

# VideoXpert Integration – Siemens SiPass

## User Guide

USER GUIDE

V1.0 | \_\_\_\_\_ 03-Nov-20



# Contents

- 1. Introduction ..... 3
- 2. Abbreviations ..... 3
- 3. Version Information ..... 3
  - 3.1. Integration Component Version ..... 3
  - 3.2. VideoXpert Version ..... 3
  - 3.3. Siemens SiPass Version ..... 4
- 5. Installation Manual ..... 5
- 6. System Operations ..... 5
  - 6.1. System Start up ..... 5
    - 6.1.1. Configuration setup ..... 5
    - 6.1.2. Access Control System Plugin Setup ..... 12
  - 6.2. System Operations Procedure ..... 14
    - 1. SiPass Alarms in VideoXpert ..... 14
    - 2. Access Control System Viewer ..... 16
    - 3. User Action Report ..... 18
    - 4. Maps ..... 19
- 7. Issues and Limitations ..... 21
- 8. Troubleshooting Steps ..... 21
- 9. References ..... 24
- 10. Support ..... 24

# 1. Introduction

This document is the User Guide for VideoXpert Integration with Siemens SiPass. The objective of this document is to provide information about the released version of the integration component, its features, installation details and known issues.

## 2. Abbreviations

#	Abbreviation	Definition
1	VMS	Video Management System
2	VX	VideoXpert
3	VxSDK	VideoXpert Software Development Kit
4	ACS	Access control System

Table 1: Abbreviations

## 3. Version Information

### 3.1. Integration Component Version

#	Component Name	Version	Description
1	VideoXpertSiPass_Setup.msi	1.0.6	Siemens SiPass Access Control Integration driver Installer

Table 2: Integration Component Version

### 3.2. VideoXpert Version

#	Component Name	Version	Remarks
1	VideoXpert Core	3.9.0.191	Nil
2	VideoXpert Professional	3.9.0.191	Nil
3	VideoXpert Media Gateway	3.9.0.191	Nil
4	VideoXpert Storage	3.9.0.191	Nil
5	VxSDK	3.9.0.191	Nil
6	Access Control System Viewer	3.7.1.0	Nil

Table 3: VideoXpert Version

### 3.3. Siemens SiPass Version

#	Component Name	Version	Remarks
1	Siemens SiPass	2.76 SP2	Nil

Table 4: Siemens SiPass Version

## 4. System Overview

The proposed solution is an integration driver for Siemens SiPass security management system. This integration helps Siemens SiPass to connect with VideoXpert. The integrated system allows end users to use VideoXpert to access information from Siemens SiPass. VideoXpert users may use Admin Portal or OpsCenter Client to view or acknowledge access control events from Siemens SiPass.

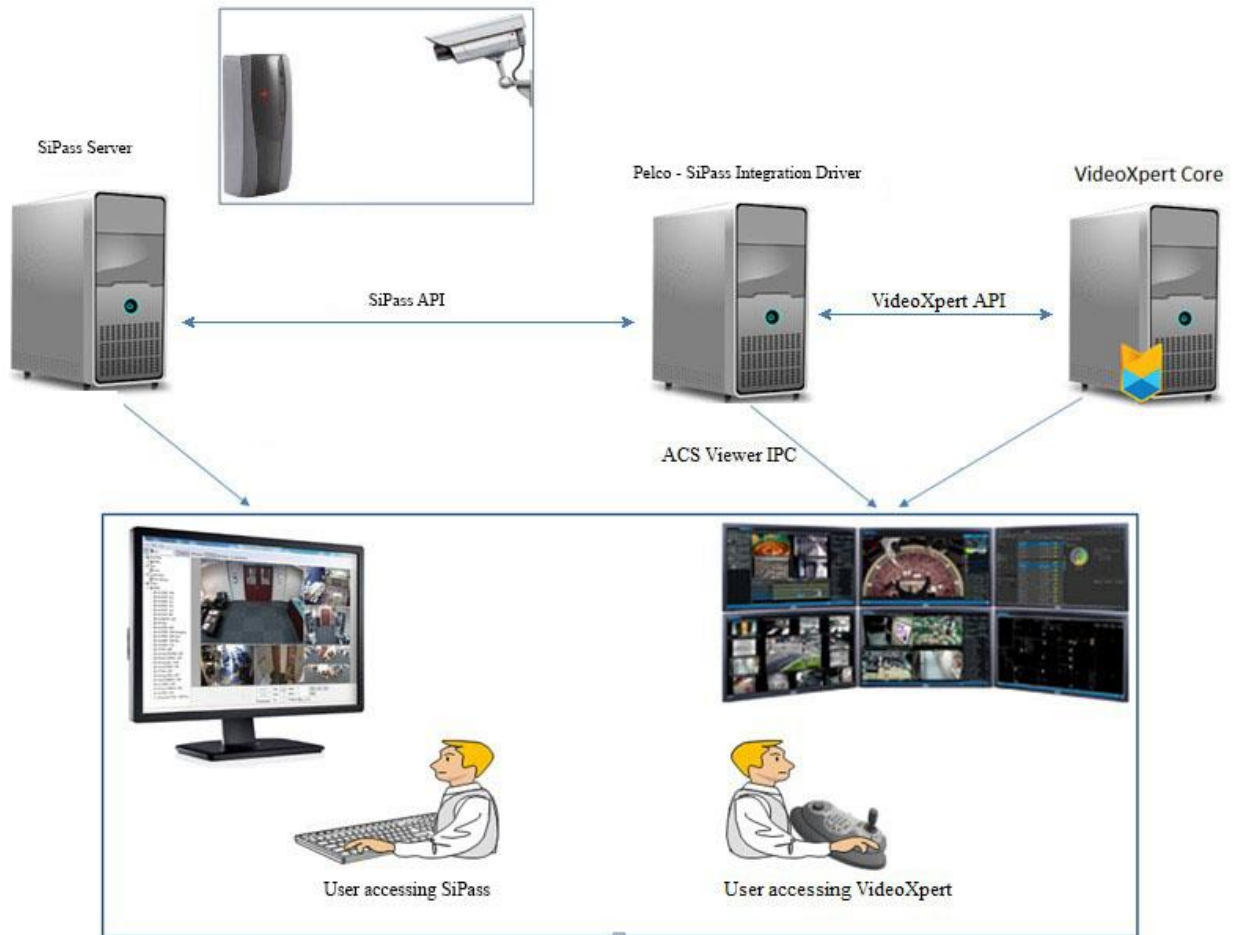


Figure 1: System Overview

The integration driver shall be using VxSDK for all its interfacing needs with VideoXpert. The integration driver also supports Pelco Access Control System Viewer to allow user information retrieval and control functionality of Siemens SiPass devices in VideoXpert. This includes viewing Siemens SiPass access control points and user lists in VideoXpert and sending control commands to the access control points.

