

AWSTemplateFormatVersion: 2010-09-09

Transform: 'AWS::LanguageExtensions'

Parameters:

Stage: # <<- this is a parameter definition.

Type: String

Default: Dev

AllowedValues:

- Dev
- Prod

Conditions:

isProd: !Equals

- !Ref **Stage** # <<- this is a reference to the definition
- Prod

isDev: !Equals

- !Ref Stage
- Dev

Resources:

DevQueue:

Type: 'AWS::SQS::Queue'

Condition: isDev

Properties:

QueueName: !Sub 'My\${Stage}Queue'

ProdQueue:

Type: 'AWS::SQS::Queue'

Condition: isProd

Properties:

QueueName: !Sub 'My\${Stage}Queue'

DevTopic:

Condition: isDev

Type: 'AWS::SNS::Topic'

ProdTopic:

Condition: isProd

Type: 'AWS::SNS::Topic'

MyAlarm:

Type: 'AWS::CloudWatch::Alarm'

Properties:

AlarmDescription: Alarm if Q depth grows beyond 10 msgs

Namespace: AWS/SQS

MetricName: ApproximateNumberOfMessagesVisible

Dimensions:

- Name: !Sub '\${Stage}Queue'
- Value: !GetAtt
 - !Sub '\${Stage}Queue'
 - QueueName

Statistic: Sum

Period: 300

EvaluationPeriods: 1

Threshold: 10

ComparisonOperator: GreaterThanThreshold

AlarmActions:

- !Ref
 - 'Fn::Join':
 - "
 - !Ref Stage
 - Topic

The intrinsic function Ref returns the value of the specified *parameter* or *resource*. When the [AWS::LanguageExtensions transform](#) is used, you can use intrinsic functions as a parameter to Ref and [Fn::GetAtt](#).

The intrinsic function Fn::Sub substitutes variables in an input string with values that you specify. In your templates, you can use this function to construct commands or outputs that include values that aren't available until you create or update a stack.

You need to use intrinsic functions to concatenate a static value with a Ref value.
[Fn::Join reference](#)
In your case, this would lead to the following construct.

```
"Resource": [  
  "Fn::Join": [ "", [ "arn:aws:s3:::", { "Ref": "BucketName" } ] ]
```