Лабораторная работа

Номер 10

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Цель работы

Приобретение практических навыков по конфигурированию SMTP-сервера в части настройки аутентификации

Логи почты /var/log/maillog

```
[dmmosharov@server.dmmosharov.net ~]$ sudo -i
[sudo] password for dmmosharov:
[root@server.dmmosharov.net ~]# tail -f /var/log/maillog
Jan 29 21:42:42 server postfix/smtpd[169917]: connect from unknown[192.
168.1.30]
Jan 29 21:42:42 server postfix/smtpd[169917]: 5004423B7826: client=unkn
own[192.168.1.30]
Jan 29 21:42:42 server postfix/cleanup[169921]: 5004423B7826: message-i
d=<cb4f731041e294a48f2b1583545b5680e5468409.camel@dmmosharov.net>
Jan 29 21:42:42 server postfix/qmgr[168172]: 5004423B7826: from=<dmmosh
arov@dmmosharov.net>, size=544, nrcpt=1 (queue active)
Jan 29 21:42:42 server postfix/smtpd[169917]: disconnect from unknown[1
92.168.1.30] ehlo=1 mail=1 rcpt=1 data=1 quit=1 commands=5
Jan 29 21:42:42 server postfix/local[169922]: 5004423B7826: to=<dmmosha
rov@dmmosharov.net>, relay=local, delay=0.01, delays=0/0/0/0, dsn=2.0.0
, status=sent (delivered to maildir)
Jan 29 21:42:42 server postfix/qmgr[168172]: 5004423B7826: removed
Jan 29 21:47:26 server dovecot[168365]: pop3-login: Login: user=<dmmosh
arov>, method=PLAIN, rip=192.168.1.1, lip=192.168.1.1, mpid=170651, sec
ured, session=<Xv1uzY1J0K3AqAEB>
Jan 29 21:48:44 server dovecot[168365]: pop3(dmmosharov)<170651><Xv1uzY
1J0K3AqAEB>: Disconnected: Logged out top=0/0, retr=1/688, del=1/2, siz
e=1341
Jan 30 21:03:01 server dovecot[168365]: imap(169552): Warning: Time jum
ped forwards 82333.861165 seconds
```

Рис. 1: Логи почты /var/log/maillog

/etc/dovecot/dovecot.conf

Рис. 2: /etc/dovecot/dovecot.conf

/etc/dovecot/dovecot.conf

```
  GNU nano 8.1            /etc/dovecot/dovecot.conf
## Dovecot configuration file

# If you're in a hurry, see http://wiki2.dovecot.org/QuickConfiguration

# "doveconf -n" command gives a clean output of the changed settings. >
# instead of copy&pasting files when posting to the Dovecot mailing li>

# '#' character and everything after it is treated as comments. Extra >
# and tabs are ignored. If you want to use either of these explicitly >
# value inside quotes, eg.: key = "# char and trailing whitespace   "

# Most (but not all) settings can be overridden by different protocols>
# source/destination IPs by placing the settings inside sections, for >
# protocol imap { }, local 127.0.0.1 { }, remote 10.0.0.0/8 { }

# Default values are shown for each setting, it's not required to unco>
# those. These are exceptions to this though: No sections (e.g. namesp>
# or plugin settings are added by default, they're listed only as exam>
# Paths are also just examples with the real defaults being based on c>
# options. The paths listed here are for configure --prefix=/usr
# --sysconfdir=/etc --localstatedir=/var

# Protocols we want to be serving.
protocols = imap pop3 lmtp
```

Рис. 3: /etc/dovecot/dovecot.conf

/etc/dovecot/conf.d/10-master.conf

```
[root@server.dmmosharov.net ~]# nano /etc/dovecot/conf.d/10-master.conf
```

Рис. 4: /etc/dovecot/conf.d/10-master.conf

service lmtp

```
  GNU nano 8.1      /etc/dovecot/conf.d/10-master.conf
    #port = 995
    #ssl = yes
  }
}

service submission-login {
  inet_listener submission {
    #port = 587
  }
  inet_listener submissions {
    #port = 465
  }
}

service lmtp {
  unix_listener /var/spool/postfix/private/dovecot-lmtp {
        group = postfix
        user = postfix
        mode = 0600
}


  # Create inet listener only if you can't use the above UNIX socket
  #inet_listener lmtp {
    # Avoid making LMTP visible for the entire internet
    #address =
    #port =
```

