



# Configuring Cisco Physical Access Manager Integration Module

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Release 5.1

## About the Cisco Physical Access Manager Integration Module

Cisco Physical Access Manager (CPAM) is the management application for the Cisco Physical Access Control solution. Its easy-to-use interface lets you configure Cisco Physical Access gateways and modules, monitor activity, enroll users, and integrate with IT applications and data stores. The Cisco Physical Access Manager Integration Module is a ASP.NET Web Service that integrates events from CPAM with PSOM.

When CPAM receives alarms from its sensors, alerts are created in PSOM. If a second alarm of the same type occurs on the same sensor, CPAM bumps up the alarm count in its monitoring console; PSOM receives every new alert individually. For example, when a door is forced open five times, in CPAM there is one alarm with a count of 5 and in PSOM there are 5 separate alerts.

When an alert's status is modified with CPAM, the status of the alert is also changed in PSOM. Once a CPAM alarm is Acknowledged or Cleared, the status of all corresponding PSOM alerts will be changed to Acknowledged or Closed. Once a PSOM alert is Acknowledged or Closed, the status of all corresponding CPAM alarms will be changed.

PSOM receives the following types of CPAM alarms:

- Door alarms—Door forced open, Door held open, Pre-alarm
- Reader alarms—Invalid badge, Suspended badge, Lost badge, Unknown badge

PSOM supports these CPAM sensors:

- All active gateway doors from CPAM
- All active gateway inputs that do not belong to any doors
- Gateway PowerFail inputs
- Gateway Tamper inputs



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Note

Non-door devices are mapped to the Intrusion Detector type sensor.

## Version Mapping

Table 1 shows the CPAM version and how it maps to the version of the CPAM Integration Module that should be used for integration.

**Table 1** CPAM and CPAM Integration Module Version Mapping

CPAM version	CPAM Integration Module Version
1.2	1.2

## Event Status Mapping

Table 2 shows how alarm states are mapped between CPAM and PSOM.

**Table 2** CPAM and PSOM Alarm State Mapping

CPAM status	PSOM Status
Open	Open
Acknowledged	Acknowledged
Cleared	Closed
N/A	Deleted <sup>1</sup>

1. Because there is not a corresponding alarm status for Deleted in CPAM, changing the alert status in PSOM from Closed to Deleted does not affect CPAM.

## Permissions Required

To configure CPAM to integrate with PSOM, you will need specific user authorities:

- You must belong to the local Administrators group on the Connector Web Service machine.
- You should have authorization to create an Active Directory network user on the Connector Web Service machine.

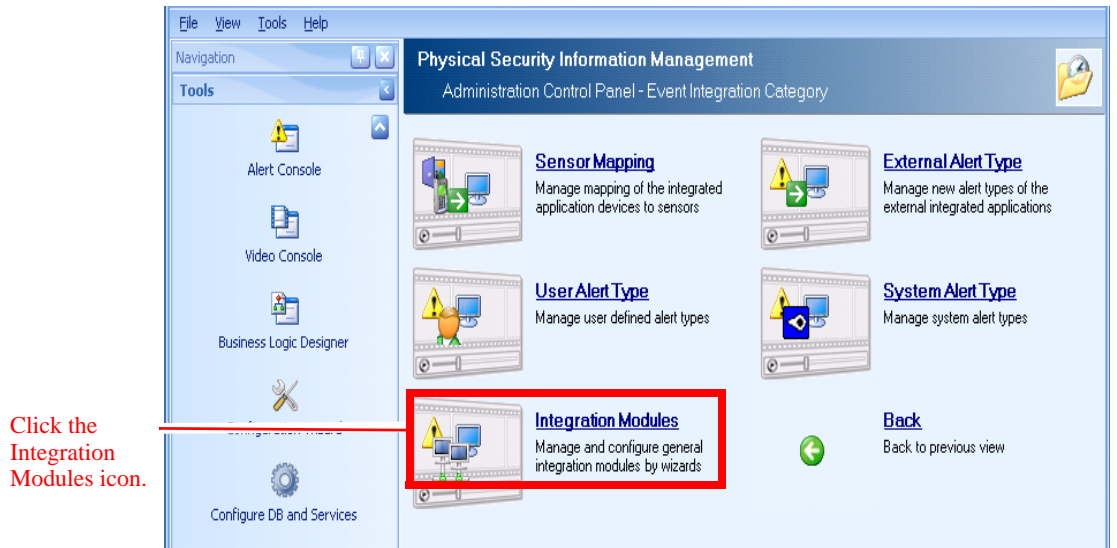
# Configuring the Cisco Physical Access Manager Integration Module with the Integration Module Wizard

