Milestone Certified Solution

BriefCam

Certified
Solution for

milestone

BriefCam

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Table of Contents

About BriefCam

BriefCam is the industry's leading provider of Video Synopsis® and Deep Learning solutions for rapid video review and search, face recognition, real-time alerting and quantitative video insights. By transforming raw video into actionable intelligence, BriefCam dramatically shortens the time-to-target for security threats while increasing safety and optimizing operations. BriefCam's award-winning products are deployed by law enforcement and public safety organizations, government and transportation agencies, major enterprises, healthcare and educational institutions, and local communities worldwide. For more information about transforming video surveillance into actionable intelligence, visit https://www.briefcam.com/.

About Milestone Systems

Milestone Systems is a global leader in providing open platform IP video surveillance software. Milestone has provided easy-to-use, powerful video management software in more than 200,000 installations, worldwide.

Milestone XProtect® provides open architecture products that are compatible with more IP cameras, encoders, and digital video recorders than any other manufacturer. Because Milestone provides an open platform, you can integrate today's best business solutions and expand what's possible with future innovations. Visit www.milestonesys.com for more.

Executive Summary

BriefCam provides Video Content Analytics, as an integral part of the Milestone XProtect environment, enabling users to review hours of video in minutes and pinpoint objects of interest; derive quantitative insights for operational efficiency and data driven decision making; as well as leverage advanced analytics to provide near real-time notifications to effectively balance sensitivity, accuracy and efficiency.

REVIEW – Quickly review hours of video in minutes or even seconds and instantly find objects of interest across multiple cameras.

RESEARCH – Track people and vehicle movement patterns over time, trending demographic segmentations, identifying hotspots and running A/B tests.

RESPOND – Unlock the ability to trigger a call to action, bringing relevant events to the forefront and allowing quick review by individuals who can provide an accurate assessment.

BriefCam is seamlessly integrated with Milestone xProtect:

Backend Integration – BriefCam supports two types of backend integrations:

> **On-demand:** BriefCam can quickly and efficiently fetch recorded video directly from Milestone's servers using the MIPS SDK. After an initial setup, the user is presented with the list of licensed cameras in which the user can select any number of cameras from which video will be fetched. After selecting the desired time period, the Milestone plug-in copies the video from the Milestone server to the BriefCam server and begins processing.

> **Real-time:** For real-time video processing applications, BriefCam can receive a continuous real-time video stream from the MIPS SDK. In this scenario, BriefCam processes and anlyzes the video on-the-fly and generates alerts that match pre-set rules and conditions. In this case, the video is not saved locally on BriefCam's server, only objects that match the rule conditions.

Frontend Integration – BriefCam has developed an xProtect client plug-in that adds a tab inside the client which allows users to quickly access the BriefCam software.

Next Generation Video Content Analytics: BriefCam Capabilities

Video Synopsis

Extracts objects from the original video and efficiently reconstructs and superimposes them back in the original scene, simultaneously displaying events that have occurred at different times. The result is a dramatically shorter video segment that fully preserves the viewer's ability to analyze the scene.

Multi-Camera Search

Rapidly pinpoint people and vehicles of interest, using an extensive range of appearance and movement filters, across multiple video sources.

Case Management

Organize all video assets of an investigation in a single container, bookmark objects of interest, and summarize case findings (including all relevant exhibits) in an exportable report, streamlining investigation workflows.

Expansive Search Criteria

Search by: Man, Woman, Child, Face, Bike, Motorcycle, Car, Pickup, Van, Truck, Bus, Train, Airplane, Boat and Animals, Upper Wear, Lower Wear, Hat, Bag, Color, Size, Speed, Direction, Common Paths, Dwell and Activity Time.

Face Recognition

(Feature can be disabled per user requirements) Precise face recognition rapidly pinpoints people of interest in real-time using digital images extracted from video, external image sources and pre-defined watchlists.

Visual Layers

Create visual analytics for activity, dwell time, common paths and object interaction.

