Red Hat build of Apache Camel K 1.10

Kamelets Reference

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Abstract

Red Hat build of Apache Camel K Kamelets are reusable route components that hide the complexity of creating data pipelines that connect to external systems.

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PREFACE

MAKING OPEN SOURCE MORE INCLUSIVE

Red Hat is committed to replacing problematic language in our code, documentation, and web properties. We are beginning with these four terms: master, slave, blacklist, and whitelist. Because of the enormity of this endeavor, these changes will be implemented gradually over several upcoming releases. For more details, see our CTO Chris Wright's message .

CHAPTER 1. AWS DYNAMODB SINK

Send data to AWS DynamoDB service. The sent data will insert/update/delete an item on the given AWS DynamoDB table.

Access Key/Secret Key are the basic method for authenticating to the AWS DynamoDB service. These parameters are optional, because the Kamelet also provides the following option 'useDefaultCredentialsProvider'.

When using a default Credentials Provider the AWS DynamoDB client will load the credentials through this provider and won't use the static credential. This is the reason for not having access key and secret key as mandatory parameters for this Kamelet.

This Kamelet expects a JSON field as body. The mapping between the JSON fields and table attribute values is done by key, so if you have the input as follows:

{"username":"oscerd", "city":"Rome"}

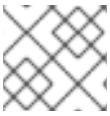
The Kamelet will insert/update an item in the given AWS DynamoDB table and set the attributes 'username' and 'city' respectively. Please note that the JSON object must include the primary key values that define the item.

1.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **aws-ddb-sink** Kamelet:

Property	Name	Description	Type	Default	Example
region *	AWS Region	The AWS region to connect to	string		**"eu-west-1"**
table *	Table	Name of the DynamoDB table to look at	string		
accessKey	Access Key	The access key obtained from AWS	string		
operation	Operation	The operation to perform (one of PutItem, UpdateItem, DeleteItem)	string	**"PutItem"**	**"PutItem"**
overrideEndpoint	Endpoint Overwrite	Set the need for overiding the endpoint URI. This option needs to be used in combination with uriEndpointOverride setting.	boolean	**false**	

Property	Name	Description	Type	Default	Example
secretKey	Secret Key	The secret key obtained from AWS	string		
uriEndpointOverride	Overwrite Endpoint URI	Set the overriding endpoint URI. This option needs to be used in combination with overrideEndpoint option.	string		
useDefaultCredentialsProvider	Default Credentials Provider	Set whether the DynamoDB client should expect to load credentials through a default credentials provider or to expect static credentials to be passed in.	boolean	**false**	
writeCapacity	Write Capacity	The provisioned throughput to reserved for writing resources to your table	integer	**1**	



NOTE

Fields marked with an asterisk (*) are mandatory.

1.2. DEPENDENCIES

At runtime, the **aws-ddb-sink** Kamelet relies upon the presence of the following dependencies:

- mvn:org.apache.camel.kamelets:camel-kamelets-utils:1.8.0
- camel:core
- camel:jackson
- camel:aws2-ddb
- camel:kamelet

1.3. USAGE

This section describes how you can use the **aws-ddb-sink**.

1.3.1. Knative Sink

You can use the **aws-ddb-sink** Kamelet as a Knative sink by binding it to a Knative object.

aws-ddb-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: aws-ddb-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-ddb-sink
    properties:
      region: "eu-west-1"
      table: "The Table"
```

1.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

1.3.1.2. Procedure for using the cluster CLI

1. Save the **aws-ddb-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f aws-ddb-sink-binding.yaml
```

1.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel aws-ddb-sink -p "sink.region=eu-west-1" -p "sink.table=The Table"
```

This command creates the KameletBinding in the current namespace on the cluster.

1.3.2. Kafka Sink

You can use the **aws-ddb-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

aws-ddb-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: aws-ddb-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-ddb-sink
    properties:
      region: "eu-west-1"
      table: "The Table"
```

1.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

1.3.2.2. Procedure for using the cluster CLI

1. Save the **aws-ddb-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f aws-ddb-sink-binding.yaml
```

1.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic aws-ddb-sink -p "sink.region=eu-west-1" -p
"sink.table=The Table"
```

This command creates the KameletBinding in the current namespace on the cluster.

1.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/aws-ddb-sink.kamelet.yaml

CHAPTER 2. AVRO DESERIALIZE ACTION

Deserialize payload to Avro

2.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **avro-deserialize-action** Kamelet:

Property	Name	Description	Type	Default	Example
schema *	Schema	The Avro schema to use during serialization (as single-line, using JSON format)	string		**"{\"type\": \"record\", \"namespace\": \"com.example\", \"name\": \"FullName\", \"fields\": [{\"name\": \"first\", \"type\": \"string\"}, {\"name\": \"last\", \"type\": \"string\"}]}"**
validate	Validate	Indicates if the content must be validated against the schema	boolean	**true**	

NOTE

Fields marked with an asterisk (*) are mandatory.

