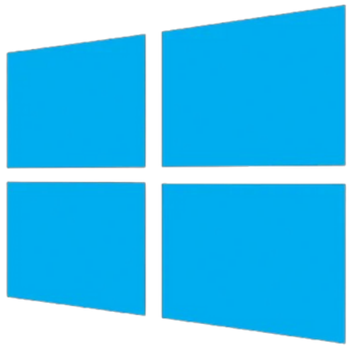
AWS Cloud and DevOps Training
by Mr. Mahendran Selvakumar

Organized by KPR Institute of Engineering and Technology
Department of Computer Science and Engineering

Create and Attach an EBS Volume to a Windows EC2 Instance

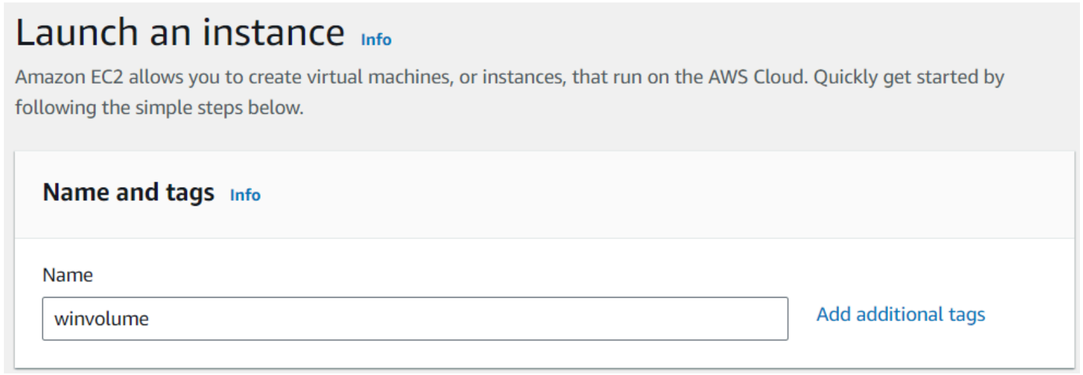


Sooriya N
III - CSE

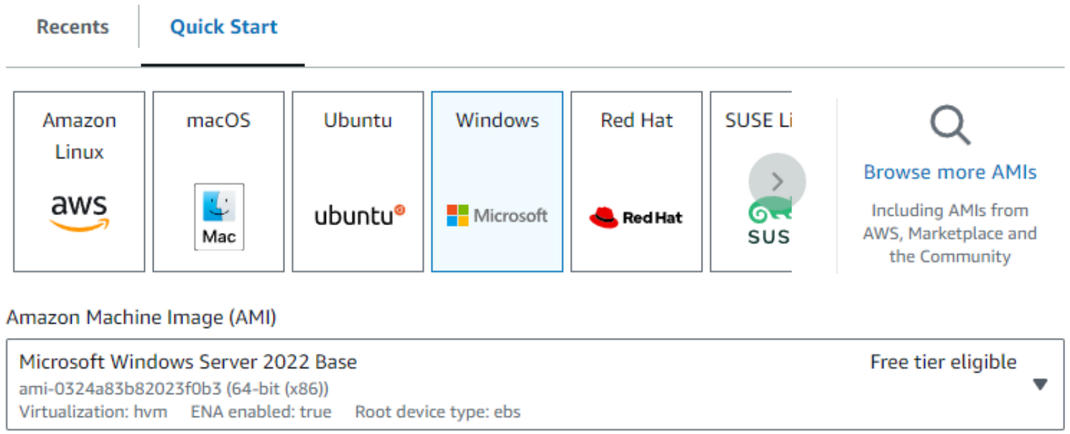
1. Launching an EC2 Instance

Start by creating an EC2 instance in your desired region.

