

Configuring a VPN Server with pfSense (3e)

Network Security, Firewalls, and VPNs, Third Edition - Lab 08

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Time on Task:

11 hours, 24 minutes

Progress:

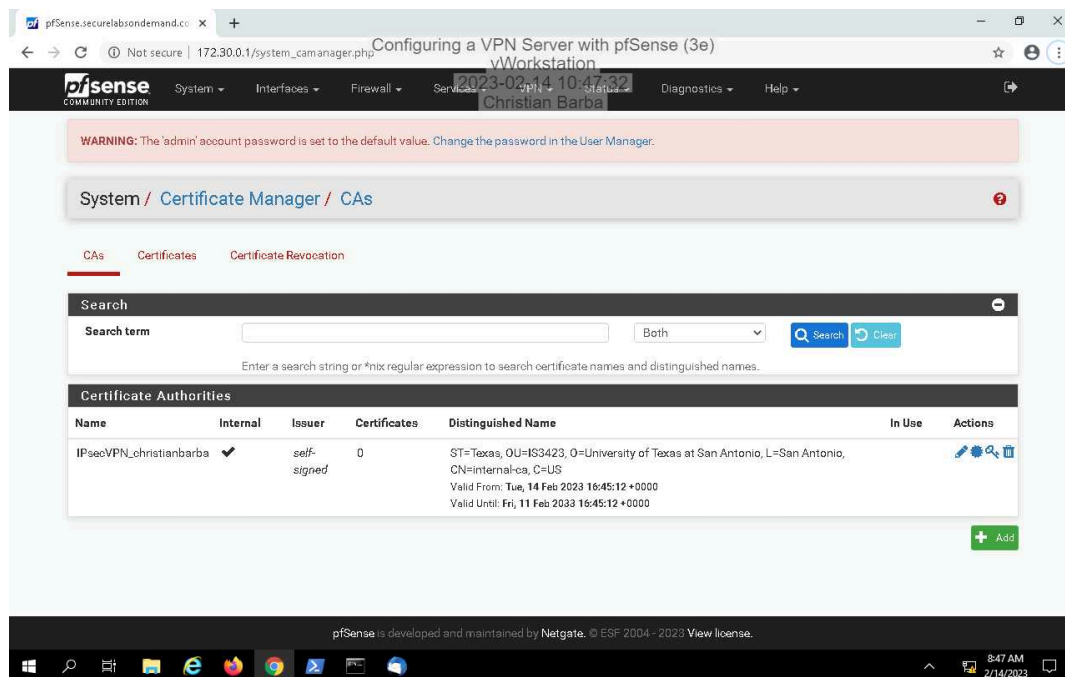
100%

