

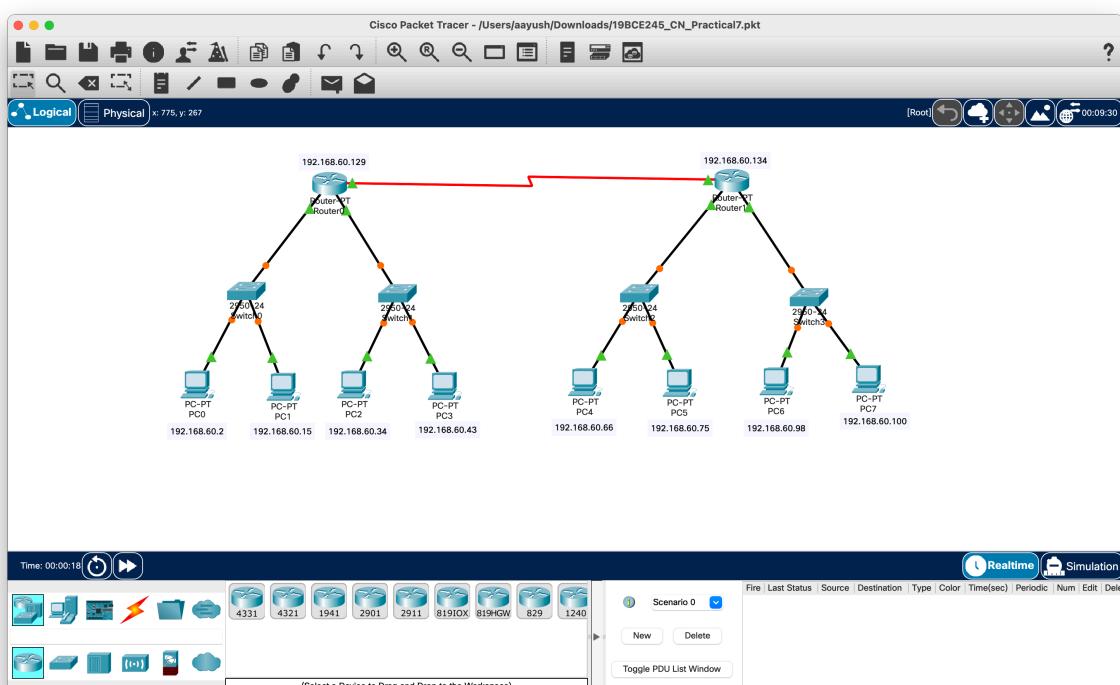
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2 October 2021

