suprema

BioStar 2 Integration for Milestone XProtect

SETUP GUIDE

Version 1.2
English

Contents

Target Audience

This document is intended for system operators as well as system administrators and describes the integration between Suprema BioStar 2 and Milestone XProtect.

The system operators/administrators require basic knowledge of the Milestone XProtect system and high knowledge of the Suprema BioStar 2.

Introduction

Suprema's BioStar 2 is the powerful web-based security platform that provides the ability to integrate with third-party systems easily. This integration is based on Suprema's BioStar 2 server and enables operators to display the access control events and alarm on the XProtect Smart Client.

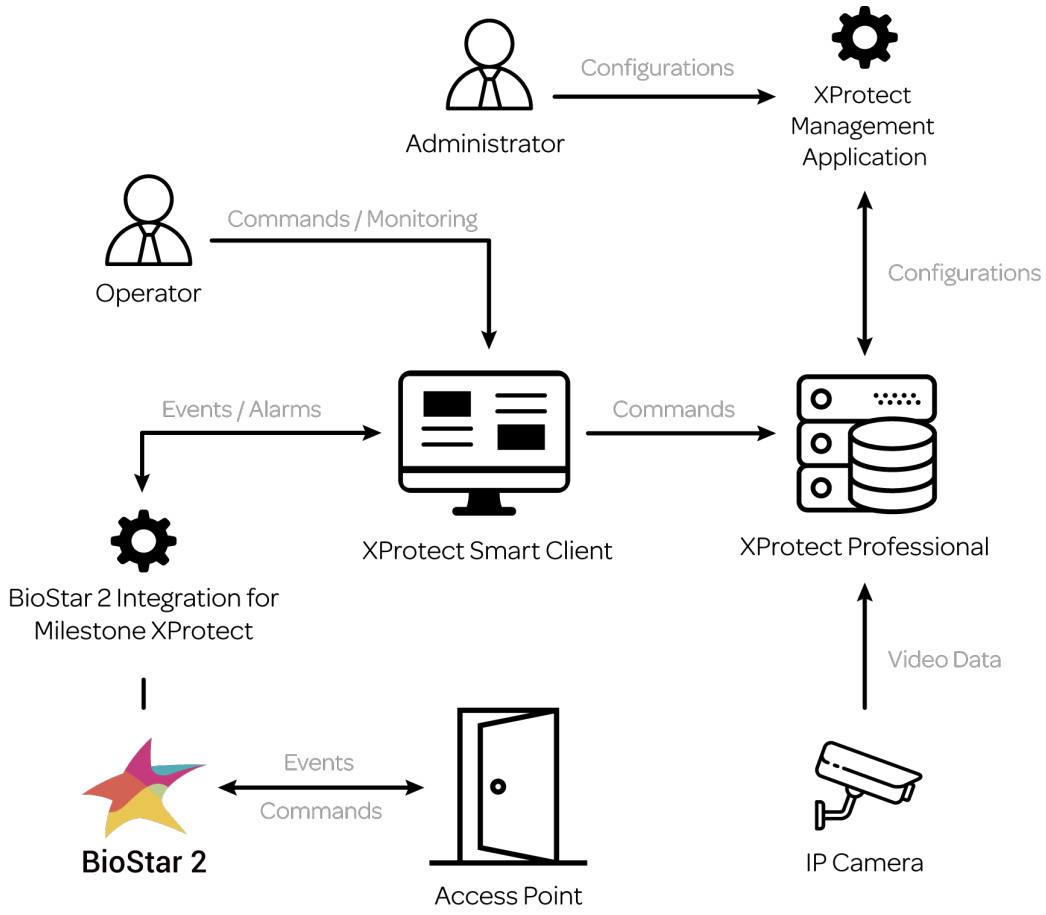
With the full features of BioStar 2, XProtect VMS creates a comprehensive access control solution. Furthermore, by coupling video and access control events, operators can control cameras and view real-time video and recorded video from one easy-to-use interface.

- Management and administration for users, doors, zones, and elevators with XProtect Smart Client.
- View live and historical access control events from within Milestone software and allows the operator to search for historical events with a range of parameters.
- Acknowledge the access control alarm of BioStar 2 in XProtect Smart Client.
- Real-time control the doors to unlock, lock and release the alarm.
- Open and close the doors through the Maps function of the XProtect Smart Client.

NOTE

- For more details on the functionality of XProtect VMS and XProtect Smart Client, see the manuals for Milestone software.

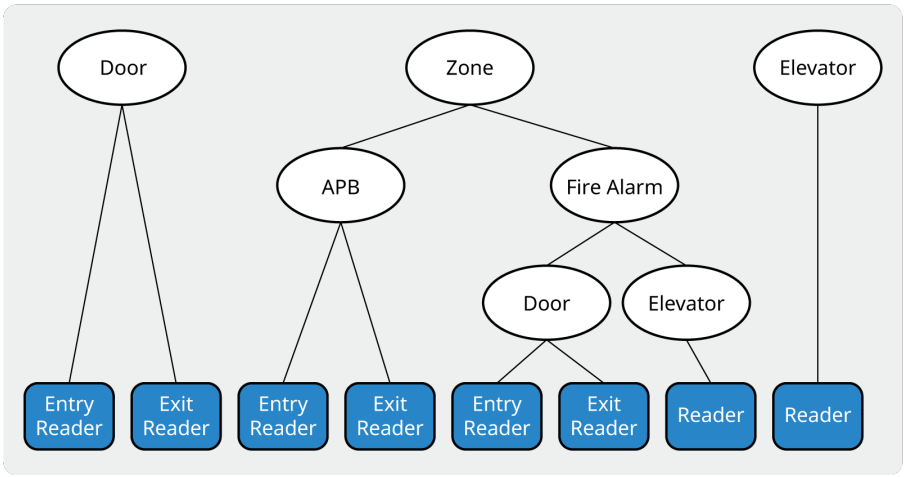
System diagram



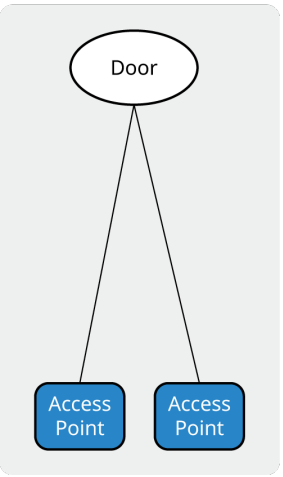
Structural differences between BioStar 2 and XProtect

