

SLAMmer

Documentation

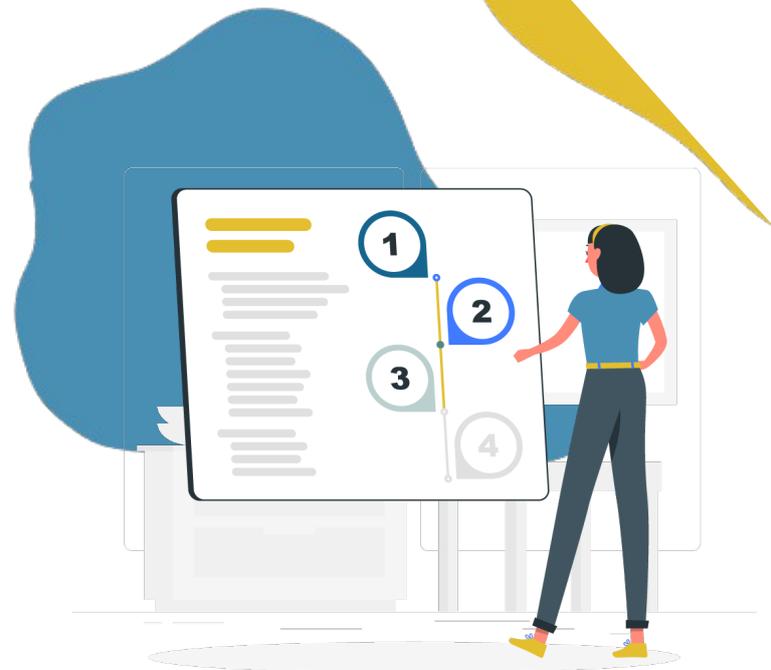
Empowering Camera Systems With Unmatched Monitoring And Reporting

The logo for PJH Technologies is contained within a large yellow circle. It features the letters 'PJH' in a large, white, sans-serif font, with 'TECHNOLOGIES' in a smaller, white, sans-serif font below it. A white graphic element consisting of a curved line with three circular nodes is positioned above the text.

PJH
TECHNOLOGIES



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Overview

SLammer is a Milestone VMS plugin that runs on XProtect Smart Client. The plug-in monitors camera downtime camera configuration discrepancies and provides camera health statistics for service level agreement assurance/enforcements.

The powerful reporting system shows all the relevant data for the Service Level Agreement for the camera system as well as camera configuration "odd-one-out" data per camera model.

Features

- Quick Summary of uptime statistics of configured cameras.
- Quick search of online and offline cameras.
- Generate reports of Camera performance and SLA statistics in PDF and XLSX formats.
- Generate reports of Camera Configurations and misconfigurations PDF and XLSX.

Licensing

The perpetual license purchased on PJHTechnologies.com allows the user to use the software indefinitely, but support and updates are only available for 1 year from the day of purchase. After that, a license renewal is required to continue receiving support and updates. The license packs are counted per

camera.

