

Вернёмся на ISP

Настройка времени.

Проверим работоспособность плагина.

```
root@ISP:~# systemctl status chrony
• chrony.service - chrony, an NTP client/server
   Loaded: loaded (/lib/systemd/system/chrony.service; vendor preset: enabled)
   Active: active (running) since Wed 2022-08-24 12:14:14 CEST; 1min 45s ago
```

Перейдём к конфигурации файла.

```
root@ISP:~# nano /etc/chrony/chrony.conf
```

Файл должен принять вид.

```
# Welcome to the chrony configuration file. See chrony.conf(5) for more
# information about usable directives.

# Include configuration files found in /etc/chrony/conf.d.
confdir /etc/chrony/conf.d
allow 3.3.3.0/24
allow 4.4.4.0/24
local stratum 4

# Use Debian vendor zone.
# pool 2.debian.pool.ntp.org iburst

# Use time sources from DHCP.
# sourcedir /run/chrony-dhcp

# Use NTP sources found in /etc/chrony/sources.d.
# sourcedir /etc/chrony/sources.d

# This directive specify the location of the file containing ID/key pairs for
# NTP authentication.
# keyfile /etc/chrony/chrony.keys

# This directive specify the file into which chronyd will store the rate
# information.
driftfile /var/lib/chrony/chrony.drift

# Save NTS keys and cookies.
#ntsdumpdir /var/lib/chrony

# Uncomment the following line to turn logging on.
log tracking measurements statistics

# Log files location.

# Log files location.
logdir /var/log/chrony

# Stop bad estimates upsetting machine clock.
# maxupdateskew 100.0

# This directive enables kernel synchronisation (every 11 minutes) of the
# real-time clock. Note that it can't be used along with the 'rtcfile' directive.
rtcsync

# Step the system clock instead of slewing it if the adjustment is larger than
# one second, but only in the first three clock updates.
makestep 10 30
```

```
root@ISP:~# systemctl restart chrony
```

```
root@ISP:~# systemctl status chrony
• chrony.service - chrony, an NTP client/
  Loaded: loaded (/lib/systemd/system/
  Active: active (running) since Wed 2
```

Примерно так должно всё выглядеть.

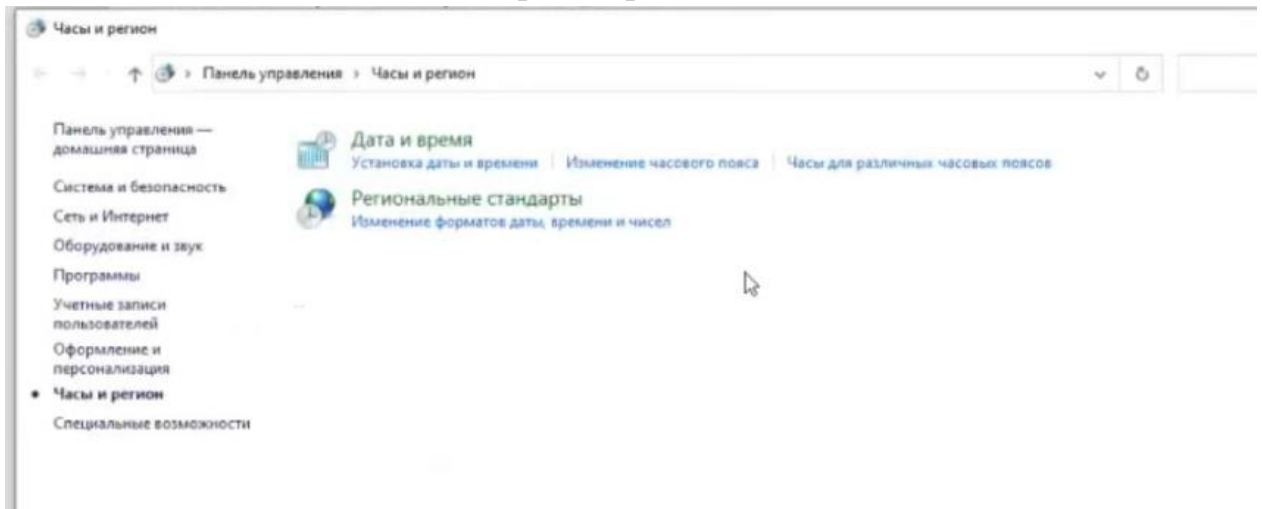
```
root@ISP:~# date
Wed 04 May 2022 08:01:24 AM EDT
```

```
root@ISP:~# timedatectl set-timezone Europe/Moscow
root@ISP:~# date
Wed 04 May 2022 03:02:25 PM MSK
```

