

Manual

Milestone Honeywell Pro-Watch Access Control Integration v2.0

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Target audience for this document

The installation and configuration part of this document is aimed at system administrators of both the Milestone XProtect, Honeywell Pro-Watch and HSDK software.

The operation part of this document is aimed at system administrators and also system operators with basic knowledge of Milestone XProtect.

As this manual contains specific details about the integration between Milestone XProtect and Honeywell Pro-Watch, it is recommended for system administrators to check the following sources of information:

- Milestone XProtect 2019 R3 (XProtect Management Client and XProtect Smart Client) help which contains detailed information about XProtect Access
- Honeywell Pro-Watch Installation Guide v4.5 SP1 which contains detailed information about installation of Pro-Watch access control system
- Honeywell Pro-Watch Software Suite v4.5 SP1 help which contains detailed information about configuration and use of Pro-Watch access control system
- Honeywell Security Developer Kit User's Guide v2.6.0.0 contains detailed information about installation, configuration and use of HSDK

and for system operators to check at least:

- Milestone XProtect 2019 R3 (XProtect Smart Client) help which contains detailed information about Milestone XProtect Access

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All names of people and organizations used in this document's examples are fictitious. Any resemblance to any actual organization or person, living or dead, is purely coincidental and unintended.

This product may make use of third-party software for which specific terms and conditions may apply. When that is the case, you can find more information in the file *3rd_party_software_terms_and_conditions.txt* located in your Milestone surveillance system installation folder.

General description

Introduction

The Milestone Honeywell Pro-Watch Access Control Integration is a Milestone XProtect Access plug-in, which supports a number of features including:

- Events generated by doors/door access points from Honeywell Pro-Watch access control system can be used as sources for Alarms and Rules in Milestone XProtect
- Live monitoring of events in Milestone XProtect based on the association of door access points and cameras
- Control and status monitoring of doors from Milestone XProtect including visual representation
- Badge Holders from Honeywell Pro-Watch access control system are integrated into Milestone XProtect

Solution overview

The integration consists of an XProtect Event Server plug-in which communicates with Honeywell Security Developer Kit (HSDK) as illustrated here:

<XProtect Event Server> <-> <HSDK> <-> <Pro-Watch access control system> <-> <Panel>

The machine running the XProtect Event Server must be able to connect to the HSDK/Pro-Watch system using TCP/IP communication. The configuration of the plug-in is done in the XProtect Management Client where

- The Pro-Watch system must be added
- Different properties can be set
- It is possible to create Alarms and Rules using the Pro-Watch system supported events as sources

Also, some useful information is logged into the Audit logs of the XProtect Management Client.

Note: *The HSDK supports only a single system querying for events. This means that only a single XProtect Event Server must access the HSDK at a time. If more than one XProtect Event Server (or other application such as HSDK Test Client) tries to communicate with the HSDK, the receiving of events will become unpredictable.*

The integrated features in the XProtect Smart Client include:

- Adding the Pro-Watch system doors/door access points as Access Monitor for live monitoring of the events
- Adding the Pro-Watch system Hardware Actions as Overlay Buttons
- Map feature integration used for control, monitoring and visual representation of the Pro-Watch system doors
- Pro-Watch generated alarms are listed and visualized in the Alarms list
- Acknowledgement of the Pro-Watch generated alarms
- Centralized overview of Events/Doors/Cardholders in Access Control tab
- Access request notifications

Installation

Prerequisites

The Milestone Honeywell Pro-Watch Access Control Integration is compatible with:

- Milestone XProtect Corporate, Expert, Professional+, Express+ and Essential+ 2019 R3 or newer
- Honeywell Pro-Watch v4.5 SP1
- Honeywell Security Developer Kit (HSDK) v2.6.0.0

Installer

The Milestone Honeywell Pro-Watch Access Control Integration consists of one installation file supporting Windows 64-bit only:

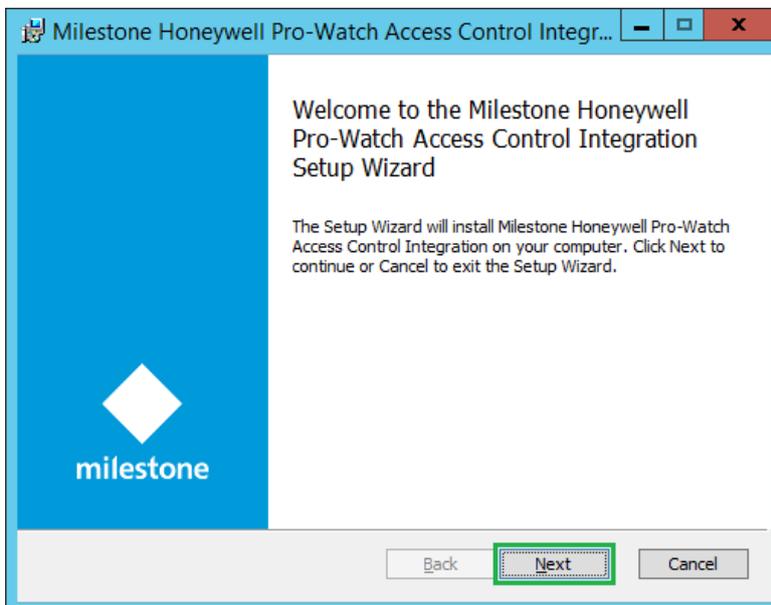
- *ProWatchInstallation_x64_2.0.XX.X.msi*

The Milestone Honeywell Pro-Watch Access Control Integration must be installed on the following computers:

- On the computer where the Milestone XProtect Event Server is installed
- On the computers where the Milestone XProtect Management Client is installed

Installation steps

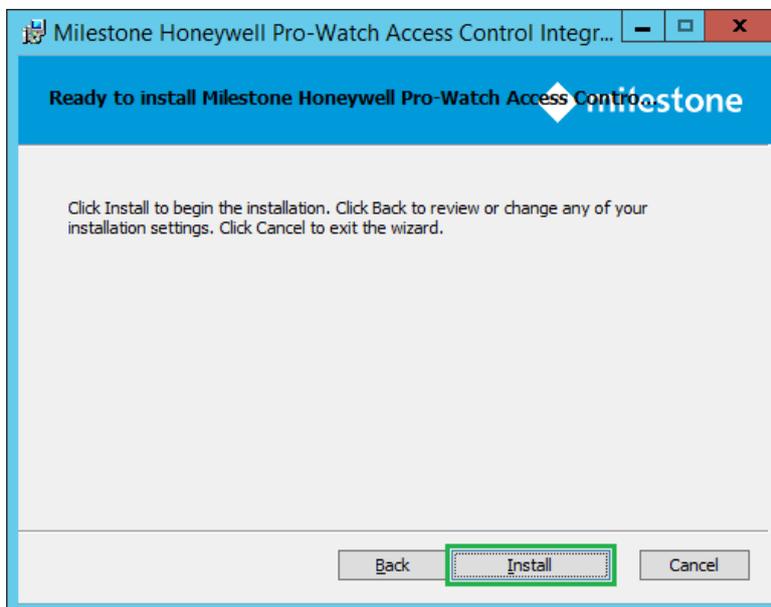
1. Start the installation by executing *ProWatchInstallation_x64_2.0.XX.X.msi*.
2. Click **Next**.



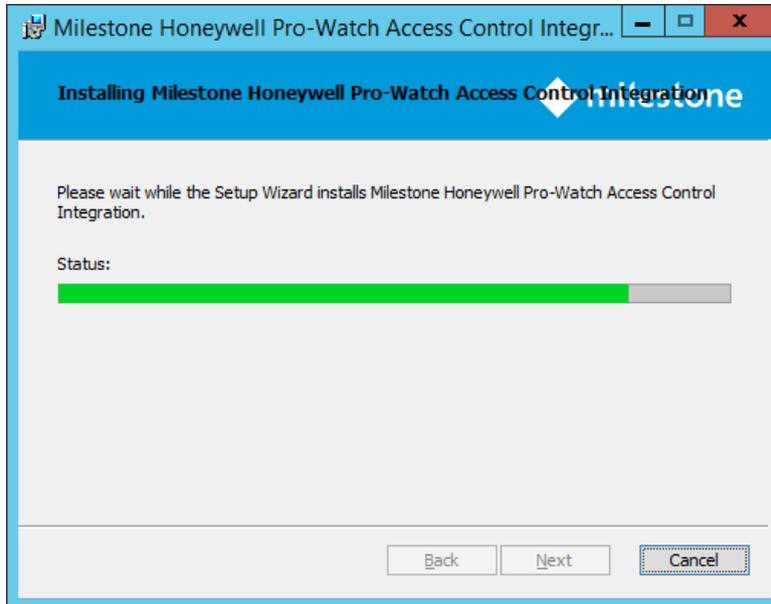
3. Read the license agreement carefully and select the **I accept the terms in the License Agreement** box. Click **Next**.



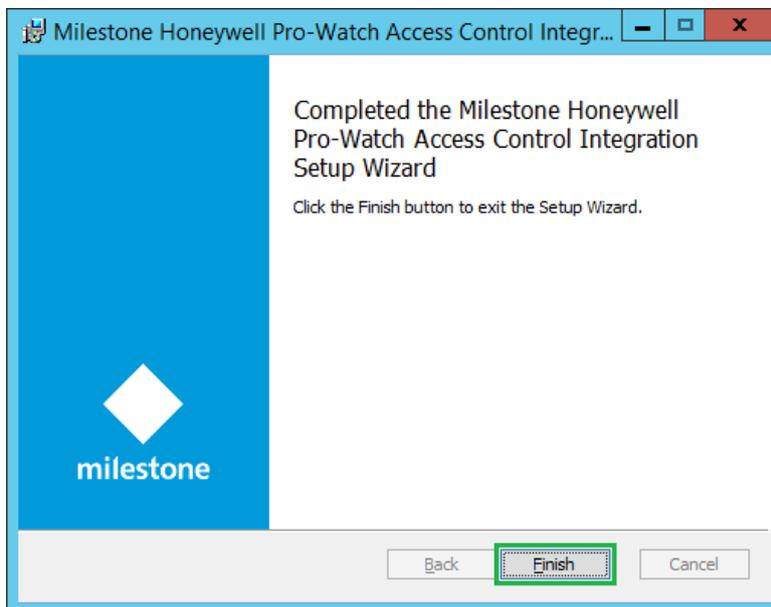
4. Click **Install**.



- The next steps are executed automatically.



- Click **Finish**.



- Restart the XProtect Event Server and the XProtect Management Client.

License

The use of Milestone XProtect Access requires a **Base** license which allows accessing this feature. An **Access control door** license is needed for each door which needs to be controlled.

See the Milestone XProtect help for more information about the **Base** and **Access control door** license.

This solution does have also a build-in **MIP** license check that is locked to the software license code (SLC) of the XProtect installation of which it is a part.

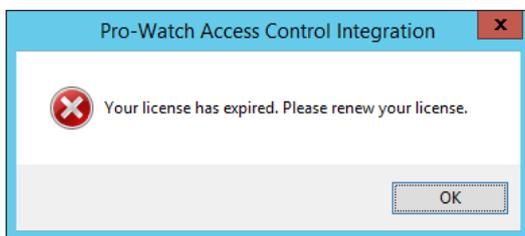
It automatically comes with a 30 days grace period which starts from the date when the plug-in is installed. After the grace period expires, a permanent **MIP** license is needed.

The permanent **MIP** license is free of charge for this solution.

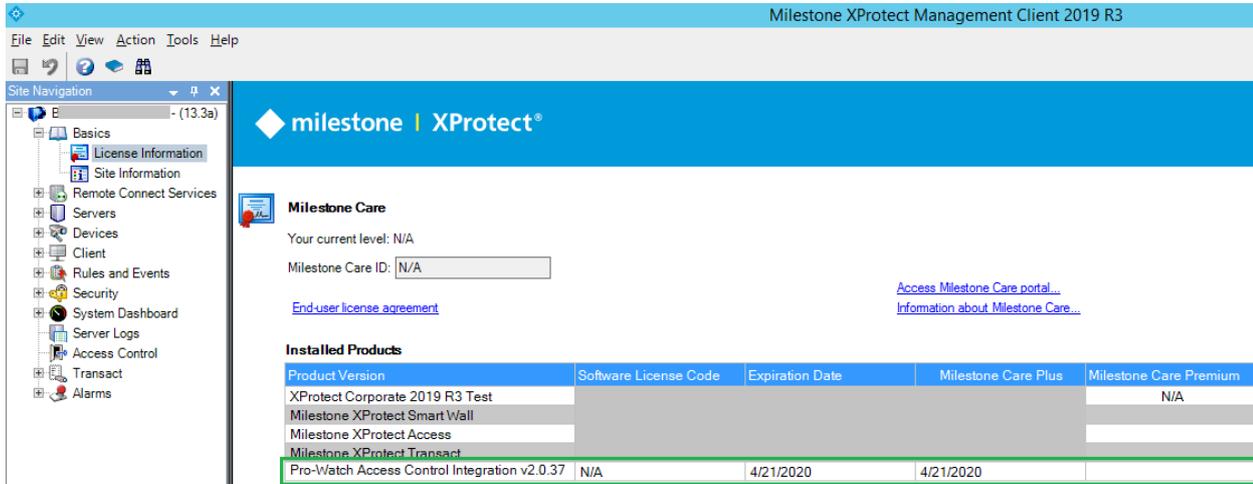
The permanent **MIP** licenses are provided by the distributor. In order to generate a permanent **MIP** license, the distributor must know the SLC of the XProtect system where the solution has been installed. Collect the SLC and send it to the distributor, preferably via email.

When the permanent **MIP** license is acquired, the XProtect system must be reactivated, either online or offline.

If **MIP** license check fails, the plug-in will issue error messages and will have a reduced functionality.

