

Лабораторная работа 5

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16 февраля, 2023., Москва, Россия

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Цель лабораторной работы

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

Выполнение лабораторной работы

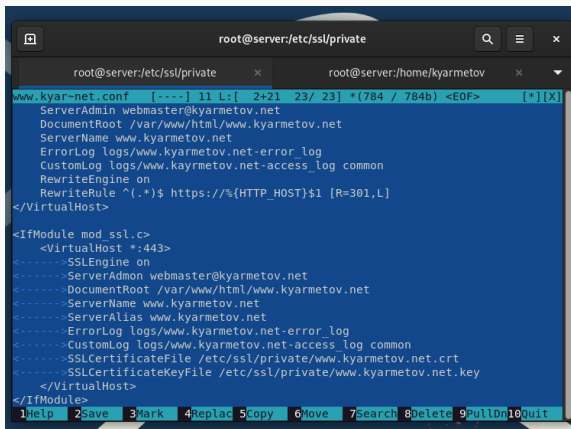
Настройка HTTPS-сервера

```
root@server:/etc/ssl/private
```

```
.....+.....  
.....+.....  
.....+.....  
.....+.....  
.....+.....  
.....+.....  
.....+.....  
.....+.....  
.....+.....  
.....+.....  
-----  
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,  
If you enter '.', the field will be left blank.  
-----  
Country Name (2 letter code) [XX]:RU  
State or Province Name (full name) [:]:Russia  
Locality Name (eg, city) [Default City]:Moscow  
Organization Name (eg, company) [Default Company Ltd]:kyarmetov  
Organizational Unit Name (eg, section) []:kyarmetov  
Common Name (eg, your name or your server's hostname) []:kyarmetov.net  
Email Address []:kyarmetov@kyarmetov.net  
[root@server.kyarmetov.net private]# ls  
www.kyarmetov.net.crt www.kyarmetov.net.key  
[root@server.kyarmetov.net private]#
```

Figure 1: создание сертификата

Настройка HTTPS-сервера



The screenshot shows a terminal window with two tabs. The active tab is titled 'root@server:/etc/ssl/private' and displays the configuration for the 'www.kyar-net.conf' file. The configuration includes settings for the 'VirtualHost *:443' block, such as 'ServerAdmin', 'DocumentRoot', 'ServerName', 'ErrorLog', 'CustomLog', 'RewriteEngine', and 'RewriteRule'. The 'SSL' section is also visible, showing 'SSLEngine on', 'SSLCertificateFile', and 'SSLCertificateKeyFile'. The terminal window has a dark background and a light-colored text. The bottom of the window shows a status bar with various keyboard shortcuts like '1help', '2Save', '3Mark', etc.

```
root@server:/etc/ssl/private
www.kyar-net.conf  [----] 11 L:[ 2+21 23/ 23] *(784 / 784b) <E0F> [*][X]
ServerAdmin webmaster@kyarmetov.net
DocumentRoot /var/www/html/www.kyarmetov.net
ServerName www.kyarmetov.net
ErrorLog logs/www.kyarmetov.net-error_log
CustomLog logs/www.kayrmetov.net-access_log common
RewriteEngine on
RewriteRule ^(.*)$ https://%{HTTP_HOST}$1 [R=301,L]
</VirtualHost>

<IfModule mod_ssl.c>
  <VirtualHost *:443>
    <----->SSLEngine on
    <----->ServerAdmon webmaster@kyarmetov.net
    <----->DocumentRoot /var/www/html/www.kyarmetov.net
    <----->ServerName www.kyarmetov.net
    <----->ServerAlias www.kyarmetov.net
    <----->ErrorLog logs/www.kyarmetov.net-error_log
    <----->CustomLog logs/www.kyarmetov.net-access_log common
    <----->SSLCertificateFile /etc/ssl/private/www.kyarmetov.net.crt
    <----->SSLCertificateKeyFile /etc/ssl/private/www.kyarmetov.net.key
  </VirtualHost>
</IfModule>
1help 2Save 3Mark 4Replac 5Copy 6Move 7Search 8Delete 9PullDn 10Quit
```

Figure 2: настройка SSL

Настройка HTTPS-сервера

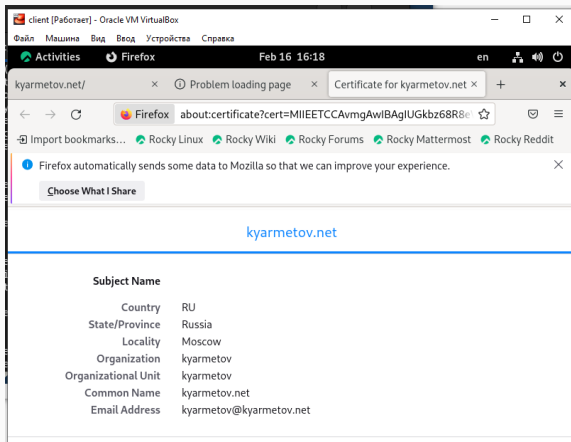
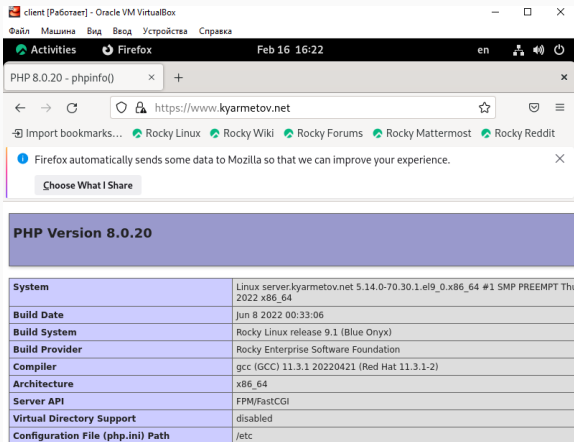


Figure 3: проверка доступа

```
Complete!  
[root@server.kyarmetov.net private]#  
[root@server.kyarmetov.net private]# mcedit /var/www/html/www.kyarmetov.net/  
[root@server.kyarmetov.net private]# mcedit /var/www/html/www.kyarmetov.net/index.html  
  
[root@server.kyarmetov.net private]# cd /var/www/html/www.kyarmetov.net/  
[root@server.kyarmetov.net www.kyarmetov.net]# mv index.html index.php  
[root@server.kyarmetov.net www.kyarmetov.net]#  
[root@server.kyarmetov.net www.kyarmetov.net]# restorecon -vR /etc  
[root@server.kyarmetov.net www.kyarmetov.net]# restorecon -vR /var/www  
[root@server.kyarmetov.net www.kyarmetov.net]# systemctl restart httpd  
bash: systemctl: command not found...  
[root@server.kyarmetov.net www.kyarmetov.net]# systemctl restart httpd  
[root@server.kyarmetov.net www.kyarmetov.net]#
```

Figure 4: установка php



The screenshot shows a web browser window with the title "client [Работаer] - Oracle VM VirtualBox". The browser is Firefox, and the address bar shows "https://www.kyarmetov.net". The page content is titled "PHP Version 8.0.20" and displays a table of system information.

System	Linux server.kyarmetov.net 5.14.0-70.30.1.el9_0.x86_64 #1 SMP PREEMPT Th 2022 x86_64
Build Date	Jun 8 2022 00:33:06
Build System	Rocky Linux release 9.1 (Blue Onyx)
Build Provider	Rocky Enterprise Software Foundation
Compiler	gcc (GCC) 11.3.1 20220421 (Red Hat 11.3.1-2)
Architecture	x86_64
Server API	FPM/FastCGI
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc

Figure 5: web-страница

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