2.2. DEPENDENCIES

At runtime, the **avro-deserialize-action** Kamelet relies upon the presence of the following dependencies:

- github:openshift-integration.kamelet-catalog:camel-kamelets-utils:kamelet-catalog-1.6-SNAPSHOT
- camel:kamelet
- camel:core
- camel:jackson-avro

2.3. USAGE

This section describes how you can use the **avro-deserialize-action**.

2.3.1. Knative Action

You can use the **avro-deserialize-action** Kamelet as an intermediate step in a Knative binding.

avro-deserialize-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: avro-deserialize-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: '{"first":"Ada","last":"Lovelace"}'
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: json-deserialize-action
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: avro-serialize-action
    properties:
      schema: "{\"type\": \"record\", \"namespace\": \"com.example\", \"name\": \"FullName\", \"fields\":
[{\"name\": \"first\", \"type\": \"string\"},{\"name\": \"last\", \"type\": \"string\"}]}"
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: avro-deserialize-action
    properties:
      schema: "{\"type\": \"record\", \"namespace\": \"com.example\", \"name\": \"FullName\", \"fields\":
[{\"name\": \"first\", \"type\": \"string\"},{\"name\": \"last\", \"type\": \"string\"}]}"
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: json-serialize-action
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

2.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

2.3.1.2. Procedure for using the cluster CLI

1. Save the **avro-deserialize-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f avro-deserialize-action-binding.yaml
```

2.3.1.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind --name avro-deserialize-action-binding timer-source?
message='{"first":"Ada","last":"Lovelace"}' --step json-deserialize-action --step avro-serialize-action -p
step-1.schema='{"type": "record", "namespace": "com.example", "name": "FullName", "fields":
[{"name": "first", "type": "string"},{"name": "last", "type": "string"}]}' --step avro-deserialize-action -p
step-2.schema='{"type": "record", "namespace": "com.example", "name": "FullName", "fields":
[{"name": "first", "type": "string"},{"name": "last", "type": "string"}]}' --step json-serialize-action
channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

2.3.2. Kafka Action

You can use the **avro-deserialize-action** Kamelet as an intermediate step in a Kafka binding.

avro-deserialize-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: avro-deserialize-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: '{"first":"Ada","last":"Lovelace"}'
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: json-deserialize-action
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: avro-serialize-action
    properties:
      schema: "{\"type\": \"record\", \"namespace\": \"com.example\", \"name\": \"FullName\", \"fields\":
[{\"name\": \"first\", \"type\": \"string\"},{\"name\": \"last\", \"type\": \"string\"}]}"
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: avro-deserialize-action
```

```
    properties:
      schema: "{\"type\": \"record\", \"namespace\": \"com.example\", \"name\": \"FullName\", \"fields\":
[{\"name\": \"first\", \"type\": \"string\"},{\"name\": \"last\", \"type\": \"string\"}]}"
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: json-serialize-action
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

2.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

2.3.2.2. Procedure for using the cluster CLI

1. Save the **avro-deserialize-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f avro-deserialize-action-binding.yaml
```

2.3.2.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind --name avro-deserialize-action-binding timer-source?
message='{"first":"Ada","last":"Lovelace"}' --step json-deserialize-action --step avro-serialize-action -p
step-1.schema='{"type": "record", "namespace": "com.example", "name": "FullName", "fields":
[{"name": "first", "type": "string"},{"name": "last", "type": "string"}]}' --step avro-deserialize-action -p
step-2.schema='{"type": "record", "namespace": "com.example", "name": "FullName", "fields":
[{"name": "first", "type": "string"},{"name": "last", "type": "string"}]}' --step json-serialize-action
kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

2.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/avro-deserialize-action.kamelet.yaml

CHAPTER 3. AVRO SERIALIZE ACTION

Serialize payload to Avro

3.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **avro-serialize-action** Kamelet:

Property	Name	Description	Type	Default	Example
schema *	Schema	The Avro schema to use during serialization (as single-line, using JSON format)	string		**"{\"type\": \"record\", \"namespace\": \"com.example\", \"name\": \"FullName\", \"fields\": [{\"name\": \"first\", \"type\": \"string\"}, {\"name\": \"last\", \"type\": \"string\"}]}"**
validate	Validate	Indicates if the content must be validated against the schema	boolean	**true**	

NOTE

Fields marked with an asterisk (*) are mandatory.

3.2. DEPENDENCIES

At runtime, the **avro-serialize-action** Kamelet relies upon the presence of the following dependencies:

- github:openshift-integration.kamelet-catalog:camel-kamelets-utils:kamelet-catalog-1.6-SNAPSHOT
- camel:kamelet
- camel:core
- camel:jackson-avro

3.3. USAGE

This section describes how you can use the **avro-serialize-action**.