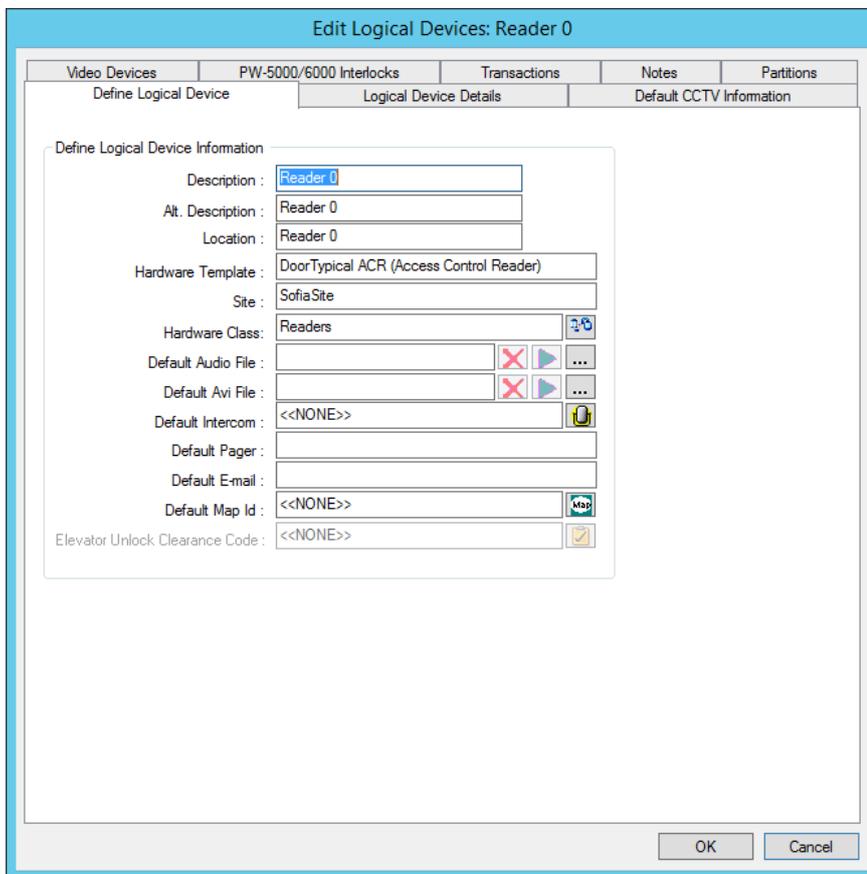


The license information can also be checked in the XProtect Management Client > **Site Navigation** > **Basics** > **License Information** > **Installed Products** > **Pro-Watch Access Control Integration v2.0.XX.X**

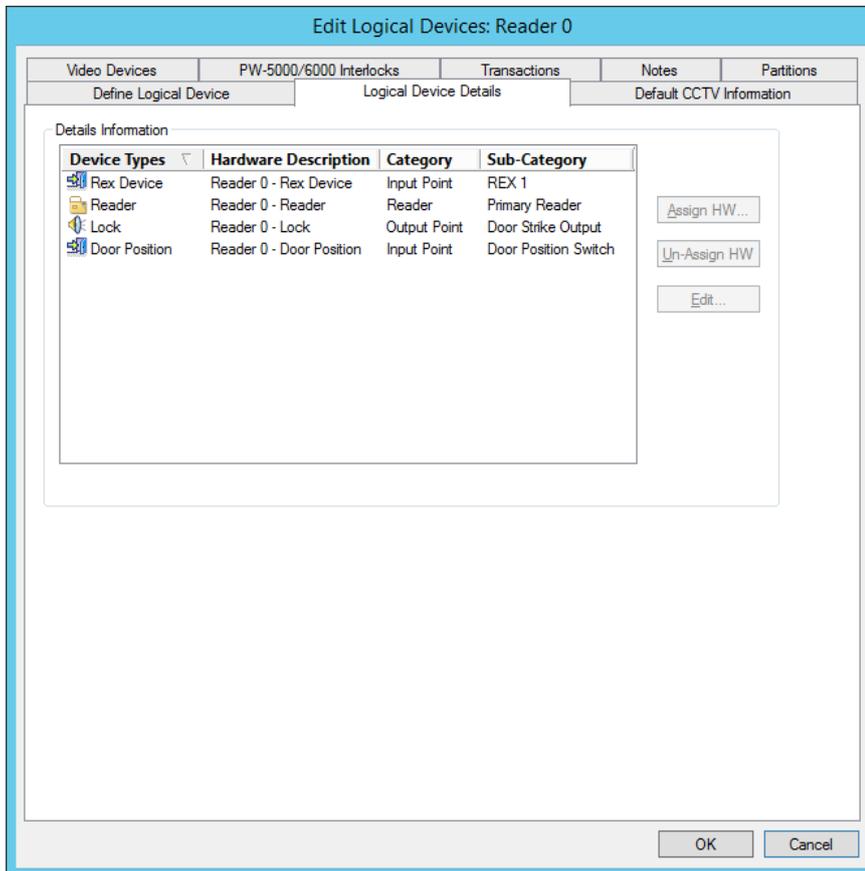


Pro-Watch and XProtect elements mapping

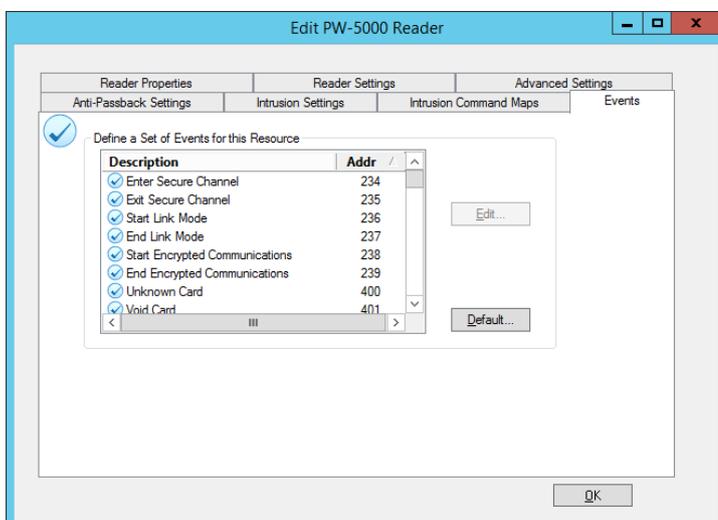
The hierarchy in the Pro-Watch system is usually **Site > Channel > Panel > Logical Devices**. The **Logical Devices** are based on **Hardware Templates** and **Hardware Classes**.



Each of these **Logical Devices** can include several device types of different category and sub-category. In the example below, you can see a logical device **Reader 0** based on **Hardware Template: DoorTypicalACR (Access Control Reader)** and **Hardware Class: Reader**.



A set of events is defined for each device type (resource). In the example below you can see the events listed for the **Reader 0 – Reader** resource.



The Milestone Honeywell Pro-Watch Access Control integration supports only the logical devices based on **Hardware Template: DoorTypicalACR (Access Control Reader)** and **Hardware Class: Reader**, their device types (resources) and the defined set of events for these resources. The integration may work with logical devices based on other **Hardware Template** and **Hardware Classes**, but Custom Development does not guarantee that.

The table below contains the mapping between the Pro-Watch system devices and the XProtect Access devices:

| Pro-Watch | XProtect | Notes |
|---|-------------------|---|
| Reader 0 (DoorTypicalACR (Access Control Reader)) | Door | <ul style="list-style-type: none"> • Visible in XProtect Management Client and can be selected as a source of events • Visible in XProtect Smart Client • Takes over the ownership of events generated by the following resources: Rex Device, Lock and Door Position in the XProtect system • Hardware Actions from the Pro-Watch system are transferred into actions in the XProtect system |
| Reader 0 – Rex Device | NA | <ul style="list-style-type: none"> • Not visible in XProtect Management Client • Not visible in XProtect Smart Client • The parent device (in this case Reader 0) takes over the ownership of the generated events |
| Reader 0 – Reader | Door Access Point | <ul style="list-style-type: none"> • Visible in XProtect Management Client and can be selected as a source of events • Visible in XProtect Smart Client • The generated events are with source Reader 0 – Reader |
| Reader 0 – Lock | NA | <ul style="list-style-type: none"> • Not visible in XProtect Management Client • Not visible in XProtect Smart Client • The parent device (in this case Reader 0) takes over the ownership of the generated events |
| Reader 0 – Door Position | NA | <ul style="list-style-type: none"> • Not visible in XProtect Management Client • Not visible in XProtect Smart Client • The parent device (in this case Reader 0) takes over the ownership of the generated events |

Pro-Watch configuration

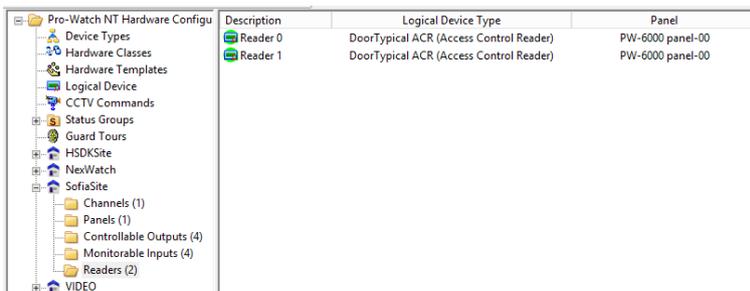
General configuration

1. (Optional) Connect the Pro-Watch panel to the network and turn it on.

In the example below, a **PW-6000** panel is used.

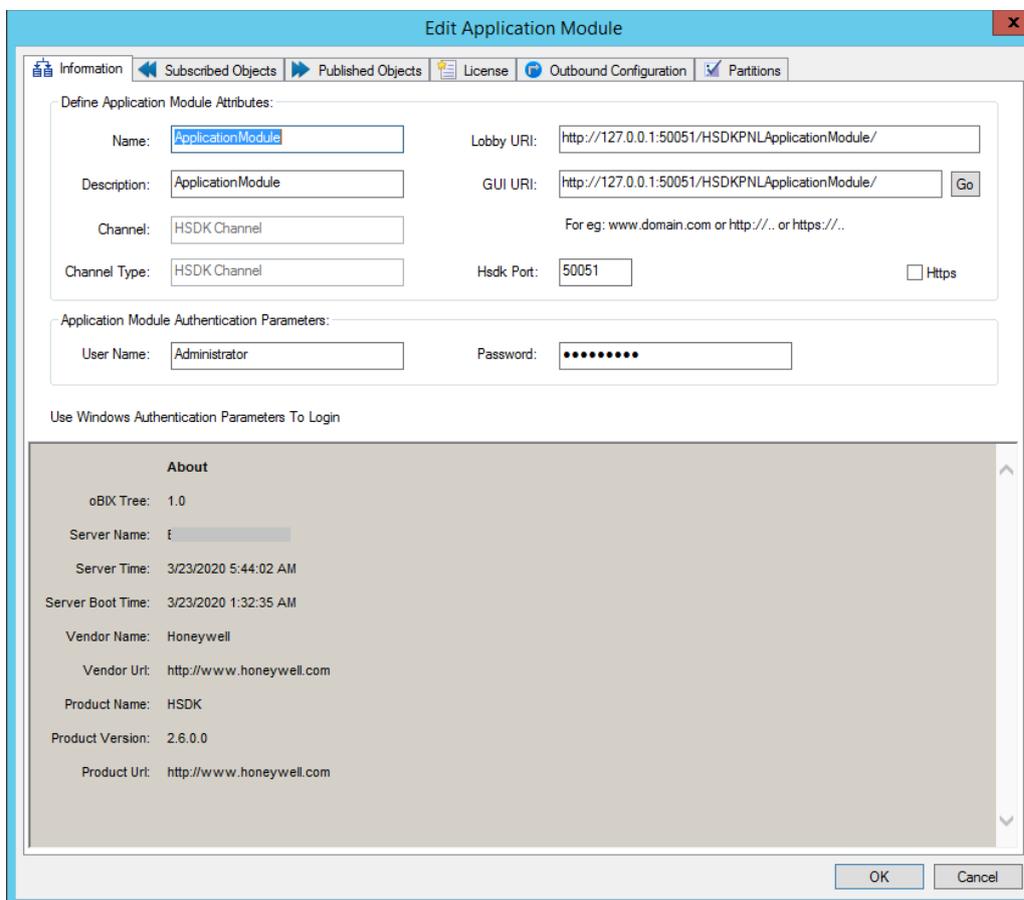
2. Create a **Site**, a **Channel**, and a **PW-6000** panel.
3. Add at least one **Reader** for the panel.

In the example below, two **Readers** are created.



| Description | Logical Device Type | Panel |
|-------------|---|------------------|
| Reader 0 | DoorTypical ACR (Access Control Reader) | PW-6000 panel-00 |
| Reader 1 | DoorTypical ACR (Access Control Reader) | PW-6000 panel-00 |

4. (Optional) Verify that there is a connection between the **PW-6000** panel and **Pro-Watch Software Suite**.
5. Create a **HSDK Site**, a **Channel**, and a **HSDK Panel**.
6. Create an **Application Module** using the **HSDK Channel** and the **HSDK Panel** from the previous step.



Edit Application Module

Information | Subscribed Objects | Published Objects | License | Outbound Configuration | Partitions

Define Application Module Attributes:

Name: Lobby URI:

Description: GUI URI:

Channel: For eg: www.domain.com or http://.. or https://..

