Lab Manual 1

NETWORK ESSENTIALS LAB Manual

User mode : Basic Ping , Basic Trace , Basic show commands .
Privilege Mode : If you want to do complete monitoring , Complete show commands then PM .
100 per commands only show .
Global Configuration mode : Any changes then Global config mode .

Basic configuration – Hostname, Clock, no ip domain lookup. Setting up History size

```
R1(config)#hostname R1
R1#clock set 10:10:10 march 10 2020
R1(config)#no ip domain-lookup
R1#terminal history size ?
<0-256> Size of history buffer
```

Configure Password(Enable,Console,Telnet)

```
R1(config)#enable password cisco


R1(config)#line con 0
R1(config-line)#password cisco
R1(config-line)#login
R1(config-line)#exi

R1(config)#line vty 0
R1(config-line)#password cisco
```

```
R1(config-line)#login
R1(config-line)#exi

R1(config)#username AAA password AAA
R1(config)#line vty 0 4
R1(config-line)#login local
R1(config-line)#exi
```

Configure login banner

```
R1(config)#banner motd $ ALERT - HEADOFFICE ROUTER
$
```

Encrypt password

```
R1(config)#service password-encryption
R1(config)#enable secret cisco123
```

Save all configurations .

```
R1#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
```

Remove all configurations

Router#**erase startup-config**

Restart Router and switch
Router#**reload**

Password recovery .

Physical OFF and ON

CTR+SHIFT+PAUSE/BREAK (Pause/Break or equivalent command depends upon diff laptops)

Self decompressing the image :
################################
monitor: command "boot" aborted due to user interrupt
rommon 1 > confreg 2142
rommon 2 > reset

Continue with configuration dialog? [yes/no]:no

Router>enab
Router#conf t
Router(config)#no enable password
Router(config)#no enable secret
Router#show version
Configuration register is 0x2142
Router(config)#config-register 2102
Router#reload
This time it will not ask for the password.

How to assign IP address to the interface of the Router

R1(config)#interface fastEthernet 0/0
R1(config-if)#ip address 10.0.0.1 255.0.0.0
R1(config-if)#no shutdown
R1(config-if)#exi

Rules to assign the IP address to the router:

1. All the LAN and WAN should be in different networks (or should not repeat the same networks).

2. Router Ethernet IP and the LAN network assigned should be in the same network.

3. Both the interfaces of router facing each other should be in the same network.

4. All the interfaces of routers should be in the different network.