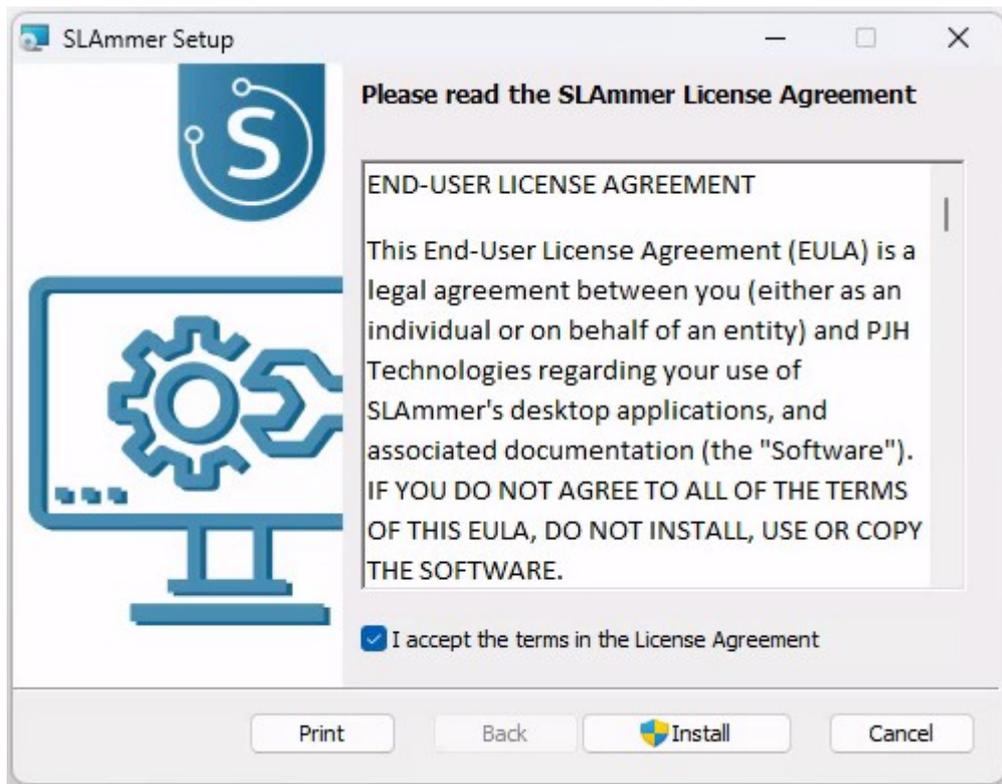
Requirements

Surveillance system that uses Milestone VMS system.
XProtect Smart Client 2022 R3 or newer.