Channel Type: Hsdk Port: Https

Application Module Authentication Parameters:

User Name: Password:

Use Windows Authentication Parameters To Login

About

oBX Tree: 1.0

Server Name:

Server Time: 3/23/2020 5:44:02 AM

Server Boot Time: 3/23/2020 1:32:35 AM

Vendor Name: Honeywell

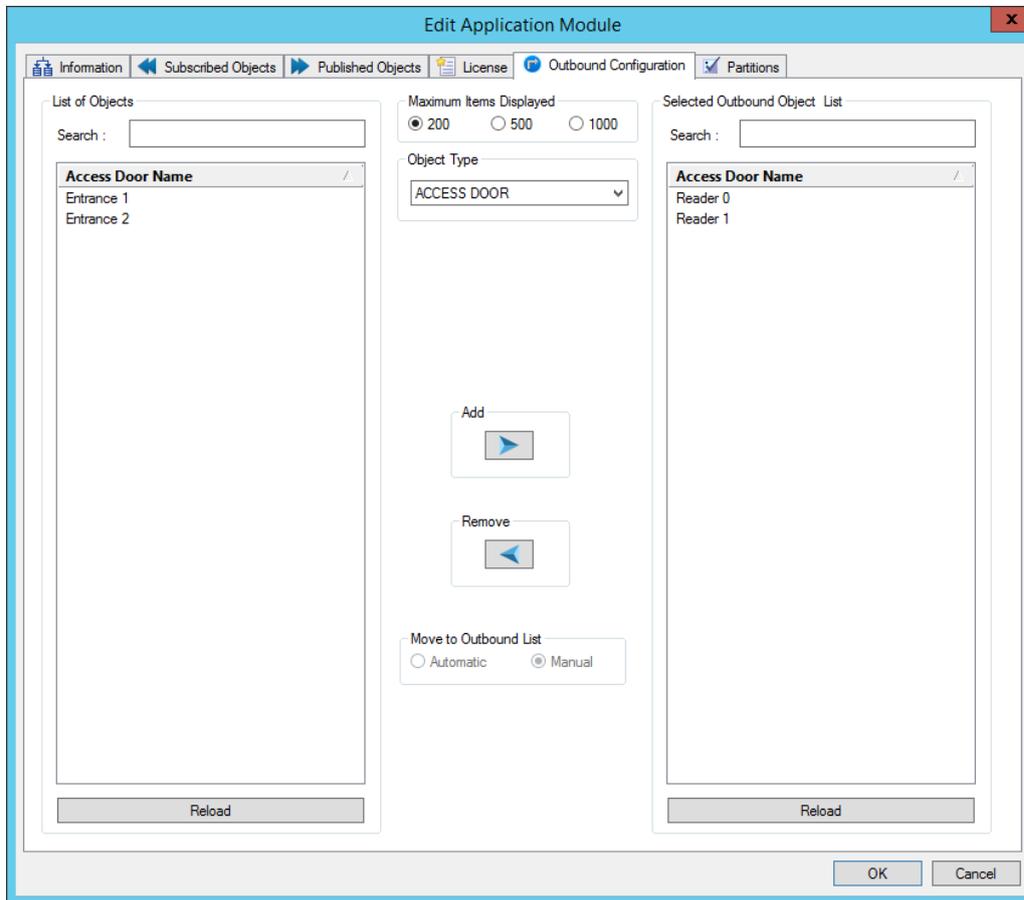
Vendor Url: http://www.honeywell.com

Product Name: HSDK

Product Version: 2.6.0.0

Product Url: http://www.honeywell.com

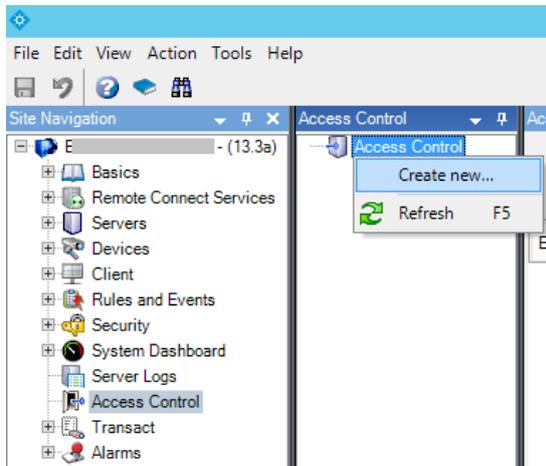
7. Add a **Reader** (part of object type **ACCESS DOOR**) to the **Outbound Object List**.
In the example below, two **Readers** are added.



XProtect Management Client configuration

Add Pro-Watch Access Control

1. Open XProtect Management Client > **Site Navigation** > **Access Control**.
2. Right click on the **Access Control** node and select **Create new...**



3. Enter a proper **Name** and select **Honeywell Pro-Watch** from the **Integration plug-in** dropdown. The following connection details appear and need to be specified:

Note: In case HSDK and Milestone XProtect are installed on different computers and **https** connection type is used, it is mandatory to open the certificate stores on the computer where the HSDK is installed and export **HSDK Root CA** (located in **Certificates (Local Computer) > Trust Root Certification Authorities > Certificates**) and **computer certificate issued by HSDK Root CA** (located in **Certificates (Local Computer) > Personal > Certificates**). Then import both certificates in the same certificate stores on the computer where the Milestone XProtect Event Server is installed.

Host: The IP address or the computer name of the **HSDK Lobby URI**.

Note: In case HSDK and Milestone XProtect are installed on different computers and **https** connection type is used, it is mandatory to use the computer name (instead of the IP address).

Port: The port number of **HSDK Lobby URI** also known as **Hsdk port**.

Https: The connection type will be changed to **https**. The port should be adjusted properly depending on the connection type.

User name: The user with the administrative rights for the Pro-Watch system.

Password: The password of the user.

Application name: The name of the HSDK application module.

Event Polling Interval (Milliseconds): Defines the event polling interval. It is recommended to use the default value.

State Polling Interval (Seconds): Defines the state polling interval. It is recommended to use the default value.

Example:

Create Access Control System Integration ✕

Create access control system integration

Name the access control system integration, select the integration plug-in and enter the connection details.

| | |
|--|---|
| Name: | <input type="text" value="pw6k"/> |
| Integration plug-in: | <input type="text" value="Honeywell Pro-Watch"/> |
| Host: | <input type="text" value="127.0.0.1"/> |
| Port: | <input type="text" value="50051"/> |
| Https: | <input type="checkbox"/> |
| User name: | <input type="text" value="Administrator"/> |
| Password: | <input type="password" value="●●●●●●"/> |
| Application name: | <input type="text" value="HSDKPNLApplicationModule"/> |
| Event Polling Interval (Milliseconds): | <input type="text" value="500"/> |
| State Polling Interval (Seconds): | <input type="text" value="20"/> |

Click **Next**.

4. The configuration data will be collected from the access control system. A few items will be added based on the received configuration data from the Pro-Watch system:

Example:

In the example below, the following items are added:

Doors (2): The doors which are added to the **Outbound Configuration** ([step 6, chapter Pro-Watch configuration – General configuration](#)):

Reader 0
Reader 1

Units (2): The units (door access points) which are related to the added doors.

Reader 0 – Reader
Reader 1 – Reader

Servers (1): The Pro-Watch system.

Server

Events (179): A list with supported events.

| | |
|------------------------------------|---------------------------------------|
| 1: EV_LOG Threshold Limit Exceeded | 430: Invalid Card - Before Activation |
| 2: Database record Add | 431: Denied - Building not open |
| 3: Database record updated | 432: Building Close Fail- Key |
| 4: Database record deleted | 433: Sensor Fail |
| 5: Database queryset | 434: Coax Failure |

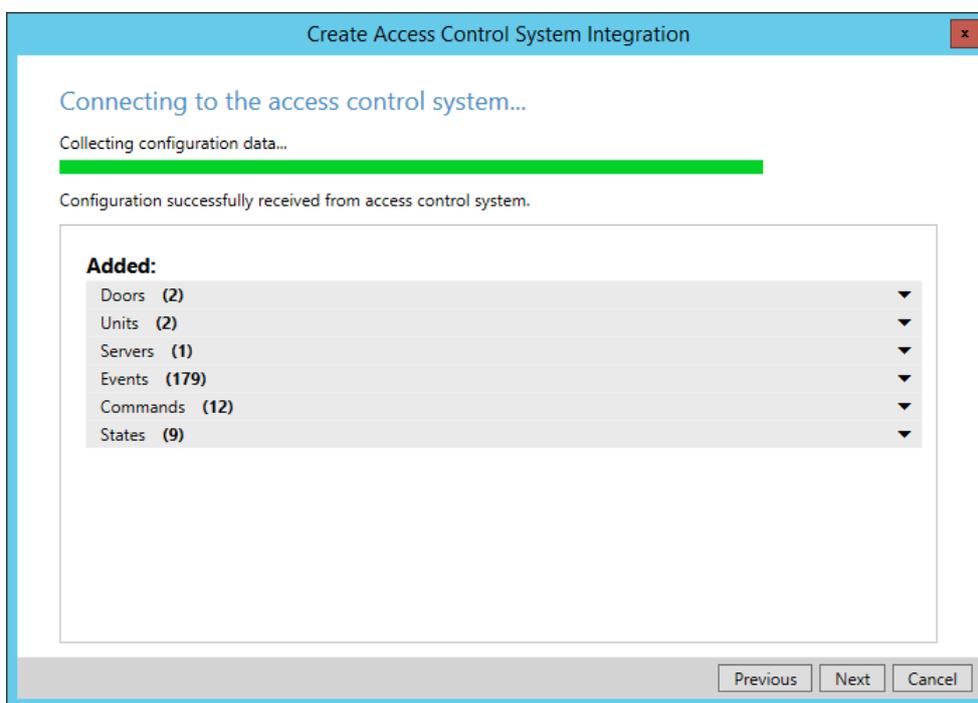
| | |
|---|---|
| 6: Operator has logged in | 435: Exit Granted |
| 7: Operator has logged off | 436: Exit Denied |
| 8: Report has been requested | 437: Auto unlocked |
| 9: Operator log is filling up | 438: Auto locked |
| 10: Event Occured | 439: Coax shunted |
| 11: Alarm response has been entered | 440: Sensor shunted |
| 12: Alarm has been acknowledged | 441: Denied - ABA Site Code |
| 13: Alarm has been cleared | 442: Denied - ABA card expired |
| 14: CCTV command has been requested | 443: VIP Tamper Shunt |
| 15: Page has been issued | 444: VIP Tamper unshunt |
| 16: Alarm beeper has been silenced | 445: VIP Tamper |
| 17: Alarm has been cleared without a normal | 446: MSM Failure |
| 18: Maps have been rebuilt | 447: Building Close Fail- User |
| 19: System procedure has been executed | 448: Reader/Device Comm Fail |
| 20: Intercom Request | 449: Reader/Device Tamper |
| 50: Download request | 450: Keypad Failure |
| 51: Mask an alarm point | 451: Host denied access (Verification Viewer) |
| 52: Arm an alarm point | 452: Biometric Verification Failed |
| 53: Door locked | 453: Biometric Verification Failed: No Record |
| 54: Door unlocked | 454: Biometric Verification Failed: No Device |
| 55: Door in access mode | 455: Auto-Disabled Card |
| 56: Timed override issue | 456: Wireless Rdr Tamper Active |
| 57: Momentary Unlock | 457: Wireless Rdr Tamper Inactive |
| 58: Output activate request | 458: Tamper - Wireless Rdr Low Batt |
| 59: Output deactivate request | 459: Tamper - Wireless Rdr R/F Loss |
| 60: Output momentary pulse | 460: Tamper - Wireless Rdr Motor |
| 61: Threat level change request | 461: Wireless Reader Key Override |
| 62: Void card request | 462: Incomplete Card/PIN Sequence |
| 63: Archive Start | 463: Tamper Rdr R/F Jammed |
| 64: Archive has completed | 464: Tamper Rdr Offline |
| 65: Restore has started | 465: Tamper Rdr Lock Jammed |
| 66: Restore has completed | 466: Tamper Rdr Fault |
| 70: Invalid Operator ID | 467: Tamper Rdr No Signal |
| 71: Invalid password | 500: Access Granted |
| 72: Invalid workstation | 501: HostGrant |
| 73: Invalid operator class | 502: Executive Privilege |
| 74: Operator ID has expired | 503: Timed override enabled |
| 75: Too Many Active Users | 504: Timed override disabled |
| 76: EV_LOG Limit Exceeded | 505: Timed override enabled by host |
| 77: Door Reenabled | 506: Timed override disabled by host |
| 78: Group Access Project Started | 507: Timed override expired |
| 79: Group Access Project Ended | 508: Opened Unlocked Door |
| 80: Remote Server is Offline | 509: Local Grant - Duress - Not Used |

| | |
|---|---|
| 81: Intrusion Group control request | 512: Local Grant - APB Error - Not Used |
| 82: Intrusion Zone List control request | 513: Local Grant - APB Error - Used |
| 83: Intrusion Zone control request | 514: Local Grant - Duress - Used |
| 84: Portal Lock control request | 515: Local Grant - Door not used |
| 100: Communication Break | 516: Access terminated |
| 101: Loop Command error | 517: Host Grant (Verification Viewer) |
| 102: Checksum error occurred | 518: Pre-Grant: Local Grant in Progress |
| 103: Message termination error | 519: Pre-Grant: Host Grant in Progress |
| 104: Unexpected Disconnect | 600: Reader has been disabled |
| 105: Connection Started | 601: Reader has been unlocked |
| 106: Connection successful | 602: Reader has been locked |
| 107: Connection failed | 603: Reader in facility code mode only |
| 114: Disconnect complete | 604: Reader in card only mode |
| 400: Unknown Card | 605: Reader in PIN only mode |
| 401: Void Card | 606: Reader Card+PIN mode |
| 402: Expired Card Attempt | 607: Reader in Card OR PIN mode |
| 403: Card Trace | 608: Rex Pressed, Non-verified |
| 404: Host denied access | 609: Rex Pressed, Door not used |
| 405: Valid Card at an unauthorized reader | 610: Rex Pressed, Door used |
| 406: Lost Card Attempt | 611: Host Rex, Non-verified |
| 407: Stolen Card Attempt | 612: Host Rex, Door not used |
| 408: Unaccounted for Card Attempt | 613: Host Rex, Door used |
| 409: Deactivated Card Attempt | 614: Guard Arrived Early |
| 410: Terminated Card Attempt | 615: Guard Arrived Late |
| 411: Valid Card presented at wrong time | 616: Guard Never Arrived |
| 412: Invalid Reader Time Zone | 617: Guard Is Now Late |
| 413: Invalid Pin | 900: Input point in alarm |
| 414: Invalid Facility Code | 10900: Input point in alarm, RTN return to normal |
| 415: Valid card with an incorrect issue level | 901: Input point in short condition |
| 416: Invalid Timed override | 902: Input point is open |
| 417: Invalid IN-X-IT status | 903: Input point held past shunt time |
| 418: Invalid threat level | 904: Input point in trouble |
| 419: Antipassback error | 905: Input point masked for Entry Delay |
| 420: Pincode Retry Exceeded | 906: Input Point Masked for Exit Delay |
| 421: Invalid Forward Card Read | 907: Input point fault detected |
| 422: Invalid Reverse Card Read | 908: Input point status unknown |
| 423: Attempt to open Locked Door | 910: Input point disconnected |
| 425: Duress Detected - Access Denied | 911: Monitor Input Alarm |
| 426: Second not presented | 950: Output point is active |
| 427: Access denied - Occupancy limit reached | Lost connection |
| 428: Access denied - Area disabled | Reconnected |
| 429: Access denied - Use limit reached | |

Commands (12): A list of supported actions (commands) for the doors added: Mask, UnMask, TimedMask, Lock, MomentaryUnlock, Re-Enable, TimeOverride, Unlock, MaskTamperAlarm, UnMaskTamperAlarm, EnterCypher, ExitCypher

Note: For detailed Hardware Actions description, see the Honeywell Pro-Watch Software Suite v4.5 SP1 help.