To run the Integration Module Wizard:

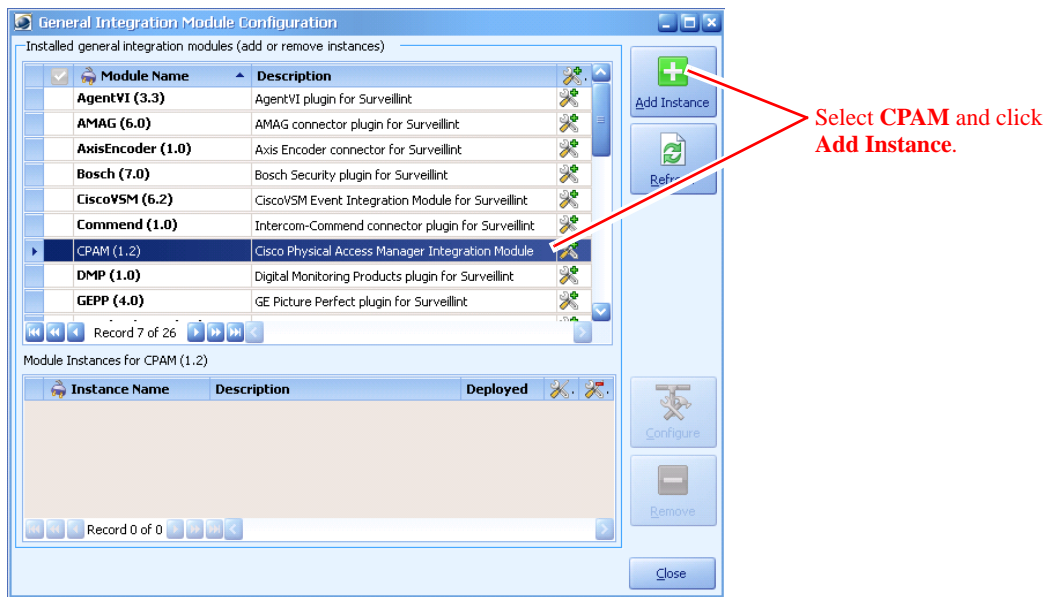
**Step 1** Click the **Event Integration** icon in the Administration Console.



**Step 2** Click the **Integration Modules** icon in the Administration Console.

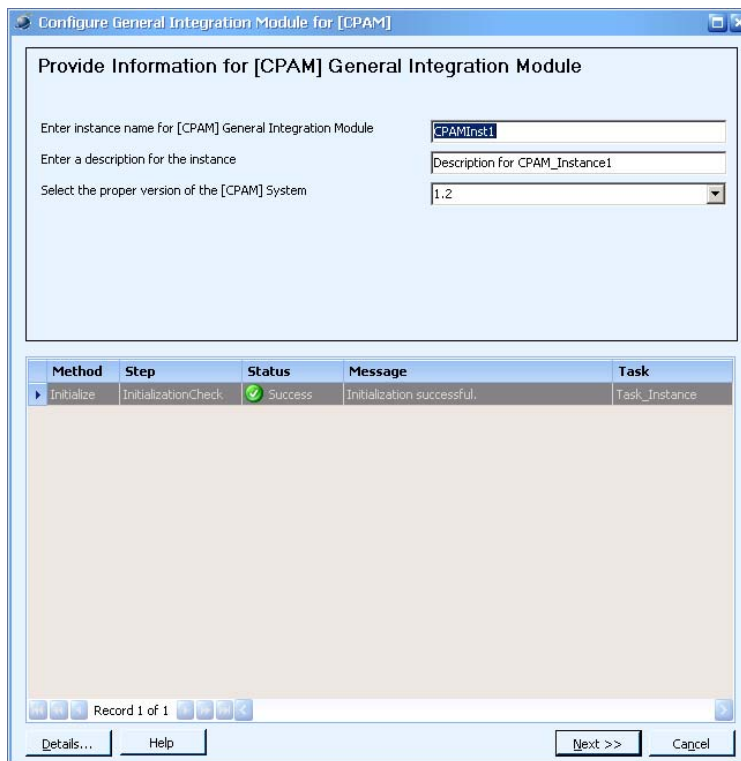


The General Integration Module Configuration window appears.



