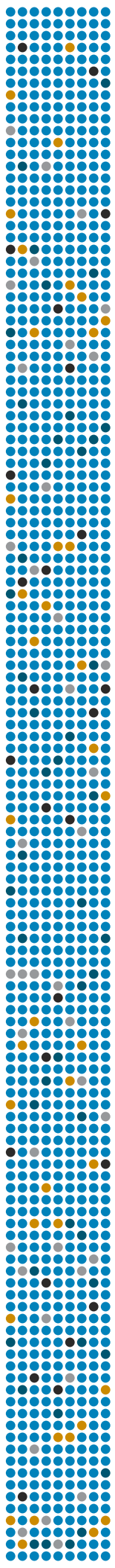




Senstar Thin Client

3.x
User Guide



Contents

Introduction.....	4
Supported hardware.....	4
Performance guidelines.....	4
Log in to the Web interface.....	5
Configuration.....	6
Configure the Thin Client.....	6
Settings.....	6
Connect to Mobile Bridge.....	11
Add a Thin Client to Symphony.....	12
Connect to Enterprise Manager.....	12
Add a user.....	12
User permissions.....	13
Restore factory settings using the hardware.....	13
Restore factory settings using the Web interface.....	13
Digital signage.....	13
Add a video file.....	14
Display a video file.....	14
Display a video file when waiting for events.....	14
Add a network connection.....	15
Enable SNMP.....	15
Add a custom certificate.....	15
Display the static privacy mask.....	15
Cameras.....	17
Connect to an ONVIF camera directly.....	17
Connect to an RTSP camera directly.....	17
Import a camera list.....	18
Export a camera list.....	18
Camera views.....	19
Select a camera view.....	19
Create a camera view.....	19
Delete a camera view.....	19
Show stream profile information.....	19
Enable smart 2-view.....	20
Carousels.....	21
Select a carousel.....	21
Add a carousel in direct connection mode.....	21
Delete a carousel in direct connection mode.....	21
Client interface.....	22
Navigation buttons.....	22
Calibrate a touchscreen monitor.....	22
CEC commands.....	23
Save an image from a camera.....	24
Activate joystick mode.....	24

Thin Client Locator tool.....	26
Open the Web interface.....	26
Clean update path.....	26
Firmware Update tool.....	27
Install firmware.....	27
Thin Client Remote application.....	28
Create a connection.....	28
Close a connection.....	28
Edit a connection.....	28
Delete a connection.....	28
Open a connection.....	28
Create a camera view.....	29
Select a camera view.....	29
Delete a camera view.....	29
Select a carousel.....	29
Select digital signage.....	29
Configure the Thin Client.....	30
Legal information.....	31

Introduction

The Senstar Thin Client is a secure, reliable, and cost-effective server alternative that displays 1080p video from network cameras quickly and easily.

The Thin Client includes a Web interface, for administrators, that includes configuration options and a client interface, for users, that displays footage and includes viewing options. In addition, the Thin Client Remote application allows users to view footage and access viewing options from mobile devices.

Supported hardware

The Thin Client supports the following hardware.

Hardware	Requirements
Touchscreen monitor	Any of the following: <ul style="list-style-type: none"> • iiyama ProLite T1731SR-B1 • iiyama ProLite T1931SR-B1 • Capacitive or optical touchscreen monitors that are compatible with the generic single/multi-touch HID drivers
Joystick	Any of the following: <ul style="list-style-type: none"> • APEM USB joysticks • Axis USB joysticks
USB network adapter	USB network adapters based on the following chip sets: <ul style="list-style-type: none"> • RealTek RTL8150 • RealTek RTL8152 • RealTek RTL8192

Performance guidelines

The Thin Client performs best when you do not exceed the settings below.

Views	Maximum resolution	Maximum FPS	Aspect ratio
1-View	1920 x 1080	25	1.77778
2-View	960 x 1080	25	0.88888
4-View	960 x 540	25	1.77778
6-View	640 x 540	20	1.18519
9-View	640 x 360	20	1.77778
12-View	480 x 360	10	1.33333
16-View	480 x 270	10	1.77778

Log in to the Web interface

Use a browser to log in to the Thin Client Web interface. By default, the IP address (without using DHCP) of the Thin Client is 192.168.0.20.

The Web interface supports the following browsers:

- Chrome
- Firefox
- Internet Explorer 11

1. In a browser, navigate to the IP address of the Thin Client.
2. Type your username.
3. Type your password.
4. Select the language for the interface.
5. Click **Login**.