# Practical 7

## Subnetting

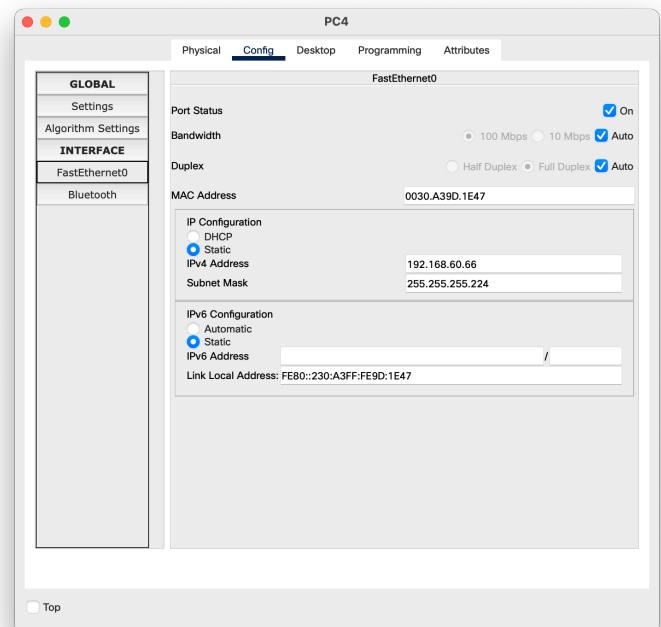
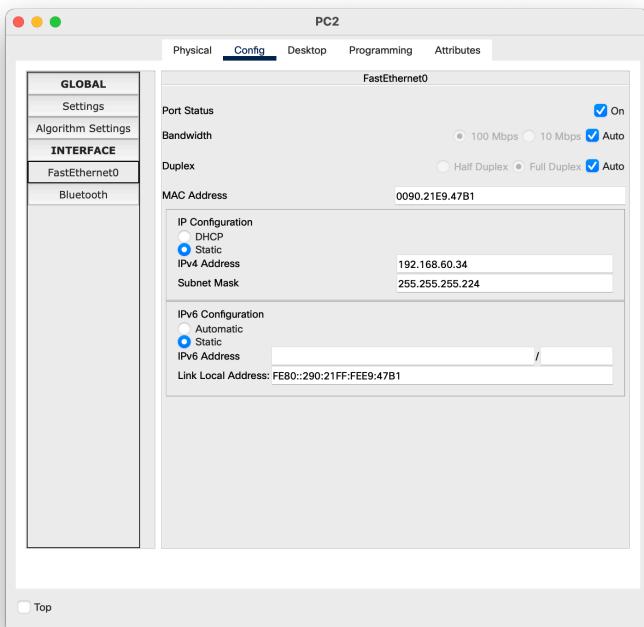
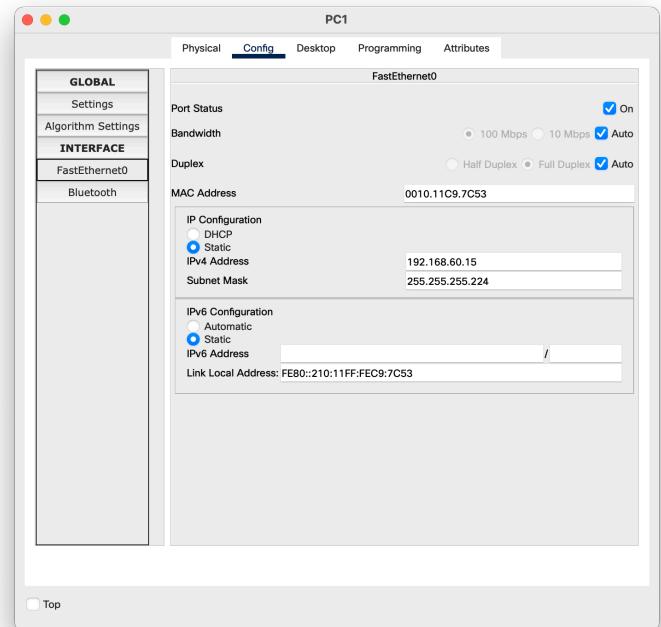
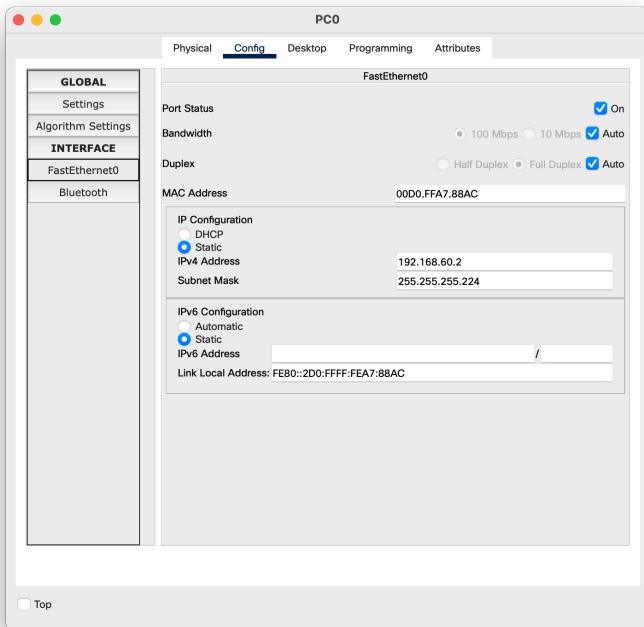
- Implementation of Subnetting: Design multiple subnets using Packet Tracer with suitable number of hosts. Make a plan to assign static IP addressing across all subnet to understand Subnetting.**

