

Отчет лабораторной работы 4

Дисциплина: Администрирование сетевых подсистем

Тема

Базовая
настройка
HTTP-сервера
Apache

Выполнение работы

Установка HTTP-сервера.

```
[root@localhost.user.net ~]# dnf -y groupinstall "Basic Web Server"
Last metadata expiration check: 0:00:36 ago on Mon 17 Nov 2025 08:53:35 PM UTC.
Dependencies resolved.
=====
 Package           Architecture   Version      Repository    Size
=====
Installing group/module packages:
 httpd             x86_64        2.4.62-4.el9_6.4  appstream    44 k
 httpd-manual      noarch       2.4.62-4.el9_6.4  appstream    2.2 M
 mod_fcgid         x86_64        2.3.9-28.el9     appstream    74 k
 mod_ssl           x86_64        1:2.4.62-4.el9_6.4 appstream   108 k
Installing dependencies:
 apr               x86_64        1.7.0-12.el9_3   appstream    122 k
 apr-util          x86_64        1.6.1-23.el9    appstream    94 k
 apr-util-bdb      x86_64        1.6.1-23.el9    appstream    12 k
 httpd-core        x86_64        2.4.62-4.el9_6.4 appstream   1.4 M
 httpd-filesystem  noarch       2.4.62-4.el9_6.4  appstream    11 k
 httpd-tools        x86_64        2.4.62-4.el9_6.4  appstream    78 k
 rocky-logos-httpd noarch       90.16-1.el9     appstream    24 k
```

```
[astakhovam@localhost.user.net ~]$ sudo -i
[root@localhost.user.net ~]# LANG=C yum grouplist
Extra Packages for Enterprise Linux 9 - x86_64 6.2 kB/s | 35 kB  00:05
Extra Packages for Enterprise Linux 9 - x86_64          691 kB/s | 20 MB  00:29
Rocky Linux 9 - BaseOS                                400 B/s | 4.1 kB  00:10
Rocky Linux 9 - AppStream                             442 B/s | 4.5 kB  00:10
Rocky Linux 9 - Extras                               287 B/s | 2.9 kB  00:10
Available Environment Groups:
  Server
  Minimal Install
  Workstation
  KDE Plasma Workspaces
  Custom Operating System
  Virtualization Host
Installed Environment Groups:
  Server with GUI
Installed Groups:
  Container Management
  Development Tools
```

Базовое конфигурирование HTTP-сервера.

