

SMTP

Postfix provide SMTP

Default port: 25

Config: /etc/postfix/main.cf

Steps to follow:

SMTP sending to single user

Step-1: Install a postfix package

yum install postfix

```
[root@client /]# yum install postfix
CentOS Stream 9 - BaseOS                               20 kB/s | 6.9 kB   00:00
CentOS Stream 9 - AppStream                             4.6 kB/s | 7.0 kB   00:01
CentOS Stream 9 - Extras packages                       6.7 kB/s | 8.2 kB   00:01
Dependencies resolved.
=====
Package                               Architecture      Version            Repository          Size
=====
Installing:
postfix                               x86_64            2:3.5.25-1.el9     appstream           1.5 M
=====
Transaction Summary
=====
Install 1 Package
=====
Total download size: 1.5 M
Installed size: 4.4 M
Is this ok [y/N]: y
Downloading Packages:
postfix-3.5.25-1.el9.x86_64.rpm                               598 kB/s | 1.5 MB   00:02
-----
Total                                                                    374 kB/s | 1.5 MB   00:04
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing                : 1/1
  Running scriptlet: postfix-2:3.5.25-1.el9.x86_64 1/1
  Installing           : postfix-2:3.5.25-1.el9.x86_64 1/1
  Running scriptlet: postfix-2:3.5.25-1.el9.x86_64 1/1
  Verifying            : postfix-2:3.5.25-1.el9.x86_64 1/1
Installed:
postfix-2:3.5.25-1.el9.x86_64
Complete!
```

Step-2: Start and enable the postfix service

systemctl start postfix

systemctl enable postfix

```
[root@server /]# systemctl status postfix
● postfix.service - Postfix Mail Transport Agent
   Loaded: loaded (/usr/lib/systemd/system/postfix.service; enabled; preset: disabled)
   Active: active (running) since Wed 2024-11-20 23:23:34 IST; 40min ago
     Process: 6232 ExecStartPre=/usr/sbin/restorecon -R /var/spool/postfix/pid (code=exited, status=0/SUCCESS)
     Process: 6234 ExecStartPre=/usr/libexec/postfix/aliasesdb (code=exited, status=0/SUCCESS)
     Process: 6236 ExecStartPre=/usr/libexec/postfix/chroot-update (code=exited, status=0/SUCCESS)
     Process: 6237 ExecStart=/usr/sbin/postfix start (code=exited, status=0/SUCCESS)
```

Check the netstat using port number

netstat -an | grep ":25"

```
[root@server /]# netstat -an | grep ":25"
tcp        0      0 127.0.0.1:25          0.0.0.0:*              LISTEN
tcp6       0      0 :::1:25               :::*                    LISTEN
```

Step-3: Edit the main.cf file

```
# vi /etc/postfix/main.cf

# inet_interfaces=all

# myhostname=server.com

# mydomain=domain.tld    -- don't make any changes
```

```
#
inet_interfaces = all
#inet_interfaces = $myhostname
#inet_interfaces = $myhostname, localhost
#inet_interfaces = localhost

# Enable IPv4, and IPv6 if supported
inet_protocols = all
```

```
#
myhostname = server.com
#myhostname = virtual.domain.tld

# The mydomain parameter specifies the
# The default is to use $myhostname minus
# $mydomain is used as a default value for
# parameters.
#
#mydomain = domain.tld
```

Step-4: Restart the postfix service

```
# systemctl restart postfix
```

Check netstat

```
# netstat -an | grep ":25"
```

```
[root@server /]# netstat -an | grep ":25"
tcp        0      0 0.0.0.0:*                0.0.0.0:25      LISTEN
tcp6       0      0 :::*                    :::*             LISTEN
```

Step-5: Create a new user (if, needed)

```
# useradd mailuser1 #passwd mailuser1

# useradd mailuser2 #passwd mailuser2
```

