Лабораторная работа

Номер 15

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Содержание

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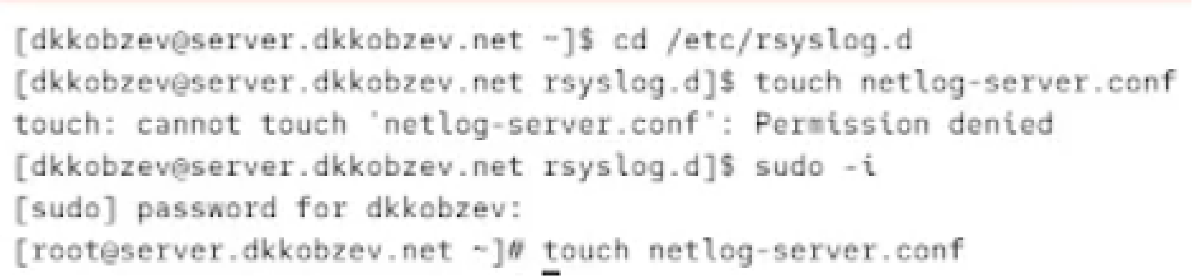
Список таблиц

1 Цель работы

Целью данной работы является получение навыков по работе с журналами системных событий.

2 Выполнение лабораторной работы

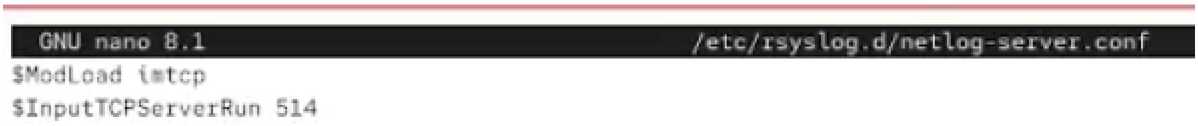
На сервере создаем файл конфигурации сетевого хранения журналов (Рис. 12.1).



```
[dkkobzev@server.dkkobzev.net ~]$ cd /etc/rsyslog.d
[dkkobzev@server.dkkobzev.net rsyslog.d]$ touch netlog-server.conf
touch: cannot touch 'netlog-server.conf': Permission denied
[dkkobzev@server.dkkobzev.net rsyslog.d]$ sudo -i
[sudo] password for dkkobzev:
[root@server.dkkobzev.net ~]# touch netlog-server.conf
```

Рис. 2.1: Создание файла конфигурации сетевого хранения журналов

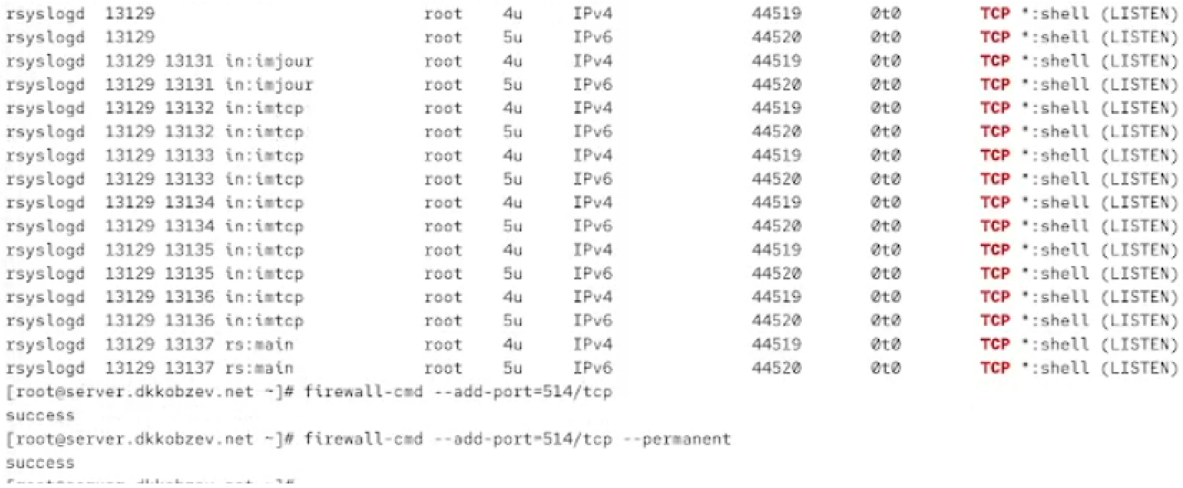
В файле конфигурации /etc/rsyslog.d/netlog-server.conf включаем приём записей журнала по TCP-порту 514 (Рис. 12.2).



```
  GNU nano 8.1                          /etc/rsyslog.d/netlog-server.conf
$ModLoad imtcp
$InputTCPServerRun 514
```

Рис. 2.2: Файл конфигурации /etc/rsyslog.d/netlog-server.conf

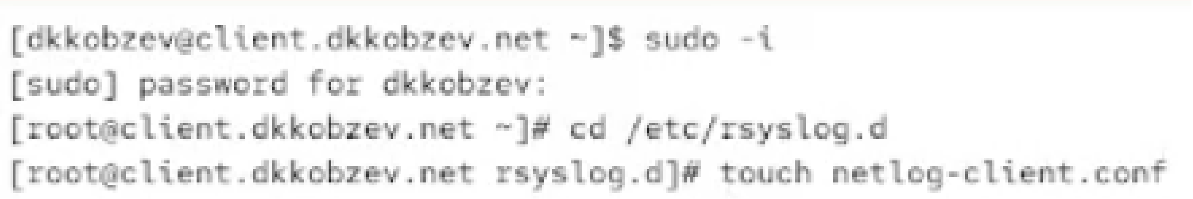
Перезапускаем службу rsyslog и смотрим, какие порты, связанные с rsyslog, прослушиваются. На сервере настраиваем межсетевой экран для приёма сообщений по TCP-порту 514 (Рис. 12.3).



```
rsyslogd  13129                        root    4u     IPv4             44519      0t0        TCP *:shell (LISTEN)
rsyslogd  13129                        root    5u     IPv6             44520      0t0        TCP *:shell (LISTEN)
rsyslogd  13129 13131 in:imjour        root    4u     IPv4             44519      0t0        TCP *:shell (LISTEN)
rsyslogd  13129 13131 in:imjour        root    5u     IPv6             44520      0t0        TCP *:shell (LISTEN)
rsyslogd  13129 13132 in:imtcp         root    4u     IPv4             44519      0t0        TCP *:shell (LISTEN)
rsyslogd  13129 13132 in:imtcp         root    5u     IPv6             44520      0t0        TCP *:shell (LISTEN)
rsyslogd  13129 13133 in:imtcp         root    4u     IPv4             44519      0t0        TCP *:shell (LISTEN)
rsyslogd  13129 13133 in:imtcp         root    5u     IPv6             44520      0t0        TCP *:shell (LISTEN)
rsyslogd  13129 13134 in:imtcp         root    4u     IPv4             44519      0t0        TCP *:shell (LISTEN)
rsyslogd  13129 13134 in:imtcp         root    5u     IPv6             44520      0t0        TCP *:shell (LISTEN)
rsyslogd  13129 13135 in:imtcp         root    4u     IPv4             44519      0t0        TCP *:shell (LISTEN)
rsyslogd  13129 13135 in:imtcp         root    5u     IPv6             44520      0t0        TCP *:shell (LISTEN)
rsyslogd  13129 13136 in:imtcp         root    4u     IPv4             44519      0t0        TCP *:shell (LISTEN)
rsyslogd  13129 13136 in:imtcp         root    5u     IPv6             44520      0t0        TCP *:shell (LISTEN)
rsyslogd  13129 13137 rs:main          root    4u     IPv4             44519      0t0        TCP *:shell (LISTEN)
rsyslogd  13129 13137 rs:main          root    5u     IPv6             44520      0t0        TCP *:shell (LISTEN)
[root@server.dkkobzev.net ~]# firewall-cmd --add-port=514/tcp
success
[root@server.dkkobzev.net ~]# firewall-cmd --add-port=514/tcp --permanent
success
[root@server.dkkobzev.net ~]#
```

