

Create an Azure Virtual machine in France central using of Ubuntu image and attach a data disk with VM. disk size should be 8Gb

Create a virtual machine on azure dashboard

Home >

Virtual machines

Default Directory

+ Create Switch to classic Reservations Manage view Refresh Export to CSV Open query Assign tags Start Restart Stop

Filter for any field... Subscription equals all Type equals all Resource group equals all Location equals all Add filter

Showing 1 to 1 of 1 records.

No grouping List view

Name	Subscription	Resource group	Location	Status	Operating system	Size	Public IP address
VM1	Pay-As-You-Go	VOL_VPC	France Central	Running	Linux	Standard_D2s_v3	20.199.17.128

Create a virtual network

Home >

Virtual networks

Default Directory

+ Create Manage view Refresh Export to CSV Open query Assign tags

Filter for any field... Subscription equals all Resource group equals all Location equals all Add filter

Showing 1 to 12 of 12 records.

No grouping List view

Name	Resource group	Location	Subscription
aks-vnet-18663747	MC_Vnewnet_cluster_francecentral	Japan East	Pay-As-You-Go
aks-vnet-22638277	MC_VPC01_cluster1_japaneast	Japan East	Pay-As-You-Go
VCOD1-vnet	COD1	France Central	Pay-As-You-Go
Virtualnetwork	VPC01	France Central	Pay-As-You-Go
VM1	VOL_VPC	France Central	Pay-As-You-Go

Create one public and private subnet inside the VPC

Home > Virtual networks > VM1

VM1 | Subnets

Virtual network

Search + Subnet + Gateway subnet Refresh Manage users Delete

Overview Activity log Access control (IAM) Tags Diagnose and solve problems Settings Address space

Search subnets

Name	IPv4	IPv6	Available IPs	Delegated to	Security group	Route table
default	10.0.0.0/24	-	251	-	-	-
public_subnet	10.0.1.0/24	-	250	-	-	-
private_subnet	10.0.2.0/24	-	251	-	-	-

Connect the instance to the terminal

```
PS C:\Users\10748211\Downloads> ssh -i VM1_key.pem azureuser@20.199.17.128
Welcome to Ubuntu 24.04.1 LTS (GNU/Linux 6.8.0-1015-azure x86_64)
```

```
* Documentation:  https://help.ubuntu.com
* Management:    https://landscape.canonical.com
* Support:        https://ubuntu.com/pro
```

System information as of Tue Oct 1 14:19:35 UTC 2024

```
System load:  0.05          Processes:            133
Usage of /:   5.0% of 28.02GB Users logged in:          0
Memory usage: 4%           IPv4 address for eth0: 10.0.1.4
Swap usage:   0%
```

```
azureuser@VM1:~$ sudo su -
```

```
root@VM1:~# lsblk
```

