message box.

PTZ Control

Using PTZ Functions

Under **PTZ**, you can find the PTZ controls for PTZ-enabled cameras.

Item	Description
	<p>Use the arrows to move the camera to the left or right, and up or down. Use the home button  in the middle to move the camera to the home position (= start position). For information on the  button, see below.</p>

Item	Description
	<p>Click the button to enable digital zoom. The button turns red  when digital zoom is active. Click the button again to disable digital zoom.</p> <ul style="list-style-type: none"> To zoom in: position the mouse over the area where you want to zoom in, and then press and hold the mouse button. When zoomed in, the text Digital Zoom appears (in green) on the image.  <ul style="list-style-type: none"> To zoom out: press and hold the Shift key and the mouse button.
	<p>Use this slider to adjust the moving speed of the PTZ camera (if the camera supports this function).</p>
	<p>Press and hold the buttons to zoom in or out on the centre of the camera image.</p>
	<p>Adjust focus (only available if the camera supports the function). Click the middle button to manually adjust the focus. Use the + and – buttons to adjust.</p>
	<p>Adjust iris (only available if the camera supports the function). Click the buttons to manually adjust the iris (open/close).</p>
	<p>Wash/wipe (only available if the camera supports the function). Click to wash and/or wipe the lens of the outdoor camera.</p>
	<p>Manage and use PTZ preset positions. For more information, see <i>Managing PTZ Preset Positions</i> on page 173.</p>
	<p>(Infra-red) LEDs on the camera (only available if the camera supports the function). Click to switch the LEDs on or off.</p> <div style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;"> <p> Caution! If you are running video analytic applications on the camera, Xtralis strongly recommends to disable the IR LEDs, because they may attract insects to the camera lens and interfere with detection by the analytic applications. Use separate IR illuminators if necessary.</p> </div>
	<p>Auxiliary functions: type the auxiliary function number (1–255) in the box, and then click the buttons to enable or disable the selected auxiliary function on the camera. Auxiliary camera functions vary depending on the camera model. For more information, consult the documentation of the camera. The XO software may not support all available functions.</p>

Instead of the buttons on the screen, you can also use these keys on the keyboard for PTZ control:

- Arrow keys (up, down, left, right)
- Home = Zoom in
- Page Up = Zoom out

- End = Focus near
- Page down = Focus far.

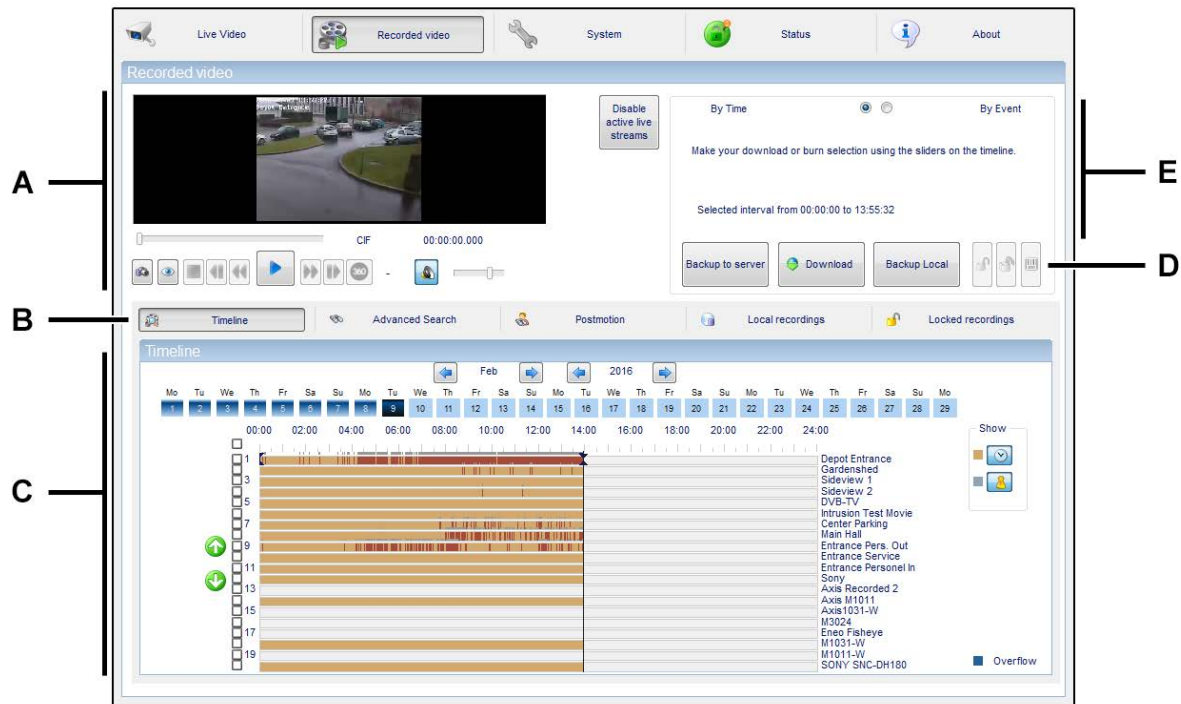
Furthermore, on-screen PTZ is available. Move the mouse cursor to the edge of the image and it will transform into a white arrow. Press and hold the mouse button to move the camera in the direction of the arrow.



Recorded Video

About Recorded Video

The **Recorded Video** screens allow you to play back or back up the recordings on the XO device's hard disk(s). In the top menu, click **Recorded video**. By default, the **Timeline** tab opens.








