

[CreateVpc](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1>CreateVpc) [EC2 Global](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly) [vpc in aws](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly) [vpc in aws](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly) [Private Clou](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly) [AWS VPC](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly) [bing.com/](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly) [Bing Video](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly) [aws nat g](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly) [AWS NAT](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly) [github - S](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly) [sandeepr](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly) [+](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly)

VPC Services Search [Alt+S]

[VPC](#) > [Your VPCs](#) > Create VPC

Create VPC Info

A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances.

VPC settings

Resources to create [Info](#)
Create only the VPC resource or the VPC and other networking resources.
 VPC only VPC and more

Name tag - optional
Creates a tag with a key of 'Name' and a value that you specify.
hpcsa-vpc

IPv4 CIDR block [Info](#)
 IPv4 CIDR manual input IPAM-allocated IPv4 CIDR block
172.20.0.0/16
CIDR block size must be between /16 and /28.

IPv6 CIDR block [Info](#)
 No IPv6 CIDR block IPAM-allocated IPv6 CIDR block
 Amazon-provided IPv6 CIDR block IPv6 CIDR owned by me

Tenancy [Info](#)
Default

Tags
A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

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[vpcs | VPC](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#vpcs) [EC2 Global](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc) [vpc in aws](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly) [vpc in aws](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly) [Private Clou](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly) [AWS VPC](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly) [bing.com/](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly) [Bing Video](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly) [aws nat g](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly) [AWS NAT](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly) [github - S](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly) [sandeepr](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly) [+](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly)

VPC dashboard [Actions](#) [Create VPC](#)

Your VPCs (2) [Info](#)

Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR	DHCP option set	Main route table
Default	vpc-037a78c035bcf7502	Available	172.31.0.0/16	-	dept-00238ef8958033...	rtb-0665f3f7fd8ab99f
hpcsa-vpc	vpc-0f1ba822b9015b6f8	Available	172.20.0.0/16	-	dept-00238ef8958033...	-

Select a VPC above

VPC dashboard [Actions](#) [Create VPC](#)

Virtual private cloud

- Your VPCs**
 - Subnets
 - Route tables
 - Internet gateways
 - Egress-only internet gateways
 - DHCP option sets
 - Elastic IPs
 - Managed prefix lists
 - Endpoints
 - Endpoint services
 - NAT gateways
 - Peering connections
- Security**
 - Network ACLs
 - Security groups
- DNS firewall**
 - Rule groups
 - Domain lists
- Network Firewall**
 - Firewalls
 - Firewall policies

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Subnet settings

Specify the CIDR blocks and Availability Zone for the subnet.

Subnet 1 of 1

Subnet name
Create a tag with a key of 'Name' and a value that you specify.

The name can be up to 256 characters long.

Availability Zone
Choose the zone in which your subnet will reside, or let Amazon choose one for you.

IPv4 VPC CIDR block
Choose the IPv4 VPC CIDR block to create a subnet in.

IPv4 subnet CIDR block
 256 IPs
[Edit](#)

Tags - optional

Key	Value - optional
<input type="text" value="Name"/>	<input type="text" value="hpcsa-vpc-public"/>

[Add new tag](#)
You can add 49 more tags.
[Remove](#)

[Add new subnet](#)

[Cancel](#) [Create subnet](#)



Subnets (5) [Info](#)

Subnets (5) [Actions](#) [Create subnet](#)

Subnets (5) [Info](#)

Name	Subnet ID	State	VPC	IPv4 CIDR	IPv6 CIDR	Available IPv4 adrs
Default1	subnet-0e632da737ec86656	Available	vpc-037a78c035bcf7502 Default	172.31.0.0/20	-	4091
Default2	subnet-0bbc38c204d7e3d02	Available	vpc-037a78c035bcf7502 Default	172.31.16.0/20	-	4091
Default3	subnet-0f0bfe478495acec1	Available	vpc-037a78c035bcf7502 Default	172.31.32.0/20	-	4091
hpcsa-vpc-public	subnet-087e60901235ed93d	Available	vpc-0f1ba822b9015b6f8 hpcsa-vpc-public	172.20.5.0/24	-	251
hpcsa-vpc-private	subnet-003f15a6590808519	Available	vpc-0f1ba822b9015b6f8 hpcsa-vpc-private	172.20.10.0/24	-	251

