AI Alarm Verification

CBS-AAV-VGD | CBS-AAV-PER

en   User manual

Table of contents

1 Prerequisites

The following prerequisites are mandatory in order to configure Bosch AI Alarm Verification plugin for Milestone XProtect®:

– Have an existing installation of a Milestone XProtect® system, including the following components:
    – XProtect® Management Server
    – XProtect® API Gateway
    – XProtect® Event Server
    – XProtect® Log Server
    – XProtect® Management Client
    – XProtect® Recording Server
    – XProtect® Smart Client
– Have the installer for Bosch AI Alarm Verification plugin for Milestone XProtect® available
– Have an account in Remote Portal, with the correct company selected as the default company
– Have an installation of Configuration Manager, minimum required version 7.70

2   Disclaimer

To ensure the reliability of the AI Alarm Verification functionality, it should be tested and documented under realistic conditions. This includes accounting for the expected load on the video management system, the lighting conditions, and the types of individuals and alarm scenarios likely to occur in the monitored environment. Proper evaluation in these areas is crucial, as issues at any stage of the configuration process can impact the effectiveness of the verification system.

3   Adding cameras to the Milestone XProtect® system

Before configuring your camera, you must add it to the Milestone XProtect® system. To add a camera, do the following steps:

1. Open the **Management Client**
2. Click on the **Recording Servers** tab
3. Right-click on the required recording server
4. Click **Add Hardware**. A configuration wizard is displayed
5. In the wizard, select the **Manual** option to proceed with adding a camera
6. Enter the **Username** and **Password** previously used in the Configuration Manager
7. If you have not set a password for the camera, select the **(Factory default)** option
8. Select which **drivers** to use when scanning for hardware. Select all that apply

> **Notice!**
> The more drivers you select, the slower the scanning will be.

9. Enter the **IP address** of the camera
10. Select the **Use HTTPS** checkbox
11. Click **Next**
‣ The hardware is now added to the system

If required, you have the option to enable the **Metada port 1** checkbox. Add the camera and, if applicable, the metadata to a group.

> **Notice!**
> The system must have at least 1 default group.

4 Installing Bosch AI Alarm Verification plugin and Bosch AV Gateway via the Installer

> **(i)** **Notice!**
> Make sure you have downloaded the Bosch AI Alarm Verification plugin before following the steps below.

1. Start the AI Alarm Verification plugin installation wizard
2. Click through the installation wizard
3. When required, choose to install the **Bosch AV-Config Plugin**, and the **BoschAVConfigPlugin Client**
4. Complete the installation

5   Registering in Remote Portal

Notice!
Make sure that a default company is selected in Remote Portal. Otherwise, the device registration will not work.

Notice!
Make sure that a region is set in Remote Portal.

Notice!
Make sure that a link to the data center location is set in Remote Portal as a linked application.

To register your service in the Remote Portal, do the following steps:
1.   Open the XProtect® Management Client
2.   Click on **Bosch AI Services**
3.   Log in to your account in the Remote Portal. If you do not have an account, create a new account
4.   Click **Login with Single Sign-On**
5.   In the next step register the XProtect® instance
6.   The registration process may prompt you to log in to the Remote Portal again. If required, log in once more to conclude the registration process

6 Registering XProtect® instance and license in Remote Portal

A dialog box is automatically displayed when you log in to the Remote Portal for the first time. The dialog box will prompt you to connect a XProtect® system to your currently selected default company in the Remote Portal.

1. Click **Next** to proceed with the registration
2. When prompted, you must confirm you have read and accepted the terms and conditions of the service
3. After registering, click on **License Management**
4. In the bottom-right corner of the page, click the blue options icon
5. Enter your license key
6. Click **Save**
7. Click **Ok**
8. Go back to the **System** tab
9. Click on the XProtect® instance
10. Click on **Activate Service** for AI Alarm Verification
11. Select **Europe** as a link from your account
12. When prompted, you must confirm you have read and accepted the terms and conditions of the service

▸ Your license is now assigned to a camera

7   Adding gun license to the camera and setting VCA tasks

To add the gun license to the camera, do the following steps:

1. Open the Bosch Configuration Manager
2. Click on the **Service** tab
3. Enter the activation key
4. On the left side of the page, use the button to save your changes
‣ The license is now available under **Installed licenses**

To set the VCA tasks, do the following steps:

1. Open the Bosch Configuration Manager
2. At the top of the client, click the **VCA** tab
3. In the ribbon bar below the top of the client, click the **Main Operation** tab
4. For **Analysis type**, select **IVA Pro Visual Gun Detection**
5. For **Tracking parameters**, select **Visual Gun Verification (2D)**
6. In the ribbon bar below the top of the client, click the **Tasks** tab
7. Click the **Detect gun in hand** task. If it not yet available, create the task
8. Set an **Alarm extension time [s]** of at least 2.0
9. Save your changes
‣ The VCA task alarm is now available

8 Adding the camera to gun verification in Bosch AI Alarm Verification plugin for Milestone XProtect®

Notice!

Make sure your cameras have an activated license for IVA Pro Visual Gun Detection.

