Packet Tracer - Skills Integration Challenge(Instructor Version)

**Instructor Note:** Red font color or Gray highlights indicate text that appears in the instructor copy only.

Topology



Addressing Table

|  |  |  |  |
| --- | --- | --- | --- |
| Device | Interface | IP Address | Subnet Mask |
| [[R1Name]] | G0/0 | [[R1Add]] | 255.255.255.0 |
| [[PC1Name]] | NIC | [[PC1Add]] | 255.255.255.0 |

1. Scenario

The network administrator has asked you to prepare a router for deployment. Before it can be connected to the network, security measures must be enabled. In this activity, you will encrypt and configure strong passwords. You will then configure SSH for remote access and demonstrate that you can access the router from a PC.

Requirements

* Configure IP addressing on **[[PC1Name]]** and **[[R1Name]]**.
* Configure the hostname as **[[R1Name]]** and encrypt all plain text passwords.
* Set a strong secret password of your choosing.
* Set the domain name to **[[R1Name]]** (case-sensitive).

[[R1Name]](config)# **ip domain-name [[R1Name]]**

* Create a user of your choosing with a strong password.

[[R1Name]](config)# **user *any\_user* password *any\_password***

* Generate 1024-bit RSA keys.

**Note:** In Packet Tracer, enter the **crypto key generate rsa** command, and press **Enter** to continue.

[[R1Name]](config)# **crypto key generate rsa**

The name for the keys will be: [[R1Name]].[[R1Name]]

Choose the size of the key modulus in the range of 360 to 2048 for your

 General Purpose Keys. Choosing a key modulus greater than 512 may take

 a few minutes.

How many bits in the modulus [512]: **1024**

% Generating 1024 bit RSA keys, keys will be non-exportable...[OK]

* Block anyone for three minutes who fails to log in after four attempts within a two-minute period.

[[R1Name]](config)# **login block-for 180 attempts 4 within 120**

* Configure line the vty lines for SSH access and require the local user profiles.

[[R1Name]](config-line)# **transport input ssh**

[[R1Name]](config-line)# **login local**

* Save the configuration to NVRAM.
* Be prepared to demonstrate to your instructor that you have established SSH access from **[[PC1Name]]** to **[[R1Name]]**.

ID: [[indexNames]][[indexAdds]]