

Windows PowerShell
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Try the new cross-platform PowerShell <https://aka.ms/pscore6>

PS C:\Users\ADMIN> **kathara**
usage: kathara [-h] [-v] <command> [<args>]

Possible Kathara commands are:

- vstart Start a new Kathara device
- vclean Stop a single Kathara device
- vconfig Manage the network interfaces of a running Kathara device
- lstart Start a Kathara network scenario
- lclean Stop a Kathara network scenario
- linfo Show information about a Kathara network scenario
- lrestart Restart a Kathara network scenario
- ltest Test a Kathara network scenario
- lconfig Manage the network interfaces of a running Kathara device in a Kathara network scenario
- connect Connect to a Kathara device
- exec Execute a command in a Kathara device
- wipe Delete all Kathara devices and collision domains, optionally also delete settings
- list Show all running Kathara devices of the current user
- settings Show and edit Kathara settings
- check Check your system environment

A network emulation tool.

positional arguments:

command Command to run.

options:

- h, --help Show an help message and exit.
- v, --version Print the current Kathara version.

PS C:\Users\ADMIN> **dir**

Directory: C:\Users\ADMIN

Mode	LastWriteTime		Length	Name
----	-----	-----	-----	----
d-----	10-01-2023	09:57		.argounl
d-----	13-09-2023	11:48		.cache
d-----	11-10-2023	13:22		.config
d-----	12-10-2023	09:32		.docker
d-----	13-09-2023	11:48		.eclipse
d-----	12-10-2022	01:28		.iclerr

Type here to search

1-01-2023 10:01

31-01-2023 10:01

03-08-2023 13:34

12-10-2023 10:01

31-01-2023 10:01

09-01-2023 13:27

09-01-2023 13:27

03-08-2023 13:34

14-09-2023 13:55

02-09-2023 12:31

14-08-2023 13:18

13-09-2023 11:34

14-08-2023 13:57

14-08-2023 13:49

14-08-2023 13:39

28-08-2023 12:19

14-08-2023 13:58

14-08-2023 13:31

music

OneDrive

Pictures

r1

Recorded Calls

Saved Games

Searches

Videos

wekafiles

176 .packettracer

319 age,fat.R

39777 autosave.xml

311 csv.Arff

284 cust.Arff

272 customer.Arff

556 day3lab2.arff

311 employee.Arff

124 pencils.R

PS C:\Users\ADMIN> md lab2

Directory: C:\Users\ADMIN

Mode	LastWriteTime	Length	Name
d----	12-10-2023 10:17		lab2

PS C:\Users\ADMIN> cd .\lab2\

PS C:\Users\ADMIN\lab2> dir

PS C:\Users\ADMIN\lab2> md c1

Directory: C:\Users\ADMIN\lab2

Mode	LastWriteTime	Length	Name
d----	12-10-2023 10:18		c1

Engine running

Type here to search

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Lenovo



Docker Desktop

Upgrade plan

Search for images, containers, volumes, extensions and more...

Ctrl+K

Windows PowerShell

Recycle



Container PS C:\Users\ADMIN> cd .\lab2\
PS C:\Users\ADMIN\lab2> dir
PS C:\Users\ADMIN\lab2> md c1



Images



Volumes

Directory: C:\Users\ADMIN\lab2



Dev Enviro

Mode	LastWriteTime	Length	Name
d----	12-10-2023 10:18		c1



Docker Sc

PS C:\Users\ADMIN\lab2> md c2



Learning c

Directory: C:\Users\ADMIN\lab2



Extensions

Mode	LastWriteTime	Length	Name
d----	12-10-2023 10:18		c2

+ Add Extens

PS C:\Users\ADMIN\lab2> md r1



R 4.2

Directory: C:\Users\ADMIN\lab2

Mode	LastWriteTime	Length	Name
d----	12-10-2023 10:18		r1



scilab-6
(64-bit)

PS C:\Users\ADMIN\lab2> md c3



Turbo C

Directory: C:\Users\ADMIN\lab2

Mode	LastWriteTime	Length	Name
d----	12-10-2023 10:18		c3

Engine running

PS C:\Users\ADMIN\lab2> dir



Type here to search



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Lenovo

Docker Desktop

Upgrade plan

Search for images, containers, volumes, extensions and more...