States (9): A list of supported states for the added doors and panel: Closed, Open, Unknown, Locked, Unlocked, Fault, Unknown, Connected, Disconnected

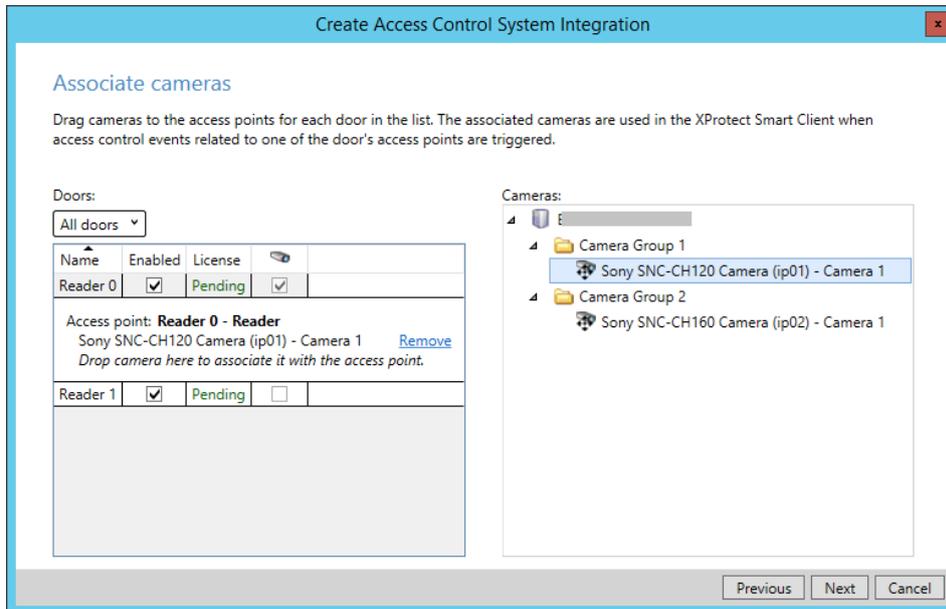


Click **Next**.

- (Optional) Drag and drop cameras to the door access points for each door in the list. The associated cameras are used in XProtect Smart Client when access control events related to each door are triggered.

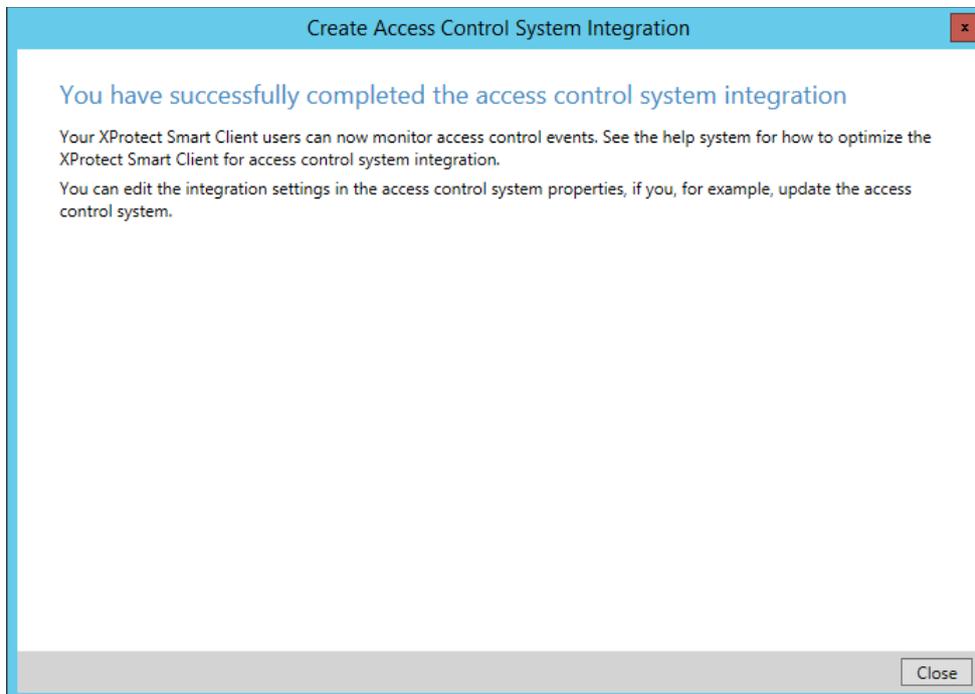
Example:

In this example, **Sony SNC-CH120 Camera 1 (ip01) – Camera 1** is associated to **Reader 0 – Reader**.



Click **Next**.

- The configuration of the access control system integration is saved successfully to the server. Click **Close**.



Remove Pro-Watch Access Control

- Open XProtect Management Client > **Site Navigation** > **Access Control**.
- Right click on the access control and select **Delete** or press the **Del** button on the keyboard.

Pro-Watch Access Control Properties

Note: See the Milestone XProtect (XProtect Management Client) help for the **Access control** properties.

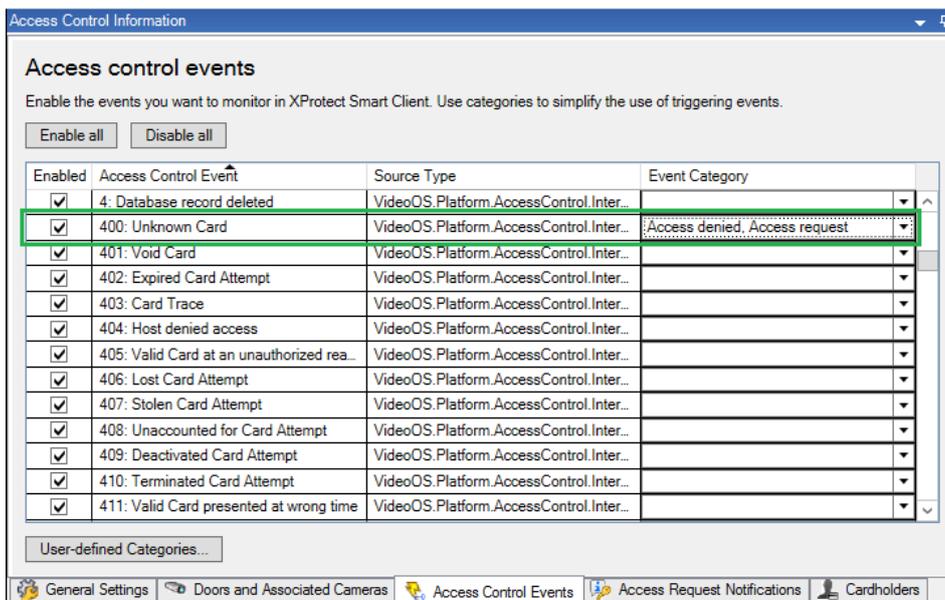
General Settings tab

Note: Operator login required option (differentiated user rights) is not supported.

Access Control Events tab

Note: All listed events are enabled, but not assigned to an **Event Category** by default.

Access denied and **Access request** are assigned to **400: Unknown Card** in this example as this access control event will be used in chapters [Alarms based on Pro-Watch Access Control events](#) and [Access request notifications](#).



| Enabled | Access Control Event | Source Type | Event Category |
|-------------------------------------|---|---|-------------------------------|
| <input checked="" type="checkbox"/> | 4: Database record deleted | VideoOS.Platform.AccessControl.Inter... | |
| <input checked="" type="checkbox"/> | 400: Unknown Card | VideoOS.Platform.AccessControl.Inter... | Access denied, Access request |
| <input checked="" type="checkbox"/> | 401: Void Card | VideoOS.Platform.AccessControl.Inter... | |
| <input checked="" type="checkbox"/> | 402: Expired Card Attempt | VideoOS.Platform.AccessControl.Inter... | |
| <input checked="" type="checkbox"/> | 403: Card Trace | VideoOS.Platform.AccessControl.Inter... | |
| <input checked="" type="checkbox"/> | 404: Host denied access | VideoOS.Platform.AccessControl.Inter... | |
| <input checked="" type="checkbox"/> | 405: Valid Card at an unauthorized rea... | VideoOS.Platform.AccessControl.Inter... | |
| <input checked="" type="checkbox"/> | 406: Lost Card Attempt | VideoOS.Platform.AccessControl.Inter... | |
| <input checked="" type="checkbox"/> | 407: Stolen Card Attempt | VideoOS.Platform.AccessControl.Inter... | |
| <input checked="" type="checkbox"/> | 408: Unaccounted for Card Attempt | VideoOS.Platform.AccessControl.Inter... | |
| <input checked="" type="checkbox"/> | 409: Deactivated Card Attempt | VideoOS.Platform.AccessControl.Inter... | |
| <input checked="" type="checkbox"/> | 410: Terminated Card Attempt | VideoOS.Platform.AccessControl.Inter... | |
| <input checked="" type="checkbox"/> | 411: Valid Card presented at wrong time | VideoOS.Platform.AccessControl.Inter... | |

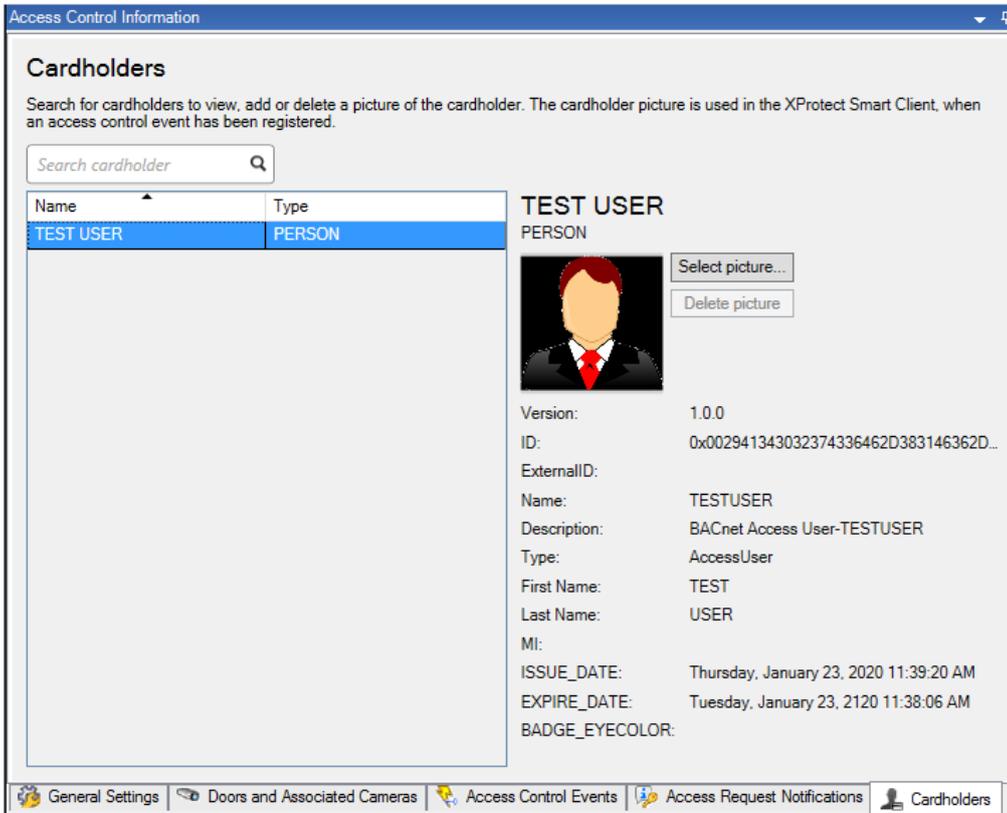
Access Request Notifications tab

Notes: By default, **Access denied** is not associated with **Access request** which means that the association should be configured additionally.

Cardholders tab

Badge Holders from the Pro-Watch system are transferred into the XProtect system, including some basic information and the picture.

The information for the **Test User** is shown in the example below.

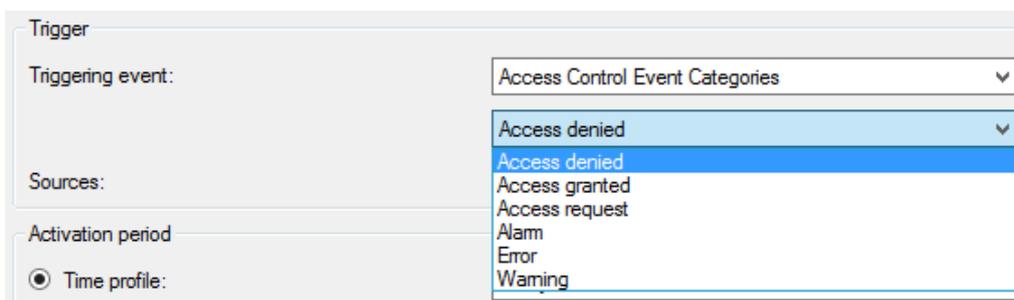


Alarms based on Pro-Watch Access Control events

1. Open XProtect Management Client > **Site Navigation** > **Alarms** > **Alarm Definitions**.
2. In the **Alarm Definitions** panel right click the **Alarm Definitions** node and select **Add New...**

Note For detailed description on how to configure **Alarm Definitions**, see the Milestone XProtect (XProtect Management Client) help.