Рис. 2.3: Настройка сервера сетевого журнала

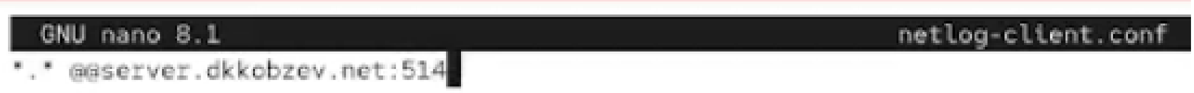
На клиенте создаем файл конфигурации сетевого хранения журналов (Рис. 12.4).



```
[dkkobzev@client.dkkobzev.net ~]$ sudo -i
[sudo] password for dkkobzev:
[root@client.dkkobzev.net ~]# cd /etc/rsyslog.d
[root@client.dkkobzev.net rsyslog.d]# touch netlog-client.conf
```

Рис. 2.4: Создание файла конфигурации сетевого хранения журналов

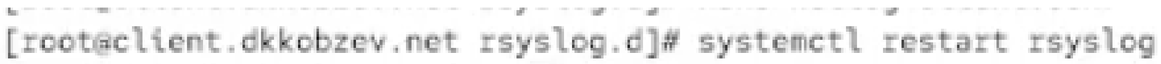
На клиенте в файле конфигурации /etc/rsyslog.d/netlog-client.conf включаем перенаправление сообщений журнала на 514 TCP-порт сервера (Рис. 12.5).



```
  GNU nano 8.1                                           netlog-client.conf
*.* @@server.dkkobzev.net:514
```

Рис. 2.5: Файл конфигурации /etc/rsyslog.d/netlog-client.conf

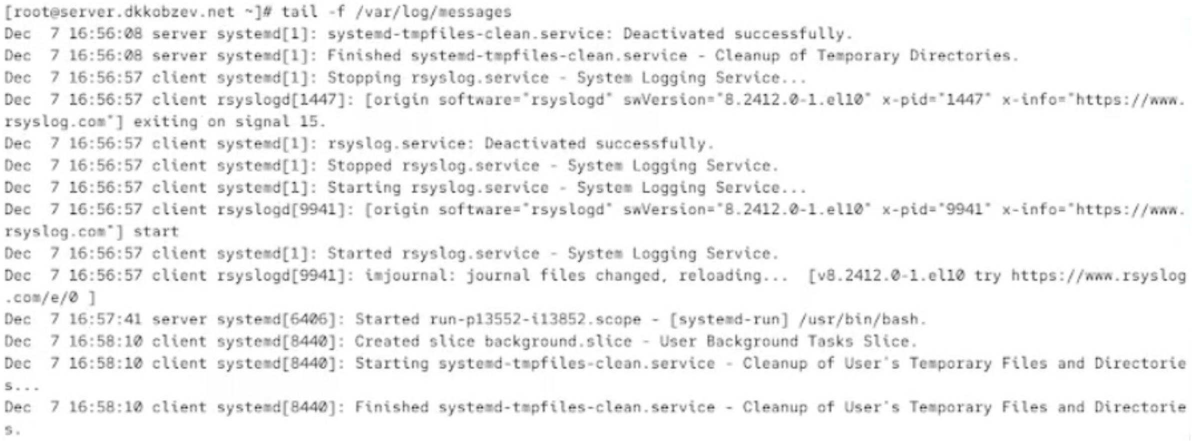
Перезапускаем службу rsyslog (Рис. 12.6).



```
[root@client.dkkobzev.net rsyslog.d]# systemctl restart rsyslog
```