Step-6: Install s-nail package

```
# yum install s-nail
```

```
[root@server /]# yum install s-nail
CentOS Stream 9 - BaseOS                               3.4 kB/s | 6.9 kB  00:02
CentOS Stream 9 - AppStream                             5.6 kB/s | 7.0 kB  00:01
CentOS Stream 9 - Extras packages                       7.8 kB/s | 8.2 kB  00:01
Dependencies resolved.
=====
Package                        Architecture      Version           Repository        Size
-----
Installing:
s-nail                         x86_64            14.9.22-8.el9    appstream         622 k
Transaction Summary
-----
Install 1 Package

Total download size: 622 k
Installed size: 1.1 M
Is this ok [y/N]: y
Downloading Packages:
s-nail-14.9.22-8.el9.x86_64.rpm                               594 kB/s | 622 kB  00:01
-----
Total
Running transaction check                                     246 kB/s | 622 kB  00:02
Transaction check succeeded.
```

Step-7: Check sending mail to user

```
Disable firewall
```

```
# mail -s "Test mail" mailuser1
```

```
# enter the content
```

```
# Ctrl+D – to complete text mail
```

```
[root@server /]# mail -s "Test mail" mailuser1
s-nail: Warning: $LOGNAME (siddharrth) not identical to user (root)!
s-nail: Warning: $USER (siddharrth) not identical to user (root)!
To: mailuser1
Subject: Test mail

s-nail: There are new messages in the error message ring (denoted by ERROR),
s-nail:   which can be managed with the `errors' command
ERROR# hello message from root
^D
-----
(Preliminary) Envelope contains:
To: mailuser1
Subject: Test mail
Send this message [yes/no, empty: recompose]? y
```

Step-8: Check the mail whether sent in queue

```
# mailq – mail queue
```

```
[root@server /]# mailq
Mail queue is empty
```

Step-9: Check in mail log

```
# tail -f /var/log/maillog
```

```
[root@server /]# tail -f /var/log/maillog
Nov 20 10:35:08 server postfix/master[4671]: daemon started -- version 3.5.25, configuration /etc/postfix
Nov 20 23:23:33 server postfix/postfix-script[6226]: stopping the Postfix mail system
Nov 20 23:23:33 server postfix/master[4671]: terminating on signal 15
Nov 20 23:23:34 server postfix/postfix-script[6303]: starting the Postfix mail system
Nov 20 23:23:34 server postfix/master[6305]: daemon started -- version 3.5.25, configuration /etc/postfix
Nov 20 23:43:57 server postfix/pickup[6306]: 32B1C116AF7E: uid=0 from=<root>
Nov 20 23:43:57 server postfix/cleanup[6730]: 32B1C116AF7E: message-id=<20241120181357.32B1C116AF7E@server.com>
Nov 20 23:43:57 server postfix/qmgr[6307]: 32B1C116AF7E: from=<root@server.com>, size=332, nrcpt=1 (queue active)
Nov 20 23:43:57 server postfix/local[6736]: 32B1C116AF7E: to=<mailuser1@server.com>, orig_to=<mailuser1>, relay=local, delay=0.04, delays=0.02/0.01/0/0, dsn=2.0.0, status=sent (delivered to mailbox)
Nov 20 23:43:57 server postfix/qmgr[6307]: 32B1C116AF7E: removed
```

Step-10: Check in user login

```
# su - mailuser1
```

```
# mail - to see all mail
```

```
# enter the mail number i.e. 1
```

```
[siddharrth@server /]$ su - mailuser1
Password:
[mailuser1@server ~]$ mail
s-nail version v14.9.22. Type '?' for help
/var/spool/mail/mailuser1: 1 message 1 new
•N 1 root 2024-11-20 23:43 15/461 "Test mail
& 1
[-- Message 1 -- 15 lines, 461 bytes --]:
Date: Wed, 20 Nov 2024 23:43:57 +0530
To: mailuser1@server.com
Subject: Test mail
Message-Id: <20241120181357.32B1C116AF7E@server.com>
From: root <root@server.com>

hello message from root

& █
```

SMTP Alias (group mail)

Step-1: Create a user alias for grouping

```
# useradd unix-group
```

```
[root@server /]# useradd unix-group
[root@server /]# passwd unix-group
Changing password for user unix-group.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
[root@server /]#
```

Step-2: Create a new user (if, needed)

