

United VMS 8.1

Installation Guide

FLIR TruWITNESS

© 2019 FLIR Systems, Inc. All rights reserved worldwide. No parts of this manual, in whole or in part, may be copied, photocopied, translated, or transmitted to any electronic medium or machine readable form without the prior written permission of FLIR Systems, Inc.

Names and marks appearing on the products herein are either registered trademarks or trademarks of FLIR Systems, Inc. and/or its subsidiaries. All other trademarks, trade names, or company names referenced herein are used for identification only and are the property of their respective owners. This product is protected by patents, design patents, patents pending, or design patents pending. The contents of this document are subject to change.

FLIR Systems, Inc.
6769 Hollister Avenue
Goleta, California 93117
USA
Phone: 888.747.FLIR (888.747.3547)
International: +1.805.964.9797

For technical assistance, please call us at +1.888.388.3577 or visit the Service & Support page at www.flir.com/security.

Important Instructions and Notices to the User:

Modification of this device without the express authorization of FLIR Commercial Systems, Inc. may void the user's authority under FCC rules to operate this device.

The 'About' section contains a summary of pertinent changes to this document.

Table of Contents

1. General	1
1.1 Introduction	1
1.2 Install Software	1
1.3 License	2
1.4 System Requirements	2
2. Configuration of the Latitude for TruWITNESS	5
2.1 Define Archiver Storage on the Edge Location	5
2.2 Add Transcoder if none exists	7
2.3 Advanced Configuration	7
2.3.1 Failover Archiver	7
2.3.2 Audit Trail - Reporting Tool	10
2.4 Gateway	11
2.4.1 Add Gateway if required	12
2.4.2 FLIR Cloud	13
2.4.3 TruWITNESS Tab	15
2.5 Email Server and Web Server	15
2.5.1 Mail Server	17
2.5.2 Web Server – add if not existing	18
3. Camera Map location in the VMS	19
3.1 Neighbor Aware Configuration	19
3.2 Setting up Camera Location parameters for GIS Map display	22
4. Set up Charging Hub and Assignment Station	27
4.1 Connecting the Charging Hub	27
4.2 Discover Charging Hub	28
4.3 Set Charging Hub Location	31
4.4 The Assignment Station	33
5. Users and their TruWITNESS equipment	36
5.1 Create ordinary User	36
5.2 Setting up TW Users	38
5.3 Setting up PCS's	39
5.4 Assign Sensories to TW Users	40
6. Applying Firmware Upgrades	43
6.1 Hub	43
6.2 Sensory and PCS	44

Table of Contents

- 7. How-To 46**
 - 7.1 Moving Hub to another System 46
 - 7.2 Moving PCS to another System 46
 - 7.3 PCS Battery 46
 - 7.4 PCS Time Update 46
 - 7.5 Collecting PCS Logs 46
 - 7.6 Format PCS 47
 - 7.7 Sensory 47
 - 7.8 Factory Default Sensory 47
- 8. Troubleshooting 48**

1 General

[Introduction](#)

[Install Software](#)

[License](#)

[System Requirements](#)

1.1 Introduction

This document describes the steps required to set up a Latitude system to use **TruWITNESS** equipment.

For more information about the various hardware components and software features, see the TruWITNESS Release note and the appropriate Quick Guide provided with the hardware.

1.2 Install Software

New Installations:

The current TruWITNESS-capable software version will be distributed to users by arrangement with FLIR Operations.

NOTE: For a new installation, prior to following TruWITNESS installation instructions, the user must perform a standard Latitude Installation as described in the Latitude Installation and Clarification documents. This document is provided as part of a standard Latitude installation. Existing Latitude systems must be upgraded to Latitude 8.0 before upgrading to the TruWITNESS version.

For new installations, during the installation process, the following Services must be added:

Under "Servers" check Transcoder

Under "Servers" check Gateway

Under "Clients" check TW Assignment Tool

Under "Other" check "SDK"

If these were not included at time of installation, they can be added after the fact by following the instructions under:

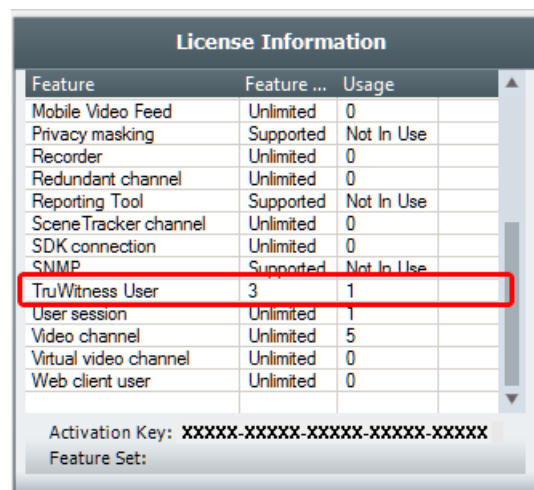
[Add Transcoder if none exists](#)

[Add Gateway if required](#)

[Add Assignment Tool](#)

1.3 License

All sites (New instances or upgrading from previous versions) will need new licenses that include the TruWITNESS Feature.



Feature	Feature ...	Usage
Mobile Video Feed	Unlimited	0
Privacy masking	Supported	Not In Use
Recorder	Unlimited	0
Redundant channel	Unlimited	0
Reporting Tool	Supported	Not In Use
SceneTracker channel	Unlimited	0
SDK connection	Unlimited	0
SNMP	Supported	Not In Use
TruWitness User	3	1
User session	Unlimited	1
Video channel	Unlimited	5
Virtual video channel	Unlimited	0
Web client user	Unlimited	0

Activation Key: XXXXX-XXXXX-XXXXX-XXXXX-XXXXX
Feature Set:

TruWITNESS License

As seen in the example above, the TruWITNESS license covers a maximum number of concurrent users – that is the number of TruWITNESS Sensories that may be concurrently *Assigned* to users.

An SDK license will be needed for every [Assignment tool](#) that will be loaded onto workstations

GIS maps must be ordered in order to use the GIS maps features

If the site does not yet have these licenses, contact FLIR Operations to obtain them, and then use the associated Activation Key to install the new license. The process is described in the Latitude Admin Center Help file.

1.4 System Requirements

This installation must follow all Latitude system requirements found in the Latitude Installation documentation.

Additional specific requirements for TruWitness must be observed.

1. Cards with Data Plans for PCSs

PCSs must have valid Cellular SIMs installed, with adequate Data Plans.

The following guidelines should be observed:

SIM type: Nano-SIM (4FF)

Network: GSM (i.e. in US, AT&T or T-Mobile, **not** Verizon and Sprint)

3G and 4G networks are supported for US and APAC regions (EMEA only supports 4G)

4G is suitable for all communications including live video. 3G networks do not support live video and should only be used during back-up for alarms and GPS location data.

Data Plan: Recommendation 5GB-10GB/PCS/Month, preferably an IoT data plan. Minimum of 1 Mbps to be able to get Alarm live streaming and a minimum of 10kbps for normal connectivity (i.e. GPS and connectivity status)

Quality of Service: It is important to speak with your local provider to request a data plan with High quality of service. There may be special plans which are most suitable.

Some examples include: Unlimited plans, First Responder plans, etc.

These examples may vary according to provider and region.

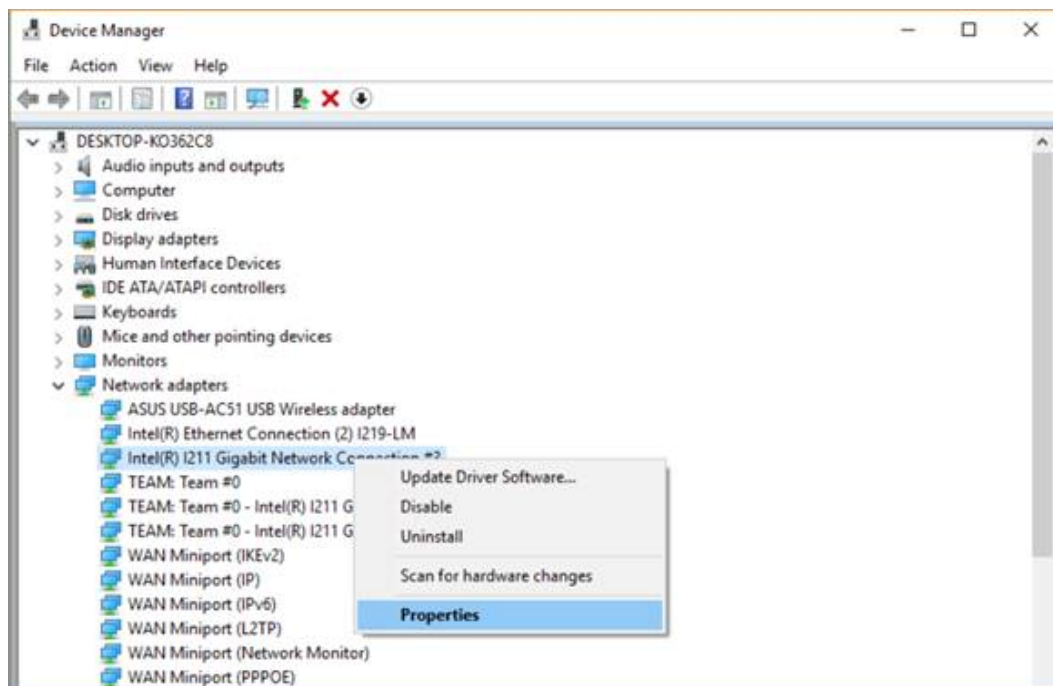
Note: Some unlimited plans may include a data cap, which when exceeded, will throttle your data speeds.

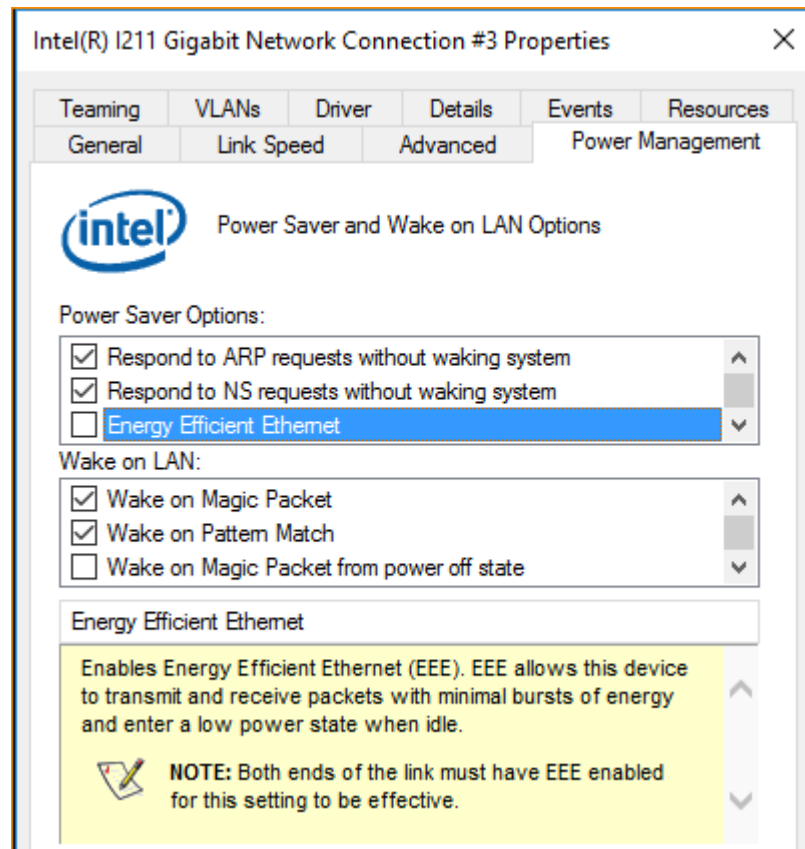
2. Servers with support for “Energy Efficient Ethernet” (EEE)

If the charging hub is connected to a device that supports EEE, this feature **MUST** be disabled. If EEE is enabled, the green LED on the Ethernet connection of the charging hub will blink slowly.

To turn off this feature in Windows:

Go to Device Manager -> right click on the relevant network adapter -> Properties -> Power Management -> uncheck “Energy Efficient Ethernet”.





Routers and Switches with support for “Energy Efficient Ethernet” (EEE)

To disable this option on switches and routers, consult the manufacturers documentation or support due to the varying differences between hardware models and manufacturers. If the option exists, but cannot be disabled on a device, a different switch or router, with this option disabled, must be used.

2 Configuration of the Latitude for TruWITNESS

The following setup steps must be followed in the Latitude Admin Center to enable TruWITNESS functionality.

[Define Archiver Storage on the Edge Location](#)

[Add Transcoder if none exists](#)

[Add Gateway if none exists](#)

[FLIR Cloud](#)

[TruWITNESS Tab](#)

[Email Server and Web Server](#)

[Mail Server](#)

[Web Server – add if not existing](#)

2.1 Define Archiver Storage on the Edge Location

In the Latitude Admin Center Navigation Tree, open the **Storage Tab** of the **Archiver** entity, scroll to the bottom of the page and go to the **Storage Location for Downloading Edge Recordings** panel.

The screenshot shows the Latitude Admin Center interface. On the left is a navigation tree with 'TW3 (1) (TW3)' expanded, showing 'Archiver' and various servers. The main panel is the 'Storage' tab for the 'Archiver' entity. It includes a 'Drives Information' table, a 'Storage Usage' pie chart, and a 'Storage Location for Downloading Edge Recordings' panel at the bottom, which is highlighted with a red box. The highlighted panel contains the following information:

Drive	Type	Total Size (GB)	Free Space (GB)	Block Size (KB)	Used For	Recommend
C:\	NTFS	79	24	4	System Drive	No
E:\	NTFS	49	4	4	Data	No
D:\	NTFS	500	500	4	Data	No

Storage Usage

Used containers

Archiving span
 Earliest Recording: 7/31/2018 5:55:03 PM
 Latest Recording: 8/9/2018 9:31:23 PM
 Total Span: 9 Days, 3 Hours, 36 Minutes

Storage Location for Downloading Edge Recordings

☒ Enable edge recording download

Storage location: D:\TWV [Test]

Maximum quota: 500 GB

In order for the Edge Storage Location settings to take effect, the Archiver must be restarted.

Enable and Define Location for Archiving SOE content

Define Location for Edge Recordings

1. Click **Enable edge recording download**.
2. Enter a valid **Storage location**

WARNING: DO NOT place the Storage on the Edge download location in the same directory as the Archiver storage.

It is not recommended to create video storage locations on the C: Drive

3. Set the **Maximum Quota**.

4. **Test**

5. **Save** the change.

6. Restart the Archiver

A) Restart safrun windows service

1. Open start > run and type Services.msc
2. Scroll down to DVTel.Safrun, right click and select 'Stop'
3. Wait a few minutes before right clicking and selecting 'Start'

This will stop all Latitude Services. Restarting the physical Server will accomplish the same thing.

B) Use safrun app to restart Archiver

1. In Windows system tray, find small Dog icon representing Safrun app (does not show when using RDP)
2. In the App, see three services that begin with "dvtel.archiver"
3. Right click, "kill application" and press ok for each three
4. After a few minutes, follow the same steps and select "start application"

Note: TruWITNESS recordings are cyclic and will always succeed in offloading newer footage in expense of older footage and retention policies if disk space is exceeded.