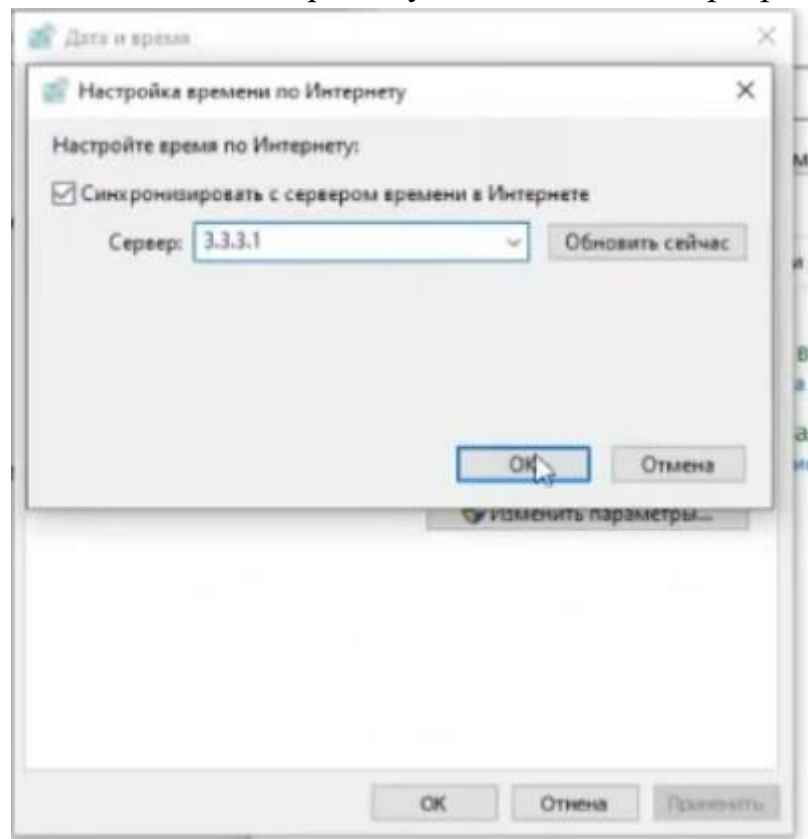
```
root@ISP:~# chronyc tracking
Reference ID      : 7F7F0101 ()
Stratum          : 4
Ref time (UTC)   : Wed May 04 12:03:40 2022
System time      : 0.000000000 seconds fast of NTP time
Last offset      : +0.000000000 seconds
RMS offset       : 0.000000000 seconds
Frequency        : 0.000 ppm slow
Residual freq    : +0.000 ppm
Skew             : 0.000 ppm
Root delay       : 0.000000000 seconds
Root dispersion  : 0.000000000 seconds
Update interval  : 0.0 seconds
Leap status      : Normal
```

```
root@ISP:~# chronyc clients
Hostname          NTP    Drop Int IntL Last      Cmd    Drop Int  Last
=====
```

Настроим время на CLI



Необходимо в строчке указать наш dns сервер.

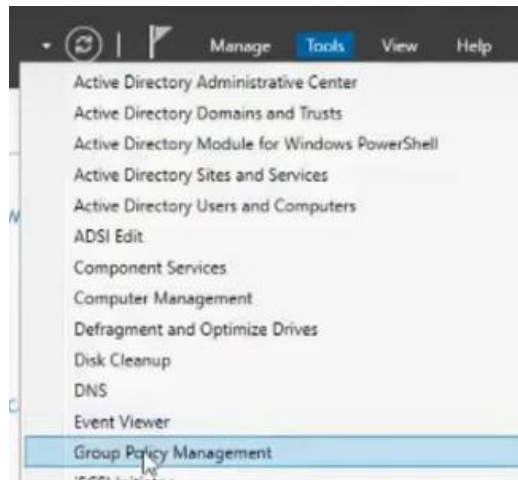


Теперь на ISP появится клиент.

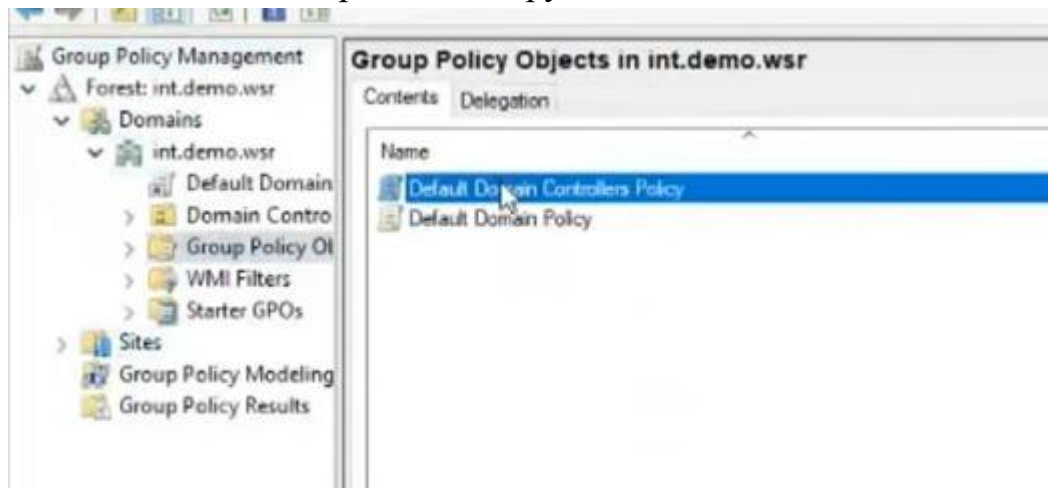
```
root@ISP:~# chronyc clients
Hostname                NTP      Drop Int IntL Last      Cmd      Drop Int  Last
=====
3.3.3.10                 3        0   3   -    6        0        0   -    -
root@ISP:~#
```