BioStar 2 is a security platform which can manage all components for access control, but XProtect uses the simple ACU-based topology. Therefore, there are few differences between BioStar 2 and XProtect. For examples, BioStar 2's Door, Zone, Elevator has the same level with XProtect's Door, but BioStar 2's element has more specified items. See below image.

Suprema BioStar 2



Milestone XProtect



Functionalities

In XProtect Smart Client, you can use below functionalities with this plug-in;

- Retrieves the user(cardholder) from BioStar 2.
- Retrieves the door from BioStar 2.
- Retrieves the zone from BioStar 2.
- Retrieves the elevator from BioStar 2.
- Displays the status of the door in real-time.
- Displays the access control event in real-time.
- Displays the access control alarm of BioStar 2.
- Acknowledges the access control alarm of BioStar 2.
- Controls the door status of BioStar 2. (Clear Alarm, Clear APB, Open, Lock Door, Unlock Door, Release Door)
- Controls the zone status of BioStar 2. (Clear Alarm, Clear APB)
- Controls the elevator status of BioStar 2. (Clear Alarm)
- Links doors and camera and monitors them together.
- Allocates and monitors the door, zone, and elevator with Maps.
- Generates a report for access control events.

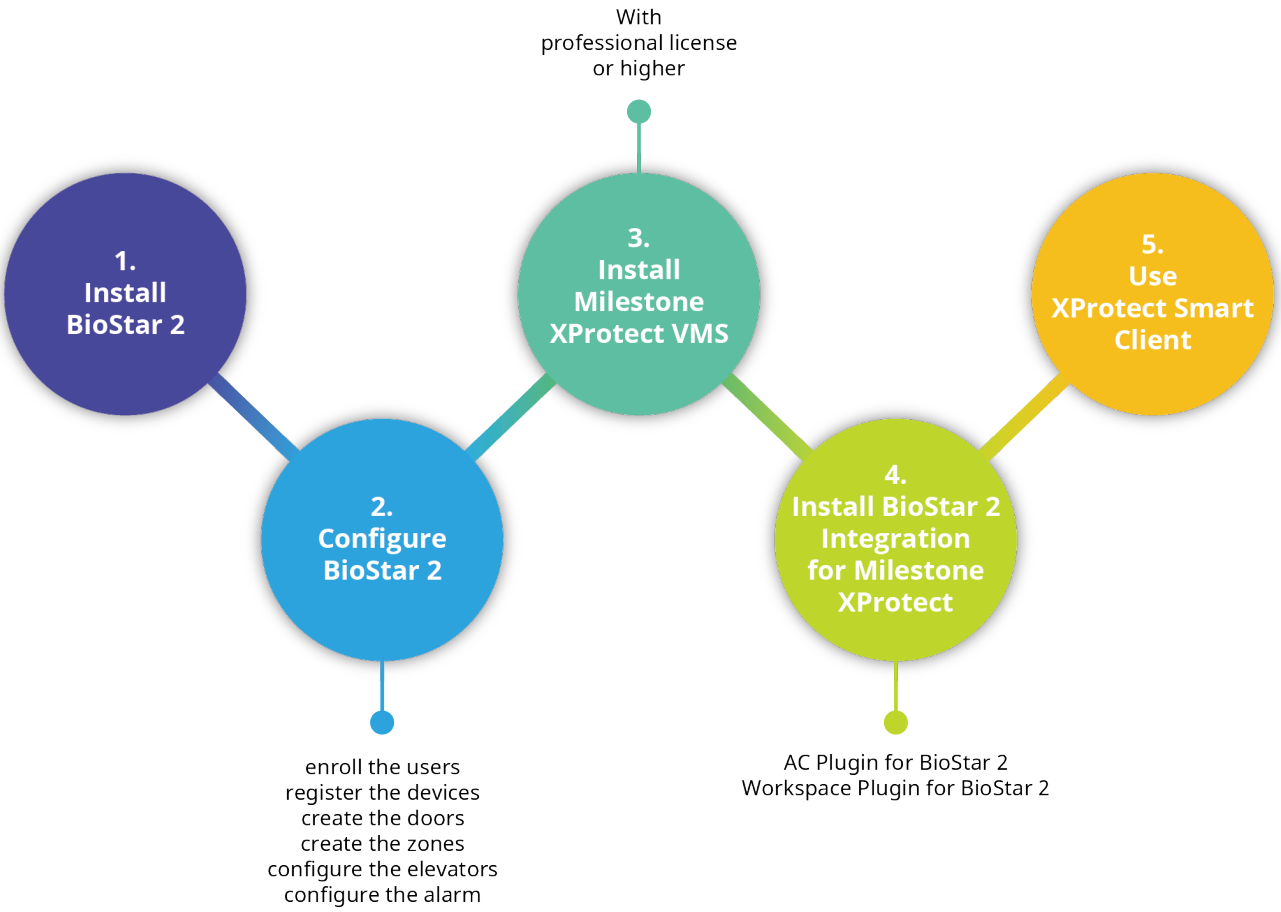
Installation

Prerequisites

- Must install the one of Milestone XProtect VMS.
  - XProtect Professional 2017 R2 or higher version
  - XProtect Professional+ 2017 R2
  - XProtect Expert 2017 R2
  - XProtect Corporate 2017 R2
- Must install BioStar 2.4.1 or higher version.
- Must have a Milestone license for XProtect Professional or higer version.
- XProtect VMS and BioStar 2 must be installed first.
- All access control configuration settings of BioStar 2 must be completed.
- System requrements
  - CPU: 4GHz Quad Core
  - RAM: Minimum 10 GB
  - Hard disk space: Minimum 1 TB free hard disk space available
  - Operating system:

