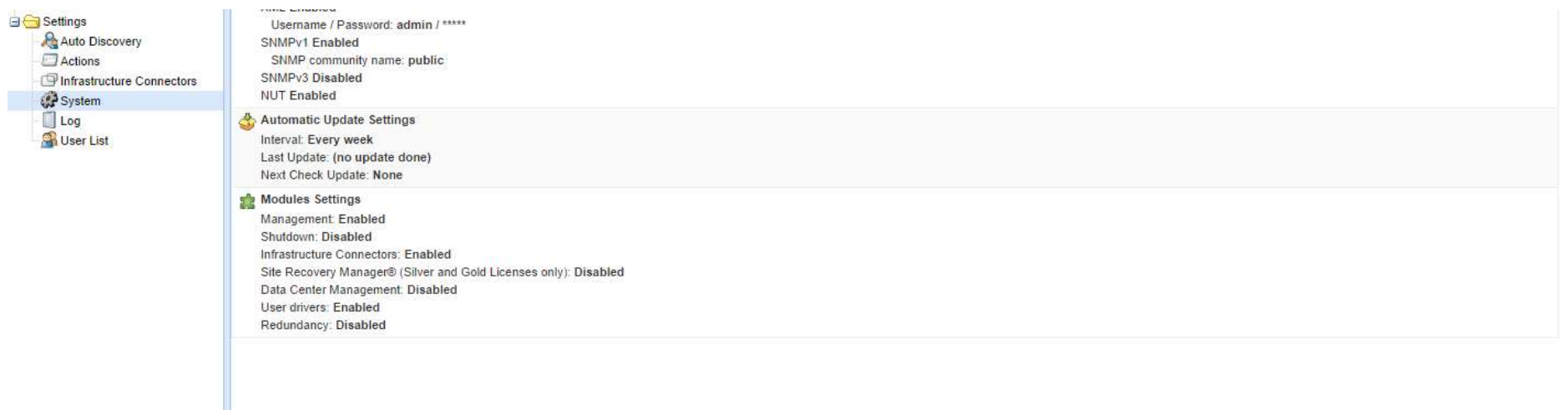IPM now integrates a new infrastructure connector for HPE OneView users. This connector retrieves in IPM all servers managed by one (or several) HPE OneView instance(s). HPE OneView provides the rack where each server is installed and IPM stores it as the location. Thank to this spatial information, HPE OneView users can trigger the power capping ability of HPE servers on environmental events occurring in their rack.
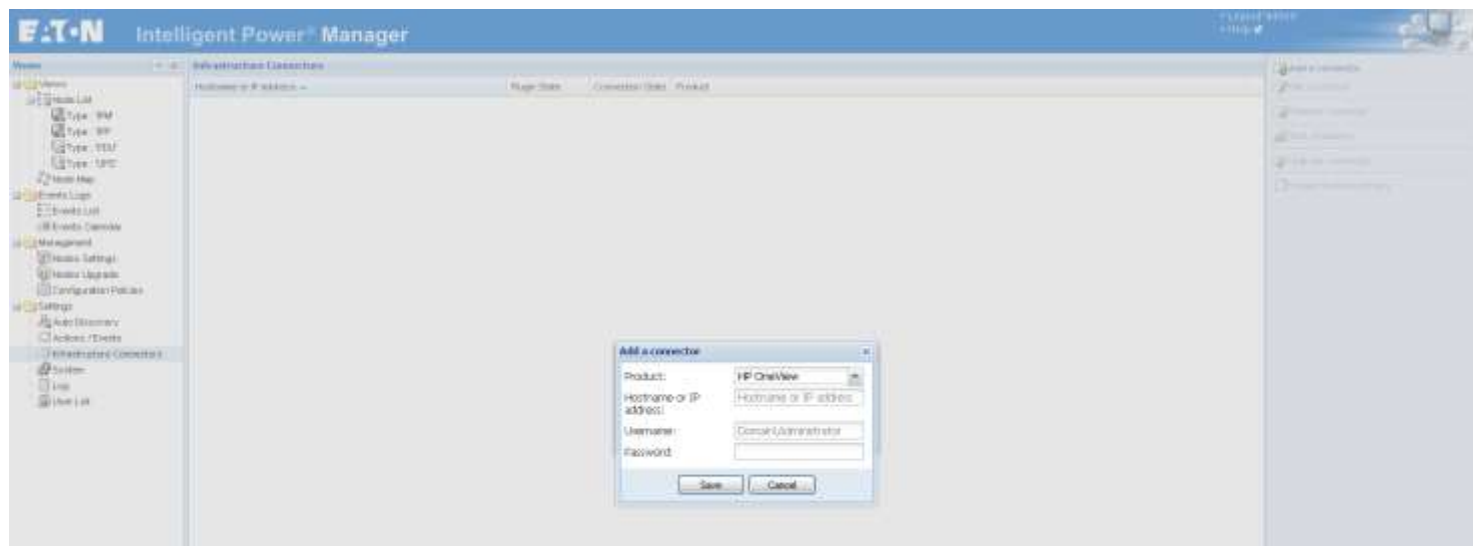
This infrastructure connector is available only to users having a GOLD or a SILVER license. GOLD license unlocks all the features with no restriction. SILVER license checks the discovery of an Eaton Premium UPS device before granting access to all the features.