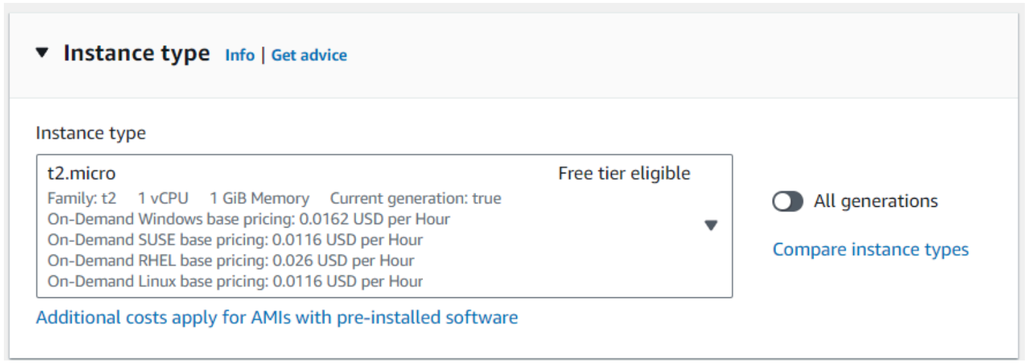
Ensure that the instance is running in a specific availability zone (e.g., us-east-1c).



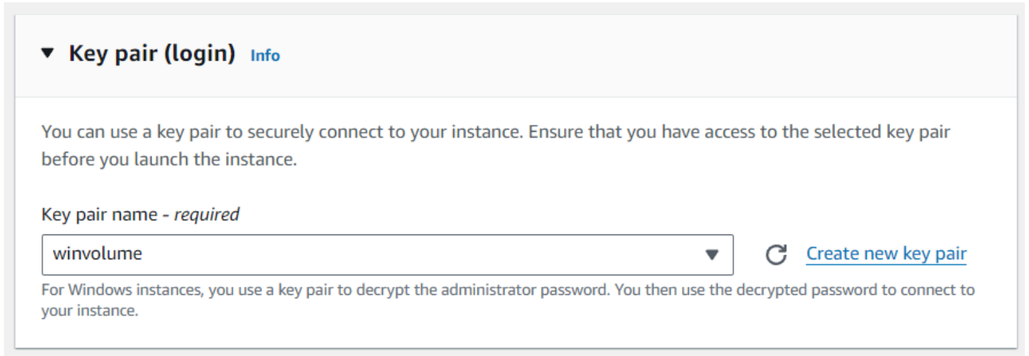
Create new EC2 Instance. I named EC2 as “winvolume”



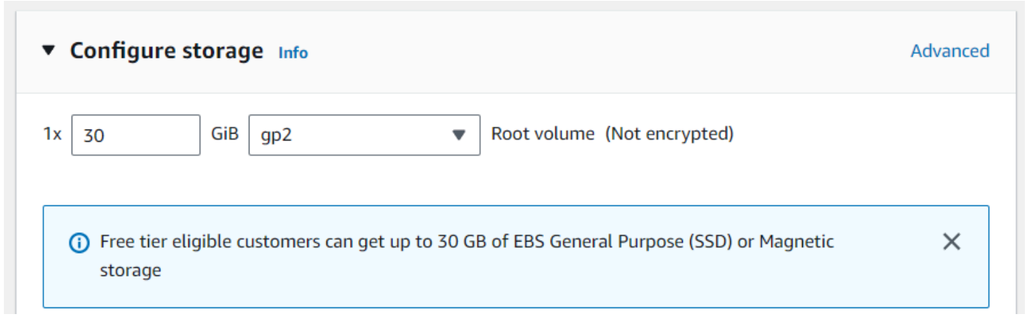
Select Microsoft Windows Server as the operating system from the Amazon Machine Images (AMI) list.



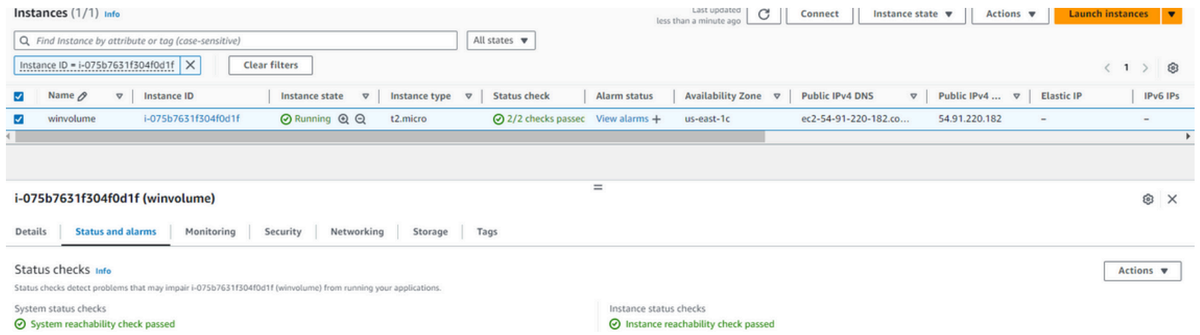
NOTE* If you are in free tier always opt for free instance type



Give name for key pair and select .pem file type



Root volume of 30gb will be allocated in windows



Click on Launch Instance
Check for the status and wait until it get passed.