    Microsoft® Windows® 10 Pro (64 bit)*
    Microsoft Windows 10 Enterprise (64 bit)*
    Microsoft Windows 8.1 Pro (64-bit)
    Microsoft Windows 8 Enterprise (64-bit)
    Microsoft Windows 8 Pro (64-bit)
    Microsoft Windows 7 Ultimate (64-bit)
    Microsoft Windows 7 Enterprise (64-bit)
    Microsoft Windows 7 Professional (64-bit)
    Microsoft Windows 2008 R2 (64bit): Standard
  - Other: Microsoft .NET 4.5.1 Framework

Configuration procedure



Installing the BioStar 2 Integration for Milestone XProtect

BioStar 2 Integration for Milestone XProtect has two components;

- **AC Plugin for BioStar 2.exe**
- **WorkspacePluginforBioStar2.exe**

AC Plugin for BioStar 2.exe is used to connect the access control system and XProtect VMS. In other words, it works as a middleware to exchange the data between BioStar 2 and XProtect VMS.

WorkspacePluginforBioStar2.exe provides the functionality for using BioStar 2 in the XProtect Smart Client. This component must be installed on the PC where XProtect Smart Client is installed.

NOTE

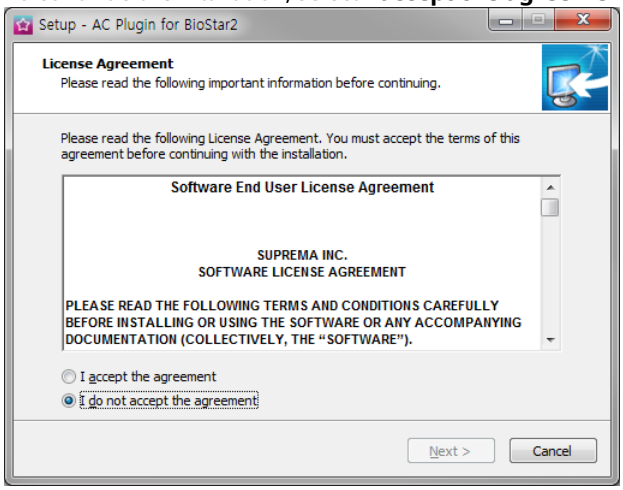
- These plug-ins were built with MIP SDK 2016 and tested for Milestone XProtect Professional 2017 R2. For other versions of XProtect, please contact suprema technical support team(support.supremainc.com).

AC Plugin for BioStar 2

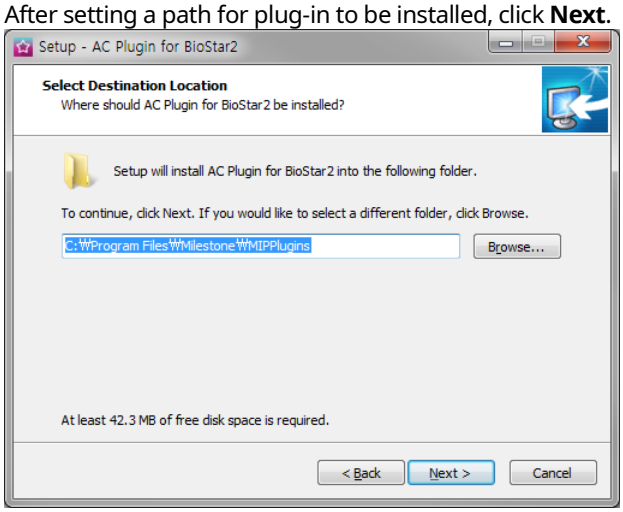
1 Run **AC Plugin for BioStar 2.exe** file.

2 Select a language and click **OK**.

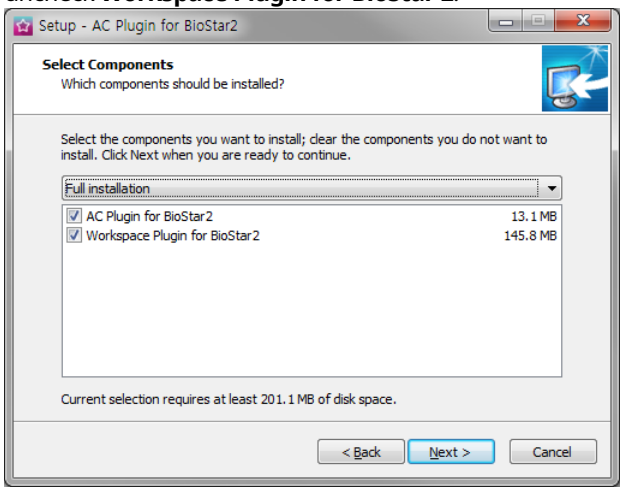
3 To continue the intallation, select **I accept the agreement** and click **Next**.