NAME	MAJ:MIN	RM	SIZE	RO	TYPE	MOUNTPOINTS
sda	8:0	0	30G	0	disk	
├─sda1	8:1	0	29G	0	part	/
├─sda14	8:14	0	4M	0	part	
├─sda15	8:15	0	106M	0	part	/boot/efi
└─sda16	259:0	0	913M	0	part	/boot
sdb	8:16	0	16G	0	disk	
└─sdb1	8:17	0	16G	0	part	/mnt
sdcc	8:32	0	8G	0	disk	
sr0	11:0	1	628K	0	rom	

```
root@VM1:~# mkfs.
```

```
mkfs.bfs      mkfs.cramfs  mkfs.ext3     mkfs.fat      mkfs.msdos   mkfs.vfat
mkfs.btrfs    mkfs.ext2    mkfs.ext4     mkfs.minix    mkfs.ntfs    mkfs.xfs
```

```
root@VM1:~# mkfs.ext4 /dev/sdc
```

```
mke2fs 1.47.0 (5-Feb-2023)
```

```
Discarding device blocks: done
```

```
Creating filesystem with 2097152 4k blocks and 524288 inodes
```

```
Filesystem UUID: 972611bf-81b4-4c79-8abf-b6e3fd4c7ef7
```

```
root@VM1:~# mkdir /data
```

```
root@VM1:~# mount /dev/sdc /data
```

```
root@VM1:~# blkid
```

```
/dev/sdb1: UUID="1c584646-4f45-4f7e-af93-992f31ea9c66" BLOCK_SIZE="4096" TYPE="ext4" PARTUUID="30ac91c6-01"
/dev/sda16: LABEL="BOOT" UUID="28b8c8ec-d86d-4cd8-b218-afaecbf2dd6f" BLOCK_SIZE="4096" TYPE="ext4" PARTUUID="734d5011-006f-4623-ad93-a2ac18a7e79e"
/dev/sda15: LABEL_FATBOOT="UEFI" LABEL="UEFI" UUID="D5E6-8187" BLOCK_SIZE="512" TYPE="vfat" PARTUUID="7dbd2c4b-8ff3-4c6f-bc2f-5f8a9cbaed32"
/dev/sda1: LABEL="cloudimg-rootfs" UUID="bf171e20-4158-4861-8c95-1443ece8c413" BLOCK_SIZE="4096" TYPE="ext4" PARTUUID="1a6a002b-5407-43ed-a20a-67c0e584807b"
/dev/sdc: UUID="972611bf-81b4-4c79-8abf-b6e3fd4c7ef7" BLOCK_SIZE="4096" TYPE="ext4"
/dev/sda14: PARTUUID="d5673fda-51ba-48ab-bafc-85c163d56c7b"
```

```
root@VM1:~# vim /etc/fstab
```

```
root@VM1: /data
# CLOUD_IMG: This file was created/modified by the Cloud Image build process
UUID=bf171e20-4158-4861-8c95-1443ece8c413 / ext4 discard,commit=30,errors=remount-ro 0 1
LABEL=BOOT /boot ext4 defaults,discard 0 2
UUID=D5E6-8187 /boot/efi vfat umask=0077 0 1
/dev/disk/cloud/azure_resource-part1 /mnt auto defaults,nofail,x-systemd.after=cloud-init.service,_netdev,comment=cloudconfig 0 2
UUID=972611bf-81b4-4c79-8abf-b6e3fd4c7ef7 /data ext4 defaults 0 0
~
~
~
```

```

root@VM1:~# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/root        29G   1.5G   27G   6% /
tmpfs            3.9G     0   3.9G   0% /dev/shm
tmpfs            1.6G 1008K   1.6G   1% /run
tmpfs            5.0M     0   5.0M   0% /run/lock
efivarfs         128K   35K   89K  29% /sys/firmware/efi/efivars
/dev/sda16       881M   59M  761M   8% /boot
/dev/sda15       105M   6.1M   99M   6% /boot/efi
/dev/sdb1         16G   28K   15G   1% /mnt
tmpfs            789M   12K  789M   1% /run/user/1000
/dev/sdc         7.8G   24K   7.4G   1% /data

```

```

root@VM1:~# cd /data
root@VM1:/data# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/root        29G   1.5G   27G   6% /
tmpfs            3.9G     0   3.9G   0% /dev/shm
tmpfs            1.6G 1008K   1.6G   1% /run
tmpfs            5.0M     0   5.0M   0% /run/lock
efivarfs         128K   35K   89K  29% /sys/firmware/efi/efivars
/dev/sda16       881M   59M  761M   8% /boot
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tmpfs            789M   12K  789M   1% /run/user/1000
/dev/sdc         7.8G   24K   7.4G   1% /data

```

```

root@VM1:/data# touch mahek.txt
root@VM1:/data# mount -a
root@VM1:/data#

```

We will now reboot the instance and reconnect it.

```

PS C:\Users\10748211\Downloads> ssh -i VM1_key.pem azureuser@20.199.17.128
Welcome to Ubuntu 24.04.1 LTS (GNU/Linux 6.8.0-1015-azure x86_64)

```

```

azureuser@VM1:~$ sudo su -
root@VM1:~# cd /data
root@VM1:/data# ls
lost+found mahek.txt
root@VM1:/data# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/root        29G   1.5G   27G   6% /
tmpfs            3.9G     0   3.9G   0% /dev/shm
tmpfs            1.6G 1016K   1.6G   1% /run
tmpfs            5.0M     0   5.0M   0% /run/lock
efivarfs         128K   35K   89K  29% /sys/firmware/efi/efivars
/dev/sdc         7.8G   24K   7.4G   1% /data
/dev/sda16       881M   59M  761M   8% /boot
/dev/sda15       105M   6.1M   99M   6% /boot/efi
/dev/sdb1         16G   28K   15G   1% /mnt
tmpfs            789M   12K  789M   1% /run/user/1000

```