Ctrl+K

Windows PowerShell

Recycle



Container

d----- 12-10-2023 10:18 r1



Google Chrome



Images

PS C:\Users\ADMIN\lab2> md c3



Volumes

Directory: C:\Users\ADMIN\lab2



Dev Env

Mode	LastWriteTime	Length	Name
d-----	12-10-2023 10:18		c3



LibreOffice 7.5



Docker

PS C:\Users\ADMIN\lab2> dir



Learning

Directory: C:\Users\ADMIN\lab2



Microsoft Edge

Extensions

Mode	LastWriteTime	Length	Name
d-----	12-10-2023 10:18		c1
d-----	12-10-2023 10:18		c2
d-----	12-10-2023 10:18		c3
d-----	12-10-2023 10:18		r1

+ Add Extension



R 4.2.



scilab-6 (64-bit)



Turbo C

```
PS C:\Users\ADMIN\lab2> notepad.exe lab.conf
PS C:\Users\ADMIN\lab2> notepad.exe c1.startup
PS C:\Users\ADMIN\lab2> notepad.exe c2.startup
PS C:\Users\ADMIN\lab2> notepad.exe r1.startup
PS C:\Users\ADMIN\lab2> notepad.exe c3.startup
PS C:\Users\ADMIN\lab2> dir
```

Directory: C:\Users\ADMIN\lab2

Mode	LastWriteTime	Length	Name
d-----	12-10-2023 10:18		c1
d-----	12-10-2023 10:18		c2
d-----	12-10-2023 10:18		c3
d-----	12-10-2023 10:18		r1
-a-----	12-10-2023 10:20	47	c1.startup
-a-----	12-10-2023 10:21	47	c2.startup
-a-----	12-10-2023 10:22	47	r1.startup

Engine running



Type here to search



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Lenovo

Container

Images

Volumes

Dev Enviro

Docker Sc

Learning c

Extensions

Add Exten

scilab-6 (64-bit)

Turbo C

12-10-2023 10:18

12-10-2023 10:18

12-10-2023 10:18

12-10-2023 10:20

12-10-2023 10:21

12-10-2023 10:22

12-10-2023 10:20

12-10-2023 10:22

c2

c3

r1

c1.startup

c2.startup

c3.startup

lab.conf

r1.startup

PS C:\Users\ADMIN\lab2> kathara lstart

INFO - ===== Starting Network Scenario =====

Deploying collision domains...|#####| 2/2

CRITICAL - (MachineAlreadyExistsError) Device with name `c2` already exists.

PS C:\Users\ADMIN\lab2> kathara wipe

Are you sure to wipe Kathara? (y/n) y

PS C:\Users\ADMIN\lab2> kathara lstart

INFO - ===== Starting Network Scenario =====

Deploying collision domains...|#####| 2/2

Deploying devices...|#####| 4/4

PS C:\Users\ADMIN\lab2> kathara lstart

INFO - ===== Starting Network Scenario =====

Deploying collision domains...|#####| 2/2

CRITICAL - (MachineAlreadyExistsError) Device with name `r1` already exists.

PS C:\Users\ADMIN\lab2> kathara wipe

Are you sure to wipe Kathara? (y/n) y

PS C:\Users\ADMIN\lab2> kathara lstart

INFO - ===== Starting Network Scenario =====

Deploying collision domains...|#####| 2/2

Deploying devices...|#####| 4/4

PS C:\Users\ADMIN\lab2> kathara wipe

Are you sure to wipe Kathara? (y/n) y

PS C:\Users\ADMIN\lab2> kathara lstart

INFO - ===== Starting Network Scenario =====

Deploying collision domains...|#####| 2/2

Deploying devices...|#####| 4/4

PS C:\Users\ADMIN\lab2> kathara wipe

Are you sure to wipe Kathara? (y/n) y

PS C:\Users\ADMIN\lab2> kathara lstart

INFO - ===== Starting Network Scenario =====

Deploying collision domains...|#####| 2/2

Deploying devices...|#####| 4/4

PS C:\Users\ADMIN\lab2>

Engine running

Type here to search

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Lenovo

Pictures

dwdm

lab2

Name

c1

c2

Date modified

12-10-2023 10:18

Type

File folder

Size

12-10-2023 10:18

File folder

c1 - Notepad

File Edit Format View Help

```
ifconfig eth0 10.0.0.1 netmask 255.255.255.0 up
```



