

CONFIGURATION GUIDE DAVANTIS / XPROTECT



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1. INTRODUCTION

1.1. INTRODUCTION

This document describes the configuration needed for the integration between Milestone XProtect Video Management System and DAVANTIS video analytics systems.

It contains the necessary steps to send alarms from a DAVANTIS video analytics system to a Milestone XProtect VMS platform and the features available to check the recorded video associated to the alarms.

The goal is that an operator using the Milestone XProtect Management Application and Smart Client can verify analytics events with a snapshot and a video using the same graphical interface than for other devices.

Milestone XProtect VMS integration is available for DAVANTIS software Daview v167 or higher.

1.2. COPYRIGHT

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2.1. ARCHITECTURES







2.2. ADD DAVANTIS STREAMS TO XPROTECT

Prior to adding DAVANTIS streams into XProtect, we first need to enable the feature "virtual ONVIF camera" for all desired DAVANTIS streams at the DAVANTIS units (see "3.2. Enable virtual ONVIF camera feature")

Recording DAVANTIS streams is an advanced and optional feature that will allow the user to get and record live feed from the DAVANTIS units. The DAVANTIS streams include a detection bounding box around the intrusion. Please notice that is not required, neither necessary, to add DAVANTIS streams in XProtect in order to receive DAVANTIS alarms/events at XProtect.

At Milestone XProtect Management Client:

• At the left panel go to "Recording Servers", right click at the desired server and select "Add Hardware":



2. MILESTONE XPROTECT CONFIGURATION

Select "Express" option

and click "Next".

2.2.1. ADDING STREAMS USING "EXPRESS" MODE

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node	nodels for manually entered IP addresses and host names

Enter DAVANTIS credentials for the unit and click next. Default credentials are "admin" and blank password.

Add Har	dware						×
Speci	fy user name and password if d	levices are not using the default on	es .				
Include	User Name	Password				Add	
	(Factory Default)	•••••				Remove	
	root	•••••					
_							_
	Help		< Back	Next >	(Cancel	

2.2.1. ADDING STREAMS USING "EXPRESS" MODE

2.2.1. Find and select the desired DAVANTIS unit. Click "Next".

Add Hardware

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Wait while your hardware is being detected. Once detection has completed, select which hardware to add.

stect	ed hardware:				
Add	Address	Port	Hardware model	Status	
\square	158.109.5.153	25055	Davantis Daview LR (ONVIF)	Success	
	158.109.5.189	25055	Davantis Daview LR (ONVIF)	Success	
	158.109.5.188	25055	Davantis Daview LR (ONVIF)	✓ Success	
	158.109.5.237	25055	Davantis Daview LR (ONVIF)	Success	
	158.109.5.101	80	Tanz Security THC151 (ONVIF)	Success	
	158.109.5.166	25055	Davantis Daview LR (ONVIF)	Success	
	158.109.5.115	25055	Davantis Daview LR (ONVIF)	Success	
	158.109.5.151	25055	Davantis Daview LR (ONVIF)	Success	
	158.109.5.135	25055	Davantis Daview LR (ONVIF)	✓ Success	
-				4.	

Enable the desired cameras within the unit and click "Next".

lardware name template:			Device name template			
Default		~	Default			
Hardware to Add	Enabled	Nar	me			_
Davantis Daview LR - 158.109.5.153						
Hardware:		Dav	antis Daview LR (158.10	9.5.153)		
Camera port 1:		Dav	antis Daview LR (158.10	9.5.153) - Camera 1		
Camera port 2:		Dav	antis Daview LR (158.10	9.5.153) - Camera 2		
Camera port 3:		Dav	antis Daview LR (158.10	9.5.153) - Camera 3		
Camera port 4:		Dav	antis Daview LR (158.10)	9.5.153) - Camera 4		

2.2.1. ADDING STREAMS USING "EXPRESS" MODE

Select a default camera group at XProtect and click "Next".

Add Hardware



Select a default group for all devices types. Alternatively, select device group individually for each device.

Default camera group:	Devices	Add	to Group	
DAVANTIS cameras	Cameras			
Default microphone group:	Davantis Daview LR (158.1	09.5.153) - Ca Defa	ult Group	~
No group selected	Davantis Daview LR (158.1	09.5.153) - Ca Defa	ult Group	~
Default speaker group:	To Davantis Daview LR (158.10	09.5.153) - Ca Defa	ult Group	~
No group selected				
Default metadata group:				
No group selected	21			
Default input group:				
No group selected	2			
Default output group:	Contraction of the second s			
No group selected				
No group selected				

You should now see the DAVANTIS device containing all added streams.