3.3.1. Knative Action

You can use the **avro-serialize-action** Kamelet as an intermediate step in a Knative binding.

avro-serialize-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: avro-serialize-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: '{"first":"Ada","last":"Lovelace"}'
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: json-deserialize-action
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: avro-serialize-action
    properties:
      schema: "{\"type\": \"record\", \"namespace\": \"com.example\", \"name\": \"FullName\", \"fields\":
[{\"name\": \"first\", \"type\": \"string\"},{\"name\": \"last\", \"type\": \"string\"}]}"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

3.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

3.3.1.2. Procedure for using the cluster CLI

1. Save the **avro-serialize-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f avro-serialize-action-binding.yaml
```

3.3.1.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind --name avro-serialize-action-binding timer-source?
message='{"first":"Ada","last":"Lovelace"}' --step json-deserialize-action --step avro-serialize-action -p
step-1.schema='{"type": "record", "namespace": "com.example", "name": "FullName", "fields":
[{"name": "first", "type": "string"},{"name": "last", "type": "string"}]}' channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

3.3.2. Kafka Action

You can use the **avro-serialize-action** Kamelet as an intermediate step in a Kafka binding.

avro-serialize-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: avro-serialize-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: '{"first":"Ada","last":"Lovelace"}'
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: json-deserialize-action
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: avro-serialize-action
    properties:
      schema: "{\"type\": \"record\", \"namespace\": \"com.example\", \"name\": \"FullName\", \"fields\":
[{\"name\": \"first\", \"type\": \"string\"},{\"name\": \"last\", \"type\": \"string\"}]}"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

3.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

3.3.2.2. Procedure for using the cluster CLI

1. Save the **avro-serialize-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f avro-serialize-action-binding.yaml
```

3.3.2.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind --name avro-serialize-action-binding timer-source?
message='{"first":"Ada","last":"Lovelace"}' --step json-deserialize-action --step avro-serialize-action -p
step-1.schema='{"type": "record", "namespace": "com.example", "name": "FullName", "fields":
[{"name": "first", "type": "string"},{"name": "last", "type": "string"}]}'
kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

3.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/avro-serialize-action.kamelet.yaml

CHAPTER 4. AWS KINESIS SINK

Send data to AWS Kinesis.

The Kamelet expects the following header:

- **partition** / **ce-partition**: to set the Kinesis partition key

If the header won't be set the exchange ID will be used.

The Kamelet is also able to recognize the following header:

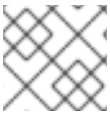
- **sequence-number** / **ce-sequencenumber**: to set the Sequence number

This header is optional.

4.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **aws-kinesis-sink** Kamelet:

Property	Name	Description	Type	Default	Example
accessKey *	Access Key	The access key obtained from AWS	string		
region *	AWS Region	The AWS region to connect to	string		**"eu-west-1"**
secretKey *	Secret Key	The secret key obtained from AWS	string		
stream *	Stream Name	The Kinesis stream that you want to access (needs to be created in advance)	string		



NOTE

Fields marked with an asterisk (*) are mandatory.

4.2. DEPENDENCIES

At runtime, the **aws-kinesis-sink** Kamelet relies upon the presence of the following dependencies:

- camel:aws2-kinesis
- camel:kamelet

4.3. USAGE

This section describes how you can use the **aws-kinesis-sink**.

4.3.1. Knative Sink

You can use the **aws-kinesis-sink** Kamelet as a Knative sink by binding it to a Knative object.

aws-kinesis-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: aws-kinesis-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-kinesis-sink
    properties:
      accessKey: "The Access Key"
      region: "eu-west-1"
      secretKey: "The Secret Key"
      stream: "The Stream Name"
```

4.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

4.3.1.2. Procedure for using the cluster CLI

1. Save the **aws-kinesis-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f aws-kinesis-sink-binding.yaml
```

4.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel aws-kinesis-sink -p "sink.accessKey=The Access Key" -p
"sink.region=eu-west-1" -p "sink.secretKey=The Secret Key" -p "sink.stream=The Stream Name"
```

This command creates the KameletBinding in the current namespace on the cluster.

4.3.2. Kafka Sink

You can use the **aws-kinesis-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

aws-kinesis-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: aws-kinesis-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-kinesis-sink
    properties:
      accessKey: "The Access Key"
      region: "eu-west-1"
      secretKey: "The Secret Key"
      stream: "The Stream Name"
```

4.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

4.3.2.2. Procedure for using the cluster CLI

1. Save the **aws-kinesis-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f aws-kinesis-sink-binding.yaml
```

4.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic aws-kinesis-sink -p "sink.accessKey=The Access Key" -p "sink.region=eu-west-1" -p "sink.secretKey=The Secret Key" -p "sink.stream=The Stream Name"
```

This command creates the KameletBinding in the current namespace on the cluster.

4.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/aws-kinesis-sink.kamelet.yaml

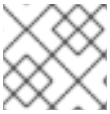
CHAPTER 5. AWS KINESIS SOURCE

Receive data from AWS Kinesis.

5.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **aws-kinesis-source** Kamelet:

Property	Name	Description	Type	Default	Example
accessKey *	Access Key	The access key obtained from AWS	string		
region *	AWS Region	The AWS region to connect to	string		**"eu-west-1"**
secretKey *	Secret Key	The secret key obtained from AWS	string		
stream *	Stream Name	The Kinesis stream that you want to access (needs to be created in advance)	string		



NOTE

Fields marked with an asterisk (*) are mandatory.

5.2. DEPENDENCIES

At runtime, the **aws-kinesis-source** Kamelet relies upon the presence of the following dependencies:

- camel:gson
- camel:kamelet
- camel:aws2-kinesis

5.3. USAGE

This section describes how you can use the **aws-kinesis-source**.

