AWS -Docs - Changing the Instance Type

https://docs.aws.amazon.com/en_pv/AWSEC2/latest/UserGuide/ec2-instance-resize.html

As your needs change, you might find that your instance is over-utilized (the instance type is too small) or under-utilized (the instance type is too large). If this is the case, you can change the size of your instance. For example, if your t2.micro instance is too small for its workload, you can change it to another instance type that is appropriate for the workload.

If the root device for your instance is an EBS volume, you can change the size of the instance simply by changing its instance type, which is known as *resizing* it. If the root device for your instance is an instance store volume, you must migrate your application to a new instance with the instance type that you need. For more information about root device volumes, see Storage for the Root Device. When you resize an instance, you must select an instance type that is compatible with the configuration of the instance. If the instance type that you want is not compatible with the instance configuration you have, then you must migrate your application to a new instance with the instance type that you need.

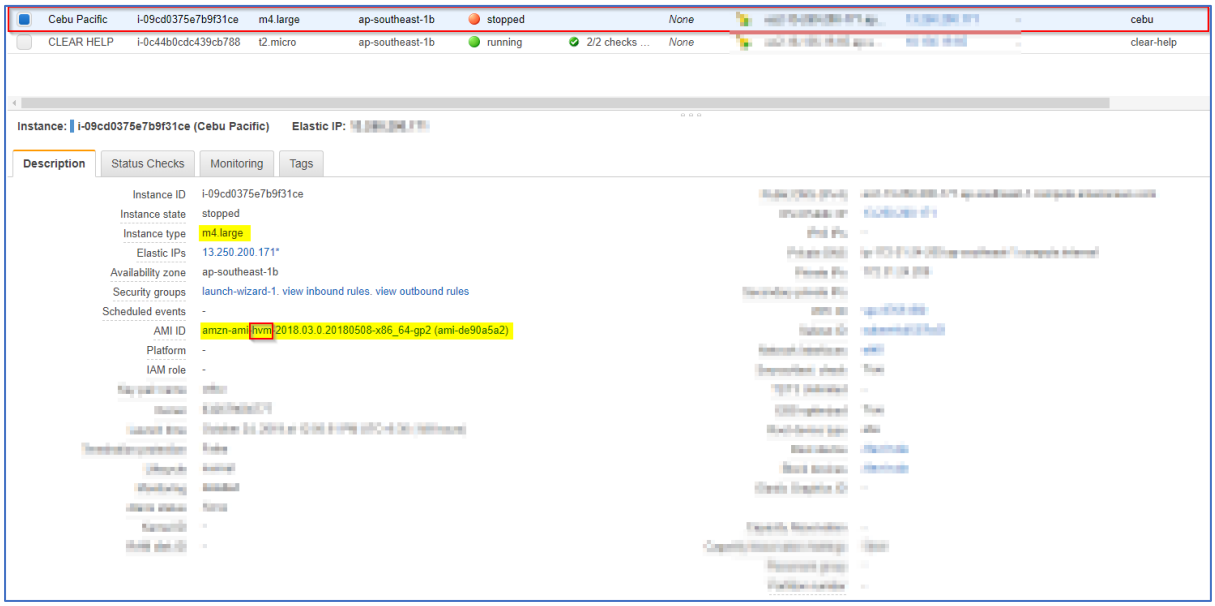
Important

When you resize an instance, the resized instance usually has the same number of instance store volumes that you specified when you launched the original instance. With instance types that support NVMe instance store volumes (which are available by default), the resized instance might have additional instance store volumes, depending on the AMI. Otherwise, you can migrate your application to an instance with a new instance type manually, specifying the number of instance store volumes that you need when you launch the new instance.

Compatibility for Resizing Instances

You can resize an instance only if its current instance type and the new instance type that you want are compatible in the following ways:

Virtualization type: Linux AMIs use one of two types of virtualization: paravirtual (PV) or hardware virtual machine (HVM). You can't resize an instance that was launched from a PV AMI to an instance type that is HVM only.

