**Create Cloud Formation Stacks via CLI**

Step 1: Create a Template file in your Desktop "creates3.json" or "creates3.yaml from below example in your Desktop

**creates3.json**

**{**

**"AWSTemplateFormatVersion" : "2010-09-09",**

**"Parameters" : {**

**"BucketName": {**

**"Description": "The bucket should follow syntax as username-region-bucketname",**

**"Type": "String",**

**"Default": "mohanraz81-us-east-1-testbucket"**

**}**

**},**

**"Resources" : {**

**"S3Bucket" : {**

**"Type" : "AWS::S3::Bucket",**

**"Properties" : {**

**"BucketName": { "Ref": "BucketName" }**

**}**

**}**

**},**

**"Outputs" : {**

**"S3BucketName" : {**

**"Value" : {"Ref": "S3Bucket"},**

**"Description" : "Name of S3 bucket"**

**}**

**}**

**}**

**creates3.yaml**

**AWSTemplateFormatVersion: 2010-09-09**

**Parameters:**

**BucketName:**

**Description: Name of S3 Bucket**

**Type: String**

**Default: "mohanraz81-us-east-1-testbucket"**

**Resources:**

**S3Bucket:**

**Type: 'AWS::S3::Bucket'**

**Properties:**

**BucketName:**

**Ref: BucketName**

**Outputs:**

**S3BucketName:**

**Value: !Ref S3Bucket**

**Description: Name of S3 bucket**

**Step 2: login to Lab Desktop or CLI Folder installed on your Desktop**

**Use create-stack to create a Stack**

**Syntax**

**$ aws cloudformation create-stack --stack-name STACKNAME --template-body file://TEMPLATE PATH --parameters ParameterKey=PARAMETERNAME,ParameterValue=PARAMETERVALUE**

**Example**

**$ aws cloudformation create-stack --stack-name myteststack --template-body file:///home/mohanraz81/testcreates3.yaml --parameters ParameterKey=BucketNamebyuser,ParameterValue=mohanraz81-us-east-1-testcli**

**Step 3: Updating the Stack by adding one more S3 bucket**

**Update the Template File**

**AWSTemplateFormatVersion: 2010-09-09**

**Parameters:**

**BucketName:**

**Description: Name of S3 Bucket**

**Type: String**

**Default: "mohanraz81-us-east-1-testbucket123"**

**Resources:**

**S3Bucket:**

**Type: 'AWS::S3::Bucket'**

**Properties:**

**BucketName:**

**Ref: BucketName**

**S32Bucket:**

**Type: 'AWS::S3::Bucket'**

**Properties:**

**BucketName: "mohanraz81-us-east-1-test2bucket123"**

**Outputs:**

**S3BucketName:**

**Value: !Ref S3Bucket**

**Description: Name of S3 bucket**

**$ aws cloudformation update-stack --stack-name myteststack --template-body file:///home/mohanraz81/testcreates3.yaml  --parameters ParameterKey=BucketNamebyuser,ParameterValue=mohanraz81-us-east-1-testcli**

**Step 4: List all the stack**

**PROMPT> aws cloudformation list-stacks --stack-status-filter CREATE\_COMPLETE**

**[**

**{**

**"StackId": "arn:aws:cloudformation:us-east-2:123456789012:stack/myteststack/**

**644df8e0-0dff-11e3-8e2f-5088487c4896",**

**"TemplateDescription": "AWS CloudFormation Sample Template S3\_Bucket: Sample template showing how to create a publicly accessible S3 bucket. \*\*WARNING\*\* This template creates an**

