Лабораторная работа №12 Синхронизация времени

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Настройка параметров времени

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Управление синхронизацией времени

```
[root@server.kazhavoronkov.net ~]# dnf -y install chrony
Extra Packages for Enterprise Linux 10 - x86_64          42 kB/s |  37 kB     00:00
Extra Packages for Enterprise Linux 10 - x86_64         2.8 MB/s | 5.5 MB     00:01
Rocky Linux 10 - BaseOS                                  12 kB/s | 4.3 kB     00:00
Rocky Linux 10 - AppStream                               16 kB/s | 4.3 kB     00:00
Rocky Linux 10 - Extras                                  11 kB/s | 3.1 kB     00:00
Package chrony-4.6.1-1.el10.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@server.kazhavoronkov.net ~]#
```
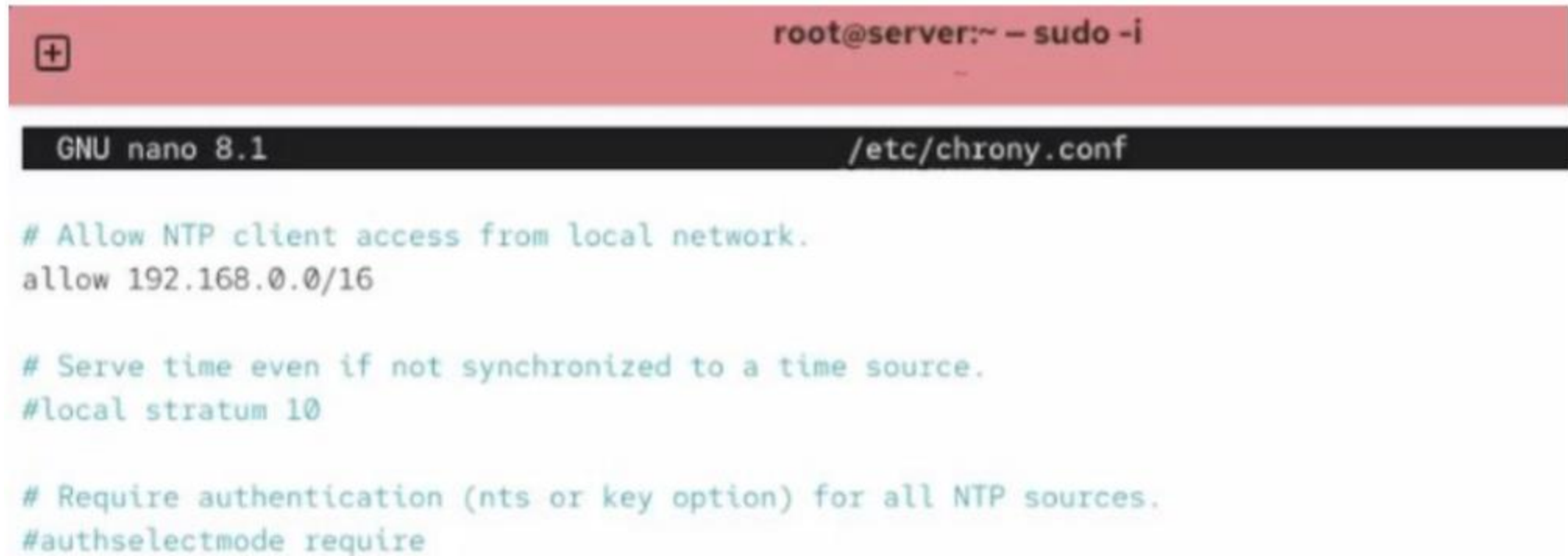
Управление синхронизацией времени

```
[root@server.kazhavoronkov.net ~]# chronyc sources
MS Name/IP address              Stratum Poll Reach LastRx Last sample
===============================================================================
^* ntp21.vniiftri.ru                 2    7   367     41    -254us[ -408us] +/- 7591us
^- ru.opensourceserver.ru            2    7   377     41     +82us[  +82us] +/-   23ms
^? 2a0b:4880::aaa1:59ff:fe5>         0    8     0      -      +0ns[   +0ns] +/-    0ns
^- 45.90.45.122                      2    7   377    113   +2576us[+2432us] +/-   46ms
[root@server.kazhavoronkov.net ~]#
```

