MilestoneIntegration
USER MANUAL
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CONFIDENTIAL



Document Summary

Installing and Configuring the Milestone Integration

This pre-requisite document outlines how to install the Milestone client and integrate it with PlateSmart's ARES. Note: to set up a PlateSmart/Milestone integration, having active cameras in XProtect is mandatory.

Configuring Analytical Events for ARES and Milestone

This section's purpose is to show how to setup and configure use of the Milestone integration within ARES to allow us to pull the video feed through Milestone's SDK for processing.

Installing the Milestone Plugin

This section's purpose is to show how to configure both ARES and Milestone to use Milestone's Analytical Event process as well as verify proper configuration.

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Installing Milestone

1. Locate the "Milestone XProtect VMS Products 2018 R3 System Installer."

2. Run this application and install the program in the desired directory. For any questions during the installation of Milestone, see <u>https://www.milestonesys.com/support/help-yourself/manuals-and-guides/</u>

3. This should place the two shortcuts "XProtect Management Client 2018 R3" and "XProtect Smart Client 2018 R3" on the Desktop.

4. Navigate to the following directory:

"YourPC" > "Installation Drive" > "Program Files" > "Milestone" > "XProtect Smart Client" > "bin" (Installation drive is the drive that Milestone is installed on)

· • 🕇 📙 :	> Thi	s PC > Local Disk (C:) > Program Files >	Milestone > XProtect Sma	art Client > bin		ٽ ~	Search bin	م
		Name	Date modified	Туре	Size			
A Quick access		AudioPlayerDotNet.dll	9/7/2018 12:51 AM	Application extens	19.745 KB			
Desktop	*	AVIExporterClientMW.dll	9/7/2018 8:34 AM	Application extens	22.693 KB			
🕂 Downloads	*	boost chrono-vc120-mt-1 57.dll	9/7/2018 12:45 AM	Application extens	29 KB			
Documents	\mathcal{A}	boost regex-vc120-mt-1 57.dll	9/7/2018 12:45 AM	Application extens	1.023 KB			
E Pictures	#	boost_serialization-vc120-mt-1_57.dll	9/7/2018 12:45 AM	Application extens	248 KB			
Local Disk (C:)		boost_system-vc120-mt-1_57.dll	9/7/2018 12:45 AM	Application extens	19 KB			
_		boost_thread-vc120-mt-1_57.dll	9/7/2018 12:45 AM	Application extens	100 KB			
This PC		CoreToolkits.dll	9/7/2018 12:52 AM	Application extens	31,916 KB			
Desktop		icudt48.dll	9/7/2018 12:45 AM	Application extens	17,850 KB			
🔮 Documents		icuin48.dll	9/7/2018 12:45 AM	Application extens	1,498 KB			
🕹 Downloads		🗟 icuio48.dll	9/7/2018 12:45 AM	Application extens	49 KB			
h Music		icule48.dll	9/7/2018 12:45 AM	Application extens	195 KB			
Pictures		🗟 iculx48.dll	9/7/2018 12:45 AM	Application extens	48 KB			
Videor		icutu48.dll	9/7/2018 12:45 AM	Application extens	139 KB			
Videos	-	🗟 icuuc48.dll	9/7/2018 12:45 AM	Application extens	1,236 KB			
Local Disk (C:)		ImageViewerDotNet.dll	9/7/2018 1:11 AM	Application extens	22,671 KB			
Network		MV1.dll	9/7/2018 8:33 AM	Application extens	662 KB			
		imfc120.dll	9/7/2018 8:33 AM	Application extens	5,477 KB			
		imfcm120.dll	9/7/2018 8:33 AM	Application extens	90 KB			
		Mm025.dll	9/7/2018 8:33 AM	Application extens	60 KB			
		msvcp120.dll	9/7/2018 12:45 AM	Application extens	645 KB			
		····		· · · ·				

5. Use CTRL-A to select all the files in the directory, then CTRL-C to copy them.

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6. Navigate to the following directory and paste the files into the Command Center and Processor folders.

→ · ↑ >	This PC	> Local Disk (C:) > Program File	s > PlateSmart > ARES >	
- Quick access	ħ	lame ^	Date modified	Туре
		Alerter	11/8/2017 3:59 PM	File folder
Desktop	*	ARES Viewer	11/8/2017 3:59 PM	File folder
Downloads	*	Command Center	11/8/2017 4:02 PM	File folder
Documents	*	Data Miner	11/8/2017 3:59 PM	File folder
Fictures	1	DatabaseXML	11/8/2017 3:58 PM	File folder
svr-fs01	*	Edge Processors	10/24/2017 12:32	File folder
Builds	1	File Transfer	11/8/2017 3:59 PM	File folder
ProgramData	4 1	Manager	11/8/2017 3:59 PM	File folder
Deserver Files	1	Partner Services	11/8/2017 3:58 PM	File folder
Program Files	*	Processor	11/8/2017 3:59 PM	File folder
This PC		Remote Broker	11/8/2017 3:59 PM	File folder
		Watch Dog	11/8/2017 3:59 PM	File folder
Network		Logs	11/8/2017 3:58 PM	Shortcut

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Configuring Milestone

1. Open Command Center and add a service:

VMS Type: Milestone

VMS Name: Any recognizable ID [we will use 'MS' in this document] **Send Plate Metadata**: Send plate data to Milestone for all ARES cameras using this integration.