3. On the **Properties** page, locate the group of settings called **Trigger**.
4. Specify the **Triggering event** by selecting from the top dropdown list the **Access Control Event Categories** event group, and from the next dropdown list, select the appropriate **Event Category**. The default **Event Categories** as well as the **User-defined Categories** are listed here.



In the example, **Access denied** is selected.

- From the **Sources** dropdown list, select a proper source depending on the required configuration. The default options are:

All doors: This option will select all added doors as a source for triggering the alarm.

<door 1>: This option will select only **door 1** as a source.

<door 2>: This option will select only **door 2** as a source.

..

<door n>: This option will select only **door n** as a source.

Other...: This option opens the **Select Sources** dialog. The following three options are available:

Access Control Servers: This option will list all added access control systems and related access control units.

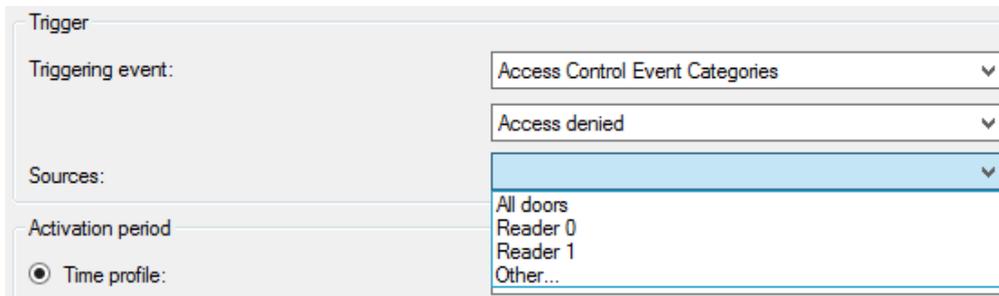
All Access Control Servers: This option will select all added access control servers as sources.

All Access Control Units: This option will select all added access control units as sources.

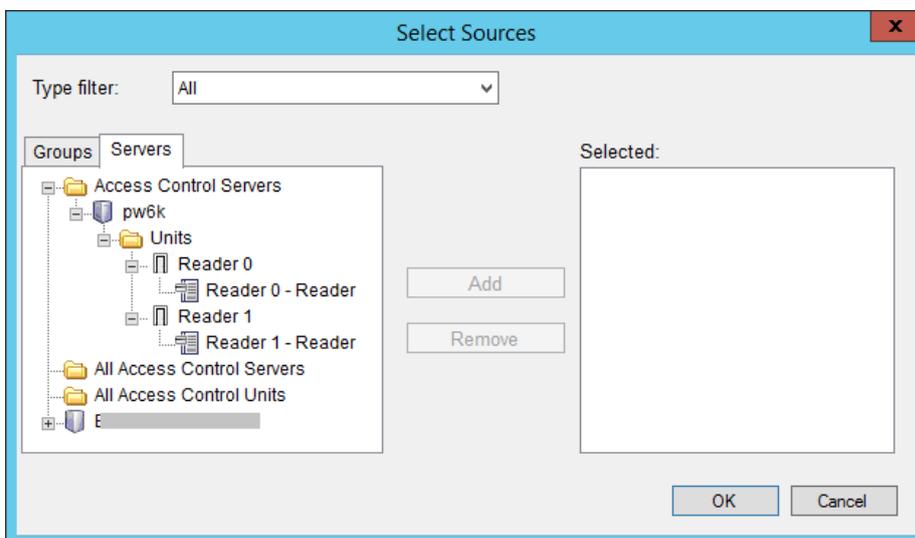
Select a proper source(s). Click **OK** when the selection is done.

The following options are available in the example below:

All doors, Reader 0, Reader 1, Other...

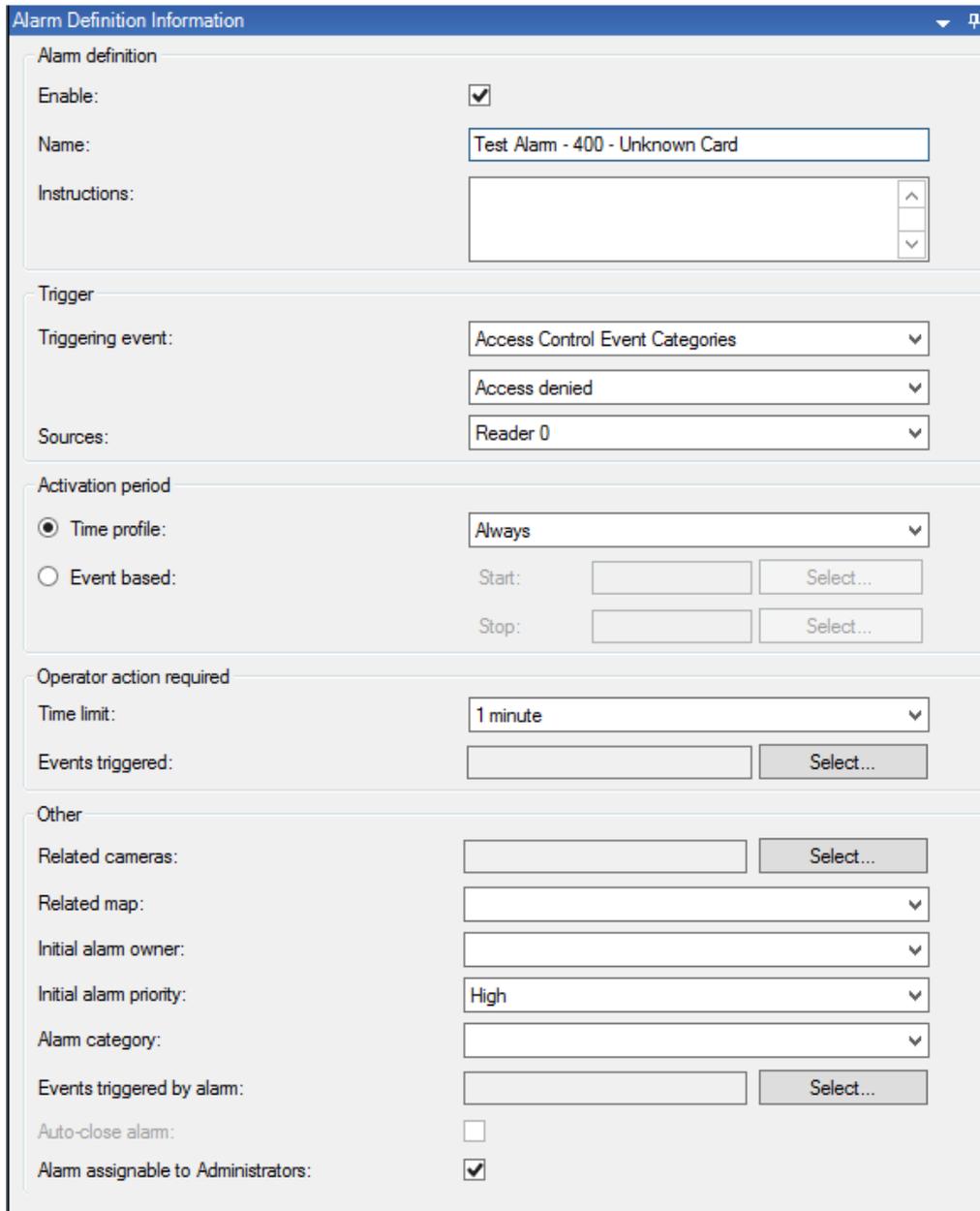


The **Other...** option



Reader 0 from the initial listings is selected in the example above. Click **OK**.

- Click **Save** in the toolbar to save the alarm.



Alarm Definition Information

Alarm definition

Enable:

Name: Test Alarm - 400 - Unknown Card

Instructions:

Trigger

Triggering event: Access Control Event Categories

Access denied

Sources: Reader 0

Activation period

Time profile: Always

Event based: Start: Select... Stop: Select...

Operator action required

Time limit: 1 minute

Events triggered: Select...

Other

Related cameras: Select...

Related map:

Initial alarm owner:

Initial alarm priority: High

Alarm category:

Events triggered by alarm: Select...

Auto-close alarm:

Alarm assignable to Administrators:

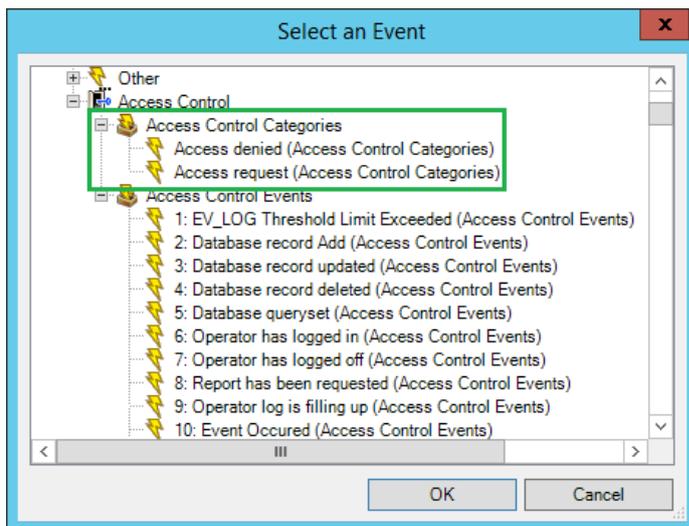
Rules based on Pro-Watch Access Control events

- Open XProtect Management Client > **Site Navigation** > **Rules and Events** > **Rules**.
- In the **Rules** panel, right click on the **Rules** node and select **Add Rule...**

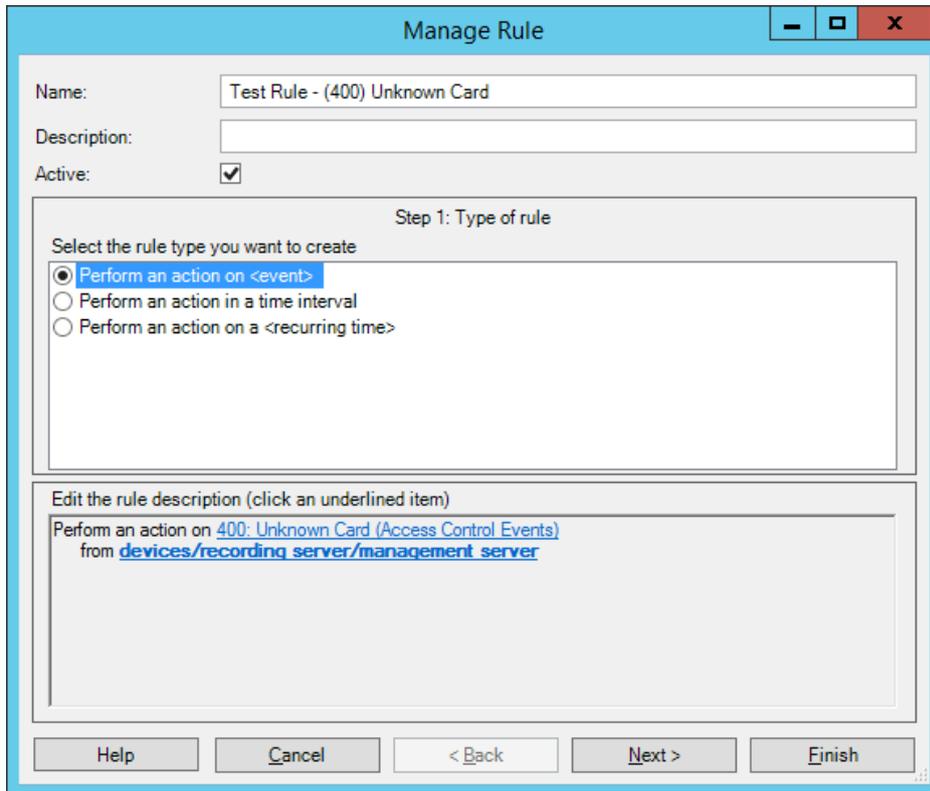
Note For detailed description on how to configure **Rules**, see the Milestone XProtect (XProtect Management Client) help.

3. In the **Step 1: Type of rule section**, select **Perform an action on <event>**.
4. In the **Edit the rule description section (click an underlined item)**, click **event**.
5. In the **Select an Event** dialog box, expand **Access Control > Access Control Events**, and select an event as per your requirements.

Note: An **Access Control Categories** root will appear in this tree if an event is assigned to **Event Category** in the [Pro-Watch Access Control Properties](#).

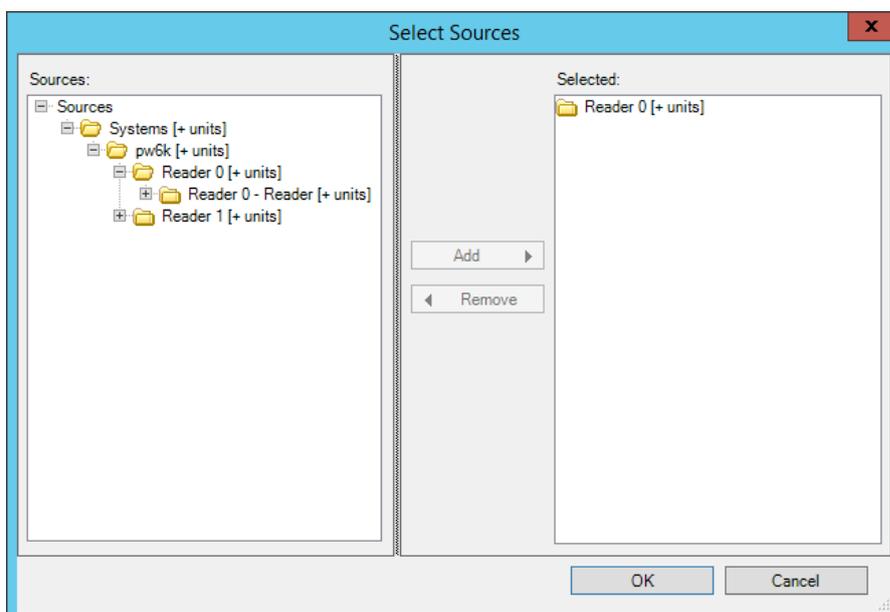


400: Unknown Card (Access Control Events) is selected in the example above. Click **OK**.