**S3 bucket. You will be billed for the AWS resources used if you create a stack from this template.",**

**"StackStatusReason": null,**

**"CreationTime": "2013-08-26T03:27:10.190Z",**

**"StackName": "myteststack",**

**"StackStatus": "CREATE\_COMPLETE"**

**}**

**]**

**Step 5: Details of a Stack**

**PROMPT> aws cloudformation describe-stacks --stack-name myteststack**

**{**

**"Stacks":  [**

**{**

**"StackId": "arn:aws:cloudformation:us-east-2:123456789012:stack/myteststack/a69442d0-0b8f-11e3-8b8a-500150b352e0",**

**"Description": "AWS CloudFormation Sample Template S3\_Bucket: Sample template showing how to create a publicly accessible S3 bucket. \*\*WARNING\*\* This template creates an S3 bucket.**

**You will be billed for the AWS resources used if you create a stack from this template.",**

**"Tags": [],**

**"Outputs": [**

**{**

**"Description": "Name of S3 bucket to hold website content",**

**"OutputKey": "BucketName",**

**"OutputValue": "myteststack-s3bucket-jssofi1zie2w"**

**}**

**],**

**"StackStatusReason": null,**

**"CreationTime": "2013-08-23T01:02:15.422Z",**

**"Capabilities": [],**

**"StackName": "myteststack",**

**"StackStatus": "CREATE\_COMPLETE",**

**"DisableRollback": false**

**}**

**]**

**}**

**Step 6: Viewing Stack Events**

**PROMPT> aws cloudformation describe-stack-events --stack-name myteststack**

**{**

**"StackEvents": [**

**{**

**"StackId": "arn:aws:cloudformation:us-east-2:123456789012:stack/myteststack/466df9e0-0dff-08e3-8e2f-5088487c4896",**

**"EventId": "af67ef60-0b8f-11e3-8b8a-500150b352e0",**

**"ResourceStatus": "CREATE\_COMPLETE",**

**"ResourceType": "AWS::CloudFormation::Stack",**

**"Timestamp": "2013-08-23T01:02:30.070Z",**

**"StackName": "myteststack",**

**"PhysicalResourceId": "arn:aws:cloudformation:us-east-2:123456789012:stack/myteststack/a69442d0-0b8f-11e3-8b8a-500150b352e0",**

