

Лаборатория работа 8

Настройка SMTP-сервера

ПОДГОТОВИЛА: КИМ РЕАЧНА
ГРУППА: НПИБД-02-20

Цель работы:

Приобретение практических навыков по установке и конфигурированию SMTP-сервера.

Задание:

- Установка Postfix
- Изменение параметров Postfix с помощью postconf
- Проверка работы Postfix
- Конфигурация Postfix для домена
- Внесение изменений в настройки внутреннего окружения виртуальной машины

Установка Postfix

```
[kreachna@server.kreachna.net ~]$ sudo -i
[sudo] password for kreachna:
[root@server.kreachna.net ~]# dnf -y install postfix
Extra Packages for Enterprise Linux 9 - x86_64
Extra Packages for Enterprise Linux 9 - x86_64
Rocky Linux 9 - BaseOS
Rocky Linux 9 - BaseOS
Rocky Linux 9 - AppStream
Rocky Linux 9 - AppStream
Rocky Linux 9 - Extras
Rocky Linux 9 - Extras
Last metadata expiration check: 0:00:01 ago on Fri 02 Dec 2022 10:32:59 AM UTC.
Dependencies resolved.
=====
Package                Architecture      Version
=====
Installing:
postfix                x86_64            2:3.5.9-19.el9
Transaction Summary
=====
Install 1 Package
```

```
24 kB/s | 24 kB      00:01
6.1 MB/s | 12 MB     00:01
4.6 kB/s | 3.6 kB    00:00
1.6 MB/s | 1.7 MB     00:01
[root@server.kreachna.net ~]# dnf -y install s-nail
Last metadata expiration check: 0:00:35 ago on Fri 02 Dec 2022 10:32:59 AM UTC.
Dependencies resolved.
=====
Package                Architecture      Version      Repository      Size
=====
Installing:
s-nail                 x86_64            14.9.22-6.el9  appstream        621 k
Transaction Summary
=====
Install 1 Package

Total download size: 621 k
Installed size: 1.1 M
Downloading Packages:
s-nail-14.9.22-6.el9.x86_64.rpm
-----
Total
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing      :
  Running scriptlet: s-nail-14.9.22-6.el9.x86_64
  Installing     : s-nail-14.9.22-6.el9.x86_64
  Running scriptlet: s-nail-14.9.22-6.el9.x86_64
  Verifying      : s-nail-14.9.22-6.el9.x86_64
-----
Installed:
s-nail-14.9.22-6.el9.x86_64
Complete!
```

Изменение параметров Postfix с помощью postconf

```
[root@server.kreachna.net ~]# postconf -n
alias_database = hash:/etc/aliases
alias_maps = hash:/etc/aliases
command_directory = /usr/sbin
compatibility_level = 2
daemon_directory = /usr/libexec/postfix
data_directory = /var/lib/postfix
debug_peer_level = 2
debugger_command = PATH=/bin:/usr/bin:/usr/local/bin:/usr/X11R6/bin ddd $daemon_directory
                        & sleep 5
html_directory = no
inet_interfaces = localhost
inet_protocols = all
mail_owner = postfix
mailq_path = /usr/bin/mailq.postfix
manpage_directory = /usr/share/man
meta_directory = /etc/postfix
mydestination = $myhostname, localhost.$mydomain, localhost
myorigin = $mydomain
newaliases_path = /usr/bin/newaliases.postfix
queue_directory = /var/spool/postfix
readme_directory = /usr/share/doc/postfix/README_FILES
sample_directory = /usr/share/doc/postfix/samples
sendmail_path = /usr/sbin/sendmail.postfix
setgid_group = postdrop
shlib_directory = /usr/lib64/postfix
smtp_tls_CAfile = /etc/pki/tls/certs/ca-bundle.crt
smtp_tls_CApolicy = /etc/pki/tls/certs
smtp_tls_security_level = may
smtpd_tls_cert_file = /etc/pki/tls/certs/postfix.pem
smtpd_tls_key_file = /etc/pki/tls/private/postfix.key
smtpd_tls_security_level = may
unknown_local_recipient_reject_code = 550
```

```
[root@server.kreachna.net ~]# postconf
2bounce_notice_recipient = postmaster
access_map_defer_code = 450
access_map_reject_code = 554
address_verify_cache_cleanup_interval = 12h
address_verify_default_transport = $default_transport
address_verify_local_transport = $local_transport
address_verify_map = btree:$data_directory/verify_cache
address_verify_negative_cache = yes
address_verify_negative_expire_time = 3d
address_verify_negative_refresh_time = 3h
address_verify_pending_request_limit = 5000
address_verify_poll_count = ${stress?{1}:{3}}
address_verify_poll_delay = 3s
address_verify_positive_expire_time = 31d
address_verify_positive_refresh_time = 7d
address_verify_relay_transport = $relay_transport
address_verify_relayhost = $relayhost
address_verify_sender = $double_bounce_sender
address_verify_sender_dependent_default_transport_maps = $sender_dependent_default_transport_maps
address_verify_sender_dependent_relayhost_maps = $sender_dependent_relayhost_maps
address_verify_sender_ttl = 0s
address_verify_service_name = verify
address_verify_transport_maps = $transport_maps
address_verify_virtual_transport = $virtual_transport
alias_database = hash:/etc/aliases
alias_maps = hash:/etc/aliases
allow_mail_to_commands = alias, forward
allow_mail_to_files = alias, forward
allow_min_user = no
allow_percent_hack = yes
allow_untrusted_routing = no
alternate_config_directories =
```