Рис. 5: service lmtp

Настройка сокета

```
[root@server.dmmosharov.net ~]# postconf -e 'mailbox_transport = lmtp:u
nix:private/dovecot-lmtp'
[root@server.dmmosharov.net ~]# nano /etc/dovecot/conf.d/10-auth.conf
```

Рис. 6: Настройка сокета

auth_username_format

```
# that "#" and "/" characters are translated to "@".
#auth_username_translation =

# Username formatting before it's looked up from databases. You can use
# the standard variables here, eg. %Lu would lowercase the username, %>
# drop away the domain if it was given, or "%n-AT-%d" would change the>
# "-AT-". This translation is done after auth_username_translation cha>
auth_username_format = %Ln

# If you want to allow master users to log in by specifying the master
```

Рис. 7: auth_username_format

Перезапуск postfix и dovecot

```
[root@server.dmmosharov.net ~]# systemctl restart postfix
[root@server.dmmosharov.net ~]# systemctl restart dovecot
[root@server.dmmosharov.net ~]#
```

Рис. 8: Перезапуск postfix и dovecot

Отправка письма

Рис. 9: Отправка письма

Логи почты

```
Jan 30 21:12:59 server postfix/smtpd[175561]: warning: run-time library
 vs. compile-time header version mismatch: OpenSSL 3.5.0 may not be com
patible with OpenSSL 3.2.0
Jan 30 21:12:59 server postfix/smtpd[175561]: connect from unknown[192.
168.1.30]
Jan 30 21:12:59 server postfix/smtpd[175561]: 8E00623BDEF6: client=unkn
own[192.168.1.30]
Jan 30 21:12:59 server postfix/cleanup[175565]: 8E00623BDEF6: message-i
d=<20260130211259.7DF71906B5@client.dmmosharov.net>
Jan 30 21:12:59 server postfix/smtpd[175561]: disconnect from unknown[1
92.168.1.30] ehlo=2 starttls=1 mail=1 rcpt=1 data=1 quit=1 commands=7
Jan 30 21:12:59 server postfix/qmgr[175439]: 8E00623BDEF6: from=<root@c
lient.dmmosharov.net>, size=551, nrcpt=1 (queue active)
Jan 30 21:12:59 server postfix/local[175566]: 8E00623BDEF6: passing <dm
mosharov@dmmosharov.net> to transport=lmtp
Jan 30 21:12:59 server dovecot[175465]: lmtp(175568): Connect from loca
l
Jan 30 21:12:59 server dovecot[175465]: lmtp(dmmosharov)<175568><HjZUJN
sefWnQrQIAfCZNow>: msgid=<20260130211259.7DF71906B5@client.dmmosharov.n
et>: saved mail to INBOX
Jan 30 21:12:59 server dovecot[175465]: lmtp(175568): Disconnect from l
ocal: Logged out (state=READY)
Jan 30 21:12:59 server postfix/lmtp[175567]: 8E00623BDEF6: to=<dmmoshar
ov@dmmosharov.net>, relay=server.dmmosharov.net[private/dovecot-lmtp],
delay=0.05, delays=0.01/0.01/0.02/0.02, dsn=2.0.0, status=sent (250 2.0
.0 <dmmosharov@dmmosharov.net> HjZUJNsefWnQrQIAfCZNow Saved)
Jan 30 21:12:59 server postfix/qmgr[175439]: 8E00623BDEF6: removed
```

Рис. 10: Логи почты

Почтовый ящик mail

```
[dmmosharov@server.dmmosharov.net ~]$ MAIL=~/Maildir/ mail
s-nail version v14.9.24.  Type `?' for help
/home/dmmosharov/Maildir: 2 messages 1 new
    1 Denis Mosharov        2026-01-29 21:41   18/656   "test          "
▸N  2 Super User            2026-01-30 21:12   21/833   "LMTP test     "
&
```

