8.6.5 Packet Tracer - Configure IP ACLs to Mitigate Attacks

File Edit Options View Tools Extensions Window Help

Logical | Physical x: 165, y: 607   Root   12:40:00

Packet Tracer - Configure IP ACLs to Mitigate Attacks

Addressing Table

Device	Interface	IP Address	Subnet Mask	Default Gateway	Switc
R1	G0/1	192.168.1.1	255.255.255.0	N/A	S1 F0
	S0/0/0 (DCE)	10.1.1.1	255.255.255.252		N/A
R2	S0/0/0	10.1.1.2	255.255.255.252	N/A	N/A
	S0/0/1 (DCE)	10.2.2.2	255.255.255.252		
	G0/0	209.165.200.225	255.255.255.224		
	Lo0	192.168.2.1	255.255.255.0		
R3	G0/1	192.168.3.1	255.255.255.0	N/A	S3 F0
	S0/0/1	10.2.2.1	255.255.255.252		N/A
PC-A	NIC	192.168.1.3	255.255.255.0	192.168.1.1	S1 F0
PC-C	NIC	192.168.3.3	255.255.255.0	192.168.3.1	S3 F0

Objectives

- Verify connectivity among devices before firewall configuration.
- Use ACLs to ensure remote access to the routers is available only from management station PC-C.
- Configure ACLs on R1 and R3 to mitigate attacks.
- Verify ACL functionality.

Background/Scenario

Access to routers R1, R2, and R3 should only be permitted from PC-C, the management station. PC-C is also used for connectivity testing to PC-A, which is a server providing DNS, SMTP, FTP, and HTTPS services.

Standard operating procedure is to apply ACLs on edge routers to mitigate common threats based on source and destination IP address. In this activity, you will create ACLs on edge routers R1 and R3 to achieve this goal. You will then verify ACL functionality from internal and external hosts.

The routers have been pre-configured with the following:

Time Elapsed: 00:10:33   Completion: 100%

Dock   Check Results   Back   1/1   Next

Network diagram:

Server-PT PC-A — 2960-24TT S1 — 1941 R1 (192.168.1.0/24) — 1941 R2 (10.1.1.0/30) — Cluster (10.2.2.0/30) — 1941 R3 — 2960-24TT S3 — PC-PT PC-C (192.168.3.0/24)

User Profile

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Additional Info:

OK   Cancel

Time: 00:12:10   Realtime   Simulation

Router-PT-Empty

Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete

Scenario 0
New   Delete
Toggle PDU List Window