***WARNING: DO NOT** place the Storage on the Edge download location in the same directory as the Archiver storage.

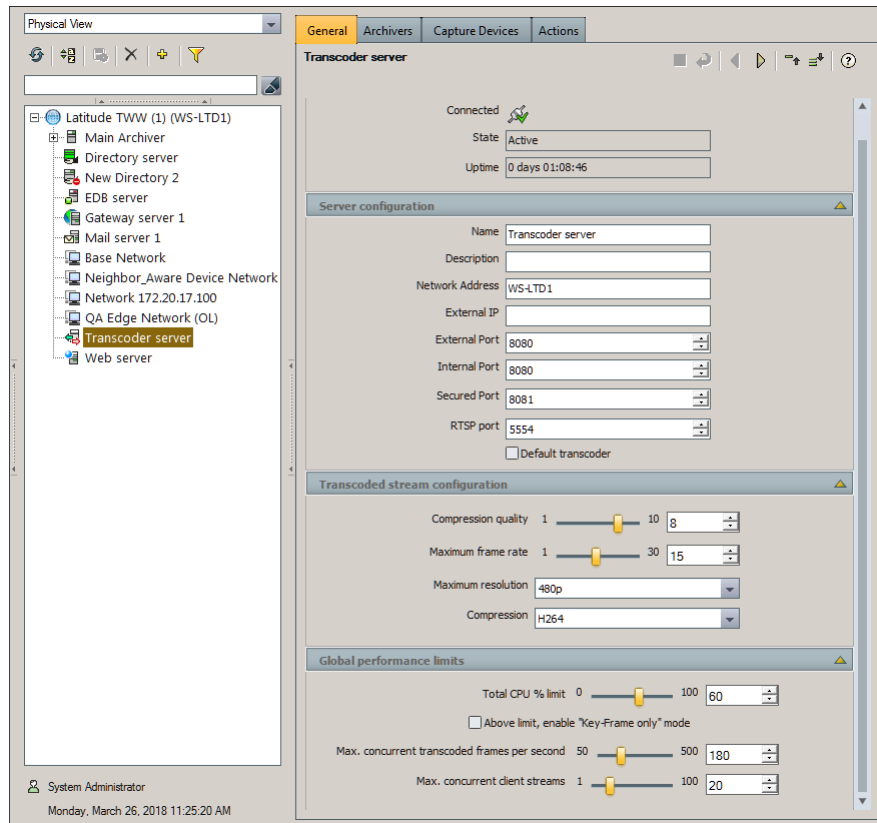
It is not recommended to create video storage locations on the C: Drive

2.2 Add Transcoder if none exists

The Latitude System will normally be configured with a Transcoder – if not, one should be added.

In the Latitude Admin Center Navigation Tree, right-click on the **System** entity, and click on **Add Transcoder**.

The default settings will normally be sufficient.



Transcoder Setup

Note: When the system only has one Transcoder, it is NOT necessary to explicitly 'attach' the Archiver in the Archiver tab.

Note: Transcoder is only needed for use of EZ-Client, however Control Center is the recommended client for TruWITNESS for live viewing

2.3 Advanced Configuration

This section is to be used for advanced configurations that are not required for TruWITNESS to function but might be needed for specific functionality that a customer is already using.

Topics included:

[Failover Archiver](#)

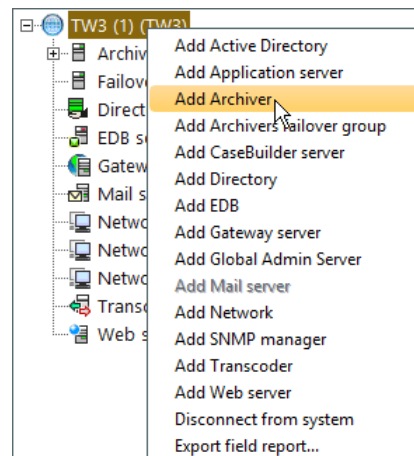
[Audit Trail - Reporting Tool](#)

2.3.1 Failover Archiver

Adding a Failover Archiver

Note: This section is to be used if a user has, or would like to add, a Failover Archiver. Failover Archiver is not required for TruWITNESS and this step may be skipped if not desired.

In order to configure a Failover Archiver, In the Latitude Admin Center Navigation Tree, right-click on the **System** entity, and click on **Add Archiver**



General

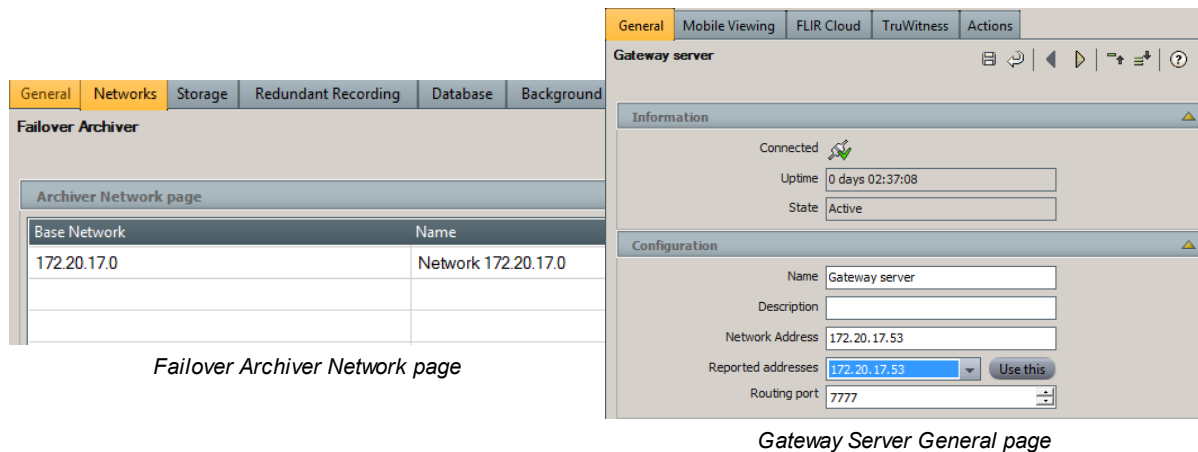
In the **General** page, enter the Network address under **Configuration**.

Under **Failover Configuration**, click "Enable Failover Functionality" and configure as required.

Network

Navigate to the **Network** tab and add a network.

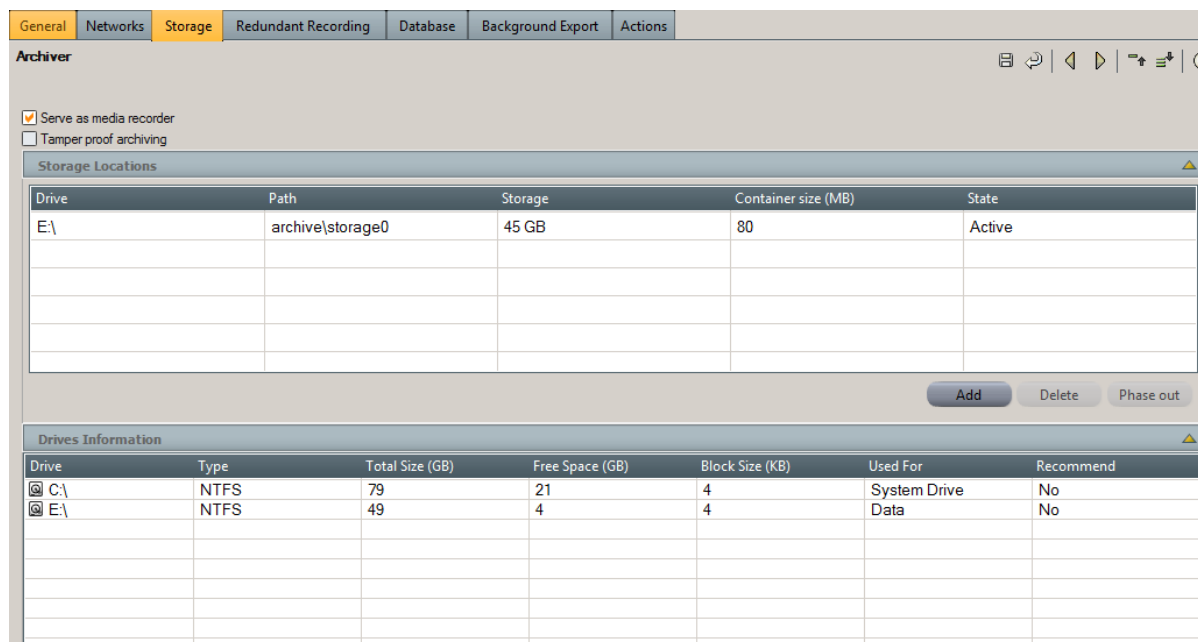
NOTE: In order for TruWITNESS to work with a Failover Archiver, there must be a network assigned to the Failover Archiver that matches the same IP scheme set in the Gateway.



Storage

Go to the Storage tab and wait for the **Drives Information** section to populate with available drives.

Under **Storage Locations** in the **Drives** Column, Click to drop down and select the desired drive. Go through each successive column and configure then as necessary.



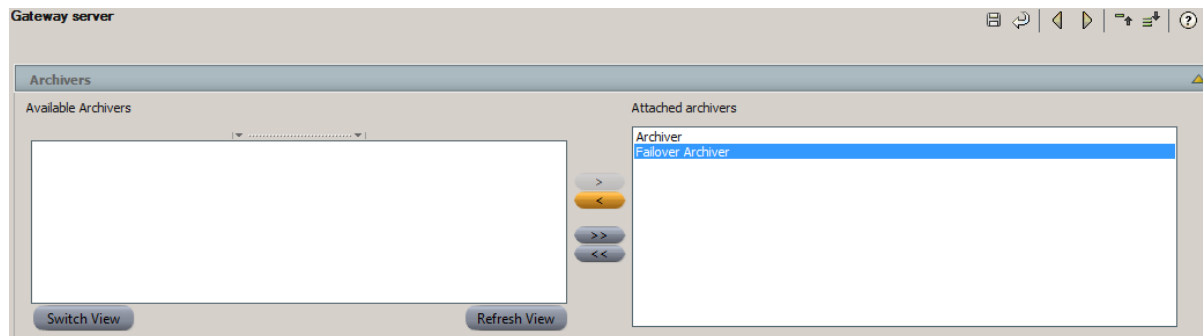
Press **Save**.

Gateway

NOTE: In order for TruWITNESS to work with a Failover Archiver the Failover Archiver must be attached to the Gateway

Navigate to the Gateway and open the **TruWITNESS** tab

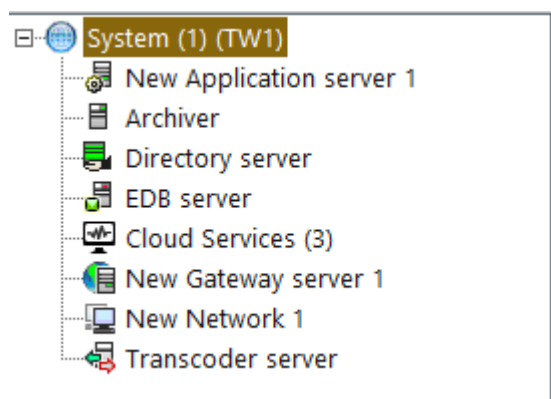
Move the Failover Archiver to the "Attached Archivers" section and click **Save**



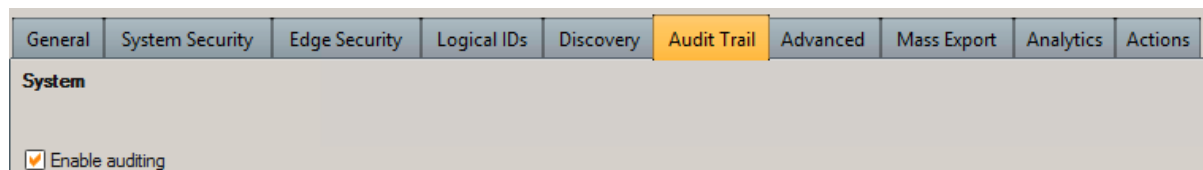
2.3.2 Audit Trail - Reporting Tool

If a user wishes to use the Latitude Reporting tool with TruWITNESS events, they must enable to Audit Trail

1. In the Admin Center Tree, navigate to the System (top)



2. Go to the "Audit Trail" tab.
3. Check "Enable Auditing"



4. Ensure that "TruWITNESS alarm Triggered" is present under "Audited Events"

Audited events
PTZ Camera pattern started / ended
PTZ lock overridden
PTZ locked / unlocked
PTZ Movement started / ended
PTZ session started / ended
Radiometric alarm cleared
Radiometric alarm triggered
Recording clip export started / ended
Recording session started / ended
Remote control operation executed
Remote control session started / ended
Scene Motion on / off triggered
SD card restore session started / ended
Server accessibility recovered / lost
Shutdown called
Source filter streaming started / stopped
Storage location status is restored / down
Storage location was tampered
Storage utilization level is abnormal / back to normal
Subtree added
Subtree moved
Subtree removed
SynchronizationFailed
System root recovered
Tampering camera
Technician session started / ended
Temperature abnormal / back to normal
Timer elapsed
TruWitness alarm triggered
Unit accessibility recovered / lost
User has logged in
User has logged out
User login failed
User password changed
User was forced to log out
Zone motion on / off triggered

5. Save

2.4 Gateway

Add a Gateway if none exists, and define **FLIR Cloud** and **TruWITNESS** parameters

[Add Gateway if required](#)

[FLIR Cloud](#)

[TruWITNESS Tab](#)

2.4.1 Add Gateway if required

Depending on the installation, the Gateway Server service may need to be installed.

Note: Entering the Latitude installer will STOP Latitude Services and restart them when the installer is closed

1. Go to the Windows Start Menu and type "Add or Remove Programs"
2. Find the Latitude Installation in the list of programs and double click
3. The Latitude installer should pop up (maybe minimized on the taskbar)
4. Click "Next"
5. Select "Modify" and click Next
6. Choose to backup system configuration (recommended) or not and click "Next"
7. Under "Servers" check "Gateway" if it isn't already

At this point it is also recommended to select to other Features needed for TruWITNESS

1. Under "Clients" check TW Assignment Tool
2. Under "Other" check "SDK"

Click "Next" and click "Change" and "Finish" when completed.

In the Latitude Admin Center Navigation Tree, right-click on the **System** entity, and click on **Add Gateway Server**.

Caution: Entering 'localhost', results in an error later in the process.

2.4.2 FLIR Cloud

Entering FLIR Cloud credentials

In the **Gateway** page, open the **FLIR Cloud Tab**.

Click "Enable Connection" and Save

The screenshot shows the 'Gateway server' configuration interface. At the top, there are tabs: 'General', 'Mobile Viewing', 'FLIR Cloud' (which is highlighted), 'TruWitness', and 'Actions'. Below the tabs, the 'Gateway server' title is followed by a toolbar with icons for refresh, back, forward, and other navigation functions. The main content area is titled 'Connection to FLIR Cloud'. It contains a checkbox labeled 'Enable connection' which is checked. Below this are three input fields: 'Email address' with the placeholder text '<yrCloudCredentialsHolder>@<yr_email>', 'Password' with masked characters '****', and 'Login status' which displays 'Connected'. At the bottom of this section are two buttons: 'Register' and 'Forgot Password?'. Below the buttons is a link for 'Privacy Policy'.

