# Table of Contents

What Is the AWS Serverless Application Repository? ................................................................. 1  
Consuming Applications and Publishing Applications ................................................................... 2  
    Consuming Applications ........................................................................................................... 2  
        Browsing, Searching, and Deploying Applications ................................................................. 2  
        Deleting Application Stacks .................................................................................................. 3  
    Publishing Applications ......................................................................................................... 3  
        Publishing an Application Through the AWS Management Console .................................. 4  
        Publishing an Application Through the AWS CLI ............................................................... 5  
        Deleting an Application Through the AWS Management Console ................................... 5  
        Deleting an Application Through the AWS CLI ................................................................. 6  
        Using the AWS Serverless Application Model (AWS SAM) .................................................. 6  
Limits ........................................................................................................................................ 20  
Troubleshooting .......................................................................................................................... 21  
    You Can't Make an Application Public .................................................................................... 21  
    A Limit Was Exceeded ............................................................................................................. 21  
    Updating an Application's Readme File Doesn't Immediately Reflect on the Public Site .......... 21  
    You Can't Deploy the Same Application Twice ..................................................................... 22  
    Why Is My Application Not Publicly Available ...................................................................... 22  
    Contacting Support ................................................................................................................ 22  
Resources ..................................................................................................................................... 23  
    Applications ............................................................................................................................ 23  
        URI ....................................................................................................................................... 23  
        HTTP Methods ...................................................................................................................... 23  
        Schemas ............................................................................................................................... 24  
        Properties .......................................................................................................................... 27  
    Applications applicationId ....................................................................................................... 37  
        URI ....................................................................................................................................... 37  
        HTTP Methods ...................................................................................................................... 37  
        Schemas ............................................................................................................................... 40  
        Properties .......................................................................................................................... 41  
    Applications applicationId Changesets .................................................................................. 49  
        URI ....................................................................................................................................... 49  
        HTTP Methods ...................................................................................................................... 49  
        Schemas ............................................................................................................................... 50  
        Properties .......................................................................................................................... 51  
    Applications applicationId Policy ............................................................................................ 54  
        URI ....................................................................................................................................... 54  
        HTTP Methods ...................................................................................................................... 54  
        Schemas ............................................................................................................................... 55  
        Properties .......................................................................................................................... 57  
    Applications applicationId Versions ....................................................................................... 59  
        URI ....................................................................................................................................... 59  
        HTTP Methods ...................................................................................................................... 59  
        Schemas ............................................................................................................................... 60  
        Properties .......................................................................................................................... 61  
    Applications applicationId Versions semanticVersion ............................................................ 63  
        URI ....................................................................................................................................... 63  
        HTTP Methods ...................................................................................................................... 64  
        Schemas ............................................................................................................................... 64  
        Properties .......................................................................................................................... 66  
Document History ......................................................................................................................... 72  
AWS Glossary .............................................................................................................................. 73  

---

AWS Serverless Application Repository Developer Guide
What Is the AWS Serverless Application Repository?

The AWS Serverless Application Repository makes it easy for developers and enterprises to quickly find, deploy, and publish serverless applications in the AWS Cloud. For more information about serverless applications, see Serverless Computing and Applications on the AWS website.

The AWS Serverless Application Repository is deeply integrated with the AWS Lambda console, so that developers of all levels can get started with serverless computing without needing to learn anything new. You can use category keywords to browse for applications such as web and mobile backends, data processing applications, or chatbots. You can also search for applications by name, publisher, or event source. To use an application, you simply choose it, configure any required fields, and deploy it with a few clicks.

You can also easily publish applications, sharing them publicly with the community at large, or privately within your team or across your organization. To publish a serverless application (or app), you can use the AWS Management Console, AWS Command Line Interface (AWS CLI), or AWS SDKs to upload your code. Along with your code, you upload a simple manifest file, also known as an AWS Serverless Application Model (AWS SAM) template. For more information about AWS SAM, see AWS Serverless Application Model (AWS SAM).

In this guide, you can learn about the two ways to work with the AWS Serverless Application Repository:

- **Consuming Applications (p. 2)** – Browse for applications and view information about them, including source code and readme files. Also install, configure, and deploy applications of your choosing.
- **Publishing Applications (p. 3)** – Configure and upload applications to make them available to other developers, and publish new versions of applications.
Consuming Applications and Publishing Applications

Following, you can find information on how to consume and publish serverless applications through the AWS Serverless Application Repository.

Topics
- Consuming Applications (p. 2)
- Publishing Applications (p. 3)

Consuming Applications

Following, you can find out how to find and deploy serverless applications that have been published to the AWS Serverless Application Repository. You can browse for applications that are publicly available without having an AWS account by visiting the public site. Alternatively, you can browse for applications from within the AWS Lambda console.

Browsing, Searching, and Deploying Applications

Find, configure, and deploy an application in the AWS Serverless Application Repository by using the following procedure.

To find and configure an application in the AWS Serverless Application Repository

1. Open the AWS Serverless Application Repository public home page, or open the AWS Lambda console and choose Serverless Application Repository.
2. Browse or search for an application.
3. Choose an application to view more details about it, such as its capabilities and the number of times it has been deployed by AWS customers.
   
   The deployment counts are shown for the AWS Region in which you are trying to deploy the application.
4. On the application detail page, view the application’s permissions and application resources by viewing the SAM template, license, and readme file. On this page, you can also find the Source code URL link for applications that are publicly shared.
5. Configure the application in the Configure application parameters section. For guidance on configuring a particular application, see that application’s readme file. For example, configuration requirements might include specifying the name of an Amazon DynamoDB table, an Amazon S3 bucket, or an Amazon API Gateway API that you want the application to have access to.
6. Choose Deploy. Doing this takes you to the Deployment status page.
7. On the Deployment status page, you can view the progress of your deployment. While waiting for your deployment to complete, you can search and browse for other applications, and return to this page through the Lambda console.

After your application has been successfully deployed, you can review and manage the resources that have been created using existing AWS tools.
Deleting Application Stacks

To delete an application that you previously deployed using the AWS Serverless Application Repository, follow the same procedure as for deleting an AWS CloudFormation stack:

- **AWS Management Console**: To delete an application using the AWS Management Console, see Deleting a Stack on the AWS CloudFormation Console in the AWS CloudFormation User Guide.
- **AWS CLI**: To delete an application using the AWS CLI, see Deleting a Stack in the AWS CloudFormation User Guide.

Publishing Applications

Following, you can find how to make your serverless applications available for others to find and deploy. You can publish serverless applications by using the AWS Management Console, the AWS Command Line Interface (AWS CLI), or an AWS SDK.

To publish an application, you first upload the application code. You also need to upload a simple manifest file, also known as an AWS Serverless Application Model (AWS SAM) template. For more information about using AWS SAM, see Using the AWS Serverless Application Model (AWS SAM) (p. 6).

**Note**

To make the serverless applications that you publish available to developers in other AWS Regions, publish your applications to either US East (N. Virginia) (us-east-1) or US East (Ohio) (us-east-2). Publishing your application in any other AWS Region restricts its availability to that AWS Region. For more information about AWS Serverless Application Repository regions and endpoints, see Regions and Endpoints in the AWS General Reference.

Before you publish an application to the AWS Serverless Application Repository, you need the following:

- A valid AWS account.
- A valid AWS Serverless Application Model (AWS SAM) template that defines the AWS resources used. For more information about AWS SAM, see AWS Serverless Application Model (AWS SAM).
- A package for your application that you created using the AWS CloudFormation package command for the AWS CLI. This command packages the local artifacts (local paths) that your AWS SAM template references. For more details, see package in the AWS CloudFormation documentation.
- A URL pointing to your application’s source code, in case you want to publish your application publicly.
- A readme.txt file. This file should describe how customers can use your application, and how to configure it before deploying it in their own AWS accounts.
- A license.txt file.
- A valid Amazon S3 bucket policy that grants the service read permissions for artifacts uploaded to Amazon S3 when you packaged your application. Following is an example of such a policy.

```json
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Principal": {
        "Service": "serverlessrepo.amazonaws.com"
      },
      "Action": "s3:GetObject",
      "Resource": "arn:aws:s3::<your-bucket-name>/*"
    }
  ]
}
```
Note
The information that you enter when publishing an application is not encrypted. This information includes such data as author name, location, and contact information. If you have personally identifiable information that you don’t want to be stored or made public, we recommend that you don’t enter this information when publishing your application.

Publishing an Application Through the AWS Management Console

You can create and publish an application through the AWS Management Console as described following.

Creating a New Application Through the Console

Create a new application in the AWS Serverless Application Repository by using the following procedure.

To create a new application in the AWS Serverless Application Repository

1. Open the AWS Serverless Application Repository console and choose Publish applications.
2. On the Publish an application page, type the indicated application information into the following boxes:
   - Application Name
   - Author
   - Description
   - Search labels (space delimited)
   - SPDX license
   - Readme.txt file
   - Semantic version
   - Source code URL (required only for publicly shared applications)
   - AWS SAM template file
3. Choose Publish application.

Sharing an Application Through the Console

Make your application publicly available using the following procedure.

To make your application publicly available

1. Open the AWS Serverless Application Repository console.
2. On the navigation pane, choose My Applications to bring up the list of applications that you have created.
3. Choose the application that you want to share.
4. In the Application Details section, move the Visibility slider to Application is public.

Publishing a New Version of an Existing Application Through the Console

Publish a new version of an application that you already created using the following procedure.
To publish a new version of an application

1. Open the AWS Serverless Application Repository console.
2. On the navigation pane, choose **My Applications** to bring up the list of applications that you have created.
3. Choose the application that you want to publish a new version for.
4. Choose **Publish new version**.
5. For **AWS SAM template file**, type the name of the new AWS SAM template file for this version.
6. Choose **Publish**.

Publishing an Application Through the AWS CLI

You can create and publish an application through the AWS CLI as described following.

Creating a New Application Through the AWS CLI

To create a new application using the AWS CLI, you first need to gather the same items required for publishing through the AWS Management Console, described preceding. You then use the `aws serverlessrepo create-application` function, passing it each of these items as parameters.

