

Лабораторная работа № 1.
Установка CHR и Ansible, настройка VPN

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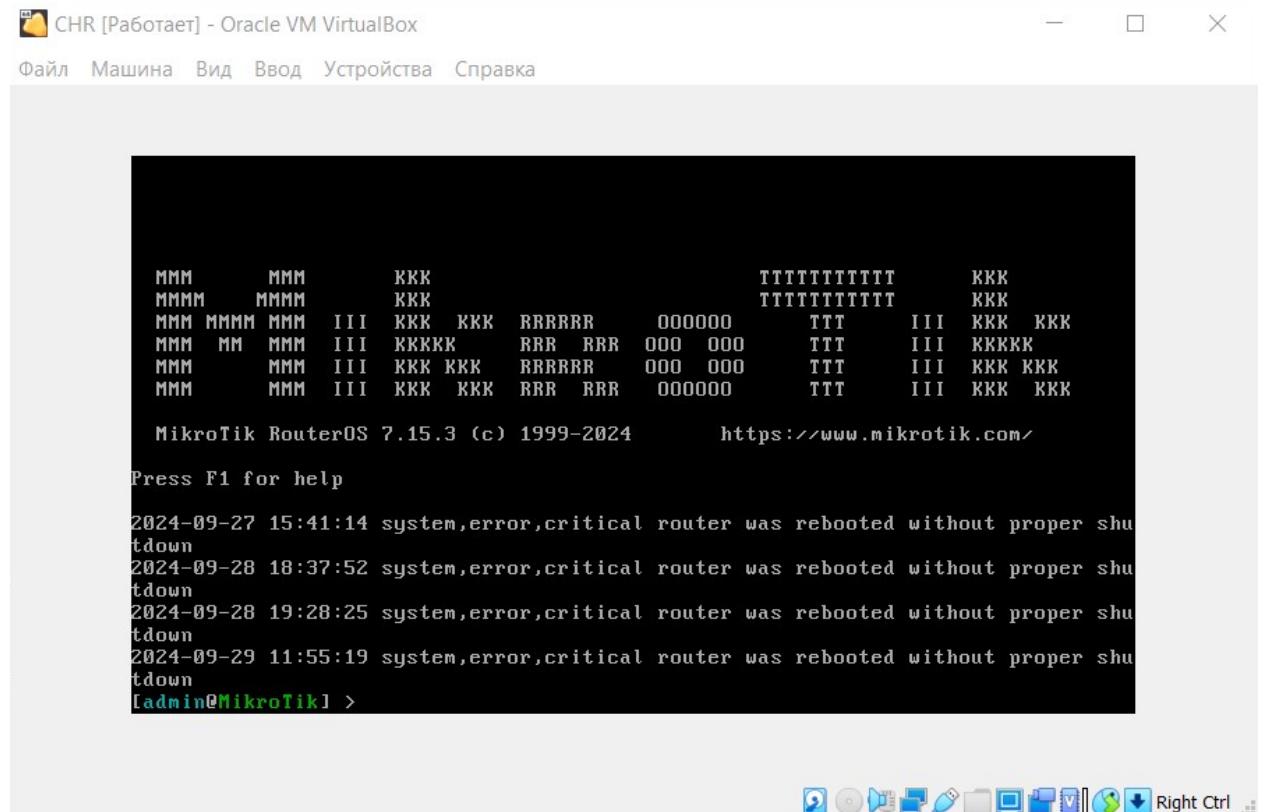
Цель работы

Целью данной работы является развертывание виртуальной машины на базе платформы Microsoft Azure с установленной системой контроля конфигураций Ansible и установка CHR в VirtualBox.

Ход работы

Была создана виртуальная машина (Ubuntu), установлен Python версии 3.12.3 и Ansible

На второй виртуальной машине установлен CHR



Создан Wireguard сервер и сгенерированы ключи для сервера

```
params
private.key
public.key
wg0.conf
```