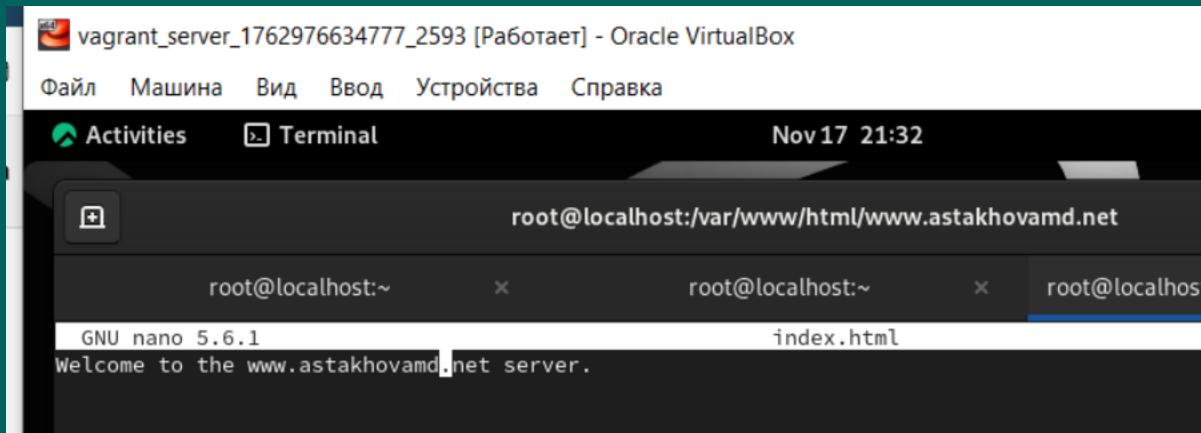
```
Complete!
[root@localhost.user.net ~]# firewall-cmd --list-services
cockpit dhcp dhcpcv6-client dns ssh
[root@localhost.user.net ~]# firewall-cmd --get-services
RH-Satellite-6 RH-Satellite-6-capsule afp amanda-client amanda-k5-client amqp amqps apcupsd audit aus
weisapp2 bacula bacula-client bareos-director bareos-filedaemon bareos-storage bb bgp bitcoin bitcoin
-rpc bitcoin-testnet bitcoin-testnet-rpc bittorrent-lsd ceph ceph-exporter ceph-mon cfengine checkmk-
agent cockpit collectd condor-collector cratedb ctdb dds dds-multicast dds-unicast dhcp dhcpcv6 dhcpcv6
-client distcc dns dns-over-tls docker-registry docker-swarm dropbox-lansync elasticsearch etcd-clien
t etcd-server finger foreman foreman-proxy freeipa-4 freeipa-ldap freeipa-ldaps freeipa-replication f
reeipa-trust ftp galera ganglia-client ganglia-master git gpgsql grafana gre high-availability http htt
p3 https ident imap imaps ipfs ipp ipp-client ipsec irc ircs iscsi-target isns jenkins kadmin kdeconn
ect kerberos kibana klogin kpasswd kprop kshell kube-api kube-apiserver kube-control-plane kube-contr
ol-plane-secure kube-controller-manager kube-controller-manager-secure kube-nodeport-services kube-sc
heduler kube-scheduler-secure kube-worker kubelet kubelet-readonly kubelet-worker ldap ldaps libvirt
libvirt-tls lightning-network llmnr llmnr-client llmnr-tcp llmnr-udp managesieve matrix mdns memcache
minidlna mongodb mosh mountd mqtt mqtt-tls ms-wbt mssql murmur mysql nbd nebula netbios-ns netdata-d
ashboard nfs nfs3 nmea-0183 nrpe ntp nut opentelemetry openvpn ovirt-imageio ovirt-storageconsole ovi
rt-vmconsole plex pmcd pmproxy pmwebapi pmwebapis pop3 pop3s postgresql privoxy prometheus
-node-exporter proxy-dhcp ps2link ps3netsrv ptp pulseaudio puppetmaster quassel radius rdp redis redi
s-sentinel rootd rpc-bind rquotad rsh rsyncd rtsp salt-master samba samba-client samba-dc sane sip si
ps slp smtp smtp-submission smtps snmp snmptrap snmptrap spideroak-lansync spotify-sync s
```

```
-client distcc dns dns-over-tls docker-registry docker-swarm dropbox-lansync elasticsearch etcd-clien
t etcd-server finger foreman foreman-proxy freeipa-4 freeipa-ldap freeipa-ldaps freeipa-replication f
reeipa-trust ftp galera ganglia-client ganglia-master git gpgsql grafana gre high-availability http htt
p3 https ident imap imaps ipfs ipp ipp-client ipsec irc ircs iscsi-target isns jenkins kadmin kdeconn
ect kerberos kibana klogin kpasswd kprop kshell kube-api kube-apiserver kube-control-plane kube-contr
ol-plane-secure kube-controller-manager kube-controller-manager-secure kube-nodeport-services kube-sc
heduler kube-scheduler-secure kube-worker kubelet kubelet-readonly kubelet-worker ldap ldaps libvirt
libvirt-tls lightning-network llmnr llmnr-client llmnr-tcp llmnr-udp managesieve matrix mdns memcache
minidlna mongodb mosh mountd mqtt mqtt-tls ms-wbt mssql murmur mysql nbd nebula netbios-ns netdata-d
ashboard nfs nfs3 nmea-0183 nrpe ntp nut opentelemetry openvpn ovirt-imageio ovirt-storageconsole ovi
rt-vmconsole plex pmcd pmproxy pmwebapi pmwebapis pop3 pop3s postgresql privoxy prometheus
-node-exporter proxy-dhcp ps2link ps3netsrv ptp pulseaudio puppetmaster quassel radius rdp redis redi
s-sentinel rootd rpc-bind rquotad rsh rsyncd rtsp salt-master samba samba-client samba-dc sane sip si
ps slp smtp smtp-submission smtps snmp snmptrap snmptrap spideroak-lansync spotify-sync s
quid ssdp ssh steam-streaming svdrp svn syncthing syncthing-gui syncthing-relay synergy syslog syslog
-tls telnet tentacle tftp tile38 tinc tor-socks transmission-client upnp-client vdsm vnc-server warpi
nator wbem-http wbem-https wireguard ws-discovery ws-discovery-client ws-discovery-tcp ws-discovery-u
dp wsman wsmans xdmcp xmpp-bosh xmpp-client xmpp-local xmpp-server zabbix-agent zabbix-server zerotie
r
[root@localhost.user.net ~]# firewall-cmd --add-service=http
success
[root@localhost.user.net ~]# firewall-cmd --add-service=http --permanent
success
```