The **Recorded Video** screen contains the following elements:



A	A preview screen with controls for playback.
B	Tabs with different functions in the Recorded Video screen.
C	The content of this part of the screen depends on the selected tab. The example above shows the Timeline tab with individual timelines for each video channel.
D	Buttons for backing up and unlocking recordings. The available buttons depend on the selected tab.
E	The content of this part of the screen depends on the selected tab. The example above shows options to search recordings by time or event, and a result list below. <ul style="list-style-type: none"> When searching by time, this area displays the start and end time of the selected interval. When searching by event, this area displays a list of found event recordings.

Searching Recordings on the Timeline





Timeline Overview

The **Timeline** tab contains individual timelines for each video channel, with a calendar on top. The colours of the days in the calendar indicate if there are recordings on that day.





Colour	Description
 (grey)	Day without recordings. There were either no recordings made on that day, or the system has already cleaned up the recordings on that day, according to the Maximum days recording setting.
 (red)	Earliest day with recordings; the system is cleaning up recordings on this day, according to the Maximum days recording setting.
 (blue)	Day with recordings.
 (dark blue)	Currently selected day with recordings. The recordings of this day appear in the camera timelines under the calendar.
 (light blue)	Day in the future. No recordings yet.

The camera number appears on the left-hand side of the timeline, the camera name on the right-hand side. If the system contains more cameras than can fit on the screen, use the arrow buttons  and  at the left to scroll down/up to see more timelines: click to move one camera up/down; click and hold to scroll continuously.

The colours on the timeline indicate the type of recording.

Colour	Description
 (orange)	Continuous recording.
 (red)	Recording on event. If you zoom in (drag the mouse on the time indication line) on an event recording, you will see that it consists of the following parts: <ul style="list-style-type: none"> • Grey areas indicating pre and post event recording. • A red vertical bar indicating the time when the input that triggered the recording, was activated. 
 (light grey)	Period without recordings for this video channel.

Under **Show**, on the right-hand side, you can choose to display or hide the recording types on the timeline.

Button	Description
	Click the button to show/hide continuous recordings on the timeline.
	Click the button to show/hide event recordings on the timeline. If you only display event recordings, you can quickly jump from one recording to the next/previous using the  and  buttons that appear to the left and right side of the timelines.


If you change the display options during playback, playback stops.



Note

The XO device can record maximum 16 000 events per day (the counter is reset at night). If more events occur on the same day (= overflow), the XO device switches automatically to continuous recording for all cameras. This is indicated in blue bars on the timeline. You cannot hide overflowing recordings.

Hover your mouse over a recording in the timeline to see its details:

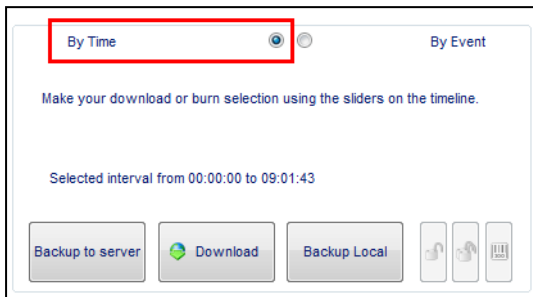
	Start time: 08:13:55 End time: 08:14:09 Event time: 08:14:00 Triggers: 1080+ (CAM02 PERIMETER)
---	--

- Start and end time of the recording.
- Event time (only for event recordings)
- Trigger that activated the event (only for event recordings).

Selecting a Timeframe on the Timeline

To select a specific timeframe on the timeline, proceed as follows:

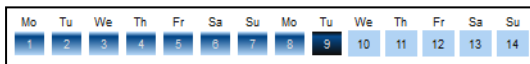
1. In the top menu, click **Recorded video**, and then click the **Timeline** tab.
2. In the top right, click **By Time**.



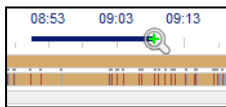
3. Click the arrow buttons to select the desired month and year.



4. Click the desired day. You can only click days that contain recordings; so you cannot click grey and light blue days. The day in dark blue is the currently selected day. The recordings of that day appear in the timeline.



5. By default the time indication is shown with a 30-minute interval. To zoom in, drag the mouse on the time indication line. The pointer changes into a magnifying glass while dragging. A black marker appears to indicate the selected time. To zoom out again, right-click the time indication line.

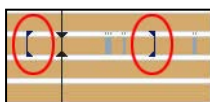


6. Click in the timeline of the desired camera. A black vertical marker appears where you clicked.

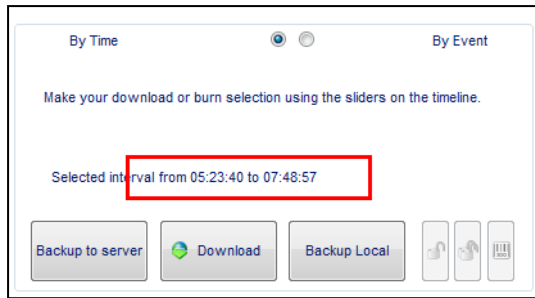


The preview window (top left) displays the still image of the selected camera at the selected date and time.


7. To change the selected time, drag the vertical marker to the desired position. Zoom in on the timeline if necessary.
8. To select a specific interval, drag the black delimiters on the selected timeline to the desired start and end time.