Define FLIR Cloud parameters for Gateway

If already registered, enter credentials and click "Save"

If there is a possibility that an account already exists, enter the potential FLIR Cloud email and click "Forgot Password". If there is an associated account, an email will arrive with password reset instructions.

Note: If the existing FLIR Cloud account belongs to an SVS (Smart Vehicle Search) implementation, a dedicated account must be created for TruWITNESS as these two features cannot share a FLIR Cloud account. This is true also if SVS is used in the future with an existing TruWITNESS account.

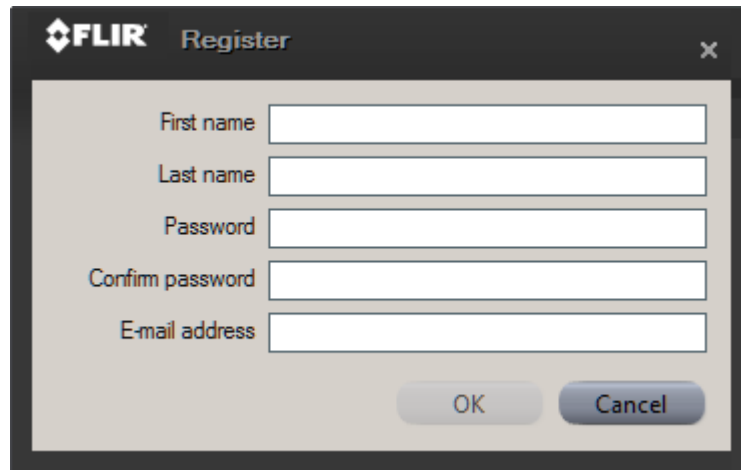
When FLIR Cloud registration has been done and the correct credentials entered, the Login status will show as **Connected** (this can take up to 1 min for the Login status to change).

Note: Cannot disable or change FLIR Cloud connection while TruWitness devices exist in the system. Please remove TruWitness devices from Admin Center and try again.

One-Time Registration for the FLIR Cloud

IMPORTANT NOTE WHEN OPENING FLIR CLOUD ACCOUNT: The FLIR Cloud credentials provide access to view video material from that account – Sensitive sites being set up by integrators or users need to be aware of this when sharing these credentials.

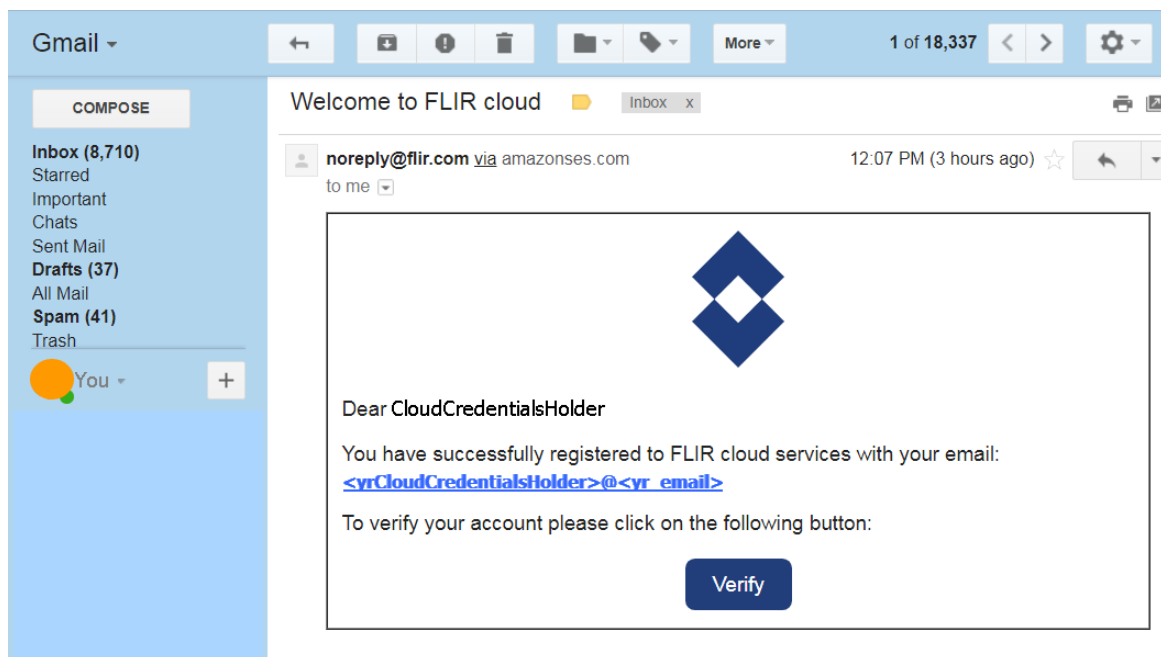
If not already registered, then from the FLIR Cloud Credentials panel shown above, click **Register**.
A Registration Drop-down will be shown.

A dialog box titled "FLIR Register" with a close button (X) in the top right corner. It contains five input fields: "First name", "Last name", "Password", "Confirm password", and "E-mail address". At the bottom, there are two buttons: "OK" and "Cancel".

Register Credentials for FLIR Cloud

Complete all fields.
(Password currently requires 8 digits)
Enter an email address where a confirmation email can be accessed.
Click **OK**.

A verification email is sent to the email address provided.

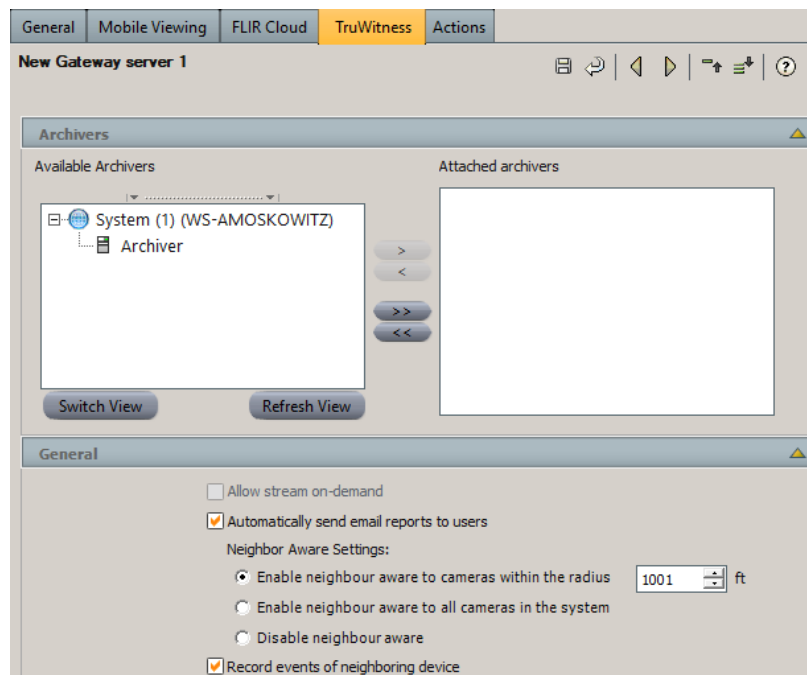


FLIR LAMBDA Confirmation email

Verify the registration in the email as instructed.

Once the Confirmation Email has been verified, you will be able to [enter credentials](#) in FLIR Cloud Tab shown above and click "Save"

2.4.3 TruWITNESS Tab



Define Archiver/s to be associated with TruWITNESS

Attach an Archiver and save.

The default General Settings should be adequate unless user needs something special.

Automatically send email reports to user:

This section refers to the end-of-shift email of which the user will received for each triggered alarm. For more information, see [Email Server and Web Server](#)

Neighbor Aware Settings:

This section allows you to configure camera settings for the [Neighbor Aware](#) functionality.

Record events of neighboring devices:

When enabled, neighboring TruWITNESS devices will begin recording, if not already recording.

Allow stream on demand

This option is disabled, only allowing live video to stream from the User to the Control Center when an alarm/event is triggered. Otherwise, live video is blocked.

The feature may be used in future builds.

2.5 Email Server and Web Server

The Email Server and Web Server are used by the TruWITNESS system so that each individual user can receive and view an **End of Shift report** that shows the recordings and metadata for each Alarm that was generated by that user.

To use this feature, Email Server and Web Server must be configured in Latitude.

In the Admin Center Navigation Tree, right-click on the **System** entity, and click on **Add Main Server** and/or **Add Web Server**, and follow the relevant guidelines.

[Mail Server](#)

[Web Server – add if not existing](#)

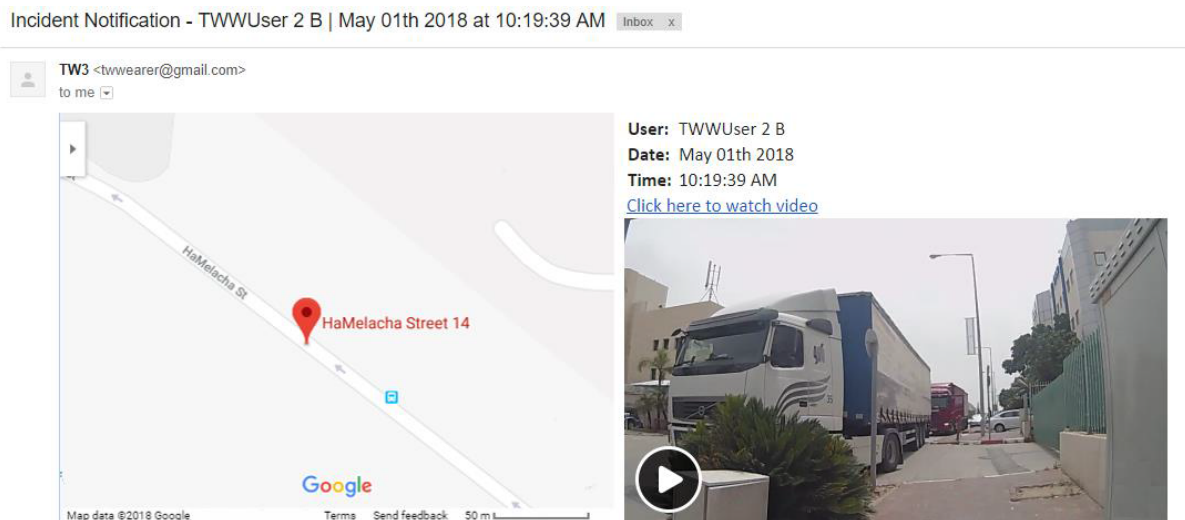
End of Shift Event Email

At the end of a TruWITNESS User's shift, they will disconnect the FLIR TruWITNESS PCS and insert it in the Charging Hub for offload of all footage and data to the VMS. Once the video is downloaded to the VMS, a very important part of this transaction is the end-of-shift Event Email. For every time an alarm was triggered, the TruWITNESS User will receive an individual email with location information and a snapshot from the event. Clicking that snapshot will automatically direct the TruWITNESS User to an EZ Client playback page, showing footage from that specific incident, fully equipped with thumbnail search and bookmarks.

The emails contain the date and time of the Alarm and a snapshot from the video. The full video can be viewed by following an embedded link for viewing using the EZ Client viewer.

Note: When a user views an Events Report playback using this link, this will **not** consume an extra EZ Client License.

Example - End of Shift Event Email



Note: If an alarm/event was triggered and then the user pressed again to end the alarm/event, the default setting (configurable) is to have 30 seconds post-recording. If a second alarm/event was triggered during the post recording period, it will continue the first event/alarm, rather than create a second one. This will result in one long alarm/event in the query and a single email will be send when the event is fully ended, and post-recording has completed.

2.5.1 Mail Server

Add a Mail Server if one does not already exist.

In the Latitude Admin Center Navigation Tree, right-click on the **System** entity, and click on **Add Mail Server**.

Use your email settings to fill out the relevant information

Admin Center/Mail Server Page

The screenshot displays the 'Mail server 1' configuration page. At the top, there are tabs for 'General' and 'Actions'. Below the tabs, the title 'Mail server 1' is shown. A 'Connected' status with a green checkmark icon is visible. The 'Configuration' section contains the following fields and options:

- Name: Mail server 1
- Description: (empty)
- SMTP server: smtp.gmail.com
- SMTP port: 587
- Sender address: yourcredntialsholder@gmail.com
- ☒ Server requires authorization
- User name: yourcredntialsholder@gmail.com
- Password: (masked with asterisks)
- Confirm password: (masked with asterisks)
- ☒ Server requires SSL

Mail Server Settings

1. Complete all fields.
2. **Save**

2.5.2 Web Server – add if not existing

In the Latitude Admin Center Navigation Tree, right-click on the **System** entity, and click on **Add Web Server**.

The screenshot shows the 'Web server' configuration window in the Latitude Admin Center. The window has two tabs: 'General' (selected) and 'Actions'. The 'Web server' title bar is visible. The 'Information' section shows 'Connected' with a green checkmark, 'Uptime' as '0 days 01:11:35', and 'State' as 'Active'. The 'Configuration' section contains the following fields: 'Name' (Web server), 'Description' (empty), 'Network Address' (WS-LTD1), 'Reported addresses' (WS-LTD1 with a dropdown arrow and a 'Use this' button), a checked checkbox 'Web site is located in a virtual directory', 'Virtual directory' (WebClient), 'Port' (80), 'Secured Website Port' (443), and 'External Address' (empty). Navigation icons are present in the top right corner of the window.

Define Network Address for the Web Server

Set up **Network Address** (IP or System Name)
(external address of the System)

The system will use the *internal* IP address of the Web Server as a default - thus only EZ Client users *on the same subnet* will be able to access content.

In order for Web Client users outside that subnet to access content, the Web Server's **External IP address** must be specified. Consult your IP Department.

3 Camera Map location in the VMS

[Neighbor Aware Configuration](#)

[Setting up Camera Location parameters for GIS Map display](#)

3.1 Neighbor Aware Configuration

Neighbor Aware pairs the mobile freedom of TruWITNESS User with the wide reach of the UVMS infrastructure.

With Neighbor Aware, a TruWITNESS User out in the field using a TruWITNESS User device has the ability to trigger an alarm and by doing so the neighbor aware does the following:

1. All cameras and Sensory which are in the Neighbor Aware region enter into an Neighbor Aware state.
2. If a camera was not recording, it will start recording, including the pre-recording set for the TruWITNESS User policy. It will end recording when the neighbor aware event is over.
3. If a PTZ camera is set to "go to location" it will redirect to the GPS location of the TruWITNESS User that triggered the event.
4. Any TruWITNESS User in the defined radius of the triggered alarm will receive a notification (vibration of PCS, OLED message and blue light on Sensory) alerting them that there is a near by alert and they will enter into Neighbor Aware state.
5. If a second alarm is triggered by a different TruWITNESS User within the same radius:
 - a. PTZ camera location will remain positioned towards the the original alarm device
 - b. The cameras in Neighbor Aware state will update their post recording time to the policy with the longer post alarm time.
 - c. The Neighbor aware device will remain in Neighbor Aware state, even if the first device ends the alarm, loses signal or leaves the radius, as long as there is an active alarm from a TruWITNESS User device within it's radius.
 - d. The Neighbor aware device will not remain in Neighbor Aware state if it itself loses signal or leave the radius of the all alarm devices.

In order to use the TruWITNESS Neighbor-Aware capabilities, it is necessary to enter the location parameters and orientation information for all cameras that support Neighbor-aware functionality.

In addition, any regular fixed camera which have Location parameters defined, and are linked to the GIS map (under AdminCenter configuration) will also show on the GIS Map.

