

Infrastructure Management Pack for vRealize Operations Manager

Purpose of the article

The following article describes how to use Eaton Infrastructure Management Pack (MP) for vRealize Operations Manager 1.0

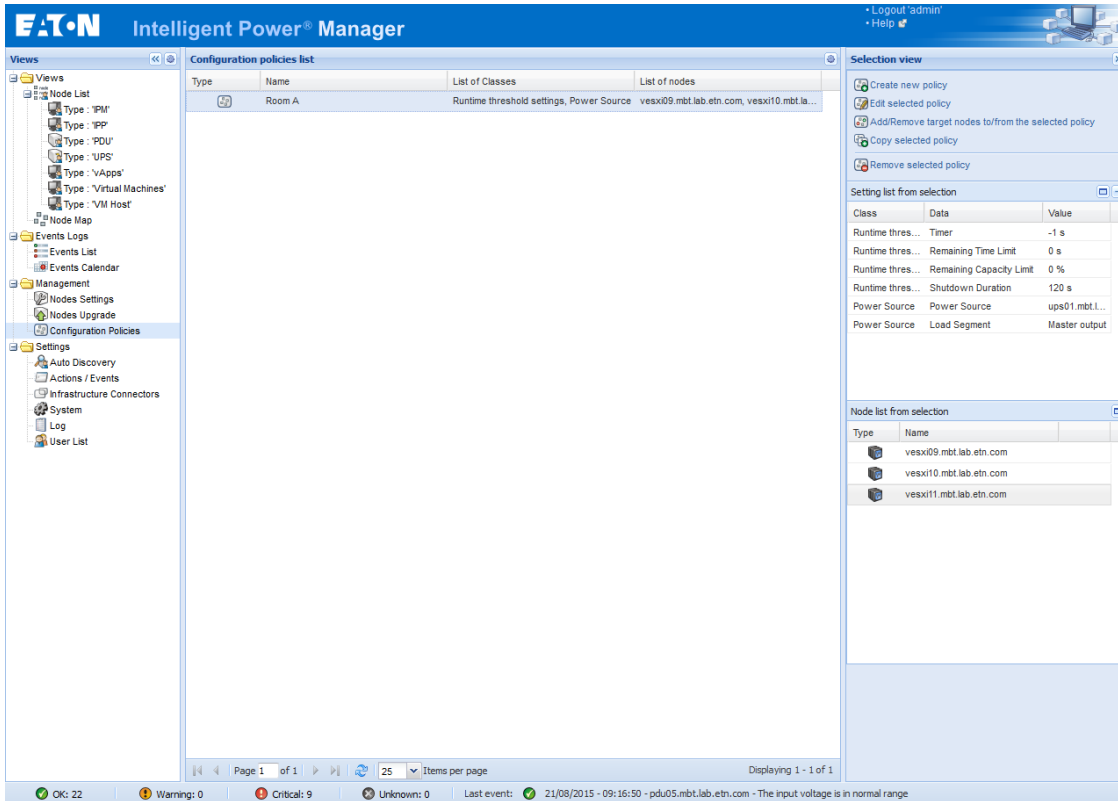
Pre-requisite

- VMware vRealize Operations Manager server running with
 - Licenses
- IPM running with
 - UPSes
 - vCenter connector configured
 - Policy defined
 - Gold or Silver license
- Eaton MP downloaded (.pak)

The screenshot displays the Eaton Intelligent Power Manager web interface. The main content area is titled "Infrastructure Connectors" and shows a table of configured connectors. The table has columns for "Hostname or IP address...", "Plugin...", "Conn...", and "Product".

Hostname or IP address...	Plugin...	Conn...	Product
Product: New VMware vCenter (1 Item)			
vcenter04.mbt.lab.etn.c...			New VMware vCenter
Product: VMware ESX/ESXi through vCenter (3 Items)			
vesx09.mbt.lab.etn.com			VMware ESX/ESXi through vCenter
vesx10.mbt.lab.etn.com			VMware ESX/ESXi through vCenter
vesx11.mbt.lab.etn.com			VMware ESX/ESXi through vCenter

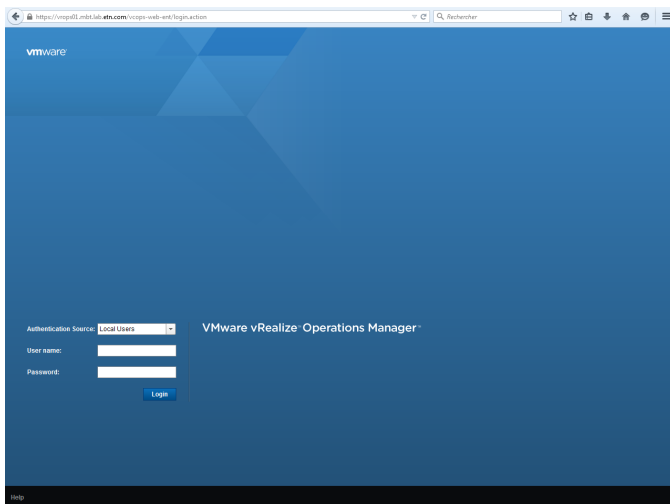
The interface also includes a left-hand navigation menu with options like "Views", "Events Logs", "Management", and "Settings". A status bar at the bottom shows system health: "OK: 22", "Warning: 0", "Critical: 9", and "Unknown: 0". The last event is dated "21/08/2015 - 09:16:50" and describes a voltage issue: "pdu05.mbt.lab.etn.com - The input voltage is in normal range".