To add your camera to gun verification, do the following steps:

1. Go to the Bosch AI Alarm Verification plugin for Milestone XProtect®
2. Click **Configure** for the AI Alarm Verification: Visual Gun (VMS)
3. Click **Add cameras**
4. Select the cameras to add to the service
5. Click **Next**. A wizard is displayed
6. Adjust the camera settings in the wizard. The wizard provides recommended values. You can accept the recommended values or you can enter your own values
7. Complete the remaining steps through the wizard. If you provided your own values, you may be prompted to confirm you want to overwrite the recommended values
   ▸ The camera is now available in Bosch AI Alarm Verification plugin for Milestone XProtect®

After adding the camera, a rule and an alarm will be set automatically. You can adjust these in the settings of your camera, in the Milestone XProtect® Management Client

9   Raising an alarm and checking the Milestone XProtect® Smart Client

To raise an alarm for your camera, do the following steps:

1. Go to the XProtect® Smart Client
2. Click on the **Main views** tab
3. On the left side of your page, click **Cameras**
4. Select a recording server
5. Select a camera group
6. Select your camera by right-clicking on it
7. Click **Send camera**
8. Click **New floating window**
9. Go to the **Alarm Manager** tab
10. Raise an alarm. You can do this by holding a detectable object in view of the camera
11. On the bottom left of your page, in **Quick Filters**, you will see your alarm in the **On hold** section

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(i)
Notice!
By default, if the service verifies that the alarm is correct, the alarm will be moved to the **New** section. If the service rejects the alarm, the alarm will be moved to the **Closed** section. You can adjust the default behavior.

(i)
Notice!
A fallback alarm can be raised if the Bosch AV Gateway does not work.

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10 Configuration options in Bosch AI Alarm Verification plugin for Milestone XProtect®

10.1 AI filter intensity

You have 3 options for the AI filter intensity in Bosch AI Alarm Verification plugin for Milestone XProtect®. You can select different options for each camera.
The AI filter intensity sets the threshold above which a detection is accepted as a true detection, such as detecting a person, a vehicle, or a gun.
The levels of AI filter intensity set the degree of sensitivity for triggering an alarm. The following options are available:

– **Weak Filter (more alarms)**: this option is the lowest threshold, and the most sensitive. It generates more alarms because it applies fewer criteria for detection. This filter is useful in environments where high sensitivity is required.
– **Balanced Filter (general monitoring needs)**: this option provides a balance between sensitivity and accuracy. It applies criteria for detection without generating a high number of false alarms. This filter is useful for general monitoring needs.
– **Strong Filter (fewer alarms)**: this option holds the highest threshold and is the least sensitive. It generates fewer alarms by applying stricter detection criteria. This filter should only be used in environments with very good lighting conditions and in a multi-camera setup.

10.2 IVA tasks

You must set the IVA tasks for a camera in the Configuration Manager before configuration in the Bosch AI Alarm Verification plugin for Milestone XProtect®. Refer to the Configuration Manager documentation.

10.3 Individual camera settings

Each camera can have different settings for how the alarms are shown in the XProtect® Smart Client. The settings can be changed in Bosch AI Alarm Verification plugin for Milestone XProtect®.

1. Open the Bosch AI Alarm Verification plugin for Milestone XProtect®
2. Select the camera you want to configure
3. Click **Settings**. A wizard is displayed: The wizard provides the following options:
– **Display of detections under AI evaluation**: defines whether the detections should be shown in the operator view if AI evaluation is still running
– **Display of AI verified false alarms**: defines whether AI-classified false alarms should be shown to the operator in the operator view
– **Display Emergency Alert in XProtect® Mobile client**: defines whether AI-verified gun alarms should be handled as an Emergency Alert. To learn more about Emergency Alerts in XProtect®, refer to the Milestone documentation:
 – https://doc.milestonesys.com/latest/en-US/standard_features/sf_mobile/ mobc_emergencyalert_in_xpmobc.htm
 – https://learn.milestonesys.com/courses/441806/#/
4. Click **Save** to store your configuration options

11   Deleting a XProtect® system and license

To delete a XProtect® system from the Remote Portal, do the following steps:
1.   Go to the Remote Portal, through the Bosch AI Alarm Verification plugin for Milestone XProtect®
2.   Click the **Systems** tab
3.   Find the system you want to delete and click on the three dots. A wizard is displayed
4.   In the wizard, click **Yes**
▸   The system is now deleted

To delete a XProtect® license from the Remote Portal, do the following steps:
1.   Go to the Remote Portal, through the Bosch AI Alarm Verification plugin for Milestone XProtect®
2.   Click the **Service Licensing** tab
3.   Find the license you want to remove and click on the three dots. A wizard is displayed
4.   In the wizard, click **Yes**
▸   The license is now removed from the account

12   Removing a camera

To remove a camera from the Bosch AI Alarm Verification plugin for Milestone XProtect® , do the following steps:

1.   Go to Bosch AI Alarm Verification plugin for Milestone XProtect®
2.   On the right side of your page, click on the bin symbol of the camera you want to remove. A wizard is displayed
3.   In the wizard, click **Remove**
▸   The camera is now removed from the Bosch AI Alarm Verification plugin for Milestone XProtect®

13 Use latest software

Before using the software application for the first time, make sure that you are running the most current software release. For consistent functionality, compatibility, performance, and security, regularly update the software throughout the operational life of the software application. Follow the instructions in the product documentation regarding software installation and updates.

The following links provide more information:

– General information: https://www.boschsecurity.com/xc/en/support/product-security/
– Security advisories, that is a list of identified vulnerabilities and proposed solutions: https://www.boschsecurity.com/xc/en/support/product-security/security-advisories.html

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