Настройки клиента через Winbox

- подключение к роутеру
- создан интерфейс WireGuard

Interface <wg-client>

General

Status

Traffic

Name: wg-client

Type: WireGuard

MTU: 1420

Actual MTU: 1420

Listen Port: 49734

Private Key: *****

Public Key: g6Oh79rAVcXAmnkMCaZZHBmkBt4WofitG/l7GxNdZGo=

OK

Cancel

Apply

Disable

Comment

Copy

Remove

Torch

Reset Traffic Counters

WG Export

enabled

running

slave

passthrough

На сервере прописана конфигурация

-публичный ключ клиента

```
[Interface]
Address = 10.66.66.1/24
ListenPort = 49734
PrivateKey = QEzn0BGI71gBfoy+DnnQgQK2Fy7HrsaY4rzF2ecr0Xo=

### Client mikrotik
[Peer]
PublicKey = g6Oh79rAVcXAmnkMCaZZHBmkBt4WofitG/l7GxNdZGo=
AllowedIPs = 10.66.66.2/24
```

Запуск службы

```
• wg-quick@wg0.service - WireGuard via wg-quick(8) for wg0
  Loaded: loaded (/usr/lib/systemd/system/wg-quick@.service; enabled; preset: enabled)
```

```
: Starting wg-quick@wg0.service - WireGuard via wg-quick(8) for wg0...
360]: [#] ip link add wg0 type wireguard
360]: [#] wg setconf wg0 /dev/fd/63
376]: Warning: AllowedIP has nonzero host part: 10.66.66.2/24
360]: [#] ip -4 address add 10.66.66.1/24 dev wg0
360]: [#] ip link set mtu 1420 up dev wg0
: Finished wg-quick@wg0.service - WireGuard via wg-quick(8) for wg0.
```

```
: Starting wg-quick@wg0.service - WireGuard via wg-quick(8) for wg0...
360]: [#] ip link add wg0 type wireguard
360]: [#] wg setconf wg0 /dev/fd/63
376]: Warning: AllowedIP has nonzero host part: 10.66.66.2/24
360]: [#] ip -4 address add 10.66.66.1/24 dev wg0
360]: [#] ip link set mtu 1420 up dev wg0
: Finished wg-quick@wg0.service - WireGuard via wg-quick(8) for wg0.
```

Добавлена информация о VPN сервисе

Wireguard Peer <aWZlbC92ZFA5FEBr46op6vokBnkbQq5MVWT+s+H18kk=>

Name:

▲

▲

Interface:

wg-client

▼

Public Key:

aWZlbC92ZFA5FEBr46op6vokBnkbQq5MVWT+s+H18kk=

Private Key:

▼

Endpoint:

172.20.10.8

▲

Endpoint Port:

49734

▲

Allowed Address:

10.66.66.0/24

◆

Preshared Key:

▼

Persistent Keepalive:

▼

☐ Responder

Current Endpoint Address:

172.20.10.8

Current Endpoint Port:

49734

Rx:

0 B

Tx:

0 B

Last Handshake:

00:00:00

Client Address:

◆

Client DNS:

◆

Проверка

Address <10.66.66.2/24>

Address:

Network: ▲

Interface: ▼

```
[admin@MikroTik] > ping 10.66.66.1
```

SEQ	HOST	SIZE	TTL	TIME	STATUS
0	10.66.66.1	56	64	881us	
1	10.66.66.1	56	64	601us	
2	10.66.66.1	56	64	646us	
3	10.66.66.1	56	64	650us	
4	10.66.66.1	56	64	656us	
5	10.66.66.1	56	64	640us	

sent=6 received=6 packet-loss=0% min-rtt=601us avg-rtt=679us
max-rtt=881us

```
PING 10.66.66.2 (10.66.66.2) 56(84) bytes of data.  
64 bytes from 10.66.66.2: icmp_seq=1 ttl=64 time=1.88 ms  
64 bytes from 10.66.66.2: icmp_seq=2 ttl=64 time=0.691 ms  
64 bytes from 10.66.66.2: icmp_seq=3 ttl=64 time=0.495 ms  
64 bytes from 10.66.66.2: icmp_seq=4 ttl=64 time=0.434 ms  
64 bytes from 10.66.66.2: icmp_seq=5 ttl=64 time=0.729 ms  
64 bytes from 10.66.66.2: icmp_seq=6 ttl=64 time=0.696 ms
```

```
interface: wg0  
public key: aWZIBc92ZFA5FEBr46op6vokBnkbQq5MVWT+s+H18kk=  
private key: (hidden)  
listening port: 49734  
  
peer: g60h79rAVcXAmnkMCaZZHBmkBt4WofitG/l7GxNdZGo=  
endpoint: 172.20.10.5:49734  
allowed ips: 10.66.66.0/24  
latest handshake: 7 seconds ago  
transfer: 2.16 KiB received, 1.96 KiB sent
```