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Step # 1: Install MRTG 2/5

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Centos Install and Configure MRTG

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How do I install and configure MRTG under Fedora Linux or CentOS Linux v5.x server to monitor the traffic load on network-links including routers?



The Multi Router Traffic Grapher (MRTG) is a tool to monitor the traffic load on network-links.

MRTG generates HTML pages containing PNG images which provide a LIVE visual representation of this traffic. You need the following packages:



• mrtg: Multi Router Traffic Grapher

net-snmp and net-snmp-utils: SNMP (Simple Network Management Protocol)
is a protocol used for network management. The NET-SNMP project includes various SNMP tools. net-snmp
package contains the snmpd and snmptrapd daemons, documentation, etc. You also want to install the netsnmp-utils package, which contains NET-SNMP utilities.

This FAQ works with RHEL / CentOS and Fedora Linux.

Step # 1: Install MRTG

Type the following command to install packages using $\underline{\text{yum command}}^{[3]}$ under CentOS / Fedora Linux:

```
# yum install mrtg net-snmp net-snmp-utils
```

Step # 2: Configure snmpd

If you need to monitor localhost including interface and other stuff such as CPU, memory etc, configure snmpd. Open /etc/snmpd/snmpd.conf, enter:

```
# vi /etc/snmpd/snmpd.conf
```

Update it as follows to only allow access from localhost:

```
com2sec local
                 localhost
                                      public
group MyRWGroup v1
                          local
group MyRWGroup v2c
                           local
group MyRWGroup usm
                           local
view all
          included
                                                       80
access MyRWGroup ""
                                             exact all
                                                           a11
                         any
                                   noauth
                                                                  none
syslocation VSNL, India
syscontact Root <vivek@nixcraft.tld>
```

Save and close the file. Restart snmpd:

```
# chkconfig snmpd on
# service snmpd restart
```

Make sure you see interface IP, by running the following command:

```
# snmpwalk -v 1 -c public localhost IP-MIB::ipAdEntIfIndex
```

Sample Outputs:

```
IP-MIB::ipAdEntIfIndex.123.xx.yy.zzz = INTEGER: 2
IP-MIB::ipAdEntIfIndex.127.0.0.1 = INTEGER: 1
```

Step # 1: Install MRTG 3/5

Step # 3: Configure MRTG

Use cfgmaker command to creates /etc/mrtg/mrtg.cfg file, enter:

```
# cfgmaker --global 'WorkDir: /var/www/mrtg' --output /etc/mrtg/mrtg.cfg
public@localhost
```

- --global 'WorkDir: /var/www/mrtg': add global config entries i.e. set workdir to store MRTG graphs.
- --output /etc/mrtg/mrtg.cfg: configr output filename
- public@localhost: public is the community name of the device you want to create a configuration for. If you are using the wrong community name you will get no response from the device. localhost is the DNS name or the IP number of an SNMP-managable device i.e. our local server.

Finally, run indexmaker to create web pages which display the status of an array of mrtg interface status pages:

```
# indexmaker --output=/var/www/mrtg/index.html /etc/mrtg/mrtg.cfg
```

Step # 4: Verify Cron Job

/etc/cron.d/mrtg runs mrtg command to monitor the traffic load on network links:

```
# cat /etc/cron.d/mrtg
```

Sample Output:

```
*/5 * * * root LANG=C LC_ALL=C /usr/bin/mrtg /etc/mrtg/mrtg.cfg --lock-file /var/lock/mrt
```

Just make sure crond is running and you are done with configuration:

```
# chkconfig --list crond [4]
```

If it is off in run level # 3, just run the following to turn on <u>crond service</u> ^[5]:

```
# chkconfig crond on
# service crond on [5]
```

How do I view mrtg graphs?

You need Apache web server to view graphs, simply type the following to install httpd:

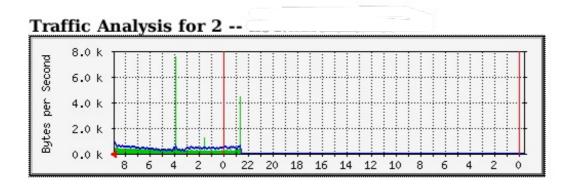
```
# yum install httpd
# chkconfig httpd on
# service httpd on
```

Fire a webbrowser and type the url:

```
http://your-ip.add.ress/mrtg/
```

```
http://192.168.1.5/mrtg/
```

MRTG Index Page



version 2.14.5

and Dave Rand <dlr@bungi.com>

[6]

Fig.01:Sample MRTG Graph

How Do I Create MRTG For My Router at 192.168.1.254?

Run cfgmaker as follows (there is no need to configure snmp for router, as most router and switches comes pre configured with their own SNMPD):

```
# cfgmaker --global 'WorkDir: /var/www/mrtg' --output /etc/mrtg/mrtg.cfg public@router
```

OR

```
# cfgmaker --global 'WorkDir: /var/www/mrtg' --output /etc/mrtg/mrtg.cfg
public@192.168.1.254
```

How Do I Password Protect My Graphs?

Read this FAQ: Set Apache Password Protected Directories [7] With .htaccess File.

See Also:

Linux MRTG Tutorial [8]

Download PDF version (135K) [9].

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URLs in this post:

- [1] Image: http://www.cyberciti.biz/faq/category/centos/
- [2] Image: http://www.cyberciti.biz/faq/category/fedora-linux/
- [3] yum command: http://www.cyberciti.biz/faq/rhel-centos-fedora-linux-yum-command-howto/

- [4] chkconfig --list crond: http://www.cyberciti.biz/faq/check-running-services-in-rhel-redhat-fedora-centoslinux/
- [5] crond service: http://www.cyberciti.biz/faq/howto-linux-unix-start-restart-cron/
- [6] Image: http://www.cyberciti.biz/faq/centos-fedora-linux-multi-router-traffic-grapher-tutorial/mrtg_index_page/
- [7] this FAQ: Set Apache Password Protected Directories: http://www.cyberciti.biz/faq/howto-setup-apache-password-protect-directory-with-htaccess-file/
- [8] Linux MRTG Tutorial: http://www.cyberciti.biz/nixcraft/linux/docs/uniqlinuxfeatures/mrtg/
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