IFT 266 Introduction to Network Information Communication Technology

Lab 10

Switch Configuration - Secure Shell (SSH)

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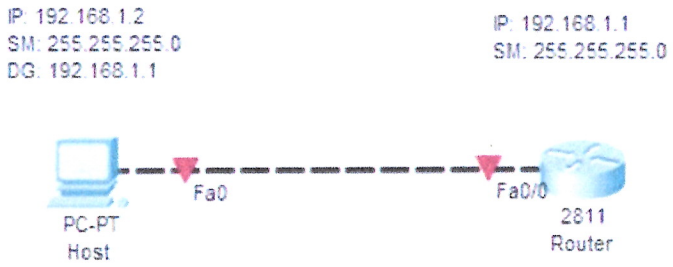
After you complete each step, put an 'x' in the completed box.

Objective: Create a simple topology to configure and test an encrypted SSH connection.

1. Set up the following Packet Tracer topology.



Completed ☒

2. Navigate to the router's CLI and enter the following commands.

```
Router>en
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int fa0/0
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#no shut

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0,
changed state to up
```

Completed ☒

3. Configure the host's IP address, subnet mask, and default gateway so that it can communicate with the router.

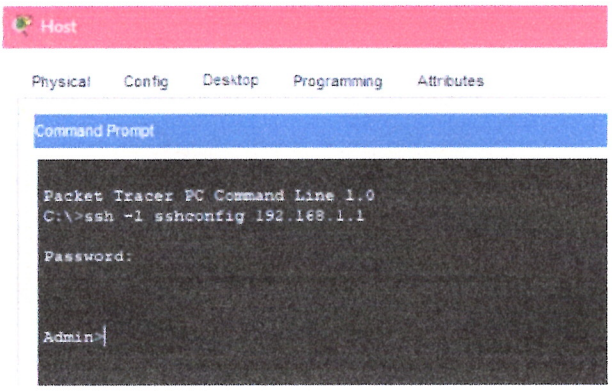
4. Verify that the host can talk to the router with a ping.

5. We will now configure SSH on our router. Navigate to the router's CLI again and enter the following commands.

```
Router(config)#hostname Admin
Admin(config)#ip domain name sshconfig.local
Admin(config)#username sshconfig password test
Admin(config)#crypto key generate rsa


The name for the keys will be: Admin.sshconfig.local
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]: 2048
% Generating 2048 bit RSA keys, keys will be non-exportable...[OK]

Admin(config)#ip ssh version 2
*Mar 1 0:17:11.542: %SSH-5-ENABLED: SSH 2 has been enabled

Admin(config)#line vty 0 15
Admin(config-line)#transport input ssh
Admin(config-line)#password test
Admin(config-line)#logging synchronous
Admin(config-line)#exit
Admin(config)#service password-encryption
Admin(config)#enable password testing
Admin(config)#
```

6. Now that our SSH configuration has been set up, we can test the connectivity. Enter the following command into the host's command prompt. You will be prompted to enter the password you set earlier.

Note on the command: ssh – l (l for lima) .....



Completed ☒

7. If you executed all steps successfully, you should see the router's **Admin** prompt after entering your SSH password. If you can't connect, troubleshoot!

Attach a screenshot of your successful SSH connection!