

CPAM URL notification to IPICS example

Tested with CPAM releases 1.1.0-1.3.0

CPAM software has the ability to invoke a URL trigger as part of a Global I/O action.

In this example, we will configure CPAM to trigger an IPICS policy that has been predefined on the IPICS server.

The IPICS policy creation and function verification is beyond the scope of this document. The IPICS administrator will have to configure the policy on the IPICS system and verify that the policy performs as expected, before we attempt to invoke it from the CPAM system.

In this example we will only trigger the policy, we will not be sending any customized or fixed attributed from CPAM to IPICS. If we see use cases for this type of function, we will investigate it further.

Basic steps:

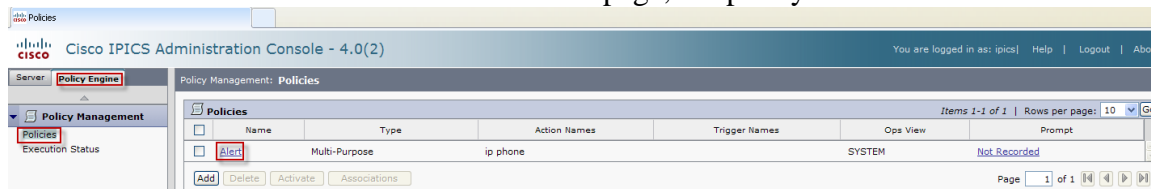
1. Determine the IPICS policy URL
2. Configure the CPAM to invoke the URL
3. Manually test the URL can be invoked via CPAM
4. Define a Global I/O and configure the trigger, with the action of URL notification

Detailed steps:

Determining the IPICS policy URL used to trigger the desired policy prior to IPICS 2.2 or higher.

This section is designed to assist the IPICS administrator with how to enable the IPICS system to accept a URL policy trigger. The IPICS administrator should see the associated document titled 'Direct URL triggering of IPICS Policies' to enable the URL triggering feature in IPICS.

Here we see via the IPICS web administration page, the policy to send an Alert.



This is what we will use in the CPAM configuration to trigger this specific policy on the IPICS system.

In IPICS 2.2 and later, the IPICS Administrator can invoke a web services API method from a web browser to obtain a list of IPICS policies, and their ID numbers.

https://192.168.2.193/ipics_server/services/NorthboundService/getAllPolicies

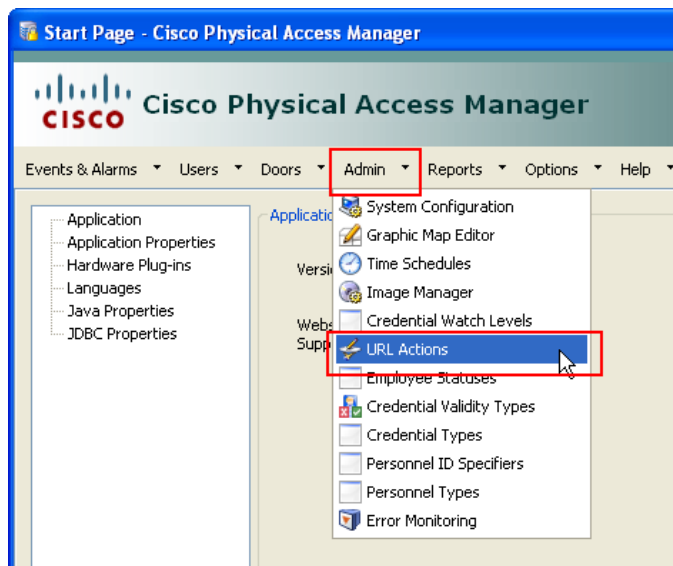
```
<ns:getAllPoliciesResponse xmlns:ns="http://com.cisco.ipics.issymo.northbound.service">
  <ns:getAllPoliciesReturn>
    <ns:policyVOs>
      <ns:policyVO>
        <ns:id>279</ns:id>
        <ns:description />
        <ns:name>Alert</ns:name>
        </ns:policyVO>
      </ns:policyVOs>
    </ns:getAllPoliciesReturn>
  </ns:getAllPoliciesResponse>
```

Using the **ns:id** noted above, the IPICS administrator obtained and provided to the CPAM administrator the following URL to use for sending the IPICS Policy “Alert” notification trigger.

https://192.168.2.193/ipics_server/services/NorthboundService/executePolicy?policyId=279

Configure the CPAM server to send the URL notification.

