Cloud Formation Assignment2 – VPC AND SUBNET TEMPLATE

CloudFormation

Stacks
StackSets
Exports

Application Composer New
IaC generator

Registry
Public extensions
Activated extensions
Publisher

Spotlight

Feedback

Management & Governance

AWS CloudFormation

Model and provision all your cloud infrastructure

AWS CloudFormation provides a common language to describe and provision all the infrastructure resources in your environment in a safe, repeatable way.

Create a CloudFormation stack

Use your own template or a sample template to quickly get started.

Create stack

How it works

Getting started

What is AWS CloudFormation
Getting started with CloudFormation
Learn template basics
Quick starts

More resources

Documentation
API reference
FAQs

CloudFormation

Stacks
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Stacks (0)

Refresh | Delete | Update | Stack actions | Create stack

Filter by stack name

Filter status: Active

View nested

1

Stack name	Status	Created time	Description

No stacks

No stacks to display

Create stack

View getting started guide

Step 1
Create stack

Step 2
Specify stack details

Step 3
Configure stack options

Step 4
Review and create

Create stack

Prerequisite - Prepare template

Prepare template
Every stack is based on a template. A template is a JSON or YAML file that contains configuration information about the AWS resources you want to include in the stack.

- (●) Choose an existing template
  Upload or choose an existing template.
- ( ) Use a sample template
  Choose from our sample template library.
- ( ) Build from Application Composer
  Create a template using a visual builder.

Specify template

A template is a JSON or YAML file that describes your stack's resources and properties.

Template source
Selecting a template generates an Amazon S3 URL where it will be stored.

- ( ) Amazon S3 URL
  Provide an Amazon S3 URL to your template.
- (●) Upload a template file
  Upload your template directly to the console.
- ( ) Sync from Git - *new*
  Sync a template from your Git repository.

Upload a template file

Choose file

JSON or YAML formatted file

S3 URL: Will be generated when template file is uploaded

View in Application Composer

Cancel Next

VPCANDSUBNETCFN.YML

File Edit View

```yaml
Resources:
  myVPC:
    Type: AWS::EC2::VPC
    Properties:
      CidrBlock: 10.0.0.0/16
      EnableDnsSupport: 'true'
      EnableDnsHostnames: 'true'
      Tags:
       - Key: stack
         Value: production
  mySubnet:
    Type: AWS::EC2::Subnet
    Properties:
      VpcId: !Ref myVPC
      CidrBlock: 10.0.0.0/24
      AvailabilityZone: "us-east-1a"
      Tags:
      - Key: stack
        Value: production
```

Ln 19, Col 26 | 413 characters | 100% | Windows (CRLF) | UTF-8

Step 1
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Upload a template file

Choose file

VPCANDSUBNETCFN.YML.txt

JSON or YAML formatted file

S3 URL: https://s3.us-east-1.amazonaws.com/cf-templates-1t54q2k6ujegq-us-east-1/2024-05-20T150507.524Zatc-VPCANDSUBNETCFN.YML.txt

View in Application Composer

Cancel Next

Step 1
Create stack

Step 2
Specify stack details

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Configure stack options

Step 4
Review and create

Specify stack details

Provide a stack name

Stack name

CLOUDFORMATIONASSIGNMENT2

Stack name must be 1 to 128 characters, start with a letter, and only contain alphanumeric characters. Character count: 25/128.

Parameters

Parameters are defined in your template and allow you to input custom values when you create or update a stack.

No parameters

There are no parameters defined in your template

Cancel Previous Next

Step 1
Create stack

Step 2
Specify stack details

Step 3
Configure stack options

Step 4
Review and create

Configure stack options

Tags - optional

Tags (key-value pairs) are used to apply metadata to AWS resources, which can help in organizing, identifying, and categorizing those resources. You can add up to 50 unique tags for each stack.

No tags associated with the stack.

Add new tag

You can add 50 more tag(s)

Permissions - optional

Specify an existing AWS Identity and Access Management (IAM) service role that CloudFormation can assume.