For setup of GIS positioning, follow the instructions for [Setting up Camera Location parameters for GIS Map display](#)

There are 3 types of cameras that are displayed on a map and react differently to a Neighbor Aware event:

1. [Fixed cameras and PTZ cameras with a fixed location](#)
2. [PTZ cameras with "Go To Preset Positions"](#)
3. [PTZ cameras with "Absolute Positioning"](#)

Fixed cameras:

Fixed Cameras are displayed on a map using the GIS positioning set up with a regular GIS map. When a neighbor aware event is triggered, these cameras will:

1. Enter into alarm mode
2. Begin recording if they are not recording already

Go To Preset Positions:

For PTZ cameras that **do not** support an absolute “Go to location” command (described in the section below), the Neighbor Aware will use presets to point the camera toward the closest compass direction of the Neighbor Aware Alarm. Eight (8) presets should be defined for each such camera oriented to the north, north-east, east etc. Upon Neighbor Aware alarms, the closest preset will be selected to orient the camera to the spot.

To setup the camera for “Go to Preset”, navigate to the camera’s General tab, and expand the “PTZ Goto Location” section:

Preset numbers configured for the cameras should start from the configured Starting Preset Number (representing north), with the next seven preset numbers set to the next clockwise compass direction as shown in the below table:

Direction	Preset Number
North	Starting Preset Number
North-East	Starting Preset Number + 1
East	Starting Preset Number + 2
South-East	Starting Preset Number + 3
South	Starting Preset Number + 4
South-West	Starting Preset Number + 5
West	Starting Preset Number + 6
North-West	Starting Preset Number + 7

Absolute Positioning:

For PTZ cameras that support absolute positioning, a “Go to absolute PTZ Location” command can be configured to be sent to the camera, pointing the camera toward the direction of the Neighbor Aware incident.

To setup the camera for “Go to absolute PTZ Location”, navigate to the camera’s General tab, and expand the “PTZ Goto Location” section:

1. Confirm that the camera has GIS Global Positioning **Enabled** with the camera’s relevant GPS coordinates.

A camera’s General page includes a “**GIS Positioning**” section that maintains the GPS location of each camera:

Enable Global Positioning: cameras must have this checkbox checked to be considered by GIS Maps. The default coordinates are 0, 0, and 0 (Longitude, Latitude and Altitude). Enter the required coordinates (See [Tips on adding camera location](#)) and **Save** the page. Once Global Positioning has been enabled for the camera and coordinates saved, a given camera can be [added to a GIS Map](#) by navigating to the GIS Map in the Logical View tree. Under the map’s “GIS Map” tab, the camera can be selected as a GIS Entity.

2. Check “**Go to absolute position upon alarm**” to enable the setting. Enter the Camera Mounted Height.
3. Next, press the “**Set current position**” button in the PTZ GotoLocation section **when the camera is directly pointed north and tilted horizontally (at the horizon)**.
4. If the camera supports absolute positioning, it should report its location upon selecting to set current position
5. The values reported will be used as offset degrees when an absolute Go to Location command is sent. Note that in Pelco D format, a reported value of 35999 is equivalent to 359.99 degrees. For example, in the figure above, the camera has a set North Position of 11.65 degrees and a Horizon Position of 3.06 degrees.
6. Press the Save button to save the updated settings and use “Go to Location” for the camera.

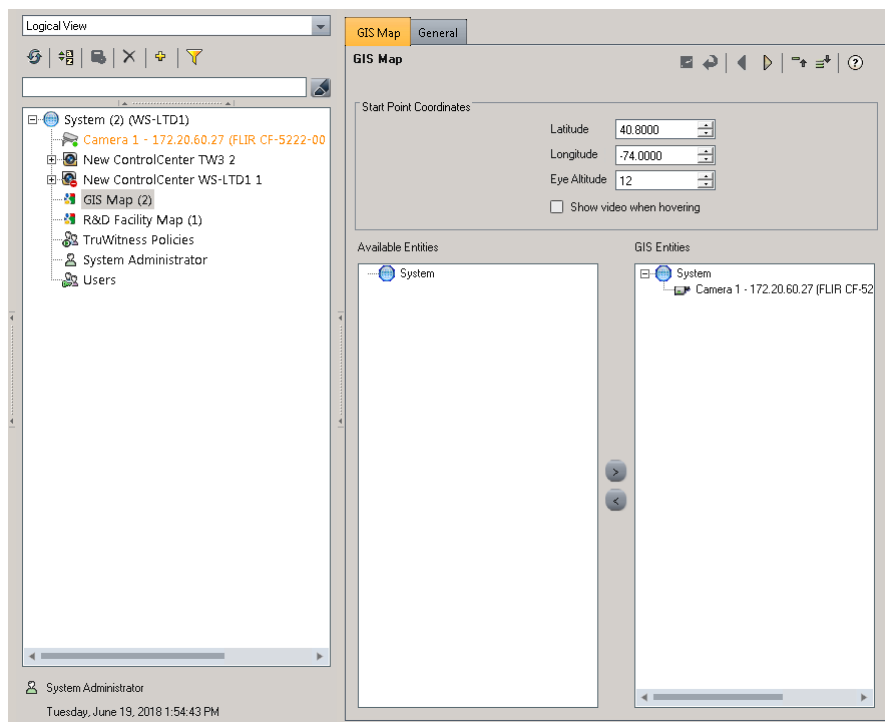
3.2 Setting up Camera Location parameters for GIS Map display

When using TruWITNESS facilities, Control Center operators can call up a GIS Map tile, and icons for all connected TruWITNESS Sensory will be displayed.

The system contains an entity called '**Default GIS Map**'.

1. From the sidebar, select **Logical View**.
2. Select the entity **Default GIS Map**

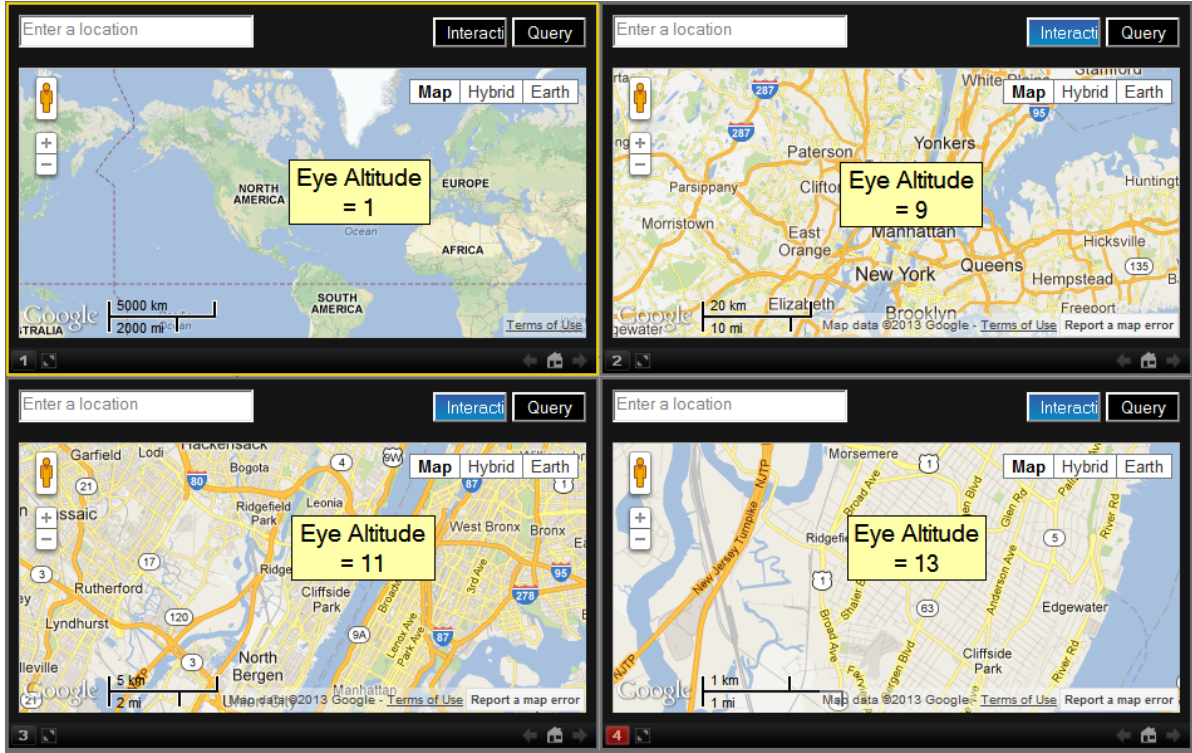
The default parameters are shown below.



These Latitude and Longitude parameters are for the general New York area.

The 'Eye Altitude' is an indication of the standard Google Maps zoom factor.

'1' is maximum zoom out and shows the entire hemisphere. Higher zoom values will initially show less area and more detail.



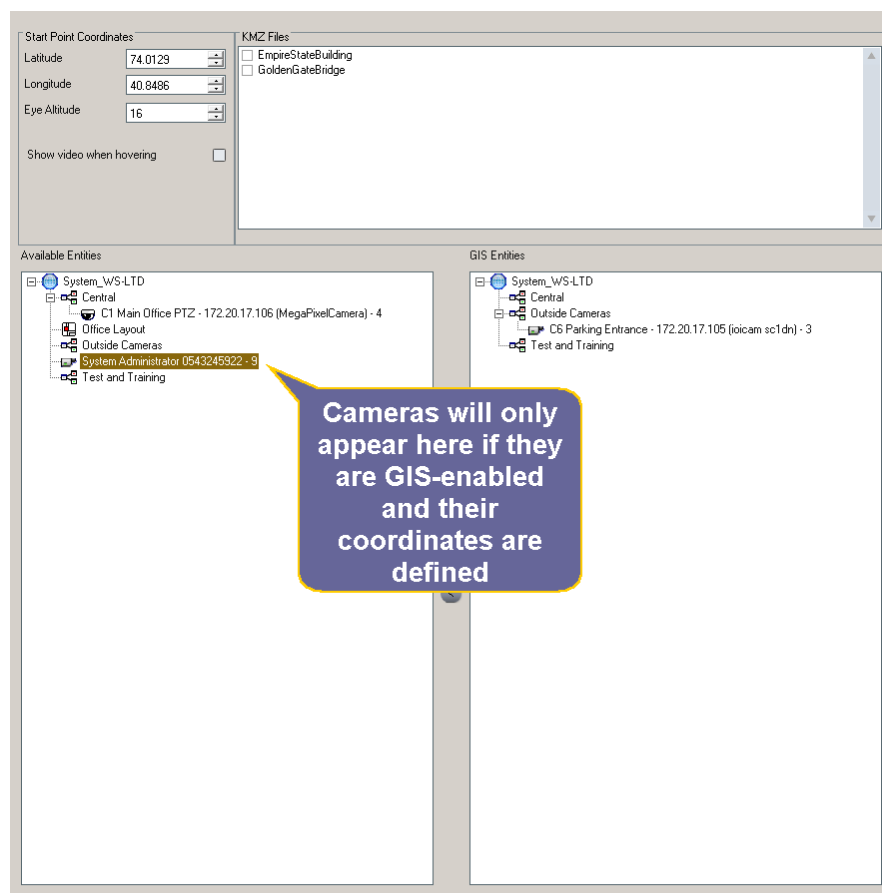
3. Select cameras that are to be shown on the map. (Note: Cameras will only appear here if they have been assigned GIS co-ordinates in their definitions).

Note: If 3D images are to be displayed, check required KMZ files.

To Create a GIS Map Entity

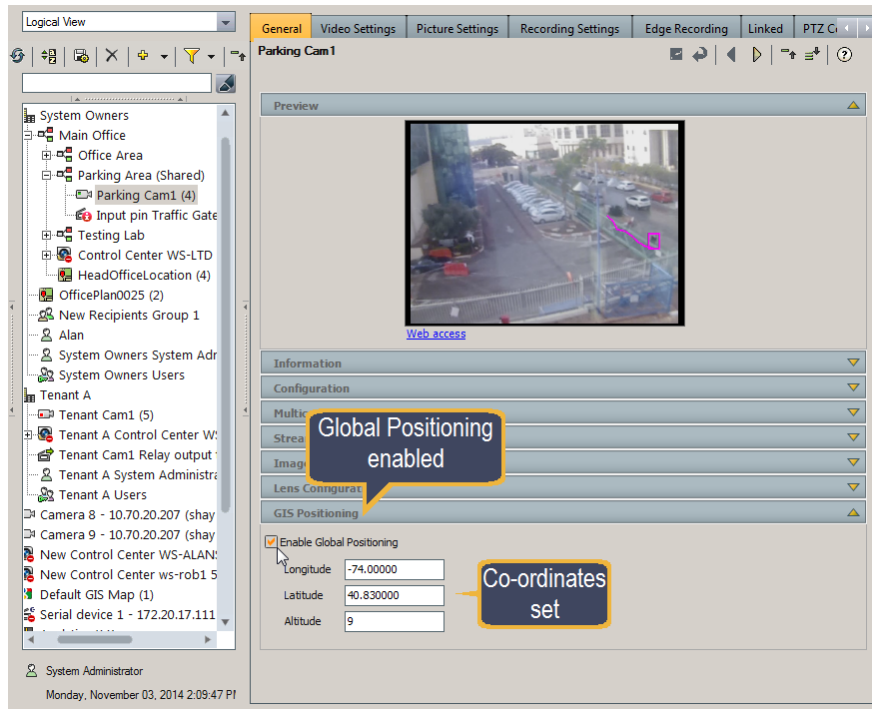
1. From the sidebar, select *Logical View*.
2. Right click on the System entity, and select *Add GIS Map* from the drop down list.
3. In the *GIS Map* tab, enter Longitude and Latitude co-ordinates and Altitude.

4. Select cameras that are to be shown on the map.



5. To define GIS positioning coordinates, navigate to the cameras video scene. In the *General* tab, scroll down and expand the *GIS Positioning* section.

Click "Enable Global Positioning" and enter the desired coordinates



6. In the *General* tab, enter a *Name* and a *Description* for the GIS Map.
7. The URL is obtained by contacting Operations and order the GIS maps feature.

The screenshot shows the 'GIS Map' configuration window with the 'General' tab active. The 'Name and Description' section contains the following fields:

- Name:** My GIS Map
- Description:** (empty)
- URL:** http://10.70.90.231/MappingServices/Ma

Below the URL field are 'Browse' and 'Test' buttons. The 'Web Browser' section features a search bar labeled 'Enter a location', 'Interactive' and 'Query' buttons, and a map of New York City. The map includes a compass, a scale bar for 10 km, and copyright information for 2014 Google.

Note: If 3D images are to be displayed, check required KMZ files.

4 Set up Charging Hub and Assignment Station

[Connecting the Charging Hub](#)

[Discover Charging Hub](#)

[Set Charging Hub Location](#)

[The Assignment Station](#)

4.1 Connecting the Charging Hub



Charging Hub

An RJ45 line must connect to the Latitude network via the supplied PoE Injector (Data IN) and from there (Data OUT) to the RJ45 port at the back of the Charging Hub.

The Charging hub needs to be connected to 1Gig connection, otherwise it will suffer from loddw offload speed

Important Note on Charging Hub Storage:

FLIR strongly recommends the following, regarding storage write speeds:

1. Storage for TruWITNESS recordings should be capable of a write speed of 100Mbps or above, per charging hub.
2. If multiple Charging Hubs are in use on a single Archiver, the Archiver will offload one hub at a time in order to reduce the storage write speed requirements. If simultaneous offload from multiple hubs is required, each hub should be on a different Archiver.