Рис. 2.6: Перезапуск службы rsyslog

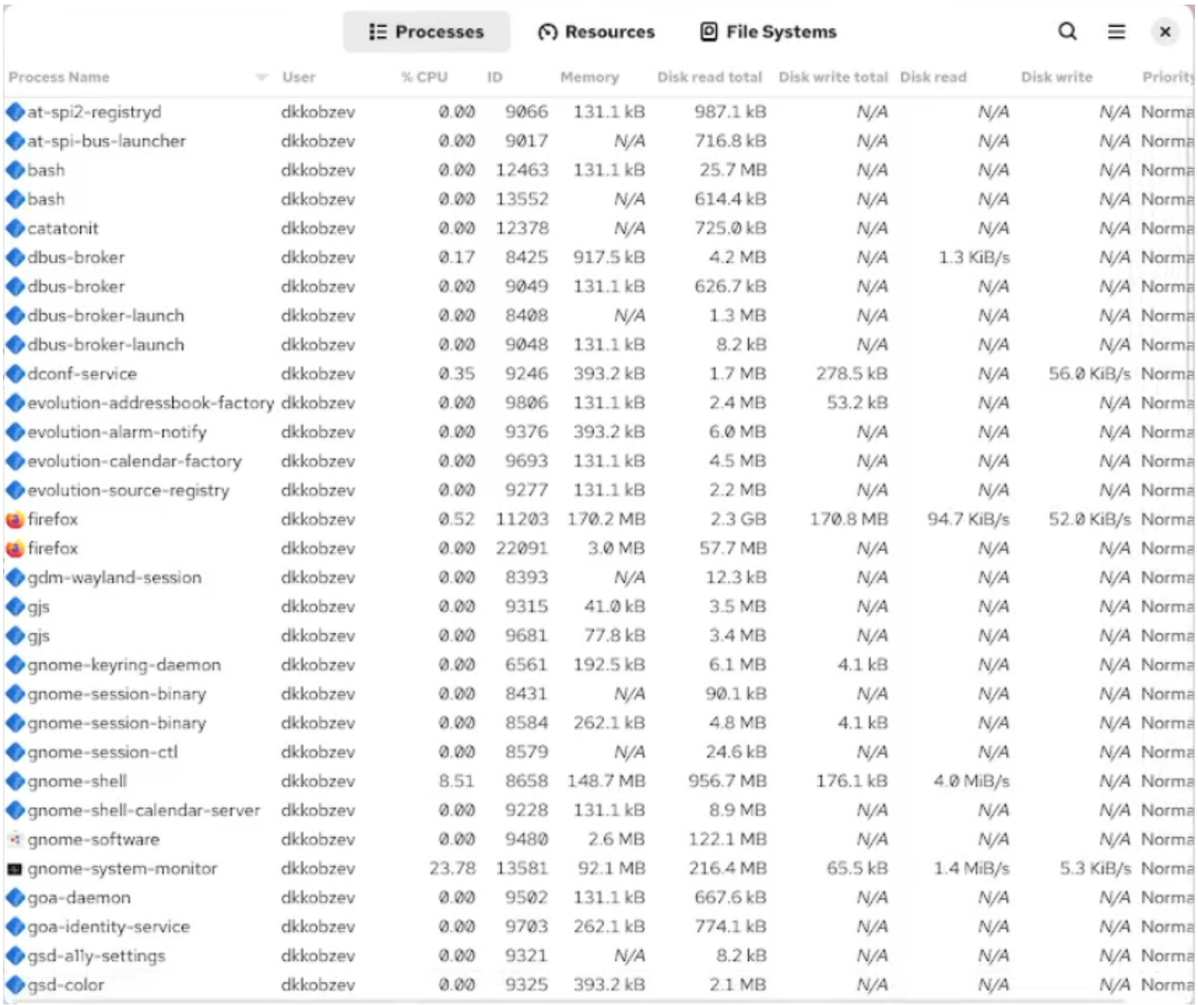
На сервере смотрим один из файлов журнала (Рис. 12.7).



```
[root@server.dkkobzev.net ~]# tail -f /var/log/messages
Dec  7 16:56:08 server systemd[1]: systemd-tmpfiles-clean.service: Deactivated successfully.
Dec  7 16:56:08 server systemd[1]: Finished systemd-tmpfiles-clean.service - Cleanup of Temporary Directories.
Dec  7 16:56:57 client systemd[1]: Stopping rsyslog.service - System Logging Service...
Dec  7 16:56:57 client rsyslogd[1447]: [origin software="rsyslogd" swVersion="8.2412.0-1.el10" x-pid="1447" x-info="https://www.
rsyslog.com"] exiting on signal 15.
Dec  7 16:56:57 client systemd[1]: rsyslog.service: Deactivated successfully.
Dec  7 16:56:57 client systemd[1]: Stopped rsyslog.service - System Logging Service.
Dec  7 16:56:57 client systemd[1]: Starting rsyslog.service - System Logging Service...
Dec  7 16:56:57 client rsyslogd[9941]: [origin software="rsyslogd" swVersion="8.2412.0-1.el10" x-pid="9941" x-info="https://www.
rsyslog.com"] start
Dec  7 16:56:57 client systemd[1]: Started rsyslog.service - System Logging Service.
Dec  7 16:56:57 client rsyslogd[9941]: imjournal: journal files changed, reloading...  [v8.2412.0-1.el10 try https://www.rsyslog
.com/e/0 ]
Dec  7 16:57:41 server systemd[6406]: Started run-p13552-i13852.scope - [systemd-run] /usr/bin/bash.
Dec  7 16:58:10 client systemd[8440]: Created slice background.slice - User Background Tasks Slice.
Dec  7 16:58:10 client systemd[8440]: Starting systemd-tmpfiles-clean.service - Cleanup of User's Temporary Files and Directorie
s...
Dec  7 16:58:10 client systemd[8440]: Finished systemd-tmpfiles-clean.service - Cleanup of User's Temporary Files and Directorie
s.
```

Рис. 2.7: Один из файлов журнала

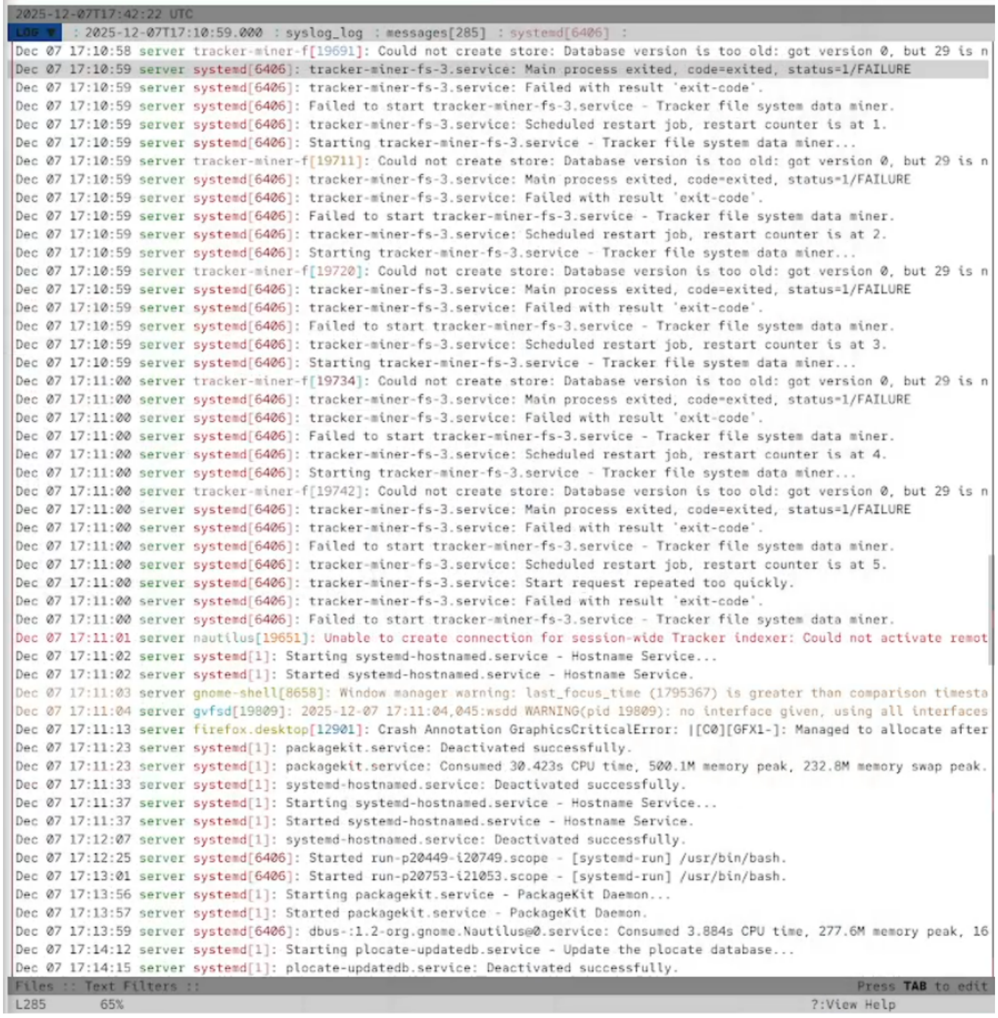
На сервере под пользователем user запускаем графическую программу для просмотра журналов (Рис. 12.8).



