



## Create Jenkins Server

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# AWS



Services

Search for services, features, blogs, docs, and more

[Option+S]



N. Virginia ▾

Console Home Info



Recently visited Info



EC2

:

US East (N. Virginia)	us-east-1
US East (Ohio)	us-east-2
US West (N. California)	us-west-1
US West (Oregon)	us-west-2
Africa (Cape Town)	af-south-1
Asia Pacific (Hong Kong)	ap-east-1
Asia Pacific (Jakarta)	ap-southeast-3
Asia Pacific (Mumbai)	ap-south-1

- Make sure that You are in N.Virginia region  
( This AMI is only available N.Virginia )



# AWS

The screenshot shows the AWS console interface. At the top, there is a search bar with the text 'EC2'. Below the search bar, a sidebar on the left lists various categories: Services (9), Features (40), Blogs (1,734), Documentation (126,461), Knowledge Articles (30), Tutorials (18), and Events (0). A red arrow points from the search bar to the 'Services' link in the sidebar. To the right of the sidebar, the main content area displays search results for 'EC2'. The results are titled 'Services' and include two items: 'EC2' and 'EC2 Image Builder'. The 'EC2' item is highlighted with a blue border and has a star icon next to it. Below the 'EC2' item, the text 'Virtual Servers in the Cloud' is visible. The 'EC2 Image Builder' item also has a star icon and a brief description: 'A managed service to automate build, customize and deploy OS images'. On the far right, there is a sidebar with a 'Actions' dropdown menu and a 'With AWS' section.

- Type EC2 in search bar
- Choose EC2 from list



# AWS

The screenshot shows the AWS EC2 Dashboard. On the left, there's a sidebar with various navigation links like EC2 Dashboard, Instances, and Images. The main area displays metrics for running instances, elastic IPs, key pairs, placement groups, snapshots, dedicated hosts, instances, load balancers, security groups, and volumes. A callout box provides information about launching Microsoft SQL Server Always On availability groups. Below these metrics, there's a 'Launch instance' section with a large orange 'Launch Instance' button, which has a red arrow pointing to it from the bottom-left. There's also a 'Migrate a server' button. To the right of this section is a 'Service health' panel showing the US East (N. Virginia) region is operating normally.

- Click Launch Instance



## Name and tags

Name

Add additional tags

- Type here your server name (name is not an issue )



# AWS

## ▼ 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

The screenshot shows the AWS Management Console interface for searching Amazon Machine Images (AMIs). At the top, there is a search bar with the text "cydeo". Below the search bar, there are two tabs: "Recents" and "Quick Start", with "Quick Start" being the active tab. A horizontal line separates this from the main content area. In the main area, there are five cards representing different AMI types: "Amazon Linux" (with the AWS logo), "Ubuntu" (with the "ubuntu®" logo), "Windows" (with the Microsoft logo), "Red Hat" (with the Red Hat logo), and "SUSE Linux" (with the SUSE logo). To the right of these cards is a search icon and a link "Browse more AMIs" which includes a note: "Including AMIs from AWS, Marketplace and the Community". At the bottom left, there is a footer text "Amazon Machine Image (AMI)".

- Search for cydeo
- Hit the ENTER



# AWS

Quickstart AMIs (0) My AMIs (0) AWS Marketplace AMIs (0) Community AMIs (1)

Commonly used AMIs Created by me AWS & trusted third-party AMIs Published by anyone

Refine results

cydeo (1 filtered, 1 unfiltered) < 1 >

**Community AMIs**

Community AMIs contain all AMIs that are public, therefore anyone can publish an AMI and it will show in this catalog. This catalog can also contain paid products. When using community AMIs it is best practice to ensure you know and trust the publisher before launching an AMI.

**CYDEO\_LatestImage\_2022**

ami-0093c5779f6f4d7d1 Microsoft Cybertek Image for Students Use only -- Spartan App with No Auth (port 8000) with Basic Auth (port 7000) Oracle DB (1521) Initial Jenkins(8081) ORDS (1000) (wait around 5 mins to fully launch)

Platform: Windows Architecture: x86\_64 Owner: 478127437259 Publish date: 2022-07-06 Root device type: ebs ENA enabled: Yes

Virtualization: hvm

Select

- Click Community AMI
- Select **Cydeo\_LatestImage\_2022**



including 1000s of application and OS images

## Some of your current settings will be changed or removed if you proceed

X

Changing your AMI will result in some of your current settings being overridden. You will require permission for your changes to succeed. [Find out more.](#)

