Manual

Milestone Dynamic Stream Selection v2.0





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Target audience for this document

This document is aimed at system operators with some experience with Milestone XProtect® Corporate 2018 R3 and provides a description of how to install and use the Milestone Dynamic Stream Selection plug-in.

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This product may make use of third party software for which specific terms and conditions may apply. When that is the case, you can find more information in the file *3rd_party_software_terms_and_conditions.txt* located in your Milestone surveillance system installation folder.



General description

Introduction

The Dynamic Stream Selection Plug-in provides the ability to determine the size of a camera view item and use the above-mentioned interface extension to send a message to the Smart Client to switch stream on the camera view item.

Solution overview

The Dynamic Stream Selection plug-in in the Smart Client monitors which camera view items are currently shown and whether size of the camera view items is changed.

If the camera within each camera view item does have two or more video streams, the plug-in determines whether two of the camera video streams have names containing string **High** and **Low**. The names are not case-sensitive.

For each such camera view item, if resolution size of the view item is larger than the resolution specified in the configuration, the plug-in will command the camera view item to use the stream with the name containing the string **High**. If it is smaller than the specified resolution, the plug-in will command the camera view item to use the stream with the name containing the string **Low**.

The Dynamic Stream Selection plug-in also works in case the camera view item is sent to **New Floating Window**. It switches the streams dynamically according to the camera view item size of the window.

Installation

Prerequisites

The Milestone Dynamic Stream Selection plug-in is only compatible with Milestone Advanced VMS products (XProtect® Corporate 2017 R2 and XProtect® Expert 2017 R2) or newer.

Plug-in installer

The Milestone Dynamic Stream Selection consists of one installation file supporting Windows 64-bit only:

• DynamicStreamInstaller_x64.msi

The Milestone Dynamic Stream Selection plug-in should be installed on the following computers:

- On the computer where the Milestone Smart Client is installed
- On the computer where the Milestone Management Client is installed

Installation steps

1. Start the installation by executing DynamicStreamInstaller_x64.msi.



2. Click Next.

🖟 Milestone Dynamic Stream Selection Plugin Setup —							
	Welcome to the Mileston Stream Selection Plugin	Milestone Dynamic 1 Plugin Setup Wizard					
	The Setup Wizard will install Milestone Dynamic Stream Selection Plugin on your computer. Click Next to continue or Cancel to exit the Setup Wizard.						
milestone							
	<u>B</u> ack <u>N</u> e	xt	Cano	cel			

3. Read the license agreement carefully and select the **I accept the terms in the License** Agreement box. Click Next.





4. By default it will be selected option **Will be installed on local hard drive**, which is the correct one. Click **Next**.

🖟 Mileston	e Dynamio	Stream Selection	Plugin Se	etup		_		×
Custom Select t	Setup ne way you	want features to be	e installed			nil	esto	ne
Click the	icons in th	e tree below to char	nge the w	ay features	will be insta	alled.		
	 Milestone Dynamic Stream Seled Will be installed on local hard drive Entire feature will be installed on local hard drive Feature will be installed when required Entire feature will be unavailable 						0KB on	
<			>				Browse.	
Reset Disk Usage Back Next				t	Canc	el		

5. Click Install.





6. Click **Yes**, in case the following message appears on the screen:



7. The next steps are executed automatically.

🖟 Milestone	Dynamic Stream Selection Plugin Setup	_		×			
Installing Milestone Dynamic Stream Selection Plugin miles							
Please wai	Please wait while the Setup Wizard installs Milestone Dynamic Stream Selection Plugin.						
Status: Copying new files							
	Back	Next	Cano	el			



8. Click Finish.



License

The solution has a build-in license check that is locked to the software license code (SLC) of the VMS installation of which it is part.

It automatically comes with a 30 days grace period which starts from the date the plug-in is installed. After the grace period expires, a permanent license is needed.

The permanent licenses are provided by the distributor. In order to generate a permanent license, the distributor must know the SLC of the VMS system where the solution has been installed. Collect the SLC and send it to the distributor, preferably via email.

When the permanent license is acquired, the XProtect VMS must be reactivated, either online or offline.

If license check fails, the Smart Client plug-ins will issue error messages and will have a reduced functionality.





The license information can also be checked in the Management Client > **Site Navigation** > **Basics** > **License Information** > **Installed Products** > **Dynamic Stream Selection**.



Configuration

Management Client

1. Open the Management Client > Site Navigation > Devices > Cameras.





- 2. Select specific camera and click on the **Settings** tab in the **Properties** window.
- 3. Configure low **Resolution** for **Video stream 1**, 1024x768 for example.
- 4. Configure high **Resolution** for **Video stream 2**, 1920x1080 for example.
- 5. Save the changes.

