

## Email to printer gateway

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This document covers setting up a Linux box to download email from a POP3 account on a Microsoft Exchange server and printing it to a network printer. When the emails are downloaded they are deleted. Already read emails are also deleted. Only new emails will be printed.

This example was done using Slackware 12.0.0

### Setup printer in cups

```
chmod 755 /etc/rc.d/rc.cups  
/etc/rc.d/rc.cups start
```

links <http://127.0.0.1:631/>

add the printer, print a test page, and make it the default or specify it in the lpr command.

### Create user

```
root@monitor:~# adduser
```

Login name for new user []: printemail

User ID ('UID') [ defaults to next available ]:

Initial group [ users ]:

Additional groups (comma separated) []:

Home directory [ /home/printemail ]

Shell [ /bin/bash ] /bin/false

- Warning: /bin/false is not in /etc/shells (potential problem using FTP)  
Do you wish to change the shell ? (Y/n) n

Expiry date (YYYY-MM-DD) []:

New account will be created as follows:

```
-----  
Login name.....: printemail  
UID.....: [ Next available ]  
Initial group....: users  
Additional groups: [ None ]  
Home directory...: /home/printemail  
Shell.....: /bin/false
```

Expiry date.....: [ Never ]

This is it... if you want to bail out, hit Control-C. Otherwise, press ENTER to go ahead and make the account.

Creating new account...

Changing the user information for printemail  
Enter the new value, or press ENTER for the default

Full Name []:  
Room Number []:  
Work Phone []:  
Home Phone []:  
Other []:

Changing password for printemail  
Enter the new password (minimum of 5, maximum of 127 characters)  
Please use a combination of upper and lower case letters and numbers.

New password:  
Bad password: too short.  
Warning: weak password (enter it again to use it anyway).  
New password:  
Re-enter new password:  
Password changed.

Account setup complete.

```
root@monitor:~# usermod -p a5wEg324s printemail  
root@monitor:~# usermod -L printemail
```

I disable the account from remote logins for security. Slackware's cron daemon does not use the users shell anyway.

## **Configure Fetchmail to retrieve email into the local account**

Use fetchmail to obtain mail from remote locations.

```
printemail@monitor:~$ cat .fetchmailrc  
poll mail.example.org with proto POP3 and options no dns  
user 'support' there with password 's3cr3t' is 'printemail' here and wants mda "/usr/bin/  
procmail -d %T" options nokeep flush
```

```
printemail@monitor:~$ chmod 0710 .fetchmailrc
```

## **Script mailx to print email**

Create a mailx command file that:

- a. prints the first email
- b. deletes the first email
- c. quits the program

\* note: I tried to do this using mailrc but the program would not respect the quit command when there were more than 2 emails in the mailbox !\*?

```
#!/usr/bin/mailcmd
set cmd=/usr/bin/lpr
set page=yes
set pipe-text/html="lynx -dump -force_html /dev/stdin"
#mailrc would not respect the quit command
  folder /var/mail/printemail
  pipe 1 /usr/bin/lpr
  delete 1
  quit
```

Then write a bash script to run mailx until no new mail exists in the mailbox.

```
#!/usr/bin/bash
#!/usr/local/bin/print_email.sh

#fetch the new mail
/usr/bin/fetchmail > /dev/null

#print all new mail

while ( /usr/bin/mailx -e > /dev/null 2>&1 ); do
  /usr/bin/mailx -B < ~/.mailcmd ;
  sleep 1 ;
done
```

### **Schedule the job**

Finally you would want to cron the job so that it runs every five minutes.

```
root@nebula:~# crontab -l | grep print_email
# print_email every five minutes
*/5 * * * * /usr/local/bin/print_email.sh 1> /dev/null
```