Note: If separate Archivers are sharing the same storage location, the storage write speeds should accommodate ~120Mbps per Charging hub.

3. If a charging hub is connected to an Archiver which manages a number of cameras, the storage write speed must provide the necessary 100Mbps for the hub in addition to the requirements of all the attached

cameras.

If the above is not considered, the transfer of recordings from the Charging hub to the storage location designated by its Archiver can be a bottleneck that can result in multiple offloading attempts, longer offload times and possibly some gaps. Where multiple cameras are attached to the same Archiver some of their recordings may be lost or they may experience some latency.



Servers with support for “Energy Efficient Ethernet” (EEE)

If the charging hub is connected to a device that supports EEE, this feature **MUST** be disabled. If EEE is enabled, the green LED on the Ethernet connection of the charging hub will blink slowly. For more information on how to disable this feature, see [System Requirements](#)

4.2 Discover Charging Hub

The Charging Hub must be discovered and attached to the Archiver.

Important Note on Charging Hub Storage:

FLIR strongly recommends the following, regarding storage write speeds:

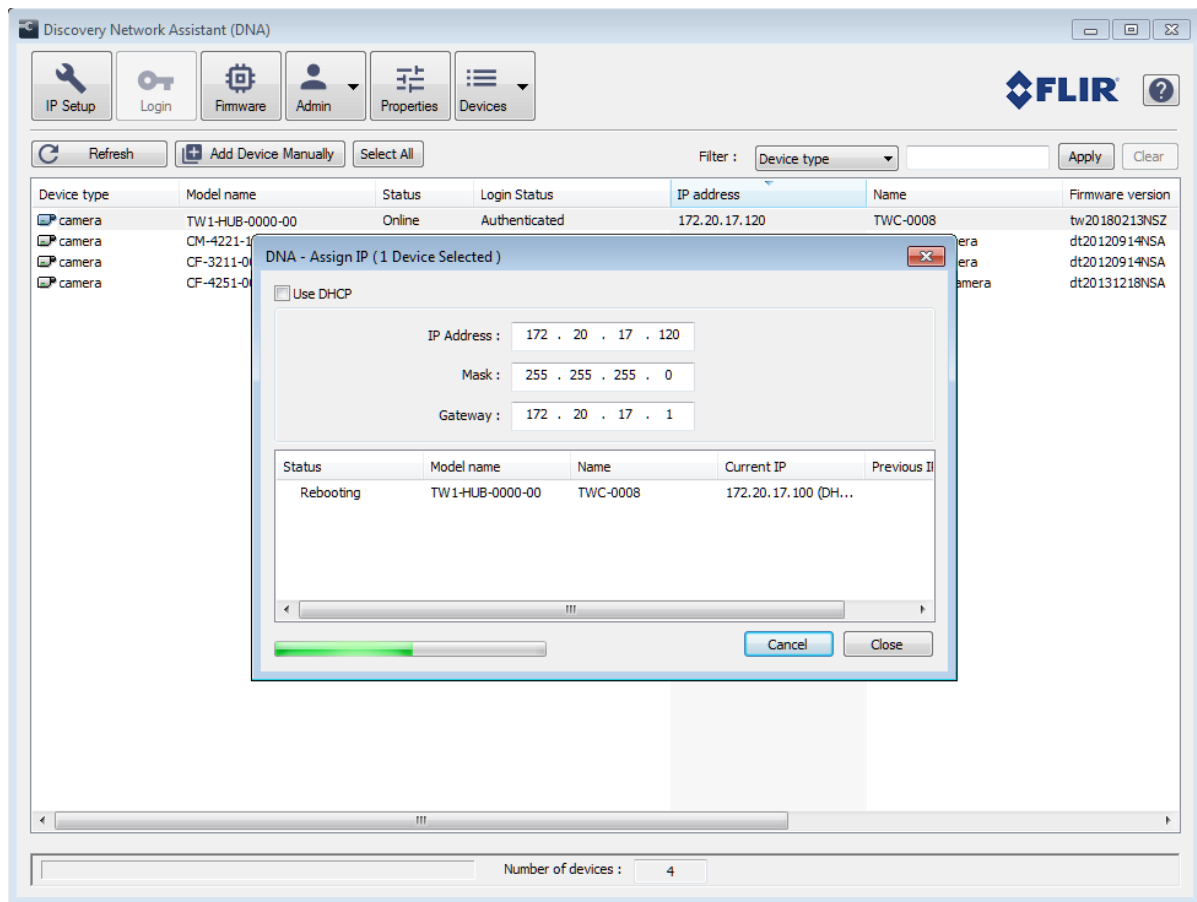
1. Storage for TruWITNESS recordings should be capable of a write speed of 100Mbps or above, per charging hub.
2. If multiple Charging Hubs are in use on a single Archiver, the Archiver will offload one hub at a time in order to reduce the storage write speed requirements. If simultaneous offload from multiple hubs is required, each hub should be on a different Archiver.

Note: If separate Archivers are sharing the same storage location, the storage write speeds should accommodate ~120Mbps per Charging hub.

3. If a charging hub is connected to an Archiver which manages a number of cameras, the storage write speed must provide the necessary 100Mbps for the hub in addition to the requirements of all the attached cameras.

If the above is not considered, the transfer of recordings from the Charging hub to the storage location designated by its Archiver can be a bottleneck that can result in multiple offloading attempts, longer offload times and possibly some gaps. Where multiple cameras are attached to the same Archiver some of their recordings may be lost or they may experience some latency.

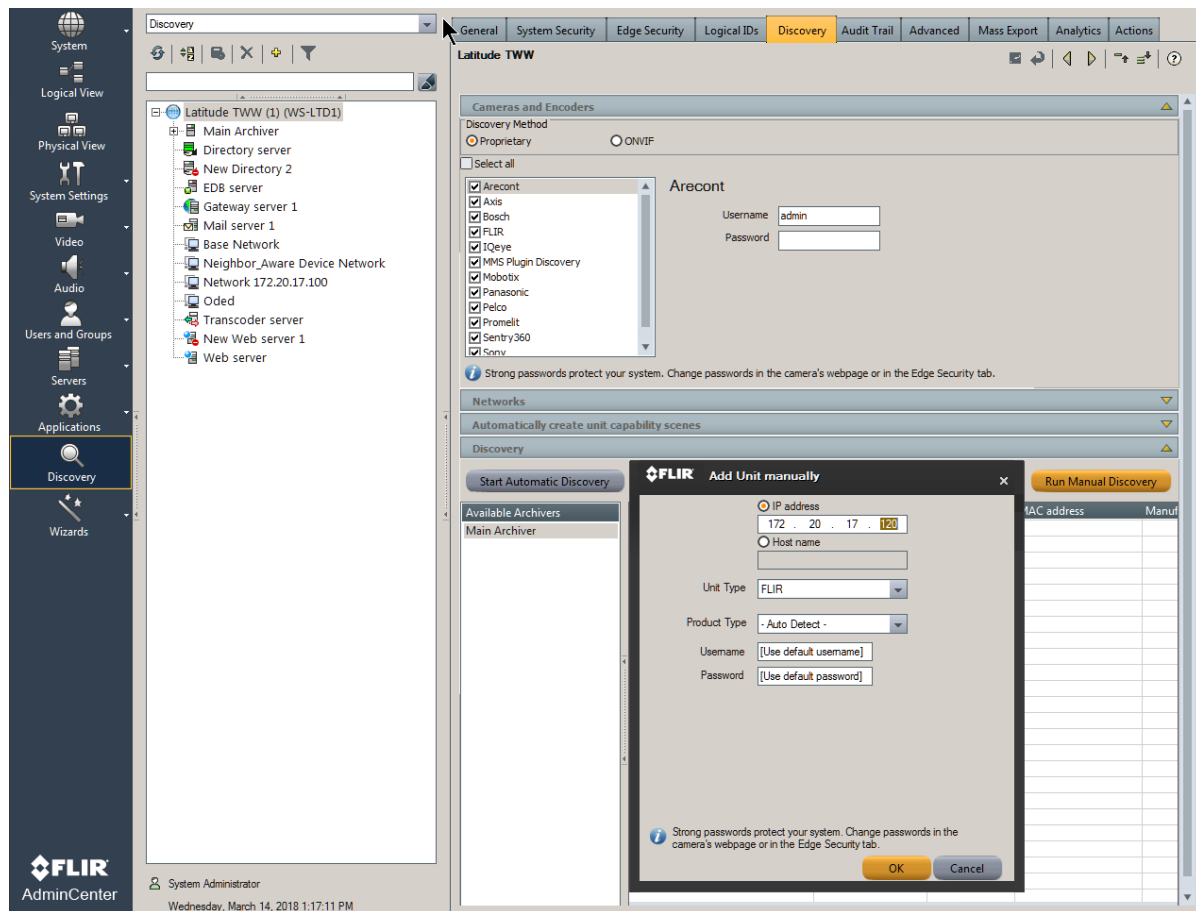
Use the DNA Application (only version 2.2.1. or above) to set an appropriate IP address for the Charging hub.



Setting Charging Hub IP with DNA

The Charging Hub model name is TW1-HUB-0000-00.

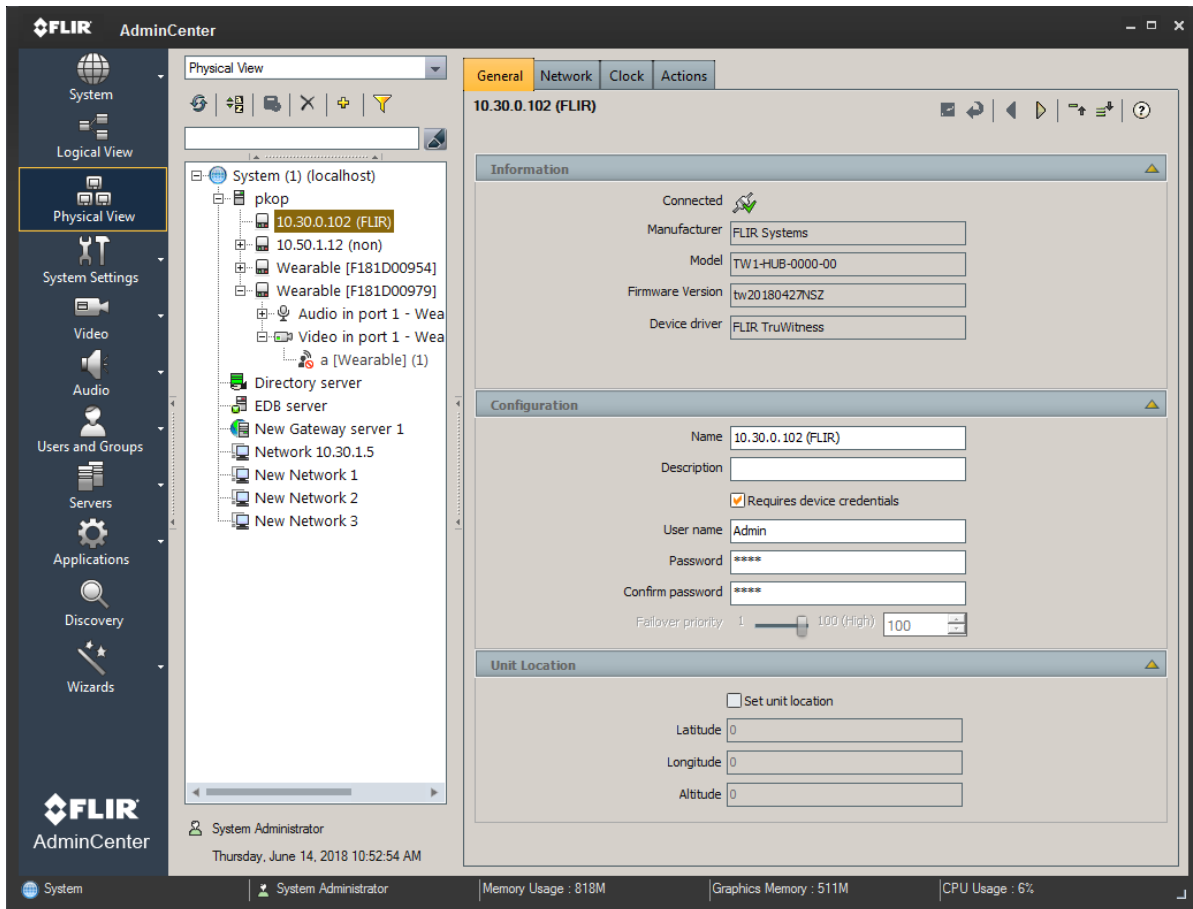
In the Admin Center, open the Discovery tab in the Sidebar, and manually Discover the Charging Hub using the IP address set above.



Charging Hub Manual Discovery

In the list of Discovered entities, select the Charging Hub to be attached to the Archiver, and **Save**.

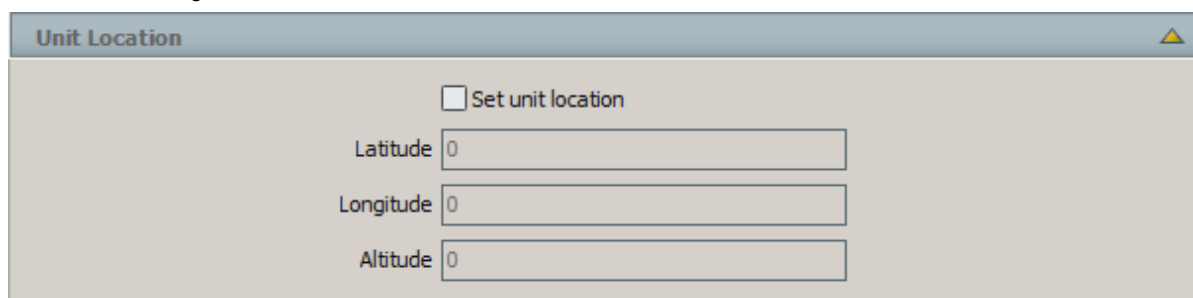
The Charging Hub will now appear in the Admin Center Physical View.



4.3 Set Charging Hub Location

In the Charging Hub **Device** screen, check the '**Set unit location**' box, and then enter the GIS location parameters for the Hub.