Process Name	User	% CPU	ID	Memory	Disk read total	Disk write total	Disk read	Disk write	Priorit
at-spi2-registryd	dkkobzev	0.00	9066	131.1 kB	987.1 kB	N/A	N/A	N/A	Norma
at-spi-bus-launcher	dkkobzev	0.00	9017	N/A	716.8 kB	N/A	N/A	N/A	Norma
bash	dkkobzev	0.00	12463	131.1 kB	25.7 MB	N/A	N/A	N/A	Norma
bash	dkkobzev	0.00	13552	N/A	614.4 kB	N/A	N/A	N/A	Norma
catatonit	dkkobzev	0.00	12378	N/A	725.0 kB	N/A	N/A	N/A	Norma
dbus-broker	dkkobzev	0.17	8425	917.5 kB	4.2 MB	N/A	1.3 KiB/s	N/A	Norma
dbus-broker	dkkobzev	0.00	9049	131.1 kB	626.7 kB	N/A	N/A	N/A	Norma
dbus-broker-launch	dkkobzev	0.00	8408	N/A	1.3 MB	N/A	N/A	N/A	Norma
dbus-broker-launch	dkkobzev	0.00	9048	131.1 kB	8.2 kB	N/A	N/A	N/A	Norma
dconf-service	dkkobzev	0.35	9246	393.2 kB	1.7 MB	278.5 kB	N/A	56.0 KiB/s	Norma
evolution-addressbook-factory	dkkobzev	0.00	9806	131.1 kB	2.4 MB	53.2 kB	N/A	N/A	Norma
evolution-alarm-notify	dkkobzev	0.00	9376	393.2 kB	6.0 MB	N/A	N/A	N/A	Norma
evolution-calendar-factory	dkkobzev	0.00	9693	131.1 kB	4.5 MB	N/A	N/A	N/A	Norma
evolution-source-registry	dkkobzev	0.00	9277	131.1 kB	2.2 MB	N/A	N/A	N/A	Norma
firefox	dkkobzev	0.52	11203	170.2 MB	2.3 GB	170.8 MB	94.7 KiB/s	52.0 KiB/s	Norma
firefox	dkkobzev	0.00	22091	3.0 MB	57.7 MB	N/A	N/A	N/A	Norma
gdm-wayland-session	dkkobzev	0.00	8393	N/A	12.3 kB	N/A	N/A	N/A	Norma
gjs	dkkobzev	0.00	9315	41.0 kB	3.5 MB	N/A	N/A	N/A	Norma
gjs	dkkobzev	0.00	9681	77.8 kB	3.4 MB	N/A	N/A	N/A	Norma
gnome-keyring-daemon	dkkobzev	0.00	6561	192.5 kB	6.1 MB	4.1 kB	N/A	N/A	Norma
gnome-session-binary	dkkobzev	0.00	8431	N/A	90.1 kB	N/A	N/A	N/A	Norma
gnome-session-binary	dkkobzev	0.00	8584	262.1 kB	4.8 MB	4.1 kB	N/A	N/A	Norma
gnome-session-ctl	dkkobzev	0.00	8579	N/A	24.6 kB	N/A	N/A	N/A	Norma
gnome-shell	dkkobzev	8.51	8658	148.7 MB	956.7 MB	176.1 kB	4.0 MiB/s	N/A	Norma
gnome-shell-calendar-server	dkkobzev	0.00	9228	131.1 kB	8.9 MB	N/A	N/A	N/A	Norma
gnome-software	dkkobzev	0.00	9480	2.6 MB	122.1 MB	N/A	N/A	N/A	Norma
gnome-system-monitor	dkkobzev	23.78	13581	92.1 MB	216.4 MB	65.5 kB	1.4 MiB/s	5.3 KiB/s	Norma
goa-daemon	dkkobzev	0.00	9502	131.1 kB	667.6 kB	N/A	N/A	N/A	Norma
goa-identity-service	dkkobzev	0.00	9703	262.1 kB	774.1 kB	N/A	N/A	N/A	Norma
gsd-a11y-settings	dkkobzev	0.00	9321	N/A	8.2 kB	N/A	N/A	N/A	Norma
gsd-color	dkkobzev	0.00	9325	393.2 kB	2.1 MB	N/A	N/A	N/A	Norma