Select a subnet

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[vpc in aws](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1>EditSubnet EC2 Global | <a href=) | [vpc in aws](#) | [Private Cld](#) | AWS VPC | [bing.com/](#) | [Bing Video](#) | [aws nat gill](#) | AWS NAT | [github - S...](#) | [sandepv...](#)

VPC Services Search [Alt+S]

Subnets > subnet-087e60901233ed93d > Edit subnet settings

Edit subnet settings Info

Subnet

Subnet ID	Name
subnet-087e60901233ed93d	hpcsa-vpc-public

Auto-assign IP settings Info
Enable AWS to automatically assign a public IPv4 or IPv6 address to a new primary network interface for an instance in this subnet.

Enable auto-assign public IPv4 address Info

Enable auto-assign customer-owned IPv4 address Info
Option disabled because no customer owned pools found.

Resource-based name (RBN) settings Info
Specify the hostname type for EC2 instances in this subnet and optional RBN DNS query settings.

Enable resource name DNS A record on launch Info

Enable resource name DNS AAAA record on launch Info

Hostname type Info
 Resource name
 IP name

DNS64 settings
Enable DNS64 to allow IPv6-only services in Amazon VPC to communicate with IPv4-only services and networks.

Enable DNS64 Info

Cancel **Save**

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[igws | VPC](https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#igw) EC2 Global | [vpc in aws](#) | [vpc in aws](#) | [Private Cld](#) | AWS VPC | [bing.com/](#) | [Bing Video](#) | [aws nat gill](#) | AWS NAT | [github - S...](#) | [sandepv...](#)

VPC dashboard Services Search [Alt+S]

Internet gateways (2) Info

Name	Internet gateway ID	State	VPC ID	Owner
hpcsa-vpc-igw	igw-0bbb4209bfc310796	Detached	-	364907632105
Default-igw	igw-017b45a912a1fe8a	Attached	vpc-037a78c035bcf7502 Default	364907632105

Select an internet gateway above

Actions Create internet gateway

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Sidebar Navigation:

- VPC dashboard
- EC2 Global View
- Filter by VPC: Select a VPC
- Virtual private cloud
 - Your VPCs
 - Subnets
 - Route tables
- Internet gateways
 - Egress-only internet gateways
 - DHCP option sets
 - Elastic IPs
 - Managed prefix lists
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 - NAT gateways
 - Peering connections
- Security
 - Network ACLs
 - Security groups
- DNS firewall
 - Rule groups
 - Domain lists
- Network Firewall
 - Firewalls
 - Firewall policies

Screenshot of the AWS VPC console showing the Internet Gateways page. The page displays two Internet gateways: 'hpcsa-vpc-igw' and 'Default-igw'. The 'hpcsa-vpc-igw' gateway is selected.

Internet Gateways (1/2) Info

Name	Internet gateway ID	State	VPC ID	Owner
<input checked="" type="checkbox"/> hpcsa-vpc-igw	igw-0bbb4209bfc310796	Attached	vpc-0f1ba822b9015b6f8 hpcsa-vpc	364907632105
<input type="checkbox"/> Default-igw	igw-017b45a91b2a1fe8a	Attached	vpc-037a78c035bcf7502 Default	364907632105

igw-0bbb4209bfc310796 / hpcsa-vpc-igw

Details Tags

Details

Internet gateway ID <input checked="" type="checkbox"/> igw-0bbb4209bfc310796	State Attached	VPC ID vpc-0f1ba822b9015b6f8 hpcsa-vpc	Owner 364907632105
--	--	---	-----------------------

Screenshot of the AWS VPC console showing the Route Tables page. A success message indicates a route table was created successfully.

Route table rtb-0db1e1417c52bc9e9 | hpcsa-vpc-public-rt was created successfully.

rtb-0db1e1417c52bc9e9 / hpcsa-vpc-public-rt

Details Info

Route table ID <input checked="" type="checkbox"/> rtb-0db1e1417c52bc9e9	Main <input checked="" type="checkbox"/> No	Explicit subnet associations -	Edge associations -
VPC vpc-0f1ba822b9015b6f8 hpcsa-vpc	Owner ID 364907632105		

Routes (1)

Destination	Target	Status	Propagated
172.20.0.0/16	local	Active	No

Screenshot of the AWS VPC console showing the 'Edit routes' page for a specific route table.

