

AWS-S3

S3 Component

Available as of Camel 2.8

The S3 component supports storing and retrieving objects from/to [Amazon's S3](#) service.

Prerequisites



You must have a valid Amazon Web Services developer account, and be signed up to use Amazon S3. More information are available at [Amazon S3](#).

URI Format

```
aws-s3://bucketName[?options]
aws-s3://bucketNameOrArn[?options] (Camel 2.18 onwards)
```

The bucket will be created if it don't already exists.

You can append query options to the URI in the following format, ?options=value&option2=value&...

URI Options

Name	Default Value	Context	Description
amazonS3Client	null	Shared	Reference to a <code>com.amazonaws.services.sqs.AmazonS3</code> in the Registry .
accessKey	null	Shared	Amazon AWS Access Key
secretKey	null	Shared	Amazon AWS Secret Key
amazonS3Endpoint	null	Shared	The region with which the AWS-S3 client wants to work with.
region	null	Producer	The region who the bucket is located. This option is used in the <code>com.amazonaws.services.s3.model.CreateBucketRequest</code> .
deleteAfterRead	true	Consumer	Delete objects from S3 after it has been retrieved.
deleteAfterWrite	false	Producer	Camel 2.11.0 Delete file object after the S3 file has been uploaded
maxMessagesPerPoll	10	Consumer	The maximum number of objects which can be retrieved in one poll. Used in the <code>com.amazonaws.services.s3.model.ListObjectsRequest</code> .
policy	null	Shared	Camel 2.8.4: The policy for this queue to set in the <code>com.amazonaws.services.s3.AmazonS3#setBucketPolicy()</code> method.
storageClass	null	Producer	Camel 2.8.4: The storage class to set in the <code>com.amazonaws.services.s3.model.PutObjectRequest</code> request.
prefix	null	Consumer	Camel 2.10.1: The prefix which is used in the <code>com.amazonaws.services.s3.model.ListObjectsRequest</code> to only consume objects we are interested in.
multiPartUpload	false	Producer	Camel 2.15.0: If it is true, camel will upload the file with multi part format, the part size is decided by the option of <code>partSize</code>
partSize	25 * 1024 * 1024	Producer	Camel 2.15.0: Setup the <code>partSize</code> which is used in multi part upload, the default size is 25M.
serverSideEncryption	null	Producer	Camel 2.16: Sets the server-side encryption algorithm when encrypting the object using AWS-managed keys. For example use AES256.
proxyHost	null	Producer	Camel 2.16: Specify a proxy host to be used inside the client definition.
proxyPort	null	Producer	Camel 2.16: Specify a proxy port to be used inside the client definition.
includeBody	true	Consumer	Camel 2.17: If it is true the exchange body will be set to a stream to the contents of the file. If false the headers will be set with the S3 object metadata but the body will be null.
operation	null	Producer	Camel 2.18: The operation to perform in case the end-user don't want to do a simple upload. Values can be: <code>copyObject</code> , <code>listBuckets</code> , <code>deleteBucket</code>

Required S3 component options



You have to provide the `amazonS3Client` in the [Registry](#) or your `accessKey` and `secretKey` to access the [Amazon's S3](#).

Batch Consumer

This component implements the [Batch Consumer](#).

This allows you for instance to know how many messages exists in this batch and for instance let the [Aggregator](#) aggregate this number of messages.