## **5. Installation Manual**

Refer to *VideoXpert Integration – Siemens SiPass [Installation Manual].docx*

## **6. System Operations**

Before installing “VideoXpertSiPass\_Setup -x.x.x.x.msi” make sure all the prerequisites are installed. Prerequisites are documented in *VideoXpert Integration Siemens SiPass [Installation Manual].docx*

### **6.1. System Start up**

During the installation, the configuration setup will be performed and can be run from the desktop shortcut after installation.

#### **6.1.1. Configuration setup**

The Pelco SiPass Service Configuration Application can be found on the desktop as a shortcut.

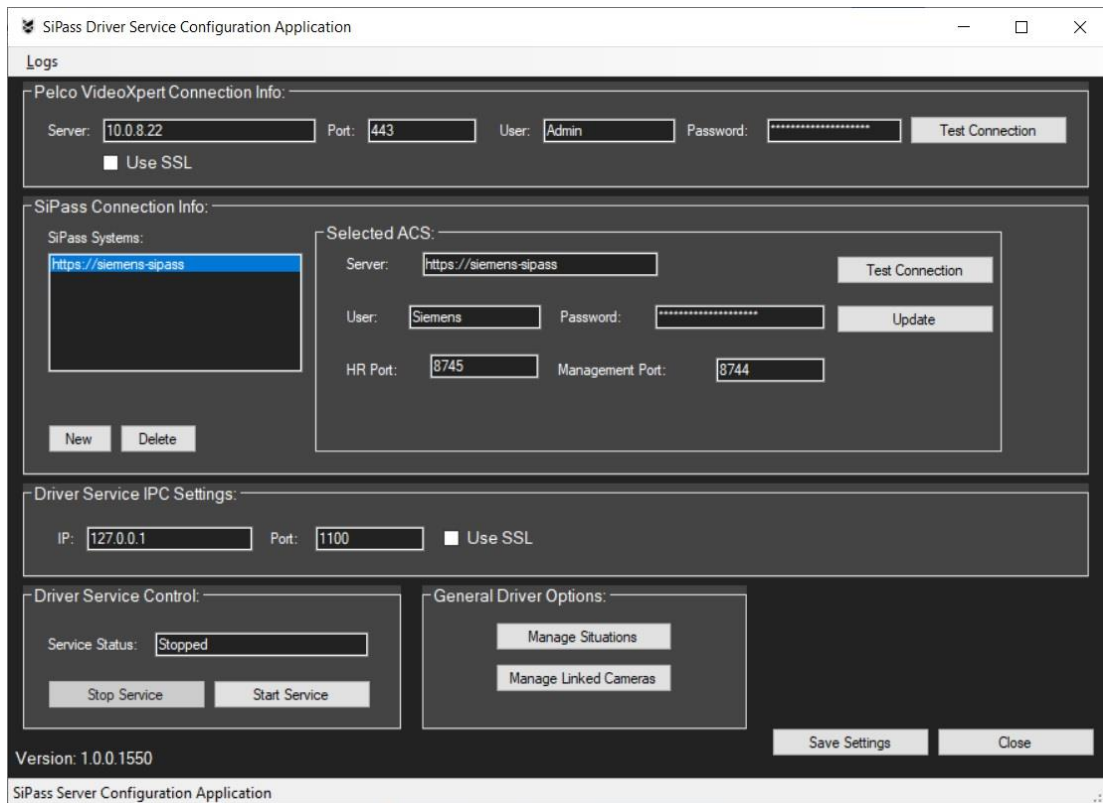


Figure 2: Driver Configuration Application

### 6.1.1.1. Pelco VideoXpert Connection

Enter the following fields in the **Pelco VideoXpert Connection Info** section:

- **Server:** Enter the hostname or IP address of the VideoXpert server
- **Port:** Enter the port VideoXpert VX System is configured with.
- **User:** Enter the username for a VideoXpert user with access to the system.
- **Password:** Enter the password for a VideoXpert user with access to the system
- To test the connection information is correct click on the **Test Connection** button. If all the fields are correct a **Successful connection** message will appear:

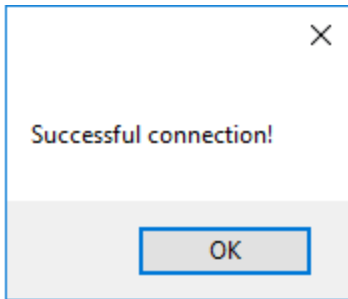


Figure 3: VideoXpert connection test success

- If connection fails, check the configuration tool logs from the application Logs menu and check all fields are entered correctly.
- Click on **Save Settings**.

#### 6.1.1.2. Siemens SiPass Connection

Enter the following fields in the **Siemens SiPass Connection Info** section:

- **Server:** Enter the hostname or IP address of the Siemens SiPass server
- **HR Port:** Enter the port Siemens SiPass HR API is configured with.
- **Management Port:** Enter the port Siemens SiPass Management API is configured with.
- **User:** Enter the username for a Siemens SiPass user with access to the system.
- **Password:** Enter the password for a Siemens SiPass user with access to the system
- To test the connection information is correct click on the **Test Connection** button. If all the fields are correct a **Successful connection** message will appear:

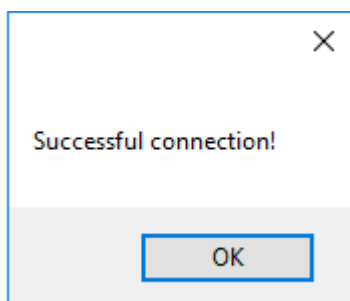


Figure 4: Siemens SiPass connection test success

- If connection fails, check the configuration tool logs from the application **Logs** menu and check all fields are entered correctly.

- Click on **Add** to add the new configuration to the list of SiPass systems.
- To edit a field:
  - Select the system in **SiPass Systems** list
  - Edit the fields
  - Click on **Update** to update the entry to the list. (Note you must click on update before clicking Save Settings)
- Click on **Save Settings**.

### 6.1.1.3. Driver Service IPC Settings

Enter the following fields in the **Driver Service IPC Settings** section:

- **IP:** Enter the IP address of the PC where this driver is installed. (If multiple network interfaces are configured, use the one which will be used to connect to from the VideoXpert Access Control Viewer.
- **Port:** Enter the port the IPC server will be listening on.

