

Assignment 6 – iptables and pivoting

Submission:

When: Deadline according to Blackboard.
How: Summary upload to BB.
What: one PDF-file (max 2 page).
Team size: Teams of 2.

Points:

14 points

Description:

The goal for this assignment is to practice iptables as well as pivoting. Therefore, you will set up the following network in your containers.

Network: set up two servers (box1: www, box2: ssh) that are both on their own network 192.168.111.x/27 (--net flag for docker). Their settings (iptables) should be very restrictive and only **box3** (details later) needs to access them. In your report, describe / justify your settings.

Box3: set up a machine that has two network interfaces where one is in your regular network (the one you connect to via VPN) and a second interface that allows box 3 to connect to the two servers mentioned above. Test that you can get access to both machines. On the other hand, Box3 should also allow ssh login.

Kali (or similar): Now connect via VPN to the network and login in via ssh.

Discuss/demonstrate at least two possibilities on how to get access to the internal machines (pivoting). Of course, you cannot change network settings for box1 and box2.

Note: you can use static or dynamic IPs.

Note2: for the servers you can use existing servers that you have and simply change settings.

Grading (10points):

correct network setup (1):

content depth (9):

- explanation/justification of the settings box1/2 (3):
- discussion of the two pivoting ideas (4):
- comparison between the different pivoting ideas (2):

problem solved (2):

professionalism of report (2):

Good Luck!