

Guia de implementação **OSPF direto ao ponto**



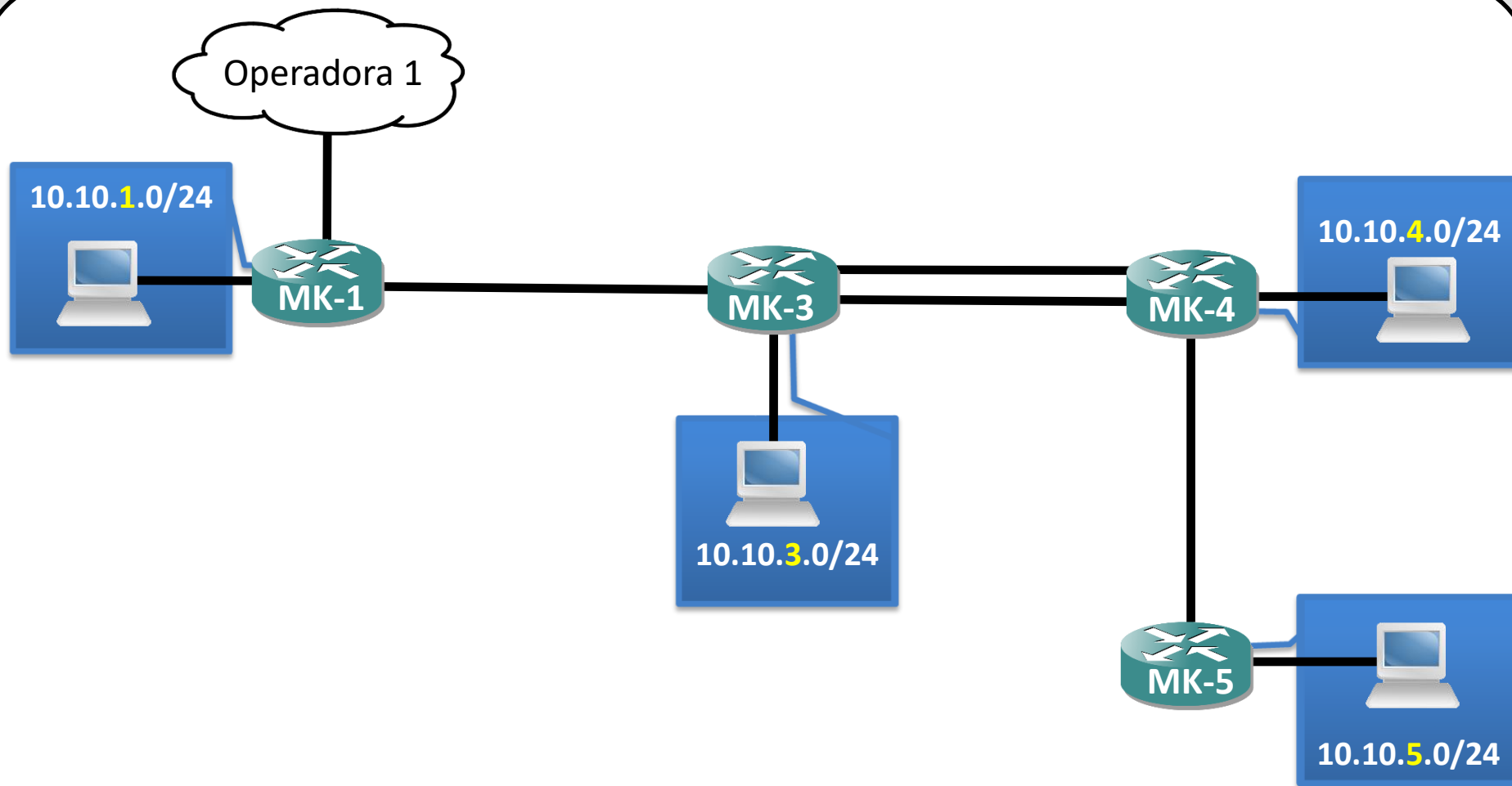
Redes Brasil



Oque já temos pronto?