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ENG

10:40
12-10-2023



Lenovo


```
lstart
ing Networ
#####
sError) [
wipe
(y/n) y
lstart
ing Networ
|#####
#####
lstart
ing Networ
..|#####
#####
lstart
ing Networ
...|#####
#####
lstart
ing Networ
s...|#####
#####
```

Pictures
dwdm
lab2

Name
c1
c2

Date modified	Type	Size
12-10-2023 10:18	File folder	
12-10-2023 10:18	File folder	

c3 - Notepad

File Edit Format View Help

```
ifconfig eth0 20.0.0.2 netmask 255.255.255.0 up
```

I



35°C Partly sunny 10:41 12-10-2023

LENOVO

↑ This PC Local Disk (C:) Users ADMIN lab2

Pictures

dwdm

lab2

Name

c1

c2

Date modified

12-10-2023 10:18

12-10-2023 10:18

Type

File folder

File folder

Size

lab - Notepad

File Edit Format View Help

c1[0]=A

c2[0]=A

r1[0]=A

r1[1]=B

c3[0]=B

I

86.3
83/0
of d
l=63
l=63
l=63
l=63
l=63
l=63
l=63
l=63

0% pack
0.115/0



35°C Partly sunny 10:57 12-10-2023 ENG

Lenovo

230 ttl=6
231 ttl=6
232 ttl=6
233 ttl=6
234 ttl=6

ved, 86.3
11/0.183/0

bytes of d
=1 ttl=63
q=2 ttl=63
q=3 ttl=63
q=4 ttl=63
q=5 ttl=63
q=6 ttl=63
q=7 ttl=63
q=8 ttl=63

ved, 0% pack
0.097/0.115/0

File Home Share View
← → ▾ ↑ This PC > Local Disk (C:) > Users > ADMIN > lab2

Pictures		Name	Date modified	Type	Size
	dwdm	c1	12-10-2023 10:18	File folder	
	lab2	c2	12-10-2023 10:18	File folder	

```
r1 - Notepad
File Edit Format View Help
ifconfig eth0 10.0.0.3 netmask 255.255.255.0 up
ifconfig eth1 20.0.0.1 netmask 255.255.255.0 up
```


Recycle

root@c1: /

--- Startup Commands Log

++ ifconfig eth0 10.0.0.1 netmask 255.255.255.0 up

--- End Startup Commands Log

root@c1: /# ifconfig

```
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.0.1 netmask 255.255.255.0 broadcast 10.0.0.255
    ether 5a:06:87:44:bf:f2 txqueuelen 1000 (Ethernet)
    RX packets 12 bytes 1016 (1016.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536

inet 127.0.0.1 netmask 255.0.0.0

loop txqueuelen 1000 (Local Loopback)

RX packets 0 bytes 0 (0.0 B)

RX errors 0 dropped 0 overruns 0 frame 0

TX packets 0 bytes 0 (0.0 B)

TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

root@c1: /# ping 10.0.0.2

PING 10.0.0.2 (10.0.0.2) 56(84) bytes of data:

64 bytes from 10.0.0.2: icmp_seq=1 ttl=64 time=0.100 ms

64 bytes from 10.0.0.2: icmp_seq=2 ttl=64 time=0.095 ms

64 bytes from 10.0.0.2: icmp_seq=3 ttl=64 time=0.085 ms

64 bytes from 10.0.0.2: icmp_seq=4 ttl=64 time=0.092 ms

64 bytes from 10.0.0.2: icmp_seq=5 ttl=64 time=0.093 ms

scilab-6
(64-bit)

Turbo C

```
PS C:\Users\ADMIN\lab2> kathara wipe
Are you sure to wipe Kathara? (y/n) y
PS C:\Users\ADMIN\lab2> kathara lstart
INFO - ===== Starting Network
Deploying collision domains...|#####
Deploying devices...|#####
PS C:\Users\ADMIN\lab2> kathara wipe
Are you sure to wipe Kathara? (y/n) y
PS C:\Users\ADMIN\lab2> kathara lstart
INFO - ===== Starting Network
Deploying collision domains...|#####
Deploying devices...|#####
```

Engine running

Type here to search

35°C Partly sun

--- Startup Commands Log

++ ifconfig eth0 10.0.0.2 netmask 255.255.255.0 up

--- End Startup Commands Log

imroot@c2:/# ifconfig

