The Sysadmin's Daily Grind: Mail and Queuegraph

MAIL HELP

Worms, mail bombs, and users who send multiple megabyte Powerpoint files across the wire give Postfix administrators plenty of reasons to view their charges with a critical eye from time to time.

BY CHARLY KÜHNAST

Mailgraph has been giving me useful information for a long while now [1]. It is time to turn the spotlight on this visualization tool for Postfix logfiles and to introduce the related Queuegraph project. Mailgraph [2] is a small footprint daemon that continuously reads the Postfix logfile and shovels the data it gathers into a round robin database (RRD). The front-end is a CGI script that generates a graph based on the RRD data.

The program requires the ubiquitous Perl interpreter, RRDTool [3] for the database, and the File::Tail Perl module, which you can obtain from the CPAN archive. The heart of Mailgraph is a Perl script called *mailgraph.pl*; the daemon I referred to earlier. You can launch the daemon manually, but it makes more sense to add the *init* script provided by the distribution to run the daemon when you boot your machine. I use the following command to launch Mailgraph:

```
mailgraph --daemon --logfile ⤳
/var/log/postfix ⤳
--ignore-localhost
```

The *--ignore-localhost* parameter prevents mail traffic from or to 127.0.0.1 from being collected, as this traffic mainly has to do with connections to
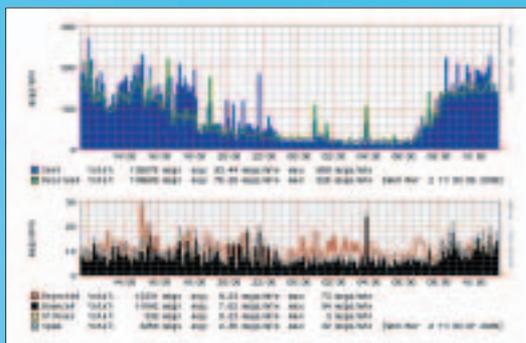
Figure 1: You can view statistics for incoming and outgoing messages in your browser.

the virus or spam filters running on the same machine.

I use *mailgraph.cgi* to display the results. I might need to modify the paths to the RRDs (one for mail traffic and another for bounce, virus, and spam information) in the script. Mailgraph also needs a temporary directory, which must be writeable by the web server. On my machine, I set this up with:

```
my $rrd = ⤳
'/var/log/mailgraph.rrd';
my $rrd_virus = '/var/log/⤳
mailgraph_virus.rrd';
my $tmp_dir = '/tmp/mailgraph';
```

That's all. After allowing Mailgraph to collect data for a while, I can call

http://web-server-URL/cgi-bin/mailgraph.cgi to view the results (see Figure 1).

Snake Dancing

Queuegraph, a tool that very much resembles Mailgraph, outputs mail queue statistics [4]. In contrast to Mailgraph, Queuegraph does not automatically create the RRD when first launched. You need to run a shell script called *createrrd.sh* to do this. Don't forget to modify the path for the RRD in the script; the path will default to */etc/postfix* otherwise. Queuegraph is not a daemon; instead it is launched once a minute by cron:

```
* * * * * /usr/local⤳
/bin/count.sh &
```

In *count.sh*, you simply need to modify the path to the RRD, unless you accept the default. You can drop the two CGI scripts into the CGI directory on your web server alongside *mailgraph.cgi*. ■

Figure 2: Queuegraph uses an approach similar to Mailgraph.

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INFO

[1] G. Greve, Brave GNU World, Linux Magazine, issue #53 / April, p94
[2] Mailgraph: *http://people.ee.ethz.ch/~dws/software/mailgraph/*
[3] RRDTool: *http://people.ee.ethz.ch/~oetiker/webtools/rrdtool/*
[4] Queuegraph: *http://www.stahl.bau.tu-bs.de/~hildeb/postfix/queuegraph/*