

Администрирование сетевых подсистем

Расширенные настройки SMTP-сервера

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Цели и задачи работы

Приобретение практических навыков по конфигурированию SMTP-сервера с поддержкой аутентификации, LMTP и шифрования TLS.

Выполнение лабораторной работы

Настройка LMTP в Dovecot

```
1 ## Dovecot configuration file
2
3 # If you're in a hurry, see http://wiki2.dovecot.org/QuickConfiguration
4
5 # "doveconf -n" command gives a clean output of the changed settings. Use it
6 # instead of copy&pasting files when posting to the Dovecot mailing list.
7
8 # '#' character and everything after it is treated as comments. Extra spaces
9 # and tabs are ignored. If you want to use either of these explicitly, put the
10 # value inside quotes, eg.: key = "# char and trailing whitespace "
11
12 # Most (but not all) settings can be overridden by different protocols and/or
13 # source/destination IPs by placing the settings inside sections, for example:
14 # protocol imap { }, local 127.0.0.1 { }, remote 10.0.0.0/8 { }
15
16 # Default values are shown for each setting, it's not required to uncomment
17 # those. These are exceptions to this though: No sections (e.g. namespace {})
18 # or plugin settings are added by default, they're listed only as examples.
19 # Paths are also just examples with the real defaults being based on configure
20 # options. The paths listed here are for configure --prefix=/usr
21 # --sysconfdir=/etc --localstatedir=/var
22
23 # Protocols we want to be serving.
24
25 protocols = imap pop3 lmtp
26
27 # A comma separated list of IPs or hosts where to listen in for connections.
28 # "*" listens in all IPv4 interfaces, ":::" listens in all IPv6 interfaces.
29 # If you want to specify non-default ports or anything more complex,
30 # edit conf.d/master.conf.
31 #listen = *, :::
```

```
Oct 15 09:33:17 server postfix/smtpd[14512]: connect from client.ahmedfarg.net[192.168.1.30]
Oct 15 09:33:17 server postfix/smtpd[14512]: E2891412E535: client=client.ahmedfarg.net[192.168.1.30]
Oct 15 09:33:17 server postfix/cleanup[14516]: E2891412E535: message-id=<20251015093317.CE7CE412ED28@client.ahmedfarg.net>
Oct 15 09:33:17 server postfix/smtpd[14512]: disconnect from client.ahmedfarg.net[192.168.1.30] ehlo=2 starttls=1 mail=1 rcpt=1 data=1 quit=1 commands=7
Oct 15 09:33:17 server postfix/qmgr[14234]: E2891412E535: from=<ahmedfarg@client.ahmedfarg.net>, size=554, nrcpt=1 (queue active)
Oct 15 09:33:17 server postfix/local[14517]: E2891412E535: passing <ahmedfarg@ahmedfarg.net> to transport=lmtp
Oct 15 09:33:17 server dovecot[14271]: lmtp(14519): Connect from local
Oct 15 09:33:17 server dovecot[14271]: lmtp(ahmedfarg)<14519><mVuAOF1q72i30AAANsLdkw>: msgid=<20251015093317.CE7CE412ED28@client.ahmedfarg.net>: saved mail to INBOX
Oct 15 09:33:17 server postfix/lmtp[14518]: E2891412E535: to=<ahmedfarg@ahmedfarg.net>, relay=server.ahmedfarg.net [private/dovecot-lmtp], delay=0.04, delays=0/0/0.02/0.01, dsn=2.0.0, status=sent (250 2.0.0 <ahmedfarg@ahmedfarg.net> mVuAOF1q72i30AAANsLdkw Saved)
Oct 15 09:33:17 server dovecot[14271]: lmtp(14519): Disconnect from local: Logged out (state=READY)
Oct 15 09:33:17 server postfix/qmgr[14234]: E2891412E535: removed
```

