## Step 1: Create an Empty Proxmox VM

- 1. **Login to Proxmox**: Access the Proxmox web interface via your browser.
- 2. Create a New VM:
  - Navigate to "Create VM" in the top-right corner of the Proxmox interface.
  - In the General tab:
    - Give the VM a name (e.g., "EmptyVM").
  - o In the **OS** tab:
    - Do not select an ISO image.
  - In the Hard Disk tab:
    - Uncheck "Add Storage" or select Do not use any disk.
  - o Configure the rest of the VM settings as required (CPU, Memory, etc.).
  - Complete the wizard to create the VM.
- 3. Note the VM ID:
  - Once created, note the VM ID (e.g., 134).
- 4. Remove Associated Disks (if any):
  - Go to VM > Hardware > Hard Disk.
  - o If there is an existing disk, select it and click **Remove**.

## Step 2: Transfer the OVA File to the Proxmox Server

- 1. Open a terminal on your local machine.
- 2. Use scp to transfer the .ova file to the Proxmox server: scp /path/to/your/file.ova root@192.168.7.221:/root
- 3. Enter the **root password** for the Proxmox server when prompted.

## **Step 3: Extract the OVA File**

SSH into the Proxmox server: ssh root@192.168.7.221

- 1. Navigate to the directory where the OVA file was transferred (e.g., /root).
- Extract the .ova file using the tar command: tar -xvf filename.ova

3.

- Replace filename.ova with the actual name of your file.
- This should extract multiple files, including a .vmdk file (e.g., PA-VM-ESX-11.1.4-disk1.vmdk).

## Step 4: Import the Disk into the Proxmox VM

- Run the qm importdisk command to import the .vmdk file: qm importdisk 134 PA-VM-ESX-11.1.4-disk1.vmdk local-lvm -format qcow2
  - Replace 134 with the VM ID of the empty VM you created.
  - Replace PA-VM-ESX-11.1.4-disk1.vmdk with the actual .vmdk filename.

- local-lvm is the storage pool where the disk will be imported. Adjust it if necessary.
- 2. Wait for the process to complete. It will convert and attach the .vmdk to the VM.

## **Step 5: Verify and Attach the Disk**

- 1. Go to the Proxmox web interface.
- 2. Navigate to **VM > Hardware**.
- 3. You should see the imported disk listed under the hardware options.
- 4. If it is not automatically attached, you can manually attach it:
  - Click Add > Hard Disk.
  - Select the disk you just imported.

## **Step 6: Configure the Boot Order**

- 1. Go to **VM > Options**.
- 2. Edit the **Boot Order**:
  - o Set the imported disk as the first boot device.
  - Remove or lower the priority of the **CD-ROM drive**.
- 3. Save the changes.

## Step 7: Start the VM

- 1. Go back to the **Summary** tab.
- 2. Click Start to boot the VM.

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#### PALO ALTO SETUP

# **Step 1: Attach Network Interfaces**

- 1. Attach the Network Interfaces in Proxmox:
  - Go to VM > Hardware > Add > Network Device.
  - Add the network interfaces in the following order:
    - 1. Management Interface:
      - Bridge: Assign a bridge to connect the management interface to your Proxmox management network.
    - 2. WAN Interface:
      - Bridge: Assign a bridge that connects to the WAN network or internet.
    - 3. **DMZ Interface**:
      - Bridge: Assign a bridge for the DMZ network.
    - 4. LAN Interface:

- Bridge: Assign a bridge for the LAN network.
- Configure these bridges in Proxmox to map to your physical or virtual networks as necessary.

	Memory	7.88 GiB
٠	Processors	4 (1 sockets, 4 cores) [x86-64-v2-AES]
	BIOS	Default (SeaBIOS)
	Display	Default
00	Machine	Default (i440fx)
	SCSI Controller	VirtIO SCSI single
0	CD/DVD Drive (ide2)	none,media=cdrom
	Hard Disk (scsi0)	local-lvm:vm-135-disk-0,discard=on,iothread=1,size=60G,ssd=1
⇄	Network Device (net0)	virtio=BC:24:11:53:B6:98,bridge=vmbr0
⇄	Network Device (net1)	virtio=BC:24:11:EE:69:1E,bridge=vmbr0
⇄	Network Device (net2)	virtio=BC:24:11:DE:D8:F8,bridge=PADMZ
⇄	Network Device (net3)	virtio=BC:24:11:DC:24:C2,bridge=PALAN

## Step 2: Start the VM and Check Boot Menu

- 1. Power On the VM:
  - Go to VM > Summary and click Start.
- 2. Monitor the Boot Process:
  - Open the Console tab in Proxmox to monitor the VM boot process.
  - When the Palo Alto Boot Menu appears, pay attention to the Management GUI
    IP Address displayed during the boot process.
  - Scribble it down, as it will be required to access the web interface.

## Step 3: Log In to the VM

- 1. Wait for the Login Prompt:
  - The first prompt you will see is PA-HDF login. Ignore this.
  - Wait until it changes to PA-VM login.
- 2. Log in to Palo Alto VM:
  - Enter the default credentials:

■ Username: admin

■ Password: admin.

- 3. Change the Default Password:
  - o The VM will prompt you to set a new password for the admin user.
  - Follow the prompts to set a secure password.

## **Step 4: Retrieve Management IP Address (If Missed)**

#### 1. Log In to the Console:

- If you missed the IP address during the boot process, you can retrieve it using the CLI.
- o At the prompt, type the following command: show interface management
- The output will display the management interface details, including the assigned IP address.

## **Step 5: Access the Palo Alto Web Interface**

- 1. Open a Browser:
  - o On a machine connected to the management network, open a web browser.
- 2. Access the GUI: Enter the URL in the format: https://<management-ip-address>
  - Replace <management-ip-address> with the IP address you retrieved or noted earlier.
- 3. Log In to the Web Interface:
  - Use the default credentials (if not changed):
    - Username: admin
    - Password: admin (or the new password you set).
  - You can now configure the Palo Alto firewall through its GUI.