Перейдём на SRV

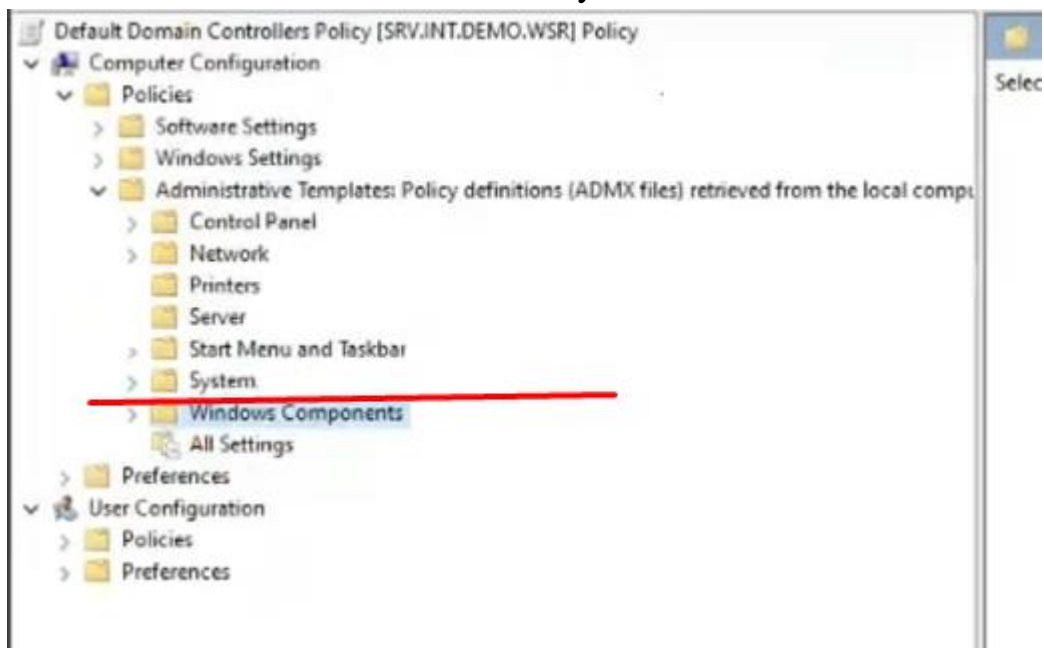
Чтобы настроить время необходимо использовать службу времени.
Поскольку у нас установлен домен то это можно сделать через доменные политики!



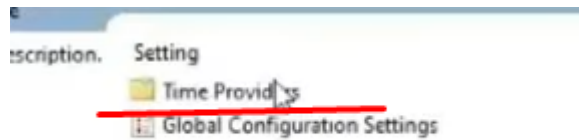
Переходим в груп. Политики.



Заходим в System

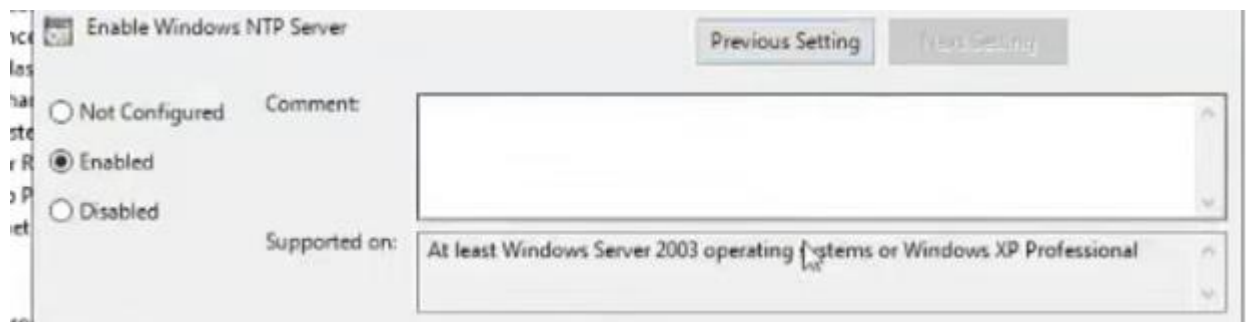


Далее в Windows Time Server.