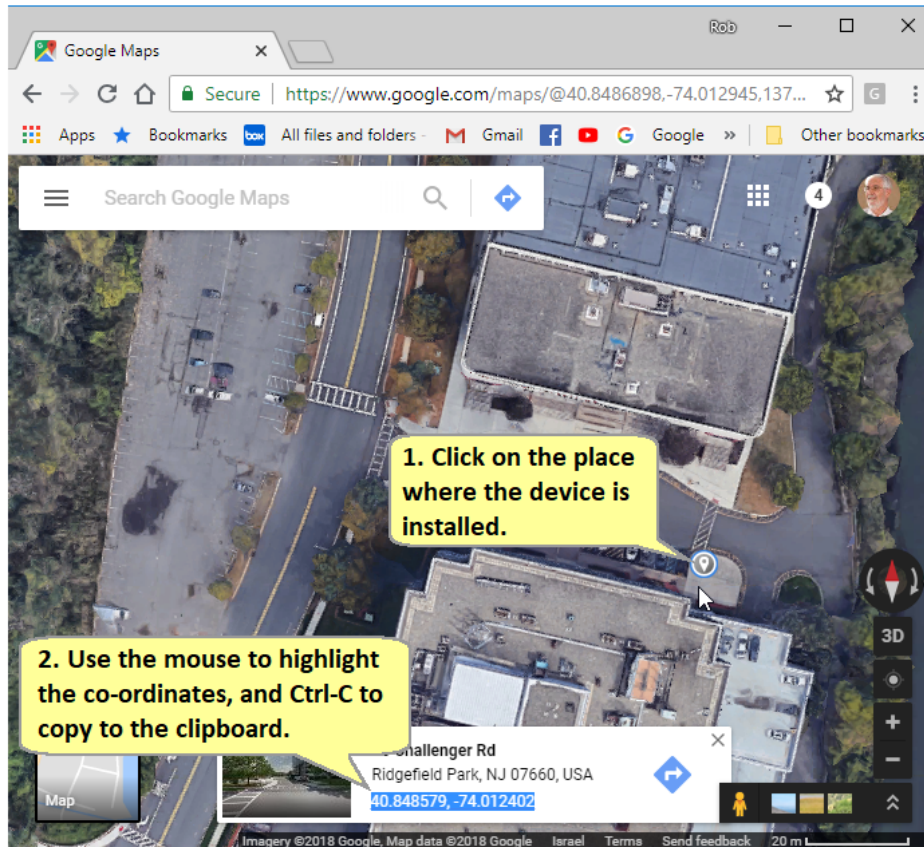
These coordinates will be set in all PCSs that are charged in the Hub, to give them a 'Default Location' for each new working session.



Tips on Entering Location data

(This is just a suggestion!)

1. Open Google Maps and navigate to the location where the device will be installed



2. Open text editor (Notepad, Microsoft Word, or similar)
 3. Paste the co-ordinates into the editor, and from there copy the **Latitude** and **Longitude** values into the corresponding **Unit Location fields**.
- (The **Altitude** field is not used at this stage).

4.4 The Assignment Station

The screenshot shows the FLIR TruWitness Assignment Tool interface. The top navigation bar includes the FLIR logo, the tool name, and a welcome message for the System Administrator. The main content area is divided into two sections: 'Device' and 'Users'.

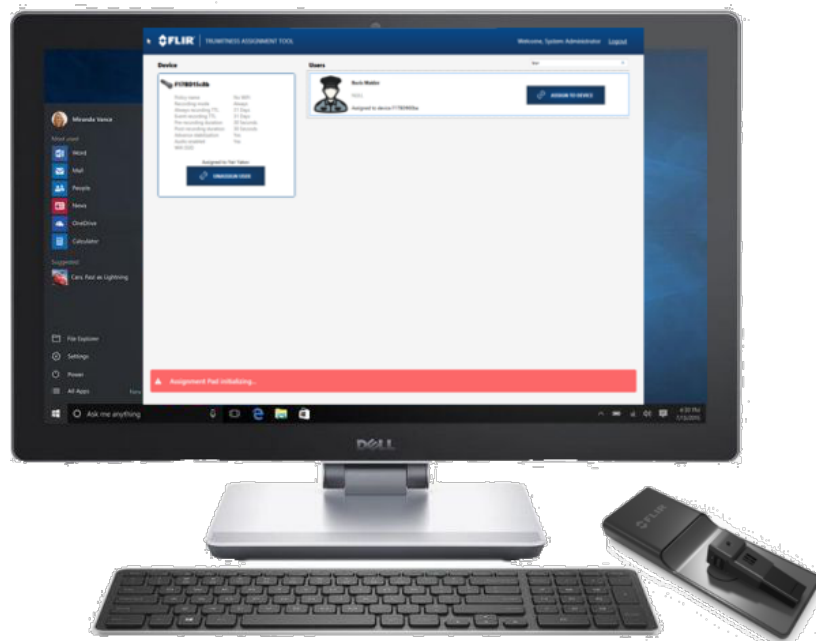
Device Section: Displays the device ID 'F181D00953' and its current policy settings. A callout points to the device ID, stating 'Device currently on the Assignment Pad'. Another callout points to the policy settings, stating 'Current Policy for this User'. A 'UNASSIGN USER' button is visible at the bottom of the device section.

Users Section: Lists the current TruWITNESS Users in the System. The list includes: System Administrator (not assigned), Richard Whittaker (Assigned to device F181D00965), Trevor Glover (Assigned to device F181D00957), Trthor Hastings (Assigned to device F181D00976), Roger Haifele (Assigned to device F181D00967), Bob Gunstone (Assigned to device F181D00969), Sally Williams (Assigned to device F181D00966), and Peter Hadfield (Assigned to device F181D00953). A callout points to this list, stating 'List of current TruWITNESS Users in the System'. A 'REFRESH ASSIGNMENT' button is located at the bottom right of the users section.

Other Callouts: A note states 'Note: 'Device' refers to any TruWITNESS device [Sensory, etc.] that is recognized by the Assignment Pad'. A 'Selected User' callout points to Peter Hadfield. A 'Message Area' callout points to a red-bordered box at the bottom of the interface.

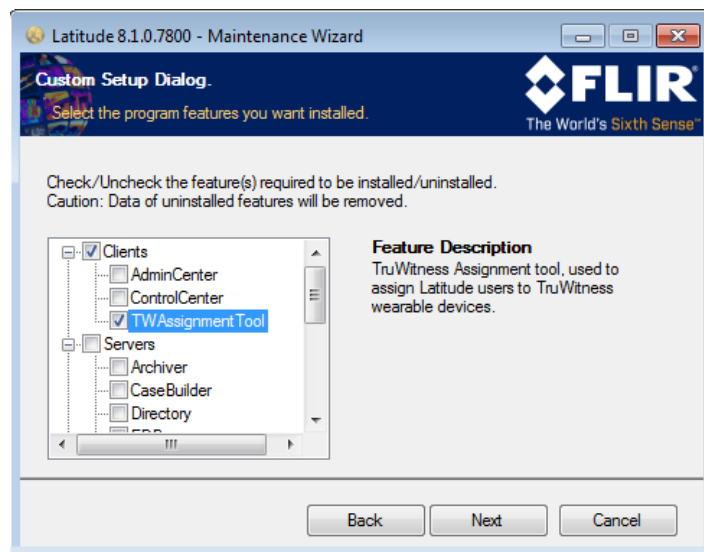
Assignment Tool Screen - Appearance

The Assignment Station consists of a workstation running the **TruWitness Assignment Tool**, and equipped with an **Assignment Pad**.



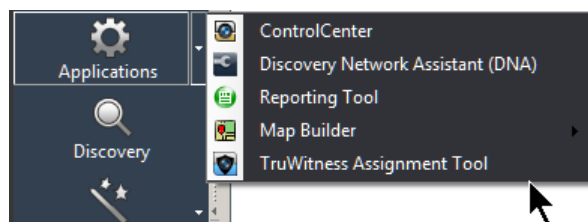
Assignment Tool screen and Assignment Pad with Sensory in place

1. Run the TruWitness Assignment Tool Application. This can be installed via a Custom Installation.



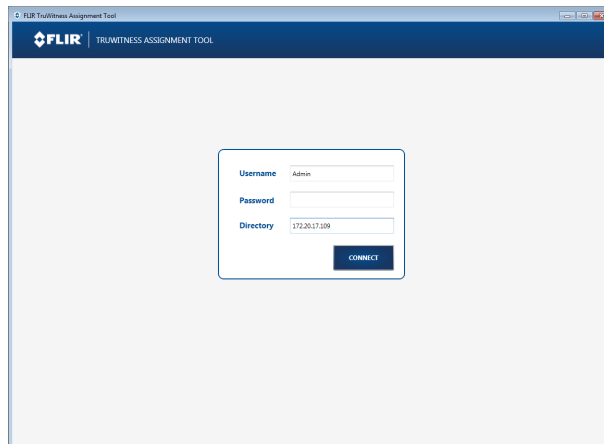
Installing the Assignment Tool

2. Alternatively, if you intend to run the Assignment Tool on the same workstation as you have the Admin Center, then it can be run from the Applications tab of the Admin Center Client.



Assignment Tool Client Application

3. Once the Application is loaded and opened, you need to enter the address of the Latitude system and Log in.



Login to the Latitude System

4. If the Assignment Pad is not yet connected via USB to the workstation, you will be prompted to connect it.

Once the Assignment tool application is logged in, close it and continue setup in Admin Center by creating [Users](#)

5 Users and their TruWITNESS equipment

[Create ordinary User](#)

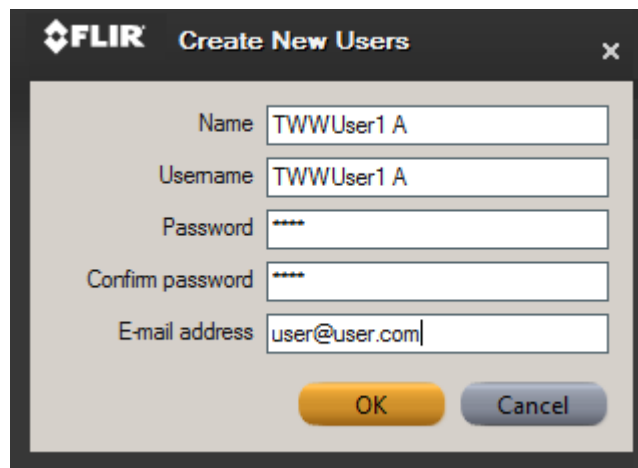
[Setting up TruWITNESS Users](#)

[Setting up PCS's](#)

[Assign Sensories to TruWTiness Users](#)

5.1 Create ordinary User

In the Admin Center Users page Right click the System at the top of the tree and select "add user". Complete the "Create New user" fields and press Ok.



The screenshot shows a 'Create New Users' dialog box from the FLIR Admin Center. The dialog box has a title bar with the FLIR logo and a close button. It contains five input fields: 'Name' with the value 'TWWUser1 A', 'Username' with the value 'TWWUser1 A', 'Password' with four asterisks, 'Confirm password' with four asterisks, and 'E-mail address' with the value 'user@user.com'. At the bottom of the dialog are two buttons: 'OK' and 'Cancel'.

Select the User in the tree and check that user has Mobile permission (by default at this stage) by looking in the "Privileges" tab for that user and looking under the "Mobile" section by scrolling down to the bottom.

General Login Access Rights Privileges Layouts Actions

TWWUser1 A

Entity	Allow	Deny	Undefined	Inherited From
Perform Remote Actions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Operate Layout Tour	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Operate CaseBuilder	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Cameras	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Microphones	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Monitors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Speakers	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
PTZ	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Alarm Management	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Layouts	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Analytics	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Admin Center	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Login	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Modify Global Settings	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Install and Update License	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Export Field Report	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Perform Mass Export	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Use Reporting Tool	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Servers	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Edge Devices Configuration	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Scenes Configuration	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Sites and Enterprises	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Maps	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Camera Sequence	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
User Management	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Alarms	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Coverages, Profiles & Schedules	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Plugins and Integrations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Mobile	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Display video from mobile device	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Member Of

Users

Mobile Permission

For use of a custom User Profile Picture in the Assignment Tool, go to the User's General page and check "Change Profile Picture". Browse to the desired picture and save

Profile Picture

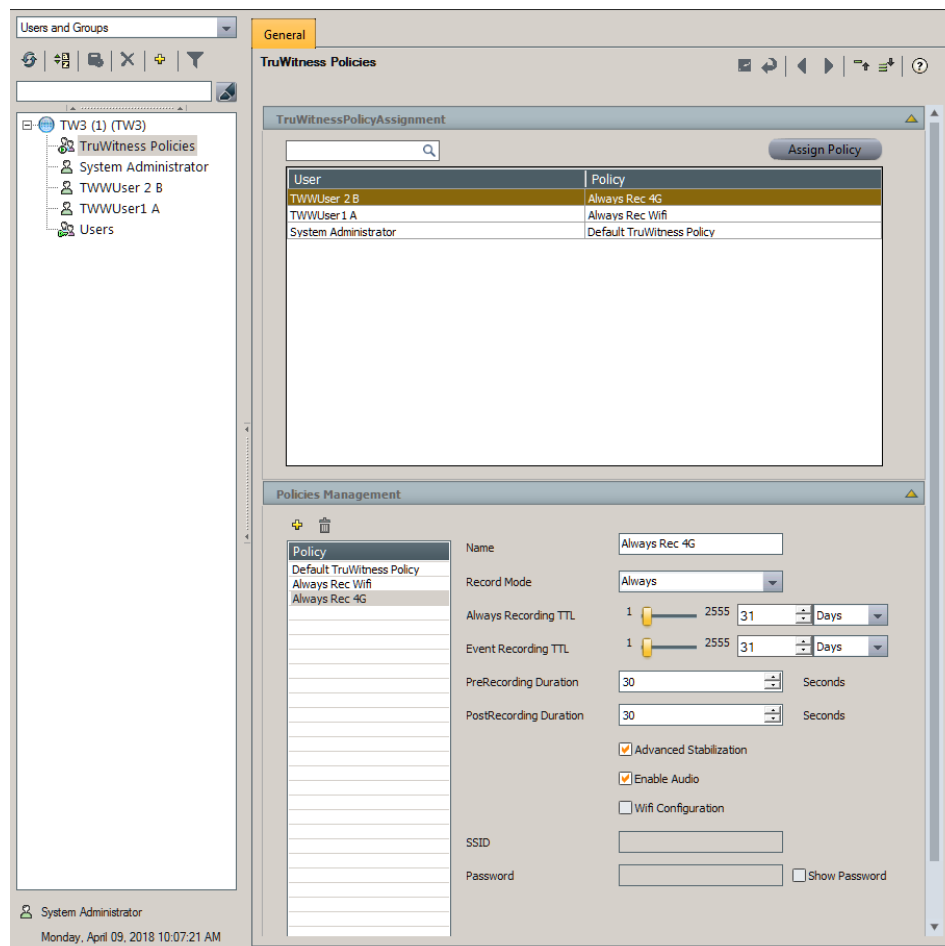
☒ Change profile picture

Path

The user is now available for TruWITNESS Assignment

5.2 Setting up TW Users

In the Admin Center Users page, click on the TruWITNESS Policies Group to open the pane showing all current and potential TruWITNESS users and the Policies that are assigned to them.



Management - TW User and Policies Page

All Users who have Mobile Permissions set ON in their **User/Privileges** settings will appear in the User/Policies panel, and are initially assigned the Default **TruWitness Policy**.

Policies Management

Policies set various parameters for TruWITNESS devices.

The **Default TruWitness Policy** is assigned to all new users.

Additional Policies can be defined and allocated to users if different Recording parameters are required.