The URL is <https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#EditRoutesRouteTableId=rtb-0db1e1417c52bc9e9>

The page displays two route entries:

Destination	Target	Status	Propagated
172.20.0.0/16	local	Active	No
0.0.0.0/0	Internet Gateway	-	No

Buttons at the bottom include 'Add route', 'Cancel', 'Preview', and 'Save changes'.

Screenshot of the AWS VPC console showing the 'Edit subnet associations' page for a specific route table.

The URL is <https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#EditRouteTableSubnetAssociationsRouteTableId=rtb-0db1e1417c52bc9e9>

The page shows available subnets and selected subnets:

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
hpcsa-vpc-private	subnet-003f15a6590808519	172.20.10.0/24	-	Main (rtb-01601459593aca514)
<input checked="" type="checkbox"/> hpcsa-vpc-public	subnet-087e60901233ed93d	172.20.5.0/24	-	Main (rtb-01601459593aca514)

Selected subnets: subnet-087e60901233ed93d / hpcsa-vpc-public

Buttons at the bottom include 'Cancel' and 'Save associations'.

Screenshot of the AWS VPC console showing the same 'Edit subnet associations' page as the previous screenshot.

The URL is <https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#EditRouteTableSubnetAssociationsRouteTableId=rtb-0db1e1417c52bc9e9>

The interface is identical to the previous screenshot, showing the list of available and selected subnets.

<https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#RouteTables>

VPC dashboard Services Search [Alt+S]

Route tables (1/3) Info

Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC	Owner ID
Default RT	rtb-0665f3f77d8ab99f	-	-	Yes	vpc-037a78c035bcf7502 Default	364907632105
-	rtb-01601459593aca514	-	-	Yes	vpc-0f1ba822b9015b6f8 hpcsa-vpc-public	364907632105
hpcsa-vpc-public-rt	rtb-0db1e1417c52bc9e9	subnet-087e60901233ed93d...	-	No	vpc-0f1ba822b9015b6f8 hpcsa-vpc-public	364907632105

Actions Create route table

VPC dashboard Services Search [Alt+S]

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<https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#LaunchInstances>

EC2 > Instances > Launch an instance

Launch an instance Info

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

Name and tags Info

Name: vpc-demo Add additional tags

Application and OS Images (Amazon Machine Image) Info

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below.

Search our full catalog including 1000s of application and OS images

Quick Start

Amazon Linux macOS Ubuntu Windows Red Hat SUSE Linux Browse more AMIs

Amazon Machine Image (AMI)

Ubuntu Server 22.04 LTS (HVM), SSD Volume Type ami-0287a05f0e0cd93a (64-bit (x86)) / ami-0b6581fde9de7779 (64-bit (Arm)) Free tier eligible

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro) in the Regions in which t2.micro is unavailable instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Cancel Launch instance Review commands

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EC2 Global | **vpc in aws** | **vpc in aws** | **Private Clic** | **AWS VPC** | **bing.com/** | **Bing Video** | **aws nat g** | **AWS NAT** | **github - S** | **sandeepw/**

New tab | Launch an | https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#LaunchInstances:

Services | Search [Alt+S]

Additional costs apply for AMIs with pre-installed software

Key pair (login) info

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - required hpcsa-win Create new key pair

Network settings info

VPC - required Info vpc-0f1ba822b9015b6f8 (hpcsa-vpc) 172.20.0.16

Subnet Info subnet-087c60001233ed93d hpcsa-vpc-public VPC: vpc-0f1ba822b9015b6f8 Owner: 364907632105 Availability Zone: ap-south-1a IP Addresses available: 251 CIDR: 172.20.0.16

Auto-assign public IP Info Enable

Firewall (security groups) Info A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

Create security group Select existing security group

Security group name - required launch-wizard-5 This security group will be added to all network interfaces. The name can't be edited after the security group is created. Max length is 255 characters. Valid characters: a-z, A-Z, 0-9, spaces, and _-/!@#\$%^&{}[]*