Рис. 2.8: Графическая программа для просмотра журналов

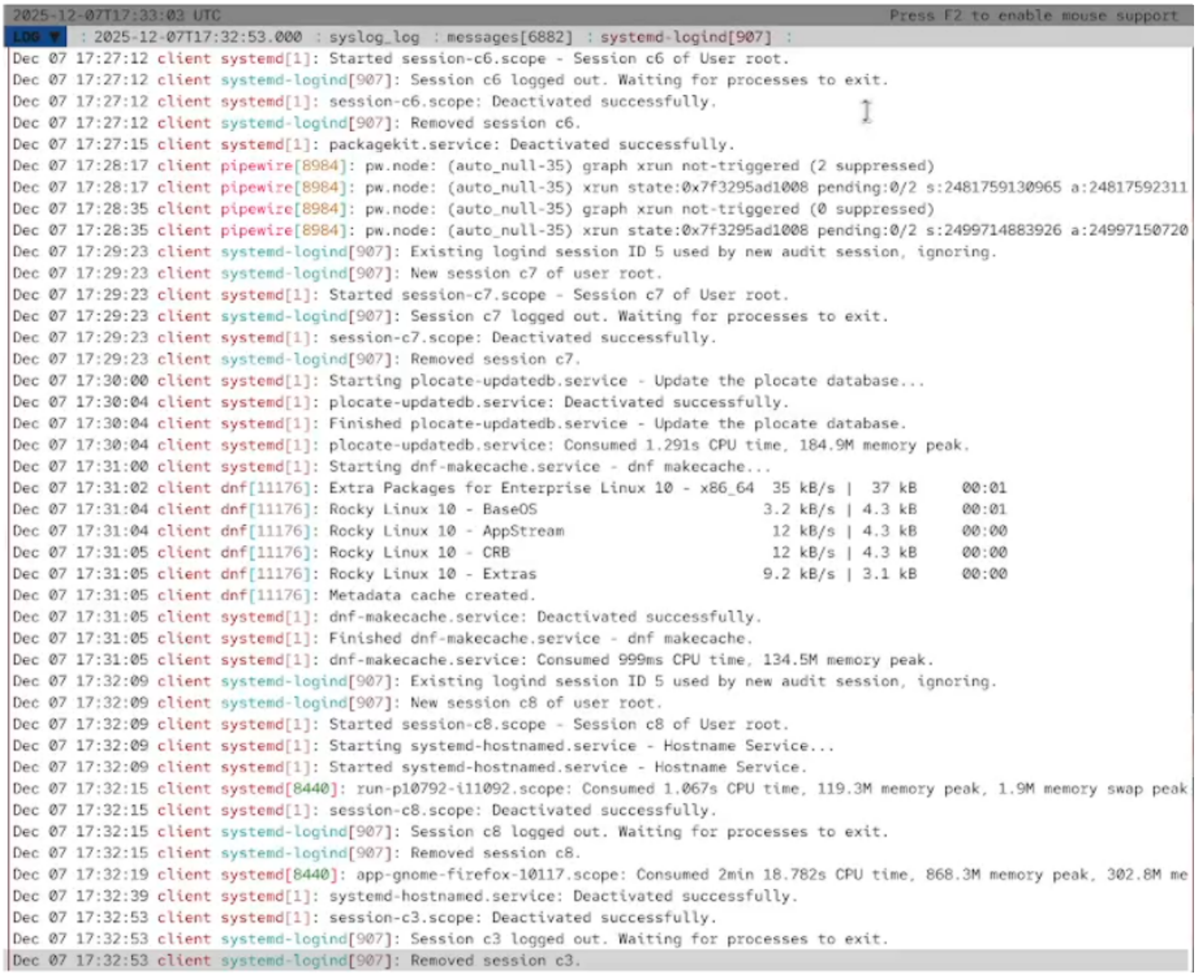
Просмотрите логи с сервера с помощью lnav (Рис. 12.9).



```
2025-12-07T17:42:22 UTC
LOG ▼  : 2025-12-07T17:10:59.000  : syslog_log  : messages[285]  : systemd[6406]  :
Dec 07 17:10:58 server tracker-miner-f[19691]: Could not create store: Database version is too old: got version 0, but 29 is n
Dec 07 17:10:59 server systemd[6406]: tracker-miner-fs-3.service: Main process exited, code=exited, status=1/FAILURE
Dec 07 17:10:59 server systemd[6406]: tracker-miner-fs-3.service: Failed with result 'exit-code'.
Dec 07 17:10:59 server systemd[6406]: Failed to start tracker-miner-fs-3.service - Tracker file system data miner.
Dec 07 17:10:59 server systemd[6406]: tracker-miner-fs-3.service: Scheduled restart job, restart counter is at 1.
Dec 07 17:10:59 server systemd[6406]: Starting tracker-miner-fs-3.service - Tracker file system data miner...
Dec 07 17:10:59 server tracker-miner-f[19711]: Could not create store: Database version is too old: got version 0, but 29 is n
Dec 07 17:10:59 server systemd[6406]: tracker-miner-fs-3.service: Main process exited, code=exited, status=1/FAILURE
Dec 07 17:10:59 server systemd[6406]: tracker-miner-fs-3.service: Failed with result 'exit-code'.
Dec 07 17:10:59 server systemd[6406]: Failed to start tracker-miner-fs-3.service - Tracker file system data miner.
Dec 07 17:10:59 server systemd[6406]: tracker-miner-fs-3.service: Scheduled restart job, restart counter is at 2.
Dec 07 17:10:59 server systemd[6406]: Starting tracker-miner-fs-3.service - Tracker file system data miner...
Dec 07 17:10:59 server tracker-miner-f[19720]: Could not create store: Database version is too old: got version 0, but 29 is n
Dec 07 17:10:59 server systemd[6406]: tracker-miner-fs-3.service: Main process exited, code=exited, status=1/FAILURE
Dec 07 17:10:59 server systemd[6406]: tracker-miner-fs-3.service: Failed with result 'exit-code'.
Dec 07 17:10:59 server systemd[6406]: Failed to start tracker-miner-fs-3.service - Tracker file system data miner.
Dec 07 17:10:59 server systemd[6406]: tracker-miner-fs-3.service: Scheduled restart job, restart counter is at 3.
Dec 07 17:10:59 server systemd[6406]: Starting tracker-miner-fs-3.service - Tracker file system data miner...
Dec 07 17:11:00 server tracker-miner-f[19734]: Could not create store: Database version is too old: got version 0, but 29 is n
Dec 07 17:11:00 server systemd[6406]: tracker-miner-fs-3.service: Main process exited, code=exited, status=1/FAILURE
Dec 07 17:11:00 server systemd[6406]: tracker-miner-fs-3.service: Failed with result 'exit-code'.
Dec 07 17:11:00 server systemd[6406]: Failed to start tracker-miner-fs-3.service - Tracker file system data miner.
Dec 07 17:11:00 server systemd[6406]: tracker-miner-fs-3.service: Scheduled restart job, restart counter is at 4.
Dec 07 17:11:00 server systemd[6406]: Starting tracker-miner-fs-3.service - Tracker file system data miner...
Dec 07 17:11:00 server tracker-miner-f[19742]: Could not create store: Database version is too old: got version 0, but 29 is n
Dec 07 17:11:00 server systemd[6406]: tracker-miner-fs-3.service: Main process exited, code=exited, status=1/FAILURE
Dec 07 17:11:00 server systemd[6406]: tracker-miner-fs-3.service: Failed with result 'exit-code'.
Dec 07 17:11:00 server systemd[6406]: Failed to start tracker-miner-fs-3.service - Tracker file system data miner.
Dec 07 17:11:00 server systemd[6406]: tracker-miner-fs-3.service: Scheduled restart job, restart counter is at 5.
Dec 07 17:11:00 server systemd[6406]: tracker-miner-fs-3.service: Start request repeated too quickly.
Dec 07 17:11:00 server systemd[6406]: tracker-miner-fs-3.service: Failed with result 'exit-code'.
Dec 07 17:11:00 server systemd[6406]: Failed to start tracker-miner-fs-3.service - Tracker file system data miner.
Dec 07 17:11:01 server nautilus[19651]: Unable to create connection for session-wide Tracker indexer: Could not activate remot
Dec 07 17:11:02 server systemd[1]: Starting systemd-hostnamed.service - Hostname Service...
Dec 07 17:11:02 server systemd[1]: Started systemd-hostnamed.service - Hostname Service.
Dec 07 17:11:03 server gnome-shell[8658]: Window manager warning: last_focus_time (1795367) is greater than comparison timesta
Dec 07 17:11:04 server gvfsd[19809]: 2025-12-07 17:11:04,045:wsdd WARNING(pid 19809): no interface given, using all interfaces
Dec 07 17:11:13 server firefox.desktop[12901]: Crash Annotation GraphicsCriticalError: |[C0][GFX1-]: Managed to allocate after
Dec 07 17:11:23 server systemd[1]: packagekit.service: Deactivated successfully.
Dec 07 17:11:23 server systemd[1]: packagekit.service: Consumed 30.423s CPU time, 500.1M memory peak, 232.8M memory swap peak.
Dec 07 17:11:33 server systemd[1]: systemd-hostnamed.service: Deactivated successfully.
Dec 07 17:11:37 server systemd[1]: Starting systemd-hostnamed.service - Hostname Service...
Dec 07 17:11:37 server systemd[1]: Started systemd-hostnamed.service - Hostname Service.
Dec 07 17:12:07 server systemd[1]: systemd-hostnamed.service: Deactivated successfully.
Dec 07 17:12:25 server systemd[6406]: Started run-p20449-i20749.scope - [systemd-run] /usr/bin/bash.
Dec 07 17:13:01 server systemd[6406]: Started run-p20753-i21053.scope - [systemd-run] /usr/bin/bash.
Dec 07 17:13:56 server systemd[1]: Starting packagekit.service - PackageKit Daemon...
Dec 07 17:13:57 server systemd[1]: Started packagekit.service - PackageKit Daemon.
Dec 07 17:13:59 server systemd[6406]: dbus-:1.2-org.gnome.Nautilus@0.service: Consumed 3.884s CPU time, 277.6M memory peak, 16
Dec 07 17:14:12 server systemd[1]: Starting plocate-updatedb.service - Update the plocate database...
Dec 07 17:14:15 server systemd[1]: plocate-updatedb.service: Deactivated successfully.
Files :: Text Filters ::                                                                            Press TAB to edit
L285       65%                                                                                  ?:View Help
```