- Planejamento;
- Interfaces já estão renomeadas;
- IPs de PTP;
- Roteamento estático;
- DHCP Server;
- NAT básico no MK-1;
- Script para gerar PPPoEs.

Guia de implementação de OSPF



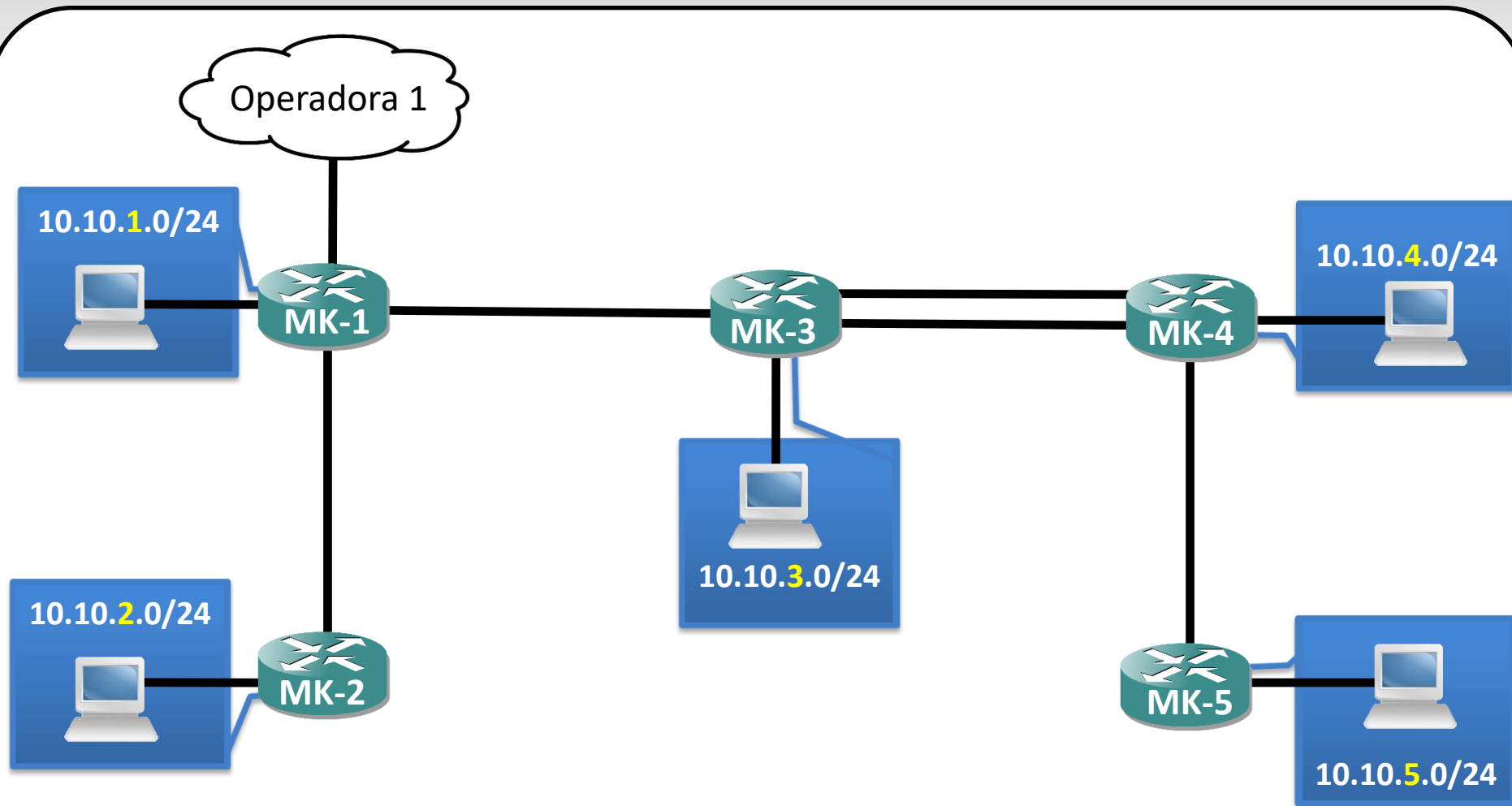
O que a maioria faz ?

