

Лабораторная работа 14

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17 февраля, 2023., Москва, Россия

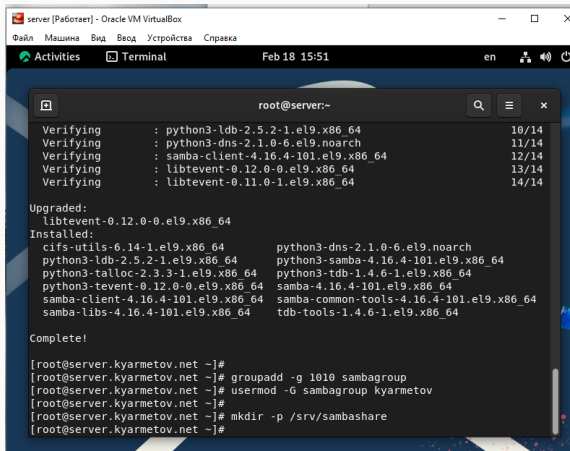
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Цель лабораторной работы

Приобретение навыков настройки доступа групп пользователей к общим ресурсам по протоколу SMB.

Выполнение лабораторной работы

Настройка сервера Samba



```
server [Работаer] - Oracle VM VirtualBox
Файл  Машина  Вид  Ввод  Устройства  Справка

Activities  Terminal  Feb 18 15:51  en  [Icons]  [Volume]  [Power]

root@server:~
Verifying      : python3-ldb-2.5.2-1.el9.x86_64      10/14
Verifying      : python3-dns-2.1.0-6.el9.noarch     11/14
Verifying      : samba-client-4.16.4-101.el9.x86_64 12/14
Verifying      : libtevent-0.12.0-0.el9.x86_64     13/14
Verifying      : libtevent-0.11.0-1.el9.x86_64     14/14

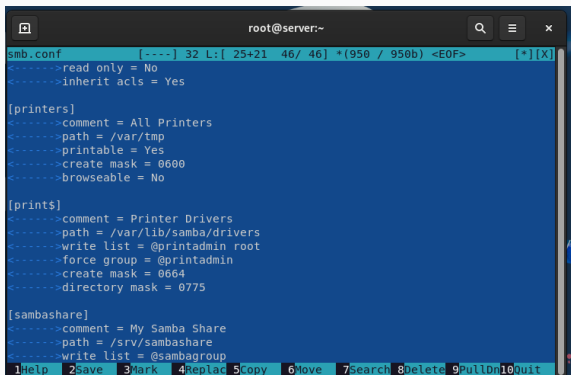
Upgraded:
  libtevent-0.12.0-0.el9.x86_64
Installed:
  cifs-utils-6.14-1.el9.x86_64      python3-dns-2.1.0-6.el9.noarch
  python3-ldb-2.5.2-1.el9.x86_64    python3-samba-4.16.4-101.el9.x86_64
  python3-talloc-2.3.3-1.el9.x86_64 python3-tdb-1.4.6-1.el9.x86_64
  python3-tevent-0.12.0-0.el9.x86_64 samba-4.16.4-101.el9.x86_64
  samba-client-4.16.4-101.el9.x86_64 samba-common-tools-4.16.4-101.el9.x86_64
  samba-libs-4.16.4-101.el9.x86_64  tdb-tools-1.4.6-1.el9.x86_64

Complete!

[root@server.kyarmetov.net ~]#
[root@server.kyarmetov.net ~]# groupadd -g 1010 sambagroup
[root@server.kyarmetov.net ~]# usermod -G sambagroup kyarmetov
[root@server.kyarmetov.net ~]#
[root@server.kyarmetov.net ~]# mkdir -p /srv/sambashare
[root@server.kyarmetov.net ~]#
```

