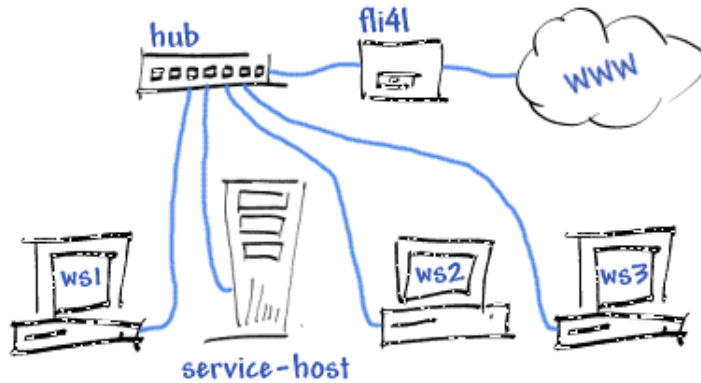# Automail for fli4l

by Stefan Blechschmidt

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About the author:

Being a trained electrician, I found myself in 1990 in front of a CAD workstation to develop a switch and control station. Obviously, I got infected by a then unknown 'virus', and that's just fine.

Translated to English by:
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Abstract:

Who is not using this one diskette router from http://www.fli4l.de/ ? Most likely everyone of its users knows about the problem when the router is being used in *dial-on-demand* mode in an existing network system with internal mail server. When the router establishes a connection the mail server should know about it, this would enable it to send and receive mail.
This article is describing one possibility on how to solve this problem.

Short Description of the Environment

Our illustration shows the concept of the network which we are going to use as a example for this article. *WS1 to WS3* represent workstations connected to the WWW through the router. The *service-host* is responsible for the internal and the external mail. Sending mail is being handled by *MTA*. Receiving with *fetchmail* and subsequent sorting with *procmail*. The mailboxes on the service host are provided to the workstations via *POP3* or *IMAP*

The Problem

If one of the workstations is establishing a connection to the WWW the service host does normally not notice it. It would be possible to instruct the service host with the help of a *cron job* to send or receive mail at specific times. More elegant would be to inform the service host when the connection is being established, enabling it to do the mail job.

Since the router is being run from a diskette, there is no complex script or program to control the mail server from the router.

The Idea

While informing the service host about the connection, it should be possible to launch a request to start a process for mail to be sent or received.

The Solution

For *fli4l* a program named *wget* is available , with the size of about 100 kB, it should fit easily on the diskette. With *wget* we can establish a connection to the service host at the same time when dialing. This will be possible by *inetd* opening a port on the service host, waiting for a connection from the router. With the connection a script will start additional processes to send and receive mail.

The script is written in Perl you may download it here (mailstart.pl.gz).

Router Adjustments

Dialing in activates the file `.../opt/etc/ppp/ip-up`. This is the right place to establish a connection to our service host. By adding the line:

```
wget -t 1 --spider MAILSERVER:PORT/xyz &> /dev/null
```

we are doing just that.

Explanations to the Commands of *wget*

- Option -t 1
  With this option we are attempting to reach the program *mailstart* on the mail server
- Option --spider
  This option checks if the page exists, but it does not download it.
- MAILSERVER:PORT/*xyz*
  This names the mail server and the port through which the program is being accessed. *xyz* names the file to be downloaded. This definition is actually not required, without it *wget* requests the file *index.html* as default.

- /dev/null
  Means the output of *wget* is being sent to nirvana.This statement may be left off to see which data *wget i*s receiving.

Mail Server Adjustment

With the help of the super server *inetd* the program *mailstart* [1] is being activated. To make this happen we have to edit the files

/etc/inetd.conf

/etc/services

In this file we assign the port which *wget* shall access. The line:

```
mailstart  4000/tcp # Mailstart
```

does accomplish that.

/etc/inetd.conf

In this file we are defining which program should be started. *inetd* monitors its execution and logs this in */var/log/syslog*.

The line:

```
mailstart  stream  tcp  nowait  root  /usr/sbin/tcpd  /root/bin/mailstart
```

is going to finish this step. The first name must be the same as noted in the file */etc/services*.

Adjustments *mailstart.pl*

Through variables the program can be adjusted to the particular server.

$protokoll

With the variable *$protokoll* we can define if the calls shall be logged. Setting the variable to **1** will log the calls in */var/log/mailstart.log*. If the variable is set to **0** no log will be created.

```
Default: 1 create log
```

$protokoll_ziel

With this variable we can determine the target of the log.

```
Default: /var/log/mailstart.log
```

$mailholen

Here we enter the name of the program which fetches the mail. To start that program the user must be `root` or the name which was entered into */etc/inetd.conf*. If someone else wants to use the program the command has to start with `su USER -c \"COMMAND PARAMETER\"`. If the command is several words long it has to be set in quotation marks, also, it must be protected with \.

```
Default (one line):
```

```
su postmaster -c \"fetchmail -t 40 -a -L /var/log/fetchmail/fetchmail.log -f /home/postmaster/.fetchmailr
```

$mailsenden

Here is the place for the program used to send email. To start that program the user must be `root` or the name which was entered into */etc/inetd.conf* If someone else wants to use the program the command has to start with `su USER -c \"BEFEHL PARAMETER\"`. If the command is several words long it has to be set in quotation marks, the command must be protected with \.

```
Default: sendmail -q
```

By the way, part of the program is a small POD documentation which provides a short description. You can get to the description with `perdoc mailstart`.

Test

Prior to testing the super server needs to be restarted, `/etc/init.d/inetd restart` should do it. Now you can test with `telnet localhost mailstart` if the server responds . You should get a display similar to this.

```
Trying 127.0.0.1...
Connected to localhost.
Escape character is '^]'.
HTTP/1.1 220 OK
Date: Sun, 20 Jul 2003 10:45:46 GMT
Server: mailstart/perl (sbsbavaria)
Last-Modified: Sun, 20 Jul 2003 10:45:46 GMT
Content-Type: text/txt
Content-Length: 11
1234567890
Connection closed by foreign host.
```

Well, that's it. I hope you are getting the desired result from my description. If that's not the case we do have a problem.
- You, because it doesn't work.
- I, because I was not able to give a decent description:-).

Download

- [1] mailstart.pl.gz - Program to control the service hosts in Perl

Links / References

- www.fli4l.de - fli4l Homepage
- www.perl.org - Perl Homepage