

# Catalyst 5000 Switch FAQ

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### Related Information

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## Introduction

This document provides answers to frequently asked questions about the Cisco Catalyst 5000 Series switch.

## Prerequisites

### Requirements

There are no specific requirements for this document.

### Conventions

Refer to Cisco Technical Tips Conventions for more information on document conventions.

# Frequently Asked Questions

## Is the port administratively disabled?

If the "Link" LED is orange (not flashing), the port is administratively disabled or the port has been disabled due to error situations found by the switch. In order to determine which cause set the LED to orange, do a **show port** command on the switch. A port status of "disabled" means the port has been administratively shut down. A port status of "errDisable" means that the port has been shut down due to errors.

## What are the proper cables for this product?

- 100BaseTX port – straight through RJ–45 cable to a router or workstation; an Ethernet crossover RJ–45 cable to a hub or another switch (Category 5 UTP)
- 100BaseFX port – multimode fiber with an SC connector
- 10BaseT port – straight through RJ–45 cable to a router or workstation; an Ethernet crossover RJ–45 cable to a hub or another switch
- 10BaseFL port – multimode fiber with an ST connector
- CDDI port – data–grade RJ–45 an Ethernet crossover (Category 5)
- FDDI Module Multimode Fiber port – multimode fiber with a MIC connector
- FDDI Module Single–Mode Fiber – singlemode fiber with an ST connector
- ATM Twisted Pair port – RJ–45 (Category 5 UTP) cable
- ATM Fiber port – multimode or singlemode fiber with an SC connector
- ATM DS3 port – 75–ohm RG–59 coaxial cable with a BNC connector
- MII – Catalyst 5000 Series Installation Guide Cabling Instructions

## How do I enable the port module?

Use the **set port enable** *[mod\_num]/[port\_num]* command, where "mod\_num" is the module number and "port\_num" is the port number.

## How do I determine if an IP address is configured on the switch?

Enter the **show interface** command and check the settings of "inet," "netmask," and "broadcast" for the interface named "sc0." If they are all set to "0.0.0.0," the IP address has not been set.

## How do I configure an IP address?

Use the command **set interface sc0** *[IP address] [subnet mask]* .

## How do I check the subnet mask on the switch and reconfigure it?

- In order to check the subnet mask on the switch, use the **show interface** command. Look for a "netmask [subnet mask]" entry.
- Use the command **set interface sc0** *[IP address] [subnet mask]* to reconfigure the subnet mask.

## Is there a default route on the switch?

Use the **show ip route** command to display the ip route table. Check the table for a default route.

```
!This is with no default route for sc0
cat5k> (enable) show ip route
Fragmentation   Redirect   Unreachable
```

```

-----
enabled          enabled          enabled

Destination      Gateway      Flags    Use      Interface
-----
172.16.84.0      172.16.84.20  U        867      sc0
default          default      UH       0        sl

```

## How do I set a default route on the switch?

Use the **set ip route default** *[gateway]* *[metric]* command.

```

!Make sure the default gateway is available
cat5k> (enable) ping 172.16.84.1
172.16.84.1 is alive
!Add the default route for sc0
cat5k> (enable) set ip route default 172.16.84.1
Route added.
!Verify that the route was added
cat5k> (enable) show ip route
Fragmentation  Redirect  Unreachable
-----
enabled          enabled          enabled

Destination      Gateway      Flags    Use      Interface
-----
default          172.16.84.1  UG       0        sc0
172.16.84.0      172.16.84.20  U        868      sc0
default          default      UH       0        sl0
cat5k_84.20 (enable)

```

## What VLAN configuration documents exist on CCO?

Configuring VLANs.

### Are the switch ports to which the end devices connect in the same VLAN?

Use the **show vlan** command to view port assignments. Both ports you try to connect across must be assigned to the same VLAN.

### How do I assign both ports to the same VLAN?

Use the **set vlan** *[vlan]* *[module/port]* command to set ports into VLANs.

### Are the VLAN or trunk ports configured to pass that VLAN?

- Use the **show vlan** command to view port assignments.
- In order to check which VLANs are allowed on a trunk port, use the **show trunk** command.

### How do I assign all non-trunk ports along the link to the same VLAN and configure any trunk ports along the link to pass that VLAN?

- Use the **set vlan** command to change port assignments.
- In order to change which VLANs are enabled on a trunk port, use the **set trunk** command.

## Are all the switch ports along the link between the end device and the router either in the same VLAN or trunk ports configured to pass that VLAN?

- Use the `show vlan` command to view port assignments.
- In order to check which VLANs are allowed on a trunk port, use the `show trunk` command.

## Is the trunk port connected and configured with the correct speed and duplex settings?

Use the `show port [module_#]/[port_#]` command, where *module\_#* and *port\_#* are the module and port numbers for the trunk port in question. Check the output in the *Status*, *Duplex*, and *Speed* columns. The status must be "connected" and, the speed and duplex must match on both ends of the trunk (or one or both ends of the trunk can be set to auto–negotiate the speed and/or duplex).

## How do I connect the trunk port and/or correct its speed and duplex configuration?

- Use the `set port speed [module_#]/[port_#] [speed]` command, where *module\_#* and *port\_#* are the module and port numbers for the trunk port in question and "speed" is the desired port speed. The port speed must either be "100" or "auto." When in doubt use "100."
- Use the `set port duplex [module_#]/[port_#] [dup_type]` command, where *module\_#* and *port\_#* are the module and port numbers for the trunk port in question and "dup\_type" is the desired duplex setting. The duplex setting must either be "full" or "half."

## Is the trunk port trunking and configured to pass the desired VLAN range?

Use the `show trunk [module_#]/[port_#]` command, where *module\_#* and *port\_#* are the module and port numbers for the trunk port in question. The status must be "trunking." Under "Vlans allowed on trunk" you see the VLAN range or individual VLAN numbers that you want the trunk to carry.

## How do I disable auto–negotiation and change the speed and/or duplex settings?

- In order to change the port speed of a 100BaseTX port on the 10/100 Mbps Fast Ethernet Switching module, use the `set port speed [module#]/[port#] [speed]` command, where "speed" is either "10," "100," or "auto."
- In order to change the transmission type of a port, use the `set port duplex [module#]/[port#]` command.
- Verify that the speed and/or transmission type of a port has been set correctly with the `show port [module#]/[port#]` command.

## Do all switches in the VTP domain run the same version of VTP?

Use the `show vtp domain` command. The VTP version is shown in the output.

## Standardize the VTP version that runs on all switches in the VTP domain.

All switches in the same VTP domain must run the same version of VTP. Some switches in your network

possibly cannot run VTP version 2. If this is the case, you must revert all switches to version 1 to use VTP with these switches. You must run CatOS version 3.1(1) or greater to use VTP version 2. In order to set the VTP version, use this command.

```
set vtp v2 {enable | disable}
```

For further information on VTP versions, refer to [Configuring VLANs: VTP Version 2](#).

## Configure the correct domain name on the problem switch.

Use the `set vtp domain [domain_name]` command.

## Is the problem switch configured with the correct VTP domain name?

Use the `show vtp domain` command. The domain name is shown in the output. The domain name must be the same for all switches in the management domain.

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## Related Information

- [Technical Support & Documentation – Cisco Systems](#)

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