

# Cisco Cheat Sheet

## Basic Configuration

### Initial Commands

Name the device:

```
Router# configure terminal
```

```
Router(config)# hostname [hostname]
```

Configure a banner:

```
R1(config)# banner motd $Authorized Access Only$
```

Save the Changes:

```
R1# copy running-config startup-config
```

Configure Interface IPv4:

```
R1(config)# interface gigabitethernet 0/0
```

```
R1(config-if)# description Link to LAN 1
```

```
R1(config-if)# ip address 192.168.10.1 255.255.255.0
```

```
R1(config-if)# no shutdown
```

-or-

```
R1(config)# interface serial 0/0/0
```

```
R1(config-if)# description Link to R2
```

```
R1(config-if)# ip address 209.165.200.225 255.255.255.252
```

```
R1(config-if)# clock rate 128000
```

```
R1(config-if)# no shutdown
```

### Secure Management Access

```
R1(config)# enable secret class
```

```
R1(config)# line console 0
```

```
R1(config-line)# password cisco
```

```
R1(config-line)# login
```

```
R1(config-line)# exit
```

```
R1(config)# line vty 0 4 ← depending on the number of VTYs!
```

```
R1(config-line)# password cisco
```

```
R1(config-line)# login
```

```
R1(config-exit)# exit
```

```
R1(config)# service password-encryption
```

## VLAN

### Access Control Lists

This chapter describes how to configure Access Control Lists (ACLs).

**Note!** Each ACL contains an implicit DENY at the end!

## Spanning Tree

This chapter describes how to configure Spanning Tree.

## Link Aggregation

This chapter describes how to configure port channels and to apply and configure the Link Aggregation Control Protocol (LACP).

### Configure Interfaces

```
s1(config)# interface range fe0/1-2
```

```
s1(config-if-range)# shutdown
```

```
s1(config-if-range)# channel-group 1 mode active
```

```
s1(config-if-range)# exit
```

```
s1(config)# interface port-channel 1
```

```
s1(config-if)# switchport mode trunk
```

```
s1(config-if)# switchport trunk allowed vlan 1,2,20
```

## Verify Link Aggregation

```
s1# show interface port-channel1
```

```
s1# show etherchannel summary
```

```
s1# show etherchannel port-channel
```

```
s1# show interfaces f0/1 etherchannel
```

More information about Link Aggregation Control Protocol (LACP) (802.3ad) for Gigabit Interfaces.

## OSPF

This chapter describes how to configure OSPF.

## Single-Area OSPF

This chapter describes how to configure Single-Area OSPF.

```
R1(config)# interface GigabitEthernet0/0
```

```
R1(config-if)# bandwidth 1000000
```

```
R1(config-if)# exit
```

```
R1(config)# router ospf 10
```

```
R1(config-router)# router-id 1.1.1.1
```

```
R1(config-router)# auto-cost reference-bandwidth 1000
```

```
R1(config-router)# network 172.16.1.0 0.0.0.255 area 0
```

```
R1(config-router)# passive-interface g0/0
```

## Verifying Single-Area OSPF

## Multi-Area OSPF

<https://github.com/roaldnefs/cisco-cheatsheet>