University of Utah
School of Computing
CS 6967: Security Operations

Lab 7 Response Outline

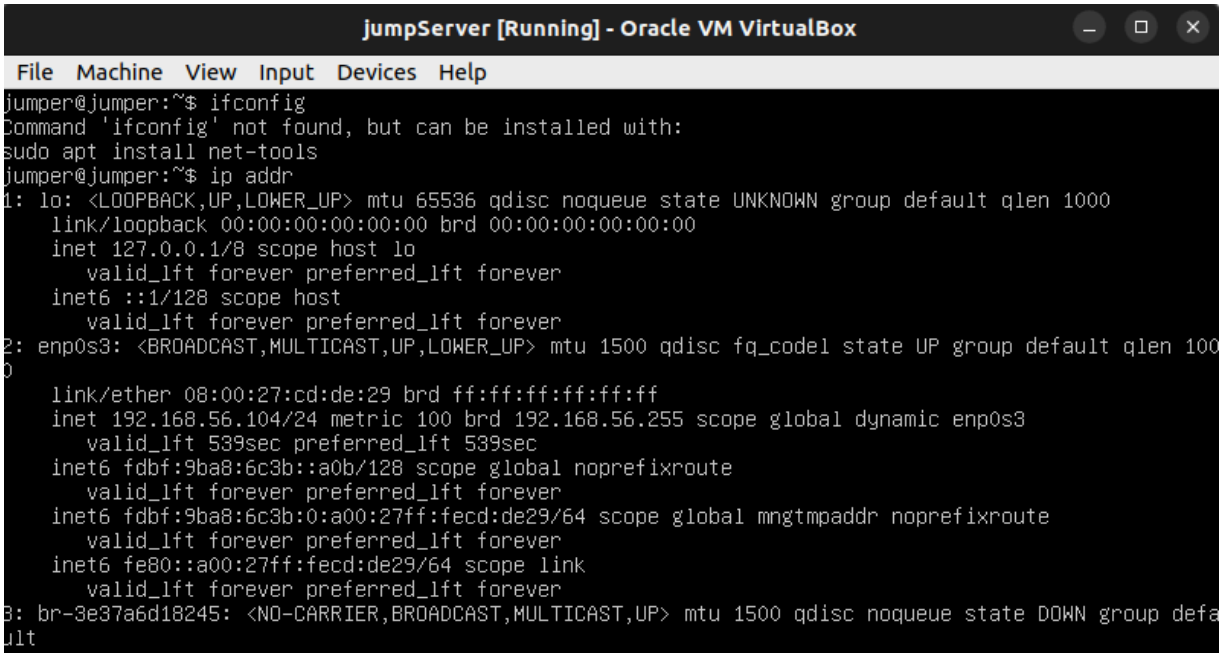
Lab 7: Jump Server

Test 1: Jump Server to Run Inside LAN

Summary of test experience:

In this test, we must run the Warpgate jump server inside LAN. After importing the vbox instance of Warpgate and configuring it to the host-only network, I could run the jump server inside LAN.

Screenshot of test results:



Provide a brief (1-2 sentences) explanation of the results answering the question: How does the image demonstrate that you completed the test?