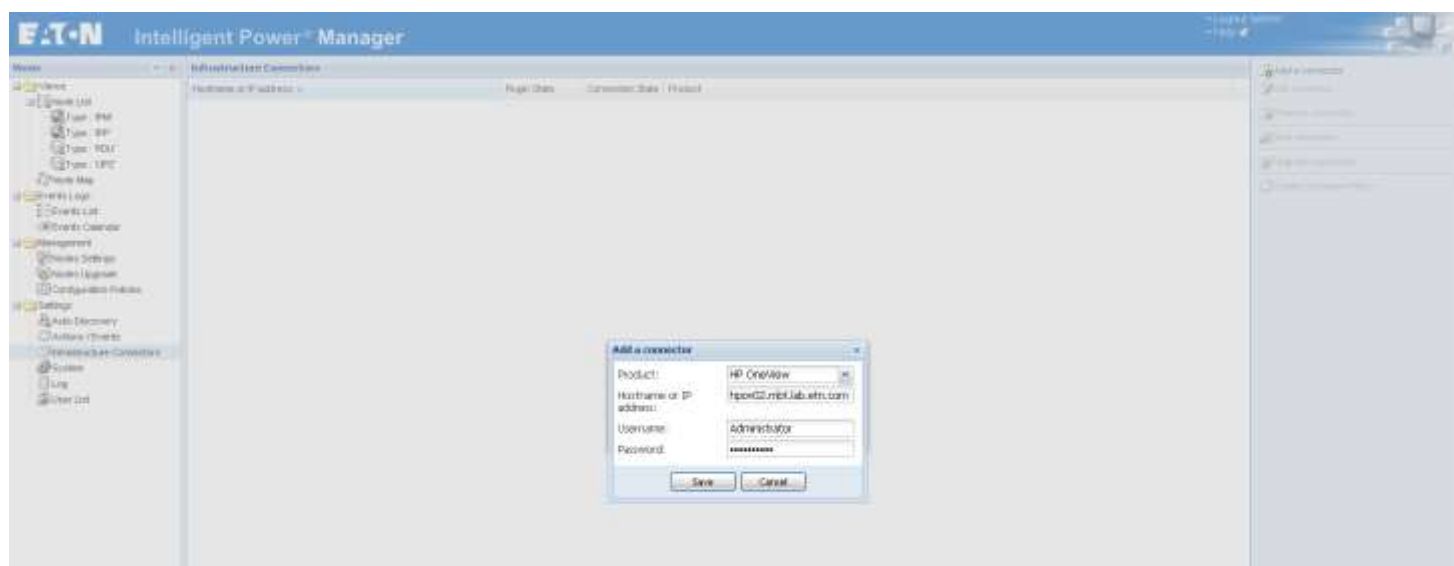## Create an OpenStack Connector

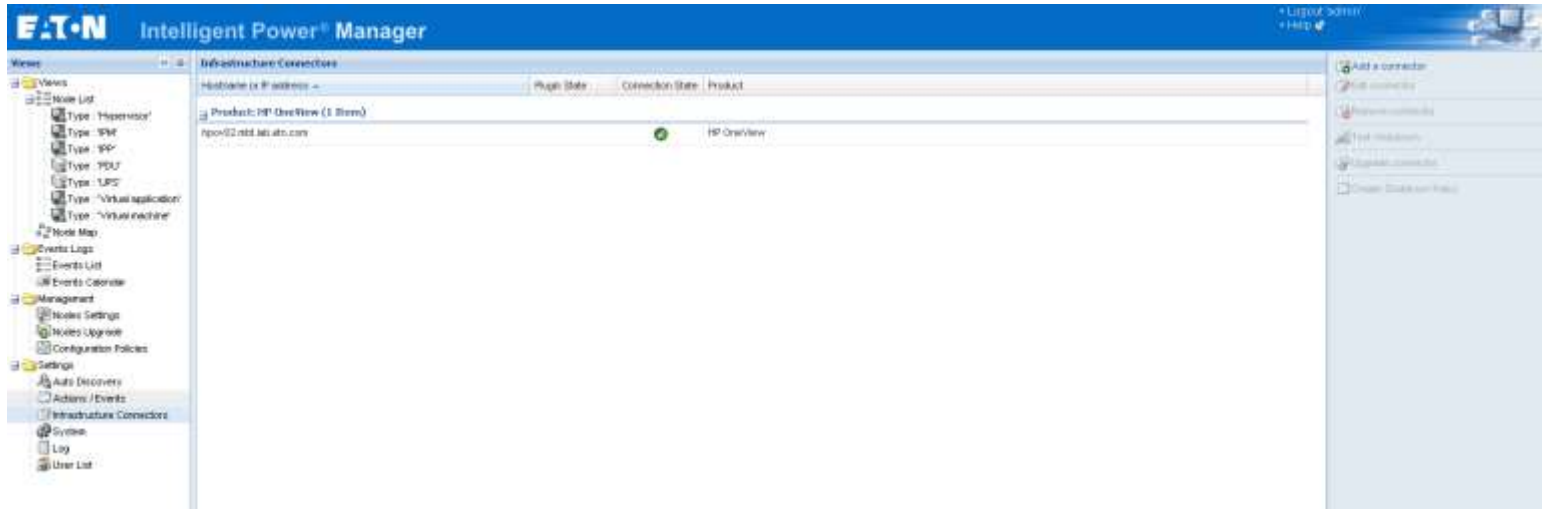1.   Go to "System" panel.