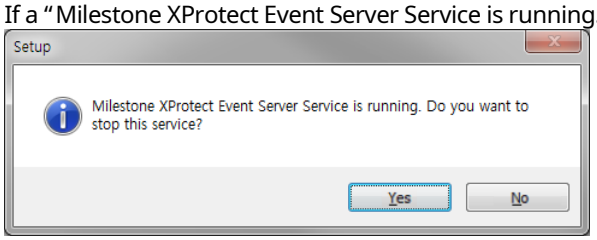
4 After setting a path for plug-in to be installed, click **Next**.



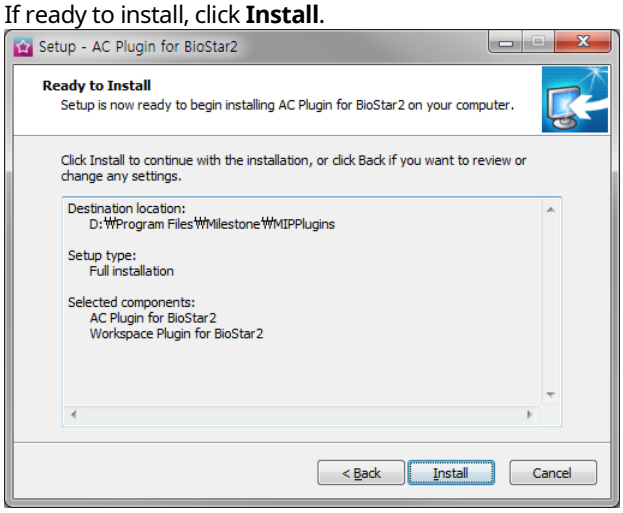
5 Select **Full installation** and click **Next**. If XProtect Smart Client is installed separately with XProtect Professional, uncheck **Workspace Plugin for BioStar 2**.



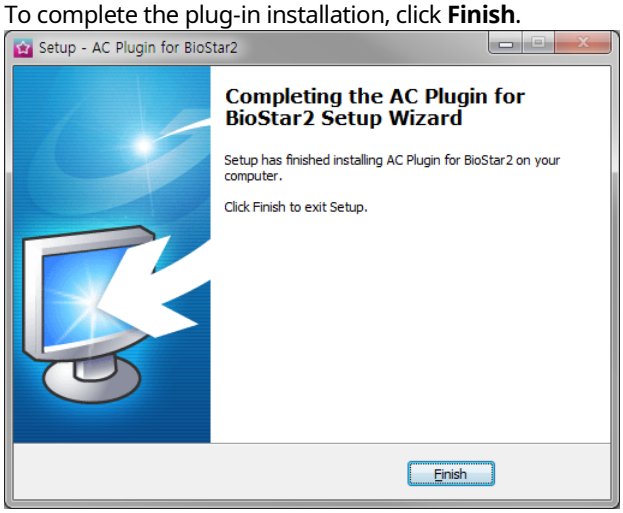
6 If a "Milestone XProtect Event Server Service is running. Do you want to stop this service?" window appears, click **Yes**.



7 If ready to install, click **Install**.



8 To complete the plug-in installation, click **Finish**.

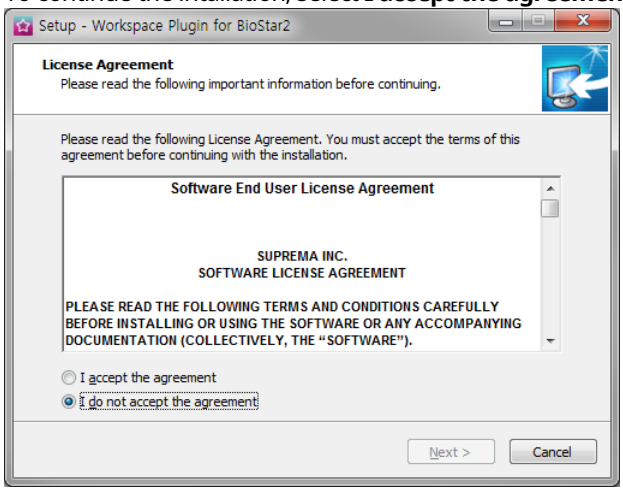


Workspace Plugin for BioStar 2

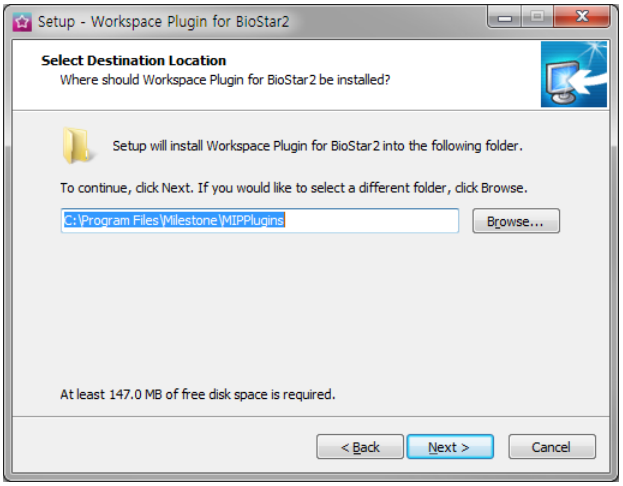
1 Run **WorkspacePluginforBioStar2.exe** file.

2 Select a language and click **OK**.

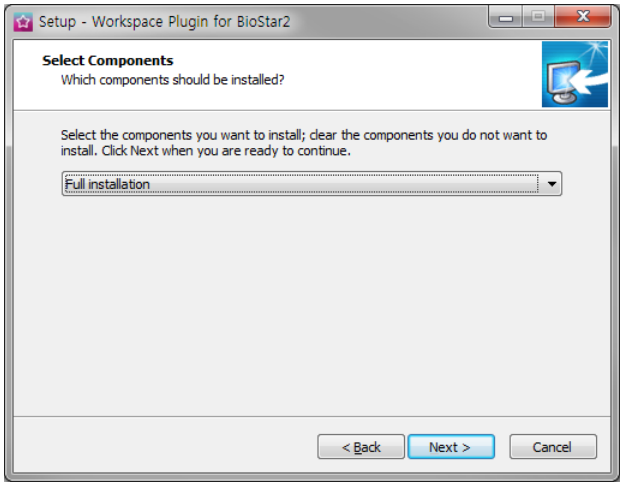
3 To continue the intallation, select **I accept the agreement** and click **Next**.



