

# Programação para Redes

# Na aula anterior

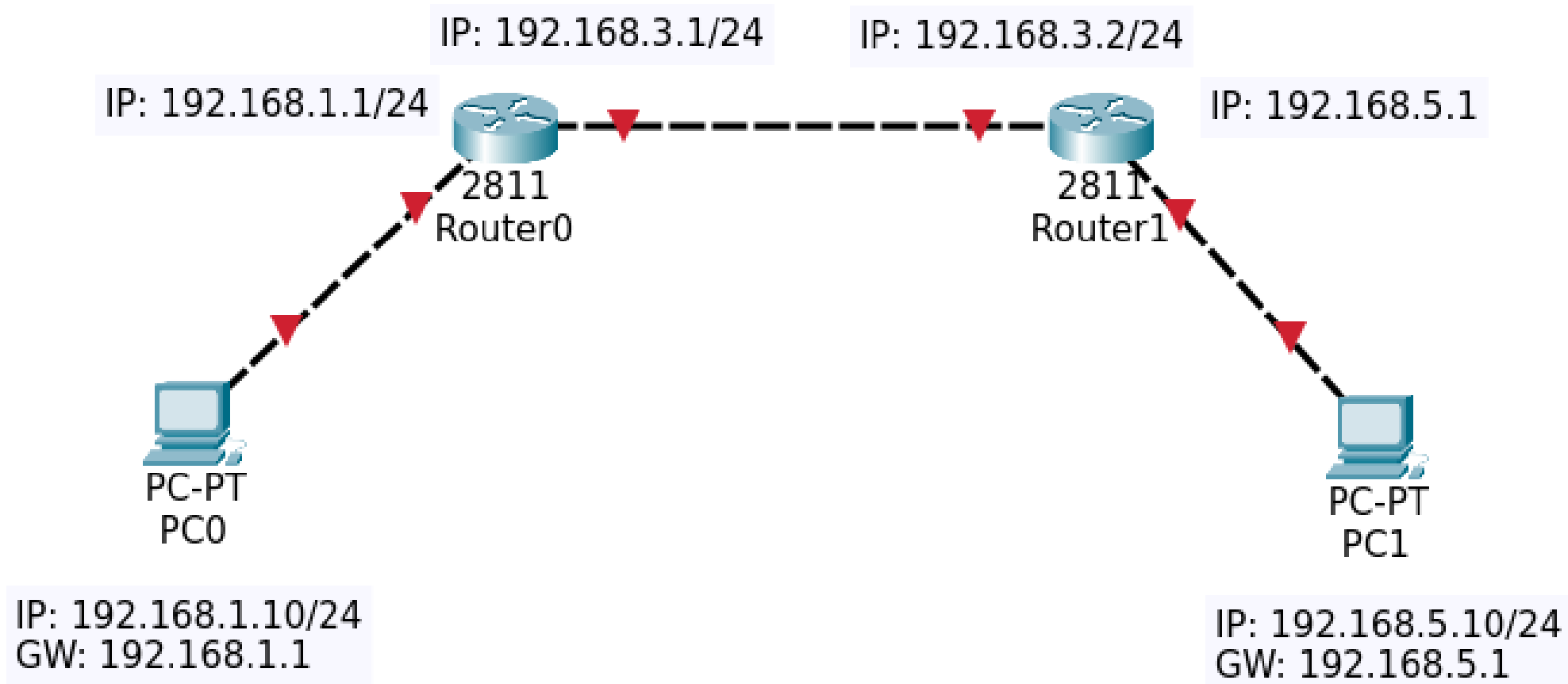
- Roteamento via conectividade direta

# Relembrando: determinação de rotas

- Entrega direta: ocorre quando o roteador está diretamente conectado na rede de destino
- Entrega indireta: o roteador não está diretamente conectado
  - Rotas estáticas (manuais)
  - Rotas dinâmicas

# Na aula de hoje

- Roteamento via rotas estáticas



# Após fazer as ligações físicas

- PC0

C:\>ping 192.168.5.10

Pinging 192.168.5.10 with 32 bytes of data:

Reply from 192.168.1.1: Destination host unreachable.

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- “Unreachable” → Inalcançável

- Router 0

```
Router(config)#hostname Router0
```

```
Router0(config)#ip route 192.168.5.0 255.255.255.0 192.168.3.2
```

- PC0

```
C:\>ping 192.168.5.10
```

```
Pinging 192.168.5.10 with 32 bytes of data:
```

```
Request timed out.
```

```
Request timed out.
```

```
Request timed out.
```

```
Request timed out.
```

```
Ping statistics for 192.168.5.10:
```

```
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

- “Request timed out” → A resposta não voltou

- Router 1