IAM role - optional

Choose the IAM role for CloudFormation to use for all operations performed on the stack.

IAM role name | *Sample-role-name* | Remove

Stack failure options

Behavior on provisioning failure

Specify the roll back behavior for a stack failure. Learn more

- (•) Roll back all stack resources
  Roll back the stack to the last known stable state.
- ( ) Preserve successfully provisioned resources
  Preserves the state of successfully provisioned resources, while rolling back failed resources to the last known stable state. Resources without a last known stable state will be deleted upon the next stack operation.

- (●) Roll back all stack resources
  Roll back the stack to the last known stable state.
- ( ) Preserve successfully provisioned resources
  Preserves the state of successfully provisioned resources, while rolling back failed resources to the last known stable state. Resources without a last known stable state will be deleted upon the next stack operation.

Delete newly created resources during a rollback

Specify whether resources that were created during a failed operation should be deleted regardless of their deletion policy. Learn more

- (●) Use deletion policy
  Retains or deletes created resources according to their attached deletion policy.
- ( ) Delete all newly created resources
  Deletes created resources during a rollback regardless of their attached deletion policy.

Advanced options

You can set additional options for your stack, like notification options and a stack policy. Learn more

▶ Stack policy - optional

Defines the resources that you want to protect from unintentional updates during a stack update.

▶ Rollback configuration - optional

Specify alarms for CloudFormation to monitor when creating and updating the stack. If the operation breaches an alarm threshold, CloudFormation rolls it back.

▶ Notification options - optional

Specify a new or existing Amazon Simple Notification Service topic where notifications about stack events are sent.

▶ Stack creation options - optional

Specify the timeout and termination protection options for stack creation.

Cancel Previous Next

Step 1
Create stack

Step 2
Specify stack details

Step 3
Configure stack options

Step 4
Review and create

Review and create

Step 1: Specify template

Edit

Prerequisite - Prepare template

Template
Template is ready

Template

Template URL
https://s3.us-east-1.amazonaws.com/cf-templates-1t54q2k6ujegq-us-east-1/2024-05-20T150507.524Zatc-VPCANDSUBNETCFN.YML.txt

