МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ

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«САНКТ-ПЕТЕРБУРГСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ АЭРОКОСМИЧЕСКОГО ПРИБОРОСТРОЕНИЯ»
КАФЕДРА КОМПЬЮТЕРНЫХ ТЕХНОЛОГИЙ И ПРОГРАММНОЙ ИНЖЕНЕРИИ

ОТЧЕТ
ЗАЩИЩЕН С ОЦЕНКОЙ
ПРЕПОДАВАТЕЛЬ

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ОТЧЕТ О ЛАБОРАТОРНОЙ РАБОТЕ №6
Общий доступ к файлам. SMB/CIFS и Samba

по дисциплине: Администрирование вычислительных сетей

РАБОТУ ВЫПОЛНИЛ

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Цель работы:

Изучить технологию работы с общими файлами по протоколам SMB/CIFS

Задачи:

На сервере, сконфигурированном в предыдущих работах, т. е. имеющем имя Вашего отца и входящего в домен с Вашей фамилией и номером группы, создать каталог с общими файлами с именем tutorials, доступными всем студентам (членам группы stud), доступ на изменение файлов (Change), и полный s) на чтение, и на изменение - членам группы teachers. Обеспечить и показать, что если работать на клиентском компьютере, то можно работать с файлами из созданного сетевого каталога на оговоренных условиях. В качестве подсказки: для того, чтобы добиться выполнения указанных в задании разрешений нужно воспользоваться списками управления доступом, которые реализованы в Astra Linux Special Ed), доступ на изменение файлов (Change), и полный ition. Легче всего их использовать через графическое приложение «Общие папки (Samba)», которое доступно по пункту «Сеть» в Панели управления. Устанавливаемые права доступа доступны в графическом интерфейсе через свойства созданного каталога tutorials.