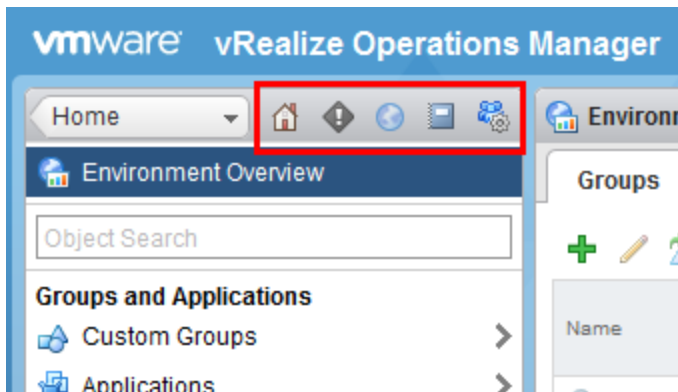
Step by step guide

Connect on VMware vRealize Operations Manager

- Use the Web interface

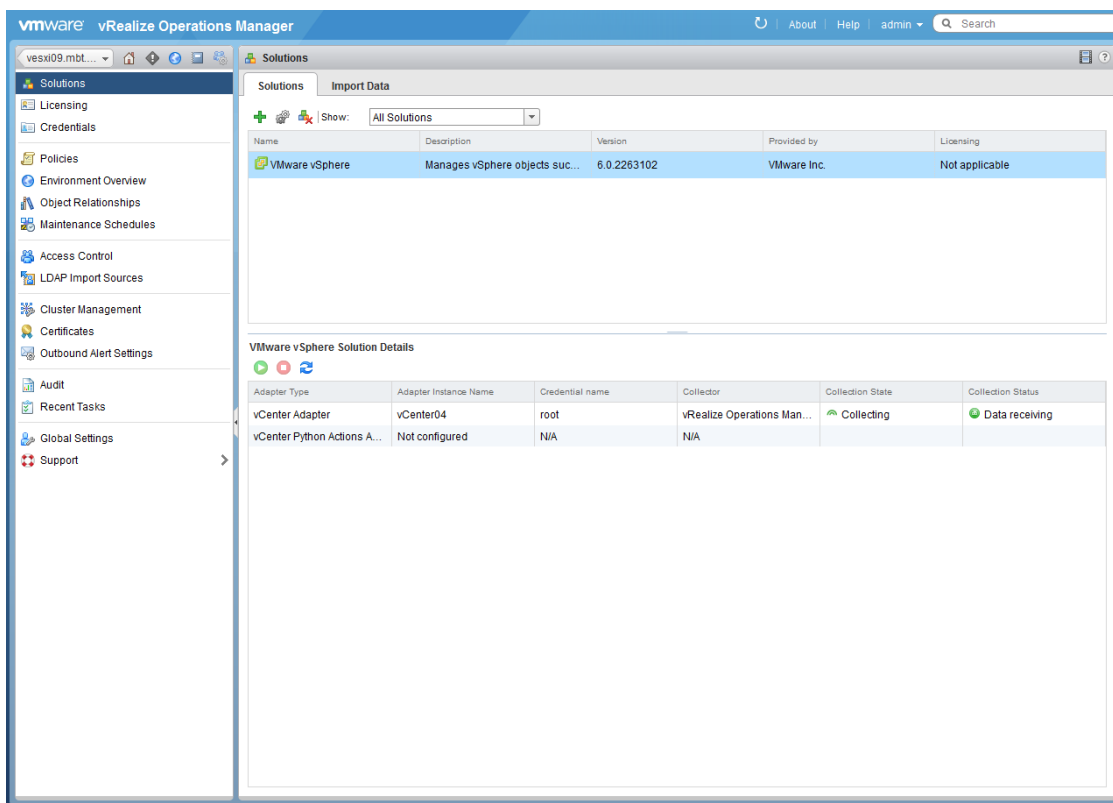


The way to go in the different section is through the "Tab"



Install the management pack (MPs)

1. Go to "Administration" => "Solutions"
2. Click on "Add" (green cross)
3. Browse and select the MP
4. Upload



Configure the solutions

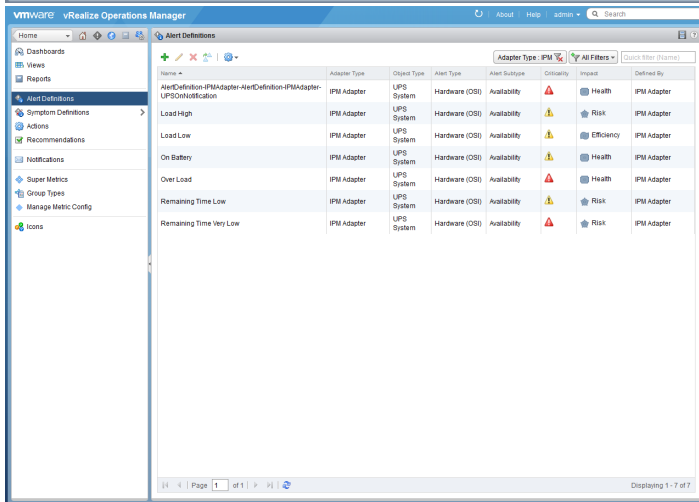
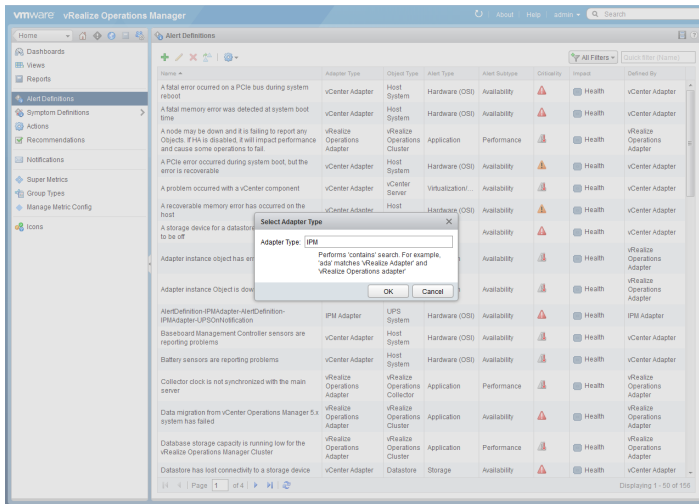
1. Select the solution
2. Click on "configure"
3. Add a new instance
4. Configure as your needs
5. Do for both VMware and Eaton