Рис. 11: Почтовый ящик mail

/etc/dovecot/conf.d/10-master.conf

```
[root@server.dmmosharov.net ~]# nano /etc/dovecot/conf.d/10-master.conf
```

Рис. 12: /etc/dovecot/conf.d/10-master.conf

Структура service auth

```
service auth {
  unix_listener /var/spool/postfix/private/auth {
  group = postfix
  user = postfix
  mode = 0660
  }
  # auth_socket_path points to this userdb socket by default. It's typ>
  # used by dovecot-lda, doveadm, possibly imap process, etc. Users th>
  # full permissions to this socket are able to get a list of all user>
  # get the results of everyone's userdb lookups.
  #
  # The default 0666 mode allows anyone to connect to the socket, but >
  # userdb lookups will succeed only if the userdb returns an "uid" fi>
  # matches the caller process's UID. Also if caller's uid or gid matc>
  # socket's uid or gid the lookup succeeds. Anything else causes a fa>
  #
  # To give the caller full permissions to lookup all users, set the m>
  # something else than 0666 and Dovecot lets the kernel enforce the
  # permissions (e.g. 0777 allows everyone full permissions).
  unix_listener auth-userdb {
    mode = 0666
    user = dovecot
    #group =
  }
```

Рис. 13: Структура service auth

Настройка почты в postfix

```
[root@server.dmmosharov.net ~]# postconf -e 'smtpd_sasl_type = dovecot'
[root@server.dmmosharov.net ~]# postconf -e 'smtpd_sasl_path = private/
auth'
[root@server.dmmosharov.net ~]# postconf -e 'smtpd_recipient_restrictio
ns = reject_unknown_recipient_domain, permit_mynetworks, reject_non_fqd
n_recipient, reject_unauth_destination, reject_unverified_recipient, pe
rmit'
[root@server.dmmosharov.net ~]# postconf -e 'mynetworks = 127.0.0.0/8'
[root@server.dmmosharov.net ~]#
```

Рис. 14: Настройка почты в postfix

/etc/postfix/master.cf

```
[root@server.dmmosharov.net ~]# postconf -e 'mynetworks = 127.0
[root@server.dmmosharov.net ~]# nano /etc/postfix/master.cf
```

Рис. 15: /etc/postfix/master.cf

Включение авторизации

```
  GNU nano 8.1              /etc/postfix/master.cf              Modified
#
# Postfix master process configuration file.  For details on the format
# of the file, see the master(5) manual page (command: "man 5 master" o
# on-line: http://www.postfix.org/master.5.html).
#
# Do not forget to execute "postfix reload" after editing this file.
#
# ==========================================================================
# service type  private unpriv  chroot  wakeup  maxproc command + args
#               (yes)   (yes)   (no)    (never) (100)
# ==========================================================================
smtp      inet  n       -       -       -       -       smtpd
  -o smtpd_sasl_auth_enable=yes
  -o smtpd_recipient_restrictions=reject_non_fqdn_recipient,reject_unk
#smtp      inet  n       -       n       -       1       postscreen
#smtpd     pass  -       -       n       -       -       smtpd
#dnsblog   unix  -       -       n       -       0       dnsblog
#tlsproxy  unix  -       -       n       -       0       tlsproxy
# Choose one: enable submission for loopback clients only, or for any s
#127.0.0.1:submission inet n -   n       -       -       smtpd
#submission inet n       -       n       -       -       smtpd
#  -o syslog_name=postfix/submission
#  -o smtpd_tls_security_level=encrypt
#  -o smtpd_sasl_auth_enable=yes
#  -o smtpd_tls_auth_only=yes
#  -o local_header_rewrite_clients=static:all
#  -o smtpd_reject_unlisted_recipient=no
#     Instead of specifying complex smtpd_<xxx>_restrictions here,
#     specify "smtpd_<xxx>_restrictions=$mua_<xxx>_restrictions"
#     here, and specify mua_<xxx>_restrictions in main.cf (where
#     "<xxx>" is "client", "helo", "sender", "relay", or "recipient").
#  -o smtpd_client_restrictions=
```