Report Generated: Sunday, February 19, 2023 at 8:29 PM

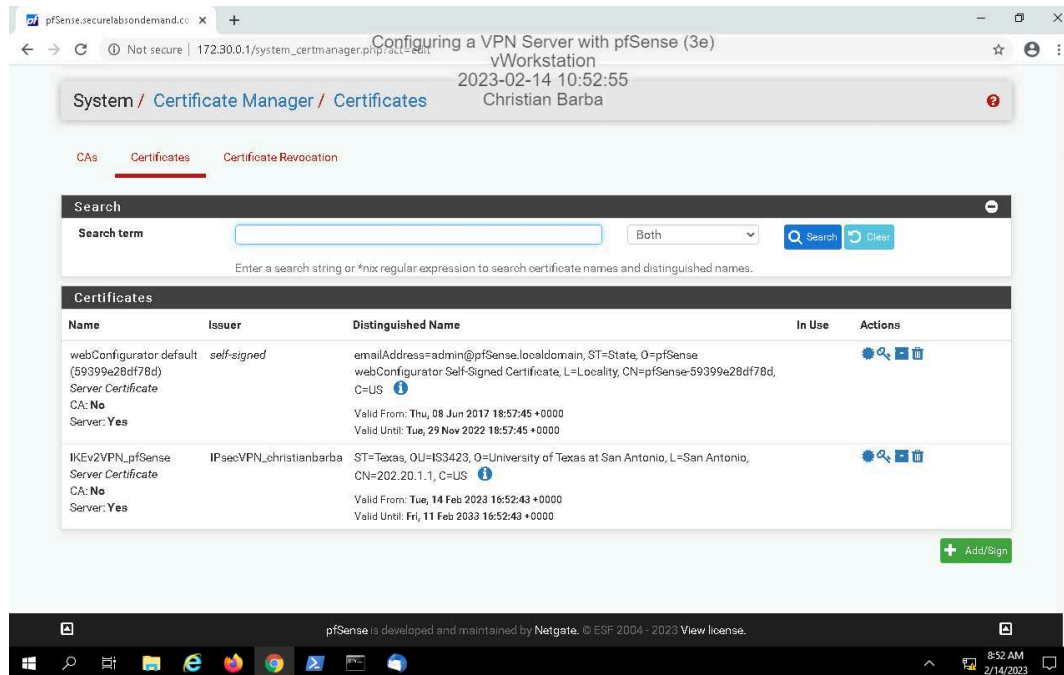
Section 1: Hands-On Demonstration

Part 1: Configure an IPsec VPN Server

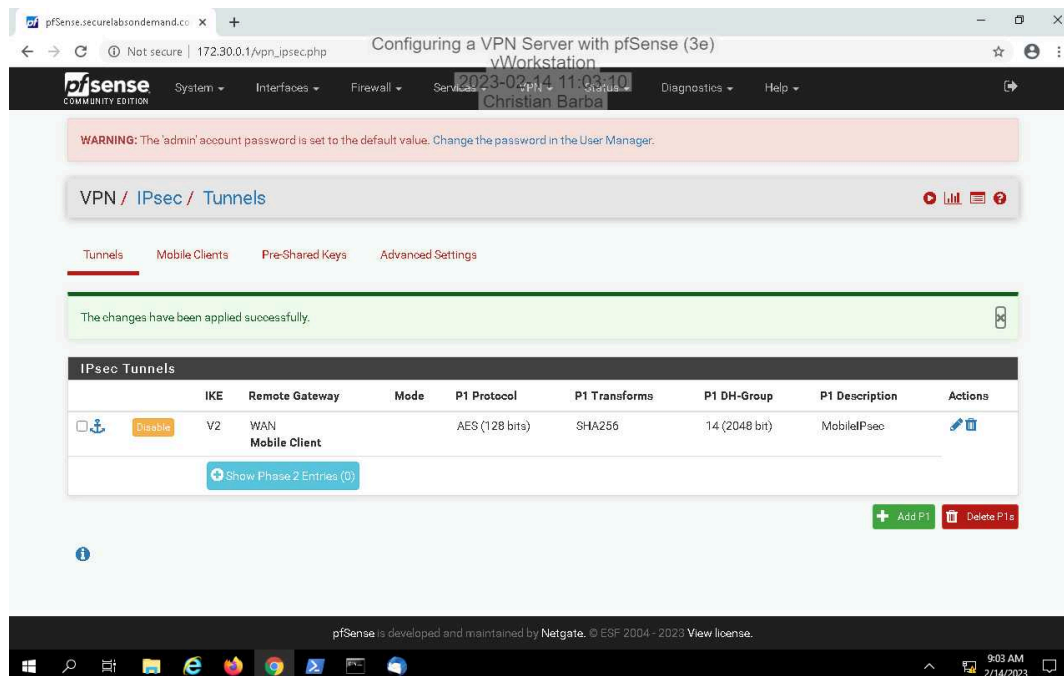
18. Make a screen capture showing the updated **Certificate Authorities** table.