Файл конфигурации smb.conf:

```
#
# Sample configuration file for the Samba suite for Debian GNU/Linux.
#
#
# This is the main Samba configuration file. You should read the
# smb.conf(5) manual page in order to understand the options listed
# here. Samba has a huge number of configurable options most of which
# are not shown in this example
#
```

```
# Some options that are often worth tuning have been included as
# commented-out examples in this file.
#  - When such options are commented with ";", the proposed setting
#    differs from the default Samba behaviour
#  - When commented with "#", the proposed setting is the default
#    behaviour of Samba but the option is considered important
#    enough to be mentioned here
#
# NOTE: Whenever you modify this file you should run the command
# "testparm" to check that you have not made any basic syntactic
# errors.


#======================= Global Settings =======================


[global]


## Browsing/Identification ###


# Change this to the workgroup/NT-domain name your Samba server will part of
   workgroup = WORKGROUP


#### Networking ####


# The specific set of interfaces / networks to bind to
# This can be either the interface name or an IP address/netmask;
# interface names are normally preferred
;   interfaces = 127.0.0.0/8 eth0


# Only bind to the named interfaces and/or networks; you must use the
# 'interfaces' option above to use this.
```

```
# It is recommended that you enable this feature if your Samba machine is

# not protected by a firewall or is a firewall itself.  However, this

# option cannot handle dynamic or non-broadcast interfaces correctly.

;   bind interfaces only = yes




#### Debugging/Accounting ####


# This tells Samba to use a separate log file for each machine

# that connects

   log file = /var/log/samba/log.%m


# Cap the size of the individual log files (in KiB).

   max log size = 1000


# We want Samba to only log to /var/log/samba/log.{smbd,nmbd}.

# Append syslog@1 if you want important messages to be sent to syslog too.

   logging = file


# Do something sensible when Samba crashes: mail the admin a backtrace

   panic action = /usr/share/samba/panic-action %d




####### Authentication #######


# Server role. Defines in which mode Samba will operate. Possible

# values are "standalone server", "member server", "classic primary

# domain controller", "classic backup domain controller", "active

# directory domain controller".
```

```
#
# Most people will want "standalone server" or "member server".
# Running as "active directory domain controller" will require first
# running "samba-tool domain provision" to wipe databases and create a
# new domain.
   server role = standalone server


   obey pam restrictions = yes


# This boolean parameter controls whether Samba attempts to sync the Unix
# password with the SMB password when the encrypted SMB password in the
# passdb is changed.
   unix password sync = yes


# For Unix password sync to work on a Debian GNU/Linux system, the following
# parameters must be set (thanks to Ian Kahan <<kahan@informatik.tu-muenchen.de>
for
# sending the correct chat script for the passwd program in Debian Sarge).
   passwd program = /usr/bin/passwd %u
   passwd chat = *Enter\snew\s*\spassword:* %n\n *Retype\snew\s*\spassword:* %n\n
*password\supdated\ssuccessfully* .


# This boolean controls whether PAM will be used for password changes
# when requested by an SMB client instead of the program listed in
# 'passwd program'. The default is 'no'.
   pam password change = yes


# This option controls how unsuccessful authentication attempts are mapped
# to anonymous connections
   map to guest = bad user
```

```
########## Domains ###########


#
# The following settings only takes effect if 'server role = classic
# primary domain controller', 'server role = classic backup domain controller'
# or 'domain logons' is set
#


# It specifies the location of the user's
# profile directory from the client point of view) The following
# required a [profiles] share to be setup on the samba server (see
# below)
;  logon path = \\%N\profiles\%U
# Another common choice is storing the profile in the user's home directory
# (this is Samba's default)
#  logon path = \\%N\%U\profile


# The following setting only takes effect if 'domain logons' is set
# It specifies the location of a user's home directory (from the client
# point of view)
;  logon drive = H:
#  logon home = \\%N\%U


# The following setting only takes effect if 'domain logons' is set
# It specifies the script to run during logon. The script must be stored
# in the [netlogon] share
# NOTE: Must be store in 'DOS' file format convention
;  logon script = logon.cmd
```

```
# This allows Unix users to be created on the domain controller via the SAMR
# RPC pipe.  The example command creates a user account with a disabled Unix
# password; please adapt to your needs
; add user script = /usr/sbin/useradd --create-home %u


# This allows machine accounts to be created on the domain controller via the
# SAMR RPC pipe.
# The following assumes a "machines" group exists on the system
; add machine script  = /usr/sbin/useradd -g machines -c "%u machine account" -d
/var/lib/samba -s /bin/false %u


# This allows Unix groups to be created on the domain controller via the SAMR
# RPC pipe.
; add group script = /usr/sbin/addgroup --force-badname %g


############ Misc ############


# Using the following line enables you to customise your configuration
# on a per machine basis. The %m gets replaced with the netbios name
# of the machine that is connecting
;   include = /home/samba/etc/smb.conf.%m


# Some defaults for winbind (make sure you're not using the ranges
# for something else.)
;  idmap config * :          backend = tdb
;  idmap config * :          range   = 3000-7999
;  idmap config YOURDOMAINHERE : backend = tdb
;  idmap config YOURDOMAINHERE : range   = 100000-999999
;  template shell = /bin/bash
```

```
# Setup usershare options to enable non-root users to share folders

# with the net usershare command.


# Maximum number of usershare. 0 means that usershare is disabled.

#   usershare max shares = 100


# Allow users who've been granted usershare privileges to create

# public shares, not just authenticated ones

   usershare allow guests = yes

   disable netbios = no
#====================== Share Definitions ======================

   security = user
[homes]

   comment = Home Directories

   browseable = no


# By default, the home directories are exported read-only. Change the

# next parameter to 'no' if you want to be able to write to them.

   read only = yes


# File creation mask is set to 0700 for security reasons. If you want to

# create files with group=rw permissions, set next parameter to 0775.

   create mask = 0700


# Directory creation mask is set to 0700 for security reasons. If you want to

# create dirs. with group=rw permissions, set next parameter to 0775.

   directory mask = 0700


# By default, \\server\username shares can be connected to by anyone

# with access to the samba server.
```

```
# The following parameter makes sure that only "username" can connect

# to \\server\username

# This might need tweaking when using external authentication schemes

    valid users = %S


# Un-comment the following and create the netlogon directory for Domain Logons

# (you need to configure Samba to act as a domain controller too.)

;[netlogon]

;   comment = Network Logon Service

;   path = /home/samba/netlogon

;   guest ok = yes

;   read only = yes


# Un-comment the following and create the profiles directory to store

# users profiles (see the "logon path" option above)

# (you need to configure Samba to act as a domain controller too.)

# The path below should be writable by all users so that their

# profile directory may be created the first time they log on

;[profiles]

;   comment = Users profiles

;   path = /home/samba/profiles

;   guest ok = no

;   browseable = no

;   create mask = 0600

;   directory mask = 0700

    printable = no

    guest ok = no

    guest only = no

[printers]

    comment = All Printers
```

```
    browseable = no

    path = /var/tmp

    printable = yes

    guest ok = no

    read only = yes

    create mask = 0700

    guest only = no


# Windows clients look for this share name as a source of downloadable

# printer drivers

[print$]

    comment = Printer Drivers

    path = /var/lib/samba/printers

    browseable = yes

    read only = yes

    guest ok = no

# Uncomment to allow remote administration of Windows print drivers.

# You may need to replace 'lpadmin' with the name of the group your

# admin users are members of.

# Please note that you also need to set appropriate Unix permissions

# to the drivers directory for these users to have write rights in it

;   write list = root, @lpadmin

    printable = no

    guest only = no

[share]

    comment = <Файлы с полным доступом для всех. Работайте осторожно!>

    guest ok = yes

    force user = nobody

    force group = nogroup

    path = /srv/files
```

```
    read only = yes

    printable = no

    browseable = yes

    guest only = no

    valid users = nobody


[tutorials]

    path = /srv/tutorials

    browseable = yes

    create mask = 0660

    directory mask = 2770

    force group = teachers

    read only = no

    valid users = @stud, @teachers

    write list = @teachers

    read list = @stud

    printable = no

    guest ok = no

    guest only = no

    comment = Сетевой ресурс для 6 лабораторной
```

