

intERLab AIT March 2008
Network Management Workshop
MRTG / RRD Tool

MRTG

In 12 Steps

1. Install MRTG

```
# apt-get install mrtg
```

2. Create the /etc/mrtg directory

```
$ sudo mkdir /etc/mrtg
```

3. Find out the SNMP Community String – Interl4b

4. Find the IP / name of the Device

- 10.10.10.1

- or one of the other routers and switches (10.10.10.10, 10.10.1.253, 10.10.1.254, 10.10.2.253, 10.10.2.254)

5. Run cfgmaker (the command below all on one line!)

```
# /usr/bin/cfgmaker --output=/etc/mrtg/router.mrtg --global 'workdir: /var/www/mrtg'  
--global 'options[_]: growright,bits' Interl4b@10.10.??
```

Make the workdir if necessary:

```
# mkdir -p /var/www/mrtg/
```

6. View the mrtg configuration file created by cfgmaker, you can make changes and see the results, if you want (/etc/mrtg/router.mrtg)

7. Use indexmaker to create HTML files

```
# /usr/bin/indexmaker --output=/var/www/mrtg/device.html /etc/mrtg/router.mrtg
```

8. Run MRTG command (ignore the error and run 3 times)

```
# /usr/bin/mrtg /etc/mrtg/router.mrtg
```

9. put the above command in a script

```
# echo '/usr/bin/mrtg /etc/mrtg/router.mrtg' > /etc/mrtg/mrtgscript  
# chmod +x /etc/mrtg/mrtgscript
```

NOTE: on systems with UTF-8 as the default locale, this will cause problems – you need to explicitly specify: 'env LANG=C /usr/bin/mrtg /etc/mrtg/router.mrtg' when running the script.

10. Edit the crontab and insert the command to be run every 5 minutes

```
# crontab -e  
0-59/5 * * * * /etc/mrtg/mrtgscript
```

11. Load the browser through webserver

<http://localhost/mrtg/>

12. Go for Tea / come back and see if your graph is moving.

RRDTool

```
# apt-get install rrdtool  
# apt-get install librrdp-perl  
# apt-get install librrds-perl
```

Add in your MRTG Configuration file

```
# vi /etc/mrtg/router.mrtg  
; add below Workdir
```

LogFormat: rrdtool

[go to </var/www/mrtg/> and see how the .rrd files have been created]

What about graphs ?

1. Install mrtg-rrd

```
# apt-get install mrtg-rrd  
# cd /usr/lib/cgi-bin  
# ln -s mrtg-rrd.cgi 14all.cgi
```

2. rerun indexmaker

```
# /usr/bin/indexmaker --output=/var/www/mrtg/device.html /etc/mrtg/router.mrtg
```

3. Create /etc/mrtg-rrd.conf like this:

```
# echo '/etc/mrtg/router.mrtg' >/etc/mrtg-rrd.conf
```

4. Make /var/www/mrtg writeable for the Web server:

```
# chown www-data /var/www/mrtg
```

Look at the webpage (<http://localhost/mrtg/router.html>) again!