

Setting Up MRTG

First download the latest setup file from
<http://people.ee.ethz.ch/~oetiker/webtools/mrtg/pub/>.

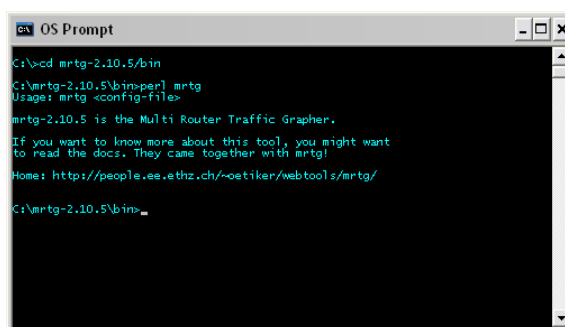
In order to run MRTG you will also need a copy of “Active Perl” on the system. This can be obtained from
<http://aspn.activestate.com/ASPN/Downloads/ActivePerl/Source>.
It must be version 5.005 or better.

To setup “Active Perl” see “Setting Up Perl” on
<http://support.plustech.co.uk>

Ensure the Perl Binary Directory is listed in the system path: “C:\Perl\bin;%SystemRoot%\system32;%SystemRoot%;...”

Unzip your copy of MRTG
to “C:\mrtg-2.10.5\”

The to check that every
thing is installed properly
open up a command prompt
go into
“C:\MRTG-2.10.5\bin” and
type:



```

OS Prompt
C:\>cd mrtg-2.10.5\bin
C:\mrtg-2.10.5\bin>perl mrtg
Usage: mrtg <config-file>

mrtg-2.10.5 is the Multi Router Traffic Grapher.
If you want to know more about this tool, you might want
to read the docs. They came together with mrtg!
Home: http://people.ee.ethz.ch/~oetiker/webtools/mrtg/

C:\mrtg-2.10.5\bin>

```

“perl mrtg”

This will give the error
message shown opposite

(To open a command
prompt click. “Start” >
“Run” and type “cmd”)

Initially a configuration file must be created. But first you need to know the following information:

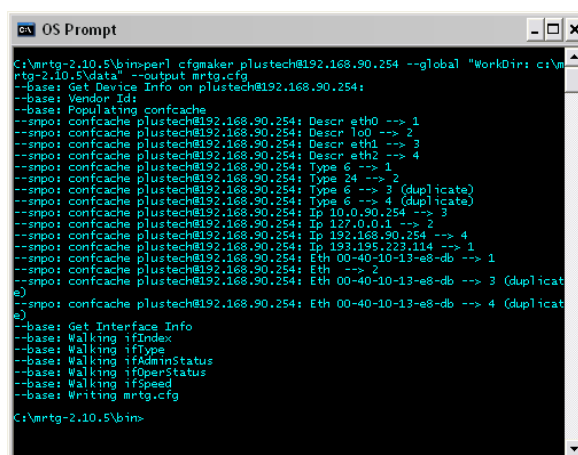
- The IP address or hostname and the SNMP port number, (if non standard), of the device you want to monitor.
- If you want to monitor something other than bytes in and out, you must also know the SNMPOID of what you want to monitor.
- Finally you need to know the read-only SNMP community string for your device. If you don't know it, try public; that is the default.

We will be using 192.168.90.254 (a Sonicwall Firewall) with Community string Plustech. We are interested in monitoring traffic, and the CPU load.

The first thing we do in setting up mrtg is making a default config file. Get to a cmd prompt and change to the `c:\mrtg-2.10.5\bin` directory. Type the following command:

```
perl cfmaker plustech@192.168.90.254 --global "WorkDir: c:\mrtg-2.10.5\data" --output mrtg.cfg
```

This creates an initial MRTG config file for you. Note that in this file all interfaces of your device will be stored by number. Unfortunately, these numbers are likely to change whenever you reconfigure the device. In order to work around this with a router configuration *cfmaker* can be used to produce a configuration which is based on IP numbers, or even Interface Descriptions. Check [the cfmaker manpage](#)



