

BTXTM

"Bridge to XProtect"

for

Milestone XProtect

Integration with

Third-party Systems

User Guide

"Enable your video surveillance operator to monitor and control your security system!"

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Summary

This document provides a basic overview as well as installation and operating instructions for the BTX[™] software package.

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1. System Overview

BTX[™] (Bridge to Milestone XProtect) is a communication bridge / middleware that transforms events and alarms from third-party systems into a variety of actions in Milestone XProtect.

BTX works by receiving real-time event and alarm data streams from third-party systems such as video analytics, access control, sensors, security and building automation equipment, SIP phone systems, and software applications. It receives event data in a variety of protocols and converts this data into a variety of actions in XProtect.

Incoming data is received, transposed, and analyzed. Then, based on user-defined settings, filters, and schedules, BTX transforms this data into XProtect to ...

- Generate Alarms with Video Bookmarks.
- Generate Events with Video Bookmarks.
- Debounce, i.e. filter or ignore, repetitive or over-active alarms.
- Schedule alarm time-of-day intervals.
- Tag Searchable Bookmarks.
- Trigger User-defined Events. (for Text and Email Notifications, Relays and Digital Outputs, and other functions)
- Trigger Smart Client Matrix Views.
- Trigger PTZ Commands. (for any camera, even for those from which a given event did not originate)
- Relay analytics snapshots and other relevant metadata into the XProtect Smart Client.
- Rename third-party alarms to convey site-specific, situational specific details to the Smart Client operator.

All of this functionality is accomplished without the use of XProtect plug-ins, and without requiring a technician to define an elaborate set of XProtect generic events, rules, and alarm definitions in the XProtect Management Client.

With BTX, it is possible integrate dozens, or hundreds, of third-party devices with XProtect in just a few minutes.

The simplicity and utility of BTX improves *real-time* situational awareness by making third-party events and alarms *pop* in Milestone XProtect, while also capturing and reporting event metadata data to better inform security operators.

BTX integrates with over 30+ sensors, devices, and systems. One instance of BTX can simultaneously receive and manage alarms from any number of systems of devices. There is no limit to the number of devices one can integrate with BTX, and no additional licensing is required to integrate with any additional third-party sub-system.

1.1. System Requirements

The BTX system requirements are conventional and lightweight.

- Windows 10, 11. *Windows 7 version available for older versions of XProtect.
- Microsoft .net framework 4.8.0 or higher.
- BTX is lightweight software low disk usage / low RAM consumption / minimal CPU usage.
 - 350MB disk space.
 - 100MB RAM.
- Typically install on the same server as the Milestone XProtect Management Service.
- Run as desktop application during configuration phase, then switch to Windows service version for production.
- Supplemental Upgrade Protection (SUP) available to keep BTX current with the latest version releases for XProtect.



1.2. BTX Features

BTX provides the following features to transform third-party alarms into* action* in Milestone XProtect.

- **RECEIVE** third-party data in a variety of formats, including TCP, HTTP Post, UDP, Serial, SNMP Traps, and other protocols.
 - FILTER third-party alarms by alarm keyword and/or device of origin
 - ASSOCIATE XProtect cameras / devices to specific third-party devices.
 - **GENERATE** XProtect events and / or alarm records.
 - DEBOUNCE frequent or over-active third-party alarm messages, reducing false-positives and operator alarm fatigue.
- SEARCH third-party events and alarms as XProtect Bookmarks.
- SCHEDULE alarms to be active at different times of the day.
- TRIGGER XProtect user-defined events (for text & email notifications, relays and digital outputs, Smart Wall commands, etc.)
- CALL UP Smart Client matrix views.
- ACTIVATE PTZ Commands (for any camera, even for those from which a given event did not originate).
- RENAME XProtect event / alarm messages to by easily understood by the Smart Client operator.
- DISPLAY third-party video analytics snapshots directly in the XProtect Smart Client.
- STORE relevant third-party data directly in the XProtect alarm record database
- MONITOR device /sensor status with App-Tech's Situational Awareness plug-in.
- INTEGRATE with other systems, such as the mass notification and incident management systems

2. Data Flow

2.1. Overview





3. Installation

3.1. BTX Server

The BTX Server runs on any server which has network connectivity with XProtect and the third-party system(s) of interest.

It is typically installed on the same server as the main XProtect services.

3.2. Core Application

Run the installer for the BTX core application. Choose the installation folder.

				\sim
A22-TECHS App-Tech	hs BTX installation locat	tion.		
Applying Technology Solutions	he folder in whi <mark>c</mark> h to install A	App-Techs BT	х.	
Setup will install App-Techs BTX in the Browse and select another folder. Clid	following folder. To install in Install to start the installati	a different fo on.	lder, <mark>c</mark> lick	
Destination Folder		Brov	vse	1
Destination Folder C:\App=Techs\BTX Space required: 157.7 MB		Brow	vse	
Destination Folder C:\App-Techs\BTX Space required: 157.7 MB Space available: 182.9 GB		Brov	vse]
Destination Folder C:\App-Techs\BTX Space required: 157.7 MB Space available: 182.9 GB Iullsoft Install System v3.10		Brov	vse	
Destination Folder C:\App-Techs\BTX Space required: 157.7 MB Space available: 182.9 GB Jullsoft Install System v3.10		Brov	vse	



3.3. Windows Service Installation

Navigate to the location of the directory where BTX was installed. Locate the file "BTXServiceInstaller.bat" in the BTX/BTX folder

Ex. C:\App-Techs\BTX\BTX\BTXServiceInstaller.bat

Open the \BTXServiceInstaller.bat file in notepad. Edit the file path to indicate the installation location:



Save the file while making sure it remains a *.bat file.

RUN AS ADMIN the BTXServiceInstaller.bat batch file.



The BTX Service version is now successfully installed. If errors occur in the service installation process, contact App-Techs support.



4. BTX Initial Setup

4.1. Run BTX.exe as a desktop application

To launch BTX, from the Windows "Start" menu, select ...

- All Programs
- App-Techs Directory
 - BTX (Bridge to XProtect)

Alternatively, the default file path for BTX.exe to is: C:\app-techs\BTX\core\BTX.exe

4.2. Activate your BTX License

Upon launch, a license key is required. Enter your license key.

If you do not have a license key, use the "Copy" button to save your MAC address. Contact App-Techs at support@app-techs.com to request a license key. Be sure to include your MAC address with your license request.

<		-			1 BTX
			Сору	: 4CEDFB93A6AA	Your MAC address:
				ense	Activate Licen
				ense	Activate Licen

4.3. Choose your third-party integration.

Select any number of integrations to pre-load alarm settings into BTX. NOTE: If the preferred integration is not on this list, proceed without checking any boxes; BTX includes the ability to create custom integration configurations in subsequent sections.

	Select your in	ntegrations:	
Active Guardian Gu	Inshot Detection	Inovonics Wireless Sen	isors
AMAG Access Cont	trol	Metrasens Metal Detec	tors
Axis Device Events		Oosto Face Detection A	alytics
Axis Plate Verifier L	PR	ParkPOW Parking Mana	agement
Bosch B-Series Pan	els (Mode2)	Plate Recognizer LPR	
Code Blue Emerger	ncy Phones	Teledyne FLIR Intrusion	Analytics
EAGL Gunshot Dete	ection	Teledyne FLIR TRK Enco	ders
Halo Smart Sensor	5	Triton Sensors	
🗌 Hanwha Wisenet R	oadAI LPR	Vaidio Video Analytics	
Vilestone Configuration			
Milestone Server IP	127.0.0.1	HTTPS	
Milestone Username	admin	Basic Authen	tication
Milestone Password	•••••		



4.4. Enter Milestone XProtect server information.

Enter the correct network and authentication settings to establish a connection with the XProtect Management Server.

The XProtect username used to authenticate must have sufficient privileges in the XProtect Management Client "Roles" menu to view all cameras and to write alarm records. It is strongly recommended to provide this user with admin-level privileges. Either windows users or basic users may be used.

After configuring the connection settings, click the "OK".

