

# Администрирование сетевых подсистем

## Лабораторная работа №10

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## Информация

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

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

Рис. 1: Правка конфига dovecot

```
[root@server ~]# postconf -e 'mailbox_transport = lmtp:unix:private/dovecot-lmtp'
```

Рис. 2: Переопределение postfix

# Выполнение лабораторной работы

```
service auth {
    # auth_socket_path points to this userdb socket by default. It's
    typically
    # used by dovecot-lda, doveadm, possibly imap process, etc. Users that
    have
    # full permissions to this socket are able to get a list of all
    usernames and
    # get the results of everyone's userdb lookups.
    #
    # The default 0666 mode allows anyone to connect to the socket, but the
    # userdb lookups will succeed only if the userdb returns an "uid" field
    that
    # matches the caller process's UID. Also if caller's uid or gid matches
    the
    # socket's uid or gid the lookup succeeds. Anything else causes a
    failure.
    #
    # To give the caller full permissions to lookup all users, set the mode
    to
    # something else than 0666 and Dovecot lets the kernel enforce the
    # permissions (e.g. 0777 allows everyone full permissions).
    unix_listener /var/spool/postfix/private/auth {
        group = postfix
        user = postfix
        mode = 0660
    }
    unix_listener auth-userdb {
        mode = 0600
        user = dovecot
    }

    # Postfix smtp-auth
    #unix_listener /var/spool/postfix/private/auth {
    # mode = 0666
    #}
```

Рис. 3: Определение службы аутентификации

```
[root@server ~]# postconf -e 'smtpd_sasl_type = dovecot'  
[root@server ~]# postconf -e 'smtpd_sasl_path = private/auth'
```

Рис. 4: Задание типа аутентификации postfix



```
[root@client ~]# printf 'username\x00user\1234' | base64
dXNlcm5hbWUAdXNlcmlM0
[root@client ~]# telnet server.user.net 25
telnet: server.user.net: Name or service not known
server.user.net: Unknown host
[root@client ~]#
```

Рис. 5: Строка аутентификации и попытка отправки письма

```
[root@server ~]# cp /etc/pki/dovecot/certs/dovecot.pem /etc/pki/tls/certs  
[root@server ~]# cp /etc/pki/dovecot/private/dovecot.pem /etc/pki/tls/private  
[root@server ~]#
```

Рис. 6: Копирование файлов сертификата

```
[root@server ~]# postconf -e 'smtpd_tls_cert_file=/etc/pki/tls/certs/dovecot.p  
em'  
[root@server ~]# postconf -e 'smtpd_tls_key_file=/etc/pki/tls/private/dovecot.  
pem'  
[root@server ~]# postconf -e 'smtpd_tls_session_cache_database = btree:/var/li  
b/postfix/smtpd_scache'  
[root@server ~]# postconf -e 'smtpd_tls_security_level = may'  
[root@server ~]# postconf -e 'smtp_tls_security_level = may'
```

Рис. 7: Конфигурирование postfix

```
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_unknown_
h_recipient_domain,permit_sasl_authenticated,reject
```

Рис. 8: Запуск smtp сервера на 587-м порте

```
[root@server ~]# firewall-cmd --get-services
RH-Satellite-6 RH-Satellite-6-capsule afp amanda-client amanda-k5-client amqp
amqps apcupsd audit ausweisapp2 bacula bacula-client bareos-director bareos-fi
ledaemon bareos-storage bb bgp bitcoin bitcoin-rpc bitcoin-testnet bitcoin-tes
tnet-rpc bittorrent-lsd ceph ceph-exporter ceph-mon cfengine checkmk-agent coc
kpit collectd condor-collector cratedb ctdb dds dds-multicast dds-unicast dhcp
dhcpv6 dhcpv6-client distcc dns dns-over-tls docker-registry docker-swarm dro
pbox-lansync elasticsearch etcd-client etcd-server finger foreman foreman-prox
y freeipa-4 freeipa-ldap freeipa-ldaps freeipa-replication freeipa-trust ftp g
alera ganglia-client ganglia-master git gpsd grafana gre high-availability htt
p http3 https ident imap imaps ipfs ipp ipp-client ipsec irc ircs iscsi-target
isns jenkins kadmin kdeconnect kerberos kibana klogin kpasswd kprop kshell ku
be-api kube-apiserver kube-control-plane kube-control-plane-secure kube-contro
ller-manager kube-controller-manager-secure kube-nodeport-services kube-schedu
ler kube-scheduler-secure kube-worker kubelet kubelet-readonly kubelet-worker
ldap ldaps libvirt libvirt-tls lightning-network llmnr llmnr-client llmnr-tcp
llmnr-udp managesieve matrix mdns memcache minidlna mongodb mosh moundd mqtt m
qtt-tls ms-wbt mssql murmur mysql nbd nebula netbios-ns netdata-dashboard nfs
nfs3 nmea-0183 nrpe ntp nut openvpn ovirt-imageio ovirt-storageconsole ovirt-v
mconsole plex pmcd pmproxy pmwebapi pmwebapis pop3 pop3s postgresql privoxy pr
ometheus prometheus-node-exporter proxy-dhcp ps2link ps3netsrv ptp pulseaudio
puppetmaster quassel radius rdp redis redis-sentinel rpc-bind rquotad rsh rsyn
cd rtsp salt-master samba samba-client samba-dc sane sip sips slp smtp smtp-su
bmission smtps snmp snmpv1 snmpv2 snmpv3 snmptrap spideroak-lansync spotify-sy
nc squid ssdp ssh ssh-custom steam-streaming svdrp svn syncthing syncthing-gui
syncthing-relay synergy syslog syslog-tls telnet tentacle tftp tile38 tinc to
r-socks transmission-client upnp-client vdsml vnc-server warpinator wbem-http w
bem-https wireguard ws-discovery ws-discovery-client ws-discovery-tcp ws-disco
very-udp wsman wsmans xdmcp xmpp-bosh xmpp-client xmpp-local xmpp-server zabbi
x-agent zabbix-server zerotier
[root@server ~]# firewall-cmd --add-service=smtp-submission
success
[root@server ~]# firewall-cmd --add-service=smtp-submission --permanent
success
[root@server ~]# firewall-cmd --reload
success
[root@server ~]#
```

Рис. 9: Настройка межсетевого экрана

# Выполнение лабораторной работы

```
#!/bin/bash

echo "Provisioning script $0"

echo "Install needed packages"
dnf -y install postfix
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 = 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'
```

Рис. 10: mail.sh на сервере

```
#!/bin/bash

echo "Provisioning script $0"

echo "Install needed packages"
dnf -y install postfix
dnf -y install s-nail
dnf -y install evolution
dnf -y install telnet

echo "Configure postfix"
postconf -e "inet_protocols = ipv4"

echo "Start postfix service"
systemctl enable postfix
systemctl start postfix
```

Рис. 11: mail.sh на клиенте

Во время выполнения этой лабораторной работы я приобрёл практические навыки по конфигурированию SMTP-сервера в части настройки аутентификации.