Installation

SLammer Setup

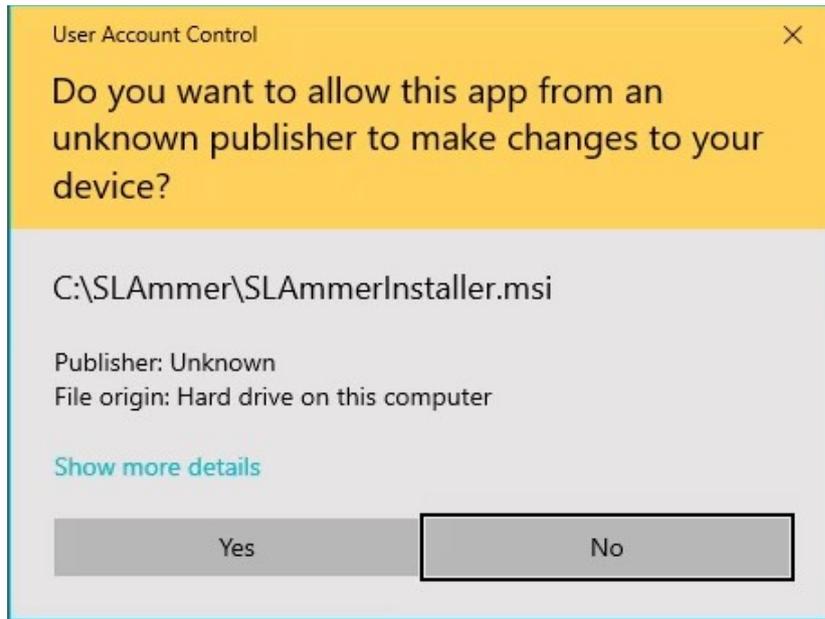




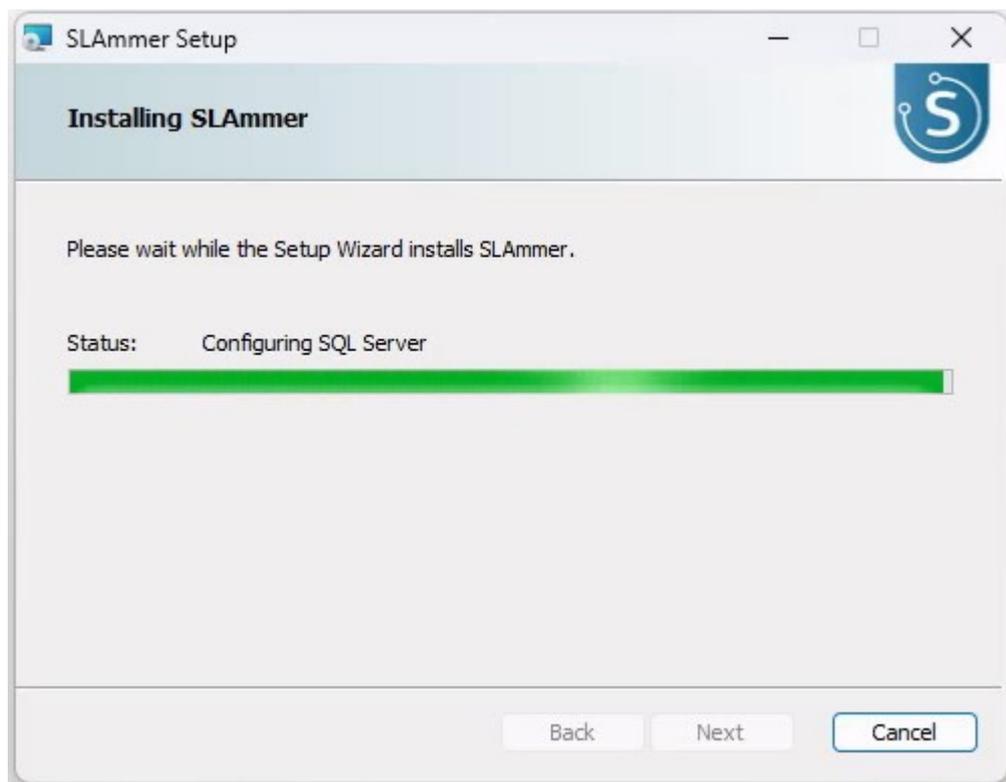
After starting the installer, the EULA will appear. It is required to accept the EULA to continue with the installation.

Click to install.

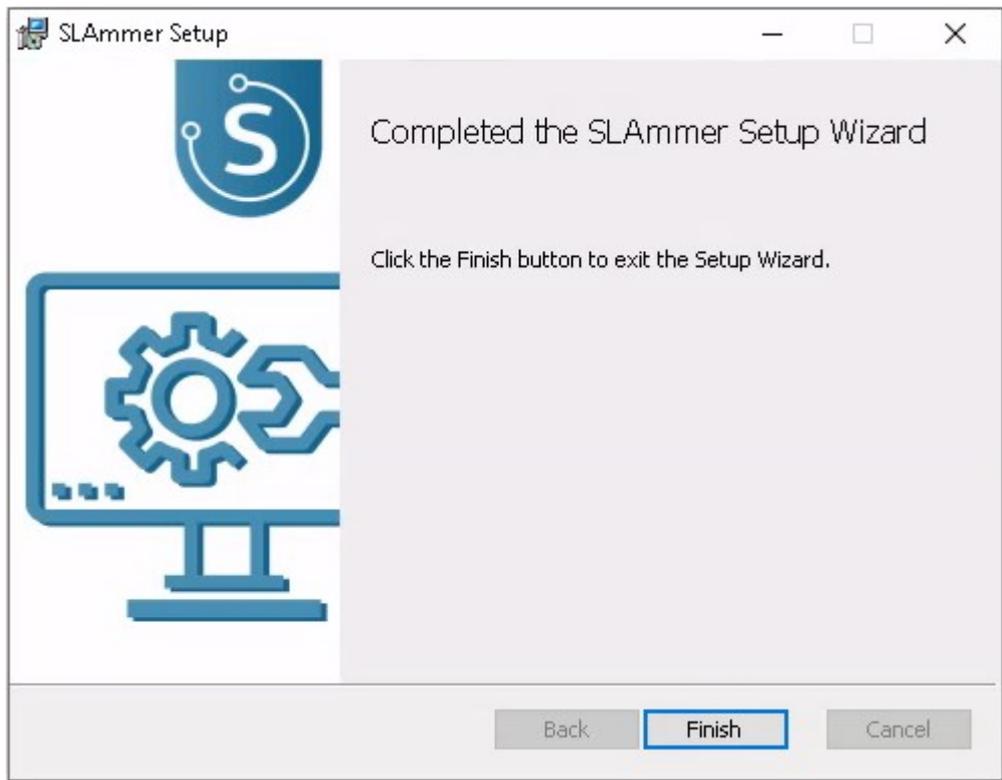
User Account Control



Click on the “Yes” button to continue. This is required to allow the installation.



The screen above shows the installation process has started. Wait until the process is finished.



Click on “Finish” to complete the installation.