Milestone Server IP	127.0.0.1	HTTPS
Vilestone Username	admin	Basic Authentication
Vilestone Password	••••	

4.4.1. XProtect Authentication Success - "Connected"

If BTX can successfully authenticate with Milestone XProtect, a green "Connected" will appear in the lower-left.

Note the log view provides information on connectivity status.





4.4.2. XProtect Authentication Success - "Disconnected"

The BTX "Log View" provides information on BTX connectivity status.

If authentication to XProtect was unsuccessful, check your username / password. Verify the user profile has administrative privileges in the XProtect Management Client. Check your network settings to determine if BTX can access the XProtect Management Server over the LAN.



Re-try authenticating with XProtect by going to the BTX "Settings" tab. Re-enter your server address and credentials. Click "Save."

Bridge to XProtect	1 bout		-		1
Inbound Configuration					
TCP listening port	7227	Start Listening Listen on Startup 			
Milestone Configuration	ı —			1	
Milestone IP	10.1.1.100	HTTPS			
Milestone Username	admin	Milestone Password	•	2	
Basic Authentication	1				
General Settings				<u> </u>	
Maximum logging days	10				
			3		
	4			Save	
Ailestone: Disconnected	Reconnect		Licensed	Until: 3/2	7/2

Then press "Reconnect"

The "Log View" will verify if the new server address and / or credentials successfully authenticated with XProtect.



Bridge to X	Protect	-		2
og View De	vices Settings About			
14:28:13:	Fetching User Defined Events			
14:28:13:	Unable to fetch User Defined Events.			
14:28:13:	Fetching Matrices			
14:28:13:	Unable to fetch Matrices.			
15:05:16:				
15:05:16:	Authenticating SDK.			
15:05:31:	Unable to authenticate SDK.			
15:05:31:				
15:05:31:	Fetching Cameras			
15:05:31:	Fetching User Defined Events			
15:05:31:	Unable to fetch User Defined Events.			
15:05:31:	Fetching Matrices			
15:05:31:	Unable to fetch Matrices.			
15:05:46:				
15:05:46:	Authenticating SDK.			
15:05:47:	Connected to the Core ation API.			
15:05:47:	SDK Authenticated.			
15:05:47:				
15:05:47:	Fetching Cameras			
15:05:48:	Fetching User Defined Events			
15:05:48:	Fetching Matrices			
15:05:48:	Listening on port 7227			
Clear Log	Open Log F 'e			SEN
ilestone:	Connected	Licensed U	ntil: 3/2	7/2



5. BTX Settings

5.1. Inbound Configuration

The BTX core application receives third-party data in the form of TCP messages. Default listening port is 7227. Optionally change the port number if that port is being used by another application.

Check firewall settings to verify the server can accept inbound TCP messages on the listening port (default=7227). It is common for users to create a firewall "inbound rule" to allow traffic sent from third-party devices / systems.

To start actively listening for events from third-party systems, click the "Start Listening" button.

It is strongly recommended to set BTX to "Listen on Startup", as indicated by the checkbox below. When starting / re-starting BTX in the future, BTX will automatically begin listening for incoming alarms, without the need to manually activate BTX.

∧ BTX			-	×
Log View Devices Settings	About			
Inbound Configuration				
TCP listening port	7227	Start Listening		
		 Listen on Startup 		

5.2. Outbound Configuration

In the event the XProtect network address or user / pass has changed, update your server settings and click the "Save" button/

▲ BTX			-	×
Log View Devices	About			
Inbound Configuration				_
TCP listening port	7227	Start Listening		
		Listen on Startup		
Milestone Configuration	ı ———			
Milestone IP	10.11.11.190	HTTPS		
Milestone Username	admin	Milestone Password		
Basic Authentication	i .	Refresh XProtect Data		

5.3. Refresh XProtect Data

If changes are made to the XProtect Management Server configuration, such the addition of XProtect cameras, user-defined events, ptz presets, or matrix profiles, the "Refresh XProtect Data" will retrieve these new settings from the server.

NOTE: BTX automatically updates its server information when restarted. The "Refresh XProtect Data" is only required if changes have been made while BTX is open as a desktop application.

Milestone Configuration			
Milestone IP	10.1.1.1	HTTPS	
Milestone Username	admin	Milestone Password	•••••
Basic Authentication	(Refresh XProtect Data	>



6. Basic Alarm Setup – Associate third-party alarms with XProtect Cameras

6.1. Alarm Data Overview

BTX uses three key pieces of information to associate inbound third-party event data to XProtect cameras and devices:

- (1) the **date** / **time** of the event; i.e, WHEN the event occurred.
- (2) the alarm keyword; i.e, WHAT type of event occurred.
- (3) the **third-party device name**. i.e, WHERE the event occurred.

By convention, BTX receives event data via TCP in the following format:

<DATE><TIME><Event Type><Third-party device name>

Parameter #1: <DATE> - Reported date of event.
Parameter #2: <TIME> - Reported time of event.
Parameter #3: <Event Type> - Reported event type.
Parameter #4: <Third-party device name> - Reported device name.
Parameter #5+: <other metadata> - This data may be useful, but is not required to map events in XProtect.

Parameters #1-4 contain all the information needed to map incoming third-party alarms with XProtect. Incoming alarm messages may contain additional parameters, but these function as optional event metadata.

The "Log View" tab displays incoming third-party event data in real-time. The log windows displays the contents of the incoming TCP message as shown below:

9:58:17:	
9:58:17:	Connected to TCP Test
9:58:17:	Received: <date><time><event type=""><device name=""></device></event></time></date>
9:58:17:	Keyword: Event Type Device Name: Device Name
9:58:17:	Invalid Message

When BTX receives an incoming third-party event, the "Log View" tab will assist the user by clearly indicating the **alarm keyword** and **third-party device name** as shown below.

▲ Bridge to XProtect	-	\times
Log View Device Map Settings About		
16:54:37: 16:54:37: Connected to TCP Test 16:54:37: Received: <date> <time> <dial> <device 101=""> 16:54:37: Keyword: DIAL Device Name: Device 101</device></dial></time></date>		



The core function of BTX is to allow the user to define if an **alarm keyword** *AND* **third-party device name** match qualifies as an event-of-interest that merits forwarding to XProtect.

BTX does not automatically forward all alarms to Milestone XProtect. This is by design. Many third-party systems release many different types of event messages, only some that may be of security interest.

By requiring an **alarm keyword** match, BTX filters incoming messages based on type, identifying events of security interest while logging and ignoring banal or non-security-related events.

Once BTX establishes an **alarm keyword** match, BTX will then need to pair (or associate) the reported **third-party device name** with its XProtect camera counterpart.

When there is a positive match of both **alarm keyword** and the **third-party device name**, BTX will execute the user's preferred actions in XProtect, and thus the third-party event is associated with video in Milestone XProtect.

6.2. Define Alarm Actions.

To establish an **alarm keyword** match in XProtect, go to the "Device Map" tab, and click the "Define Actions" button in the top-left corner of the tab.



Select an integration group from the drop-down, or create a new group.

Groups are a way of organizing and saving pre-defined **alarm keyword** templates. This allows the user to rapidly apply alarm settings to many third-party devices without the need to manually configure settings for each device individually.

Code Blue	Remove	Create a new Group	Add
AMAG	1		
Axis Device	rs —		
Axis LPR	Active Keywo	rd:	
Bosch Panel	Schedule 🛗 Debou	ncing: Seconds	
Code Blue	ons		
FLIR Intr	Alarm 🗌 Event	Offset in Seconds	
Halo	User Defined Event		`
	Matrix	Matrix Prefix	
Hanwha Counting			



6.3. Define Alarm Keyword Actions.

In the "Define Keyword Actions" section, highlight a pre-configured "Define Keyword Action," or press "ADD" to create a new one.

On the right-hand side, edit or enter the "Keyword:" field. This field is critical; it is where the user defines if an incoming **alarm keyword** qualifies as event-of-interest to send to XProtect.

By default, the "Keyword" field uses CONTAINS logic to determine an **alarm keyword** match, i.e., if the incoming event message contains "DIAL" [case-sensitive!], then execute the subsequent actions in XProtect.

Check the "Active" checkbox to tell BTX to begin actively listening for this alarm keyword type.