Comprehensive Business Intelligence

Leverage aggregated video analytic metadata and the embedded BI platform, users can perform quantitative analysis, extract actionable insights from their video, and visualize them within customizable dashboards and reports. Compare visitor, pedestrian, and traffic patterns of any desired timeframe, i.e. days, months, years, to spot trends, outliers and insights.

Third Party Data Sources

Seamlessly correlate video content with third party data sources, such as Point of Sale, Time Management, and Access Control, for a uniquely informative view of your environment.

Proactive Alerting & Reporting

REAL-TIME ALERTS: Trigger real-time alerts, based on face recognition, vehicles and people of interest in time sensitive situations.

SMART ALERTS: Respond to complex situational changes in the environment, while effectively balancing sensitivity, accuracy and efficiency.

WATCHLISTS: Scalable face recognition watchlist management and powerful alert rule configuration enables rapid notification of events in your environment.

NOTIFICATIONS: Send notifications to messaging services, the xProtect alarms area and Chrome browsers.

GPU Support

Accelerates video processing to analyze more video, deliver insights more quickly and extract richer metadata.

BriefCam Technical Specifications

Supported Resolution	Minimum CIF, Maximum 4k
Supported Frame Rate (FPS)	8-30 Frames Per Second
Supported Video File Formats	.AVI, .MKV, .MPEG4, .WMV, .DVR, .ASF, .RT4, .DIVX, .264, .H264, .GE5, .TS, .3GP, .XBA (single stream and multi-stream), .MP4, .FLV
Supported Codecs	H.264, H.265/HEVC, MPEG-4, H.263
File-Based Ingestion	Multi-File Videos or Single File Videos
Supported Camera Types	Fixed Cameras
Single Sign-On (SSO)	Microsoft Active Directory, including user groups (OU Support)
Face Recognition	Minimum Face Size 30x30 Pixels
Supported Languages	Brazilian Portuguese, Chinese Simplified, Chinese Traditional, Danish, Dutch, English, Finnish, French, German, Japanese, Korean, Latin Spanish, Turkish, Vietnamese
Supported Browsers	Google Chrome Desktop

Certified Products

- BriefCam Protect, BriefCam Insights
- Milestone XProtect Corporate 2018 R1, 2018 R3, 2017 R1, 2017 R3
- Milestone XProtect Smart Client 2018 R1, 2018 R3, 2017 R1, 2017 R3

Performance of the solution may vary if different XProtect products and/or system components not listed in the tests details are included.

Test Setup

The VMS is configured with several cameras. The cameras are configured as licensed video sources to BriefCam Protect.

REVIEW: The user is logging in to BriefCam's web-client from within the xProtect plug-in tab and creates a new case. Then, the user adds several video sources from the licnesed VMS cameras. The video is fetched from the VMS and processing starts. Then, the user can see the extracted objects and use the different search filters.

RESEARCH: The user configures an on-demand (scheduled) video source and optionally defines custom dimensions (areas or paths). Objects appearing in the video source are counted and presented in one of the out-of-the-box dashboards.

