

# Администрирование сетевых подсистем

## Настройка POP3/IMAP-сервера (Dovecot)

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## Цели и задачи работы

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Приобретение практических навыков по установке и конфигурированию почтового сервера **Dovecot** для работы с протоколами **POP3** и **IMAP**.

## Выполнение лабораторной работы

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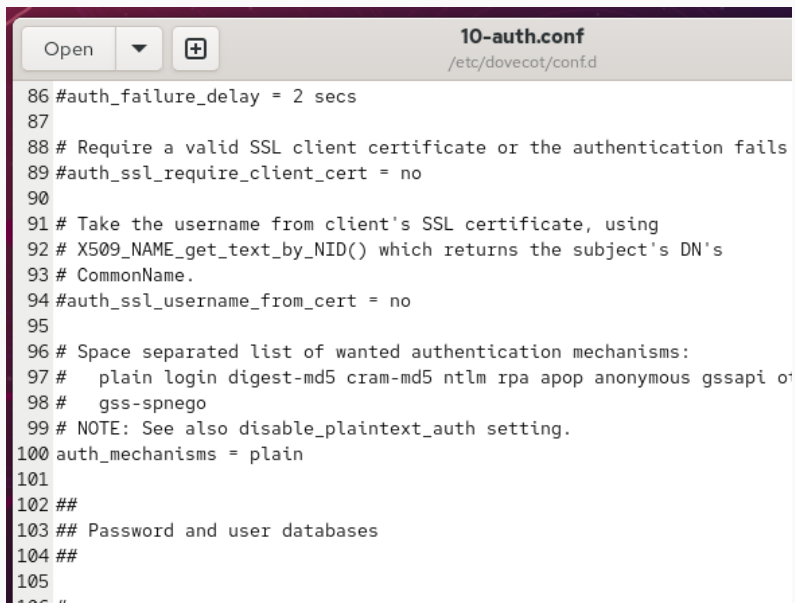
```

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
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 = *, ::
32
33 # Base directory where to store runtime data.
34 #base_dir = /var/run/dovecot/
35
36 # Name of this instance. In multi-instance setup doveadm and other commands
37 # can use -i <instance_name> to select which instance is used (an alternative
38 # to --config-path). The instance name is also added to Dovecot processes

```

Saving file "/etc/dovecot/dovecot.conf"...

Plain Text ▼ Tab Width: 8 ▼ Ln 25, Col 22 INS



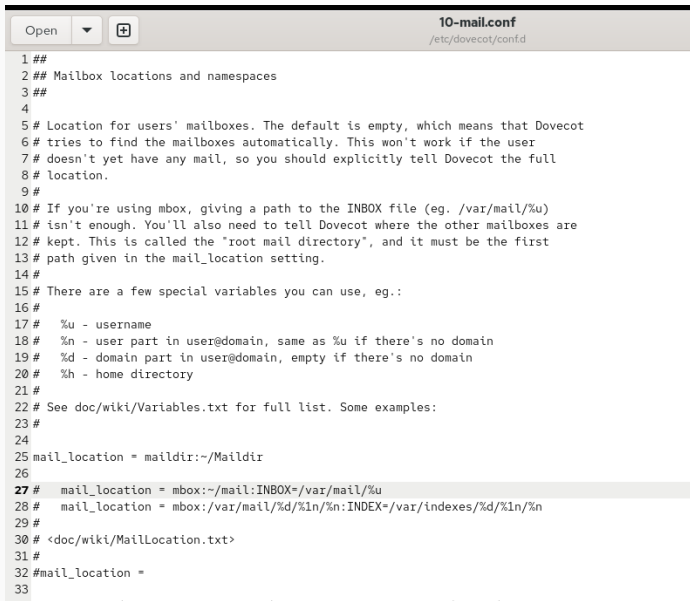
The image shows a text editor window with a title bar that includes the filename "10-auth.conf" and the path "/etc/dovecot/conf.d". The editor has a menu bar with "Open", a dropdown arrow, and a "+" icon. The main content area displays the configuration file's text, which includes several commented-out settings and one active setting. The line numbers 86 through 106 are visible on the left side of the editor.

```
86 #auth_failure_delay = 2 secs
87
88 # Require a valid SSL client certificate or the authentication fails
89 #auth_ssl_require_client_cert = no
90
91 # Take the username from client's SSL certificate, using
92 # X509_NAME_get_text_by_NID() which returns the subject's DN's
93 # CommonName.
94 #auth_ssl_username_from_cert = no
95
96 # Space separated list of wanted authentication mechanisms:
97 #   plain login digest-md5 cram-md5 ntlm rpa apop anonymous gssapi or
98 #   gss-spnego
99 # NOTE: See also disable_plaintext_auth setting.
100 auth_mechanisms = plain
101
102 ##
103 ## Password and user databases
104 ##
105
106 "
```