Define Keyword Actions			- 0				
Code Blue	✓ Remove Cr	reate a new Group	D Add				
Define Keyword Actions	Filters						
Add Remove	Active Keyword	d: DIAL					
HANGUP	🗌 Schedule 🧰 Debounce	. 0					
	Actions						
	Alarm Event	0					
	User-Defined Event	~					
	Matrix	BTX_Alarm					
	Bookmark	0					
	PTZ Preset	Camera	✔ Preset ✔				
	Data						
	Replacement Message						
	Appended Message 🕖						
	Associated Cameras		~				
	System Time		Map Guid				
	Cancel		Save				



6.3.1. Alarm Keyword Specificity

In the case of many integrations, a partial alarm keyword match is all that is required to integrate a third-party event with XProtect.

However, in some cases, defining a more specific alarm keyword can provide more granular control over what actions are taken in XProtect.

In the example below, BTX received an incoming third-party event with the alarm keyword, "PlateRecLPR not in list."

• The character string "PlateRecLPR" is a generic identifier; "_not_in_list" indicates a specific type of event. In this case, the alarm keyword event indicates that a license plate did not match with a list and is therefore an unknown plate.

∧ Bridge to XProtect

-	\times

Log View Device Map Settings About

11:07:19:	
11:07:19:	Connected to TCP Test
11:07:19:	Received: <date><time><platereclpr_not_in_list><camera-1><xp:tag: big<="" td=""></xp:tag:></camera-1></platereclpr_not_in_list></time></date>
Truck> <xp< td=""><td>Location:SJUBI1><xp:categorymame:not_in_list></xp:categorymame:not_in_list></td></xp<>	Location:SJUBI1> <xp:categorymame:not_in_list></xp:categorymame:not_in_list>
11:07:19:	Keyword: PlateRecLPR_not_in_list Device Name: camera-1
11:07:19:	

If the aim is to send ALL license plate detections to XProtect, i.e. all alarms keywords that CONTAIN "PlateRecLPR", then defining a partial **alarm keyword** match as "PlateRecLPR" will suffice.

Define Keyword Actions			-		>			
PlateRec	✓ Remove Creation	eate a new Group		Add				
efine Keyword Actions	Filters							
Add Remove	Active Keyword	PlateRecLPR						
PlateRecLPR_not_in_list	Schedule 🧰 Debounce:	0						
PlateRecLPR_Unauthoriz	Actions							
	🗹 Alarm 🗌 Event	0						
	User-Defined Event				~			
	🗹 Matrix	BTX_Alarm						
	Bookmark	0						
	PTZ Preset	Camera 🗸	Preset		~			
	Data							
	Replacement Message							
	Appended Message 🕖							
	Associated Cameras	Associated Cameras						
	System Time		M	lap Gui	d			
	Cancel			Sav	e			



However, if the user prefers certain actions in XProtect based on plate list type, then the BTX user must define a more specific keyword match.

Click the ADD button in the "Define Keyword Actions" section to create a more specific keyword. De-activate or remove the generic "PlateRecLPR" Keyword Action.

Ex: When keyword CONTAINS "PlateRecLPR_not_in_list", only generate a XProtect bookmark.

Define Keyword Actions				-		>	
PlateRec	✓ Remove	Create a	new Group		Add		
Define Keyword Actions	Filters						
Add Remove	🗹 Active Key	word:	PlateRecLPR_not	_in_list			
PlateRecLPR PlateRecLPR_not_in_list	Schedule 🛗 Deb	ouncing:	Seconds				
PlateRecLPR_Unauthoriz	Actions						
	Alarm Event	Off	set in Seconds				
	User Defined Event					~	
	Matrix	Matrix BTX					
	Bookmark	Off	Offset in Seconds				
	PTZ Preset	Can	nera 🗸	Preset		~	
	Data						

Ex: When keyword CONTAINS "PlateRecLPR_Unauthorized", generate a XProtect alarm + bookmark, trigger the User-defined event "BTX_Alarm_Unauthorized", and fire all live Matrix profiles that start with "BTX_Alarm."

PlateRec	✓ Remove	Create a	new Group		Add			
efine Keyword Actions	Filters							
Add Remove	Active K	eyword:	PlateRecLPR_Un	authorized				
PlateRecLPR PlateRecLPR not_in_list	🗌 Schedule 🧰 D	ebouncing:	Seconds					
PlateRecLPR_Unauthori	z Actions							
	Alarm Event	Alarm Event Of		Offset in Seconds				
	User Defined Even	BT)	BTX_LPR_Unauthorized Vehicle					
	Matrix	BT	X_Alarm					
	Bookmark	Of	fset in Seconds					
	PTZ Preset	Car	mera 🗸	Preset				



6.4. Choose your preferred actions in Milestone XProtect:

Select the filters and actions to occur when an **alarm keyword** match occurs.

Filters	
Active Keyword:	DIAL
🗌 Schedule 🧰 Debounce:	Seconds
Actions	
🗹 Alarm 🗌 Event	Offset in Seconds
User-Defined Event	~
Matrix	BTX_Alarm
Bookmark	Offset in Seconds
PTZ Preset	Camera 🖌 Preset 🖌
Data	
Replacement Message	
Appended Message 😗	
Associated Cameras	~
System Time	🗌 Map Guid
Cancel	Save

Below is a description of each function can trigger when a keyword match occurs.

Filters:

Keyword [Text field]: A character string match is required to qualify an inbound third-party event as an event-of-interest. This field uses CONTAINS logic. If the alarm keyword being sent by the third-party device CONTAINS a character string match in this field, BTX will execute subsequent actions in XProtect as specified by the user.

Active [Checkbox]: Enables / disables the Keyword Action. If disabled, BTX will not execute the specified actions in Milestone XProtect.

Schedule [Menu]: Specify a time of day/week by which BTX will execute actions in XProtect. This is useful if certain alarms are only of interest at certain times, such as during the evening / night, or during non-work hours.

Debounce [Numeric Text field]: Default = 0 seconds. Ignore repeat alarms over a set time period (in seconds). This is useful if a third-party device reports over-active or repetitive alarms. By ignoring repeat alarms, the user can avoid spamming Milestone with redundant alarm records that are of no security value.

Actions:

Alarm [Checkbox]: Generate a XProtect alarm record.

Event [Checkbox]: Generate a XProtect event record.



Offset [Numeric Text field]: Default = 0 seconds. Option to modify the alarm / event record timestamp by -x or +x seconds to correct a misalignment of third-party devices' reported event time with the actual event time. (Applies to both Alarm and Events)

User-defined Event [Checkbox + dropdown]: Option to trigger a XProtect user-defined event when a keyword match occurs.

Matrix [Checkbox + dropdown]: Option to trigger all XProtect Matrix Profiles that <u>START WITH</u> the text string entered in this field.

Bookmark [Checkbox + Numeric Text Field]: Option to write a searchable bookmark, viewable in the XProtect Smart Client "Search" tab. Includes the option to alter the bookmark time stamp by -xor +x seconds to correct for any misalignment of third-party devices' reported event time with the actual event time.



PTZ Preset [Checkbox + dropdown]: Option to trigger a PTZ preset on any PTZ camera when a keyword match occurs.

Data:

Replacement Message [Text field]: When generating a XProtect event / alarm record, BTX replace the alarm keyword reported by the third-party device with the contents of this field.

Appended Message [Text field]: When generating a XProtect event / alarm record, add the contents of this field to the tail of the alarm message.

Associated Cameras [Dropdown]: Optionally choose to associate additional XProtect cameras with a XProtect event or alarm record. This provides additional situational awareness when the primary associated camera lacks sufficient FOV coverage to view with event.



System Time [Checkbox]: Overwrite the event time reported by the device with the XProtect system time. This can be used to compensate for device time drift and other factors.

Map GUID [Checkbox]:: For Vaidio Video Analytics integration only: Automatically use the reported XProtect GUID to associate the device with its XProtect counterpart.

Click "Save" to save your settings for each defined keyword actions.