The box at the top right of the screen indicates the exact start and end time of the selected interval:



9. You can now watch and/or download this footage:

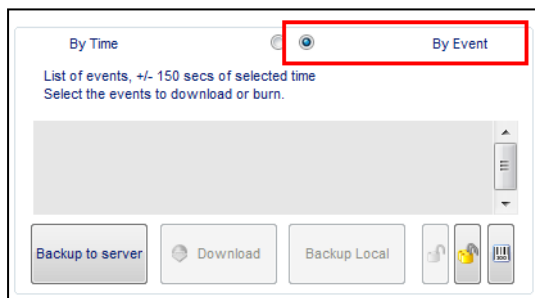
- To play the selected video, click the  button. Playback starts at the vertical marker in the timeline.
- To download the selected video, click **Download**.

Searching Event Recordings on the Timeline

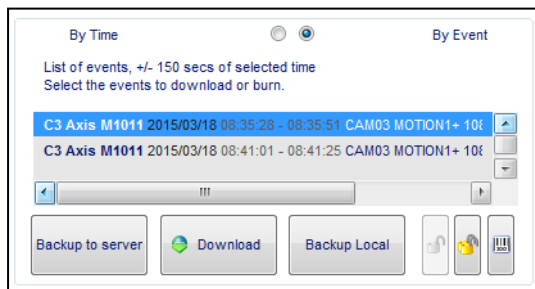
When you search by event, the system will select the events that happened 150 seconds before or after a selected time on the timeline, for a selected camera.

To select event recordings on the timeline, proceed as follows:

1. In the top menu, click **Recorded video**, and then click the **Timeline** tab.
2. In the top right, click **By Event**.



3. Click in the timeline of the desired camera, at the desired time.
The result list displays the event recordings that happened 150 seconds before and after the selected point in time. If there are no event recordings in that 150-second timeframe, the result list will be empty.



4. You can now watch and/or download this footage:

- To play a specific recording, double-click it in the result list.
- To download a recording, click it in the result list, and then click **Download**.

Playing the Selected Footage

When you have selected a timeframe or a video recording, you can play it using the controls under the preview window. Playback starts at the vertical marker in the timeline.



Note

The video player plays what is shown on the timeline. If you display only event recordings, the player skips the 'empty' time slots in between event recordings.

Use the control buttons as follows:

Button	Description
	Click to choose the options for rendering analytic bounding boxes. For details, see <i>Rendering Analytic Bounding Boxes</i> on page 226.
	Click to take a snapshot.
	Click to stop playback. The image will freeze at the time reached in the playback.
	Click to fast forward/backward.
	Click to start playback.
	Click to pause playback. Click the button to resume.
	Click to de-warp images from a 360° panoramic camera. For more information, see <i>360° Camera Images</i> on page 197.
	Click to mute/unmute the sound. To adjust the volume level, drag the slider on the right-hand side of the button. Audio is only available if you have enabled audio for the camera.

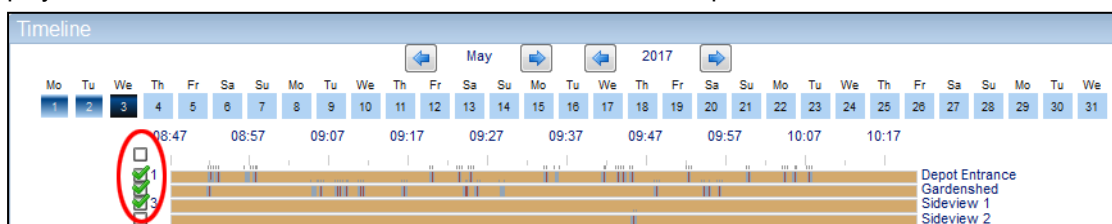
To see the recorded video at full screen, double-click the video player image. Double-click again to return to the normal preview window.


Synchronised Playback

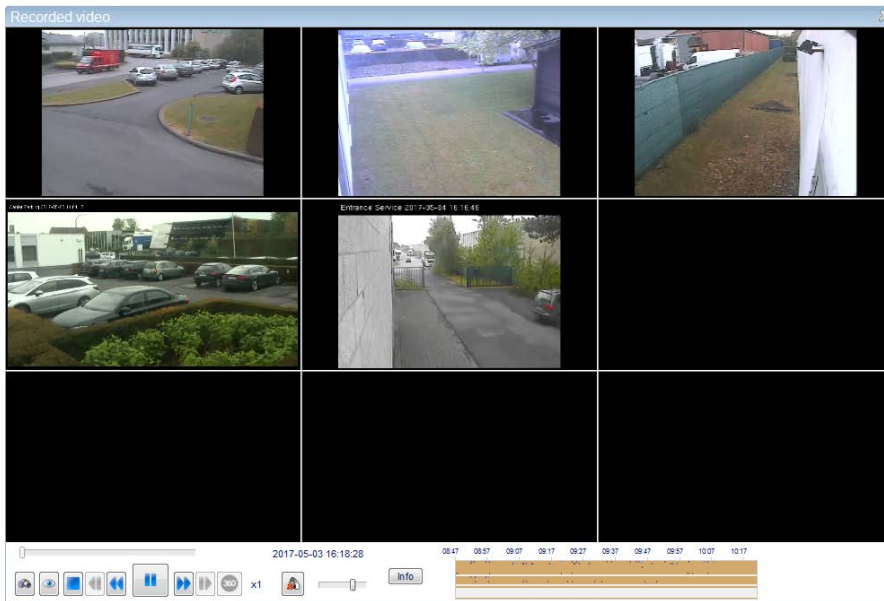
You can watch recorded video of multiple cameras simultaneously (with images of identical time settings).

To synchronised playback, proceed as follows:

1. On the **Timeline** tab, select the checkboxes of the cameras that you want to include in the synchronised playback. To select all cameras, select the checkbox at the top.