### Changes

- Your security group rules will be overridden.
- ▶ Volumes details

Cancel

Confirm Changes

- Confirm Changes



## ▼ Instance type Info

### Instance type

t2.micro

Family: t2 1 vCPU 1 GiB Memory

On-Demand Linux pricing: 0.0116 USD per Hour

On-Demand Windows pricing: 0.0162 USD per Hour

Free tier eligible

Compare instance types

## NOTES

- Make sure that Instance type is chosen as **t2.micro free tier eligible**
- Only one type of server is free  
750 hours per month for 12 month -> only for first year  
 $31 \text{ day} \times 24 \text{ hours} = 744$   
It means you need to have **only one server at a time**

 **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 IOs, 1 GB of snapshots, and 100 GB of bandwidth to the internet 



- Proceed without key pair

## ▼ 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*



Default value ▾

 [Create new key pair](#)

For Windows instances, you use a key pair to decrypt the administrator password. You then use the decrypted password to connect to your instance.

▼ Configure storage [Info](#)[Advanced](#)

1x

30

GiB

gp2

Root volume

 Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage 

NO CHANGES

[Add new volume](#)

0 x File systems

[Edit](#)

## ▼ Network settings

Edit

Network

vpc-34ff5649

Subnet

No preference (Default subnet in any availability zone)

Auto-assign public IP

Enable

### Security groups (Firewall) [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.

We'll create a new security group called '**launch-wizard-1**' with the following rules:

Allow RDP traffic from

Helps you connect to your instance

Anywhere

0.0.0.0/0



- Click Edit button



# AWS

## 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*

MyWebServerGroup

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

launch-wizard-1 created 2022-05-06T13:25:57.385Z

## Inbound security groups rules

### ▼ Security group rule 1 (TCP, 3389, 0.0.0.0/0)

Remove

Type Info

rdp

Protocol Info

TCP

Port range Info

3389

Source type Info

Anywhere

Source Info

Add CIDR, prefix list or security group

Description - optional Info

e.g. SSH for admin desktop

0.0.0.0/0 X

- Create Security Group
- Give a name  
(My-Jenkins-Server )
- Put description  
(ORDS - Spartans - Jenkins - HR )



# AWS

▼ Security group rule 1 (TCP, 3389, 0.0.0.0/0)

Type [Info](#)      Protocol [Info](#)      Port range [Info](#)

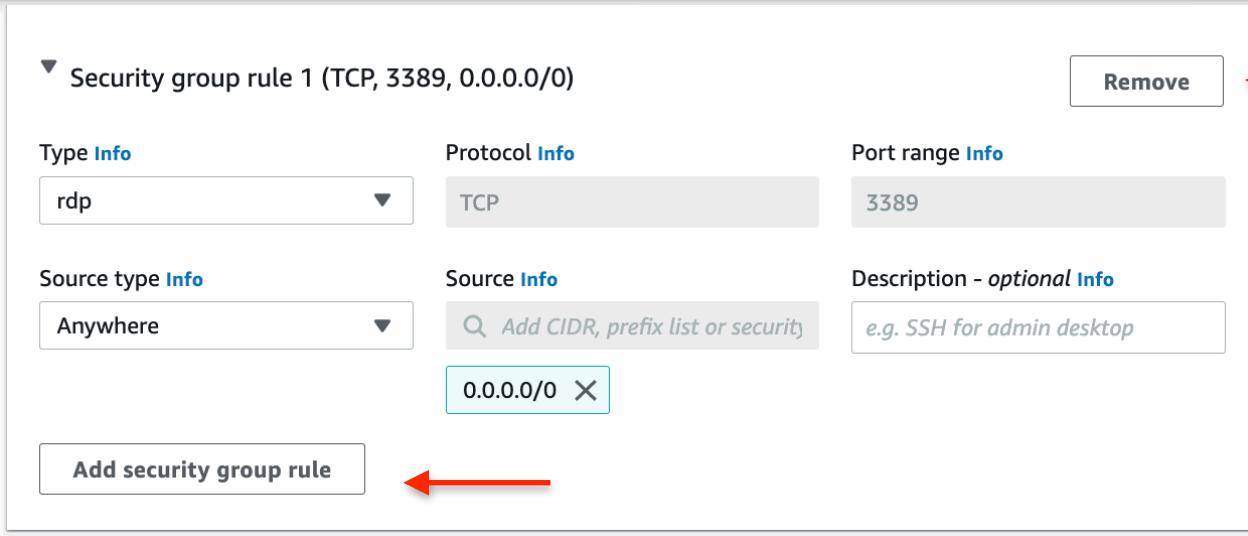
rdp	TCP	3389
-----	-----	------

Source type [Info](#)      Source [Info](#)      Description - *optional* [Info](#)

Anywhere	<input type="text" value="Add CIDR, prefix list or security group"/> <a href="#">X</a>	e.g. SSH for admin desktop
----------	--	----------------------------