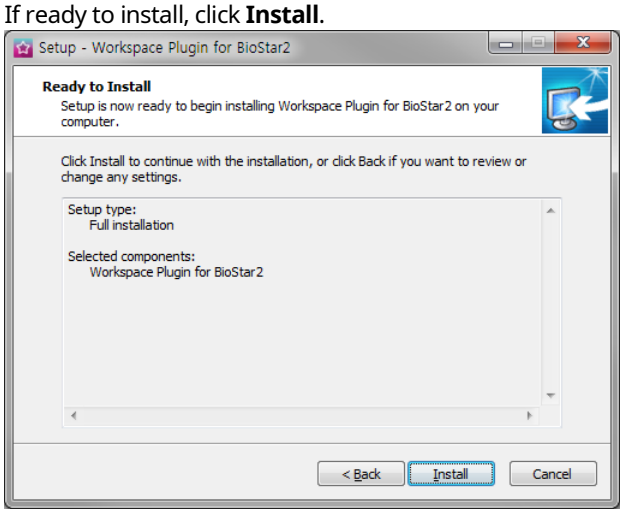
4 After setting a path for plug-in to be installed, click **Next**.



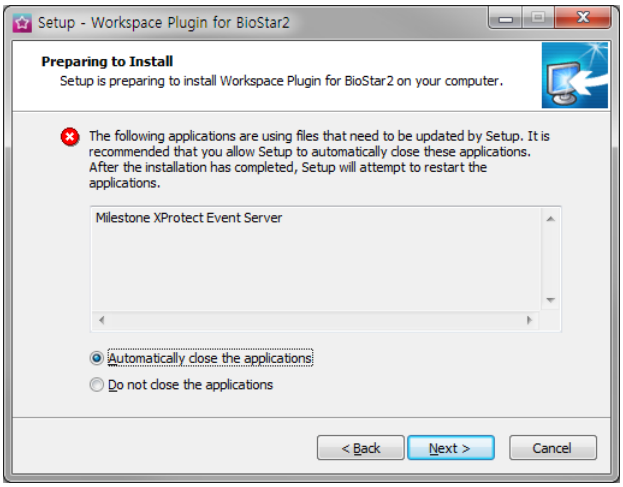
5 Select **Full installation** and click **Next**.



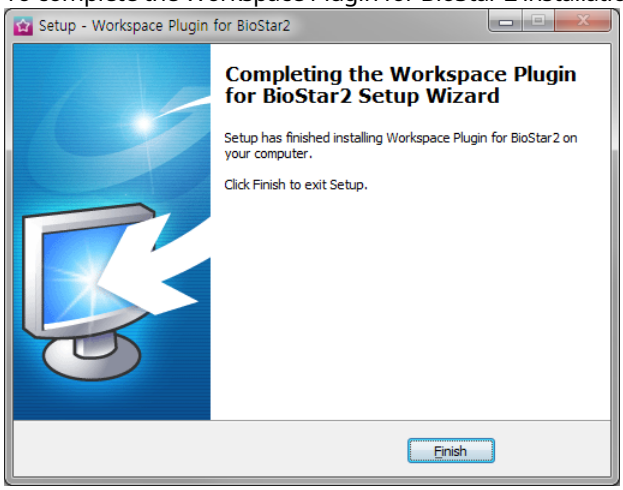
6 If ready to install, click **Install**.



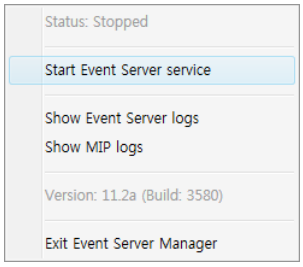
7 If a warning message appears, select **Automatically close the applications** and click **Next**.



8 To complete the Workspace Plugin for BioStar 2 installation, click **Finish**.



9 When the installation is completed successfully, start the **Milestone XProtect Event Server** manually. To do this, go to the system tray and right-click on the **Milestone XProtect Event Server** icon and then click **Start Event Server service**.

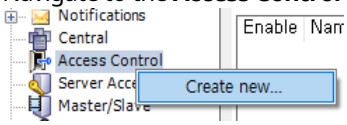


Configuration

Connecting to BioStar 2

1 Run **Milestone XProtect Professional 2017 R2 Management Application**.

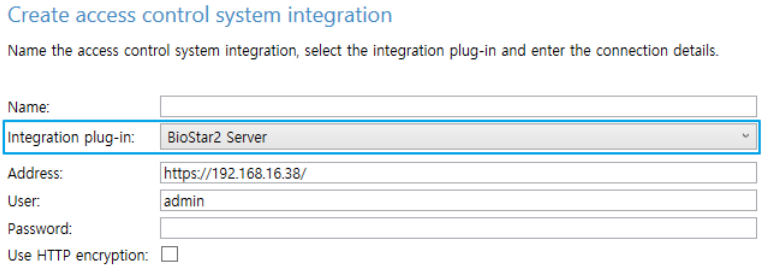
2 Navigate to the **Access Control** node. Righ-click on it and click **Create new**.