Note: The IP and port settings above will be used in the VideoXpert clients when connecting to this driver interface using the Access Control System Viewer. See **IP Address** and **Port** fields below:

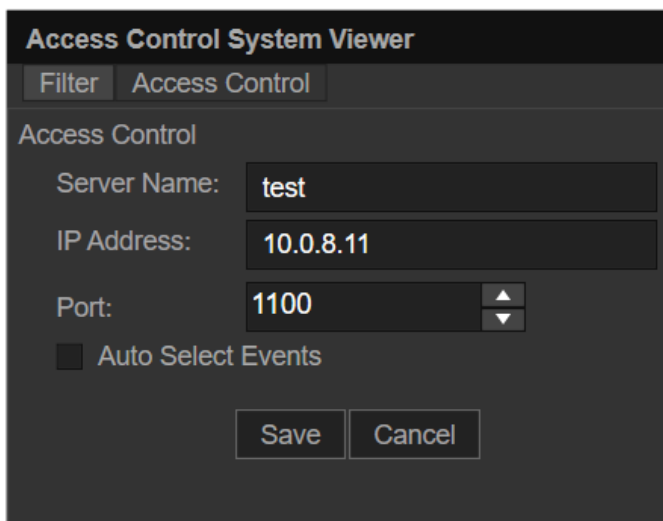


Figure 5: Access Control System Viewer IPC Settings

- **Certificate:** If SSL communication is required between IPC client/server enter the path to the SSL cert personnel exchange format file (.pfx file).

#### 6.1.1.4. Manage Situations

- Click on the **Manage Situationsadm** button under **General Driver Options** to configure the Siemens SiPass situations list that will be imported into Pelco.
- The manage situations window will open as follows:

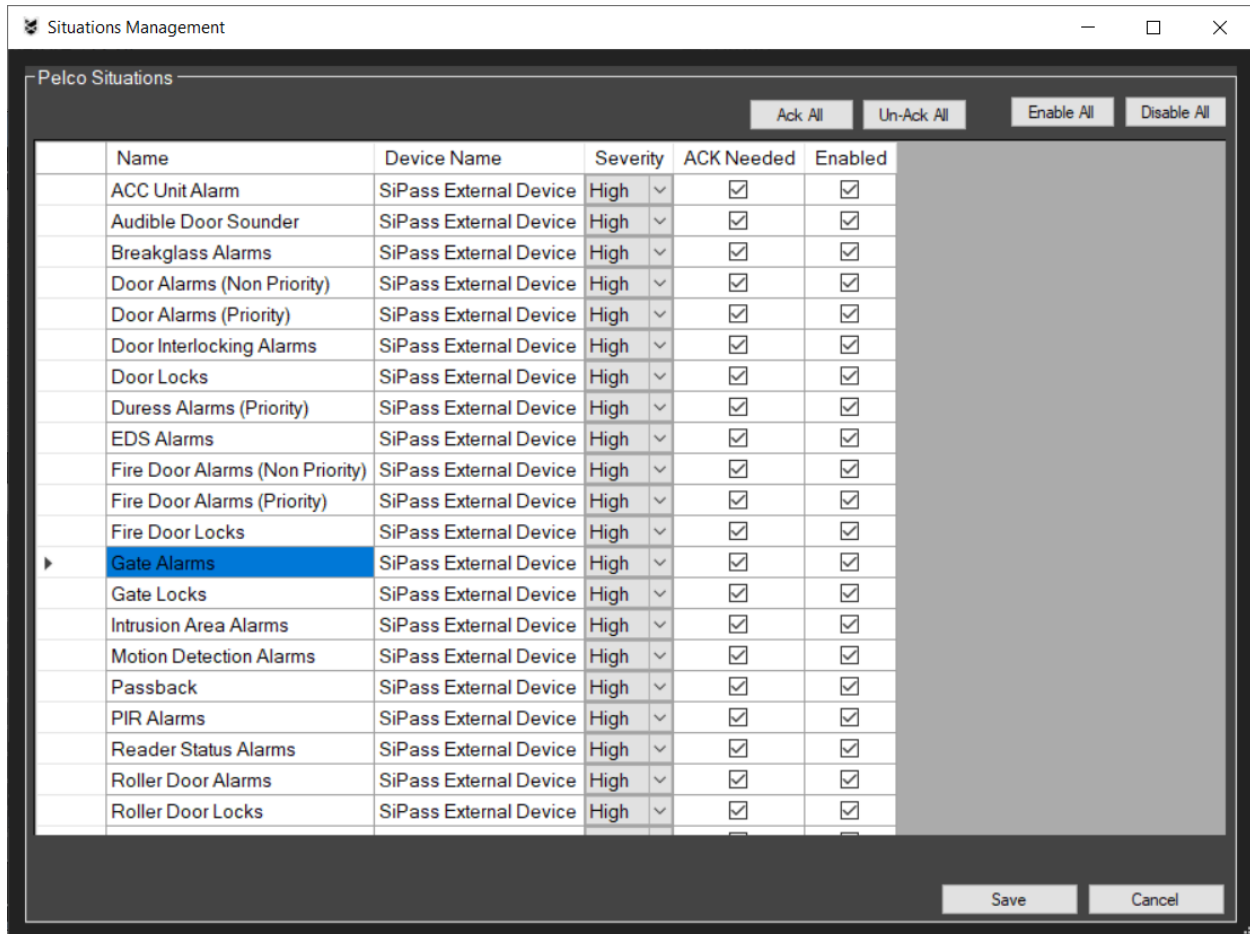


Figure 6: Situations management

- The configurable fields are:
  - Name – This must be edited before starting service for the first time as Situations are imported into VideoXpert they can only be edited via VxToolbox
  - Severity – This must be edited before starting service for the first time as Situations are imported into VideoXpert they can only be edited via VxToolbox
  - ACK Needed

- Enabled – disabling will filter the event type at the driver and events will not be injected into VideoXpert.
- When complete click **Save**.

### 6.1.1.5 Manage Linked Cameras

This allows cameras to be associated with events in VideoXpert based on the SiPass terminal (access control point) where the SiPass event occurred.

