

ОТЧЕТ ЛАБОРАТОРНОЙ РАБОТЫ 5

ДИСЦИПЛИНА

АДМИНИСТРИРОВАНИЕ СЕТЕВЫХ ПОДСИСТЕМ

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РАСШИРЕННАЯ НАСТРОЙКА HTTP-СЕРВЕРА APACHE

Цель работы

*Приобретение практических навыков
по расширенному конфигурированию HTTP сервера Apache
в части безопасности и возможности использования PHP.*

КОНФИГУРИРОВАНИЕ НТТР-СЕРВЕРА ДЛЯ РАБОТЫ ЧЕРЕЗ ПРОТОКОЛ HTTPS.

```

root@localhost:/etc/pki/tls/private
[astakhovamd@localhost.user.net ~]$ sudo -i
[sudo] password for astakhovamd:
[root@localhost.user.net ~]# mkdir -p /etc/pki/tls/private
[root@localhost.user.net ~]# ln -s /etc/pki/tls/private /etc/ssl/private
[root@localhost.user.net ~]# cd /etc/pki/tls/private
[root@localhost.user.net private]# openssl req -x509 -nodes -r
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
root@localhost:/etc/ssl/private]# mv www.astakhovamd.net.crt /etc/pki/tls/certs
r.net private]# mv www.astakhovamd.net.crt /etc/ssl/cert/
tc/ssl/private/www.astakhovamd.net.crt': No such file or directory
r.net private]#

```

```

GNU nano 5.6.1
VirtualHost *:80>
ServerAdmin webmaster@astakhovamd.net
DocumentRoot /var/www/html/www.astakhovamd.net
ServerName www.astakhovamd.net
ServerAlias www.astakhovamd.net
ErrorLog logs/www.astakhovamd.net-error_log
CustomLog logs/www.astakhovamd.net-access_log common
RewriteEngine on
RewriteRule ^(.*)$ https://%{HTTP_HOST}$1 [R=301,L]
</VirtualHost>

<IfModule mod_ssl.c>
<VirtualHost *:443>
    SSLEngine on
    ServerAdmin webmaster@astakhovamd.net
    DocumentRoot /var/www/html/www.astakhovamd.net
    ServerName www.astakhovamd.net
    ServerAlias www.astakhovamd.net
    ErrorLog logs/www.astakhovamd.net-error_log
    CustomLog logs/www.astakhovamd.net-access_log common
    SSLCertificateFile /etc/ssl/certs/www.astakhovamd.net.crt
    SSLCertificateKeyFile /etc/ssl/private/www.astakhovamd.net.key
</VirtualHost>
</IfModule>

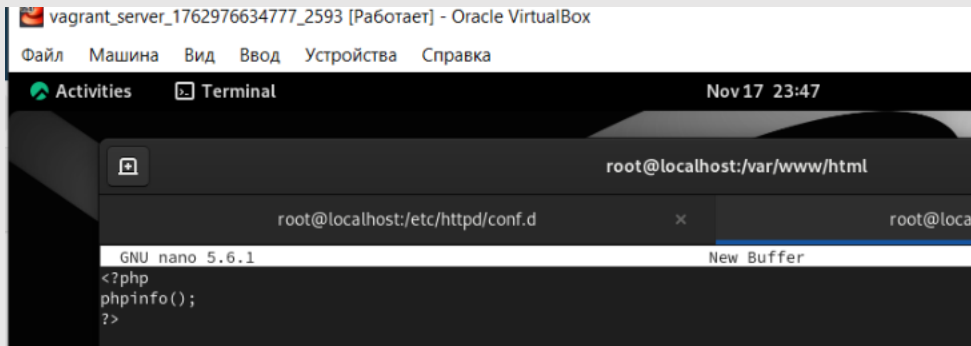
```

 You are about to be asked to enter information that will be incorporated into your certificate request.
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 There are quite a few fields but you can leave some blank
 For some fields there will be a default value,
 root@localhost:/etc/ssl/private]#

```

ster code) [XX]:RU
ame (full name) []:Russia
city) [Default City]:Moscow
eg, company) [Default Company Ltd]:astakhovamd
Name (eg, section) []:astakhovamd
ur name or your server's hostname) []:astakhovamd.net
takhovamd@astakhovamd.net
r.net private]# mv www.astakhovamd.net.crt /etc/pki/tls/certs
r.net private]#
/ssl/private/www.astakhovamd.net.crt': No such file or directory
r.net private]#

