Uvod u rad na ruterima

Ruter

Telnet Access

Serial Ports

FastEthernet Ports

Telnet Access

Auxiliary Port

Modem Access

Console Port

Terminal Access

Memorije

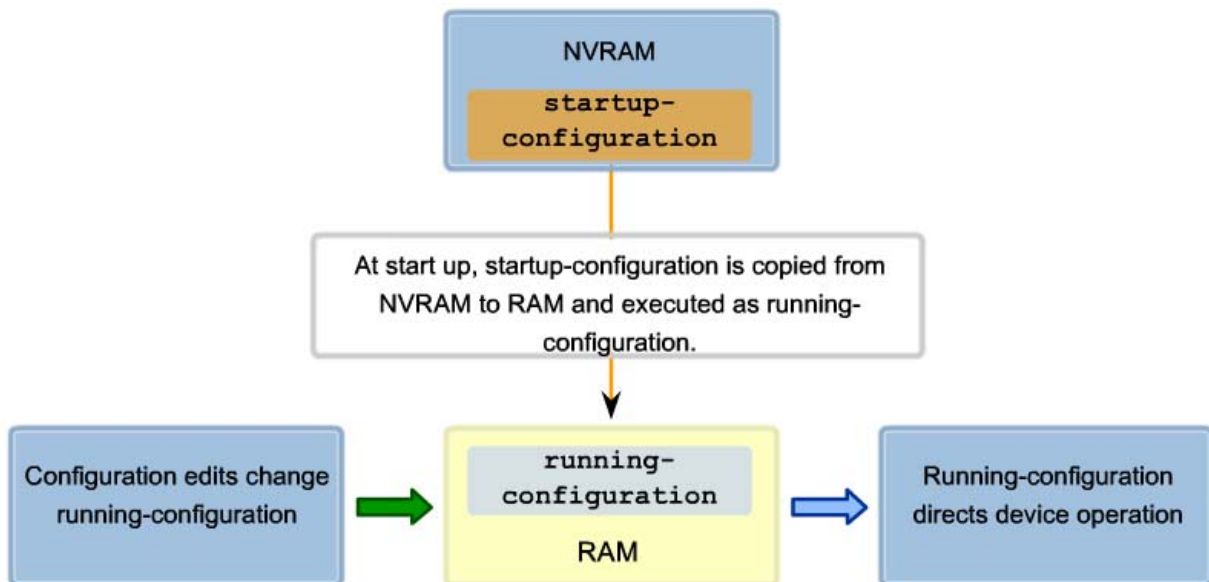| RAM			NVRAM	Flash	
Internetwork Operating System			Backup Configuration File	Operating Systems	Interfaces
Programs	Active Configuration File	Tables and Buffers			
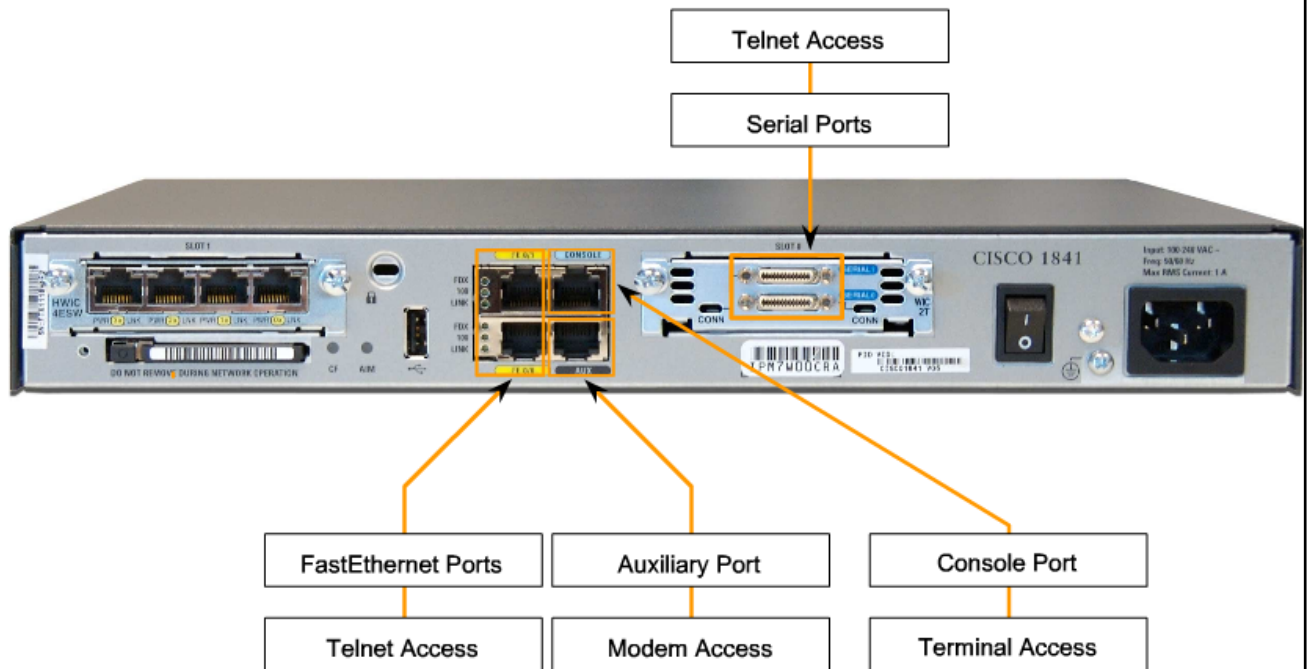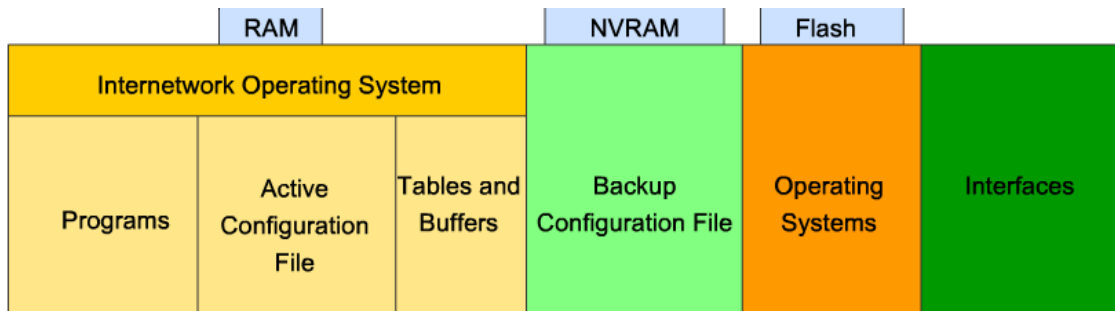
Konfiguracioni fajlovi

