



SureStream

PRODUCT BRIEF
VEGA SYSTEMS INC.

April 2020

Contents

Table of Figures	2
Document Revision	2
Introduction	3
Architecture	3
Features	6
Low Latency Video	6
Support for both Multicast and Unicast stream	6
GPU rendering	6
Robust to Management Server and Recording Server Failures	6
Authentication	7
ONVIF profile S camera support	7
PTZ support	7
Playback	7
Multicast IP and port configuration	7
Licensing	7
XProtect Compatibility	7
Summary	8
About Vega Systems Inc.	8



Table of Figures

Figure 1: SureStream Concept.....	4
Figure 2: SureStream Architecture.....	4
Figure 3: SureStream Management Client Interface	5
Figure 4: SureStream Smart Client Viewer Set Up.....	6
Figure 5: SureStream multiple viewers, PTZ control	6

Document Revision

Version	Date	Remarks
1.0	4/2018	For Release 3.0
2.0	9/2018	For Release 4.0.2
3.0	4/2020	For Release 6.0.3

Introduction

At video surveillance installations, any live video loss is a security loop hole.

Zero live video loss depends on many components, some beyond VMS's control – camera, network, monitors, power supply etc. However, the VMS needs to ensure that the cause for loss of live video should not be due to VMS's components.

In XProtect, availability of live video at a Smart Client depends on the proper functioning of the XProtect recording server. Failure of this component results in loss of live video. While mitigation strategies exist to handle its failure, all need additional hardware investment and cannot provide ZERO live video loss.

SureStream is the only plugin solution for XProtect, that enables all Smart Clients, once authenticated, to start and receive low-latency multicast streams directly from cameras, bypassing recording servers. Recording server failure has no impact on live video. Un-interrupted live video is only dependent on non-VMS components.

Architecture

SureStream consists of MIP plugin components that reside in the Management Server and in each Smart Client.

The management server component and its associated front end in the management client, provide a way to:

1. Scout the network to find ONVIF S multicast compatible cameras.
2. Configure multicast parameters on each of these cameras.

The Smart Client SureStream component enables the end user to start/receive multicast streaming from one or more compatible cameras that the user is authenticated to access.

Playback for each of these cameras is sourced from the corresponding XProtect Recording server.

Figure 1, Figure 2 depict concept and architecture. Figure 3, Figure 4 and Figure 5 depict the Management Client and Smart Client interfaces of SureStream.

