

Администрирование системных подсистем

Настройка POP3/IMAP сервера Dovecot + Postfix

Сейдалиев Тагиетдин Ровшенович

30 ноября 2025

Российский университет дружбы народов, Москва, Россия

Цель работы

Основная цель

Настроить и проверить работу почтовых сервисов POP3 и IMAP.

Установка компонентов

Установка необходимых пакетов

Были установлены пакеты Dovecot и Telnet.

```
[root@server ~]# yum install dovecot telnet
Running transaction
Preparing : 1/1
Installing : telnet-1:0.17-94.el10.x86_64 1/2
              Running scriptlet: dovecot-1:2.3.21-16.el10.x86_64 2/2
              Installing : dovecot-1:2.3.21-16.el10.x86_64 2/2
              Running scriptlet: dovecot-1:2.3.21-16.el10.x86_64 2/2

Installed:
  dovecot-1:2.3.21-16.el10.x86_64           telnet-1:0.17-94.el10.x86_64

Complete!
[root@server ~]#
```

Рис. 1: Установка пакетов

Настройка Dovecot

Активированы протоколы IMAP и POP3.

```
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.
```

Выбран метод аутентификации plain.

```
96 # Space separated list of wanted authentication mechanisms:  
97 #   plain login digest-md5 cram-md5 ntlm rpa apop anonymous gssapi otp  
98 #   gss-spnego  
99 # NOTE: See also disable_plaintext_auth setting.  
100  
101 auth_mechanisms = plain  
102
```

Рис. 3: auth_mechanisms

Источники учётных данных

Использованы PAM и passwd как источники данных о пользователях.

```
6 # PAM authentication. Preferred nowadays by most systems.  
7 # PAM is typically used with either userdb passwd or userdb static.  
8 # REMEMBER: You'll need /etc/pam.d/dovecot file created for PAM  
9 # authentication to actually work. <doc/wiki/PasswordDatabase.PAM.txt>  
10  
11 passdb {  
12   driver = pam  
13 }  
14  
15 userdb {  
16   driver = passwd  
17 }  
18 |
```

Рис. 4: auth-system.conf.ext

Формат почтовых ящиков

Почтовые данные хранятся в формате Maildir.

```
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 # mail_location = maildir:~/Maildir
25 # mail_location = mbox:~/mail:INBOX=/var/mail/%u
26 # mail_location = mbox:/var/mail/%d/%n:%n:INDEX=/var/indexes/%d/%n/%n
27 #
28 # mail_location = mbox:~/mail:INBOX=/var/mail/%u:INDEX=/var/indexes/%d/%n/%n
```

Настройка Postfix и firewall

Настройка доставки почты

Postfix отправляет почту в каталог Maildir.

```
[root@server.trseidaliev.net server]# firewall-cmd --add-service=pop3 --permanent
success
[root@server.trseidaliev.net server]# firewall-cmd --add-service=pop3s --permanent
success
[root@server.trseidaliev.net server]# firewall-cmd --add-service=imap --permanent
success
[root@server.trseidaliev.net server]# firewall-cmd --add-service=imaps --permanent
success
[root@server.trseidaliev.net server]# firewall-cmd --reload
success
[root@server.trseidaliev.net server]# firewall-cmd --list-services
cockpit dhcp dhcpcv6-client dns http https imap imaps pop3 pop3s smtp ssh ssh-custom
[root@server.trseidaliev.net server]# restorecon -vR /etc
[root@server.trseidaliev.net server]# systemctl restart postfix
[root@server.trseidaliev.net server]# systemctl enable dovecot
Created symlink '/etc/systemd/system/multi-user.target.wants/dovecot.service' → '/usr/lib/systemd/system/dovecot.service'.
[root@server.trseidaliev.net server]# systemctl start dovecot
[root@server.trseidaliev.net server]#
```

Рис. 6: firewalld

Проверка работы системы

Настройка Evolution

Почтовый клиент настроен на работу с сервером.