5.3.1. Knative Source

You can use the **aws-kinesis-source** Kamelet as a Knative source by binding it to a Knative object.

aws-kinesis-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
```

```
kind: KameletBinding
metadata:
  name: aws-kinesis-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-kinesis-source
    properties:
      accessKey: "The Access Key"
      region: "eu-west-1"
      secretKey: "The Secret Key"
      stream: "The Stream Name"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

5.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

5.3.1.2. Procedure for using the cluster CLI

1. Save the **aws-kinesis-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the source by using the following command:

```
oc apply -f aws-kinesis-source-binding.yaml
```

5.3.1.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind aws-kinesis-source -p "source.accessKey=The Access Key" -p "source.region=eu-west-1"
-p "source.secretKey=The Secret Key" -p "source.stream=The Stream Name" channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

5.3.2. Kafka Source

You can use the **aws-kinesis-source** Kamelet as a Kafka source by binding it to a Kafka topic.

aws-kinesis-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: aws-kinesis-source-binding
```

```
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-kinesis-source
    properties:
      accessKey: "The Access Key"
      region: "eu-west-1"
      secretKey: "The Secret Key"
      stream: "The Stream Name"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

5.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

5.3.2.2. Procedure for using the cluster CLI

1. Save the **aws-kinesis-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f aws-kinesis-source-binding.yaml
```

5.3.2.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind aws-kinesis-source -p "source.accessKey=The Access Key" -p "source.region=eu-west-1"
-p "source.secretKey=The Secret Key" -p "source.stream=The Stream Name"
kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

5.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/aws-kinesis-source.kamelet.yaml

CHAPTER 6. AWS LAMBDA SINK

Send a payload to an AWS Lambda function

6.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **aws-lambda-sink** Kamelet:

Property	Name	Description	Type	Default	Example
accessKey *	Access Key	The access key obtained from AWS	string		
function *	Function Name	The Lambda Function name	string		
region *	AWS Region	The AWS region to connect to	string		**"eu-west-1"**
secretKey *	Secret Key	The secret key obtained from AWS	string		

NOTE

Fields marked with an asterisk (*) are mandatory.

6.2. DEPENDENCIES

At runtime, the **aws-lambda-sink** Kamelet relies upon the presence of the following dependencies:

- camel:kamelet
- camel:aws2-lambda

6.3. USAGE

This section describes how you can use the **aws-lambda-sink**.

6.3.1. Knative Sink

You can use the **aws-lambda-sink** Kamelet as a Knative sink by binding it to a Knative object.

aws-lambda-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: aws-lambda-sink-binding
spec:
  source:
```

```
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-lambda-sink
    properties:
      accessKey: "The Access Key"
      function: "The Function Name"
      region: "eu-west-1"
      secretKey: "The Secret Key"
```

6.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

6.3.1.2. Procedure for using the cluster CLI

1. Save the **aws-lambda-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f aws-lambda-sink-binding.yaml
```

6.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel aws-lambda-sink -p "sink.accessKey=The Access Key" -p
"sink.function=The Function Name" -p "sink.region=eu-west-1" -p "sink.secretKey=The Secret Key"
```

This command creates the KameletBinding in the current namespace on the cluster.

6.3.2. Kafka Sink

You can use the **aws-lambda-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

aws-lambda-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: aws-lambda-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
```

```
    name: my-topic
sink:
  ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: aws-lambda-sink
  properties:
    accessKey: "The Access Key"
    function: "The Function Name"
    region: "eu-west-1"
    secretKey: "The Secret Key"
```

6.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

6.3.2.2. Procedure for using the cluster CLI

1. Save the **aws-lambda-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f aws-lambda-sink-binding.yaml
```

6.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic aws-lambda-sink -p "sink.accessKey=The Access Key" -p "sink.function=The Function Name" -p "sink.region=eu-west-1" -p "sink.secretKey=The Secret Key"
```

This command creates the KameletBinding in the current namespace on the cluster.

6.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/aws-lambda-sink.kamelet.yaml

CHAPTER 7. AWS REDSHIFT SINK

Send data to an AWS Redshift Database.

This Kamelet expects a JSON as body. The mapping between the JSON fields and parameters is done by key, so if you have the following query:

'INSERT INTO accounts (username,city) VALUES (:#username,:#city)'

The Kamelet needs to receive as input something like:

'{ "username":"oscerd", "city":"Rome"}'

7.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **aws-redshift-sink** Kamelet:

Property	Name	Description	Type	Default	Example
databaseName *	Database Name	The Database Name we are pointing	string		
password *	Password	The password to use for accessing a secured AWS Redshift Database	string		
query *	Query	The Query to execute against the AWS Redshift Database	string		**"INSERT INTO accounts (username,city) VALUES (:#username,:#city)"**
serverName *	Server Name	Server Name for the data source	string		**"localhost"**
username *	Username	The username to use for accessing a secured AWS Redshift Database	string		
serverPort	Server Port	Server Port for the data source	string	**5439**	

NOTE

Fields marked with an asterisk (*) are mandatory.

7.2. DEPENDENCIES

At runtime, the **aws-redshift-sink** Kamelet relies upon the presence of the following dependencies:

- camel:jackson
- camel:kamelet
- camel:sql
- mvn:com.amazon.redshift:redshift-jdbc42:2.1.0.5
- mvn:org.apache.commons:commons-dbcp2:2.7.0

7.3. USAGE

This section describes how you can use the **aws-redshift-sink**.

7.3.1. Knative Sink

You can use the **aws-redshift-sink** Kamelet as a Knative sink by binding it to a Knative object.

aws-redshift-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: aws-redshift-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-redshift-sink
    properties:
      databaseName: "The Database Name"
      password: "The Password"
      query: "INSERT INTO accounts (username,city) VALUES (:#username,:#city)"
      serverName: "localhost"
      username: "The Username"
```