Рис. 16: Включение авторизации

Перезапуск postfix и dovecot

```
[root@server.dmmosharov.net ~]# systemctl restart postfix
[root@server.dmmosharov.net ~]# systemctl restart dovecot
[root@server.dmmosharov.net ~]#
```

Рис. 17: Перезапуск postfix и dovecot

Установка Telnet

```
root@client:~# dnf -y install telnet
Extra Packages for Enterprise Linux 10 - x86_64                  11 kB/s |  41 kB     00:03
Rocky Linux 10 - BaseOS                                         837  B/s | 4.3 kB     00:05
Rocky Linux 10 - BaseOS                                         1.1 MB/s | 8.7 MB     00:08
Rocky Linux 10 - AppStream                                       11 kB/s | 4.3 kB     00:00
Rocky Linux 10 - CRB                                            5.1 kB/s | 4.3 kB     00:00
Rocky Linux 10 - CRB                                            515 kB/s | 498 kB     00:00
Rocky Linux 10 - Extras                                         576  B/s | 3.1 kB     00:05
Rocky Linux 10 - Extras                                         587  B/s | 5.9 kB     00:10
Dependencies resolved.
================================================================================================
 Package          Architecture        Version                    Repository              Size
================================================================================================
Installing:
 telnet           x86_64              1:0.17-94.el10             appstream               62 k

Transaction Summary
================================================================================================
Install  1 Package

Total download size: 62 k
Installed size: 109 k
Downloading Packages:
telnet-0.17-94.el10.x86_64.rpm                                  2.4 MB/s |  62 kB     00:00
------------------------------------------------------------------------------------------------
Total                                                           180 kB/s |  62 kB     00:00
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing        :                                                                        1/1
  Installing       : telnet-1:0.17-94.el10.x86_64                                           1/1
  Running scriptlet: telnet-1:0.17-94.el10.x86_64                                           1/1

Installed:
  telnet-1:0.17-94.el10.x86_64

Complete!
root@client:~#
```

Рис. 18: Установка Telnet

Авторизация по telnet

```
root@client:~# printf 'dmmosharov\x00dmmosharov\x00123456' | base64
ZG1tb3NoYXJvdgBkbW1vc2hhcm92ADEyMzQ1Ng==
root@client:~# telnet server.dmmosharov.net 25
Trying 192.168.1.1...
Connected to server.dmmosharov.net.
Escape character is '^]'.
220 server.dmmosharov.net ESMTP Postfix
EHLO test
250-server.dmmosharov.net
250-PIPELINING
250-SIZE 10240000
250-VRFY
250-ETRN
250-STARTTLS
250-AUTH PLAIN
250-ENHANCEDSTATUSCODES
250-8BITMIME
250-DSN
250-SMTPUTF8
250 CHUNKING
AUTH PLAIN ZG1tb3NoYXJvdgBkbW1vc2hhcm92ADEyMzQ1Ng==
235 2.7.0 Authentication successful
^Cquit
quit
Connection closed by foreign host.
root@client:~#
```

Рис. 19: Авторизация по telnet

Настройка postfix

```
[root@server.dmmosharov.net ~]# cp /etc/pki/dovecot/certs/dovecot.pem /
etc/pki/tls/certs
[root@server.dmmosharov.net ~]# cp /etc/pki/dovecot/private/dovecot.pem
 /etc/pki/tls/private
[root@server.dmmosharov.net ~]# postconf -e 'smtpd_tls_cert_file=/etc/p
ki/tls/certs/dovecot.pem'
[root@server.dmmosharov.net ~]# postconf -e 'smtpd_tls_key_file=/etc/pk
i/tls/private/dovecot.pem'
[root@server.dmmosharov.net ~]# postconf -e 'smtpd_tls_session_cache_da
tabase = btree:/var/lib/postfix/smtpd_scache'
[root@server.dmmosharov.net ~]# postconf -e 'smtpd_tls_security_level =
 may'
[root@server.dmmosharov.net ~]# postconf -e 'smtp_tls_security_level =
may'
[root@server.dmmosharov.net ~]#
```

