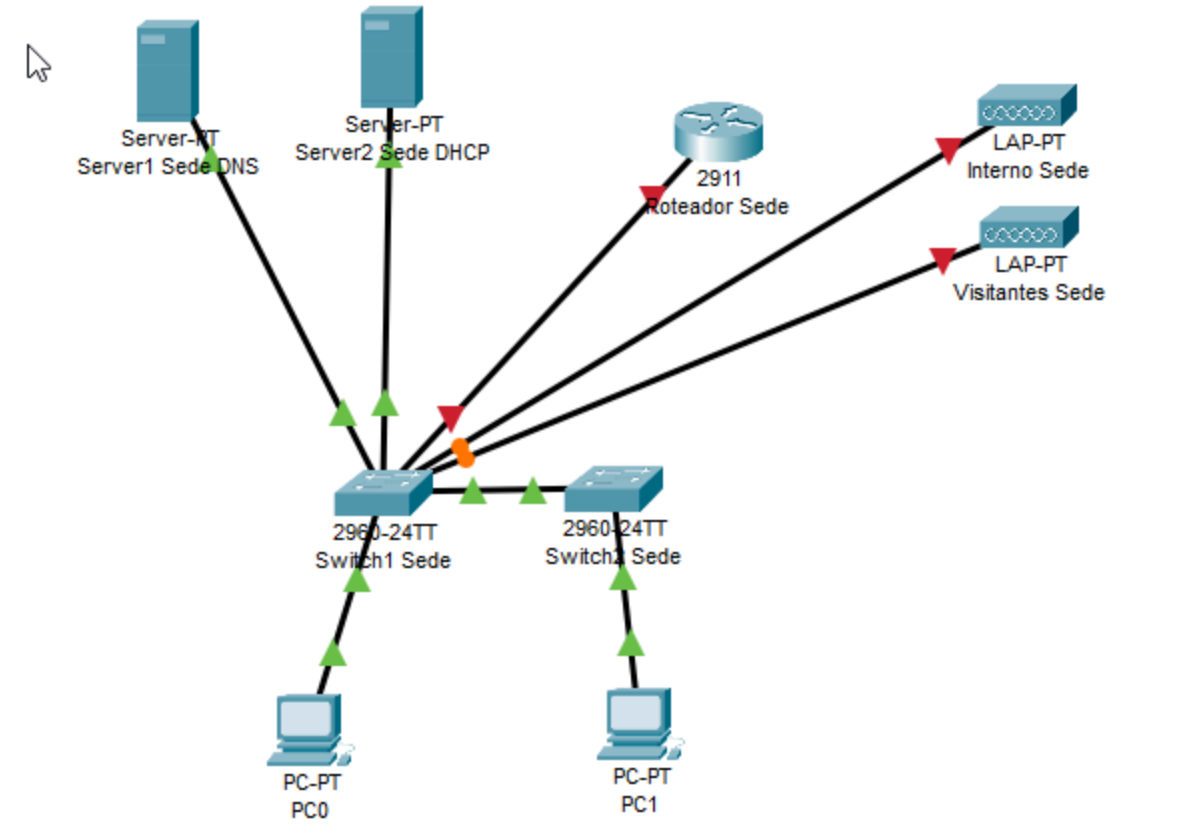
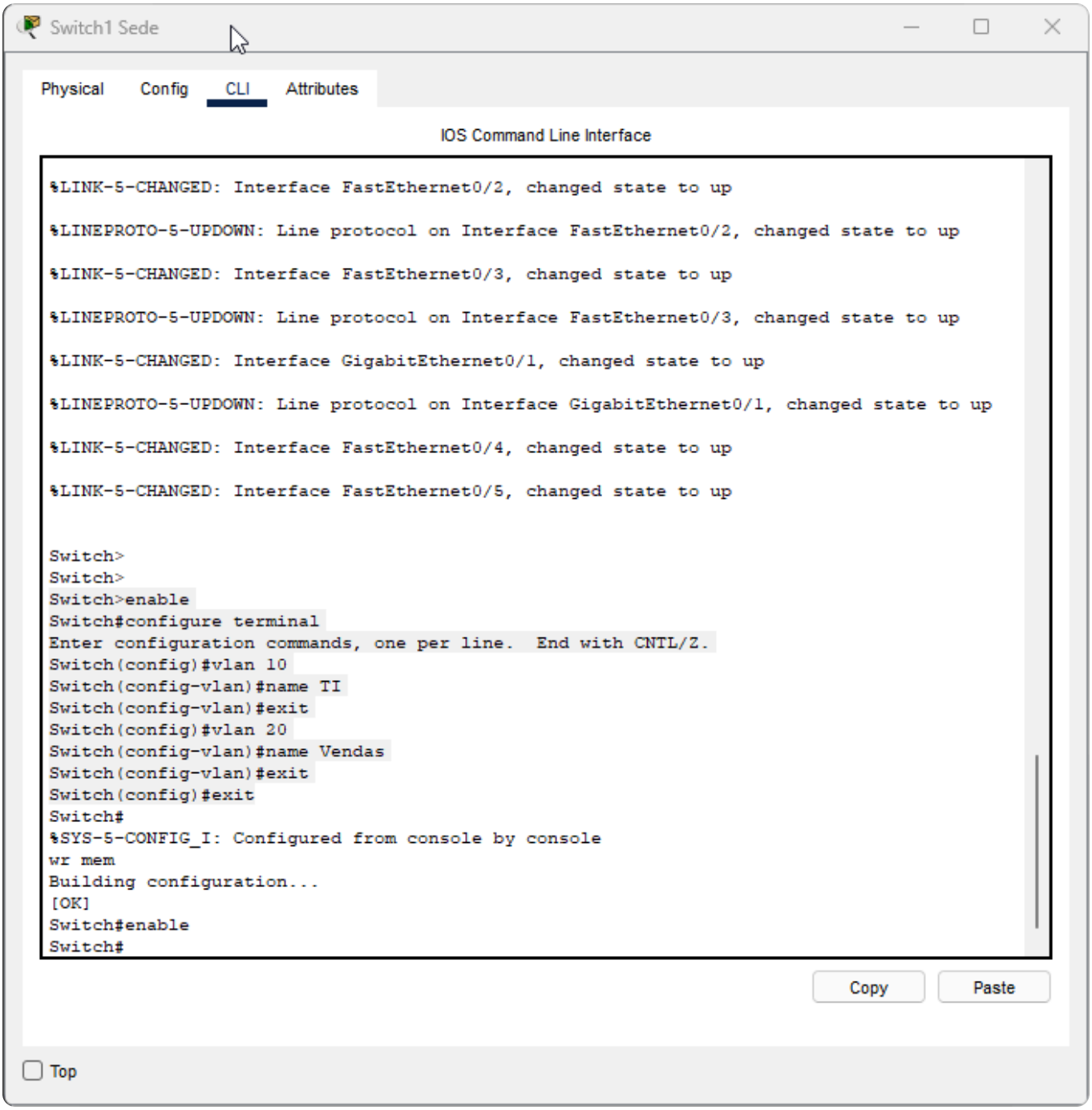
Projeto 1