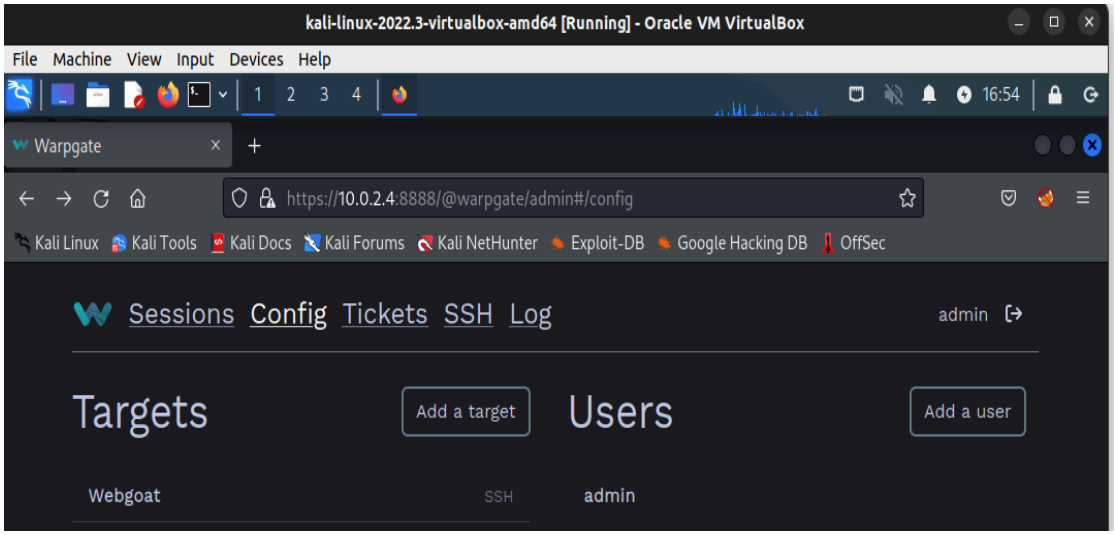
From the above image, we can see that the IP address of the jump server is 192.168.56.104/24, meaning it's running inside the LAN network.

Test 2: Web Server Accessible From the WAN

Summary of test experience:

Test 2 requires us to check if we can access the SSO server from the WAN, i.e., the Kali Linux browser. After I had started the dockerized version of the warpgate SSO service on the jump server, I got into the webpage of the warpgate SSO service. I configured a pseudo-SSO authentication from the WAN to the WebGoat server.

Screenshot of test results:



Provide a brief (1-2 sentences) explanation of the results answering the question: How does the image demonstrate that you completed the test?

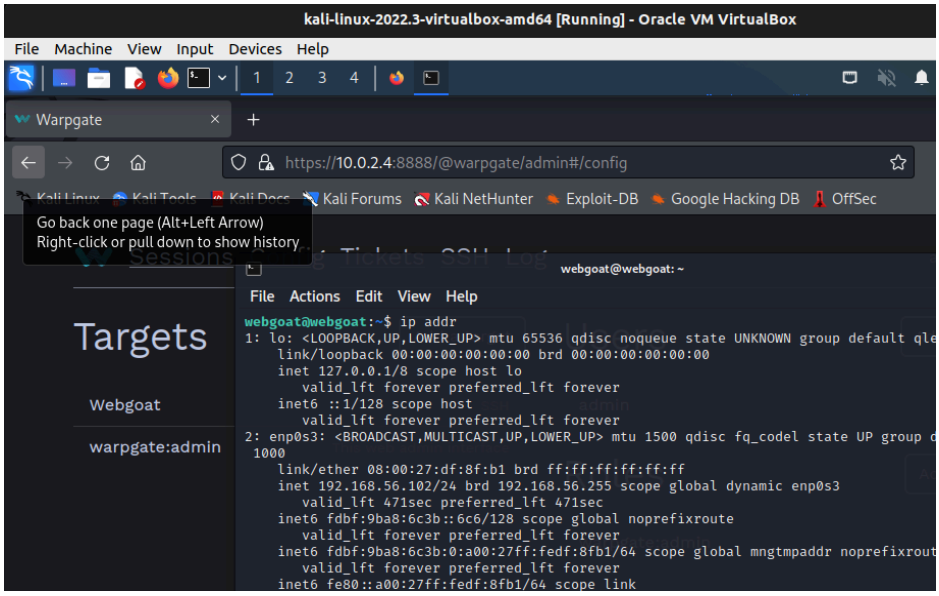
The above screenshot shows that the warpgate SSO web server is accessible from Kali Linux.

Test 3: SSH into the Web Server

Summary of test experience:

In this test, we must SSH into the WebGoat server from Kali Linux via warpgate SSO server. I already configured the pseudo-SSH authentication to the WebGoat server on the warpgate SSO server.

Screenshot of test results:



Provide a brief (1-2 sentences) explanation of the results answering the question: How does the image demonstrate that you completed the test?

The above image shows that a successful SSH connection to the WebGoat server has been made from Kali Linux, which runs inside WAN.