6.5. Associate Analytic Devices with Milestone Camera(s)

Go to the "Device Map" tab, and click the "Associate Actions" button:

∧ Bridge to XProtec	t						
Log View Device M	ap Settings About						
Define Actio	ns Associate I	Devices	Dele	te Row			
Select an integration	group:						
▲ Associate Devices					_		×
Select a Group	•						
Axis Device			Integration Device	XProtect Camera	Group		
Axis LPR	ad NE-4 ^						
Bosch Panel	d N 3						
Code Blue	Quad E-2						
FLIR Intr	oster - Parking View SE-2						
Halo	oster PTZ	+ Remove					
Hanwha Counting	oster W-3 N 4						
Metrasens							
Ext - Driveway Vicon Quad E-2	~~/						
Ext - Driveway Vicon Quad N-1							
Ext - Driveway Vicon Quad S-3							
Ext - Driveway Willow Entrance	PanQuad SE 2						
Ext - Driveway WillowLn W 3							
Ext - Dumpster BoschQuad N-1	~						
Cancel						ОК	

Choose the XProtect cameras from the dropdown you would like to associate with third-party device:.



Click "Add".

▲ Associate Devices



In the "Analytics Device" Column, enter the third-party device name next to its XProtect counterpart.

Associate Devices		Associate	the 3rd-party d	evice name	- □ >
Code Blue	~	with its XI	Protect camera l	by typing HERE	
Search XProtect Ca	ameras			Integration Devic	XProtect Camera Group
AXIS D2110-VE Security	y Radar (10.16.1.241)	- Camera 1	^	Type 3rd-Party Device Name	EXT - Alley Pole Parkin, Code Blu
BWC-01 (B8A44FB0910	D) - Camera 1			CodeBlue102	Ext - Alley Pole to Pitn Code Blu
Ext - Alley Pole Condo	Grass PanQuad NE-4				
Ext - Alley Pole Parking	Front Entrance PanQ	uad SE 2		CodeBlue103	Ext - Bobs Entrance - I Code Blu
Ext - Alley Pole Parking	Lot PanQuad N 3			Codeblue104	Ext - Condo Field Pole Code Blu
Ext - Alley Pole to Pitne	ey PanQuad E 1				
Ext - Bobs Entrance - Pa	arking BoschQuad E-	2	Add →		
Ext - Condo Field Pole	behind Dumpster - Pa	arking View SE-2	+ Remove		
Ext - Condo Field Pole	behind Dumpster E-1		Remove		
Ext - Condo Field Pole	behind Dumpster PT2	2			
Ext - Condo Field Pole	behind Dumpster W-	3			
Ext - Driveway Front Do	oor PanQuad N 4				
Ext - Driveway PanQua	d E 1				
Ext - Driveway Vicon Q	uad Below-4				
Ext - Driveway Vicon Q	uad E-2				
Ext - Driveway Vicon Q	uad N-1				
Ext - Driveway Vicon Q	uad S-3				
Ext - Driveway Willow E	Entrance PanQuad SE	2			
			v		
Cancel					ок

Click "OK" to save settings.



6.6. Configure Device Specific Actions in XProtect.

Once third-party devices have been associated with XProtect cameras, they are added as rows to the "Device Map" grid.

The "Device Map" displays to the user what actions will be taken in XProtect when an alarm keyword match occurs on each specific thirdparty device.

To edit settings at the device-level, highlight a row and click on a specific Keyword Action.

A Bridge	to XProtect Device Map	ings Abo	ut						_		×
Defi	ne Actions	Ass	ociate Devices	Delete Row	Search	Code Blue	~				
Found	Group	Active	Integration Device	XProtect Camera		GUID			Keyword Actions		
▶ ✓	Code Blue	✓	Ex. CodeBlue101	Ext - Alley Pole to Pitney	PanQuad E 1	f0bb6343-887c-	43c7-8871	-d8d7f52	Add	Remove	
✓	Code Blue	✓	Ex. CodeBlue102	Ext - Bobs Entrance - Par	rking BoschQuad E-2	0e4e733f-ed5f-4	4e4d-8d5b	-bbdca4			
✓	Code Blue	✓	Ex. CodeBlue103	Ext - Condo Field Pole be	ehind Dumpster - Parking View SE-2	584a31d9-c051-	4763-9c16	5-657776			
✓	Code Blue	✓	Ex. CodeBlue104	Ext - Alley Pole Parking L	ot PanQuad N 3	70ba2cef-01d1-	4b30-8693	-90c690!			

Edit your settings. By editing the settings, the user will only change the keyword settings for this device. These settings will <u>NOT</u> apply to other devices on the table.

∧ Bri	dge to XProtect										-	o x
Log Vi	ew Device Map Set	ttings Ab	out									
	Define Actions	As	sociate Devices	Delete Row	Search	Code Blue	~					
Fou	nd Group	Active	Integration Device	XProtect Camera		GUID		Keyword Actions				
•	Code Blue	✓	Ex. CodeBlue101	Ext - Alley Pole to Pitney	PanQuad E 1	f0bb6343-887c-43	c7-8871-d8d7f5	Add Remove	Filters			
6	Code Blue	V	Ex. CodeBlue102	Ext - Bobs Entrance - Par	king BoschQuad E-2	0e4e733f-ed5f-4e4	ld-8d5b-bbdca4		Active Keyword:	DIAL		
	Code Blue	V	Ex. CodeBlue103	Ext - Condo Field Pole be	hind Dumpster - Parking View SE-2	584a31d9-c051-47	'63-9c16-65777€	HANGUP	🗌 Schedule 🛗 De	bouncing: Se	conds	
	Code Blue	V	Ex. CodeBlue104	Ext - Alley Pole Parking L	ot PanQuad N 3	70ba2cef-01d1-4b	30-8693-90c690		Actions			
									Alarm Devent	Offset in Second	iS	
									User Defined Event			~
									Matrix	BTX_Alarm		
									Bookmark	Offset in Second	ls	
									PTZ Preset	Camera 🗸	Preset	~
									Data			
									Replacement Message			
									Appended Message 🚯			
									Associate Cameras	System Time	Map 4	Guid
											_	_
									Cancel		(Sa	ave
											_	
							~					
<							>	-				

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NOTE: Regarding **device-specific** actions, BTX allows the user very granular control over what actions in XProtect will be taken on each specific third-party device.

There are many instances where the user may want different actions to occur in XProtect based on certain events occurring on a particular third-party device.

A good example of this is with PTZ presets. If integrating 40 motion sensor devices, each motion sensor will likely require its own PTZ command, based on the proximity of the nearest PTZ camera.



7. Testing and Evaluating Integration Configuration

7.1. Send SAMPLE third-party events to test integration configuration.

Go to the "Log View" tab.

Use the "TCP Test" field to mimic a sample third-party event message.

Third-party events previously received by BTX can be copied from the "Log View" tab or the log file and resent to BTX as test events by using the "TCP Test" feature.

× ∧ Bridge to XProtect Log View Device Map Settings About 14:05:09: 14:05:09: Connected to TCP Test Copy (CTRL-C) a previously received Received: <DATE> <TIME> <DIAL> <CodeBlue 101> 14:05:09: third-party event message. 14:05:09: Keyword: DIAL | Device Name: CodeBlue 101 14:05:09: 14:05:09: Alarm DIAL sent to Milestone. 14:05:10: Created Bookmark DIAL. Paste (CTRL-V) to mimic the event without needing to physically trigger an event on the device. Clear Log **Open Log File** SEND <DATE> <TIME> <DIAL> <CodeBlue 101> Milestone: Connected Licensed Until: 02/06/2030



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7.2. Evaluating the BTX Log View and Log Files

BTX logs all received third-party events and subsequent actions taken in XProtect.

While open as a Desktop Application, the user can view the most recently received third-party events in the "Log View" tab. Today's log file can also be opened by clicking "Open Log File" button.

To access previous log files, use Windows explorer and navigate to: C:\App-Techs\BTX\logs [*default file path*]

Below is an example of the log reporting a successful alarm sent to XProtect and the actions taken in XProtect.

