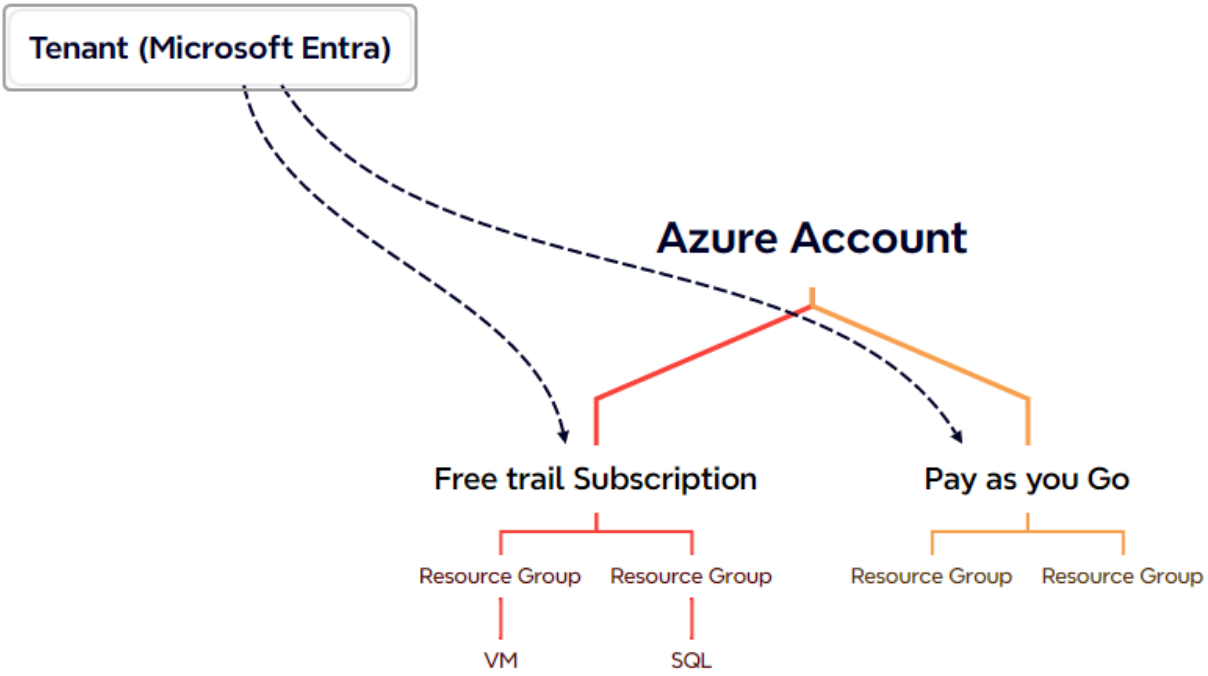
Azure VM Creation (W.r.t disks)