```
Router(config)#hostname Router1
```

```
Router1(config)#ip route 192.168.1.0 255.255.255.0 192.168.3.1
```

- PC0

```
C:\>ping 192.168.5.10
```

```
Pinging 192.168.5.10 with 32 bytes of data:
```

```
Reply from 192.168.5.10: bytes=32 time<1ms TTL=126
```

```
Reply from 192.168.5.10: bytes=32 time<1ms TTL=126
```

```
Reply from 192.168.5.10: bytes=32 time<1ms TTL=126
```

```
Reply from 192.168.5.10: bytes=32 time<1ms TTL=126
```

```
Ping statistics for 192.168.5.10:
```

```
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
```

```
Approximate round trip times in milli-seconds:
```

```
Minimum = 0ms, Maximum = 0ms, Average = 0ms
```



# Resumo das configurações dos roteadores

- Router 0

```
Router(config)#hostname Router0
```

```
Router0(config)#ip route 192.168.5.0 255.255.255.0 192.168.3.2
```

- Router 1

```
Router(config)#hostname Router1
```

```
Router1(config)#ip route 192.168.1.0 255.255.255.0 192.168.3.1
```

# Rota padrão

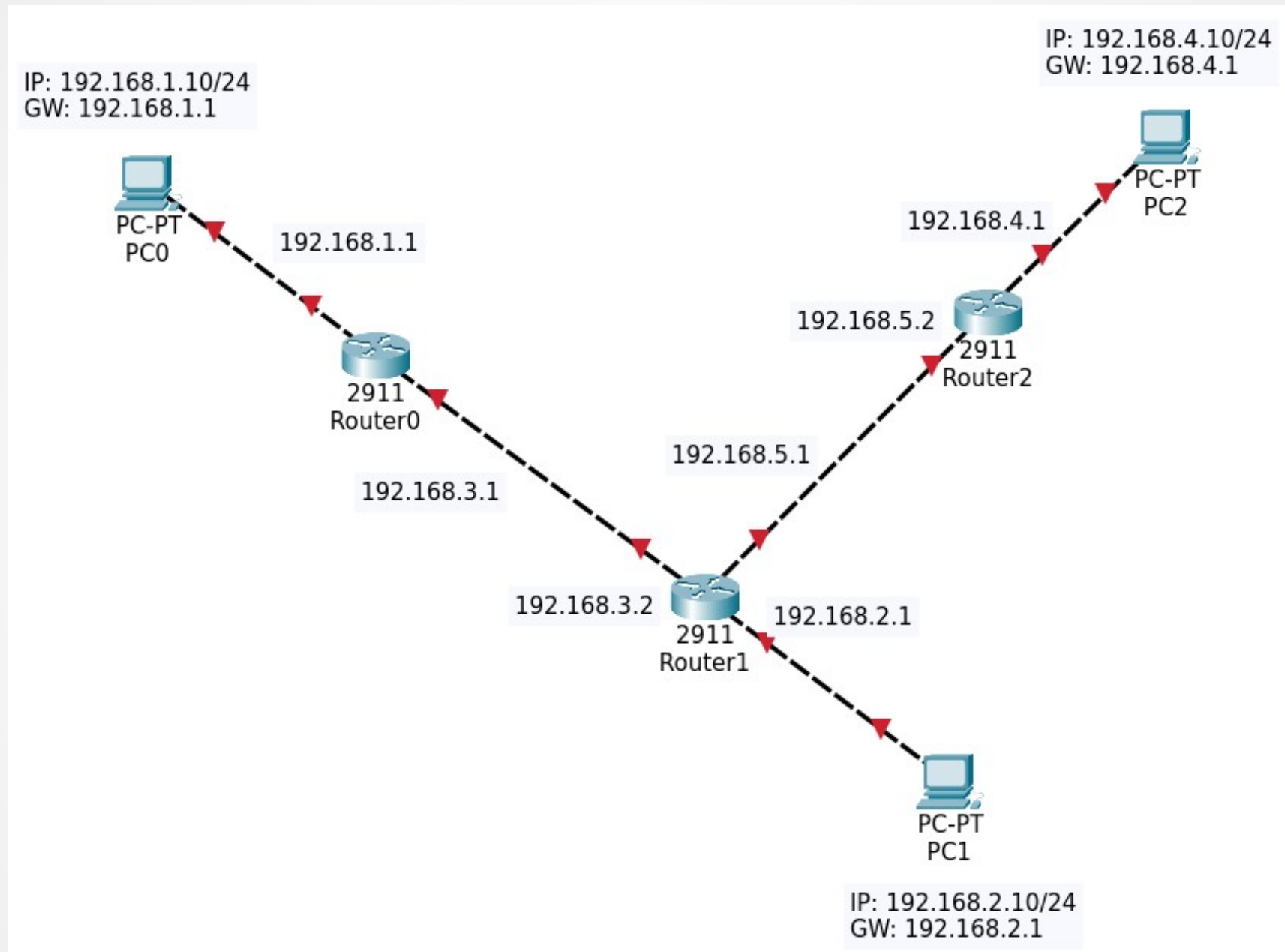
- A rota padrão é a rota para a qual os pacotes são encaminhados quando não há nenhuma entrada que corresponda exatamente ao destino

Router(config)# ip route 0.0.0.0 0.0.0.0 IP

Ex:

Router(config)# ip route 0.0.0.0 0.0.0.0 172.20.2.1

# Exercício



# Referências

- TETZ, Edward. Cisco networking all-in-one for dummies. John Wiley & Sons, 2011.