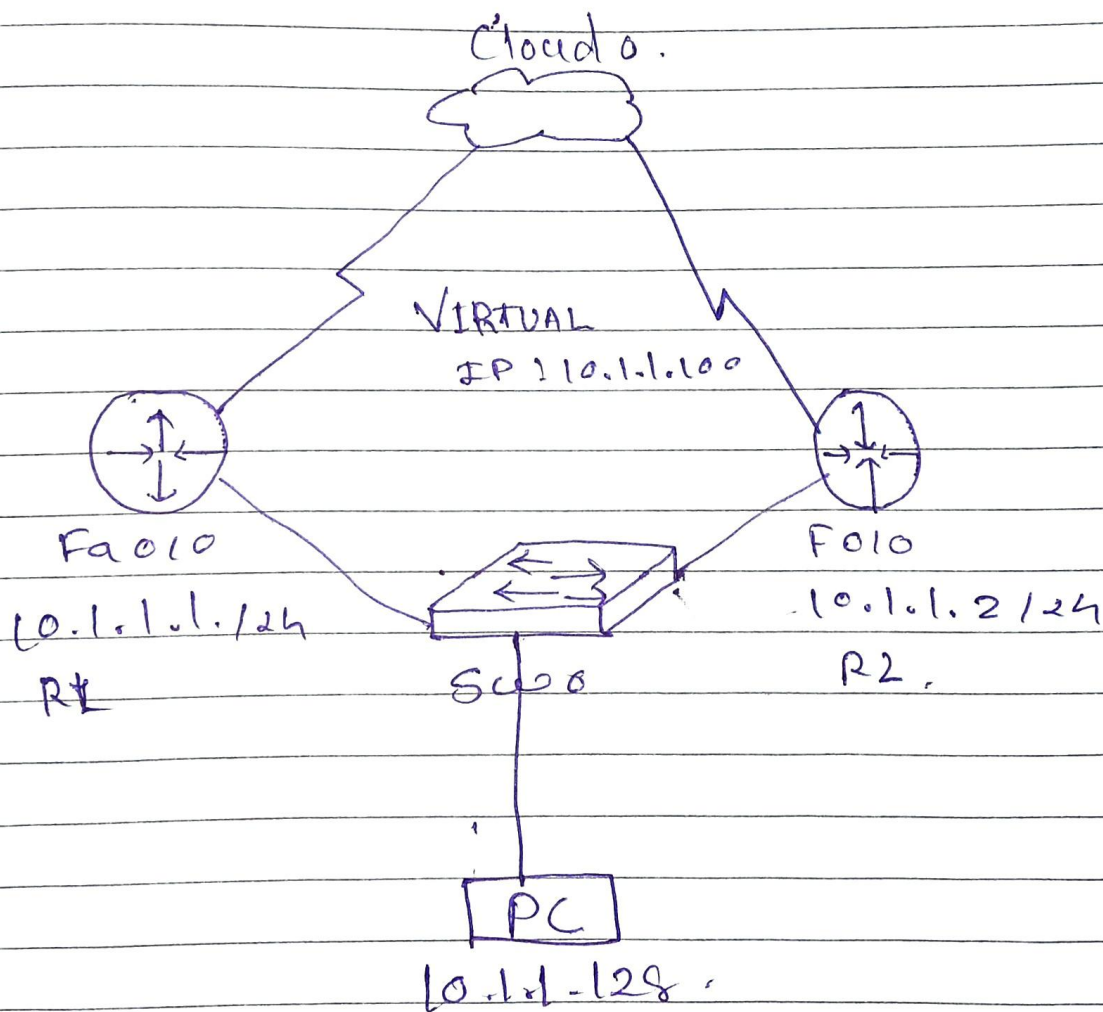


1. List of IP Services Types and Example of HSRP.

→ IP services.

- HSRP
- VRRP
- GLBP
- TNP
- SYSLON
- CDP

→ HSRP example.



R1

Date / /

Saathi

R1 (config) # int fa 0/0

R1 (config) # ip add 10.1.1.1 255.255.255.0

R2

R2 (config) # int fa 0/0

R2 (config-if) # ip add 10.1.1.2 255.255.255.0

R1

R1 (config-if) # standby 1 ip 10.1.1.100

R1 (config-if) # standby 1 name HSRP\_TEST

R1 (config-if) # standby 1 priority 110

R1 (config-if) # standby 1 preempt

R2

R2 (config) # int fa 0/0

R2 (config-if) # standby 1 ip 10.1.1.100

R2 (config-if) # standby 1 name HSRP\_TEST

R2 (config-if) # standby 1 priority 100

R2 (config-if) # standby 1 preempt

## 2) Explain Security Threat.

→ The term threat, Vulnerability and weakness are often used in Cybersecurity.

→ Understanding the difference between these term is important.



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- It allows organizations to correctly implement, document and assess their cybersecurity activities and controls.
- A Potential for Violation of Security, which exists when there is an entity, circumstance, capability, action or event that could cause harm.
- Cyber threats are sometimes incorrectly confused with vulnerabilities.

