UPAS Virtual Appliance OVF Deployment and Initialization Guide

1. Introduction

This document guides users through the process of deploying the UPAS OVF (Open Virtualization Format) template into a VMware vSphere/ESXi environment and performing the necessary initial system configuration after the first boot.

Configuration Goals:

1. **Successfully import the OVF file into VMware vSphere/ESXi.**
2. **Enable the SSH service and allow remote login for the root account.**
3. **Set a static IP address for the virtual machine using the built-in UPAS shortcut command.**

Default Login Credentials:

- **Account: root**
- **Password: !Qaz@Wsx1234**

Shortcut Command:

- **Network Configuration Script: !pe**

2. OVF Deployment Guide (for VMware vSphere Client)

1. **Log in to vSphere Client: Log in to the VMware vSphere Client with your administrator account.**
2. **Select a Host or Cluster: In the left-hand navigation panel, right-click on the ESXi host or cluster where you want to deploy the VM.**
3. **Select "Deploy OVF Template": From the context menu, choose "Deploy OVF Template".**
4. **Select an OVF file:**
    - **Choose "Local file", then click "UPLOAD FILES".**

    - Select your UPAS OVF file (.ova) and click "NEXT".
5. Specify Name and Location:
    - Enter a Virtual machine name.
    - Choose a datacenter or folder for the deployment location and click "NEXT".
6. Select a Compute Resource:
    - Select the ESXi host or cluster to run the VM.
    - After the compatibility check succeeds, click "NEXT".
7. Review Details: Verify the OVF template details and click "NEXT".
8. Select Storage:
    - Choose a datastore for the virtual machine's disk files.
    - It is recommended to select "Thin Provision" for the disk format to save storage space.
    - Click "NEXT".
9. Select Networks:
    - Select a destination VM Network for the virtual machine's network adapter.
    - Click "NEXT".
10. Finish Deployment:
    - Review the configuration summary.
    - Click "FINISH" to begin the deployment.

3. Virtual Machine Initial Setup

Step 1: Log in via VMware Console

1. Once deployment is complete, locate the new UPAS VM in the vSphere Client and Power On it.
2. Open the Web Console for the VM.
3. Wait for the system to boot up and display the login prompt.
4. Log in with the default credentials:
    - Login: root
    - Password: !Qaz@Wsx1234

Step 2: Enable SSH and Permit Root Login (Ubuntu 24.04)

1. **Edit the SSH configuration file:**
   vi /etc/ssh/sshd_config

2. **Modify the configuration:**
   - **Press i to enter Insert Mode.**
   - **Find the line #PermitRootLogin prohibit-password.**
   - **Change it to PermitRootLogin yes (ensure you remove the # at the beginning of the line).**
3. **Save and exit:**
   - **Press the Esc key to exit Insert Mode.**
   - **Type :wq and press Enter.**
4. **Restart the SSH service:**
   systemctl restart sshd

Step 3: Set Static IP using the UPAS Shortcut Command

1. **Run the network configuration script:**
   In the command line, type the UPAS shortcut command !pe and press Enter.
   !pe

   (Note: This is a shortcut alias for perl /usr/UPAS/upasnetwork-ubuntu.pl)

```
root@UPAS-SENSOR-UB:~# perl /usr/UPAS/upasnetwork-ubuntu.pl
------------------------------------------------
[UPAS NIC Setting Tool 2024/2/6(Running on Ubuntu)]
(1)Add a Single NIC
(2)Add a Trunk NIC
(3)Show a NIC Config
(4)Restart Network
(5)Show NIC(ip command)
(6)Restart UPAS(include Nginx)
(7)Restart Nginx
(8)Stop UPAS or Nginx
(9)Delete a NIC config file
(10)Modify Hostname
(11)Collector Or Gatherer Mode
Option: 1,2,3,4,5,6,7,8,9,10,11? Others will quit.
1
Enter NIC Device Name(eg. eth0)
eth1
Enter IPv4 address:
192.168.101.236
Enter IPv4 Netmask:
255.255.255.0
Enter IPv4 gateway address:
192.168.101.254
Enable IPv6 manual setting?(y/n)
n
------------------------------------------------
network:
  version: 2
  ethernets:
    eth1:
      dhcp4: no
      addresses:
        - 192.168.101.236/24
      routes:
        - to: default
          via: 192.168.101.254
------------------------------------------------
Confirm eth1 config content, Save File?(y/n)
------------------------------------------------
```

2. **Select "Add a Single NIC":**

   From the script menu, type 1 and press Enter.

3. **Enter NIC Device Name:**
   - **At the Enter NIC Device Name prompt, type your network interface name (e.g., eth0 or eth1) and press Enter.**
4. **Enter IP Information:**

   Follow the prompts to enter your network details:
   - **IPv4 address: (Your planned static IP)**

- **IPv4 Netmask: (Your planned subnet mask)**
- **IPv4 Gateway address: (Your planned gateway)**

5. **IPv6 Configuration:**
   - **At the Enable IPv6 manual setting?(y/n) prompt, type n and press Enter if you do not need IPv6.**
6. **Confirm and Save Settings:**
   - **The script will display a preview of the configuration file to be saved.**
   - **Carefully review all the information to ensure it is correct.**
   - **At the Confirm ... config content, Save File?(y/n) prompt, type y and press Enter to save and apply the settings.**

Step 4: Verify Network Configuration

1. **Check the IP address:**
   ip addr show

   Confirm that your network interface has been assigned the static IP you configured.
2. **Test connectivity:**
   ping -c 4 8.8.8.8

   A successful response indicates that your network configuration is complete and has internet access.

4. Summary

You have now successfully completed the deployment and initial setup of the UPAS OVF. The virtual machine is now accessible remotely via SSH using the root account and the new static IP address.