Configuration

Configure the Thin Client using the settings page in the Web interface or by running the setup wizard.

The Thin Client prompts you to run the setup wizard when it starts for the first time or after restoring factory settings. You can also run the setup wizard at any time from the settings page in the Web interface

You can connect the Thin Client to Symphony using the Mobile Bridge.

Configure the Thin Client

You can configure the Thin Client in the Web interface.

1. In the Web interface, click **Settings**.
2. In the **About** pane, set general information.
3. In the **Network Setup** pane, set the parameters that the Thin Client uses to connect to the network.
4. In the **Security** pane, set and confirm the password.
5. In the **Video Source** pane, set how the Thin Client connects to cameras.
6. In the **Digital Signage** pane, configure the video media that plays as digital signage.
7. In the **Display Options** pane, select the options for displaying camera views.
8. In the **Server Time** pane, set the time for the Thin Client.
9. In the **Management** pane, configure a connection between the Thin Client and Enterprise Manager.
10. In the **Maintenance** pane, perform maintenance functions.
11. Click **Save**.

Settings

About

Setting	Description
Device Name	Define the name of the Thin Client device.
Firmware Version	This field displays the current firmware version on the Thin Client device.
On-screen Interface Language	Select the language for the Thin Client device.
Model	This field displays the Thin Client model.
Serial	This field displays the Thin Client serial number.

Network Setup

Setting	Description
Configure IP automatically	Select to set network parameters automatically.

Setting	Description
Manually configure IP	Select to set network parameters manually.
IP Address	This field contains the IP address of the Thin Client device. By default, the IP address (without using DHCP) of the Thin Client device is 192.168.0.20.
Subnet Mask	This field contains the subnet mask for the network to which the Thin Client device connects.
Default Gateway	This field contains the default gateway for the network to which the Thin Client device connects.
DNS Server	This field contains the IP address of the DNS server.
Add Custom HTTPS Certificate	Click to add custom certificates.

Security

Setting	Description
Username	This field displays the username for the Thin Client device. You configure the username when the setup wizard runs after installation or a reset.
Password	This field contains the password for the Thin Client device. You configure the password when the setup wizard runs after installation or a reset.
Confirm password	This field contains the password confirmation.

Video Source

Setting	Description
Connect through Mobile Bridge	Select to connect to a Symphony Server using Mobile Bridge.
Direct camera connection	Select to connect to cameras directly.
Address	Type the address of the Mobile Bridge. This field is available if you select Connect through Mobile Bridge.
Additional	This field displays a list of IP addresses for redundant Mobile Bridge instances available to the Thin Client.
Port	Type the port that the Mobile Bridge uses. This field is available if you select Connect through Mobile Bridge.
Use HTTPS	Select whether the Mobile Bridge uses HTTPS for communication. This field is available if you select Connect through Mobile Bridge.

Setting	Description
Username	Type the username for the Mobile Bridge. This field is available if you select Connect through Mobile Bridge.
Password	Type the password for the Mobile Bridge. This field is available if you select Connect through Mobile Bridge.
Use Video From	Select how the Thin Client receives video. <ul style="list-style-type: none"> • Symphony—The Thin Client gets video from the Symphony Server. • Video Proxy—The Thin Client gets video from a single Symphony Server that acts as a proxy server for a multi-server farm. Use this option if you want to stream video over the Internet with Symphony Server 7.0 or later. • Camera via Multicast—The Thin Client gets video from the camera using multicast. This option is only supported when you use Axis, Bosch, or ONVIF cameras.
Manage Cameras	Click this button to add, edit, or remove cameras. This option is available if you select Direct camera connection.
Import Cameras	Click this button to import a list of cameras. This option is available if you select Direct camera connection.
Export Cameras	Click this button to export a list of cameras. This option is available if you select Direct camera connection.

Digital Signage

Setting	Description
Enable Digital Signage	Select whether to enable digital signage.
Manage Files	Click to manage the files that the Thin Client device can display as digital signage.
Add File	Click to add files for digital signage.
Select All	Click to select all of the files that you have added to the Thin Client device.
Deselect All	Click to clear all selections.
Use Selected Files	Click to add all of the selected files to the files list.

