

Guided Lab: Creating a Capacity Reservation (Mock)

Description

AWS Capacity Reservation is a feature provided by Amazon Web Services (AWS) that enables you to reserve capacity for your Amazon EC2 instances in a specific Availability Zone for any duration. This feature is particularly useful for applications that require specific host or instance placement. By reserving compute capacity in advance, you can ensure that it is available when you create instances against the reservation. There is no minimum time or size commitment, and you can create, modify, and terminate your capacity reservation at any time.

Objectives

In this lab, you will:

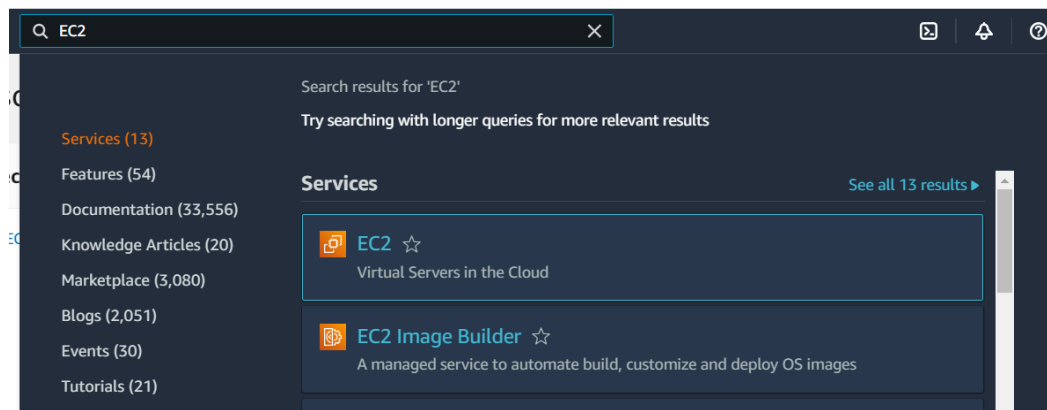
- Understand Capacity Reservations
- Learn how to create a Capacity Reservation

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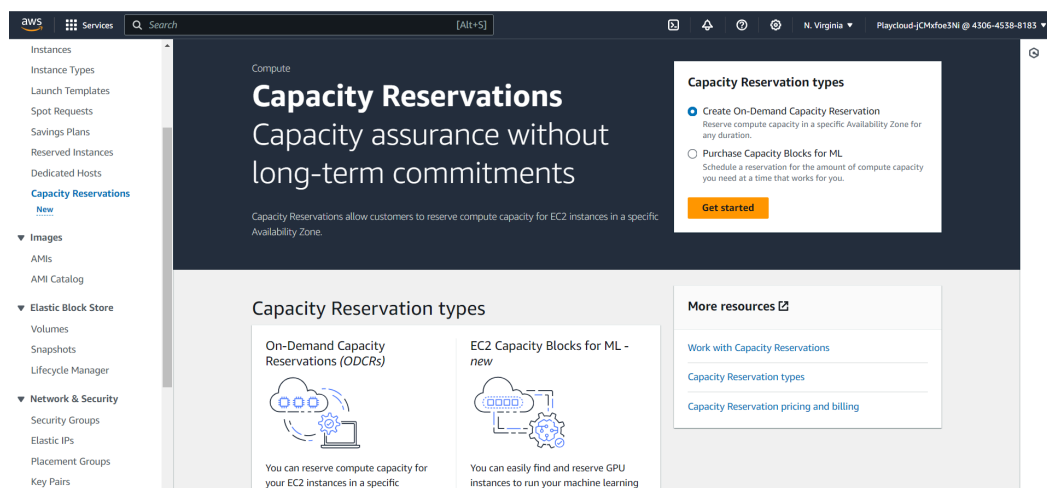
Lab Steps

Create a Capacity Reservation to reserve compute capacity for your instances in a specific Availability Zone for any duration

1. Navigate to the search bar, type "EC2", and click to open the EC2 Dashboard.



2. On the left-hand panel, select **Capacity Reservations** under the **Instances**. You will be redirected to the Capacity Reservation dashboard. In the **Capacity Reservation types**, select the **Create On-Demand Capacity Reservation** and click **Get started**.



3. When creating a Capacity Reservation, it's important to configure the Instance details section properly. The instance type, platform, and Availability Zone of the instances that you plan to launch must match the instance type, platform, and Availability Zone specified in the reservation. If there is a mismatch, the Capacity Reservation will not apply. For example, if an open Capacity Reservation doesn't match, an instance launch that targets that Capacity Reservation explicitly will fail.

- **Instance Type**– The type of instance to launch into the reserved capacity. An example is `t3.micro`.
- **Platform** – The operating system for your instances. For this lab, we will use Linux as the Operating System.
- **Availability Zone**– Specify the Availability Zone where you want to reserve the capacity.