∧ Bridge to XProtect

Log View Device Map Settings About



Below is an example of a third-party event in which BTX did not detect an alarm keyword match. A Bridge to XProtect

 Log View
 Device Map
 Settings
 About

 12:12:22:
 12:12:22:
 Connected to TCP Test
 12:12:22:
 Received: <01/03/2025 > <07:37:26> <LPR_not_in_list > <EmergencyEntrance > <XP:Tag:US-PA SUV NONE Mercedes-Benz GL-Class</td>

 > <XP:Location:MNC8305> <XP:CategoryName:not_in_list >
 12:12:22:
 Keyword: LPR not in list | Device Name: EmergencyEntrance

 12:12:22:
 Keyword LPR_not_in_list not found in device EmergencyEntrance's profiles
 12:12:22:

Below is an example of a third-party event in which BTX did not detect a third-party device name match. A Bridge to XProtect

Log View Device Map Settings About

 12:15:36:

 12:15:36:

 12:15:36:

 Connected to TCP Test

 12:15:36:

 Received: <01/03/2025> <07:37:26> <Road_not_in_list> <DeviceTEST1> <XP:Tag:US-PA SUV NONE Mercedes-Benz GL-Class</td>

 ><XP:Location:MNC8305> <XP:CategoryName:not_in_list>

 12:15:36:
 Keyword: Road_not_in_list | Device Name: DeviceTEST1



7.3. Review Alarm Results in the XProtect Smart Client.

With successful configuration, a BTX user can review the actions taken in the XProtect Smart Client.

For alarms, go to the Smart Client alarm manager tab to confirm events and alarms are successfully being sent by BTX.





7.4. Review Searchable Bookmarks

To review search bookmarks in the XProtect, be sure the Bookmark option was selected in BTX for a given alarm keyword / third-party device.

1.	ine Actions	Ass	ociate Devices	Delete Row	Search	Code Blue	•	
Found	Group	Active	Integration Device	XProtect Ca	imera		GUID	yword Actions
	Code Blue	✓	89	Office - PD	Axis Demo Camera		2cc1d115-99d0-4099	Add Remove Filters
-	Code Blue	✓	Ex. CodeBlue101	Ext - Alley F	Pole to Pitney PanQuad E	1	f0bb6343-887c-43c7-	DIAL Active Keyword: DIAL
~	Code Blue	✓	Ex. CodeBlue102	Ext - Bobs B	Entrance - Parking BoschQ	tuad E-2	0e4e733f-ed5f-4e4d-	Schedule Debouncing: Second
-	Code Blue	✓	Ex. CodeBlue103	Ext - Condo	Field Pole behind Dump	ster - Parking View SE-2	584a31d9-c051-4763	Actions
•	Code Blue	~	Ex. CodeBlue104	Ext - Alley F	Pole Parking Lot PanQuad	N 3	70ba2cef-01d1-4b30-	Alarm Event Offset in Seconds
								User Defined Event BTX_Code Blue Device
								Wiatrix BTX_Alarm
								Bookmark Offset in Seconds
								DTZ Procet Camera 🗸
								Data
								Replacement Message
								Appended Message () _{Source}

To search bookmarks, go to:

- 1) XProtect Smart Client "Search" tab,
- 2) Select Cameras,
- 3) Choose "Bookmarks" Option,
- 4) Click "New Search",
- 5) Type search criteria. BTX bookmarks are searchable as character string matches. In XProtect, partial matches are sufficient.





Note: XProtect user permissions may limit access to the Search tab, or prevent viewing of bookmarks on given XProtect cameras and devices. Check your user privileges before evaluating integration results from BTX.





8. Milestone Settings – User-Defined Events, Rules, and Live Matrix Views

8.1. Overview

BTX requires very little configuration in the XProtect Management Client to trigger various security and display actions in XProtect. However, a few features require some minor setup in the Management Client so that BTX can trigger the preferred action.

8.2. Trigger XProtect User-defined events.

User-defined events in XProtect are used to trigger "Rules" which initiate additional security actions third-party devices. Security responses, including email notification, I/O commands, and Smart Wall presets, are controlled via XProtect Rules.

8.2.1. Create User-defined Events in XProtect

1 In the XProtect Management Client, go to the Site Navigation bar on the left hand side of the screen and select *User-defined Events*.

2 From the file menu, select Action->Add User-defined Event....



10K

×

Cancel

Add Liter-defined Event

3

Enter mane for uner-defined events

81%_Sample_UserdafinedEvent

3 Enter name of User-defined Event.

Be sure to click "Save" in XProtect.



8.2.2. Refresh Management Server Configuration in BTX.

If you create new User-defined events in the XProtect Management Client, BTX must be re-refreshed to update its stored information.

To refresh XProtect settings in BTX, go to the "Settings" tab \rightarrow "Refresh XProtect Data

Bridge to XProtect			-		×
og View Device Mac Settings	bout				
Inbound Configuration -					_
TCP listening port	7227	Stop Listening			
		Listen on Startup			
Milestone Configuration					
Milestone IP	10.11.11.190	HTTPS			
Milestone Username	admin	Milestone Parsword			
Basic Authentication		Refresh XProtect Data			
General Settings					_
Maximum logging days	30				
	50				
			S	ave	
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8.3. Trigger XProtect User-defined events in BTX.

In BTX, User-defined events can be associated with given alarm keyword / third-party device as shown below:

	Associate Devices	Delete Row Search Code Blu	ue 🗸
Found Group	Active Integration Device	XProtect Camera	GUID Keyword Actions
Code Blue	89	Office - PD Axis Demo Camera	2cc1d115-99d0-4099 Add Remove Filters
Code Blue	Ex. CodeBlue101	Ext - Alley Pole to Pitney PanQuad E 1	f0bb6343-887c-43c7-
Code Blue	Ex. CodeBlue102	Ext - Bobs Entrance - Parking BoschQuad E-2	0e4e733f-ed5f-4e4d- Schedule Debouncing: Seconds
Code Blue	Ex. CodeBlue103	Ext - Condo Field Pole behind Dumpster - Parking View SE-2	2 584a31d9-c051-4763
Code Blue	Ex. CodeBlue104	Ext - Alley Pole Parking Lot PanQuad N 3	70ba2cef-01d1-4b30-
			Marrix Q. Search Bookmark DTZ Preset Data Replacement Message Appended Message Appended Message



Section 201

8.3.1. Trigger Action in XProtect using XProtect Rules

Trigger Action using XProtect Rules

1 In the XProtect Management Client, go to the Site Navigation bar on the left hand side of the screen and select *Rules*.

2 From the file menu, select Action \rightarrow Add Rule....

3 Follow the steps in the Manage Rule tool to create a rule that associates any specified User-defined Event with a desired action.

2	3	
estone XProtect Management Client 2018 R2	5	
dit View Action Tools Help	Manage Rule	
2 😧 🗢 🛱	manageman	
ngation 🗸 🗸 🖌	Name: New Bule 001	
LEANNOR 1124	Active: Step 1: Type of rule Step 1: Type of rule Step 1: Type of rule C Perform an action on event? C Perform an action in a time interval	é
Time Politice Mino Po	Edit the rule description (click an underlined item) Perform an action on <u>event</u> from <u>devices/recording_server/management_server</u>	



8.4. Trigger XProtect Live Matrix Views

To configure a Matrix Display in XProtect:

1 In the XProtect Management Client, go to the Site Navigation bar on the left-hand side toolbar and select *Matrix*.

- **2** From the file menu, select Action \rightarrow Add Matrix....
- **3** Save Settings in XProtect.



8.4.1. Refresh Management Server Configuration in BTX.

If you create new Matrix Profiles in the XProtect Management Client, BTX must be re-refreshed to update its stored information.

To refresh XProtect settings in BTX, go to the "Settings" tab \rightarrow "Refresh XProtect Data."

▲ Bridge to XProtect			_	×
Log View Device Map Setting	gs bout			
Inbound Configuration				 _
TCP listening port	7227	Stop Listening		
		✓ Listen on Startup		
Milestone Configuration	ı ———			
Milestone IP	10.11.11.190	HTTPS		
Milestone Username	admin	Milestone Password		
Basic Authentication		Refresh XProtect Data		



8.4.2. Trigger XProtect Live Matrix View with BTX.

In BTX, XProtect live matrix views events can be associated with given alarm keyword / third-party device as shown below:

Note: The Matrix textbox in BTX uses *STARTS WITH* logic. As such, in the example below, BTX will trigger all XProtect Matrix profiles that *START WITH* "BTX_Alarm". This logic is useful if you want certain alarms to trigger certain sets of Matrix Profiles.