Stack description
-

Step 2: Specify stack details

Edit

Provide a stack name

Stack name
CLOUDFORMATIONASSIGNMENT2

Parameters

Search

1

Key	Value

No parameters

There are no parameters defined in your template

Step 3: Configure stack options

Edit

Tags

Search tags

1

Key	Value

No tags

There are no tags defined for this stack

Permissions

No permissions

There is no IAM role associated with this stack

Stack failure options

Stack failure options

Rollback on failure
Activated

Delete newly created resources during a rollback
Deactivated

Stack policy

No stack policy

There is no stack policy defined

Rollback configuration

Monitoring time
-

CloudWatch alarm ARN

-

Notification options

SNS topic ARN

No notification options

There are no notification options defined

-

CloudWatch alarm ARN

-

Notification options

SNS topic ARN

No notification options

There are no notification options defined

Stack creation options

Timeout

-

Termination protection

Deactivated

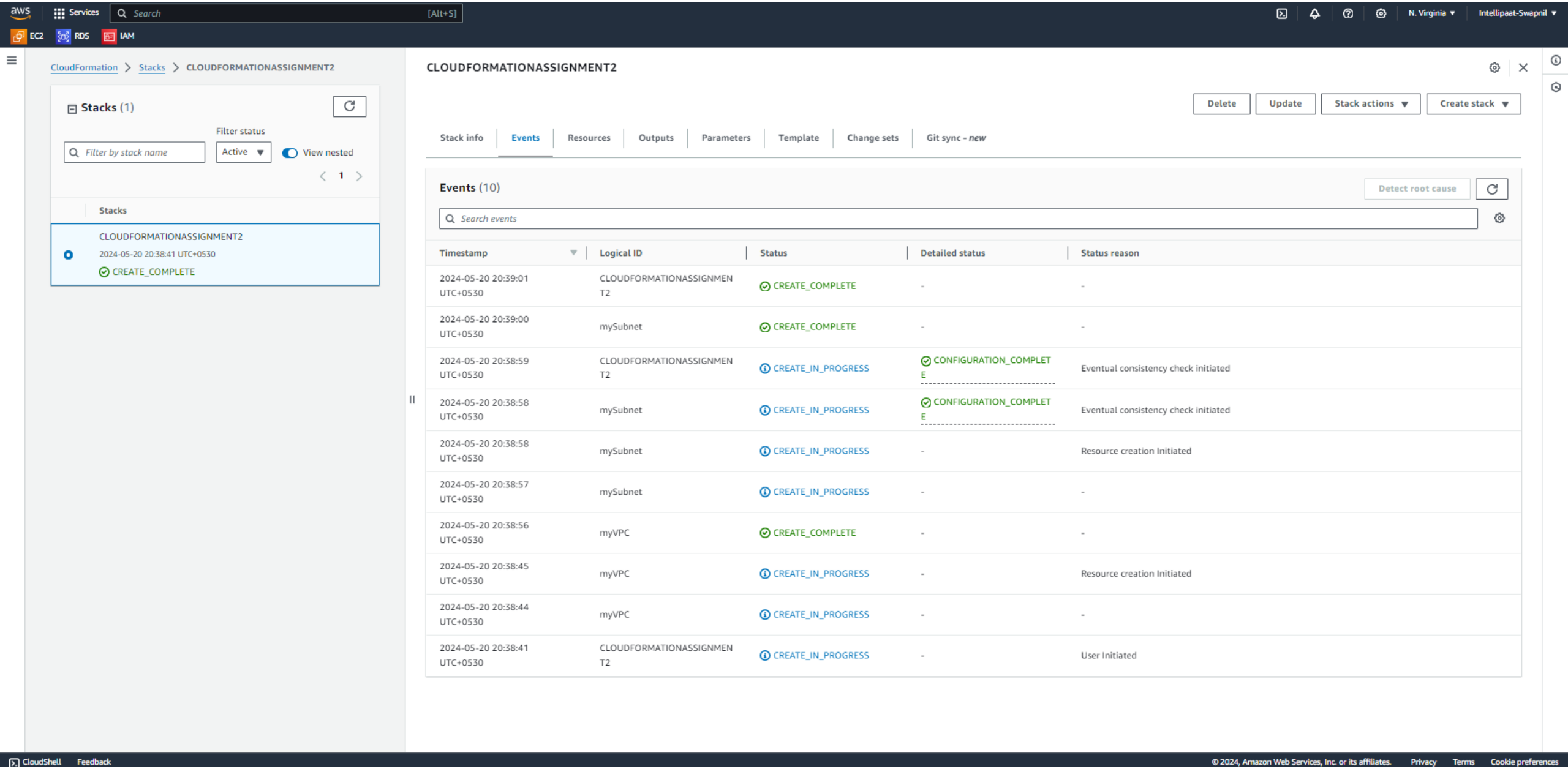
Quick-create link

Use quick-create links to get stacks up and running quickly from the AWS CloudFormation console with the same basic configuration as this stack. Copy the URL on the link to share. Learn more

