SPECIFICATION - SMTP

SMTP SERVER

We use sendmail (http://www.sendmail.org) as our SMTP server.

PREREQUISITE

1. IP addresses of the mail and IMAP servers
2. Domain names of the mail and IMAP servers

REQUIRED KNOWNLEDGE

1. Concept on UNIX users: differentiation of root and normal user.
2. Concept on IP address and domain name.
3. Confidence in working on shell and using text editor such as vi.

INTRODUCTION

You are required to setup a SMTP server for your organization.

The SMTP server should provide the following services:

1. Accepting emails sent from recognized hosts to anywhere else of the Internet.
2. Accepting emails sent from Internet to recognized email addresses.

Also, the server should allow IMAP server to access the mail spool (the directory where received emails are stored) with read-write permission.

CONFIGURATION

Make sure you have the required software installed.

As root, run

```
# rpm -q sendmail sendmail-cf
```

If they are present, their names and versions will be shown.

You need to do the following configuration step as root.

1. Edit `/etc/mail/sendmail.mc`:

   (a) Look for this line:

   `DAEMON_OPTIONS(‘Port=smtp,Addr=127.0.0.1, Name=MTA’)`

   Change it to

   `dnl DAEMON_OPTIONS(‘Port=smtp,Addr=127.0.0.1, Name=MTA’)`

   N.B. the first quoting character is backquote (‘) while the second one is apostrophe (’).

   (b) Look for this line:

   `EXPOSED_USER(‘root’)dnl`

   Insert the following 3 lines **BEFORE** the above line.

   ```
   FEATURE(‘allmasquerade’)dnl
   FEATURE(‘masquerade_envelope’)dnl
   MASQUERADE_AS(‘keepsmiling.org’)dnl
   ```

   N.B. the first quoting character is backquote (‘) while the second one is apostrophe (’).

2. Edit `/etc/mail/local-host-names` to add **ALL** IP addresses of your organization.

   e.g.

   Suppose your organization domain name is **keep-smiling.org**, your mail server hostname is **mail.keep-smiling.org** and there are totally 3 hosts in your organization with IP addresses **10.1.1.1**, **10.1.1.2** and **10.1.1.3** respectively, then you should have the following lines in your `/etc/mail/local-host-names`.

   ```
   127.0.0.1
   mail.keep-smiling.org
   keep-smiling.org
   10.1.1.1
   10.1.1.2
   10.1.1.3
   ```

3. Append the following line to `/etc/mail/access`:

   ```
   10.1     RELAY
   ```

4. Run this command once:

   ```
   /usr/bin/makemap  hash  /etc/mail/access  <  /etc/mail/access
   ```

5. Append the following line to `/etc/hosts.allow`

   `sendmail: ALL`

6. Run the command below to generate new configuration file:

   ```
   # m4 /etc/mail/sendmail.mc > /etc/sendmail.cf
   ```

7. Run the command below to restart Sendmail:

   ```
   # /sbin/service sendmail restart
   ```

8. Add users to your SMTP server:

   Suppose you have 3 users in your organization, namely **behappy**, **befunny**, and **becrazy**, add 3 accounts into your system. See SPECIFICATION - ACCOUNT for details on how to add a user account.

   In order to reduce your heavy workload on setting up a mail server, you can designate a member of team to add the user accounts. However, you are already sitting in front of the mail server. How can your fellow team member add the user accounts into the mail server? This is where remote login comes into play. You should allow one of your team member to login the mail server as root from his/her computer via network:

   (a) Ask the designated team member for the IP address of his/her own computer.

   (b) Suppose the IP address obtained from your team member is `10.1.1.10`, put the following line into `/etc/hosts.allow`:

   `sshd: 10.1.1.10`

   (c) Your team member can remote login the mail server from `10.1.1.10`:

   ```
   # ssh -l root 10.1.1.1
   ```

   (d) Your team member can run `redhat-user-config` in the same terminal where he/she used to login the mail server.

EXPORTING MAIL SPOOL TO IMAP SERVER

IMAP server needs the mail spool **/var/spool/mail** to serve its IMAP client. Since the mail server delivers mail to its own local spool, it needs to export the local spool to IMAP server, so that the IMAP server can read the emails sent to the users of the organization.

You need to be root to do the setup:

1. Start NFS server

   ```
   # serviceconf
   Select nfs.
   Press Start button.
   ```

2. Append the following line to `/etc/hosts.allow`

   `rpc.mountd,portmap:  10.1.1.4`

   (ATTENTION: Change `10.1.1.4` to the IP address of your IMAP server)

3. Append the following line to `/etc/exports`

   `/var/spool/mail      10.1.1.4(rw)`

   (ATTENTION: Change `10.1.1.4` to the IP address of your IMAP server)

4. Append the following line to `/etc/hosts` if the line is not present

   `10.1.1.4    imap.keep-similing.org   imap`

   (ATTENTION: Change `10.1.1.4` to the IP address of your IMAP server)

5. Run this command

   ```
   # exportfs -a
   ```

HOW TO ENABLE SMTP SERVER

The SMTP server is enabled by default.

TEST YOUR SMTP SERVER

1. Ask your BROWSER team to send an email to their email addresses, e.g. `behappy@keep-similing.org`.
2. If your SMTP server is setup correctly, your BROWSER team should be able to send out emails without getting error message.
3. Ask your IMAP team to mount `/var/spool/mail` from the SMTP server.

FILES

`/etc/mail/access`	List of hosts and networks that can relay mail using the SMTP server
`/etc/mail/local-host-names`	List of hosts in local network
`/etc/mail/sendmail.mc`	Master configuration file
`/etc/sendmail.cf`	Sendmail configuration file

RPMS

`sendmail`	Sendmail
`sendmail-cf`	Sendmail configuration package

SEE

`http://www.redhat.com/docs/manuals/linux/RHL-7.3-Manual/ref-guide/s1-email-sendmail.html`
Setting up Sendmail on RedHat Linux

Have fun!

-*- spec-smtp -*-