

PC4(Configure IP ACLs to Mitigate Attacks and Configuring IPv6 ACLs (Part 1,2))

(Part 1 - Verify connectivity among devices before firewall configuration-RIP and ping pc-server, server -pc to check)

(Part 2 - Secure Access to Routers

Set up the SSH protocol)

Enter the following commands in CLI mode of Router0:

Router>enable

Router#configure terminal

Router(config)#ip domain-name ismail.com

Router(config)#hostname Router0

Router0(config)#

Router0(config)#crypto key generate rsa

Router0(config)#line vty 0 4

Router0(config-line)#transport input ssh

Router0(config-line)#login local

Router0(config-line)#exit

Router0(config)#username SSHadmin privilege 15 password ismail

Router0(config)#exit

Router0#

Enter the following commands in CLI mode of Router1

Router>enable

Router#configure terminal

Router(config)#ip domain-name ismail.com

Router(config)#hostname Router1

Router1(config)#

Router1(config)#crypto key generate rsa

Router1(config)#line vty 0 4

Router1(config-line)#transport input ssh

Router1(config-line)#login local

Router1(config-line)#exit

Router1(config)#username SSHadmin privilege 15 password ismail

Router1(config)#exit

Enter the following commands in CLI mode of Router2

Router>enable

Router#configure terminal

Router(config)#ip domain-name ismail.com

Router(config)#hostname Router2

Router2(config)#

Router2(config)#crypto key generate rsa

Router2(config)#line vty 0 4

Router2(config-line)#transport input ssh

Router2(config-line)#login local

Router2(config-line)#exit

Router2(config)#username SSHadmin privilege 15 password ismail

Router2(config)#exit

(Create an ACL 10 to permit remote access to PC only

Enter the following commands in CLI mode of all Routers)

Router>enable

Router#configure terminal

Router(config)#access-list 10 permit host 192.168.4.2

Router(config)#line vty 0 4

Router(config-line)#access-class 10 in

(Now we verify the remote access from PC using the following and find it to be successful)

OUTPUT:

Go to **PC0** AND Go to **command prompt c:>\ssh -I SSHadmin 192.168.4.1** (Router2 ka IP address likhna hai)

Password:cisco

Go to **Server0** AND Go to **command prompt c:>\ssh -I SSHadmin 192.168.1.1** (Router0 GE0/0 ka IP address likhna hai)

Go to **Server0** AND Go to **command prompt c:>\ssh -I SSHadmin 192.168.2.2** (Router1 S0/1/0 ka IP address likhna hai)

Go to **Server0** AND Go to **command prompt c:>\ssh -I SSHadmin 192.168.3.1** (Router1 S0/1/1 ka IP address likhna hai)

Go to **Server0** AND Go to **command prompt c:>\ssh -I SSHadmin 192.168.4.1** (Router2 GE0/0 ka IP address likhna hai)