In the CPAM client under Admin → URL actions, we configure the actions.

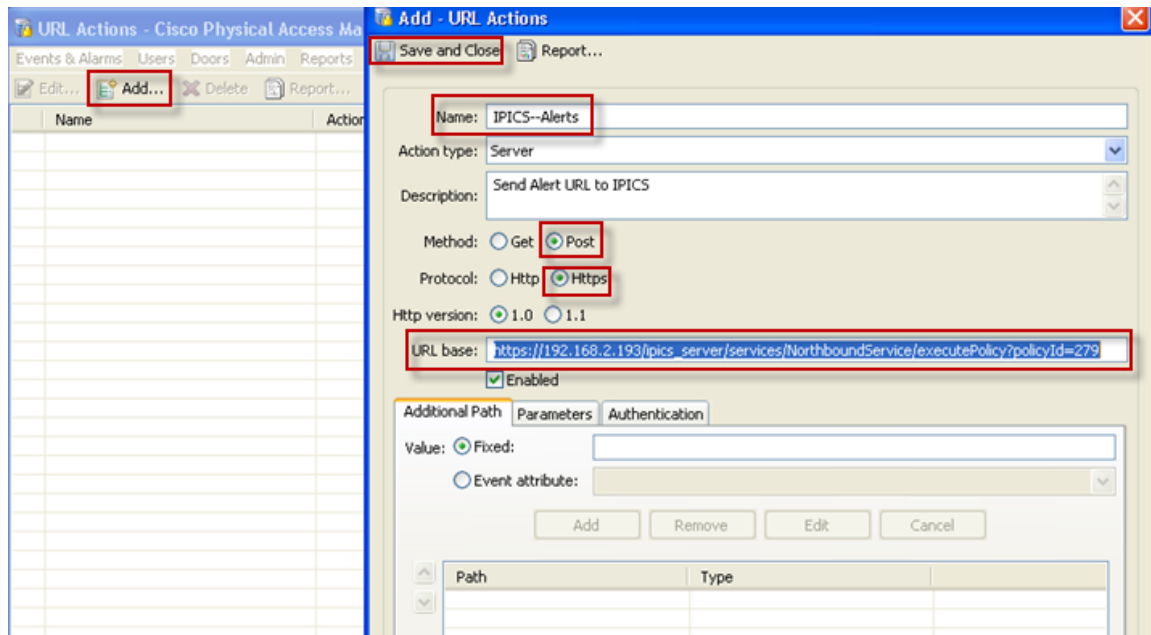


Here we define the URL action.

We click Add.

We name the URL action

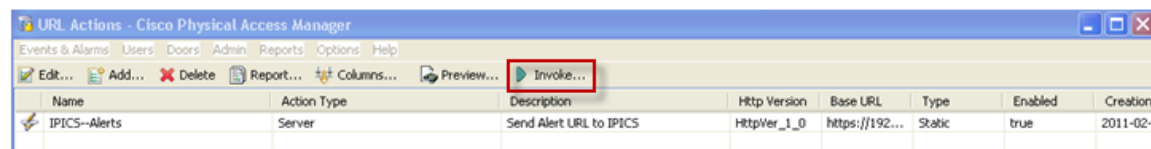
We select Post and Http since we are sending an http trigger. (Based on the link)
 We then configure the link that the IPICS administrator provided
 We then click Save and Close.



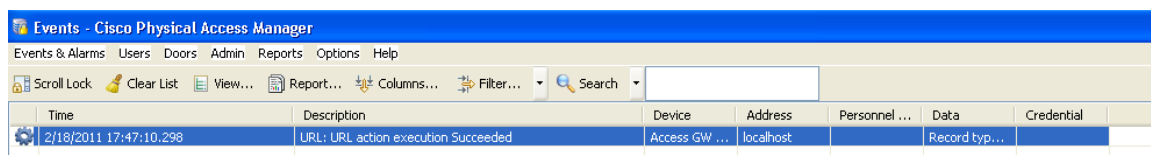
Manually test the URL can be invoked via CPAM

Once saved, we can highlight the URL, and click Invoke...