```



КОНФИГУРИРОВАНИЕ HTTP-СЕРВЕРА ДЛЯ РАБОТЫ ЧЕРЕЗ ПРОТОКОЛ HTTPS.

```

root@localhost:~
root@localhost:/etc/httpd/conf.d
[astakhovamd@localhost.user.net ~]$ sudo -i
[sudo] password for astakhovamd:
[root@localhost.user.net ~]# dnf -y install php
Last metadata expiration check: 2:01:27 ago on Mon 17 Nov 2025 09:44:16 PM UTC.
Dependencies resolved.
=====
Package                Architecture      Version           Repository        Size
=====
Installing:
php                    x86_64            8.0.30-3.el9_6   appstream         8.2 k
Installing dependencies:
nginx-filestream       noarch            2:1.20.1-22.el9_6.3 appstream         9.6 k
php-common              x86_64            8.0.30-3.el9_6   appstream         666 k
Installing weak dependencies:
php-cli                 x86_64            8.0.30-3.el9_6   appstream         3.1 M
php-fpm                 x86_64            8.0.30-3.el9_6   appstream         1.6 M
php-mbstring            x86_64            8.0.30-3.el9_6   appstream         466 k
php-opcache             x86_64            8.0.30-3.el9_6   appstream         510 k
php-pdo                 x86_64            8.0.30-3.el9_6   appstream         81 k
php-xml                 x86_64            8.0.30-3.el9_6   appstream         132 k
=====
Transaction Summary
=====
Install 9 Packages

Total download size: 6.5 M
Installed size: 35 M
Downloading Packages:
(1/9): php-xml-8.0.30-3.el9_6.x86_64.rpm                25 kB/s | 132 kB    00:05
(2/9): php-opcache-8.0.30-3.el9_6.x86_64.rpm            91 kB/s | 510 kB    00:05
(3/9): nginx-filestream-1.20.1-22.el9_6.3.noarch.rpm    249 kB/s | 9.6 kB   00:00
(4/9): php-common-8.0.30-3.el9_6.x86_64.rpm             1.1 MB/s | 666 kB   00:00
(5/9): php-8.0.30-3.el9_6.x86_64.rpm                   167 kB/s | 8.2 kB   00:00
(6/9): php-pdo-8.0.30-3.el9_6.x86_64.rpm               628 kB/s | 81 kB    00:00
(7/9): php-fpm-8.0.30-3.el9_6.x86_64.rpm               244 kB/s | 1.6 MB   00:06

```

```

Complete!
[root@localhost.user.net ~]# cd /var/www/html/
[root@localhost.user.net html]# sudo nano www.astakhovamd.net
[root@localhost.user.net html]# chown -R apache:apache /var/www
[root@localhost.user.net html]# restorecon -vR /etc
[root@localhost.user.net html]# restorecon -vR /var/www
[root@localhost.user.net html]# systemctl restart httpd

```

ВНЕСЕНИЕ ИЗМЕНЕНИЙ В НАСТРОЙКИ ВНУТРЕННЕГО ОКРУЖЕНИЯ ВИРТУАЛЬНОЙ МАШИНЫ

```
[root@localhost.user.net conf.d]#  
[root@localhost.user.net conf.d]#  
[root@localhost.user.net conf.d]#  
[root@localhost.user.net conf.d]#  
[root@localhost.user.net conf.d]# cp -R /etc/httpd/conf.d/* /vagrant/provision/server/http/etc/httpd/conf.d  
cp: overwrite '/vagrant/provision/server/http/etc/httpd/conf.d/autoindex.conf'? Y  
cp: overwrite '/vagrant/provision/server/http/etc/httpd/conf.d/fcgid.conf'? Y  
cp: overwrite '/vagrant/provision/server/http/etc/httpd/conf.d/manual.conf'? Y  
cp: overwrite '/vagrant/provision/server/http/etc/httpd/conf.d/README'? Y  
cp: overwrite '/vagrant/provision/server/http/etc/httpd/conf.d/server.astakhovamd.net.conf'? Y  
cp: overwrite '/vagrant/provision/server/http/etc/httpd/conf.d/ssl.conf'? Y  
cp: overwrite '/vagrant/provision/server/http/etc/httpd/conf.d/userdir.conf'? Y  
cp: overwrite '/vagrant/provision/server/http/etc/httpd/conf.d/welcome.conf'? Y  
cp: overwrite '/vagrant/provision/server/http/etc/httpd/conf.d/www.astakhovamd.net.conf'? Y  
[root@localhost.user.net conf.d]# cp -R /var/www/html/* /vagrant/provision/server/http/var/www/html  
cp: overwrite '/vagrant/provision/server/http/var/www/html/server.astakhovamd.net/index.html'? Y  
cp: overwrite '/vagrant/provision/server/http/var/www/html/www.astakhovamd.net/index.html'? Y  
[root@localhost.user.net conf.d]# mkdir -p /vagrant/provision/server/http/etc/pki/tls/private  
[root@localhost.user.net conf.d]# mkdir -p /vagrant/provision/server/http/etc/pki/tls/certs  
[root@localhost.user.net conf.d]# cp -R /etc/pki/tls/private/www.astakhovamd.net.key /vagrant/provision/server/http/etc/pki/tls/private  
cp: missing destination file operand after /etc/pki/tls/private/www.astakhovamd.net.key /vagrant/provision/server/http/etc/pki/tls/private
```

```
root@localhost  
root@localhost:/vagrant/provision/server  
GNU nano 5.6.1  
#!/bin/bash  
  
set -e  
  
dnf update -y  
  
dnf install -y httpd  
  
dnf install -y php php-cli php-fpm php-common php-mysqlnd  
  
systemctl enable httpd  
systemctl start httpd  
  
dnf install -y firewalld  
systemctl enable firewalld  
systemctl start firewalld  
  
firewall-cmd --zone=public --add-service=http --permanent  
firewall-cmd --zone=public --add-service=https --permanent  
  
firewall-cmd --reload  
  
echo "<?php phpinfo(); ?>" > /var/www/html/info.php  
chmod 644 /var/www/html/info.php
```

ИТОГ РАБОТЫ

Были приобретены практические навыки по расширенному конфигурированию HTTP сервера Apache в части безопасности и возможности использования PHP.

***СПАСИБО
ЗА ВНИМАНИЕ!***