7.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

7.3.1.2. Procedure for using the cluster CLI

1. Save the **aws-redshift-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f aws-redshift-sink-binding.yaml
```

7.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel aws-redshift-sink -p "sink.databaseName=The Database Name" -p
"sink.password=The Password" -p "sink.query=INSERT INTO accounts (username,city) VALUES
(:#username,:#city)" -p "sink.serverName=localhost" -p "sink.username=The Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

7.3.2. Kafka Sink

You can use the **aws-redshift-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

aws-redshift-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: aws-redshift-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-redshift-sink
    properties:
      databaseName: "The Database Name"
      password: "The Password"
      query: "INSERT INTO accounts (username,city) VALUES (:#username,:#city)"
      serverName: "localhost"
      username: "The Username"
```

7.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

7.3.2.2. Procedure for using the cluster CLI

1. Save the **aws-redshift-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f aws-redshift-sink-binding.yaml
```

7.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic aws-redshift-sink -p
"sink.databaseName=The Database Name" -p "sink.password=The Password" -p
"sink.query=INSERT INTO accounts (username,city) VALUES (:#username,:#city)" -p
"sink.serverName=localhost" -p "sink.username=The Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

7.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/aws-redshift-sink.kamelet.yaml

CHAPTER 8. AWS SNS SINK

Send message to an AWS SNS Topic

8.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **aws-sns-sink** Kamelet:

Property	Name	Description	Type	Default	Example
accessKey *	Access Key	The access key obtained from AWS	string		
region *	AWS Region	The AWS region to connect to	string		**"eu-west-1"**
secretKey *	Secret Key	The secret key obtained from AWS	string		
topicNameOrArn *	Topic Name	The SQS Topic name or ARN	string		
autoCreateTopic	Autocreate Topic	Setting the autocreation of the SNS topic.	boolean	**false**	

NOTE

Fields marked with an asterisk (*) are mandatory.

8.2. DEPENDENCIES

At runtime, the **aws-sns-sink** Kamelet relies upon the presence of the following dependencies:

- camel:kamelet
- camel:aws2-sns

8.3. USAGE

This section describes how you can use the **aws-sns-sink**.

8.3.1. Knative Sink

You can use the **aws-sns-sink** Kamelet as a Knative sink by binding it to a Knative object.

aws-sns-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
```

```
metadata:
  name: aws-sns-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-sns-sink
    properties:
      accessKey: "The Access Key"
      region: "eu-west-1"
      secretKey: "The Secret Key"
      topicNameOrArn: "The Topic Name"
```

8.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

8.3.1.2. Procedure for using the cluster CLI

1. Save the **aws-sns-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f aws-sns-sink-binding.yaml
```

8.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel aws-sns-sink -p "sink.accessKey=The Access Key" -p
"sink.region=eu-west-1" -p "sink.secretKey=The Secret Key" -p "sink.topicNameOrArn=The Topic
Name"
```

This command creates the KameletBinding in the current namespace on the cluster.

8.3.2. Kafka Sink

You can use the **aws-sns-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

aws-sns-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: aws-sns-sink-binding
```

```
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-sns-sink
    properties:
      accessKey: "The Access Key"
      region: "eu-west-1"
      secretKey: "The Secret Key"
      topicNameOrArn: "The Topic Name"
```

8.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

8.3.2.2. Procedure for using the cluster CLI

1. Save the **aws-sns-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f aws-sns-sink-binding.yaml
```

8.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic aws-sns-sink -p "sink.accessKey=The Access Key" -p "sink.region=eu-west-1" -p "sink.secretKey=The Secret Key" -p "sink.topicNameOrArn=The Topic Name"
```

This command creates the KameletBinding in the current namespace on the cluster.

8.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/aws-sns-sink.kamelet.yaml

CHAPTER 9. AWS SQS SINK

Send message to an AWS SQS Queue

9.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **aws-sqs-sink** Kamelet:

Property	Name	Description	Type	Default	Example
accessKey *	Access Key	The access key obtained from AWS	string		
queueNameOrArn *	Queue Name	The SQS Queue name or ARN	string		
region *	AWS Region	The AWS region to connect to	string		**"eu-west-1"**
secretKey *	Secret Key	The secret key obtained from AWS	string		
autoCreateQueue	Autocreate Queue	Setting the autocreation of the SQS queue.	boolean	**false**	

NOTE

Fields marked with an asterisk (*) are mandatory.

9.2. DEPENDENCIES

At runtime, the **aws-sqs-sink** Kamelet relies upon the presence of the following dependencies:

- camel:aws2-sqs
- camel:core
- camel:kamelet

9.3. USAGE

This section describes how you can use the **aws-sqs-sink**.

9.3.1. Knative Sink

You can use the **aws-sqs-sink** Kamelet as a Knative sink by binding it to a Knative object.

aws-sqs-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: aws-sqs-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-sqs-sink
    properties:
      accessKey: "The Access Key"
      queueNameOrArn: "The Queue Name"
      region: "eu-west-1"
      secretKey: "The Secret Key"
```