Estrutura inicial



Configurando Switch 1 - Sede

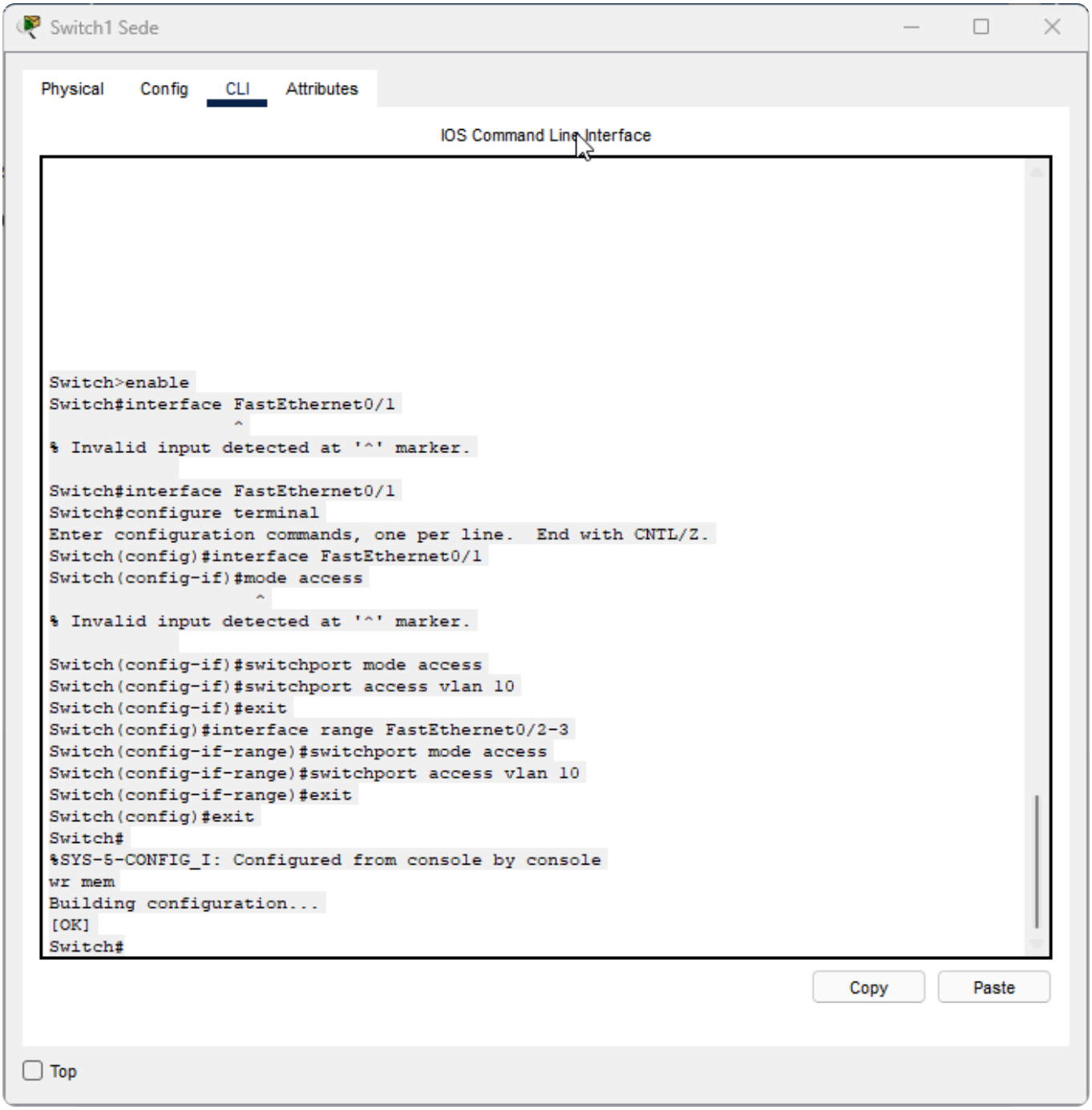
Configurando Vlans para segmentação de rede




```
Switch>enable

Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#vlan 10

Switch(config-vlan)#name TI

Switch(config-vlan)#exit
```

```
Switch(config)#vlan 20

Switch(config-vlan)#name Vendas

Switch(config-vlan)#exit

Switch(config)#exit

Switch#

%SYS-5-CONFIG_I: Configured from console by console

wr mem
```

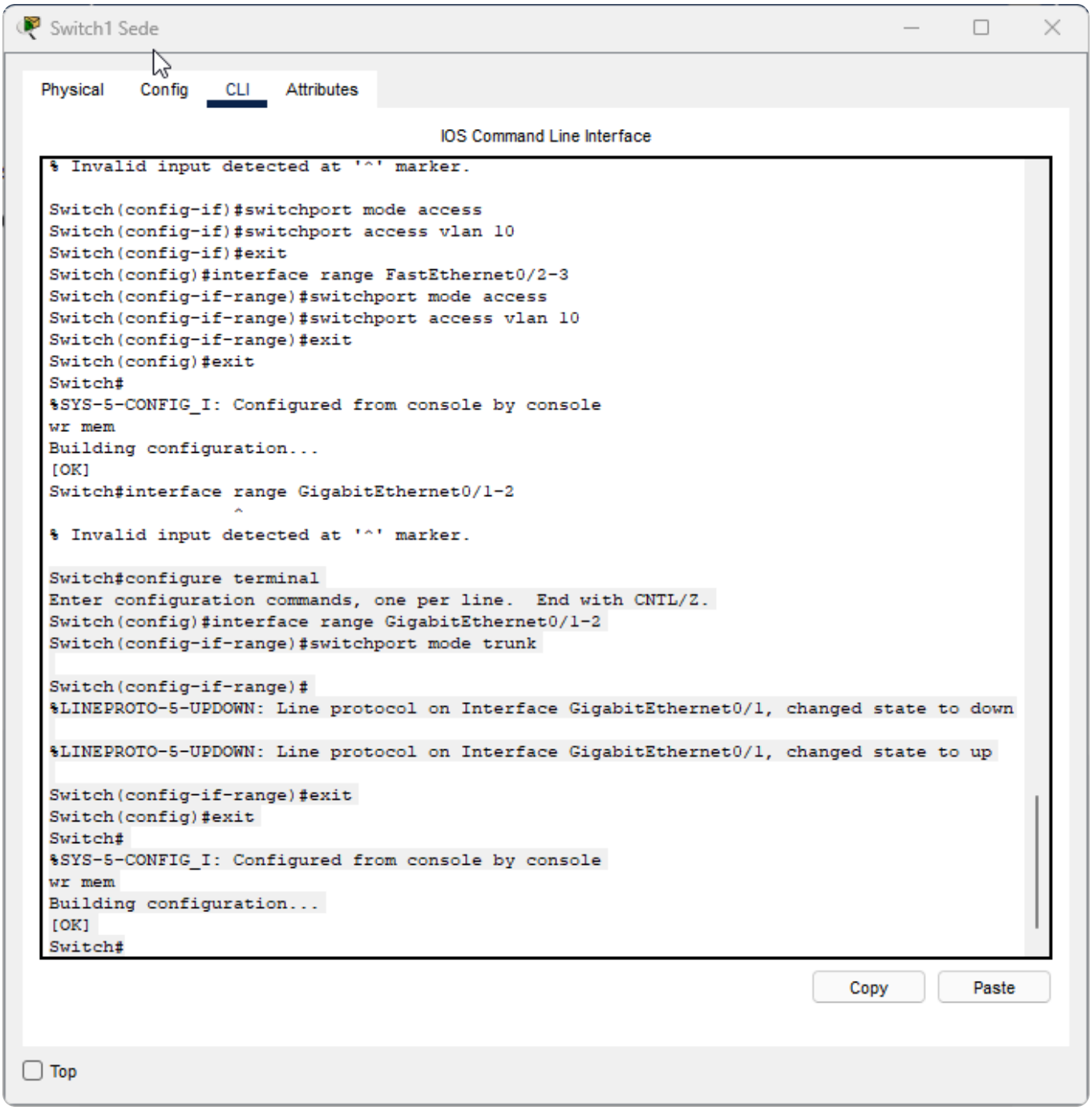
Configurando as entradas fastethernet para se conectarem na vlan 10 (TI)




```
Switch>enable

Switch#interface FastEthernet0/1

^

% Invalid input detected at '^' marker.

Switch#interface FastEthernet0/1

Switch#configure terminal
```

```
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface FastEthernet0/1
Switch(config-if)#mode access
^
% Invalid input detected at '^' marker.
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface range FastEthernet0/2-3
Switch(config-if-range)#switchport mode access
Switch(config-if-range)#switchport access vlan 10
Switch(config-if-range)#exit
Switch(config)#exit
Switch#
%SYS-5-CONFIG_I: Configured from console by console
wr mem
Building configuration...
[OK]
Switch#
```