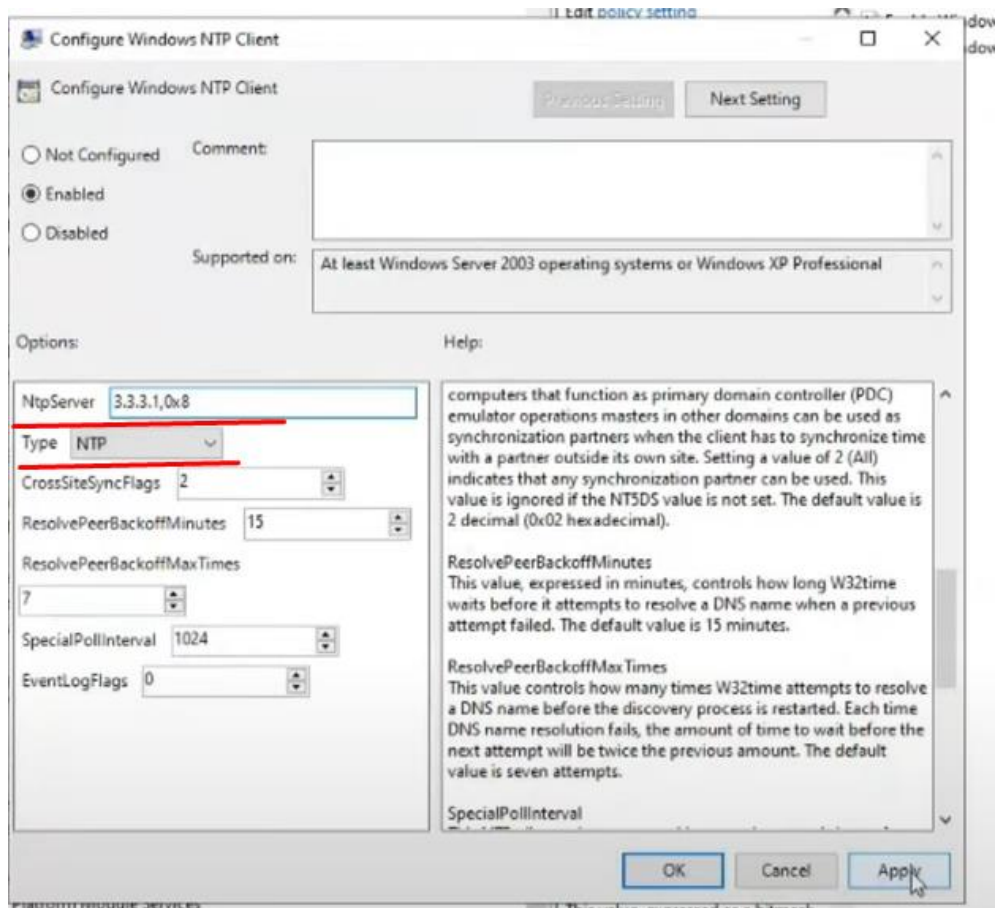


Setting	State	Comment
Configure Windows NTP Client	Not configured	No
Enable Windows NTP Client	Not configured	No
Enable Windows NTP Server	Not configured	No

Включаем все NTP(с низу)

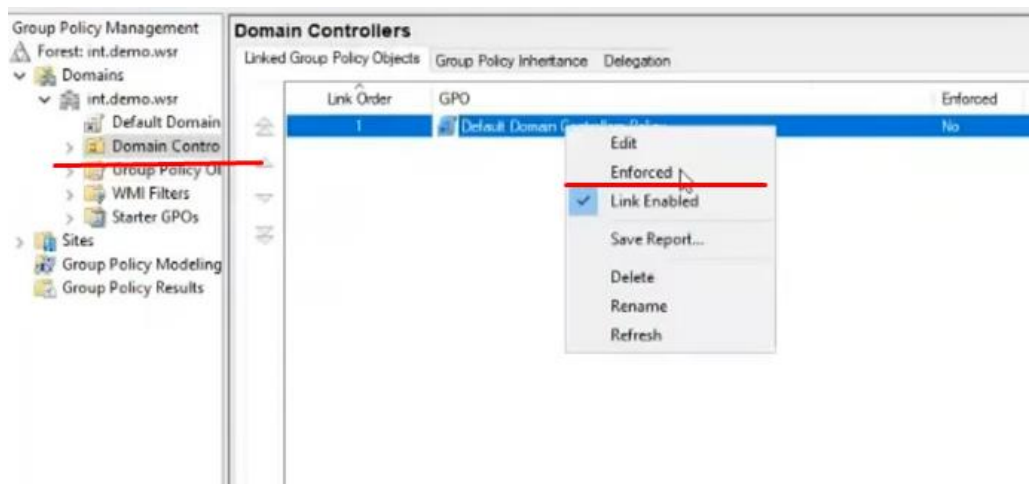


У клиента прописываем NTP Server.(и протокол NTP)