Настройка виртуального хостинга для HTTP-сервера.

```
GNU nano 5.6.1
$TTL 1D
@ IN SOA      @ server.astakhovam.net.
              2024072700 ; serial
              1D         ; refresh
              1H         ; retry
              1W         ; expire
              3H )       ; minimum
              NS        @
              A        192.168.1.1
$ORIGIN astakhovam.net.
server    A      192.168.1.1
ns        A      192.168.1.1
dhc       A      192.168.1.1
www      A      192.168.1.1
```

```
root@localhost:~ x root@localhost:~ x
GNU nano 5.6.1 192.168.1
$TTL 1D
@ IN SOA      @ server.astakhovamd.net. (
    2024072700 ; serial
    1D          ; refresh
    1H          ; retry
    1W          ; expire
    3H )        ; minimum
NS      @
A       192.168.1.1
PTR     server.astakhovamd.net.
$ORIGIN 1.168.192.in-addr.arpa.
1       PTR     server.astakhovamd.net.
1       PTR     ns.astakhovamd.net.
1       PTR     www.astakhovamd.net.
```



root@localhost:/etc/httpd/conf.d

root@localhost:~

www.astakhovamd.net.conf

```
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
```

Настройка виртуального хостинга для HTTP-сервера

```
[root@localhost.user.net html]# mkdir server.astakhovamd.net
[root@localhost.user.net html]# cd /var/www/html/server.astakhovamd.net
[root@localhost.user.net server.astakhovamd.net]# touch index.html
[root@localhost.user.net server.astakhovamd.net]# sudo nano index.html
[root@localhost.user.net server.astakhovamd.net]# cd /var/www/html
[root@localhost.user.net html]# mkdir www.astakhovamd.net
[root@localhost.user.net html]# cd /var/www/html/www.astakhovamd.net
[root@localhost.user.net www.astakhovamd.net]# touch index.html
[root@localhost.user.net www.astakhovamd.net]# █
```

```
[root@localhost.user.net www.astakhovamd.net]# sudo nano index.html
[root@localhost.user.net www.astakhovamd.net]# chown -R apache:apache /var/www
[root@localhost.user.net www.astakhovamd.net]# restorecon -vR /etc
[root@localhost.user.net www.astakhovamd.net]# restorecon -vR /var/named
[root@localhost.user.net www.astakhovamd.net]# restorecon -vR /var/www
[root@localhost.user.net www.astakhovamd.net]# systemctl restart httpd
█
```

```
root@localhost:~          root@localhost:~          root@localhost:~          root@localhost:vagrant/provision/server

GNU nano 5.6.1
dnf -y groupinstall "Basic Web Server"
echo "Copy configuration files"

cp -R /vagrant/provision/server/http/etc/httpd/* /etc/httpd
cp -R /vagrant/provision/server/http/var/www/* /var/www

chown -R apache:apache /var/www

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

echo "Configure firewall"

firewall-cmd --add-service=http
firewall-cmd --add-service=http --permanent
echo "Start http service"
systemctl enable httpd
systemctl start httpd
```

**Внесение изменений
в
настройки внутреннего
окружения
виртуальной машины.**

Внесение изменений в Vagrantfile

```
end

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

end

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

end
```

Итог работы



*Приобрели практические
навыки
по установке и базовому
конфигурированию
HTTP-сервера Apache.*

Спасибо за внимание!