Рис. 20: Настройка postfix

/etc/postfix/master.cf

```
#               (yes)   (yes)   (no)    (never) (100)
# ==========================================================================
smtp      inet  n       -       n       -       -       smtpd
submission inet n       -       n       -       -       smtpd
  -o smtpd_tls_security_level=encrypt
  -o smtpd_sasl_auth_enable=yes
  -o smtpd_recipient_restrictions=reject_non_fqdn_recipient,reject_unk
#smtp      inet  n       -       n       -       1       postscreen
#smtpd     pass  -       -       n       -       -       smtpd
#dnsblog   unix  -       -       n       -       0       dnsblog
#tlsproxy  unix  -       -       n       -       0       tlsproxy
# Choose one: enable submission for loopback clients only, or for any
#127.0.0.1:submission inet n -   n       -       -       smtpd
```

Рис. 21: /etc/postfix/master.cf

Настройка firewall

```
tion-lv civilization-v cockpit collectd condor-collector cratedb ctdb d
ds dds-multicast dds-unicast dhcp dhcpv6 dhcpv6-client distcc dns dns-o
ver-quic dns-over-tls docker-registry docker-swarm dropbox-lansync elas
ticsearch etcd-client etcd-server factorio finger foreman foreman-proxy
 freeipa-4 freeipa-ldap freeipa-ldaps freeipa-replication freeipa-trust
 ftp galera ganglia-client ganglia-master git gpsd grafana gre high-ava
ilability http http3 https ident imap imaps iperf2 iperf3 ipfs ipp ipp-
client ipsec irc ircs iscsi-target isns jenkins kadmin kdeconnect kerbe
ros kibana klogin kpasswd kprop kshell kube-api kube-apiserver kube-con
trol-plane kube-control-plane-secure kube-controller-manager kube-contr
oller-manager-secure kube-nodeport-services kube-scheduler kube-schedul
er-secure kube-worker kubelet kubelet-readonly kubelet-worker ldap ldap
s libvirt libvirt-tls lightning-network llmnr llmnr-client llmnr-tcp ll
mnr-udp manageiq-ajax matrix mdns memcache minecraft mindlna mndp mongod
b mosh mountd mpd mqtt mqtt-tls ms-wbt mssql murmur mysql nbd nebula ne
ed-for-speed-most-wanted netbios-ns netdata-dashboard nfs nfs3 nmea-018
3 nrpe ntp nut opentelemetry openvpn ovirt-imageio ovirt-storageconsole
 ovirt-vmconsole plex pmcd pmproxy pmwebapi pmwebapis pop3 pop3s postgr
esql privoxy prometheus prometheus-node-exporter proxy-dhcp ps2link ps3
netsrv ptp pulseaudio puppetmaster quassel radius radsec rdp redis redi
s-sentinel rootd rpc-bind rquotad rsh rsyncd rtsp salt-master samba sam
ba-client samba-dc sane settlers-history-collection sip sips slimevr sl
p smtp smtp-submission smtps snmp snmptls snmptls-trap snmptrap spidero
ak-lansync spotify-sync squid ssdp ssh ssh-custom statsrv steam-lan-tra
nsfer steam-streaming stellaris stronghold-crusader stun stuns submissi
on supertuxkart svdrp svn syncthing syncthing-gui syncthing-relay syner
gy syscomlan syslog syslog-tls telnet tentacle terraria tftp tile38 tin
c tor-socks transmission-client turn turns upnp-client vdsm vnc-server
vrrp warpinator wbem-http wbem-https wireguard ws-discovery ws-discover
y-client ws-discovery-host ws-discovery-tcp ws-discovery-udp wsdd wsdd-
http wsman wsmans xdmcp xmpp-bosh xmpp-client xmpp-local xmpp-server za
bbix-agent zabbix-java-gateway zabbix-server zabbix-trapper zabbix-web-
service zero-k zerotier
[root@server.dmmosharov.net ~]# firewall-cmd --add-service=smtp-submiss
ion
success
[root@server.dmmosharov.net ~]# firewall-cmd --add-service=smtp-submiss
ion --permanent
success
[root@server.dmmosharov.net ~]# firewall-cmd --reload
success
[root@server.dmmosharov.net ~]# systemctl restart postfix
[root@server.dmmosharov.net ~]#
```