Be sure to check with the IPICS Administrator prior to invoking the URL to be sure that the IPICS system is ready for the policy to be invoked.



Once we answer Yes to the confirmation pop up, we can then view the Events log to see the status. Here we see the message where the URL action was created and the message where it was manually invoked successfully.



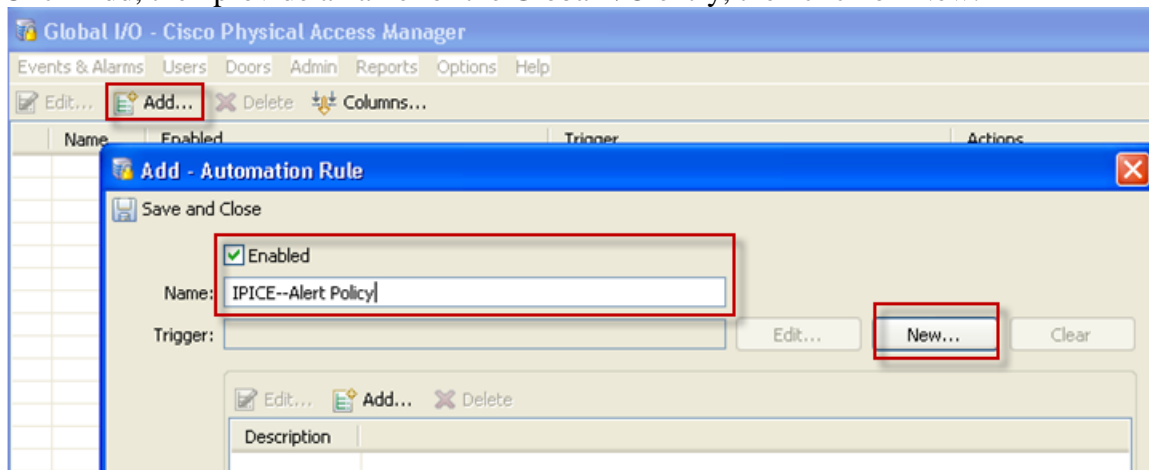
At this point, you can ask the IPICS Administrator to verify that the policy was invoked and that it functioned as expected.

Define a Global I/O and configure the trigger, with the action of URL notification

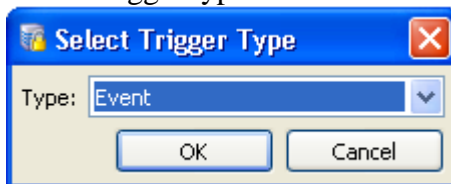
Now we have the URL action configured and verified, we can configure a Global I/O to use it. We will trigger on a 'Door Forced Open' event for a specific door, and the action will be to send the URL notification to the IPICS system.



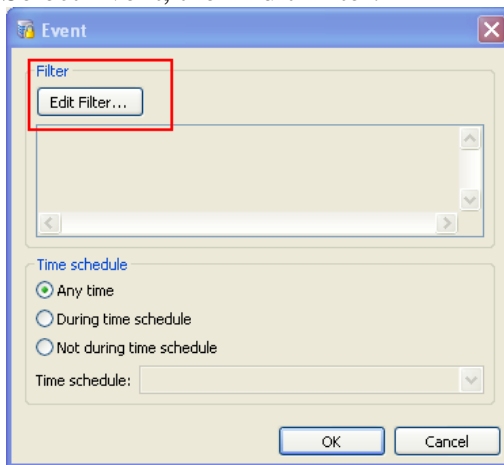
Click Add, then provide a name for the Global I/O entry, then click on New.