2. To set the timeframe, click in any of the selected camera timelines and adjust as required.
3. Click . The system opens a matrix view with the selected camera images.



Synchronised playback offers similar tools as single playback, except that:

- Sound is only available for one video channel at a time: click the camera image for which you want to play the sound.
 - You can click the **Info** button to display the camera name and image resolution below the camera images.
4. To view one of the camera images at full screen, double-click it. Double-click it again to return to multiple playback.

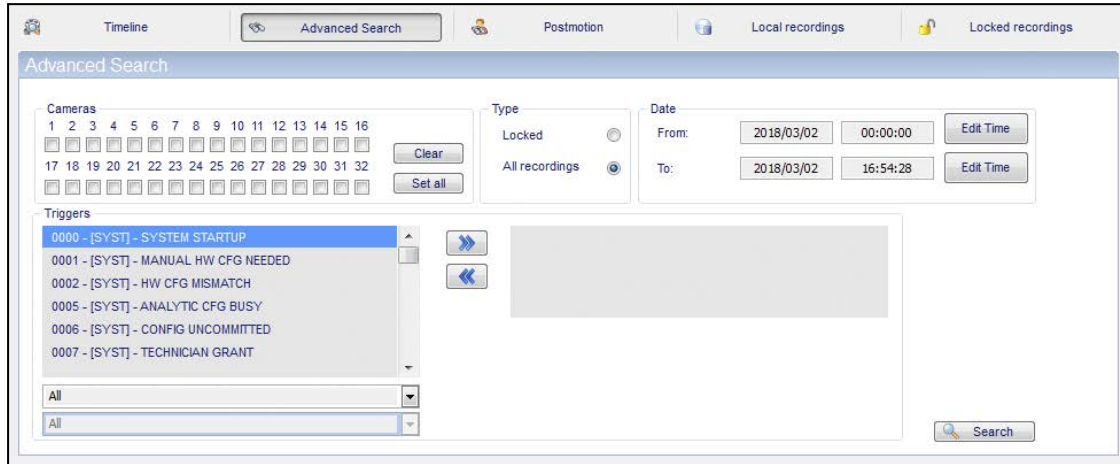


5. To stop synchronised playback and return to the timeline screen:
 - Click the close button  in the top right corner.
 - Click the stop button .

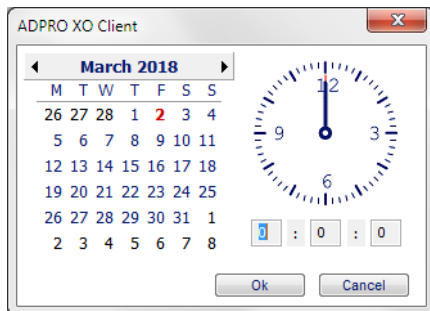
Searching Recordings via Advanced Search


The advanced search allows you to search for recordings on specific triggers. Proceed as follows:

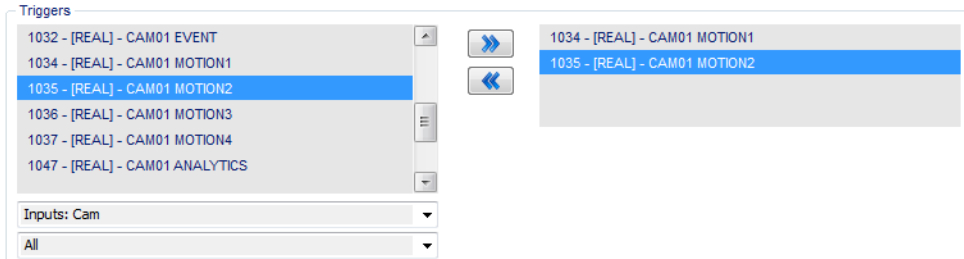
1. In the top menu, click **Recorded video**, and then click the **Advanced Search** tab.




2. Under **Cameras**, select the checkboxes for all the cameras that you want to include in the search. Click **Set all** to select all cameras.
3. Under **Type**, select:
 - o **Locked**: to search in locked recordings only.
 - o **All recordings**: to search in all recordings.
4. Under **Date**, set the desired time frame. You can type the date and time indications in the **From** and **To** boxes, or you can click **Edit Time** to select a date and time:



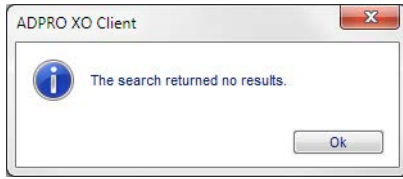
5. Optional: under **Triggers**, click the desired input, and then click the  button to move the selected input to the list on the right. You can select maximum 4 triggers.



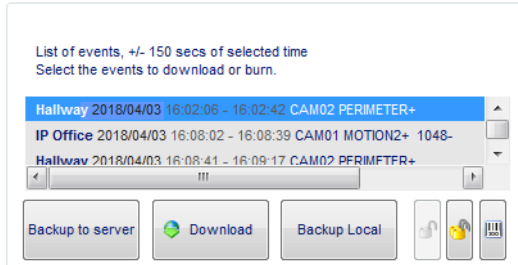
Use the filters below the list to reduce the list. If you filter on camera inputs, you can filter further on camera number.

6. To remove a selected input from the search, click it in the list on the right-hand side, and then click the  button.

7. Click **Search** to start searching for recordings.
 - If there are no results, the following message appears:



- If there are results matching your search, they appear in the results list at the top right.



