

# Configuring Load Balancing Using WCCP on Data Centers

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## Load Balancing with WCCP on Data Centers

To load balance traffic across multiple NCE modules, assignment methods are defined in each service group. WCCP v2.0 protocol allows either hash or mask as the assignment method.

The designated NCE module provides the redirection table to the WCCP router based on the load balance configuration. The designated NCE module also passes the redirection table to all the available branches to transport TCP traffic to the correct SCTP tunnel.

**Note**

Whenever there is a change in the redirection table, the existing connections may be reset. The WCCP router starts redirecting the TCP packets based on the updated redirection table.

Masking must be explicitly specified. You can specify up to four mask values based on the source or destination IP address of the packet. The mask value is specified using a maximum of seven bits.

**Note**

The masking method can only be used for load balancing with the Catalyst 6500 /3750 series switches and Cisco 7600 series routers. Cisco recommends L2 masking on switches and GRE/hash on routers.

The following example shows how load balancing is configured on the data center service module:

```
CA-2821-1(config)> tpo wccp load-balance ?
  hash      Hash Parameters
  mask      Mask Parameters
CA-2821-1(config)> tpo wccp load-balance hash ?
  dst-ip    Destination ip address
  src-ip    Source ip address
CA-2821-1(config)> tpo wccp load-balance hash dst-ip ?
<cr>
  src-ip    Source ip address
CA-2821-1(config)> tpo wccp load-balance hash dst-ip src-ip ?
<cr>
CA-2821-1(config)> tpo wccp load-balance hash dst-ip src-ip
```

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```
CA-2821-1(config)> tpo wccp load-balance mask src-ip-mask ?
    Hexadecimal Mask in Hexadecimal number (0x0 - 0xFE000000)
CA-2821-1(config)> tpo wccp load-balance mask src-ip-mask 0xFE000000 ?
<cr>
    dst-ip-mask Specify sub-mask used in packet destination-IP address
CA-2821-1(config)> $ask src-ip-mask 0xFE000000 dst-ip-mask 0xFE000000
```