2.   Enable the "Infrastructure Connectors" module.

3.   Go to the "Infrastructure Connectors" panel.

4.   Add a connector and select "HP OneView" as product type.
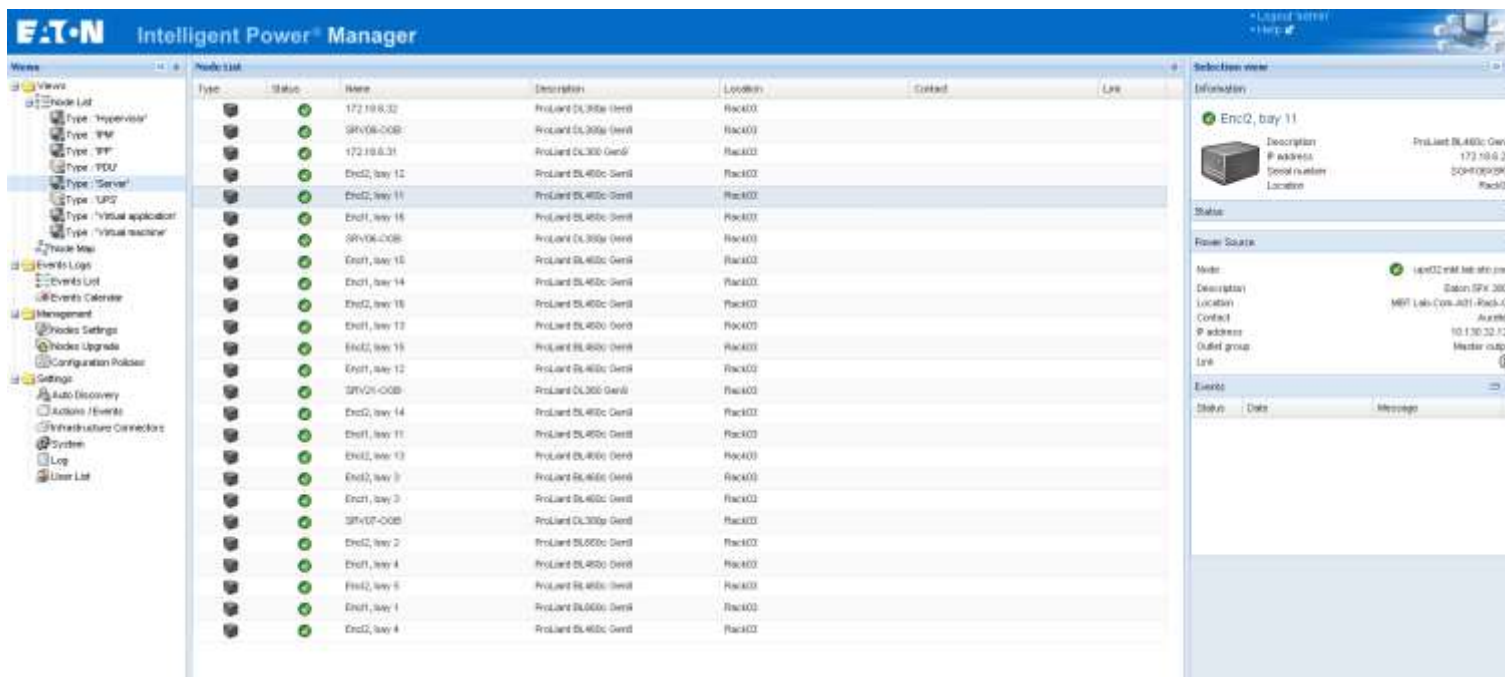