Рис. 22: Настройка firewall

openssl

```
[root@client]~ # openssl s_client -starttls smtp -crlf -connect server.dmnoshazov.net:587
Connecting to 192.168.1.1
CONNECTED(00000003)
depth=0 OU=IMAP server, CN=imap.example.com, emailAddress=postmaster@example.com
verify error:num=18:self-signed certificate
verify return:1
depth=0 OU=IMAP server, CN=imap.example.com, emailAddress=postmaster@example.com
verify return:1
---
Certificate chain
 0 s:OU=IMAP server, CN=imap.example.com, emailAddress=postmaster@example.com
   i:OU=IMAP server, CN=imap.example.com, emailAddress=postmaster@example.com
   a:PKEY: rsaEncryption, 3072 (bit); sigalg: RSA-SHA256
   v:NotBefore: Jan 29 21:30:11 2026 GMT; NotAfter: Jan 29 21:30:11 2027 GMT
---
Server certificate
-----BEGIN CERTIFICATE-----
MIIFEjCCAfqgAwIBAgIUTxsLULAUDH6Z1bRuuLTLrXJd3ODwDQYJKoZIhvcNAQEL
BQAwNDELMBIGA1UECwwLSUFlBUCBzZXJ2ZXIxOTAXBgNVBAMMEGltYXAuZXhhbXBs
Z55jb20wJTAjBgkqhkiG9w0BCQEWFmBvcm1hYXN0ZXJAZXhhbXBsZ55jb20wHhcN
MjYwMTI5MjEzMDExMjcwMTI5MjEzMDEzMjBYMRQwEjAOVQQLDAtiTUFQIUHCl
cnZlcjEZMBcGA1UEAwwQaWltcCSleGFtcGxlLmNvbTElMCMGCSqGSIb3DQEJARYW
cGNzdGlhcnRlckB1eGFtcGxlLmNvbTCCAaIwDQYJKoZIhvcNAQEBBQADggGPADCC
AYoCggGBALZZQFqEZBXL4SKLQMtbQdoSSeISOOC/pWE5jf38kP2xBZ1N9rd81Sg0D
dU7ø+CcGNQEvgeR+BI8BHQMB9bOOojSejRAjZgRU4qiQyFlZyKo7LhU/FOptVrOl
kc1PvTvSSZK/73lc72UKCzIKFs+FVUuARMLHJuLRU1BuZyQpk+yG8ybFU2Zhu7EE
4iCPtCvEKTFE+5bp+3H7tpjnoD3AocD3IB2EKOXKAqULHB2AloVdUkDZUKTNZc3O
jsTEo3dG1+DOXOnYZTba8AgzVoE2VhB4YBgKQeFhJgsoBxQBD+9xtL7KGRMCujzg
MoYeFM9GiUEVXOCDzj/1lNkSveoTbgzRu+3lBgJuyzOnGTQAkwcTGOkYt3zwBFBC
xIRM3HDEZBOC5+Hs7kSzEiVl+Scs+MklRvE9iu7gIrNgbJCSJ2SIGtHnNVSFk8uT
NBJFToJRh3ykglA/lfXzqN4lVH/0IFGoCDhOLSrzi+wC7pCjSARDelnaZA+wKyoX
BNkJKvebJkIDAGAB6qGwMjAABBgUghkgBhvhCAQEEBAMCBkAwHQYDVR0OBBYEFLN1
++3CXuoWlHM4ah5OFGNuvfVqMA0OCSqOSIb3DQEBCwUAA4IBgQBTKE75H84wMgLB
8N6HisZ94k j0fwljsOO5wm4XJybkJnJIL6UhqQqm63asSCQjhnXKxE7arZlUqxxJ
aOJoDOOZzYxvo8+hmRs2HjqBkKLoSioG4CYqbykj9CZ5/7XAlAngbk+QOvZLZm
qkdmCkuV8AvGTZkzTgK+Z1zhK75P1BWyz7lmqqR4kBmHzhqZtaREAPIfl7RYYVYS
MymqsGQ2EBeGBCfOMCGHEFy7MCh5qDLRQDaQatguhn77OahtWEaFOelaOraWRHf7
2bYZS8Zxcc3F+VFfEXnCJmRyJzGaFTQZUuVJbRMMvlPXXMfAkgeiFt+JLJMYzGs
TqnyfKGkPOUeqfvtnu3O3APP4yjc7vpaBTpem+xf67kF7NRbSKqvFUDMqDipYLC
Q7uZhyPnuUEXqp/wxKjHuZCuukjvcBtKPT/y+BhBBPkjqluoZAYuLnCZk+vchvJp
3JQL39Aqx4/kKcYeF9yHVXAtvnOuFt6vVXVOIOB0kOuLimHlzg=
-----END CERTIFICATE-----
subject=OU=IMAP server, CN=imap.example.com, emailAddress=postmaster@example.com
issuer=OU=IMAP server, CN=imap.example.com, emailAddress=postmaster@example.com
---
No client certificate CA names sent
```

