

# Защита лабораторной работы № 5

дисциплина: администрирование сетевых подсистем

Студент: яссин оулед салема

Группа: НПИбд-02-20

# Постановка задачи

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

# Конфигурирование HTTP-сервера для работы через протокол HTTPS

[illegible]

Конфигурирование  
HTTP-сервера для  
работы через  
протокол HTTPS

```
root@server:/etc/httpd/conf.d

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

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

# Конфигурирование HTTP-сервера для работы через протокол HTTPS

- Вносим изменения в настройки межсетевого экрана на сервере, разрешив работу с https

```
mandat.com 333.com www.yassine.net.com
[root@server.yassine.net conf.d]# vi /etc/httpd/conf.d/www.yassine.net.conf
[root@server.yassine.net conf.d]# firewall-cmd --list-services
cockpit dhcp dhcpv6-client dns http ssh
[root@server.yassine.net conf.d]# firewall-cmd --get-services
RH-Satellite-6 RH-Satellite-6-capsule amanda-client amanda-k5-client amqp amqp
apcupsd audit bacula bacula-client bb bgp bitcoin bitcoin-rpc bitcoin-testnet
tcoin-testnet-rpc bittorrent-ldsc ceph ceph-mon cfengine cockpit collectd cond
collector ctdb dhcp dhcpv6 dhcpv6-client distcc dns dns-over-tls docker-regist
docker-swarm dropbox-lansync elasticsearch etcd-client etcd-server finger for
an foreman-proxy freeipa-4 freeipa-ldap freeipa-ldaps freeipa-replication free
a-trust ftp galera ganglia-client ganglia-master git grafana gre high-availabi
ty http https imap imaps ipp ipp-client ipsec irc ircs iscsi-target isns jenko
kadmin kdeconnect kerberos kibana klogin kpasswd kprop kshell kube-api kube-a
server kube-control-plane kube-controller-manager kube-scheduler kubelet-work
ldap ldaps libvirt libvirt-tls lightning-network llmnr managesieve matrix mdns
emcache minidlna mongodb mosh mountd mqtt mqtt-tls ms-wbt mssql murmur mysql r
netbios-ns nfs nfs3 nmea-0183 nrpe ntp nut openvpn ovirt-imageio ovirt-storag
onsole ovirt-vmconsole plex pmcd pmproxy pmwebapi pmwebapis pop3 pop3s postgre
l privoxy prometheus proxy-dhcp ptp pulseaudio puppetmaster quassel radius rdp
edis redis-sentinel rpc-bind rquotad rsh rsyncd rtsp salt-master samba samba-d
ent samba-dc sane sip sips slp smtp smtp-submission smtps snmp snmptrap spider
k-lansync spotify-sync squid ssdp ssh steam-streaming svdrp svn syncthing synd
ing-gui synergy syslog syslog-tls telnet tentacle tftp tile38 tinc tor-socks t
nsmission-client upnp-client vdsd vnc-server wbem-http wbem-https wireguard ws
```

# Конфигурирование HTTP-сервера для работы через протокол HTTPS

Page Info — https://www.rmkipchakbaev.net/

General Permissions **Security**

### Website Identity

Website: www.rmkipchakbaev.net  
Owner: This website does not supply ownership information.  
Verified by: rmkipchakbaev [View Certificate](#)  
Expires on: December 18, 2021

### Privacy & History

Have I visited this website prior to today? Yes, 3 times  
Is this website storing information on my computer? No [Clear Cookies and Site Data](#)  
Have I saved any passwords for this website? No [View Saved Passwords](#)

### Technical Details

Connection Encrypted (TLS\_AES\_256\_GCM\_SHA384, 256 bit keys, TLS 1.3)  
The page you are viewing was encrypted before being transmitted over the Internet.  
Encryption makes it difficult for unauthorized people to view information traveling between computers. It is therefore unlikely that anyone read this page as it traveled across the network.

server.yassine.net/ x ⚠ Warning: Potential Security Risk Ahead yassine.net/ x + x

← → ↻ Not Secure https://www.yassine.net ☆ 📧 ☰

🟢 Rocky Linux 🟢 Rocky Wiki 🟢 Rocky Forums 🟢 Rocky Mattermost 🟢 Rocky Reddit

📘 Firefox automatically sends some data to Mozilla so that we can improve your experience. X

[Choose What I Share](#)

⚠

## Warning: Potential Security Risk Ahead

Firefox detected a potential security threat and did not continue to www.yassine.net. If you visit this site, attackers could try to steal information like your passwords, emails, or credit card details.

[Learn more...](#)

[Go Back \(Recommended\)](#) [Advanced...](#)

# Конфигурирование HTTP-сервера для работы с PHP