Step-3: Add user alias in alias file

```
# vi /etc/aliases
```

```
# unix-group: mailuser1,mailuser2,mahendra,dhoni
```

```
sales:      postmaster
support:    postmaster
unix-group: mailuser1,mailuser2,mahendra,dhoni

# trap decode to catch security attacks
decode:     root
```

Step-4: Restart the aliases

```
# newaliases - !!!!
```

(or)

```
# systemctl restart postfix
```

```
[root@server /]# newaliases
```

Step-5: Send mail

```
# mail -s "test aliases" unix-group
```

```
[root@server /]# mail -s "test aliases" unix-group
s-nail: Warning: $LOGNAME (siddharrth) not identical to user (root)!
s-nail: Warning: $USER (siddharrth) not identical to user (root)!
To: unix-group
Subject: test aliases

s-nail: There are new messages in the error message ring (denoted by ERROR),
s-nail:   which can be managed with the `errors' command
ERROR# Test aliases for group mail
^D
-----
(Preliminary) Envelope contains:
To: unix-group
Subject: test aliases
Send this message [yes/no, empty: recompose]? y
```

Step-6: check mail sent

```
# mailq
```

```
[root@server /]# mailq
Mail queue is empty
```

```
# tail -f /var/log/maillog
```

```
[root@server ~]# tail -f /var/log/maillog
Nov 20 23:43:57 server postfix/local[6736]: 32B1C116AF7E: to=<mailuser1@server.com>, orig_to=<mailuser1>, relay=local, delay=0.04, size=1024, dsn=25.0.0, status=sent (delivered to mailbox)
Nov 20 23:43:57 server postfix/qmgr[6307]: 32B1C116AF7E: removed
Nov 21 00:41:45 server postfix/pickup[6306]: 4AF8B119AF82: uid=0 from=<root>
Nov 21 00:41:45 server postfix/cleanup[7095]: 4AF8B119AF82: message-id=<20241120191145.4AF8B119AF82@server.com>
Nov 21 00:41:45 server postfix/qmgr[6307]: 4AF8B119AF82: from=<root@server.com>, size=340, nrcpt=1 (queue active)
Nov 21 00:41:45 server postfix/local[7101]: 4AF8B119AF82: to=<mailuser1@server.com>, orig_to=<unix-group>, relay=local, delay=0.04, size=1024, dsn=25.0.0, status=sent (delivered to mailbox)
Nov 21 00:41:45 server postfix/local[7101]: 4AF8B119AF82: to=<mailuser2@server.com>, orig_to=<unix-group>, relay=local, delay=0.04, size=1024, dsn=25.0.0, status=sent (delivered to mailbox)
Nov 21 00:41:45 server postfix/local[7101]: 4AF8B119AF82: to=<mahendra@server.com>, orig_to=<unix-group>, relay=local, delay=0.04, size=1024, dsn=25.0.0, status=sent (delivered to mailbox)
Nov 21 00:41:45 server postfix/local[7101]: 4AF8B119AF82: to=<dhoni@server.com>, orig_to=<unix-group>, relay=local, delay=0.04, size=1024, dsn=25.0.0, status=sent (delivered to mailbox)
Nov 21 00:41:45 server postfix/qmgr[6307]: 4AF8B119AF82: removed
```

Step-7: Check in user login

```
# su - mailuser1
```

```
# mail - to see all mail
```

```
# enter the mail number i.e. 2
```

```
[siddharrth@server ~]$ su - mailuser1
Password:
```

```
[mailuser1@server ~]$ mail
s-nail version v14.9.22. Type '?' for help
/var/spool/mail/mailuser1: 2 messages 2 new
•N 1 root                2024-11-20 23:43    15/461    "Test mail
  N 2 root                2024-11-21 00:41    15/471    "test aliases
& 2
[-- Message 2 -- 15 lines, 471 bytes --]:
Date: Thu, 21 Nov 2024 00:41:45 +0530
To: unix-group@server.com
Subject: test aliases
Message-Id: <20241120191145.4AF8B119AF82@server.com>
From: root <root@server.com>

Test aliases for group mail

& █
```