Display Options

Setting	Description
Show date and time decoration over video	Select whether the Thin Client device shows the date and time over video.
Show camera name decoration over video	Select whether the Thin Client device shows the name of the camera over video.
Display "No Camera" in empty cells	Select whether the Thin Client device identifies camera panels to which you have not assigned cameras.
Show decorations from Symphony	Select whether the Thin Client device displays the static privacy mask from Symphony. This option is available if you select Connect through Mobile Bridge.
Maintain Aspect Ratio	Select whether the Thin Client device maintains the aspect of the ratio of the camera when displaying video.
Fit To Window	Select whether the Thin Client device fits the video from a camera into window on the screen.

Server Time

Setting	Description
Synchronize with Symphony Server	Select whether the Thin Client device synchronizes with the time from the Symphony Server. This option is available if you select Connect through Mobile Bridge.
Time Zone	Select the time zone for the Thin Client device. This option is available if you clear the Synchronize with Symphony Server check box.
Synchronize with NTP server(s)	Select whether the Thin Client synchronizes with an NTP server. This option is available if you clear the Synchronize with Symphony Server check box.
Use default NTP servers	Select whether to use the default NTP servers. This option is available if you select Synchronize with NTP server(s).
Set manually	Select whether to manually set the NTP server and add the address for the NTP server pool. This option is available if you select Synchronize with NTP server(s).

Setting	Description
Set manually	Select to manually set the NTP server. This option is available if you clear the Synchronize with Symphony Server check box.
Date	Set the date for the Thin Client device.
Time	Set the time for the Thin Client device.

Management


Setting	Description
Enable Management	Select to use Enterprise Manager to manage the Thin Client device.
Organization Name	Type the organization name in Enterprise Manager. This field is available if you select Enable Management.
Address	This field displays the address for Enterprise Manager. This field is available if you select Enable Management.
Passphrase	Type the password for Enterprise Manager. This field is available if you select Enable Management.
Enable Proxy	Select to connect to Enterprise Manager through a proxy server.
Proxy Address	Type the address of the proxy server. This field is available if you select Enable Proxy.
Proxy Port	Type the port on the proxy server that the Thin Client device uses. This field is available if you select Enable Proxy.
Proxy Username	Type the username for the proxy server. This field is available if you select Enable Proxy.
Proxy Password	Type the password for the proxy server. This field is available if you select Enable Proxy.

Save Image to Network Attached Storage

Setting	Description
Enable	Select to display the configuration settings that allow the Thin Client device to access network attached storage.
Path	Type the path for the NAS storage. The Thin Client device uses this path to save images from cameras.

Setting	Description
Username	Type the username for the NAS storage. If your NAS permits anonymous access, leave this field blank.
Password	Type the password for the NAS storage. If your NAS permits anonymous access, leave this field blank.

Maintenance


Setting	Description
Select Input	Click to detect the input mechanism from a touchscreen monitor.  Note: This setting only applies to a specific model of touchscreen monitor that supports separate pen and touch input.
Calibrate	Click to calibrate a touchscreen monitor. The touchscreen monitor prompts you to touch the four corners and the center of the touchscreen monitor.
Restart	Click to restart the Thin Client device.
Restore	Click to restore the Thin Client device to factory settings.
Update	Click to check the Xnet for updated firmware file. If an update is available, the Thin Client device prompts you to install it.
Upload	Click to select a firmware file to upload to and install on the Thin Client device.
System Log	Click to download log files.

Connect to Mobile Bridge

You can connect a Thin Client device to a Mobile Bridge to make the cameras connected to the Symphony Server available to the Thin Client device.

Starting with Symphony 7.1, the Mobile Bridge is part of the Symphony Server and not a standalone application.

1. In the Thin Client Web interface, click **Settings**.
2. In the **Video Source** pane, select **Connect through Mobile Bridge**.
3. Type the address and port for the Mobile Bridge.
4. Select whether to use HTTPS for the connection.
5. Type the username and password for the Mobile Bridge.

6. In the **Use Video From** list, select how the Thin Client gets video from the camera.
 - **Symphony**—The Thin Client gets video from the Symphony Server.
 - **Video Proxy**—The Thin Client gets video from a single Symphony Server that acts as a proxy server for a multi-server farm.
 - **Camera via Multicast**—The Thin Client gets video from the camera using multicast.
 -  **Note:** To get video using multicast with an ONVIF camera, you must configure the camera to use multicast. For more information, see [KB10337](#).
7. Click **Save**.