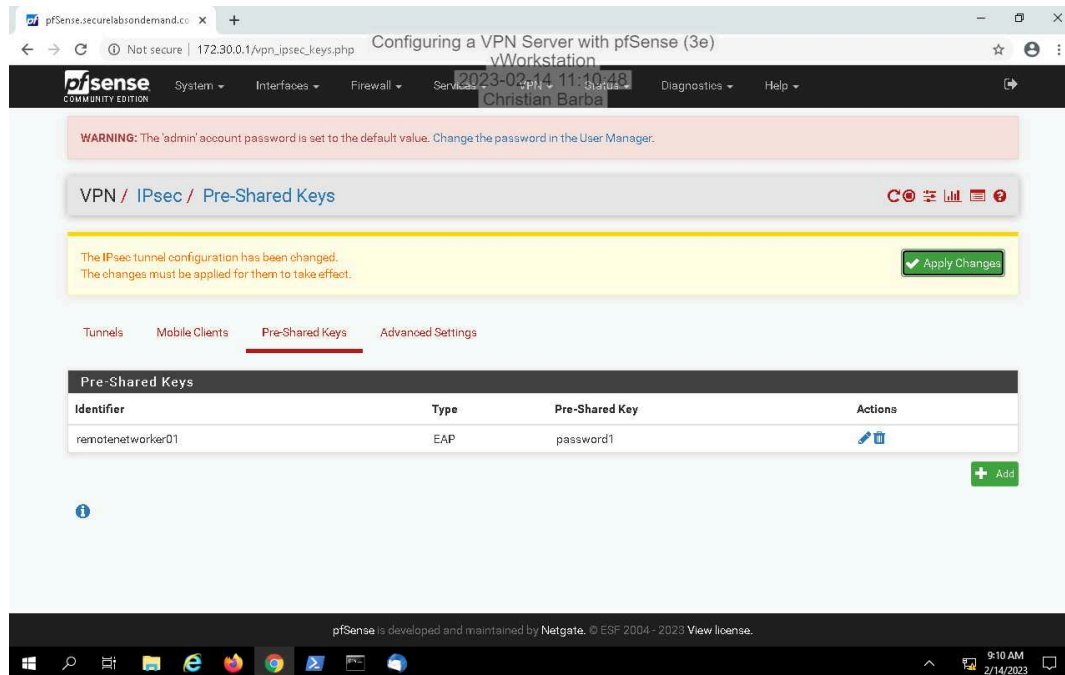
32. Make a screen capture showing the updated Certificates table.



56. Make a screen capture showing the updated IPsec Tunnels table.

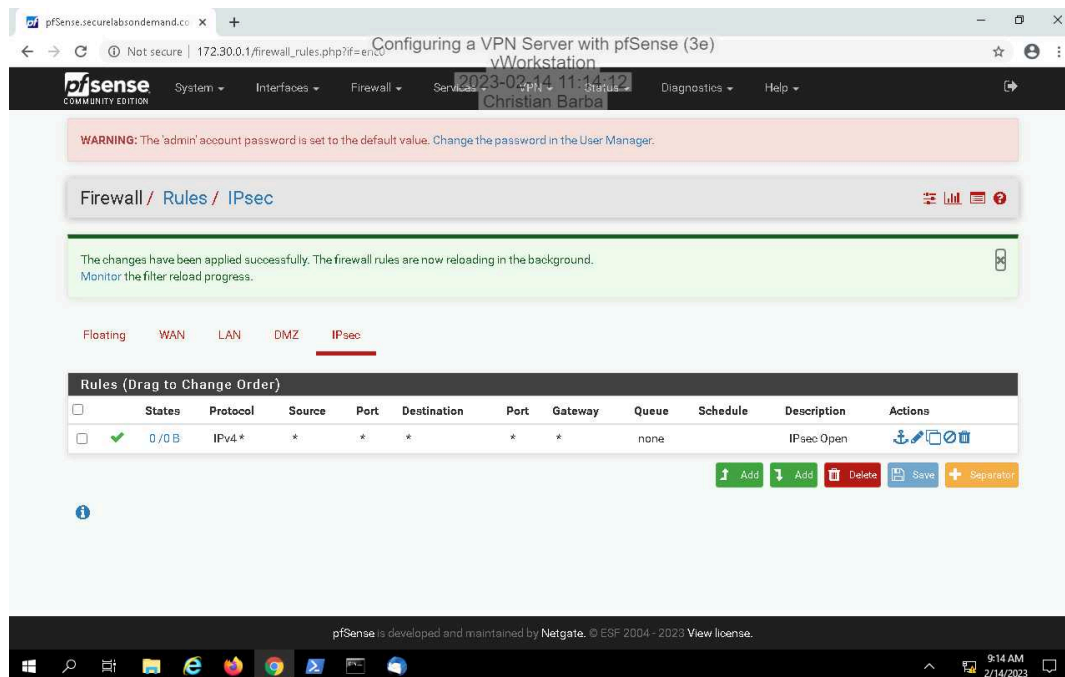


74. Make a screen capture showing the updated Pre-Shared Keys table.



Part 2: Configure a Firewall Rule for VPN Traffic

9. Make a screen capture showing the updated IPsec Rules table.



Section 2: Applied Learning

Part 1: Configure an OpenVPN VPN Server

13. Make a screen capture showing the **CA configuration form**.

The screenshot shows the 'Create a New Certificate Authority (CA) Certificate' step in the pfSense OpenVPN Remote Access Server Setup Wizard. The form includes the following fields and values:

- Descriptive name:** OpenVPN_CA_christianbarba
- Key length:** 2048 bit
- Lifetime:** 3650
- Country Code:** US
- State or Province:** Texas
- City:** San Antonio
- Organization:** The University of Texas at San Antonio

At the bottom of the form is a blue button labeled 'Add new CA'. The browser's address bar shows the URL '172.30.0.1/wizard.php?xml=openvpn-wizard.xml'.

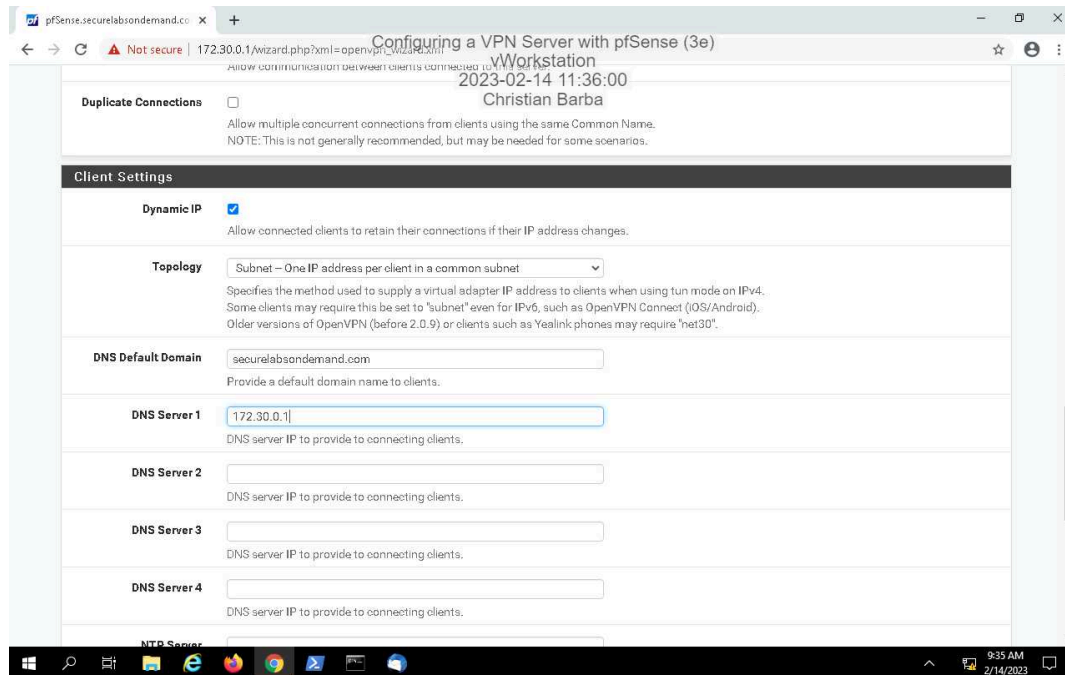
27. Make a screen capture showing the **Tunnel Settings** section.

The screenshot shows the 'Tunnel Settings' section of the pfSense OpenVPN Remote Access Server Setup Wizard. The settings are as follows:

- Tunnel Network:** 172.31.1.0/24
- Redirect Gateway:** ☐ (unchecked)
- Local Network:** 172.30.0.0/24
- Concurrent Connections:** 2
- Compression:** Omit Preference (Use OpenVPN Default)
- Type-of-Service:** ☐ (unchecked)
- Inter-Client Communication:** ☒ (checked)
- Duplicate Connections:** ☐ (unchecked)

