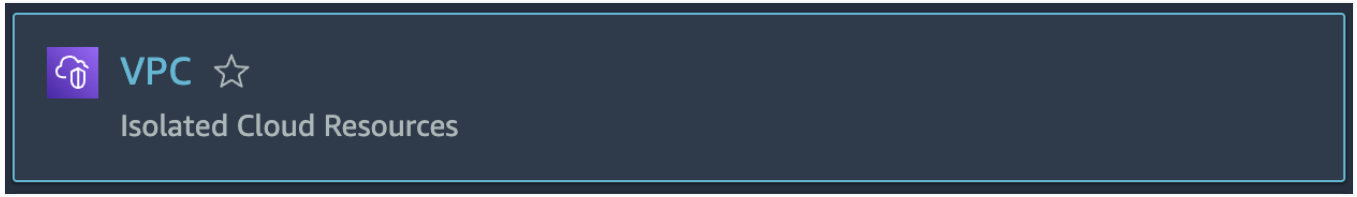
## Introduction

Amazon Virtual Private Cloud (Amazon VPC) enables you to launch AWS resources into a virtual network that you've defined. This virtual network closely resembles a traditional network that you'd operate in your own data center with the benefits of using the scalable infrastructure of AWS. It is logically isolated from other virtual networks in the AWS cloud.

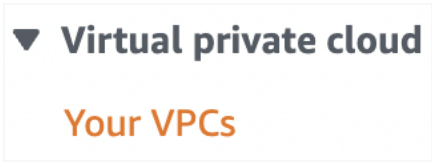
You can create a new VPC using the AWS Management Console.

## Instructions

1. In the AWS Management Console search bar, enter *VPC*, and click the **VPC** result under **Services**:

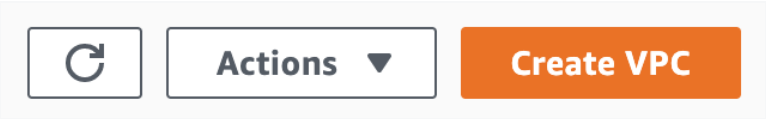



2. From the VPC dashboard, click on **Your VPCs** link in the sidebar menu:



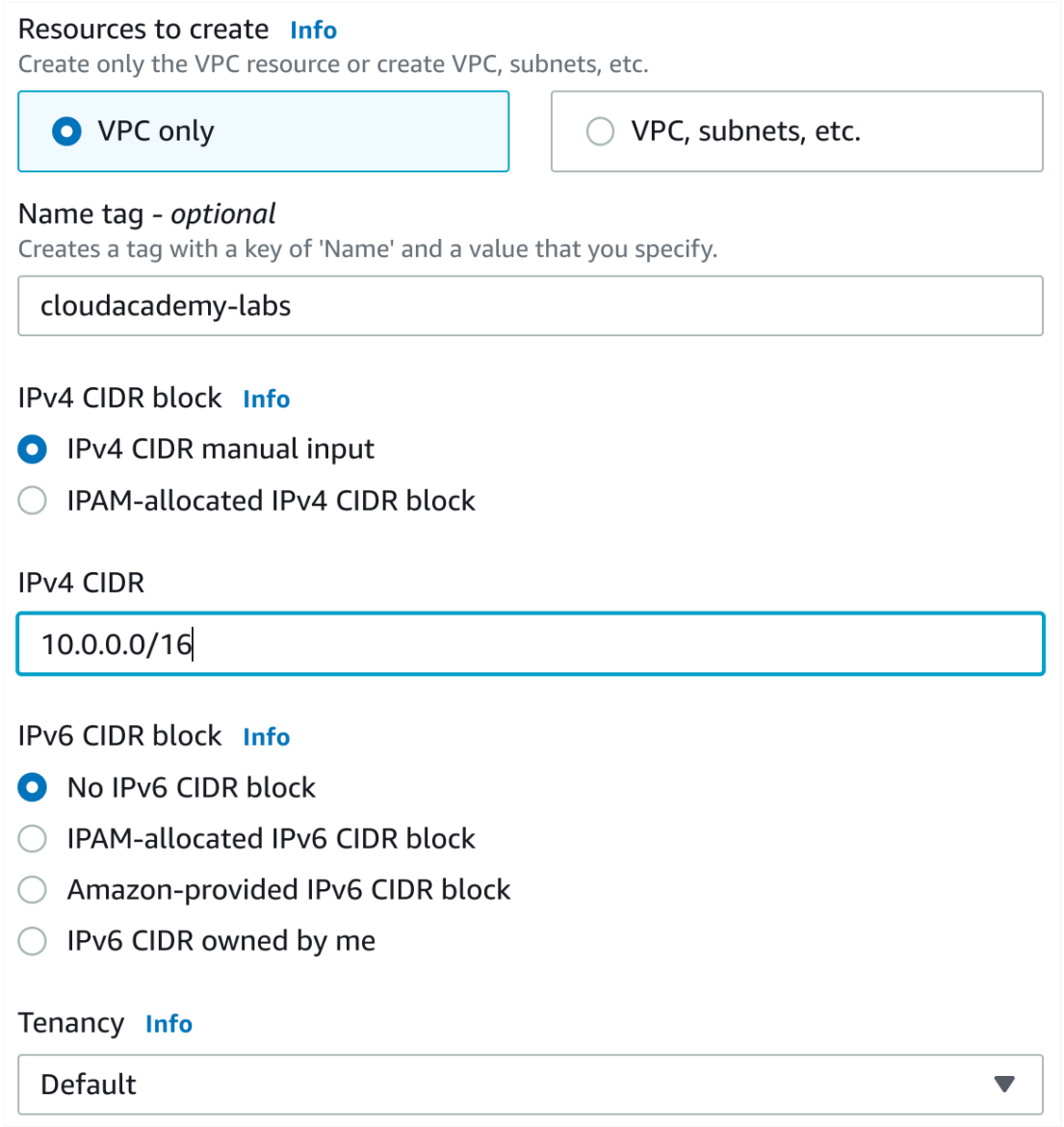

This page lists all previously created VPCs. Every new AWS account comes with a **Default VPC**.

3. Click **Create VPC** to begin creating a new VPC:




4. Specify the following VPC details on the Create VPC page then click **Create VPC:**

- **Resources to create**: Select **VPC only**
- **Name tag**: `cloudacademy-labs`. This is the name for your VPC; doing so creates a tag with a key of Name and the value that you specify.
- **CIDR block**: `10.0.0.0/16`. You should specify a CIDR block from the private (non-publicly routable) IP address ranges as specified in RFC 1918.
- **IPv6 CIDR block**: No IPv6 CIDR block. VPCs support IPv6 addresses but this is not a focus for this Lab.
- **Tenancy**: `Default`. Dedicated tenancy ensures your instances run on single-tenant hardware.




Amazon creates the requested VPC and the following linked services:

- a **DHCP options set** (this set enables DNS for instances that need to communicate over the VPC's Internet gateway)
- a **Route Table** (it contains a set of rules, called *routes*, that are used to determine where network traffic is directed)

- a **Network ACL** (it is a list of rules to determine whether traffic is allowed in or out of any subnet associated with the network ACL)

*Note:* No Subnets or Internet Gateways are automatically created -- you need to add them manually.

## Summary

In this Lab Step, you created a VPC. In the following steps, you will create additional resources within the VPC.

VALIDATION CHECKS

**1 Checks** Check again

**Created VPC**

Created a non-default VPC

Amazon VPC