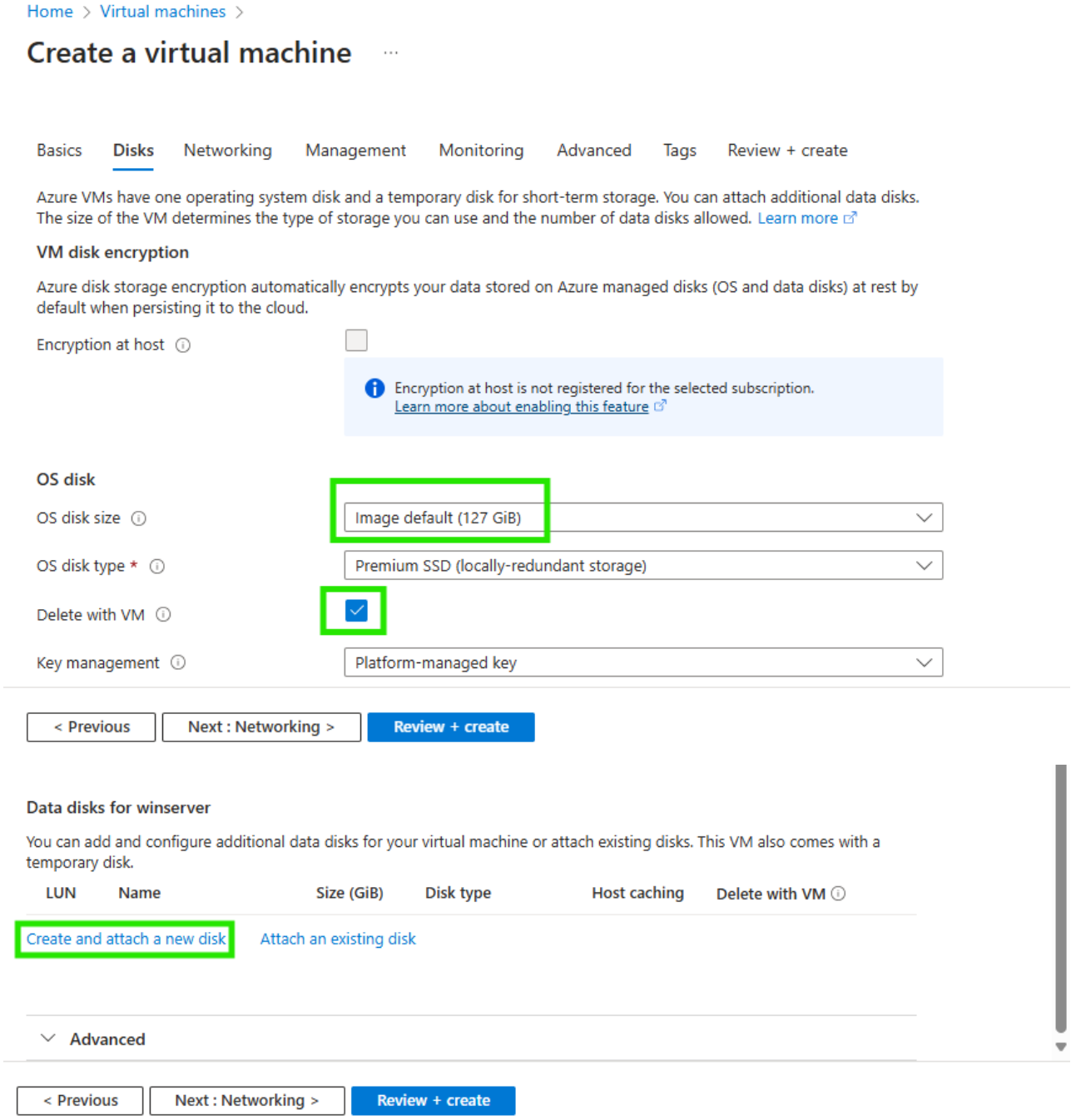
Organizing Azure Resources

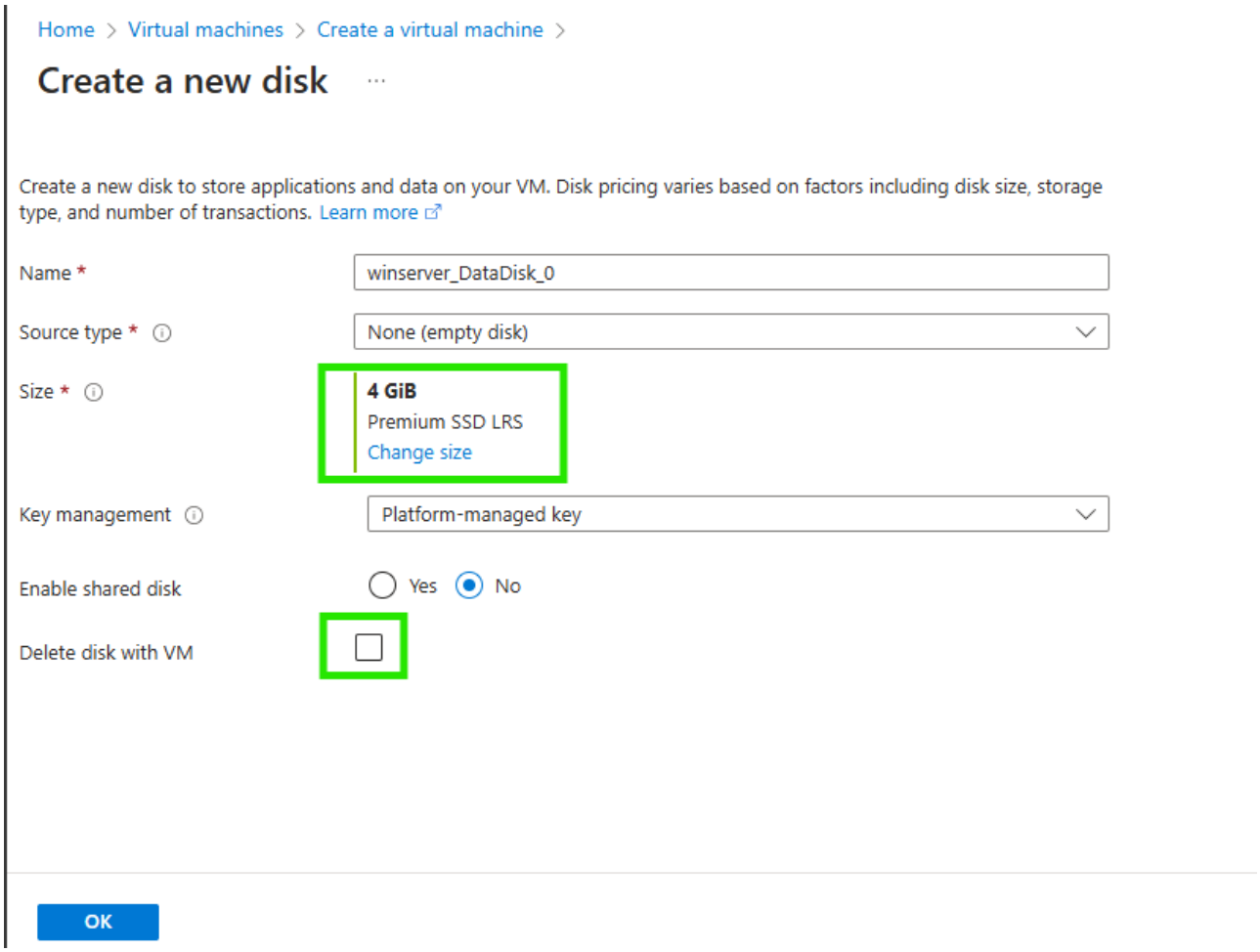


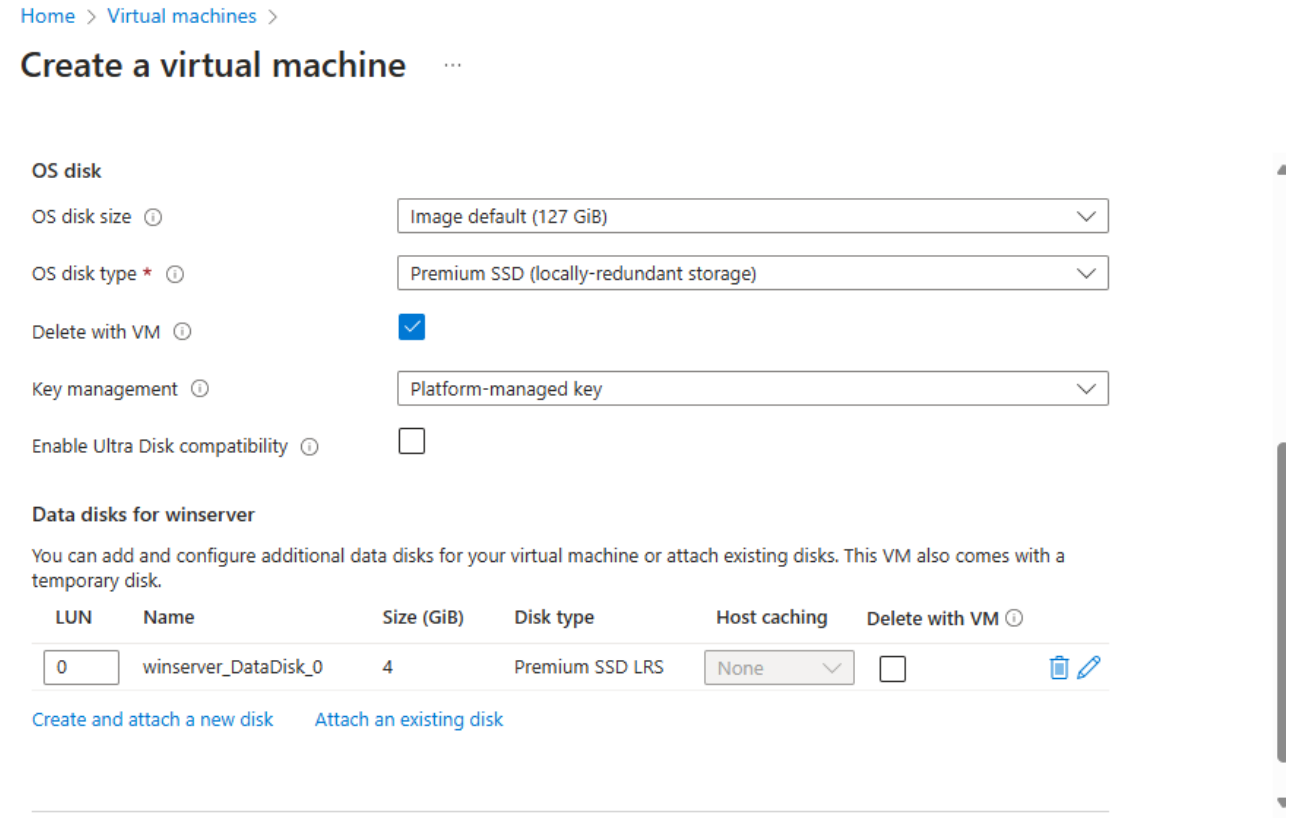
Windows Servers

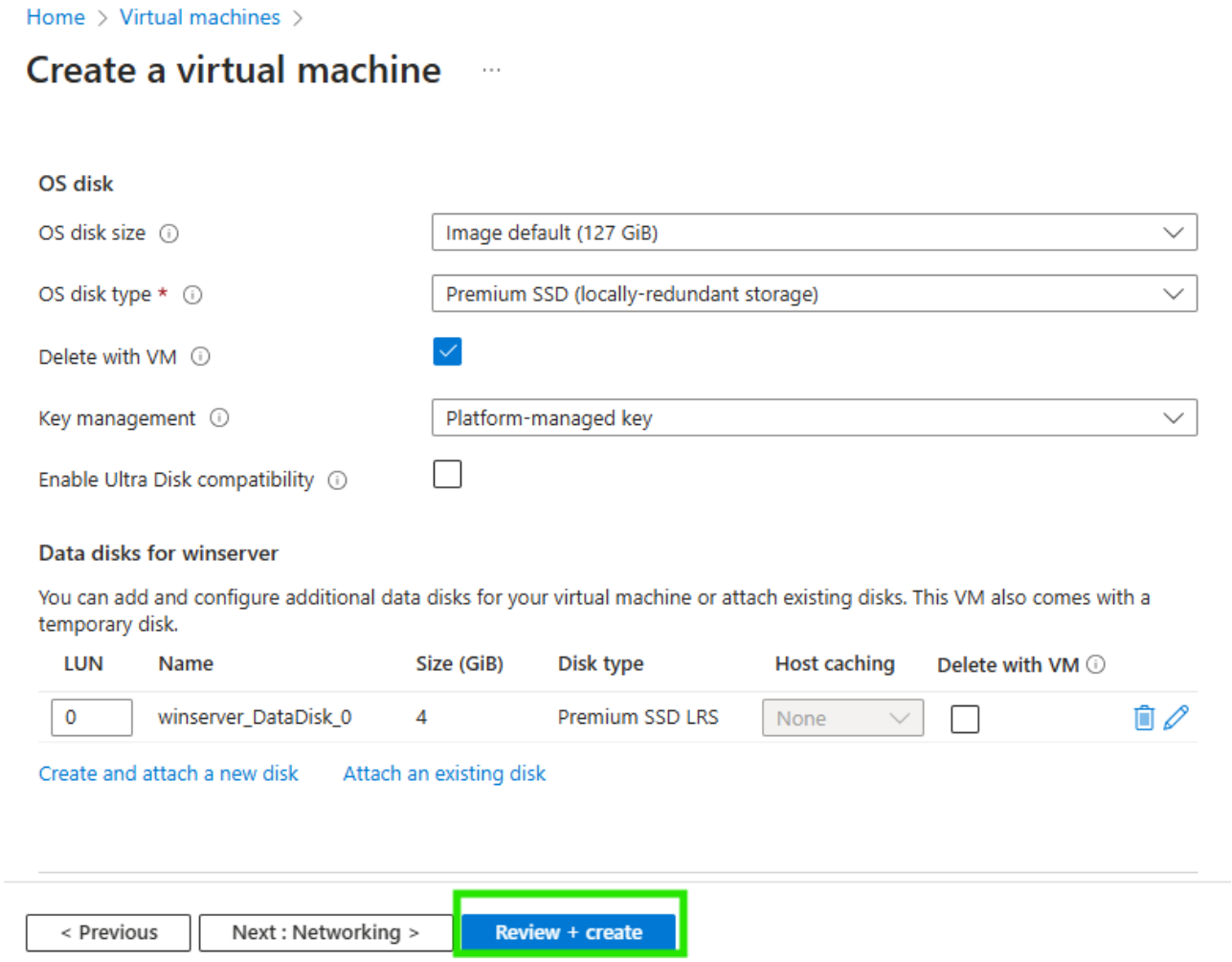
- Refer Here for Quick start

- Disk section

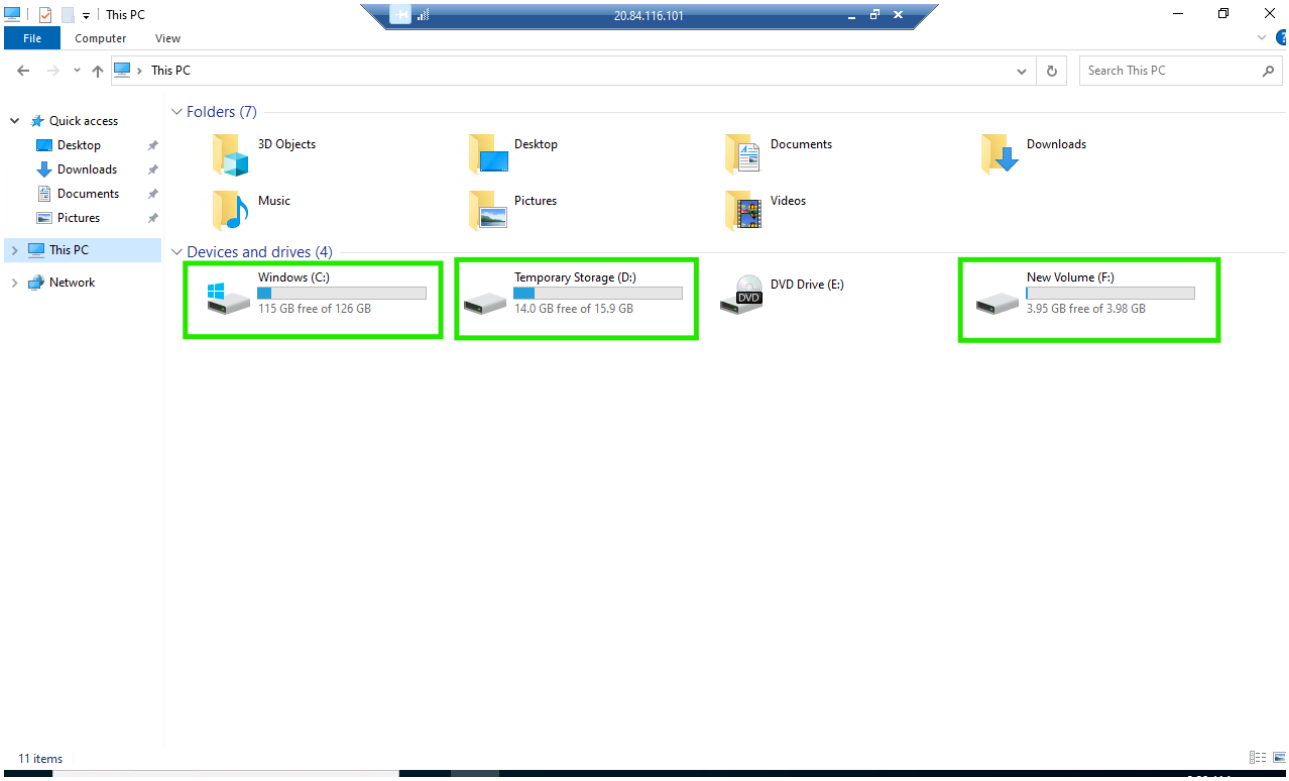



Home > Virtual machines > Create a virtual machine >
Create a new disk
Create a new disk to store applications and data on your VM. Disk pricing varies based on factors including disk size, storage type, and number of transactions. Learn more
Name *
winserver_DataDisk_0
Source type *
None (empty disk)
Size *
4 GiB
Premium SSD LRS
Change size
Key management
Platform-managed key
Enable shared disk
Yes
No
Delete disk with VM
OK