- Colocar endereços de PTP;
- Anunciar as redes diretamente conectadas;
- Anunciar rede dos PPPoEs ou redistribuir rotas conectadas;
- Redistribuir rota default no roteador de borda.

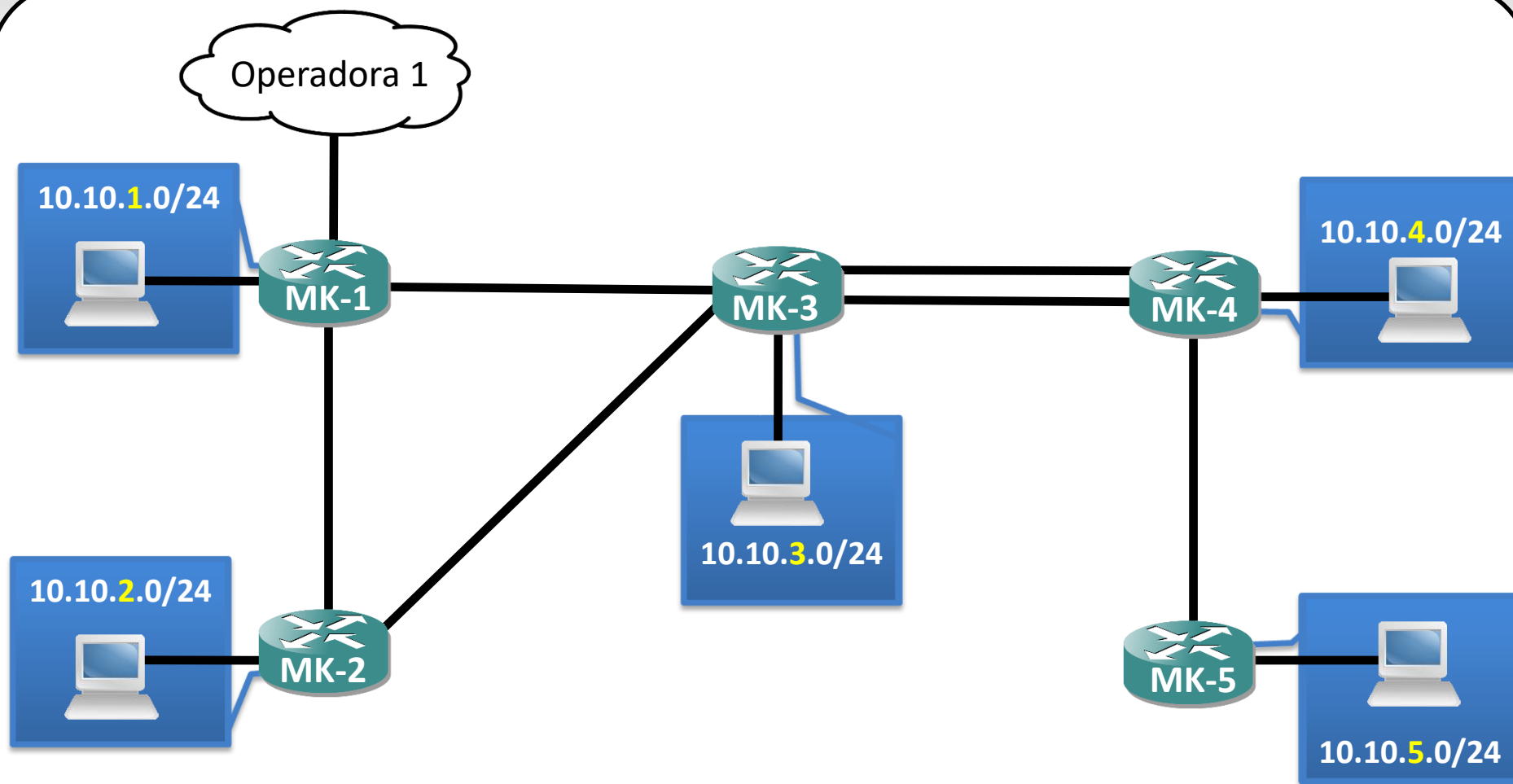
Oque você deve fazer ?