9.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

9.3.1.2. Procedure for using the cluster CLI

1. Save the **aws-sqs-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f aws-sqs-sink-binding.yaml
```

9.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel aws-sqs-sink -p "sink.accessKey=The Access Key" -p
"sink.queueNameOrArn=The Queue Name" -p "sink.region=eu-west-1" -p "sink.secretKey=The
Secret Key"
```

This command creates the KameletBinding in the current namespace on the cluster.

9.3.2. Kafka Sink

You can use the **aws-sqs-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

aws-sqs-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
```

```
metadata:
  name: aws-sqs-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-sqs-sink
    properties:
      accessKey: "The Access Key"
      queueNameOrArn: "The Queue Name"
      region: "eu-west-1"
      secretKey: "The Secret Key"
```

9.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

9.3.2.2. Procedure for using the cluster CLI

1. Save the **aws-sqs-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f aws-sqs-sink-binding.yaml
```

9.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic aws-sqs-sink -p "sink.accessKey=The Access Key" -p "sink.queueNameOrArn=The Queue Name" -p "sink.region=eu-west-1" -p "sink.secretKey=The Secret Key"
```

This command creates the KameletBinding in the current namespace on the cluster.

9.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/aws-sqs-sink.kamelet.yaml

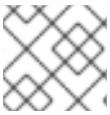
CHAPTER 10. AWS SQS SOURCE

Receive data from AWS SQS.

10.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **aws-sqs-source** Kamelet:

Property	Name	Description	Type	Default	Example
accessKey *	Access Key	The access key obtained from AWS	string		
queueNameOrArn *	Queue Name	The SQS Queue name or ARN	string		
region *	AWS Region	The AWS region to connect to	string		**"eu-west-1"**
secretKey *	Secret Key	The secret key obtained from AWS	string		
autoCreateQueue	Autocreate Queue	Setting the autocreation of the SQS queue.	boolean	**false**	
deleteAfterRead	Auto-delete Messages	Delete messages after consuming them	boolean	**true**	



NOTE

Fields marked with an asterisk (*) are mandatory.

10.2. DEPENDENCIES

At runtime, the **aws-sqs-source** Kamelet relies upon the presence of the following dependencies:

- camel:aws2-sqs
- camel:core
- camel:kamelet
- camel:jackson

10.3. USAGE

This section describes how you can use the **aws-sqs-source**.

10.3.1. Knative Source

You can use the **aws-sqs-source** Kamelet as a Knative source by binding it to a Knative object.

aws-sqs-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: aws-sqs-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-sqs-source
    properties:
      accessKey: "The Access Key"
      queueNameOrArn: "The Queue Name"
      region: "eu-west-1"
      secretKey: "The Secret Key"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

10.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

10.3.1.2. Procedure for using the cluster CLI

1. Save the **aws-sqs-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the source by using the following command:

```
oc apply -f aws-sqs-source-binding.yaml
```

10.3.1.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind aws-sqs-source -p "source.accessKey=The Access Key" -p
"source.queueNameOrArn=The Queue Name" -p "source.region=eu-west-1" -p
"source.secretKey=The Secret Key" channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

10.3.2. Kafka Source

You can use the **aws-sqs-source** Kamelet as a Kafka source by binding it to a Kafka topic.

aws-sqs-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: aws-sqs-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-sqs-source
    properties:
      accessKey: "The Access Key"
      queueNameOrArn: "The Queue Name"
      region: "eu-west-1"
      secretKey: "The Secret Key"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

10.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

10.3.2.2. Procedure for using the cluster CLI

1. Save the **aws-sqs-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the source by using the following command:

```
oc apply -f aws-sqs-source-binding.yaml
```

10.3.2.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind aws-sqs-source -p "source.accessKey=The Access Key" -p
"source.queueNameOrArn=The Queue Name" -p "source.region=eu-west-1" -p
"source.secretKey=The Secret Key" kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

10.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/aws-sqs-source.kamelet.yaml

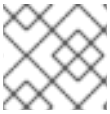
CHAPTER 11. AWS 2 SIMPLE QUEUE SERVICE FIFO SINK

Send message to an AWS SQS FIFO Queue

11.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **aws-sqs-fifo-sink** Kamelet:

Property	Name	Description	Type	Default	Example
accessKey *	Access Key	The access key obtained from AWS	string		
queueNameOrArn *	Queue Name	The SQS Queue name or ARN	string		
region *	AWS Region	The AWS region to connect to	string		**"eu-west-1"**
secretKey *	Secret Key	The secret key obtained from AWS	string		
autoCreateQueue	Autocreate Queue	Setting the autocreation of the SQS queue.	boolean	**false**	
contentBasedDeduplication	Content-Based Deduplication	Use content-based deduplication (should be enabled in the SQS FIFO queue first)	boolean	**false**	



NOTE

Fields marked with an asterisk (*) are mandatory.

11.2. DEPENDENCIES

At runtime, the **aws-sqs-fifo-sink** Kamelet relies upon the presence of the following dependencies:

- camel:aws2-sqs
- camel:core
- camel:kamelet

11.3. USAGE

This section describes how you can use the **aws-sqs-fifo-sink**.

11.3.1. Knative Sink

You can use the **aws-sqs-fifo-sink** Kamelet as a Knative sink by binding it to a Knative object.

aws-sqs-fifo-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: aws-sqs-fifo-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-sqs-fifo-sink
    properties:
      accessKey: "The Access Key"
      queueNameOrArn: "The Queue Name"
      region: "eu-west-1"
      secretKey: "The Secret Key"
```

11.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

11.3.1.2. Procedure for using the cluster CLI

1. Save the **aws-sqs-fifo-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f aws-sqs-fifo-sink-binding.yaml
```

11.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel aws-sqs-fifo-sink -p "sink.accessKey=The Access Key" -p
"sink.queueNameOrArn=The Queue Name" -p "sink.region=eu-west-1" -p "sink.secretKey=The
Secret Key"
```

This command creates the KameletBinding in the current namespace on the cluster.

11.3.2. Kafka Sink

You can use the **aws-sqs-fifo-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

aws-sqs-fifo-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: aws-sqs-fifo-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-sqs-fifo-sink
    properties:
      accessKey: "The Access Key"
      queueNameOrArn: "The Queue Name"
      region: "eu-west-1"
      secretKey: "The Secret Key"
```

11.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

11.3.2.2. Procedure for using the cluster CLI

1. Save the **aws-sqs-fifo-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f aws-sqs-fifo-sink-binding.yaml
```

11.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic aws-sqs-fifo-sink -p "sink.accessKey=The Access Key" -p "sink.queueNameOrArn=The Queue Name" -p "sink.region=eu-west-1" -p "sink.secretKey=The Secret Key"
```

This command creates the KameletBinding in the current namespace on the cluster.

11.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/aws-sqs-fifo-sink.kamelet.yaml

CHAPTER 12. AWS S3 SINK

Upload data to AWS S3.

The Kamelet expects the following headers to be set:

- **file** / **ce-file**: as the file name to upload

If the header won't be set the exchange ID will be used as file name.

12.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **aws-s3-sink** Kamelet:

Property	Name	Description	Type	Default	Example
accessKey *	Access Key	The access key obtained from AWS.	string		
bucketNameOrArn *	Bucket Name	The S3 Bucket name or ARN.	string		
region *	AWS Region	The AWS region to connect to.	string		**"eu-west-1"**
secretKey *	Secret Key	The secret key obtained from AWS.	string		
autoCreateBucket	Autocreate Bucket	Setting the autocreation of the S3 bucket bucketName.	boolean	**false**	

NOTE

Fields marked with an asterisk (*) are mandatory.

12.2. DEPENDENCIES

At runtime, the **aws-s3-sink** Kamelet relies upon the presence of the following dependencies:

- camel:aws2-s3
- camel:kamelet

12.3. USAGE

This section describes how you can use the **aws-s3-sink**.

12.3.1. Knative Sink

You can use the **aws-s3-sink** Kamelet as a Knative sink by binding it to a Knative object.

aws-s3-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: aws-s3-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-s3-sink
    properties:
      accessKey: "The Access Key"
      bucketNameOrArn: "The Bucket Name"
      region: "eu-west-1"
      secretKey: "The Secret Key"
```

12.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

12.3.1.2. Procedure for using the cluster CLI

1. Save the **aws-s3-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f aws-s3-sink-binding.yaml
```

12.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel aws-s3-sink -p "sink.accessKey=The Access Key" -p
"sink.bucketNameOrArn=The Bucket Name" -p "sink.region=eu-west-1" -p "sink.secretKey=The
Secret Key"
```

This command creates the KameletBinding in the current namespace on the cluster.

12.3.2. Kafka Sink

You can use the **aws-s3-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

aws-s3-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: aws-s3-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-s3-sink
    properties:
      accessKey: "The Access Key"
      bucketNameOrArn: "The Bucket Name"
      region: "eu-west-1"
      secretKey: "The Secret Key"
```

12.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

12.3.2.2. Procedure for using the cluster CLI

1. Save the **aws-s3-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f aws-s3-sink-binding.yaml
```