Figure 1: Создание группы

Настройка сервера Samba



```
root@server:~
smb.conf [----] 32 L: [ 25+21 46/ 46] *(950 / 950b) <E0F> [*][X]
<----->read only = No
<----->inherit acls = Yes

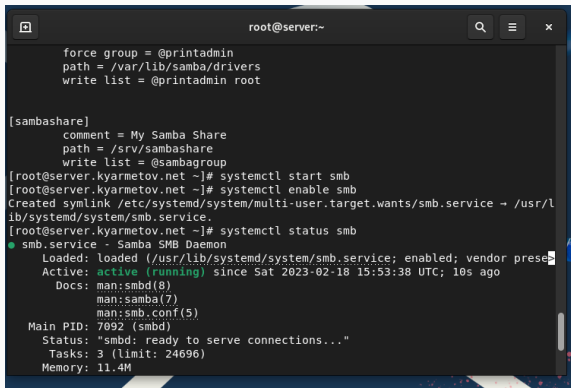
[printers]
<----->comment = All Printers
<----->path = /var/tmp
<----->printable = Yes
<----->create mask = 0600
<----->browseable = No

[print$]
<----->comment = Printer Drivers
<----->path = /var/lib/samba/drivers
<----->write list = @printadmin root
<----->force group = @printadmin
<----->create mask = 0664
<----->directory mask = 0775

[sambashare]
<----->comment = My Samba Share
<----->path = /srv/sambashare
<----->write list = @sambagroup
1Help 2Save 3Mark 4Replac 5Copy 6Move 7Search 8Delete 9PullDn 10Quit
```

Figure 2: файл smb.conf

Настройка сервера Samba

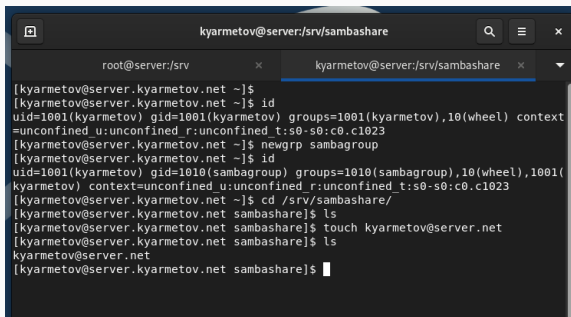
A terminal window titled 'root@server:~' with search, menu, and close icons. It displays the configuration of the smb service, including the 'force group', 'path', and 'write list' for both the global configuration and the '[smbashare]' section. It then shows the commands to start and enable the service, followed by the output of 'systemctl status smb', which indicates the service is active and running.

```
force group = @printadmin
path = /var/lib/samba/drivers
write list = @printadmin root

[smbashare]
comment = My Samba Share
path = /srv/smbashare
write list = @smbagroup
[root@server.kyarmetov.net ~]# systemctl start smb
[root@server.kyarmetov.net ~]# systemctl enable smb
Created symlink /etc/systemd/system/multi-user.target.wants/smb.service → /usr/lib/systemd/system/smb.service.
[root@server.kyarmetov.net ~]# systemctl status smb
● smb.service - Samba SMB Daemon
   Loaded: loaded (/usr/lib/systemd/system/smb.service; enabled; vendor prese
   Active: active (running) since Sat 2023-02-18 15:53:38 UTC; 10s ago
     Docs: man:smbd(8)
           man:samba(7)
           man:smb.conf(5)
    Main PID: 7092 (smbd)
   Status: "smbd: ready to serve connections..."
     Tasks: 3 (limit: 24696)
    Memory: 11.4M
```