## Настройка аутентификации

```
10
11 passdb {
12     driver = pam
13     # [session=yes] [setcred=yes] [failure_show_msg=yes] [max_requests=<n>]
14     # [cache_key=<key>] [<service name>]
15     #args = dovecot
16 }
17
18 ##
19 ## User databases
20 ##
21
22 # System users (NSS, /etc/passwd, or similar). In many systems nowadays this
23 # uses Name Service Switch, which is configured in /etc/nsswitch.conf.
24 userdb {
25     # <doc/wiki/AuthDatabase.Passwd.txt>
26     driver = passwd
27     # [blocking=no]
28     #args =
29
30     # Override fields from passwd
31     #override_fields = home=/home/virtual/%u
32 }
33
```

# Конфигурация системных баз пользователей



```
1 ##
2 ## Mailbox locations and namespaces
3 ##
4
5 # Location for users' mailboxes. The default is empty, which means that Dovecot
6 # tries to find the mailboxes automatically. This won't work if the user
7 # doesn't yet have any mail, so you should explicitly tell Dovecot the full
8 # location.
9 #
10 # If you're using mbox, giving a path to the INBOX file (eg. /var/mail/%u)
11 # isn't enough. You'll also need to tell Dovecot where the other mailboxes are
12 # kept. This is called the "root mail directory", and it must be the first
13 # path given in the mail_location setting.
14 #
15 # There are a few special variables you can use, eg.:
16 #
17 # %u - username
18 # %n - user part in user@domain, same as %u if there's no domain
19 # %d - domain part in user@domain, empty if there's no domain
20 # %h - home directory
21 #
22 # See doc/wiki/Variables.txt for full list. Some examples:
23 #
24
25 mail_location = maildir:~/Maildir
26
27 mail_location = mbox:~/mail:INBOX=/var/mail/%u
28 mail_location = mbox:/var/mail/%d/%1n/%n:INDEX=/var/indexes/%d/%1n/%n
29 #
30 <doc/wiki/MailLocation.txt>
31 #
32 #mail_location =
33
```



```
[root@server.ahmedfarg.net ~]# firewall-cmd --add-service=pop3 --permanent
success
[root@server.ahmedfarg.net ~]# firewall-cmd --add-service=pop3s --permanent
success
[root@server.ahmedfarg.net ~]# firewall-cmd --add-service=imap --permanent
success
[root@server.ahmedfarg.net ~]# firewall-cmd --add-service=imaps --permanent
success
[root@server.ahmedfarg.net ~]# firewall-cmd --reload
success
[root@server.ahmedfarg.net ~]# firewall-cmd --list-services
cockpit dhcp dhcpv6-client dns http https imap imaps pop3 pop3s smtp ssh ssh-custom
[root@server.ahmedfarg.net ~]# restorecon -vR /etc
Relabeled /etc/NetworkManager/system-connections/eth1.nmconnection from unconfined_u:object_r:user_tmp_t:s0 to unconfined_u:object_r:NetworkManager_etc_rw_t:s0
[root@server.ahmedfarg.net ~]# systemctl restart postfix.service
[root@server.ahmedfarg.net ~]# systemctl enable dovecot
Created symlink '/etc/systemd/system/multi-user.target.wants/dovecot.service' -> '/usr/lib/systemd/system/dovecot.service'.
[root@server.ahmedfarg.net ~]# systemctl start dovecot
[root@server.ahmedfarg.net ~]#
```