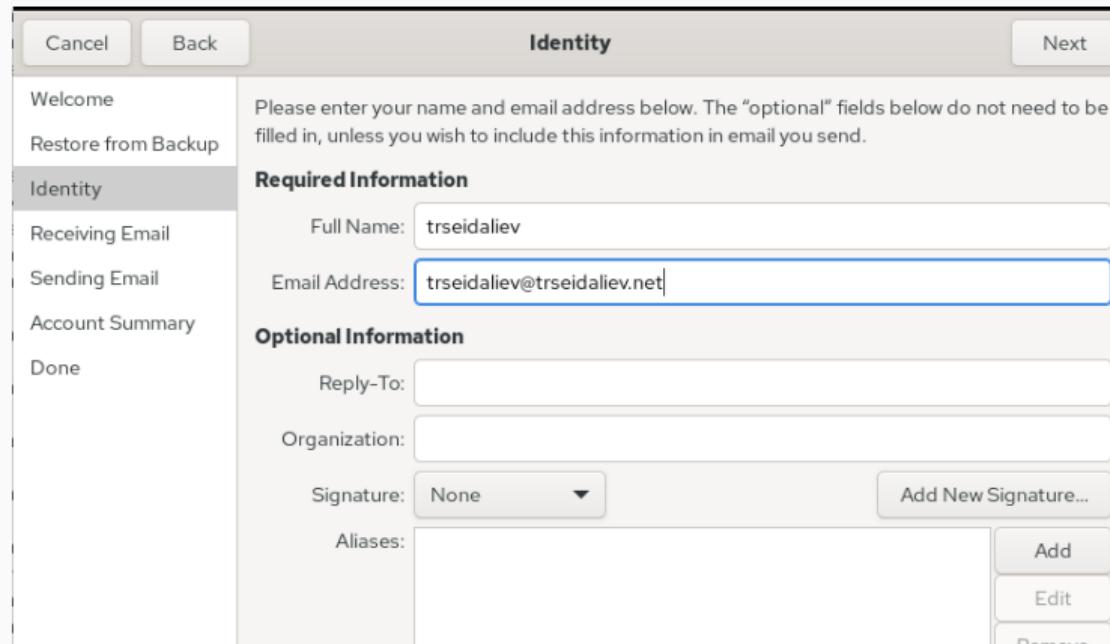


Рис. 7: Настройка Evolution

Настройка IMAP

IMAP-сервер настроен корректно.

Server Type: IMAP

Description: For reading and storing mail on IMAP servers.

Configuration

Server: mail.trseidaliev.net Port: 143

Username: trseidaliev

Security

Encryption method: STARTTLS after connecting

Authentication

Check for Supported Types Password

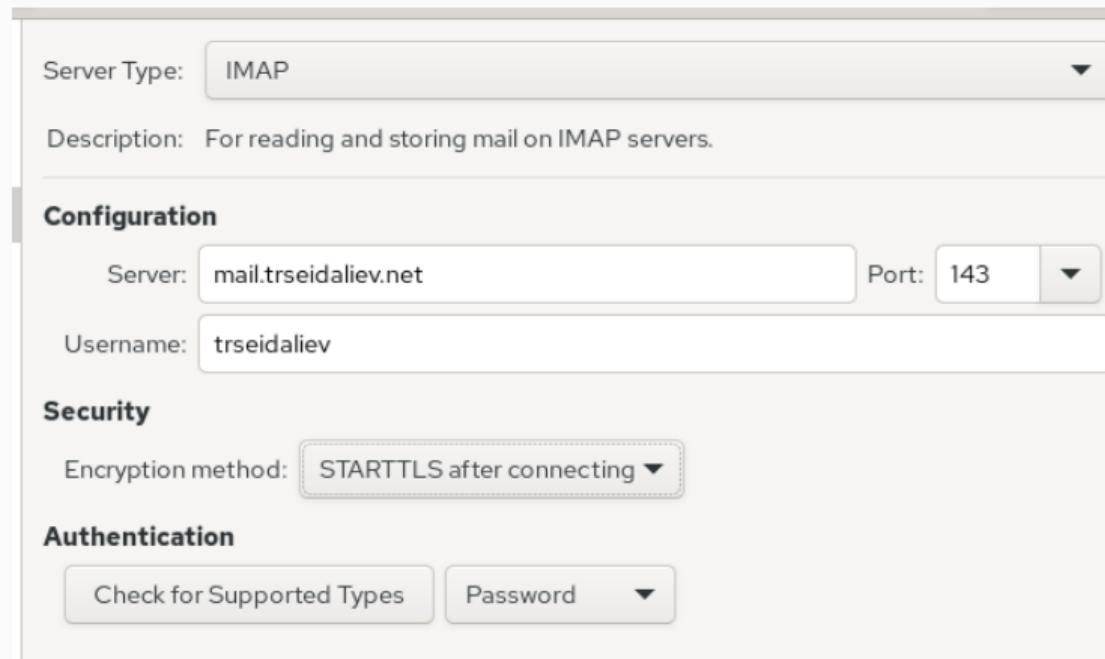


Рис. 8: IMAP настройки

Настройка SMTP

SMTP-сервер принимает исходящую почту.

Server Type: **SMTP** ▾

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

Configuration

Server: **mail.trseidaliev.net** Port: **25** ▾

Server requires authentication

Security

Encryption method: **No encryption** ▾

Authentication

Type: **Check for Supported Types** **PLAIN** ▾

Username: **trseidaliev**

Send Options

Re-encode message before send

Проверка получения почты

Письма успешно приняты в Evolution.