2. MILESTONE XPROTECT CONFIGURATION

2.2.2. ADDING STREAMS USING "MANUAL" MODE

2.2.2. Select "Manual" option and click "Next".

Add Hardware			>
	Add Hardware		
	This wizard helps you detect and set up hardware.		
	Hardware detection method:		
	 Express (recommended) Automatically detects hardware on the recording server's local network 		
	 Address range scanning Scans defined network address ranges and detects hardware models 		
	 Manual Detects hardware models for manually entered IP addresses and host names 		
milestone			
The Open Platform Company			
Help	< Back Next >	Cancel	

Enter DAVANTIS credentials for the unit and click next. Default credentials are "admin" and blank password.

Add Har	dware						×
Specif	fy user name and password if devices are n	ot using the defau	ult ones.				
	the News	Deres d			-		
include	User Name	Password				MOO	
	(Factory Default)	•••••				Remove	
	root	•••••			-		
							_
	Help		< Back	Next >		Cancel	

2.2.2. ADDING STREAMS USING "MANUAL" MODE

Select the driver "ONVIF Conformant
Device (2-16 channels)" and click "Next".

Add Hardware Select which drivers to use when scanning for hardware. The more drivers selected, the slower the scanning. ACTI Select All Clear All Clear All Clear All ACTI </tab

Enter the IP of the DAVANTIS unit and set the port to 25055. Click "Next"

× Add Hardware Enter information for hardware you want to add. Optionally, select driver type to speed up detection. Address Port Hardware model Add 158,109.5,153 25055 1 (Auto-detect) < Back Next > Help Cancel

ADDING ADDING Add Hardware

2.2.2. Click on "Next".

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"MANUAL"	
MODE	

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	158 109 5 153	25055	Davartis Daview LR (ONV/IE)	Success

Enable the desired cameras within the unit and click "Next".

Hardware name template:			Device name template:	
Default		~	Default	
Hardware to Add	Enabled	Nar	e	_
Davantis Daview LR - 158.109.5.153				
Hardware:		Dav	ntis Daview LR (158.109.5.153)	
Camera port 1:		Dav	ntis Daview LR (158.109.5.153) - Camera 1	
Camera port 2:		Dav	ntis Daview LR (158.109.5.153) - Camera 2	
Tamera port 3:		Dav	ntis Daview LR (158.109.5.153) - Camera 3	
Camera port 4:		Dav	ntis Daview LR (158.109.5.153) - Camera 4	

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2.2.2. ADDING STREAMS USING "MANUAL" MODE Select a default camera group at XProtect and click "Next".

Add Hardware

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Select a default group for all devices types. Alternatively, select device group individually for each device.

Default camera group:	Devices	Add to Group	
DAVANTIS cameras	Cameras		
Default microphone group:	Davantis Daview LR (158.109.	5.153) - Ca Default Group	~
No group selected	Davantis Daview LR (158.109.	5.153) - Ca Default Group	~
Default speaker group:	Davantis Daview LR (158.109.	5.153) - Ca Default Group	~
No group selected	6		
Default metadata group:			
No group selected	2		
Default input group:			
No group selected			
Default output group:			
Default output group: No group selected	2		
Default output group: No group selected			

You should now see the DAVANTIS device containing all added cameras.



2.3. SET CAMERA NAMES

Camera names of the cameras in Milestone XProtect related to DAVANTIS alarms must be named identically as the camera names defined at the DAVANTIS unit (see "3. Configure DAVANTIS Platform").

To modify the camera names, at Milestone XProtect Management Client:

- At left panel go to "Recording Servers" or "Devices" section.
- Go to the device Info section of each camera and modify the "Name" field:

Milestone XProtect Management	lient 2018 R3		-	σ	х
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Please take into account that any change of camera names in Milestone XProtect Server requires a DAVANTIS machine restart.

2.4. SET CONTINUOUS RECORDING

For a deeper tracking of the alerts it is recommended to create a "Rule" that sets continuous recording for all DAVANTIS cameras.

In the left panel please go to "Rules and Events":

- Right click on "Rules".
- Click on "Add Rule".
- Set a descriptive name like Continuous DAVANTIS Recording.
- Select "Perform an action in a time interval" and click "Next".
- Select "Always" and click "Next".
- Select "Start recording on <devices>", then click on recording device at the bottom panel and add the DAVANTIS unit cameras, click "Next".
- Click "Next" again and "Finish".

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2.5. ALARMS AND EVENTS AT XPROTECT

Milestone may receive "Alarms" and "Events". Alarms will be shown at Milestone Smart Client to the operator but no action will take place in Milestone afterwards.

If DAVANTIS is set to send Alarms (see "3. Configure DAVANTIS Platform") we don't need to define anything on Milestone XProtect. If this is the case please direct to step "2.6. Configuring XProtect Smart Client".

However, if we want to set actions to be performed when an event is raised, we must set DAVANTIS to send Events and define them on Milestone. These events are filtered through "Alarm Definitions", and when a positive match occurs, an alarm is created with a copy of all the information contained within the analytics event.

This will allow, for example, to set operator actions, priorities or to trigger other events.

Please take into account that the feature "Flexible event rule engine" is not available in all Milestone products.