Рис. 23: openssl

Авторизация

```
---
read R BLOCK
EHLO test
250-server.dmmosharov.net
250-PIPELINING
250-SIZE 10240000
250-VRFY
250-ETRN
250-AUTH PLAIN
250-ENHANCEDSTATUSCODES
250-8BITMIME
250-DSN
250-SMTPUTF8
250 CHUNKING
AUTH PLAIN ZG1tb3NoYXJvdgBkbW1vc2hhcm92ADEyMzQ1Ng==
235 2.7.0 Authentication successful
```

Рис. 24: Авторизация

Настройка smtp в клиенте

Рис. 25: Настройка smtp в клиенте

Отправка письма

Рис. 26: Отправка письма

Письмо в ящике

Рис. 27: Письмо в ящике

Логи почты

```
Jan 30 21:42:37 server postfix/smtpd[179873]: connect from unknown[192.
168.1.30]
Jan 30 21:42:37 server postfix/tlsmgr[179310]: warning: btree:/var/lib/
postfix/smtpd_scache is unavailable. unsupported dictionary type: btree
Jan 30 21:42:40 server postfix/smtpd[179873]: E3EEB24C8CCF: client=unkn
own[192.168.1.30], sasl_method=PLAIN, sasl_username=dmmosharov
Jan 30 21:42:40 server postfix/cleanup[179882]: E3EEB24C8CCF: message-i
d=<a88e4740dd7fd529b7f9712bf9e7261a78cb0278.camel@dmmosharov.net>
Jan 30 21:42:40 server postfix/qmgr[179294]: E3EEB24C8CCF: from=<dmmosh
arov@dmmosharov.net>, size=550, nrcpt=1 (queue active)
Jan 30 21:42:40 server postfix/smtpd[179873]: disconnect from unknown[1
92.168.1.30] ehlo=2 starttls=1 auth=1 mail=1 rcpt=1 data=1 quit=1 comma
nds=8
Jan 30 21:42:40 server postfix/local[179883]: E3EEB24C8CCF: passing <dm
mosharov@dmmosharov.net> to transport=lmtp
Jan 30 21:42:40 server dovecot[177045]: lmtp(179885): Connect from loca
l
Jan 30 21:42:40 server dovecot[177045]: lmtp(dmmosharov)<179885><YnBSOt
AlfWmtvgIAfCZNow>: msgid=<a88e4740dd7fd529b7f9712bf9e7261a78cb0278.came
l@dmmosharov.net>: saved mail to INBOX
Jan 30 21:42:40 server dovecot[177045]: lmtp(179885): Disconnect from l
ocal: Logged out (state=READY)
Jan 30 21:42:40 server postfix/lmtp[179884]: E3EEB24C8CCF: to=<dmmoshar
ov@dmmosharov.net>, relay=server.dmmosharov.net[private/dovecot-lmtp],
delay=0.06, delays=0.01/0.01/0.03/0.01, dsn=2.0.0, status=sent (250 2.0
.0 <dmmosharov@dmmosharov.net> YnBSOtAlfWmtvgIAfCZNow Saved)
Jan 30 21:42:40 server postfix/qmgr[179294]: E3EEB24C8CCF: removed
```