Once the solutions installed and configured, the discovery process will start (if checked) and the monitoring part will start every 5 minutes (default value)

Configure the content

After the installation of the MP, you can modify all the symptoms, alarms, icons, dashboard, actions, recommendations in the content panel.

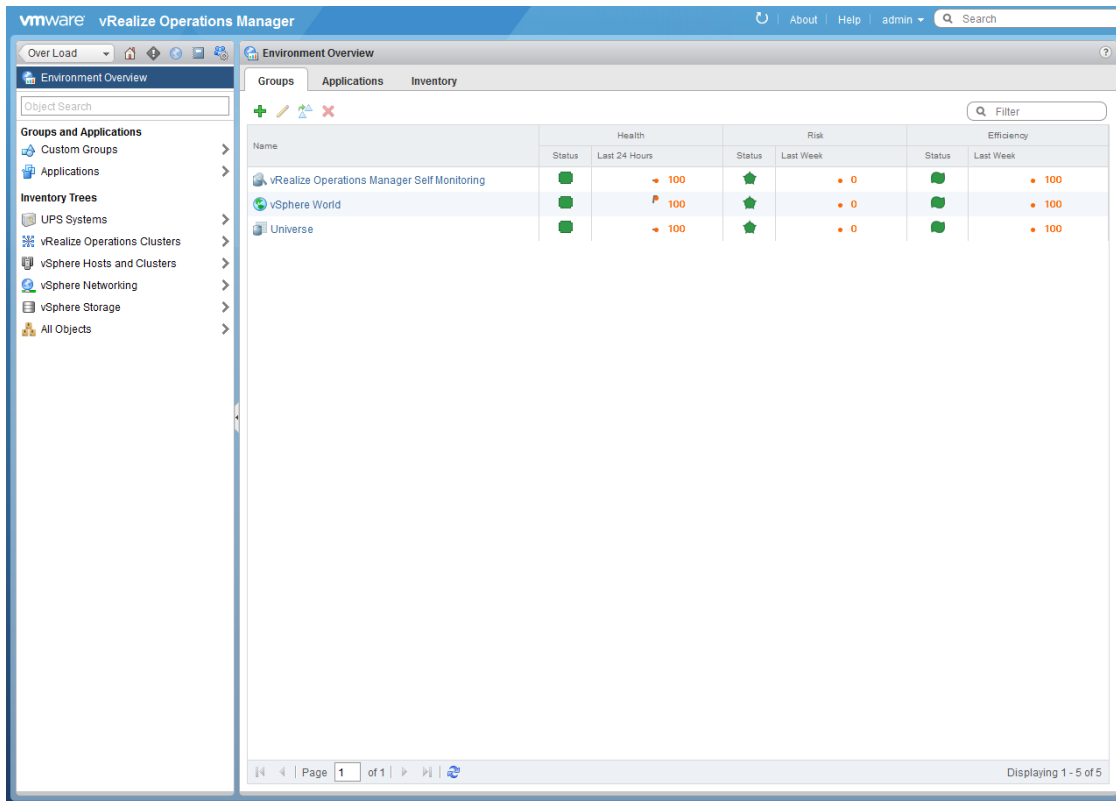
You can easily access the IPMAdapter alert with the filter on "Adapter Type" on "IPM"