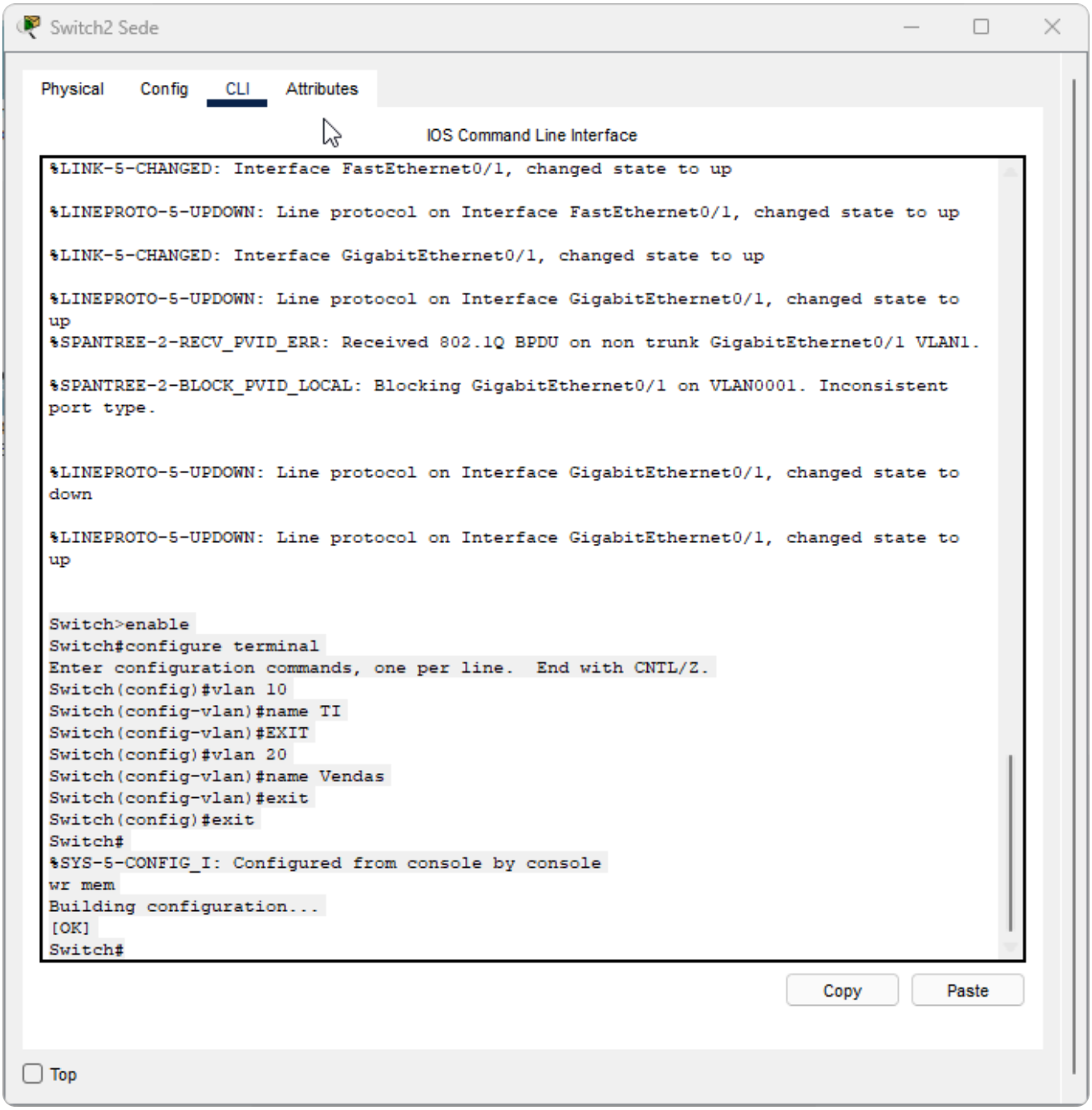
Inserindo as portas gigabit que conectam os 2 switchs como trunk para que os dados das duas vlans possam transitar no mesmo cabo




```
Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#interface range GigabitEthernet0/1-2

Switch(config-if-range)#switchport mode trunk



Switch(config-if-range)#
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to d



%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to u



Switch(config-if-range)#exit

Switch(config)#exit

Switch#

%SYS-5-CONFIG_I: Configured from console by console

wr mem

Building configuration...

[OK]

Switch#
```

Configurando Switch 2 - Sede



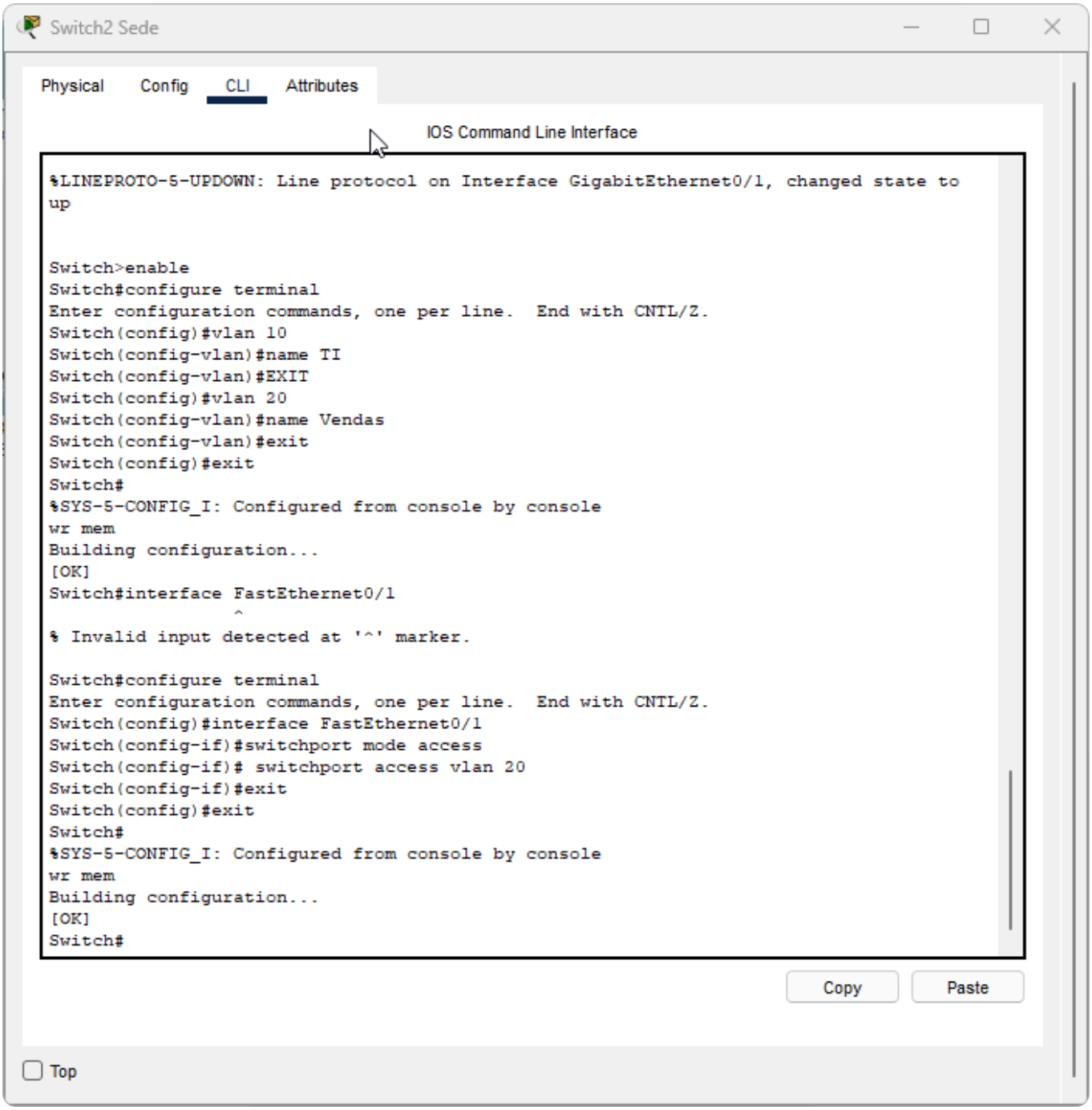

```
Switch>enable

Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#vlan 10

Switch(config-vlan)#name TI

Switch(config-vlan)#EXIT
```

```
Switch(config)#vlan 20

Switch(config-vlan)#name Vendas

Switch(config-vlan)#exit

Switch(config)#exit

Switch#

%SYS-5-CONFIG_I: Configured from console by console

wr mem

Building configuration...

[OK]

Switch#
```