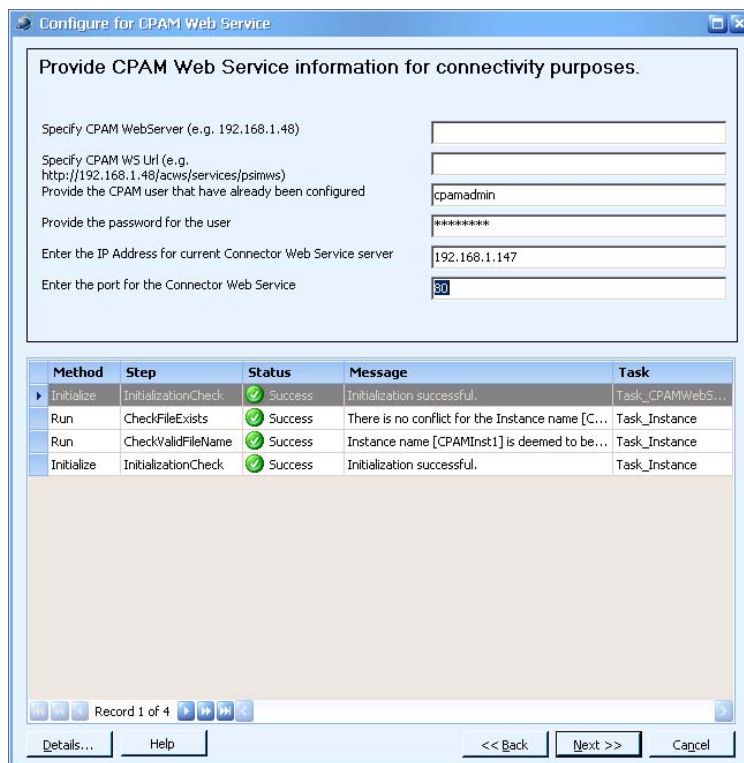
**Step 3** Select **CPAM** and click **Add Instance**.

The Configure General Integration Module window appears.



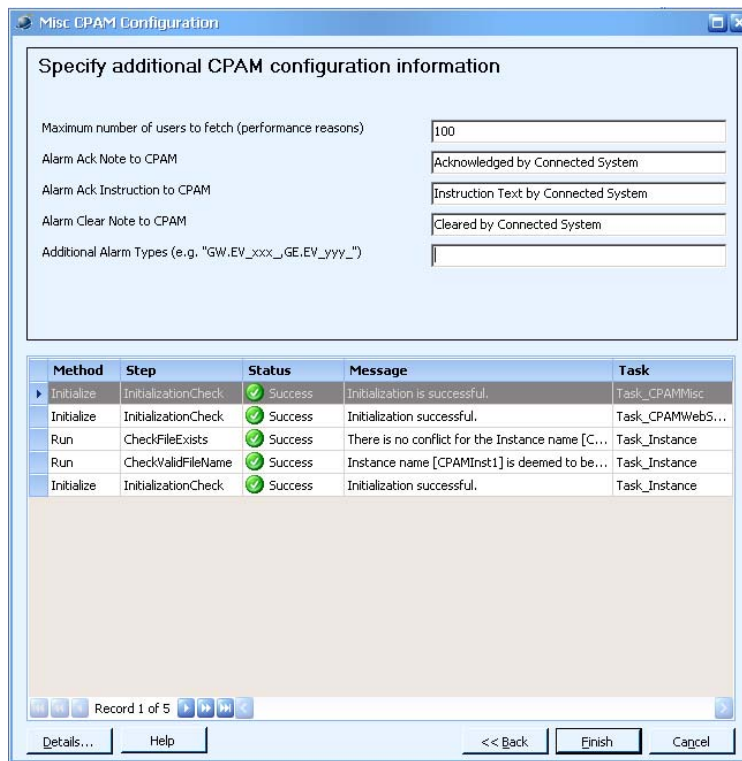
- Step 4** Enter an alpha-numeric descriptor for this specific instance of CPAM in the **Enter instance name** field. Once the sensors are put into PSOM environment, they are referenced by the instance name specified in this field. This makes it possible for the Connector Web Service to be moved, or the CPAM Server or CPAM Application to be reconfigured, without affecting existing PSOM sensors as long as the instance name remains the same.
- Step 5** In the **Enter a description for the instance** field, enter a short description that can be viewed in relevant PSOM Consoles.
- Step 6** Select the version of CPAM with which you are integrating from the **Select the proper version** field.
- Step 7** Click **Next**.

The Configure for CPAM Web Service window appears.



