



Лабораторная работа №12. Синхронизация времени

Студент:

Астахова Марина Дмитриевна

Группа:

НПИБД02-23



Цель работы:

Получение навыков по управлению
системным временем и настройке
синхронизации времени

Настройка параметров времени

```
astakhovamd@localhost:~  
[astakhovamd@localhost.astakhovamd.net ~]$ timedatectl  
    Local time: Tue 2025-12-02 11:04:20 UTC  
    Universal time: Tue 2025-12-02 11:04:20 UTC  
        RTC time: Tue 2025-12-02 11:04:18  
    Time zone: UTC (UTC, +0000)  
System clock synchronized: no  
      NTP service: active  
    RTC in local TZ: no  
[astakhovamd@localhost.astakhovamd.net ~]$
```

```
    RTC in local TZ: no  
[astakhovamd@localhost.astakhovamd.net ~]$ date  
Tue Dec  2 11:04:48 AM UTC 2025  
[astakhovamd@localhost.astakhovamd.net ~]$
```

Управление синхронизацией времени

```
resolve host: mirrors.fedoraproject.org]
Error: Failed to download metadata for repo 'epel': Cannot prepare internal mirrorlist: Curl error (6): Couldn't resolve host name for https://mirrors.fedoraproject.org/metalink?repo=epel-9&arch=x86_64&infra=$infra&content=pub/rocky [Could not resolve host: mirrors.fedoraproject.org]
[astakhovamd@localhost.astakhovamd.net ~]$ which hwclock
/usr/sbin/hwclock
[astakhovamd@localhost.astakhovamd.net ~]$
```

```
#minsources 2
```

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

```
[astakhovamd@localhost.astakhovamd.net ~]$ chronyc sources
MS Name/IP address          Stratum Poll Reach LastRx Last sample
=====
[astakhovamd@localhost.astakhovamd.net ~]$
```

```
[astakhovamd@localhost.astakhovamd.net ~]$ sudo nano /etc/chrony.conf
[sudo] password for astakhovamd:
[astakhovamd@localhost.astakhovamd.net ~]$ echo "allow 192.168.0.0/16" | sudo tee -a /etc/chrony.conf
allow 192.168.0.0/16
[astakhovamd@localhost.astakhovamd.net ~]$ sudo systemctl restart chronyd
[astakhovamd@localhost.astakhovamd.net ~]$
```

Управление синхронизацией времени

```
[astakhovamd@localhost.astakhovamd.net ~]$ firewall-cmd --add-service=ntp--permanent
Error: INVALID_SERVICE: ntp--permanent
[astakhovamd@localhost.astakhovamd.net ~]$ firewall-cmd--reload
bash: firewall-cmd--reload: command not found...
[astakhovamd@localhost.astakhovamd.net ~]$ firewall-cmd --reload
success
```

```
[sudo] password for astakhovamd:
[astakhovamd@localhost.astakhovamd.net ~]$ systemctl restart chronyd
[astakhovamd@localhost.astakhovamd.net ~]$ chronyc sources
MS Name/IP address          Stratum Poll Reach LastRx Last sample
=====
^- 87.103.245.205             2    6    17     5  -3617us[-2779us] +/-  49ms
^- 51.250.0.158               2    6    17     5  -2928us[-2091us] +/-  43ms
^* frieze.starlink.ru        2    6    17     5   -116us[ +721us] +/- 7710us
^- as57164-151-0-2-53.htel.>  2    6    17     5  -5851us[-5014us] +/-   33ms
^? localhost                 0    7     0    -    +0ns[  +0ns] +/-    0ns
[astakhovamd@localhost.astakhovamd.net ~]$
```

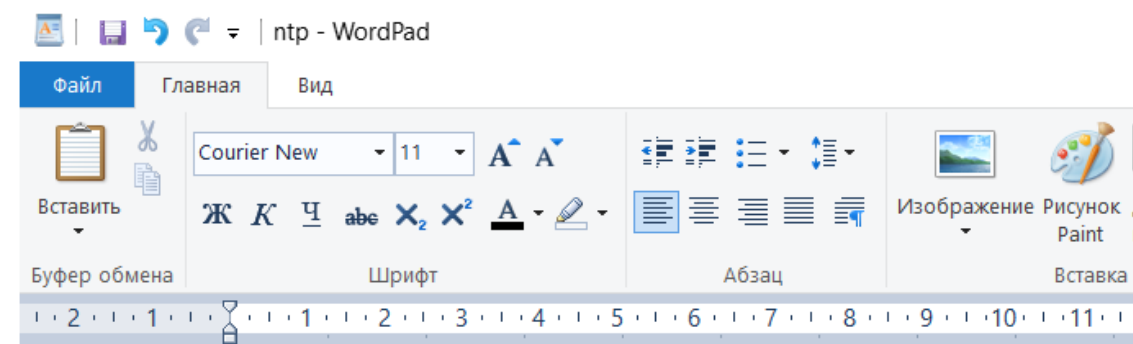
```
logdir /var/log/chrony

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

server server.astakhovamd.net iburst

^G Help      ^O Write Out  ^W Where Is
```

Внесение изменений в настройки внутреннего окружения виртуальных машин



```
#!/bin/bash
```

```
echo "Provisioning script $0"  
echo "Install needed packages"
```

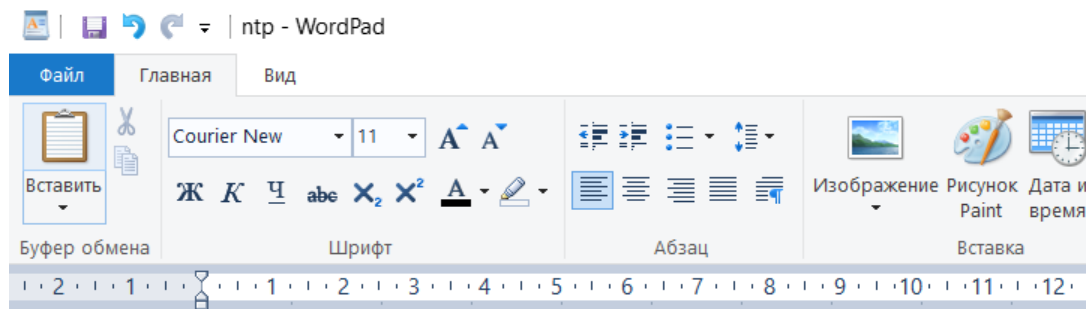
```
dnf-y install chrony  
echo "Copy configuration files"
```

```
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
```



```
#!/bin/bash
```

```
echo "Provisioning script $0"  
echo "Copy configuration files"
```

```
cp-R /vagrant/provision/client/ntp/etc/* /etc  
restorecon-vR /etc
```

```
echo "Restart chronyd service"  
|  
systemctl restart chronyd
```

Внесение изменений в настройки внутреннего окружения виртуальных машин

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

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

```
end  
,
```



Спасибо за внимание!