Server Endpoint: The Milestone VMS DNS (machine name) or IP Address **API User ID/Password**: Milestone VMS credentials

eneral Retention		
MS Name:		*
MS ID:	0	
MS Type:	MileStone	~ *
	Send Plate Metadata	
lugin Directory:	2016	\sim
erver Endpoint:		*
letadata Port:		
PI Port:		
PI User Name:		*
PI Password:		*
nd of Metadata Delimiter:		

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2. Set up a camera

VMS Association: Selected ID from Partner Service name ['MS' in this document]. Once you've chosen a **VMS Association**, select the **Discover Camera** button and choose a camera from the list. Restart the Data Miner and each Processor that will be affected by these changes.

Camera Ir	formation	Edit Sheet
Name:	Samsung Wisenet Ca	ameras (192.168.99.110)
Vms Association:	MS	~
	Discov	er Camera
Partner Association:		~

Choose a Milestone Camera
Cameras:
Name
Samsung Wisenet Cameras (192.168.99.56) - Camera 1
Samsung Wisenet Cameras (192.168.99.110) - Camera 1
Pelco lx1x Series (192.168.99.100) - Camera 1
Select Cancel

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3. To confirm that everything is working properly, right click on the node for this camera and select **Monitor Camera**. The camera stream should load and play.



4. The following can be reset by right clicking on the **ARES_Dataminer** and selecting restart.

		Status	Last Message	Name	Server	Last Heartbeat		Command
	0	Ok	Running	ARES_WatchDog	VM-EA2	4:08:31 PM		None
	0	Ok	Initializing WatchDog client	ARES_Manager	VM-EA2	4:08:32 PM		None
	0	Ok	Running	ARES_FileTransfer	VM-EA2	4:08:33 PM		None
•	0	Ok	Running	ARES_DataMiner	VM-EA2	4:08:34 PM	0	RestartNeeded
	0	Ok	Running	ARES_Alerter	VM-EA2	4:08:34 PM		None
	0	Ok	Running	ARES_RemoteBroker	VM-EA2	4:08:35 PM		None
	0	Ok	Processing feed	Camera 1 (ARES_Processor_1)	VM-EA2	4:08:37 PM		None

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Creating Analytical Events

In Command Center

1. For each alert policy you want to send metadata with, enter the **Alert Policy Edit Sheet** and select the VMS name from the **VMS Association** dropdown.

⊡- NOC ⊕-ﷺ 1 Noc User	Alert Policy E	Edit Sheet	
Status Status Torrer Status Torrer Status Status Status Status Status Status Status Status Status Status Status Status Status Status Status Status Status Status Status Status Status Status S	Back	Next Cancel Finish	
⊡			
2 Cameras	Name:	Hotlist	*
Milestone Camera	Policy Type:	Table List ~	
ia.⊶i≫ 2 Camera Groups ia.∞ie 3 Policies	Policy Sub-Type:	HOTLIST	*
	VMS Association:	Milestone ~	
	Description:		
		Enabled	

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2. Open Plate Viewer/Alert Viewer and the **Metadata List** to confirm that the correct data is coming through. If the camera connection is correct and running properly, the interface shown below will be populated with metadata.