RESPOND: The user configures a live camera rule (real-time and/or smart alerts). Once an object meets the rule criteria a new alert will be populated on the alerts area.
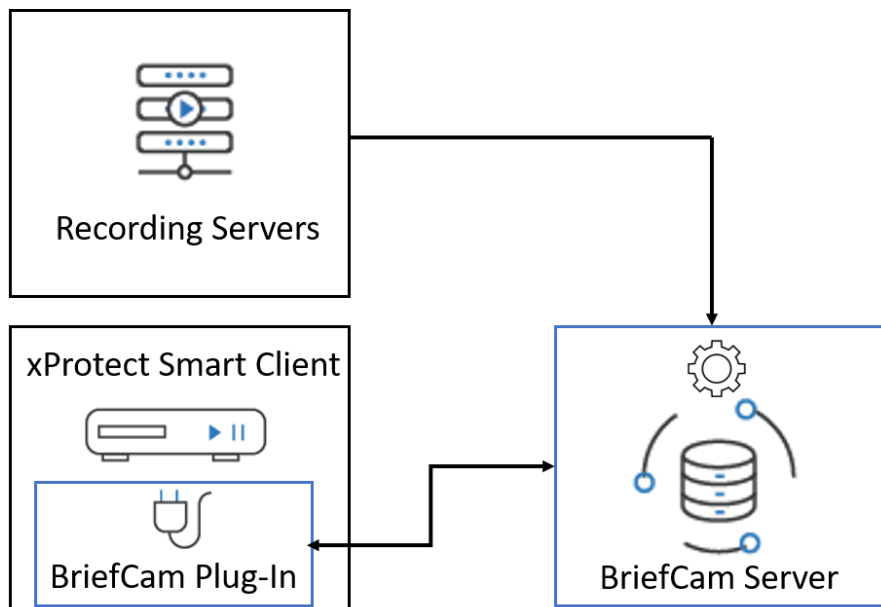
The BriefCam UI appears in a "Video Synopsis" tab in the xProtect Smart Client. The user can use the entire BriefCam user-facing UI inside the client. Once a video needs to be fetched from the VMS the BriefCam server interfaces with the Milestone Recording Servers (through the MIPS SDK) and fetches he required on-demand or real-time video. BriefCam processes the video and presents the results to the user within the xProtect Client.

All simulated video streams used in this test were configured at 30 frames per second (FPS). All video streams were configured to use the H.264 video codec. The image resolutions used in this test included the following:

- 1920x1080 (2.1 Megapixel / 1080p / 2.3 Mbit/s)

Installation Guide

What Should Be Installed

- VMS integration plugin

- Milestone embedded client application

Installation Guidelines

Integration Plugin Installation

1. Run the VMS Integration Plugin Installation by double-clicking the **BriefCamMilestonePlugin_<Version_number>.exe** file.
   The VMS integration Plugin Installation is required to be installed on every machine on which the BriefCam Server/Processing Server/Alert Processing Server is installed

2. To proceed with the installation, read the license and indicate acceptance of the License Agreement terms. After you have accepted the terms, select the path to the plugin installation directory. Please note that it should be the same directory as the BriefCam Server directory.
   By default, it is set to **C:\Program Files\BriefCam\BriefCam Server**.

3. Click **Install** and continue as instructed by following the installation procedure.

Milestone Embedded Client Installation

The following section describes the installation and configuration that need to be performed to allow the BriefCam web client application to become embedded in the Milestone XProtect Smart Client.

After you have installed the Milestone plugin on the BriefCam Server, you are ready to install Milestone Embedded Client.

1. On the same computer on which Milestone XProtect Smart Client is installed, run the Embedded Integration Plugin Installation by double-clicking the **BriefCamEmbeddedClientForMilestoneXProtect(64bit)_<Version_number>.exe** file.
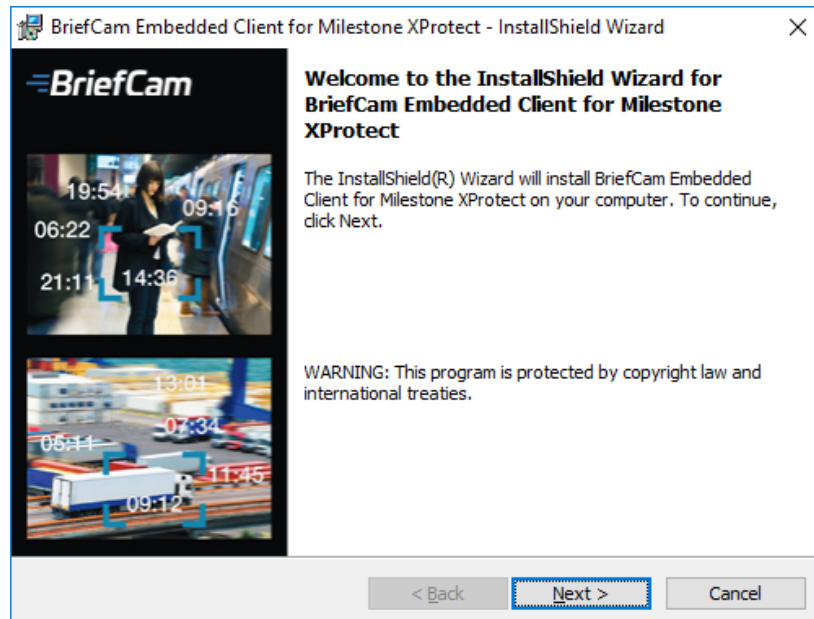