Open quick-create link

Create change set

Cancel Previous Submit


Services
Search
[Alt+S]
N. Virginia
Intellipaat-Swapnil
EC2
RDS
IAM
CloudFormation > Stacks > CLOUDFORMATIONASSIGNMENT2
Stacks (1)
Filter status
Filter by stack name
Active
View nested
1
Stacks
CLOUDFORMATIONASSIGNMENT2
2024-05-20 20:38:41 UTC+0530
CREATE_COMPLETE
CLOUDFORMATIONASSIGNMENT2
Delete
Update
Stack actions
Create stack
Stack info
Events
Resources
Outputs
Parameters
Template
Change sets
Git sync - new
Events (10)
Detect root cause
Search events
Timestamp
Logical ID
Status
Detailed status
Status reason
2024-05-20 20:39:01 UTC+0530
CLOUDFORMATIONASSIGNMENT2
CREATE_COMPLETE
-
-
2024-05-20 20:39:00 UTC+0530
mySubnet
CREATE_COMPLETE
-
-
2024-05-20 20:38:59 UTC+0530
CLOUDFORMATIONASSIGNMENT2
CREATE_IN_PROGRESS
CONFIGURATION_COMPLETE
Eventual consistency check initiated
2024-05-20 20:38:58 UTC+0530
mySubnet
CREATE_IN_PROGRESS
CONFIGURATION_COMPLETE
Eventual consistency check initiated
2024-05-20 20:38:58 UTC+0530
mySubnet
CREATE_IN_PROGRESS
-
Resource creation Initiated
2024-05-20 20:38:57 UTC+0530
mySubnet
CREATE_IN_PROGRESS
-
-
2024-05-20 20:38:56 UTC+0530
myVPC
CREATE_COMPLETE
-
-
2024-05-20 20:38:45 UTC+0530
myVPC
CREATE_IN_PROGRESS
-
Resource creation Initiated
2024-05-20 20:38:44 UTC+0530
myVPC
CREATE_IN_PROGRESS
-
-
2024-05-20 20:38:41 UTC+0530
CLOUDFORMATIONASSIGNMENT2
CREATE_IN_PROGRESS
-
User Initiated
CloudShell
Feedback
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences

Stacks (1)

Filter status

Filter by stack name | Active | View nested

1

Stacks
CLOUDFORMATIONASSIGNMENT2 2024-05-20 20:38:41 UTC+0530 CREATE_COMPLETE

CLOUDFORMATIONASSIGNMENT2

Delete | Update | Stack actions | Create stack

Stack info | Events | Resources | Outputs | Parameters | Template | Change sets | Git sync - *new*

Resources (2)

Search resources

1

Logical ID	Physical ID	Type	Status	Module
mySubnet	subnet-007170941b2da94ce	AWS::EC2::Subnet	CREATE_COMPLETE	-
myVPC	vpc-05834d3da75d58b03	AWS::EC2::VPC	CREATE_COMPLETE	-

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

CFinstance

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

Recents | Quick Start

Amazon Linux | macOS | Ubuntu | Windows | Red Hat | SUSE Li

Browse more AMIs

Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Amazon Linux 2023 AMI — Free tier eligible

Summary

Number of instances Info

1

Software Image (AMI)

Amazon Linux 2023 AMI 2023.4.2...read more

ami-0bb84b8ffd87024d8

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, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Cancel | Launch instance

Review commands

Amazon Machine Image (AMI)

Amazon Linux 2023 AMI — Free tier eligible
ami-0bb84b8ffd87024d8 (64-bit (x86), uefi-preferred) / ami-04b395c05193adbbd (64-bit (Arm), uefi)
Virtualization: hvm ENA enabled: true Root device type: ebs

Description

Amazon Linux 2023 AMI 2023.4.20240513.0 x86_64 HVM kernel-6.1

Architecture	Boot mode	AMI ID	
64-bit (x86)	uefi-preferred	ami-0bb84b8ffd87024d8	Verified provider

Instance type Info | Get advice

Instance type

t2.micro — Free tier eligible
Family: t2 1 vCPU 1 GiB Memory Current generation: true
On-Demand Windows base pricing: 0.0162 USD per Hour
On-Demand SUSE base pricing: 0.0116 USD per Hour
On-Demand RHEL base pricing: 0.0716 USD per Hour
On-Demand Linux base pricing: 0.0116 USD per Hour

All generations

Compare instance types

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*

Proceed without a key pair (Not recommended) — Default value

Create new key pair

Summary

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Amazon Linux 2023 AMI 2023.4.2...read more
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Cancel Launch instance