```
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.0.2 netmask 255.255.255.0 broadcast 10.0.0.255
    ether 1a:7d:7e:c0:3d:60 txqueuelen 1000 (Ethernet)
    RX packets 27 bytes 2318 (2.2 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 13 bytes 1162 (1.1 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536

```
    inet 127.0.0.1 netmask 255.0.0.0
    loop txqueuelen 1000 (Local Loopback)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

Adroot@c2:/# ping 10.0.0.3

```
PING 10.0.0.3 (10.0.0.3) 56(84) bytes of data:
64 bytes from 10.0.0.3: icmp_seq=1 ttl=64 time=0.105 ms
64 bytes from 10.0.0.3: icmp_seq=2 ttl=64 time=0.092 ms
64 bytes from 10.0.0.3: icmp_seq=3 ttl=64 time=0.092 ms
64 bytes from 10.0.0.3: icmp_seq=4 ttl=64 time=0.089 ms
64 bytes from 10.0.0.3: icmp_seq=5 ttl=64 time=0.090 ms
64 bytes from 10.0.0.3: icmp_seq=6 ttl=64 time=0.088 ms
64 bytes from 10.0.0.3: icmp_seq=7 ttl=64 time=0.089 ms
64 bytes from 10.0.0.3: icmp_seq=8 ttl=64 time=0.089 ms
64 bytes from 10.0.0.3: icmp_seq=9 ttl=64 time=0.090 ms
64 bytes from 10.0.0.3: icmp_seq=10 ttl=64 time=0.040 ms
64 bytes from 10.0.0.3: icmp_seq=11 ttl=64 time=0.090 ms
64 bytes from 10.0.0.3: icmp_seq=12 ttl=64 time=0.090 ms
64 bytes from 10.0.0.3: icmp_seq=13 ttl=64 time=0.089 ms
64 bytes from 10.0.0.3: icmp_seq=14 ttl=64 time=0.088 ms
64 bytes from 10.0.0.3: icmp_seq=15 ttl=64 time=0.087 ms
64 bytes from 10.0.0.3: icmp_seq=16 ttl=64 time=0.089 ms
64 bytes from 10.0.0.3: icmp_seq=17 ttl=64 time=0.091 ms
64 bytes from 10.0.0.3: icmp_seq=18 ttl=64 time=0.089 ms
64 bytes from 10.0.0.3: icmp_seq=19 ttl=64 time=0.087 ms
```



```
--- Startup Commands Log
++ ifconfig eth0 20.0.0.2 netmask 255.255.255.0 up
--- End Startup Commands Log
root@c3:/# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 20.0.0.2 netmask 255.255.255.0 broadcast 20.0.0.255
    ether 0e:79:30:39:c0:43 txqueuelen 1000 (Ethernet)
    RX packets 13 bytes 1086 (1.0 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

IN\lab2> kathara

===== Startin

sion domains...|#

MachineAlreadyExists

MIN\lab2> kathara

o wipe Kathara? (y

MIN\lab2> kathara

===== Startin

sion domains...|#

ices...|#####

ADMIN\lab2> kathara

===== Startin

sion domains...|#

MachineAlreadyExists

\ADMIN\lab2> kathara

e to wipe Kathara? (y

\ADMIN\lab2> kathara

===== Startin

sion domains...|#

devices...|#####

s\ADMIN\lab2> kathara

ure to wipe Kathara? (y

rs\ADMIN\lab2> kathara

===== Startin

sion domains...|#

g devices...|#####

ers\ADMIN\lab2> kathara

sure to wipe Kathara? (y

ers\ADMIN\lab2> kathara

===== Startin

sion domains...|#

ng devices...|#####

```
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    loop txqueuelen 1000 (Local Loopback)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

root@c3:/# ping 20.0.0.1

