

Unit 6 Discussion 1: Determining Firewall Rules

Learning Objectives and Outcomes

- You will be able to explore design and firewall rules for a bastion host.
- You will examine how a bastion host allows administrators to access Samba and Secure Shell (SSH) for remotely managing a server.

Assignment Requirements

As the Linux system administrator of insurance company Secure All, Inc., you need to design firewall rules for the organization's bastion host file server, which uses Samba. This server is located in the local area network (LAN) with the network address 172.16.0.0/12 and subnet 255.240.0.0. The server should also allow Web application access for its online transaction platform to mount the filesystem. The Web application resides on the Web server located in the demilitarized zone (DMZ). This server has two interface cards. One card, which is for the traffic from the DMZ firewall, is linked to the wide area network (WAN). This card's IP address is 192.168.1.5. The other interface card has the IP address 172.16.1.5 and is linked to the LAN.

Which firewall rules should be written using iptables for the server hosting Samba? Discuss and suggest firewall rules to allow administrators to remotely manage the server using SSH. Use the concept of "default deny" when designing the rules.

Participate in this discussion by engaging in a meaningful debate regarding the firewall rules that can be written using iptables. You must defend your choices with a valid rationale. At the end of the discussion, write a summary of your learning from the discussion and submit it to your instructor.

Required Resources

None

Submission Requirements

- Format: Microsoft Word
- Font: Arial, Size 12, Double-Space
- Citation Style: Chicago Manual of Style
- Length: 1–2 pages
- Due By: Unit 6

Self-Assessment Checklist

- I have provided suitable iptables rules for the server hosting Samba using the concept of “default deny.”
- I have explained key points of how a bastion host should allow administrators to access Samba and SSH for remotely managing the server.