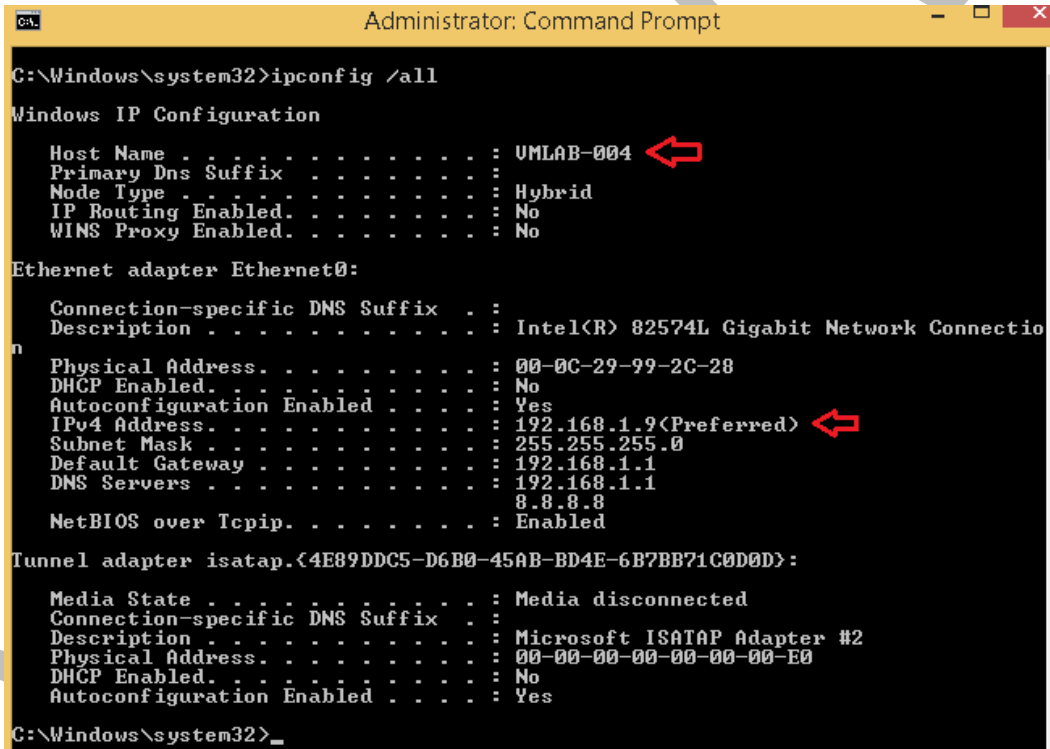
	PROCEDIMENTOS			Página 1 de 6
	ROTAS ESTATICAS – CRIANDO ROTA PERMANENTE PELO PROMPT DE COMANDO			
	Setor Responsável LABORATÓRIO	Analista Responsável Nome: Fábio Nepomuceno		Emissão 02/06/2020

1. OBJETIVO:

Este procedimento tem como objetivo delinear os passos para simular a criação de uma rota estática.

Será necessário criar uma rota da máquina da rede 192.168.1.9 para se comunicar com o firewall da rede 192.168.100.1.

- Micro da rede 192.168.1.1.



```

Administrator: Command Prompt
C:\Windows\system32>ipconfig /all

Windows IP Configuration

    Host Name . . . . . : UMLAB-004
    Primary Dns Suffix . . . . . :
    Node Type . . . . . : Hybrid
    IP Routing Enabled. . . . . : No
    WINS Proxy Enabled. . . . . : No

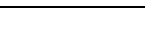
Ethernet adapter Ethernet0:

    Connection-specific DNS Suffix . :
    Description . . . . . : Intel(R) 82574L Gigabit Network Connection
    Physical Address. . . . . : 00-0C-29-99-2C-28
    DHCP Enabled. . . . . : No
    Autoconfiguration Enabled . . . . : Yes
    IPv4 Address. . . . . : 192.168.1.9(Preferred)
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.1
    DNS Servers . . . . . : 192.168.1.1
                           8.8.8.8
    NetBIOS over Tcpip. . . . . : Enabled

Tunnel adapter isatap.{4E89DDC5-D6B0-45AB-BD4E-6B7BB71C0D0D}:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . :
    Description . . . . . : Microsoft ISATAP Adapter #2
    Physical Address. . . . . : 00-00-00-00-00-00-E0
    DHCP Enabled. . . . . : No
    Autoconfiguration Enabled . . . . : Yes

C:\Windows\system32>
  
```

	PROCEDIMENTOS			Página 2 de 6
	ROTAS ESTATICAS – CRIANDO ROTA PERMANENTE PELO PROMPT DE COMANDO			
	Setor Responsável LABORATÓRIO	Analista Responsável Nome: Fábio Nepomuceno	Emissão 02/06/2020	Versão 1.0