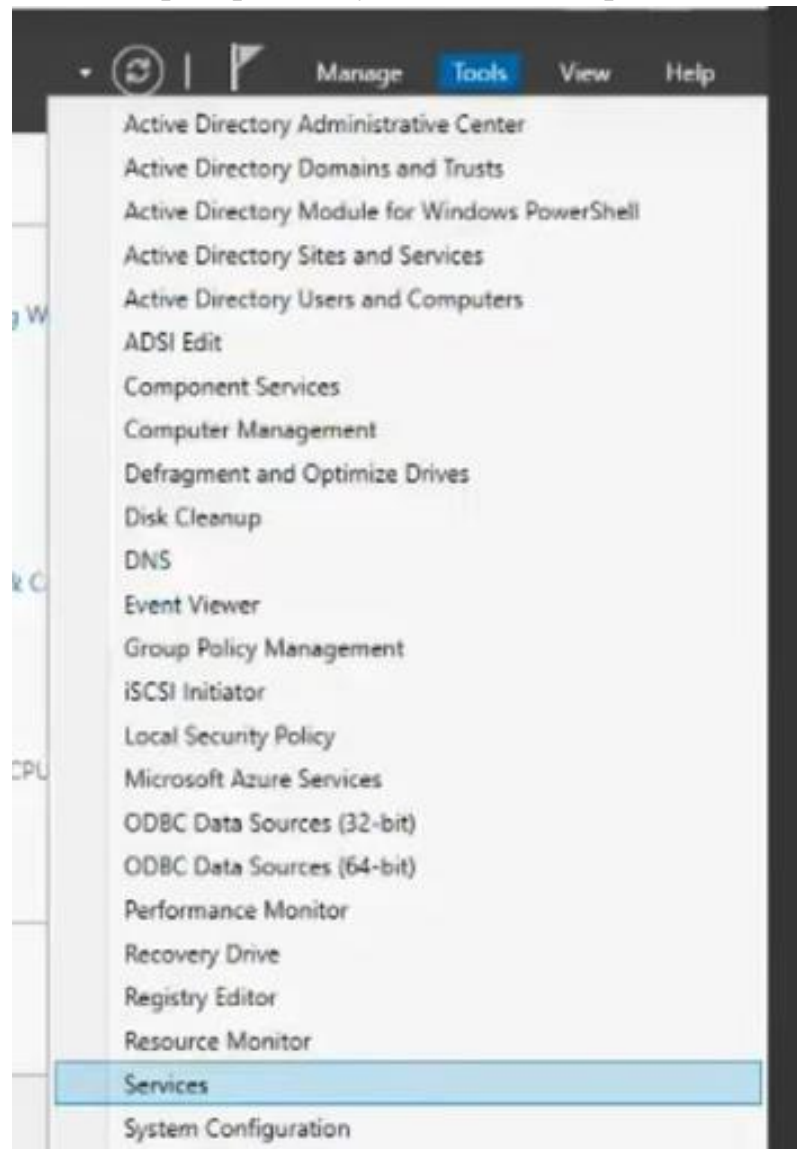


Далее применима данную политику.

Зайдём в доменный контролер и сделаем политику Endforced.



Проверим запущен ли наш сервис.



Windows Modules Installer	Enables inst...		Manual	Local Syste...
Windows Push Notification...	This service ...	Running	Automatic	Local Syste...
Windows Push Notification...	This service ...	Running	Automatic	Local Syste...
Windows PushToInstall Serv...	Provides inf...		Disabled	Local Syste...
Windows Remote Manage...	Windows R...	Running	Automatic	Network S...
Windows Search	Provides co...		Disabled	Local Syste...
Windows Security Service	Windows Se...	Running	Manual	Local Syste...
Windows Time	Maintains d...	Running	Automatic (T...	Local Service
Windows Update	Enables the ...	Running	Manual (Trig...	Local Syste...
Windows Update Medic Ser...	Enables rem...	Running	Manual	Local Syste...
WinHTTP Web Proxy Auto...	WinHTTP i...	Running	Manual	Local Service

На ISP должен появиться второй клиент!

```
root@ISP:~# chronyc clients
Hostname           NTP      Drop Int IntL Last      Cmd      Drop Int  Last
=====
3.3.3.10           3        0    3    -   489      0        0    -    -
4.4.4.100         4        0    5    -    59      0        0    -    -
root@ISP:~#
```

Преходим на WEB-L и настраиваем chrony.

```
root@WEB-L:~# apt install chrony
```

```
root@WEB-L:~# nano /etc/chrony/chrony.conf
```

```
# Welcome to the chrony configuration file. See chrony.conf(5) for more
# information about usable directives.

# Include configuration files found in /etc/chrony/conf.d.
#confdir /etc/chrony/conf.d

# Use Debian vendor zone.
#pool 2.debian.pool.ntp.org iburst
server srv.int.demo.wsr prefer iburst_

# Use time sources from DHCP.
#sourcedir /run/chrony-dhcp

# Use NTP sources found in /etc/chrony/sources.d.
#sourcedir /etc/chrony/sources.d

# This directive specify the location of the file containing ID/key pairs for
# NTP authentication.
# keyfile /etc/chrony/chrony.keys

# This directive specify the file into which chronyd will store the rate
# information.
driftfile /var/lib/chrony/chrony.drift

# Save NTS keys and cookies.
#ntsdumpdir /var/lib/chrony

# Uncomment the following line to turn logging on.
log tracking measurements statistics

# Log files location.
logdir /var/log/chrony

# Stop bad estimates upsetting machine clock.
# maxupdateskew 100.0

# This directive enables kernel synchronisation (every 11 minutes) of the
# real-time clock. Note that it can't be used along with the 'rtcfile' directive.
rtcsync

# Step the system clock instead of slewing it if the adjustment is larger than
# one second, but only in the first three clock updates.
makestep 10 30

# Get TAI-UTC offset and leap seconds from the system tz database.
# This directive must be commented out when using time sources serving
# leap-smeared time.
# leapsectz right/UTC
```



```
root@WEB-L:~# systemctl restart chrony
```

```
root@WEB-L:~# systemctl status chrony
• chrony.service - chrony, an NTP client/server
   Loaded: loaded (/lib/systemd/system/chrony.service; enabled; vendor preset: enabled)
   Active: active (running) since Wed 2022-05-04 08:17:23 EDT; 7s ago
     Docs: man:chronyd(8)
```