For any inquiries related to installation, please feel free to contact PJH Technologies at our website: <https://pjhtechnologies.com> or through our e-mail: connect@pjhtechnologies.com

Operation

SLA Dashboard



Views | Exports | Search | **SLammer** | Alarm Manager | Incidents | System Monitor | 10:33:38 | [Generate Reports](#)

Search Camera Name

All cameras are currently online

Status	Camera Name	Time Offline	Previously Offline
All cameras are currently online			

10:10 10:20 2023/06/13 10:33:32.063 10:50 11:00

Longest Offline Month to date: Back Right Longest Offline: Back Right	Average Downtime Month to date: 0,03% Last Month: 0%												
Camera Performance <table border="1"> <thead> <tr> <th>Most Offline</th> <th>Least Offline</th> </tr> </thead> <tbody> <tr><td>1. Back Right 0,37 Hr</td><td>1. Back Left 0 Hr</td></tr> <tr><td>2. Front Left 0,09 Hr</td><td>2. Front Right 0 Hr</td></tr> <tr><td>3. Braai Area 0,01 Hr</td><td>3. Braai Area 0,01 Hr</td></tr> <tr><td>4. Back Left 0 Hr</td><td>4. Front Left 0,09 Hr</td></tr> <tr><td>5. Front Right 0 Hr</td><td>5. Back Right 0,37 Hr</td></tr> </tbody> </table>	Most Offline	Least Offline	1. Back Right 0,37 Hr	1. Back Left 0 Hr	2. Front Left 0,09 Hr	2. Front Right 0 Hr	3. Braai Area 0,01 Hr	3. Braai Area 0,01 Hr	4. Back Left 0 Hr	4. Front Left 0,09 Hr	5. Front Right 0 Hr	5. Back Right 0,37 Hr	Camera Status Currently Online: 5 Currently Offline: 0
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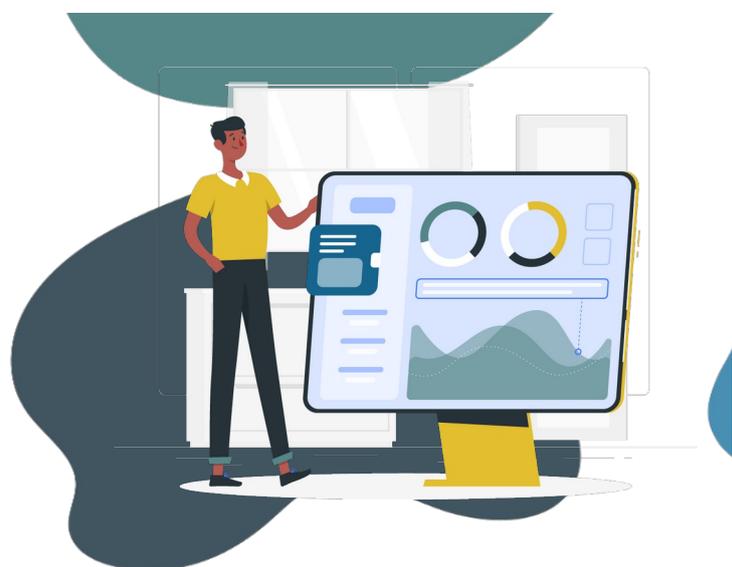
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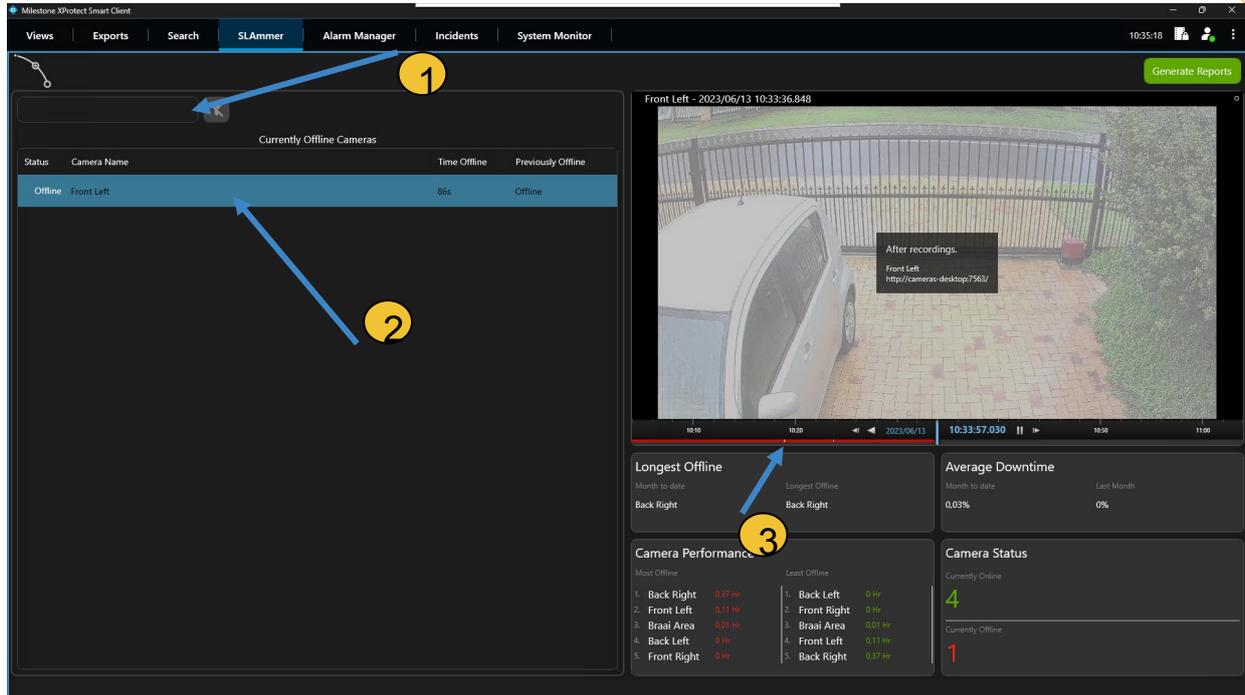


