

Configuring the Cisco IOS WAN Interface

Contents

- [Configuring the Transport-opt Service Engine on a WAN Interface, page 3-1](#)

Configuring the Transport-opt Service Engine on a WAN Interface

In a point-to-point WAN interface configuration, the Network Capacity Expansion identifier (tpo ID) that is specified on the CLI is used for all destination hardware.

In a multipoint WAN interface configuration, the **bind** command on Network Capacity Expansion Service Module determines which tpo ID is used for a given destination network.

There are two ways of redirecting TCP packets to the NCE application:

1. Inline interception - recommended at the branch office.
2. WCCP-based redirection - [Configuring TCP Redirection Using WCCP, page 6-1](#).

	Command or Action	Purpose
	From the Host-Router CLI	
Step 1	enable Example: Router> enable	Enters privileged EXEC mode on the host router. Enter your password if prompted.
Step 2	configure terminal Example: Router# configure terminal	Enters global configuration mode on the host router.

	Command or Action	Purpose
Step 3	Interface <i>serial slot / module / port</i> Example: Router(config)# Int serial 0/0/0	Enters the serial interface mode (WAN interface) Serial, ATM, Frame-relay, GE/FE WAN interfaces, and GRE-tunnel interfaces are supported.
Step 4	Transport-opt <i>transport-opt id / multipoint</i> interface transport-opt-Service-Engine <i>slot/port</i> Example: Router(config-if)# Transport-opt {transport-opt id / multipoint} interface transport-opt-Service-Engine 4/0	Configures TCP redirection on the WAN interface. Traffic is redirected to the service module and is optimized and sent out on the WAN interface. The multipoint keyword is currently supported only on GE/FE interfaces. When the multipoint keyword is selected, the tpo ID is not required to be configured in the Cisco IOS command.

Example:

```
interface GigabitEthernet0/3/0
ip address 10.10.10.11 255.255.0.0
load-interval 30
negotiation auto
transport-opt 1 interface Transport-Opt-Service-Engine4/0
end
```

To verify that redirection is occurring on the WAN interface, check that there are adjacencies created for the main NCE Service Module interface and for every tpo ID defined on the WAN interface.

```
CA-3845-1#show adjacency detail | begin Transport
IP Transport-Opt-Service-Eng 1.3.202.26(6)
69255907 packets, 90732988194 bytes
epoch 0
sourced in sev-epoch 0
Encap length 14
00DEAD1075010016C82071FF0800
ARP
IP Transport-Opt-Service-Eng 1.3.202.26(4)
connectionid 1 ← for each transport-opt id
81183499 packets, 7603329060 bytes
epoch 0
sourced in sev-epoch 2
Encap length 14
00DEAD1075010016C82071010800
Wan Optimization
CA-3845-1#
```