

Azure VM to AWS Ec2 SOP Migration

PHASE 2: IN-Detailed troubleshooting for (1/2) Instance check

1. Install AWS Linux Kernel on the source server. (This to be done in PHASE-1 , as it will replicate)

```
$ apt install linux-aws
```

2. De-attach the root volume of newly launched instance (test/cutover) and attach it to rescue instance as

```
/dev/sdf
```

3. SSH into a Rescue/Helper instance.

```
$ sudo su
```

```
# mkdir /rescue
# mount /dev/xvdf1 /rescue
# mount -o bind /proc /rescue/proc
# mount -o bind /dev /rescue/dev
# mount -o bind /sys /rescue/sys
# chroot /rescue
```

MAIN STEP

4. Once we change the root directory, we edited the /boot/grub/grub.cfg file and removed the entries related to azure kernel.

- a. In **menuentry** block remove the {block} with AZURE kernel entry.
- b. In **submenu** block remove the {block1} with AZURE kernel entry and {block2} with AZURE kernel (recovery mode).
- c. From the **submenu** copy the block with AWS kernel from "recordfail" to "initrdfail" and paste it in menuentry.

In order to edit this file, kindly download the **grub.cfg** file from instance to local system using **scp command**.

```
scp -i "testkey.pem" grub.cfg ubuntu@3.110.197.156:/rescue/boot/grub/
```

Once file is downloaded, open the file with text editor.

Step 1. Move to line 150 : menuentry and delete the block for Azure kernel.

Step 2. Move to submenu in next line and delete the block for Azure kernel and Azure kernel (recovery mode).

Step 3. After removing above 3 blocks, you are left with AWS kernel entry block.

Step 4. Copy the menuentry block for AWS kernel from "recordfail" to "initrdfail" and paste it on line 150.

****Note: keep the check on staring "{" and ending "}" of curly braces and indentation in blocks.****

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5. Network config

We edit the **/etc/netplan** directory and **remove all other files** present in directory except: **50-cloud-init.yaml**

```
# vim 50-cloud-init.yaml
-----
network:
  ethernets:
    eth0:
      dhcp4: true
      dhcp6: false
      match:
        macaddress: 02:11:7a:89:9d:8e
      set-name: eth0
  version: 2
-----
```

Save the file.

Note: Get The MAC-Address from the NetWork Interface:of Ec2

Save the file.

6. Remove the **udev rules** at /etc/udev/rules.d directory i.e. we remove all files within the **rules.d directory**.

7. Check /etc/fstab file and **comment out(add comment)** the entry

#/dev/disk/cloud/azure_resource-part1 and save file.

8. **cd /etc/systemd/system/multi-user.target.wants/** and remove the below entries:

```
1 - hv-fcopy-daemon.service
2 - hv-vss-daemon.service
3 - hv-kvp-daemon.service
4 - ephemeral-disk-warning.service
5 - walinuxagent.service
```

```
like rm -rf hv-fcopy-daemon.service
```

9.remove azure user from the system.

```
userdel -r azureuser
```

10.Run below command to update permission for ubuntu user.

```
# chown root:root /home
# chmod 755 /home
# chown ubuntu:ubuntu /home/ubuntu -R
```

```
# chmod 700 /home/ubuntu
# chmod 700 /home/ubuntu/.ssh
# chmod 600 /home/ubuntu/.ssh/authorized_keys
```

****Note :** `cat /home/ubuntu/.ssh/authorized_keys` and confirm the public key is there in file.

11. Enter the command for detaching the volume , first exit & unmount partition

```
# exit
# umount /rescue/{proc,sys,dev}
# umount /rescue
```

12. Reattach volume back to impaired instance and start the instance and see if you are able to access the instance from terminal.

13.SSH into Migrated Instance

We are good to go with the Server