Рис. 28: Логи почты

vagrant

```
[root@server.dmmosharov.net ~]# cd /vagrant/provision/server
[root@server.dmmosharov.net server]# cp -R /etc/dovecot/dovecot.conf /v
agrant/provision/server/mail/etc/dovecot/
cp: overwrite '/vagrant/provision/server/mail/etc/dovecot/dovecot.conf'
? y
[root@server.dmmosharov.net server]# cp -R /etc/dovecot/conf.d/10-maste
r.conf /vagrant/provision/server/mail/etc/dovecot/conf.d/
[root@server.dmmosharov.net server]# cp -R /etc/dovecot/conf.d/10-auth.
conf /vagrant/provision/server/mail/etc/dovecot/conf.d/
cp: overwrite '/vagrant/provision/server/mail/etc/dovecot/conf.d/10-aut
h.conf'? y
[root@server.dmmosharov.net server]# mkdir -p /vagrant/provision/server
/mail/etc/postfix/
[root@server.dmmosharov.net server]# cp -R /etc/postfix/master.cf /vagr
ant/provision/server/mail/etc/postfix/
[root@server.dmmosharov.net server]#
```

Рис. 29: vagrant

mail.sh для сервера

```
  GNU nano 8.1        /vagrant/provision/server/mail.sh
#!/bin/bash
echo "Provisioning script $0"
echo "Install needed packages"
dnf -y install postfix
dnf -y install s-nail
dnf -y install dovecot
dnf -y install telnet
echo "Copy configuration files"
cp -R /vagrant/provision/server/mail/etc/* /etc
chown -R root:root /etc/postfix
restorecon -vR /etc
echo "Configure firewall"
firewall-cmd --add-service=smtp --permanent
firewall-cmd --add-service pop3 --permanent
firewall-cmd --add-service pop3s --permanent
firewall-cmd --add-service imap --permanent
firewall-cmd --add-service imaps --permanent
firewall-cmd --add-service smtp-submission --permanent
firewall-cmd --reload
echo "Start postfix service"
systemctl enable postfix
systemctl start postfix
echo "Configure postfix"
postconf -e 'mydomain = dmmosharov.net'
postconf -e 'myorigin = $mydomain'
postconf -e 'inet_protocols = ipv4'
postconf -e 'inet_interfaces = all'
postconf -e 'mydestination = $myhostname, localhost.$mydomain, localho
$mydomain'↪
#postconf -e 'mynetworks = 127.0.0.0/8, 192.168.0.0/16'
echo "Configure postfix for dovecot"
postconf -e 'home_mailbox = Maildir/'
echo "Configure postfix for auth"
postconf -e 'smtpd_sasl_type = dovecot'
postconf -e 'smtpd_sasl_path = private/auth'
postconf -e 'smtpd_recipient_restrictions = reject_unknown_recipient_d
permit_mynetworks, reject_non_fqdn_recipient, reject_unauth_destinatio
reject_unverified_recipient, permit'
↪
                        [ Wrote 57 lines ]
^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify
```

Рис. 30: mail.sh для сервера

mail.sh для клиента

root@client:~ — sudo -i

```
GNU nano 8.1                    /vagrant/provision/client/mail.s
#!/bin/bash
echo "Provisioning script $0"
echo "Install needed packages"
dnf -y install postfix
dnf -y install s-nail
echo "Configure postfix"
postconf -e 'inet_protocols = ipv4'
echo "Start postfix service"
systemctl enable postfix
systemctl start postfix
dnf -y install evolution
dnf -y install telnet
```

Рис. 31: mail.sh для клиента

Выводы

В результате выполнения лабораторной работы были получены навыки продвинутой настройки smtp и авторизации