6. In the **Edit the rule description section (click an underlined item)**, click **devices/recording server/management server**.
7. In the **Select Sources** dialog box, select **Systems [+ units]** or expand it, and select devices as per your requirements. Click **OK**.

Reader 0 [+ units] is selected in the example below. Click **OK**.



8. In **Step 2: Conditions**, select conditions if those are required and click **Next**.
9. In **Step 3: Actions**, following actions are added based on the integration (These actions were added when [Pro-Watch Access Control is added to XProtect](#)):

Mask <Door>

TimedMask <Door>

Lock <DoorAccessPoint Extension>

ReEnable <DoorAccessPoint Extension>

UnLock <DoorAccessPoint Extension>

MaskTamperAlarm <DoorAccessPoint Extension>

EnterCypher <DoorAccessPoint Extension>

ExitCypher <DoorAccessPoint Extension>

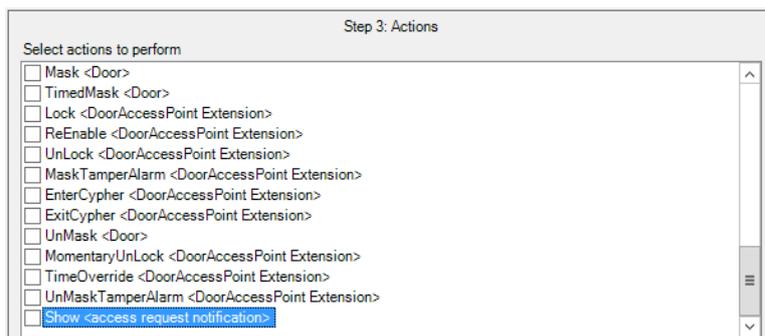
UnMask <Door >

MomentaryUnlock <DoorAccessPoint Extension>

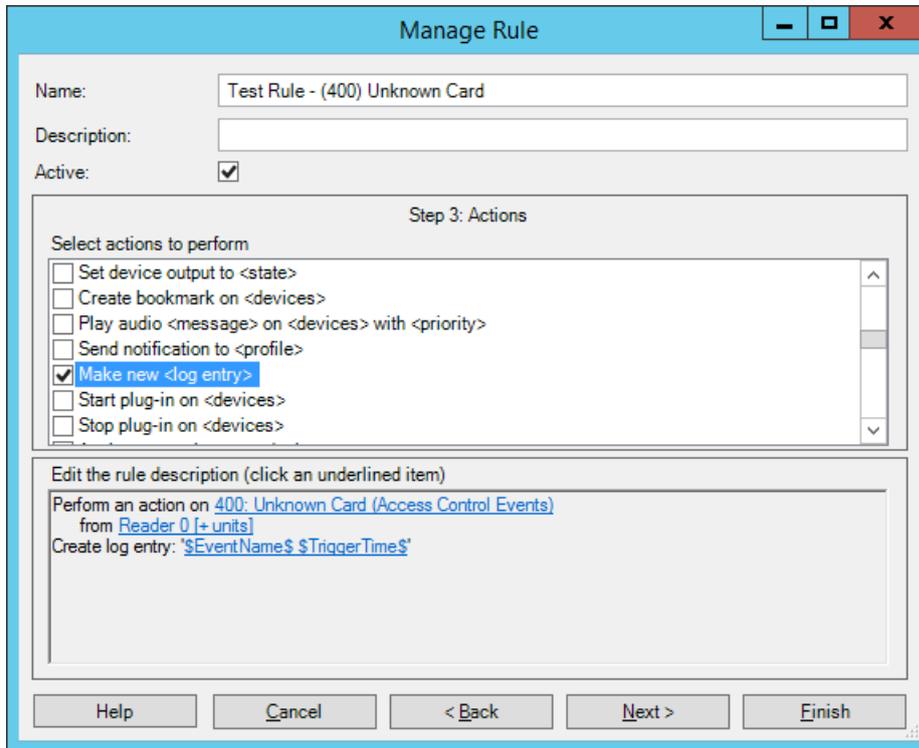
TimeOverride <DoorAccessPoint Extension>

UnMaskTamperAlarm <DoorAccessPoint Extension>

Show <access request notification>



In the example one of the default XProtect actions is selected – **Make new <log entry>** with variables **Reader 0 - \$TriggerTime\$**. In this way, a new log entry is created in the **Rule-triggered logs** when the event is triggered.



10. In **Step 4**: Select **Stop criteria**, if needed, and click **Next**.
Stop criteria is not selected in the example.
11. Click **Finish**.

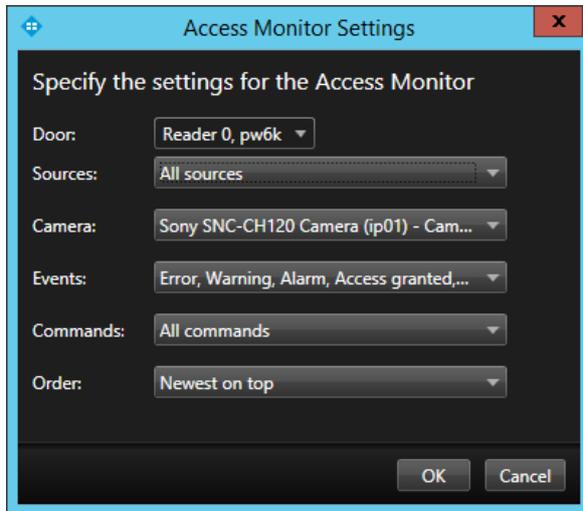
XProtect Smart Client configuration

Add Pro-Watch Access Monitor

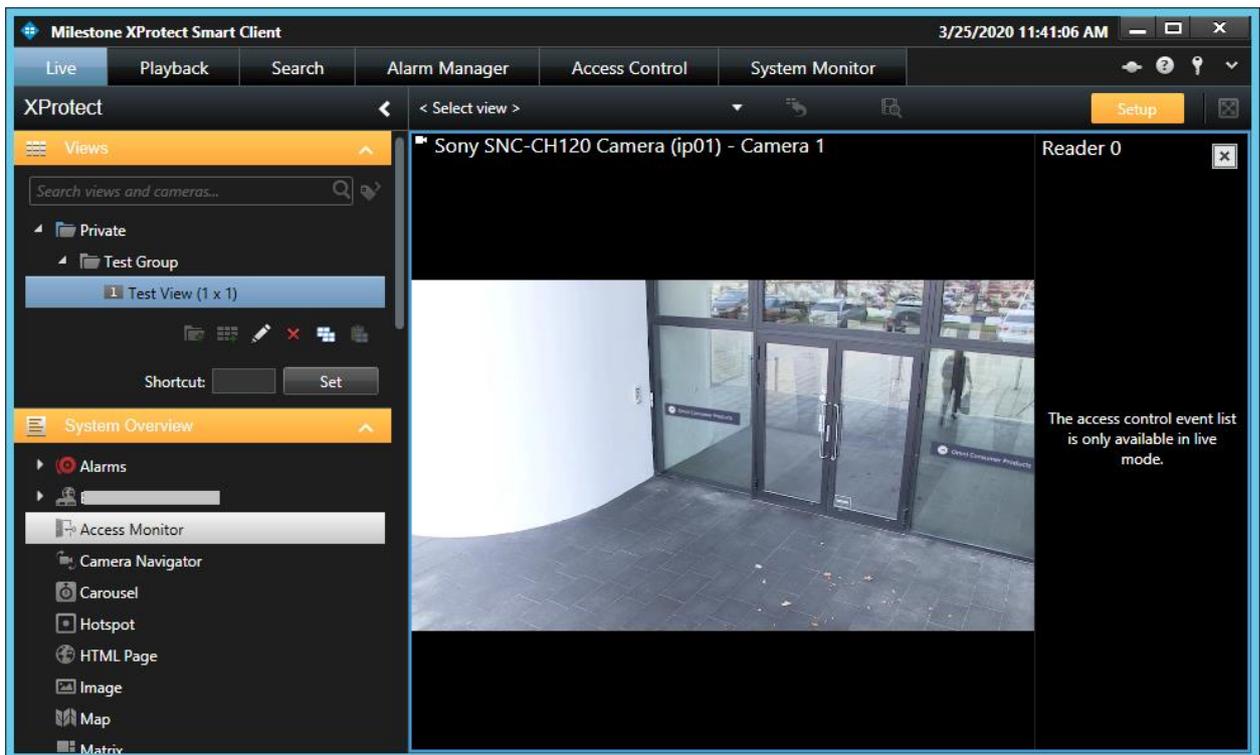
1. Open XProtect Smart Client > **Live** tab.
2. In the upper-right corner, click **Setup**.
3. Add a **Group** and a **View**.

***Note:** For detailed description on how to configure **Access Monitor**, see the Milestone XProtect (XProtect Smart Client) help.*

4. In the **System Overview** pane, click **Access Monitor** and drag it to the view.
5. In the **Access Monitor Settings** dialog box, specify the settings based on the requirements. In the example below, **Reader 0** is selected and all other settings are set by default. Click **OK**.



- The **Access Monitor** with the given configuration will be added to the view. If an access control event is triggered, it appears on the right side of the view. Check subchapter [XProtect Smart Client operation - Live](#) to see how it looks when an event is triggered.



- Click **Setup** to complete the configuration.

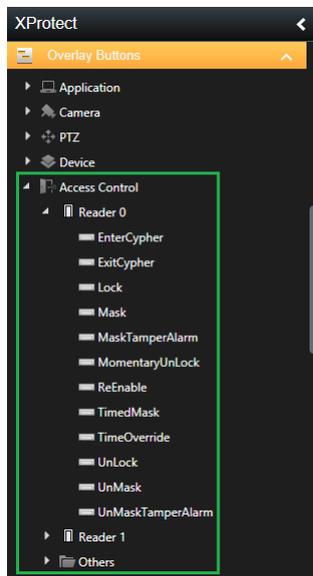
Add Pro-Watch Overlay Buttons

- Open XProtect Smart Client > **Live** tab.
- Click **Setup** in the upper-right corner.

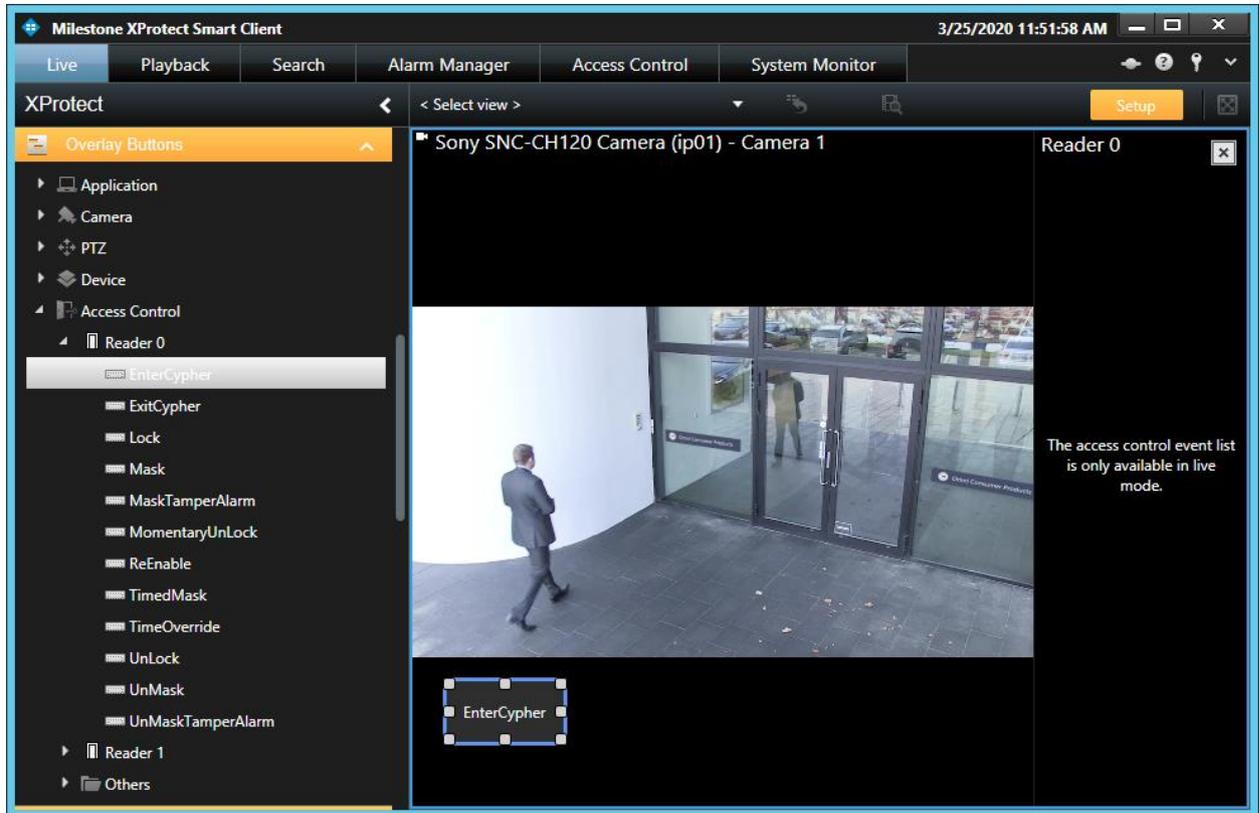
3. Add a **Group** and a **View**.
4. Add a **Camera** or **Access Monitor**

Note For detailed description on how to configure **Overlay Buttons**, see the Milestone XProtect (XProtect Smart Client) help.

