IndigoVision

Avigilon Access Control Manager (ACM) Integration

Administrator's Guide

Legal Considerations

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1 ABOUT THIS GUIDE

This guide is provided for system administrators integrating the Avigilon Access Control Manager (ACM) system with the IndigoVision Control Center suite.

Safety notices

This guide uses the following formats for safety notices:

⚠️ **Warning**	*Indicates a hazardous situation which, if not avoided, could result in death or serious injury.*

⚠️ **Caution**	*Indicates a hazardous situation which, if not avoided, could result in moderate injury, damage the product, or lead to loss of data.*

Notice	*Indicates a hazardous situation which, if not avoided, may seriously impair operations.*

💡	*Additional information relating to the current section.*

References

The following documents are referenced in this document:

- Control Center Help
  Located at ***Start > IndigoVision > Control Center > Control Center Help***.
- IndigoVision Control Center Installation Guide
  Located on the Control Center CD.
- IndigoVision Avigilon ACM logs
  Located at ***C:\ProgramData\IndigoVision\IndigoVision Avigilon ACM Integration\Log***.

💡	*Control Center Help is located on the Control Center workstation, by default.*

2 OVERVIEW

The IndigoVision ACM allows events from an Avigilon ACM system to integrate with IndigoVision Control Center (version 17.x).

Avigilon ACM version 6.16 onward can be integrated with IndigoVision Control Center.

This document explains how to install and configure the IndigoVision ACM Integration Module.

Compatibility

Please ensure you have properly installed, configured, and licensed the Avigilon ACM system.

The minimum supported ACM version is 6.16.

A XML Collaboration license is required from Avigilon and must be applied to the ACM system, see "Configure the ACM system with the events & XML license " on page 7.

System requirements

You can install the ACM Integration Module on the following Windows® Operating Systems with the latest service packs applied:

- Windows® 10 (64-bit) version 1607 or later
- Windows® Server 2019
- Windows® Server 2016 R2
- Windows® Server 20012 R2

If a firewall is enabled on your system, an exception is required.

3 LICENSING

The IndigoVision ACM Integration Module is a licensed product. You must apply a license to the system running the ACM Integration Module.

You can manage the software license using the License Manager tool. The License Manager tool can be downloaded from the **Management Software download** section of the IndigoVision website.

► To install the License Manager tool, see "Install the IndigoVision License Manager Tool" on page 10.

Supported events

The following events can be sent from the Avigilon ACM system to IndigoVision Control Center:

- Forced door
- Normal forced door
- Door held open
- Normal door held open
- Unknown card
- Expired card attempt
- Valid card at unauthorized reader

Supported actions

The following actions can be performed in Avigilon ACM from external relays in IndigoVision Control Center:

- Lock/unlock a door
- Activate, deactivate, or pulse relay outputs

4 INSTALLATION

The Avigilon ACM Integration must be installed in the following sequence:

1. Configure the ACM System with the Events & XML License. See "Configure the ACM system with the events & XML license " on page 7.
2. Configure IndigoVision Control Center with the zones and detectors. See "Configure IndigoVision Control Center with the External System and zones and detectors" on page 8.
3. Install the IndigoVision License Manager Tool. See "Install the IndigoVision License Manager Tool" on page 10.
4. Install the IndigoVision ACM Integration. See "Install the IndigoVision Avigilon ACM Integration" on page 10.
5. Configure the Integration. See "Configure the IndigoVision Avigilon ACM Integration" on page 11.
6. Map the ACM events with IndigoVision external detectors. See "Map alarms and external relays" on page 12.
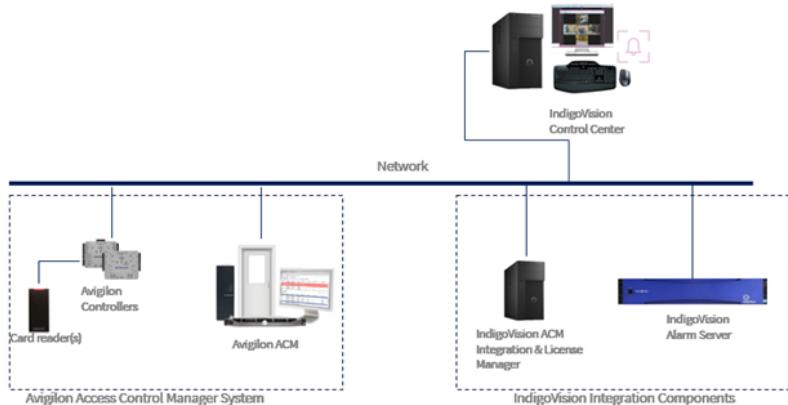7. Map the IndigoVision external relays with ACM outputs.