- **Tenancy** – Specify whether to run on shared hardware (default) or a dedicated instance.
- *(Optional)* **Placement group ARN** – The ARN of the cluster placement group in which to create the Capacity Reservation.
- **Quantity** – The request will be denied if the specified number of instances exceeds the remaining On-Demand Instance limit for the chosen instance type.

Instance details [Info](#)

Instance type

t3.micro

☒ EBS-optimized
If the selected instance type is EBS-optimized by default, you will not be able to uncheck this option.

☐ Instance store
Temporary block-level storage. Data persists only during the life of the instance.

Platform

Linux/UNIX

Availability Zone

us-east-1a

Tenancy

Default - run a shared hardware instance

Placement group

None

Total capacity
You can reserve capacity up to your current On-Demand instance quota.

instance(s)
You can't reduce the capacity below 0 instances.

4. Configure the following settings in the **Reservation details** section:

- **Reservation Ends** – Choose one of the following options:
 - **Manually** – Reserve the capacity until you explicitly cancel it. Note that it will remain active in your account and continue to be billed until you manually cancel it.
 - **Specific time** – Cancel the capacity reservation automatically at the specified date and time.
For this lab, we will use the **Specific Time**.
- **Instance eligibility** – Choose one of the following options:
 - **Open** – The Capacity Reservation automatically places an instance into reserved capacity if it has matching attributes (instance type, platform, and Availability Zone).
 - **Targeted** – The Capacity Reservation only accepts instances that have matching attributes (instance type, platform, and Availability Zone), and that explicitly target the reservation.

Capacity Reservation details [Info](#)

Capacity Reservation ends

Specify when the Capacity Reservation should end. When the Capacity Reservation ends, the reserved capacity is released. Instances running in the reserved capacity continue to run in On-Demand capacity.

☒ **At specific time**

The Capacity Reservation ends automatically at the specified date and time.



Note: By default, the Capacity Reservation is configured to end at a specific date and time that you must specify. This ensures that the reservation is released and billing ends when you expect. If you prefer to keep the reservation indefinitely and cancel it when you no longer need it, select **Manually**.

☐ **Manually**

The Capacity Reservation remains active in your account until you manually cancel it.

Instance eligibility

Indicate the criteria for instances that can run in this Capacity Reservation.

☐ **Open: Any instance with matching attributes.**

All instances with matching attributes (instance type, platform, and Availability Zone) automatically run in the capacity.

☒ **Targeted: Only instances that target the Capacity Reservation.**

When you launch instances, you must specify the reservation ID or the reservation resource group ARN associated with this reservation.

5. If you have finished the configuration, click the **Create** button.

Capacity Reservation ends

Specify when the Capacity Reservation should end. When the Capacity Reservation ends, the reserved capacity is released. Instances running in the reserved capacity continue to run in On-Demand capacity.

☒ **At specific time**

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Note: By default, the Capacity Reservation is configured to end at a specific date and time that you must specify. This ensures that the reservation is released and billing ends when you expect. If you prefer to keep the reservation indefinitely and cancel it when you no longer need it, select **Manually**.

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Indicate the criteria for instances that can run in this Capacity Reservation.

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All instances with matching attributes (instance type, platform, and Availability Zone) automatically run in the capacity.

☒ **Targeted: Only instances that target the Capacity Reservation.**

When you launch instances, you must specify the reservation ID or the reservation resource group ARN associated with this reservation.

Tags (0)

No tags defined

Add new tag

You can add up to 50 more items

Cancel

Create

A confirmation window for creating the Capacity Reservation will appear. Select **Confirm**.

Note: This lab is for mock creation only; therefore, you won't be able to actually reserve capacity.

specific time

Capacity Reservation ends automatically at the specified date and time.

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00:00:00

Manually

Capacity Reservation remains active in your account until you manually cancel it.

Instance eligibility

Indicate the criteria for instances that can run in this Capacity Reservation.

Open: Any instance with matching attributes.

All instances with matching attributes (instance type, platform, and Availability Zone) automatically run in the capacity.

Targeted: Only instances that target the Capacity Reservation.

When you launch instances, you must specify the reservation ID or the reservation resource group ARN associated with this reservation.

Tags (0)

No tags defined

Add new tag

You can add up to 50 more items

Cancel

Create

Confirm Capacity Reservation

The Capacity Reservation will be billed at the On-Demand rate for the selected instance type as soon as the capacity is provisioned in your account, whether you run instances in the reserved capacity or not. Billing will end automatically when the Capacity Reservation is released at the specified end date and time. For more information, see [Capacity Reservation pricing and billing](#).

Are you sure that you want to continue?

Cancel

Confirm

