

Crowd People Counter for Milestone XProtect

Milestone XProtect

Crowd People Counter for Milestone XProtect counts people in a large crowd in real time.



Canon's Crowd People Counter utilizes deep learning to count the number of people with high accuracy even in congested situations.

By displaying the results as a graph, it allows to grasp the changes of the number of people and act for appropriate guidance of people and optimal security.

Current Issue

Ascertain the state of congestion to implement proper action



Solution

Visualizes the congestion status, and notifies if necessary

Use cases



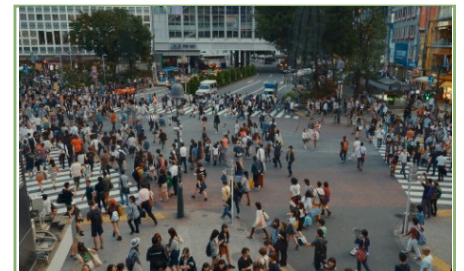
Station/Airport

By grasping the congestion status of the premises, the system can be used for the optimal arrangement of security guards and the safe guidance of people.



Events

By counting the number of people in a crowd in real time, the system can be used to prevent accidents by immediately arranging security guards.



City area

By analyzing changes in traffic conditions in places such as intersections and main streets, the system can be used to create safe and secure environments.

Specifications		Crowd People Counter for Milestone XProtect
Function (Input / Output)	Input	Supported cameras: Milestone XProtect Compliant Live/recorded video from network cameras registered to Milestone XProtect Maximum resolution: 5472 x 3648
	Output	Analyzed still image file (JPEG)*1, analysis results file (CSV)*1, log (CSV), analyzed data (JSON)*2 *1 Possible to download analysis results data to XProtect Client *2 An external system necessary to enable Web API to acquire an analyzed data.
Detection Area		Setting detection areas and non-detection areas respectively <ul style="list-style-type: none"> • Polygon (polygon consisting of 3 to 8 points) • Up to 4 detection areas and 4 non-detection areas
Schedule Setting		Up to 20 schedules can be set. Up to 5 schedules can be set for a camera. Run history can be saved as a text file.
Graph Display		<ul style="list-style-type: none"> • Displays results during the count in the live video (possible to set display interval). • Displays a count result for an arbitrary period* (possible to set display interval automatically according to the period). * By clicking the graph, the first count result within the display interval is shown.
Event Notification		Events are notified when triggered by thresholds. <ul style="list-style-type: none"> - Possible to set 2 levels of thresholds (Warning/Critical) - Possible to set thresholds for a camera or for an aggregated results* of multiple cameras (2 to 5). * Possible to set Multiple camera notification up to 8 sets.
Preview of Results		Displays count results on the screen. Displays aggregated result as graph.
Recommended PC Specifications		[For Analysis Server] CPU: Intel Core i7-6700 or greater (at least 4 cores, HT technology compatible)* Memory: 16GB or more* Storage: Sufficient capacity for outputting data is necessary. [For XProtect Client] CPU: Intel Core i7-4770 or greater (3.4GHz or greater) Memory: 8GB or more * In the case of simultaneously executing five analysis. The specifications required vary according to the number of analysis to be executed.
Operating System		Windows 10 Pro/Windows 10 Enterprise 64-bit Windows Server 2012 Standard 64-bit, Windows Server 2012 R2 Standard 64-bit Windows Server 2016 Standard 64-bit
Supported XProtect Server		Milestone XProtect Corporate 2017/2018/2019 R1*/2019 R2*/2019 R3* Milestone XProtect Expert 2017/2018/2019 R1*/2019 R2*/2019 R3* Milestone XProtect Enterprise 2016 R2 Milestone XProtect Professional+ 2017/2018/2019 R1*/2019 R2*/2019 R3* Milestone XProtect Professional 2017/2018/2019 R1/2019 R2 Milestone XProtect Express+ 2017/2018/2019 R1*/2019 R2*/2019 R3* * The function to encrypt communication with the client and services that retrieve data streams from the recording server is not supported.
Supported XProtect Client		Milestone XProtect Smart Client 64-bit 2016 R3/2017/2018/2019 R1/2019 R2/2019 R3 Milestone XProtect Smart Client for Express and Professional 64-bit 2019 R2
Software		[For Analysis Server] .Net Framework 4.6.1, SQL Server Express 2016, Visual C++ 2015 Runtime Library [For XProtect Client] .Net Framework 4.5.2
Display Language		Japanese/English/Italian/Spanish - Linked to the language settings of Milestone XProtect Smart Client. Displayed in English for other languages than listed above.
Number of Pixels Necessary for Detecting a Person		15 pixels for a person's width - Maximum detectable number of people at highest resolution: approx. 88,000 - Maximum detectable number of people in full HD: approx. 9,000
Angle Looking Downward on People (Angle of Depression)		10° to 65°* * Even within the angle of depression, depending on the degree of congestion of the crowd, the people overlapping may affect the count.