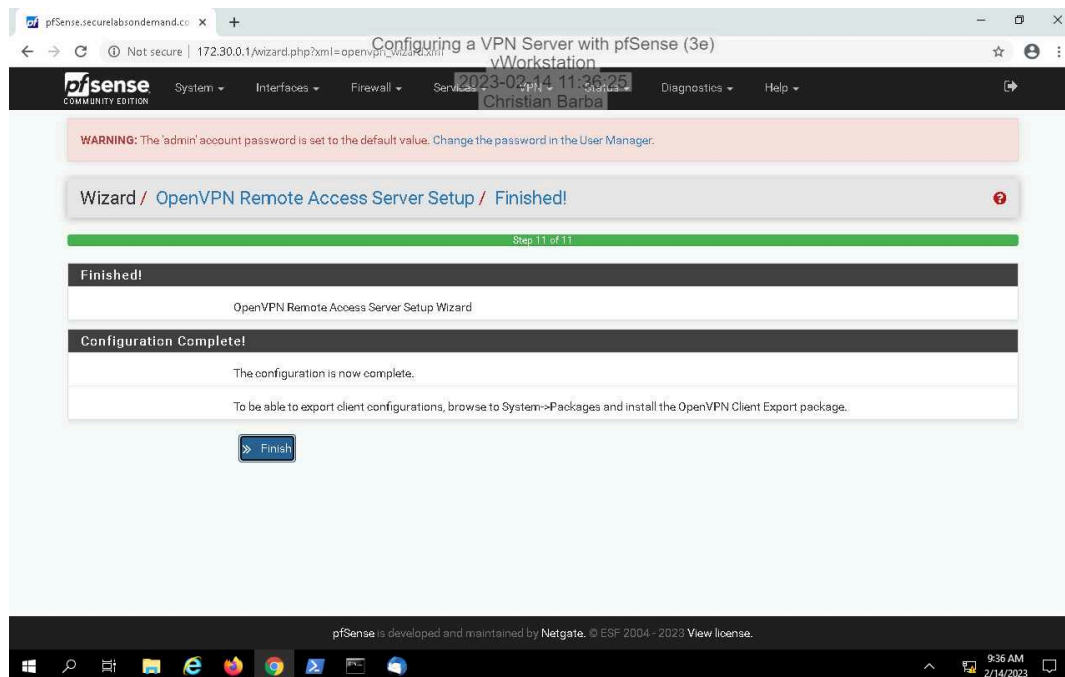
The 'Inter-Client Communication' checkbox is checked. The 'Duplicate Connections' checkbox is unchecked. The browser's address bar shows the URL '172.30.0.1/wizard.php?xml=openvpn-wizard.xml'.