Figure 3: Проверка работы

Настройка сервера Samba



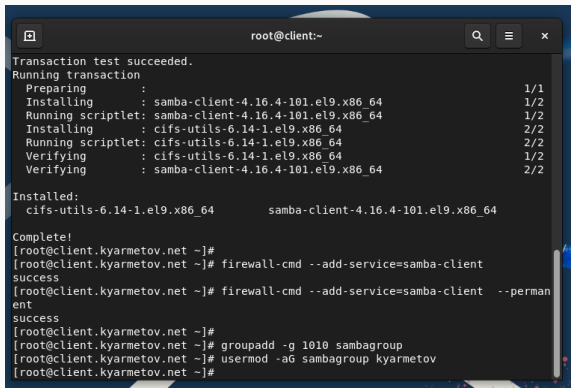
```
kyarmetov@server:/srv/sambashare

root@server:/srv  x  kyarmetov@server:/srv/sambashare  x  v

[kyarmetov@server.kyarmetov.net ~]$
[kyarmetov@server.kyarmetov.net ~]$ id
uid=1001(kyarmetov) gid=1001(kyarmetov) groups=1001(kyarmetov),10(wheel) context
=unconfined_u:unconfined_r:unconfined_t:s0-s0:c0.c1023
[kyarmetov@server.kyarmetov.net ~]$ newgrp sambagroup
[kyarmetov@server.kyarmetov.net ~]$ id
uid=1001(kyarmetov) gid=1010(sambagroup) groups=1010(sambagroup),10(wheel),1001(
kyarmetov) context=unconfined_u:unconfined_r:unconfined_t:s0-s0:c0.c1023
[kyarmetov@server.kyarmetov.net ~]$ cd /srv/sambashare/
[kyarmetov@server.kyarmetov.net sambashare]$ ls
[kyarmetov@server.kyarmetov.net sambashare]$ touch kyarmetov@server.net
[kyarmetov@server.kyarmetov.net sambashare]$ ls
kyarmetov@server.net
[kyarmetov@server.kyarmetov.net sambashare]$
```

Figure 4: Создание пользовательской директории

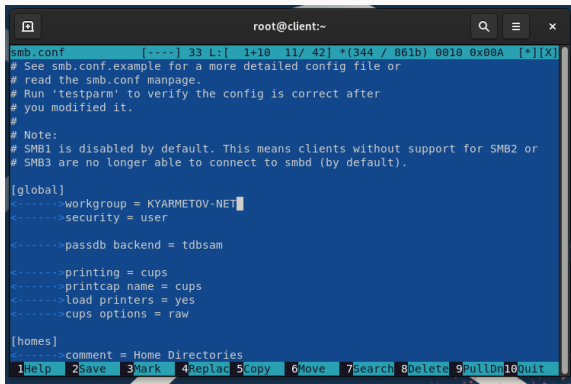
Монтирование файловой системы Samba на клиенте



```
root@client:~  
Transaction test succeeded.  
Running transaction  
  Preparing           :                               1/1  
  Installing          : samba-client-4.16.4-101.el9.x86_64 1/2  
  Running scriptlet:  samba-client-4.16.4-101.el9.x86_64 1/2  
  Installing          : cifs-utils-6.14-1.el9.x86_64      2/2  
  Running scriptlet:  cifs-utils-6.14-1.el9.x86_64      2/2  
  Verifying           : cifs-utils-6.14-1.el9.x86_64      1/2  
  Verifying           : samba-client-4.16.4-101.el9.x86_64 2/2  
  
Installed:  
  cifs-utils-6.14-1.el9.x86_64      samba-client-4.16.4-101.el9.x86_64  
  
Complete!  
[root@client.kyarmetov.net ~]#  
[root@client.kyarmetov.net ~]# firewall-cmd --add-service=samba-client  
success  
[root@client.kyarmetov.net ~]# firewall-cmd --add-service=samba-client --perman  
ent  
success  
[root@client.kyarmetov.net ~]#  
[root@client.kyarmetov.net ~]# groupadd -g 1010 sambagroup  
[root@client.kyarmetov.net ~]# usermod -aG sambagroup kyarmetov  
[root@client.kyarmetov.net ~]#
```