```
PING 20.0.0.1 (20.0.0.1) 56(84) bytes of data:
64 bytes from 20.0.0.1: icmp_seq=1 ttl=64 time=0.064 ms
64 bytes from 20.0.0.1: icmp_seq=2 ttl=64 time=0.030 ms
64 bytes from 20.0.0.1: icmp_seq=3 ttl=64 time=0.086 ms
64 bytes from 20.0.0.1: icmp_seq=4 ttl=64 time=0.086 ms
64 bytes from 20.0.0.1: icmp_seq=5 ttl=64 time=0.090 ms
64 bytes from 20.0.0.1: icmp_seq=6 ttl=64 time=0.083 ms
64 bytes from 20.0.0.1: icmp_seq=7 ttl=64 time=0.080 ms
64 bytes from 20.0.0.1: icmp_seq=8 ttl=64 time=0.082 ms
```

```
--- 20.0.0.1 ping statistics ---
8 packets transmitted, 8 received, 0% packet loss, time 7307ms
```

```
rtt min/avg/max/mdev = 0.030/0.075/0.090/0.018 ms
```

root@c3:/# ping 10.0.0.1

ping: connect: Network is unreachable

root@c3:/# route

```
Kernel IP routing table
Destination      Gateway
```

Genmask

Flags Metric Ref Use Ifac

35°C Partly sunny

11:00

12-10-2023

Extensions

root@c3: /

Docker Extension

Browse

Search

```
64 bytes from 20.0.0.1: icmp_seq=2 ttl=64 time=0.030 ms
64 bytes from 20.0.0.1: icmp_seq=3 ttl=64 time=0.086 ms
64 bytes from 20.0.0.1: icmp_seq=4 ttl=64 time=0.086 ms
64 bytes from 20.0.0.1: icmp_seq=5 ttl=64 time=0.090 ms
64 bytes from 20.0.0.1: icmp_seq=6 ttl=64 time=0.083 ms
64 bytes from 20.0.0.1: icmp_seq=7 ttl=64 time=0.080 ms
64 bytes from 20.0.0.1: icmp_seq=8 ttl=64 time=0.082 ms
```

```
--- 20.0.0.1 ping statistics ---
8 packets transmitted, 8 received, 0% packet loss, time 7307ms
rtt min/avg/max/mdev = 0.030/0.075/0.090/0.018 ms
```

```
root@c3:/# ping 10.0.0.1
ping: connect: Network is unreachable
```

```
root@c3:/# route
Kernel IP routing table
```

Destination	Gateway	Genmask	Flags	Metric	Ref	Use	Iface
20.0.0.0	0.0.0.0	255.255.255.0	U	0	0	0	eth0

```
root@c3:/# route add default gw ^C
```

```
root@c3:/# ping 10.0.0.3
ping: connect: Network is unreachable
```

```
root@c3:/# ping 20.0.0.1
PING 20.0.0.1 (20.0.0.1) 56(84) bytes of data:
```

```
64 bytes from 20.0.0.1: icmp_seq=1 ttl=64 time=0.046 ms
64 bytes from 20.0.0.1: icmp_seq=2 ttl=64 time=0.082 ms
64 bytes from 20.0.0.1: icmp_seq=3 ttl=64 time=0.147 ms
64 bytes from 20.0.0.1: icmp_seq=4 ttl=64 time=0.086 ms
64 bytes from 20.0.0.1: icmp_seq=5 ttl=64 time=0.078 ms
64 bytes from 20.0.0.1: icmp_seq=6 ttl=64 time=0.078 ms
64 bytes from 20.0.0.1: icmp_seq=7 ttl=64 time=0.083 ms
64 bytes from 20.0.0.1: icmp_seq=8 ttl=64 time=0.083 ms
64 bytes from 20.0.0.1: icmp_seq=9 ttl=64 time=0.083 ms
64 bytes from 20.0.0.1: icmp_seq=10 ttl=64 time=0.084 ms
64 bytes from 20.0.0.1: icmp_seq=11 ttl=64 time=0.085 ms
64 bytes from 20.0.0.1: icmp_seq=12 ttl=64 time=0.079 ms
64 bytes from 20.0.0.1: icmp_seq=13 ttl=64 time=0.083 ms
64 bytes from 20.0.0.1: icmp_seq=14 ttl=64 time=0.084 ms
64 bytes from 20.0.0.1: icmp_seq=15 ttl=64 time=0.082 ms
64 bytes from 20.0.0.1: icmp_seq=16 ttl=64 time=0.082 ms
```


Extensions Marketplace

Give feedback

Docker | root@c3: /

inet_route [-FC] flush NOT supported
root@c3:/# route add default gw 20.0.0.1
root@c3:/# route

Browse

Kernel IP routing table

Destination	Gateway	Genmask	Flags	Metric	Ref	Use Ifac
default	20.0.0.1	0.0.0.0	UG	0	0	0 eth0
20.0.0.0	0.0.0.0	255.255.255.0	U	0	0	0 eth0

BETA



PowerShell

ers\ADMIN\lab2> katha root@c3:/# ping 10.0.0.1