Проверка работы Postfix

```
root@server:~ x mc [root@server.kreachna.net ~] x kreachna@server:~ x root@server:~ x
[kreachna@server.kreachna.net ~]$ sudo -i
[sudo] password for kreachna:
[root@server.kreachna.net ~]# tail -f /var/log/maillog
Dec  2 10:41:13 server postfix/postfix-script[37151]: refreshing the Postfix mail system
Dec  2 10:41:13 server postfix/master[36918]: reload -- version 3.5.9, configuration /etc/postfix
Dec  2 10:41:13 server postfix/master[36918]: warning: ignoring inet_protocols parameter value change
Dec  2 10:41:13 server postfix/master[36918]: warning: old value: "all", new value: "ipv4"
Dec  2 10:41:13 server postfix/master[36918]: warning: to change inet_protocols, stop and start Postfix
Dec  2 10:45:29 server postfix/pickup[37156]: D0E8D870154: uid=1001 from=<kreachna>
Dec  2 10:45:29 server postfix/cleanup[37304]: D0E8D870154: message-id=<20221202104529.D0E8D870154@server.kreachna.net>
Dec  2 10:45:29 server postfix/qmgr[37157]: D0E8D870154: from=<kreachna@kreachna.net>, size=332, nrcpt=1 (queue active)
Dec  2 10:45:29 server postfix/local[37310]: D0E8D870154: to=<kreachna@server.kreachna.net>, relay=local, delay=0.05, delays=0.04/0.01/0/0, dsn=2.0.0, status=sent
Dec  2 10:45:29 server postfix/qmgr[37157]: D0E8D870154: removed
```

```
From kreachna@client.kreachna.net  Fri Dec  2 11:02:58 2022
Return-Path: <kreachna@client.kreachna.net>
X-Original-To: kreachna@server.kreachna.net
Delivered-To: kreachna@server.kreachna.net
Received: from client.kreachna.net (client.kreachna.net [192.168.1.30])
        by server.kreachna.net (Postfix) with ESMTPS id 02877870153
        for <kreachna@server.kreachna.net>; Fri,  2 Dec 2022 11:02:57 +0000 (UTC)
Received: by client.kreachna.net (Postfix, from userid 1001)
        id 452A384DD49; Fri,  2 Dec 2022 10:55:31 +0000 (UTC)
Date: Fri, 02 Dec 2022 10:55:31 +0000
To: kreachna@server.kreachna.net
Subject: test1
User-Agent: s-nail v14.9.22
Message-Id: <20221202105531.452A384DD49@client.kreachna.net>
From: kreachna@client.kreachna.net
```