For more information about the parameters to be passed to this function, type `aws serverlessrepo create-application help` at the AWS CLI.

Sharing an Application Through the AWS CLI

To make your application publicly available using the AWS CLI, you can use the `aws serverlessrepo put-application-policy` function, passing the application ID and policy statement as parameters.

For more information about the parameters to be passed to this function, type `aws serverlessrepo put-application-policy help` at the AWS CLI.

Publishing a New Version of an Existing Application Through the AWS CLI

To create a new version of an application using the AWS CLI, you can use the `aws serverlessrepo create-application-version` function, passing the application ID, semantic version, new SAM template, and source code URL as parameters.

For more information about the parameters to be passed to this function, type `aws serverlessrepo create-application-version help` at the AWS CLI.

Deleting an Application Through the AWS Management Console

To delete a published application through the AWS Management Console, do the following.

1. Open the AWS Serverless Application Repository console.
2. For **My Applications**, choose the application that you want to delete.
3. In the application's detail page, choose **Delete application**.

   A message appears.
4. Choose **Delete application** to complete the deletion.

## Deleting an Application Through the AWS CLI

To delete a published application using the AWS CLI, you run the `aws serverlessrepo delete-application` command. In the command, specify the application ID of the application that you want to delete.

The following command deletes an application, where `<value>` is the application ID:

```bash
PROMPT> aws serverlessrepo delete-application --application-id <value>
```

## Using the AWS Serverless Application Model (AWS SAM)

The AWS Serverless Application Model (AWS SAM) is a model that defines serverless applications. AWS SAM is natively supported by AWS CloudFormation and defines simplified syntax for expressing serverless resources. The specification currently covers API operations, AWS Lambda functions, and Amazon DynamoDB tables. The specification is available under Apache 2.0 for AWS partners and customers to adopt and extend within their own tool sets. For details on the specification, see AWS Serverless Application Model.

AWS SAM supports special resource types that simplify how to express functions, API operations, mappings, and DynamoDB tables for serverless applications, in addition to some features for these services like environment variables. The AWS CloudFormation description of these resources conforms to the AWS Serverless Application Model. To deploy your application, specify the resources that you need as part of your application. You specify these along with their associated permissions policies in an AWS CloudFormation template file (written in either JSON or YAML). You then package your deployment artifacts, and deploy the template.

## Requesting new AWS Resources for AWS Serverless Application Repository

The sections below list AWS Resources and Policy Templates currently supported by AWS Serverless Application Repository. If you would like to request new AWS Resources and/or Policy Templates to be added, please contact AWS Support.

## Supported AWS Resources in the AWS Serverless Application Repository

Serverless applications that you publish to the AWS Serverless Application Repository can include additional AWS CloudFormation resources. The following is a complete list of supported resources:

- `AWS::Serverless::Function`
- `AWS::Serverless::Api`
- `AWS::Serverless::SimpleTable`
- `AWS::Lambda::Alias`
- `AWS::Lambda::Version`
- `AWS::Lambda::EventSourceMapping`
- `AWS::ApiGateway::Account`
- `AWS::ApiGateway::ApiKeys`
Policy Templates

When you add a serverless application to the AWS Serverless Application Repository, AWS SAM allows you to choose from a list of policy templates. When you choose one of these templates, your AWS Lambda functions are scoped to the resources that are used by your application. The following lists the permissions that are applied to each policy template in the policy templates list. AWS SAM automatically populates the placeholder items (such as AWS Region and account ID) with the appropriate information.

The following example shows that the SQSPollerPolicy policy expects a QueueName as a resource. The AWS SAM template retrieves the name of the "MyQueue" Amazon SQS queue, which can be created in the same application or requested as a parameter to the application.
MyFunction:
  Type: 'AWS::Serverless::Function'
  Properties:
    CodeUri: ${codeuri}
    Handler: hello.handler
    Runtime: python2.7
    Policies:
      - SQSPollerPolicy:
          QueueName:
            Fn::GetAtt: ['MyQueue', 'QueueName']

SQSPollerPolicy: Gives Permissions to Poll an Amazon SQS Queue

"Statement": [

  "Effect": "Allow",
  "Action": [
    "sqs:DeleteMessage",
    "sqs:ReceiveMessage"
  ],
  "Resource": {
    "Fn::Sub": [
      "arn:${AWS::Partition}:sqs:${AWS::Region}:${AWS::AccountId}:${queueName}",
      {
        "queueName": {
          "Ref": "QueueName"
        }
      }
    ]
  }
]

LambdaInvokePolicy: Gives Permission to Invoke a Lambda Function, Alias, or Version

"Statement": [

  "Effect": "Allow",
  "Action": [
    "lambda:InvokeFunction"
  ],
  "Resource": {
    "Fn::Sub": [
      "arn:${AWS::Partition}:lambda:${AWS::Region}:${AWS::AccountId}:function:*",
      {
        "functionName": {
          "Ref": "FunctionName"
        }
      }
    ]
  }
]
CloudWatchPutMetricPolicy: Gives Permissions to Put Metrics to CloudWatch

```
"Statement": [
  {
    "Effect": "Allow",
    "Action": [
      "cloudwatch:PutMetricData"
    ],
    "Resource": "*"
  }
]
```

EC2DescribePolicy: Gives Permission to Describe Amazon EC2 Instances

```
"Statement": [
  {
    "Effect": "Allow",
    "Action": [
      "ec2:DescribeRegions",
      "ec2:DescribeInstances"
    ],
    "Resource": "*"
  }
]
```

DynamoDBCrudPolicy: Gives CRUD Access to a DynamoDB Table

```
"Statement": [
  {
    "Effect": "Allow",
    "Action": [
      "dynamodb:GetItem",
      "dynamodb:DeleteItem",
      "dynamodb:PutItem",
      "dynamodb:Scan",
      "dynamodb:Query",
      "dynamodb:UpdateItem",
      "dynamodb:BatchWriteItem",
      "dynamodb:BatchGetItem"
    ],
    "Resource": {
      "Fn::Sub": [
        "arn:${AWS::Partition}:dynamodb:${AWS::Region}:${AWS::AccountId}:table/
        ${tableName}",
        {
          "tableName": {
            "Ref": "TableName"
          }
        }
      ]
    }
  }
]
```
DynamoDBReadPolicy: Gives Read-Only Access to a DynamoDB Table

"Statement": [  
  {  
    "Effect": "Allow",  
    "Action": [  
      "dynamodb:GetItem",  
      "dynamodb:Scan",  
      "dynamodb:Query",  
      "dynamodb:BatchGetItem"  
    ],  
    "Resource": {  
      "Fn::Sub": [  
        "arn:${AWS::Partition}:dynamodb:${AWS::Region}:${AWS::AccountId}:table/  
        #{tableName}"
      ]  
    }  
  }  
]

SESSendBouncePolicy: Gives SendBounce Permission to an Amazon SES Identity

"Statement": [  
  {  
    "Effect": "Allow",  
    "Action": [  
      "ses:SendBounce"  
    ],  
    "Resource": {  
      "Fn::Sub": [  
        "arn:${AWS::Partition}:ses:${AWS::Region}:${AWS::AccountId}:identity/  
        #{identityName}"
      ]  
    }  
  }  
]
ElasticsearchHttpPostPolicy: Gives POST Permissions to Amazon Elasticsearch Service

```
"Statement": [
    {
      "Effect": "Allow",
      "Action": [
        "es:ESHttpPost"
      ],
      "Resource": {
        "Fn::Sub": [
          "arn:${AWS::Partition}:es:${AWS::Region}:${AWS::AccountId}:domain/
          ${domainName}",
          {
            "domainName": {
              "Ref": "DomainName"
            }
          }
        ]
      }
    }
]
```

S3ReadPolicy: Gives Read Permissions to Objects in the Amazon S3 Bucket

```
"Statement": [
    {
      "Effect": "Allow",
      "Action": [
        "s3:GetObject",
        "s3:ListBucket",
        "s3:GetBucketLocation",
        "s3:GetObjectVersion",
        "s3:GetLifecycleConfiguration"
      ],
      "Resource": [
        {
          "Fn::Sub": [
            "arn:${AWS::Partition}:s3:::${bucketName}",
            {
              "bucketName": {
                "Ref": "BucketName"
              }
            }
          ]
        },
        {
          "Fn::Sub": [
            "arn:${AWS::Partition}:s3:::${bucketName}/*",
            {
              "bucketName": {
                "Ref": "BucketName"
              }
            }
          ]
        }
      ]
    }
]
```
S3CrudPolicy: Gives CRUD Permissions to Objects in the Amazon S3 Bucket

"Statement": [
  {
    "Effect": "Allow",
    "Action": [
      "s3:GetObject",
      "s3:ListBucket",
      "s3:GetBucketLocation",
      "s3:GetObjectVersion",
      "s3:PutObject",
      "s3:GetLifecycleConfiguration",
      "s3:PutLifecycleConfiguration"
    ],
    "Resource": [
      {
        "Fn::Sub": [
          "arn:${AWS::Partition}:s3:::${bucketName}",
          {
            "bucketName": {
              "Ref": "BucketName"
            }
          }
        ],
      },
      {
        "Fn::Sub": [
          "arn:${AWS::Partition}:s3:::${bucketName}/*",
          {
            "bucketName": {
              "Ref": "BucketName"
            }
          }
        ]
      }
    ]
  }
]

AMIDescribePolicy: Gives Permissions to Describe Amazon Machine Images (AMIs)

"Statement": [
  {
    "Effect": "Allow",
    "Action": [
      "ec2:DescribeImages"
    ],
    "Resource": {
      "Fn::Sub": "arn:${AWS::Partition}:ec2:${AWS::Region}:${AWS::AccountId}:image/*
    }
CloudFormationDescribeStacksPolicy: Gives Permission to Describe AWS CloudFormation Stacks

```json
"Statement": [
  {
    "Effect": "Allow",
    "Action": [
      "cloudformation:DescribeStacks"
    ],
    "Resource": {
      "Fn::Sub": "arn:${AWS::Partition}:cloudformation:${AWS::Region}:${AWS::AccountId}:stack/*"
    }
  }
]
```