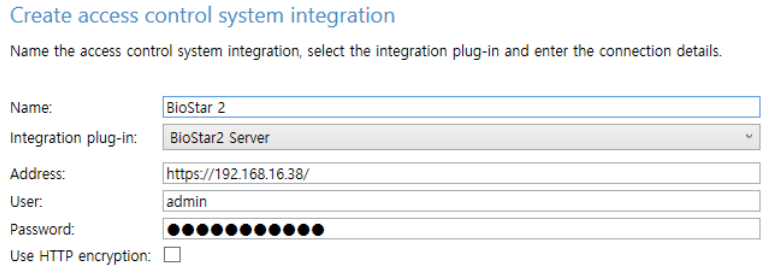
NOTE

- If the plug-in is not found, restart the Milestone Event Server Service. To do this, go to the system tray and right-click on the **Milestone XProtect Event Server** icon and then click **Restart Event Server service**.

3 Select **Integration plug-in** as **BioStar 2 Server**.



4 If the plug-in is found, **Create Access Control System Integration** window is appear. Enter or edit the each field.



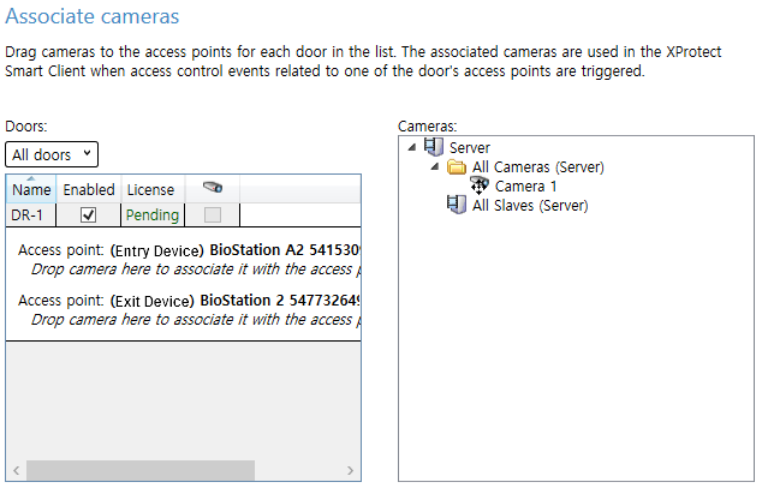
- **Name**: Enter the desired name of the plug-in.
- **Integration plug-in**: Select **BioStar 2 Server** from the list.
- **Address**: IP address of BioStar 2 server.
- **User**: Enter the login ID for BioStar 2.
- **Password**: Enter the password for BioStar 2.

5 To connect the Biostar 2, click **Next**.

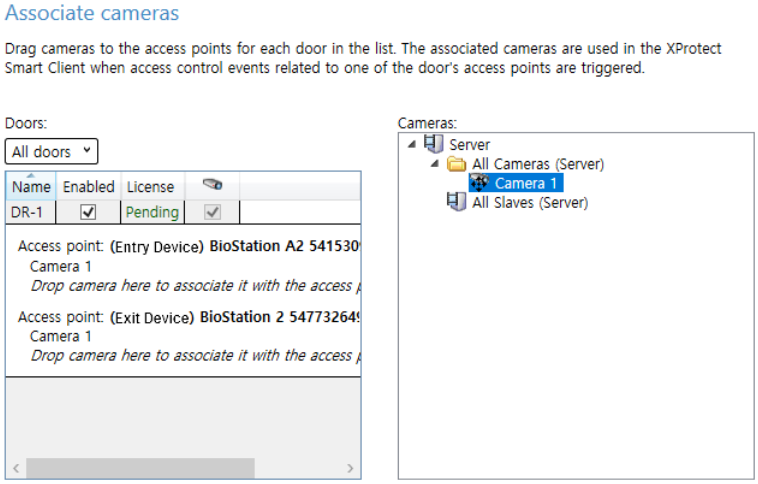
Associating the camera

If BioStar 2 connected correctly, the **Associate cameras** screen appear. In this step, you can associate the cameras with access points.

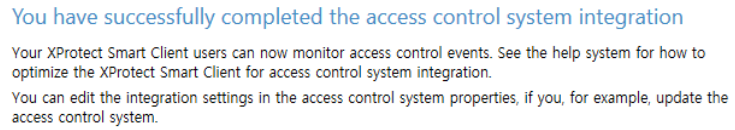
1 Find the camera in the **Cameras** pane and drag it to the associated access points.