8. You can now watch and/or download this footage:
 - To play a recording, double-click it in the result list.
 - To download a recording, click it in the result list, and then click **Download**.




Note

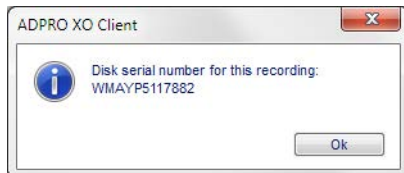
When you perform an advanced search on recorded video, the results pane may display a different trigger than the one you selected for searching. This may happen if you have defined multiple triggers in the recording condition that corresponds with the found recording. The system will take the first trigger that is specified in the recording condition, and display that in the search results pane. That trigger may be different from the one you selected for searching.

Identifying the Storage Disk

If you have multiple hard disks in your XO device, you can check on which hard disk an event recording has been stored. This feature is not available for continuous recordings.

To identify the storage disk for an event recording, proceed as follows:

1. Select the desired recording in the results list, or click an event recording in the timeline.
2. Click the  button. A popup window appears displaying the serial number of the hard disk:



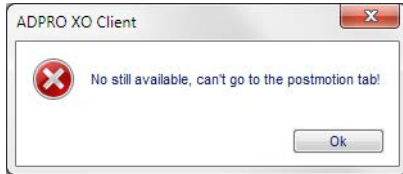
3. Click **OK** to close the message box.

Searching Recordings via Postmotion

The XO device does not only store the video footage on the hard disk, it also creates a metadata file describing the contents of the footage. This information allows you to quickly find all sequences in which an object was moving inside a specific area of the camera image.

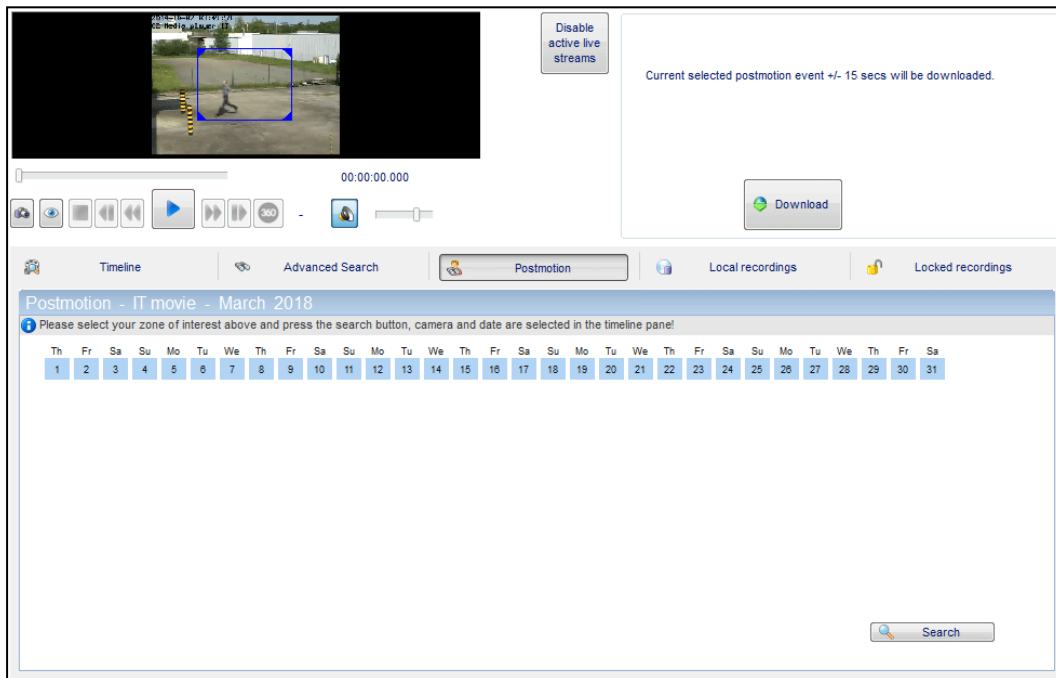
To find recordings via postmotion, proceed as follows:

1. In the top menu, click **Recorded video**, and then click the **Timeline** tab.
2. In the time indicator bar, select the desired date.
3. In the timeline of the desired camera, click in any existing recording. This will allow the postmotion function to create a still image. The still image appears in the preview window at the top of the screen.
4. Click the **Postmotion** tab.
 - If there is no still image available, (for example, because you clicked an empty recording line, or you did not give the system time to load the still image), The following error message appears:



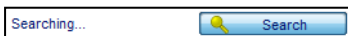
In this case, click the **Timeline** tab and return to step 3.

- If the still image is available, the following screen appears:

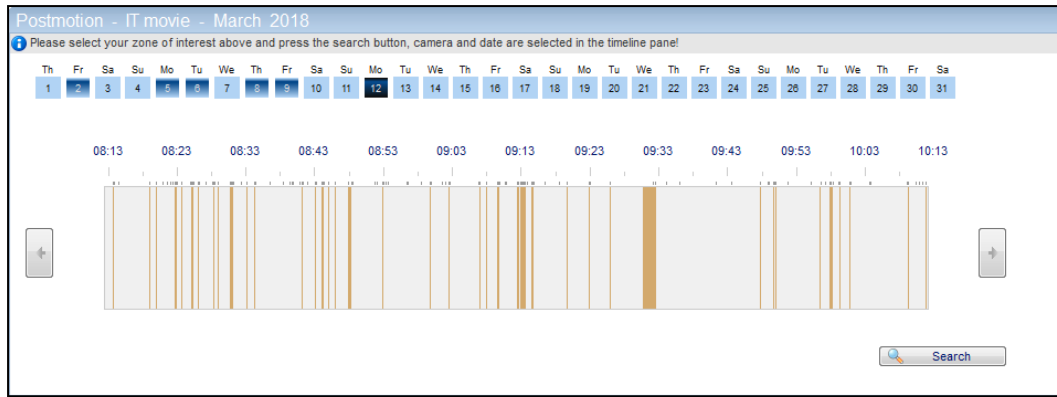


The blue rectangle in the preview image indicates the zone of interest: the area that the postmotion function will analyse.




