

Отчёт по лабораторной работе 14

Настройка файловых служб Samba

Цвелев С.А. НПИбд-02-22

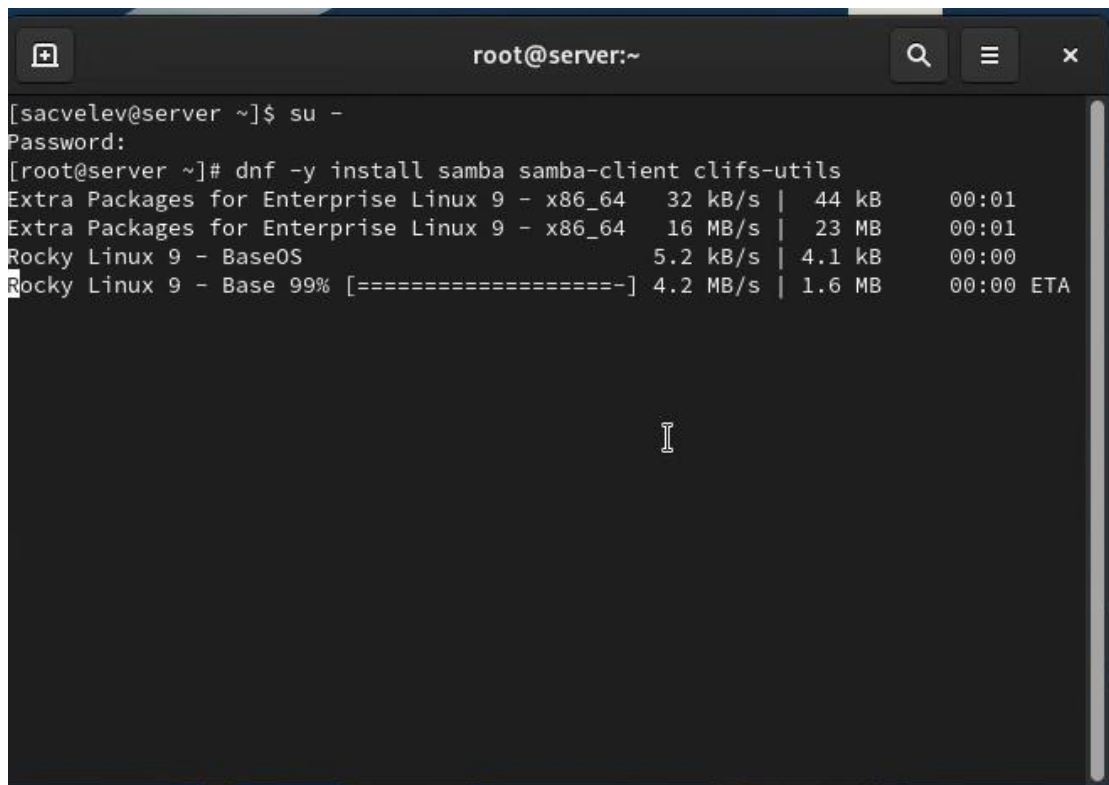
Содержание

1 Цель работы

Получить навыки настройки доступа групп пользователей к общим ресурсам по протоколу SMB.

2 Ход работы

Запускаем сервер и устанавливаем все необходимые пакеты Samba.



```
root@server:~  
[sacvelev@server ~]$ su -  
Password:  
[root@server ~]# dnf -y install samba samba-client clifs-utils  
Extra Packages for Enterprise Linux 9 - x86_64 32 kB/s | 44 kB 00:01  
Extra Packages for Enterprise Linux 9 - x86_64 16 MB/s | 23 MB 00:01  
Rocky Linux 9 - BaseOS 5.2 kB/s | 4.1 kB 00:00  
Rocky Linux 9 - Base 99% [=====] 4.2 MB/s | 1.6 MB 00:00 ETA
```

Создаём группу sambagroup для пользователей, что будут работать с Samba-сервером. В файле конфигурации smb.conf изменяем параметр рабочей группы и добавляем раздел с описанием общего доступа к разделяемому ресурсу.

```
root@server:~
#
# Note:
# SMB1 is disabled by default. This means clients without support for SMB2 or
# SMB3 are no longer able to connect to smbd (by default).
[global]
    workgroup = SACVELEV-NET
    security = user

    passdb backend = tdbsam

    printing = cups
    printcap name = cups
    load printers = yes
    cups options = raw

[homes]
    comment = Home Directories
    valid users = %S, %D%w%S
    browseable = No
    read only = No
    inherit acls = Yes
```