2. Creating an EBS Volume

- Navigate to Elastic Block Store and select Create Volume.
- Choose the volume type, typically General Purpose SSD (gp3 or gp2).
- Allocate the desired volume size (e.g., 15 GB).
- Make sure the availability zone is same for both instance and volume.
- Ensure the volume is not created from a snapshot.
- Click Create Volume to proceed.

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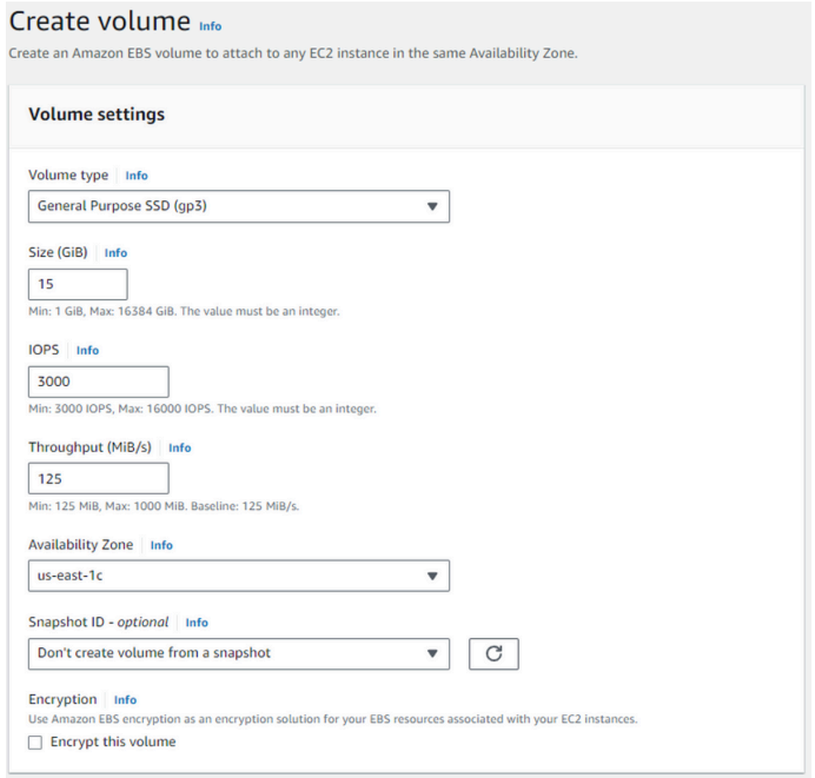
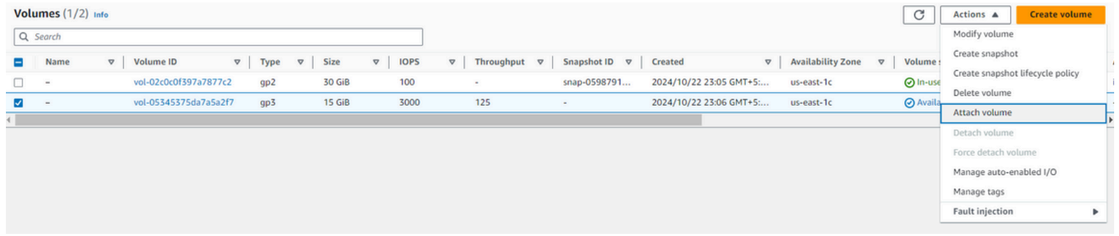
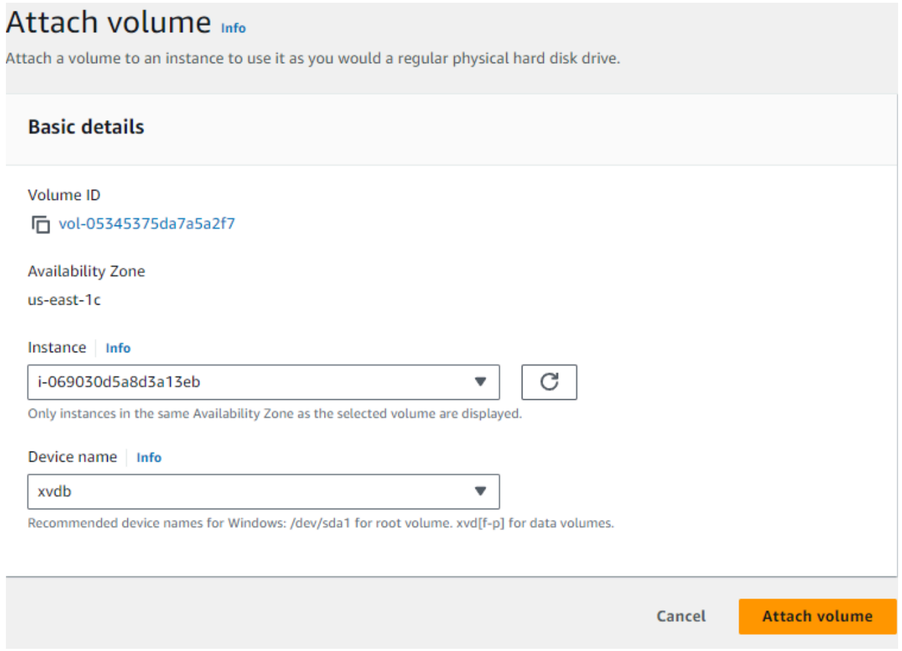