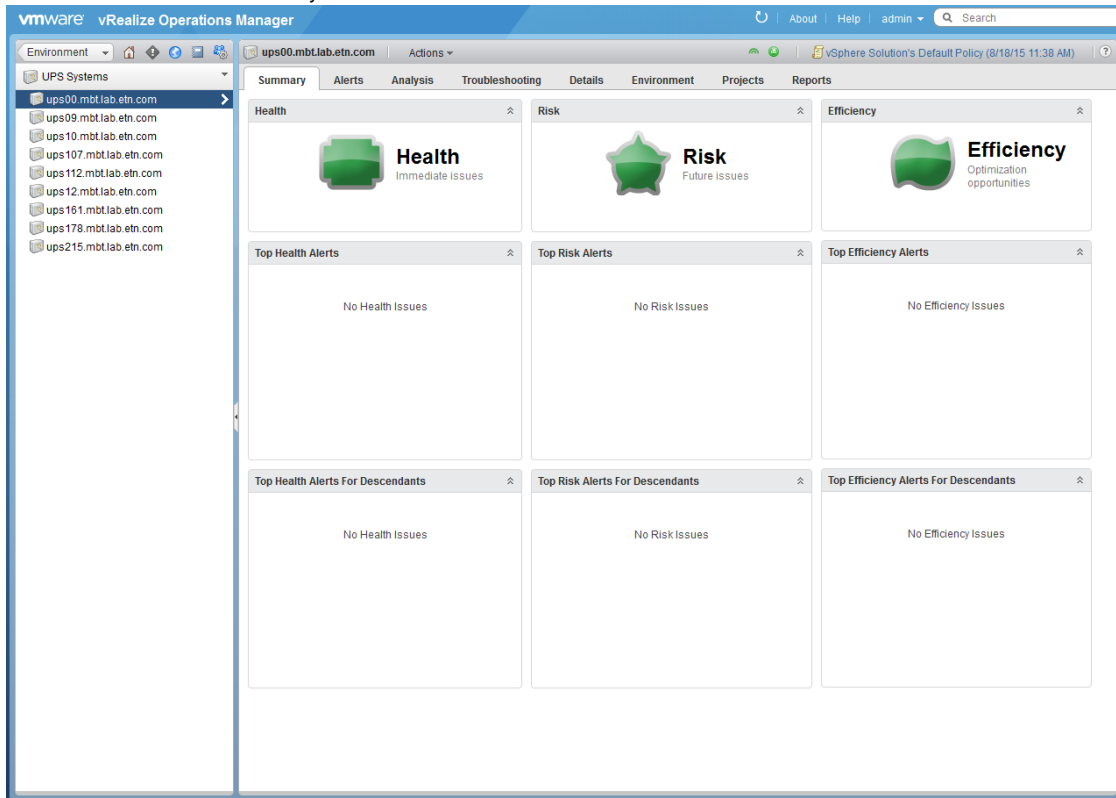
You can modify the name and the configuration regarding your needs.

Check the UPS discovered and the data

1. Select "Environment"

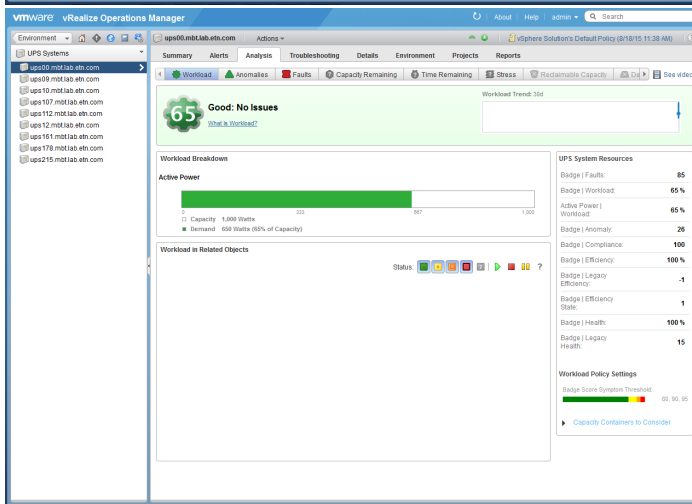
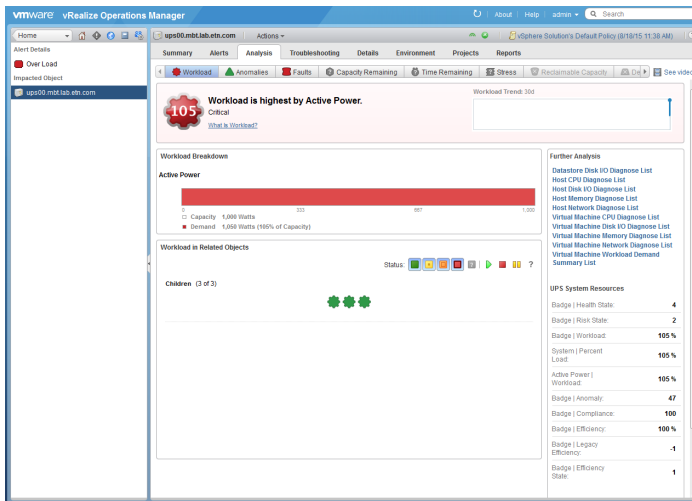