Der	ne Actions	Ass	ociate Devices	Delete Row	Search	Code Blue	e	
Found	Group	Active	Integration Device	XProtect C	amera		GUID	Actions
	Code Blue	✓	89	Office - PD	Axis Demo Camera		2cc1d	d Remove Filters
✓	Code Blue	•	Ex. CodeBlue101	Ext - Alley	Pole to Pitney PanQuad E	1	f0bb6	AL Active Keyword: DIAL
✓	Code Blue	~	Ex. CodeBlue102	Ext - Bobs	Entrance - Parking Bosch	Quad E-2	0e4e7	Schedule Debouncing: Seconds
✓	Code Blue	~	Ex. CodeBlue103	Ext - Cond	o Field Pole behind Dump	ster - Parking View SE-2	584a3	Actions
✓	Code Blue	v	Ex. CodeBlue104	Ext - Alley	Pole Parking Lot PanQuad	N 3	70ba2	Alarm Event Offset in Seconds
								Matrix BTX_Alarm Bookmark Bookmark PT2 Preset Camera Preset PT2
								Data
								Replacement Message
								Appended Message () _{Source}
								Associate Cameras System Time Man (

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9. Third-party Integrations - General

9.1. Overview

BTX receives third-party alarm message via TCP to default port 7227. If the third-party device allows you to specify a TCP output when an event-of-interest occurs, BTX can integrate the device with Milestone XProtect.

9.2. Third-party integration subsystems

Not all third-party devices provide the option to send user-defined TCP messages. In this case, BTX uses sub-systems to receive messages in other protocols / formats and convert them into a TCP message.

BTX third-party sub-systems are located in the following directory:

c:\app-techs\BTX\Third-party

If an integration requires a sub-system, instructions are included in the sub-system folder.

9.3. Formatting TCP messages for BTX.

BTX uses the format below to receive and process third-party alarms.

Parameter #4

If the third-party device allows you to specify the TCP message to be sent, use this format to construct the alarm messages to be forwarded to XProtect.

will now associate all Vaidio alerts occurring on "VaidioDevice001" to the corresponding XProtect camera.



9.4. Third-party Integration Example – Axis Device Events

Axis devices provide a method to send outbound TCP message when device events-of-interest occur. BTX can receive this message and integrate the event with XProtect.

Note: Check network and firewall settings to confirm the third-party device can communicate with BTX over port: 7227 (default).

Use the format above to construct a preferred alarm string.

In this case, the ALARM KEYWORD is "FenceGuard Breach" and the DEVICE NAME is "Axis225"

3 To BTX Fence Guard: Any Profile Send notification thr Use this rule Name To BTX Wait between actions (max 23:59:59) 00:00:00
4 Send notification through TCP
4 Send notification through TCP FX 190 4 DATE- <time><fenceguard_breach><axis225> + 1 ps System 1 ps System Date and time Orientation Users OLIVE 2 SNMP Maintenance Plain config Waintenance Plain config</axis225></fenceguard_breach></time>



When a "FenceGuard_Breach" is received by BTX from the Axis device, it will be displayed as the following:

▲ Bridge to XProtect	-	×
Log View Device Map Settings About		
14:54:17: 14:54:17: Connected to TCP Test 14:54:17: Received: <date><time><fenceguard_breach><axis225> 14:54:17: Keyword: FenceGuard_Breach Device Name: Axis225</axis225></fenceguard_breach></time></date>		

With the alarm keyword: "FenceGuard_Breach" and device name: "Axis 225", BTX can easily be configured to integrate this Axis device event with XProtect.

Step #1: Rridge	Create new Internet to XProtect	egration Group.			- 🗆 ×
Log View	Device Map Settir	igs About			
Defi	ine Actions	Associate Devices	Delete Row	Search	Axis Device
F A C	Define Keyword Actio	ns		- Konword Activ	X
	Select a Group	• Remove	Axis Device Ev	ents A	d

Step #2: Select the "Axis Device Events" from the "Select a Group ..." dropdown menu.

Define Reyword Actions				-		×
Select a Group	▲ Remove	Create a n	iew Group		Add	
Axis Device Events Defir Axis LPR	rs	Kaunada				_
Bosch Panel Code Blue	Active Schedule 🏢	Keyword: Debouncing:	Seconds			
ep #3: Define a new Keyword Define Keyword Actions	Action.			_		- ×
ep #3: Define a new Keyword Define Keyword Actions Axis Device Events	Action.	Create a	a new Group	_	Add	×
ep #3: Define a new Keyword Define Keyword Actions Axis Device Events	Action. Remove Filters	Create a	a new Group	_	Add	×



Step #4: Define an "Alarm Keyword" match and choose preferred actions in XProtect.

Define Keyword Actions			- 🗆 X
Axis Device Events	✓ Remove	freate a new Group	Add
Define Keyword Actions	Filters		
FenceGuard_Breach	Active Keywor	rd: FenceGuard_E	Breach
	Actions		
	🗹 Alarm 🗌 Event	Offset in Seconds	
	User Defined Event		~
	Matrix	BTX_Alarm	
	Bookmark	Offset in Seconds	
	PTZ Preset	Camera 🗸	Preset 🗸
	Data		
	Replacement Message		
	Appended Message 😗		
	Associate Cameras	System Time	Map Guid
	Cancel		Save

Step #5: Associate the Axis Device with its XProtect counterpart. A "FenceGuard_Breach" event on device "Axis225" is now integrated with Milestone XProtect.

Associate Devices	Delete Row Search.		Axis Device 🗸	
Associate Devices				- 🗆 X
Axis Device Events	ct Integration Group	Ass	ociate Device	e Name
Search		Integrat Device	XProtect Camera	Group
		Axis225	Office - PD Axis Demo	Axis Device Events
Office - LobbyTempComThermal	^			
Office - PD Axis Demo Camera				
Office PD Deck PT7				
Office - PD Office Hanwha demo intercom				
Prod - Assembly Quad 1				
Prod - Bench FR Cam				
Prod - Ceiling Fisheye Vicon	Add -			
Prod - Ceiling P12 Drad - Center Airle Perch	← Remove			
Prod - Center Asie Bosch	bbA			
Prod - Demo area Quad 4	Add			
Prod - Demo FR Hanwha	camera			
Prod - Demo Intrusion Hanwha				
Prod - Demo Table Bosch				
Prod - Entrance Area Quad 3				
Dead Shahing Area Qued 2				
Prod - Shelving Area Quad 2				
Production Data Center				
Prod - Snelving Area Quad 2 Production Data Center				

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10. Third-party Integrations – IronYun Vaidio Video Analytics

BTX serves as the middleware to relay Vaidio live analytics alerts to Milestone XProtect. Users have ample control over what actions are taken in Milestone XProtect when a Vaidio alert-of-interest occurs.

10.1. Vaidio Alert Configuration

Navigate to the Vaidio Alert menu and go to the "Alert Rule" sub-tab. Choose to add an alert or edit an existing one.

← -	→ C 0 8	ē≏ 1 B/ale	ertRule			\$	\bigtriangledown \checkmark	٤	≡
	TECHS. Alert							ی 📀	
	Dashboard History	lert Rule 1							
Q (0)	Alert Name Ca	amera Name	Q Search						
\$ Q	O Add Alert							< 1	>
<u>ጵ</u> " በ	Alert Name 🗍	Alert Type	Rule	Alert Schedule	Camera Name	Trigger Action	Actions	Ŵ	^
ک آھ ان	2 Face Detections	Face Recognition	App- Techs_Employee, Unauthorized Person	Forever	Office - FR - PD Desktop, Office - FR - PandaCam, Prod - Bench FR, Prod - Hanwha Face Rec Cam	To BTX Bridge to Milestone XProtect	Edit	3	
	LPR Detections	License Plate Reco	Bad_Guy, Company_Vehicle, Employee_Vehicle, Not in list, Unauthorized_Vehi	Forever	LPR - Alley East, LPR - Bosch LPR Camera, LPR - Willow Driveway				

After configuring your preferred alert parameters, select "BTX Bridge to XProtect" from the "Trigger Action:" dropdown menu.