Управление синхронизацией времени

```
[root@client.kazhavoronkov.net ~]# nano /etc/chrony.conf
[root@client.kazhavoronkov.net ~]# systemctl restart chronyd
[root@client.kazhavoronkov.net ~]# chronyc sources
MS Name/IP address         Stratum Poll Reach LastRx Last sample
===============================================================================
[root@client.kazhavoronkov.net ~]# 
```

Управление синхронизацией времени


```
root@server:~ — sudo -i

GNU nano 8.1                                    /etc/chrony.conf

# Allow NTP client access from local network.
allow 192.168.0.0/16

# Serve time even if not synchronized to a time source.
#local stratum 10

# Require authentication (nts or key option) for all NTP sources.
#authselectmode require
```

Управление синхронизацией времени

```
[root@server.kazhavoronkov.net ~]# systemctl restart chronyd
[root@server.kazhavoronkov.net ~]# firewall-cmd --add-service=ntp --permanent
success
[root@server.kazhavoronkov.net ~]# firewall-cmd --reload
success
[root@server.kazhavoronkov.net ~]# nano /etc/chrony.conf
[root@server.kazhavoronkov.net ~]# nano /etc/chrony.conf
[root@server.kazhavoronkov.net ~]#
```

Управление синхронизацией времени

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

# Insert/delete leap seconds by slewing instead of stepping.
#leapsecmode slew
server server.kazhavoronkov.net iburst
# Set the TAI-UTC offset of the system clock.
#leapseclist /usr/share/zoneinfo/leap-seconds.list

# Specify directory for log files.
logdir /var/log/chrony

# Select which information is logged.
#log measurements statistics tracking
```

Управление синхронизацией времени

```
[root@client.kazhavoronkov.net ~]# nano /etc/chrony.conf
[root@client.kazhavoronkov.net ~]# systemctl restart chronyd
[root@client.kazhavoronkov.net ~]# █
```

Управление синхронизацией времени

```
[root@client.kazhavoronkov.net ~]# chronyc sources
MS Name/IP address          Stratum Poll Reach LastRx Last sample
===============================================================================
[root@client.kazhavoronkov.net ~]# █
```

Управление синхронизацией времени

```
[root@server.kazhavoronkov.net ~]# chronyc sources
MS Name/IP address         Stratum Poll Reach LastRx Last sample
===============================================================================
^+ ntp2.mail.ru                 2   6   377    41    -928us[ -928us] +/- 4057us
^- mail.rashnikov.name          2   6   337    37    -820us[ -820us] +/-   25ms
^* mskm9-ntp03c.ntppool.yan>    2   6   377    42    -426us[ -183us] +/- 3639us
^- tms04.deltatelesystems.ru    1   6   337    37    -504us[ -504us] +/-   17ms
```

Внесение изменений в настройки внутреннего окружения виртуальных машин