Запускаем демон Samba. Подключаемся для проверки доступа к серверу через smbclient. Настраиваем межсетевой экран.

```
root@server:~
Feb 19 15:51:17 server systemd[1]: Starting Samba SMB Daemon...
Feb 19 15:51:17 server smbd[10875]: [2025/02/19 15:51:17.182385, 0] ../../sour>
Feb 19 15:51:17 server smbd[10875]: smbd version 4.20.2 started.
Feb 19 15:51:17 server smbd[10875]: Copyright Andrew Tridgell and the Samba T>
Feb 19 15:51:17 server systemd[1]: Started Samba SMB Daemon.
[root@server ~]# smbclient -L //server
Password for [SACVELEV-NET\root]:
Anonymous login successful

      Sharename      Type      Comment
      -----      -
      print$         Disk      Printer Drivers
      sambashare      Disk      My Samba Share
      IPC$           IPC       IPC Service (Samba 4.20.2)
SMB1 disabled -- no workgroup available
[root@server ~]# less /usr/lib/firewalld/services/samba.xml
[root@server ~]# firewall-cmd --add-service=samba
success
[root@server ~]# firewall-cmd --add-service=samba --permanent
success
[root@server ~]# firewall-cmd --reload
success
[root@server ~]# ch
```

Настраиваем права доступа и контекст безопасности для каталога с разделяемым ресурсом.

```
root@server:/srv

[root@server ~]# smbclient -L //server
Password for [SACVELEV-NET\root]:
Anonymous login successful

      Sharename      Type      Comment
      -----
      print$         Disk      Printer Drivers
      sambashare     Disk      My Samba Share
      IPC$           IPC       IPC Service (Samba 4.20.2)

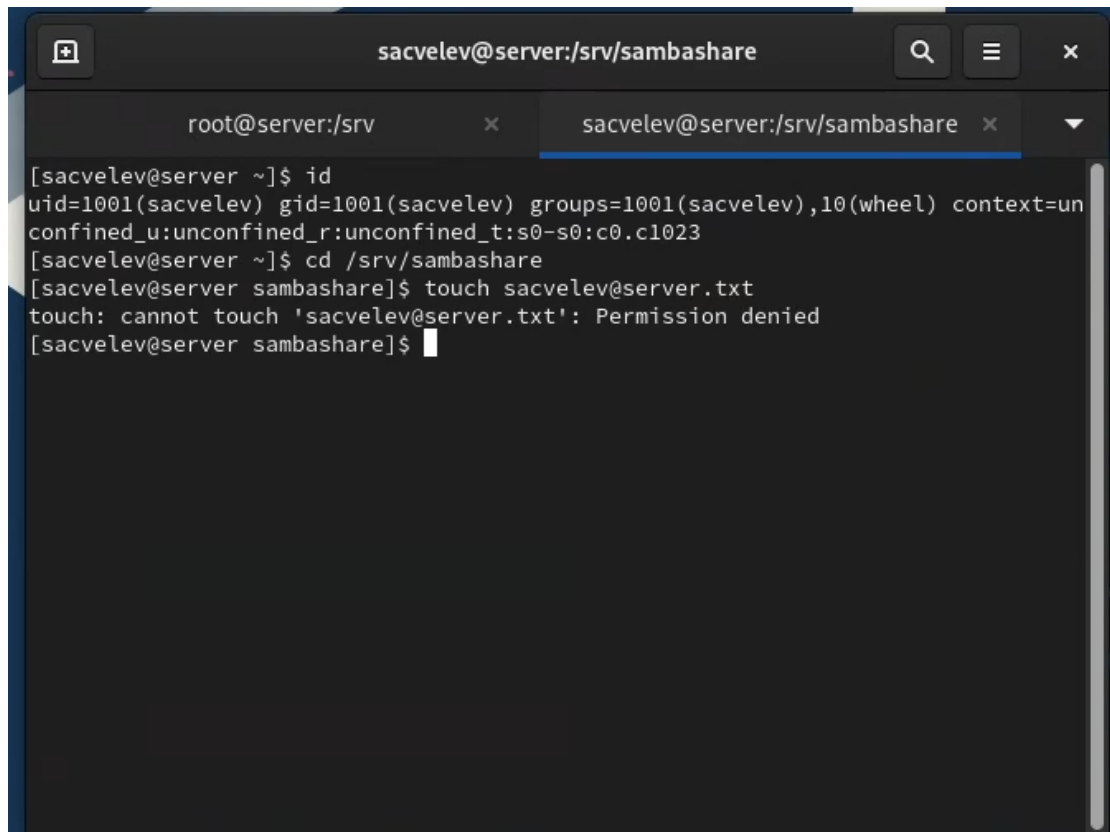
SMB1 disabled -- no workgroup available
[root@server ~]# less /usr/lib/firewalld/services/samba.xml
[root@server ~]# firewall-cmd --add-service=samba
success
[root@server ~]# firewall-cmd --add-service=samba --permanent
success
[root@server ~]# firewall-cmd --reload
success
[root@server ~]# chgrp sambagroup /srv/sambashare
[root@server ~]# chmod g=rwx /srv/sambashare
[root@server ~]# cd /srv
[root@server srv]# ls -Z
unconfined_u:object_r:var_t:s0 nfs unconfined_u:object_r:var_t:s0 sambashare
[root@server srv]# semanage fcontext -a -t samba_share_t "/srv/sambashare(/.*)?"
```