3: Attaching the Volume to the EC2 Instance



Now you can see the volume has been created but Not in Use.
Select the volume you want to attach and under Actions select Attach volume.

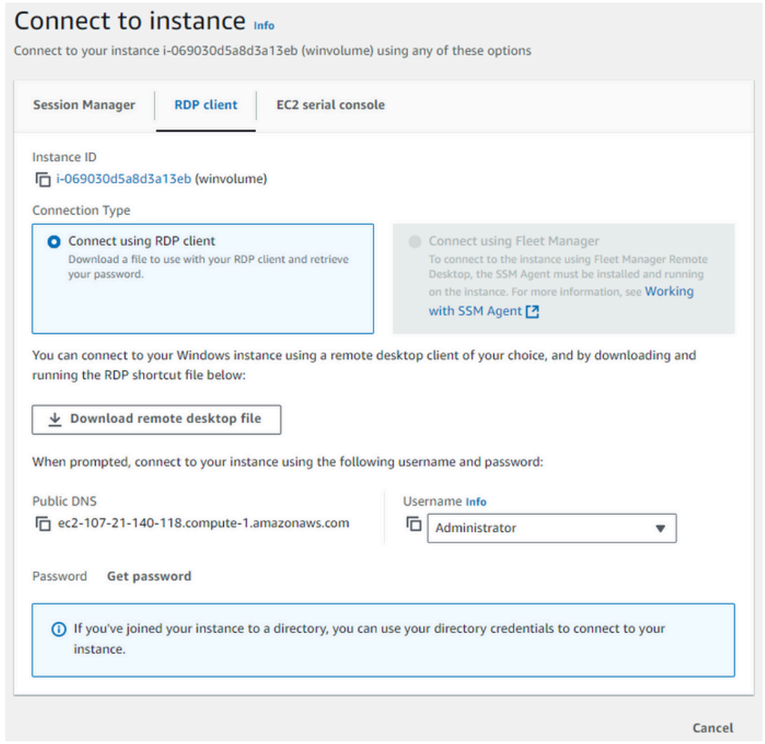


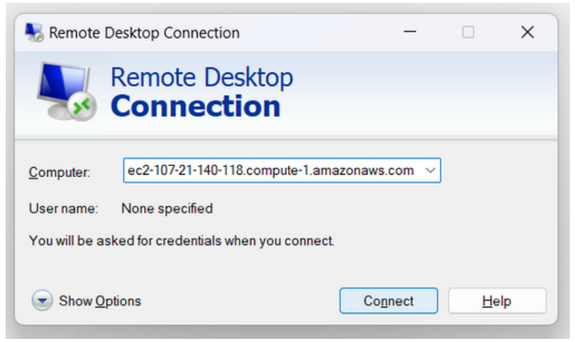
Make sure that location of both Instance and Volume remain Same.
In my case it is us-east-1c.
You can now notice that New Volume has been Attached.

