Slot and Subslot Configuration

This chapter contains information on slots and subslots. Slots specify the chassis slot number in your device and subslots specify the slot where the service modules are installed.

For further information on the slots and subslots, see the "About Slots and Interfaces" sections:

- Hardware Installation Guide for Cisco Catalyst 8300 Series Edge Platforms

- Hardware Installation Guide for Cisco Catalyst 8200 Series Edge Platforms

The following section is included in this chapter:

- Configuring the Interfaces, on page 1

Configuring the Interfaces

The following sections describe how to configure Gigabit interfaces and also provide examples of configuring the router interfaces:

- Configuring Gigabit Ethernet Interfaces, on page 1

- Configuring the Interfaces: Example, on page 3

- Viewing a List of All Interfaces: Example, on page 3

- Viewing Information About an Interface: Example, on page 4

Configuring Gigabit Ethernet Interfaces

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **interface GigabitEthernet** *slot/subslot/port*
4. **ip address** *ip-address mask* [**secondary**] **dhcp pool**
5. **negotiation auto**
6. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** Router> **enable**	Enables privileged EXEC mode. Enter your password if prompted.
Step 2	**configure terminal** **Example:** Router# **configure terminal**	Enters global configuration mode.
Step 3	**interface GigabitEthernet** *slot/subslot/port* **Example:** Router(config)# **interface GigabitEthernet 0/0/1**	Configures a GigabitEthernet interface. • **GigabitEthernet**—Type of interface. • *slot*—Chassis slot number. • */subslot*—Secondary slot number. The slash (/) is required. • /port—Port or interface number. The slash (/) is required.
Step 4	**ip address** *ip-address mask* [**secondary**] **dhcp pool** **Example:** Router(config-if)# **ip address 10.0.0.1 255.255.255.0 dhcp pool**	Assigns an IP address to the GigabitEthernet • **ip address** *ip-address*—IP address for the interface. • *mask*—Mask for the associated IP subnet. • **secondary** (optional)—Specifies that the configured address is a secondary IP address. If this keyword is omitted, the configured address is the primary IP address. • **dhcp**—IP address negotiated via DHCP. • **pool**—IP address autoconfigured from a local DHCP pool.
Step 5	**negotiation auto** **Example:** Router(config-if)# **negotiation auto**	Selects the negotiation mode. • **auto**—Performs link autonegotiation.
Step 6	**end** **Example:** Router(config-if)# **end**	Ends the current configuration session and returns to privileged EXEC mode.

Configuring the Interfaces: Example

The following example shows the **interface gigabitEthernet** command being used to add the interface and set the IP address. **0/0/0** is the slot/subslot/port. The ports are numbered 0 to 5.

```
Router# show running-config interface gigabitEthernet 0/0/0
Building configuration...
Current configuration : 71 bytes
!
interface gigabitEthernet0/0/0
no ip address
negotiation auto
end

Router# configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)# interface gigabitEthernet 0/0/0
```

Viewing a List of All Interfaces: Example

In this example, the **show platform software interface summary**, **show interfaces summary**, and **show platform software status control-process brief** commands are used to display all the interfaces:

```
Router# show platform software interface summary
  Interface              IHQ  IQD  OHQ  OQD  RXBS  RXPS  TXBS  TXPS  TRTL
-----------------------------------------------------------------------------
* GigabitEthernet0/0/0    0    0    0    0    0     0     0     0     0
* GigabitEthernet0/0/1    0    0    0    0    0     0     0     0     0
* GigabitEthernet0/0/2    0    0    0    0    0     0     0     0     0
* GigabitEthernet0/0/3    0    0    0    0    0     0     0     0     0
* Te0/0/4                 0    0    0    0    0     0     0     0     0
* Te0/0/5                 0    0    0    0    0     0     0     0     0


Router# show interfaces summary
   *: interface is up
 IHQ: pkts in input hold queue     IQD: pkts dropped from input queue
 OHQ: pkts in output hold queue    OQD: pkts dropped from output queue
 RXBS: rx rate (bits/sec)          RXPS: rx rate (pkts/sec)
 TXBS: tx rate (bits/sec)          TXPS: tx rate (pkts/sec)
 TRTL: throttle count

Interface           IHQ  IQD  OHQ   OQD   RXBS   RXPS   TXBS   TXPS   TRTL
--------------------------------------------------------------------------------

* GigabitEthernet0/0/0 0   0    0     0     0      0      0      0      0
* GigabitEthernet0/0/1 0   0    0     0     0      0      0      0      0
* GigabitEthernet0/0/2 0   0    0     0     0      0      0      0      0
* GigabitEthernet0/0/3 0   0    0     0     0      0      0      0      0
* Te0/0/4                  0    0     0     0      0      0      0      0
* Te0/0/5                  0    0     0     0      0      0      0      0

Router#show platform software status control-process brief
Load Average
 Slot  Status  1-Min  5-Min 15-Min
  RP0 Healthy   0.83   0.91   0.91


Memory (kB)
 Slot  Status    Total     Used (Pct)     Free (Pct)  Committed (Pct)
  RP0 Healthy  7768456  2654936 (34%)  5113520 (66%)   3115212 (40%)


CPU Utilization
```

```
Slot   CPU   User System   Nice    Idle    IRQ   SIRQ IOwait
RP0    0    2.70   1.70   0.00   95.59   0.00   0.00   0.00
       1    0.00   0.00   0.00  100.00   0.00   0.00   0.00
       2    0.00   0.00   0.00  100.00   0.00   0.00   0.00
       3    0.00   0.00   0.00  100.00   0.00   0.00   0.00
       4    2.40   1.40   0.00   96.19   0.00   0.00   0.00
       5    0.80   1.60   0.00   97.59   0.00   0.00   0.00
       6   12.40  12.30   0.00   75.30   0.00   0.00   0.00
       7   11.20  12.40   0.00   76.40   0.00   0.00   0.00
       8    2.80   1.80   0.00   95.40   0.00   0.00   0.00
       9    0.00   0.00   0.00  100.00   0.00   0.00   0.00
      10    0.00   0.00   0.00  100.00   0.00   0.00   0.00
      11    0.00   0.00   0.00  100.00   0.00   0.00   0.00
```

Viewing Information About an Interface: Example

The following example shows how to display a brief summary of an interface's IP information and status, including the virtual interface bundle information, by using the **show ip interface brief** command:

```
Router# show ip interface brief
GigabitEthernet0/0/0   10.10.3.1     YES NVRAM  up                  up
GigabitEthernet0/0/1   192.0.5.2     YES NVRAM  up                  up
GigabitEthernet0/0/2   192.0.2.5     YES NVRAM  down                down
GigabitEthernet0/0/3   unassigned    YES NVRAM  down                down
Te0/0/4                unassigned    YES NVRAM  down                down
Te0/0/5                10.20.4.8     YES NVRAM  down                down
Te0/1/0                unassigned    YES NVRAM  down                down
```