5. Adjust the size and position of the zone as desired. Drag the zone to the desired area; drag the corners to resize.
6. Click **Search**. During search, the message *Searching* appears:



When the search has been completed, a timeline with results appears.



Days indicated in light blue contain no results; days in blue contain results. The darkest blue date is the currently selected date.

7. Click the day of interest.
8. To zoom in on a specific period, drag the mouse over the time indication line.
9. To zoom out, right-click the time indication line.
10. To play a specific recording, click the recording in the timeline, and then click .
11. To jump to the previous/next result, click the arrow buttons   to the left and right of the timeline.

Downloading and Storing Selected Video Recordings

Overview

You can download recordings to the hard disk of your PC, or on a USB drive or CD/DVD.

If you download to the PC, the system stores the downloaded footage in the work folder, in the subfolder for this XO device. The file name contains the camera number, camera name, and the time frame of the recording. The file is stored with the extension “.hbox”.

Name	Type	Size
01 - Hallway - 16-11-07 11-15-05 -- 16-11-25 15-47-02.hbox	HBOX File	39,302 KB
01 - Hallway - 16-11-25 15-47-03 -- 16-11-25 15-47-37.hbox	HBOX File	5,683 KB
01 - IP Office - 16-11-02 13-35-22.hbox	HBOX File	257 KB
01 - IP Office - 16-11-25 11-33-41.hbox	HBOX File	7 KB

For slow network connections it is recommended to disable all live streams in order to increase the download speed, especially with synchronised playback. You can disable all active live streams by clicking the **Disable active live streams** button.



To enable live streams again, click **Live Video** in the top menu, and then add the desired cameras to the live view.



Note

When downloading a recording via **Postmotion**, only part of the recording will be stored: the selected time plus about 10 extra seconds.

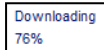
Downloading Recordings to your Local Hard Disk



To download video recordings to the hard disk of your PC, proceed as follows:

1. Search for the desired footage via the timeline, advanced search, or postmotion, then continue as follows:
 - For searches via advanced search: select the desired footage in the results pane.
 - For searches via postmotion: click the desired footage in the timeline.
2. Click **Download**.




You can see the downloading status:



The system starts playing the footage that you are downloading. To stop playback, click . If you have selected multiple cameras, the synchronised playback window will appear. To stop synced playback, click  twice.



Note

During download, the **Download** button changes: . Click the button to stop downloading.

If you have already downloaded the footage and click the **Download** button again, you will be asked whether you want to download the recording once more:



Downloading Recordings to USB Drive or CD/DVD



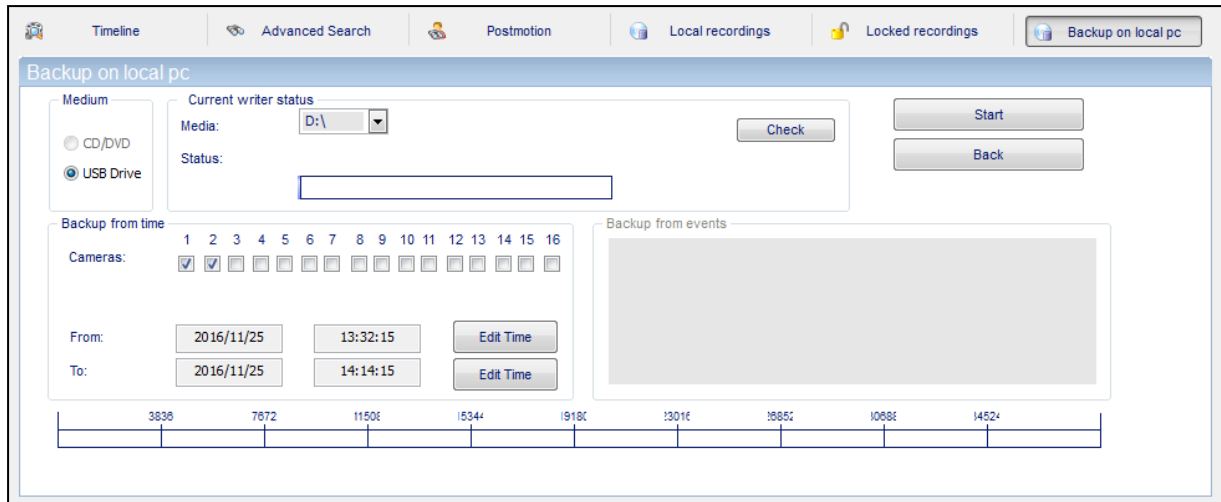
Note

Software versions XOa 3.00 and above do not support connecting a CD/DVD drive directly to the XO device. Connect the CD/DVD drive to your PC instead.

To download video recordings to USB drive or CD/DVD, proceed as follows:

1. Search for the desired footage via the timeline or advanced search.
2. Select the desired footage in the results pane.
3. You have the following options:
 - To store the video on a USB drive connected to the XO device, click **Backup to server**.
 - To store the video on a USB or CD/DVD drive connected to your local PC, click **Backup Local**.