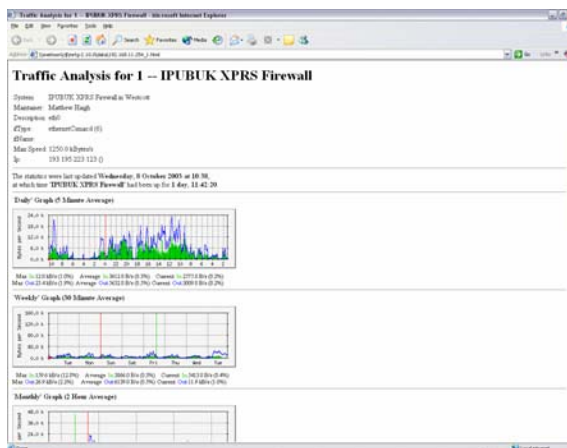
```
OS Prompt
C:\mrtg-2.10.5\bin>perl cfmaker plustech@192.168.90.254 --global "WorkDir: c:\mrtg-2.10.5\data" --output mrtg.cfg
--base: Get Device Info on plustech@192.168.90.254:
--base: Vendor Id:
--base: Populating confcache
--snmp: confcache plustech@192.168.90.254: Descr eth0 --> 1
--snmp: confcache plustech@192.168.90.254: Descr lo0 --> 2
--snmp: confcache plustech@192.168.90.254: Descr eth1 --> 3
--snmp: confcache plustech@192.168.90.254: Descr eth2 --> 4
--snmp: confcache plustech@192.168.90.254: Type 6 --> 1
--snmp: confcache plustech@192.168.90.254: Type 24 --> 2
--snmp: confcache plustech@192.168.90.254: Type 6 --> 3 (duplicate)
--snmp: confcache plustech@192.168.90.254: Type 6 --> 4 (duplicate)
--snmp: confcache plustech@192.168.90.254: Ip 10.0.90.254 --> 3
--snmp: confcache plustech@192.168.90.254: Ip 127.0.0.1 --> 2
--snmp: confcache plustech@192.168.90.254: Ip 192.168.90.254 --> 4
--snmp: confcache plustech@192.168.90.254: Ip 193.195.223.114 --> 1
--snmp: confcache plustech@192.168.90.254: Eth 00-40-10-13-e8-db --> 1
--snmp: confcache plustech@192.168.90.254: Eth --> 2
--snmp: confcache plustech@192.168.90.254: Eth 00-40-10-13-e8-db --> 3 (duplicate)
--snmp: confcache plustech@192.168.90.254: Eth 00-40-10-13-e8-db --> 4 (duplicate)
--base: Get Interface Info
--base: Walking ifIndex
--base: Walking ifType
--base: Walking ifAdminStatus
--base: Walking ifOperStatus
--base: Walking ifSpeed
--base: Writing mrtg.cfg
C:\mrtg-2.10.5\bin>
```

The above command uses "C:\mrtg-2.10.5\data" as the storage folder. This folder will not automatically be created by mrtg so it needs to be created manually.

To execute this file use the command prompt and navigate to the bin directory type the following command:

```
perl mrtg mrtg.cfg
```

To see the results navigate to “c:\mrtg-2.10.5\data”. In this directory there will be a webpage for each of the interfaces on the device.



Every time the above command is executed more data will be displayed on the graphs. Opposite is an example

In mrtg there is an option to set the configuration file to execute automatically every 5 minutes.

To do this add to the mrtg config file the option:

“RunAsDemon: yes”

Then to initiate the file, in the location “C:\mrtg-2.10.5\bin” type:

```
wperl mrtg --logging=eventlog mrtg.cfg
```

wperl is used instead of perl because for this no console window shows. mrtg will be running in the background. If there are any problems; these will be conveyed through the eventlog. To stop mrtg, terminate “wperl” through the task manager.

If you want to run mrtg at “startup” a batch file can be created and put into the start menu folder.

Opposite is an example of a batch file which could be created.

Batch files to create the configuration files can also be created to learn how to do this see “MRTG Batch files.doc” on “support.plustech.co.uk”.