Review commands

Network settings Info

VPC - *required* Info

vpc-05834d3da75d58b03
10.0.0.0/16

Subnet Info

subnet-007170941b2da94ce
VPC: vpc-05834d3da75d58b03 Owner: 866650389532
Availability Zone: us-east-1a IP addresses available: 251 CIDR: 10.0.0.0/24)

Create new subnet

Auto-assign public IP Info

Disable

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-7

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-7 created 2024-05-20T15:14:13.455Z

Inbound Security Group Rules

Security group rule 1 (TCP, 22, 0.0.0.0/0) Remove

Type Info	Protocol Info	Port range Info
ssh	TCP	22

Source type Info	Source Info	Description - *optional* Info
Anywhere	Add CIDR, prefix list or security	e.g. SSH for admin desktop

Summary

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Cancel Launch instance

Review commands

Source type Info | Source Info | Description - *optional* Info

Anywhere | Add CIDR, prefix list or security | e.g. SSH for admin desktop

0.0.0.0/0

Security group rule 2 (TCP, 443, 0.0.0.0/0) Remove

Type Info | Protocol Info | Port range Info

HTTPS | TCP | 443

Source type Info | Source Info | Description - *optional* Info

Anywhere | Add CIDR, prefix list or security | e.g. SSH for admin desktop

0.0.0.0/0

Security group rule 3 (TCP, 80, 0.0.0.0/0) Remove

Type Info | Protocol Info | Port range Info

HTTP | TCP | 80

Source type Info | Source Info | Description - *optional* Info

Anywhere | Add CIDR, prefix list or security | e.g. SSH for admin desktop

0.0.0.0/0

⚠ Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

Add security group rule

▶ Advanced network configuration

Summary

Number of instances Info

1

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Amazon Linux 2023 AMI 2023.4.2...read more

ami-0bb84b8ffd87024d8

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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, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Cancel | Launch instance

Review commands

Anywhere | Add CIDR, prefix list or security | e.g. SSH for admin desktop

0.0.0.0/0

⚠ Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

Add security group rule

▶ Advanced network configuration

▼ Configure storage Info

Advanced

1x 8 GiB gp3 Root volume (Encrypted)

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

Add new volume

Click refresh to view backup information

The tags that you assign determine whether the instance will be backed up by any Data Lifecycle Manager policies.

0 x File systems Edit

▶ Advanced details Info

▼ Summary

Number of instances Info

1

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Cancel **Launch instance**

Review commands

EC2 Dashboard
EC2 Global View
Events
Console-to-Code Preview
Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Capacity Reservations New
Images
AMIs
AMI Catalog
Elastic Block Store
Volumes
Snapshots
Lifecycle Manager
Network & Security
Security Groups
Elastic IPs
Placement Groups

Instance summary for i-013afa2ae90ce4d82 (CFinstance) Info

Updated less than a minute ago

Connect | Instance state | Actions

Instance ID i-013afa2ae90ce4d82 (CFinstance)	Public IPv4 address –	Private IPv4 addresses 10.0.0.61
IPv6 address –	Instance state Running	Public IPv4 DNS –
Hostname type IP name: ip-10-0-0-61.ec2.internal	Private IP DNS name (IPv4 only) ip-10-0-0-61.ec2.internal	
Answer private resource DNS name –	Instance type t2.micro	Elastic IP addresses –
Auto-assigned IP address –	VPC ID vpc-05834d3da75d58b03	AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. | Learn more
IAM Role –	Subnet ID subnet-007170941b2da94ce	Auto Scaling Group name –
IMDSv2 Required		

Details | Status and alarms New | Monitoring | Security | Networking | Storage | Tags

▶ Instance details Info

▶ Host and placement group Info

▼ Capacity reservation Info

Capacity Reservation ID –	Capacity Reservation setting open

▼ Accelerators Info

Elastic Graphics ID

Manage tags Info

A tag is a custom label that you assign to an AWS resource. You can use tags to help organize and identify your instances.

Key	Value - *optional*	
Name	CFinstance	Remove

Add new tag

You can add up to 49 more tags.

Cancel Save