30. Make a screen capture showing the **Client Settings** section.

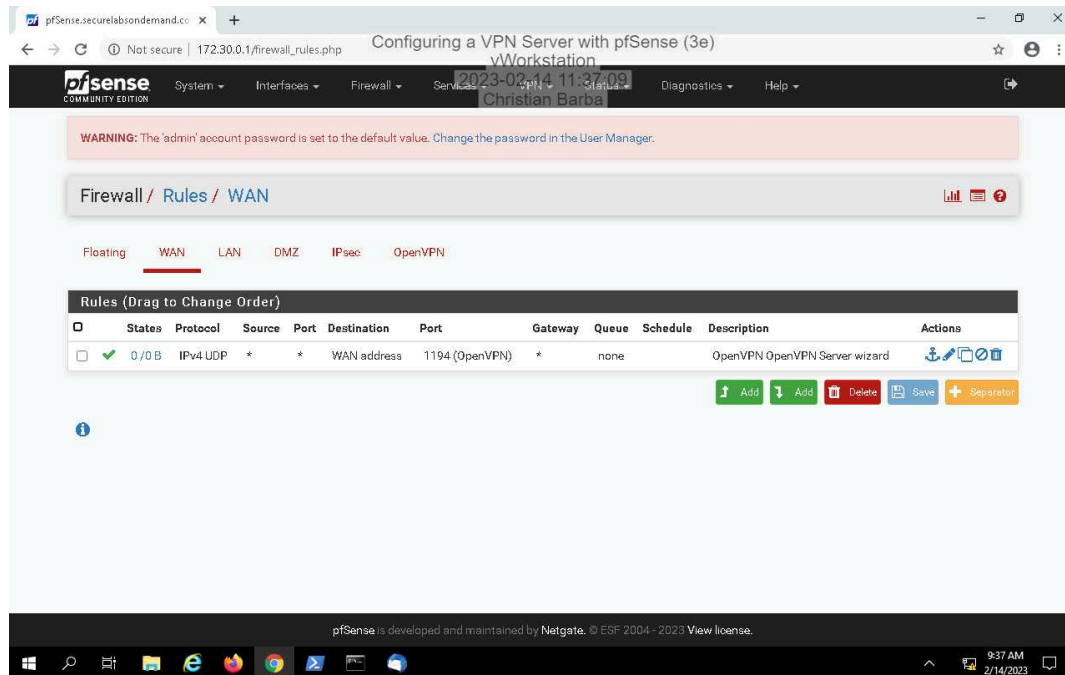


Part 2: Configure a Firewall Rule for VPN Traffic

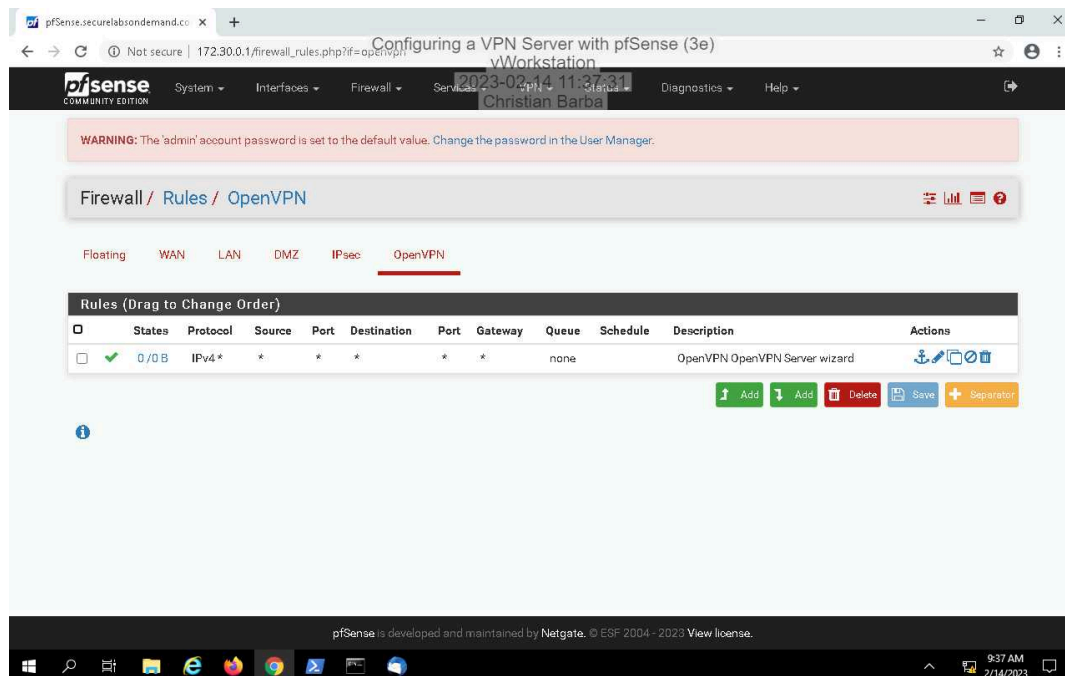
2. Make a screen capture showing the completed OpenVPN configuration.