- Click on the **Manage Linked Cameras** button under **General Driver Options** to configure cameras for SiPass access control points.
- The **Pelco Camera / SiPass Access Control Point Management** window opens

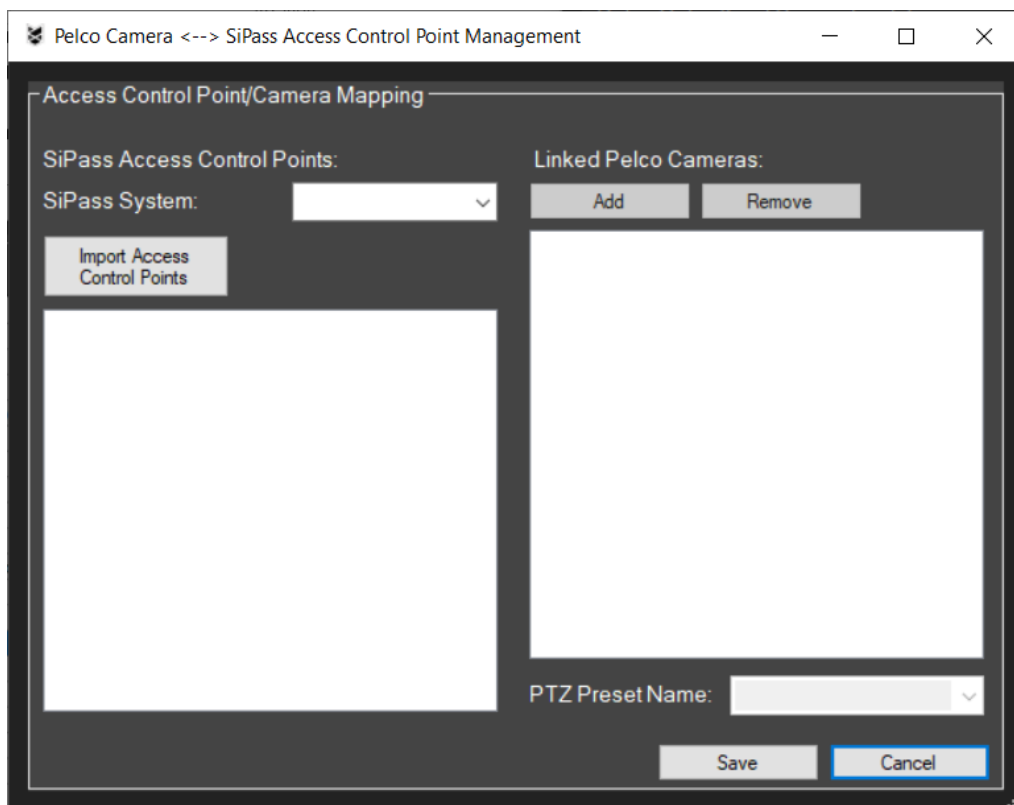


Figure 7: Pelco camera / SiPass Access Control Point association

- Select the SiPass system (Note: if this list is empty exit this window and click on **Save Settings** first)
- Click on **Import Access Control Points**. This will attempt to connect to the SiPass system configured in the previous sections and import the list of SiPass access control points into the list.

- Select an Access Control Point from the list

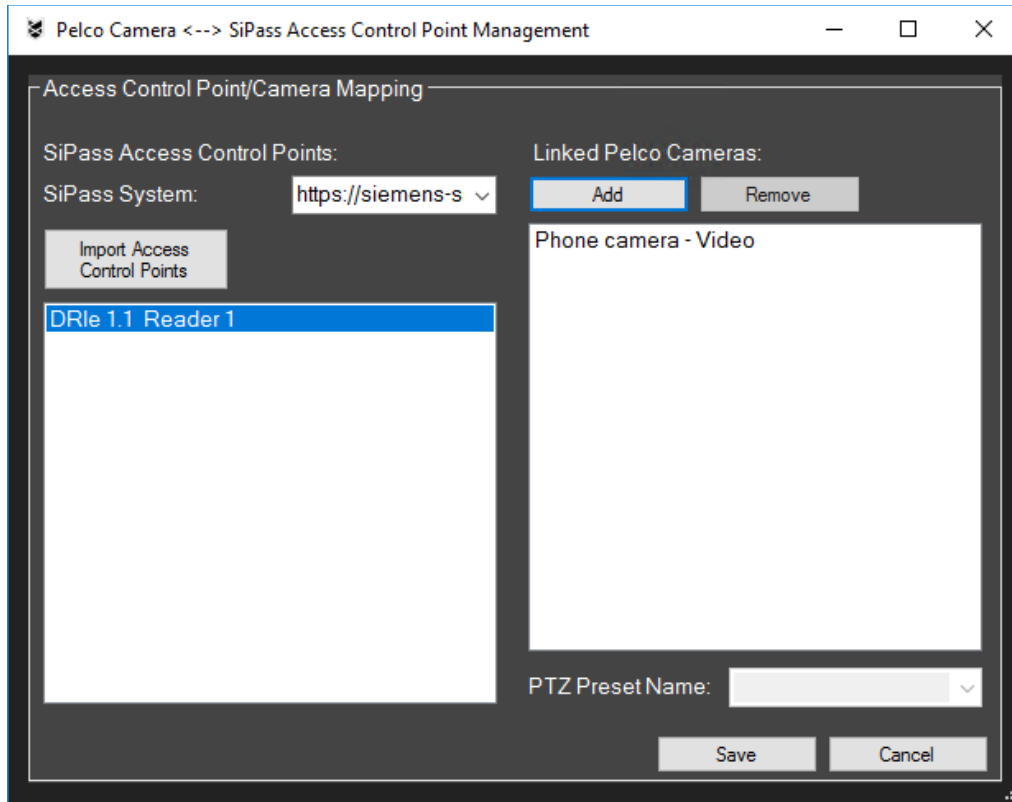


Figure 8: SiPass Access Control Point selection

- To associate a camera (or cameras) with the access control point click **Add**.
- A connection is made to VideoXpert and imports a list of video sources.

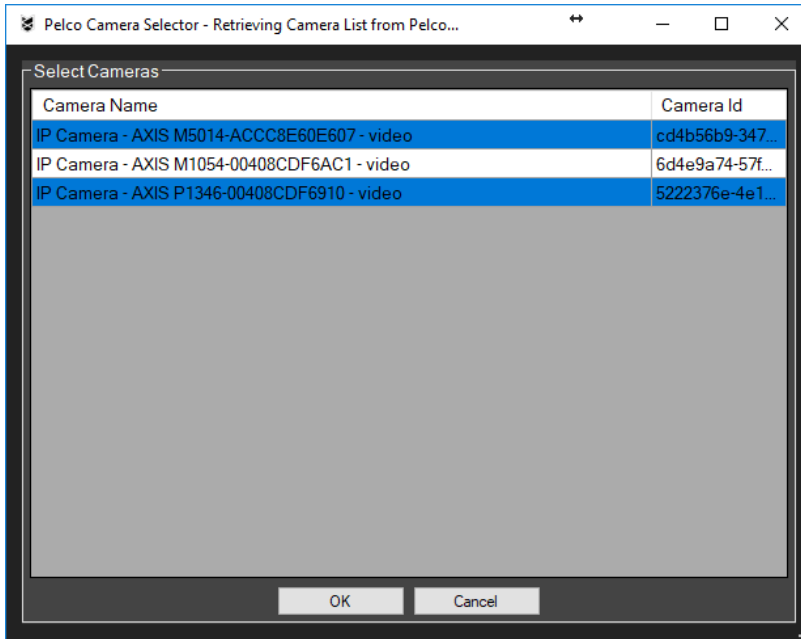


Figure 9: Pelco camera selection

- Select one or more of the video sources and click on **OK**.
- The cameras will be associated with the selected SiPass access control point.
- To disassociate a video source from an access control point select the video source and click **Remove**.
- When mapping configuration is complete click **Save** to save and exit.
- Click on **Save Settings** to commit the changes.