2 When all access points associated with cameras, click **Next** to complete the settings.



3 When the success confirmation window appears, click **Close**.

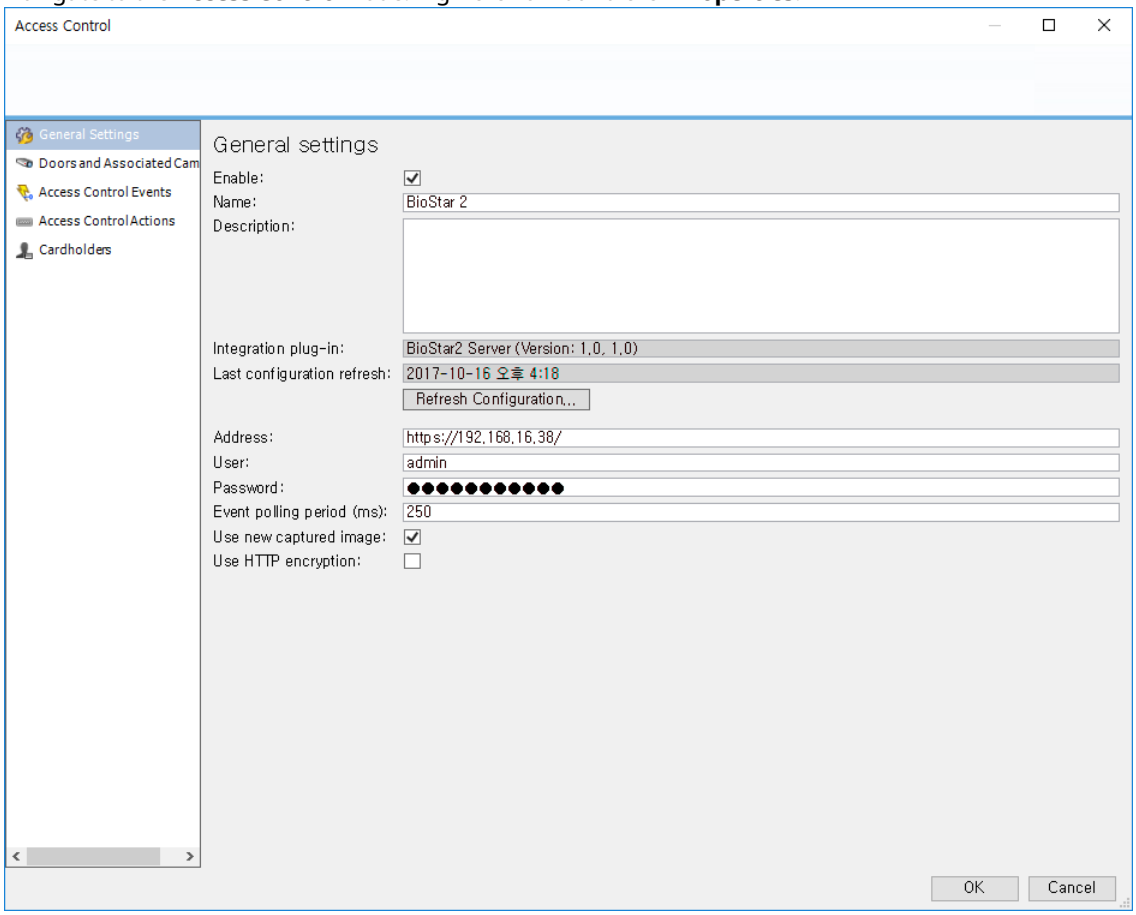


Managing the access control properties

After configuring the plug-in properly, you can add/edit the access control properties at any time.

1 Run **Milestone XProtect Professional 2017 R2 Management Application**.

2 Navigate to the **Access Control** node. Righ-click on it and click **Properties**.



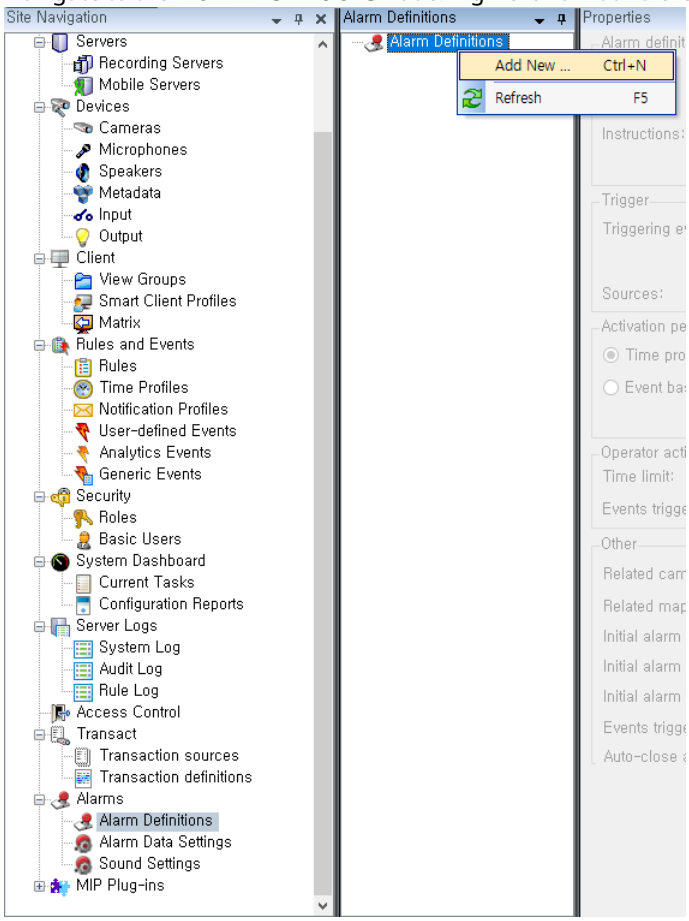
- **General Settings**: You can update the access control system name, network settings, and login information.
- **Doors and Associated Cameras**: You can associate the cameras with access points. See **Associating the Camera**.
- **Access Control Events**: You can activate or deactivate the access control event from BioStar 2, also create and assign the user-defined categories.
- **Access Control Actions**: You can create an access control action or command which is performed by the operator on the associated access points. For example, when a cardholder requests the door open, XProtect display a notification and then operator sending a door open command.
- **Cardholders**: You can view or search the cardholder information. The cardholder information is synchronized with user information of BioStar 2. In BioStar 2, user information includes user name, access group, RFID card number, fingerprint template, face template, and PIN.

Configuring the alarm

This setting is required to view or acknowledge the access control event alarms of BioStar 2 in XProtect Smart Client. The alarm can be set in **Setting** menu of BioStar 2 and if the event alarm occurs, XProtect Smart Client displays the alarm in **Alarm Manager**.