To define an event, at Milestone XProtect Management Client left panel:

- Go to "Rules and Events" and right click on "Analytics Events".
- Click on "Add New".
- The names of the "Analytics Events" must match the detection rule names defined in the DAVANTIS system. There should be a different analytic event at XProtect for every detection rule set at the DAVANTIS system.

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Site Navigation Federated Site Hierarchy	1						

2.5.1. ALARM DEFINITIONS

We need to set at least one "Alarm Definitions" per camera, but we can use more depending on what we want to show in Milestone XProtect Smart Client.

If, for example, we have 2 cameras with same DAVANTIS rule name (Intruder) at the DAVANTIS system, we could define just one Analytics Event (called Intruder) at XProtect and then 2 Alarm Definitions (each for 1 camera), using the same Analytics Event (Intruder).

But if we had 2 cameras with different DAVANTIS rule names (IntruderCam1 and IntruderCam2) we should then define 2 Analytics Events (called IntruderCam1 and IntruderCam2) and 2 Alarm Definitions as described before.

At Milestone XProtect Management client left panel:

- Go to "Alarms" and right click on "Alarm Definitions".
- Click on "Add New".
- Set any alarm definition "Name".
- Select "Analytics Events" as "Triggering event".
- Set one of the previously created events for the current alarm definition.
- And select as Source the camera related to that event.

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System Monitor		La L						
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System Log		Events triggered by alarm:	-			Detera		
Rule Lon		Auto-close alarm						
Access Control								
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Alarma								
Alarm Definitions								
Alarm Data Settings								
Sound Settings								

Camera names in Milestone XProtect related to DAVANTIS events must be named identically as the camera names defined at the DAVANTIS unit (see "3. Configure DAVANTIS Platform").

2. MILESTONE XPROTECT CONFIGURATION

2.5.2. RULES OVER DAVANTIS EVENTS

In order to perform actions over a DAVANTIS detection, XProtect users may add rules related to a DAVANTIS event.

Please notice that the feature "Flexible event rule engine" may not be available in all Milestone products.

To define a rule, at Milestone XProtect Management Client left panel:

- Go to "Rules and Events" and right click on "Rules".
- Click on "Add Rule".
- Type a name and a description for the rule.
- Select the event that will be related to the rule and the conditions to apply.
- Select actions to perform.

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2.6. CONFIGURING XPROTECT SMART CLIENT

Operators will be able to monitor DAVANTIS alarms at the "Alarm manager" at the XProtect Smart Client.

In XProtect products where the "Alarm manager" feature is not enabled, users may configure an "Alarm list" at the Live tab in order to monitor the events and alarms. We can also visualize snapshot previews, camera live views or retrieve video recordings.

Please notice that, for the Alarm list, the "Message" field will hold the rule name defined in DAVANTIS unit.

Milesto	ne XProtect Smart	t Client						01/09	/2017 11:46:3	10 -		×	
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			11:41:30 01/09/2017			New	Intruder	Camera 1			21	173	
			11:41:30 01/09/2017		1	New	Intruder	Camera 1			2	174	-
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3.1. CMS CONFIGURATION

DAVANTIS video analytics units may be configured to send alarms/events to Milestone XProtect. At the master unit, within the DAVANTIS video analytics main screen:

- Press the "Configuration" button.
- Select the "CMS" tab.
- Set the flag "Send alarms" on.
- Choose "MILESTONE" as CMS type.
- Set the IP address and port of the Milestone server (default port: 80).
- Enter User and Password of the Milestone server.
- Milestone allows two types of authentication, as Windows user or as Basic, set as configured in XProtect Management Client.
- Select to send "Alarms" or "Events" as desired (see "2.5. Alarms and events at XProtect").
- Synchronization sets a time in milliseconds to synchronize bounding boxes with the related alarm. By default, 2000 ms, the bounding box of an intrusion will be drawn 2 seconds in time before the alarm is received.
- If the streams in Milestone VMS are being recorded directly from the DAVANTIS units, we may uncheck "Show bounding boxes" so we don't show them overlapped.

Environment CMS 2		
CMS 2		
Send alarms		
CMS type	DAVANTIS	~
	IPs/DNSs	Ports
primary	~	9034
secondary		9034
Site code:		
 Automatically upo 	late public IP at CMS	
	CMS type primary secondary Site code: Automatically upd	CMS type DAVANTIS IPs/DNSs primary secondary Ste code: Automatically update public IP at CMS

After setting the configuration, please remember to synchronize the DAVANTIS unit and the Milestone server unit to the same time/date or to the same NTP server.

3.2. ENABLE VIRTUAL ONVIF CAMERA FEATURE

In case we want to receive and record at Milestone XProtect the streams directly from the DAVANTIS units (which will already contain the bounding boxes within the image), we must enable the "Virtual ONVIF Camera Streaming" feature for each camera in section "Cameras", "Add/Modify" cameras.

Virtual ONVIF camera					
Streaming (Port/URL)	Active	555	~	daview.sdp	
	13				