Cisco Packet Tracer.

1.
2.
3.

(CLI)

1.

1. R1.

a. **Console** ( ) .
. **PCA** **RS 232**.
. **R1** **Console** ( ).
. **PCA** > **Desktop** ( ) > **Terminal** ( ).
. **OK** **ENTER**. R1.

2. .

EXEC .

a. EXEC, **enable.**

    Router> **enable**
    Router#

EXEC.

. **show running-config**.

    Router# **show running-config**

? Router

Fast Ethernet? 4

Gigabit Ethernet? 2

? 2

, vty- ? 0-4

. NVRAM.

    Router# **show startup-config**
    startup-config is not present

startup-config is not present (startup-config
( )
)? Strartup-config

2.

. , ,
,
IOS.

1.

R1.

. , . .
, .

a. **R1.**

. MOTD (: **Unauthorized access is strictly.**
. .

.

1) EXEC, : **cisco**
2) EXEC, : **itsasecret**
3) : **letmein**

```
R1(config)#hostname R1
R1(config)#enable password cisco
R1(config)#enable secret itsasecret
R1(config)#line console 0
R1(config-line)#password letmein
R1(config-line)#login
R1(config-line)#exit
R1(config)#service password-enscrypt
                           ^
% Invalid input detected at '^' marker.

R1(config)#service ?
  dhcp                  Enable DHCP server and relay agent
  nagle                 Enable Nagle's congestion control algorithm
  password-encryption   Encrypt system passwords
  timestamps            Timestamp debug/log messages
R1(config)#service password-enscryption
                              ^
% Invalid input detected at '^' marker.

R1(config)#service password-encryption
R1(config)#banner motd "Unauthorized access is strictly"
R1(config)#
```

2: R1.

a. , R1.

?

Show run

. . :

```
R1 con0 is now available
```

```
Press RETURN to get started.
```

.   **ENTER**;   :

```
Unauthorized access is strictly prohibited.

User Access Verification

Password:
```

(MOTD)?

,

EXEC,   '   ?

login

.   ,   EXEC.

enable secret   EXEC,
enable password   ? Enable secret

,   ?   .   , .

3:

1:   **NVRAM.**

a.   **R1**.
NVRAM   ,
.

,   NVRAM?

Copy run-config startup-config

?

w

2:   :   -
.
-
,   ,
-              .
NVRAM.
NVRAM   ,   ,
-          .
,   -   .

a.   -   ,   **show flash**

```
R1# show flash
```

```
R1#show flash

System flash directory:
File  Length   Name/status
  3   33591768 c1900-universalk9-mz.SPA.151-4.M4.bin
  2   28282    sigdef-category.xml
  1   227537   sigdef-default.xml
[33847587 bytes used, 221896413 available, 255744000 total]
249856K bytes of processor board System flash (Read/Write)
```

- ? 3

, , IOS? 3

, — IOS?

.bin

```
R1# copy startup-config flash
Destination filename [startup-config]
```

-

. , **ENTER**. ,

ENTER.

. **show flash** ,

- .

```
R1#copy startup-config flash
Destination filename [startup-config]?

0 bytes copied in 0.416 secs (0 bytes/sec)
R1#w
Building configuration...
[OK]
R1#copy startup-config flash
Destination filename [startup-config]?
%Warning:There is a file already existing with this name
Do you want to over write? [confirm]

1265 bytes copied in 0.416 secs (3040 bytes/sec)
R1#show flash

System flash directory:
File  Length   Name/status
  3   33591768 c1900-universalk9-mz.SPA.151-4.M4.bin
  2   28282    sigdef-category.xml
  1   227537   sigdef-default.xml
  5   1265     startup-config
[33848852 bytes used, 221895148 available, 255744000 total]
249856K bytes of processor board System flash (Read/Write)
```