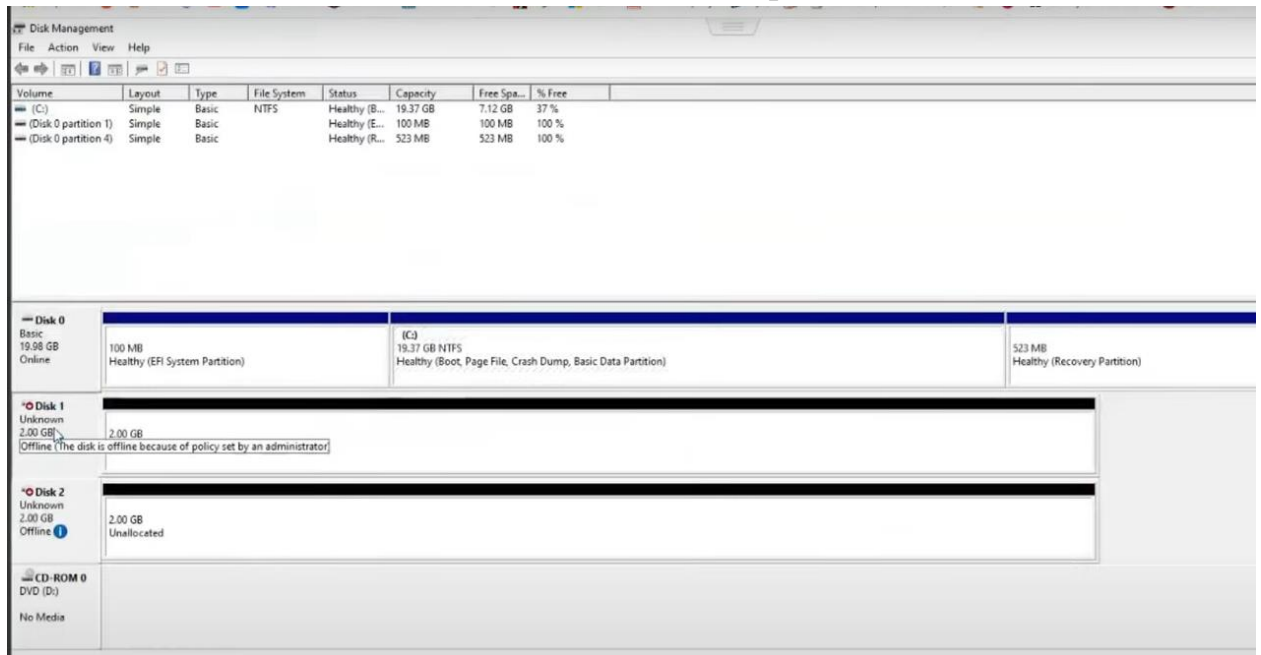
```
root@WEB-L:~# chronyc sources
MS Name/IP address         Stratum Poll Reach LastRx Last sample
=====
^* 192.168.100.200           5   6   17   17  -4862ns[ +89us] +/- 766ms
root@WEB-L:~#
```

Перед ip должна быть звёздочка, если ! значит не синхронизировалось.
правильно.

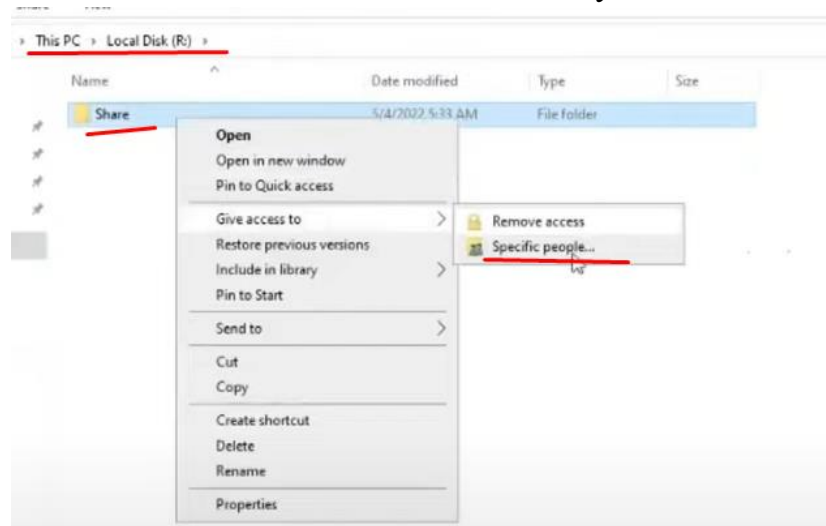
```
root@WEB-L:~# timedatectl set-timezone Europe/Moscow
root@WEB-L:~# date
Wed 04 May 2022 03:18:45 PM MSK
root@WEB-L:~#
```

На всех оставшихся машинах настройки будут абсолютно такие же.