	Row #	Complete	Date Sent	Message		
	1	True	9/28/2018 4:45 PM	{"camerald":10,"customTag":"N/A, IL		_
	2	True	9/28/2018 4:45 PM	{"camerald":10,"customTag":"FL, IUT		
	3	True	9/28/2018 4:45 PM	{"camerald":10,"customTag":"FL, AV	DJE SU CLEARWATER SP	
	4	True	9/28/2018 4:45 PM	{"camerald":10,"customTag":"FL, EQ	Source Inner (Cital As Falana)	
	5	True	9/28/2018 4:45 PM	{"camerald":10,"customTag":"N/A, T	Source Image (Click to Enlarge)	
	6	True	9/28/2018 4:45 PM	{"camerald":10,"customTag":"FL, CU		
	7	True	9/28/2018 4:45 PM	{"camerald":10,"customTag":"FL, BP		
•	8	True	9/28/2018 4:45 PM	{"camerald":10,"customTag":"FL, BSI	Ø	
	9	True	9/28/2018 4:45 PM	{"camerald":10,"customTag":"FL, BP	and the first free states	
	10	True	9/28/2018 4:45 PM	{"camerald":10,"customTag":"N/A, P		
	11	True	9/28/2018 4:45 PM	{"camerald":10,"customTag":"N/A, Y		
	12	True	9/28/2018 4:45 PM	{"camerald":10,"customTag":"N/A, W		
	13	True	9/28/2018 4:45 PM	{"camerald":10,"customTag":"N/A, R		
	14	True	9/28/2018 4:45 PM	{"camerald":10,"customTag":"N/A, D	DEFETOO	
	15	True	9/28/2018 4:45 PM	{"camerald":10,"customTag":"N/A, S	CONCERN DECTISU	N
	16	True	9/28/2018 4:45 PM	{"camerald":10,"customTag":"FL, R6	CLEARWATER ()	
	17	True	9/28/2018 4:45 PM	{"camerald":10,"customTag":"N/A, 7		
	18	True	9/28/2018 4:45 PM	{"camerald":10,"customTag":"FL, R6	Watser Cawo	
	19	True	9/28/2018 4:45 PM	{"camerald":10,"customTag":"FL, 546	Alter de Salen es tré au las Espanne de Alterné aut	
	20	True	9/28/2018 4:45 PM	{"camerald":10,"customTag":"FL, BZ		
c	1-			>		<u>D</u> elete Result

*Please note that license plate "BSET90" is used for example purposes and with example data only. This is not tied to an active hotlist nor have any live hotlists have been used in the creation of this document.

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In XProtect Management Client:

Open **XProtect Management Client** and select **Analytics Events** from the left-hand option tree. There are two separate types of events that must be included in order to properly integrate the system: an event titled **Plate Read** for base LPR data, and multiple **Plate Alert- [Policy Name]** events for LPR alerts.

3. Add an Event by right-clicking **Analytic Events** and selecting **Add Event**. Then complete the event by inputting the event name and description and clicking the **Save** icon in the upper left-hand corner of the screen (see next page).



*When configuring, the **Analytical Events** should be named **Plate Alert – [Policy Name]**, in this example this analytical event **Plate Alert – White List** corresponds to

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the ARES Alert Policy named White List in ARES.

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4. You now have analytical events created for **Plate Alarms** and **Plate Reads** generated from the ARES system. These events can be used to configure **Alarm Definitions**.

Select **Alarms** -> **Alarm Definitions** from the left-hand option tree. Right-click to add a new alarm definition, name the alarm, and select **Analytical Events** as the trigger event. In the second drop-down box in this section, select the specific analytical event you wish to use.

Alarm Definitions 🚽 🕂 🕂	Properties		-
🖃 🧏 Alarm Definitions	Name:	Plate Alert - Hotlist	
Plate Alert - Hotlist	Instructions:		~
	instructions.		
			¥
	Trigger		
	Triggering event:	Analytics Events	~
		Plate Alert - Hotlist	\sim
	Sources:	DirectShow Virtual Video Server (0.0.0.1) - Camera 2	Select
	Activation period		
	Time profile:	Always	\sim
	O Event based:	Start:	Select
		Stop:	Select
	Operator action required		
	Time limit:	1 minute	~
	Events triggered:		Select
	Other		
	Related cameras:		Select
	Related map:	Endor01-Sub Map	\sim
	Initial alam owner:		~
	Initial alarm priority:	Hot List	~
	Alam category:		\sim
	Events triggered by alarm:		Select
	Auto-close alarm:		

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Installing the PlateSmart Plugin

.Net Framework

1. Open the .NET Framework setup window.



2. Restart the computer to complete installation.

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3. Navigate to the Plugin Installer in File Explorer through:

← Name Date modified Size Туре Quick access 2016 1/22/2019 6:53 AM File folder Desktop PlateSmartMilestonePluginInstaller 1/14/2019 11:35 AM Windows Installer ... 13,516 KB Downloads Documents Pictures

Program Files -> PlateSmart -> ARES -> Partner Services -> MileStone.

4. Run the **PlateSmartMilestonePluginInstaller.msi** to complete installation. Once installation is complete, the **PlateSmart LPR** tab will appear in the XProtect Smart Client.

Milestone XProtect Smart Client 2016					
Live	Playback	Sequence Explorer	PlateSmart LPR	Alarm Manager 🧔	System Monitor
Plate Viewer	Alast Manuar				

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Summary

In the XProtect Smart Client, Under the **PlateSmart LPR** tab, plate reads will be stored as they are read from the live stream. There are different tabs, depending on the event. In this case there is the **Plate Reader** and **Alert Viewer** tab. The **Plate Reader** shows all license plates while the **Alert Viewer** only shows the plates marked in the Hotlist. A live stream of the video can be viewed under **Live** and recorded video can be viewed through **Playback**.

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