RekognitionNoDataAccessPolicy: Gives Permission to Compare and Detect Faces and Labels

```json
"Statement": [
  {
    "Effect": "Allow",
    "Action": [
      "rekognition:CompareFaces",
      "rekognition:DetectFaces",
      "rekognition:DetectLabels",
      "rekognition:DetectModerationLabels"
    ],
    "Resource": {
      "Fn::Sub": [
        "arn:${AWS::Partition}:rekognition:${AWS::Region}:${AWS::AccountId}:collection/${collectionId}",
        {
          "collectionId": {
            "Ref": "CollectionId"
          }
        }
      ]
    }
  }
]
```

RekognitionReadPolicy: Gives Permission to List and Search Faces

```json
"Statement": [
  {
    "Effect": "Allow",
    "Action": [
      "rekognition:ListFaces",
      "rekognition:SearchFaces",
      "rekognition:ListPersonGroups",
      "rekognition:ListPersons",
      "rekognition:StartCompareFaces",
      "rekognition:StartDetectLabels",
      "rekognition:StartDetectModerationLabels",
      "rekognition:StartDetectFaces",
      "rekognition:StartPersonDetection",
      "rekognition:StopCompareFaces",
      "rekognition:StopDetectLabels",
      "rekognition:StopDetectModerationLabels",
      "rekognition:StopDetectFaces",
      "rekognition:StopPersonDetection",
      "rekognition:Start/DeleteCollection",
      "rekognition:Start/DeletePersonGroup",
      "rekognition:Start/DeletePerson",
      "rekognition:Start/DeleteFaces",
      "rekognition:Start/DeleteModerationLabels",
      "rekognition:Start/DeleteLabels"
    ],
    "Resource": {
      "Fn::Sub": [
        "arn:${AWS::Partition}:rekognition:${AWS::Region}:${AWS::AccountId}:collection/${collectionId}",
        { "collectionId": { "Ref": "CollectionId" } }
      ]
    }
  }
]
```
"rekognition:ListCollections",
"rekognition:ListFaces",
"rekognition:SearchFaces",
"rekognition:SearchFacesByImage"
],
"Resource": {
  "Fn::Sub": [
    "arn:${AWS::Partition}:rekognition:${AWS::Region}:
    ${AWS::AccountId}:collection/${collectionId}"
  ]
}
]

```
RekognitionWriteOnlyAccessPolicy: Gives Permission to Create Collection and Index Faces

"Statement": [
  {
    "Effect": "Allow",
    "Action": ["rekognition:CreateCollection", "rekognition:IndexFaces"],
    "Resource": {
      "Fn::Sub": ["arn:${AWS::Partition}:rekognition:${AWS::Region}:
      ${AWS::AccountId}:collection/${collectionId}"],
      "collectionId": {
        "Ref": "CollectionId"
      }
    }
  }
]
```

```
SQSSendMessagePolicy: Gives Permission to Send Message to Amazon SQS Queue

"Statement": [
  {
    "Effect": "Allow",
    "Action": ["sqs:SendMessage"]
  },
  "Resource": {
    "Fn::Sub": [
      "arn:${AWS::Partition}:sqs:${AWS::Region}:${AWS::AccountId}:${queueName}"
    ]
  }
]
```
"queueName": {
  "Ref": "QueueName"
}
}
}
]

SNSPublishMessagePolicy: Gives Permission to Publish a Message to an Amazon SNS Topic

"Statement": [
  {
    "Effect": "Allow",
    "Action": [
      "sns:Publish"
    ],
    "Resource": {
      "Fn::Sub": [
        "arn:${AWS::Partition}:sns:${AWS::Region}:${AWS::AccountId}:${topicName}",
        {
          "topicName": {
            "Ref": "TopicName"
          }
        }
      ]
    }
  }
]

VPCAccessPolicy: Gives Access to Create, Delete, Describe, and Detach Elastic Network Interfaces

"Statement": [
  {
    "Effect": "Allow",
    "Action": [
      "ec2:CreateNetworkInterface",
      "ec2:DeleteNetworkInterface",
      "ec2:DescribeNetworkInterfaces",
      "ec2:DetachNetworkInterface"
    ],
    "Resource": {
      "Fn::Sub": "arn:${AWS::Partition}:ec2:${AWS::Region}:${AWS::AccountId}:network-interface/*"
    }
  }
]
DynamoDBStreamReadPolicy: Gives Permission to Describe and Read a DynamoDB Stream and Records

```
"Statement": [ 
  { 
    "Effect": "Allow",
    "Action": [ 
      "dynamodb:DescribeStream",
      "dynamodb:GetRecords",
      "dynamodb:GetShardIterator",
      "dynamodb:ListStreams"
    ],
    "Resource": { 
      "Fn::Sub": [ "arn:${AWS::Partition}:dynamodb:${AWS::Region}:${AWS::AccountId}:table/${tableName}/${streamName}" ,
                    "tableName": { "Ref": "TableName" }
                    , "streamName": { "Ref": "StreamName" }
                  ]
    }
  }
]
```

KinesisStreamReadPolicy: Gives Permission to List and Read an Amazon Kinesis Stream

```
"Statement": [ 
  { 
    "Effect": "Allow",
    "Action": [ 
      "kinesis:ListStreams",
      "kinesis:DescribeLimits"
    ],
    "Resource": { 
      "Fn::Sub": "arn:${AWS::Partition}:kinesis:${AWS::Region}:${AWS::AccountId}:stream/*"
    } 
  }
],

{ 
  "Effect": "Allow",
  "Action": [ 
    "kinesis:DescribeStream",
    "kinesis:GetRecords",
    "kinesis:GetShardIterator"
  ],
  "Resource": { 
    "Fn::Sub": [ "arn:${AWS::Partition}:kinesis:${AWS::Region}:${AWS::AccountId}:stream/${streamName}" ,
                  "streamName": { "Ref": "StreamName" }
                ]
  } 
}
```
SESCrudPolicy: Gives Permission to Send Email and Verify Identity

```
"Statement": [
  {
    "Effect": "Allow",
    "Action": [
      "ses:GetIdentityVerificationAttributes",
      "ses:SendEmail",
      "ses:VerifyEmailIdentity"
    ],
    "Resource": {
      "Fn::Sub": [
        "arn:${AWS::Partition}:ses:${AWS::Region}:${AWS::AccountId}:identity/
        #{identityName}",
        { "identityName": { "Ref": "IdentityName" } }
      ]
    }
  }
]
```

SNSCrudPolicy: Gives Permissions to Create, Publish, and Subscribe to Amazon SNS Topics

```
"Statement": [
  {
    "Effect": "Allow",
    "Action": [
      "sns:ListSubscriptionsByTopic",
      "sns:CreateTopic",
      "sns:SetTopicAttributes",
      "sns:Subscribe",
      "sns:Publish"
    ],
    "Resource": {
      "Fn::Sub": [
        "arn:${AWS::Partition}:sns:${AWS::Region}:${AWS::AccountId}:${topicName}*",
        { "topicName": { "Ref": "TopicName" } }
      ]
    }
  }
]
```
KinesisCrudPolicy: Gives Permission to Create, Publish, and Delete an Amazon Kinesis Stream

```
"Statement": [
  {
    "Effect": "Allow",
    "Action": [
      "kinesis:AddTagsToStream",
      "kinesis:CreateStream",
      "kinesis:DecreaseStreamRetentionPeriod",
      "kinesis:DeleteStream",
      "kinesis:DescribeStream",
      "kinesis:GetShardIterator",
      "kinesis:IncreaseStreamRetentionPeriod",
      "kinesis:ListTagsForStream",
      "kinesis:MergeShards",
      "kinesis:PutRecord",
      "kinesis:PutRecords",
      "kinesis:SplitShard",
      "kinesis:RemoveTagsFromStream"
    ],
    "Resource": {
      "Fn::Sub": [
        "arn:${AWS::Partition}:kinesis:${AWS::Region}:${AWS::AccountId}:stream/
        ${streamName}",
        {
          "streamName": {
            "Ref": "StreamName"
          }
        }
      ]
    }
  }
]
```

KMSDecryptPolicy: Gives Permission to Decrypt with an AWS KMS Key

```
"Statement": [
  {
    "Action": "kms:Decrypt",
    "Effect": "Allow",
    "Resource": {
      "Fn::Sub": [
        "arn:${AWS::Partition}:kms:${AWS::Region}:${AWS::AccountId}:key/${KeyId}",
        {
          "KeyId": {
            "Ref": "KeyId"
          }
        }
      ]
    }
  }
]
```
# AWS Serverless Application Repository Limits

Following, you can find a table that lists the limits that AWS Serverless Application Repository imposes for each AWS account for each AWS Region.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Default Limit per AWS Account per AWS Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public applications</td>
<td>100</td>
</tr>
<tr>
<td>Free Amazon S3 storage for code packages</td>
<td>5 GB</td>
</tr>
</tbody>
</table>
Troubleshooting the AWS Serverless Application Repository

When you use the AWS Serverless Application Repository, you might encounter issues when you create, update, or delete your applications. Use this section to help troubleshoot common issues that you might encounter. You can also search for answers and post questions in the AWS Serverless Application Repository forums.

Note
Applications in the AWS Serverless Application Repository are deployed by using AWS CloudFormation. For information on troubleshooting AWS CloudFormation issues, see the AWS CloudFormation Troubleshooting Guide.

Topics
- You Can't Make an Application Public (p. 21)
- A Limit Was Exceeded (p. 21)
- Updating an Application's Readme File Doesn't Immediately Reflect on the Public Site (p. 21)
- You Can't Deploy the Same Application Twice (p. 22)
- Why Is My Application Not Publicly Available (p. 22)
- Contacting Support (p. 22)

You Can't Make an Application Public

If you can't make your application public, you might be missing a license file for your application that is approved by the Open Source Initiative (OSI).

To make your application public, you need an OSI-approved license file, and also a successfully published version of the application with a source code URL for the version. You can't update the license of an application after the application is created.