$\leftarrow \rightarrow$	C 💫 🔁 ≅ 10.11.11.198/alertRule		☆ ♡	\downarrow	۲	ഫ ≡
Applying Technolog	Edit Alert				×	A
Q Ale	Face Detections Define Rule	Add Notes Trigger (Optional)				
	Alert Type: Face Recognition • 4 2 Define your alert parameters here.	Trigger Action: Email: Subject:	Email Notification Open Existing Trigger Email Notification HTTP APP Notification Avigilon Ind BTX Bridge to Milestone XProtect Digited Digited Digited Watchdog DW Spectrum IPVMS Genetec Hamwha Wisenet Wave VMS			



Enter settings to direct Vaidio alert events to a running instance of BTX.

- 1. Make sure BTX.exe is running on its server so it can receive data.
- 2. Enter IP address of the server where BTX resides.
- 3. Enter BTX listening port #. Default is 7227.
- 4. Enter any username. BTX does not require authentication, so type any value in this field.
- 5. Enter any password. BTX does not require authentication, so type any value in this field.
- 6. Optionally choose to send detection snapshots to XProtect.
- 7. Check connection to verify network path.
- 8. Save Trigger settings.
- 9. Save Alert settings.

If the "Check Connection" test fails, check firewall settings on the server where BTX resides and allow inbound TCP traffic on port: 7227 (default). Also check to make sure the Vaidio server has a network pathway to the BTX server.

	an a			
	Face Detections		Add Notes	
e)	Define Rule		Trigger (Optional)	BTX default port is 7227
	Alert Type: Face Recognition	Ŧ	Trigger Action:	BTX Bridge to Milestone XProtect
	m 4		IP/ Domain Name:	10.11.11.100 : 227 0 0
	:≡ 2		Account	type any username here, no auth requird
			Password:	type any password, no auth required 🛛 💋
			Attachment	Scene Image 🔹
	Option: Send detection snapsho	ts to X	Protect 🗕	Scene Image Scene Image with bounding boxes
				Scene image with bounding beres and metada No Scene Image
				Check Connection
	₩Schedule			
	Action Trigger (Optional)			<u> </u>
			\frown	

When "Check Connection" test succeeds, Vaidio alerts will be received by BTX.



10.2. Auto-Associate Vaidio cameras with XProtect cameras.

If the XProtect system has an active Mobile Server Service, a user can associate a Vaidio camera with its XProtect counterpart within the Vaidio UI.

If the XProtect system does not have a mobile server installed, a manual method of associating cameras is described in Section 10.3.

Step #1: Add the Milestone Mobile Server as an "NVR" instance in XProtect.

Applying	Technology Solutions	Edit NVR				×	1	Ŷ	A
۹	GAdd NVR 2	* NVR Name :	Mfr Demo		3			< 1	>
0	NVR Name	* IP/ Domain Name :	1 0	808 0 0	For example, IP Address xxx.xx Domain Name: xxx.xxx.com	x.xoox.xoor/	÷	Ĩ	T I
A . 3	Mfr Demo	* User Name :	admin						
0		* Password :							
۰		* NVR Brand :	Milestone	Ŧ	Check Connection				
@]									
শ্ব			Cancel	OK					
Ŀ							J		
-) 1					Get N			×
0-r									

Step #2: In the Vaidio "Edit Cameras" menu, use the left-hand tool bar to select a XProtect camera to associate with the Vaidio camera. Complete this step for each camera in the Vaidio system.





10.3. Configure BTX to relay Vaidio alerts to XProtect.

The BTX "Log View" tab will display Vaidio alert data received by BTX.

huge to Arrotect	
/iew_Device Map Settings About	Alert data successfully received from
3-33-39-	Vaidio server
3:33:39: Accepted connection from 10.11.11.1	98:34318
3:33:39: Received from 10.11.11.198:34318: <0)1/23/2025><13:33:22> <face_recognition_unauthorized person=""><office -="" fr<="" td=""></office></face_recognition_unauthorized>
andaCam> <quid:292d8606-a27a-43e1-9259-66< td=""><td>e2adaec6aab><xp:sourcename:btx><xp:tag:><xp:categoryname:unauthorized< td=""></xp:categoryname:unauthorized<></xp:tag:></xp:sourcename:btx></td></quid:292d8606-a27a-43e1-9259-66<>	e2adaec6aab> <xp:sourcename:btx><xp:tag:><xp:categoryname:unauthorized< td=""></xp:categoryname:unauthorized<></xp:tag:></xp:sourcename:btx>
erson> <xp:location:paul dillon=""> < <![CDATA of</td><td>imagel>></td></xp:location:paul>	imagel>>
3:33:39: Keyword: FACE RECOGNITION Unaut	horized Person Device Name: Office - FR - PandaCam
	TOD T
Clear Log Open Log File	ICP lest

Go to the "Device Map" tab and select "Define Actions." From the "Select a Group" dropdown menu, choose "Vaidio."

For each keyword type, choose the preferred actions in XProtect when a Vaidio event containing a keyword match occurs.

Def	ine Actions	▲ Define Keyword Actions				-	
ound	Group	Ac	3				
•	Vaidio	Vaidio	 Remove 	Create a	new Group		Add
✓	Vaidio						
✓	Vaidio	Define Keyword Actions	Filters				
✓	Vaidio	Add Remove	Active 5 Keyw	ord:	FACE_RECOGN	NITION	
✓	Vaidio	CAMERA_ABNORMAL	4 Schedule 🛗 Debo	uncing:	Seconds		
•	Vaidio	DWELL	Actions				
✓	Vaidio	C FALL	Alarm 🗌 Event	Off	set in Seconds		
<	Axis Device		User Defined Event				~
	RoadALLER		Matrix	BTX	_Alarm		
•	ROBURIEFIC		Bookmark	Off	set in Seconds		
✓	Hanwha Counting		PTZ Preset	Can	nera 🗸	Preset	~
v	Oosto	PEOPLE WRONG DIREC	D-+-				
~	If using t	he XProtect Mob	ile Service to auto a	issoci	ate cam	eras,	
~	select the	e Map GUID chec	kbox (default is che	cked). 📃 🥎		
✓	PlateRec		Associate Cameras	🗹 Syst	em Time	6 🗹 Мар	Guid
✓	Code Blue		Consul				Cours
	Carla Plus		Cancer				Save



Go to the "Device Map" tab and select "Associate Devices."

If auto-associating cameras as described in Section 10.2, select from the list of XProtect cameras to be integrated with Vaidio and press "ADD \rightarrow ". Press "OK". Vaidio events are now integrated with Milestone XProtect.

Defi	ne Actions	Associate Devices Delete Row	Search	Filter by	group 🗸			
ound	Group	Active Integration Device XProt	ect Camera		GUID		Keyword Ac	tions
✓	Vaidio 1	Associate Devices				-	σx	Remo
-	Vaidio							
_	V	aidio - 2						
~	Vaidio			Internetion Desire	XD	6		
-	Vaidio	earch		Fyt - Alley Pole Parkin	Fyt - Alley Pole Parking	Vaidio		
-	AX	IS D2110-VE Security Radar (10.16.1.241) - Camera 1	^	Ext - Alley Fole Parkin	g LAC - Alley Pole Parking	y value		
✓	Vaidio BW	/C-01 (B8A44FB0910D) - Camera 1		Ext - Alley Pole to Pitr	e: Ext - Alley Pole to Pitn	e Vaidio		
~	Vaidio Ext	- Alley Pole Condo Grass PanQuad NE-4		Ent. Data Entrance	De Est. Daha Estados I			
	Ext	- Alley Pole Parking Front Entrance PanQuad SE 2		EXT - BODS Entrance -	ra Ext - BODS Entrance -	Valdio		
✓	Vaidio Ext	- Alley Pole Parking Lot PanQuad N 3		Ext - Condo Field Pole	t Ext - Condo Field Pole	I Vaidio		
	Avic D Ext	- Alley Pole to Pitney PanQuad É 1	Add					
•	Ext	- BODS Entrance - Parking BoschQuad E-2	Add →	Ext - Condo Field Pole	Ext - Condo Field Pole	Vaidio		
•	RoadA Ext	- Condo Field Pole behind Dumpster - Parking View SE-2	+ Remove	Ext - Condo Field Pole	t Ext - Condo Field Pole	I Vaidio		
	Ext	- Code Field Pole behind Dumpster PTZ						
	Ext	Field Pole behind Dumpster W-3 2						
-	Oosto							
		Select and Add ->						
	Oosto	all XProtect cameras to be						
~	PlateR	an Arrotect cameras to be						
		integrated with Vaidio						
-	PlateR							
	Code		~					
•	COUE	Cancel				4	OK	
	Code	Cancer				-	UK	



If manually associating Vaidio device name with XProtect cameras, edit the "Integration Device Column" so that the device name in this column matches the camera name in Vaidio.