Конфигурация Postfix для домена

```
[root@server.kreachna.net ~]# postqueue -p
-Queue ID- --Size-- ----Arrival Time---- -Sender/Recipient-----
B21E7870154    2508 Fri Dec  2 11:09:15  MAILER-DAEMON
      (connect to client.kreachna.net[192.168.1.30]:25: No route to host)
              kreachna@client.kreachna.net

[kreachna@client.kreachna.net ~]$ echo . | mail -s testing kreachna@kreachna.net
[kreachna@client.kreachna.net ~]$
```

```
From kreachna@client.kreachna.net  Fri Dec  2 11:37:18 2022
Return-Path: <kreachna@client.kreachna.net>
X-Original-To: kreachna@kreachna.net
Delivered-To: kreachna@kreachna.net
Received: from client.kreachna.net (client.kreachna.net [192.168.1.30])
        by server.kreachna.net (Postfix) with ESMTPS id 16BC3870156
        for <kreachna@kreachna.net>; Fri,  2 Dec 2022 11:37:18 +0000 (UTC)
Received: by client.kreachna.net (Postfix, from userid 1001)
        id D380F84DD54; Fri,  2 Dec 2022 11:37:17 +0000 (UTC)
Date: Fri, 02 Dec 2022 11:37:17 +0000
To: kreachna@kreachna.net
Subject: testing
User-Agent: s-nail v14.9.22
Message-Id: <20221202113717.D380F84DD54@client.kreachna.net>
From: kreachna@client.kreachna.net
```

Внесение изменений в настройки внутреннего окружения виртуальной машины

```
[root@server.kreachna.net ~]# cd /vagrant/provision/server/
[root@server.kreachna.net server]# cd /vagrant/provision/server/dns/
[root@server.kreachna.net named]# cp -R /var/named/* /vagrant/provision/server/dns/var/named/
cp: overwrite '/vagrant/provision/server/dns/var/named/data/named.ca'
cp: overwrite '/vagrant/provision/server/dns/var/named/dynamic/managed-keys.bind'
cp: overwrite '/vagrant/provision/server/dns/var/named/dynamic/managed-keys.bind'
cp: overwrite '/vagrant/provision/server/dns/var/named/master/fz/kreachna.net'
cp: overwrite '/vagrant/provision/server/dns/var/named/master/rz/kreachna.net'
cp: overwrite '/vagrant/provision/server/dns/var/named/named.ca'
cp: overwrite '/vagrant/provision/server/dns/var/named/named.empty'
cp: overwrite '/vagrant/provision/server/dns/var/named/named.local'
cp: overwrite '/vagrant/provision/server/dns/var/named/named.loopback'
```

```
Vagrantfile
106     preserve_order: true,
107     run: "always",
108     path: "provision/client/01-routing.sh"
109
110     client.vm.provision "client mail",
111       type: "shell",
112       preserve_order: true,
113       path: "provision/client/mail.sh"
114
```

```
root@server:/vagrant/pr... x  mc [root@server.kreach... x  kreachna@server:~ x  root@se
echo "Provisioning script $0"
echo "Install needed packages"
dnf -y install postfix
dnf -y install s-nail
echo "Copy configuration files"
#cp -R /vagrant/provision/server/mail/etc/* /etc
echo "Configure firewall"
firewall-cmd --add-service=smtp --permanent
firewall-cmd --reload
restorecon -vR /etc
echo "Start postfix service"
systemctl enable postfix
systemctl start postfix
echo "Configure postfix"
postconf -e 'mydomain = user.net'
postconf -e 'myorigin = $mydomain'
postconf -e 'inet_protocols = ipv4'
postconf -e 'inet_interfaces = all'
postconf -e 'mydestination = $myhostname, localhost.$mydomain, localhost, $mydomain'
postconf -e 'mynetworks = 127.0.0.0/8, 192.168.0.0/16'
postfix set-permissions
restorecon -vR /etc
systemctl stop postfix
systemctl start postfix
```

Вывод

Получила приобретение практических навыков по установке и конфигурированию SMTP- сервера.

Спасибо за внимание!