#### 6.1.1.6. Driver Service Control

The VideoXpert – SiPass Driver can be started/stopped from within the **Driver Service Control** section.

**Important Note:** If any settings are changed the driver service must be restarted for the driver service to load the new settings.

#### 6.1.2. Access Control System Plugin Setup

Each VideoXpert client that has the Access Control System plugin installed must be configured to add a connection to the Siemens SiPass driver service.

To configure the connection in VxOpsCenter:

1. Open the Access Control System Viewer plugin

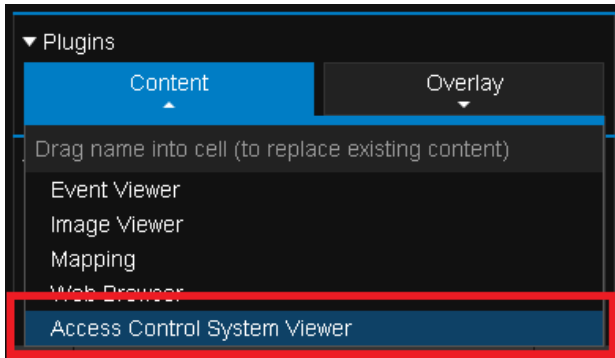


Figure 10: Access Control System Viewer plugin launch

2. Under Access Control tab click on the setting cog icon

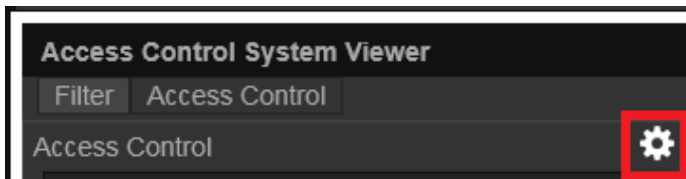


Figure 11: Access Control System Viewer settings

3. Click on the plus icon to add a new Access Control System to the list.

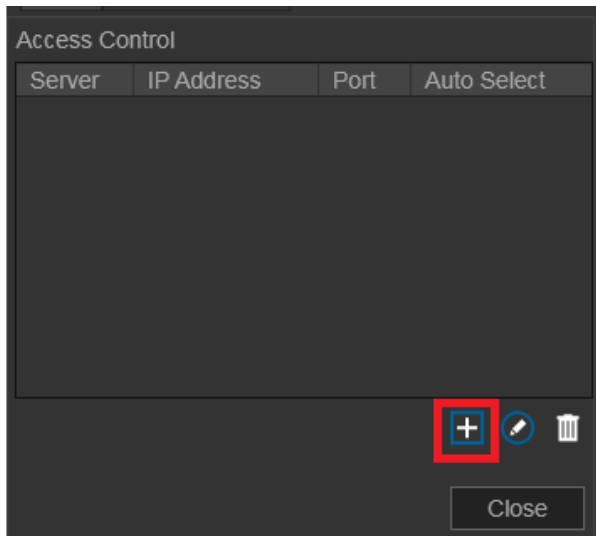


Figure 12: Add new Access Control System connection

4. Enter the connection information to the Siemens SiPass driver (Note: IP and Port should match the settings configured under previous driver configuration steps – see section 6.1.1.3 *Driver Service IPC Settings*)

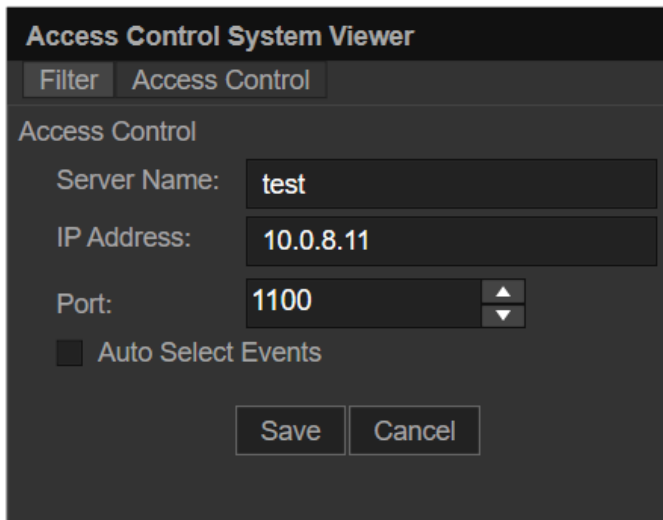


Figure 13: Driver connection settings

5. Click on **Save** and then **Close**.

When the Access Control System is opened it should now connect to the Siemens SiPass driver service.

## 6.2. System Operations Procedure

After the complete installation and System Startup procedures, SiPass alarms will be injected into VideoXpert and available to view in the VideoXpert Event Viewer. The integration also supports the VideoXpert Access Control System Viewer plugin.

### 1. SiPass Alarms in VideoXpert

Alarms injected to VideoXpert from the Siemens SiPass driver will can be viewed from both the VideoXpert Event Viewer and the Access Control System Viewer.

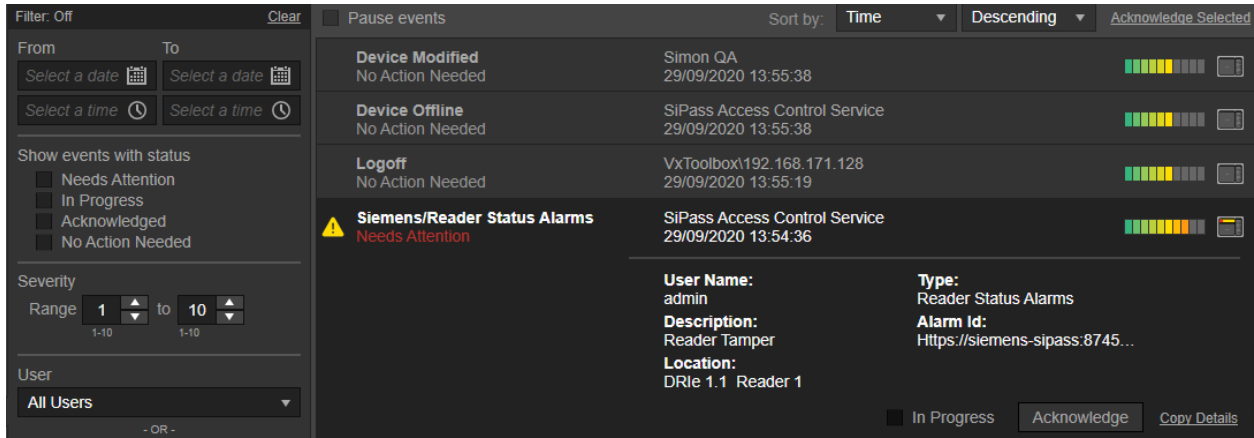


Figure 4: Siemens SiPass alarm in Event Viewer

Two-way alarm acknowledgement is supported in VideoXpert. Alarms acknowledged in VideoXpert will be acknowledged on the SiPass system.