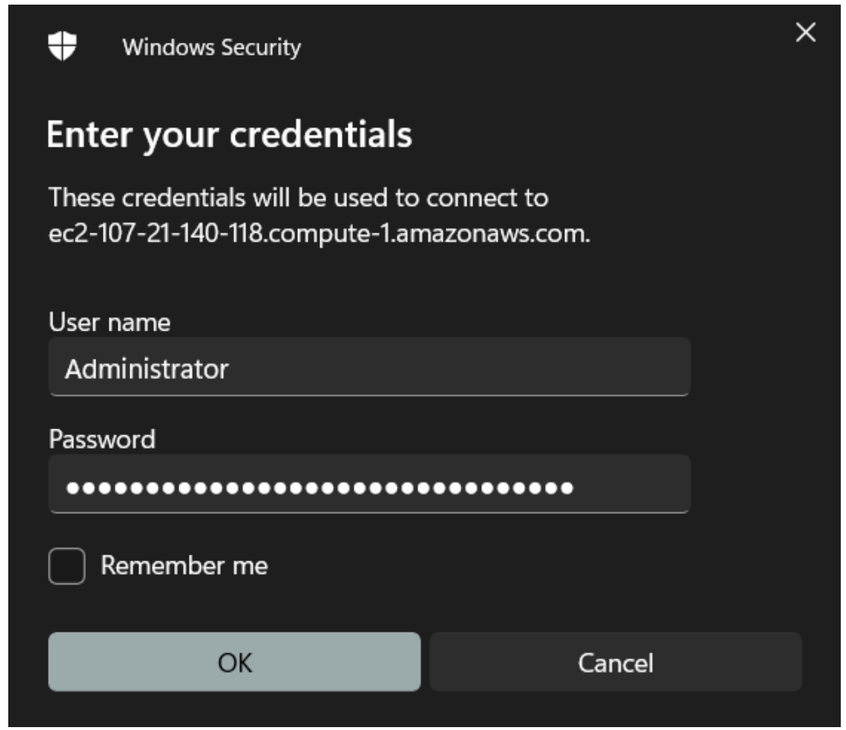
4. Connecting to the Instance

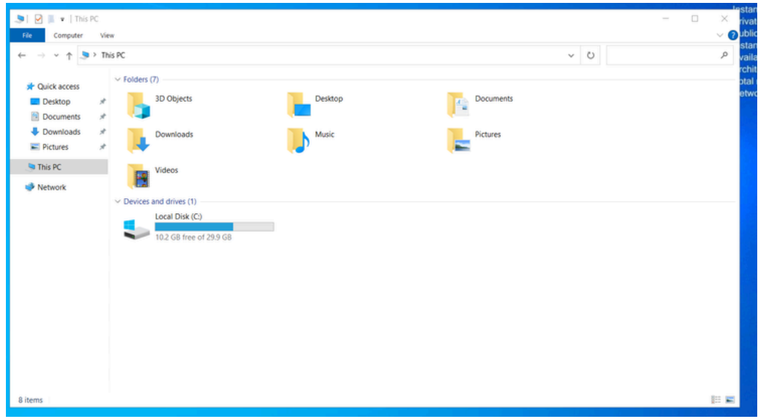
Access your EC2 instance through the chosen method (RDP or other).

Upload your .pem file and click Decrypt Password. AWS will provide the administrator password for RDP access.