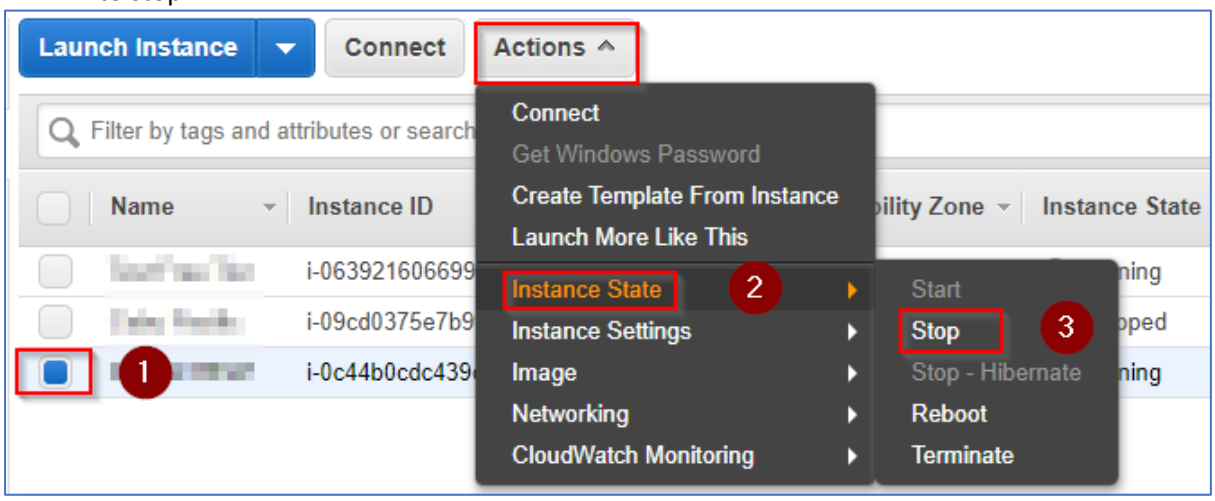


Resizing an Amazon EBS–backed Instance

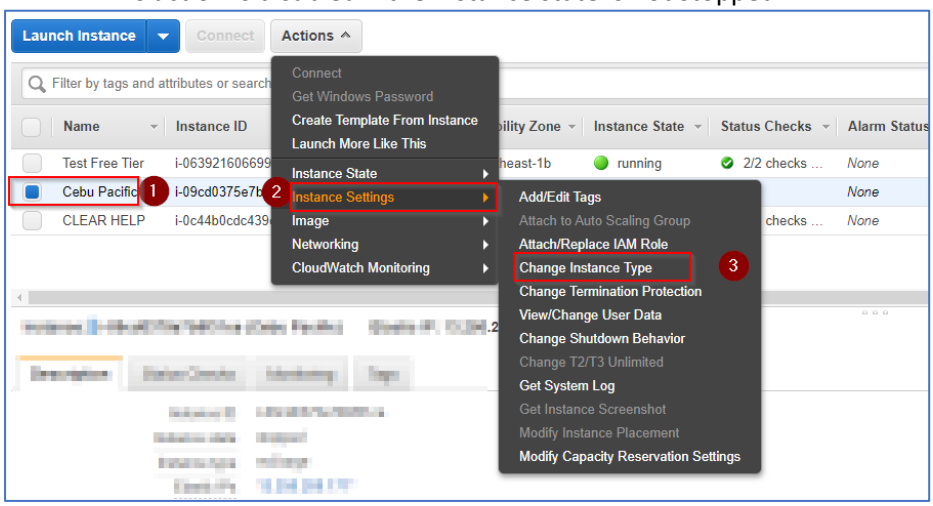
We must stop our Amazon EBS–backed instance before we can change its instance type. When we stopped the instance then proceed with the steps below.

1. Select the instance and choose **Actions**, **Instance State**, **Stop**.

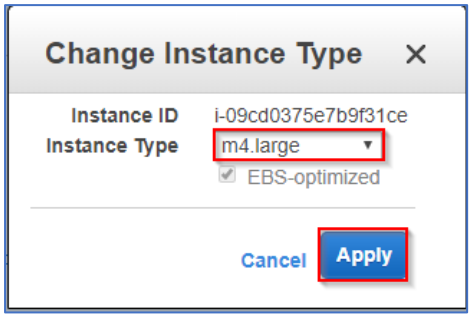
2. In the confirmation dialog box, choose **Yes, Stop**. It can take a few minutes for the instance to stop.



- With the instance still selected, choose **Actions**, **Instance Settings**, **Change Instance Type**. This action is disabled if the instance state is not stopped.



- In the **Change Instance Type** dialog box, do the following:



a. From **Instance Type**, select the instance type that you want. If the instance type that you want does not appear in the list, then it is not compatible with the configuration of your instance (for example, because of virtualization type). For more information, see Compatibility for Resizing Instances.
b. (Optional) If the instance type that you selected supports EBS–optimization, select **EBS-optimized** to enable EBS–optimization or deselect **EBS-optimized** to disable EBS–optimization. If the instance type that you selected is EBS–optimized by default, **EBS-optimized** is selected and you can't deselect it.
c. Choose **Apply** to accept the new settings.

- To restart the stopped instance, select the instance and choose **Actions**, **Instance State**, **Start**.
- In the confirmation dialog box, choose **Yes, Start**. It can take a few minutes for the instance to enter the running state.
- https://aws.amazon.com/ec2/instance-types/

General Purpose

General purpose instances provide a balance of compute, memory and networking resources, and can be used for a variety of diverse workloads. These instances are ideal for applications that use these resources in equal proportions such as web servers and code repositories.

A1 T3 T3a T2 M5 M5a M5n M4

M4 instances provide a balance of compute, memory, and network resources, and it is a good choice for many applications.

Features:

- 2.3 GHz Intel Xeon® E5-2686 v4 (Broadwell) processors or 2.4 GHz Intel Xeon® E5-2676 v3 (Haswell) processors
- EBS-optimized by default at no additional cost
- Support for Enhanced Networking
- Balance of compute, memory, and network resources

Instance	vCPU*	Mem (GiB)	Storage	Dedicated EBS Bandwidth (Mbps)	Network Performance
m4.large	2	8	EBS-only	450	Moderate
m4.xlarge	4	16	EBS-only	750	High
m4.2xlarge	8	32	EBS-only	1,000	High
m4.4xlarge	16	64	EBS-only	2,000	High
m4.10xlarge	40	160	EBS-only	4,000	10 Gigabit
m4.16xlarge	64	256	EBS-only	10,000	25 Gigabit

All instances have the following specs:

- 2.4 GHz Intel Xeon E5-2676 v3** Processor
- Intel AVX†, Intel AVX2†, Intel Turbo
- EBS Optimized