Рис. 2: Результат проверки LMTP

Настройка SMTP-аутентификации

Open ▼ +

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

```
72 }
73
74 service pop3 {
75     # Max. number of POP3 processes (connections)
76     #process_limit = 1024
77 }
78
79 service submission {
80     # Max. number of SMTP Submission processes (connections)
81     #process_limit = 1024
82 }
83
84 service auth {
85
86     unix_listener /var/spool/postfix/private/auth {
87         group = postfix
88         user = postfix
89         mode = 0660
90     }
91
92     unix_listener auth-userdb {
93         mode = 0600
94         user = dovecot
95     }
96 }
```

```
[root@client.ahmedfarg.net ~]#  
[root@client.ahmedfarg.net ~]# printf 'ahmedfarg\x00ahmedfarg\x00123456' | base64  
4  
YWhtZWVmYXJnAGFobWVkJmFyZWxMjM0NTY=  
[root@client.ahmedfarg.net ~]#  
[root@client.ahmedfarg.net ~]#  
[root@client.ahmedfarg.net ~]# telnet server.ahmedfarg.net 25  
Trying 192.168.1.1...  
Connected to server.ahmedfarg.net.  
Escape character is '^['.  
220 server.ahmedfarg.net ESMTP Postfix  
AUTH PLAIN YWhtZWVmYXJnAGFobWVkJmFyZWxMjM0NTY=  
235 2.7.0 Authentication successful
```

Рис. 4: Успешная SMTP-аутентификация


```
[root@server.ahmedfarg.net ~]#  
[root@server.ahmedfarg.net ~]# cp /etc/pki/dovecot/certs/dovecot.pem /etc/pki/tls/certs/  
[root@server.ahmedfarg.net ~]# cp /etc/pki/dovecot/private/dovecot.pem /etc/pki/tls/private/  
[root@server.ahmedfarg.net ~]# postconf -e 'smtpd_tls_cert_file = /etc/pki/tls/certs/dovecot.pem'  
[root@server.ahmedfarg.net ~]# postconf -e 'smtpd_tls_key_file = /etc/pki/tls/private/dovecot.pem'  
[root@server.ahmedfarg.net ~]# postconf -e 'smtpd_tls_session_cache_database = btree:/var/lib/postfix/smtpd_scache'  
.  
[root@server.ahmedfarg.net ~]# postconf -e 'smtpd_tls_security_level = may'  
[root@server.ahmedfarg.net ~]# postconf -e 'smtp_tls_security_level = may'  
[root@server.ahmedfarg.net ~]# █
```

Рис. 5: TLS-конфигурация

Проверка SMTP over TLS

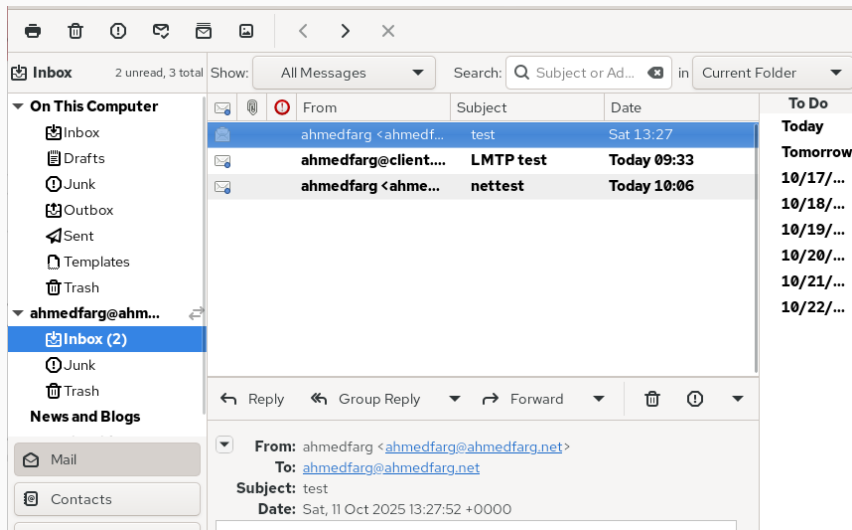


Рис. 6: Проверка TLS-соединения

Выводы по проделанной работе

В ходе лабораторной работы выполнена настройка SMTP-сервера с аутентификацией и TLS. Интеграция Postfix и Dovecot обеспечила надёжную доставку и безопасность обмена почтой. Конфигурация автоматизирована средствами **Vagrant**, что упростило развёртывание.