If you can't make your application public because you are missing a license file, delete the application and create a new one with the same name. Make sure that you provide it with one or more open-source licenses approved by the Open Source Initiative (OSI) organization.

A Limit Was Exceeded

If you receive an error message indicating that a limit was exceeded, check to see if you reached a resource limit. For AWS Serverless Application Repository limits, see AWS Serverless Application Repository Limits (p. 20).

Updating an Application's Readme File Doesn't Immediately Reflect on the Public Site

When you make your application public, the contents of your application can take up to 24 hours to update. If you experience delays longer than 24 hours, try contacting AWS Support for help. For details, see following.
You Can’t Deploy the Same Application Twice

The application name that you provide is used as the name of the AWS CloudFormation stack. If you have problems deploying an application, make sure that you don’t have an existing AWS CloudFormation stack with the same name. If you do, provide a different application name or delete the existing stack to deploy the application with the same name.

Why Is My Application Not Publicly Available

Applications are private by default. In order to make your application public, follow the steps here.

Contacting Support

If you can’t find troubleshooting solutions in this section or through the AWS Serverless Application Repository forums and you have AWS Premium Support, you can create a technical support case at AWS Support.

Before you contact AWS Support, make sure to get the Amazon Resource Name (ARN) for the application that you have questions about. You can find the application ARN in the AWS Serverless Application Repository Management Console.
Resources

The AWS Serverless Application Repository REST API includes the following resources.

Topics
- Applications (p. 23)
- Applications applicationId (p. 37)
- Applications applicationId Changesets (p. 49)
- Applications applicationId Policy (p. 54)
- Applications applicationId Versions (p. 59)
- Applications applicationId Versions semanticVersion (p. 63)

Applications

URI

/aplications

HTTP Methods

GET

Operation ID: ListApplications

Lists applications owned by the requester.

Query Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>maxItems</td>
<td>String</td>
<td>False</td>
<td>The total number of items to return.</td>
</tr>
<tr>
<td>nextToken</td>
<td>String</td>
<td>False</td>
<td>A token to specify where to start paginating.</td>
</tr>
</tbody>
</table>

Responses

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>ApplicationPage (p. 25)</td>
<td>Success</td>
</tr>
<tr>
<td>400</td>
<td>BadRequestException (p. 26)</td>
<td>One of the parameters in the request is invalid.</td>
</tr>
</tbody>
</table>
### Status Code

- **500**: `InternalServerErrorException (p. 26)` - The AWS Serverless Application Repository service encountered an internal error.
- **403**: `ForbiddenException (p. 26)` - The client is not authenticated.
- **404**: `NotFoundException (p. 26)` - The resource (for example, an access policy statement) specified in the request doesn't exist.

### POST

**Operation ID: CreateApplication**

Creates an application, optionally including an AWS SAM file to create the first application version in the same call.

#### Responses

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>201</td>
<td>Application (p. 25)</td>
<td>Success</td>
</tr>
<tr>
<td>400</td>
<td>BadRequestException (p. 26)</td>
<td>One of the parameters in the request is invalid.</td>
</tr>
<tr>
<td>500</td>
<td>InternalServerErrorException</td>
<td>The AWS Serverless Application Repository service encountered an internal error.</td>
</tr>
<tr>
<td>403</td>
<td>ForbiddenException (p. 26)</td>
<td>The client is not authenticated.</td>
</tr>
<tr>
<td>429</td>
<td>TooManyRequestsException (p. 26)</td>
<td>The client is sending more than the allowed number of requests per unit of time.</td>
</tr>
<tr>
<td>409</td>
<td>ConflictException (p. 26)</td>
<td>The resource already exists.</td>
</tr>
</tbody>
</table>

### Schemas

#### Request Bodies

**Example POST**

```json
{
    "name (p. 31)": "string",
    "description (p. 31)": "string",
    "author (p. 31)": "string",
    "spdxLicenseId (p. 31)": "string",
    "licenseBody (p. 31)": "string",
    "licenseUrl (p. 31)": "string",
    "readmeBody (p. 32)": "string",
    "readmeUrl (p. 32)": "string",
    "labels (p. 32)": [ ...
```
"string",
"homePageUrl (p. 32)": "string",
"semanticVersion (p. 32)": "string",
"templateBody (p. 32)": "string",
"templateUrl (p. 33)": "string",
"sourceCodeUrl (p. 33)": "string"
}

Response Bodies

Example ApplicationPage

{
  "applications (p. 28)": [
    {
      "applicationId (p. 29)": "string",
      "name (p. 29)": "string",
      "description (p. 29)": "string",
      "author (p. 29)": "string",
      "spdxLicenseId (p. 29)": "string",
      "labels (p. 29)": [
        "string"
      ],
      "creationTime (p. 30)": "string",
      "homePageUrl (p. 30)": "string"
    }
  ],
  "nextToken (p. 29)": "string"
}

Example Application

{
  "applicationId (p. 27)": "string",
  "name (p. 27)": "string",
  "description (p. 27)": "string",
  "author (p. 27)": "string",
  "spdxLicenseId (p. 27)": "string",
  "licenseUrl (p. 27)": "string",
  "readmeUrl (p. 28)": "string",
  "labels (p. 28)": [
    "string"
  ],
  "creationTime (p. 28)": "string",
  "homePageUrl (p. 28)": "string",
  "version (p. 28)": {
    "applicationId (p. 36)": "string",
    "semanticVersion (p. 36)": "string",
    "sourceCodeUrl (p. 37)": "string",
    "templateUrl (p. 37)": "string",
    "creationTime (p. 37)": "string",
    "parameterDefinitions (p. 37)": {
      "name (p. 34)": "string",
      "defaultValue (p. 34)": "string",
      "description (p. 34)": "string",
      "type (p. 34)": "string",
      "noEcho (p. 35)": boolean,
      "allowedPattern (p. 35)": "string",
      "constraintDescription (p. 35)": "string",
      "minValue (p. 35)": integer,
      "maxValue (p. 35)": integer,
      "allowedValues (p. 35)": ["string"]
    }
  }
}
<table>
<thead>
<tr>
<th>Schemas</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;maxValue (p. 35)&quot;</td>
<td>integer</td>
</tr>
<tr>
<td>&quot;minLength (p. 35)&quot;</td>
<td>integer</td>
</tr>
<tr>
<td>&quot;maxLength (p. 36)&quot;</td>
<td>integer</td>
</tr>
<tr>
<td>&quot;allowedValues (p. 36)&quot;</td>
<td>[ &quot;string&quot; ]</td>
</tr>
<tr>
<td>&quot;referencedByResources (p. 36)&quot;</td>
<td>[ &quot;string&quot; ]</td>
</tr>
</tbody>
</table>

**Example BadRequestException**

```
{
  "message (p. 30)": "string",
  "errorCode (p. 30)": "string"
}
```

**Example ForbiddenException**

```
{
  "message (p. 33)": "string",
  "errorCode (p. 33)": "string"
}
```

**Example NotFoundException**

```
{
  "message (p. 33)": "string",
  "errorCode (p. 34)": "string"
}
```

**Example ConflictException**

```
{
  "message (p. 30)": "string",
  "errorCode (p. 30)": "string"
}
```

**Example TooManyRequestsException**

```
{
  "message (p. 36)": "string",
  "errorCode (p. 36)": "string"
}
```

**Example InternalServerErrorException**

```
{
  "message (p. 33)": "string",
  "errorCode (p. 33)": "string"
}
```
Properties

Application

applicationId

The application Amazon Resource Name (ARN).

Type: string
Required: True

name

The name of the application.

Minimum length=1. Maximum length=140
Pattern: ":[a-zA-Z0-9\-]+;
Type: string
Required: True

description

The description of the application.

Minimum length=1. Maximum length=256
Type: string
Required: True

author

The name of the author publishing the app.

Minimum length=1. Maximum length=127.
Pattern "^[a-z0-9]([a-z0-9]-)?[a-z0-9]+$;
Type: string
Required: True

spdxLicenseId

A valid identifier from https://spdx.org/licenses/.

Type: string
Required: False

licenseUrl

A link to a license file of the app that matches the spdxLicenseId value of your application.

Maximum size 5 MB
Properties

readmeUrl

A link to the readme file in Markdown language that contains a more detailed description of the application and how it works.

Maximum size 5 MB

labels

Labels to improve discovery of apps in search results.

Minimum length=1. Maximum length=127. Maximum number of labels: 10

Pattern: "^[a-zA-Z0-9+-\-_\/@]+$";

creationTime

The date and time this resource was created.

homePageUrl

A URL with more information about the application, for example the location of your GitHub repository for the application.

version

Version information about the application.

ApplicationPage

applications

An array of application summaries.
nextToken
The token to request the next page of results.

  Type: string
  Required: False

**ApplicationSummary**

**applicationId**
The application Amazon Resource Name (ARN).

  Type: string
  Required: True

**name**
The name of the application.
Minimum length=1. Maximum length=140
Pattern: "[a-zA-Z0-9\-]+";

  Type: string
  Required: True

**description**
The description of the application.
Minimum length=1. Maximum length=256

  Type: string
  Required: True

**author**
The name of the author publishing the app.
Minimum length=1. Maximum length=127.
Pattern: "^[a-z0-9][([a-z0-9][-!-~][^@\s!-]*@[a-z0-9])?$";

  Type: string
  Required: True

**spdxLicenseId**
A valid identifier from https://spdx.org/licenses/.

  Type: string
  Required: False

**labels**
Labels to improve discovery of apps in search results.
Properties

Minimum length=1. Maximum length=127. Maximum number of labels: 10

Pattern: "^[a-zA-Z0-9+\-_/:@]+$";

Type: Array of type string

Required: False

creationTime

The date and time this resource was created.

Type: string

Required: False

homePageUrl

A URL with more information about the application, for example the location of your GitHub repository for the application.

Type: string

Required: False

BadRequestException

message

One of the parameters in the request is invalid.

Type: string

Required: False

errorCode

400

Type: string

Required: False

ConflictingException

message

The resource already exists.