Разрешаем экспортировать разделяемые ресурсы для чтения и записи.
Просматриваем UID нашего пользователя.

```
root@server:/srv

success
[root@server ~]# firewall-cmd --add-service=samba --permanent
success
[root@server ~]# firewall-cmd --reload
success
[root@server ~]# chgrp sambagroup /srv/sambashare
[root@server ~]# chmod g=rwx /srv/sambashare
[root@server ~]# cd /srv
[root@server srv]# ls -Z
unconfined_u:object_r:var_t:s0 nfs unconfined_u:object_r:var_t:s0 sambashare
[root@server srv]# semanage fcontext -a -t samba_share_t "/srv/sambashare(/.*)?"
[root@server srv]# restorecon -vR /srv/sambashare
Relabeled /srv/sambashare from unconfined_u:object_r:var_t:s0 to unconfined_u:object_r:samba_share_t:s0
[root@server srv]# cd /srv
[root@server srv]# ls -Z
unconfined_u:object_r:var_t:s0 nfs
unconfined_u:object_r:samba_share_t:s0 sambashare
[root@server srv]# setsebool samba_export_all_rw 1
[root@server srv]# setsebool samba_export_all_rw 1 -P
[root@server srv]# id
uid=0(root) gid=0(root) groups=0(root) context=unconfined_u:unconfined_r:unconfined_t:s0-s0:c0.c1023
[root@server srv]#
```

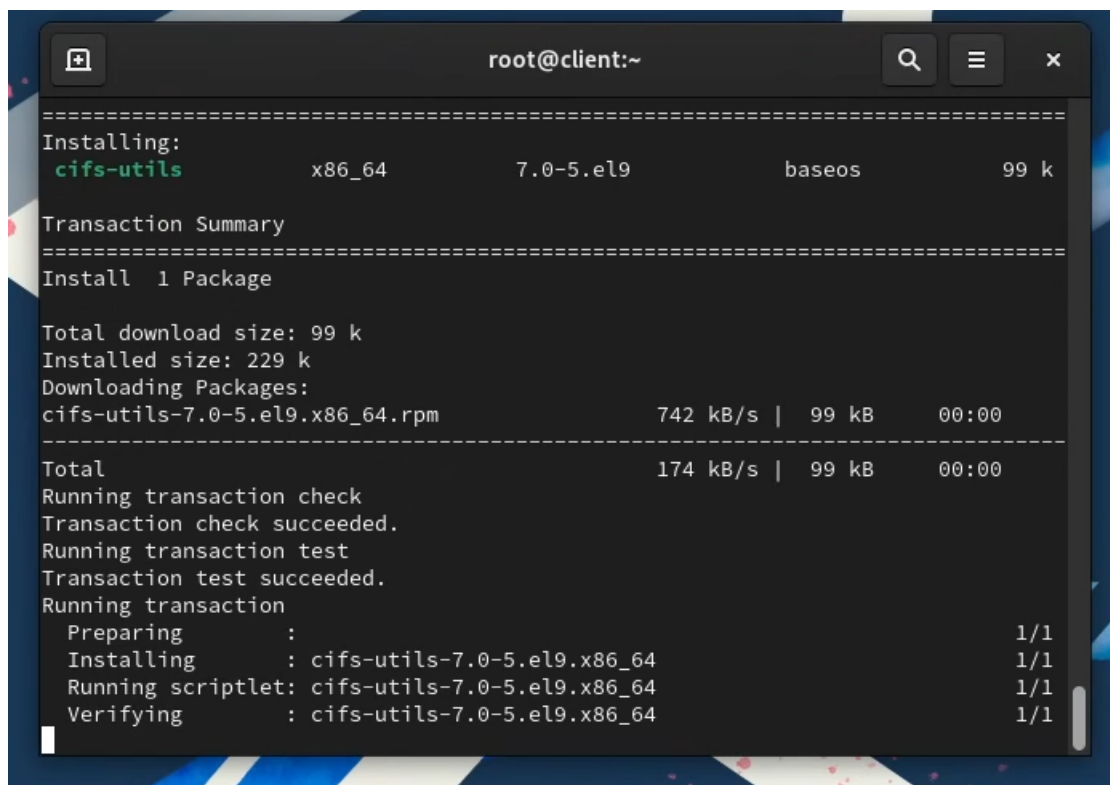
Пытаемся создать файл под нашим пользователем. Не выходит. Поэтому добавляем пользователя в созданную нами группу.



