

10 Basic Router Configuration

10.1 Configure Initial Router Settings

Device name

```
Router(config)# hostname HOSTNAME
```

Secure privileged EXEC mode

```
Router(config)# enable secret PASSWORD
```

Secure user EXEC mode

```
Router(config)# line console 0
Router(config-line)# password PASSWORD
Router(config-line)# login
```

Secure remote Telnet / SSH access

Telnet

```
Router(config)# line vty 0 15
Router(config-line)# password PASSWORD
Router(config-line)# login
Router(config-line)# transport input telnet
```

SSH

```
Router(config)# hostname R

R(config)# ip domain-name kohnlehome.de

R(config)# crypto key generate rsa
How many bits in the modulus [512]: 1024

R(config)# username BENUTZER secret GEHEIM

R(config)# line vty 0 15
R(config-line)# login local
R(config-line)# transport input ssh

R(config)# ip ssh version 2
```

Secure all passwords in the config file

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

Provide legal notification

```
Router(config)# banner motd # MESSAGE #
```

Save the configuration

```
Router# copy running-config startup-config
```

10.2 Configure Interfaces

Configure Router Interfaces

```
Router(config)# interface G0/0/0
Router(config-if)# description TEXT
Router(config-if)# ip address 192.168.0.1 255.255.255.0
Router(config-if)# ipv6 address 2001:db8:cafe:10::1/64
Router(config-if)# no shutdown
```

Verify Interface Configuration

```
Router# show ip interface brief
Router# show ipv6 interface brief
Router# show ip route
Router# show ipv6 route
Router# show ip interface
Router# show ipv6 interface
```

10.3 Configure the Default Gateway

Default Gateway on Host and Server

Default Gateway on a Switch

```
Switch(config)# interface vlan 1
Switch(config-if)# ip address 192.168.10.2 255.255.255.0
Switch(config-if)# no shutdown
Switch(config)# ip default-gateway 192.168.10.1
```