Advanced Stabilization

When Advanced Stabilization is turned on, the recorded video will be 720p but will be more stable when using in mobile situations

When Advanced Stabilization is turned off, the recorded video will be 1080p and will be more suitable for stationary situations

5.3 Setting up PCS's

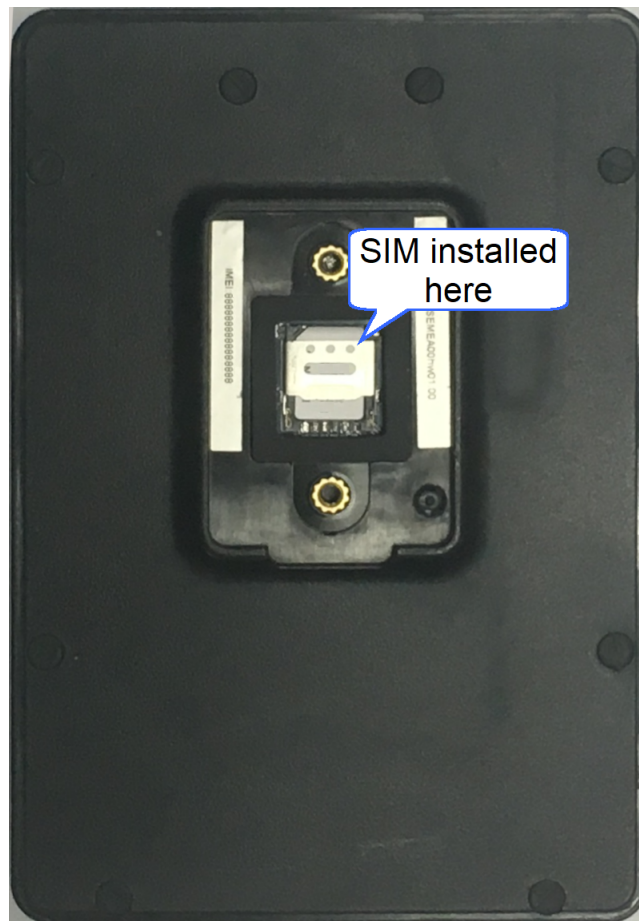
TruWITNESS devices use 3G/4G cellular services for all communications (depending on region). (See [System Requirements](#))

In order to use Cellular communications, each PCS must have a cellular provider SIM installed, with a suitable authorized data bundle.

The user should obtain blank SIMs from their Provider, and, before installing them in the PCS, note the IMEA numbers (normally a 20-digit code on the carrier envelope) so that the SIMs can be activated.

The activated SIMs must be installed in their slots under the SIM cover on the PCS.

For more information about SIM requirements see: [System Requirements](#)



PCS SIM Slot

Note: Different models of PCSs are produced to provide for the transmission standards in different 3G/4G regions - US, EMEA and APAC.

PCSs should be placed in Charging Hubs in advance of use, so that their batteries can be fully charged. A steady green light in the individual PCS bay indicates a full charge.

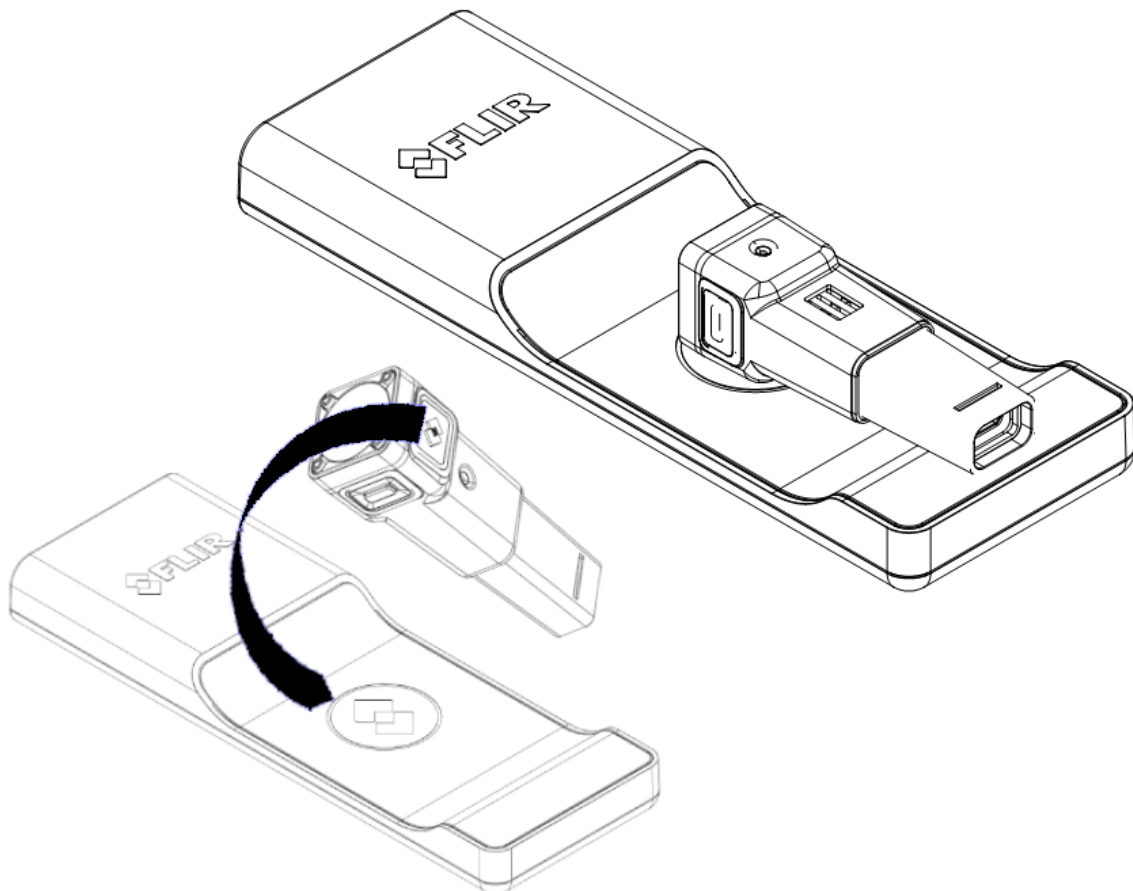
Charging Time: The time it will take to full charge a PCS is about 6.5 hours from zero to full. The PCS battery has a working time about 10 hours under.

For T cables, power source with 1.8A to 2.5A should be used (no less than 1.8A) – DO NOT CONNECT TO PC USB – USE A DEDICATED POWER SOURCE

5.4 Assign Sensories to TW Users

Once the Assignment Station is set up and TruWITNESS Users have been added from the regular Users list, the next step is to assign Sensories to the TruWITNESS Users.

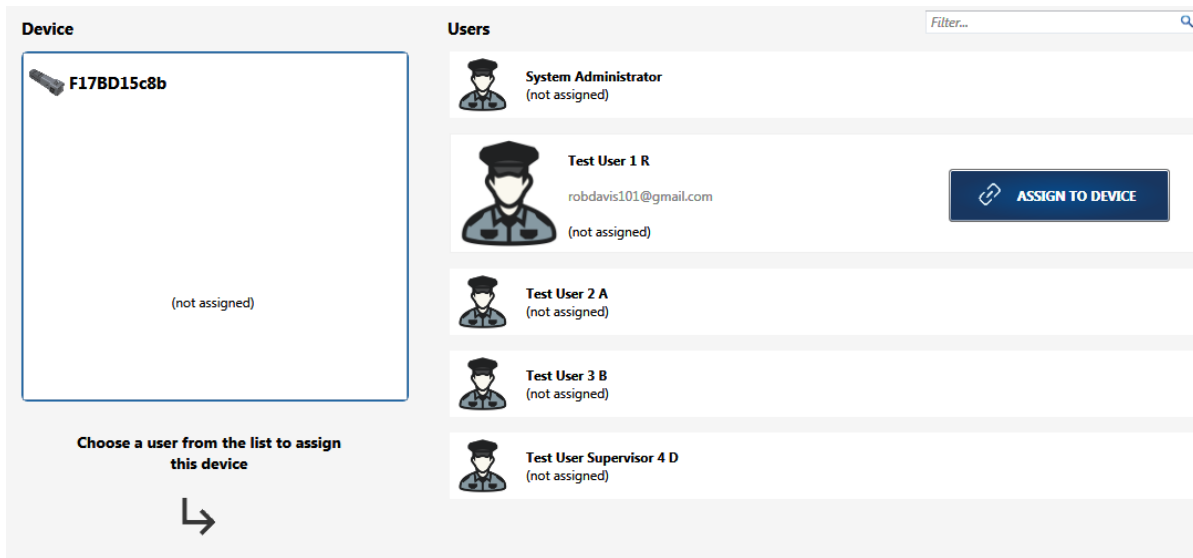
Using the Assignment Station, place a Sensory on the Assignment Pad (with the Sensory FLIR logo resting on the Assignment Pad FLIR logo).



*Assignment Pad with Sensory in place for performing Assignment
(Sensory Icon and Pad Icon touching)*

NOTE: Do not place the assignment pad on a conductive surface such as metal (i.e. do not place the assignment pad on top of a computer)

The application allows you to select a TruWITNESS User, and assign that Sensory to him.

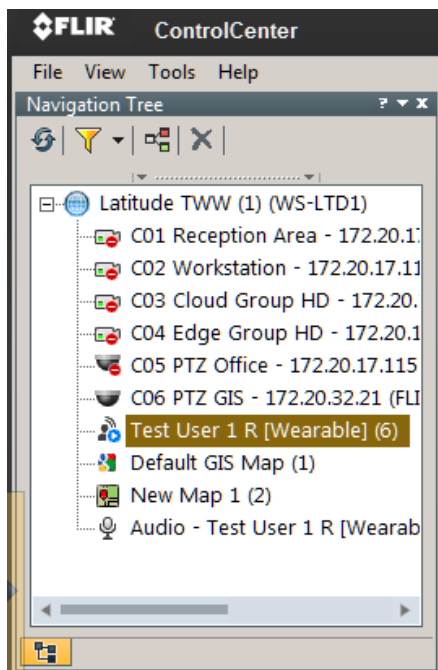


Assignment Tool showing TruWITNESS User to be Assigned.

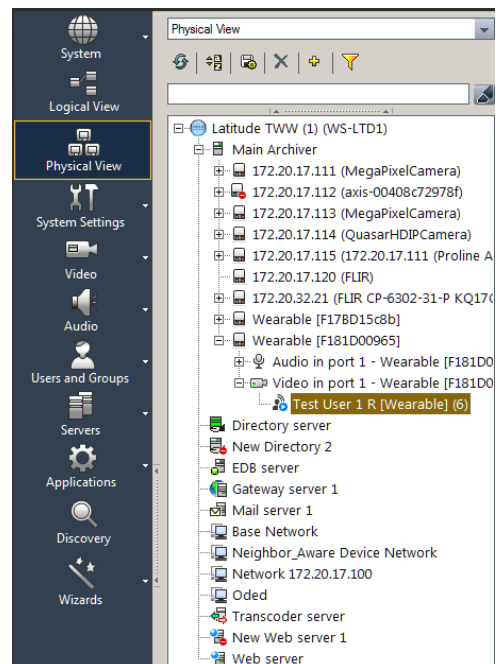
Once a Sensory is assigned to a TruWITNESS User, and plugged into the PCS, the Sensory and the TruWITNESS User will appear in the Control Center and Admin Center Navigation Trees. It is recommended to **NOT** assign a sensory to the System Administrator.

For more information, see the "TruWITNESS Wearer's Quick Guide"

Note: While a sensory is assigned to a specific user, do not change the name of user in Latitude. If a users name must be changed, unassigned the sensory prior to doing so.



TruWITNESS User appears as a scene in Control Center



TruWITNESS User with Sensory as a scene in AC Physical View

For the first time that a Sensory is assigned, if it is not plugged into the PCS within 1 month, the assignment will expire.

Note: If after 1 month, the Sensory was plugged into the PCS without re-assignment, the PCS will boot up and indicate it's working but the unit/user will not appear in Latitude.

Warning: If a sensory is taken from one system and moved to the Assignment Tool of another system, the "Un-assigned User" button will be active. Using this button without properly removing the sensory from the original system will result in unpredictable behavior.

Note: Two systems can be connected to one FLIR Cloud Account. Each VMS will maintain its own units, ignoring the other VMS's units. When moving a Sensory from one system to another system using the same FLIR Cloud account, Instructions above must be followed and the new system must on-board the Sensory

At the end of a shift, always allow up to 10 seconds at the end of an event before disconnecting the PCS from the Sensory

6 Applying Firmware Upgrades

Firmware Updates for the Hub are done using DNA (version 2.2.1.2 or above)

[Hub](#)

Firmware updates for the Sensories are stored in the Hub and applied automatically when the Sensories are connected to PCS's that have already been upgraded in the Charging Hub.

[Sensory and PCS](#)

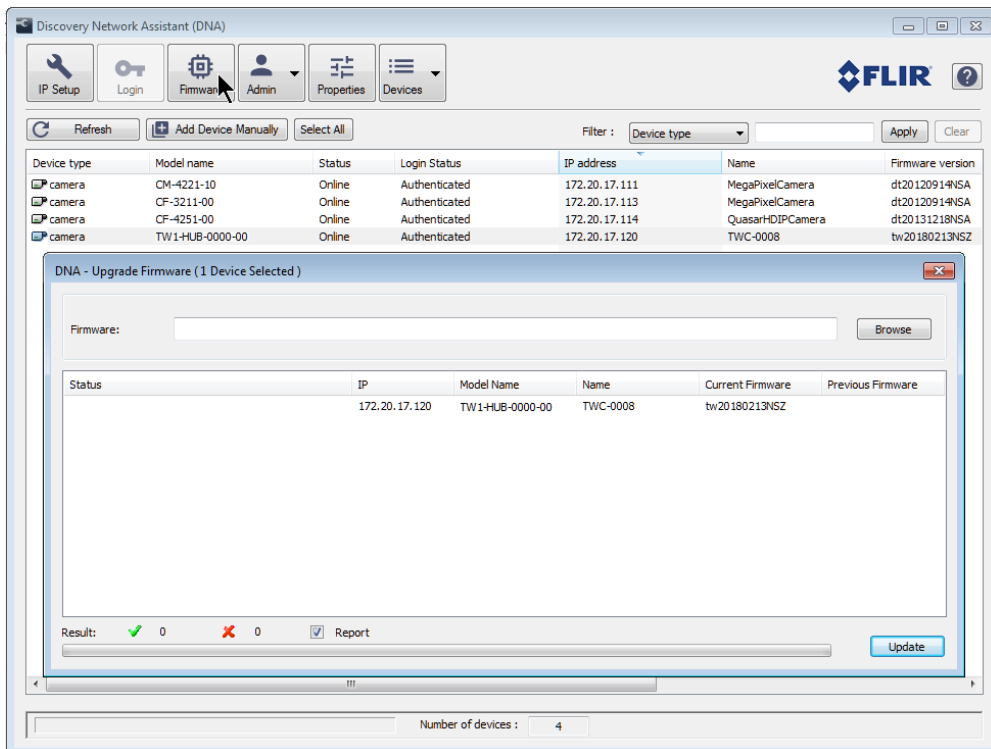
6.1 Hub

Use DNA to access the Hub, and apply the update.



Warning:

Please take care not to disconnect power from the Charging Hub during the firmware upgrade procedures!