Add a Thin Client to Symphony

You can add a Thin Client device to Symphony to allow Symphony to control the Thin Client device and display the cameras from the Thin Client device in the Symphony client interface.

To connect the Thin Client to Symphony, you must first connect the Thin Client to Mobile Bridge.

1. In the Symphony server configuration interface, click **Devices > Hardware**.
2. Click **Add Hardware**.
3. In the **Manufacturer** list, select Senstar.
4. In the **IP Address** field, type the IP address of the Thin Client.
5. In the **User Name** field, type the user name that you use to access the Thin Client.
6. In the **Password** field, type the password that you use to access the Thin Client.
7. Click **Connect To Device**.
8. In the **Name** field, type a name for the Thin Client that appears in Symphony.
9. In the **Server** list, select the Symphony Server to which to add the Thin Client.
10. Click **Save**.

Related tasks

[Connect to Mobile Bridge](#) on page 11

Connect to Enterprise Manager


1. In the Thin Client Web interface, click **Settings**.
2. In the **Management** section, select **Enable Management**.
3. Type the organization name and passphrase.
4. To connect to Enterprise Manager through a proxy server, select **Enable Proxy**.
5. Click **Save**.

Add a user

You can add multiple users with different permissions to Thin Client devices.

Thin Client devices include a default administrator with all permissions, but you can add additional administrator and viewer users. Administrators users can select cameras, carousels, and digital signage files; and configure settings. Viewer users can only view existing camera views. You can grant permission to move PTZ cameras to both administrator and viewer users.

1. In the Thin Client Web interface, click **Settings**.
2. In the **Security** pane, click **Add User**.
3. Type a username.
4. Type a password.

 **Note:** The Thin Client does not support passwords that include spaces.

5. Select whether the user is an **Administrator** or **Viewer** user.
6. To give the user permission to move PTZ cameras, select **Allow PTZ Control**.
7. Click **Save**.
8. Select whether the user is the on-screen interface user.
Selecting the user as the on-screen interface user applies the permissions of the user to the Thin Client native interface. For example, selecting a viewer user as the on-screen interface user prevents the user from accessing administrator functions in the Thin Client native interface.
9. Click **Save**.

User permissions

Thin Client devices support administrator and viewer users.

Administrator users have full access to the features and options on the Thin Client device and in the Thin Client Remote application. Viewer users can only view the cameras, camera views, and carousels on the Thin Client device and in the Thin Client Remote application.

Task	Administrator	Viewer
Cameras	Connect, configure, and view	View
Camera views	Create, select, delete, and view	View
Carousels	Create, select, delete, and view	View
PTZ cameras	Control (optional)	Control (optional)
Settings	Modify and view	

Restore factory settings using the hardware

1. Press and hold the **RST** button on the back of the Thin Client device.
2. Remove the PoE network cable.
3. Connect the PoE network cable.
4. When the LED light on the Thin Client device stops blinking, release the **RST** button.

Restore factory settings using the Web interface

1. In the Thin Client Web interface, click **Settings**.
2. Click **Restore**.
3. Click **OK**.

Digital signage

The Thin Client can display video media on attached monitors from a USB storage device.

The Thin Client supports the following file formats:

- .3pg
- .avi
- .flv

- .m4v
- .mkv
- .mov
- .mp4

The Thin Client can play the audio associated with the video media if you display the digital signage in a single camera view.

Add a video file

You can add a file from a USB storage that the Thin Client device can display as digital signage.

1. In the Thin Client Web interface, click **Settings**.
2. In the **Digital Signage** pane, select **Enable Digital Signage**.
3. Click **Manage Files**.
4. To add a new video file, perform the following steps:
 - a) Click **Add File**.
 - b) In the **File Path** field, type the full name of the video file (including the file extension) or click **Browse** and navigate to the file.
 - c) In the **Alias** field, type the name for the file that will appear in the files list.
 - d) To play the audio from the file, select **Audio**.
 - e) Click **Connect**.
5. Select the video files.
You can also click **Select All** or **Deselect All**.
6. Click **Use Selected Files**.

Related tasks

[Display a video file when waiting for events](#) on page 14

Display a video file

Once you have added a video file to a Thin Client device, you can select the video file that the Thin Client device displays in a camera view panel.

1. In the Thin Client Web interface, click **Remote Control**.
2. Click a camera view.
3. Click **Files**.
4. Click the video file.

Display a video file when waiting for events

You can configure the Thin Client to display video when it is waiting for events from Symphony.

