Smokeping & Cacti

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What's the Difference?

There's definite overlap, but:

- **Smokeping**: A latency measurement and packet loss tool. Uses RRDtool to maintain its data store. No remote daemons or services required:

  "SmokePing is a deluxe latency measurement tool. It can measure, store and display latency, latency distribution and packet loss. SmokePing uses RRDtool to maintain a longterm data-store and to draw pretty graphs, giving up to the minute information on the state of each network connection."
What's the Difference?

• **Cacti**: Uses RRDtool, PHP and stores data in MySQL as well as supporting SNMP and graphing with MRTG.

“Cacti is a complete frontend to RRDTool, it stores all of the necessary information to create graphs and populate them with data in a MySQL database. The frontend is completely PHP driven. Along with being able to maintain Graphs, Data Sources, and Round Robin Archives in a database, cacti handles the data gathering. There is also SNMP support for those used to creating traffic graphs with MRTG.”
Installation

We'll install both products:

• Installation varies between flavors of Linux and UNIX.

• It's pretty easy to install these items under Ubuntu.

• You can do massive configuration of each. We'll do some to get you started!
Smokeping: Some Details

• Basic install is extremely easy:
  
  `apt-get install smokeping`

• Basic config file
  (/etc/smokeping/config) is simple, but you can get very complex very quickly:


  and, other configuration options:

Smokeping: The Install

1. sudo apt-get install smokeping
2. sudo apt-get install echoping
3. su - (to become root)
4. cd /etc/smokeping
5. mv config config.orig

Then we will grab a copy of our local Smokeping config file, install this and go over it.

6. scp inst@noc:/var/www/share/conf/config .
7. /etc/init.d/smokeping restart
Smokeping: Some Details
/etc/smokeing/config

- Check on latency of connection (ping)
- Check on web server uptime and performance

**Latency**

++ LocalMachine

menu = The NOC

title = The noc@intERLab

host = localhost
Smokeping: More Details
/etc/smokeping/config

- Performance/Uptime

++ NOCsquid
menu = The NOC Squid
title = www-cache / HTTP for noc@intERLab
probe = EchoPingHttp
host = localhost
port = 8080
url = http://localhost/
Smokeping: The Install

There are several more examples here:


If there is time we will play with /etc/smokeping/config to customize as you want and, maybe, to use some of the example described in the file linked above.
Smokeping: The Install

Once configured, then restart the service to build the directories with RRD data:

```
# /etc/init.d/smokepinging restart
```

You can find your graphs and layout at:

```
http://hostname/cgi-bin/smokeping.cgi
```

Let's have a look at the config file...
cacti
cacti: The Install

Installation is a bit tricky... (as root):

apt-get install mysql-server-5.0

mysqladmin --user=root --password=instPass create cacti

apt-get install cacti

login with admin/admin then change
apt-get install mysql-server-5.0

Enter the same password we have used during the workshop for the *inst* account.
apt-get install cacti

You can ignore this
apt-get install cacti

Please choose “Apache2” and then Ok.
apt-get install cacti

Choose “Yes” at this screen.
apt-get install cacti

Enter the same password you used when installing MySQL previously. This is your inst account password.
apt-get install cacti

Let's use the same *inst* password to keep things simple.
cacti: Next Steps

Next open a web browser on your machine and go to the address:

http://localhost/cacti

You will see the following screens...
apt-get install cacti

Click on “Next >>”
apt-get install cacti

Be sure “New Install is chosen and press the “Next >>” button.
apt-get install cacti

Hopefully your screen looks like this. If not, let your instructor know.

Press “Finish”
cacti: Initial Login

Initial login with:
User Name: admin
Password: admin
cacti: Change Password

Use the same *inst* password to keep things simple for our workshop.
cacti: Finishing

As you can see the idea is to do the following:

• Define the devices you wish to monitor
• Define the graphs you wish to use for each device
• View and organize graphs as you want

Note that cacti takes advantage of snmp settings. As possible we'll set up some cacti graphs at this time.