- Colocar endereços de PTP;
- Criar interface de loopback;
- Setar RouterID do OSPF;
- Anunciar as redes diretamente conectadas e de preferência comentar;
- Colocar todas interfaces do OSPF como passivas, PTP e com senha MD5;
- Adicionar as interfaces de PTP manualmente;
- Add rede dos PPPoE em um rota de blackhole e redistribuir rotas estáticas;
- OSPF fora do NAT;
- Aceitar OSPF no filtro de INPUT se tiver um drop geral.

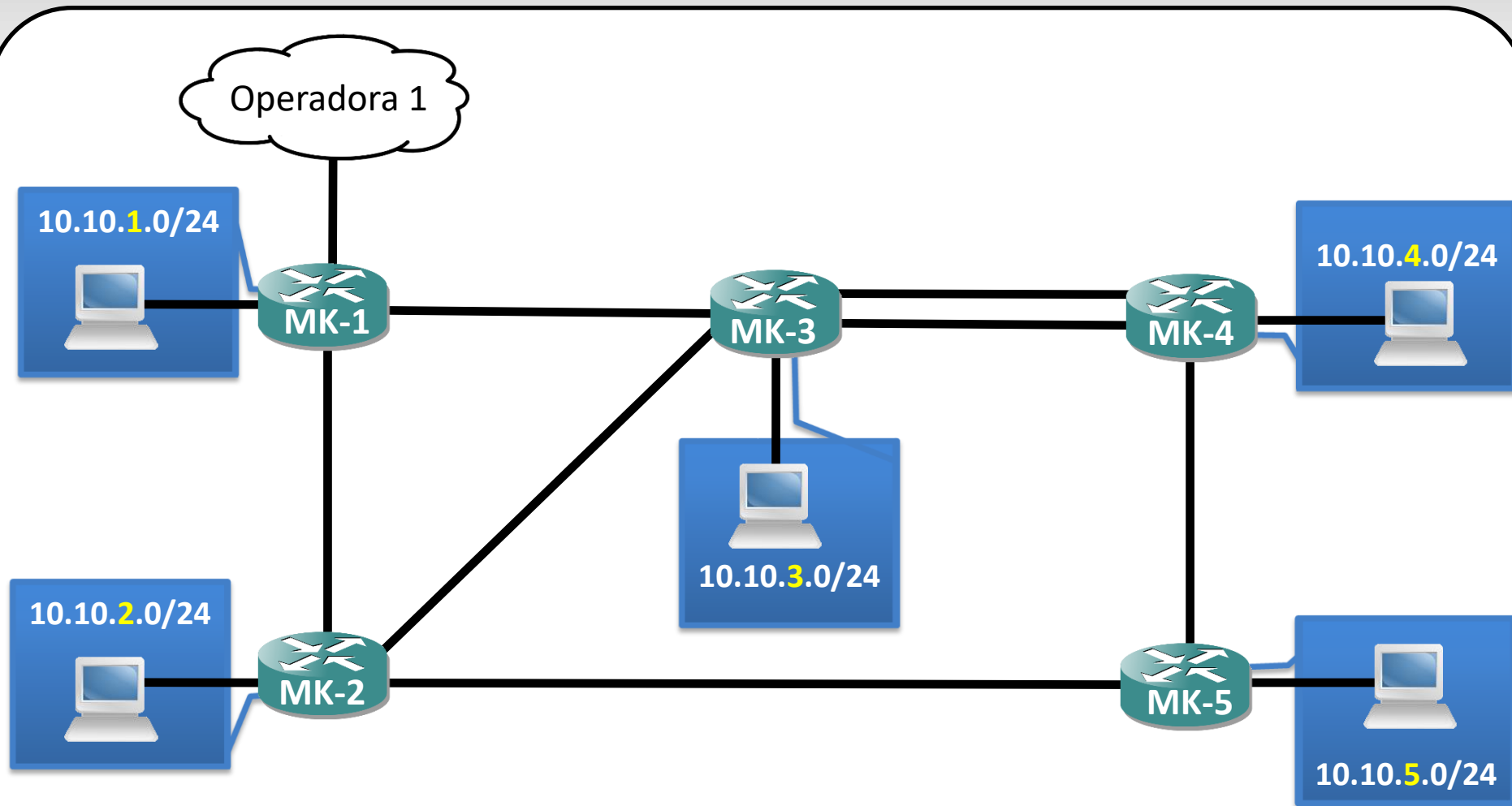
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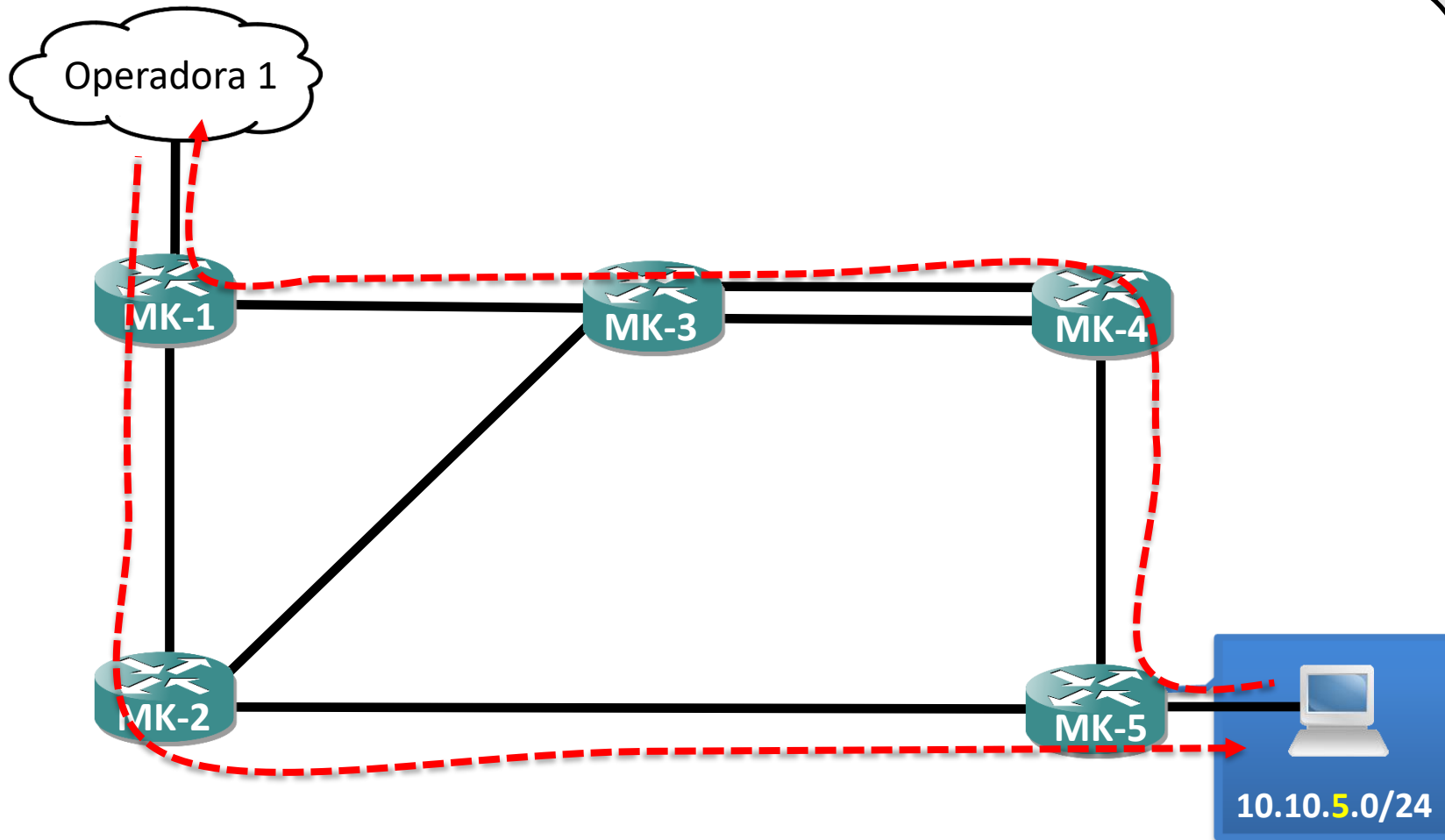