2. Go in "UPS Systems"
3. Select a UPS to see the summary



4. You will see different tabs
 - a. Alerts is the list of the alerts
 - b. Analysis will show the data computed

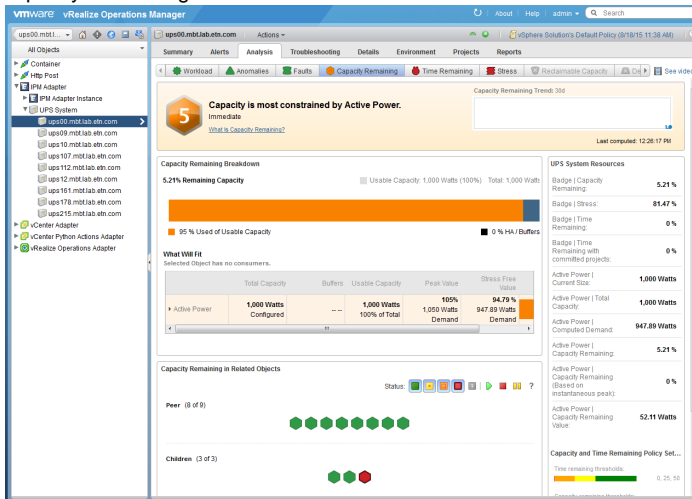
i. Workload

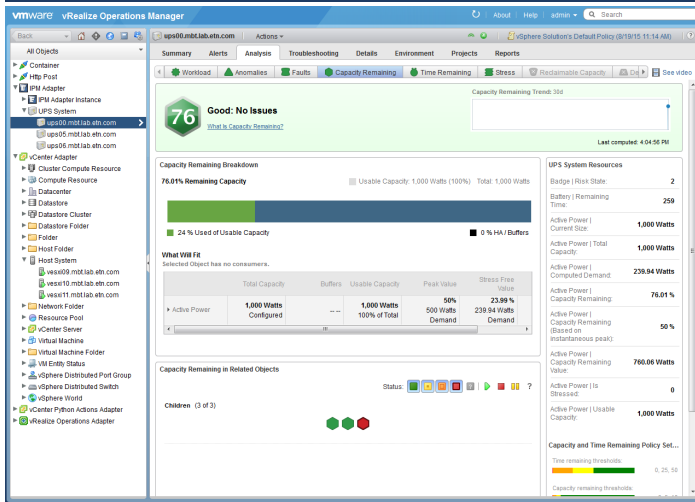
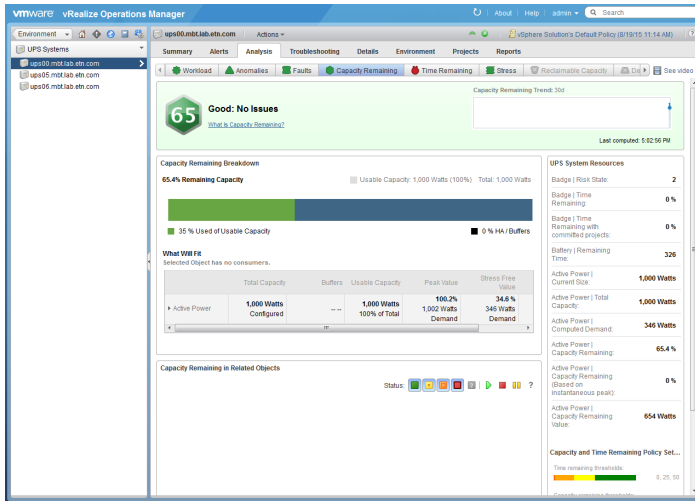


ii. Anomalies

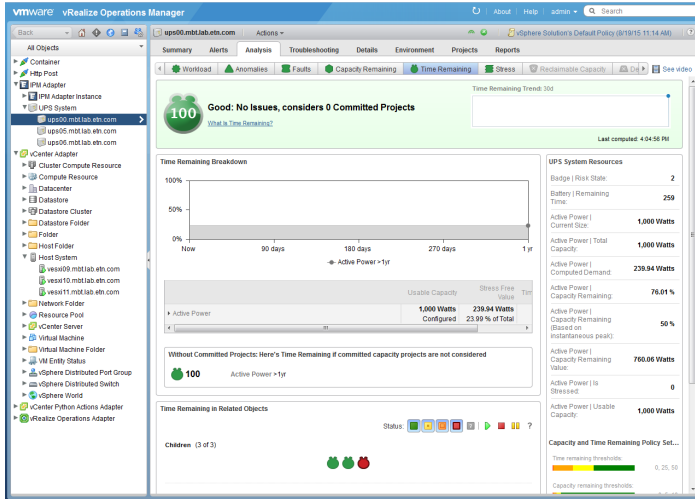
iii. Faults

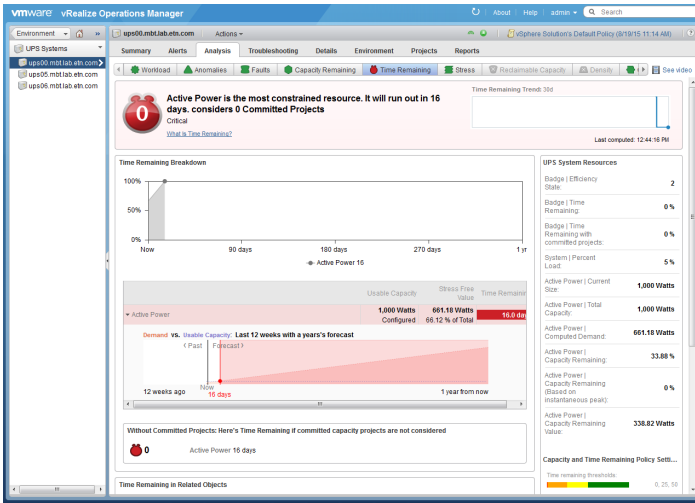
iv. Capacity Remaining



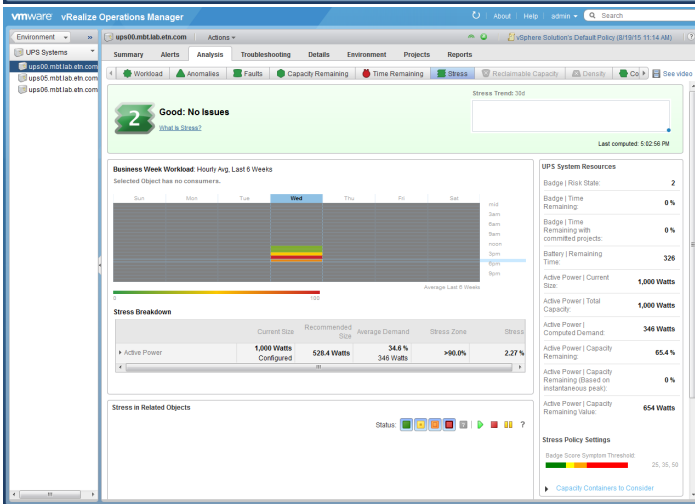
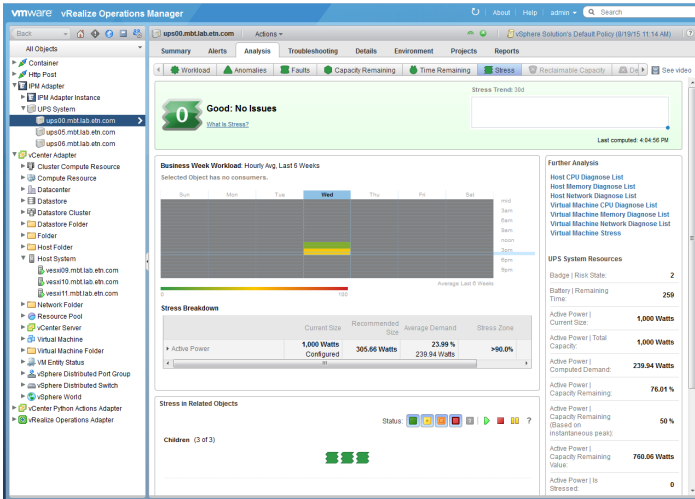