Рис. 2.9: Логи с сервера

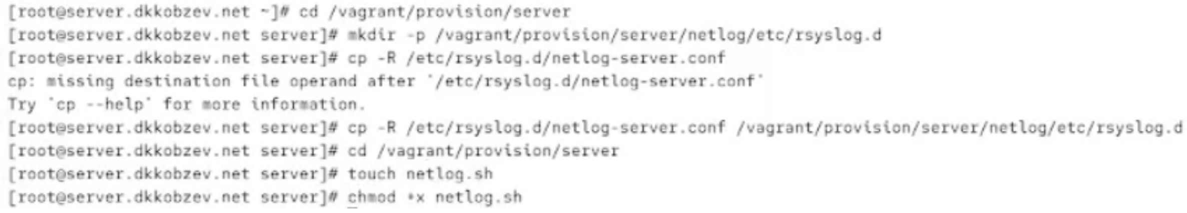
Просмотрите логи с клиента с помощью lnav (Рис. 12.10).



```
2025-12-07T17:33:03 UTC                                                          Press F2 to enable mouse support
LOG ▼ : 2025-12-07T17:32:53.000 : syslog_log : messages[6882] : systemd-logind[907] :
Dec 07 17:27:12 client systemd[1]: Started session-c6.scope - Session c6 of User root.
Dec 07 17:27:12 client systemd-logind[907]: Session c6 logged out. Waiting for processes to exit.
Dec 07 17:27:12 client systemd[1]: session-c6.scope: Deactivated successfully.
Dec 07 17:27:12 client systemd-logind[907]: Removed session c6.
Dec 07 17:27:15 client systemd[1]: packagekit.service: Deactivated successfully.
Dec 07 17:28:17 client pipewire[8984]: pw.node: (auto_null-35) graph xrun not-triggered (2 suppressed)
Dec 07 17:28:17 client pipewire[8984]: pw.node: (auto_null-35) xrun state:0x7f3295ad1008 pending:0/2 s:2481759130965 a:24817592311
Dec 07 17:28:35 client pipewire[8984]: pw.node: (auto_null-35) graph xrun not-triggered (0 suppressed)
Dec 07 17:28:35 client pipewire[8984]: pw.node: (auto_null-35) xrun state:0x7f3295ad1008 pending:0/2 s:2499714883926 a:24997150720
Dec 07 17:29:23 client systemd-logind[907]: Existing logind session ID 5 used by new audit session, ignoring.
Dec 07 17:29:23 client systemd-logind[907]: New session c7 of user root.
Dec 07 17:29:23 client systemd[1]: Started session-c7.scope - Session c7 of User root.
Dec 07 17:29:23 client systemd-logind[907]: Session c7 logged out. Waiting for processes to exit.
Dec 07 17:29:23 client systemd[1]: session-c7.scope: Deactivated successfully.
Dec 07 17:29:23 client systemd-logind[907]: Removed session c7.
Dec 07 17:30:00 client systemd[1]: Starting plocate-updatedb.service - Update the plocate database...
Dec 07 17:30:04 client systemd[1]: plocate-updatedb.service: Deactivated successfully.
Dec 07 17:30:04 client systemd[1]: Finished plocate-updatedb.service - Update the plocate database.
Dec 07 17:30:04 client systemd[1]: plocate-updatedb.service: Consumed 1.291s CPU time, 184.9M memory peak.
Dec 07 17:31:00 client systemd[1]: Starting dnf-makecache.service - dnf makecache...
Dec 07 17:31:02 client dnf[11176]: Extra Packages for Enterprise Linux 10 - x86_64  35 kB/s |  37 kB     00:01
Dec 07 17:31:04 client dnf[11176]: Rocky Linux 10 - BaseOS                          3.2 kB/s | 4.3 kB     00:01
Dec 07 17:31:04 client dnf[11176]: Rocky Linux 10 - AppStream                         12 kB/s | 4.3 kB     00:00
Dec 07 17:31:05 client dnf[11176]: Rocky Linux 10 - CRB                               12 kB/s | 4.3 kB     00:00
Dec 07 17:31:05 client dnf[11176]: Rocky Linux 10 - Extras                           9.2 kB/s | 3.1 kB     00:00
Dec 07 17:31:05 client dnf[11176]: Metadata cache created.
Dec 07 17:31:05 client systemd[1]: dnf-makecache.service: Deactivated successfully.
Dec 07 17:31:05 client systemd[1]: Finished dnf-makecache.service - dnf makecache.
Dec 07 17:31:05 client systemd[1]: dnf-makecache.service: Consumed 999ms CPU time, 134.5M memory peak.
Dec 07 17:32:09 client systemd-logind[907]: Existing logind session ID 5 used by new audit session, ignoring.
Dec 07 17:32:09 client systemd-logind[907]: New session c8 of user root.
Dec 07 17:32:09 client systemd[1]: Started session-c8.scope - Session c8 of User root.
Dec 07 17:32:09 client systemd[1]: Starting systemd-hostnamed.service - Hostname Service...
Dec 07 17:32:09 client systemd[1]: Started systemd-hostnamed.service - Hostname Service.
Dec 07 17:32:15 client systemd[8440]: run-p10792-i11092.scope: Consumed 1.067s CPU time, 119.3M memory peak, 1.9M memory swap peak
Dec 07 17:32:15 client systemd[1]: session-c8.scope: Deactivated successfully.
Dec 07 17:32:15 client systemd-logind[907]: Session c8 logged out. Waiting for processes to exit.
Dec 07 17:32:15 client systemd-logind[907]: Removed session c8.
Dec 07 17:32:19 client systemd[8440]: app-gnome-firefox-10117.scope: Consumed 2min 18.782s CPU time, 868.3M memory peak, 302.8M me
Dec 07 17:32:39 client systemd[1]: systemd-hostnamed.service: Deactivated successfully.
Dec 07 17:32:53 client systemd[1]: session-c3.scope: Deactivated successfully.
Dec 07 17:32:53 client systemd-logind[907]: Session c3 logged out. Waiting for processes to exit.
Dec 07 17:32:53 client systemd-logind[907]: Removed session c3.
```

