VI DIMENSIONS

Milestone Integration Guide

Version 4.0.100

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Revision History:

Name	Date	Reason for changes	Version
Paul Mouliere	25/09/2018	Milestone plugin guide	V4.0.0
Ashish Sriram	17/12/2018	Created framework for Milestone guide extracted from VMS Integration guide	V4.0.3
Ashish Sriram	20/12/2018	Formatting changes. Update to latest patch	V4.0.100
Ashish Sriram	31/12/2018	Formatting changes.	V4.0.100.1

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Preface

This guide is meant for technical engineers who will be configuring and maintaining the video management system (VMS). It describes how to configure Milestone and Abnormality Recognition Video Analytics System (ARVAS) plugin to send out alarm notifications to the Milestone XProtect Smart Client user interface.

Related Documentation

For more information on ARVAS, refer to the following documents:

I. **ARVAS Pre-Installation Guide**
Contains information on hardware and software related prerequisites.
II. **ARVAS Installation Guide**
Contains information about how to install and configure ARVAS.
III. **ARVAS User Guide**
Contains information about how to use ARVAS UI.
IV. **ARVAS Maintenance Guide**
Contains information abour troubleshooting and maintenance.

Support

If you face any issues with ARVAS integration with your Milestone servers or with the Milestone plugin functionality, you can write to us at enquiries@vidimensions.com. For immediate assistance, please contact us at (+65) 6570 2331

1 Before You Begin

Before starting the setup process for ARVAS integration with your Milestone system, ensure that the following pre-requisites are met. Also take note of integration limitations.

1.1 Software Pre-Requisites

- Version of your Milestone software is XProtect 2017 R1 or higher.
- Operating system is Windows 8.1 or higher; or Windows Server 2012 or higher.
- NET version is 4.7.2 or higher.

1.2 Hardware Pre-Requisites

- For hardware specifications for ARVAS server, refer to **ARVAS Pre-Installation Guide**
- For machine running ARVAS plugin, hardware specifications is same as minimum specifications for running Milestone XProtect Smart Client.

1.3 Integration Limitations

- Milestone XProtect version below 2017 cannot run ARVAS plugin. We can still integrate with systems 2014 and above, but without the plugin.

2 Integration Architecture

Following diagram illustrates the integration architecture of ARVAS with Milestone VMS
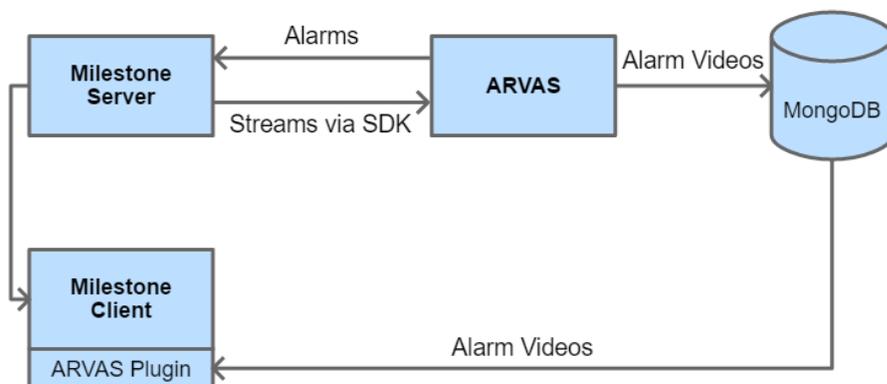

Figure 1: Data flow diagram for Milestone integration with ARVAS

3 Streaming

ARVAS can obtain live streams in two ways from Milestone VMS

1. **Using SDK** – Milestone SDK will be used by default to get live streams.
2. **Using SOAP** – Application receives streams through SOAP (Simple Object Access Protocol) instead of SDK if you set SOAP to True. SOAP reduces CPU resource usage on ARVAS server.

You can activate/deactivate SOAP by changing SOAP setting to True/False in VMS.xml file which can be found in $Installed Directory$/ADGPU/FlexAD/Config.

4 Smart Client Plugin

4.1 Milestone Options -> Arvas

1. Copy the Milestone Plugin folder to C:\Program Files\Milestone\MIPPlugins

Figure 2. Contents of the Milestone Plugin Folder

2. *[If using Xprotect Corporate]* Open Xprotect Management Client and go to Tools -> Options (Ctrl+O) and select the ARVAS tab at the end.

Figure 3. ARVAS tab under Xprotect Management Application

3. *[If not using XProtect corporate]* Set up the MongoDb server address and port as the host and port parameters.

Note: Above MongoDB setting is for Milestone Xprotect Corporate. If you are using other variants of Milestone, you need to set MongoDB address under VidDBHost setting in PluginMilestone.dll.config file which is available under Milestone plugin folder. (Example: C:\Program Files (x86)\Milestone\MIPPlugins\VDPluginMilestone)

Figure 4. Config file of ARVAS Milestone plugin

4. Set the priority levels as shown on the image above.

Note: In Milestone standard version you need to set the priority level as per the priority displayed in above XML image.