**"LogicalResourceId": "myteststack"**

**},**

**{**

**"StackId": "arn:aws:cloudformation:us-east-2:123456789012:stack/myteststack/466df9e0-0dff-08e3-8e2f-5088487c4896",**

**"EventId": "S3Bucket-CREATE\_COMPLETE-1377219748025",**

**"ResourceStatus": "CREATE\_COMPLETE",**

**"ResourceType": "AWS::S3::Bucket",**

**"Timestamp": "2013-08-23T01:02:28.025Z",**

**"StackName": "myteststack",**

**"ResourceProperties": "{\"AccessControl\":\"PublicRead\"}",**

**"PhysicalResourceId": "myteststack-s3bucket-jssofi1zie2w",**

**"LogicalResourceId": "S3Bucket"**

**},**

**{**

**"StackId": "arn:aws:cloudformation:us-east-2:123456789012:stack/myteststack/466df9e0-0dff-08e3-8e2f-5088487c4896",**

**"EventId": "S3Bucket-CREATE\_IN\_PROGRESS-1377219746688",**

**"ResourceStatus": "CREATE\_IN\_PROGRESS",**

**"ResourceType": "AWS::S3::Bucket",**

**"Timestamp": "2013-08-23T01:02:26.688Z",**

**"ResourceStatusReason": "Resource creation Initiated",**

**"StackName": "myteststack",**

**"ResourceProperties": "{\"AccessControl\":\"PublicRead\"}",**

**"PhysicalResourceId": "myteststack-s3bucket-jssofi1zie2w",**

**"LogicalResourceId": "S3Bucket"**

**},**

**{**

**"StackId": "arn:aws:cloudformation:us-east-2:123456789012:stack/myteststack/466df9e0-0dff-08e3-8e2f-5088487c4896",**

**"EventId": "S3Bucket-CREATE\_IN\_PROGRESS-1377219743862",**

**"ResourceStatus": "CREATE\_IN\_PROGRESS",**

**"ResourceType": "AWS::S3::Bucket",**

**"Timestamp": "2013-08-23T01:02:23.862Z",**

**"StackName": "myteststack",**

**"ResourceProperties": "{\"AccessControl\":\"PublicRead\"}",**

**"PhysicalResourceId": null,**

**"LogicalResourceId": "S3Bucket"**

**},**

**{**

**"StackId": "arn:aws:cloudformation:us-east-2:123456789012:stack/myteststack/466df9e0-0dff-08e3-8e2f-5088487c4896",**

**"EventId": "a69469e0-0b8f-11e3-8b8a-500150b352e0",**

**"ResourceStatus": "CREATE\_IN\_PROGRESS",**

**"ResourceType": "AWS::CloudFormation::Stack",**

**"Timestamp": "2013-08-23T01:02:15.422Z",**

**"ResourceStatusReason": "User Initiated",**

**"StackName": "myteststack",**

**"PhysicalResourceId": "arn:aws:cloudformation:us-east-2:123456789012:stack/myteststack/a69442d0-0b8f-11e3-8b8a-500150b352e0",**

**"LogicalResourceId": "myteststack"**

**}**

**]**

**}**

**Step 7: Listing Resources**

**PROMPT> aws cloudformation list-stack-resources --stack-name myteststack**

**{**

**"StackResourceSummaries": [**

**{**

**"ResourceStatus": "CREATE\_COMPLETE",**

**"ResourceType": "AWS::S3::Bucket",**

**"ResourceStatusReason": null,**

**"LastUpdatedTimestamp": "2013-08-23T01:02:28.025Z",**

**"PhysicalResourceId": "myteststack-s3bucket-sample",**

**"LogicalResourceId": "S3Bucket"**

**}**

**]**

**}**

**Step 8: Retrieving a Template**

**PROMPT> aws cloudformation get-template --stack-name myteststack**

**{**

**"TemplateBody": {**

**"AWSTemplateFormatVersion": "2010-09-09",**

**"Outputs": {**

**"BucketName": {**

**"Description": "Name of S3 bucket to hold website content",**

**"Value": {**

**"Ref": "S3Bucket"**

**}**

**}**

**},**

**"Description": "AWS CloudFormation Sample Template S3\_Bucket: Sample template showing how to create a publicly accessible S3 bucket. \*\*WARNING\*\* This template creates an S3 bucket.**

**You will be billed for the AWS resources used if you create a stack from this template.",**

**"Resources": {**

**"S3Bucket": {**

**"Type": "AWS::S3::Bucket",**

**"Properties": {**

**"AccessControl": "PublicRead"**

**}**

**}**

**}**

**}**

**}**

**Step 9: Validating a Template**

**PROMPT> aws cloudformation validate-template --template-url https://s3.amazonaws.com/cloudformation-templates-us-east-1/S3\_Bucket.template**

**{**

**"Description": "AWS CloudFormation Sample Template S3\_Bucket: Sample template showing how to create a publicly accessible S3 bucket. \*\*WARNING\*\* This template creates an S3 bucket.**

**You will be billed for the AWS resources used if you create a stack from this template.",**

**"Parameters": [],**

**"Capabilities": []**

**}**

**PROMPT> aws cloudformation validate-template --template-body file:///home/local/test/sampletemplate.json**

**{**

**"ResponseMetadata": {**

**"RequestId": "4ae33ec0-1988-11e3-818b-e15a6df955cd"**

**},**

**"Errors": [**

**{**

**"Message": "Template format error: JSON not well-formed. (line 11, column 8)",**

**"Code": "ValidationError",**

**"Type": "Sender"**

**}**

**],**

**"Capabilities": [],**

**"Parameters": []**

**}**

**A client error (ValidationError) occurred: Template format error: JSON not well-formed. (line 11, column 8)**

**Step 10: Delete a Stack**

**PROMPT> aws cloudformation delete-stack --stack-name myteststack**