Рис. 5: Путь к почтовым ящикам Maildir

```
[ahmedfarg@server.ahmedfarg.net ~]$ sudo tail -f /var/log/maillog
Oct 11 13:20:06 server postfix/postfix-script[12404]: stopping the Postfix mail system
Oct 11 13:20:06 server postfix/master[1476]: terminating on signal 15
Oct 11 13:20:06 server postfix/postfix-script[12482]: starting the Postfix mail system
Oct 11 13:20:06 server postfix/master[12484]: daemon started -- version 3.8.5, configuration /etc/postfix
Oct 11 13:20:21 server dovecot[12675]: master: Dovecot v2.3.21 (47349e2482) starting up for imap, pop3
█
```

Рис. 6: Добавление служб POP3 и IMAP

Oct 11 1:24 PM

en

Cancel

Back

Identity

Next

Welcome

Restore from Backup

Identity

Receiving Email

Sending Email

Account Summary

Done

Please enter your name and email address below. The "optional" fields below do not need to be filled in, unless you wish to include this information in email you send.

**Required Information**

Full Name:

Email Address:

**Optional Information**

Reply-To:

Organization:

Signature: 

None ▼

Add New Signature...

Aliases: 

Add

Edit

Remove

The screenshot shows the 'Receiving Email' configuration window in the Evolution mail client. On the left is a sidebar with a list of steps: 'Welcome', 'Restore from Backup', 'Identity', 'Receiving Email' (which is highlighted), 'Receiving Options', 'Sending Email', 'Account Summary', and 'Done'. At the top of the main window are three buttons: 'Cancel', 'Back', and 'Next'. The main area is titled 'Receiving Email' and contains the following settings:

- Server Type:** A dropdown menu set to 'IMAP'.
- Description:** Text indicating 'For reading and storing mail on IMAP servers.'
- Configuration:**
  - Server:** A text field containing 'mail.ahmedfarg.net'.
  - Port:** A dropdown menu set to '143'.
  - Username:** A text field containing 'ahmedfarg'.
- Security:**
  - Encryption method:** A dropdown menu set to 'STARTTLS after connecting'.
- Authentication:**
  - A button labeled 'Check for Supported Types'.
  - A dropdown menu set to 'Password'.

Рис. 8: Конфигурация клиента Evolution

Cancel Back **Sending Email** Next Finish

Welcome  
Restore from Backup  
Identity  
Receiving Email  
Receiving Options  
**Sending Email**  
Account Summary  
Done

Server Type: SMTP

Description: For delivering mail by connecting to a remote mailhub using SMTP.

**Configuration**

Server: mail.ahmedfarg.net Port: 25

☐ Server requires authentication

**Security**

Encryption method: No encryption

**Authentication**

Type: Check for Supported Types PLAIN

Username: ahmedfarg

**Send Options**

Рис. 9: Отправка и получение тестового письма

```
pass 123456
+OK Logged in.
list
+OK 2 messages:
1 666
2 667
.
retr 1
+OK 666 octets
Return-Path: <ahmedfarg@ahmedfarg.net>
X-Original-To: ahmedfarg@ahmedfarg.net
Delivered-To: ahmedfarg@ahmedfarg.net
Received: from client.ahmedfarg.net (client.ahmedfarg.net [192.168.1.30])
    by server.ahmedfarg.net (Postfix) with ESMTP id DEB57412E535
    for <ahmedfarg@ahmedfarg.net>; Sat, 11 Oct 2025 13:27:52 +0000 (UTC)
Message-ID: <43bbf76fca8c206e341bf83192d7e2df9953469d.camel@ahmedfarg.net>
Subject: test
From: ahmedfarg <ahmedfarg@ahmedfarg.net>
To: ahmedfarg@ahmedfarg.net
Date: Sat, 11 Oct 2025 13:27:52 +0000
Content-Type: text/plain
Content-Transfer-Encoding: 7bit
User-Agent: Evolution 3.52.4 (3.52.4-2.el10_0)
MIME-Version: 1.0

hello
.
dele 2
+OK Marked to be deleted
```

## Выводы по проделанной работе

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В ходе работы был установлен и настроен почтовый сервер **Dovecot** с поддержкой протоколов **IMAP** и **POP3**.

Для обработки исходящей корреспонденции использован **Postfix**.

Работа сервиса успешно проверена через клиент **Evolution** и консольные команды **telnet** и **doveadm**.

Конфигурация сохранена в систему **Vagrant**, что позволило автоматизировать установку и развёртывание сервера.