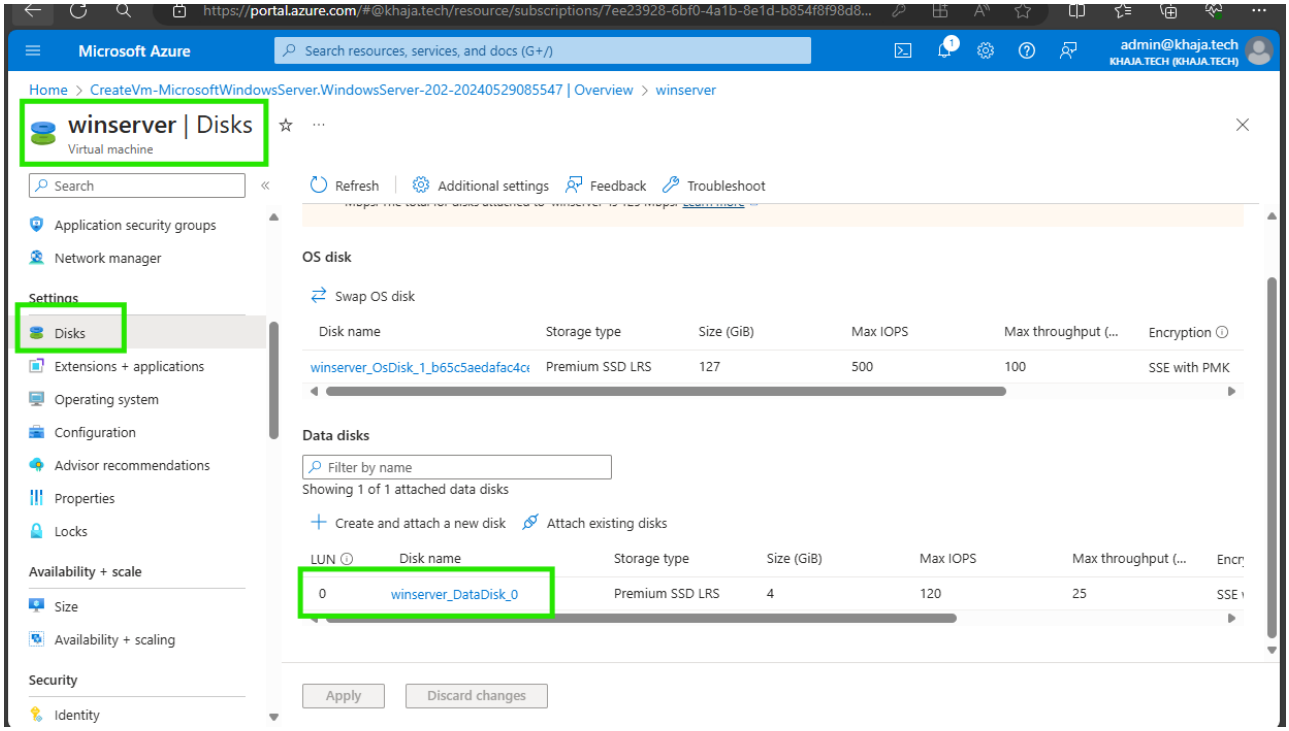

Home > Virtual machines >
Create a virtual machine
OS disk
OS disk size
Image default (127 GiB)
OS disk type *
Premium SSD (locally-redundant storage)
Delete with VM
Key management
Platform-managed key
Enable Ultra Disk compatibility
Data disks for winserver
You can add and configure additional data disks for your virtual machine or attach existing disks. This VM also comes with a temporary disk.
LUN
Name
Size (GiB)
Disk type
Host caching
Delete with VM
0
winserver_DataDisk_0
4
Premium SSD LRS
None
Create and attach a new disk
Attach an existing disk
< Previous
Next : Networking >
Review + create