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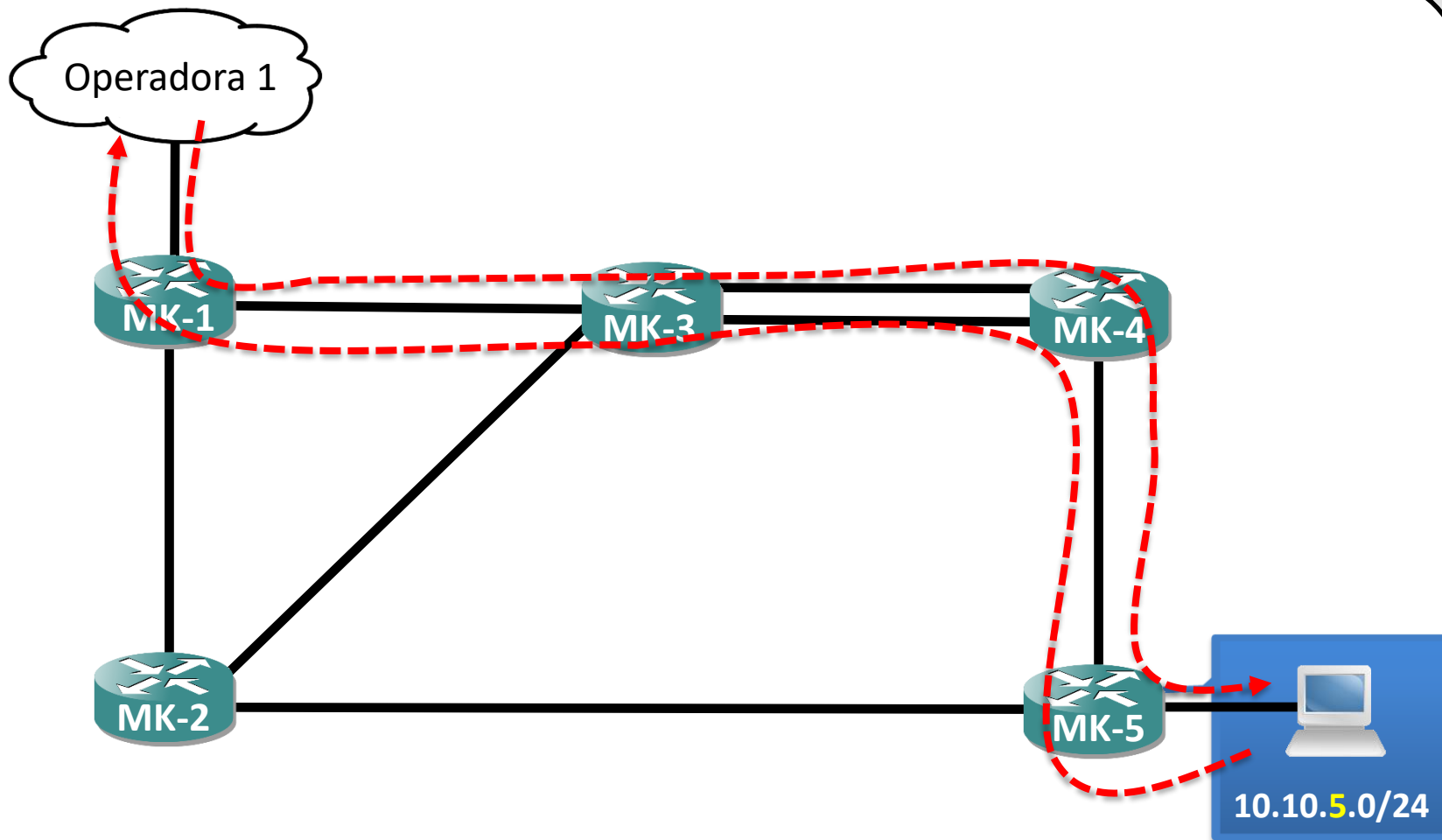
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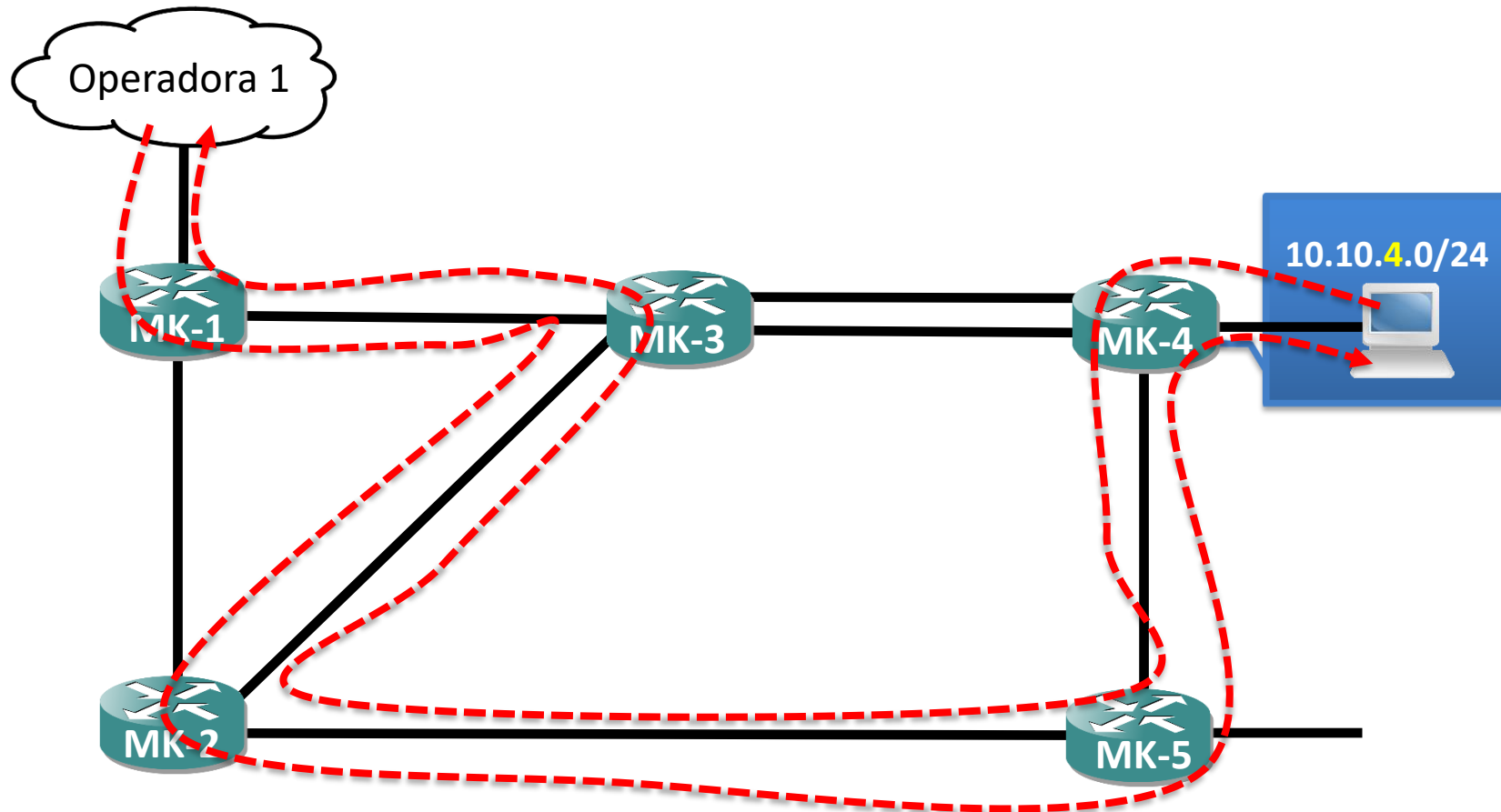
Ajustando tráfego parte 1