Figure 1: Block diagram

Configure the ACM system with the events & XML license

An XML Collaboration license is required for the ACM Integration with IndigoVision Control Center to function correctly. This license must be ordered from Avigilon and applied to the ACM system before the Integration can be configured.

To configure the Events & XML License:

1. On the ACM System, select *Settings > Collaboration*.
2. Add a new collaboration with the information given in **Table 1**.

-ᐣ̣- *Some of the settings given in Table 1 are only available under the Events tab after creating the collaboration.*

Table 1   New collaboration parameters

Parameter	Description
Type	Events - Generic XML
Installed	Check
Host	The IP address of the computer where the Integration is installed
Require TCP	Uncheck
Port	The port configured on the configuration utility of the Integration
Events:	Door Held Open Forced Door Intrusion Invalid Credential System
Schedule	24 Hours Active

3. Create a new account to be used by the Integration. Refer to **Table 2**.
4. Log in to the ACM system with the credentials given in **Table 2**.
5. From the ACM **appliance** web page:
6. Select *My Account*.
   The **identities profile** page opens.
7. Uncheck the *Do Not Log REST Logins?* checkbox.

Table 2   New account credentials

Parameter	Description
Login	The username for the account the Integration will use
Password	The password for the account the Integration will use
Confirm	Password reconfirmation
Allow Remote Access	True
Roles	Admin

Configure IndigoVision Control Center with the External System and zones and detectors

Zones and detectors must be created in IndigoVision Control Center for the configured ACM events.

Create a new external system

The IP address entered is the IP address of the host running the ACM Integration.

► For more information on creating a new external system, refer to the Control Center Online Help.

Create a new zone and external detector for ACM events

You must create zones and detectors for the configured ACM events. To create zones and detectors:

1. Add a new zone for each unique alarm you want to report in IndigoVision Control Center.
2. Within the zone, create a new external detector for the external system.
3. Specify a unique Input Number for each external detector.

Notice   *Make a note of the Input Number. You will need this when you configure the IndigoVision ACM Integration, see "Configure the IndigoVision Avigilon ACM Integration" on page 11*

💡   *IndigoVision recommends that you configure the zone name description in Control Center to closely match the ACM event name. This helps to ensure that there is no confusion in correlating events.*

► For more information on how to add the external system and configure your zones and detectors in Control Center, refer to the Control Center Online Help.

Install the IndigoVision License Manager Tool

A valid IndigoVision ACM Integration license must be ordered and applied for the Integration to function correctly. Contact your Account Manager to order the license.

Notice   *The License Manager tool must be installed on the same machine as the Integration.*

To install the License Manager tool:

1. Download the License Manager tool from the **Management Software download** section of the IndigoVision website.
2. Once downloaded, run the ***setup.exe*** file and follow the onscreen instructions.

   The License Manager tool is located at ***Components\Resources\License Manager***.
3. Once installed, run the License Manager tool and follow the onscreen instructions to create a Client to Vendor (c2v) file and apply a Vendor to Client (v2c) file.

☀ *The c2v file contains a fingerprint of the machine. This is sent to IndigoVision Order Management.*

☀ *The v2c file is provided by IndigoVision.*

☀ *You can use the License Manager tool to transfer a license from one machine to another.*

Install the IndigoVision Avigilon ACM Integration

To install the IndigoVision Avigilon ACM Integration:

☀ *If installing on Windows Server 2012 R2, the latest .NET Framework must be installed before installing the IndigoVision Avigilon ACM Integration.*
The .NET Framework can be downloaded from Microsoft.

1. From the ***Installation*** folder, double-click ***IndigoVision Avigilon ACM Integration Setup.msi*** to run the ***IndigoVision Avigilon ACM Integration*** installer.
2. Click ***Next*** to continue.
3. Accept the License Agreement and click ***Next***.
4. Select ***Browse...*** to specify the installation folder as ***C:\Program Files (x86)\IndigoVision\Avigilon ACM Integration***.
5. Check ***Everyone*** to install the IndigoVision Avigilon ACM Integration for anyone who uses the computer and click ***Next***.

6. Click *Next* to start the installation.

    The installation will start and when completed successfully, the **Installation Complete** window is displayed.