Before you begin:

- Add the Thin Client to Symphony.
 - Add a video file.
1. In the Thin Client Web interface, click **Settings**.
 2. In the **Digital Signage** pane, click **Select File**.
 3. In the list, select what the Thin Client displays in the camera view panels while waiting for events from Symphony.
 4. Click **Save**.

Related tasks

[Add a video file](#) on page 14

Add a network connection

You can add a second network connection using a USB network adapter.

When using a second network connection, you must connect to the isolated camera network to the built-in Ethernet port on the Thin Client and the network with access to the Internet to the USB network adapter.



Note: Firmware updates from Xnet do not work when a second network connection is active on a Thin Client.

1. Add a definition for `eth1` to the `/etc/network/interfaces` file.

Address type	Example definition
Static	<pre>#STATIC auto eth1 iface eth1 inet static pre-up ifconfig eth1 up pre-up ethtool -s eth1 speed 100 duplex full autoneg on pre-up ethtool -K eth1 tx-tcp-segmentation off address 192.168.0.5 netmask 255.255.255.0 gateway 192.168.0.1</pre>
Dynamic	<pre>#DHCP auto eth1 iface eth1 inet dhcp pre-up ifconfig eth1 up pre-up ethtool -s eth1 speed 100 duplex full autoneg on pre-up ethtool -K eth1 tx-tcp-segmentation off</pre>

2. Connect the USB network adapter to the Thin Client.

Enable SNMP

You can enable SNMP on the Thin Client. By default, SNMP is disabled.

1. In a browser, navigate to `https://ip_address/System/EnableSNMP`.
Where `ip_address` is the IP address of the Thin Client.
2. Log in to the Thin Client.

To disable SNMP, navigate to `https://ip_address/System/DisableSNMP`.

Add a custom certificate

You can add a custom HTTPS certificate to validate communication with the Thin Client.

To use a custom certificate with the Thin Client, the private key file must not be encrypted.

1. In the Thin Client Web interface, click **Settings**.
2. In the **Network Setup** pane, click **Add Custom HTTPS Certificate**.
3. In the **Add Custom HTTPS Certificate** window, perform the following tasks:
 - a) To select the private key, click **Choose a file**, select the private key file, and click **Open**.
 - b) To select the certificate, click **Choose a file**, select the certificate file, and click **Open**.
 - c) Click **Save**.
4. Click **Save**.

Display the static privacy mask

The Thin Client can display the static privacy masks for cameras from the Symphony Server.

Before you begin:

- Configure a static privacy mask for the camera in the Symphony server configuration interface.

The Thin Client can display the static privacy mask if you use the Mobile Bridge to connect the Thin Client to the Symphony Server.

1. In the Thin Client Web interface, click **Settings**.
2. In the **Display Options** pane, select **Show decorations from Symphony**.
3. Click **Save**.

Cameras

The Thin Client can either connect directly to cameras or connect to Mobile Bridge to access cameras from Symphony. The Thin Client can connect directly to both ONVIF and RTSP cameras.

For ONVIF cameras, the Thin Client can search for cameras on the network or you can add them manually with the IP address of the camera.

For RTSP cameras, you must manually add the cameras using the media stream URL. The Thin Client supports both unicast and multicast streams.

The Thin Client supports streams up to 1920 x 1080 resolution at 25 fps. The Thin Client can automatically select the best stream based on the layout of camera views. For the best performance with high-resolution cameras, configure an additional, lower-resolution stream for the cameras.



Note: If the Thin Client displays a no compatible streams error message for a camera in the Camera list, you must configure a stream that is compatible with the Thin Client to view video from the camera.

Connect to an ONVIF camera directly

1. In the Thin Client Web interface, click **Settings**.
2. In the **Video Source** pane, select **Direct camera connection**.
3. To use the MAC address of camera to connect to the camera, select **Allow MAC addresses for cameras**.
4. Click **Manage Cameras**.
5. To detect a camera automatically, perform the following steps:
 - a) Type the username and password for the camera.
 - b) Click **Find Devices**.
 - c) Select the camera. Click the **Next** or **Previous** button to navigate through pages or use the **Search** field to search by camera name, address, brand, or model.
 - d) Select **Audio** to stream audio from the camera.
 - e) Click **Test ONVIF compliance**.
6. To add a camera manually, perform the following steps:
 - a) Click **Manually Add Device**.
 - b) Type a device name.
 - c) In the address field, type the IP address, IP address and port (if the camera does not use port 80), or the MAC address of the camera.
 - d) Type the username and password for the camera.
 - e) Select **Audio** to stream audio from the camera.
 - f) Click **Connect**.
 - g) Click **Test ONVIF compliance**.
7. Click **Save Devices**.

