

## Cisco Catalyst Basic Operations

### Catalyst 4000/5000/6000 CatOS

```
show module
show configuration
show arp
show cam
show port
```

### Catalyst 2900/3500XL IOS

```
show version
show configuration
show arp
show mac-address-table
show interface status
```

#### Basic Show Commands

```
enable
set password
set enablepass
set system name CAT 5000 48 10/100
switch ports
set prompt cat5-3rd-idf>
set time Friday 01/05/99 08:00:00
set int sc0 up
set int sc0 1 156.33.188.61
255.255.255.192
show interface
```

```
press enter, enter old, enter new twice
press enter, enter old, enter new twice
```

```
enable
line con0
password password
enable password enable password
hostname CAT2900XL
```

```
Set via hostname
# clock set 08:00:00 5 June 99
interface vlan 1
ip address 156.33.188.61 255.255.255.192
> show interface vlan1
```

#### SNMP Commands

```
set system contact Joe Smith pager
(800) 555-1212
set system location 3rd floor idf
set snmp community read-only public
set snmp community read-write
private
set snmp community read-write-all
special
set snmp trap 10.1.1.1 public
set snmp trap enable
set snmp rmon enable
```

```
snmp-server contact Joe Smith pager (800) 555-1212
snmp-server location 3rd floor idf
snmp-server community public ro
snmp-server community private
```

```
change community strings
address of network management station
turns on all traps
```

```
snmp-server host 10.1.1.1 public
<implicit in above>
rmon options
> show rmon statistics
show snmp
```

```
show snmp
```

#### IP Host Commands

```
set ip route default 156.33.188.62
```

```
ip default-gateway 156.33.188.62
```

show ip route

show ip route

### Configuration Management

write 10.1.1.1 cat5-3rd-idf.cfg *Save configuration (post reboot)*  
 configure 10.1.1.1 cat5-3rd-idf.cfg *backup configuration to TFTP server*  
*restore configuration from TFTP server*

# write memory or copy run start  
 # write net or copy run tftp  
 # configure net or copy tftp run

### Operating System Management

copy flash tftp *backup operating system*  
 upload 10.1.1.1 cat5-23.bin *backup operating system*  
 copy tftp flash *restore/upgrade operating system*  
 download 10.1.1.1 cat5-23.bin *restore/upgrade operating system*  
 reset system

# copy flash: imagename tftp:  
 # copy tftp: imagename flash:newimagenam  
 # tar/x tftp: //TFTPserver/path/filename flash:  
 # reload

### Creating VLANs

set vtp domain mydomain  
 vlan 5 name marketing type ethernet  
 show vlan

# vlan database  
 vtp domain mydomain  
 set vlan 5 name marketing type ethernet  
 Show  
 Exit

### Port Configuration Commands

set port name 1/2 trunk-to-datacenter  
 set port level 1/1-2 high  
 set port speed 1/1-2 100  
 set port duplex 1/1-2 full  
 set vlan 5 3/1-12  
 set port broadcast 3/1-24 30%  
 set port broadcast 3/1-24 600

interface f0/2  
 description trunk-to-datacenter  
 speed 100  
 duplex full  
 switchport access vlan 5  
 port storm thresh rising 100 falling 50  
 port storm-control filter  
 Interface range fast 1/1 – 48 , 2/1 - 48

*You need to keep the spaces around ; and '.*

show port

> show interface status  
 > show ip interface brief

### Trunking Commands

set trunk 1/1-2 on

interface fast0/1

switchport mode trunk  
 > show interface f0/1 switchport

show trunk

### Dynamic Trunking Protocol Commands

set vtp domain vtpdomain  
 set vtp mode transparent

# vlan database  
 vtp domain vtpdomain  
 vtp transparent

```

show vtp domain
exit
> show vtp status

Spanning Tree Commands
set spanntree priority 5 100      sets root bridge (default 32768) for each
                                VLAN
set spanntree portvlanpri 4 16  set port priority for switch to switch links for
                                each VLAN
set spanntree portfast 2/1 enable
show spanntree 5

Troubleshooting Commands
set logging console enable      Console logging
set logging session enable      Telnet session logging
set logging level all 7         (same as Debug All)
show logging                    Port mirroring
set span 2/12 2/1 both inpkts

```