

# Module 8: CloudFormation

## Assignment - 2

```
73     ToPort: 22
74     CidrIp: "0.0.0.0/0" # Open to all for SSH (Change for better security)
75     Tags:
76     - Key: Name
77       Value: "MySecurityGroup"
78
79     # Launch an Amazon Linux EC2 instance in Public Subnet
80     CFInstance:
81       Type: AWS::EC2::Instance
82       Properties:
83         ImageId: ami-0c55b159cbfafelf0 # Amazon Linux 2 AMI (Replace with the latest
84         InstanceType: t2.micro
85         SubnetId: !Ref MyPublicSubnet
86         SecurityGroupIds:
87         - !Ref MySecurityGroup
88       Tags:
89       - Key: Name
90         Value: "CFInstance"
91
92     Outputs:
93       VPCId:
94         Description: "VPC ID"
95         Value: !Ref MyVPC
96
97       SubnetId:
98         Description: "Public Subnet ID"
99         Value: !Ref MyPublicSubnet
100
101       InstanceId:
102         Description: "EC2 Instance ID"
```

Step 1

● Create stack

○ Step 2

○ Specify stack details

○ Step 3

○ Configure stack options

○ Step 4

○ Review and create

Create stack

Prerequisite – Prepare template

You can also create a template by scanning your existing resources in the [IaC generator](#).

Prepare template

Every stack requires 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.

☐ Build from Infrastructure Composer

Create a template using a Visual builder.

Specify template

This [GitHub repository](#) contains sample CloudFormation templates that can help you get started on new infrastructure projects. [Learn more](#)

Template source

Selecting a template generates an Amazon S3 URL where it will be stored. A template is a JSON or YAML file that describes your stack's resources and properties.

☐ 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

Sync a template from your Git repository.

Upload a template file

Choose file

assi-2.yaml

JSON or YAML formatted file

S3 URL: <https://s3.us-east-1.amazonaws.com/cf-templates-1ktxcgv9kwce-us-east-1/2025-02-02T073759.616Zewt-assi-2.yaml> [View in Infrastructure Composer](#)

Cancel

Next

CloudFormation > Stacks > Assi-2

CloudFormation <

Stacks (1)

Stack details

Drifts

StackSets

Exports

Infrastructure Composer

laC generator

Hooks overview

Hooks

Filter status

Active

View nested

Stacks

Assi-2

2025-02-02 13:08:52 UTC+0530

CREATE\_IN\_PROGRESS

Assi-2

Stack info

Events - updated

Resources

Outputs

Parameters

Template

Changesets

Git sync

Delete

Update

Stack actions

Create stack

Table view

Timeline view - new

Events (1)

Search events

Timestamp	Logical ID	Status	Detailed status	Status reason
2025-02-02 13:08:52 UTC+0530	Assi-2	CREATE_IN_PROGRESS		User Initiated

## Assi-2

Stack info

Events - updated

Resources

Outputs

Parameters

Template

Changesets

Git sync

Delete

Update

Stack actions

Resources (8)

Search resources

Logical ID	Physical ID	Type	Status	Module
AttachGateway	IGW vpc-09d854943eee3088f	AWS::EC2::VPCGatewayAttachment	DELETE_COMPLETE	-
CFInstance	-	AWS::EC2::Instance	DELETE_COMPLETE	-
MyInternetGateway	igw-0b5948e5b04da5d3b	AWS::EC2::InternetGateway	DELETE_COMPLETE	-
MyPublicSubnet	subnet-0e3056537b8f93141	AWS::EC2::Subnet	DELETE_COMPLETE	-
MyRouteTable	rtb-0ddc82390f7a116e0	AWS::EC2::RouteTable	DELETE_COMPLETE	-
MySecurityGroup	sg-04d14b815f0fecaa8	AWS::EC2::SecurityGroup	DELETE_COMPLETE	-
MySubnetRouteTableAssociation	rtbassoc-0375d6f1544e8138f	AWS::EC2::SubnetRouteTableAssociation	DELETE_COMPLETE	-
MyVPC	vpc-09d854943eee3088f	AWS::EC2::VPC	DELETE_COMPLETE	-

Instances (1) Info

Last updated less than a minute ago

Con

Find Instance by attribute or tag (case-sensitive)

All states

Instance state = running

Clear filters

Name	Instance ID	Instance state	Instance type	Status check	Alarm status
CFInstance	i-06a7c16e9b9e024ce	Running	t2.micro	Initializing	View alarms

## Internet gateways (2) [Info](#)

<input type="checkbox"/>	Name	Internet gateway ID	State	VPC ID	Owner
<input type="checkbox"/>	default-rabi	<a href="#">igw-0a9f69448d57e4128</a>	Attached	<a href="#">vpc-0aa06775f5be61ea2   Default</a>	851725170629
<input type="checkbox"/>	-	<a href="#">igw-0a4a8300604dc085f</a>	Attached	<a href="#">vpc-0365bd97eddd4c1a6   MyVPC</a>	851725170629

## Subnets (7) [Info](#)

Last updated  
15 minutes ago [Actions](#)

<input type="checkbox"/>	Name	Subnet ID	State	VPC	Block Public...	IPv4 CIDR	IPv6 CIDR
<input type="checkbox"/>	-	<a href="#">subnet-00a143144f78d82b1</a>	Available	<a href="#">vpc-0aa06775f5be61ea2   Defa...</a>	Off	172.31.64.0/20	-
<input type="checkbox"/>	-	<a href="#">subnet-06d14be0d495bee08</a>	Available	<a href="#">vpc-0aa06775f5be61ea2   Defa...</a>	Off	172.31.48.0/20	-
<input type="checkbox"/>	MyPublicSubnet	<a href="#">subnet-06a9c72bbfe6c0d21</a>	Available	<a href="#">vpc-05a8a176c69f4a640   MyVPC</a>	Off	10.0.1.0/24	-
<input type="checkbox"/>	-	<a href="#">subnet-0cd15e69fbed5ff0</a>	Available	<a href="#">vpc-0aa06775f5be61ea2   Defa...</a>	Off	172.31.0.0/20	-
<input type="checkbox"/>	-	<a href="#">subnet-03a8efbb2f7b25b39</a>	Available	<a href="#">vpc-0aa06775f5be61ea2   Defa...</a>	Off	172.31.32.0/20	-
<input type="checkbox"/>	-	<a href="#">subnet-0ed75eb7f6547b6fa</a>	Available	<a href="#">vpc-0aa06775f5be61ea2   Defa...</a>	Off	172.31.16.0/20	-
<input type="checkbox"/>	-	<a href="#">subnet-0622558c888527347</a>	Available	<a href="#">vpc-0aa06775f5be61ea2   Defa...</a>	Off	172.31.80.0/20	-