Figure 5: Создание группы

Монтирование файловой системы Samba на клиенте



The image shows a terminal window with a dark background and light blue text. The window title is 'root@client:~'. The content of the terminal is the configuration file 'smb.conf'. The file starts with a header line: 'smb.conf [----] 33 L: [1+10 11/ 42] *(344 / 861b) 0010 0x00A [*][X]'. This is followed by several comment lines: '# See smb.conf.example for a more detailed config file or', '# read the smb.conf manpage.', '# Run \'testparm\' to verify the config is correct after', '# you modified it.', and '# Note:'. The next line is '# SMB1 is disabled by default. This means clients without support for SMB2 or', and the following line is '# SMB3 are no longer able to connect to smbd (by default)'. The configuration is organized into sections: '[global]' and '[homes]'. Under '[global]', there are several lines of configuration: '<----->workgroup = KYARMETOV-NET', '<----->security = user', '<----->passdb backend = tdbsam', '<----->printing = cups', '<----->printcap name = cups', '<----->load printers = yes', and '<----->cups options = raw'. Under '[homes]', there is one line: '<----->comment = Home Directories'. At the bottom of the terminal window, there is a status bar with a row of icons and labels: '1Help', '2Save', '3Mark', '4Replac', '5Copy', '6Move', '7Search', '8Delete', '9PullDn', and '10Quit'.

```
smb.conf [----] 33 L: [ 1+10 11/ 42] *(344 / 861b) 0010 0x00A [*][X]
# See smb.conf.example for a more detailed config file or
# read the smb.conf manpage.
# Run 'testparm' to verify the config is correct after
# you modified it.
#
# 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 = KYARMETOV-NET
<----->security = user

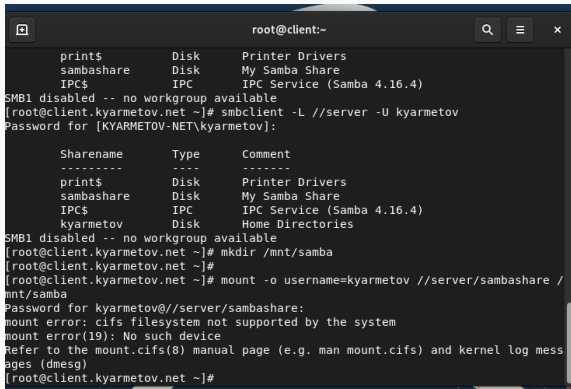
<----->passdb backend = tdbsam

<----->printing = cups
<----->printcap name = cups
<----->load printers = yes
<----->cups options = raw

[homes]
<----->comment = Home Directories
1Help 2Save 3Mark 4Replac 5Copy 6Move 7Search 8Delete 9PullDn 10Quit
```

Figure 6: файл smb.conf

Монтирование файловой системы Samba на клиенте



```
root@client:~  
  
    print$      Disk      Printer Drivers  
    sambashare  Disk      My Samba Share  
    IPC$        IPC        IPC Service (Samba 4.16.4)  
SMB1 disabled -- no workgroup available  
[root@client.kyarmetov.net ~]# smbclient -L //server -U kyarmetov  
Password for [KYARMETOV-NET\kyarmetov]:  
  
    Sharename      Type      Comment  
    -----      -  
    print$         Disk      Printer Drivers  
    sambashare     Disk      My Samba Share  
    IPC$           IPC        IPC Service (Samba 4.16.4)  
    kyarmetov      Disk      Home Directories  
SMB1 disabled -- no workgroup available  
[root@client.kyarmetov.net ~]# mkdir /mnt/samba  
[root@client.kyarmetov.net ~]#  
[root@client.kyarmetov.net ~]# mount -o username=kyarmetov //server/sambashare /  
mnt/samba  
Password for kyarmetov@//server/sambashare:  
mount error: cifs filesystem not supported by the system  
mount error(19): No such device  
Refer to the mount.cifs(8) manual page (e.g. man mount.cifs) and kernel log mess  
ages (dmesg)  
[root@client.kyarmetov.net ~]#
```

Figure 7: подключение к серверу

Приобретены практические навыки по настройке протокола SMB.