2. To proceed with the installation, read the license and indicate acceptance of the License Agreement terms. After you have accepted the terms, click **Next** to continue.
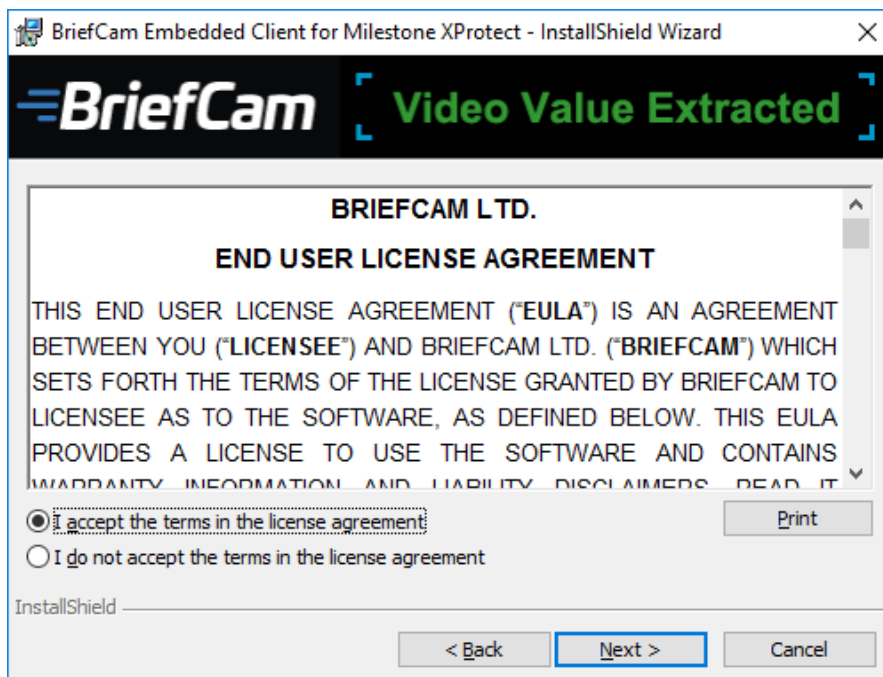
3. Select the installation destination path and click **Next**.
   Note that the installation path must be the same directory where **Milestone XProtect Smart Client** is installed.
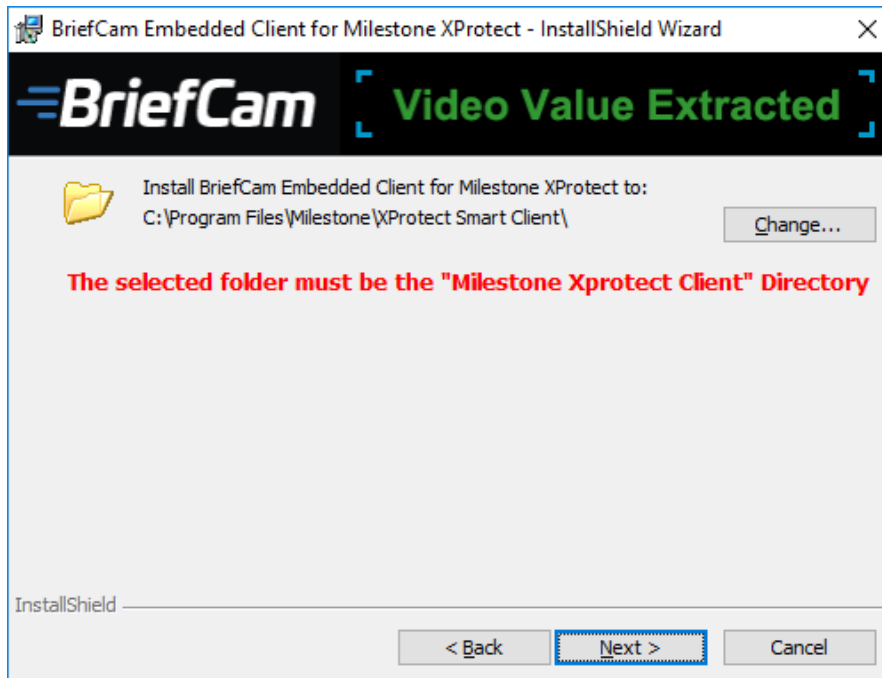
4. Enter the BriefCam Web Application URL and verify that the provided URL is correct by clicking the **Verify URL** button.
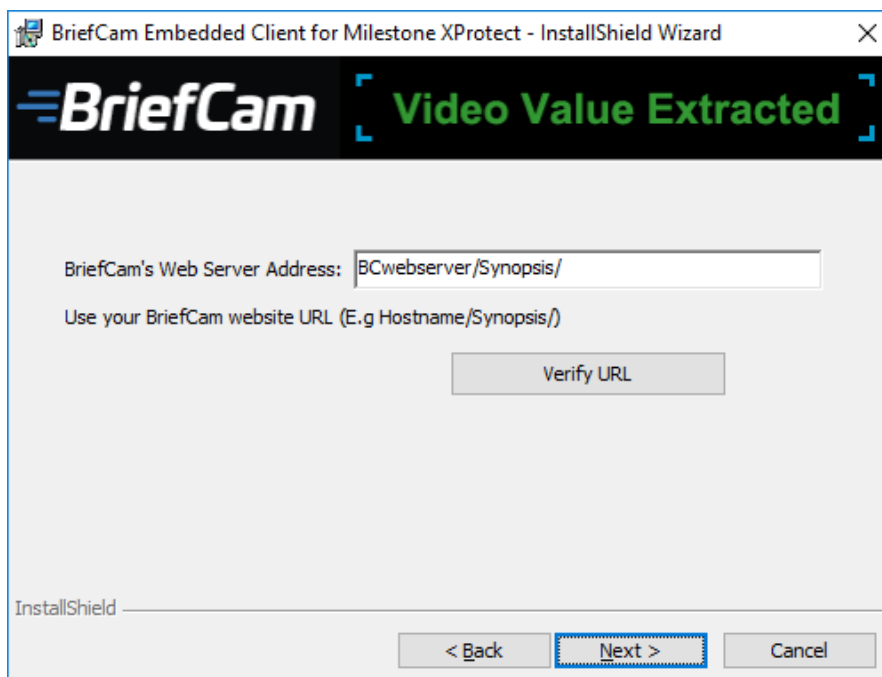
5. The URL will be saved in **BriefCam.MilestoneEmbeddedViewer.dll.config**, which is located by default in **C:\Program Files\Milestone\XProtect Smart Client\MIPPlugins\BriefCam**.