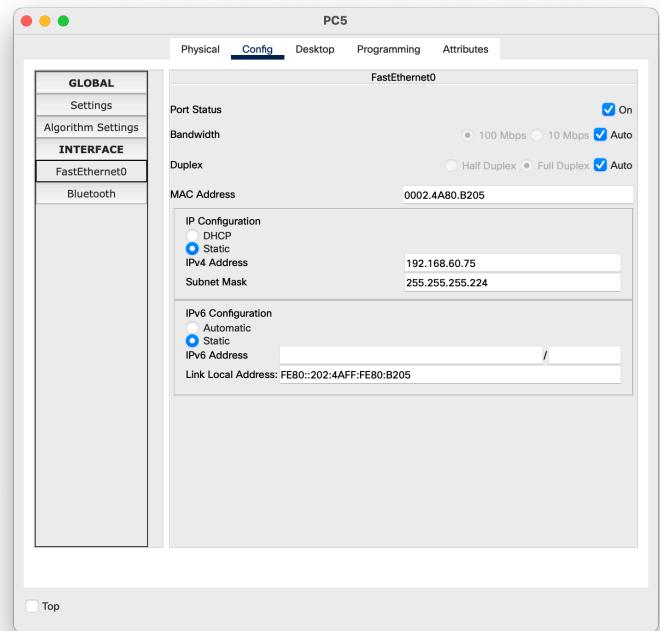
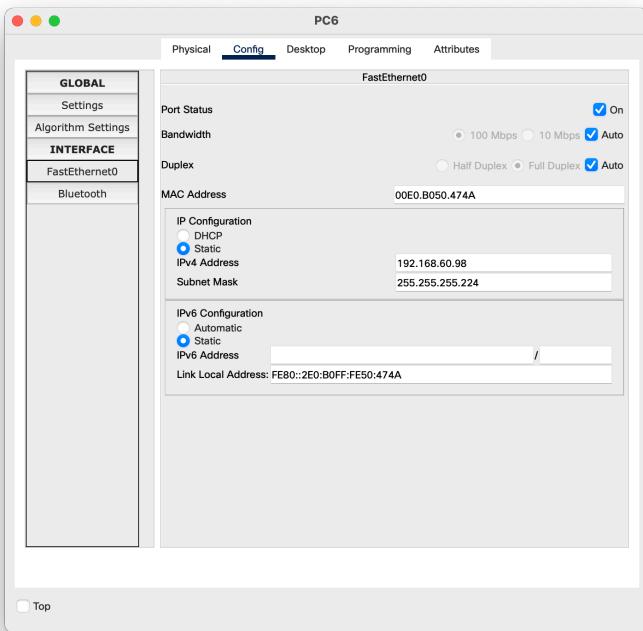
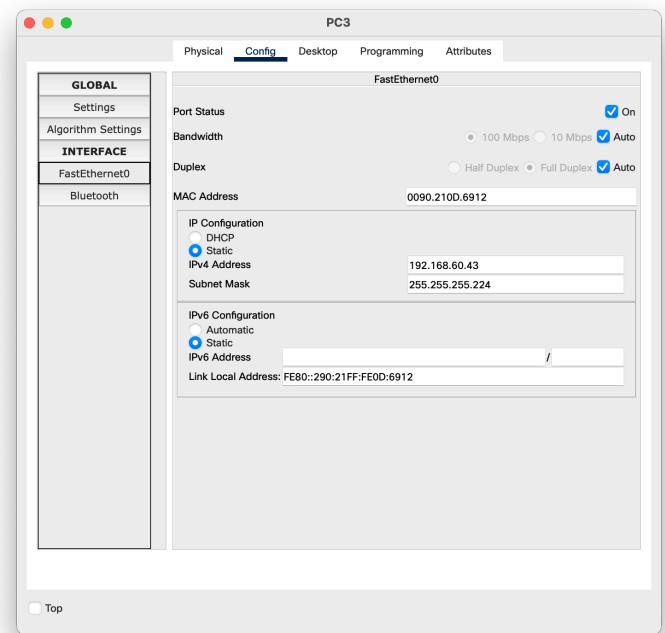
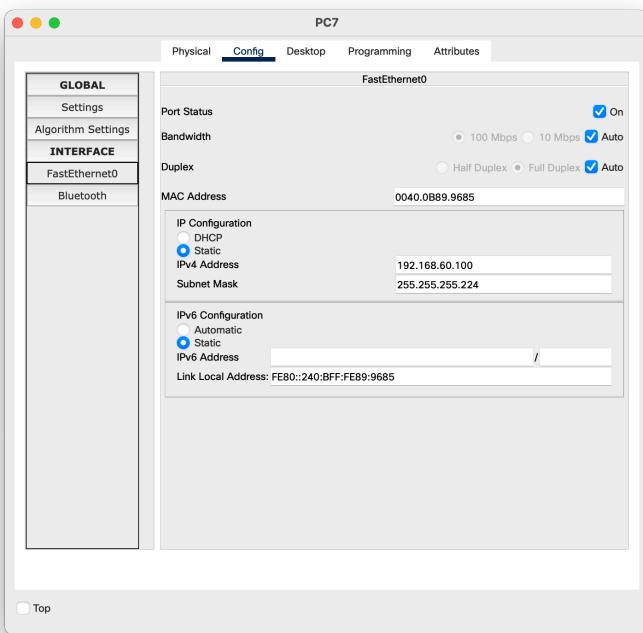
- Main Figure :**