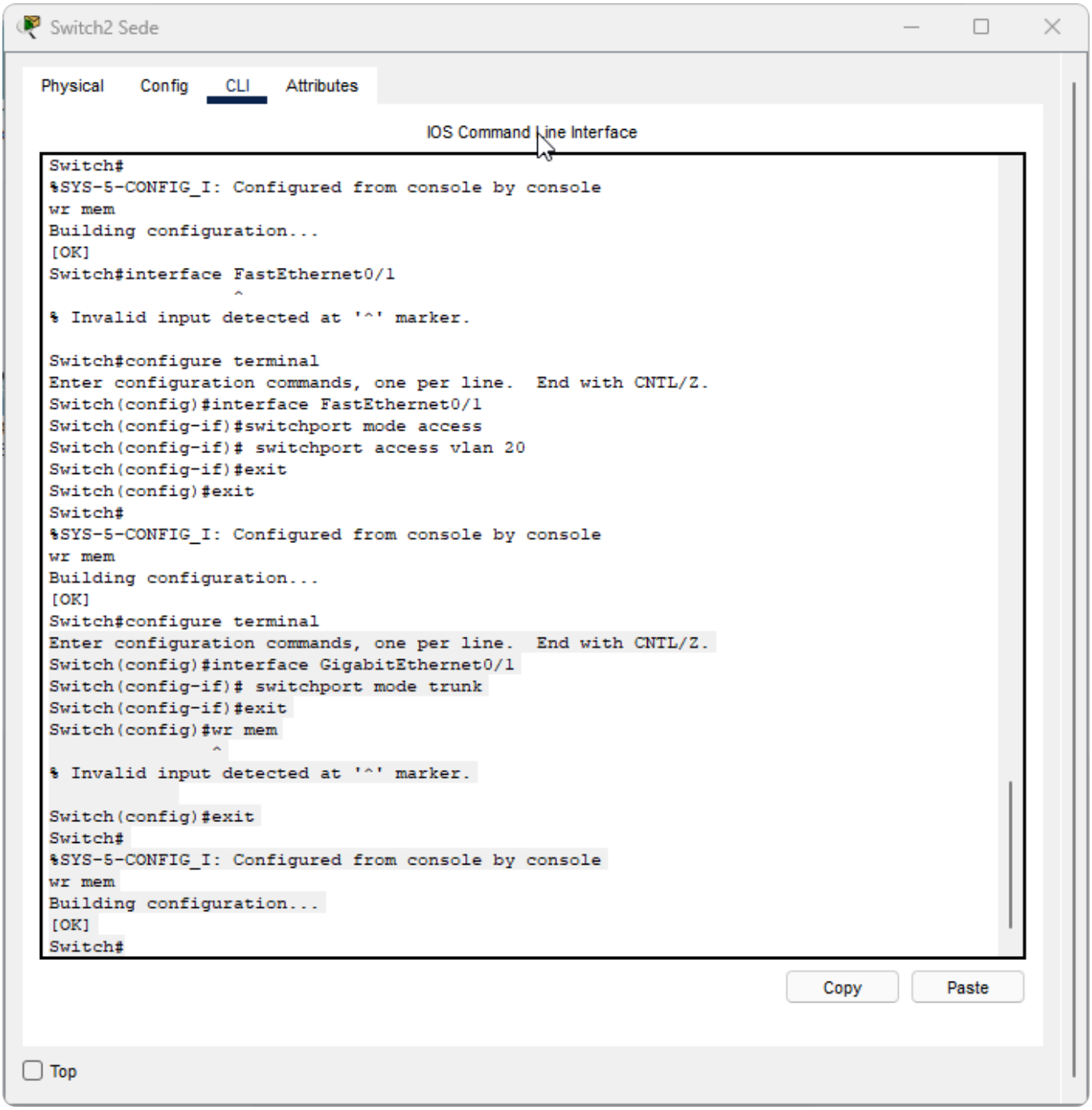
Configurando as entradas fastethernet para se conectarem na vlan 20 (Vendas)

```
Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#interface FastEthernet0/1

Switch(config-if)#switchport mode access

Switch(config-if)# switchport access vlan 20

Switch(config-if)#exit

Switch(config)#exit

Switch#

%SYS-5-CONFIG_I: Configured from console by console

wr mem

Building configuration...

[OK]
```

```
Switch#
```


Switch2 Sede
Physical
Config
CLI
Attributes
IOS Command Line Interface
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up
Switch>enable
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#vlan 10
Switch(config-vlan)#name TI
Switch(config-vlan)#EXIT
Switch(config)#vlan 20
Switch(config-vlan)#name Vendas
Switch(config-vlan)#exit
Switch(config)#exit
Switch#
%SYS-5-CONFIG_I: Configured from console by console
wr mem
Building configuration...
[OK]
Switch#interface FastEthernet0/1
^
% Invalid input detected at '^' marker.
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface FastEthernet0/1
Switch(config-if)#switchport mode access
Switch(config-if)# switchport access vlan 20
Switch(config-if)#exit
Switch(config)#exit
Switch#
%SYS-5-CONFIG_I: Configured from console by console
wr mem
Building configuration...
[OK]
Switch#
Copy
Paste
Top

Colocando giagbitethernet em modo trunk

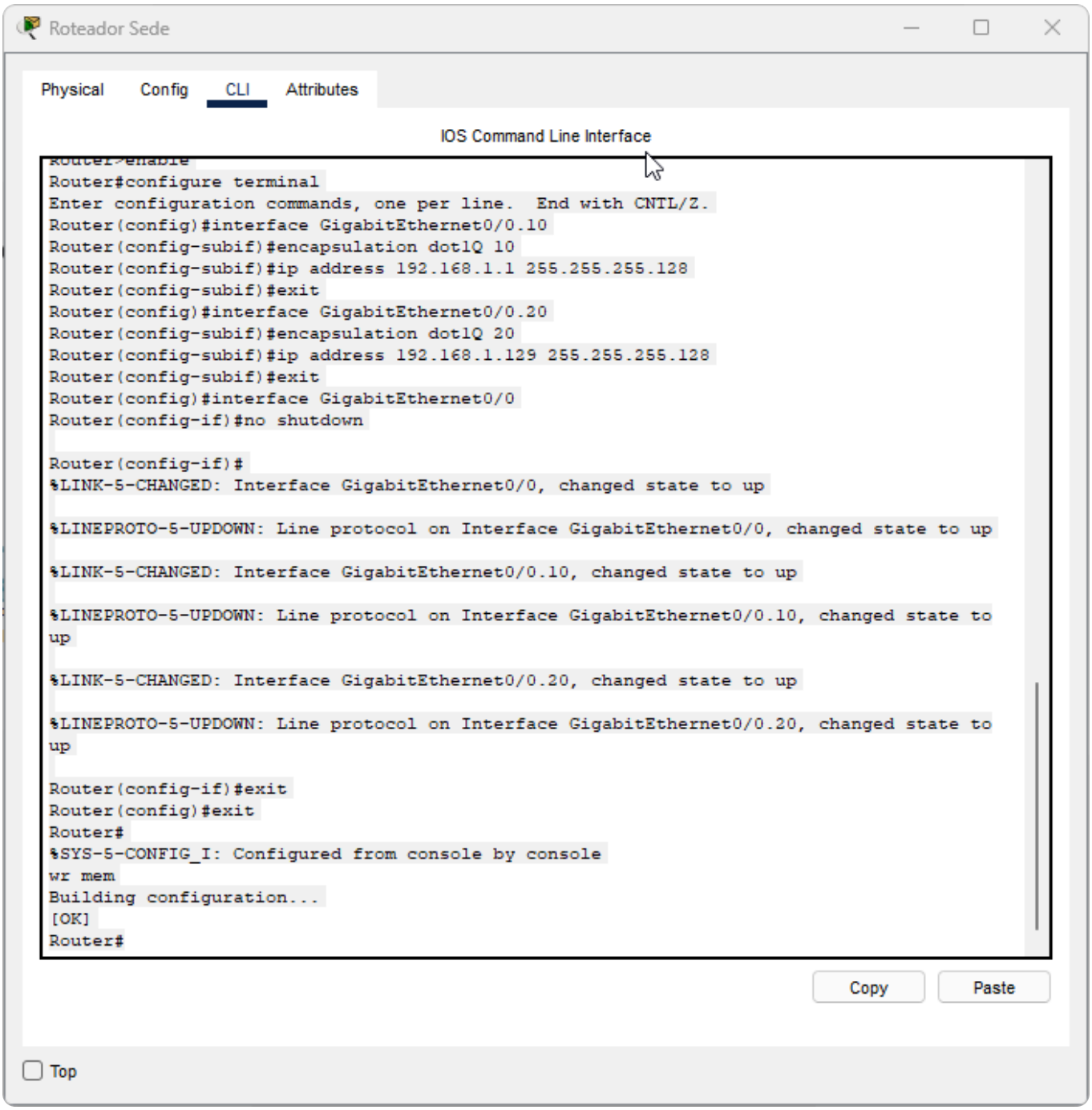



```
Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#interface GigabitEthernet0/1

Switch(config-if)# switchport mode trunk

Switch(config-if)#exit

Switch(config)#wr mem

^
```

```
% Invalid input detected at '^' marker.

Switch(config)#exit

Switch#

%SYS-5-CONFIG_I: Configured from console by console

wr mem

Building configuration...

[OK]

Switch#
```