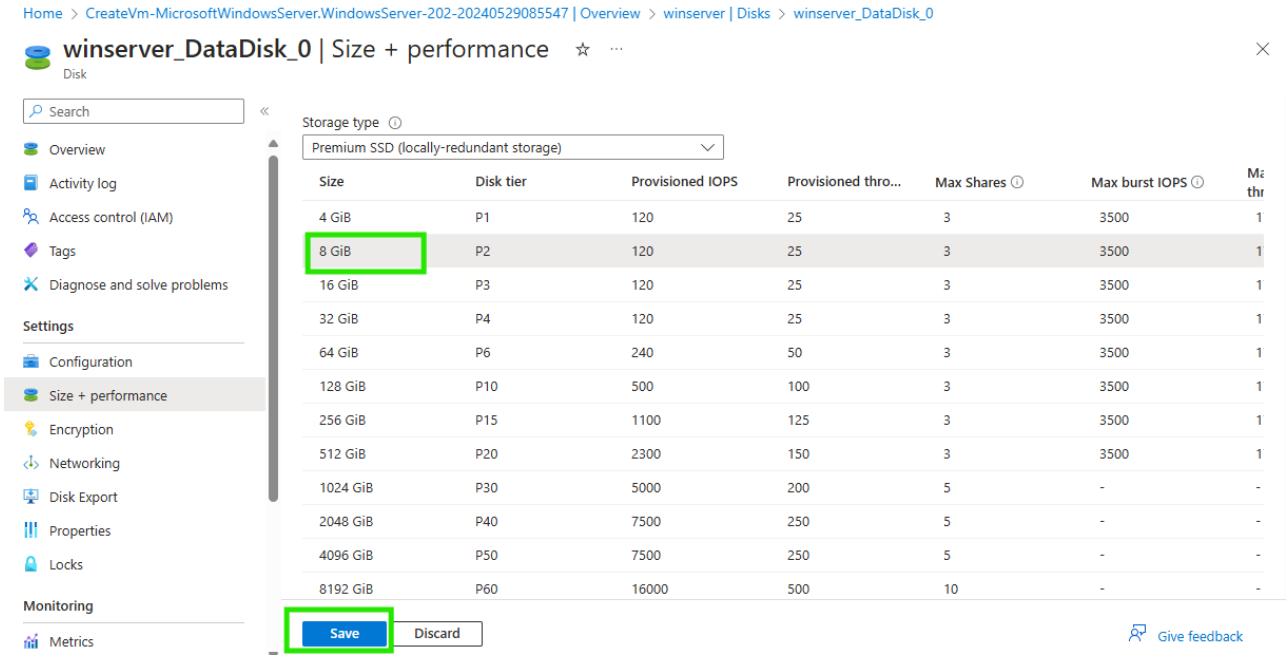


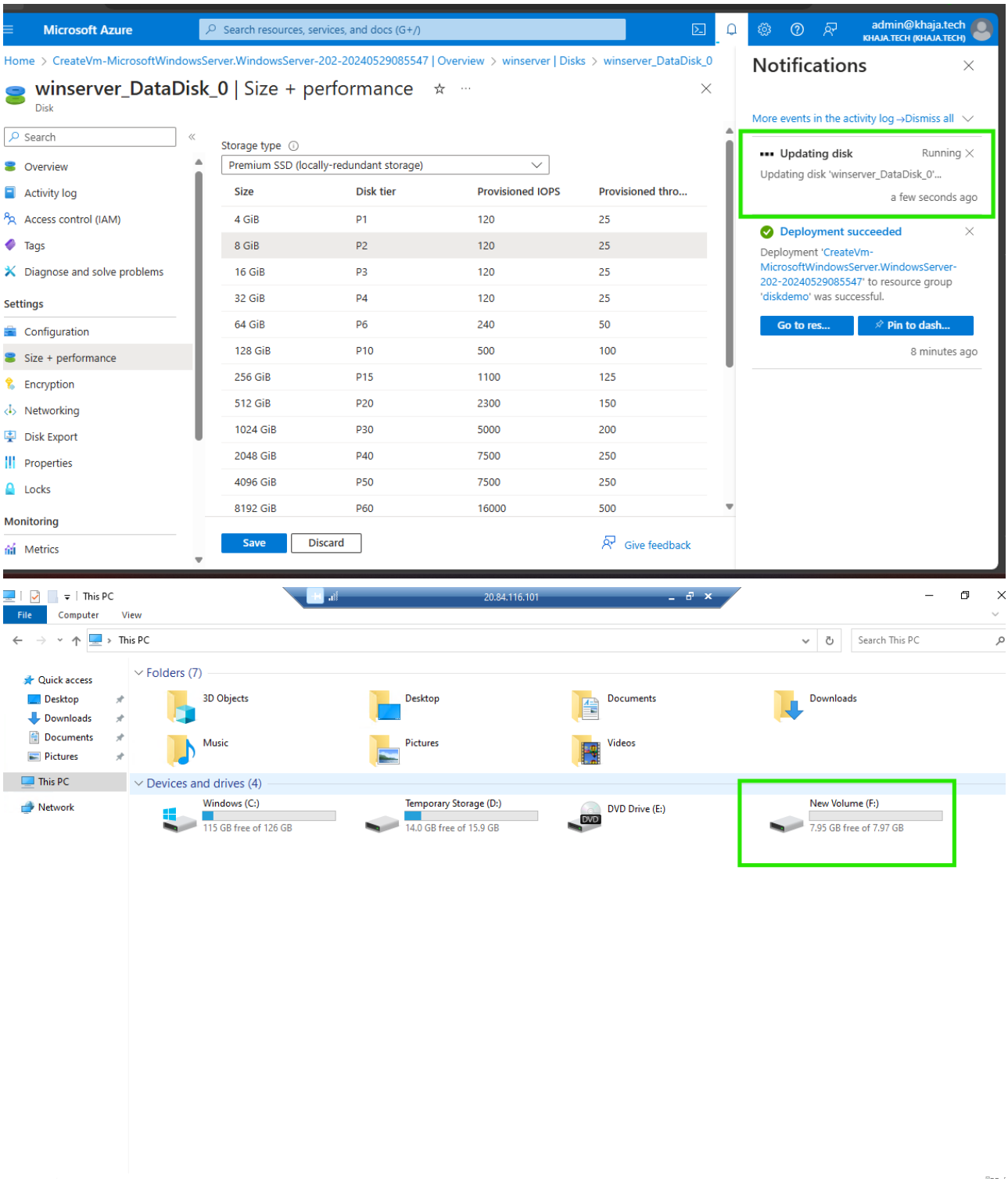
- We have create windows server with
  - os disk 127 GB
  - data disk 4 GB
  - Local/Temp Disk (16 GB)
- We need to format the Data disk to be usable, we have formatted an mounted as F:



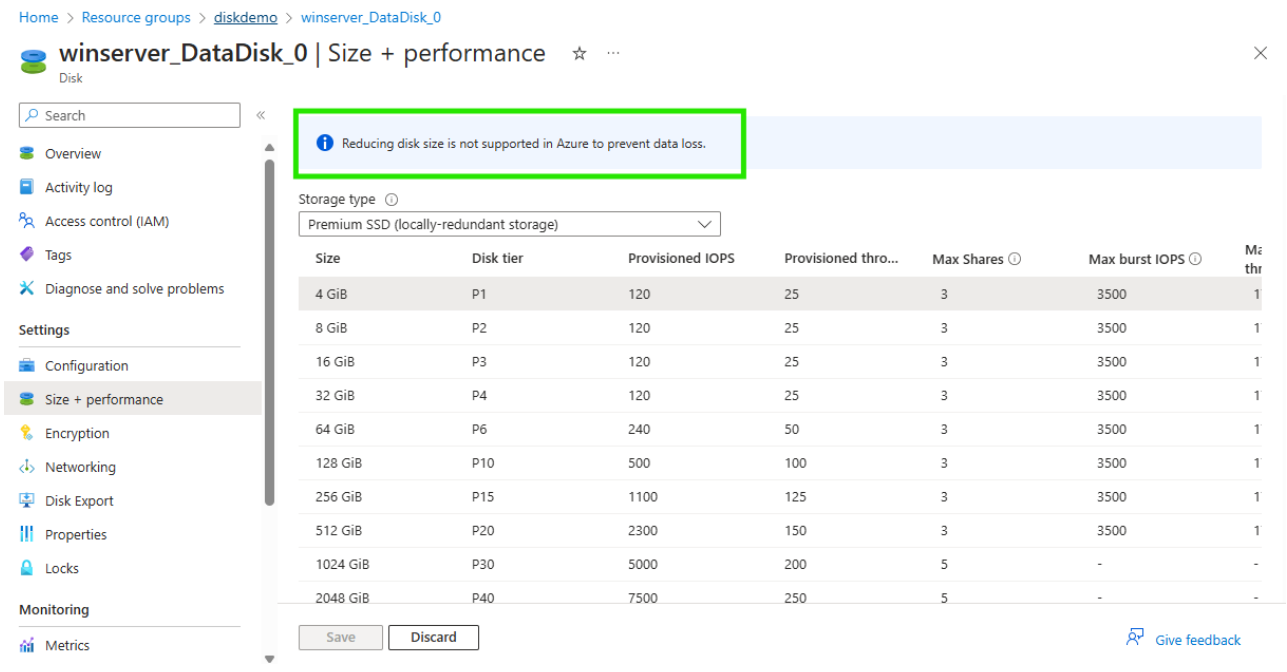
- Lets resize the data disk

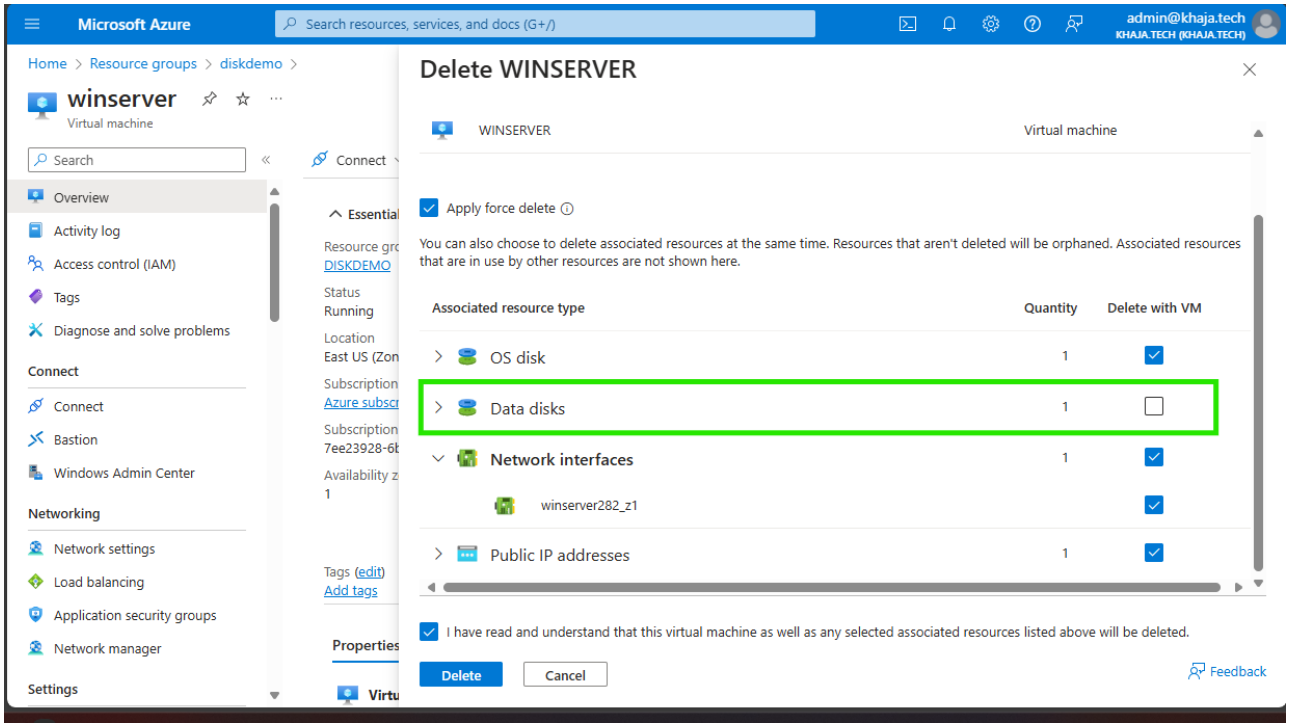





Microsoft Azure
Search resources, services, and docs (G+/)
admin@khaja.tech
KHAJA.TECH (KHAJA.TECH)
Home > CreateVm-MicrosoftWindowsServer.WindowsServer-202-20240529085547 | Overview > winserver | Disks > winserver_DataDisk_0
winserver_DataDisk_0 | Size + performance
Disk
Search
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Configuration
Size + performance
Encryption
Networking
Disk Export
Properties
Locks
Monitoring
Metrics
Storage type
Premium SSD (locally-redundant storage)
Size
Disk tier
Provisioned IOPS
Provisioned thro...
4 GiB P1 120 25
8 GiB P2 120 25
16 GiB P3 120 25
32 GiB P4 120 25
64 GiB P6 240 50
128 GiB P10 500 100
256 GiB P15 1100 125
512 GiB P20 2300 150
1024 GiB P30 5000 200
2048 GiB P40 7500 250
4096 GiB P50 7500 250
8192 GiB P60 16000 500
Save
Discard
Give feedback
Notifications
More events in the activity log → Dismiss all
Updating disk
Running
Updating disk 'winserver_DataDisk_0'...
a few seconds ago
Deployment succeeded
Deployment 'CreateVm-MicrosoftWindowsServer.WindowsServer-202-20240529085547' to resource group 'diskdemo' was successful.
Go to res...
Pin to dash...
8 minutes ago
20.84.116.101
This PC
File
Computer
View
Search This PC
Quick access
Desktop
Downloads
Documents
Pictures
This PC
Network
Folders (7)
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
Devices and drives (4)
Windows (C:)
115 GB free of 126 GB
Temporary Storage (D:)
14.0 GB free of 15.9 GB
DVD Drive (E:)
New Volume (F:)
7.95 GB free of 7.97 GB

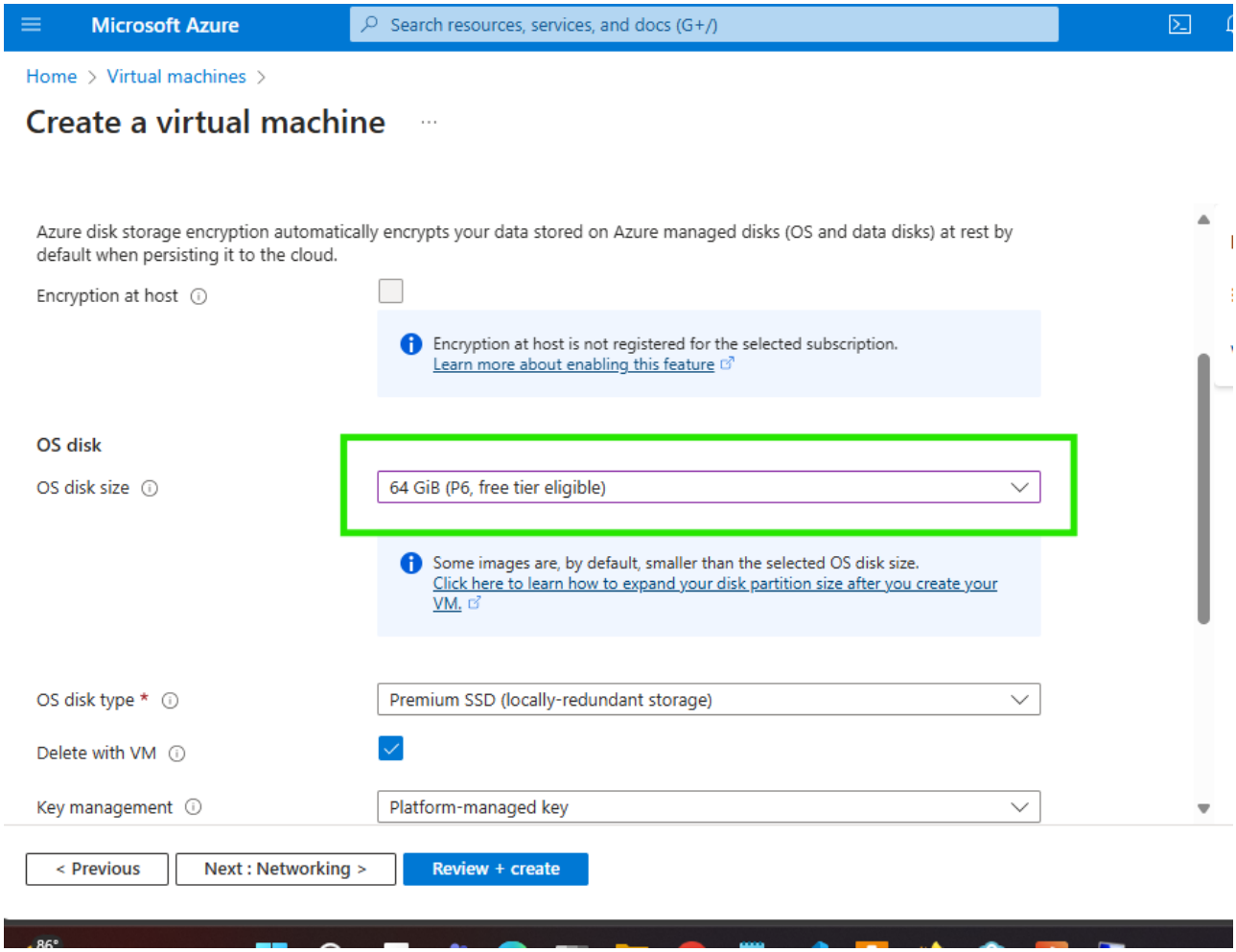
- Now lets try downsizing data disk back to 4 GiB. Reducing disk sizes is not possible.