Type: string

Required: False

errorCode

409

Type: string

Required: False
CreateApplicationInput

name
The name of the application that you want to publish.
Minimum length=1. Maximum length=140
Pattern: "^[a-zA-Z0-9\-]+";
   Type: string
   Required: True

description
The description of the application.
Minimum length=1. Maximum length=256
   Type: string
   Required: True

author
The name of the author publishing the app.
Minimum length=1. Maximum length=127.
Pattern: "^[a-z0-9]+(?![a-z0-9])(?!\-)[a-z0-9]+$";
   Type: string
   Required: True

spdxLicenseId
A valid identifier from https://spdx.org/licenses/.
   Type: string
   Required: False

licenseBody
A raw text file that contains the license of the app that matches the spdxLicenseId value of your application.
Maximum size 5 MB
   Type: string
   Required: False

licenseUrl
A link to a license file of the app that matches the spdxLicenseId value of your application.
Maximum size 5 MB
   Type: string
Properties

**readmeBody**
A text readme file in Markdown language that contains a more detailed description of the application and how it works.

Maximum size 5 MB

- **Type**: string
- **Required**: False

**readmeUrl**
A link to the readme file in Markdown language that contains a more detailed description of the application and how it works.

Maximum size 5 MB

- **Type**: string
- **Required**: False

**labels**
Labels to improve discovery of apps in search results.

Minimum length=1. Maximum length=127. Maximum number of labels: 10

Pattern: "^[a-zA-Z0-9-]+\-\:.\/@]+$";

- **Type**: Array of type string
- **Required**: False

**homePageUrl**
A URL with more information about the application, for example the location of your GitHub repository for the application.

- **Type**: string
- **Required**: False

**semanticVersion**
The semantic version of the application:

https://semver.org/

- **Type**: string
- **Required**: False

**templateBody**
The raw packaged AWS SAM template of your application.

- **Type**: string
- **Required**: False
**templateUrl**

A link to the packaged AWS SAM template of your application.

- **Type:** string
- **Required:** False

**sourceCodeUrl**

A link to a public repository for the source code of your application.

- **Type:** string
- **Required:** False

**ForbiddenException**

**message**

The client is not authenticated.

- **Type:** string
- **Required:** False

**errorCode**

403

- **Type:** string
- **Required:** False

**InternalServerErrorException**

**message**

The AWS Serverless Application Repository service encountered an internal error.

- **Type:** string
- **Required:** False

**errorCode**

500

- **Type:** string
- **Required:** False

**NotFoundException**

**message**

The resource (for example, an access policy statement) specified in the request doesn't exist.

- **Type:** string
- **Required:** False
errorCode
404
  Type: string
  Required: False

ParameterDefinition

name
The name of the parameter.
  Type: string
  Required: True

defaultValue
A value of the appropriate type for the template to use if no value is specified when a stack is created. If you define constraints for the parameter, you must specify a value that adheres to those constraints.
  Type: string
  Required: False

description
A string of up to 4,000 characters that describes the parameter.
  Type: string
  Required: False

type
The type of the parameter.
Valid values: String | Number | List<Number> | CommaDelimitedList

String: A literal string.
For example, users can specify "MyUserName".

Number: An integer or float. AWS CloudFormation validates the parameter value as a number. However, when you use the parameter elsewhere in your template (for example, by using the Ref intrinsic function), the parameter value becomes a string.
For example, users might specify "8888".

List<Number>: An array of integers or floats that are separated by commas. AWS CloudFormation validates the parameter value as numbers. However, when you use the parameter elsewhere in your template (for example, by using the Ref intrinsic function), the parameter value becomes a list of strings.
For example, users might specify "80,20", and then Ref results in ["80", "20"].

CommaDelimitedList: An array of literal strings that are separated by commas. The total number of strings should be one more than the total number of commas. Also, each member string is space-trimmed.
For example, users might specify "test,dev,prod", and then \texttt{Ref} results in \texttt{["test","dev","prod"].}

- **noEcho**
  - Whether to mask the parameter value whenever anyone makes a call that describes the stack. If you set the value to true, the parameter value is masked with asterisks (****).
  - **Type**: boolean
  - **Required**: False

- **allowedPattern**
  - A regular expression that represents the patterns to allow for \texttt{String} types.
  - **Type**: string
  - **Required**: False

- **constraintDescription**
  - A string that explains a constraint when the constraint is violated. For example, without a constraint description, a parameter that has an allowed pattern of \texttt{[A-Za-z0-9\-]+} displays the following error message when the user specifies an invalid value:
    
    Malformed input-Parameter MyParameter must match pattern \texttt{[A-Za-z0-9\-]+}
    
    By adding a constraint description, such as "must contain only uppercase and lowercase letters and numbers," you can display the following customized error message:
    
    Malformed input-Parameter MyParameter must contain only uppercase and lowercase letters and numbers.
  - **Type**: string
  - **Required**: False

- **minValue**
  - A numeric value that determines the smallest numeric value that you want to allow for \texttt{Number} types.
  - **Type**: integer
  - **Required**: False

- **maxValue**
  - A numeric value that determines the largest numeric value that you want to allow for \texttt{Number} types.
  - **Type**: integer
  - **Required**: False

- **minLength**
  - An integer value that determines the smallest number of characters that you want to allow for \texttt{String} types.
Properties

**Type**: integer  
**Required**: False

**maxLength**
An integer value that determines the largest number of characters that you want to allow for `String` types.

```markdown
**Type**: integer  
**Required**: False
```

**allowedValues**
An array containing the list of values allowed for the parameter.

```markdown
**Type**: Array of type string  
**Required**: False
```

**referencedByResources**
A list of AWS SAM resources that use this parameter.

```markdown
**Type**: Array of type string  
**Required**: True
```

**TooManyRequestsException**

**message**
The client is sending more than the allowed number of requests per unit of time.

```markdown
**Type**: string  
**Required**: False
```

**errorCode**

429

```markdown
**Type**: string  
**Required**: False
```

**Version**

**applicationId**
The application Amazon Resource Name (ARN).

```markdown
**Type**: string  
**Required**: True
```

**semanticVersion**
The semantic version of the application:
https://semver.org/
    Type: string
    Required: True

sourceCodeUrl
A link to a public repository for the source code of your application.
    Type: string
    Required: False

templateUrl
A link to the packaged AWS SAM template of your application.
    Type: string
    Required: True

creationTime
The date and time this resource was created.
    Type: string
    Required: True

parameterDefinitions
An array of parameter types supported by the application.
    Type: Array of type ParameterDefinition (p. 34)
    Required: True

Applications applicationId

URI
/aplications/applicationId

HTTP Methods

GET
Operation ID: GetApplication
Gets the specified application.

Path Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>applicationId</td>
<td>String</td>
<td>True</td>
<td>The ID of the application to get.</td>
</tr>
</tbody>
</table>
Query Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>semanticVersion</td>
<td>String</td>
<td>False</td>
<td>The semantic version of the application to get.</td>
</tr>
</tbody>
</table>

Responses

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>Application (p. 40)</td>
<td>Success</td>
</tr>
<tr>
<td>400</td>
<td>BadRequestException (p. 41)</td>
<td>One of the parameters in the request is invalid.</td>
</tr>
<tr>
<td>500</td>
<td>InternalServerErrorException</td>
<td>The AWS Serverless Application Repository service encountered an internal error.</td>
</tr>
<tr>
<td>403</td>
<td>ForbiddenException (p. 41)</td>
<td>The client is not authenticated.</td>
</tr>
<tr>
<td>404</td>
<td>NotFoundException (p. 41)</td>
<td>The resource (for example, an access policy statement) specified in the request doesn't exist.</td>
</tr>
<tr>
<td>429</td>
<td>TooManyRequestsException (p. 41)</td>
<td>The client is sending more than the allowed number of requests per unit of time.</td>
</tr>
</tbody>
</table>

DELETE

Operation ID: DeleteApplication

Deletes the specified application.

Path Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>applicationId</td>
<td>String</td>
<td>True</td>
<td>The ID of the application to get.</td>
</tr>
</tbody>
</table>

Responses

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>400</td>
<td>BadRequestException (p. 41)</td>
<td>One of the parameters in the request is invalid.</td>
</tr>
<tr>
<td>500</td>
<td>InternalServerErrorException</td>
<td>The AWS Serverless Application Repository service encountered an internal error.</td>
</tr>
<tr>
<td>204</td>
<td>None</td>
<td>Success</td>
</tr>
<tr>
<td>Status Code</td>
<td>Response Model</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>403</td>
<td>ForbiddenException (p. 41)</td>
<td>The client is not authenticated.</td>
</tr>
<tr>
<td>404</td>
<td>NotFoundException (p. 41)</td>
<td>The resource (for example, an access policy statement) specified in the request doesn't exist.</td>
</tr>
<tr>
<td>429</td>
<td>TooManyRequestsException (p. 41)</td>
<td>The client is sending more than the allowed number of requests per unit of time.</td>
</tr>
<tr>
<td>409</td>
<td>ConflictException (p. 41)</td>
<td>The resource already exists.</td>
</tr>
</tbody>
</table>

**PATCH**

Operation ID: UpdateApplication

Updates the specified application.