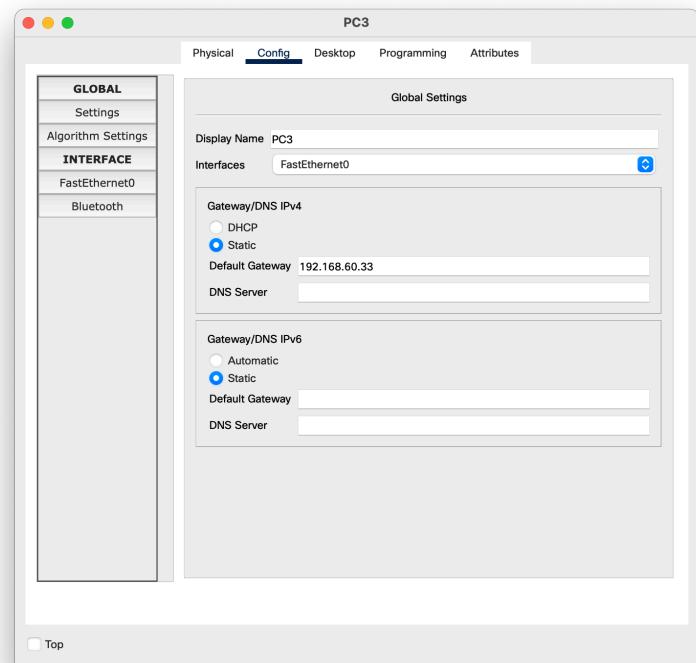
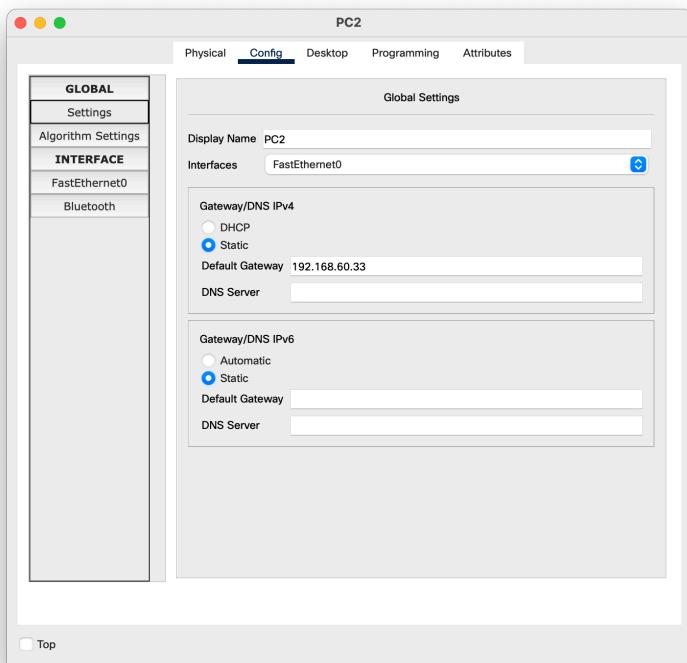
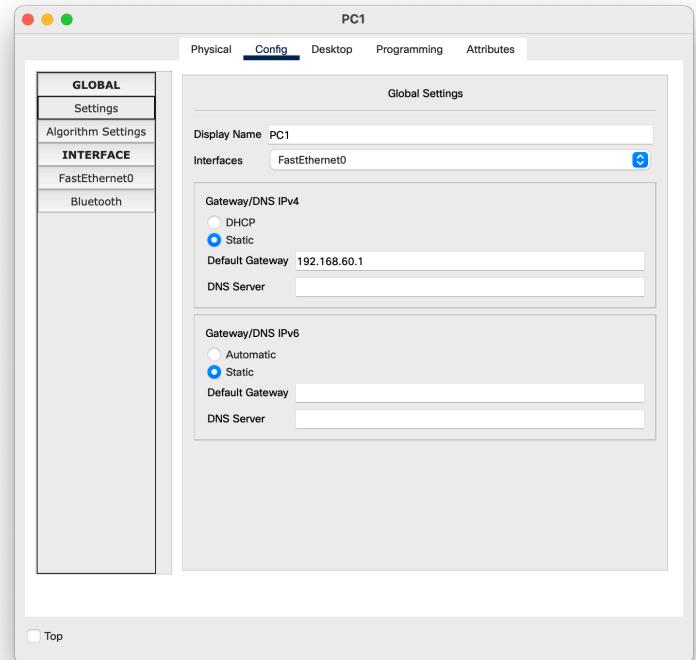
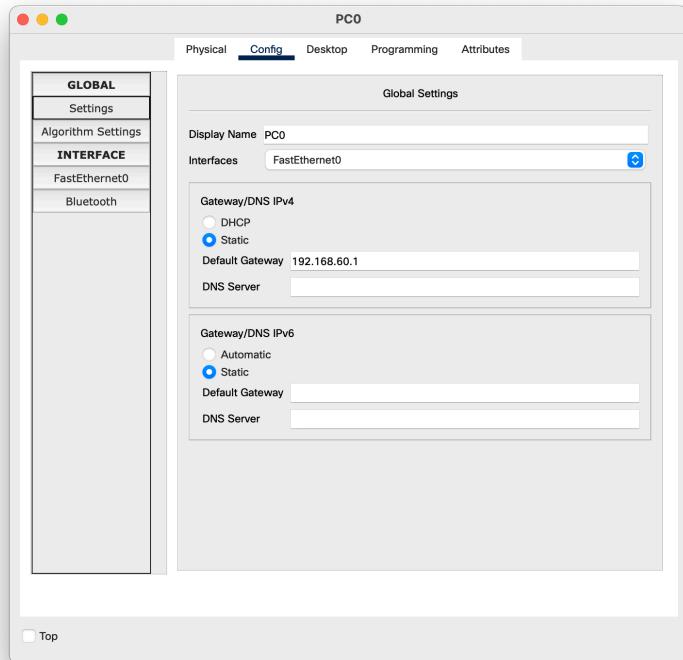


