

Improved Linux performance stats

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If you are monitoring Linux servers, then Load Average and Memory Utilisation are two important health checks. Cacti can measure these out-of-the-box, but you can also tune the graphs to make them much more useful.

1 Load Average

To monitor Linux load average with a standard Cacti installation:

- Go to “Devices”, select a device, then “Create Graphs for this host”
- Under “Graph Templates” select dropdown “Create: [ucd/net - Load Average]”
- At the bottom of the page click “Create”

However the graph format is poorly designed: the 1-minute, 5-minute and 15-minute load averages are stacked on top of one another instead of behind each other.

This is easily fixed. There is a very detailed description here: <http://hans.fugal.net/blog/2009/01/10/sensible-graphs-with-cacti/> but in summary the steps are as follows.

- Go to console, Graph Templates
- Click on “ucd/net - Load Average”

You should see a table of 7 items.

- Click on ‘Item # 3’ which is 5 Minute Average. It opens a new page.

- Change 'STACK' to 'LINE1'
- Change 'Color' to '002A8F'
- Click 'Save'
- Click on 'Item # 5' which is 15 Minute Average. It opens a new page.
- Change 'STACK' to 'LINE1'
- Click 'Save'
- On the line for 'Item # 7', click the red cross at the end of the line to delete it

Now view your graphs. This change will automatically reflect in all the load average graphs you have - even ones you had previously created.

2 Memory utilisation

The same blog page referred to above also has a procedure for making the memory graphs easier to understand. This is best done by downloading his template to your laptop:

http://hans.fugal.net/cacti/cacti_graph_template_ucdnet_-_memory_usage_hans.xml

There is a small bug in this XML file which needs fixing. Open the file in a text editor, find the section which begins "Swap Used (Hans)" and a few lines further down change

```
<value>e,f,-</value>
```

to

```
<value>f,e,-</value>
```

Now you need to import this template into Cacti. In the web interface select "Import Templates", next to Import Template from Local File click "choose", locate the edited XML file on your hard drive, then click "Save". It should show successful import of some templates.

To start using this template, navigate to a device, click "Create Graphs for this Host", under Graph Templates select "ucd/net - Memory Usage (Hans)", then at the bottom of the page click Create.