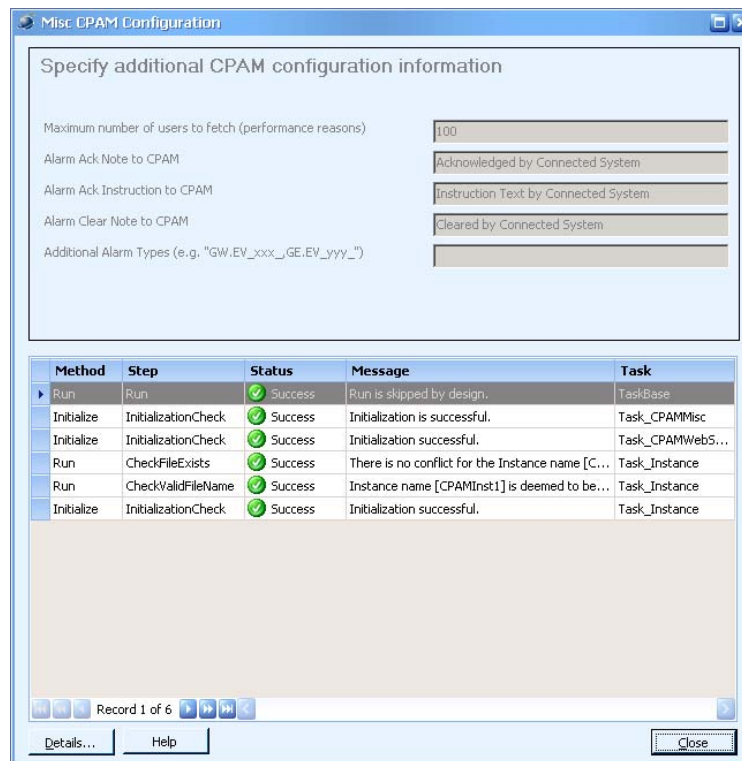
- Step 8** Enter the server name or IP address of the CPAM Web Server in the **Specify CPAM WebServer** field.
- Step 9** Enter the URL of the CPAM Web Server in the **Specify CPAM WS Url** field.
- Step 10** Enter the name of the CPAM user that can access the CPAM Web Server in the **Provide the CPAM user** field.
- Step 11** Enter the corresponding password in the **Provide the password** field.
- Step 12** Enter the IP address for the current Connector Web Service in the **Enter the IP Address for current Connector Web Service server** field.
- Step 13** Enter the port number under which the Connector Web Service is running in the **Enter the port for the Connector Web Service** field.
- Step 14** Click **Next**.

The Misc CPAM Configuration window appears.



- Step 15** Enter the maximum number of users to fetch at a time from CPAM in the **Maximum number of users to fetch** field.
- Step 16** Enter the message to deliver to CPAM when an alert is acknowledged in PSOM in the **Alarm Ack Note to CPAM** field.
- Step 17** Enter the response instruction to deliver to CPAM when an alert is acknowledged in PSOM in the **Alarm Ack Instruction to CPAM** field.
- Step 18** Enter the message to deliver to CPAM when an alert is cleared (closed) in PSOM in the **Alarm Clear Note to CPAM** field.
- Step 19** Leave the **Additional Alarm Types** field blank. It is for future use.
- Step 20** Click **Finish**.

After the validation is finished, the configuration file is sent to the Connector Web Service and the IIS Server hosting the Connector Web Service will be restarted. The final window appears.



**Step 21** Click **Close**.

## Using Plugin Pages to Configure the Cisco Physical Access Manager Integration Module

To configure the Cisco Physical Access Manager Integration Module (CPAM) with Plugin Pages:

- Step 1** From the machine where Connector Web Service is installed, open Internet Explorer and navigate to <http://localhost/PxConnectorWS/PluginPages/default.aspx>.  
The Connector Plugin Configuration window appears.
- Step 2** Click **Add Instance** next to **CPAM** under **Available to be Deployed**.  
The CPAM Instance Configuration window appears.
- Step 3** Provide values for the CPAM Integration Module parameters as explained [Table 3](#).

**Table 3** CPAM Integration Module Parameters

Parameter	Description
Instance Name	If there are multiple CPAM devices, please assign unique names for each instance of the CPAM Integration Module that you create to access an actual CPAM device.
Instance Description	A description that identifies this CPAM Integration Module.
Time Zone Offset	You may leave this value set to zero (0).
WS Address	The Web service IP address that CPAM will use to access the CPAM Integration Module for PSOM.
WS Port	The Web service port number on CPAM from which the CPAM Integration Module will receive events. This value is the same port as the PxConnectorWS; the default value is 80.
CPAM WebService URL	The Web Service URL for Cisco Physical Access Manager. The URL is a combination of the IP address for the machine where the CPAM process is running, and the port number to which CPAM is listening.
CPAM User Name	An operator user account on Cisco Physical Access Manager from which appropriate alarms can be received by the CPAM Integration Module.
CPAM Password	The corresponding password.
Maximum Users List	The maximum number of users to be returned as the result of a query. Normally, there is no need to change this value.
Alarm Ack Notes	Text message to be recorded in the Notes field of the alarm in Cisco Physical Access Manager when an alarm is acknowledged by PSOM.
Alarm Ack Instruction	Text message to be recorded in the Instruction field of the alarm in Cisco Physical Access Manager when an alarm is acknowledged by PSOM.
Alarm Clear Response Notes	Text message to be recorded in the Notes field of the alarm in Cisco Physical Access Manager when an alarm is closed by PSOM.
CPAM Alarm Types	Leave this field blank. It is for future use.

