Slot and Subslot Configuration

This chapter contains information on slots and subslots. Slots specify the chassis slot number in your router 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” section in the Hardware Installation Guide for the Cisco 4000 Series Integrated Services Routers.

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 3

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

<table>
<thead>
<tr>
<th>Command or Action</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong> enable</td>
<td>Enables privileged EXEC mode. Enter your password if prompted.</td>
</tr>
<tr>
<td><strong>Example:</strong> Router&gt; <strong>enable</strong></td>
<td></td>
</tr>
</tbody>
</table>

| **Step 2** configure terminal | Enters global configuration mode. |
| **Example:** Router# **configure terminal** |

| **Step 3** interface GigabitEthernet *slot/subslot/port* | Configures a GigabitEthernet interface. |
| **Example:** Router(config)# **interface GigabitEthernet 0/0/1** |
| - *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 | Assigns an IP address to the GigabitEthernet |
| **Example:** Router(config-if)# **ip address 10.0.0.1 255.255.255.0 dhcp pool** |
| - *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 | Selects the negotiation mode. |
| **Example:** Router(config-if)# **negotiation auto** |
| - *auto* Performs link autonegotiation. |

| **Step 6** end | Ends the current configuration session and returns to privileged EXEC mode. |
| **Example:** Router(config-if)# **end** |
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 3.

```
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` and `show interfaces summary` 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
* GigabitEthernet 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
* GigabitEthernet 0 0 0 0 0 0 0 0 0
```

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
Interface   IP-Address  OK? Method Status Protocol
GigabitEthernet0/0/0   10.0.0.1  YES manual  down  down
GigabitEthernet0/0/1   unassigned YES NVRAM  administratively down  down
```
<table>
<thead>
<tr>
<th>Interface</th>
<th>IP Address</th>
<th>Status</th>
<th>Subslot</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>GigabitEthernet0/0/2</td>
<td>10.10.10.1</td>
<td>YES</td>
<td>NVRAM</td>
<td>up</td>
</tr>
<tr>
<td>GigabitEthernet0/0/3</td>
<td>8.8.8.1</td>
<td>YES</td>
<td>NVRAM</td>
<td>up</td>
</tr>
<tr>
<td>GigabitEthernet0</td>
<td>172.18.42.33</td>
<td>YES</td>
<td>NVRAM</td>
<td>up</td>
</tr>
</tbody>
</table>