5.   Click on save.

6. After the initialization delay, you should see the green icon telling that the communication is established.

How-to use the HPE OneView feature
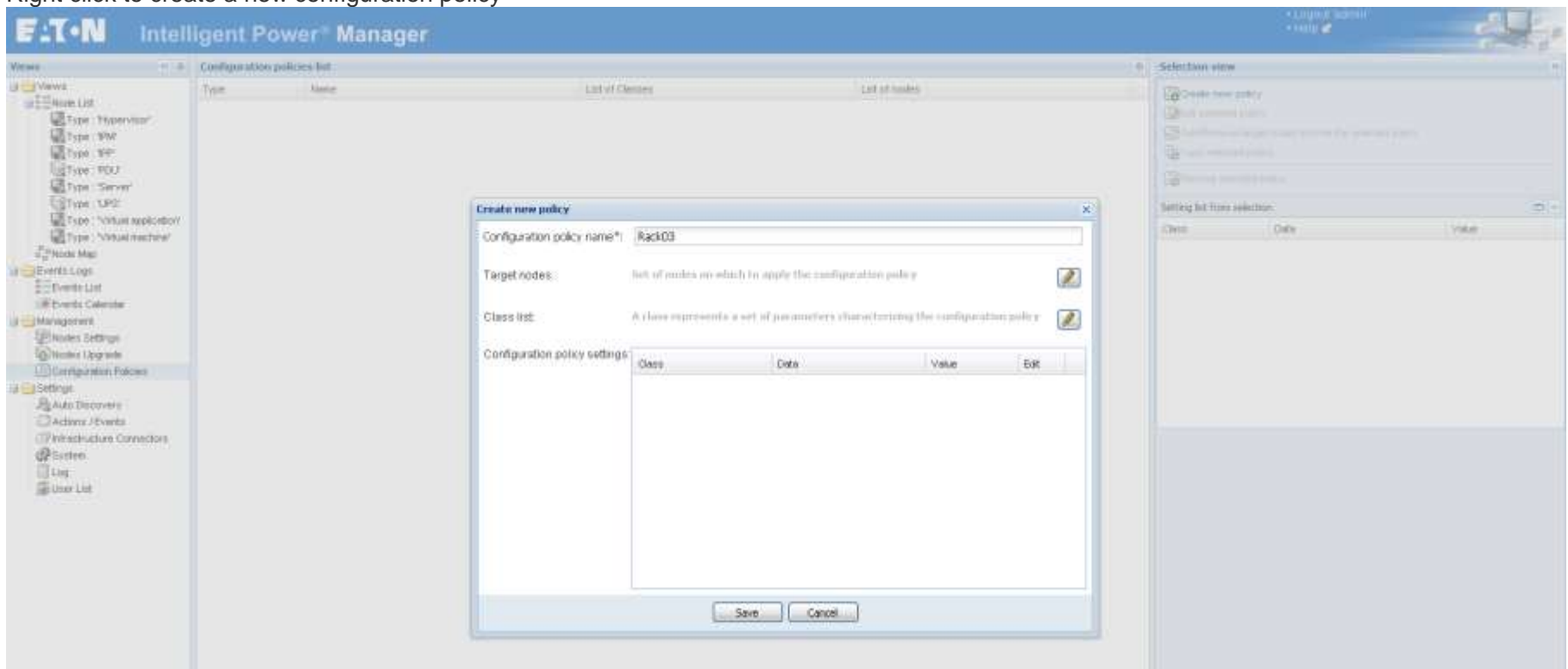