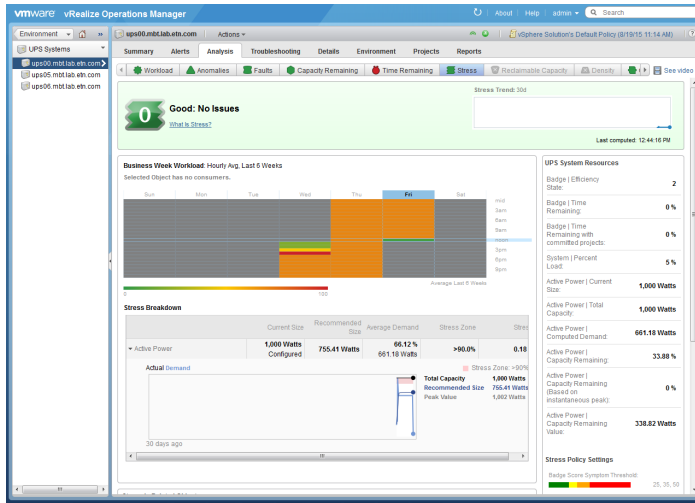
v. Time Remaining



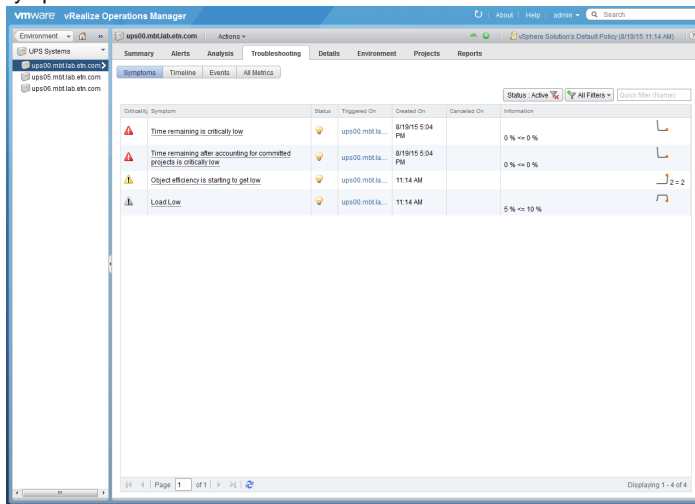


vi. Stress

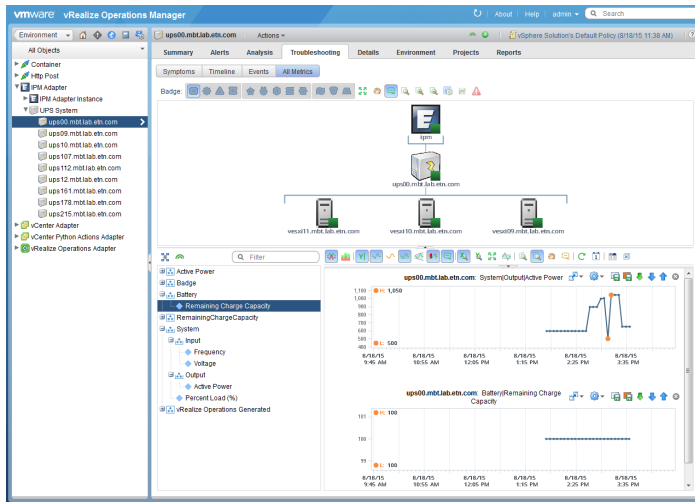




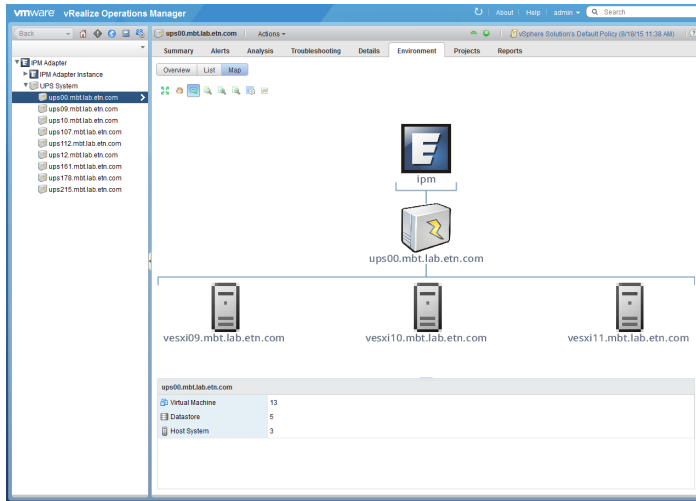
c. Troubleshooting
i. Symptoms



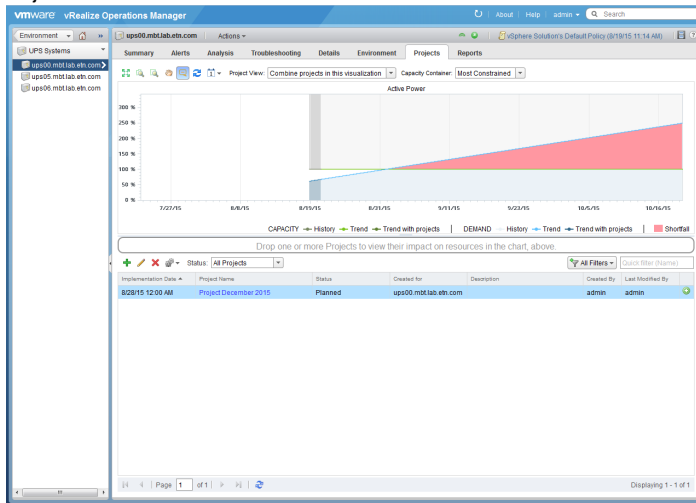
ii. All metrics



d. Details with configuration Views and Heatmaps
e. Environment with the Map



f. Project



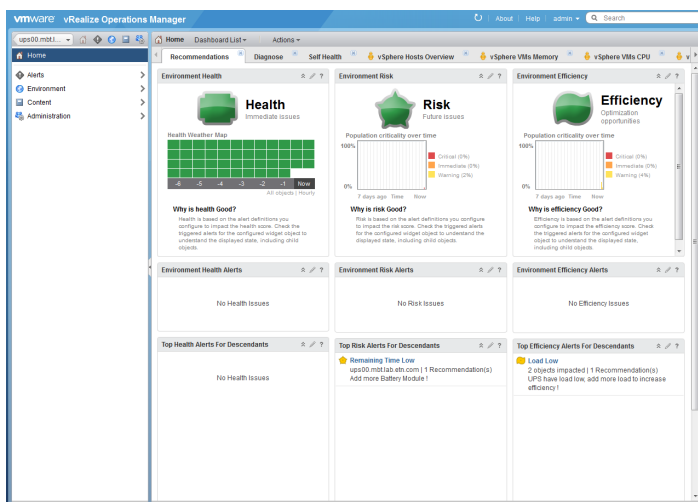
g. Reports

All this area is for analysis and troubleshooting.

Dashboard

Home Page with the "Recommendations" dashboard with the UPS alarms and with the UPS in the grid of the Health Weather Map.

When you clic on the square you can see the relationship between the square highlighted.



VMware vRealize Operations Manager

Administration | Home | Dashboard List | Actions | About | Help | admin | Search

Home | Alerts | Environment | Content | Administration

Recommendations | Diagnose | Self Health | vSphere Hosts Overview | vSphere VMs Memory | vSphere VMs CPU

Environment Health

Health Weather Map

Name: **Desktop741**
Health: 100
Workload: 0
Faults: 0
Anomaly: 7

Why is health Good?
Health is based on the alert definitions you configure to inspect the health score. Check the registered alerts for the configured subject object to understand the displayed state, including child objects.

Environment Health Alerts: No Health Issues

Top Health Alerts For Descendants: **Over Load**
ups00.mot.lab.ath.com | 2 Recommendation(s)
UPS overload, decrease the consumption!

Environment Risk

Risk

Population critically over time

7 days ago | Time | Now

Why is risk Good?
Risk is based on the alert definitions you configure to inspect the risk score. Check the registered alerts for the configured subject object to understand the displayed state, including child objects.

Environment Risk Alerts: No Risk Issues

Top Risk Alerts For Descendants: **Load High**
ups00.mot.lab.ath.com | 1 Recommendation(s)
UPS overload, add more capacity or module!

Environment Efficiency

Efficiency

