Send an Email Alert When Your Linux Server Disk Space Gets Low Through Shell Script

Introduction

Linux mail command is a command-line utility that allows us to send emails from the command line. It will be quite useful to send emails from the command line if we want to generate emails programmatically from shell scripts or web applications. The mail command can be used directly by the terminal as well as the Shell script. However, many other commands are available in Linux that can be used to send the emails from the command line such as sendmail, mutt, SSMTP, telnet, and more.

Step I – Install mailutils

To install the mailutils package, execute the below command:

```
sudo apt install mailutils
```

The above command will ask for a system password, type the password, and press **ENTER** key. It will verify the installation, type **'y'** to confirm the installation. Consider the below snap of output:

```
javatpoint@javatpoint-Inspiron-3542:~$ sudo apt install mailutils
[sudo] password for javatpoint:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  libgsasl7 libkyotocabinet16v5 libmailutils5 libmysqlclient20 libntlm0
  mailutils-common postfix
Suggested packages:
  mailutils-mh mailutils-doc procmail postfix-mysql postfix-pgsql postfix-ldap
  postfix-pcre postfix-lmdb postfix-sqlite sasl2-bin dovecot-common resolvconf
  postfix-cdb postfix-doc
The following NEW packages will be installed:
  libgsasl7 libkyotocabinet16v5 libmailutils5 libmysqlclient20 libntlm0
  mailutils mailutils-common postfix
0 upgraded, 8 newly installed, 0 to remove and 298 not upgraded.
Need to get 0 B/3,127 kB of archives.
After this operation, 14.7 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
```

It will start a daemon process and ask for the postfix configuration, select your desired postfix option.

```
┤ Postfix Configuration ├
Please select the mail server configuration type that best meets your needs.

 No configuration:
  Should be chosen to leave the current configuration unchanged.
 Internet site:
  Mail is sent and received directly using SMTP.
 Internet with smarthost:
  Mail is received directly using SMTP or by running a utility such
  as fetchmail. Outgoing mail is sent using a smarthost.
 Satellite system:
  All mail is sent to another machine, called a 'smarthost', for delivery.
 Local only:
  The only delivered mail is the mail for local users. There is no network.

 General type of mail configuration:

                    No configuration
                    Internet Site
                    Internet with smarthost
                    Satellite system
                    Local only


              <Ok>                          <Cancel>
```

There four postfix options are available for installation. They are as follows:

```
┤ Postfix Configuration ├
The "mail name" is the domain name used to "qualify" _ALL_ mail addresses without a domain name. This includes mail to and from
<root>: please do not make your machine send out mail from root@example.org unless root@example.org has told you to.

This name will also be used by other programs. It should be the single, fully qualified domain name (FQDN).

Thus, if a mail address on the local host is foo@example.org, the correct value for this option would be example.org.

System mail name:

database3

              <Ok>                          <Cancel>
```

Step -II Create a Linux Script File

create a linux script file with executable permission

`sudo touch disk_alert.sh && sudo chmod +x disk_alert.sh`

Step -III Open a Script File and Edit

`sudo vim disk_alert.sh`

```bash
#!/bin/bash

CURRENT=$(df / | grep / | awk '{ print $5}' | sed 's/%//g')
THRESHOLD=15

if [[ $CURRENT -gt $THRESHOLD ]]
then
        mail -s 'Disk Space Alert' cu.18bcs6728@gmail.com <<< "Disk Space Full:$CURRENT%"
else
        echo "All Good!!"
fi

~
```

Step -Iv Execute disk_alert.sh File

sudo disk_alert.sh || ./disk_alert.sh

Step -V Output
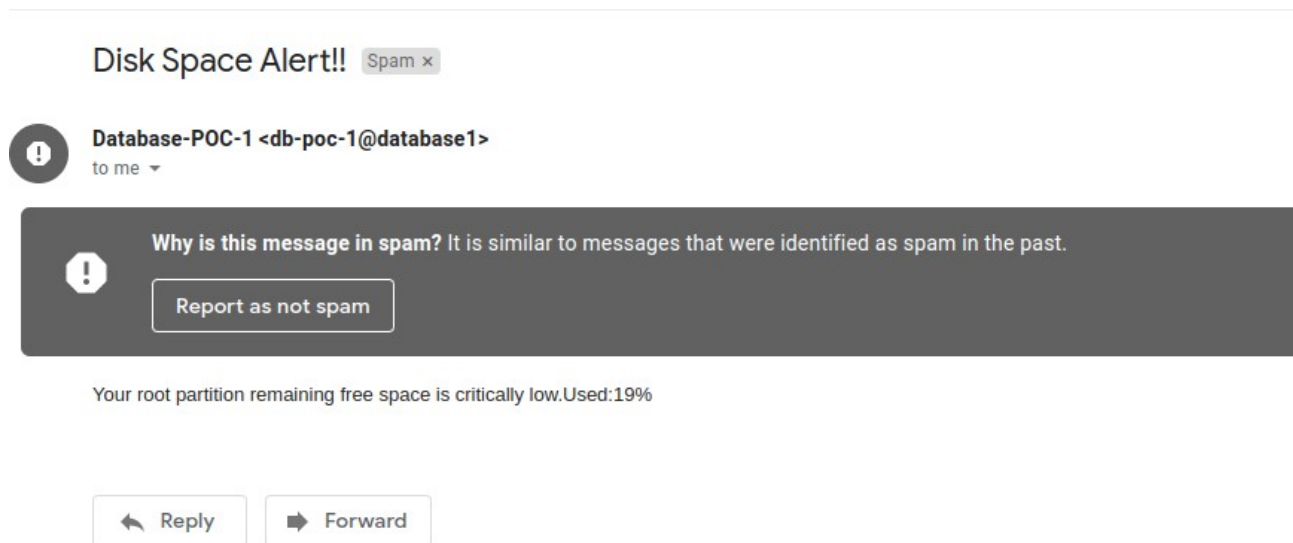
case -I

if CURRENT < THRESHOLD

```
db-poc-1@database1:~$ ./disk.sh
All Good!!!
db-poc-1@database1:~$
```

Case -II

if CURRENT > THRESHOLD

Disk Space Alert!! Spam ×

Database-POC-1 <db-poc-1@database1>
to me ▾

Why is this message in spam? It is similar to messages that were identified as spam in the past.

Report as not spam

Your root partition remaining free space is critically low.Used:19%

↩ Reply   ➡ Forward

Thank You