6. Once the installation is complete, the URL configuration can be modified manually as needed.

7. Click **Install**.
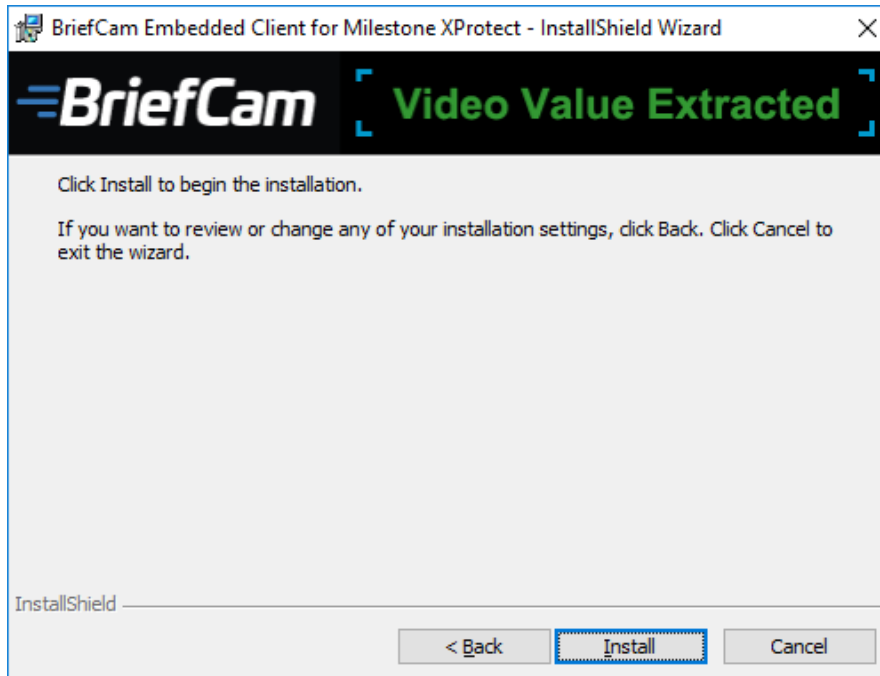
8. Your installation is now complete. Click **Finish**.

9. To establish a connection from the BriefCam client embedded in the Milestone XProtect Smart Client to the BriefCam Server:

   - Launch XProtect Smart Client and log in to the Milestone server.

   - Once it is up and running, a BriefCam **Video Synopsis** tab will appear in the XProtect client's main application window. Click it to access the embedded BriefCam client in a separate application tab.

   - You will be asked to log in to BriefCam upon clicking the **Video Synopsis** tab. Enter your username and password and click **Sign In.**
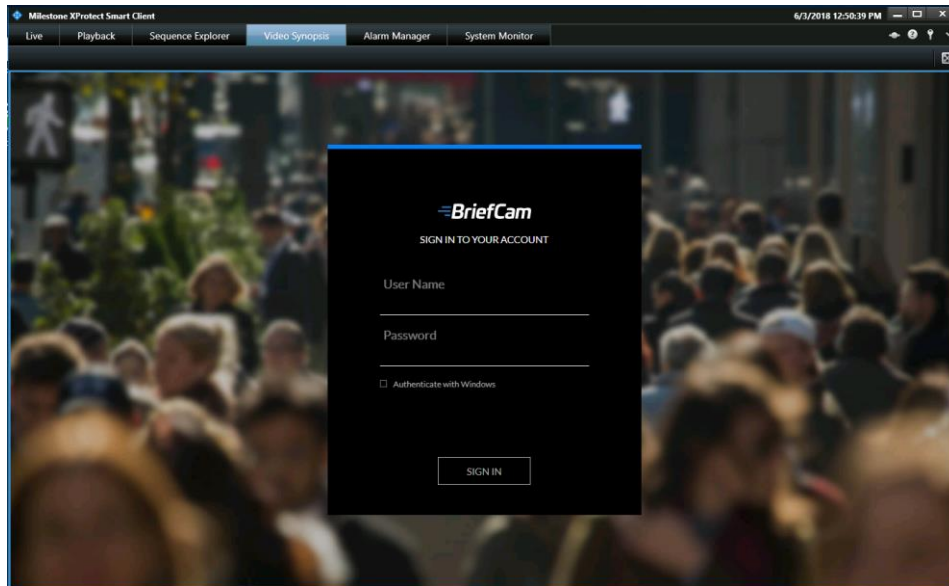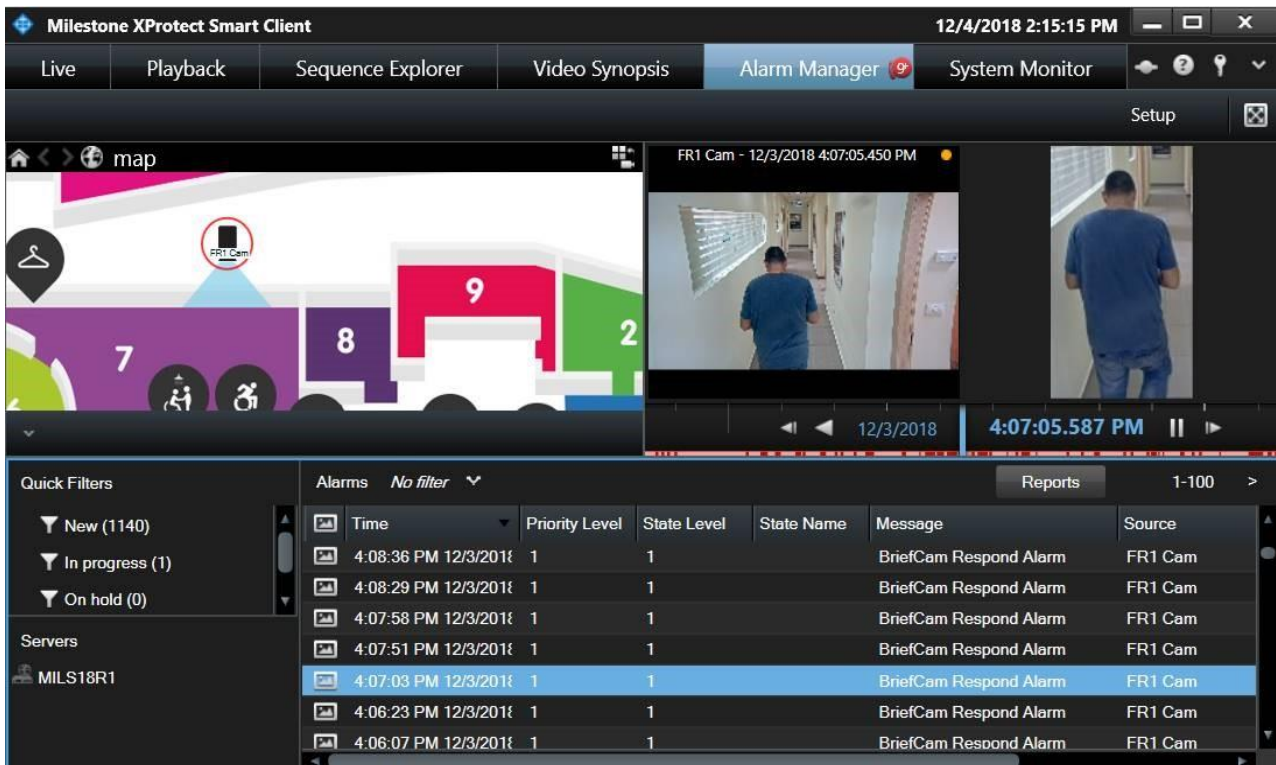
- Upon logging in, the embedded BriefCam client will appear within the Milestone XProtect Smart Client's **Video Synopsis** tab.