Vaidio 🗸	entered in V	aidio HERE		
Search		Intege Device	XProtect Camera	Group
		VaidioDevice001	Ext - Alley Pole Parking Lot P	Vaidio
XIS D2110-VE Security Radar (10.16.1.241) - Camera 1	^			
WC-01 (B8A44FB0910D) - Camera 1		Ext - Alley Pole to Pitney Par	C Ext - Alley Pole to Pitney Pan	Vaidio
xt - Alley Pole Condo Grass PanQuad NE-4		Ed. Bala Estavas Badda	L Data Data Data	Matata
xt - Alley Pole Parking Front Entrance PanQuad SE 2		Ext - BODS Entrance - Parking	I Ext - BODS Entrance - Parking	Valdio
xt - Alley Pole Parking Lot PanQuad N 3		Ext - Condo Field Pole behin	d Ext - Condo Field Pole behind	Vaidio
xt - Alley Pole to Pitney PanQuad E 1				1.000
xt - Bobs Entrance - Parking BoschQuad E-2	Add →	Ext - Condo Field Pole behin	d Ext - Condo Field Pole behind	Vaidio
xt - Condo Field Pole behind Dumpster - Parking View SE-2	+ Remov			
xt - Condo Field Pole behind Dumpster E-1	- Kelliov	Ext - Condo Field Pole behin	d Ext - Condo Field Pole behind	Vaidio
xt - Condo Field Pole behind Dumpster PTZ				
xt - Condo Field Pole behind Dumpster W-3				
xt - Driveway Front Door PanQuad N 4				
xt - Driveway PanQuad E 1				
xt - Driveway Vicon Quad Below-4				
xt - Driveway Vicon Quad E-2				
xt - Driveway Vicon Quad N-1				
xt - Driveway Vicon Quad S-3				
xt - Driveway Willow Entrance PanQuad SE 2				
	~			

The camera name as entered in the Vaidio UI is the field shown below:

$\leftarrow \rightarrow C$	🔿 🖄 🗝 1 🔹 B/camera/cameraManagement		☆	♥ 3		பி	≡
Edit Camera							×
> Camero Consiguration	Al Model : 1 v Al Engines	🔹 🏘 Profile Outdoor Person Vehi	cle Object				
* Camera Name							
VaidioDevice001	General ROI						
Description	. C		Resolution: 3840x	2160 pixel 🗰 Pr	eview	. ⊳I∢	
Activated Dea	tivated				N.		
Group	The second second				-		
Groups: 3	T AND A AND		all and a		-		
Location Type							
None GPS Map	ndoor Map						
Camera Type			and the		and and		

Click OK. Vaidio events are now integrated with Milestone XProtect.



10.4. Create list specific actions for Vaidio License Plate Recognition (LPR) and Face Recognition detections.

There are many scenarios where a BTX user may want to trigger specific actions in XProtect based on the detection list. This applies specifically to the Vaidio face recognition and license plate recognition (LPR) analytics. As an example, a user may want trigger a XProtect user-defined event to unlock a door for detected individuals on the "Employee" list, but generate an alarm for individuals on the "Unauthorized" list.

BTX makes this simple to do by allowing users to trigger action based on a more specific alarm keyword type.

To setup list-specific actions in BTX, go to the "Device Map" tab, select "Device Actions", and choose "Vaidio" from the "Select a Group ..." dropdown.

With its default settings, BTX will consider <u>ALL</u> received Vaidio alerts containing the alarm keyword "FACE_RECOGNITION" or "LPR" as qualifying as an alarm keyword match.

Deactivate the default "Face Recognition" alarm keyword and click ADD to define a new keyword action.

Click "Add" to define a new Keyword Action and create a new entry with a keyword containing a Vaidio list name. Ex. "FACE_RECOGNITION_Unauthorized"

▲ Define Keyword Actions						_		\times
Vaidio	~	Remove	Crea	ate a	new Group		Add	
Define Keyword Actions	Filters							_
	A	ctive	Keyword:		FACE_RECOGNITIO	N_Unaut	thorized	
	S	hedule	Debounce		Seconds			
DWELL	Action	15						
FACE_RECOGNITION_Un	A	arm Eve	ent	Offs	et in Seconds			
FALL		ser-Defined E	vent					~
ILLEGAL_PARKING	M	atrix		BTX	Alarm			

BTX will now trigger trigger actions in XProtect only if the Vaidio alert contains the "Unauthorized" list type.



Ex: When keyword CONTAINS "FACE_RECOGNITION_Employee", generate a XProtect bookmark and trigger the User-defined event.

Define Keyword Actions				-		×
Vaidio	✓ Remove	Create	a new Group		Add	
Define Keyword Actions	Filters					_
Add Remove	Active	Keyword:	FACE_RECOGNI	TION_Emplo	oyee	
CAMERA_ABNORMAL	Schedule	Debouncing:	Seconds			
	Actions					
FACE_RECOGNITION_Em	Alarm 🗌 Ev	vent O	ffset in Seconds			
	🔽 User Defined B	Event BT	X_FR_EmployeeList			~
	Matrix	BT	X_Alarm			
	Bookmark	0	ffset in Seconds			
	PTZ Preset	Ca	mera 🗸	Preset		~
PEOPLE_COUNTING	Data					_

Ex: When keyword CONTAINS "FACE_RECOGNITION_Unauthorized", generate a XProtect alarm + bookmark, trigger the Userdefined event "BTX_FR_BadGuyList", and fire all live Matrix profiles that start with "BTX_Alarm."

Define Keyword Actions				_		
Vaidio	✓ Remove	Create a	a new Group		Add	
Define Keyword Actions	Filters					
Add Remove	Active	Keyword:	FACE_RECOGNI	TION_Unaut	thorized	
CAMERA_ABNORMAL	Schedule 🛗 Debouncing:		Seconds			
	Actions					
FACE RECOGNITION Em	🖂 Alarm 🗌 Ever	nt Of	fset in Seconds			
FACE_RECOGNITION_Un	User Defined Eve	ent BT.	X_FR_BadGuyList		Y	
	Matrix	BT	X_Alarm			
	Bookmark	Of	fset in Seconds			
	PTZ Preset	Ca	mera 🗸	Preset	~	
	Data					



Please note that any alarms containing another list type, ex. "Visitors," will now have to be defined in BTX to qualify as an alarm keyword match.

The alarm keyword entered in BTX must match the list name as entered in the Vaidio UI.





11. BTX FAQ

Q: BTX connection settings appear correct, but the Log View indicates that I am not receiving any alarm data from my third-party devices. What could be the cause?

A: The most common fixes for this issue is to check if the third-party devices are on the same network subnet as BTX, or if there is a verified network path between the third-party device and BTX. Try pinging the device from the server on which BTX is installed. If pinging the device is unsuccessful, check your network settings, or contact a network administrator to establish a network pathway between the device and BTX.

Another common fix is to check your server's firewall settings. Because BTX requires receiving inbound TCP messages on port 7227, it is common for the Windows Firewall or Anti-virus software to block this traffic unless a rule specifically authorized this traffic. Try temporarily disabling your firewall to see if traffic appears. If so, adjust firewall rules / settings to allow traffic when it is enabled.



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