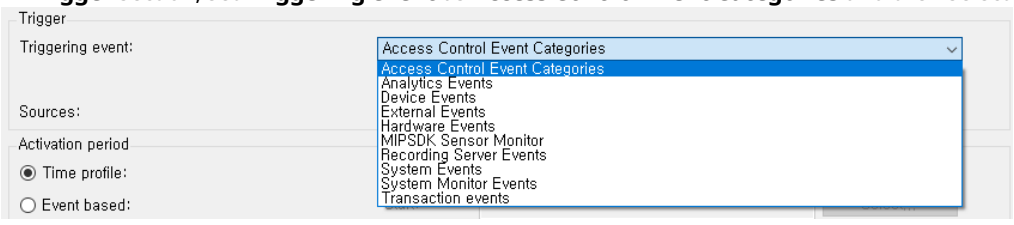
1 Run **Milestone XProtect Professional 2017 R2 Management Application**.

2 Navigate to the **Alarm Definitions** node. Righ-click on it and click **Add New**.

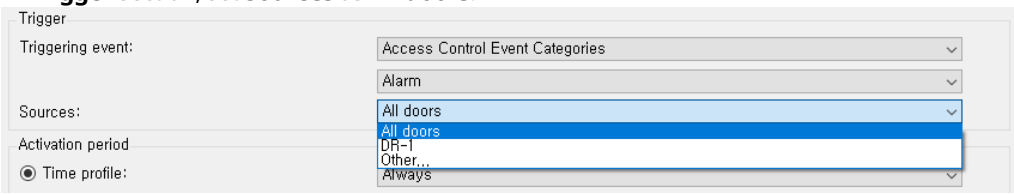


3 Change the alarm name in **Name** field.

4 In **Trigger** section, set **Triggering event** as **Access Control Event Categories** and then select **Alarm**.



5 In **Trigger** section, set **Sources** as **All doors**.



Troubleshooting

Fail to get settings from BioStar 2 when using HTTPS connection

Environment

- OS: Windows Server 2012 / Windows 7(SP1) / Windows Server 2008 R2
- BioStar 2 Version: BioStar 2.5.0

Symptom

An error occurs during install the Workspace Plugin for BioStar 2.

Cause

BioStar 2.5.0 is designed to use TLS 1.1 or TLS 1.2 as a default. However, applications and services that are written by using WinHTTP for Secure Sockets Layer (SSL) connections that use the WINHTTP_OPTION_SECURE_PROTOCOLS flag can't use TLS 1.1 or TLS 1.2 protocols. This is because the definition of this flag doesn't include these applications and services.

Solution

Install Easy Fix which is provided by Microsoft and then rebstart the system.
To do this, visit; https://support.microsoft.com/en-us/help/3140245/update-to-enable-tls-1-1-and-tls-1-2-as-a-default-secure-protocols-in

Fail to access BioStar 2 when using HTTP connection

Environment

Upgrade BioStar 2 from BioStar 2.4.1 to BioStar 2.5.0

Symptom

An error occurs during login to BioStar 2.

Cause

When using HTTP connection, BioStar 2.4.1 uses the payload encryption to log in. However, BioStar 2.5.0 does not use the payload encryption.

Solution

After upgrading to BioStar 2.5.0, Run **Milestone XProtect Professional 2017 R2 Management Application**.
Navigate to the **Access Control node**. Right-click on it and click **Properties**. Uncheck **Use HTTP encryption**.

Appendices

Event list

Here is an event list of BioStar 2 that can be handled by XProtect system. This list is part of BioStar 2 event list.

- 1:1 duress authentication succeeded (Access-on-card + Fingerprint + PIN)
- 1:1 duress authentication succeeded (Access-on-card + Fingerprint)
- 1:1 duress authentication succeeded (Access-on-card + PIN)
- 1:1 duress authentication succeeded (Access-on-card)
- 1:N authentication failed
- 1:N authentication failed (Access-on-card + Fingerprint)
- 1:N authentication failed (Access-on-card + PIN)
- 1:N authentication failed (Face)
- 1:N authentication failed (Fingerprint)
- 1:N authentication failed (PIN)
- 1:N authentication succeeded
- 1:N authentication succeeded (Face + PIN)
- 1:N authentication succeeded (Face)
- 1:N authentication succeeded (Fingerprint + PIN)
- 1:N authentication succeeded (Fingerprint)
- 1:N duress authentication succeeded
- 1:N duress authentication succeeded (Face + PIN)
- 1:N duress authentication succeeded (Face)
- 1:N duress authentication succeeded (Fingerprint + PIN)
- 1:N duress authentication succeeded (Fingerprint)
- Access denied
- Access denied (Blacklist)
- Access denied (Capture failure)
- Access denied (Disabled user)
- Access denied (Expired)
- Access denied (Face detection failure)
- Access denied (Forced lock schedule)
- Access denied (Hard Anti-passback)
- Access denied (Invalid access group)
- Access denied (Soft anti-passback)
- Access denied (Soft timed anti-passback)
- Access denied (Timed anti-passback)
- Access-on-card issue succeeded
- All user deletion succeeded
- Authentication failed
- Authentication failed (Bad fingerprint placement)
- Authentication failed (Invalid authentication mode)
- Authentication failed (Invalid credential)
- Authentication failed (Timeout)
- Authentication failed. (Server matching is off)
- Dual authentication failed
- Dual authentication failed (Invalid access group)
- Dual authentication failed (Timeout)
- Dual authentication succeeded
- Elevator activated
- Elevator deactivated
- Fake Fingerprint Detected
- Lock by emergency
- Lock by operator
- Lock by schedule
- Release by emergency
- Release by operator
- Release by schedule
- Unlock by emergency
- Unlock by operator
- Unlock by operator
- User deletion failed
- User deletion succeeded
- User enrollment failed
- User enrollment succeeded
- User update failed
- User update succeeded

Command list

Command	Components		
	Door	Zone	Elevator
Clear Alarm	O	O	O
Clear APB	O	O (APB only)	X
Open	O	X	X
Lock Door	O	X	X
Unlock Door	O	X	X
Release Door	O	X	X

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