[Add security group rule](#)

[Remove](#) 



- We are not going to use rdp
- Click Remove

- Click Here to add new Rules



# AWS

Add Port Number 8081

▼ Security group rule 1 (TCP, 8081, 0.0.0.0/0, Jenkins)

[Remove](#)

Type [Info](#)

Custom TCP

Protocol [Info](#)

TCP

Port range [Info](#)

8081

Source type [Info](#)

Anywhere

Source [Info](#)

Add CIDR, prefix list or security

Description - optional [Info](#)

Jenkins

Choose ANYWHERE

Type here Jenkins as desc



## Add Port Number 7000

▼ Security group rule 2 (TCP, 7000, 0.0.0.0/0, Spartan Auth)

Type [Info](#)      Protocol [Info](#)      Port range [Info](#)

Custom TCP      TCP      7000

Source type [Info](#)      Source [Info](#)      Description - *optional* [Info](#)

Anywhere      Add CIDR, prefix list or security      Spartan Auth

0.0.0.0/0 [X](#)

Choose ANYWHERE

Type here Spartan Auth as desc 

# AWS

Add Port Number 8080

▼ Security group rule 3 (TCP, 8000, 0.0.0.0/0, Spartan No Auth)

Type [Info](#)      Protocol [Info](#)      Port range [Info](#)

Custom TCP      TCP      8000

Source type [Info](#)      Source [Info](#)      Description - optional [Info](#)

Anywhere      Add CIDR, prefix list or security      Spartan No Auth

0.0.0.0/0

Choose ANYWHERE

Type here Spartan No Auth as desc



Add Port Number 1521

▼ Security group rule 4 (TCP, 1521, 0.0.0.0/0, Oracle DB)

Type Info      Protocol Info      Port range Info

Custom TCP      TCP      1521

Source type Info      Source Info      Description - optional Info

Anywhere       X      Oracle DB

Choose ANYWHERE

Type here Oracle DB as desc



Add Port Number 1000

▼ Security group rule 4 (TCP, 1521, 0.0.0.0/0, Oracle DB) Remove

Type <a href="#">Info</a> Custom TCP	Protocol <a href="#">Info</a> TCP	Port range <a href="#">Info</a> 1000
Source type <a href="#">Info</a> Anywhere	Source <a href="#">Info</a> <input type="text"/> Add CIDR, prefix list or security 0.0.0.0/0 <span style="color: red;">X</span>	Description - optional <a href="#">Info</a> <input type="text" value="HR ORDS"/>

Type here HR ORDS as desc



▼ Summary

Number of instances [Info](#)

Software Image (AMI)  
Cybertek\_LatestImage\_1.0  
ami-0600ada9f2792ef9c

Virtual server type (instance type)  
t2.micro

Firewall (security group)  
New security group

Storage (volumes)  
1 volume(s) - 30 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 IOs, 1 GB of snapshots, and

[Cancel](#) [Launch instance](#)

Click Launch Instances



# AWS

EC2 > Instances > Launch an instance



Success

Successfully initiated launch of instance ([i-064564ac404163a10](#))

▶ [Launch log](#)

## Next Steps

### Get notified of estimated charges

[Create billing alerts](#) to get an email notification when estimated charges on your AWS bill exceed an amount you define (for example, if you exceed the free usage tier)

### How to connect to your instance

Your instance is launching and it might be a few minutes until it is in the running state, when it will be ready for you to use

Click [View Instances](#) to monitor your instance's status. Once your instance is in the 'running' state, you can connect to it from the Instances screen. Find out [how to connect to your instance](#)

[View more resources to get you started](#)



[View all instances](#)

- [View All Instances](#)



# AWS

Instances (1) <a href="#">Info</a>								
	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
<input type="checkbox"/>	MyServerB26	i-064564ac404163a10	<span>Running</span>  	t2.micro	 Initializing	No alarms 	us-east-1d	ec2-54-227-23-123.c



Wait for 2/2 checks passed

- Wait around 5 mins to fully run



# AWS

Instances (1) <a href="#">Info</a>		<a href="#">C</a>	Connect	Instance state ▾	Actions ▾	<a href="#">Launch instances</a>	▼	
		<input type="text"/> Search <span style="float: right;">&lt; 1 &gt; </span>						
<input type="checkbox"/>	Name ▾	Instance ID	Instance state ▾	Instance type ▾	Status check	Alarm status	Availability Zone ▾	Public IPv4 DNS
<input type="checkbox"/>	MyServerB26	<a href="#">i-064564ac404163a10</a>	 Running 	t2.micro	 2/2 checks passed	No alarms 	us-east-1d	ec2-54-227-23-12