**Step 4** Click the **Add Instance** button.



**Note** Any errors will appear in the logs named PxConnector\*.log stored in the C:\InetPub\wwwroot\PxConnectorWS\log\ directory. For example, if you see an *Unsuccessful* message, check the latest log file; the log file name is similar to PxConnectorService\_200809121533.log, where the number represents the file creation time. There are various reasons to fail to configure the Integration Module, but one of the more common reasons for failure is insufficient privileges. If there is a message “IMPORTANT!” in the log file, follow the instructions within the log file to correct the problem.

**Step 5** Click the **Main** link to verify that the CPAM Integration Module is listed as a Deployed Plugin.



A sensor in PSOM represents a door in Cisco Physical Access Manager. If you have 10 doors defined in Cisco Physical Access Manager, you will see a “Success! 10 sensors Retrieved” message in the above screen.

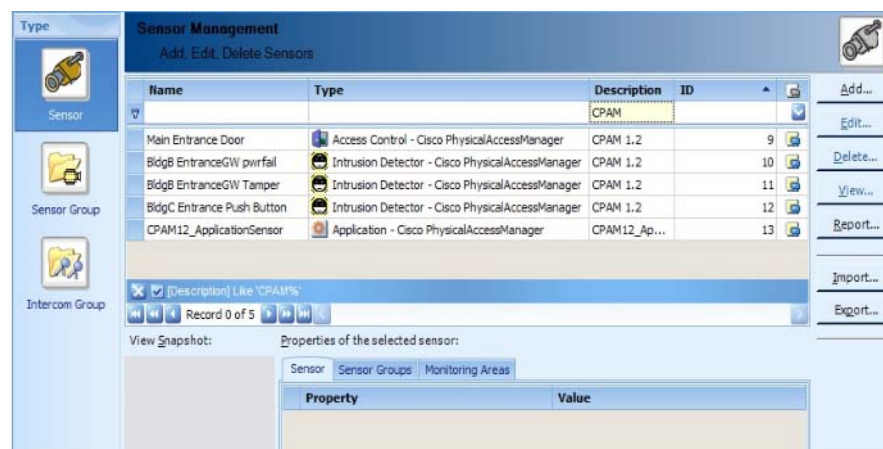
**Step 6** Restart all PSOM services as described in the “Starting and Stopping Monitoring Services” section in the *Administering Cisco Physical Security Operations Manager* guide.

Important: If the Bus Service is not running in the local machine, then it may take a few minutes for changes to be reflected. If the Bus Service is running in the same machine, these changes will be immediately reflected. If Bus Service running on a another machine, please wait a few minutes for the updates to be picked up or restart the Bus Service for immediate update.

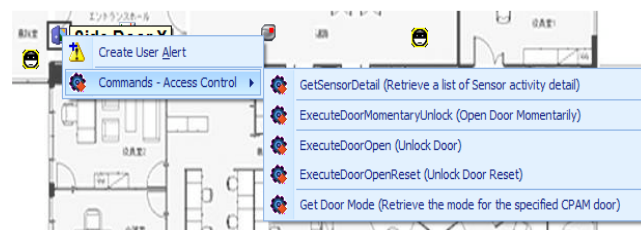
**Step 7** Verify that the Administration Console now has a sensor type for the **CPAM Sensor**.

## CPAM Sensors in PSOM

CPAM sensors appear as shown next in the Sensor Management window.



You can execute commands to control CPAM door sensors from the Operation Console.



The following commands are supported:

- GetSensorDetail—Retrieve a list of activities from the door sensor.
- Execute Door Momentary Unlock—Open the door momentarily; in CPAM, this is “Grant Door Access.”
- Execute Door Open—Lock down the door; in CPAM, this is “Set Door Mode to Locked.”

- Execute Door Open Reset—Reset the door lockdown; in CPAM, this is “Set Door Mode to Unlocked.”
- Get Door Mode—Retrieves current door mode.



**Note**

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No commands are supported for non-door CPAM sensors.

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