Configurando roteador da Sede

Configurando as duas subinterfaces para as vlans TI e Vendas para que o roteador consiga prover para as duas redes

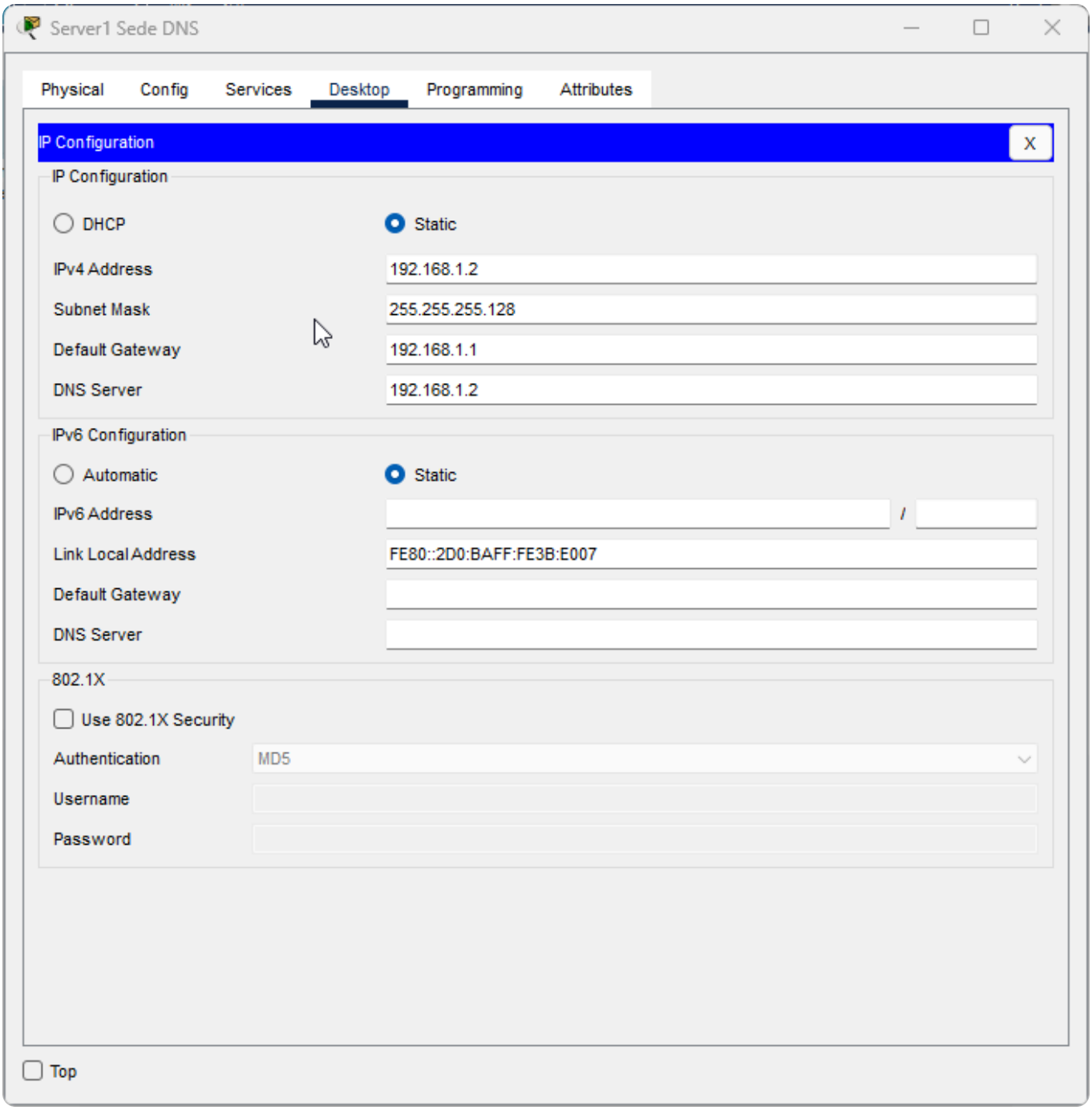



```
Router>enable

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface GigabitEthernet0/0.10

Router(config-subif)#encapsulation dot1Q 10

Router(config-subif)#ip address 192.168.1.1 255.255.255.128
```

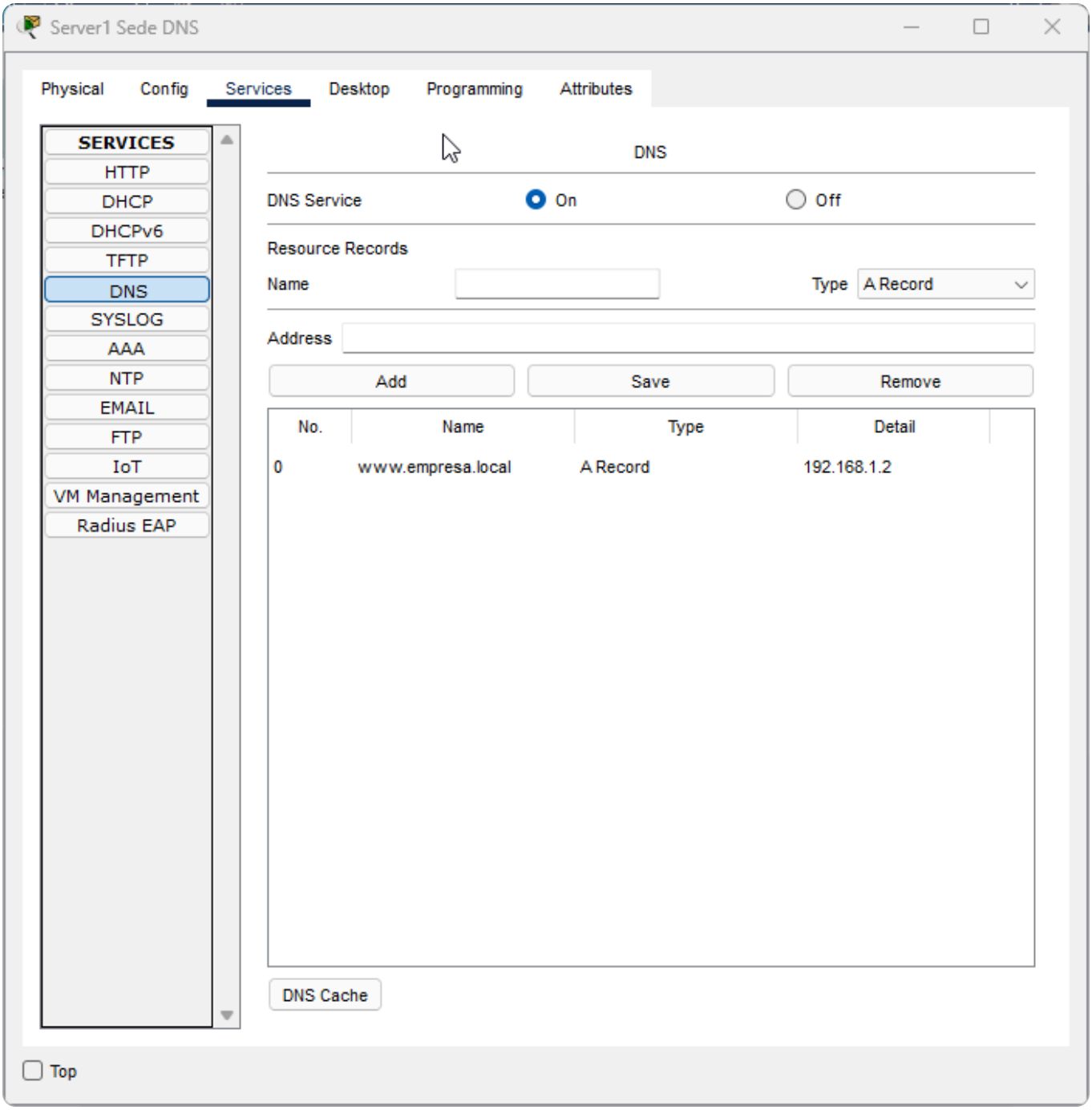
```
Router(config-subif)#exit

Router(config)#interface GigabitEthernet0/0.20

Router(config-subif)#encapsulation dot1Q 20

Router(config-subif)#ip address 192.168.1.129 255.255.255.128

Router(config-subif)#exit

Router(config)#interface GigabitEthernet0/0

Router(config-if)#no shutdown



Router(config-if)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up



%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to u



%LINK-5-CHANGED: Interface GigabitEthernet0/0.10, changed state to up



%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0.10, changed state t



%LINK-5-CHANGED: Interface GigabitEthernet0/0.20, changed state to up



%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0.20, changed state t



Router(config-if)#exit

Router(config)#exit
```

```
Router#

%SYS-5-CONFIG_I: Configured from console by console

wr mem

Building configuration...

[OK]

Router#
```

