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V2 Lab 6 - Steps 2A & 2B

Like | Updated 16 June 2017 by Katamneni, Krishna Sravya | Tags: *None*

Atom	Anything in this box needs to be edited in Atom Text

Terminal	This box contains lists of commands that should executed in order on the Terminal

(A) PCP & Vector

The objective of this lab is to monitoring to our Jenkins box and use Vector (by Netflix) as a dashboard to show vital machine statistics. PCP will be puppet installed (Performance Co Pilot) for host data collection and Vector will be used to dashboard it.

– First install `pcp` and `pcp-webapi`. These could be installed in Ubuntu using `sudo apt-get install pcp pcp-webapi` but puppet will be used in our case. Open the `/share/lab-material/puppet/build-vm.pp` in Atom. Edit the `# os packages` section and add `'pcp', 'pcp-webapi'` to the list as shown below

Terminal

```
atom /share/lab-material/puppet/build-vm.pp
```

Atom

```
# os packages
package { ['vim', 'curl', 'wget', 'openssh-client', 'openssh-server',
'git-core', 'cowsay', 'fortune', 'sl', 'xclip', 'pcp', 'pcp-webapi']:
  ensure => present,
}
```

– Run puppet apply to add those changes

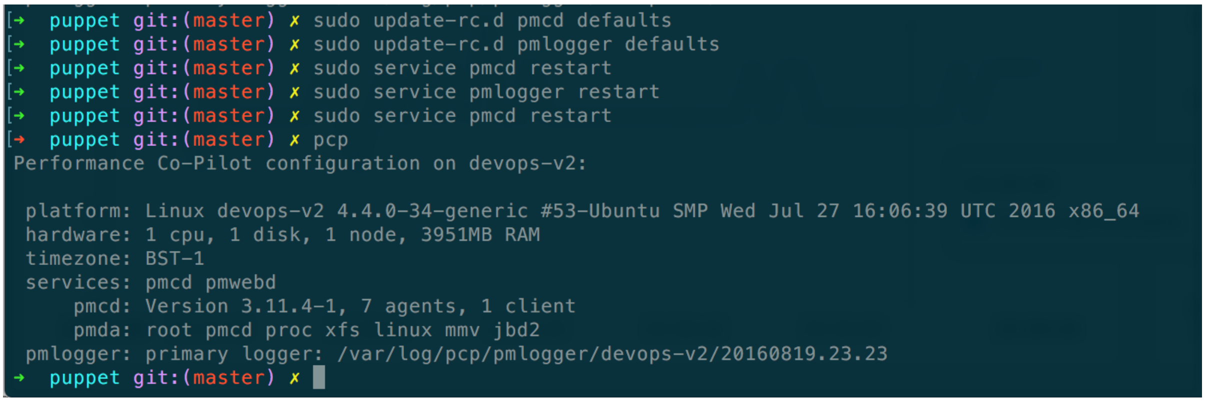
Terminal

```
cd /share/lab-material/puppet
sudo puppet apply build-vm.pp
```

– Some additional configuration of PCP is needed once installed. Run the following on the terminal & Ensure the service is running by running `pcp` in the terminal.

Terminal

```
sudo update-rc.d pmcd defaults
sudo update-rc.d pmlogger defaults
sudo service pmcd restart
sudo service pmlogger restart
pcp
```



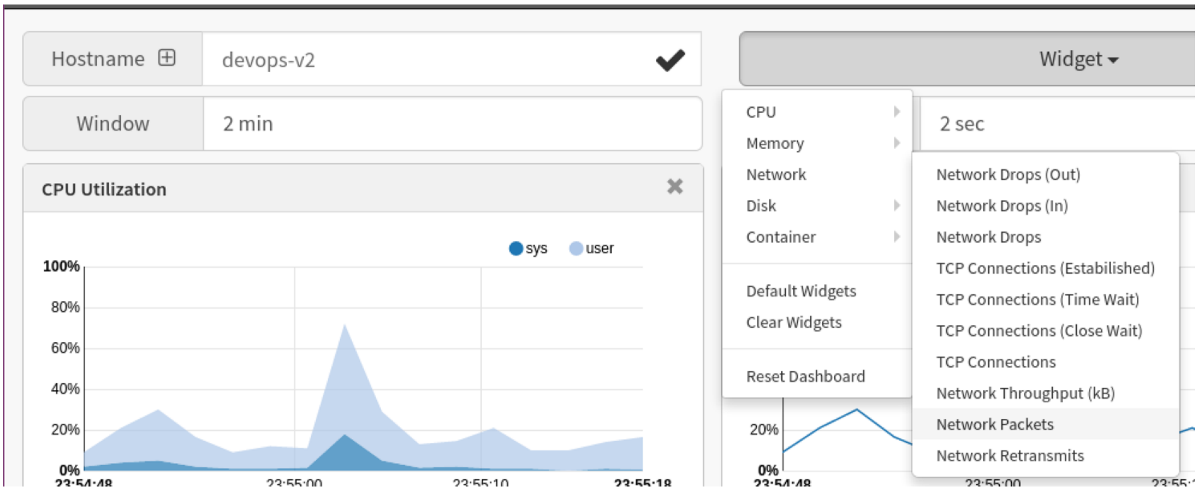
```
→  puppet git:(master) ✗ sudo update-rc.d pmcd defaults
→  puppet git:(master) ✗ sudo update-rc.d pmlogger defaults
→  puppet git:(master) ✗ sudo service pmcd restart
→  puppet git:(master) ✗ sudo service pmlogger restart
→  puppet git:(master) ✗ sudo service pmcd restart
→  puppet git:(master) ✗ pcp
Performance Co-Pilot configuration on devops-v2:

 platform: Linux devops-v2 4.4.0-34-generic #53-Ubuntu SMP Wed Jul 27 16:06:39 UTC 2016 x86_64
 hardware: 1 cpu, 1 disk, 1 node, 3951MB RAM
 timezone: BST-1
 services: pmcd pmwebd
     pmcd: Version 3.11.4-1, 7 agents, 1 client
     pmda: root pmcd proc xfs linux mmv jbd2
 pmlogger: primary logger: /var/log/pcp/pmlogger/devops-v2/20160819.23.23
→  puppet git:(master) ✗
```