### Type of threat

Spoofing identity  
 Tampering with data  
 Repudiation  
 Information disclosure

### 3) Describe threat defense technologies

- threat defense technologies provides Validated solution of best-in-class tools that helps you detect and mitigate advanced threats.
- Threat defense is the process of analyzing a security ecosystem at the holistic level to find malicious users, abnormal activity and

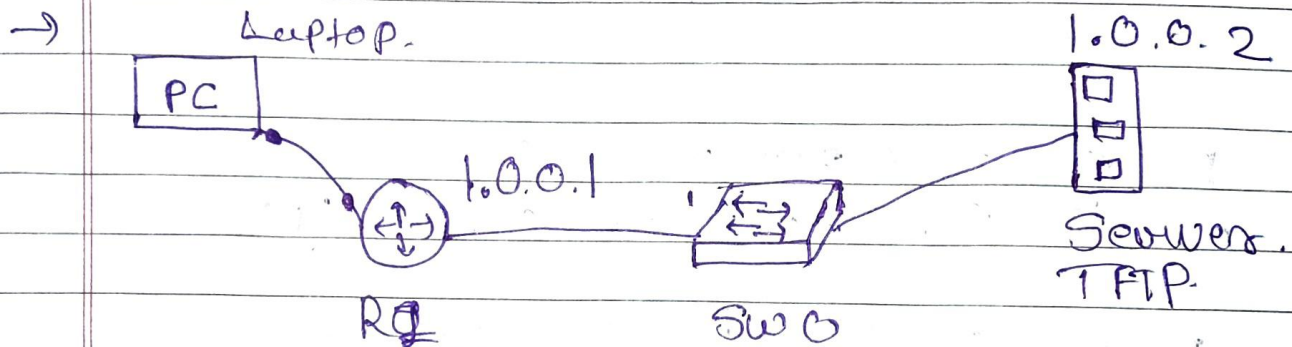
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anything that could compromise a network.

technologies.

- Firewalls.
- DDoS Protection
- Endpoint Protection
- Zero-trust Access Policies
- XDR
- SOAR

4) Example of Backup and Restore Router manging IOS?



~~Host~~

```

Router # config t
Router(config) # hostname R1
R1 (config) # line vty 0
R1 (config-line) # password new
R1 (config-line) # login
R1 (config-line) # exit
  
```



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```

R1 (config) # line console 0
R1(config-line) # Password hello 123
R1(config-line) # login
R1(config-line) # exit
    
```

R1 Configure IP address 1.0.0.1  
255.0.0.0.

R1 # Show flash.

Show the ios file of Router.  
Now copy file using

R1 # copy flash tftp.

Now copy running-config to Startup  
Config.

```

R1 # copy flash run start
R2 # copy startup-config tftp.
    
```

Now go to TFTP Server and  
Verify.

This is backup of Router  
IOS file.

Date \_\_\_ / \_\_\_ / \_\_\_

## Backup

~~Now~~ To test erasure the configuration on ~~the~~ routers.

→

R1 # erase Startup-Config.

R1 # Show-Startup-Config

R1 # reload

After Reload Previous Config. lost

check after reload.

Router > enable.

→ back our IOS Config. file from TFTP server to router.

Router # copy tftp running-config.

apply this command after apply ip address.

→ Now check restore our IOS Config file.

R1 # Show run.

In this way you are backup and Restore IOS file.



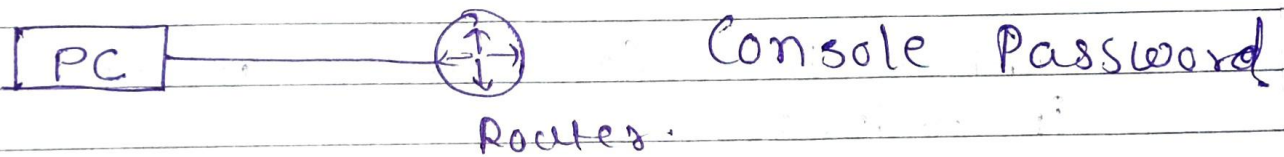
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5) List of Basic Security of Password  
- Example with apply Password in Router.

→ Basic Security.

- Don't Use Personal Information.
- Randomize Patterns and Sequences.
- Never reuse passwords.
- Prioritize Password length
- Never Share your password
- Avoid Public wifi
- Use numbers, letters, and characters
- Download a Password manager
- Check your password strength
- Change passwords periodically

Example.



Router ~~Enable~~

Router # Conf t

Router(Config) # line console 0

Router(Config-line) # login

Router(Config-line) # Password cisco

Router(Config-line) # ~~exit~~ exit

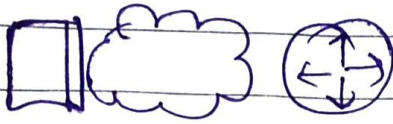
Router(Config) # exit

Router # show

Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Saathi

⇒



Virtual terminal.

```
Router (config) # line vty 0 4  
Router (config-line) # login  
Router (config-line) # password cisco2
```

⇒

Enable Password



```
Router (config) # enable password  
cisco 123
```

⇒

Secret Password

```
Router (config) # enable secret  
cisco 123
```