- FIREWALL da rede 192.168.100.1.

```
Bye bye.

IPFire v2.25 - www.ipfire.org

SRUPC-FW01.nepomucenoti.corp running on Linux 4.14.173-ipfire x86_64
Hint: Num Lock on

SRUPC-FW01 login: root
Password:
Last login: Tue Jun  2 21:40:05 -0300 2020 on /dev/console.
No mail.
[root@SRUPC-FW01 ~]# ifconfig
green0  Link encap:Ethernet  HWaddr 00:15:5D:7E:BE:0C
        inet addr:192.168.100.1 Bcast:192.168.100.255 Mask:255.255.255.0
        UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
        RX packets:1303997 errors:0 dropped:0 overruns:0 frame:0
        TX packets:1102650 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1000
        RX bytes:149207874 (142.2 Mb)  TX bytes:3597565428 (3430.9 Mb)

lo      Link encap:Local Loopback
        inet addr:127.0.0.1 Mask:255.0.0.0
        UP LOOPBACK RUNNING  MTU:65536  Metric:1
        RX packets:22246 errors:0 dropped:0 overruns:0 frame:0
        TX packets:22246 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1000
        RX bytes:1412386 (1.3 Mb)  TX bytes:1412386 (1.3 Mb)

red0    Link encap:Ethernet  HWaddr 00:15:5D:7E:BE:0B
        inet addr:192.168.1.28 Bcast:192.168.1.255 Mask:255.255.255.0
        UP BROADCAST RUNNING  MTU:1500  Metric:1
        RX packets:2669626 errors:0 dropped:0 overruns:0 frame:0
        TX packets:1116009 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1000
        RX bytes:3656670135 (3487.2 Mb)  TX bytes:100488676 (103.4 Mb)

[root@SRUPC-FW01 ~]# _
```

- Ao realizar o comando PING para o GATEWAY 192.168.100.1 não tem resposta.

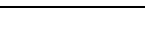
```
Administrator: Command Prompt

C:\Windows\system32>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\Windows\system32>
```

	PROCEDIMENTOS			Página 3 de 6
	ROTAS ESTATICAS – CRIANDO ROTA PERMANENTE PELO PROMPT DE COMANDO			
	Setor Responsável LABORATÓRIO	Analista Responsável Nome: Fábio Nepomuceno	Emissão 02/06/2020	Versão 1.0

2. ATIVIDADES:

- Execute o prompt de comando com perfil de administrador.
- Verifique se existe rotas estáticas criadas para este roteador usando o comando **ROUTE PRINT**.

```
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\Windows\system32>ROUTE PRINT
=====
Interface List
 3...00 0c 29 99 2c 28 .....Intel(R) 82574L Gigabit Network Connection
 1.....Software Loopback Interface 1
 5...00 00 00 00 00 00 e0 Microsoft ISA/TAP Adapter #2
=====

IPv4 Route Table
=====
Active Routes:
Network Destination        Netmask          Gateway          Interface        Metric
0.0.0.0                    0.0.0.0          192.168.1.1      192.168.1.9      276
127.0.0.0                  255.0.0.0        On-link          127.0.0.1        306
127.0.0.1                  255.255.255.255  On-link          127.0.0.1        306
127.255.255.255            255.255.255.255  On-link          127.0.0.1        306
192.168.1.0                255.255.255.0    On-link          192.168.1.9      276
192.168.1.9                255.255.255.255  On-link          192.168.1.9      276
192.168.1.255              255.255.255.255  On-link          192.168.1.9      276
224.0.0.0                  240.0.0.0        On-link          127.0.0.1        306
224.0.0.0                  240.0.0.0        On-link          192.168.1.9      276
255.255.255.255            255.255.255.255  On-link          127.0.0.1        306
255.255.255.255            255.255.255.255  On-link          192.168.1.9      276
=====
Persistent Routes:
Network Address            Netmask          Gateway Address  Metric
0.0.0.0                    0.0.0.0          192.168.1.1      Default
=====

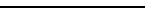
IPv6 Route Table
=====
Active Routes:
If Metric Network Destination      Gateway
1 306 ::1/128                      On-link
1 306 ff00::/8                      On-link
=====
Persistent Routes:
None

C:\Windows\system32>
```

- Em seguida execute o comando **route add + o IP da rede de destino + mask máscara de Subrede da rede de destino + o IP Gateway de destino + (-p)** para informar que a rota e persistente.

```
C:\Windows\system32>route add 192.168.100.0 mask 255.255.255.0 192.168.100.1 -p
OK!

C:\Windows\system32>
```

 NPCTI CLOUD COMPUTING	PROCEDIMENTOS			Página 4 de 6
	ROTAS ESTATICAS – CRIANDO ROTA PERMANENTE PELO PROMPT DE COMANDO			
	Setor Responsável LABORATÓRIO	Analista Responsável Nome: Fábio Nepomuceno		Emissão 02/06/2020