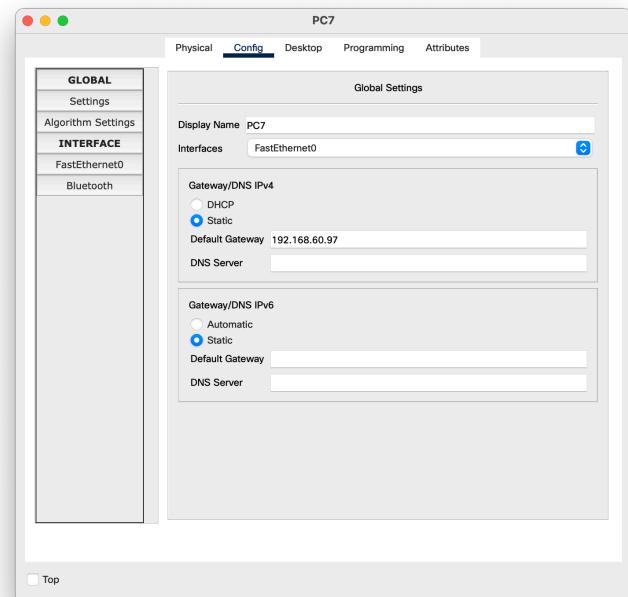
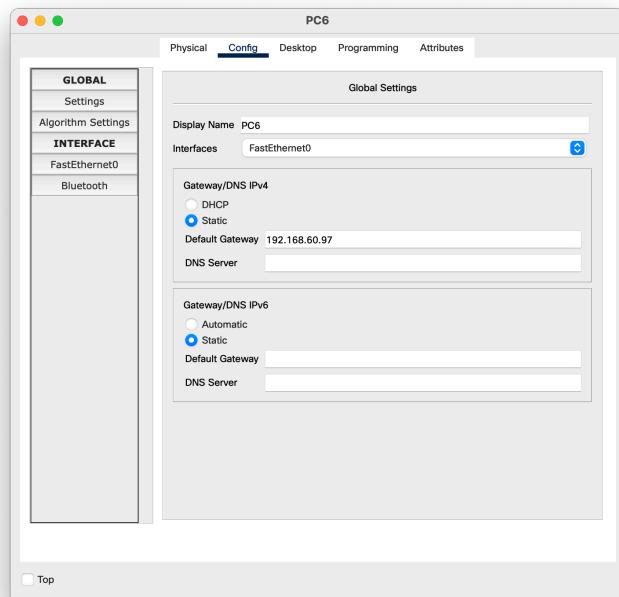
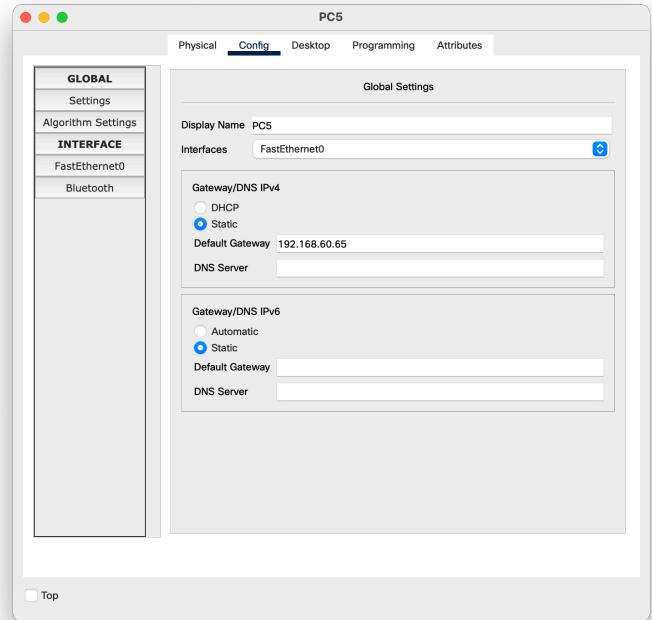
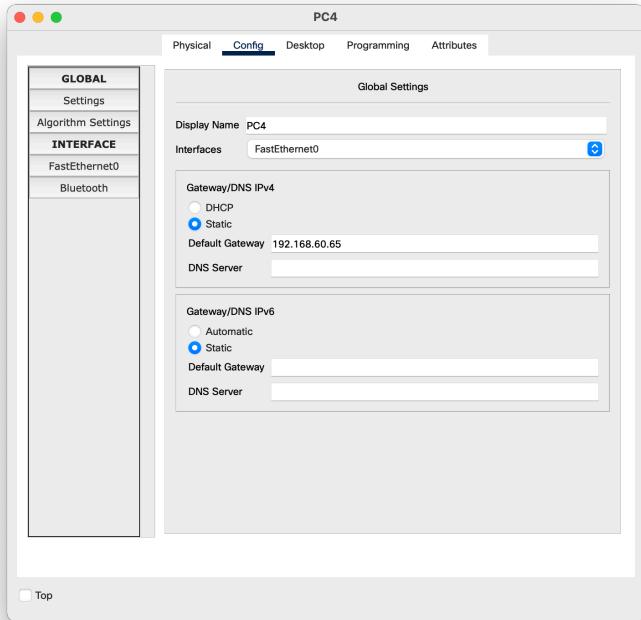
- **Configurations :**