**Path Parameters**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>applicationId</td>
<td>String</td>
<td>True</td>
<td>The ID of the application to get.</td>
</tr>
</tbody>
</table>

**Responses**

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>Application (p. 40)</td>
<td>Success</td>
</tr>
<tr>
<td>400</td>
<td>BadRequestException (p. 41)</td>
<td>One of the parameters in the request is invalid.</td>
</tr>
<tr>
<td>500</td>
<td>InternalServerErrorException</td>
<td>The AWS Serverless Application Repository service encountered an internal error.</td>
</tr>
<tr>
<td>403</td>
<td>ForbiddenException (p. 41)</td>
<td>The client is not authenticated.</td>
</tr>
<tr>
<td>404</td>
<td>NotFoundException (p. 41)</td>
<td>The resource (for example, an access policy statement) specified in the request doesn't exist.</td>
</tr>
<tr>
<td>429</td>
<td>TooManyRequestsException (p. 41)</td>
<td>The client is sending more than the allowed number of requests per unit of time.</td>
</tr>
<tr>
<td>409</td>
<td>ConflictException (p. 41)</td>
<td>The resource already exists.</td>
</tr>
</tbody>
</table>
Schemas

Request Bodies

Example PATCH

```
{
  "description (p. 47)": "string",
  "author (p. 48)": "string",
  "readmeBody (p. 48)": "string",
  "readmeUrl (p. 48)": "string",
  "labels (p. 48)": [ 
    "string"
  ],
  "homePageUrl (p. 48)": "string"
}
```

Response Bodies

Example Application

```
{
  "applicationId (p. 41)": "string",
  "name (p. 42)": "string",
  "description (p. 42)": "string",
  "author (p. 42)": "string",
  "spdxLicenseId (p. 42)": "string",
  "licenseUrl (p. 42)": "string",
  "readmeUrl (p. 42)": "string",
  "labels (p. 43)": [ 
    "string"
  ],
  "creationTime (p. 43)": "string",
  "homePageUrl (p. 43)": "string",
  "version (p. 43)": { 
    "applicationId (p. 48)": "string",
    "semanticVersion (p. 49)": "string",
    "sourceCodeUrl (p. 49)": "string",
    "templateUrl (p. 49)": "string",
    "creationTime (p. 49)": "string",
    "parameterDefinitions (p. 49)": [ 
    
    "name (p. 45)": "string",
    "defaultValue (p. 45)": "string",
    "description (p. 45)": "string",
    "type (p. 45)": "string",
    "noEcho (p. 46)": boolean,
    "allowedPattern (p. 46)": "string",
    "constraintDescription (p. 46)": "string",
    "minValue (p. 46)": integer,
    "maxValue (p. 46)": integer,
    "minLength (p. 47)": integer,
    "maxLength (p. 47)": integer,
    "allowedValues (p. 47)": [ 
      "string"
    ],
    "referencedByResources (p. 47)": [ 
      "string"
    ]
  ]}
}
```
Example BadRequestException

```json
{
  "message (p. 43)": "string",
  "errorCode (p. 43)": "string"
}
```

Example ForbiddenException

```json
{
  "message (p. 44)": "string",
  "errorCode (p. 44)": "string"
}
```

Example NotFoundException

```json
{
  "message (p. 44)": "string",
  "errorCode (p. 45)": "string"
}
```

Example ConflictException

```json
{
  "message (p. 44)": "string",
  "errorCode (p. 44)": "string"
}
```

Example TooManyRequestsException

```json
{
  "message (p. 47)": "string",
  "errorCode (p. 47)": "string"
}
```

Example InternalServerErrorException

```json
{
  "message (p. 44)": "string",
  "errorCode (p. 44)": "string"
}
```

**Properties**

**Application**

*applicationId*

The application Amazon Resource Name (ARN).
Properties

**name**

The name of the application.

Minimum length=1. Maximum length=140

Pattern: 

```
[a-zA-Z0-9\-]+;
```

**description**

The description of the application.

Minimum length=1. Maximum length=256

**author**

The name of the author publishing the app.

Minimum length=1. Maximum length=127.

Pattern: 

```
^[a-z0-9](([a-z0-9]|-)(?!-))*[a-z0-9]$;
```

**spdxLicenseId**

A valid identifier from https://spdx.org/licenses/.

**licenseUrl**

A link to a license file of the app that matches the spdxLicenseId value of your application.

Maximum size 5 MB

**readmeUrl**

A link to the readme file in Markdown language that contains a more detailed description of the application and how it works.
Maximum size 5 MB
  
  **Type:** string  
  **Required:** False

**labels**

Labels to improve discovery of apps in search results.

Minimum length=1. Maximum length=127. Maximum number of labels: 10

Pattern: "^[a-zA-Z0-9+\-_:\/@]+$";

  **Type:** Array of type string  
  **Required:** False

**creationTime**

The date and time this resource was created.

  **Type:** string  
  **Required:** False

**homePageUrl**

A URL with more information about the application, for example the location of your GitHub repository for the application.

  **Type:** string  
  **Required:** False

**version**

Version information about the application.

  **Type:** Version (p. 48)  
  **Required:** False

**BadRequestException**

**message**

One of the parameters in the request is invalid.

  **Type:** string  
  **Required:** False

**errorCode**

400

  **Type:** string  
  **Required:** False
ConflictException

message
The resource already exists.

    Type: string
    Required: False

errrorCode
409

    Type: string
    Required: False

ForbiddenException

message
The client is not authenticated.

    Type: string
    Required: False

errrorCode
403

    Type: string
    Required: False

InternalServerErrorException

message
The AWS Serverless Application Repository service encountered an internal error.

    Type: string
    Required: False

errrorCode
500

    Type: string
    Required: False

NotFoundException

message
The resource (for example, an access policy statement) specified in the request doesn't exist.
Properties

Type: string
Required: False

errorCode

404

Type: string
Required: False

ParameterDefinition

name

The name of the parameter.

Type: string
Required: True

defaultValue

A value of the appropriate type for the template to use if no value is specified when a stack is created. If you define constraints for the parameter, you must specify a value that adheres to those constraints.

Type: string
Required: False

description

A string of up to 4,000 characters that describes the parameter.

Type: string
Required: False

type

The type of the parameter.

Valid values: String | Number | List<Number> | CommaDelimitedList

String: A literal string.

For example, users can specify "MyUserName".

Number: An integer or float. AWS CloudFormation validates the parameter value as a number. However, when you use the parameter elsewhere in your template (for example, by using the Ref intrinsic function), the parameter value becomes a string.

For example, users might specify "8888".

List<Number>: An array of integers or floats that are separated by commas. AWS CloudFormation validates the parameter value as numbers. However, when you use the parameter elsewhere in your template (for example, by using the Ref intrinsic function), the parameter value becomes a list of strings.

For example, users might specify "80,20", and then Ref results in ["80", "20"].
CommaDelimitedList: An array of literal strings that are separated by commas. The total number of strings should be one more than the total number of commas. Also, each member string is space-trimmed.

For example, users might specify "test,dev,prod", and then Ref results in ["test", "dev", "prod"].

- **Type:** string
- **Required:** False

**noEcho**

Whether to mask the parameter value whenever anyone makes a call that describes the stack. If you set the value to true, the parameter value is masked with asterisks (****).

- **Type:** boolean
- **Required:** False

**allowedPattern**

A regular expression that represents the patterns to allow for String types.

- **Type:** string
- **Required:** False

**constraintDescription**

A string that explains a constraint when the constraint is violated. For example, without a constraint description, a parameter that has an allowed pattern of [A-Za-z0-9]+ displays the following error message when the user specifies an invalid value:


By adding a constraint description, such as "must contain only uppercase and lowercase letters and numbers," you can display the following customized error message:

Malformed input-Parameter MyParameter must contain only uppercase and lowercase letters and numbers.

- **Type:** string
- **Required:** False

**minValue**

A numeric value that determines the smallest numeric value that you want to allow for Number types.

- **Type:** integer
- **Required:** False

**maxValue**

A numeric value that determines the largest numeric value that you want to allow for Number types.

- **Type:** integer
- **Required:** False
**minLength**
An integer value that determines the smallest number of characters that you want to allow for String types.

Type: integer
Required: False

**maxLength**
An integer value that determines the largest number of characters that you want to allow for String types.

Type: integer
Required: False

**allowedValues**
An array containing the list of values allowed for the parameter.

Type: Array of type string
Required: False

**referencedByResources**
A list of AWS SAM resources that use this parameter.

Type: Array of type string
Required: True

**TooManyRequestsException**

**message**
The client is sending more than the allowed number of requests per unit of time.

Type: string
Required: False

**errorCode**
429

Type: string
Required: False

**UpdateApplicationInput**

**description**
The description of the application.

Minimum length=1. Maximum length=256

Type: string
Properties

Required: False

author
The name of the author publishing the app.
Minimum length=1. Maximum length=127.
Pattern "^[a-z0-9][([a-z0-9]-(?!-))][a-z0-9]+$";
Type: string
Required: False

readmeBody
A text readme file in Markdown language that contains a more detailed description of the application and how it works.
Maximum size 5 MB
Type: string
Required: False

readmeUrl
A link to the readme file in Markdown language that contains a more detailed description of the application and how it works.
Maximum size 5 MB
Type: string
Required: False

labels
Labels to improve discovery of apps in search results.
Minimum length=1. Maximum length=127. Maximum number of labels: 10
Pattern: "^[a-zA-Z0-9+\-_:\/@]+$";
Type: Array of type string
Required: False

homePageUrl
A URL with more information about the application, for example the location of your GitHub repository for the application.
Type: string
Required: False

Version

applicationId
The application Amazon Resource Name (ARN).
Type: string
Required: True

**semanticVersion**
The semantic version of the application:

https://semver.org/

Type: string
Required: True

**sourceCodeUrl**
A link to a public repository for the source code of your application.

Type: string
Required: False

**templateUrl**
A link to the packaged AWS SAM template of your application.

Type: string
Required: True

**creationTime**
The date and time this resource was created.

Type: string
Required: True

**parameterDefinitions**
An array of parameter types supported by the application.

Type: Array of type ParameterDefinition (p. 45)
Required: True

### Applications applicationId Changesets

**URI**

/aplications/ applicationId /changesets

**HTTP Methods**

**POST**

Operation ID: CreateCloudFormationChangeSet
Creates an AWS CloudFormation change set for the given application.