The SLA Dashboard screen (highlighted) contains:

- **Longest Offline:** Shows the longest offline camera name for the month to date, as well as for the full period in which SLammer was installed.
- **Average Downtime:** Shows the downtime as a percentage for the cameras as month to date and for the previous month. The percentage offline is calculated as the average total seconds of all cameras divided by the total time passed in the time period.
- **Camera Performance:** The top 5 best and worst cameras are listed in order. “Most offline” shows the cameras with the poorest performance, ranked in order of the best performance, listing the camera with the least offline time at the top.
- **Camera Status:** Shows the number of cameras that are currently online and offline.



Camera Search



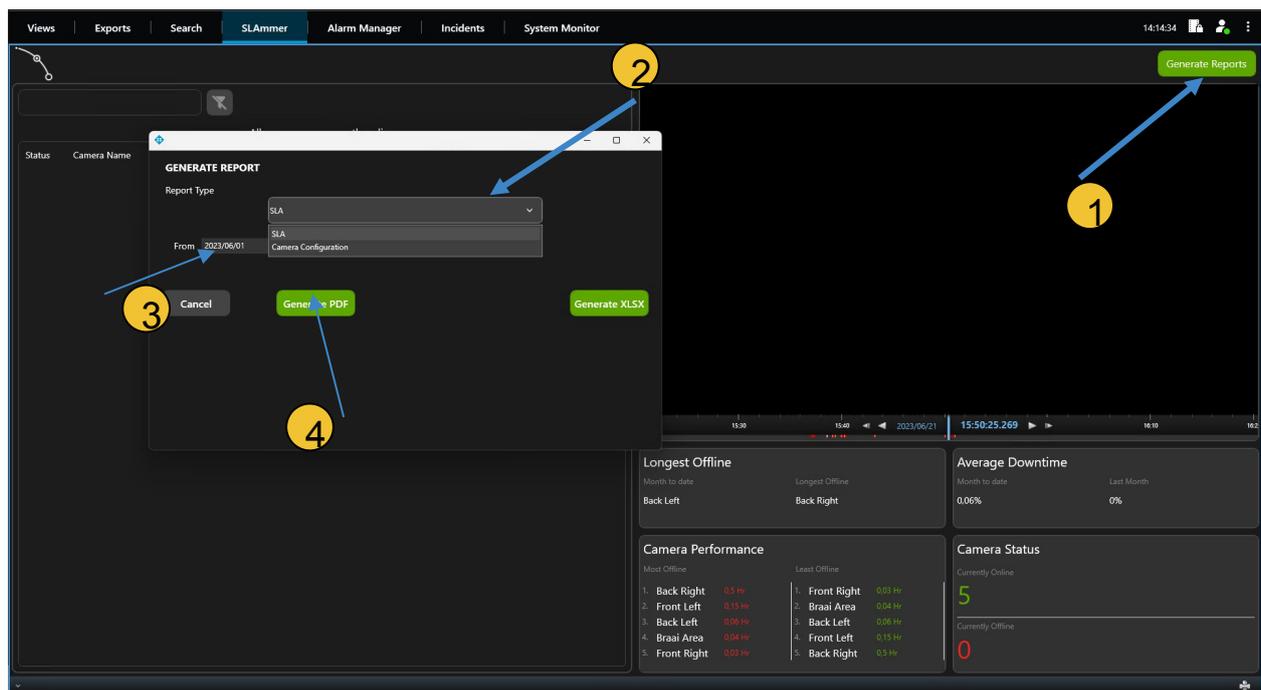
The screen above shows the statistics of the camera, when it was previously offline and the time offline.

