

ОТЧЕТ ЛАБОРАТОРНОЙ РАБОТЫ 5

ДИСЦИПЛИНА

*АДМИНИСТРИРОВАНИЕ СЕТЕВЫХ
ПОДСИСТЕМ*

Марина Астахова

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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 НТТРС.

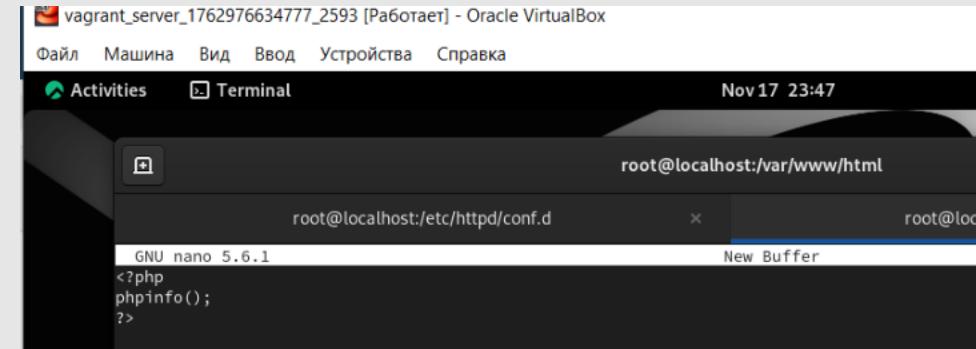
```
[astakhovamd@localhost.user.net ~]$ sudo -i
[sudo] password for astakhovamd:
[root@localhost.user.net ~]# mkdir -p /etc/pki/tls/private
[root@localhost.user.net ~]# ln -s /etc/pki/tls/private /etc/
[root@localhost.user.net ~]# cd /etc/pki/tls/private
[root@localhost.user.net private]# openssl req -x509 -nodes -out www.astakhovamd.net.key -out www.astakhovamd.net.crt
-----
```

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# field will be left blank.

```
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>
```

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



КОНФИГУРИРОВАНИЕ HTTP-СЕРВЕРА ДЛЯ РАБОТЫ ЧЕРЕЗ ПРОТОКОЛ HTTPS.

root@localhost:~

```
[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-filesystem 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

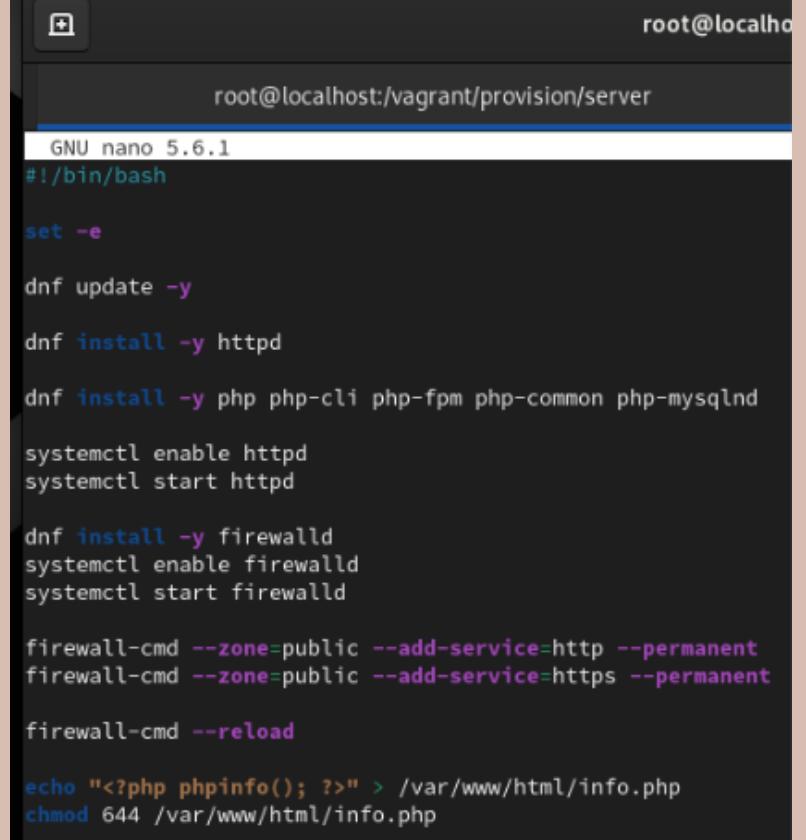
Transaction Summary
=====
 Install 9 Packages

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-filesystem-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/html
[root@localhost.user.net html]# restorecon -vR /etc
[root@localhost.user.net html]# restorecon -vR /var/www/html
[root@localhost.user.net html]# systemctl restart httpd
```

ВНЕСЕНИЕ ИЗМЕНЕНИЙ В НАСТРОЙКИ ВНУТРЕННЕГО ОКРУЖЕНИЯ ВИРТУАЛЬНОЙ МАШИНЫ

```
[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 'www.astakhovamd.net.key' /vagrant/provision/server/http/etc/pki/tls
cp: try 'cp --help' for more information
```



```
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!**