All pc config settings





All pc config settings (default gateway)



Router config settings :

**Router0 Configuration Screenshots:**

**Serial2/0 Configuration:**

Setting	Value
Port Status	On (checked)
Duplex	Full Duplex
Clock Rate	2000000
IP Configuration	IPv4 Address: 192.168.60.129, Subnet Mask: 255.255.255.224
Tx Ring Limit	10

**FastEthernet1/0 Configuration:**

Setting	Value
Port Status	On (checked)
Bandwidth	100 Mbps (selected)
Duplex	Half Duplex
MAC Address	00E0.8FD7.A29B
IP Configuration	IPv4 Address: 192.168.60.33, Subnet Mask: 255.255.255.224
Tx Ring Limit	10

**Equivalent IOS Commands:**

```

Router(config)#exit
Router(config)#interface FastEthernet1/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet1/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet1/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial2/0
Router(config-if)#

```

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**Router0 Configuration Screen:**

**FastEthernet0/0 Configuration:**

Setting	Value
Port Status	On (checked)
Bandwidth	100 Mbps
Duplex	Full Duplex
MAC Address	0004.9A60.6422
IP Configuration	IPv4 Address: 192.168.60.1, Subnet Mask: 255.255.255.224
Tx Ring Limit	10

**Equivalent IOS Commands:**

```

Router(config-if)#exit
Router(config)#interface FastEthernet5/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet1/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet1/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#

```

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