

15 IP Static Routing

15.1 Static Routes

- Router(config)# ip route network-address subnet-mask { ip-address | exit-intf [ip-address]} [distance]
- Router(config)# ipv6 route ipv6-prefix/prefix-length {ipv6-address | exit-intf [ipv6-address]} [distance]

15.2 Configure IP Static Routes

- IPv4 / IPv6 Next-Hop Static Route
- IPv4 / IPv6 Directly Connected Static Route (mit Exit-Interface)
- IPv4 / IPv6 Fully Specified Static Route (Exit-Interface + Next Hop) (z.B. für link-local Next Hop)

Diagnose

- show ip route, show ipv6 route
- show running-config

15.3 Configure IP Default Static Routes

- Router(config)# ip route 0.0.0.0 0.0.0.0 {ip-address | exit-intf}
- Router(config)# ipv6 route ::/0 {ipv6-address | exit-intf}

15.4 Configure Floating Static Routes

Backup-Routen mit Administrativer Distanz > 1

```
R1(config)# ip route 0.0.0.0 0.0.0.0 172.16.2.2
R1(config)# ip route 0.0.0.0 0.0.0.0 10.10.10.2 5
R1(config)# ipv6 route ::/0 2001:db8:acad:2::2
R1(config)# ipv6 route ::/0 2001:db8:feed:10::2 5
```

15.5 Configure Static Host Routes

Zielnetz /32 bzw /128, z.B. für Route zu einem Server

15.6.1 Packet Tracer - Configure IPv4 and IPv6 Static and Default Routes