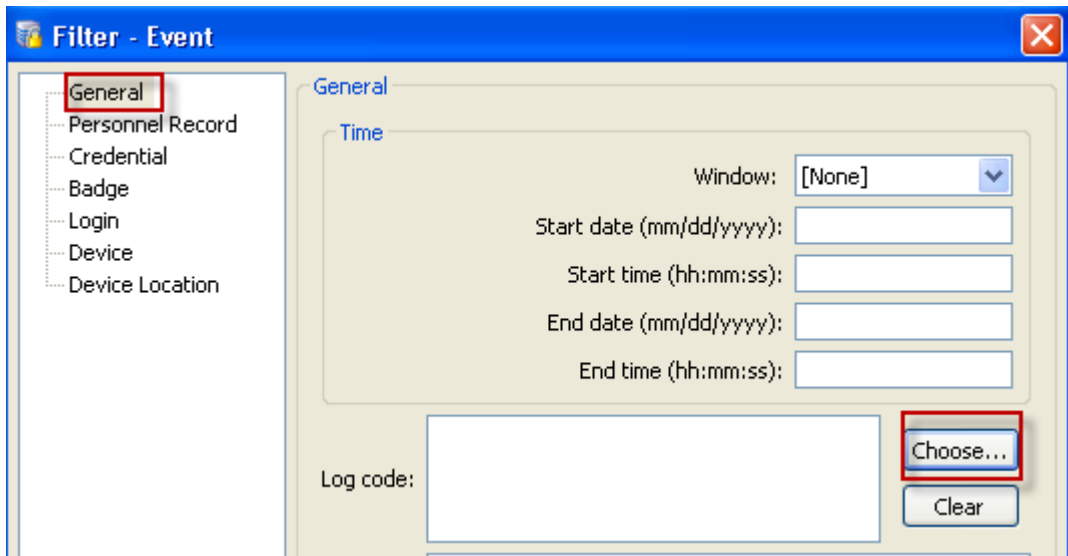
Select Trigger type Event.



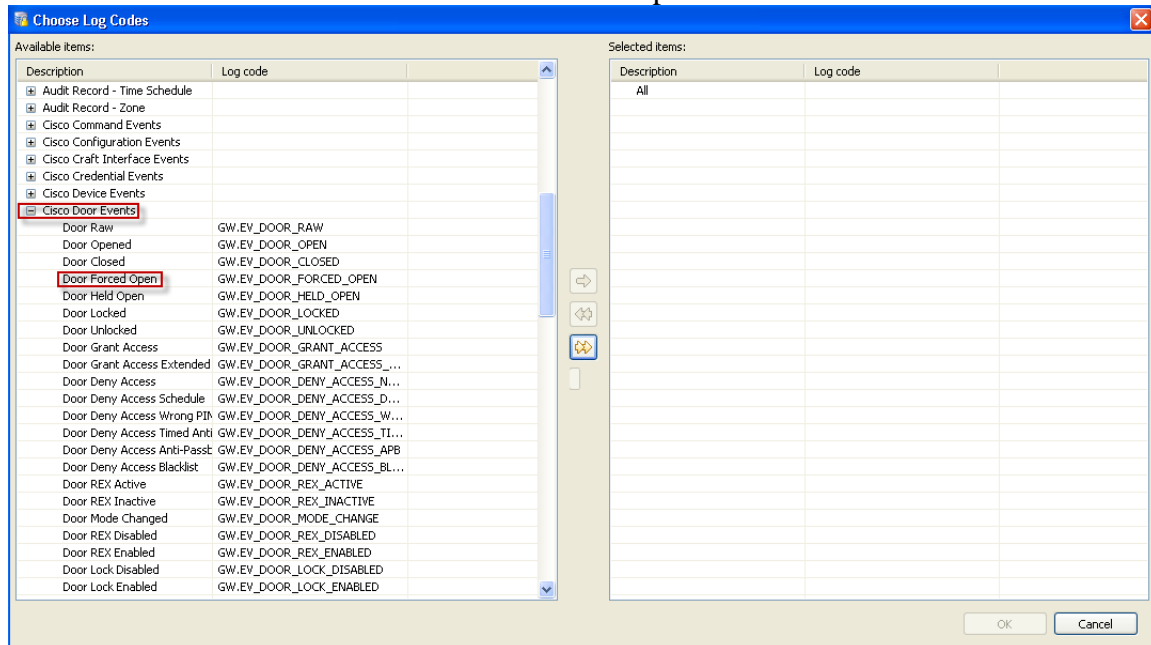
Select Event, then Edit Filter.