Скриншоты результата выполнения:
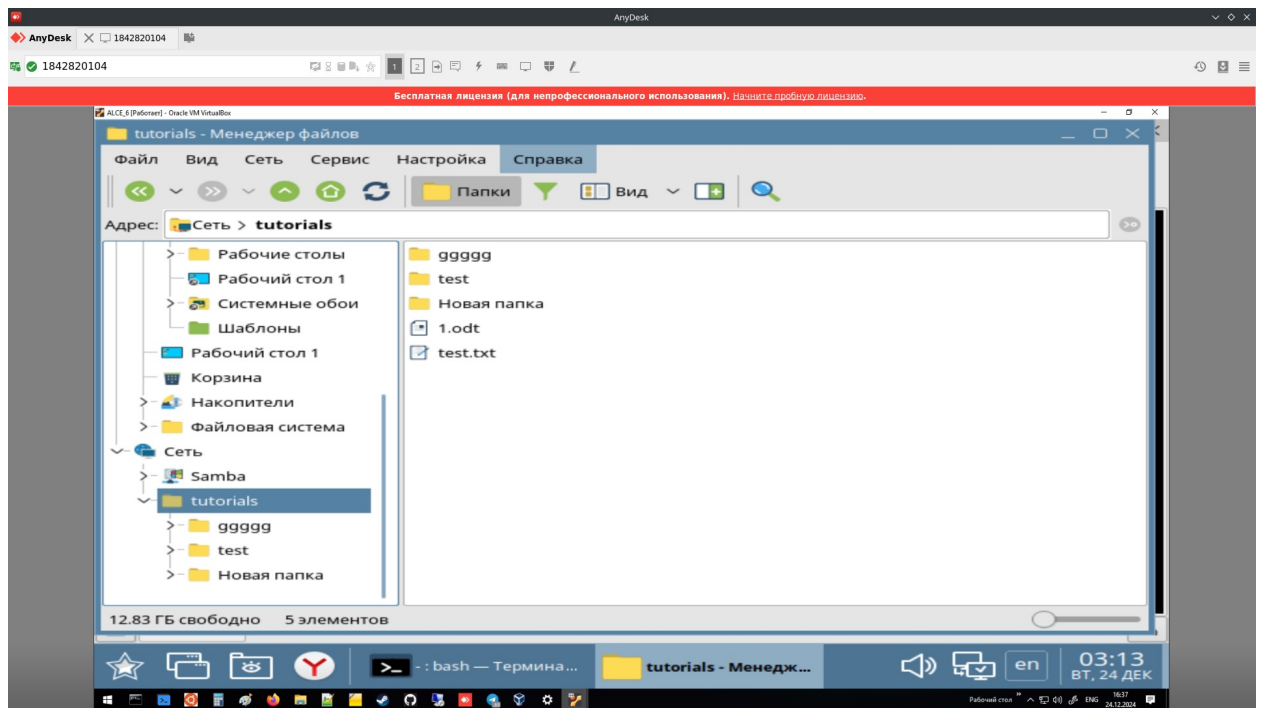
Вывод:

В результате выполнения работы был создан общий каталог "tutorials" на сервере с соответствующими правами доступа для пользователей из группы "stud" (только чтение) и группы "teachers" (полный доступ). Использование графического интерфейса "Общие папки (Samba)" в Astra Linux позволило успешно настроить права доступа, обеспечив возможность работы с файлами на клиентских компьютерах в соответствии с заданными условиями