```
===== Star
PING 10.0.0.1 (10.0.0.1) 56(84) bytes of data.
64 bytes from 10.0.0.1: icmp_seq=203 ttl=63 time=0.125 ms
64 bytes from 10.0.0.1: icmp_seq=204 ttl=63 time=0.115 ms
64 bytes from 10.0.0.1: icmp_seq=205 ttl=63 time=0.144 ms
64 bytes from 10.0.0.1: icmp_seq=206 ttl=63 time=0.114 ms
64 bytes from 10.0.0.1: icmp_seq=207 ttl=63 time=0.115 ms
64 bytes from 10.0.0.1: icmp_seq=208 ttl=63 time=0.102 ms
64 bytes from 10.0.0.1: icmp_seq=209 ttl=63 time=0.040 ms
64 bytes from 10.0.0.1: icmp_seq=210 ttl=63 time=0.113 ms
64 bytes from 10.0.0.1: icmp_seq=211 ttl=63 time=0.112 ms
64 bytes from 10.0.0.1: icmp_seq=212 ttl=63 time=0.114 ms
64 bytes from 10.0.0.1: icmp_seq=213 ttl=63 time=0.116 ms
64 bytes from 10.0.0.1: icmp_seq=214 ttl=63 time=0.105 ms
64 bytes from 10.0.0.1: icmp_seq=215 ttl=63 time=0.112 ms
64 bytes from 10.0.0.1: icmp_seq=216 ttl=63 time=0.112 ms
64 bytes from 10.0.0.1: icmp_seq=217 ttl=63 time=0.115 ms
64 bytes from 10.0.0.1: icmp_seq=218 ttl=63 time=0.113 ms
64 bytes from 10.0.0.1: icmp_seq=219 ttl=63 time=0.108 ms
64 bytes from 10.0.0.1: icmp_seq=220 ttl=63 time=0.117 ms
64 bytes from 10.0.0.1: icmp_seq=221 ttl=63 time=0.117 ms
64 bytes from 10.0.0.1: icmp_seq=222 ttl=63 time=0.049 ms
64 bytes from 10.0.0.1: icmp_seq=223 ttl=63 time=0.115 ms
64 bytes from 10.0.0.1: icmp_seq=224 ttl=63 time=0.113 ms
64 bytes from 10.0.0.1: icmp_seq=225 ttl=63 time=0.102 ms
64 bytes from 10.0.0.1: icmp_seq=226 ttl=63 time=0.183 ms
64 bytes from 10.0.0.1: icmp_seq=227 ttl=63 time=0.111 ms
64 bytes from 10.0.0.1: icmp_seq=228 ttl=63 time=0.121 ms
```