A terminal window titled 'sacvelev@server:/srv/sambashare'. It shows the execution of the 'id' command, which displays the user's identity: uid=1001(sacvelev) gid=1001(sacvelev) groups=1001(sacvelev),10(wheel) context=unconfined_u:unconfined_r:unconfined_t:s0-s0:c0.c1023. Then, the user navigates to '/srv/sambashare' and attempts to create a file 'sacvelev@server.txt' using the 'touch' command. The command fails with the message 'touch: cannot touch 'sacvelev@server.txt': Permission denied'.

```
sacvelev@server:~/~$ id
uid=1001(sacvelev) gid=1001(sacvelev) groups=1001(sacvelev),10(wheel) context=unconfined_u:unconfined_r:unconfined_t:s0-s0:c0.c1023
[sacvelev@server ~]$ cd /srv/sambashare
[sacvelev@server sambashare]$ touch sacvelev@server.txt
touch: cannot touch 'sacvelev@server.txt': Permission denied
[sacvelev@server sambashare]$
```

Устанавливаем необходимые пакеты на клиенте.



A terminal window titled 'root@client:~' showing the installation of the 'cifs-utils' package. It displays the package details, a transaction summary, and the progress of the installation. The package is installed successfully, and the transaction is completed.

```
root@client:~$ dnf install cifs-utils
Installing:
cifs-utils      x86_64      7.0-5.el9      baseos      99 k

Transaction Summary
-----
Install 1 Package

Total download size: 99 k
Installed size: 229 k
Downloading Packages:
cifs-utils-7.0-5.el9.x86_64.rpm | 742 kB/s | 99 kB | 00:00
-----
Total | 174 kB/s | 99 kB | 00:00
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing      : 1/1
  Installing     : cifs-utils-7.0-5.el9.x86_64 1/1
  Running scriptlet: cifs-utils-7.0-5.el9.x86_64 1/1
  Verifying      : cifs-utils-7.0-5.el9.x86_64 1/1
```

Настраиваем межсетевой экран. Создаем группу sambagroup. Изменяем параметр рабочей группы в smb.conf.

```
root@client:~  
Running transaction check  
Transaction check succeeded.  
Running transaction test  
Transaction test succeeded.  
Running transaction  
  Preparing      :                                1/1  
  Installing     : cifs-utils-7.0-5.el9.x86_64    1/1  
  Running scriptlet: cifs-utils-7.0-5.el9.x86_64    1/1  
  Verifying      : cifs-utils-7.0-5.el9.x86_64    1/1  
  
Installed:  
  cifs-utils-7.0-5.el9.x86_64  
  
Complete!  
[root@client ~]# less /usr/lib/firewalld/services/samba-client.xml  
[root@client ~]# firewall-cmd --add-service=samba-client  
success  
[root@client ~]# firewall-cmd --add-service=samba-client --permanent  
success  
[root@client ~]# firewall-cmd --reload  
success  
[root@client ~]# groupadd -g 1010 sambagroup  
[root@client ~]# usermod -aG sambagroup sacvelev  
[root@client ~]#
```

Пробуем подключиться с клиента к серверу. Создаём точку монтирования на клиенте и получаем доступ к общему ресурсу с помощью mount. Затем отмонтируем каталог.

```
root@client:~  
Running transaction  
  Preparing      :                                1/1  
  Installing     : cifs-utils-7.0-5.el9.x86_64    1/1  
  Running scriptlet: cifs-utils-7.0-5.el9.x86_64    1/1  
  Verifying      : cifs-utils-7.0-5.el9.x86_64    1/1  
  
Installed:  
  cifs-utils-7.0-5.el9.x86_64  
  
Complete!  
[root@client ~]# less /usr/lib/firewalld/services/samba-client.xml  
[root@client ~]# firewall-cmd --add-service=samba-client  
success  
[root@client ~]# firewall-cmd --add-service=samba-client --permanent  
success  
[root@client ~]# firewall-cmd --reload  
success  
[root@client ~]# groupadd -g 1010 sambagroup  
[root@client ~]# usermod -aG sambagroup sacvelev  
[root@client ~]# vi /etc/samba/smb.conf  
[root@client ~]# smbclient -L //server  
do_connect: Connection to server failed (Error NT_STATUS_NOT_FOUND)  
[root@client ~]# mkdir /mnt/samba  
[root@client ~]# mount -o username=sacvelev,user,rw,uid=sacvelev,gid=sambagroup
```

Создаём файл smbusers и добавляем туда нашего пользователя.