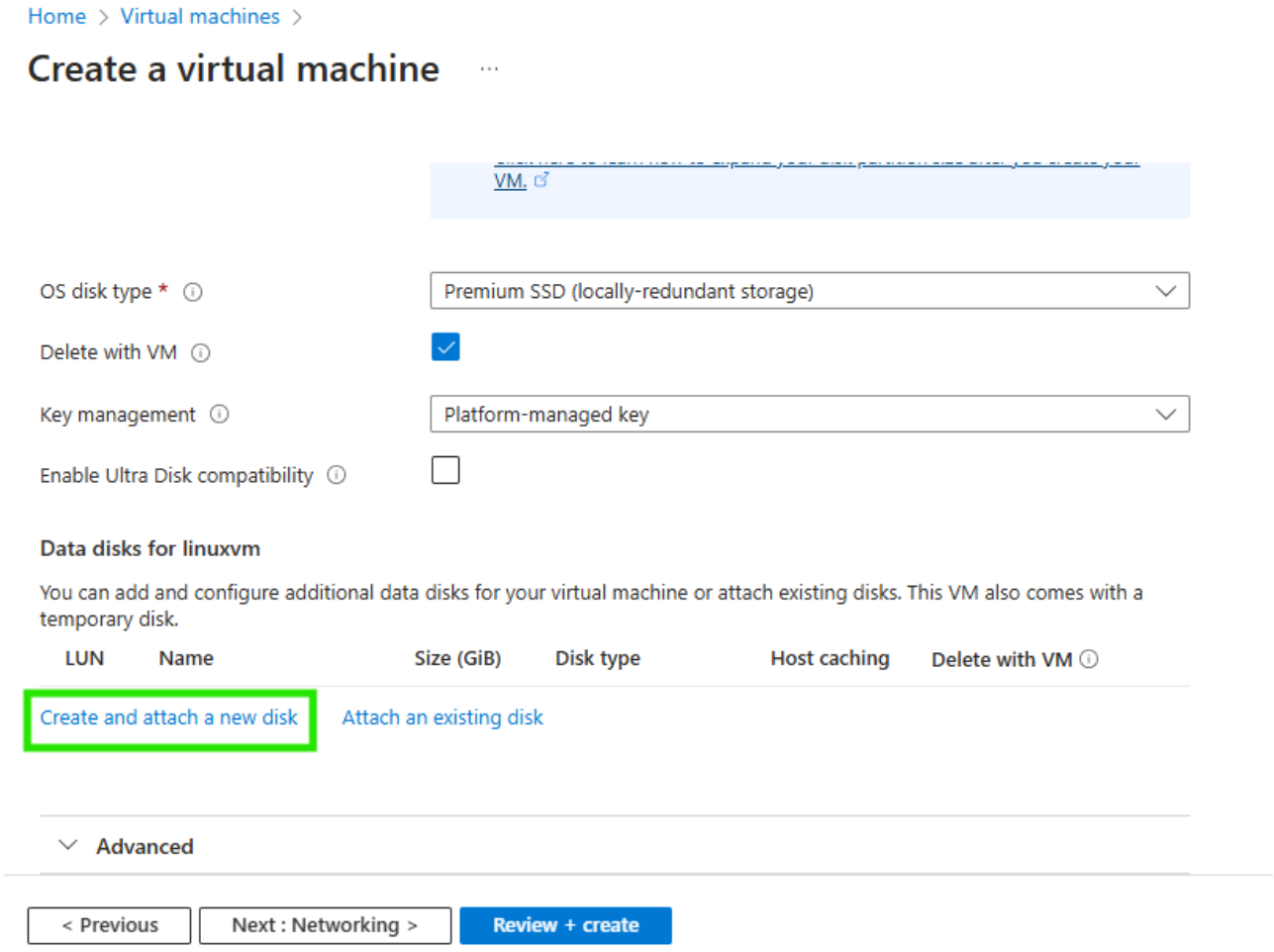


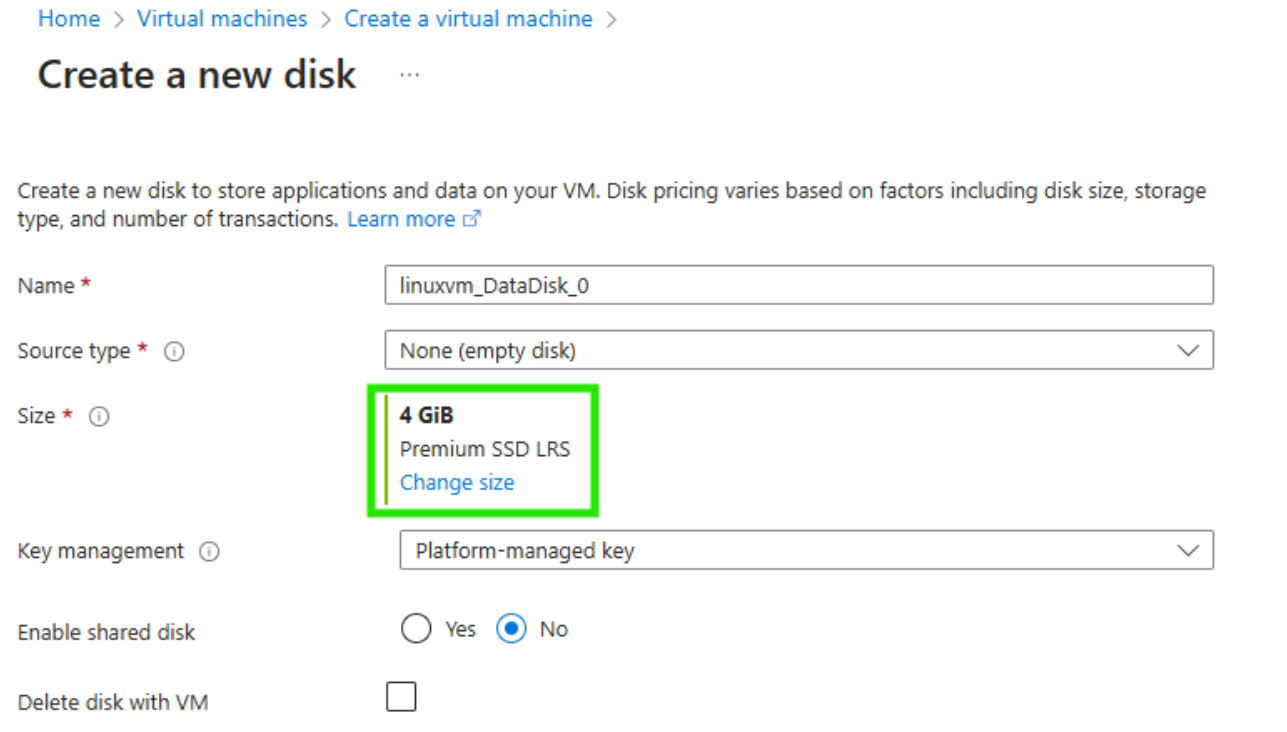
Linux Servers

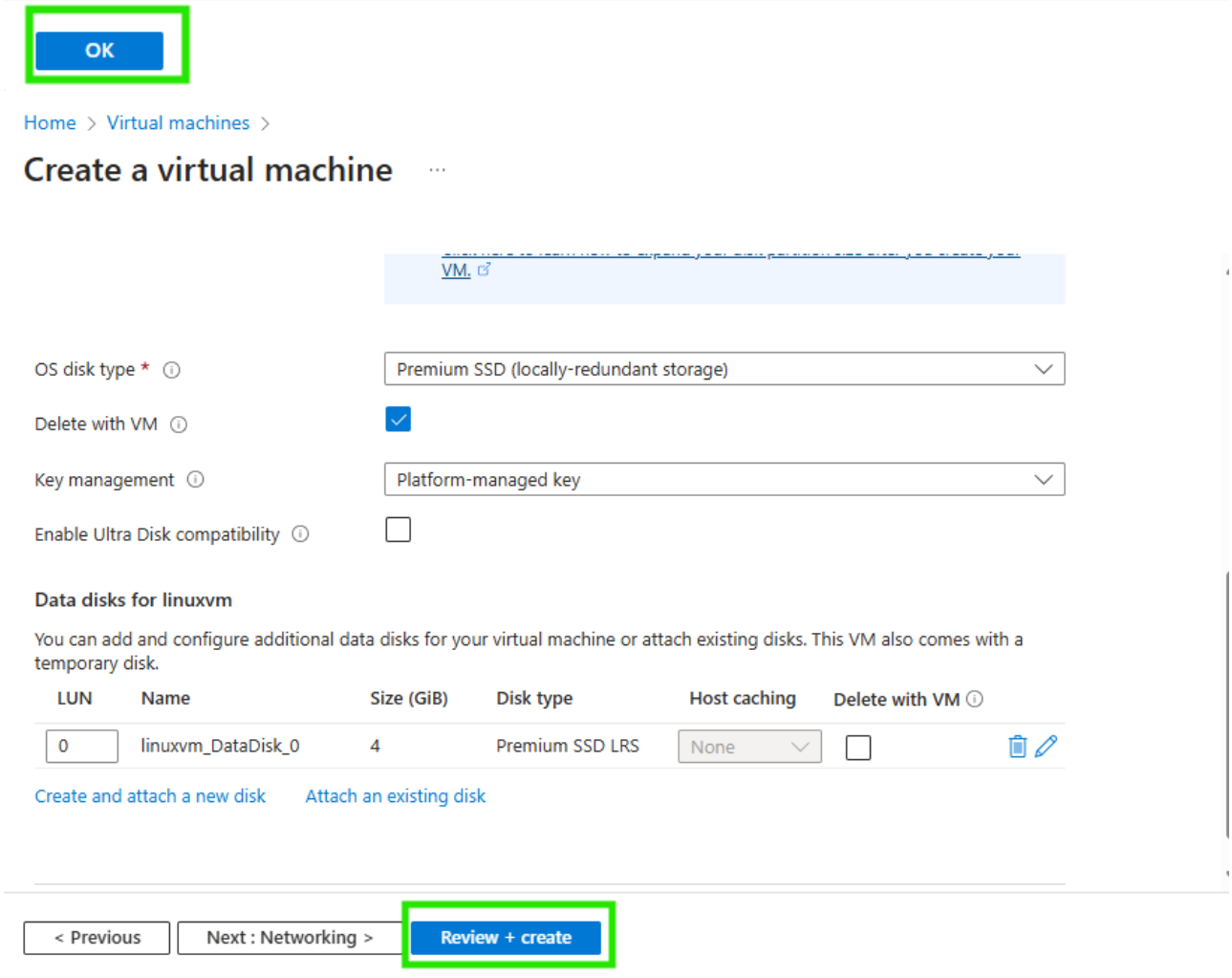
- Refer Here for quick start



- Attach data disk




Home > Virtual machines > Create a virtual machine >
Create a new disk
Create a new disk to store applications and data on your VM. Disk pricing varies based on factors including disk size, storage type, and number of transactions. Learn more
Name *
linuxvm_DataDisk_0
Source type *
None (empty disk)
Size *
4 GiB
Premium SSD LRS
Change size
Key management
Platform-managed key
Enable shared disk
Yes
No
Delete disk with VM


OK
Home > Virtual machines >
Create a virtual machine
VM.
OS disk type *
Premium SSD (locally-redundant storage)
Delete with VM
Key management
Platform-managed key
Enable Ultra Disk compatibility
Data disks for linuxvm
You can add and configure additional data disks for your virtual machine or attach existing disks. This VM also comes with a temporary disk.
LUN
Name
Size (GiB)
Disk type
Host caching
Delete with VM
0
linuxvm_DataDisk_0
4
Premium SSD LRS
None
Create and attach a new disk
Attach an existing disk
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- Attaching data disks to linux article Refer Here

```
Dell@linuxvm:~$ sudo lsblk
NAME    MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
loop0     7:0    0 63.9M  1 loop /snap/core20/2264
loop1     7:1    0   87M  1 loop /snap/lxd/28373
loop2     7:2    0 38.7M  1 loop /snap/snapd/21465
sda       8:0    0   64G  0 disk
├─sda1    8:1    0 63.9G  0 part /
├─sda14   8:14   0    4M  0 part
└─sda15   8:15   0  106M  0 part /boot/efi
sdb       8:16   0    4G  0 disk
└─sdb1    8:17   0    4G  0 part /mnt