4.2   Rules And Events → Analytics Events

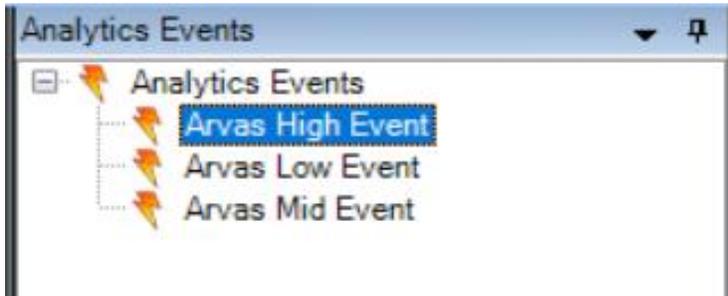You will need to create three analytics events, one for each priority:

Figure 5. ARVAS Analytics Events

You have to follow below steps to create analytics events:

1. Go to Rules and Events section on Xprotect Management application
2. Right click at 'Analytics Events'
3. Click at 'Add New..' option

4. Enter name 'Arvas High Event' under properties section
5. Repeat step 2 to 4 for 'Arvas Low Event' and 'Arvas Mid Event'

Note: In Milestone Standard version you have to configure Events under Events and Output section.

4.3 Alarms → Alarm Definitions

Then, you need to link those three events to a specific alarm.
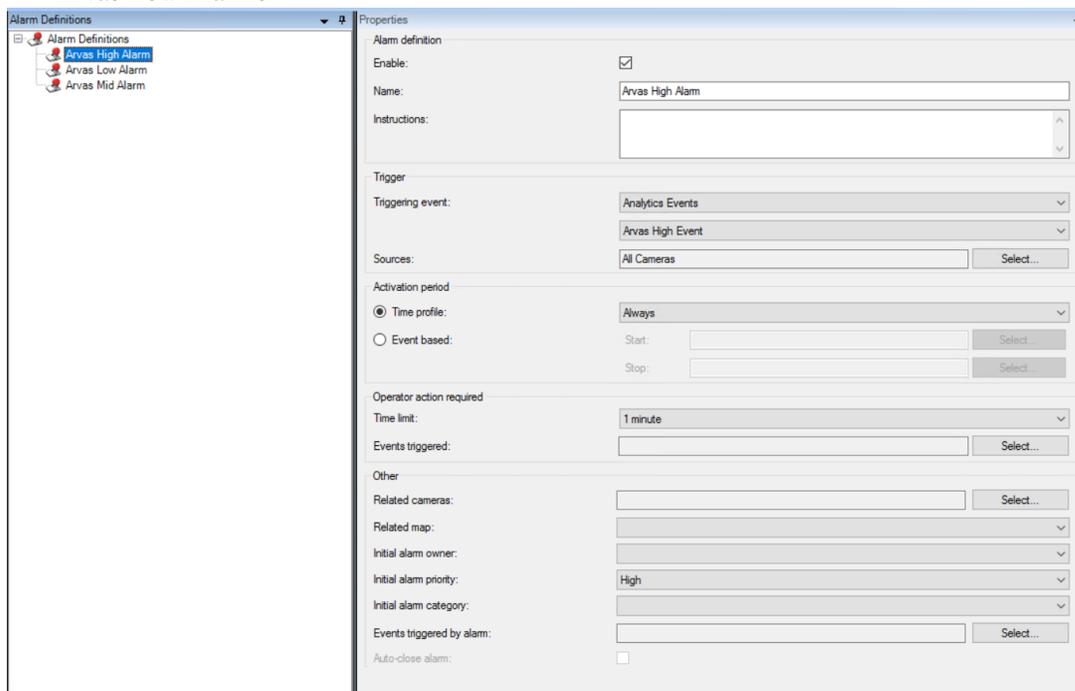
- Arvas High Alarms
- Arvas Mid Alarms
- Arvas Low Alarms

Figure 6. Properties of Alarm definition

You have to follow below steps to create Alarm definitions:

1. Expand 'Alarms' section available at left navigation panel
2. Right click at 'Alarm Definitions' tab
3. Click at 'Add New..' option
4. Enter name 'Arvas High Alarm' in properties section
5. Set following parameters for each of the Alarm definition:
   a. **Triggering event**: Set to Analytics Events and select ARVAS High/Mid/Low Events
   b. **Sources**: Set to All Cameras
   c. **Initial alarm priority**: Select depending on the type of alarm (low, mid, high)
6. Repeat step 2 to 5 for 'Arvas Mid Alarm' and 'Arvas Low Alarm'
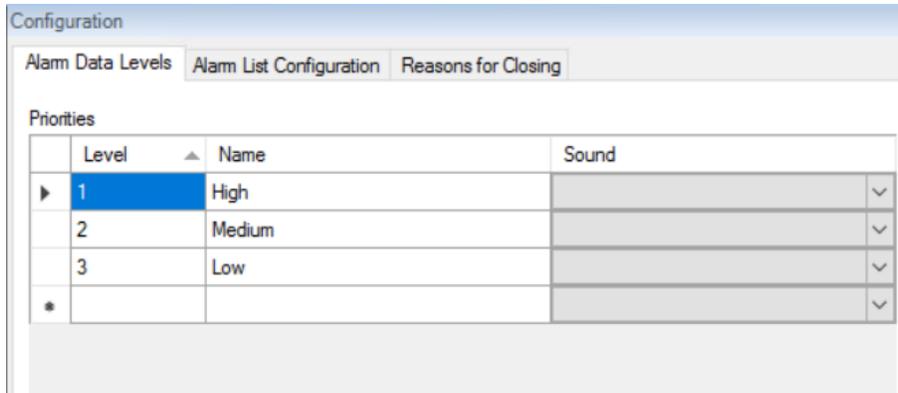
4.4 Alarms ➔ Alarm Data Settings

Figure 7. Alarm priority levels on Xprotect Management application

Set the Priority Level and Name according to the image above. The priority levels must match the ARVAS tab in the options panel.

Note: If you are not using Milestone Corporate, then Priority Level must match with the priority level defined in the **PluginMilestone.dll.config** file.