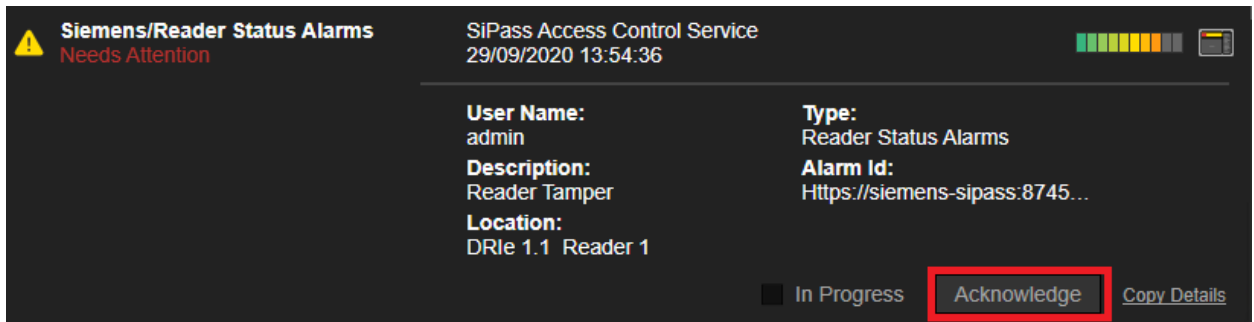


Figure 15: Acknowledge Alarm in VideoXpert

Alarms acknowledged on the SiPass system will also be acknowledged in VideoXpert.

When a camera is linked to a SiPass Access Control Point (see section 6.1.1.5 *Manage Linked Cameras*) the incoming event in VideoXpert will have the associated data source available for inspection at the time of the event.

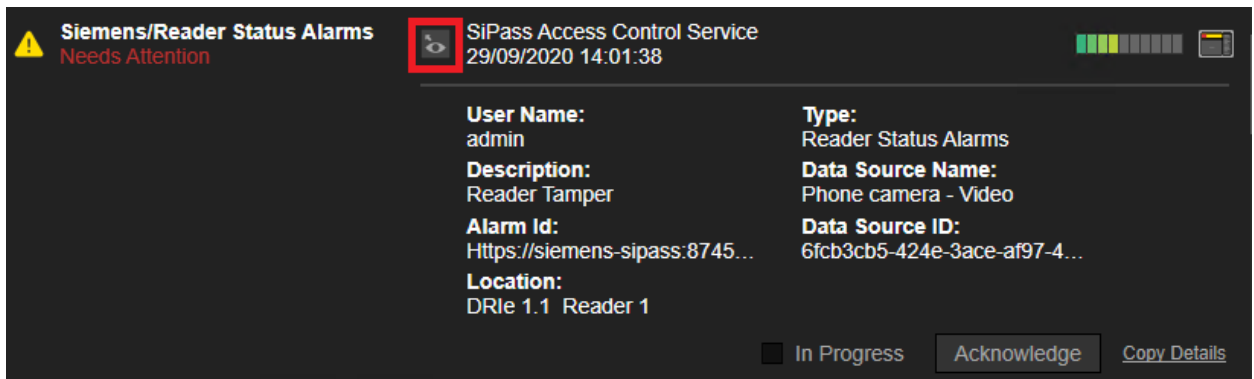


Figure 16: Event with linked camera and associated data source

## 2. Access Control System Viewer

This integration supports the Access Control System Viewer plugin in VideoXpert.

Once the plugin is installed on the client and connection is made the following features are supported:

### 6.2.2.1. Access Control Points

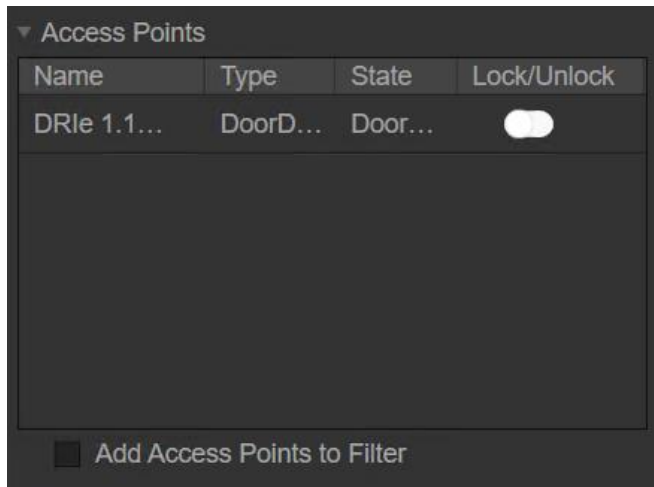


Figure 17: Access Points list

Expand the **Access Points** to show the list of Access Control Points on the SiPass system.

The state of each access point is shown in the **State** column.

The door can be locked/unlocked using the command button in **Lock/Unlock** column.

Click on the **Add Access Points to Filter** option to filter the list of events associated with that access point.

### 6.2.2.2. Access control users

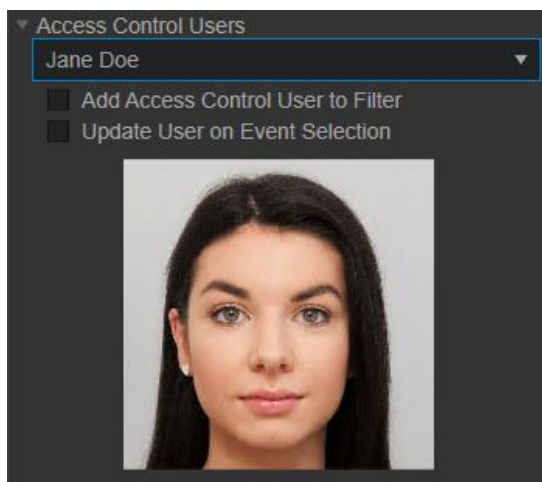


Figure 18: User image preview

Expand the **Access Control Users** to show the list of users on the SiPass system.