5. Make a screen capture showing the OpenVPN rule on the WAN Rules table.



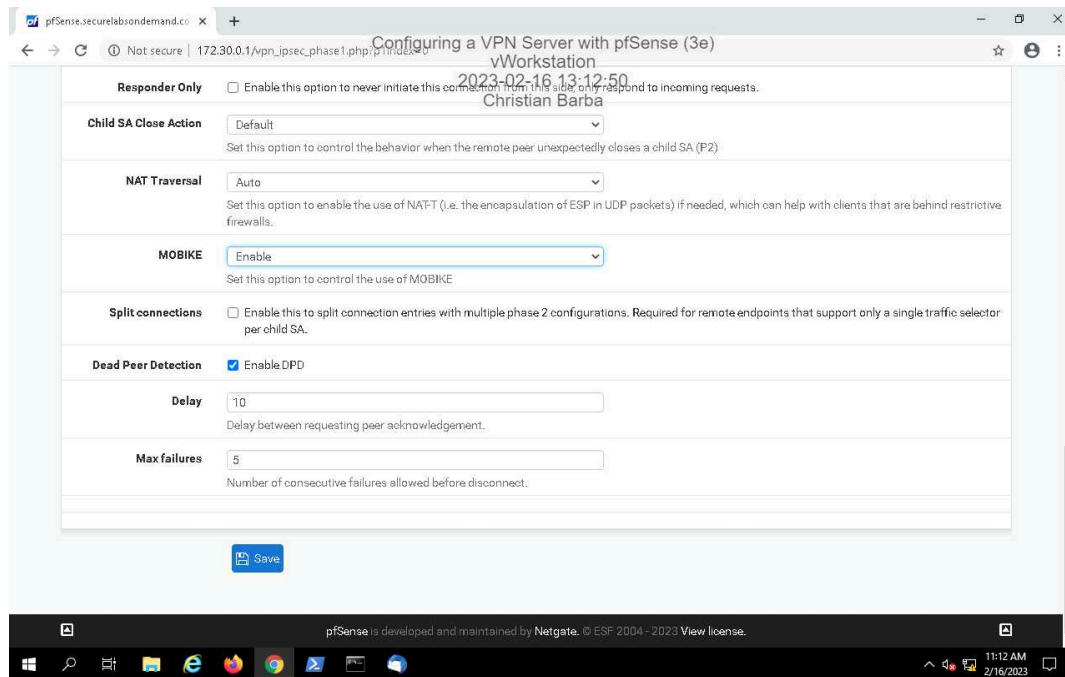
7. Make a screen capture showing the OpenVPN rule on the OpenVPN Rules table.



Section 3: Challenge and Analysis

Part 1: Enable IP Roaming for Remote VPN Clients

Make a screen capture showing the enabled **MOBIKE** option in the IPsec tunnel configuration.

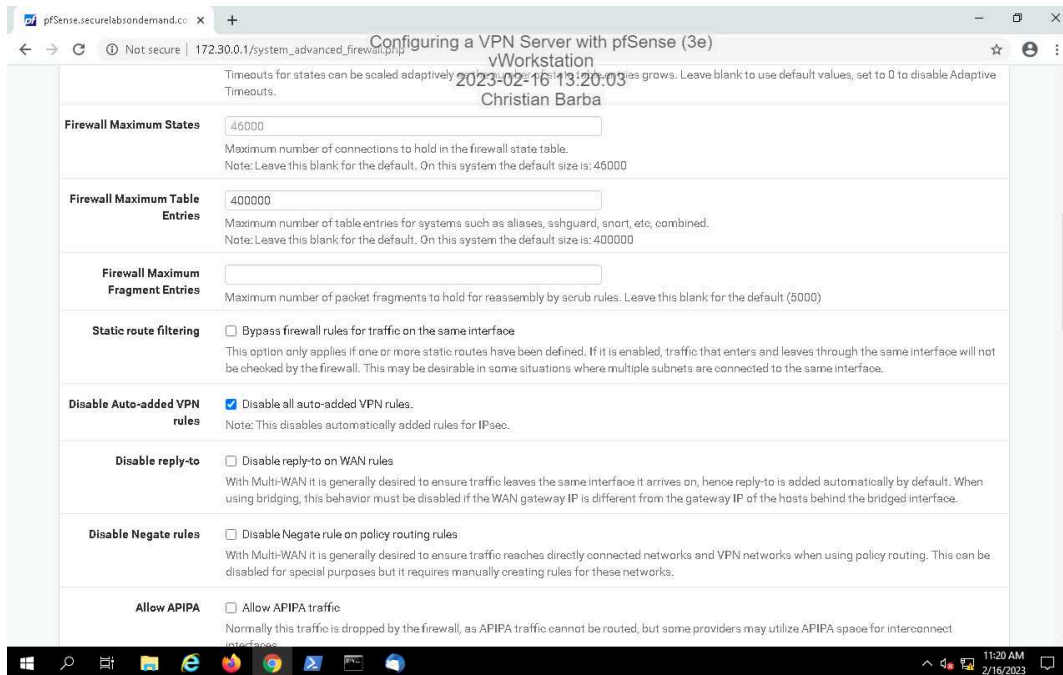


Part 2: Create Explicit Firewall Rules for an IPsec VPN

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Make a screen capture showing the **disabled automatic IPsec rule creation option**.



Make a screen capture showing your **firewall rules that permit IPsec traffic**.