The screenshot shows the Evolution email client interface. The title bar reads "Inbox (2 un...)" and the main window title is "Inbox (2 un...)" with a subtitle "2 unread, 2 total". The left sidebar lists folders: "Inbox" (selected), "Templates", "Trash", "News and Blogs", and an account entry "trseidaliev@trseida...". Below these are "Inbox (2)" (selected) and "Junk". The main pane displays two messages in the inbox:

From	Subject	Date
trseidalie...	test1	Today 07:46
trseidalie...	test2	Today 07:46

At the bottom, there are reply and group reply buttons, and a status bar showing "From: trseidaliev <trseidaliev@trseidaliev.net>".

Наблюдение и диагностика

Логи подтверждают доставку писем.

```
-----  
Nov 30 10:46:52 server postfix/smtpd[20682]: connect from client.trseidaliev.net[192.168.1.30]  
Nov 30 10:46:52 server postfix/smtpd[20682]: DE92C233483C: client=client.trseidaliev.net[192.168.1.30]  
Nov 30 10:46:52 server postfix/cleanup[20686]: DE92C233483C: message-id=<f538c2fe5053458dde4ba51e5087b12bbefc6f3e.came  
l@trseidaliev.net>  
Nov 30 10:46:52 server postfix/smtpd[20682]: disconnect from client.trseidaliev.net[192.168.1.30] ehlo=1 mail=1 rcpt=1  
data=1 quit=1 commands=5  
Nov 30 10:46:52 server postfix/qmgr[19771]: DE92C233483C: from=<trseidaliev@trseidaliev.net>, size=570, nrcpt=1 (queue  
active)  
Nov 30 10:46:52 server postfix/local[20687]: DE92C233483C: to=<trseidaliev@trseidaliev.net>, relay=local, delay=0, del  
ays=0/0/0/0, dsn=2.0.0, status=sent (delivered to maildir)  
Nov 30 10:46:52 server postfix/qmgr[19771]: DE92C233483C: removed
```

Рис. 11: maillog

Просмотр почты через терминал

Письма отображаются в Maildir.

```
[trseidaliev@server.trseidaliev.net ~]$  
[trseidaliev@server.trseidaliev.net ~]$ MAIL=~/Maildir/ mail  
s-nail version v14.9.24. Type `?' for help  
/home/trseidaliev/Maildir: 2 messages 2 unread  
►U 1 trseidaliev      2025-11-30 10:46  18/685  "test1  
U 2 trseidaliev      2025-11-30 10:46  18/685  "test2  
& q  
Held 2 messages in /home/trseidaliev/Maildir  
[trseidaliev@server.trseidaliev.net ~]$ █
```

Рис. 12: mail

Проверка POP3 через Telnet

POP3 работает корректно.

```
+OK Logged in.  
list  
+OK 2 messages:  
1 701  
2 701  
.  
retr 1  
+OK 701 octets  
Return-Path: <trseidaliev@trseidaliev.net>  
X-Original-To: trseidaliev@trseidaliev.net  
Delivered-To: trseidaliev@trseidaliev.net  
Received: from client.trseidaliev.net (client.trseidaliev.net [192.168.1.30])  
        by server.trseidaliev.net (Postfix) with ESMTP id BAD9E233483C  
        for <trseidaliev@trseidaliev.net>; Sun, 30 Nov 2025 10:46:29 +0300 (MSK)  
Message-ID: <6efc923532399f1bfeab50768d57d6f94dd7e21a.camel@trseidaliev.net>  
Subject: test1  
From: trseidaliev <trseidaliev@trseidaliev.net>  
To: trseidaliev@trseidaliev.net  
Date: Sun, 30 Nov 2025 07:46:28 +0000  
Content-Type: text/plain  
Content-Transfer-Encoding: 7bit  
User-Agent: Evolution 3.52.4 (3.52.4-2.el10_1)  
MIME-Version: 1.0  
  
test1  
.  
dele 2  
+OK Marked to be deleted.
```

Итоги работы

Основные результаты

- Настроены и запущены почтовые сервисы Dovecot (IMAP/POP3) и Postfix (SMTP).
- Выполнена проверка доставки, получения и чтения писем различными способами.
- Настроен почтовый клиент Evolution для работы с сервером.
- Проверена работа POP3 через Telnet и просмотр Maildir через терминал.
- Логи Postfix подтвердили корректность маршрутизации и доставки сообщений.
- Обновлены provisioning-скрипты для автоматизации развёртывания почтовой системы.