Connect to an RTSP camera directly

1. In the Thin Client Web interface, click **Settings**.
2. In the **Video Source** pane, select **Direct camera connection**.
3. Click **Manage Cameras**.
4. Click **Manually Add Device**.
5. In the **Device Name** field, type a name for the camera.

6. In the **Address** field, perform one of the following tasks:
 - To add a unicast stream, type the media stream URL.
 - To add a multicast stream, type the multicast stream URL.
7. To add another unicast stream, perform the following steps:
 - a) Click the **Add** button.
 - b) In the **Address**, type the media stream URL for the additional unicast stream.
8. In the **Credentials** fields, type the username and password for the camera.
9. Select **Audio** to stream audio from the camera.
10. Select whether to use multicast for the media stream.
11. Click **Connect**.
12. Select the camera and click **Save Devices**.

Import a camera list

1. In the Thin Client Web interface, click **Settings**.
2. In the **Video Source** pane, click **Import Cameras**.
3. Navigate to the camera list and click **Open**.

Export a camera list

1. In the Thin Client Web interface, click **Settings**.
2. In the **Video Source** pane, click **Export Cameras**.
3. Download and save the camera list.

Camera views

Camera views determine how many panels appear on the screen and what cameras or carousels appear in each pane.

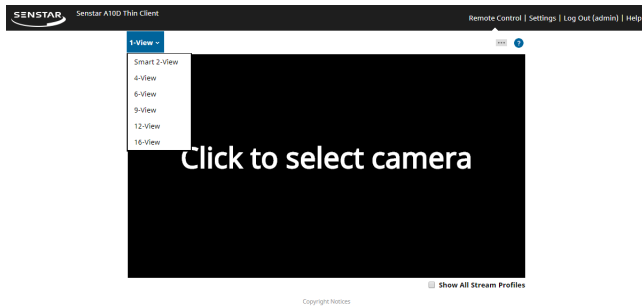
If you connect the Thin Client to Symphony, the Thin Client supports shared views. If you save a camera view in the Symphony client interface, that camera view is available to the Thin Client.

Select a camera view

1. In the Thin Client Web interface, click **Remote Control**.
2. Click the **Select View** list.
3. Select the view.

Create a camera view

1. In the Thin Client Web interface, select a view from the **Select View** list.



2. Click each panel to select the camera.
3. Click
4. Click **Save As**.
5. Type a name for the camera view.
6. Click **Save**.

Delete a camera view

1. In the Thin Client Web interface, click **Remote Control**.
2. Click ... > **Delete**.
The **Delete** option is only available if there is a saved camera view that is not active.
3. Click **Delete** beside the camera view.
4. Click **OK**.

Show stream profile information

You can show the stream profile information as a decoration in camera views.

The stream profile information includes video resolution, video codec, and frame rate.

1. In the Thin Client Web interface, click **Remote Control**.
2. Select **Show All Stream Profiles**.

Enable smart 2-view

1. In a browser, navigate to http://IP_address/System/EnableSmartTwoView.
Where *IP_address* is the IP address of your Thin Client.
2. Click back in the browser.
3. In the **View** list, select **Smart 2-View**.
4. Select the camera for each panel.
5. Click ...
6. Click **Save As**.

To disable the smart 2-view, navigate to http://IP_address/System/DisableSmartTwoView.

Carousels

A carousel loops through footage from multiple cameras and pauses on each camera for a defined time.

In Mobile Bridge mode, carousels can include cameras from any Symphony Server in the Symphony server farm and you manage carousels in Symphony. The Thin Client has a minimum switch time of 10 seconds for carousels. If you configure the carousel with a switch time that is less than 10 seconds in Symphony, the Thin Client automatically sets the switch time to 10 seconds.

In direct connect mode, you can add and delete carousels in the Thin Client Web interface.

Select a carousel

1. In the Thin Client Web interface, click **Remote Control**.
2. Click a camera panel.
3. Click the **Carousels** tab.
4. Click a carousel.

Add a carousel in direct connection mode

1. In the Thin Client Web interface, click **Remote Control**.
2. Click a camera panel.
3. Click the **Carousels** tab.
4. Click **Add**.
5. Type a name for the carousel.
6. Select the cameras to include in the carousel.
7. Set the time for each camera.
8. Click **Save**.