The following screen appears:



4. Under **Medium**, select the desired storage medium: **CD/DVD**, or **USB Drive**.
5. If you selected recordings on the timeline, you can still select additional cameras, and change the date/time.
6. Click **Start** to start writing the video footage to the selected drive.
If you want to cancel, click **Back**.

Managing Local Recordings

Overview of Local Files

From the **Local recordings** tab, you can manage the following files that are stored in the work folder on your local PC, in the subfolders for each XO device:

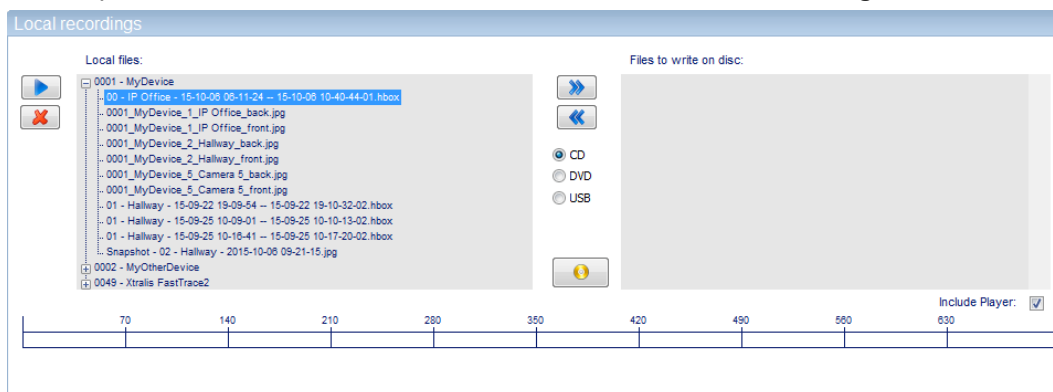
- Recordings that you saved on your PC using the **Download** button
- Recordings that you made from the **Live Video** window.
- Snapshots
- Calibration images.

You can view the files, delete them, or back them up to CD/DVD or a USB drive.





Viewing or Deleting Local Files

To view or delete locally stored files, proceed as follows:

1. In the top menu, click **Recorded Video**, and then click the **Local recordings** tab.



The **Local files** box displays the local files that are available on your PC, in separate subfolders for the different XO devices. By default, the system expands the folder for the current XO device.

- Use the  and  buttons to expand/collapse the folders.
- To view a recording, snapshot, or calibration picture: click the desired file, and then click .
- To delete a recording, snapshot, or calibration picture: click the desired file, and then click .

Backing up Local Files

The backup feature for local files allows you to include player software, so that you can play the video recordings on any Windows compatible computer.

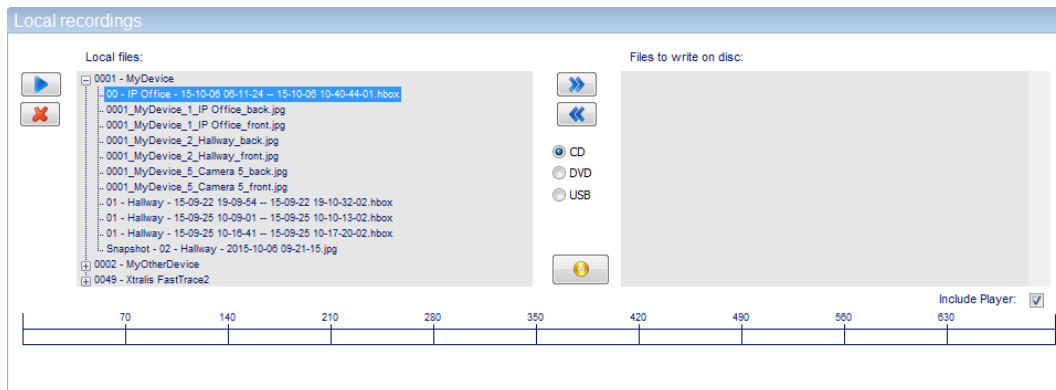


Note

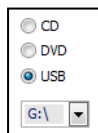
You cannot back up files that are larger than 4 GB to FAT32-formatted USB drives. If you need to back up larger files, you have to use exFAT or NTFS formatting on the USB drive.

To back up local files on CD/DVD/USB, proceed as follows:


- In the top menu, click **Recorded Video**, and then click the **Local recordings** tab.



- Select the medium to where you want to write the files: **CD**, **DVD**, or **USB**. If you click **USB**, then also select the correct drive name:



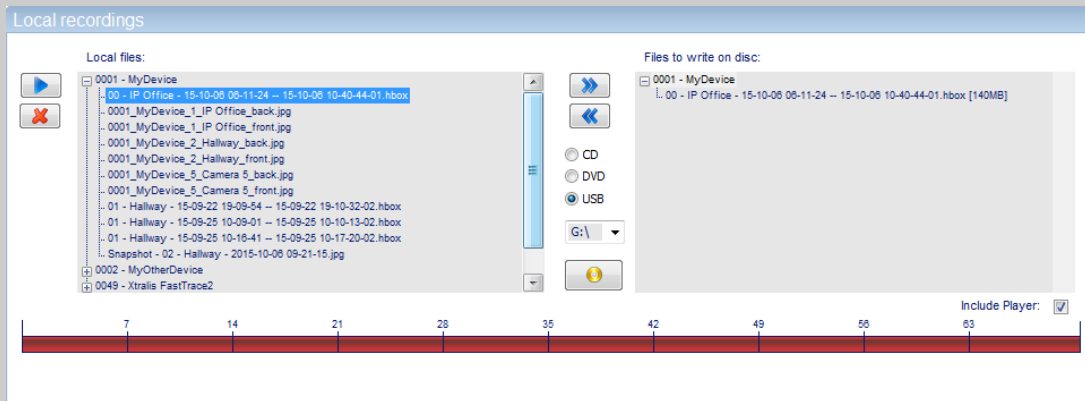
The bar at the bottom of the screen indicates the available disk space on the selected medium.