1. Check for new nodes

    Once the HP OneView connector is created and communication is established, the Node List reports the new nodes retrieved from HPE OneView.
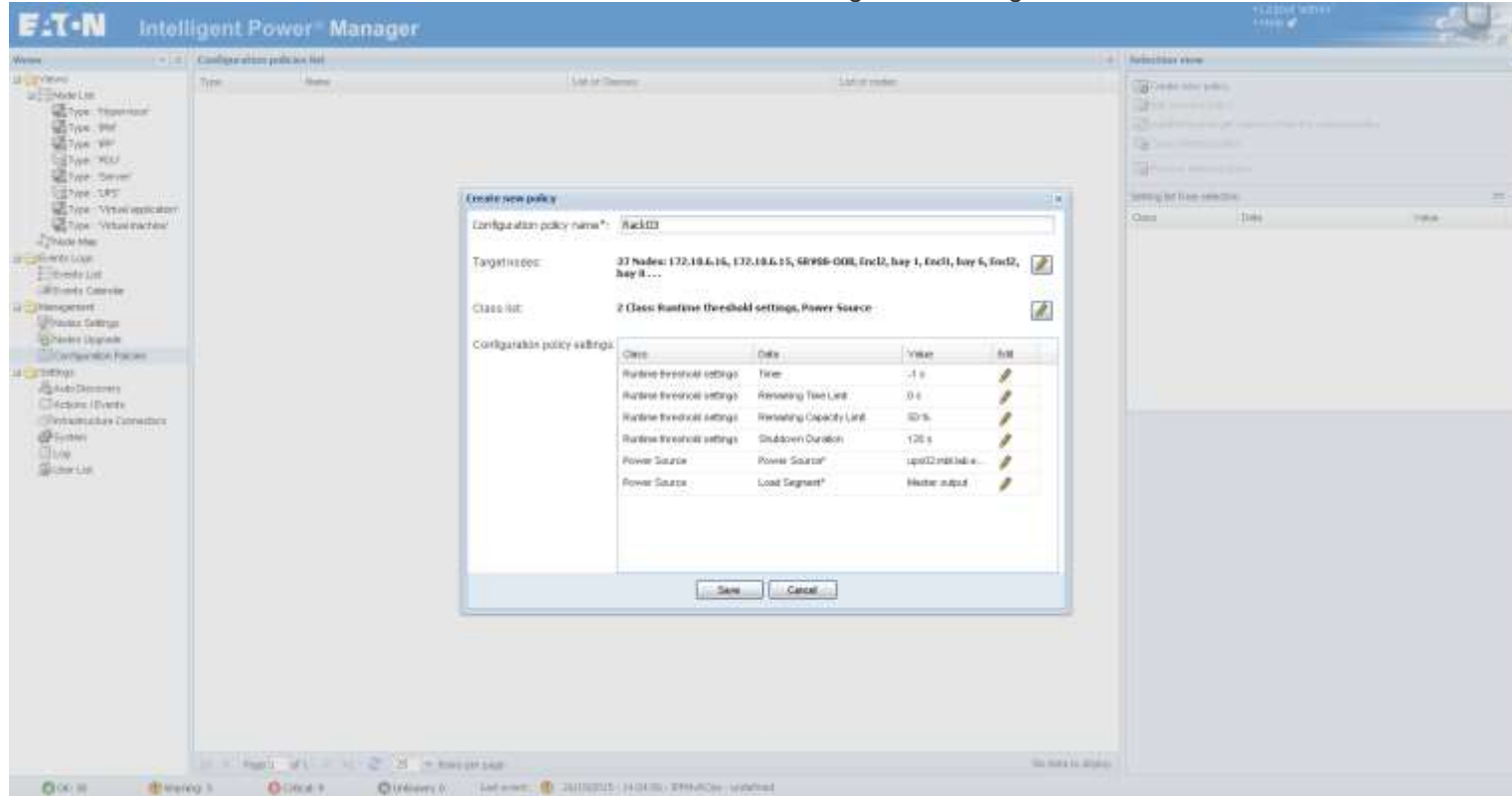