Ajustando tráfego parte 2



Ajustando tráfego parte 3



Problemas comuns com OSPF

Não estabelece adjacência

- MTU
- Timers
- Senha
- Tipo de rede
- ID da área
- Tipo de área
- Interface Passiva
- Multicast (próxima pág)
- **RouterID**

Fecha mas não recebe rotas

- Tipo de rede
- Filtros

Problemas comuns com OSPF

- NBMA – Usado quando dispositivos que estão entre os roteadores não conseguem encaminhar pacotes de multicast:



- OLTs e ONUs;
- Switchs com filtros de multicast;
- Rádios com versão de firmware muito antiga.

LOG

➤ Discarding packet: locally originated

Log			
Freeze			
Jan/21/2016 12:29:18	memory	route, ospf, error	src address=10.1.1.26
Jan/21/2016 12:29:28	memory	route, ospf, error	Discarding packet: locally originated
Jan/21/2016 12:29:28	memory	route, ospf, error	src address=10.1.1.26
Jan/21/2016 12:29:38	memory	route, ospf, error	Discarding packet: locally originated
Jan/21/2016 12:29:38	memory	route, ospf, error	src address=10.1.1.26
Jan/21/2016 12:33:38	memory	route, ospf, error	Discarding packet: locally originated
Jan/21/2016 12:33:38	memory	route, ospf, error	src address=10.1.1.26
Jan/21/2016 12:33:48	memory	route, ospf, error	Discarding packet: locally originated
Jan/21/2016 12:33:48	memory	route, ospf, error	src address=10.1.1.26
Jan/21/2016 12:33:57	memory	route, ospf, error	Discarding packet: locally originated
Jan/21/2016 12:33:57	memory	route, ospf, error	src address=10.1.1.26
Jan/21/2016 12:33:58	memory	route, ospf, error	Discarding packet: locally originated
Jan/21/2016 12:33:58	memory	route, ospf, error	src address=10.1.1.26
Jan/21/2016 12:34:08	memory	route, ospf, error	Discarding packet: locally originated
Jan/21/2016 12:34:08	memory	route, ospf, error	src address=10.1.1.26
Jan/21/2016 12:34:11	memory	route, ospf, error	Discarding packet: locally originated
Jan/21/2016 12:34:11	memory	route, ospf, error	src address=10.1.1.26
Jan/21/2016 12:34:18	memory	route, ospf, error	Discarding packet: locally originated
Jan/21/2016 12:34:18	memory	route, ospf, error	src address=10.1.1.26
Jan/21/2016 12:34:28	memory	route, ospf, error	Discarding packet: locally originated
Jan/21/2016 12:34:28	memory	route, ospf, error	src address=10.1.1.26
Jan/21/2016 12:34:38	memory	route, ospf, error	Discarding packet: locally originated
Jan/21/2016 12:34:38	memory	route, ospf, error	src address=10.1.1.26
Jan/21/2016 12:34:48	memory	route, ospf, error	Discarding packet: locally originated
Jan/21/2016 12:34:48	memory	route, ospf, error	src address=10.1.1.26
Jan/21/2016 12:34:58	memory	route, ospf, error	Discarding packet: locally originated
Jan/21/2016 12:34:58	memory	route, ospf, error	src address=10.1.1.26
Jan/21/2016 12:35:08	memory	route, ospf, error	Discarding packet: locally originated
Jan/21/2016 12:35:08	memory	route, ospf, error	src address=10.1.1.26
Jan/21/2016 12:35:09	memory	route, ospf, error	Discarding packet: locally originated

```
/ip firewall raw
```

```
add action=notrack chain=output comment="!==! - OSPF FORA DA CONNTRACK" protocol=ospf
```

```
add action=drop chain=prerouting comment="!==! - DESCARTA RECEBIMENTO DE PACOTES ORIGINADOS LOCALMENTE VIA OSPF" dst-address-type=multicast protocol=ospf src-address-type=local
```