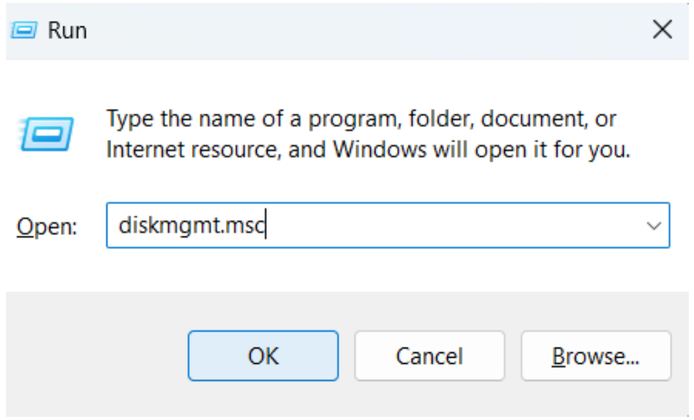


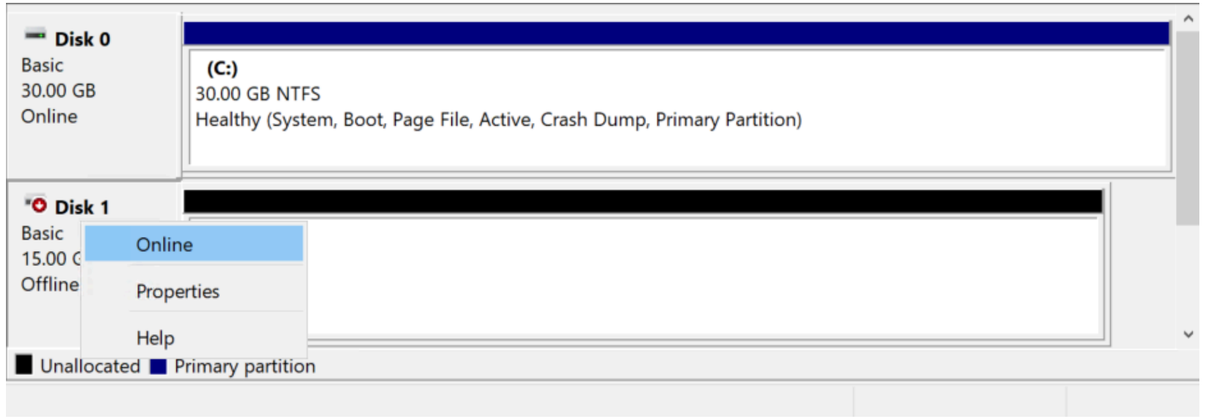


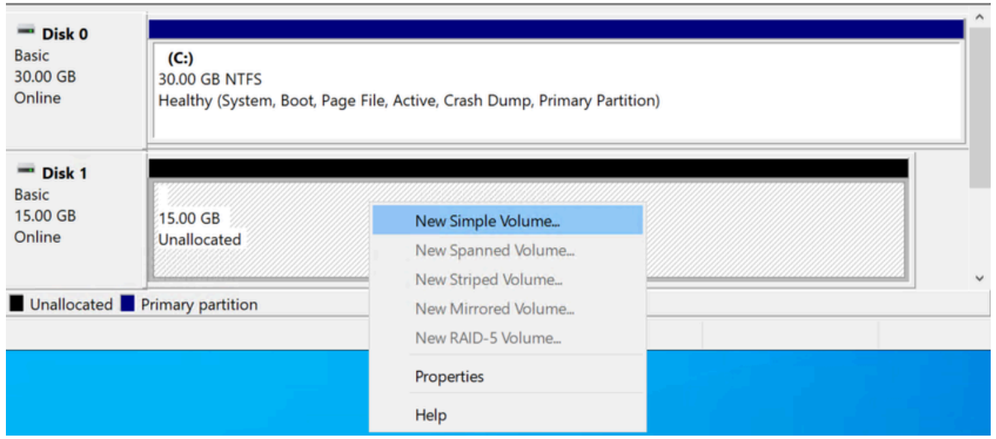
The Windows VM is now available for usage.
We can see that only one drive is available, which is not enough.
Let’s expand the storage.

5. Configuring the Volume in Disk Management

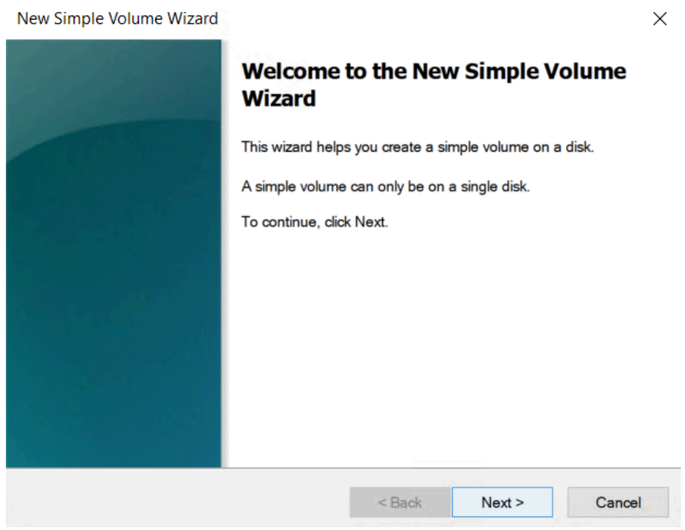
Press Win + R, type diskmgmt.msc, and open Disk Management.
You can see there are 2 volumes/disk’s where only one is allocated and another is not allocated To allocate the new volume: right click on text Disk 1 Click Online



