



Intrinsic Function – Ref

1. In this lab you are going to learn more about intrinsic function which is Ref.
2. It refers something like you create security group and then you want to refer that security group while you're creating EC2 instances. So, you want to refer an existing resource or a parameter while you're creating or making changes to your existing resource. Then you can use a ref function.
3. Again, on the CloudFormation click on create stack.
4. The code that you are going to use is this. You can get this from GitHub.

```
1 Resources:
2   MyInstance:
3     Type: AWS::EC2::Instance
4     Properties:
5       InstanceType: t2.micro
6       ImageId: ami-06b72b3b2a773be2b
7       Tags:
8         - Key: "Name"
9           Value: !Join
10          - ""
11          - - "My Demo Instance in"
12          - !Ref AWS::Region
```

5. Now upload this instance and create your stack.

The screenshot shows the 'Prerequisite - Prepare template' step of the CloudFormation wizard. It includes sections for 'Prepare template' (with options for 'Template is ready', 'Use a sample template', and 'Create template in Designer'), 'Specify template' (with options for 'Amazon S3 URL', 'Upload a template file', and 'Sync from Git - new'), and an 'Upload a template file' section where 'Ref.yaml' is selected. At the bottom, the S3 URL for the uploaded template is shown as <https://s3.ap-south-1.amazonaws.com/cf-templates-kmi81w4ukk76-ap-south-1/2024-02-21T081932.148Z957-Ref.yaml>.

6. After sometime you will see that your stack is created successfully.

CloudFormation > Stacks > ref-demo

ref-demo

Stacks (1)

Filter status: Active

View nested

Stacks

- ref-demo
 - 2024-02-21 13:49:50 UTC+0530
 - CREATE_COMPLETE

Events (5)

Timestamp	Logical ID	Status	Status reason
2024-02-21 13:50:25 UTC+0530	ref-demo	CREATE_COMPLETE	-
2024-02-21 13:50:24 UTC+0530	MyInstance	CREATE_COMPLETE	-
2024-02-21 13:49:53 UTC+0530	MyInstance	CREATE_IN_PROGRESS	Resource creation Initiated
2024-02-21 13:49:52 UTC+0530	MyInstance	CREATE_IN_PROGRESS	-
2024-02-21 13:49:50 UTC+0530	ref-demo	CREATE_IN_PROGRESS	User Initiated

7. Now if you navigate to EC2 you will see your instance there up and running.

Instances (1/1) info

Find Instance by attribute or tag (case-sensitive)

Any state

Instance state = running

Clear filters

Name: My Demo Instance in ap-south-1 | Instance ID: i-0c856007e9329bf67 | Instance state: Running | Instance type: t2.micro | Status check: Initializing | Alarm status: View alarms | Availability Z: ap-south-1a

Instance: i-0c856007e9329bf67 (My Demo Instance in ap-south-1)

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

Instance summary

Instance ID: i-0c856007e9329bf67 (My Demo Instance in ap-south-1)	Public IPv4 address: 65.0.4.206 [open address]	Private IPv4 addresses: 172.31.47.241
IPv6 address: -	Instance state: Running	Public IPv4 DNS: ec2-65-0-4-206.ap-south-1.compute.amazonaws.com [open address]

8. You will see there, so, we are referring to a parameter, or say pseudo parameter where it automatically got the region ID.
9. After you are done delete your stack.