- It is OK to run applications



# AWS

Instances (1/1) [Info](#)

C Connect Instance state Actions Launch instances

Search

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
<input checked="" type="checkbox"/> MyServerB26	i-064564ac404163a10	<span>Running</span>	t2.micro	<span>2/2 checks passed</span>	No alarms	us-east-1d	ec2-54-227-23-123.compute-1.amazonaws.com

Instance: i-064564ac404163a10 (MyServerB26)

Details Security Networking Storage Status checks Monitoring Tags

Instance summary Info

Instance ID <a href="#">i-064564ac404163a10 (MyServerB26)</a>	Public IPv4 address <a href="#">54.227.23.123   open address</a>	Private IPv4 addresses <a href="#">172.31.26.160</a>
IPv6 address -	Instance state <span>Running</span>	Public IPv4 DNS <a href="#">ec2-54-227-23-123.compute-1.amazonaws.com   open address</a>

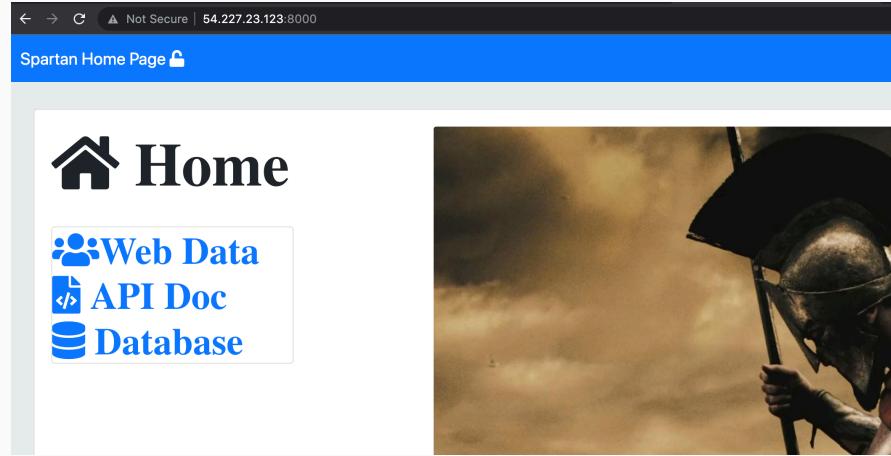
Use this IP from your instance. **NOT THIS ONE**



# AWS

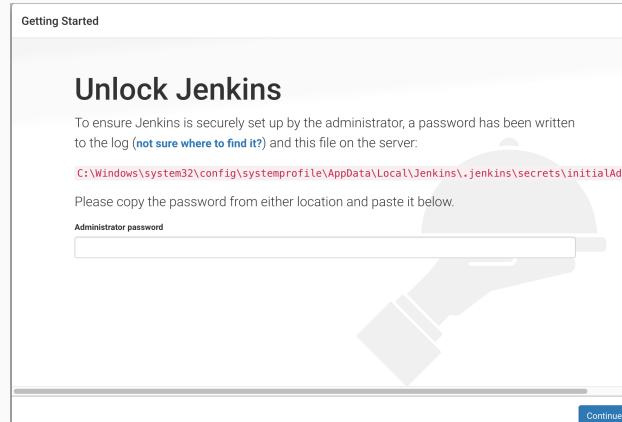
Spartans

54.227.23.123:**8000**



JENKINS

54.227.23.123:**8081**



# CYDEO

## Extras

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## ☒ HOW TO TERMINATE INSTANCE ?

Instances (1/1) [Info](#)

Search

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm :
<input checked="" type="checkbox"/>	MyServerB26	i-064564ac404163a10	<input checked="" type="checkbox"/> Running <a href="#">?</a> <a href="#">E</a>	t2.micro	<a href="#">2/2 checks passed</a>	Noalar

Instance: i-064564ac404163a10 (MyServerB26)

- Launch instances
- Launch instance from template
- Migrate a server
- Connect
- Stop instance
- Start instance
- Reboot instance
- Hibernate instance
- Terminate instance**



# AWS

Successfully terminated i-064564ac404163a10

Instances (1/1) [Info](#)

Connect Instance state Actions Launch instances

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DN
<input checked="" type="checkbox"/> MyServerB26	i-064564ac404163a10	Shutting-down	t2.micro	2/2 checks passed	No alarms <input type="button" value="+"/>	us-east-1d	-

Refresh Page

Instances (1) [Info](#)

Connect Instance state Actions Launch instances

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DN
<input type="checkbox"/> MyServerB26	i-064564ac404163a10	Terminated	t2.micro	-	No alarms <input type="button" value="+"/>	us-east-1d	-