Description - required Info

Summary

Number of instances Info 1

Software Image (AMI) Canonical, Ubuntu, 22.04 LTS, ...read more ami-0287a05fe0ef0e9d9a

Virtual server type (instance type) t2.micro

Firewall (security group) New security group

Storage (volumes) 1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Cancel Launch instance Review commands

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New tab | Instances | https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#Instances:

Services | Search [Alt+S]

EC2 Dashboard | EC2 Global View | Events

Instances

Instances

Instance Types | Launch Templates | Spot Requests | Savings Plans | Reserved Instances | Dedicated Hosts | Capacity Reservations

Images

AMIs | AMI Catalog

Elastic Block Store

Volumes | Snapshots | Lifecycle Manager

Network & Security

Security Groups | Elastic IPs | Placement Groups | Key Pairs | Network Interfaces | Load Balancing

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Instances (1/1) Info

Find Instance by attribute or tag (case-sensitive)

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
vpc-demo	i-0e5724e8e9dc33d8e	Pending	t2.micro	-	No alarms	ap-south-1a	52.66.206.35	-	-

Instance: i-0e5724e8e9dc33d8e (vpc-demo)

Details | Security | Networking | Storage | Status checks | Monitoring | Tags

Instance summary

Instance ID: i-0e5724e8e9dc33d8e (vpc-demo)

IPv6 address: -

Hostname type: IP name: ip-172-20-5-59.ap-south-1.compute.internal

Answer private resource DNS name: -

Public IPv4 address: 52.66.206.35 [open address]

Instance state: Pending

Private IP DNS name (IPv4 only): ip-172-20-5-59.ap-south-1.compute.internal

Instance type: t2.micro

Private IPv4 addresses: 172.20.5.59

Public IPv4 DNS: -

Elastic IP addresses: -

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Screenshot of the AWS CloudShell interface showing the AWS Management Console. The user is navigating through the EC2 service, specifically viewing the 'Instances' section. A terminal window is open on instance 'i-0e5724e89dc33d8e' (vpc-demo) showing system logs.

EC2 Dashboard

Instances (1/1)

Instance: i-0e5724e89dc33d8e (vpc-demo)

Details | Security | Networking | Storage | Status checks | Monitoring | Tags

Instance summary

Instance ID: i-0e5724e89dc33d8e (vpc-demo)

IPv6 address: -

Hostname type: IP name: ip-172-20-5-59.ap-south-1.compute.internal

Answer private resource DNS name: -

Public IPv4 address copied: 52.66.206.35 [Open address]

Private IP DNS name (IPv4 only): ip-172-20-5-59.ap-south-1.compute.internal

Instance type: t2.micro

Private IPv4 addresses: 172.20.5.59

Public IPv4 DNS: -

Elastic IP addresses: -

CloudShell Feedback

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CloudShell Feedback

CloudShell Feedback

Screenshot of the AWS CloudShell interface showing the AWS Management Console. The user is launching a new EC2 instance.

Launch instances

Create key pair

Key pair name: hpcsa-vps-assignment

Key pair type: RSA

Private key file format: .pem

When prompted, store the private key in a secure and accessible location on your computer. You will need it later to connect to your instance. [Learn more](#)

Cancel Create key pair

Network settings

Network: vpc-037a78c0355bcf7502 | Default

Subnet: No preference (Default subnet in any availability zone)

Auto-assign public IP: Enabled

Firewall (security group): No preference

We'll create a new security group called 'launch-wizard-6' with the following rules:

Allow SSH traffic from Anywhere

CloudShell Feedback

CloudShell Feedback

Screenshot of the AWS Cloud Console showing the EC2 Instances launch wizard.

Step 1: Launch an instance

Name and tags: Name is set to "vpc-demo-private".

Application and OS Images (Amazon Machine Image): A search bar shows "Search our full catalog including 1000s of application and OS images". Below it, a "Quick Start" tab is selected, showing categories: Amazon Linux, macOS, Ubuntu, Windows, Red Hat, and SUSE Linux. A note says "Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet."

Amazon Machine Image (AMI): An AMI card for "Ubuntu Server 22.04 LTS (HVM), SSD Volume Type" is shown, indicating "Free tier eligible".