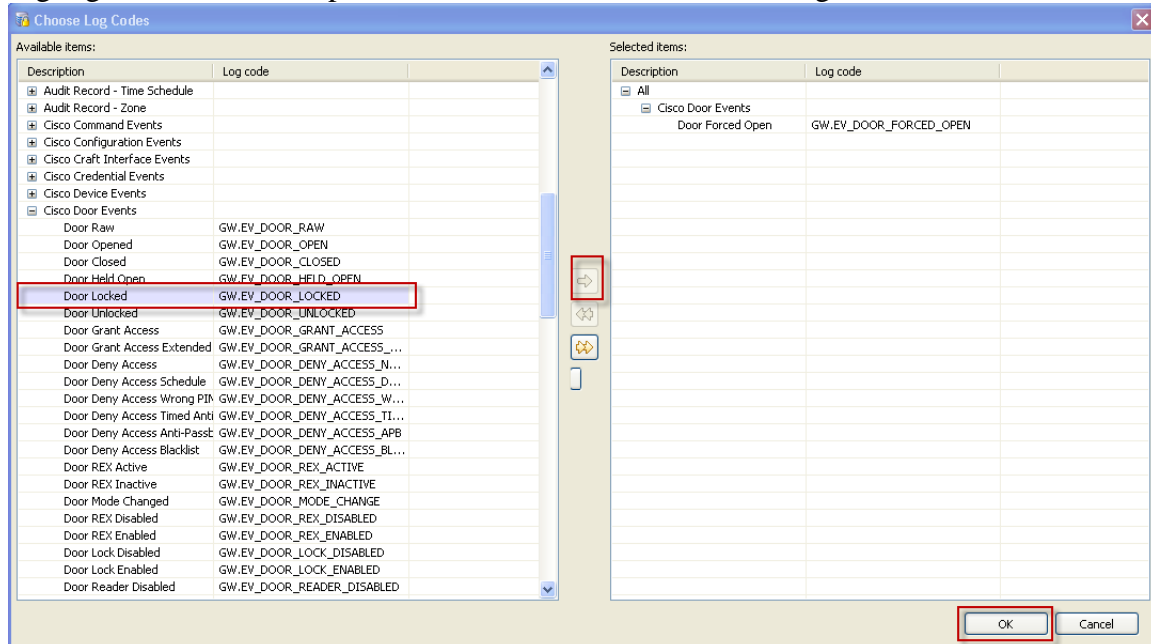
On the Edit Event → Device Menu, click Choose, and locate the Door Forced Open event under Cisco Door Events.



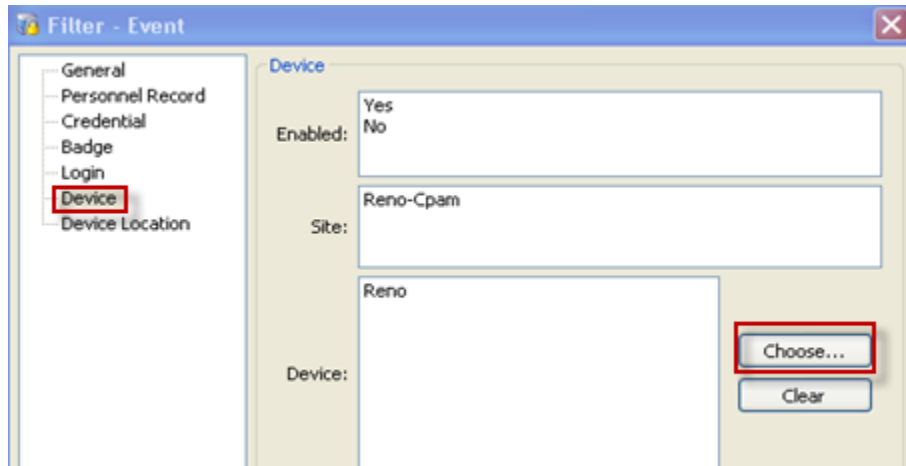
Now select Cisco Door Events and Door Forced Open.