Select the user from the drop-down list to show the user image if configured on the SiPass system.

Click on the **Add Access Control Users to Filter** option to filter the list of events by that user.

### 6.2.2.3. Filter by Access control system.

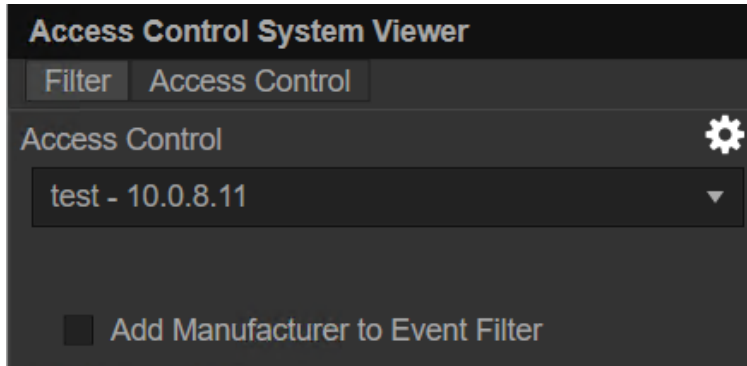


Figure 19: Access control filtering

If multiple access control systems are added select the access control system in the drop-down list and click on **Add Manufacturer to Event Filter** to filter the list of events by that Access control system.

### 6.2.2.4. Filter by Siemens SiPass event/situation type

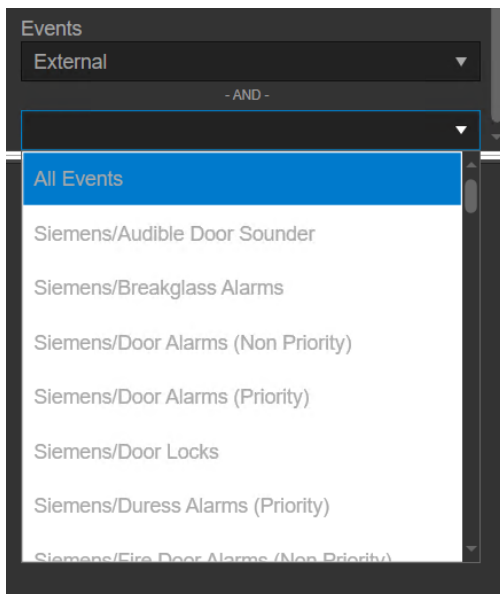


Figure 20: Event/situation type filtering

Switch to the Access Control System Viewer **Filter** tab to see all other filter options. These options include filtering by situation.

In the **Events** filter select **External**.

In the list below select the situation to filter by.

#### 6.2.2.5. View user image associated with event



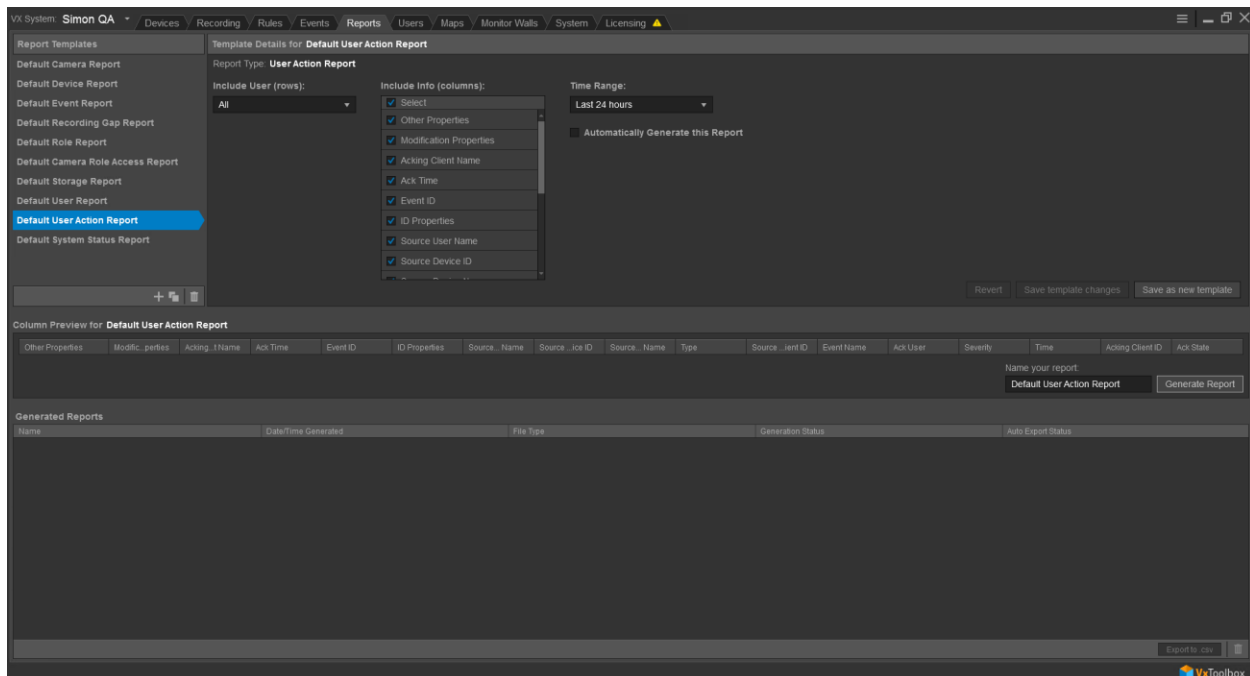
Figure 21: Event with user image icon

If a user is associated with an event the user icon appears with the event. Hovering over that icon will open the user image for preview.

### 3. User Action Report

SiPass user activity may be generated in a VideoXpert User Action Report. To generate a report, carry out the following steps:

- Login to the VxToolbox application
- Navigate to **Reports** tab
- Select **Default User Action Report** from the **Report Templates**
- Configure **Time Range** of the report to be generated
- Click **Generate Report** button
- To export the report, click Export to .csv button at the bottom of the screen



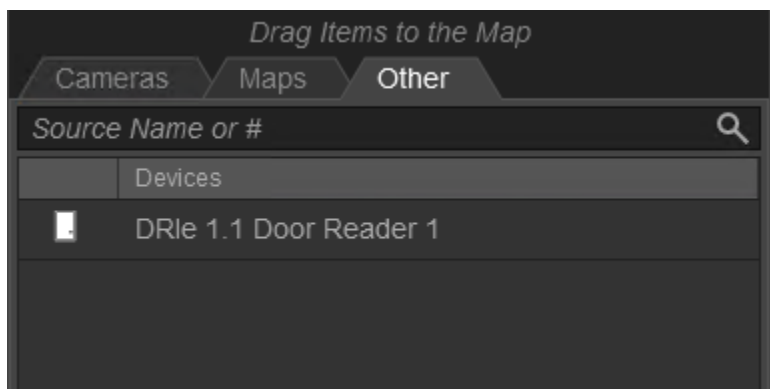
## 4. Maps

SiPass devices are supported on maps in VideoXpert. Devices may be locked or unlocked from the Vx map.