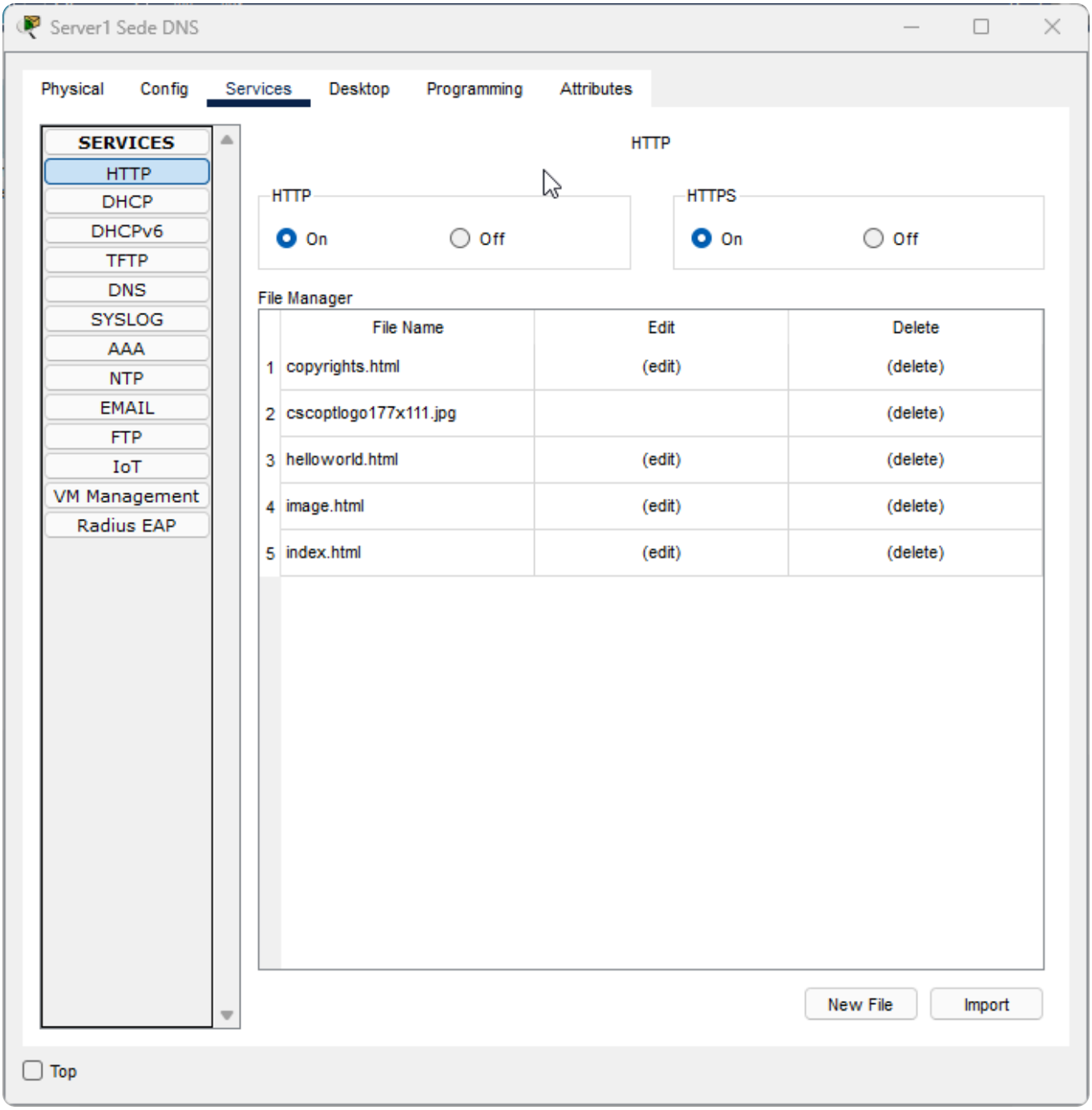
Configurando servidor DNS


Server1 Sede DNS
Physical
Config
Services
Desktop
Programming
Attributes
IP Configuration
X
IP Configuration
DHCP
Static
IPv4 Address
192.168.1.2
Subnet Mask
255.255.255.128
Default Gateway
192.168.1.1
DNS Server
192.168.1.2
IPv6 Configuration
Automatic
Static
IPv6 Address
/
Link Local Address
FE80::2D0:BAFF:FE3B:E007
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top