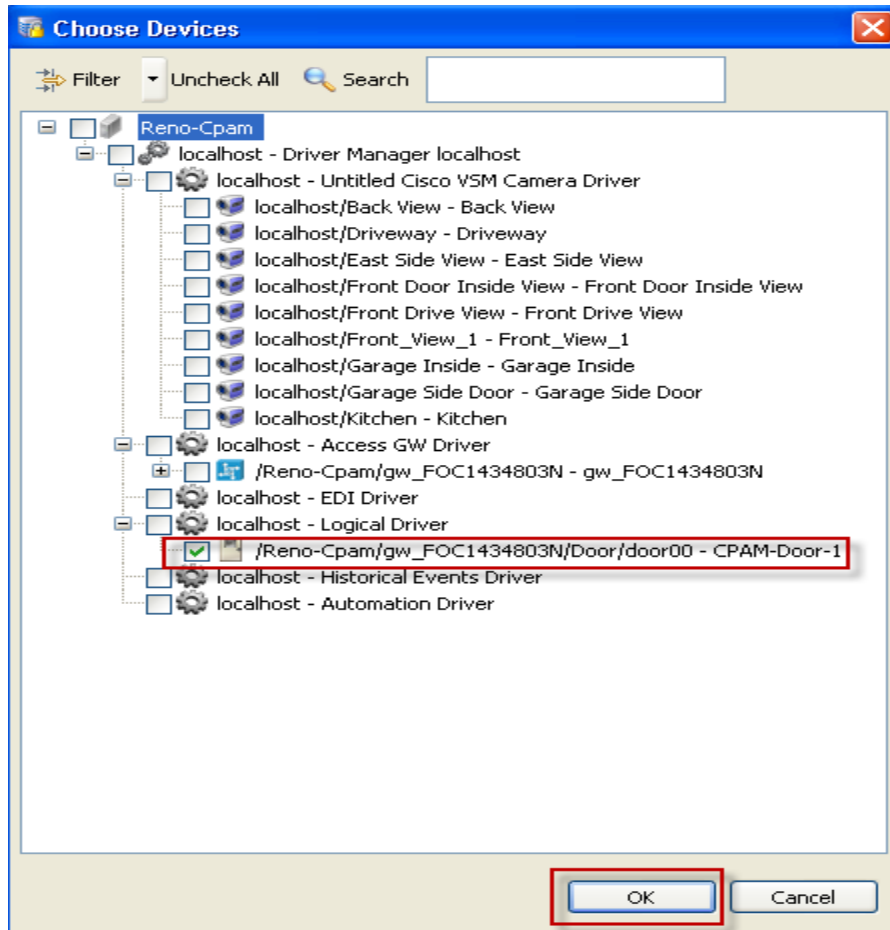
Highlight Door Forced Open. Use the arrow to move it to the right. And then click OK.