Note: Bookmarks created within BriefCam will not be displayed on Milestone XProtect Smart Client application.
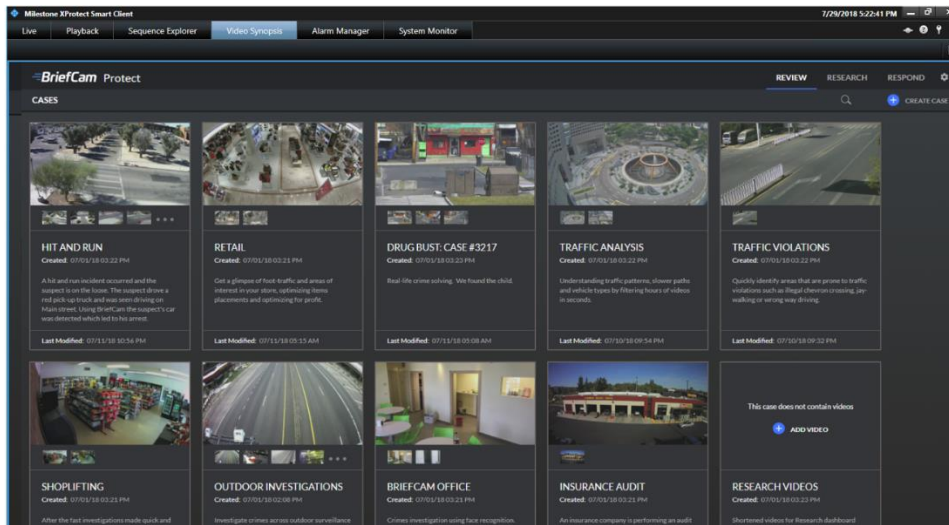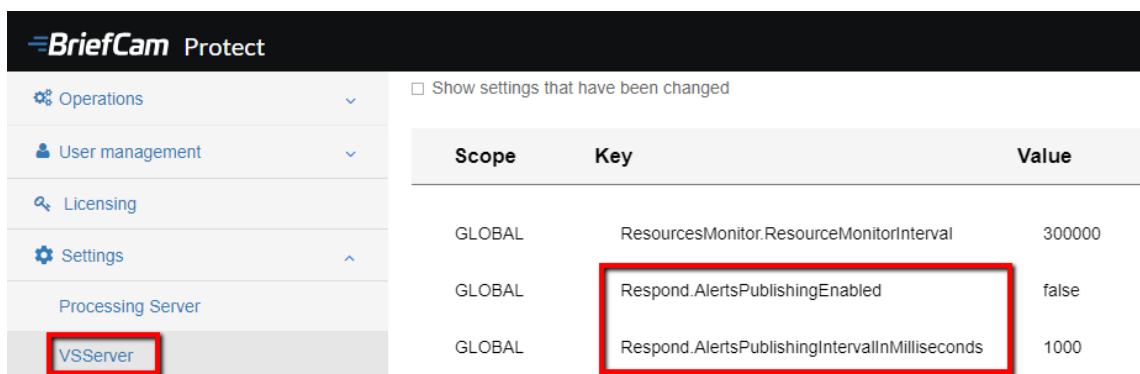
Sending Alerts to Milestone