Delete a carousel in direct connection mode












1. In the Thin Client Web interface, click **Remote Control**.
2. Click a camera panel.
3. Click the **Carousels** tab.
4. Click the delete icon next to the carousel.
5. Click **OK**.

Client interface

The client interface displays footage and includes viewing options on monitors and televisions connected directly to the Thin Client. The client interface supports input from touchscreen monitors, remotes for CEC enabled televisions, and USB mice.

If you are using the Thin Client with a touchscreen monitor, turn on the monitor before you turn on the Thin Client and you must calibrate the monitor.

Navigation buttons

Button	Function
	Select a view.
	Select a camera from the camera list.
	Expand or collapse the full-screen view of the panel.
	Select the date for historical view.
	Remove the camera from the panel.
	Rewind footage 10 seconds, 1 second, and 1 frame.
	Play and pause footage.
	Fast forward footage 1 frame, 1 second, and 10 seconds.
	Export the video as a .mkv file.
	Move a PTZ camera.
	Zoom in and zoom out with a PTZ camera.

Calibrate a touchscreen monitor

To use the client interface on a touchscreen monitor, you must calibrate the monitor.

1. In the Thin Client Web interface, click **Settings**.
2. In the **Maintenance** section, click **Calibrate**.
The calibration utility starts in the client interface on the touchscreen monitor.
3. In the client interface on the touchscreen monitor, following the instructions on the screen.

Once the calibration is complete, the client interface on the touchscreen monitor returns to the normal display.

CEC commands

Consumer Electronics Control (CEC) allows you to control the Thin Client using the remote control for the display.

Interface

Button	Function
Select	Select the menu item or expand a camera view to full screen.
Up	Move up in the menu or select the camera view above the current selection.
Down	Move down in the menu or select the camera view below the current selection.
Left	Select the camera view to the left of the current selection.
Right	Select the camera view to the right of the current selection.
Channel up	Show the previous camera.
Channel down	Show the next camera.
Record button	Save an image (screenshot) from a camera.
Blue button	Open the View menu.
Red button	Zoom in on the timeline.
Green button	Zoom out on the timeline.
Yellow button	Open the camera menu.

Playback

Buttons	Functions
Play	Toggle between playing and pausing footage.
Pause	Toggle between playing and pausing footage.
Stop	Stop playing footage.
Fast forward	Fast forward 10 seconds.
Rewind	Rewind 10 seconds.
1	Play footage at normal speed.

Buttons	Functions
2	Play footage at 2x speed.
3	Play footage at 3x speed.
4	Play footage at 4x speed.
5	Play footage at 5x speed.
7	Rewind 1 second.
9	Fast forward 1 second.
Exit	Exit the full screen.
Return	Exit the full screen.

PTZ cameras

Buttons	Functions
1	Move the PTZ camera to the home preset position.
2 to 9	Move the PTZ camera to a preset position.
Red	Zoom in on the PTZ camera.
Green	Zoom out on the PTZ camera.
Exit	Return to live video.
Up	Move the PTZ camera up.
Down	Move the PTZ camera down.
Left	Move the PTZ camera to the left.
Right	Move the PTZ camera to the right.

Save an image from a camera

You can save an image from a camera in the Thin Client native interface.

The Thin Client saves images to the path that you define in the Save Image to Network Attached Storage section on the Settings page.

1. In the Thin Client native interface, tap a video panel.
2. Tap the image icon.
3. Tap **Done**.

Activate joystick mode

You can use a joystick to control PTZ cameras in the Thin Client native interface.

To control a PTZ camera, the Thin Client must be connected to the camera using direct connect mode.

1. In the Thin Client native interface, select the PTZ camera.
2. Expand the PTZ camera to full-screen view.
3. Click a button on the joystick to activate joystick mode.

To exit joystick mode, click a button.

Thin Client Locator tool

The Thin Client Locator tool is a utility that detects Thin Client devices on the network.

You can use Thin Client Locator tool to access the Web interface of Thin Client devices and to remove unnecessary files from Thin Client devices.

Open the Web interface

You can use the Thin Client Locator tool to open the Web interface for Thin Client devices.

1. Run the Thin Client Locator tool on the same network as the Thin Client device.
2. Right-click the Thin Client device and click **View in browser**.