Usage

Message headers evaluated by the S3 producer

Header	Type	Description
CamelAwsS3Key	String	The key under which this object will be stored or which will be used for the current operation.
CamelAwsS3BucketName	String	Camel 2.18: The bucket Name which this object will be stored or which will be used for the current operation
CamelAwsS3BucketDestinationName	String	Camel 2.18: The bucket Destination Name which will be used for the current operation
CamelAwsS3ContentLength	Long	The content length of this object.
CamelAwsS3ContentType	String	The content type of this object.
CamelAwsS3ContentControl	String	Camel 2.8.2: The content control of this object.
CamelAwsS3ContentDisposition	String	Camel 2.8.2: The content disposition of this object.
CamelAwsS3ContentEncoding	String	Camel 2.8.2: The content encoding of this object.
CamelAwsS3ContentMD5	String	Camel 2.8.2: The md5 checksum of this object.
CamelAwsS3DestinationKey	String	Camel 2.18: The Destination key which will be used for the current operation
CamelAwsS3LastModified	java.util.Date	Camel 2.8.2: The last modified timestamp of this object.
CamelAwsS3Operation	String	Camel 2.18: The operation to perform. Values can be: copyObject, listBuckets, deleteBucket
CamelAwsS3StorageClass	String	Camel 2.8.4: The storage class of this object.
CamelAwsS3CannedAcl	String	Camel 2.11.0: The canned acl that will be applied to the object. see <code>com.amazonaws.services.s3.model.CannedAccessControlList</code> for allowed values.
CamelAwsS3Acl	<code>com.amazonaws.services.s3.model.AccessControlList</code>	Camel 2.11.0: a well constructed Amazon S3 Access Control List object. see <code>com.amazonaws.services.s3.model.AccessControlList</code> for more details
CamelAwsS3Headers	Map<String,String>	Camel 2.15.0: support to get or set custom objectMetadata headers.
CamelAwsS3ServerSideEncryption	String	Camel 2.16: Sets the server-side encryption algorithm when encrypting the object using AWS-managed keys. For example use AES256.

Message headers set by the S3 producer

Header	Type	Description
CamelAwsS3ETag	String	The ETag value for the newly uploaded object.
CamelAwsS3VersionId	String	The optional version ID of the newly uploaded object.

Message headers set by the S3 consumer

Header	Type	Description
CamelAwsS3Key	String	The key under which this object is stored.
CamelAwsS3BucketName	String	The name of the bucket in which this object is contained.

CamelAwsS3ETag	String	The hex encoded 128-bit MD5 digest of the associated object according to RFC 1864. This data is used as an integrity check to verify that the data received by the caller is the same data that was sent by Amazon S3.
CamelAwsS3LastModified	Date	The value of the Last-Modified header, indicating the date and time at which Amazon S3 last recorded a modification to the associated object.
CamelAwsS3VersionId	String	The version ID of the associated Amazon S3 object if available. Version IDs are only assigned to objects when an object is uploaded to an Amazon S3 bucket that has object versioning enabled.
CamelAwsS3ContentType	String	The Content-Type HTTP header, which indicates the type of content stored in the associated object. The value of this header is a standard MIME type.
CamelAwsS3ContentMD5	String	The base64 encoded 128-bit MD5 digest of the associated object (content - not including headers) according to RFC 1864. This data is used as a message integrity check to verify that the data received by Amazon S3 is the same data that the caller sent.
CamelAwsS3ContentLength	Long	The Content-Length HTTP header indicating the size of the associated object in bytes.
CamelAwsS3ContentEncoding	String	The optional Content-Encoding HTTP header specifying what content encodings have been applied to the object and what decoding mechanisms must be applied in order to obtain the media-type referenced by the Content-Type field.
CamelAwsS3ContentDisposition	String	The optional Content-Disposition HTTP header, which specifies presentational information such as the recommended filename for the object to be saved as.
CamelAwsS3ContentControl	String	The optional Cache-Control HTTP header which allows the user to specify caching behavior along the HTTP request /reply chain.
CamelAwsS3ServerSideEncryption	String	Camel 2.16: The server-side encryption algorithm when encrypting the object using AWS-managed keys.

Advanced AmazonS3 configuration

If your Camel Application is running behind a firewall or if you need to have more control over the `AmazonS3` instance configuration, you can create your own instance:

```
AWSCredentials awsCredentials = new BasicAWSCredentials("myAccessKey", "mySecretKey");

ClientConfiguration clientConfiguration = new ClientConfiguration();
clientConfiguration.setProxyHost("http://myProxyHost");
clientConfiguration.setProxyPort(8080);

AmazonS3 client = new AmazonS3Client(awsCredentials, clientConfiguration);

registry.bind("client", client);
```

and refer to it in your Camel `aws-s3` component configuration:

```
from("aws-s3://MyBucket?amazonS3Client=#client&delay=5000&maxMessagesPerPoll=5")
.to("mock:result");
```

Dependencies

Maven users will need to add the following dependency to their `pom.xml`.

```
pom.xml

<dependency>
  <groupId>org.apache.camel</groupId>
  <artifactId>camel-aws</artifactId>
  <version>${camel-version}</version>
</dependency>
```

where `${camel-version}` must be replaced by the actual version of Camel (2.8 or higher).

See Also

- [Configuring Camel](#)
- [Component](#)
- [Endpoint](#)
- [Getting Started](#)

- [AWS Component](#)