Population critically over time

7 days ago | Time | Now

Why is efficiency Good?
Efficiency is based on the alert definitions you configure to inspect the efficiency score. Check the registered alerts for the configured subject object to understand the displayed state, including child objects.

Environment Efficiency Alerts: No Efficiency Issues

Top Efficiency Alerts For Descendants: No Efficiency Issues

VMware vRealize Operations Manager

Administration | Home | Dashboard List | Actions | About | Help | admin | Search

Home | Alerts | Environment | Content | Administration

Recommendations | Diagnose | Self Health | vSphere Hosts Overview | vSphere VMs Memory | vSphere VMs CPU

Environment Health

Health Weather Map

Name: **vesx16.mot.lab.ath.com**
Health: 100
Workload: 2
Faults: 0
Anomaly: 0

Why is health Good?
Health is based on the alert definitions you configure to inspect the health score. Check the registered alerts for the configured subject object to understand the displayed state, including child objects.

Environment Health Alerts: No Health Issues

Top Health Alerts For Descendants: **Over Load**
ups00.mot.lab.ath.com | 2 Recommendation(s)
UPS overload, decrease the consumption!

Environment Risk

Risk

Population critically over time

7 days ago | Time | Now

Why is risk Good?
Risk is based on the alert definitions you configure to inspect the risk score. Check the registered alerts for the configured subject object to understand the displayed state, including child objects.

Environment Risk Alerts: No Risk Issues

Top Risk Alerts For Descendants: **Load High**
ups00.mot.lab.ath.com | 1 Recommendation(s)
UPS overload, add more capacity or module!

Environment Efficiency

Efficiency

Population critically over time

7 days ago | Time | Now

Why is efficiency Good?
Efficiency is based on the alert definitions you configure to inspect the efficiency score. Check the registered alerts for the configured subject object to understand the displayed state, including child objects.

