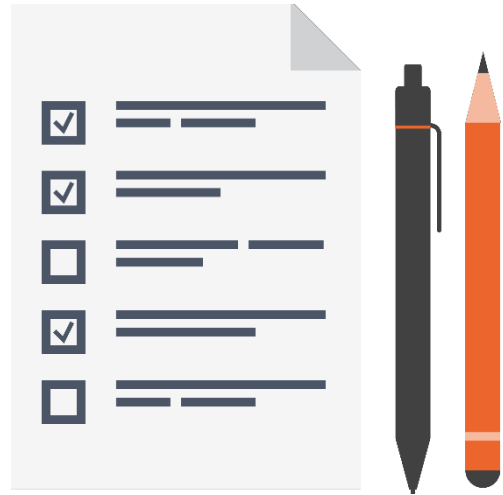


Graphing Data Collection with collectd

@

Module Overview



- Need for graphical representation
- EPEL Repository
- Installing collectd and Apache httpd

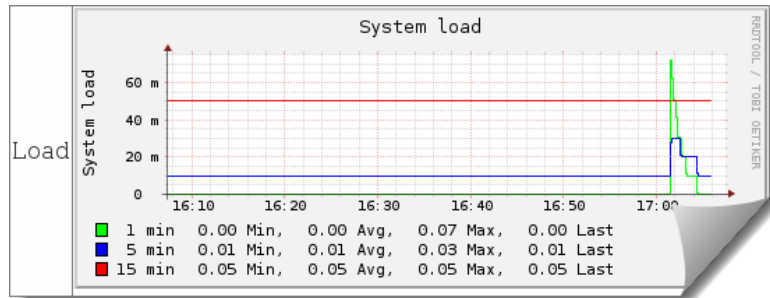
Predict Future Resource Needs

Managers Like Pictures



- A manager can't make a decision without a graph
- It's a known fact
- Presenting performance data graphically will ensure the hardware you want .. whether you actually need it or not

Graphs from collectd



- You can read collectd data via a web server
- Graphs are effortlessly created

```
# rpm -ivh \  
https://anorien.csc.warwick.ac.uk/mirrors/epel/7/x86_64/e/epel-release-7-5.noarch.rpm
```

Adding the EPEL Repository to CentOS 7

We will work with CentOS 7 for this example

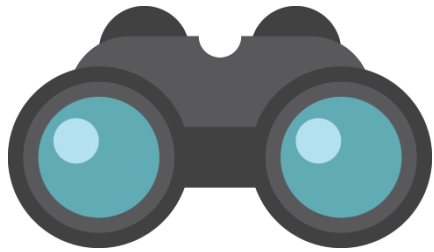
Collectd can be installed from the EPEL repo maintained by the Fedora Project

The RPM will install just the repo file and gpg key

```
# yum install -y collectd collectd-rrdtool rrdtool \  
collectd-web httpd
```

Installing collectd

We need collectd and a few additional packages to create the graphs



Demo: Installing collectd

Configuring collectd on CentOS 7

/etc/collectd.conf

BaseDir "/var/lib/collectd"

LoadPlugin rrdtool

<Plugin rrdtool>

 DataDir "/var/lib/collectd/rrd"

 CreateFilesAsync false

 CacheTimeout 120

 CacheFlush 900

 WritesPerSecond 50

</Plugin>

```
# vi /etc/httpd/conf/httpd.conf  
Listen 0.0.0.0:80
```

Apache Listen Address

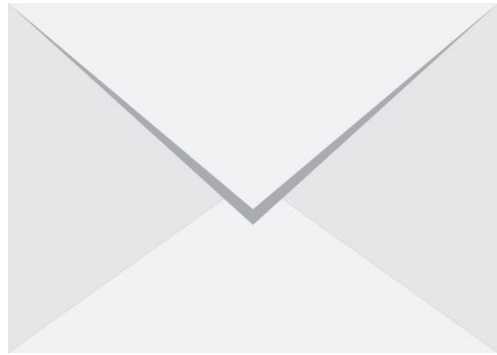
If we install Apache as new installation with collectd we will need to make sure it is listening on IPv4 Addresses

```
# vi /etc/httpd/conf.d/collectd.conf  
Require ip 192.168.0
```

Set Web Permissions

If you want to access from a remote machine we need to adjust the Apache Access Lists

Ensure the System Hostname is Resolvable



DNS: Add DNS A record

/etc/hosts: or a local host entry

CentOS

```
# systemctl enable collectd  
# systemctl enable httpd  
# systemctl start httpd  
# systemctl start collectd
```



Demo: Configuring collectd



Demo: Accessing collectd data

Summary



- We have insulted our managers
- But given them what they need
- Pretty pictures
- Added the EPEL Repository
- Installed collectd to graph performance data