– With PCP configured to start collecting information about the devops vm, vector needs to be installed. Vector is a webapp that hooks into the pcp-webapi to collect information about the server. It is built by Netflix, and made in Angular JS. It can be deployed to web server such as Nginx or deployed in a container. For simplicity, the Docker approach will be taken. Run this command on the terminal to bring down and start the vector web container.

```
docker run -d --name vector -p 8082:80 netflixoss/vector:latest
```

– With this pulled down and running navigate to http://localhost:8082/ to see the webapp running. Vector comes with a collection of default widgets and layouts. Add `devops-v2` to the hostname to begin logging information from the VM. There is no backend storage for PCP, so refreshing the page is going to loose the data. Alternative solutions with data resilience are Grafanna and Prometheus but these are a bit more heavy weight.

– To see some information on the dashboard, a simple test will be run. While monitoring the Networks, a wget of a large file will be executed. Ensure the Network Packets widget is enabled, if not add it in by going *Widgets > Network > Network* Packets.



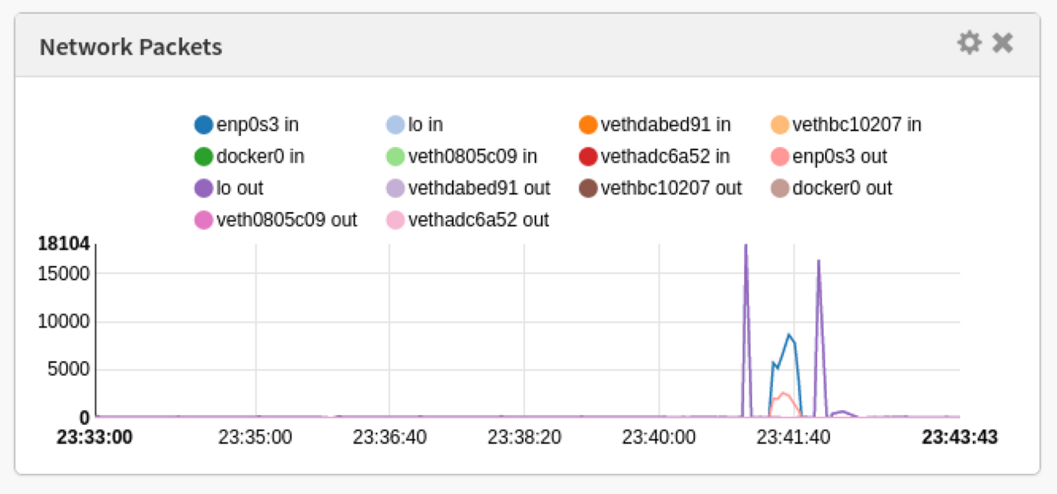
Hostname ⊞ devops-v2 ✔

Window 2 min

2 sec

– On the terminal run to begin the download. You should see some spikes on the graphs.

```
wget -O /dev/null http://cachefly.cachefly.net/100mb.test
```



- Explore the other widgets available through Vector.

(B) Information Radiators / Build monitors

The objective of this lab create a Jenkins Build monitor showing the important information to the developers such as test scores and build stats and the length of time a builds been failing for. This lab will create a build monitor for our build and deploy jobs, docker jobs and nightly tests.

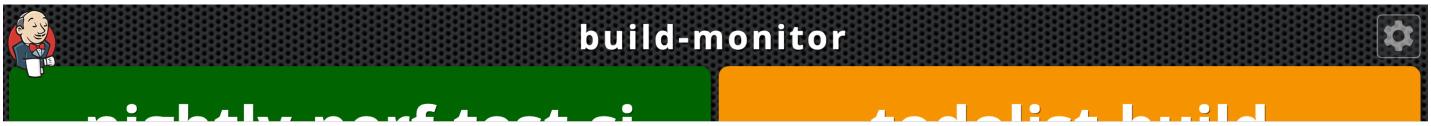
- On Jenkins, add a new plugin called *Build Monitor View*

- On Jenkins, create a new view by hitting the + icon on the jobs list view (jenkins home page)

- Give the view a name such as `build-monitor`.

- Add the jobs to the view by ticking the boxes and select Display commiters

- Save and your monitor should be shown.



Comments

There are no comments.