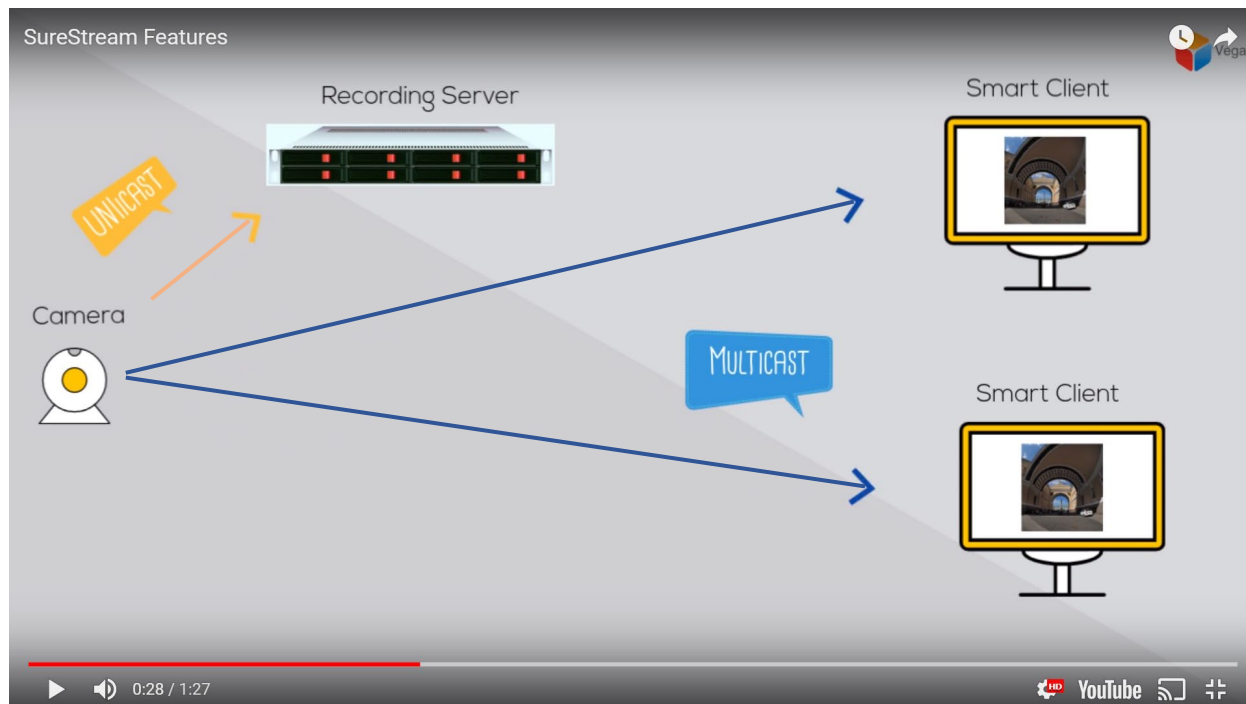


Figure 1: SureStream Concept

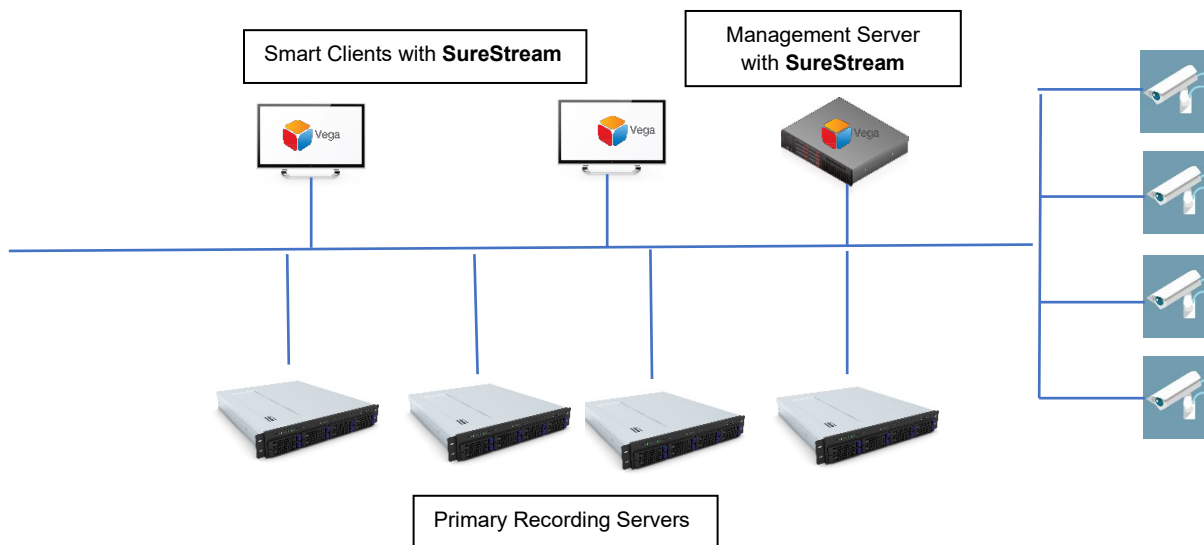


Figure 2: SureStream Architecture

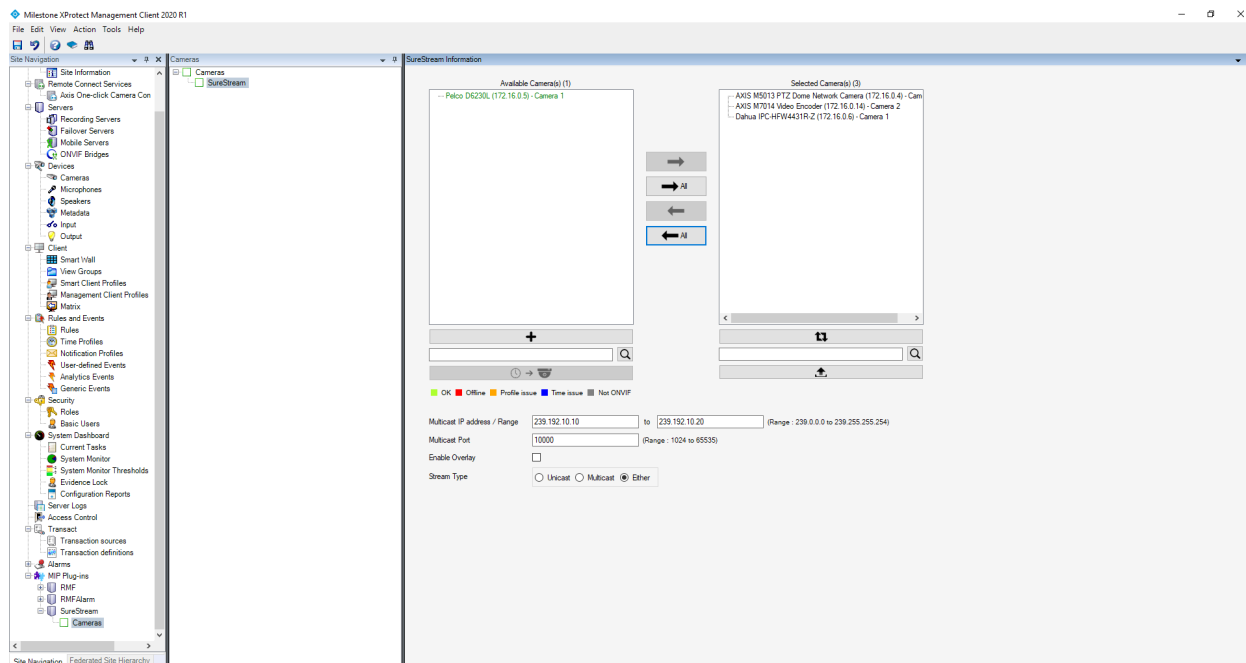


Figure 3: SureStream Management Client Interface

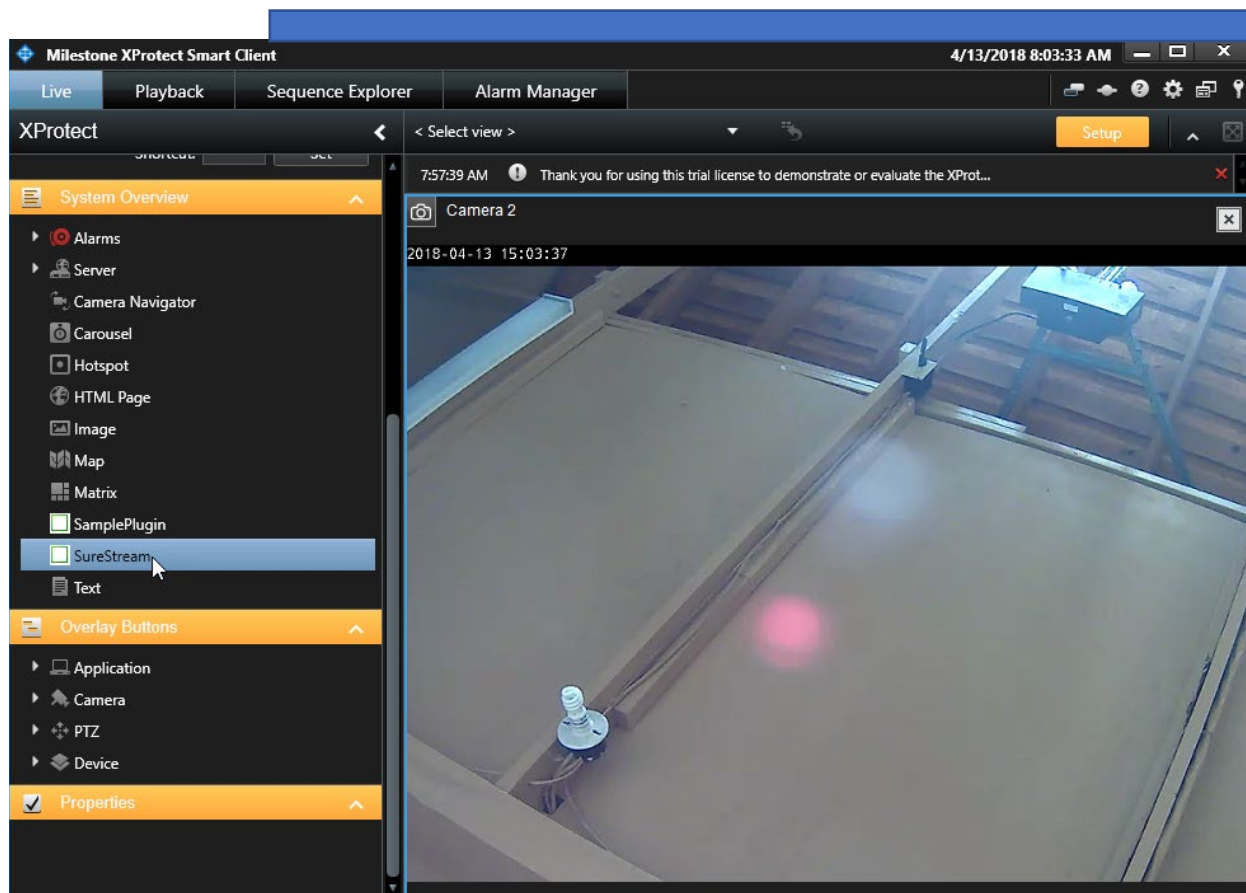


Figure 4: SureStream Smart Client Viewer Set Up

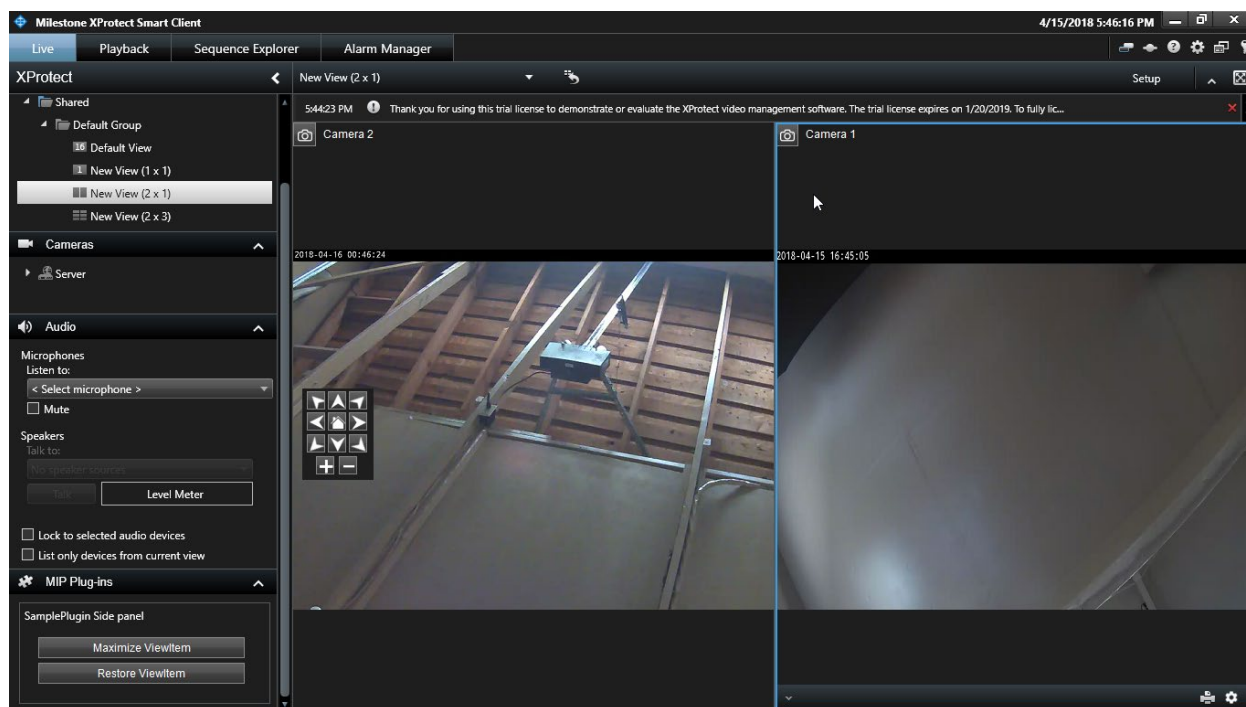


Figure 5: SureStream multiple viewers, PTZ control

Features

Low Latency Video

The live video displayed by SureStream has lower latency compared to video sourced from a recording server.

Support for both Multicast and Unicast stream

SureStream supports both multicast and unicast direct streaming from the camera. Unicast can be used in networks that do not support multicast transmission.

GPU rendering