5. In the **Overlay Buttons** panel, select and drag the action on the camera position. The following actions related to Pro-Watch doors are available: EnterCypher, ExitCypher, Lock, Mask, MaskTamperAlarm, MomentaryUnlock, ReEnable, TimedMask, TimeOverride, Unlock, UnMask, UnMaskTamperAlarm (These actions were added when [Pro-Watch Access Control is added to XProtect](#)).



The **EnterCypher** action for **Reader 0** is added to the camera in the example.



6. Click **Setup** to complete the configuration.

Add Pro-Watch devices point on the map

The Pro-Watch devices integrate with the map features of XProtect Smart Client and a visual representation of the devices can be done using this feature:

1. Open XProtect Smart Client > **Alarm Manager** tab.
2. Click **Setup** in the upper-right corner.
3. Add a map.

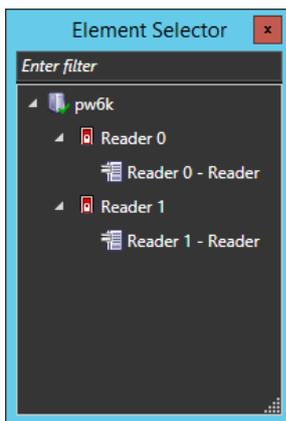
Note: For detailed description on how to configure **Maps**, see the Milestone XProtect (XProtect Smart Client) help.

4. Click **Add Access Control** in the **Tools** dialog box.

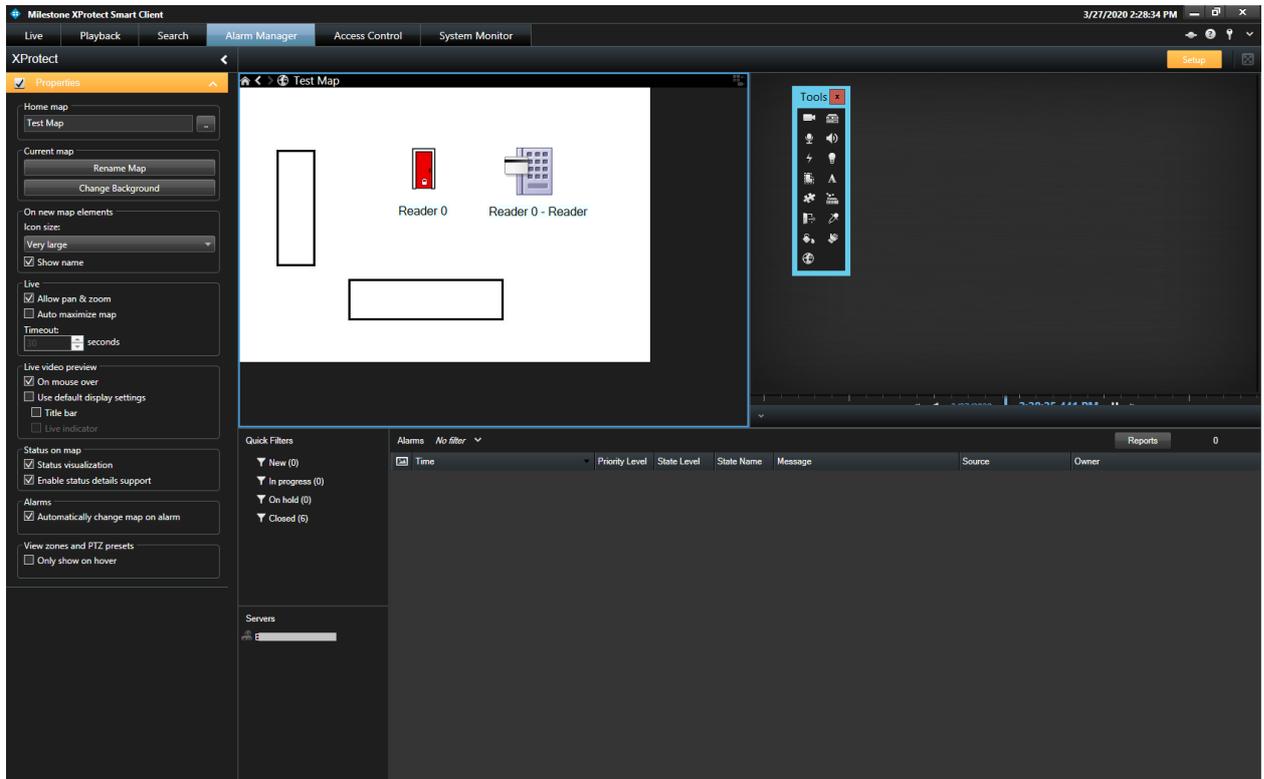


5. In the **Element Selector** dialog box, expand the Pro-Watch access control node. Drag and drop an element (door and/or door access point) from the list to the map depending on the required configuration.

Note *The panel is not supported.*



Reader 0 and **Reader 0 – Reader** are added in the example.



6. Close the **Element Selector** dialog box when you finish adding the Pro-Watch system doors.
7. Click **Setup** in the upper-right corner to complete the map configuration.

XProtect Management Client operation

Audit logs

Open XProtect Management Client > **Site Navigation** > **Server Logs** > **Audit logs**. The **Audit logs** contain information about the commands that each user performs over the doors using XProtect Smart Client.

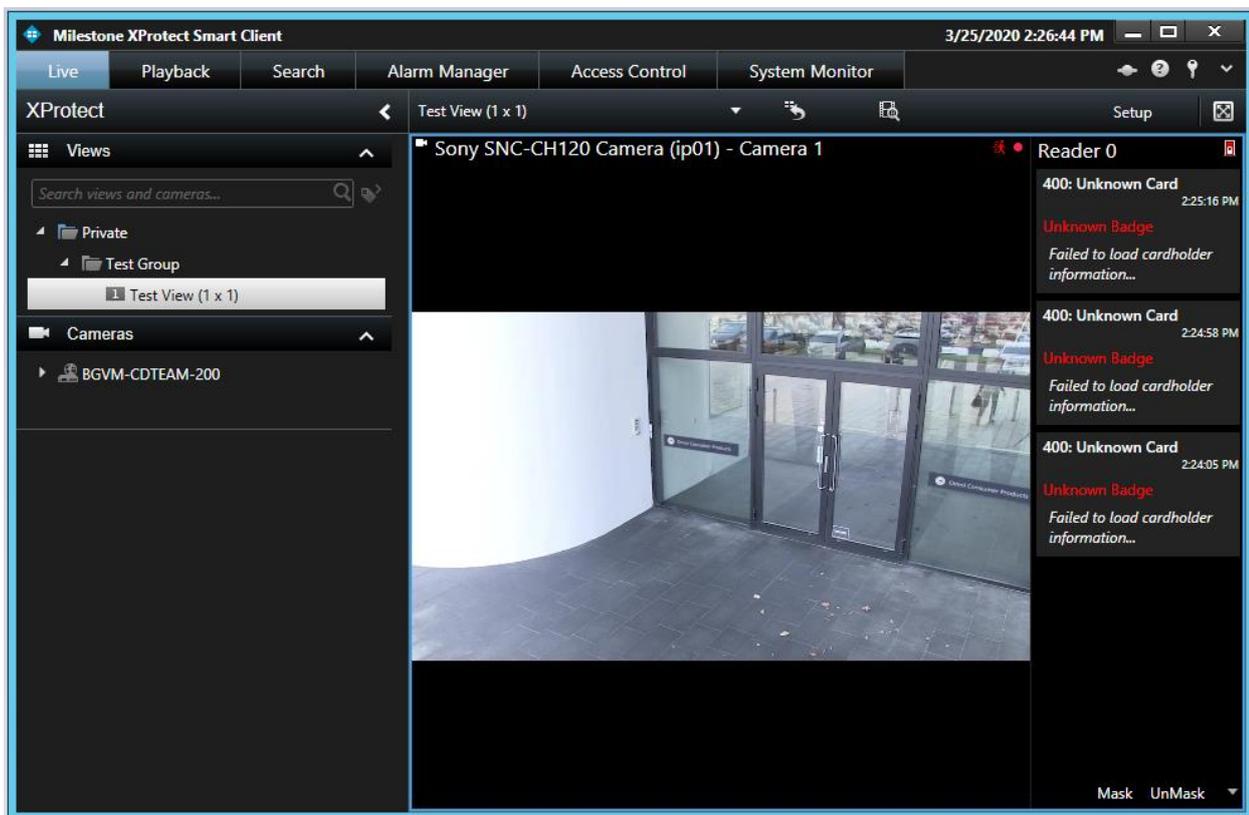
Example:

| Local time | Message text | Permission | Category | Source type | Source name | User | User location |
|----------------------|--|------------|------------------------|----------------|-------------|---------------|-----------------------------|
| 3/25/2020 2:30:11 AM | Access control system 'pw6k' executed the command 'command ExitCypher' on instance 'Reader 0' | Granted | Access control command | Access control | E... | administrator | fe80-1cc1-8bdc-92e0-ea9b%12 |
| 3/25/2020 2:30:08 AM | Access control system 'pw6k' executed the command 'command EnterCypher' on instance 'Reader 0' | Granted | Access control command | Access control | E... | administrator | fe80-1cc1-8bdc-92e0-ea9b%12 |
| 3/25/2020 2:30:06 AM | Access control system 'pw6k' executed the command 'command UnMaskTamperAlarm' on instance 'Reader 0' | Granted | Access control command | Access control | E... | administrator | fe80-1cc1-8bdc-92e0-ea9b%12 |
| 3/25/2020 2:30:03 AM | Access control system 'pw6k' executed the command 'command MaskTamperAlarm' on instance 'Reader 0' | Granted | Access control command | Access control | E... | administrator | fe80-1cc1-8bdc-92e0-ea9b%12 |
| 3/25/2020 2:29:57 AM | Access control system 'pw6k' executed the command 'command UnLock' on instance 'Reader 0' | Granted | Access control command | Access control | E... | administrator | fe80-1cc1-8bdc-92e0-ea9b%12 |
| 3/25/2020 2:29:53 AM | Access control system 'pw6k' executed the command 'command TimeOverride' on instance 'Reader 0' | Granted | Access control command | Access control | E... | administrator | fe80-1cc1-8bdc-92e0-ea9b%12 |
| 3/25/2020 2:29:49 AM | Access control system 'pw6k' executed the command 'command ReEnable' on instance 'Reader 0' | Granted | Access control command | Access control | E... | administrator | fe80-1cc1-8bdc-92e0-ea9b%12 |
| 3/25/2020 2:29:45 AM | Access control system 'pw6k' executed the command 'command MomentaryUnLock' on instance 'Reader 0' | Granted | Access control command | Access control | E... | administrator | fe80-1cc1-8bdc-92e0-ea9b%12 |
| 3/25/2020 2:29:42 AM | Access control system 'pw6k' executed the command 'command Lock' on instance 'Reader 0' | Granted | Access control command | Access control | E... | administrator | fe80-1cc1-8bdc-92e0-ea9b%12 |
| 3/25/2020 2:29:38 AM | Access control system 'pw6k' executed the command 'command TimesMask' on instance 'Reader 0' | Granted | Access control command | Access control | E... | administrator | fe80-1cc1-8bdc-92e0-ea9b%12 |
| 3/25/2020 2:29:35 AM | Access control system 'pw6k' executed the command 'command UnMask' on instance 'Reader 0' | Granted | Access control command | Access control | E... | administrator | fe80-1cc1-8bdc-92e0-ea9b%12 |
| 3/25/2020 2:29:31 AM | Access control system 'pw6k' executed the command 'command Mask' on instance 'Reader 0' | Granted | Access control command | Access control | E... | administrator | fe80-1cc1-8bdc-92e0-ea9b%12 |

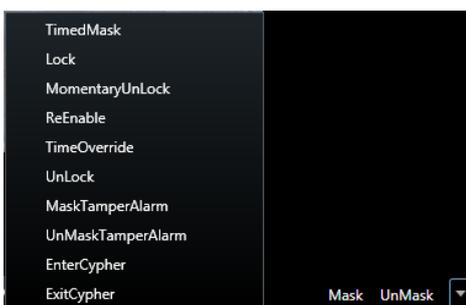
XProtect Smart Client operation

Live tab

Open XProtect Smart Client > **Live** tab. A list with generated events appears on the right side of the view (which was created in chapter [XProtect Smart Client configuration – Add Pro-Watch Access Monitor](#)) if they are also assigned to an **Event Category**. When a single event is selected, the related video recording starts playing if the video exists and it is available.



A list with available actions is displayed in the bottom-right corner (These actions were added when [Pro-Watch Access Control is added to XProtect](#)).