Рис. 2.10: Логи с клиента

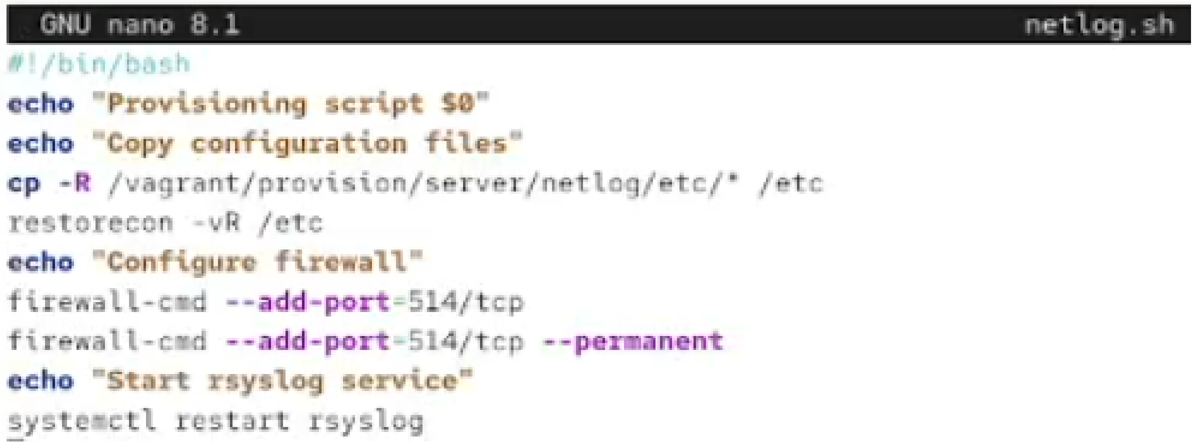
На виртуальной машине server переходим в каталог для внесения изменений в настройки внутреннего окружения /vagrant/provision/server/, создаем в нём каталог netlog, в который помещаем в соответствующие подкаталоги конфигурационные файлы. В каталоге /vagrant/provision/server создаем файл netlog.sh (Рис. 12.11).



```
[root@server.dkkobzev.net ~]# cd /vagrant/provision/server
[root@server.dkkobzev.net server]# mkdir -p /vagrant/provision/server/netlog/etc/rsyslog.d
[root@server.dkkobzev.net server]# cp -R /etc/rsyslog.d/netlog-server.conf
cp: missing destination file operand after '/etc/rsyslog.d/netlog-server.conf'
Try 'cp --help' for more information.
[root@server.dkkobzev.net server]# cp -R /etc/rsyslog.d/netlog-server.conf /vagrant/provision/server/netlog/etc/rsyslog.d
[root@server.dkkobzev.net server]# cd /vagrant/provision/server
[root@server.dkkobzev.net server]# touch netlog.sh
[root@server.dkkobzev.net server]# chmod +x netlog.sh
```

Рис. 2.11: Внесение изменений в настройки внутреннего окружения виртуальной машины

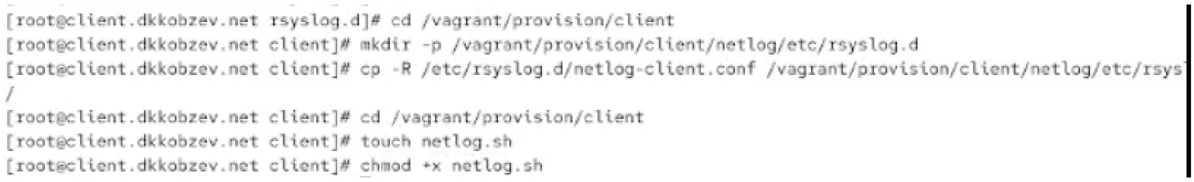
Прописываем скрипт в netlog.sh (Рис. 12.12).



```
GNU nano 8.1                                                        netlog.sh
#!/bin/bash
echo "Provisioning script $0"
echo "Copy configuration files"
cp -R /vagrant/provision/server/netlog/etc/* /etc
restorecon -vR /etc
echo "Configure firewall"
firewall-cmd --add-port=514/tcp
firewall-cmd --add-port=514/tcp --permanent
echo "Start rsyslog service"
systemctl restart rsyslog
```

Рис. 2.12: Файл netlog.sh

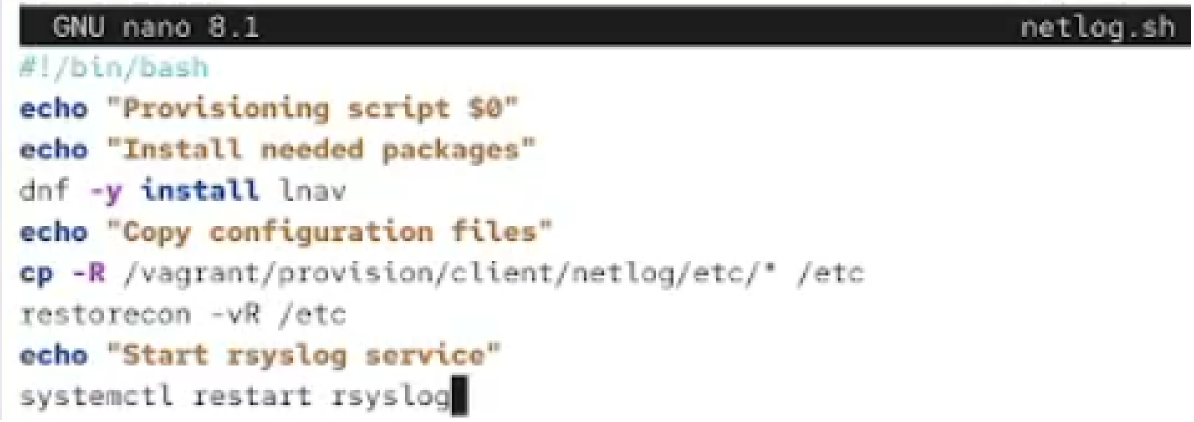
На виртуальной машине client переходим в каталог для внесения изменений в настройки внутреннего окружения /vagrant/provision/client/, создаем в нём каталог netlog, в который помещаем в соответствующие подкаталоги конфигурационные файлы. В каталоге /vagrant/provision/client создаем файл netlog.sh (Рис. 12.13).



```
[root@client.dkkobzev.net rsyslog.d]# cd /vagrant/provision/client
[root@client.dkkobzev.net client]# mkdir -p /vagrant/provision/client/netlog/etc/rsyslog.d
[root@client.dkkobzev.net client]# cp -R /etc/rsyslog.d/netlog-client.conf /vagrant/provision/client/netlog/etc/rsys
/
[root@client.dkkobzev.net client]# cd /vagrant/provision/client
[root@client.dkkobzev.net client]# touch netlog.sh
[root@client.dkkobzev.net client]# chmod +x netlog.sh
```

Рис. 2.13: Внесение изменений в настройки внутреннего окружения виртуальной машины