**Path Parameters**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>applicationId</td>
<td>String</td>
<td>True</td>
<td>The ID of the application to get.</td>
</tr>
</tbody>
</table>

**Responses**

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>201</td>
<td>ChangeSetDetails (p. 50)</td>
<td>Success</td>
</tr>
<tr>
<td>400</td>
<td>BadRequestException (p. 51)</td>
<td>One of the parameters in the request is invalid.</td>
</tr>
<tr>
<td>500</td>
<td>InternalServerErrorException (p. 51)</td>
<td>The AWS Serverless Application Repository service encountered an internal error.</td>
</tr>
<tr>
<td>403</td>
<td>ForbiddenException (p. 51)</td>
<td>The client is not authenticated.</td>
</tr>
<tr>
<td>429</td>
<td>TooManyRequestsException (p. 51)</td>
<td>The client is sending more than the allowed number of requests per unit of time.</td>
</tr>
</tbody>
</table>

**Schemas**

**Request Bodies**

**Example POST**

```
{
  "stackName (p. 52)": "string",
  "semanticVersion (p. 52)": "string",
  "parameterOverrides (p. 52)": [
    {
      "name (p. 53)": "string",
      "value (p. 53)": "string"
    }
  ]
}
```

**Response Bodies**

**Example ChangeSetDetails**

```
{
  "applicationId (p. 51)": "string",
  "semanticVersion (p. 52)": "string",
  "changeSetId (p. 52)": "string",
  "stackId (p. 52)": "string"
}
```
Example BadRequestException

```
{
  "message (p. 51)": "string",
  "errorCode (p. 51)": "string"
}
```

Example ForbiddenException

```
{
  "message (p. 53)": "string",
  "errorCode (p. 53)": "string"
}
```

Example TooManyRequestsException

```
{
  "message (p. 54)": "string",
  "errorCode (p. 54)": "string"
}
```

Example InternalServerErrorException

```
{
  "message (p. 53)": "string",
  "errorCode (p. 53)": "string"
}
```

## Properties

### BadRequestException

**message**

One of the parameters in the request is invalid.

- **Type:** string
- **Required:** False

**errorCode**

400

- **Type:** string
- **Required:** False

### ChangeSetDetails

**applicationId**

The application Amazon Resource Name (ARN).

- **Type:** string
Properties

**Required**: True

**semanticVersion**

The semantic version of the application:

https://semver.org/

  *Type*: string
  *Required*: True

**changeSetId**

The Amazon Resource Name (ARN) of the change set.

Length constraints: Minimum length of 1.

Pattern: ARN:([-a-zA-Z0-9/])*

  *Type*: string
  *Required*: True

**stackId**

The unique ID of the stack.

  *Type*: string
  *Required*: True

---

**CreateCloudFormationChangeSetInput**

**stackName**

The name or the unique ID of the stack for which you are creating a change set. AWS CloudFormation generates the change set by comparing this stack's information with the information that you submit, such as a modified template or different parameter input values.

Constraints: Minimum length of 1.

Pattern: ([a-zA-Z][a-zA-Z0-9-]*)(arn:\b(aws|aws-us-gov|aws-cn)\b([-a-zA-Z0-9/-._+])*)

  *Type*: string
  *Required*: True

**semanticVersion**

The semantic version of the application:

https://semver.org/

  *Type*: string
  *Required*: False

**parameterOverrides**

A list of parameter values for the parameters of the application.
ForbiddenException

message
The client is not authenticated.

errorCode
403

InternalServerErrorException

message
The AWS Serverless Application Repository service encountered an internal error.

errorCode
500

ParameterValue

name
The key associated with the parameter. If you don't specify a key and value for a particular parameter, AWS CloudFormation uses the default value that is specified in your template.

value
The input value associated with the parameter.
TooManyRequestsException

**message**
The client is sending more than the allowed number of requests per unit of time.

   Type: string
   Required: False

**errorCode**
429

   Type: string
   Required: False

Applications applicationId Policy

**URI**

/aws/applications/applicationId/policy

**HTTP Methods**

**GET**

Operation ID: GetApplicationPolicy

Gets the policy for the specified application.

**Path Parameters**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>applicationId</td>
<td>String</td>
<td>True</td>
<td>The ID of the application to get.</td>
</tr>
</tbody>
</table>

**Responses**

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>ApplicationPolicy (p. 56)</td>
<td>Success</td>
</tr>
<tr>
<td>400</td>
<td>BadRequestException (p. 56)</td>
<td>One of the parameters in the request is invalid.</td>
</tr>
<tr>
<td>500</td>
<td>InternalServerErrorException</td>
<td>The AWS Serverless Application Repository service encountered an internal error.</td>
</tr>
<tr>
<td>403</td>
<td>ForbiddenException (p. 56)</td>
<td>The client is not authenticated.</td>
</tr>
</tbody>
</table>
PUT

Operation ID: PutApplicationPolicy

Puts the policy for the specified application.

Path Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>applicationId</td>
<td>String</td>
<td>True</td>
<td>The ID of the application to get.</td>
</tr>
</tbody>
</table>

Responses

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>ApplicationPolicy (p. 56)</td>
<td>Success</td>
</tr>
<tr>
<td>400</td>
<td>BadRequestException (p. 56)</td>
<td>One of the parameters in the request is invalid.</td>
</tr>
<tr>
<td>500</td>
<td>InternalServerErrorException</td>
<td>The AWS Serverless Application Repository service encountered an internal error.</td>
</tr>
<tr>
<td>403</td>
<td>ForbiddenException (p. 56)</td>
<td>The client is not authenticated.</td>
</tr>
<tr>
<td>404</td>
<td>NotFoundException (p. 56)</td>
<td>The resource (for example, an access policy statement) specified in the request doesn't exist.</td>
</tr>
<tr>
<td>429</td>
<td>TooManyRequestsException (p. 56)</td>
<td>The client is sending more than the allowed number of requests per unit of time.</td>
</tr>
</tbody>
</table>
"statements (p. 57)": [
    
    "statementId (p. 57)": "string",
    "principals (p. 57)": [
        "string"
    ],
    "actions (p. 57)": [
        "string"
    ]
]

Response Bodies

Example ApplicationPolicy

{
    "statements (p. 57)": [
        
        "statementId (p. 57)": "string",
        "principals (p. 57)": [
            "string"
        ],
        "actions (p. 57)": [
            "string"
        ]
    ]
}

Example BadRequestException

{
    "message (p. 57)": "string",
    "errorCode (p. 58)": "string"
}

Example ForbiddenException

{
    "message (p. 58)": "string",
    "errorCode (p. 58)": "string"
}

Example NotFoundException

{
    "message (p. 58)": "string",
    "errorCode (p. 58)": "string"
}

Example TooManyRequestsException

{
    "message (p. 59)": "string",
    "errorCode (p. 59)": "string"
}
Example InternalServerErrorException

```json
{
    "message (p. 58)": "string",
    "errorCode (p. 58)": "string"
}
```

Properties

ApplicationPolicy

statements

An array of policy statements applied to the application.

- **Type**: Array of type ApplicationPolicyStatement (p. 57)
- **Required**: True

ApplicationPolicyStatement

statementId

A unique ID for the statement.

- **Type**: string
- **Required**: False

principals

An AWS account ID, or * to make the application public.

- **Type**: Array of type string
- **Required**: True

actions

A list of supported actions:

- GetApplication
- CreateCloudFormationChangeSet
- ListApplicationVersions
- SearchApplications
- Deploy (Note: This action enables all other actions preceding.)

- **Type**: Array of type string
- **Required**: True

BadRequestException

message

One of the parameters in the request is invalid.
Properties

Type: string
Required: False

errorCode

400

Type: string
Required: False

ForbiddenException

message
The client is not authenticated.

Type: string
Required: False

errorCode

403

Type: string
Required: False

InternalServerException

message
The AWS Serverless Application Repository service encountered an internal error.

Type: string
Required: False

errorCode

500

Type: string
Required: False

NotFoundException

message
The resource (for example, an access policy statement) specified in the request doesn't exist.

Type: string
Required: False

errorCode

404
Type: string
Required: False

**TooManyRequestsException**

message

The client is sending more than the allowed number of requests per unit of time.

Type: string
Required: False

**errorCode**

429

Type: string
Required: False

---

**Applications applicationId Versions**

**URI**

/applications/applicationId/versions

**HTTP Methods**

**GET**

Operation ID: ListApplicationVersions

Lists versions for the specified application.

**Path Parameters**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>applicationId</td>
<td>String</td>
<td>True</td>
<td>The ID of the application to get.</td>
</tr>
</tbody>
</table>

**Query Parameters**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>maxItems</td>
<td>String</td>
<td>False</td>
<td>The total number of items to return.</td>
</tr>
<tr>
<td>nextPageToken</td>
<td>String</td>
<td>False</td>
<td>A token to specify where to start paginating.</td>
</tr>
</tbody>
</table>
Responses

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>ApplicationVersionPage (p. 60)</td>
<td>Success</td>
</tr>
<tr>
<td>400</td>
<td>BadRequestException (p. 60)</td>
<td>One of the parameters in the request is invalid.</td>
</tr>
<tr>
<td>500</td>
<td>InternalServerErrorException (p. 61)</td>
<td>The AWS Serverless Application Repository service encountered an internal error.</td>
</tr>
<tr>
<td>403</td>
<td>ForbiddenException (p. 60)</td>
<td>The client is not authenticated.</td>
</tr>
<tr>
<td>404</td>
<td>NotFoundException (p. 61)</td>
<td>The resource (for example, an access policy statement) specified in the request doesn't exist.</td>
</tr>
<tr>
<td>429</td>
<td>TooManyRequestsException (p. 61)</td>
<td>The client is sending more than the allowed number of requests per unit of time.</td>
</tr>
</tbody>
</table>

Schemas

Response Bodies

Example ApplicationVersionPage

```json
{
  "versions (p. 61)": [
    {
      "applicationId (p. 63)": "string",
      "semanticVersion (p. 63)": "string",
      "sourceCodeUrl (p. 63)": "string",
      "creationTime (p. 63)": "string"
    }
  ],
  "nextToken (p. 61)": "string"
}
```

Example BadRequestException

```json
{
  "message (p. 61)": "string",
  "errorCode (p. 61)": "string"
}
```

Example ForbiddenException

```json
{
  "message (p. 62)": "string",
  "errorCode (p. 62)": "string"
}
```
Example Not Found Exception

```json
{
  "message (p. 62)": "string",
  "errorCode (p. 62)": "string"
}
```

Example Too Many Requests Exception

```json
{
  "message (p. 62)": "string",
  "errorCode (p. 62)": "string"
}
```

Example Internal Server Error Exception

```json
{
  "message (p. 62)": "string",
  "errorCode (p. 62)": "string"
}
```

Properties

**ApplicationVersionPage**

**versions**

An array of version summaries for the application.