```
[root@server.kazhavoronkov.net ~]# cd /vagrant/provision/server
[root@server.kazhavoronkov.net server]# mkdir -p /vagrant/provision/server/ntp/etc
[root@server.kazhavoronkov.net server]# cp -R /etc/chrony.conf /vagrant/provision/server/ntp/etc/
[root@server.kazhavoronkov.net server]# cd /vagrant/provision/server
[root@server.kazhavoronkov.net server]# touch ntp.sh
[root@server.kazhavoronkov.net server]# chmod +x ntp.sh
[root@server.kazhavoronkov.net server]# nano
```

Внесение изменений в настройки внутреннего окружения виртуальных машин

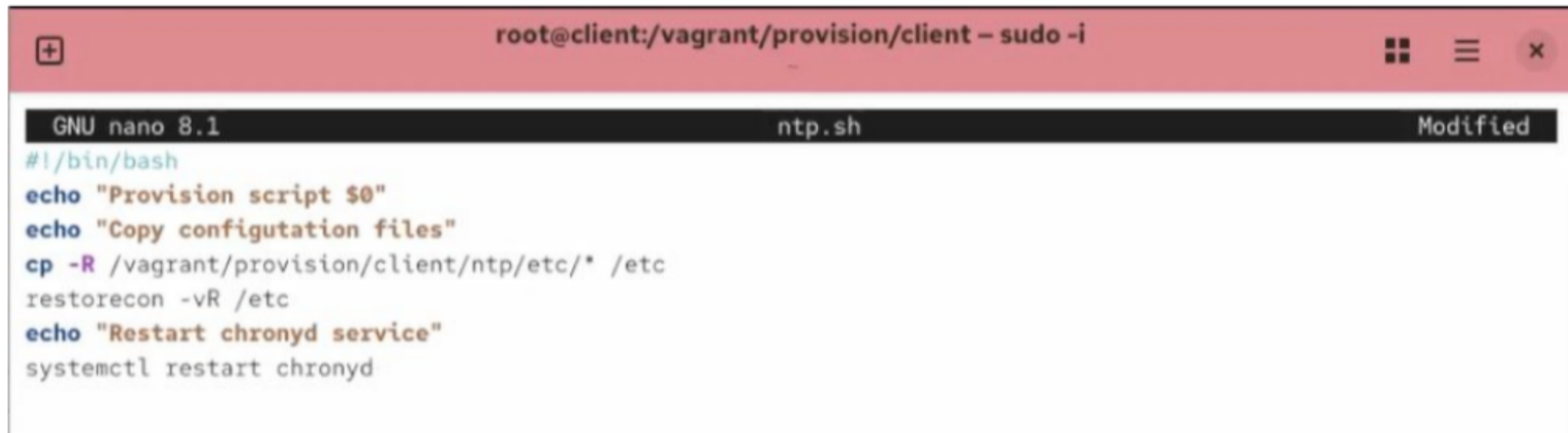```
root@server:/vagrant/provision/server — sudo -i

GNU nano 8.1   ntp.sh   Modified
#!/bin/bash
echo "Provisioning script $0"
echo "Install needed packages"
dnf -y install chrony
echo "Copy configuration files"
cp -R /vagrant/provision/server/ntp/etc/* /etc
restorecon -vR /etc
echo "Configure firewall"
firewall-cmd --add-service=ntp
firewall-cmd --add-service=ntp --permanent
echo "Restart chronyd service"
systemctl restart chronyd
```

# Внесение изменений в настройки внутреннего окружения виртуальных машин

```
[root@client.kazhavoronkov.net ~]# cd /vagrant/provision/client
[root@client.kazhavoronkov.net client]# mkdir -p /vagrant/provision/client/ntp/etc
[root@client.kazhavoronkov.net client]# cp -R /etc/chrony.conf /vagrant/provision/client/ntp/etc/
[root@client.kazhavoronkov.net client]# touch ntp.sh
[root@client.kazhavoronkov.net client]# chmod +x ntp.sh
[root@client.kazhavoronkov.net client]#
```

Внесение изменений в настройки внутреннего окружения виртуальных машин

Внесение изменений в настройки внутреннего окружения виртуальных машин

```
                    path: "provision/server/ssh.sh"
server.vm.provision "server ntp",
                    type: "shell",
                    preserve_order: true,
                    path: "provision/server/ntp.sh"
server.vm.provider :virtualbox do |v|
  v.linked_clone = true
```

```
                    path: "provision/client/mail.sh"
client.vm.provision "client ntp",
                    type: "shell",
                    preserve_order: true,
                    path: "provision/client/ntp.sh"
```