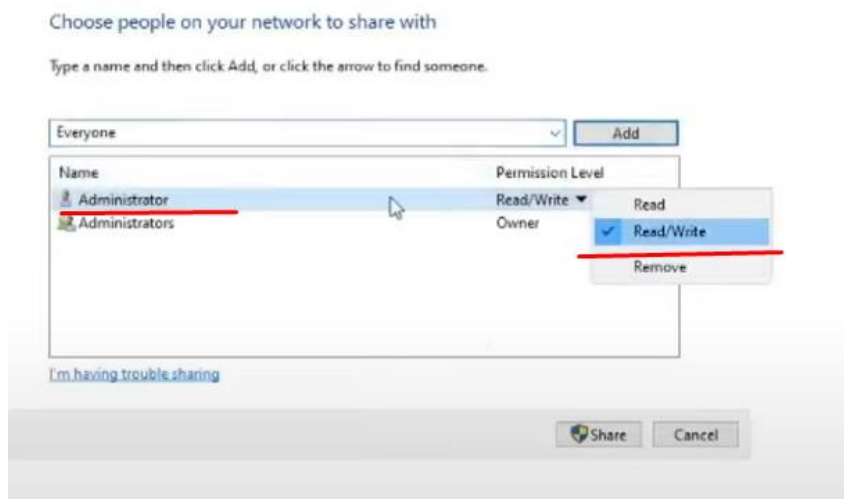
Далее добавляем 2 диска(по 2 гига) по заданию на SRV.
Включаем наши диски.(создадим первый диск диск R)



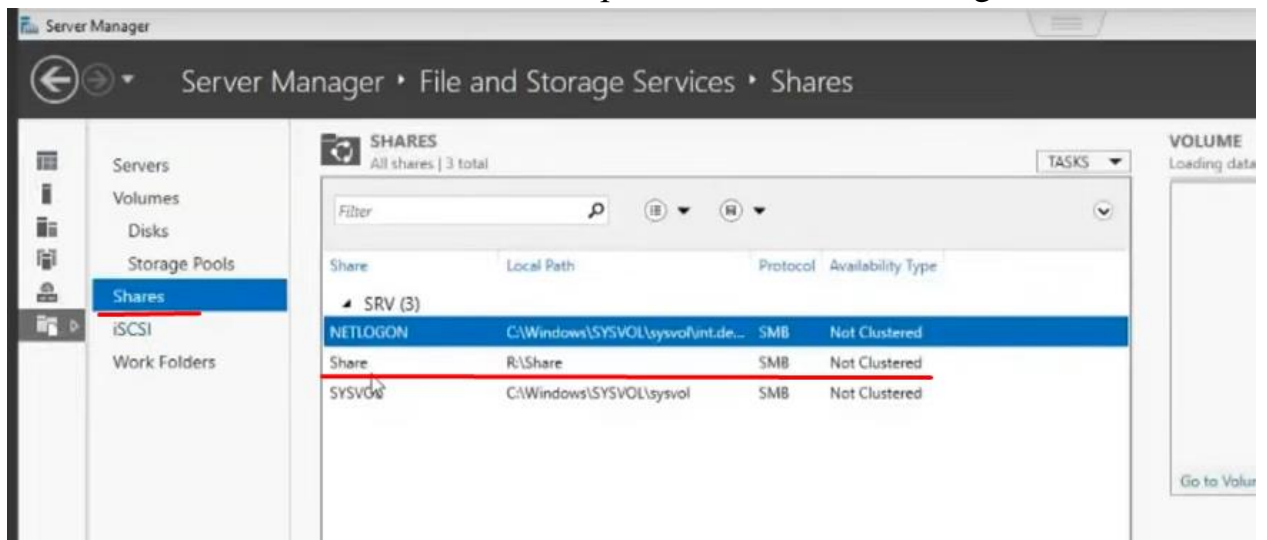
На диске создаём папку



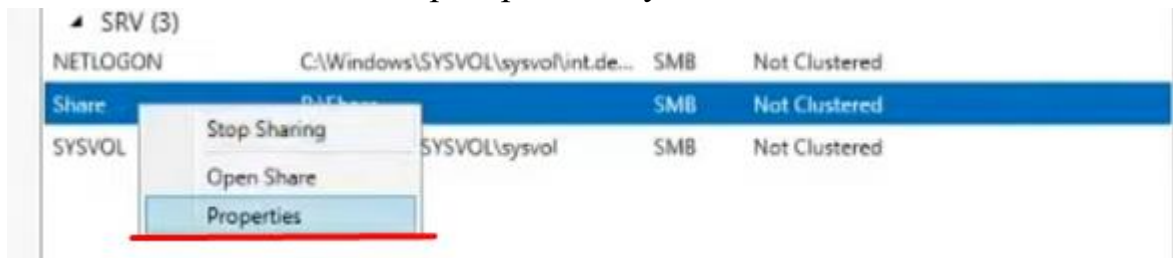
Даём доступ Администратору.