7. Click *Close* to exit setup.

🔆 *The installation automatically adds a Windows firewall exception for the IndigoVision Avigilon ACM Integration service.*

*If a firewall is enabled on your system, you must make sure that you also add the **IndigoVision Avigilon ACM Configurator.exe** executable to the list of exceptions.*

Configure the IndigoVision Avigilon ACM Integration

The IndigoVision Avigilon ACM Integration must be configured before it can be used. To configure the Integration:

1. Run configuration utility from the ***IndigoVision Avigilon ACM Integration Configurator*** Start Menu shortcut.
2. Fill out the fields given in **Table 3**.
3. Click the **Connect** button.

    A popup will show indicating the connection status of the Integration to the following:

    •   IndigoVision Alarm Server.

    •   Avigilon ACM system.

    •   Avigilon ACM system's XML Collaboration.

Table 3   Coniguration parameters

Field	Description
Alarm Server Address	The IP address of the IndigoVision Alarm Server
External System Address	Select the configured IP address(es) of the local machine running the integration that was specified as the External System in Control Center
ACM Address	Enter the IP address of the Avigilon ACM system
User Name	Enter the username to be used by the Integration to access the ACM system. See "Configure the ACM system with the events & XML license " on page 7
Password	Enter the password to be used by the Integration to access the ACM system. See "Configure the ACM system with the events & XML license " on page 7
Allow untrusted certificates	If the Avigilon ACM system is using a TLS certificate that is not trusted, for example, an automatically generated self-signed certificate, this must be checked
XML Listening Port	The port used to receive event notifications from Avigilon ACM

🔆 *Blue represents connecting to IndigoVision Alarm Server, Avigilon - REST API and Avigilon - XML Collaboration.*

When the status is green, a connection has been established.

🔆 *IndigoVision recommends that self- signed certificates are only used for initial demonstration and testing purposes.*

Correctly secured systems must use certificates from a trusted CA.

🔆 *The **XML Listening Port** is configurable on the Avigilon ACM system.*

Map alarms and external relays

When the connection status is green for all three connection types, the mapping can be configured.

To map the ACM alarms with IndigoVision alarms, and IndigoVision external relays with ACM door controls:

1. Click **Add** and configure the fields given in **Table 4** and **Table 5** in accordance with the configuration of the system.
2. Click **Save** to save the configuration.
   The Integration service will restart and apply your changes.

Table 4   Source fields

Field	Description
System	The system where the event is coming from (IndigoVision or Avigilon)
Type	The type of component that will generate the event
Id	The identifier of the component in the source system
State	The state of the component when the event was generated

Table 5   Destination fields

Field	Description
System	The system that will receive the event (IndigoVision or Avigilon)
Type	The type of component where the action will be applied
Id	The identifier of the component in the destination system
Action	The action to be applied to the component in the destination system
Parameters	The duration, in seconds, for an Avigilon Output to be pulse triggered

5 TROUBLESHOOTING

This chapter provides troubleshooting information for the ACM Integration Module.

Events not appearing in Control Center

If events are not appearing in Control Center, the following end-to-end check for a single alarm can help you to determine the source of the problem:

1. Verify that the Integration is running by confirming the Windows Service status.
2. Verify that the Integration is licensed correctly.
   The Integration Module logs show the license status.
3. Verify that the ACM appliance XML collaboration is installed, licensed, and correctly configured.
4. Verify that the Integration is sending events to the nominated Alarm Server. In the Integration Logs, check the time stamp of when the last alarm was triggered.
5. From the IndigoVision Avigilon ACM Integration Configurator check that the mapping has been done correctly. Make sure that the corresponding zones and external detectors have been created and mapped correctly

XML collaboration not detected

If the Integration does not detect the XML collaboration and displays an error indicating that the connection was unsuccessful, check the following:

1. Check that the ***IndigoVision Avigilon ACM Configurator.exe*** executable has been added to the list of firewall exceptions so it can listen on the configured XML collaboration port.
2. Verify that the XML License has been applied to the ACM system.
3. Confirm that the correct XML port is configured on the ACM system and the same XML port is used in the Integration Configuration Utility.
4. Verify that the configured pots are not blocked on the network.
5. Toggle the ***Do Not Log REST Logins?*** option from unchecked to checked and then save the settings.
6. Uncheck the ***Do Not Log REST Logins?*** option and save.
7. Test the connection again.