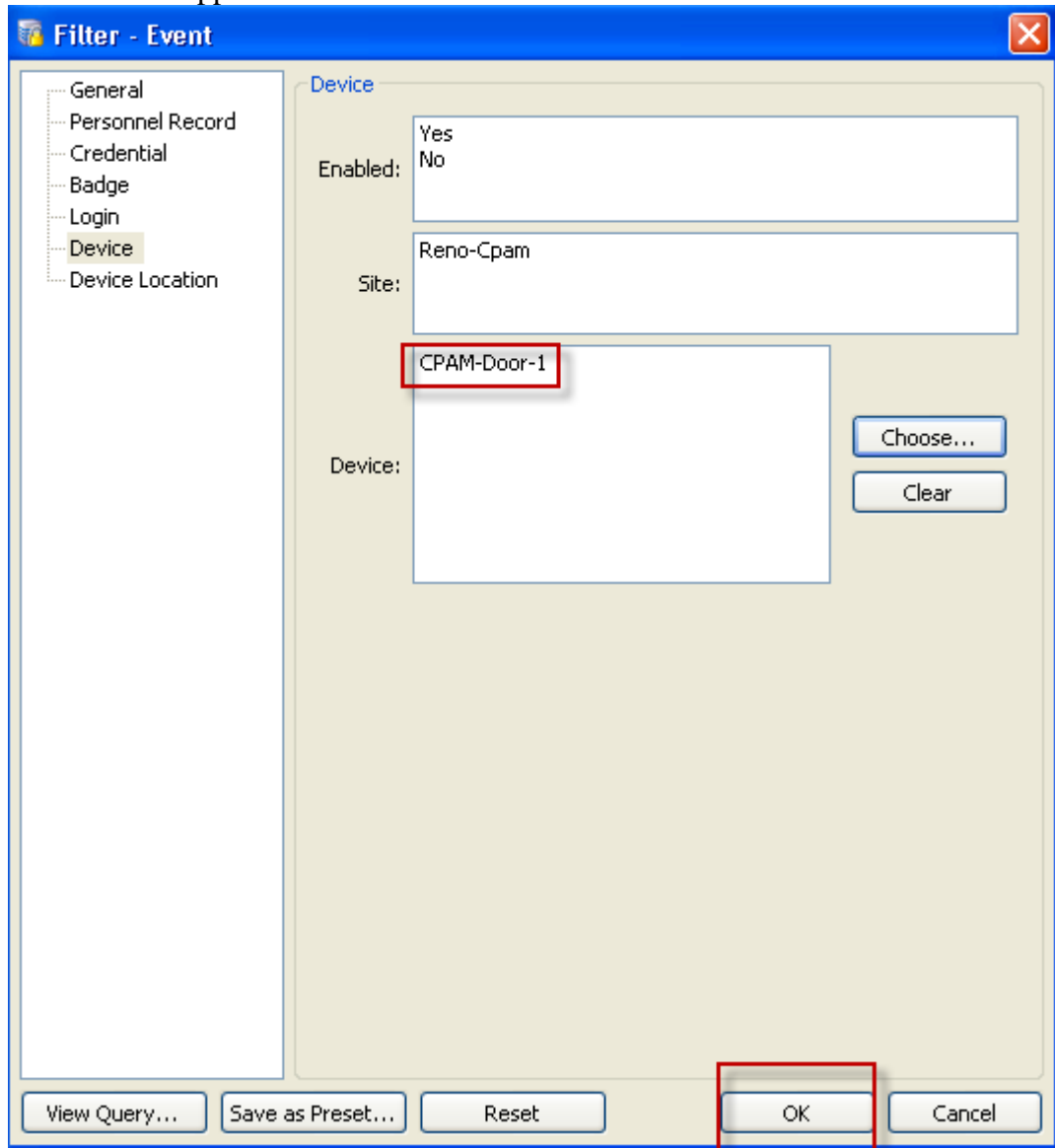
Next, move to the Device menu, and click on Choose. From here place a check mark next to the device or devices that the log code must pertain to in order for the Action to be initiated.



Select the Door and OK.

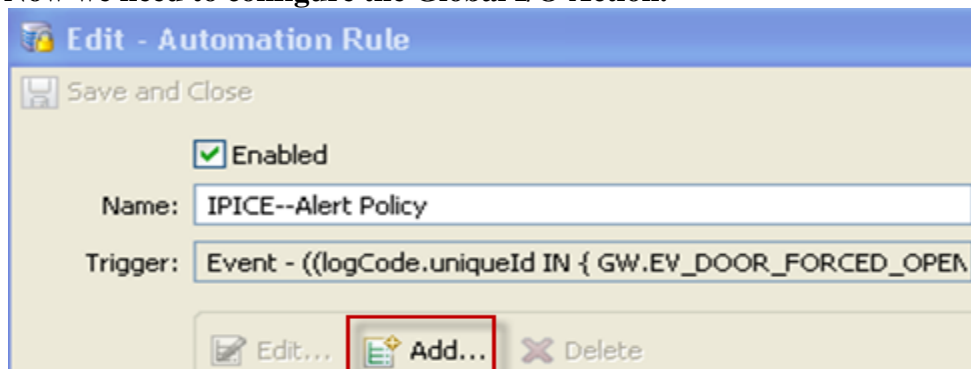


The door will appear in the Device window. Select OK.