sdc       8:32   0    4G  0 disk
sr0      11:0    1  628K  0 rom
Dell@linuxvm:~$
```

```
Windows PowerShell    Dell@linuxvm: ~
Dell@linuxvm:~$ sudo mkfs -t ext4 /dev/sdc
mke2fs 1.46.5 (30-Dec-2021)
Discarding device blocks: done
Creating filesystem with 1048576 4k blocks and 262144 inodes
Filesystem UUID: aa366c92-24f9-4075-ae7b-356585e71e2a
Superblock backups stored on blocks:
        32768, 98304, 163840, 229376, 294912, 819200, 884736

Allocating group tables: done
Writing inode tables: done
Creating journal (16384 blocks): done
Writing superblocks and filesystem accounting information: done

Dell@linuxvm:~$ sudo mkdir /projects
Dell@linuxvm:~$ sudo mount /dev/sdc /projects/
Dell@linuxvm:~$ df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/root        62G  1.6G   61G   3% /
tmpfs           417M     0  417M   0% /dev/shm
tmpfs           167M  964K  166M   1% /run
tmpfs           5.0M     0  5.0M   0% /run/lock
efivarfs        128K   37K   87K  30% /sys/firmware/efi/efivars
/dev/sda15      105M  6.1M   99M   6% /boot/efi
/dev/sdb1       3.9G   28K  3.7G   1% /mnt
tmpfs            84M  4.0K   84M   1% /run/user/1000
/dev/sdc        3.9G   24K  3.7G   1% /projects
Dell@linuxvm:~$
```

- Add the entries into /etc/fstab after fetching uuid from `sudo blkid`

```
UUID=aa366c92-24f9-4075-ae7b-356585e71e2a /projects ext4 defaults 0 0
```

Exercise

- Perform below steps in both azure and aws
    - Create a linux instance (ec2) with ubuntu 22.04 instance
    - Add an ebs volume of size 1 GB to the linux instance
    - format the disk and mount to /tools folder
    - add entries in fstab and now restart the instance.
    - After restart also you should see the mount in `df -h`