1. Select the search bar to filter the camera by its name.
2. Select the camera to see more details about the camera.
3. The gap on the bar shows when the camera was down.

This feature ensures that any potential incidents or suspicious activities that occur just before the camera goes offline are also captured and recorded, allowing for a more complete and accurate record of events. This ensures that any incidents can be quickly identified and addressed. It's a useful tool for monitoring and maintaining the safety and security of a location.

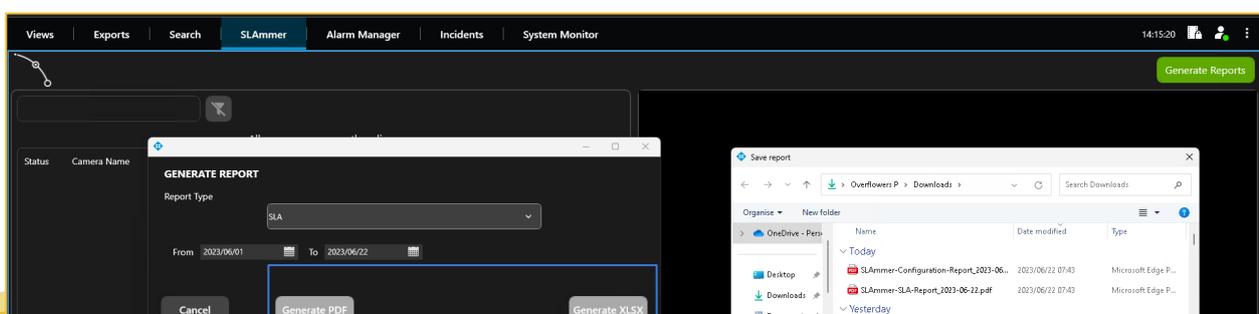
Contents

Report Generation



SLammer allows you to present the camera performance and SLA statistics data as PDF and XLSX reports. To generate reports:

1. Select “Generate Report”.
2. Select the type of report to create.
3. For the SLA Report, Select the Start and End Dates for the report data range.
4. Select “Create PDF” or “Create XLSX”.





The screen above shows what happens after the report format is selected.

- 1.** The screen indicates that the selection has been made and the report generation process is in progress. As the buttons are no longer clickable while the report is being generated, the grayed-out appearance can also serve as a visual cue to the user that they should wait until the report is finished before attempting to make any further changes or selections.
- 2.** Once the report generation process is complete, a prompt will be displayed on the screen asking the user to specify the location where they want to save the report file. Upon selecting the destination folder, the report will be saved in that folder. The file name of the report can be pre-defined or chosen by the user at the time of saving the file. Once the file is saved, the user can access it from the folder they saved it in and view or share it as needed.

Sample SLA Report

Most offline camera:

Back Right - 17 minutes, 37 seconds

Longest offline stretch:

Back Right - 2 minutes, 6 seconds

Average camera offline time when offline:

9 minutes, 17 seconds

Total offline time percentage:

0,026%

Total time in period:

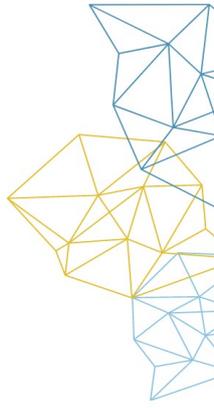
14 days, 23 hours, 59 minutes, 59 seconds

Total number of cameras offline sometime in the month:

3

Total number of cameras:

5



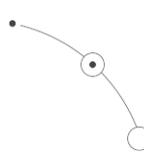
- **Most Offline Camera:** The “Back Right” camera was the most offline. The camera was offline for 17 minutes, 37 seconds. This indicates the camera with the longest total amount of offline time for the given date range. This means if the camera was offline multiple times for short stretches, it gets added up to calculate this total time
- **Longest Offline Stretch:** The “Back Right” camera was offline in one uninterrupted session. This Indicates that if a camera regularly goes offline for a short period of time, it will probably not be listed here.
- **Average Camera Offline Time When Offline:** The average time a camera stays offline before coming back online. This calculation sums the total offline time for all cameras that went offline at all, and divides it by the total number of cameras that went offline at all.
- **Total Offline Time Percentage:** The total offline time percentage indicates how often the cameras were not connected. If the percentage is high, it means the cameras went offline frequently during the monitoring period.

Front Left

Front Left total offline time: 8 minutes, 36 seconds

List of offline times for this camera:

Start time offline	End time offline	Duration offline	Reason
2023/06/06 15:13:02	2023/06/06 15:14:10	1 minutes, 8 seconds	Disconnected




- **Camera Name:** The camera name is listed at the top. In this example the camera is named "Front Left."
- **Start Time Offline:** The start time offline indicates when the camera went offline. The start time could be helpful in determining the cause of the disruption or if there were any unusual events taking place during that time.
- **End Time Offline:** The end time offline refers to the period of time when something was offline or not functioning, and the End Time refers to when this period ended and the system or service returned to being online or operational.
- **Duration Offline:** The duration offline refers to the length of time that the camera was not connected or available for use.
- **Reason:** The Reason indicates that the camera went offline.
 1. **Camera Disconnected:** The camera network disconnected from the computer or power source. When the camera is disconnected, it cannot be accessed or utilized for capturing or transmitting images or videos. Faulty network can be the cause of the camera getting disconnected as well.
 2. **Server Disconnected:** it indicates that the connection between the client device and the server is lost or terminated. The device will lose its ability to connect with the server.
 3. **Disabled:** This indicates that the functionality of the device has been intentionally restricted or deactivated. When it is disabled, it means the user has deliberately turned off the camera feature or restricted it to prevent it from using it any further.

Total number of cameras:
5

Total different camera models on site:
2

Total number of potentially misconfigured cameras:
1

Model	Number of misconfigurations
Hanwha Techwin LNV-6020R	1
Universal1ChAdv	0

Sample Camera Configuration Report



The sample above shows that there is 1 misconfigured camera model.

Model: Hanwha Techwin LNV-6020R

Setting differences		
Setting name	Value	Expected
stream:0.0.2 - Framerate	25	30

List of cameras with the above differences:
Front Left

The sample above shows the camera is capturing 25 frames per second instead of the expected 30 frames per second. It could potentially lead to a slightly lower quality of video as there are fewer frames to capture the motion of objects in the

camera's field of view. It's important to note that a slight difference in frame rate may not be noticeable to the human eye, but it can impact the overall quality of the video. Any other settings that are misconfigured would be also listed here.



Model: Hanwha Techwin LNV-6020R

Normal settings	
Setting name	Value
stream:0.0.0 - Codec	h264
stream:0.0.0 - StreamingMode	RTP_UDP
stream:0.0.0 - Resolution	1920x1080
stream:0.0.0 - Compression	10
stream:0.0.0 - Framerate	30
stream:0.0.0 - ControlMode	VBR
stream:0.0.0 - TargetBitrate	2560
stream:0.0.0 - Multicast+Address	224.0.0.50
stream:0.0.0 - Multicast+Port	50002
stream:0.0.0 - Multicast+TTL	5
stream:0.0.0 - EdgeStorageSupported	True

The example

above shows all the known setting names and values for the listed camera, the Hanwha Techwin LNV-6020R.

Model: Universal1ChAdv

Normal settings	
Setting name	Value
stream:0.0.0 - Codec	h264
stream:0.0.0 - FPS	60.0
stream:0.0.0 - StreamingMode	RTP over RTSP (TCP)
stream:0.0.0 - RTSPPort	554

The example above shows all the known setting names and values for the listed camera, the Universal1ChAdv.

Credits

Documentation writ

Assisted by: Peter Peiser, Belinda Pieters, and Jacques Smuts