```

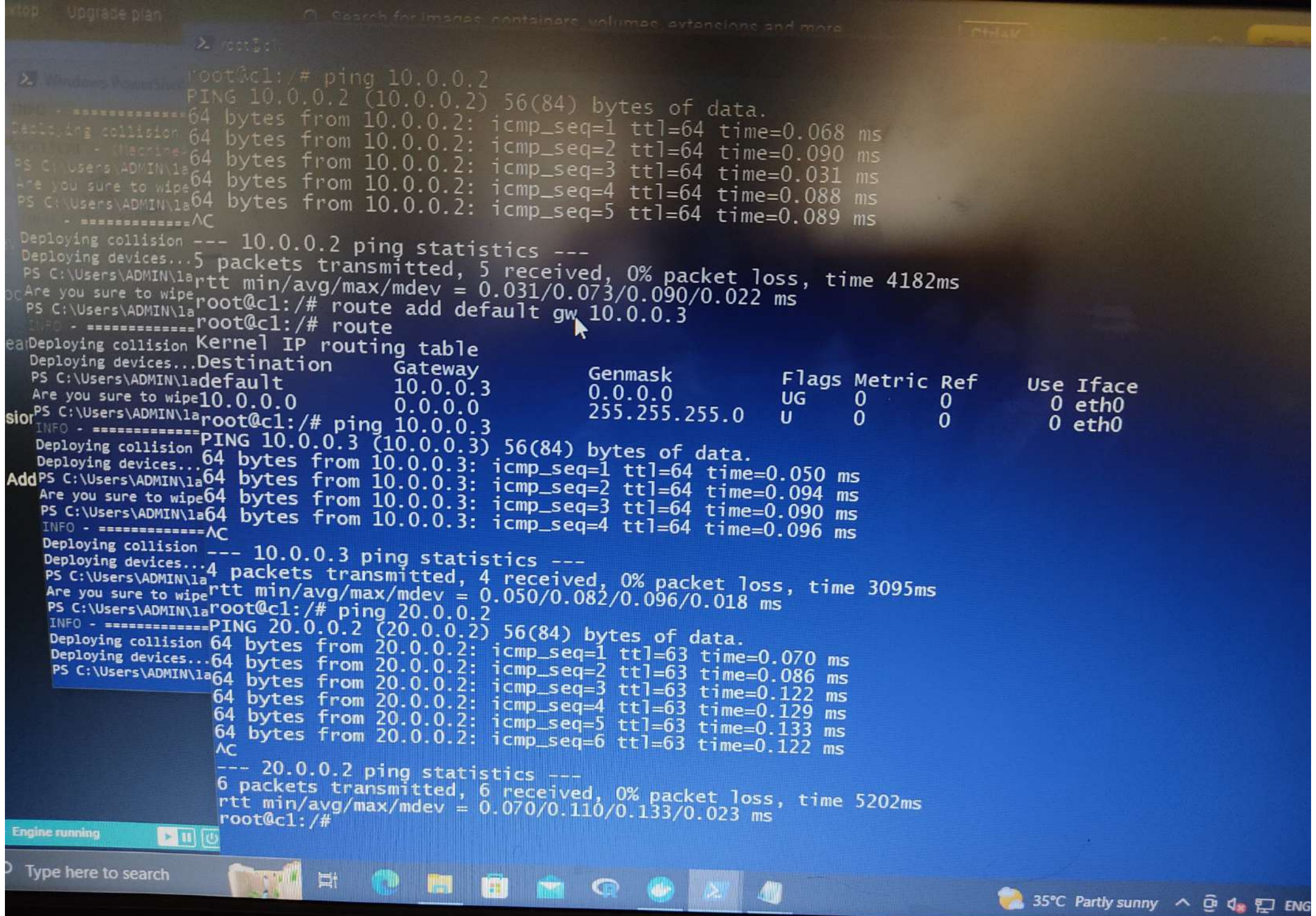
64 bytes from 10.0.0.3: icmp_seq=383 ttl=64 time=0.093 ms
64 bytes from 10.0.0.3: icmp_seq=384 ttl=64 time=0.091 ms
64 bytes from 10.0.0.3: icmp_seq=385 ttl=64 time=0.092 ms
64 bytes from 10.0.0.3: icmp_seq=386 ttl=64 time=0.093 ms
64 bytes from 10.0.0.3: icmp_seq=387 ttl=64 time=0.089 ms
--- 10.0.0.3 ping statistics ---
387 packets transmitted, 387 received, 0% packet loss, time 401424ms
rtt min/avg/max/mdev = 0.030/0.088/0.216/0.017 ms
root@c2:/# route add default gw 10.0.0.3
root@c2:/# route
Kernel IP routing table
Destination Gateway Genmask Flags Metric Ref Use Iface
0.0.0.0 10.0.0.3 0.0.0.0 UG 0 0 0 eth0
root@c2:/# ping 10.0.0.3
PING 10.0.0.3 (10.0.0.3) 56(84) bytes of data.
64 bytes from 10.0.0.3: icmp_seq=1 ttl=64 time=0.039 ms
64 bytes from 10.0.0.3: icmp_seq=2 ttl=64 time=0.090 ms
64 bytes from 10.0.0.3: icmp_seq=3 ttl=64 time=0.092 ms
64 bytes from 10.0.0.3: icmp_seq=4 ttl=64 time=0.098 ms
64 bytes from 10.0.0.3: icmp_seq=5 ttl=64 time=0.088 ms
--- 10.0.0.3 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4169ms
rtt min/avg/max/mdev = 0.039/0.081/0.098/0.021 ms
root@c2:/# ping 20.0.0.2
PING 20.0.0.2 (20.0.0.2) 56(84) bytes of data.
64 bytes from 20.0.0.2: icmp_seq=1 ttl=63 time=0.087 ms
64 bytes from 20.0.0.2: icmp_seq=2 ttl=63 time=0.213 ms
64 bytes from 20.0.0.2: icmp_seq=3 ttl=63 time=0.114 ms
64 bytes from 20.0.0.2: icmp_seq=4 ttl=63 time=0.110 ms
64 bytes from 20.0.0.2: icmp_seq=5 ttl=63 time=0.112 ms
--- 20.0.0.2 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4171ms
rtt min/avg/max/mdev = 0.087/0.127/0.213/0.044 ms
root@c2:/# tcpdump -i eth0
tcpdump: verbose output suppressed, use -v[v]... for full protocol decode
listening on eth0, link-type EN10MB (Ethernet), snapshot length 262144 bytes
0 packets captured
0 packets received by filter

```

Running

RAM 2.52

Type here to search