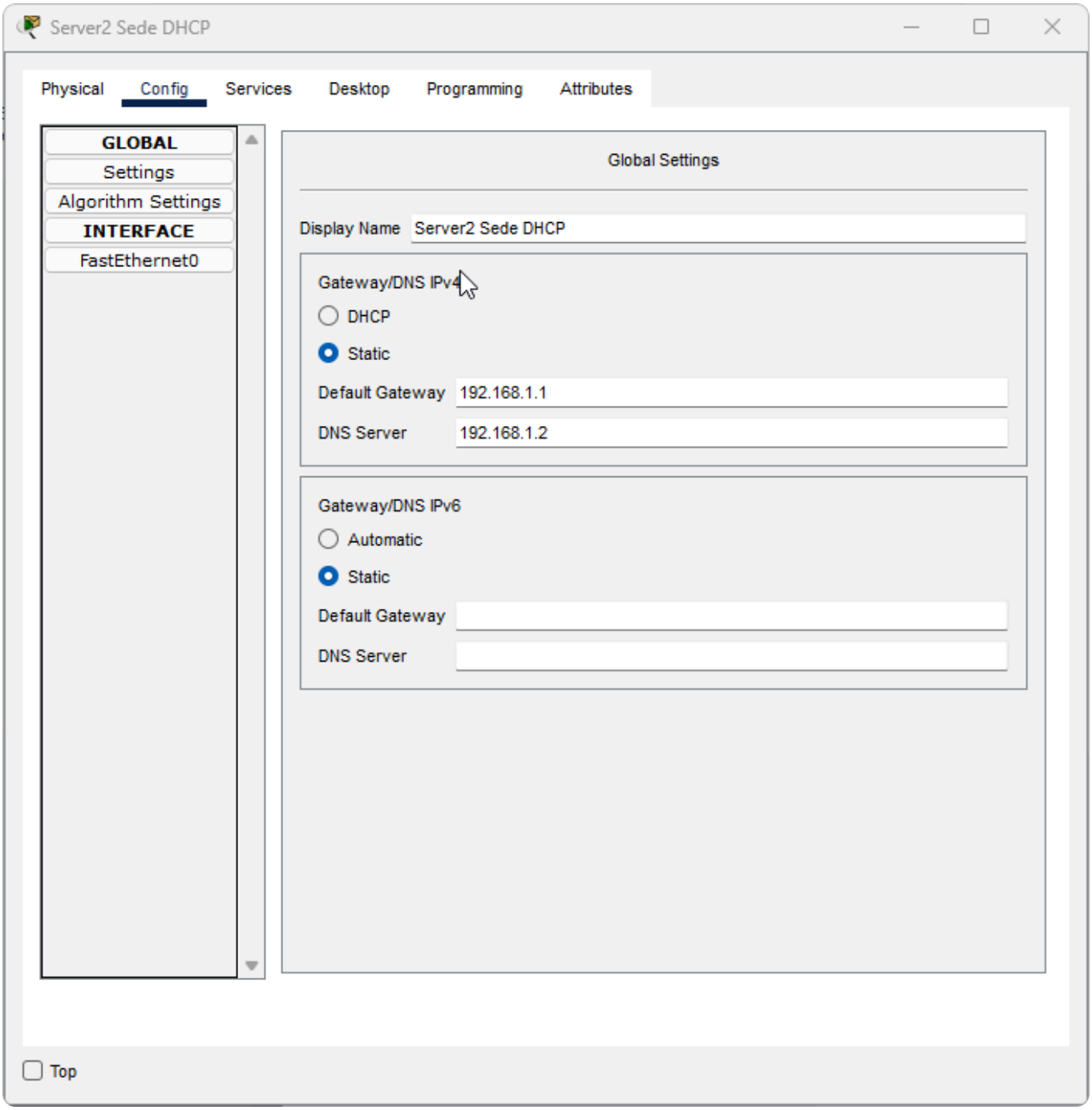
Configurando domínio



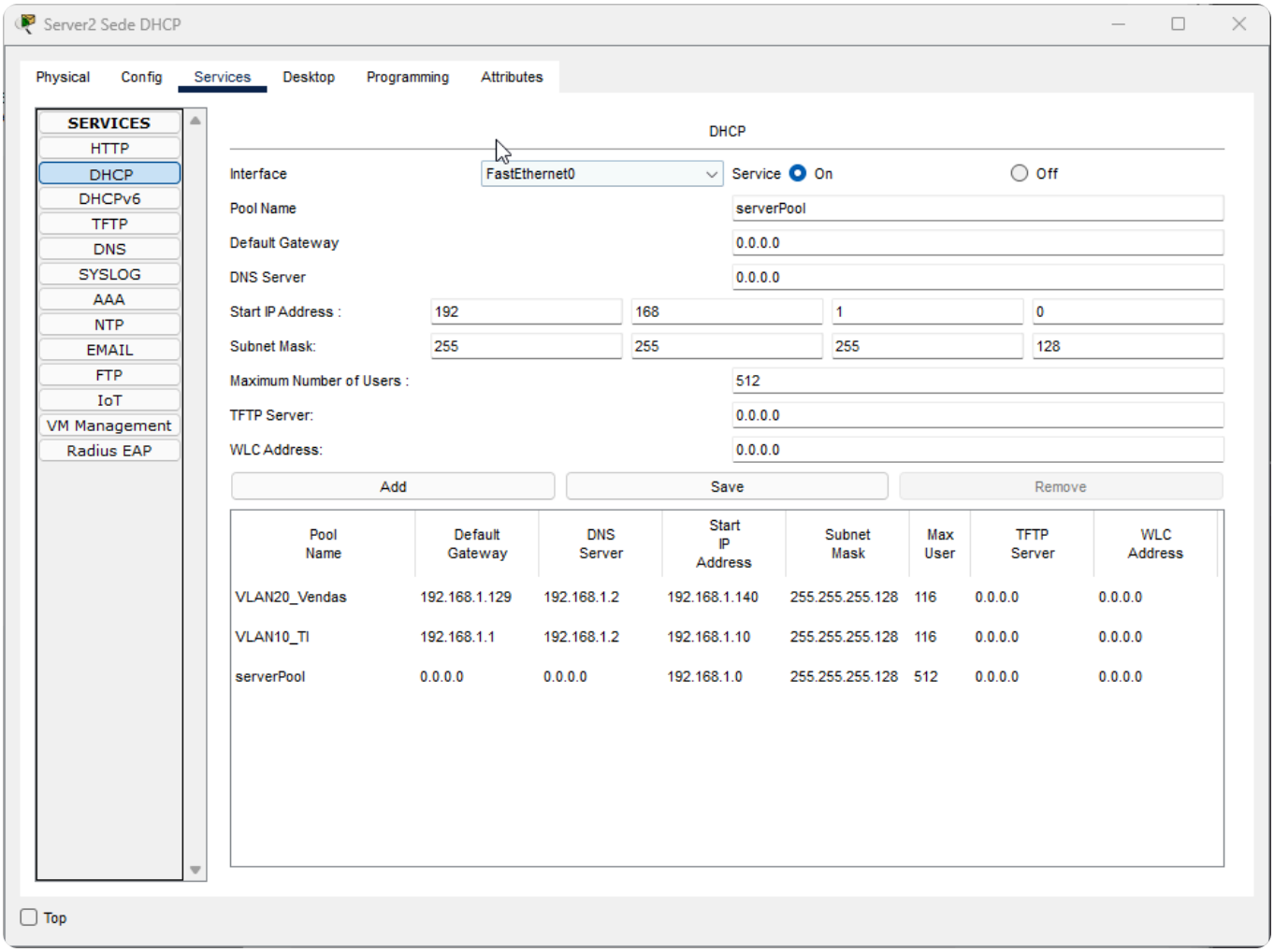
Serviço de HTTP rodando



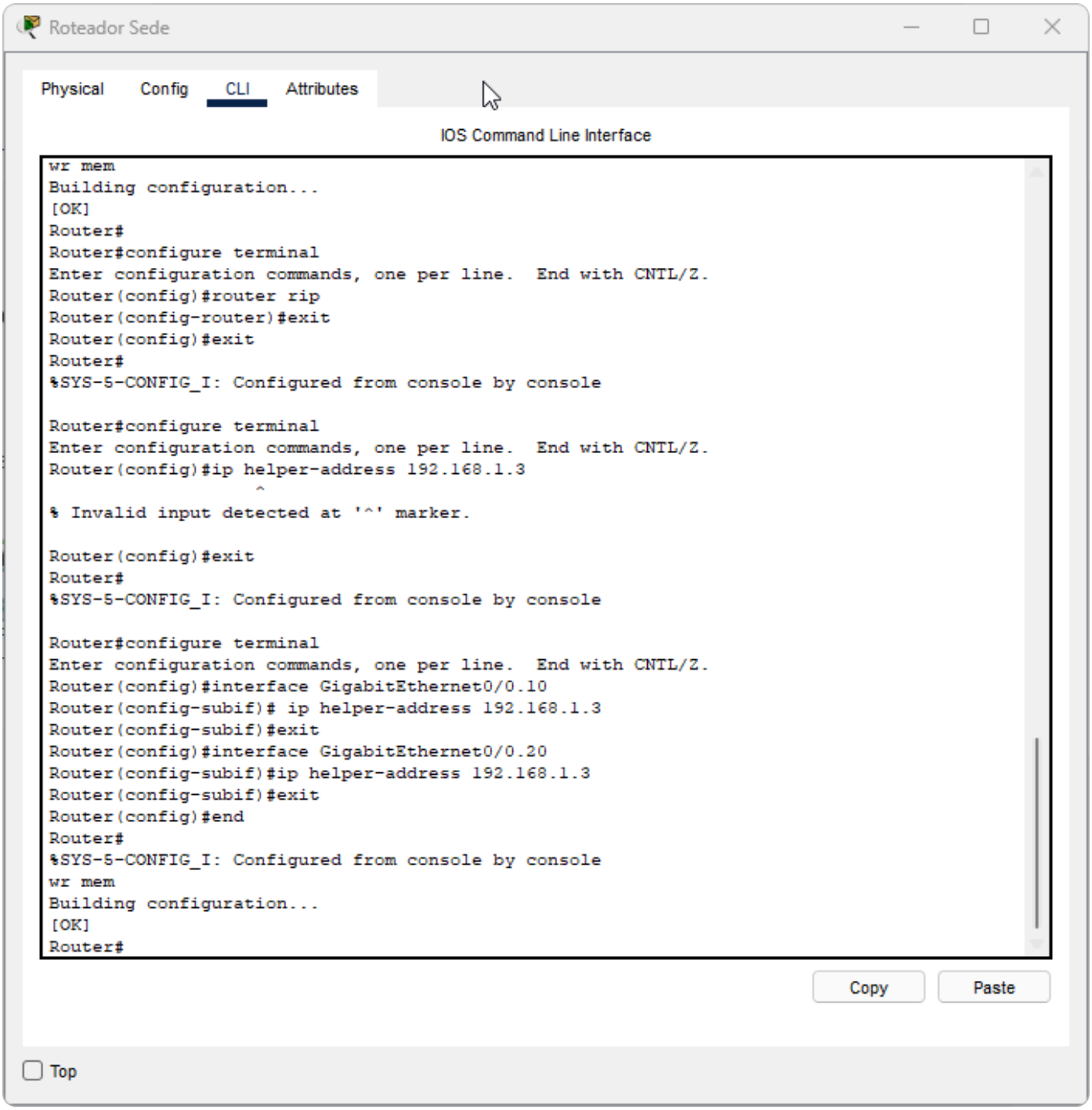
Configurando servidor DHCP


Server2 Sede DHCP
Physical
Config
Services
Desktop
Programming
Attributes
GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Global Settings
Display Name
Server2 Sede DHCP
Gateway/DNS IPv4
DHCP
Static
Default Gateway
192.168.1.1
DNS Server
192.168.1.2
Gateway/DNS IPv6
Automatic
Static
Default Gateway
DNS Server
Top