- **192.168.100.0** = Endereço IP da rede do destino;
 - **255.255.255.0** = Mascara de Subrede do destino;
 - **192.168.100.1** = Gateway padrão do destino;
 - **-P** = Rota persistente;
- Execute o comando **ROUTE PRINT** novamente para verificar se a rota foi criada.

```

C:\Windows\system32>ROUTE PRINT
=====
Interface List
3...00 0c 29 99 2c 28 .....Intel(R) 82574L Gigabit Network Connection
1.....Software Loopback Interface 1
5...00 00 00 00 00 00 e0 Microsoft ISATAP Adapter #2
=====


IPv4 Route Table
=====
Active Routes:
Network Destination        Netmask          Gateway          Interface        Metric
0.0.0.0                    0.0.0.0          192.168.1.1      192.168.1.9       276
127.0.0.0                  255.0.0.0        On-link          127.0.0.1         306
127.0.0.1                  255.255.255.255  On-link          127.0.0.1         306
127.255.255.255            255.255.255.255  On-link          127.0.0.1         306
192.168.1.0                255.255.255.0    On-link          192.168.1.9       276
192.168.1.9                255.255.255.255  On-link          192.168.1.9       276
192.168.1.255              255.255.255.255  On-link          192.168.1.9       276
192.168.100.0              255.255.255.0    192.168.100.1    192.168.1.9       21
224.0.0.0                  240.0.0.0        On-link          127.0.0.1         306
224.0.0.0                  240.0.0.0        On-link          192.168.1.9       276
255.255.255.255            255.255.255.255  On-link          127.0.0.1         306
255.255.255.255            255.255.255.255  On-link          192.168.1.9       276

Persistent Routes:
Network Address            Netmask          Gateway Address  Metric
0.0.0.0                    0.0.0.0          192.168.1.1      Default
192.168.100.0              255.255.255.0    192.168.100.1    1

IPv6 Route Table
=====
Active Routes:
If Metric Network Destination      Gateway
1 306 ::1/128 On-link
1 306 ff00::/8 On-link

Persistent Routes:
None
C:\Windows\system32>

```

	PROCEDIMENTOS			Página 5 de 6
	ROTAS ESTATICAS – CRIANDO ROTA PERMANENTE PELO PROMPT DE COMANDO			
	Setor Responsável LABORATÓRIO	Analista Responsável Nome: Fábio Nepomuceno		Emissão 02/06/2020

- Execute o bloco de notas como ADMINISTRADOR.
- Abra o arquivo HOSTS que está no diretório **%SYSTEMROOT%\SYSTEM32\DRIVERS\ETC** e insira o IP da máquina de destino.

```

File Edit Format View Help
#
# This is a sample HOSTS file used by Microsoft TCP/IP for Windows.
#
# This file contains the mappings of IP addresses to host names. Each
# entry should be kept on an individual line. The IP address should
# be placed in the first column followed by the corresponding host name.
# The IP address and the host name should be separated by at least one
# space.
#
# Additionally, comments (such as these) may be inserted on individual
# lines or following the machine name denoted by a '#' symbol.
#
# For example:
#
#       102.54.94.97       rhino.acme.com       # source server
#       38.25.63.10       x.acme.com           # x client host


# localhost name resolution is handled within DNS itself.
#       127.0.0.1         localhost
#       ::1               localhost
192.168.1.10              SRVHV-001
192.168.1.11              VMLAB-001
192.168.100.1:444         SRVPC-FW01

```


- Após salvar o arquivo, execute o comando PING para o endereço da máquina de destino.

```

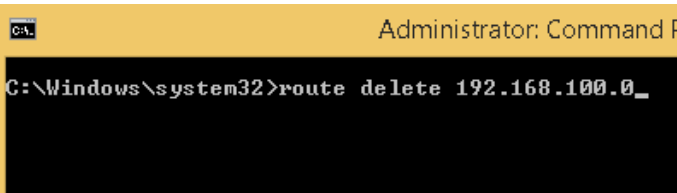
C:\Windows\system32>NOTEPAD
C:\Windows\system32>ping 192.168.100.1
Pinging 192.168.100.1 with 32 bytes of data:
Reply from 192.168.100.1: bytes=32 time=1ms TTL=64
Reply from 192.168.100.1: bytes=32 time=1ms TTL=64
Reply from 192.168.100.1: bytes=32 time<1ms TTL=64
Reply from 192.168.100.1: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
C:\Windows\system32>_

```

	PROCEDIMENTOS			Página 6 de 6
	ROTAS ESTATICAS – CRIANDO ROTA PERMANENTE PELO PROMPT DE COMANDO			
	Setor Responsável LABORATÓRIO	Analista Responsável Nome: Fábio Nepomuceno	Emissão 02/06/2020	Versão 1.0

- Para excluir a rota execute o comando **ROUTE DELETE + IP DA REDE**.



```

Administrator: Command Prompt
C:\Windows\system32>route delete 192.168.100.0_

```