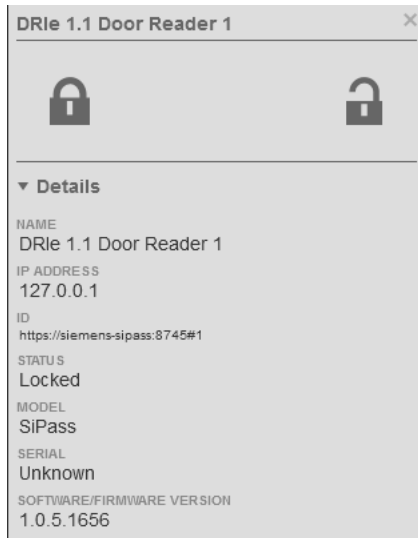
### 6.4.1 Configure SiPass devices on a map

To add SiPass devices to a VideoXpert map carry out the following steps:

- Login to the **VxToolbox** application.
- Navigate to the **Maps** tab.
- Add a map image or open an existing map to edit.
- SiPass devices will appear in the **Other** tab in Edit Map mode:







- Click the lock icon to lock the reader, and unlock to unlock the reader. The command is carried out on the SiPass server and the icon changes accordingly on the map.

## 7. Issues and Limitations

- Only 1 linked camera is supported in VideoXpert per Siemens SiPass access control point. The configuration allows multiple cameras to be associated but only the first is available in VideoXpert to view video.
- If SiPass is only licensed for one connection from VideoXpert, the service will have to be stopped before any modification to the Linked Cameras or Situations is done in the Server Configuration application.
- In VideoXpert user photos will be refreshed every 5 minutes.

## 8. Troubleshooting Steps

### Access Control Viewer Plugin not connecting to driver

1. IP and Port must match in the Siemens SiPass Configuration settings to the Access Control System Viewer plugin settings
  - Check the IP and Port settings in the **Driver IPC Settings** section of the **Siemens SiPass Driver Service Configuration** application.
  - Check the IP and Port in the **Access Control** settings in the **Access Control System Viewer** plugin settings.
2. The firewall on the Siemens SiPass driver PC must be configured to allow incoming access on the Port configured in the previous step.

- Go to windows (or 3<sup>rd</sup> party firewall) settings to add an exception for incoming TCP traffic on this port.
3. Check that the **VideoXpert Siemens SiPass Integration Driver** service is running.
    - Check the status of the service in either the **Driver Service Control** section of the **Siemens SiPass Driver Service Configuration** application or under windows services.
  4. Inspect the Siemens SiPass driver service log files or errors.
    - The driver service log files are located at:

*C:\Program Files (x86)\PelcoSiPass\Service\Logs\PelcoDriverService.log*

- On normal service start the log file should contain the following entries:

*"[DEBUG]: Start ACS IPC Server on 192.168.1.10, Port: 443"*

*"[INFO]: ACS Server: Started!"*

Note: driver service log level can be changed in the file:

*C:\ProgramFiles\PelcoSiPass\Service\ PelcoSiPassDriverService.exe.config*

### **Access Control Viewer Plugin not showing Access Points / Users**

1. Firewall on the Siemens SiPass system must be configured to allow incoming access on the Port configured in the previous step.
  - Go to windows (or 3<sup>rd</sup> party firewall) settings to add an exception for incoming TCP traffic on this port.
2. Inspect the Siemens SiPass driver service log files or errors.
  - The driver service log files are located at:

*C:\Program Files (x86)\PelcoSiPass\Service\Logs\PelcoDriverService.log*

- Requests from the Access Control Viewer and requests to the Hirsch system for information can be seen as following sample:

*"[DEBUG]: Trace: Sending response to client"*

*"[DEBUG]: Trace: Received ACSGetAccessPointList Command"*

*"[DEBUG]: Sending command [...]"*

“...”

“[DEBUG]: Response [...”

“[DEBUG]: Trace: Sending response to client”

### **Siemens SiPass Alarms/Events are not listing in VideoXpert.**

1. Siemens SiPass system must be configured to send events to the VideoXpert Siemens SiPass Integration Driver.
  - See the Remote Server settings in the **Configuration in Siemens SiPass system** section of the Prerequisites chapter in the Installation manual.
2. The firewall on the Siemens SiPass driver PC must be configured to allow incoming access on the Port configured for Alarm Port.
  - Go to windows (or 3<sup>rd</sup> party firewall) settings to add an exception for incoming TCP traffic on this port.
3. Check that the **VideoXpert Siemens SiPass Integration Driver** service is running.
  - Check the status of the service in either the **Driver Service Control** section of the **Siemens SiPass Driver Service Configuration** application or under windows services.
4. Inspect the Siemens SiPass driver service log files or errors.
  - The driver service log files are located at:

*C:\Program Files (x86)\PelcoSiPass\Service\Log\PelcoDriverService.log*

- On successful event connection of the Siemens SiPass system to this port the following will appear in the log file for incoming events:

“[DEBUG]: SerialConnectionManager.ReadDataThread: localhost:41016 IN: [3  
...”

“[DEBUG]: Recieved Event: Description: ...”

### **Duplicate Alarms/Events found in VideoXpert.**

1. This scenario shall be found if **VideoXpert Siemens SiPass Integration Driver** service is running in multiple machines accessing same Siemens SiPass server or VideoXpert systems.

## 9. References

#	Documents/Inputs	Description
1	Discussions	Technical and requirement analysis discussions between all internal and external stakeholders.
2	VideoXpert SDK	Documentation of VideoXpert SDK
3	VideoXpert integration experience	Learnings from the development and testing of VideoXpert integration modules.

## 10. Support

If the instructions provided fail to solve your problem, contact Pelco Product Support at 1-800-289-9100 (USA and Canada) or +1-559-292-1981 (international) for assistance.

## REVISION HISTORY

Version	Date	Description	Amended By	Approved By
1.0	24-Sep-20	Initial Draft	Kostas Papadopoulos	
	03-Nov-20	Update and review	Simon Graydon	



Clovis, California 93612-5699 United States  
USA & Canada Tel (800) 289-9100 Tel (800) 289-9150 Fax  
International Tel +1 (559) 292-1981 International Fax +1 (559) 348-1120  
[www.pelco.com](http://www.pelco.com) [www.pelco.com/community](http://www.pelco.com/community)