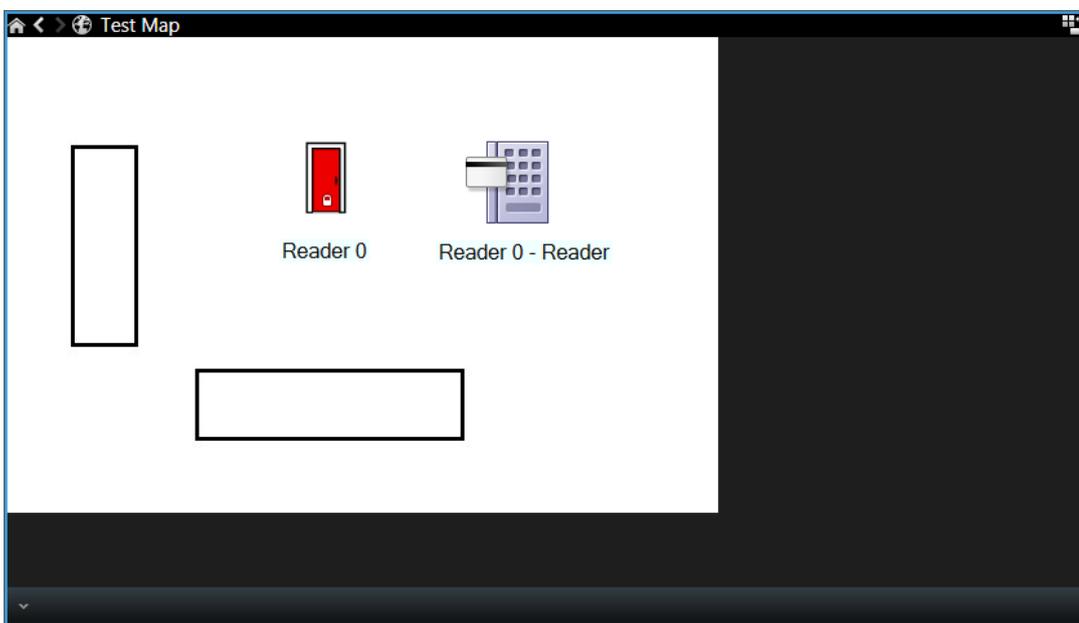
Alarm Manager tab

Pro-Watch devices on the map

Open XProtect Smart Client > **Alarm Manager** tab.

The map in the example shows **Reader 0** and **Reader 0 - Reader** (which were added in chapter [XProtect Smart Client configuration - Add Pro-Watch devices on the map](#))

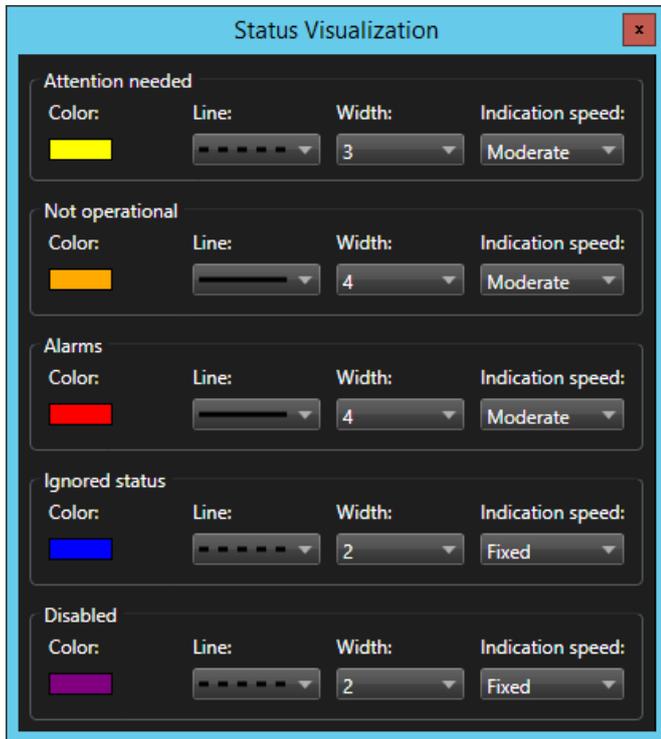
Note The correctness of the initial state of a door cannot be guaranteed. Initially, it will be set to **Locked, Closed**.



The other default XProtect states for the doors/door access points are described in the following table:

| State | Description |
|------------------|--|
| Attention needed | Currently not supported |
| Not operational | Currently not supported |
| Alarms | An alarm involving the door is generated and listed in the Alarms list. |
| Ignored status | Currently not supported. |
| Disabled | Currently not supported. |

Status Visualization option in XProtect Smart Client for configuring the desired visualization (right click on the map in **Setup** mode > **Status Visualization**):



The door states based on the integration are described in the following table:

| State | Description |
|-------|--|
| | Locked, Closed |
| | Unlocked, Closed |
| | Locked, Open |
| | Unlocked, Open |
| | State is not available. That may happen if the door is disabled in XProtect Management Client. |

There are not states for the door access points based on the integration.

Context menu

If you right-click on the door/door access point, you will see several standard actions plus the integration specific:

| Door (Reader 0) | Door Access Point (Reader 0 - Reader) |
|-----------------|---------------------------------------|
| | |

The most important ones are described in the following table:

| Action | Description | Door | Door Access Point |
|--------------------|---|-----------|-------------------|
| Acknowledge Alarms | This action changes the State Name of an alarm from New to In Progress . | Available | Available |
| Disable Alarms | Currently not supported. | Available | Available |
| Ignore Status | Currently not supported. | Available | Available |

| | | | |
|---|---|-----------|---------------|
| Mask, UnMask, TimedMask, Lock, MomentaryUnlock, ReEnable, TimeOverride, UnLock, MaskTamperAlarm, UnMaskTamperAlarm, EnterCypher, ExitCypher | Pro-Watch system actions related to doors (These actions were added when Pro-Watch Access Control is added to XProtect). Note: For detailed description, see the Honeywell Pro-Watch Software Suite v4.5 SP1 help. | Available | Not Available |
| Status Details | This action shows the current status of a door, including several properties and their values. | Available | Available |

In the example below, the **Reader 0** status is shown:

| Name | Value | Unit |
|--------------------------|--|------|
| State | Locked, Closed | |
| Version | 1.0.0 | |
| ID | 0x006F8098D9C840AF47EEABEB6213433A3881 | |
| ExternallID | | |
| Name | Reader 0 | |
| Description | Reader 0 - 0x006F8098D9C840AF47EEABEB6213433A3 | |
| Type | AccessDoor | |
| Door_Unlock_Delay_Time | 0 | |
| Door_Extended_Pulse_Time | 0 | |
| Secured_Status | SECURED | |
| Present_Value | LOCK | |
| In Alarm | False | |
| Out Of Service | False | |
| Alarm Time Delay | 00:00:00 | |

In the example below, the **Reader 0 - Reader** status is shown:

| Name | Value | Unit |
|--------------------|---|------|
| State | | |
| ID | SofiaSite_05010005000800 | |
| Name | Reader 0 - Reader | |
| Description | Reader 0 - Reader - SofiaSite::05010005000800 | |
| Type | AccessPointExtn | |
| Threat_Level | 0 | |
| FailedAttemptsTime | 00:00:00 | |
| TransientTime | 00:00:00 | |

Alarms

Pro-Watch alarms are only registered when the XProtect Event Server is running, and the integration is loaded. Moreover, the past Pro-Watch alarms cannot be read by the integration. That means that in case

the XProtect Event Server has stopped, the Pro-Watch alarms generated meanwhile will not be shown in XProtect Smart Client and also will not be displayed when the XProtect Event Server is restarted.

Alarms from Pro-Watch that are acknowledged or closed in XProtect Smart Client will also be acknowledged in Pro-Watch. XProtect also has a state named **On hold**. Setting Pro-Watch alarms to this state in XProtect Smart Client will not change their state in Pro-Watch.

Access Control tab

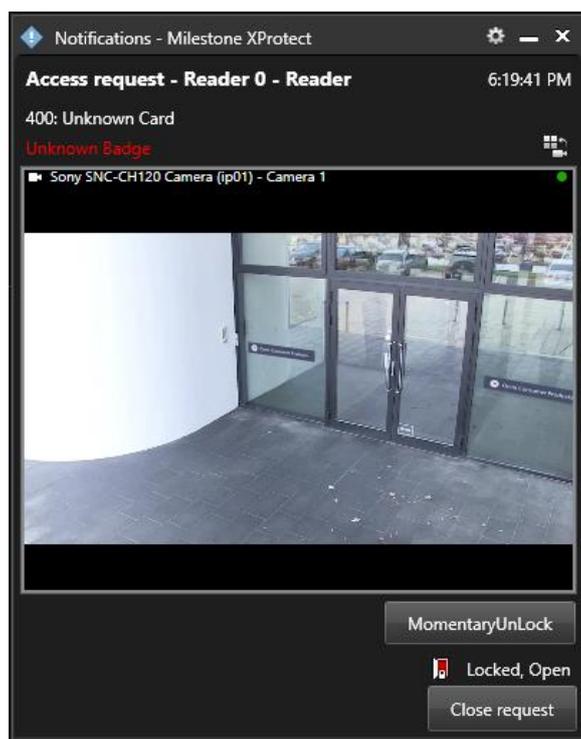
Note: For detailed description, see the Milestone XProtect (XProtect Smart Client) help.

Access request notifications

Access request notifications appear as a pop-up in the bottom-right corner of the screen. Each notification contains the following information:

- Source (door/door access point)
- Local Time
- Event
- Live video from the associated camera
- A with action
- Actual state of the door
- Button **Close request**

In the example, an access request notification for **400: Unknown Card** event is shown:



Troubleshooting

This section provides information, which helps the administrator solve cases where the integration fails working. For detailed troubleshooting [XProtect Event Server and MIP logs](#) should be inspected.

Case: Honeywell Pro-Watch is not listed as an option in **Integration plug-in** when adding the Pro-Watch Access Control to the XProtect system.

| Cause | Action |
|---|---|
| The XProtect Event Server and XProtect Management Client have not been restarted after the installation of the plug-in. | Restart the XProtect Event Server and XProtect Management Client after the installation of the plug-in. |

Case: Alarms are not detected. Map displays errors/warnings.

| Cause | Action |
|--|--|
| XProtect Event Server is not running. | Open Windows Services and check the status of Milestone XProtect Event Server. Try to start it. Check the XProtect Event Server logs, if it fails to start. |
| Milestone Honeywell Pro-Watch Access Control Integration is not loaded by the XProtect Event Server. | <p>Check the XProtect Event Server log. Look for an entry resembling:</p> <pre>"2020-03-25 9:47:48 PM UTC+02:00 Info ESEnvironmentManager Access Control plugin loaded: Honeywell Pro-Watch v2.0a - Milestone A/S"</pre> <p>Note that this only occurs while the XProtect Event Server is starting. If no log entries are found, then verify that the plug-in has been installed correctly. It should be typically located in:</p> <pre>C:\Program Files \Milestone\MIPPlugins\ProWatchAccessControlPlugin</pre> |
| MIP License has expired or is not activated. | First, consider re-activation of the license either online or offline. Check the license details in XProtect Management Client. |

XProtect Event Server and MIP logs

The Milestone Honeywell Pro-Watch Access Control integration is driven by the XProtect Event Server and initializes whenever the server is restarted. This server produces logging information, which also includes status and error messages from the integration. There are two types of logs:

- **XProtect Event Server logs:** The log files are typically located in the following folder:
C:\ProgramData\Milestone\XProtect Event Server\logs
A new log-file is created on a daily basis and is named following this format: **C<date>.log**. The content of the file can be viewed using a simple text viewer such as Microsoft Notepad
- **MIP logs:** The log files are typically located in the following folder:
C:\ProgramData\Milestone\XProtect Event Server\logs\MIPLogs
A new log-file is created on a daily basis and is named following this format: **MIP<date>.log**. The content of the file can be viewed using a simple text viewer such as Microsoft Notepad.

Log details

The level of details being logged in the **MIP logs** can be controlled from the configuration file, which is included with the plug-in. The configuration file is located in:

C:\ProgramData\Milestone\MIPPlugins\ProWatchAccessControlPlugin\LogLevel.xml

The file can be edited with a simple text editor such as Microsoft Notepad. The default content of the configuration file is the following:

```
<?xml version="1.0" encoding="utf-8" ?>
<LogLevel>
Error
</LogLevel>
<!-- Possible values: Debug, Warn, Error. Debug = Highest level of logging, Error logs least level -->
```

The **LogLevel** parameter value specifies the level of logging information. The possible values are as described: **Debug, Warn, Error**, where **Debug** gives the most detailed information about the received Pro-Watch events and alarms. This level is not recommended when running in a production environment but is intended for detailed troubleshooting.

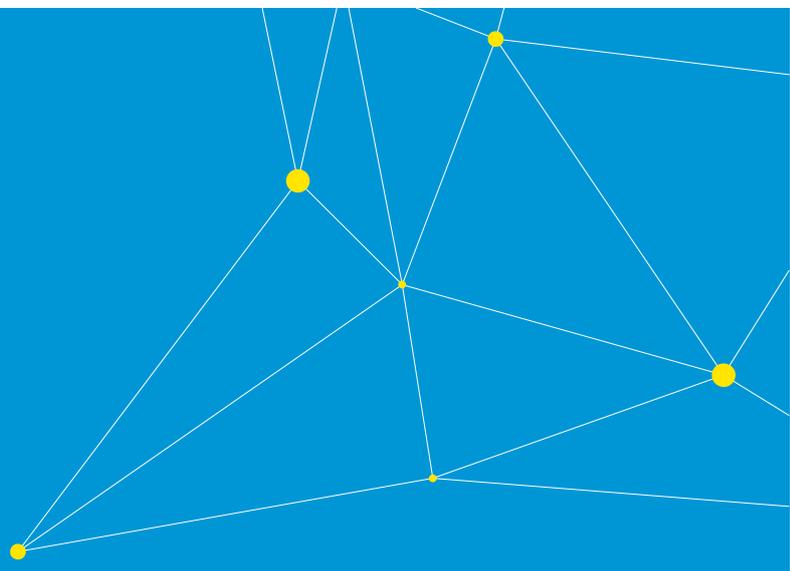
Note XProtect Event Server must be restarted in order to load the new configuration whenever changing the value of the parameters.

Limitations

The Milestone Honeywell Pro-Watch Access Control integration supports only the logical devices based on **Hardware Template: DoorTypicalACR (Access Control Reader)** and **Hardware Class: Reader**, their device types (resources) and the defined set of events for these resources. The integration may work with logical devices based on other **Hardware Templates** and **Hardware Classes**, but Custom Development does not guarantee that.

Known issues

There are no known issues at the time of the release.



Milestone Systems is a leading provider of open platform video management software; technology that helps the world see how to ensure safety, protect assets and increase business efficiency. Milestone enables an open platform community that drives collaboration and innovation in the development and use of network video technology, with reliable and scalable solutions that are proven in more than 150,000 sites worldwide. Founded in 1998, Milestone is a stand-alone company in the Canon Group.