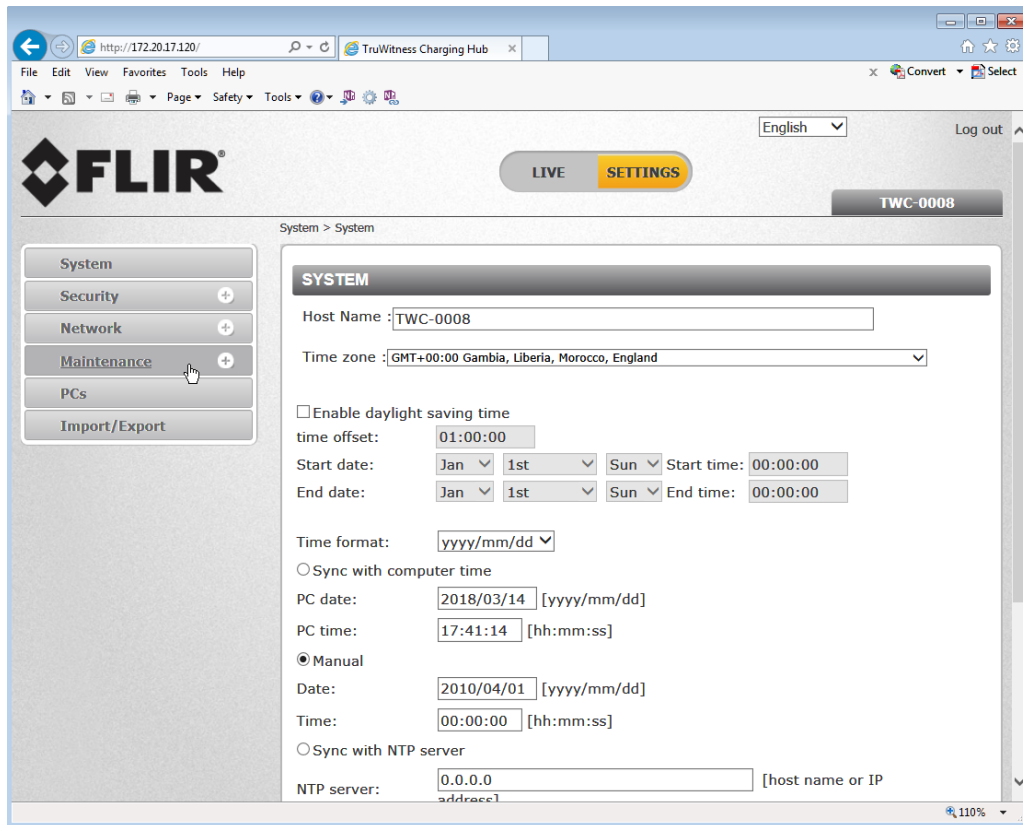


Using DNA to upgrade Charging Hub Firmware

6.2 Sensory and PCS

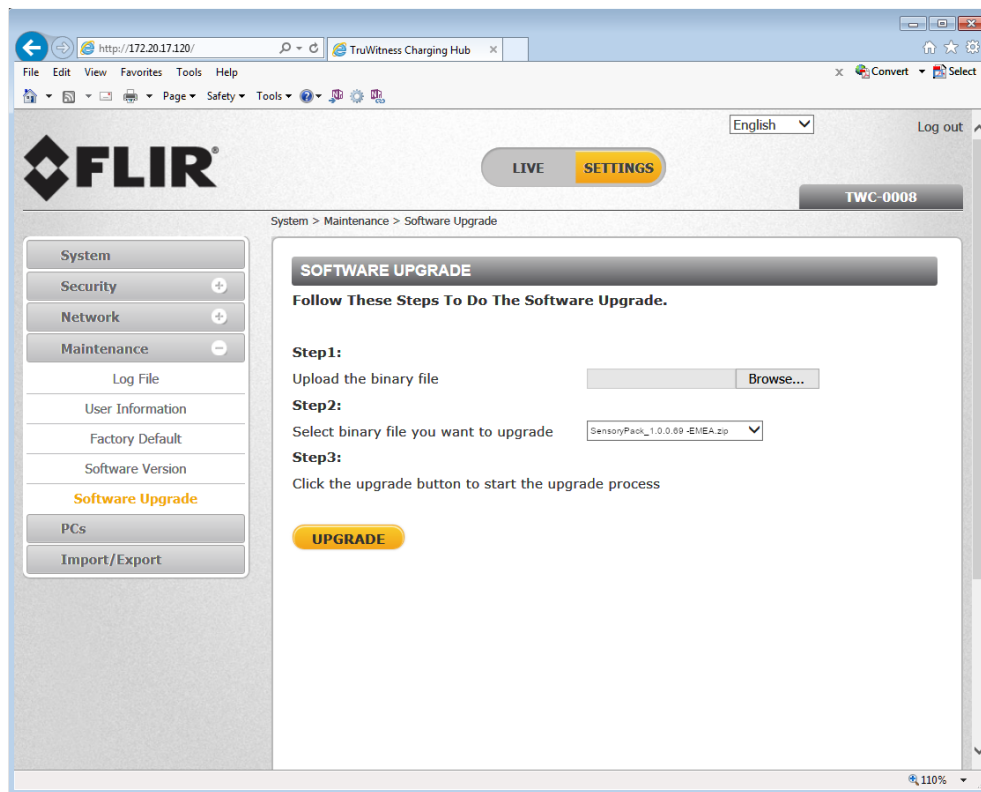
Use Internet Explorer to go to Webpage of the Hub.

(User **Admin**, pw **1234**)



Charging Hub Web Page

Go to the **Maintenance Tab**.



Using the Charging Hub Web Page to Upgrade PCS Firmware

Follow the **Software Upgrade** steps to load the upgraded PCS firmware to the Charging Hub.

Step 1: Browse to zip file

Step 2: Select the appropriate file based on region:

- 1) SensoryPack_1.0.0.xx - APAC.zip
- 2) SensoryPack_1.0.0.xx - EMEA.zip
- 3) SensoryPack_1.0.0.xx - NAAT.zip

(The 'uimages..' file should NOT be selected.)

Step 3: Click **UPGRADE**

Wait until the LED is green (stead or blinking) before removing PCS from the Charging Hub

When the upgrade is complete plug the Sensory into the PCS. The sensory will receive the Firmware from the PCS and automatically go through the upgrade process.

Part of the upgrade process requires the PCS to reboot. During the reboot process, the OLED on the PSC will turn off for several seconds to about a minute.

Note: DO NOT unplug the sensory from the PCS while it is undergoing the FW upgrade or the reboot process. Wait for the OLED to turn back on and the upgrade to complete.

Note: If the PCS is low battery, and starts the upgrade process but then dies, there is a built in fail-safe that the units will be unharmed and will continue with the upgrade when the PCS is charged and reconnected to the sensory.

Once the upgrade is completed, test simple functions such as triggering alarms, bookmarks, privacy mode, etc.

7 How-To

This section has short and informative topics with step by step instructions about how to perform specific actions regarding TruWITNESS

These topics include;

[Moving Hub to another System](#)

[Moving PCS to another System](#)

[PCS Battery](#)

[PCS Time Update](#)

[Collecting PCS Logs](#)

[Format PCS](#)

[Sensory](#)

[Factory Default Sensory](#)

7.1 Moving Hub to another System

In order to move a charging hub from one system to another system:

1. Delete the Charging Hub from Latitude: Physical View > Right click unit > Delete Unit
2. Reboot the Charging Hub by unplugging it and plugging it back in
3. Discover the Charging Hub into the new system

7.2 Moving PCS to another System

- 1) To move a PCS from one system to another ensure that the PCS has offloaded all video to original hub.
- 2) Best Practice is to [format the PCS](#) in ensure all files and logs have been removed.

7.3 PCS Battery

If the PCS battery is completely depleted, it must be inserted into the Charging Hub and charged before use.

For more information about the PCS battery and charging time see [Setting up PCS's](#)

7.4 PCS Time Update

If the Latitude System time is updated while a Hub is attached the the system, the Hub time will updated automatically, however, in order for the PCS's to receive the updated time, each PCS must be remove and reinserted into another slot of the hub.

7.5 Collecting PCS Logs

When troubleshooting steps are exhausted and issue still exist, it is advisable to collect logs from the PCS and call support.

In order to do so, go to the Charging Hub web page > PCS

There you will find that each occupied slot has an option to download logs.

Note: PCS logs will fill up to 512 MB in size. Once that limit is reached, the logs will be overwritten from the beginning. Logs are only generated on the PCS unit when it is connected to a sensory unit. Any other interaction with the PCS will not write logs.

7.6 Format PCS

WARNING: This option will not only wipe video data, but all data stored on the device, including Logs. It is advisable to contact support prior to using the Format option as a troubleshooting step.

1. Go to the Charging Hub web page > PCS
2. There you will find that each occupied slot has an option to format the PCS

7.7 Sensory

- 1) To move a Sensory from one system to another, Unassign the User with the [Assignment Tool](#).

Delete the unit from Latitude: Physical View > Right click unit > Delete Unit

- 2) If a Sensory is assigned to a user in one system and placed on the Assignment Pad of another system, a button for "Unassign" will appear but will not perform any actions. In order to move the Sensory to the new system, follow the instructions above in Step #1.

7.8 Factory Default Sensory

If a factory default of the Sensory is needed, while connected to the PCS, hold all 3 buttons for 15 seconds. The PCS display will turn off. Do NOT disconnect the Sensory and PCS until the reboot is completed.

8 Troubleshooting

Row	Symptom	Possible reason	Resolution
1	PCS is inserted into a Charging Hub slot and the Charging Hub indicator LED shows as Amber Steady		
1.1		Offload is happening on another PCS	
			<ol style="list-style-type: none"> 1. Check if another PCS is in the process of offloading on the same or different Hub. 2. Only one PCS is offloaded at a time. All successive PCS will be Steady Amber until the one before it completes. This is also true with multiple hubs on the same Archiver. <p>This is correct behavior</p>
1.2		PCS was disconnected while in privacy mode	
			<ol style="list-style-type: none"> 1. This can happen when the User disconnected the Sensory from PCS whilst in Privacy mode. 2. Verify using Control Center that all recordings have been downloaded from the PCS 3. Format PCS – see how to format the PCS
1.3		PCS belongs to another system	
			For installations with more than one Latitude system, check that the PCS is returned in the Hub of the same system from which it's connected Sensory was assigned.
2	PCS is inserted into a Charging Hub slot and the Charging Hub indicator LED shows fast Green/Amber Blinking		
2.1		Error reading SD card/ Charging fail	
			Remove and reinsert the PCS from the Charging Hub in another slot
			Power cycle the Charging Hub
3	Charging Hub Indicator LED does not light up		
3.1		There is an issue with the specific Charging Hub Slot	
			Move PCS to a new slot
3.2		There is an issue with the entire Charging Hub	

Row	Symptom	Possible reason	Resolution
			Power Cycle Charging Hub
4	Latitude shows the User (unit) in the tree as offline		
4.1		Connection to the Cloud may be interrupted	
			<ol style="list-style-type: none"> 1. Check your internet connectivity 2. Check connection to FLIR Cloud Check FLIR Cloud section to see that all steps have been completed
5	PCS OLED doesn't show 3G/4G with connection bars		
5.1		There is no cellular connectivity	
			Power cycle PCS/Sensory by disconnecting and reconnecting cable between them
6	PCS OLED shows: Reconnect the PCS		
6.1		Error message	
			The PCS must be disconnected from the Sensory and reconnected. Failure to do so can result in recording/offload issues.
7	PCS OLED shows: STORAGE EXCEEDED		
7.1		This indicates that the Archiver Edge Recording storage is full and unable to offload the PCS footage	
			<p>Increase the storage quota for External Edge Recording.</p> <p>To do so, follow the instructions in Define Archiver Storage on the Edge Location</p>
		In rare cases, this message displays due to the last few seconds of a file at the end of offload being corrupted. If increasing the Edge Recording storage did not solve this error, it may be due to this rare occurrence. All data aside from the corrupt files (~4-6 second of footage) will be offloaded and the PCS is usable, though the error message will remain.	
			In order to remove the message and corrupted files, the PCS must be formatted.
8	PCS OLED has an x with triangle		
8.1		There is no cellular connection	
			<ol style="list-style-type: none"> 1. Verify that SIM card is inserted 2. Verify that the data plan is valid 3. Power cycle PCS/Sensory by disconnecting and reconnecting cable between them
9	PCS OLED shows "connecting...", no cell connection		

Row	Symptom	Possible reason	Resolution
9.1		There is no cellular connection	
			Check that SIM is seated correctly, not scratched, no obstructions, etc. See: Setting up PCS's
			Check that data plan hasn't been exhausted
10	PCS OLED has no recording icon		
10.1		PCS may be in Privacy Mode	
			<ol style="list-style-type: none"> 1. Power cycle PCS/Sensory by disconnecting and reconnecting cable between them 2. Disconnect sensory and place it on the assignment pad to make sure it's assigned. 3. See: Assign Sensories to TW Users 4. If sensory isn't assigned to a user – assign it to a user 5. If sensory is assigned to the user – reassign it to the user 6. Check if in Privacy Mode.
11	PCS OLED shows large battery icon		
11.1		Connection issue	
			<ol style="list-style-type: none"> 1. Make sure cable is fully connected on both ends 2. Disconnect and reconnect cables on both ends 3. Try to use a different cable 4. Insert the PCS in to the Hub, let it initialize (Shows "Init" on OLED).
12	PCS OLED shows: ERROR and LED is Amber		
12.1		Appears during offload when some files are unable to be offloaded.	
			<ol style="list-style-type: none"> 1. Allow all other PCS 's to complete offload 2. Ensure problematic PCS is the only one in the hub 3. Wait 20 minutes for full "retry" process. 4. If it is still in error state, move PCS to another slot of the Charging Hub and wait another 20 minutes <p>If LED remains Amber, contact Support.</p>
13	Assignment Tool - The button for "Unassign" will appear but will not perform any actions		
13.1		Sensory could be assigned to a user in another system	
			<ol style="list-style-type: none"> 1. Check if Sensory belongs to another system (see 7 above)

Row	Symptom	Possible reason	Resolution
			2. Follow instructions to move Sensory to other system: move sensory to another system
14	Assignment Tool does not show the “Refresh Assignment” button		
14.1		The Sensory might have been factory defaulted whilst being assigned to a user	
			If the Sensory was factory defaulted while assigned to a user, the Assignment tool will not show a "Refresh Assignment" button. Rather the user must be "Unassigned" and "Assigned" again in order to continue use.
15	Assignment Tool return Error message		
15.1		Login failed: The assignment tool and the system contain different software versions	
			Check that the Assignment Tool and the Directory have the same major version, and update Assignment Tool version according to the version of the Directory
15.2		System is unreachable, service unavailable!	
			<ol style="list-style-type: none"> 1. Check if you have connection from the Client machine to the Directory 2. Make sure the Directory is up and running 3. Check that Archiver is attached to Gateway 4. Check that Gateway is connected to Cloud
15.3		Problem getting information from the system	
			Check Directory and Gateway connection
15.4		Unable to proceed with the action, service is unavailable	
			Check Gateway connection
15.5		Device belongs to an external user \r\n that does not exist in the system	
			<ol style="list-style-type: none"> 1. Check if Sensory belongs to another system (see 7 above) 2. Follow instructions to move Sensory to other system: move sensory to another system



FLIR Systems, Inc.
6769 Hollister Ave.
Goleta, CA 93117
USA

PH: +1 805.964.9797
PH: +1 877.773.3547 (Sales)
PH: +1 888.747.3547 (Support)
FX: +1 805.685.2711

www.flir.com/security

Corporate Headquarters
FLIR Systems, Inc.
27700 SW Parkway Ave.
Wilsonville, OR 97070
USA

PH: +1 503.498.3547
FX: +1 503.498.3153

Document:
United VMS 8.1 Installation Guide
Version: 1.0
Date: August 26, 2019
Language: en-US