2. Create a filter by location

    In order to focus on one rack, create a filter by location (Right click on Node List >> Create sub view from... >> Select "Location"). The sub-views created will be named according to the rack names provided by HPE OneView. Each sub-view will contain only the servers installed into the corresponding rack.

3. Select one of the views created by location.
4. In the list of servers, select the ones that have an active power capping feature.
5. Right click to create a new configuration policy

The target nodes are already set from to the previous selection.

6.   Set the name to whatever you want like, for example, "Rack03"

7.   Select the class lists "Power Source" and "Runtime thresholds settings" and configure them:
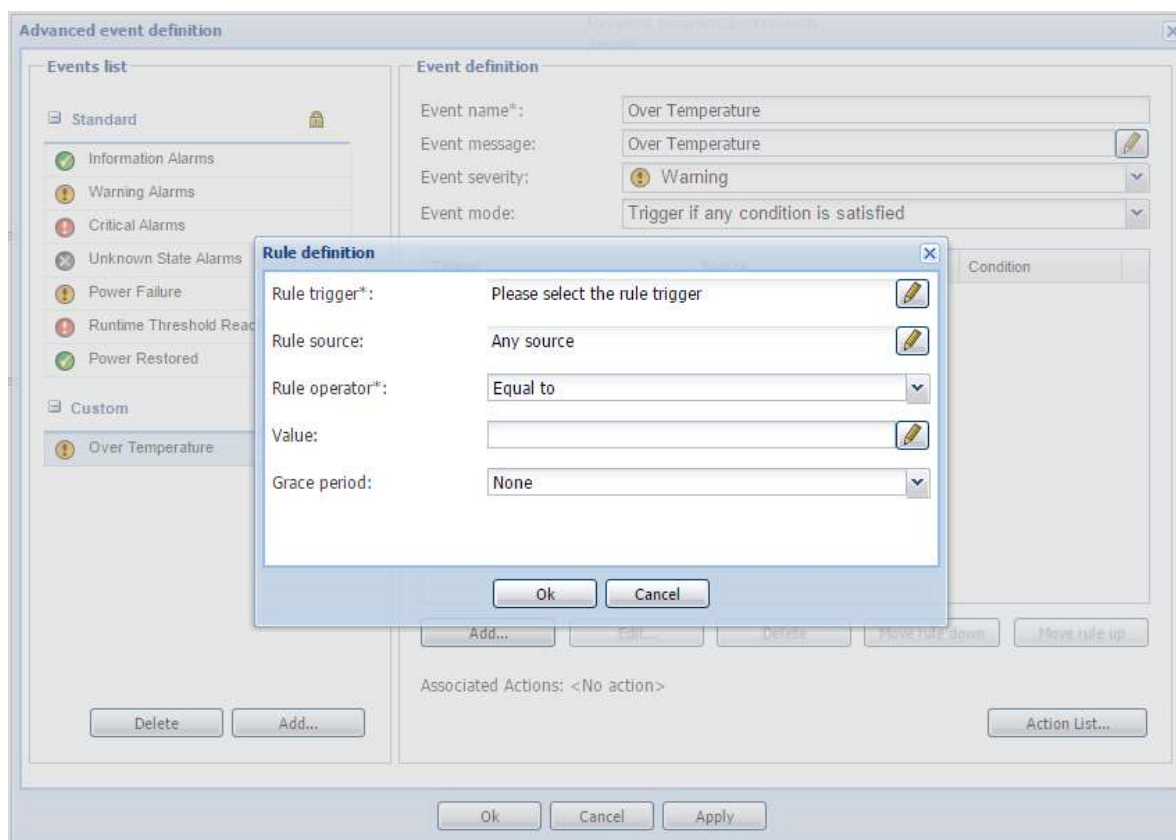

Timer: 5s;
Shutdown Duration: 2s;
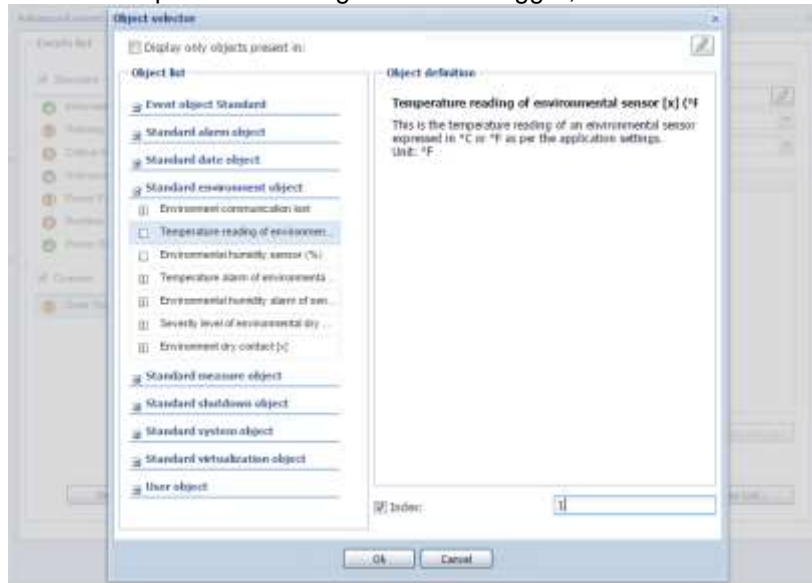Power source: select the UPS powering your rack.

8.   When prompted, accept to create a shutdown action.
      In the following dialog:
      a. choose "Power Capping on Power event" for the action,
      b. change its type to "power capping" and
      c. set the capping value (W) you want to apply when the event will trigger the action.

9.   At that point, IPM will trigger the power capping at the desired value on all servers of the selected rack in case of a power event from the selected power source.