- To add a file to the list of files to write, click the file in the **Local files** list, and then click . The file appears in the **Files to write on disc** list. The system automatically creates subfolders per XO device.





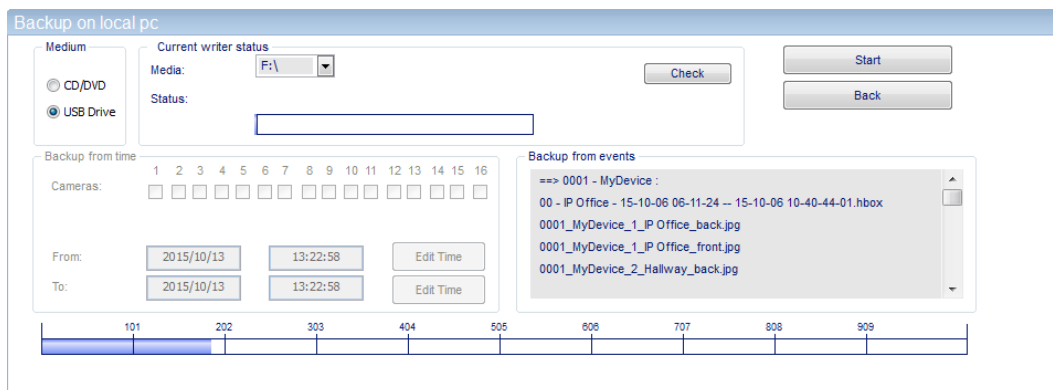
Note

If there is not enough space on the medium for writing the selected files, the bar colours red.



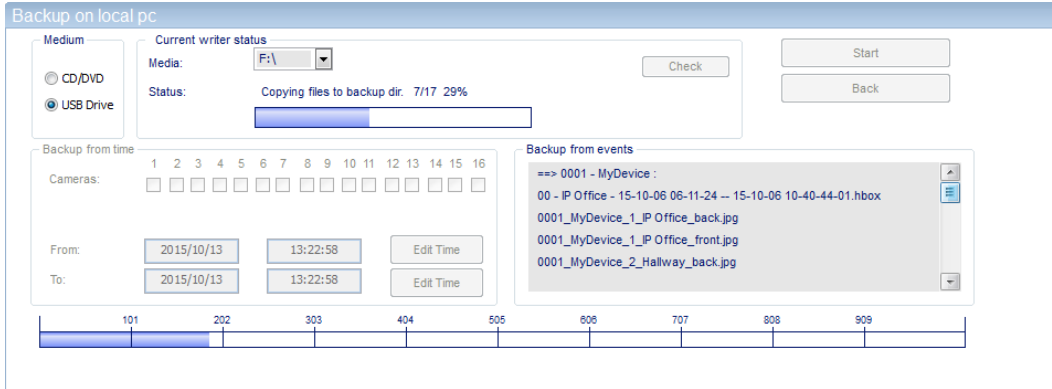
In this case, remove some files from the list of files to write, or use a larger medium.

- To remove a file from the list of files to write, click the file in the **Files to write on disc** list, and then click .
- If you want to write the player software for watching the video recordings to the medium, select the **Include Player** checkbox. This allows you to play the video recordings on any Windows compatible computer.
- To start writing the files from the **Files to write on disc** list to the selected medium, click the  button. The following screen appears:

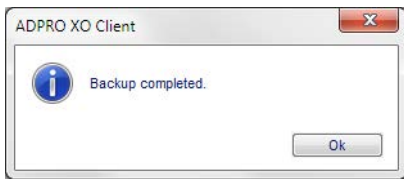


- You can still change the medium in the **Medium** section. If you do, click **Check** to check the available space on the new medium.
- The files to write on the medium appear in the **Backup from events** box. If you want to add or remove files, click **Back** to return to the previous screen.

- To write the files to the selected medium, click **Start**. The system starts writing the files to the selected medium.



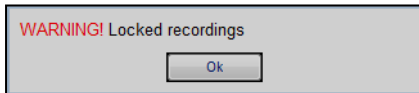
When finished, the following message appears:



- Click **OK** to close the message box. The system returns to the **Local recordings** tab.

Locked Recordings

For recordings on event, you can specify to lock the recordings. The system cannot delete locked recordings automatically. As soon as there is a locked recording, the XO client displays the following warning message:



Click **OK** to close the message box. The message box reappears each time you start the client.

The padlock in the **Recorded Video** button indicates the presence of locked recordings:



Furthermore, locked recordings trigger the system message 0049 – [SYST] – LOCKED RECORDER (by default linked to the alarm profile NORMAL EVENT).



Caution!

The XO device cannot delete locked recordings. When it encounters a locked recording during automatic clean-up (for example after 30 days), it **stops cleaning up**. When the device runs out of storage space, it also **stops recording**.

To prevent that the XO device stops recording, you have to download the locked recordings as soon as you receive the warning message, and then unlock them so that the system can delete them.