Environment Efficiency Alerts: No Efficiency Issues

Top Efficiency Alerts For Descendants: No Efficiency Issues

VMware vRealize Operations Manager

Administration | Home | Dashboard List | Actions | About | Help | admin | Search

ups00.mot.l... | Home | Alerts | Environment | Content | Administration

Recommendations | Diagnose | Self Health | vSphere Hosts Overview | vSphere VMs Memory | vSphere VMs CPU

Environment Health

Health Weather Map

All objects 1 minute

Why is health Good?
Health is based on the alert definitions you configure to inspect the health score. Check the registered alerts for the configured subject object to understand the displayed state, including child objects.

Environment Health Alerts: No Health Issues

Top Health Alerts For Descendants: No Health Issues

Environment Risk

Risk

Population critically over time

7 days ago | Time | Now

Why is risk Good?
Risk is based on the alert definitions you configure to inspect the risk score. Check the registered alerts for the configured subject object to understand the displayed state, including child objects.

Environment Risk Alerts: No Risk Issues

Top Risk Alerts For Descendants: **Remaining Time Very Low**
ups00.mot.lab.ath.com | 1 Recommendation(s)
Add more Battery Module!

Environment Efficiency

Efficiency

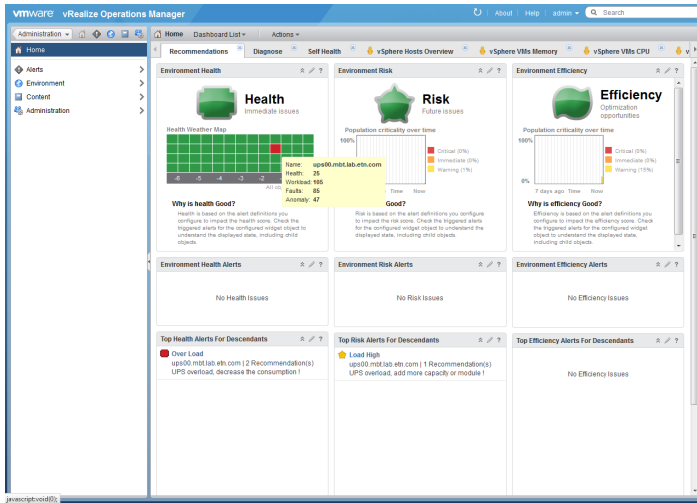
Population critically over time

7 days ago | Time | Now

Why is efficiency Good?
Efficiency is based on the alert definitions you configure to inspect the efficiency score. Check the registered alerts for the configured subject object to understand the displayed state, including child objects.

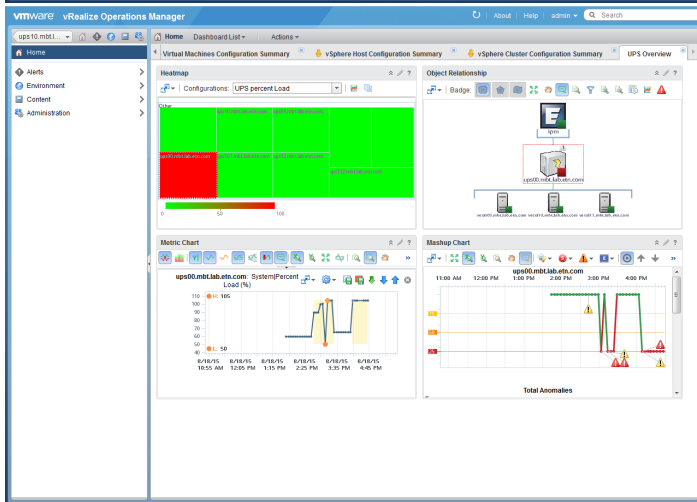
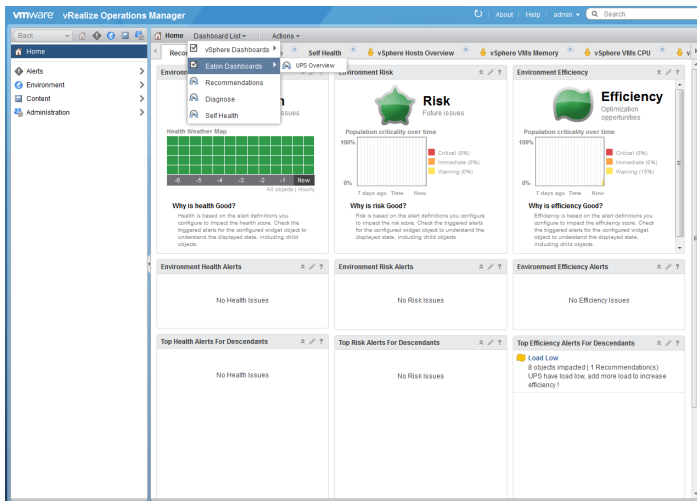
Environment Efficiency Alerts: No Efficiency Issues

Top Efficiency Alerts For Descendants: No Efficiency Issues



Eaton Dashboards

You can clic on "Dashboard Lists" and select UPS Overview to see the Eaton Dashboard.



Known issues

- 1) When two network interfaces are installed in the same UPS, you can't control the one exposed into this management pack.
- 2) This management pack handles the protection of servers discovered through vCenter. The protection of a standalone ESXi is not reported into

this Management Pack.

3) Virtual Power Sources are not available into this management pack.

Troubleshooting

You need to go in "Configuration" => "Support" => "Logs"

Expand the Master => Expand "Collector" and double clic on the IPMAdapter logs.

For customer, generating a support bundle will be the preferred method.