Alerts can be sent to Milestone's **Alarm Manager**.

In the Administrator Settings' **VSServer** section, there are two settings relevant for sending alerts outside of BriefCam:

- To send alerts outside of BriefCam, set the **RespondAlertsPublishEnabled** setting to **true**.

- To change the polling interval, use the **Respond.AlertsPublishingIntervalInMilliseconds** setting.
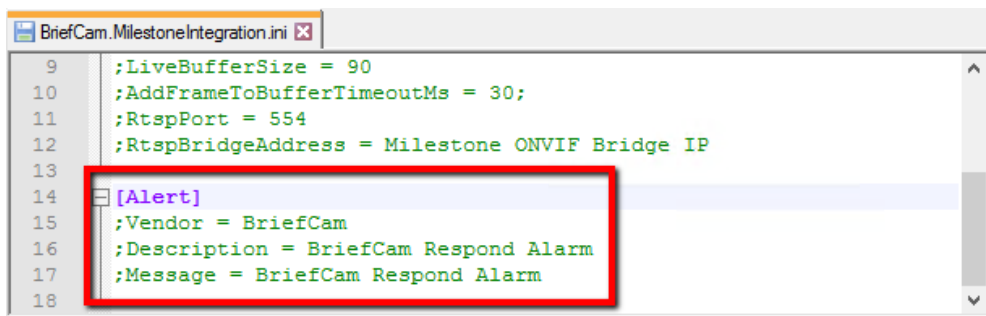

If you make changes to the settings, you need to restart or start the VSServer.

When the Milestone plug-in is installed, the **BriefCam.MilestoneIntegration.ini** file is created at: **C:\Program Files\BriefCam\plugins**.

The **[Alert]** section contains three parameters relevant to sending alerts to Milestone: **Vendor**, **Description**, and **Message**.

BriefCam sends an **analyticsEvent** to Milestone and Milestone configures it on its end to make into an alert. The **Message** parameter's value is what is used by Milestone to connect the BriefCam **analyticsEvent** and the Milestone alert.

Only alerts produced by the Milestone connected cameras will be sent to the Milestone server.

Known Limitations

During Milestone archiving:
The BriefCam Server stops extracting new objects while Milestone archives data. It restarts automatically, but there is a temporary latency of a few minutes.