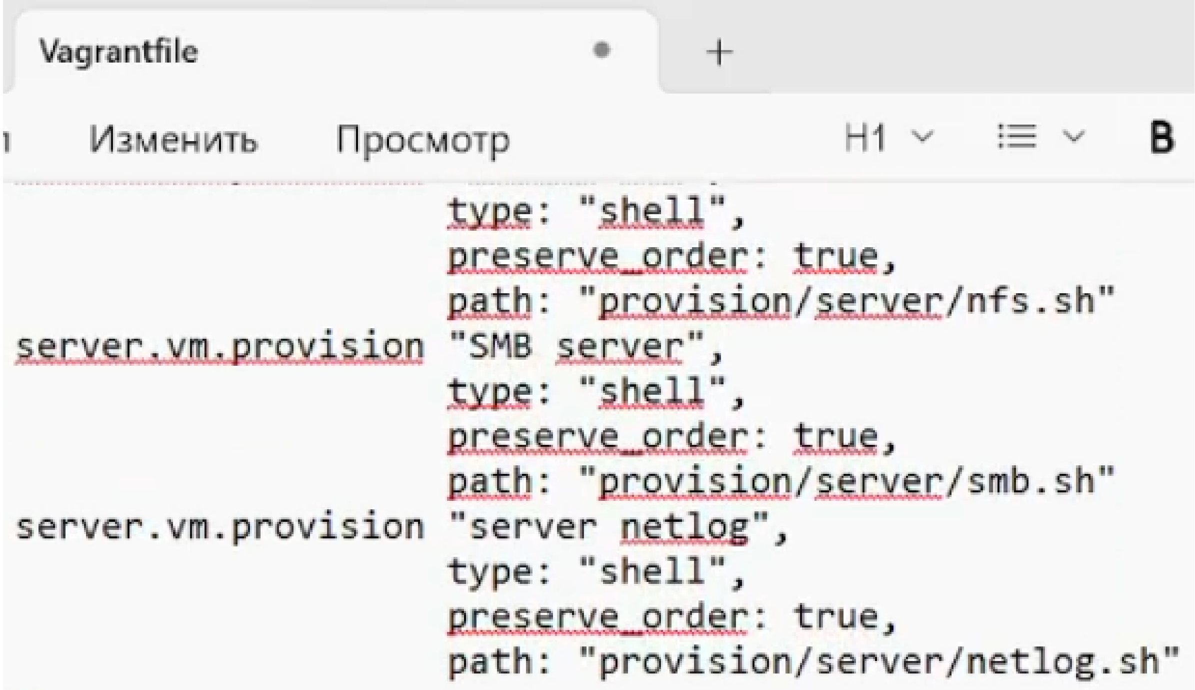
Прописываем скрипт в netlog.sh (Рис. 12.14).



```
GNU nano 8.1                                                        netlog.sh
#!/bin/bash
echo "Provisioning script $0"
echo "Install needed packages"
dnf -y install lnav
echo "Copy configuration files"
cp -R /vagrant/provision/client/netlog/etc/* /etc
restorecon -vR /etc
echo "Start rsyslog service"
systemctl restart rsyslog
```

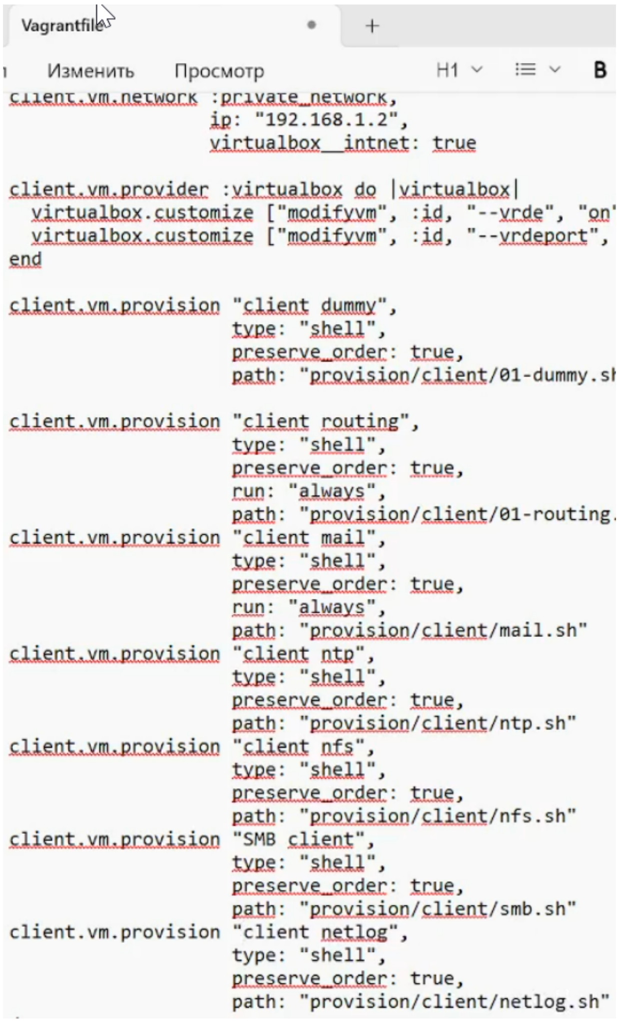
Рис. 2.14: Файл netlog.sh

Для отработки созданного скрипта во время загрузки виртуальных машин server и client в конфигурационном файле Vagrantfile добавляем в разделе конфигурации для сервера и клиент (Рис. 12.15), (Рис. 12.16).



```
                    type: "shell",
                    preserve_order: true,
                    path: "provision/server/nfs.sh"
server.vm.provision "SMB server",
                    type: "shell",
                    preserve_order: true,
                    path: "provision/server/smb.sh"
server.vm.provision "server netlog",
                    type: "shell",
                    preserve_order: true,
                    path: "provision/server/netlog.sh"
```

Рис. 2.15: Vagrantfile



```
client.vm.network :private_network,
                  ip: "192.168.1.2",
                  virtualbox__intnet: true

client.vm.provider :virtualbox do |virtualbox|
  virtualbox.customize ["modifyvm", :id, "--vrde", "on
  virtualbox.customize ["modifyvm", :id, "--vrdeport",
end

client.vm.provision "client dummy",
                    type: "shell",
                    preserve_order: true,
                    path: "provision/client/01-dummy.sh

client.vm.provision "client routing",
                    type: "shell",
                    preserve_order: true,
                    run: "always",
                    path: "provision/client/01-routing.
client.vm.provision "client mail",
                    type: "shell",
                    preserve_order: true,
                    run: "always",
                    path: "provision/client/mail.sh"
client.vm.provision "client ntp",
                    type: "shell",
                    preserve_order: true,
                    path: "provision/client/ntp.sh"
client.vm.provision "client nfs",
                    type: "shell",
                    preserve_order: true,
                    path: "provision/client/nfs.sh"
client.vm.provision "SMB client",
                    type: "shell",
                    preserve_order: true,
                    path: "provision/client/smb.sh"
client.vm.provision "client netlog",
                    type: "shell",
                    preserve_order: true,
                    path: "provision/client/netlog.sh"
```

Рис. 2.16: Vagrantfile

3 Выводы

В результате выполнения лабораторной работы мною были получены навыки по работе с журналами системных событий.

Список литературы