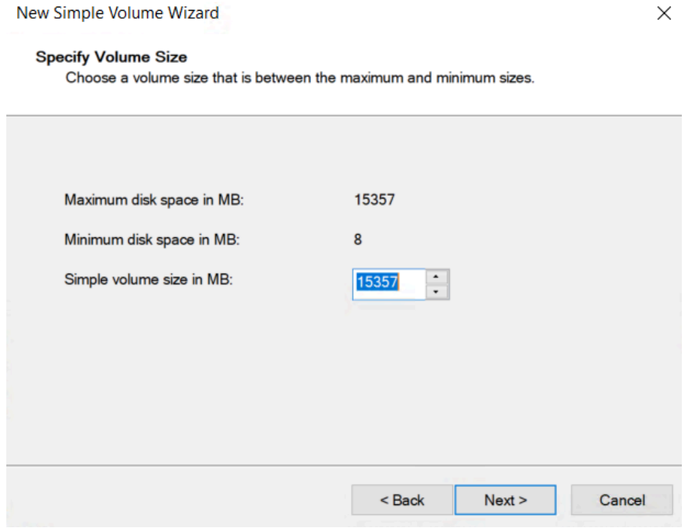




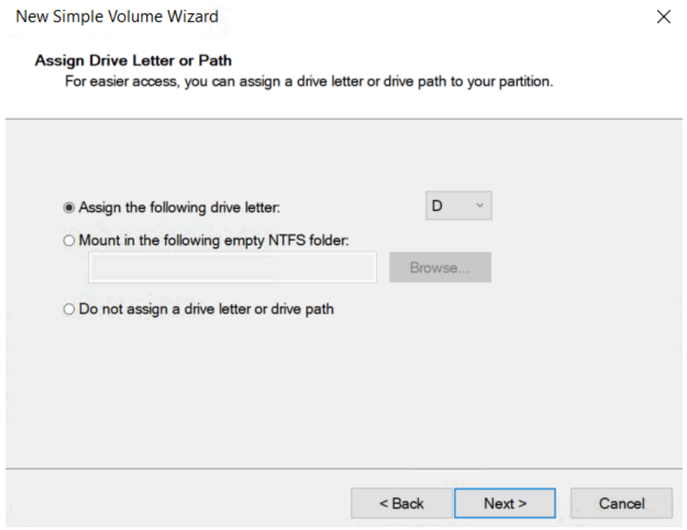
Again, right Click on Disk 1 and select Initialize Disk. Now the disk is available and ready for allocation. At last, Right click on Unallocated and select New Simple Volume.



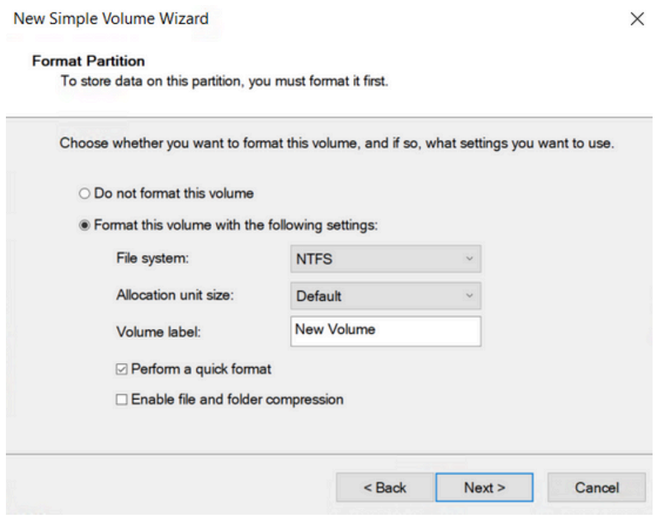
Click on “Next”