Adicionando respectivas VLANS



Configurando roteador para enviar os pedidos DHCP corretamente ao servidor

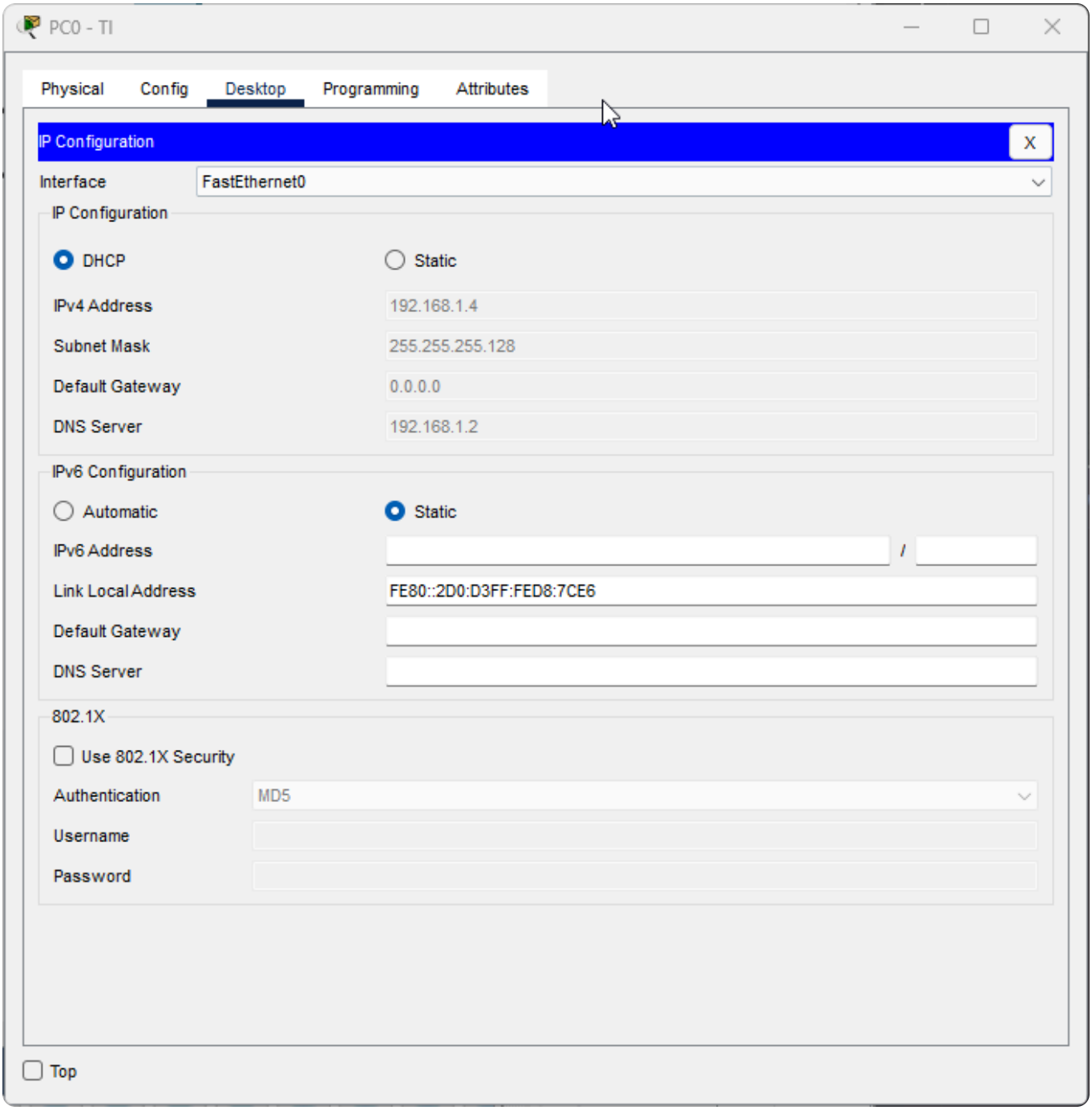



```
Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface GigabitEthernet0/0.10

Router(config-subif)# ip helper-address 192.168.1.3

Router(config-subif)#exit

Router(config)#interface GigabitEthernet0/0.20
```

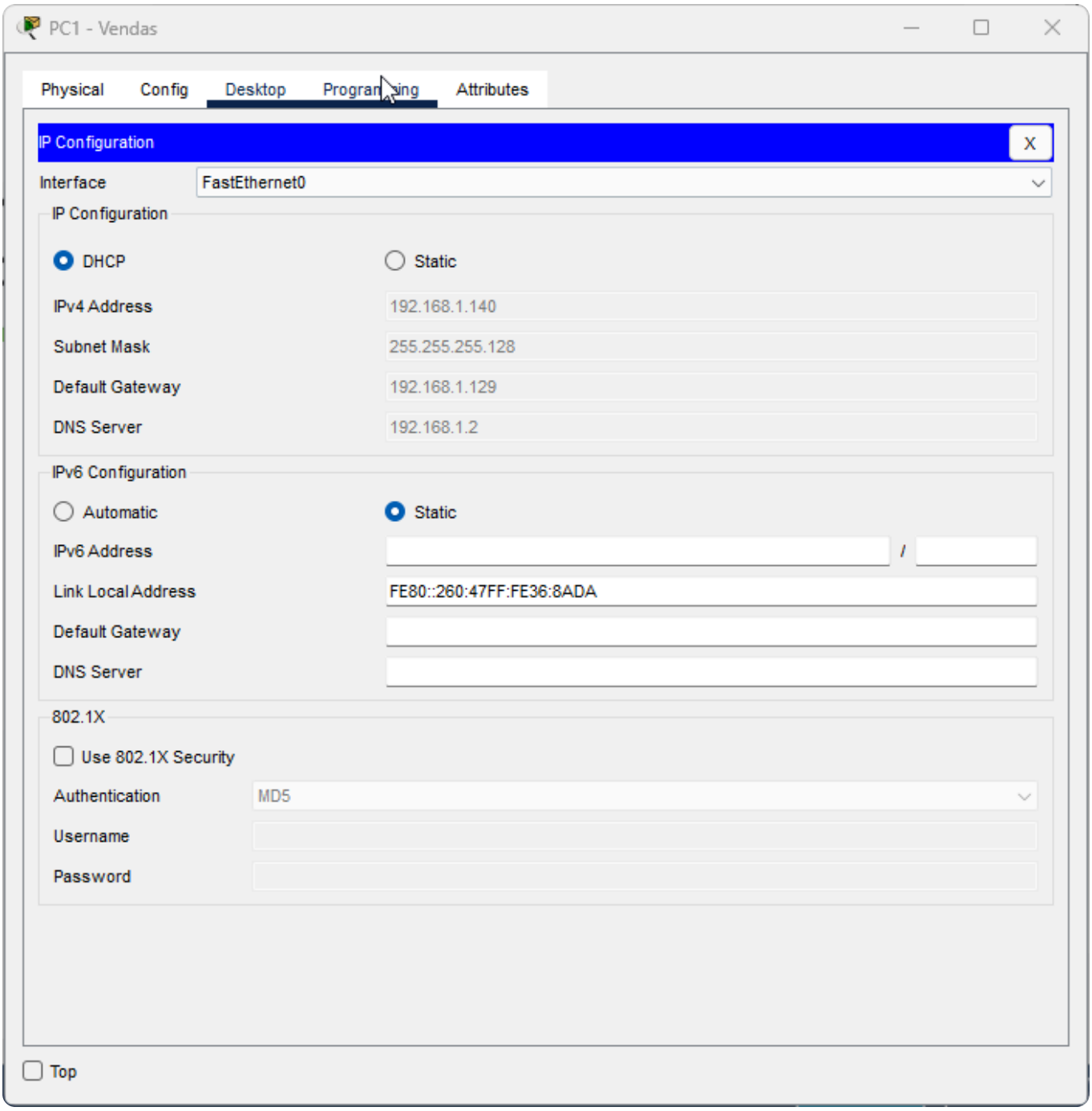
```
Router(config-subif)#ip helper-address 192.168.1.3

Router(config-subif)#exit

Router(config)#end

Router#

%SYS-5-CONFIG_I: Configured from console by console

wr mem

Building configuration...

[OK]

Router#
```

Como resultado, podemos ver que os computadores receberam endereços IP via DHCP

PC0 - TI



PC1 - Vendas



Configurando Wi-fi