```
root@server.yassine.net ~# dnf -y install php
Rocky Linux 9 - BaseOS 1.8 MB/s | 3.6 kB 00:02
Rocky Linux 9 - AppStream 1.8 MB/s | 4.1 kB 00:02
Rocky Linux 9 - Extras 1.3 MB/s | 2.8 kB 00:02
Dependencies resolved.
Package Arch Version Repository Size
-----
Installing:
php x86_64 8.0.20-3.el9 appstream 11 K
Installing dependencies:
nginx-fips x86_64 1:1.20.1-12.el9 appstream 11 K
php-csrf x86_64 8.0.20-3.el9 appstream 603 K
Installing weak dependencies:
php-cli x86_64 8.0.20-3.el9 appstream 2.1 M
php-fpm x86_64 8.0.20-3.el9 appstream 1.6 M
php-mysqlnd x86_64 8.0.20-3.el9 appstream 471 K
php-pecl-zip x86_64 8.0.20-3.el9 appstream 512 K
php-pdo x86_64 8.0.20-3.el9 appstream 94 K
php-mb x86_64 8.0.20-3.el9 appstream 133 K

Transaction Summary
-----
Install 9 Packages
Total download size: 6.5 M
Installed size: 25 M
```

root@server:/var/www/html/www.yassine.net

root@server:/var/www/html/www.yassi... x root@server:~ x

```
<?php
phpinfo();
?>
```



# Конфигурирование HTTP-сервера для работы с PHP

client [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

Activities Firefox Nov 18 19:52 en

phpinfo() x +

https://www.rmkipchakbaev.net

Rocky Linux Rocky Wiki Rocky Forums Rocky Mattermost

## PHP Version 7.2.24

System	Linux server.rmkipchakbaev.net 4.18.0-305.3.1.el8_4.x86_64 # x86_64
Build Date	Oct 22 2019 08:28:36
Server API	FPM/FastCGI
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc
Loaded Configuration File	/etc/php.ini
Scan this dir for additional .ini files	/etc/php.d
Additional .ini files parsed	/etc/php.d/20-bz2.ini, /etc/php.d/20-calendar.ini, /etc/php.d/20-ctype.ini, /etc/php.d/20-exif.ini, /etc/php.d/20-fileinfo.ini, /etc/php.d/20-ftp.ini, /etc/php.d/20-iconv.ini, /etc/php.d/20-phar.ini, /etc/php.d/20-soap.ini
PHP API	20170718
PHP Extension	20170718



# Внесение изменений в настройки внутреннего окружения виртуальной машины

```
root@server:/vagrant/provision/server
root@server:/vagrant/provision/server x root@server:~
echo "Install needed packages"
dnf -y groupinstall "Basic Web Server"
dnf -y install php

echo "copy configuration files"
cp -R /vagrant/provision/server/http/etc/httpd/* /etc/httpd
cp -R /vagrant/provision/server/http/var/www/* /var/www
cp -R /vagrant/provision/server/http/etc/ssl/private/* /etc/private

chown -R apache:apache /var/www

restorecon -vR /etc
restorecon -vR /var/www

echo "Configure firewall"
firewall-cmd --add-service=https
firewall-cmd --add-service=https --permanent
firewall-cmd --add-service=https
firewall-cmd --add-service=https
firewall-cmd --add-service=https --permanent

echo "Start http service"
systemctl enable httpd
systemctl start httpd

-- INSERT --
9,22 Bot
```

```
[root@server.yassine.net httpd]# cp -R /var/www/html/* /vagrant/provision/server
/http/var/www/html
cp: overwrite '/vagrant/provision/server/http/var/www/html/server.yassine.net/in
dex.html'? yes
cp: overwrite '/vagrant/provision/server/http/var/www/html/www.yassine.net/index
.html'? yes
[root@server.yassine.net httpd]#
```

# Вывод

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