Summary: Number of instances: 1. Software Image (AMI): Canonical, Ubuntu, 22.04 LTS, ami-0287a05f0ef0e9d9a. Virtual server type (instance type): t2.micro. Firewall (security group): New security group. Storage (volumes): 1 volume(s) - 8 GiB.

Actions: Buttons for Cancel, Launch instance (highlighted in orange), and Review commands.

Screenshot of the AWS Cloud Console showing the EC2 Instances launch wizard, step 2.

Amazon Machine Image (AMI): An AMI card for "Ubuntu Server 22.04 LTS (HVM), SSD Volume Type" is shown, indicating "Free tier eligible".

Description: Canonical, Ubuntu, 22.04 LTS, amd64 jammy image build on 2023-09-19.

Architecture: 64-bit (x86) / AMI ID: ami-0287a05f0ef0e9d9a / Verified provider.

Instance type: t2.micro (selected). Family: t2. 1 vCPU, 1 GiB Memory. Current generation: true. On-Demand Linux base pricing: 0.0124 USD per Hour. On-Demand Windows base pricing: 0.0171 USD per Hour. On-Demand RHEL base pricing: 0.0724 USD per Hour. On-Demand SUSE base pricing: 0.0124 USD per Hour.

Key pair (login): Key pair name - required: hpcsa-vpc-assigment.

Network settings: Info

Summary: Number of instances: 1. Software Image (AMI): Canonical, Ubuntu, 22.04 LTS, ami-0287a05f0ef0e9d9a. Virtual server type (instance type): t2.micro. Firewall (security group): New security group. Storage (volumes): 1 volume(s) - 8 GiB.

Actions: Buttons for Cancel, Launch instance (highlighted in orange), and Review commands.

Screenshot of the AWS Cloud Console showing the 'Launch Instances' wizard for creating a new EC2 instance.

Key pair (login) info: A key pair named 'hpcsa-vpc-assignmet' is selected. A note states: "You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance."

Network settings info:

- VPC - required:** hpcsa-vpc
- Subnet:** hpcsa-vpc-private (subnet-003f15a63500803519)
- Auto-assign public IP:** Disable
- Firewall (security groups):** Create security group (selected)
- Security group name - required:** launch-wizard-6
- Description - required:** (empty)

Summary: Number of instances: 1. Software Image (AMI): Canonical, Ubuntu, 22.04 LTS. Virtual server type (instance type): t2.micro. Firewall (security group): New security group. Storage (volumes): 1 volume(s) - 8 GiB.

Free tier information: In your first year includes 750 hours of t2.micro (or t3.micro) in the Regions in which t2.micro is unavailable instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Buttons: Cancel, Launch instance (highlighted), Review commands.

Screenshot of the AWS Cloud Console showing the 'Instances' page.

Instances (1/2) Info: A table lists two instances:

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
vpc-demo-private	i-0461bf4e2304a1722	Pending	t2.micro	-	No alarms	ap-south-1a	-	-	-
vpc-demo-public	i-0e5724e0e9dc53d8e	Running	t2.micro	2/2 checks passed	No alarms	ap-south-1a	-	52.66.206.35	-

Instance: i-0461bf4e2304a1722 (vpc-demo-private):

Details:

- Instance ID: i-0461bf4e2304a1722 (vpc-demo-private)
- Public IPv4 address: -
- Private IPv4 address: 172.20.10.1722
- Instance state: Pending
- Public IPv4 DNS: -
- Private IP DNS name (IPv4 only): ip-172-20-10-1722.ap-south-1.compute.internal
- Instance type: t2.micro
- Elastic IP addresses: -

```
Ubuntu@ip-172-20-5-59:~$ ssh -i ubuntu@172.20.10.178
[+] Login as: ubuntu
[*] Authenticating with public key "imported-openssh-key"
Welcome to Ubuntu 22.04.3 LTS (GNU/Linux 6.2.0-1012-aws x86_64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/advantage

System information as of Wed Dec 6 12:36:44 UTC 2023

System load: 0.0          Processes:      97
Usage of /: 20.7% of 7.57GB  Users logged in:      0
Memory usage: 21%          IPv4 address for eth0: 172.20.5.59
Swap usage:  0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo apt status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

Last login: Wed Dec 6 12:11:36 2023 from 14.139.109.8
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-20-5-59:~$ hpcsa-vpc-assigmet.pem
ubuntu@ip-172-20-5-59:~$ ssh -i ubuntu@172.20.10.178

Warning: Identity file /home/ubuntu/.ssh/id_rsa not accessible: No such file or directory.
usage: ssh [-i identity_file] [-c cipher_spec] [-D bind_address[:port]
           [-b bind_address] [-c cipher_spec] [-D bind_address[:port]
           [-E log_file] [-e escape_char] [-F configfile] [-I pkcs11]
           [-i identity_file] [-J [user@]host[:port]] [-L address]
           [-l login_name] [-m mac_spec] [-o ctl_cmd] [-o option] [-p port]
           [-Q query_option] [-R address] [-S socket] [-W host:port]
           [-w local_tun[:remote_tun]] destination [command [argument ...]]
ubuntu@ip-172-20-5-59:~$ chmod 400 hpcsa-vpc-assigmet.pem
ubuntu@ip-172-20-5-59:~$ ssh -i ubuntu@172.20.10.178
Warning: Identity file /home/ubuntu/.ssh/id_rsa not accessible: No such file or directory.
usage: ssh [-i identity_file] [-c cipher_spec] [-D bind_address[:port]
           [-b bind_address] [-c cipher_spec] [-D bind_address[:port]
           [-E log_file] [-e escape_char] [-F configfile] [-I pkcs11]
           [-i identity_file] [-J [user@]host[:port]] [-L address]
           [-l login_name] [-m mac_spec] [-o ctl_cmd] [-o option] [-p port]
           [-Q query_option] [-R address] [-S socket] [-W host:port]
           [-w local_tun[:remote_tun]] destination [command [argument ...]]
ubuntu@ip-172-20-5-59:~$ ls -al
total 32
drwxr-x--- 4 ubuntu  ubuntu  4096 Dec 6 12:26 .
drwxr-x--- 3 root   root   4096 Dec 6 12:09 ..
-rw-r----- 1 ubuntu  ubuntu  220 Jan  6 2022 .bash_logout
-rw-r----- 1 ubuntu  ubuntu  3771 Jan  6 2022 .bashrc
drwx----- 2 ubuntu  ubuntu  4096 Dec 6 12:11 .cache
-rw-r----- 1 ubuntu  ubuntu  807 Jan  6 2022 .profile
Ubuntu@ip-172-20-5-59:~$ 27°C Mostly sunny ENG IN 614 PM 12/6/2023
```

```
Ubuntu@ip-172-20-5-59:~$ ssh -i ubuntu@172.20.10.178
Warning: Identity file /home/ubuntu/.ssh/id_rsa not accessible: No such file or directory.
usage: ssh [-i identity_file] [-c cipher_spec] [-D bind_address[:port]
           [-b bind_address] [-c cipher_spec] [-D bind_address[:port]
           [-E log_file] [-e escape_char] [-F configfile] [-I pkcs11]
           [-i identity_file] [-J [user@]host[:port]] [-L address]
           [-l login_name] [-m mac_spec] [-o ctl_cmd] [-o option] [-p port]
           [-Q query_option] [-R address] [-S socket] [-W host:port]
           [-w local_tun[:remote_tun]] destination [command [argument ...]]
ubuntu@ip-172-20-5-59:~$ chmod 400 hpcsa-vpc-assigmet.pem
ubuntu@ip-172-20-5-59:~$ ssh -i hpcsa-vpc-assigmet.pem ubuntu@172.20.10.178
The authenticity of host '172.20.10.178 (172.20.10.178)' can't be established.
ED25519 key fingerprint is SHA256:RfCet0cXHdWNRw+WEoZlkzkgm072VlooyzbZ.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '172.20.10.178' (ED25519) to the list of known hosts.
Welcome to Ubuntu 22.04.3 LTS (GNU/Linux 6.2.0-1012-aws x86_64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/advantage

System information as of Wed Dec 6 12:41:03 UTC 2023

System load: 0.0          Processes:      97
Usage of /: 20.4% of 7.57GB  Users logged in:      0
Memory usage: 20%          IPv4 address for eth0: 172.20.10.178
Swap usage:  0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo apt status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*copyright*.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-20-10-178:~$ 27°C Mostly sunny ENG IN 614 PM 12/6/2023
```