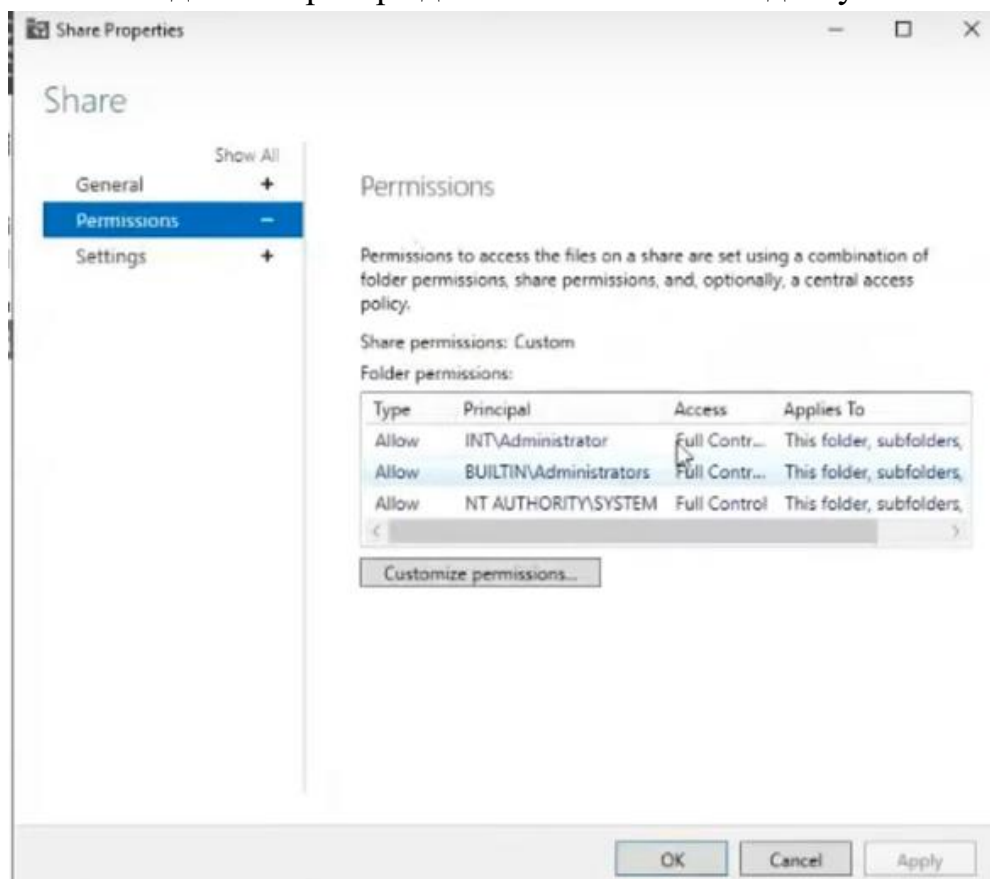
Эта папка должна отображаться в Server Manager.



Проверим доступность.



У администратора должен быть полный доступ!



Настроим CIFS

Зайдём на WEB-L

Установим CIFS

```
root@WEB-L:~# apt install cifs-utils
```

Создадим папку.

```
root@WEB-L:~# mkdir /opt/share
```

Перейдём в неё.

```
root@WEB-L:~# cd /opt/share
```

Далее в эту папку добавим наш ресурс Share.

```
root@WEB-L:/opt/share# mount.cifs //srv.int.demo.wsr/share /opt/share/ -o user=Administrator,password=P@ssw0rd
```

Попробуем создать файл. (он должен отображаться на SRV в папке Share.)

```
root@WEB-L:/opt/share# touch test1.txt
```

Далее перейдём в другой файл.

```
root@WEB-L:~# nano /etc/fstab
```

И редактируем его (вписываем строку)

```
GNU nano 5.4 /etc/fstab
# /etc/fstab: static file system information.
#
# Use 'blkid' to print the universally unique identifier for a
# device; this may be used with UUID= as a more robust way to name devices
# that works even if disks are added and removed. See fstab(5).
#
# systemd generates mount units based on this file, see systemd.mount(5).
# Please run 'systemctl daemon-reload' after making changes here.
#
# <file system> <mount point> <type> <options> <dump> <pass>
# / was on /dev/sda1 during installation
UUID=c0ac4da2-0a5a-46cd-baa0-b1a2dd793d0a / ext4 errors=remount-ro 0 1
# swap was on /dev/sda5 during installation
UUID=239c86d6-56ae-4628-a984-18a4806b3447 none swap sw 0 0
/dev/sr0 /media/cdrom0 udf,iso9660 user,noauto 0 0
//srv.int.demo.wsr/share /opt/share cifs rw,user=Administrator,password=P@ssw0rd 0 0
```

Проверяем а потом перезагружаем машину

```
root@WEB-L:~# mount -a
root@WEB-L:~# ls -l /opt/share/
total 0
-rwxr-xr-x 1 root root 0 May  4 15:39 test100.txt
root@WEB-L:~# _
```

На WEB-R делаем абсолютно тоже самое и проверяем.(создаём ещё один файл который должен быть доступен тем кому мы дали доступ) И перезагружаем машину.

```
root@WEB-R:~# mount -a
root@WEB-R:~# ls -l /opt/share/
-bash: ls: command not found
root@WEB-R:~# ls -l /opt/share/
total 0
-rwxr-xr-x 1 root root 0 May  4 15:39 test100.txt
root@WEB-R:~# touch /opt/share/test101.txt
root@WEB-R:~# ls -l /opt/share/
total 0
-rwxr-xr-x 1 root root 0 May  4 15:39 test100.txt
-rwxr-xr-x 1 root root 0 May  4 15:47 test101.txt
root@WEB-R:~# _
```