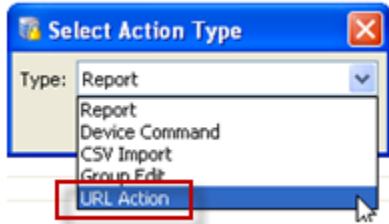


This completes the Global I/O Trigger definition.

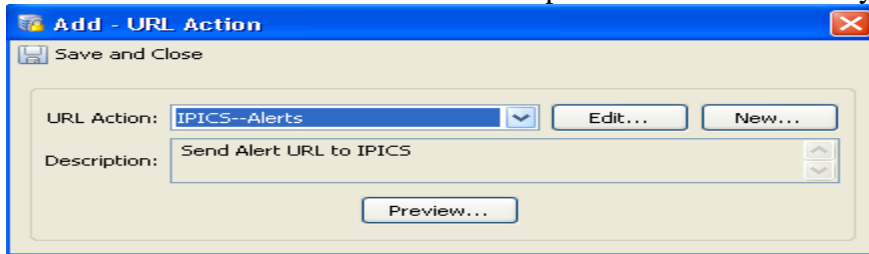
Now we need to configure the Global I/O Action.



Under Action Type, select URL Action and click OK.



On the Add URL Action menu, use the pull down to choose the desired URL Action, then click on Save and Close twice to complete the Global I/O entry.

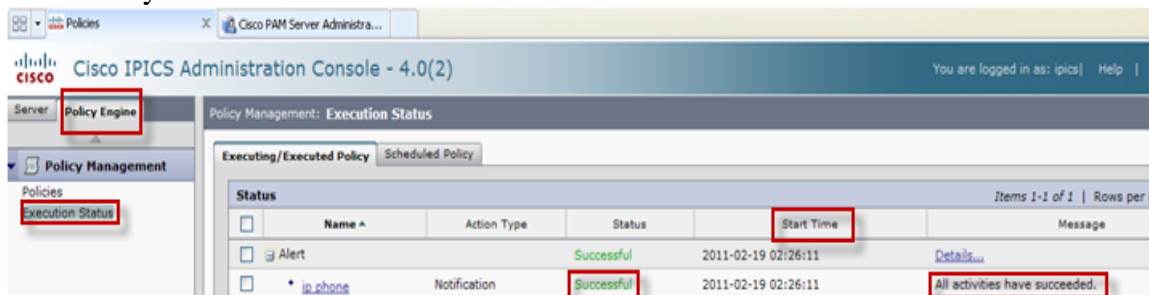


At this point, I can generate the Door Forced Open event on the desired door, and use the Events display to track the results.

Here we see the Door Forced Open message resulted in Automation rule being invoked, which in turn, sent the configured URL out to IPICS.

Time	Description	Device	Address	Personnel ...	Data	Credential
2/18/2011 18:18:50.341	Alarm cleared	jgillich-wxp04	192.168.2...		Maintenance	reno
2/18/2011 18:18:26.176	Automation rule: Invoked	Automation...	localhost		IPICE--Aler...	
2/18/2011 18:18:24.465	URL: URL action execution Succeeded	Access GW ...	localhost		Record typ...	
2/18/2011 18:18:18.606	Output Deactivated	genericOut...	/Reno-Cpa...			
2/18/2011 18:18:16.926	Door Forced Open Cleared	Reno	/Reno-Cpa...			
2/18/2011 18:18:16.612	Device IO Rule Executed	gw_FOC14...	/Reno-Cpa...		Door senso...	
2/18/2011 18:18:16.607	Output Activated	genericOut...	/Reno-Cpa...			
2/18/2011 18:18:16.536	Door Forced Open	Reno	/Reno-Cpa...			

Back on the IPICS system, the IPICS Administrator can verify that the policy was successfully executed.



Note: IPICS is in GMT time.

END