Režimi rada

User EXEC Command-Router>
ping
show (limited)
enable
etc...

Privileged EXEC Commands-Router#
all User EXEC Commands
debug commands
reload
configure
etc..

Global Configuration Commands-Router(config)#
hostname
enable secret
ip route

interface ethernet
          serial
          bri
          etc.

Interface Commands-Router(config-if)#
ip address
shutdown/ no shutdown
etc..

router   rip
          ospf
          eig rp
          etc..

Routing Engine Commands-Router(config-router)#
network
version
auto summary
etc...

line   vty
          console
          etc.

Line Commands-Router(config-line)#
password
login
etc..

Command Prompt

```
Router>ping 192.168.10.5

Router#show running-config

Router(config)#Interface FastEthernet 0/0

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

```
Switch>ping 192.168.10.9

Switch#show running-config

Switch(config)#Interface FastEthernet 0/0

Switch(config-if)#Description connection to WEST LAN4
```
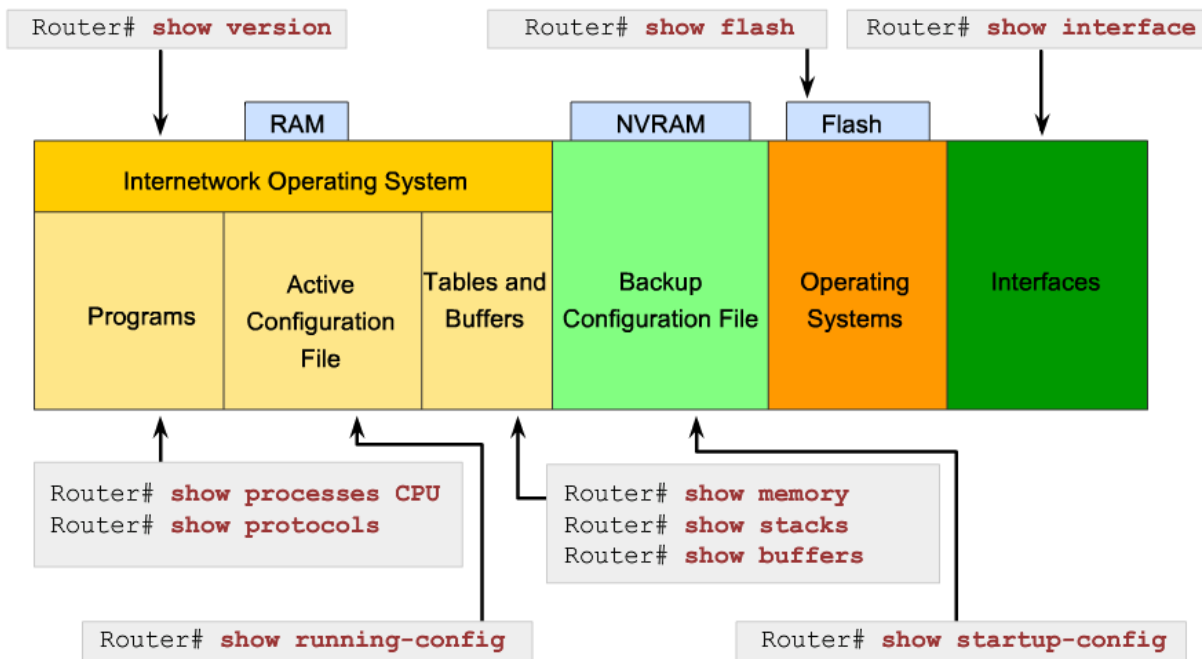
CLI Help - Context-Sensitive Help