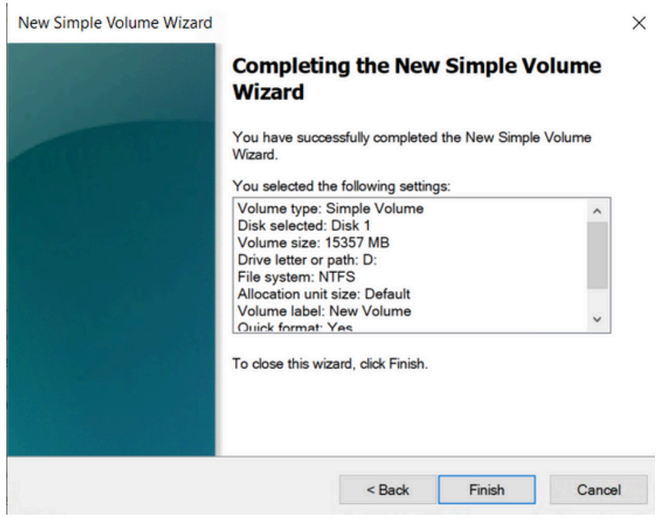
Click on “Next”



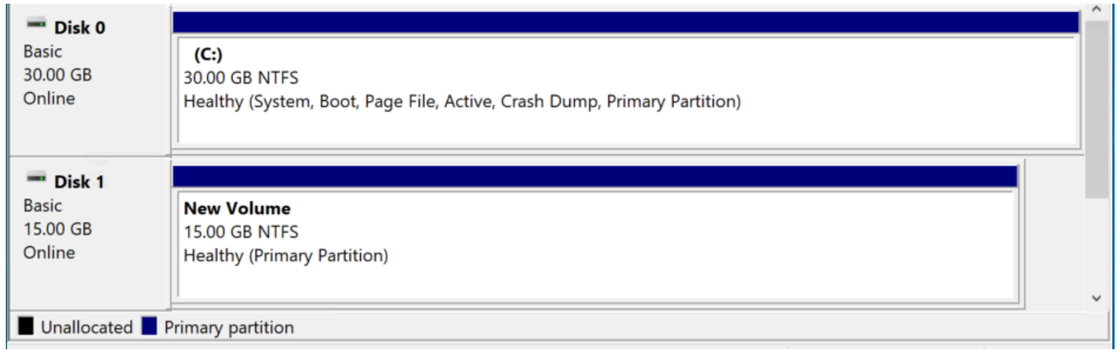
Click on “Next”



Name your drive & click on “Next”



Click on “Finish”

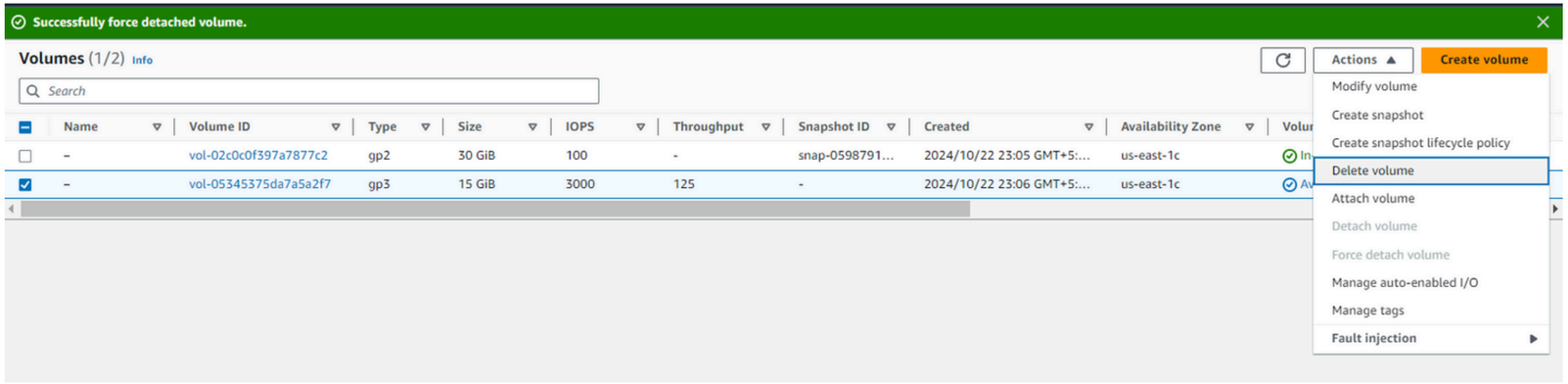


New volume has been allocated and ready to store data.

The New Volume (D) contain the same storage as allocated in EBS Volume.

Note: If you are in free-tier do not forget to delete all your Volume’s and Instances which you have used.

Head back to Volume dashboard and click on Actions dropdown menu and select Delete Volume



After deleting the volume it is automatically removed from the Volume dashboard.