Clean update path

You can use the Thin Client Locator tool to remove unnecessary files from Thin Client devices.

In some situations, files remaining from previous firmware upgrades take up too much space on Thin Client devices and prevent subsequent firmware updates.

1. Run the Thin Client Locator tool on the same network as the Thin Client device.
2. Right-click the Thin Client device and click **Clean update path**.
3. Type the administration password for the Thin Client device and click **Start**.

Firmware Update tool

The Firmware Update tool can install new firmware on Thin Client devices on the same network.

You can use the Firmware Update tool to update multiple Thin Client devices concurrently or to restore a Thin Client device to a specific version of firmware. To update multiple devices concurrently, all of the devices must have the same administration password.

Install firmware

1. Download the Firmware Update tool from .
2. Double-click `FirmwareTool.exe`.
3. In the **Step 1: Choose firmware file** field, click browse, navigate to the firmware file, and click **Open**.
4. Type the administration password for the Thin Client.
The default password for Thin Client devices is blank.
5. Click **Scan** to identify the Thin Client devices on your network.
6. Select the Thin Client device to receive the firmware.
7. Click **Firmware Update**.

Thin Client Remote application

The Thin Client Thin Client Remote application allows users to connect to the Thin Client using mobile devices.

Create a connection

To use the Thin Client Remote application, you must create a connection to a Thin Client device.

1. In the Thin Client Remote application, tap **Connections**.
2. Tap the + icon.
3. Perform one of the following steps:
 - Tap **Detected Thin Clients** and select the select a Thin Client from the list.
 - Type the address and port of the Thin Client.
4. Select whether this connection is a default connection.
The Thin Client Remote application connects to the default connection automatically when it starts.
5. Type the username and password for the Thin Client.
6. Tap **Connect**.

Close a connection

1. Tap **Connections**.
2. Tap the connection that you want to close.
3. Tap **Disconnect**.

Edit a connection

1. In the Thin Client Remote application, tap **Connections**.
2. Tap the connection that you want to edit.
3. Tap **Disconnect**.
4. Edit the connection settings.
5. Tap **Connect**.

Delete a connection

1. Tap **Connections**.
2. Tap **Edit**.
3. Tap the - icon beside the connection you want to delete.
4. Tap **Delete**.
5. Tap **Done**.

Open a connection

1. Tap **Connections**.
2. Tap the connection to open.
3. Tap **Connect**.

Create a camera view

You can use the Thin Client Remote application to create a camera view.

You must be an administrator user to create a camera view. If you are a viewer user, you cannot create a camera view.

1. In the Thin Client Remote application, tap the **Select View** button.
2. Select the view.
3. Tap each panel and select the camera.
4. Tap the ... button.
5. Click **Save As**.
6. Type a name for the camera view.
7. Tap **Save**.

Select a camera view

1. In the Thin Client Remote application, tap the **Select View** button.
2. Tap the view.

Delete a camera view

You can use the Thin Client Remote application to select a camera to display in a camera view on the Thin Client.

1. In the Thin Client Remote application, tap the ... button.
2. Tap **Delete**.
3. Tap the - button beside the camera view.
4. Tap **Delete**.

Select a carousel

You can use the Thin Client Remote application to select a camera to display in a camera view on the Thin Client.

You must be an administrator user to select a carousel to display on the Thin Client device. If you are a viewer user, you cannot select a carousel.

1. In the Thin Client Remote application, tap the **Select View** button.
2. Tap a camera panel.
3. Tap the **Carousels** tab.
4. Tap a carousel.

Select digital signage

You can use the Thin Client Remote application to select the video file that the Thin Client device displays in a camera view panel.

1. In the Thin Client Remote application, tap the **Select View** button.
2. Tap a camera panel.
3. Tap the **Digital Signage** tab.
4. Tap a file.

Configure the Thin Client

You can use the Thin Client Remote application to configure the Thin Client device to which it connects.

You must be an administrator user to configure the Thin Client device. If you are a viewer user, you cannot access the setting page.

1. In the Thin Client Remote application, tap **Settings**.
2. In the **About** pane,
3. In the **Network Setup** pane, set the parameters that
4. In the **Security** pane, set the password for the Thin Client.
5. In the **Video Source** pane, set how the Thin Client connects to cameras.
6. In the **Display Options** pane,
7. In the **Server Time** pane,
8. In the **Management** pane,
9. In the **Maintenance** pane,
10. Click **Save**.

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