Through its native support for GPU rendering, SureStream supports 4K videos.

Robust to Management Server and Recording Server Failures

Live video has zero loss even when all recording servers and the management server fail.

Authentication

User authentication is integrated to XProtect Authentication. Only users allowed by XProtect to view/playback/ptz control a camera are allowed by SureStream to view/playback/ptz control the same camera respectively.

ONVIF profile S camera support

All cameras that implement ONVIF S profile with multicast are supported by SureStream. SureStream automatically identifies such cameras added to XProtect.

PTZ support

SureStream provides ONVIF based PTZ control and an interface to pan/tilt and zoom PTZ cameras.

Playback

SureStream playback integrates with the native XProtect playback functionality.

Multicast IP and port configuration

An easy to use interface is provided to batch-set multicast streaming parameters for cameras added to XProtect.

Licensing

SureStream licensing is MIP integrated.

XProtect Compatibility

SureStream is tested with XProtect Corporate 2020 R1.



Summary

SureStream is the only plugin solution for XProtect, that enables all Smart Clients, once authenticated, to start and receive low-latency multicast streams directly from cameras, bypassing recording servers. Recording server failure has no impact on live video.

About Vega Systems Inc.

Vega Systems Inc., provides innovative MIP plugins that add unique capabilities to XProtect. We help Milestone resellers worldwide, offer differentiated XProtect solutions. For more information, visit: <https://www.vega25.com/surveillance>.