```
Router(config-if)#?
Interface configuration commands:
  access-expression        Build a bridge boolean access expression
  arp                      Set arp type (arpa, probe, snap) or timeout
  auto                     Configure Automation
  backup                   Modify backup parameters
  bandwidth                Set bandwidth informational parameter
```

```
Router(config-if)#ip a?
access-group   accounting         address   admission
auth-proxy     authentication
```

```
Router(config-if)#ip address ?
  A.B.C.D  IP address
  dhcp     IP Address negotiated via DHCP
  pool     IP Address autoconfigured from a local DHCP pool
```

Komande za proveru statusa

Router# **show version**

Router# **show flash**

Router# **show interface**

RAM	NVRAM	Flash

Internetwork Operating System

Programs	Active Configuration File	Tables and Buffers	Backup Configuration File	Operating Systems	Interfaces

Router# **show processes CPU**
Router# **show protocols**

Router# **show memory**
Router# **show stacks**
Router# **show buffers**

Router# **show running-config**

Router# **show startup-config**

Ime uređaja

```
Router>
Router>enable
Router#
Router#configure terminal
Router(config)#hostname AtlantaHQ
AtlantaHQ(config)#
```

Rad sa konfiguracionim fajlom...

```
Router# show running-configuration
```

Lists the complete configuration currently active in RAM.

The active configuration can be copied to NVRAM.

```
version 12.2

hostname Router

!interface FastEthernet0/0

 no ip address
 duplex auto
 speed auto
 shutdown

interface Serial0/0
 no ip address
 shutdown
!
interface Serial0/1
 no ip address
```

```
Router# copy running-configuration startup-configuration
```

Konfigurisanje interfejsa

```
Router(config)#interface type port
Router(config)#interface type slot/port
Router(config)#interface type slot/subslot/port
```

The following command is used to administratively turn off the interface:

```
Router(config-if)#shutdown
```

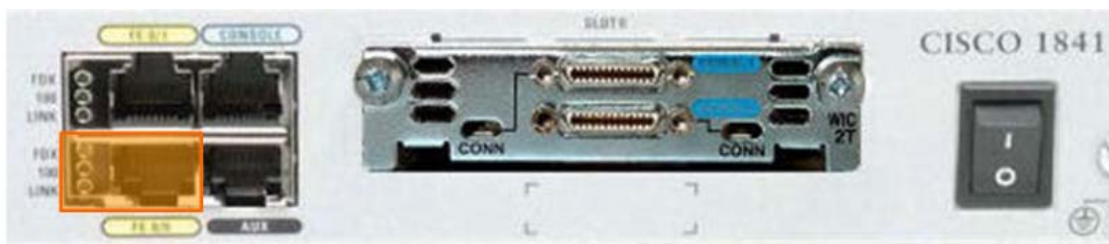The following command is used to turn on an interface that has been shutdown:

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

The following command is used to quit the current interface configuration mode:

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

Konfigurisanje Ethernet interfejsa


```
Router(config)#interface FastEthernet 0/0
Router(config-if)#ip address 192.168.10.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)#
```
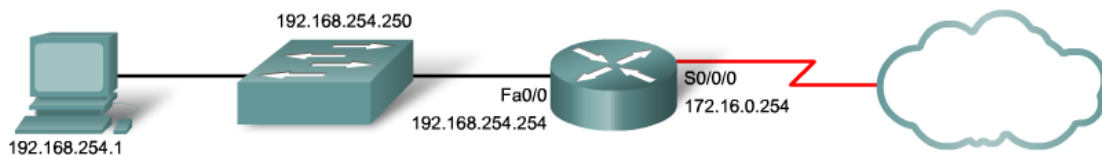
Provera interfejsa

```
Router1#show ip interface brief
Interface          IP-Address       OK?   Method   Status                  Protocol
FastEthernet0/0    192.168.254.254  YES   NVRAM    up                      up
FastEthernet0/1/0  unassigned       YES   unset    down                    down
Serial0/0/0        172.16.0.254     YES   NVRAM    up                      up
Serial0/0/1        unassigned       YES   unset    administratively down   down
```

Provera povezanosti


```
Router1#ping 192.168.254.1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.254.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/4 ms

Router1#traceroute 192.168.0.1
Type escape sequence to abort.
Tracing the route to 192.168.0.1
   1 172.16.0.253 8 msec 4 msec 8 msec
   2 10.0.0.254 16 msec 16 msec 8 msec
   3 192.168.0.1 16 msec * 20 msec
```

Extended Ping

- Router#**ping**
- Protocol [ip]:
- Target IP address:10.0.0.1
- Repeat count [5]:
- Datagram size [100]:
- Timeout in seconds [2]:5
- Extended commands [n]: n