

Module 3: Automating Infrastructure Using CloudFormation

Demo Document 2

edureka!

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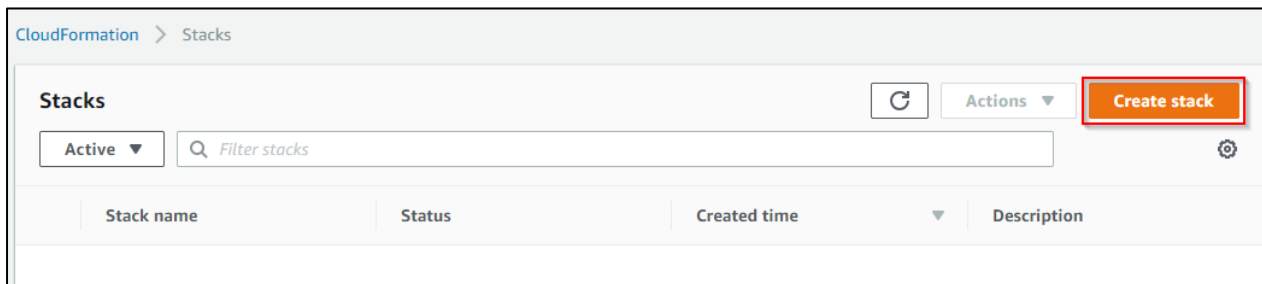
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Creating an S3 bucket using Intrinsic function (join and ref) where we get the name from parameter

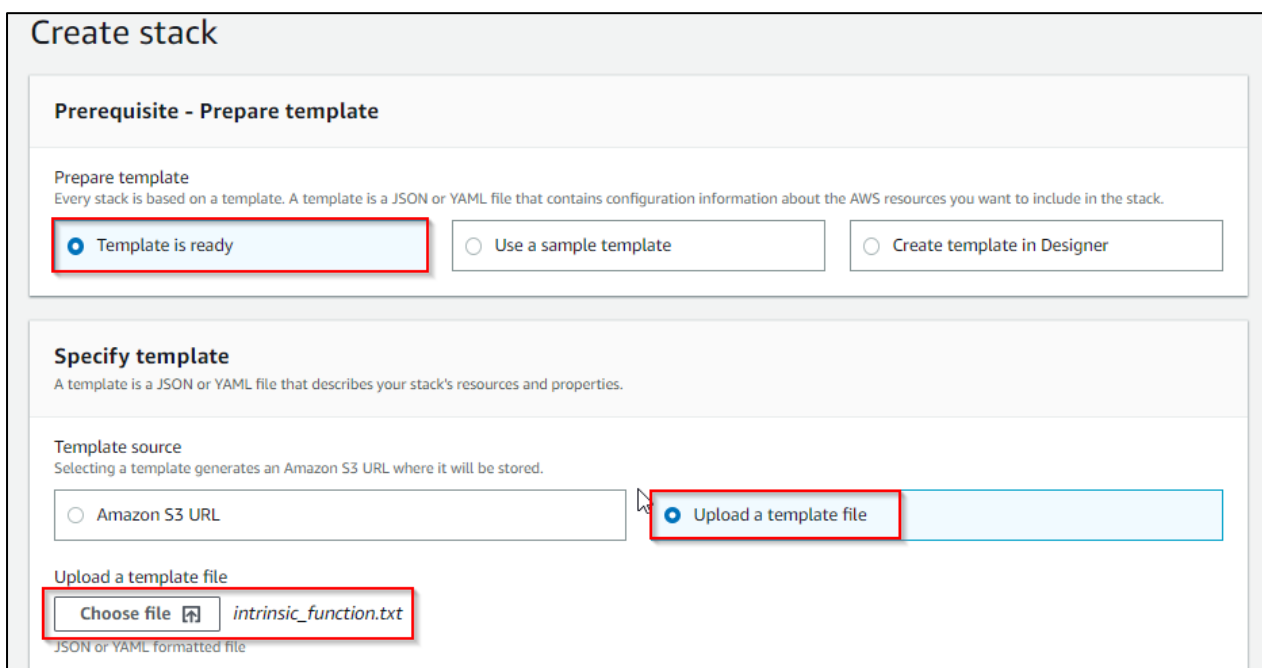
Step 1: Create a template with the Resource 'AWS::S3::Bucket' by getting the name from the *parameter* and use *intrinsic function* to create a combined name

```
{
  "AWSTemplateFormatVersion": "2010-09-09",
  "Description": "Using intrinsic Functions and parameters",
  "Parameters": {
    "s3NamePrefix": {
      "Description": "Enter the unique prefix to the name of the S3 bucket you need to create",
      "Type": "String",
      "Default": "mybucket"
    },
  },
  "Resources": {
    "s3Bucket": {
      "Type": "AWS::S3::Bucket",
      "Properties": {
        "BucketName": {
          "Fn::Join": [ "-",
            [ {
              "Ref": "s3NamePrefix"
            },
            {
              "Ref": "AWS::StackName"
            },
            {
              "Ref": "AWS::Region"
            }
          ] ] ] ] ]
        }
      }
    }
  }
}
```

Step 2: Go to AWS Management Console, navigate to **CloudFormation** console and click on “create stack”



Step 3: Click on ‘Upload a template file’ and then ‘Choose file’ from your local system. This is the file created in the Step 1. Then Click ‘Next’



Step 4: Enter your **stack name** and click “Next”

Specify stack details

Stack name

Stack name

Intrinsic-function

Stack name can include letters (A-Z and a-z), numbers (0-9), and dashes (-).

Parameters

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

s3NamePrefix

Enter the unique prefix to the name of the S3 bucket you need to create

mybucket

[Cancel](#) [Previous](#) [Next](#)

Step 5: In the ‘Configure stack options’, keep everything as default and scroll down to the and click **Next**

Step 6: In the ‘Review Stack’ page click on ‘Create Stack’

Stack creation options

Rollback on failure

Enabled

Timeout

-

Termination protection

Disabled

► Quick-create link

[Cancel](#) [Previous](#) [Create change set](#) [Create stack](#)

Step 7: Click on 'Events' tab and check the events for successful creation of stack (You might need to click on refresh for updates)

CloudFormation > Stacks > intrinsic-function: Stack details

intrinsic-function

Stack info | **Events** | Resources | Outputs | Parameters | Template

Events

Search events

Timestamp	Logical ID	Status	Status reason
16 Feb 2019 11:51:17	intrinsic-function	✓ CREATE_COMPLETE	-
16 Feb 2019 11:51:16	s3Bucket	✓ CREATE_COMPLETE	-

Step 8: You can check the S3 console and would find the S3 bucket created if the Stack completed successfully. The name will be a combination of value entered from parameter + stack name + region.

S3 buckets [Discover the console](#)

Search: my All access types

[+ Create bucket](#) [Edit public access settings](#) [Empty](#) [Delete](#) 2 Buckets 2 Regions

Bucket name	Access	Region	Date created
<input type="checkbox"/> aws-opsworks-cm-puppet-k2j8sa0myrsx	Objects can be public	US West (N. California)	Nov 5, 2018 1:56:03 PM GMT+0530
<input checked="" type="checkbox"/> mybucket-intrinsic-function-us-east-2	Objects can be public	US East (Ohio)	Feb 16, 2019 5:20:56 PM GMT+0530

Conclusion

You have successfully created a S3 bucket using intrinsic function **Join and Ref** in CloudFormation Template