- **Type:** Array of type VersionSummary (p. 63)
- **Required:** True

**nextToken**

The token to request the next page of results.

- **Type:** string
- **Required:** False

**BadRequestException**

**message**

One of the parameters in the request is invalid.

- **Type:** string
- **Required:** False

**errorCode**

400

- **Type:** string
- **Required:** False
ForbiddenException

message
The client is not authenticated.

Type: string
Required: False

errorCode
403

Type: string
Required: False

InternalServerErrorException

message
The AWS Serverless Application Repository service encountered an internal error.

Type: string
Required: False

errorCode
500

Type: string
Required: False

NotFoundException

message
The resource (for example, an access policy statement) specified in the request doesn't exist.

Type: string
Required: False

errorCode
404

Type: string
Required: False

TooManyRequestsException

message
The client is sending more than the allowed number of requests per unit of time.
Type: string  
Required: False

eerrorCode  
429  
Type: string  
Required: False

**VersionSummary**

**applicationId**  
The application Amazon Resource Name (ARN).  
Type: string  
Required: True

**semanticVersion**  
The semantic version of the application:  
https://semver.org/  
Type: string  
Required: True

**sourceCodeUrl**  
A link to a public repository for the source code of your application.  
Type: string  
Required: False

**creationTime**  
The date and time this resource was created.  
Type: string  
Required: True

---

**Applications applicationId Versions semanticVersion**

**URI**

/applications/ applicationId /versions/ semanticVersion
HTTP Methods

PUT

Operation ID: CreateApplicationVersion

Creates an application version.

Path Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>applicationId</td>
<td>String</td>
<td>True</td>
<td>The ID of the application to get.</td>
</tr>
<tr>
<td>semanticVersion</td>
<td>String</td>
<td>True</td>
<td>The semantic version of the new version.</td>
</tr>
</tbody>
</table>

Responses

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>201</td>
<td>Version (p. 65)</td>
<td>Success</td>
</tr>
<tr>
<td>400</td>
<td>BadRequestException (p. 65)</td>
<td>One of the parameters in the request is invalid.</td>
</tr>
<tr>
<td>500</td>
<td>InternalServerErrorException (p. 65)</td>
<td>The AWS Serverless Application Repository service encountered an internal error.</td>
</tr>
<tr>
<td>403</td>
<td>ForbiddenException (p. 65)</td>
<td>The client is not authenticated.</td>
</tr>
<tr>
<td>429</td>
<td>TooManyRequestsException (p. 65)</td>
<td>The client is sending more than the allowed number of requests per unit of time.</td>
</tr>
<tr>
<td>409</td>
<td>ConflictException (p. 65)</td>
<td>The resource already exists.</td>
</tr>
</tbody>
</table>

Schemas

Request Bodies

Example PUT

```json
{
  "templateBody (p. 66)": "string",
  "templateUrl (p. 67)": "string",
  "sourceCodeUrl (p. 67)": "string"
}
```
Response Bodies

Example Version

```json
{
   "applicationId (p. 70)": "string",
   "semanticVersion (p. 70)": "string",
   "sourceCodeUrl (p. 70)": "string",
   "templateUrl (p. 70)": "string",
   "creationTime (p. 71)": "string",
   "parameterDefinitions (p. 71)": [
      {
         "name (p. 67)": "string",
         "defaultValue (p. 68)": "string",
         "description (p. 68)": "string",
         "type (p. 68)": "string",
         "noEcho (p. 68)": boolean,
         "allowedPattern (p. 68)": "string",
         "constraintDescription (p. 69)": "string",
         "minValue (p. 69)": integer,
         "maxValue (p. 69)": integer,
         "minLength (p. 69)": integer,
         "maxLength (p. 69)": integer,
         "allowedValues (p. 69)": [
            "string"
         ],
         "referencedByResources (p. 70)": [
            "string"
         ]
      }
   }
}
```

Example BadRequestException

```json
{
   "message (p. 66)": "string",
   "errorCode (p. 66)": "String"
}
```

Example ForbiddenException

```json
{
   "message (p. 67)": "string",
   "errorCode (p. 67)": "String"
}
```

Example ConflictException

```json
{
   "message (p. 66)": "string",
   "errorCode (p. 66)": "String"
}
```

Example TooManyRequestsException

```json
{

```
Example InternalServerErrorException

```json
{
    "message (p. 70)": "string",
    "errorCode (p. 70)": "string"
}
```

Properties

BadRequestException

**message**

One of the parameters in the request is invalid.

- **Type**: string
- **Required**: False

**errorCode**

400

- **Type**: string
- **Required**: False

ConflictException

**message**

The resource already exists.

- **Type**: string
- **Required**: False

**errorCode**

409

- **Type**: string
- **Required**: False

CreateApplicationVersionInput

**templateBody**

The raw packaged AWS SAM template of your application.

- **Type**: string
- **Required**: False
templateUrl
A link to the packaged AWS SAM template of your application.

    Type: string
    Required: False

sourceCodeUrl
A link to a public repository for the source code of your application.

    Type: string
    Required: False

ForbiddenException
message
The client is not authenticated.

    Type: string
    Required: False

erroCode
403

    Type: string
    Required: False

InternalServerErrorException
message
The AWS Serverless Application Repository service encountered an internal error.

    Type: string
    Required: False

erroCode
500

    Type: string
    Required: False

ParameterDefinition
name
The name of the parameter.

    Type: string
    Required: True
**defaultValue**

A value of the appropriate type for the template to use if no value is specified when a stack is created. If you define constraints for the parameter, you must specify a value that adheres to those constraints.

*Type*: string  
*Required*: False

**description**

A string of up to 4,000 characters that describes the parameter.

*Type*: string  
*Required*: False

**type**

The type of the parameter.

*Valid values*: String | Number | List<Number> | CommaDelimitedList

*String*: A literal string.

For example, users can specify "MyUserName".

*Number*: An integer or float. AWS CloudFormation validates the parameter value as a number. However, when you use the parameter elsewhere in your template (for example, by using the `Ref` intrinsic function), the parameter value becomes a string.

For example, users might specify "8888".

*List<Number>*: An array of integers or floats that are separated by commas. AWS CloudFormation validates the parameter value as numbers. However, when you use the parameter elsewhere in your template (for example, by using the `Ref` intrinsic function), the parameter value becomes a list of strings.

For example, users might specify "80,20", and then `Ref` results in ["80","20"].

*CommaDelimitedList*: An array of literal strings that are separated by commas. The total number of strings should be one more than the total number of commas. Also, each member string is space-trimmed.

For example, users might specify "test,dev,prod", and then `Ref` results in ["test","dev","prod"].

*Type*: string  
*Required*: False

**noEcho**

Whether to mask the parameter value whenever anyone makes a call that describes the stack. If you set the value to true, the parameter value is masked with asterisks (****).

*Type*: boolean  
*Required*: False

**allowedPattern**

A regular expression that represents the patterns to allow for String types.
Properties

**Type**: string
**Required**: False

**constraintDescription**
A string that explains a constraint when the constraint is violated. For example, without a constraint description, a parameter that has an allowed pattern of `[A-Za-z0-9]+` displays the following error message when the user specifies an invalid value:

Malformed input-Parameter MyParameter must match pattern `[A-Za-z0-9]+`

By adding a constraint description, such as "must contain only uppercase and lowercase letters and numbers," you can display the following customized error message:

Malformed input-Parameter MyParameter must contain only uppercase and lowercase letters and numbers.

**Type**: string
**Required**: False

**minValue**
A numeric value that determines the smallest numeric value that you want to allow for Number types.

**Type**: integer
**Required**: False

**maxValue**
A numeric value that determines the largest numeric value that you want to allow for Number types.

**Type**: integer
**Required**: False

**minLength**
An integer value that determines the smallest number of characters that you want to allow for String types.

**Type**: integer
**Required**: False

**maxLength**
An integer value that determines the largest number of characters that you want to allow for String types.

**Type**: integer
**Required**: False

**allowedValues**
An array containing the list of values allowed for the parameter.

**Type**: Array of type string
**Properties**

**Required:** False

**referencedByResources**

A list of AWS SAM resources that use this parameter.

**Type:** Array of type string

**Required:** True

**TooManyRequestsException**

**message**

The client is sending more than the allowed number of requests per unit of time.

**Type:** string

**Required:** False

**errorCode**

429

**Type:** string

**Required:** False

**Version**

**applicationId**

The application Amazon Resource Name (ARN).

**Type:** string

**Required:** True

**semanticVersion**

The semantic version of the application:

https://semver.org/

**Type:** string

**Required:** True

**sourceCodeUrl**

A link to a public repository for the source code of your application.

**Type:** string

**Required:** False

**templateUrl**

A link to the packaged AWS SAM template of your application.
Properties

- **Type**: string
  - **Required**: True

**creationTime**

The date and time this resource was created.

- **Type**: string
  - **Required**: True

**parameterDefinitions**

An array of parameter types supported by the application.

- **Type**: Array of type ParameterDefinition (p. 67)
  - **Required**: True
The following table describes the documentation for this release of the AWS Serverless Application Repository.

- **API version:** latest
- **Latest documentation update:** February 20, 2018

<table>
<thead>
<tr>
<th>Change</th>
<th>Description</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public release</td>
<td>Public release of the AWS Serverless Application Repository, which is now available in 14 AWS Regions. For more information about the AWS Regions where the AWS Serverless Application Repository is available and AWS Serverless Application Repository endpoints, see Regions and Endpoints in the AWS General Reference.</td>
<td>In this release</td>
</tr>
<tr>
<td>New guide</td>
<td>This is the first, preview release of the AWS Serverless Application Repository Developer Guide.</td>
<td>November 30, 2017</td>
</tr>
</tbody>
</table>
AWS Glossary

For the latest AWS terminology, see the AWS Glossary in the AWS General Reference.