Properties 👻 🗸							
Axis 8 channel device							
~	General	^					
	Color	Color					
	Edge recording type to retrieve	Continuous					
	Mirror image	No					
	Multicast address						
	Multicast force PIM-SSM	No					
	Multicast time to live	5					
	Multicast video port	0					
	Rotation	0					
~	Video stream 1						
	Bit rate control mode	Variable bit rate					
	Bit rate control priority	None					
	Codec	H264					
	Compression	30					
	Frames per second	8					
	Include Date	No					
	Include Time	No					
	Max frames between keyframes	30					
	Max frames between kevframes mode	Default (determined by driver)					
	Resolution	1024x768					
	Streaming Mode	BTP/BTSP/TCP					
	Target bit rate	2000					
\sim	Video stream 2						
	Bit rate control mode	Variable bit rate					
	Bit rate control priority	None					
	Codec	H264					
	Compression	30					
	Frames per second	8					
	Include Date	No					
	Include Time	No					
	Max frames between keyframes	30					
	Max frames between kevframes mode	Default (determined by driver)					
	Resolution	1920x1080					
	Streaming Mode	RTP/RTSP/TCP					
	Target bit rate	2000					
~	Video stream 3						
	Bit rate control mode	Variable bit rate					
	Bit rate control priority	None					
	Codec	H264					
	Compression	30					
	Frames per second	8					
	Include Date	No					
Vic	Video stream 1						
0	👔 Info 🌇 <u>Settings</u> 📔 Streams 🥚 Record 🛧 Motion 🚳 Fisheye Lens 🥂 Events 💷 Client 🎬 Privacy masking						

6. Click on the **Streams** tab.



Add two streams: first one with low resolution, name containing string **Low**, corresponding to **Video stream 1** from the **Settings** tab and second one with high resolution, name containing string **High**, corresponding to **Video stream 2** from the **Settings** tab. For example:

Stream**: Video stream 1** Name: **Low** Res Stream Live Mode: Always Default: Checked Record: Checked if needed Remote Recording: Checked by default

Stream: **Video stream 2** Name: **High** Res Stream Live Mode: When needed Default: Not Checked Record: Checked if needed Remote Recording: Checked by default

7. Save the changes.

Properties 👻 🗣										
Stre	am information									
Str	eam		Name		Live Mode		Default	Record	Remote Re	cording
Þ	Video stream 1	`	Low Res Stream		Always	~				
	Video stream 2		High Res Stream		When needed	~				
	Add	Delete								
				-						
🚺 Inf	o 🍻 Settings	Streams 🥥 Record	🛠 Motion 🛛 🔘 Fisheye Le	ens 🤻 Events 🖵 CI	ient 🛄 Privacy masking					

Smart Client

1. Open Smart Client > **Settings** > **Dynamic Stream Selection.**



< Settings \times _ Resolution settings Application Width: 800 🗢 Panes Height: 600 🗢 Functions Update Timeline Export Smart map Joystick Keyboard Access Control Alarm Advanced Language Help Close

The default values for the **Resolution Settings** of the camera view item are **Width**: **800** and **Height**: **600**.

- 2. Change the values according to your preferences.
- 3. Click Update.
- 4. Click Close.

Operation

Smart Client

There are two cameras in the figure below. **AXIS P3367 Fixed Dome Network Camera (1) - Camera 1** does have two configured streams containing strings **High** and **Low** in the names. **AXIS Q6042 PTZ Dome Network Camera (1) - Camera 1** does have only one stream configured.









When **AXIS P3367 Fixed Dome Network Camera (1) - Camera 1** view reaches the size 800x600, the stream will be switched to **High** as shown below on the figure.







Note The plug-in functionality works only in Live mode of the Smart Client. When the stream is switched, it can cause the Smart Client camera view item to flicker or freeze for a moment.

Troubleshooting

Please check the configuration again if Dynamic Stream Selection plug-in does not work properly.



Limitations

- 1. Dynamic Stream Selection plug-in functionality works only for the first camera if a camera is added twice or more in the same Smart Client view.
- 2. Dynamic Stream Selection plug-in functionality does not work in case the view is sent to **Primary Display** or **Floating Window**.

Known issues

There are no known issues at the time of the release.



Milestone Systems is a leading provider of open platform video management software; technology that helps the world see how to ensure safety, protect assets and increase business efficiency. Milestone enables an open platform community that drives collaboration and innovation in the development and use of network video technology, with reliable and scalable solutions that are proven in more than 150,000 sites worldwide. Founded in 1998, Milestone is a stand-alone company in the Canon Group.