Configure the power capping on an environmental event

1.   Create a custom event (Actions / Events > Edit event rules...)

      a. Name it "Over Temperature"

      b. Copy the name in the event message field

      c. Set its severity to "Warning"

      d. Add a new trigger

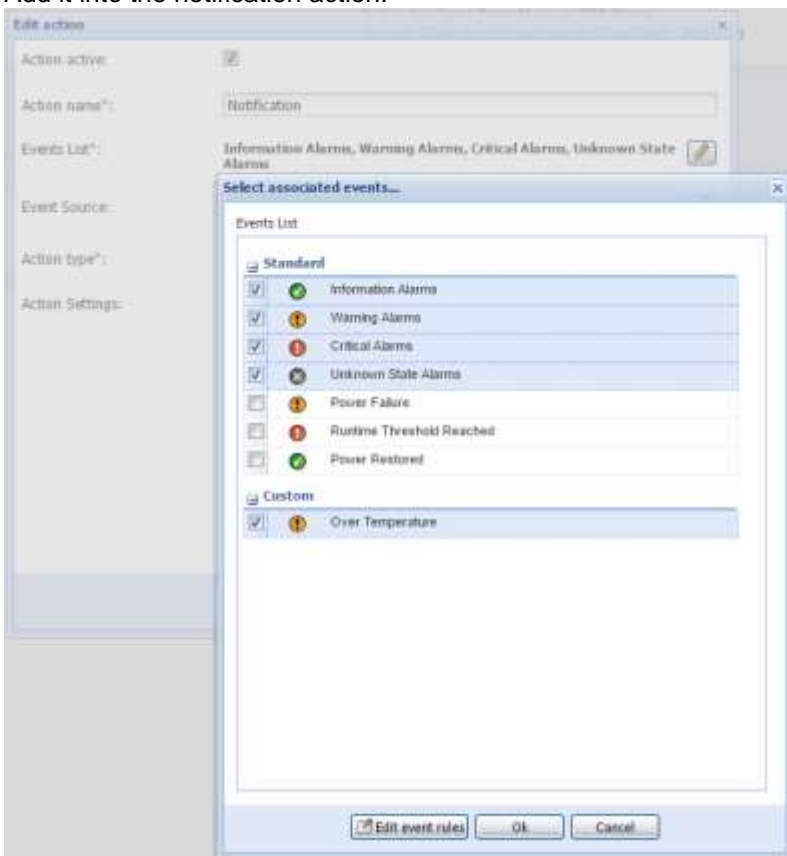   i.   Set the UPS card used as the source of the environmental data;
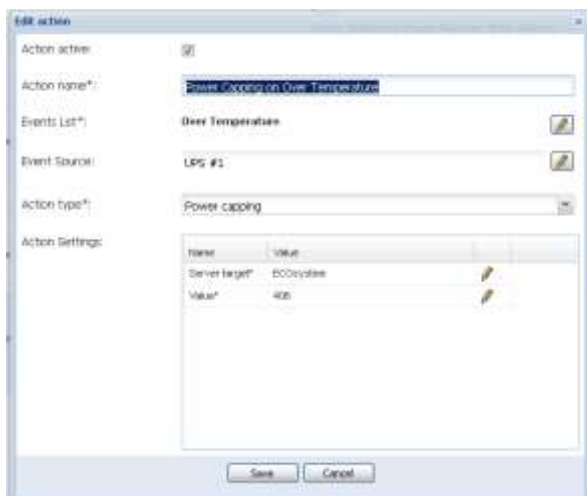
ii.   Pick the temperature reading for the rule trigger,

and select the index value 1;

iii. Set the rule operator to "Greater than";

iv.   Set the value to the desired threshold;

v.   Set the grace period to 10s to trig the event only when the temperature is stabilized over the threshold.

2. Add it into the notification action:

3. Create a new action for the power capping on Over Temperature (Actions / Events > Create new action)

a.
"Action name": "Power Capping on Over Temperature"
"Event List" must contain the custom event "Over Temperature" created the step before
"Event source" is the UPS card the environmental data comes from.
"Server target" is either an individual server on a configuration policy created earlier (like "Rack03" in the previous example).
"Value" is the Power Capping Value in Watt

4. At that point, IPM will trigger the power capping at the desired value on all servers of the selected rack in case of an over temperature event sent from the selected source. At the same time, an IPM notification will also be triggered.