```
root@c1:/# ping 10.0.0.2
PING 10.0.0.2 (10.0.0.2) 56(84) bytes of data.
64 bytes from 10.0.0.2: icmp_seq=1 ttl=64 time=0.068 ms
64 bytes from 10.0.0.2: icmp_seq=2 ttl=64 time=0.090 ms
64 bytes from 10.0.0.2: icmp_seq=3 ttl=64 time=0.031 ms
64 bytes from 10.0.0.2: icmp_seq=4 ttl=64 time=0.088 ms
64 bytes from 10.0.0.2: icmp_seq=5 ttl=64 time=0.089 ms
--- 10.0.0.2 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4182ms
rtt min/avg/max/mdev = 0.031/0.073/0.090/0.022 ms
root@c1:/# route add default gw 10.0.0.3
root@c1:/# route
Kernel IP routing table
Destination      Gateway         Genmask         Flags Metric Ref    Use Iface
0.0.0.0          10.0.0.3       0.0.0.0         UG        0      0        0 eth0
10.0.0.0         0.0.0.0        255.255.255.0   U         0      0        0 eth0
root@c1:/# ping 10.0.0.3
PING 10.0.0.3 (10.0.0.3) 56(84) bytes of data.
64 bytes from 10.0.0.3: icmp_seq=1 ttl=64 time=0.050 ms
64 bytes from 10.0.0.3: icmp_seq=2 ttl=64 time=0.094 ms
64 bytes from 10.0.0.3: icmp_seq=3 ttl=64 time=0.090 ms
64 bytes from 10.0.0.3: icmp_seq=4 ttl=64 time=0.096 ms
--- 10.0.0.3 ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3095ms
rtt min/avg/max/mdev = 0.050/0.082/0.096/0.018 ms
root@c1:/# ping 20.0.0.2
PING 20.0.0.2 (20.0.0.2) 56(84) bytes of data.
64 bytes from 20.0.0.2: icmp_seq=1 ttl=63 time=0.070 ms
64 bytes from 20.0.0.2: icmp_seq=2 ttl=63 time=0.086 ms
64 bytes from 20.0.0.2: icmp_seq=3 ttl=63 time=0.122 ms
64 bytes from 20.0.0.2: icmp_seq=4 ttl=63 time=0.129 ms
64 bytes from 20.0.0.2: icmp_seq=5 ttl=63 time=0.133 ms
64 bytes from 20.0.0.2: icmp_seq=6 ttl=63 time=0.122 ms
--- 20.0.0.2 ping statistics ---
6 packets transmitted, 6 received, 0% packet loss, time 5202ms
rtt min/avg/max/mdev = 0.070/0.110/0.133/0.023 ms
root@c1:/#
```

Engine running