12.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic aws-s3-sink -p "sink.accessKey=The Access Key" -p "sink.bucketNameOrArn=The Bucket Name" -p "sink.region=eu-west-1" -p "sink.secretKey=The Secret Key"
```

This command creates the KameletBinding in the current namespace on the cluster.

12.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/aws-s3-sink.kamelet.yaml

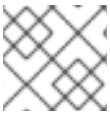
CHAPTER 13. AWS S3 SOURCE

Receive data from AWS S3.

13.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **aws-s3-source** Kamelet:

Property	Name	Description	Type	Default	Example
accessKey *	Access Key	The access key obtained from AWS	string		
bucketNameOrArn *	Bucket Name	The S3 Bucket name or ARN	string		
region *	AWS Region	The AWS region to connect to	string		**"eu-west-1"**
secretKey *	Secret Key	The secret key obtained from AWS	string		
autoCreateBucket	Autocreate Bucket	Setting the autocreation of the S3 bucket bucketName.	boolean	**false**	
deleteAfterRead	Auto-delete Objects	Delete objects after consuming them	boolean	**true**	



NOTE

Fields marked with an asterisk (*) are mandatory.

13.2. DEPENDENCIES

At runtime, the **aws-s3-source** Kamelet relies upon the presence of the following dependencies:

- camel:kamelet
- camel:aws2-s3

13.3. USAGE

This section describes how you can use the **aws-s3-source**.

13.3.1. Knative Source

You can use the **aws-s3-source** Kamelet as a Knative source by binding it to a Knative object.

aws-s3-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: aws-s3-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-s3-source
    properties:
      accessKey: "The Access Key"
      bucketNameOrArn: "The Bucket Name"
      region: "eu-west-1"
      secretKey: "The Secret Key"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

13.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

13.3.1.2. Procedure for using the cluster CLI

1. Save the **aws-s3-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f aws-s3-source-binding.yaml
```

13.3.1.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind aws-s3-source -p "source.accessKey=The Access Key" -p
"source.bucketNameOrArn=The Bucket Name" -p "source.region=eu-west-1" -p
"source.secretKey=The Secret Key" channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

13.3.2. Kafka Source

You can use the **aws-s3-source** Kamelet as a Kafka source by binding it to a Kafka topic.

aws-s3-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: aws-s3-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-s3-source
    properties:
      accessKey: "The Access Key"
      bucketNameOrArn: "The Bucket Name"
      region: "eu-west-1"
      secretKey: "The Secret Key"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

13.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

13.3.2.2. Procedure for using the cluster CLI

1. Save the **aws-s3-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f aws-s3-source-binding.yaml
```

13.3.2.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind aws-s3-source -p "source.accessKey=The Access Key" -p
"source.bucketNameOrArn=The Bucket Name" -p "source.region=eu-west-1" -p
"source.secretKey=The Secret Key" kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

13.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/aws-s3-source.kamelet.yaml

CHAPTER 14. AWS S3 STREAMING UPLOAD SINK

Upload data to AWS S3 in streaming upload mode.

14.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **aws-s3-streaming-upload-sink** Kamelet:

Property	Name	Description	Type	Default	Example
accessKey *	Access Key	The access key obtained from AWS.	string		
bucketNameOrArn *	Bucket Name	The S3 Bucket name or ARN.	string		
keyName *	Key Name	Setting the key name for an element in the bucket through endpoint parameter. In Streaming Upload, with the default configuration, this will be the base for the progressive creation of files.	string		
region *	AWS Region	The AWS region to connect to.	string		**"eu-west-1"**
secretKey *	Secret Key	The secret key obtained from AWS.	string		
autoCreateBucket	Autocreate Bucket	Setting the autocreation of the S3 bucket bucketName.	boolean	**false**	
batchMessageNumber	Batch Message Number	The number of messages composing a batch in streaming upload mode	int	**10**	
batchSize	Batch Size	The batch size (in bytes) in streaming upload mode	int	**1000000**	

Property	Name	Description	Type	Default	Example
namingStrategy	Naming Strategy	The naming strategy to use in streaming upload mode. There are 2 enums and the value can be one of progressive, random	string	**"progressive"**	
restartingPolicy	Restarting Policy	The restarting policy to use in streaming upload mode. There are 2 enums and the value can be one of override, lastPart	string	**"lastPart"**	
streamingUploadMode	Streaming Upload Mode	Setting the Streaming Upload Mode	boolean	**true**	

NOTE

Fields marked with an asterisk (*) are mandatory.

14.2. DEPENDENCIES

At runtime, the **aws-s3-streaming-upload-sink** Kamelet relies upon the presence of the following dependencies:

- camel:aws2-s3
- camel:kamelet

14.3. USAGE

This section describes how you can use the **aws-s3-streaming-upload-sink**.

14.3.1. Knative Sink

You can use the **aws-s3-streaming-upload-sink** Kamelet as a Knative sink by binding it to a Knative object.

aws-s3-streaming-upload-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: aws-s3-streaming-upload-sink-binding
spec:
```

```
source:
  ref:
    kind: Channel
    apiVersion: messaging.knative.dev/v1
    name: mychannel
sink:
  ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: aws-s3-streaming-upload-sink
  properties:
    accessKey: "The Access Key"
    bucketNameOrArn: "The Bucket Name"
    keyName: "The Key Name"
    region: "eu-west-1"
    secretKey: "The Secret Key"
```

14.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

14.3.1.2. Procedure for using the cluster CLI

1. Save the **aws-s3-streaming-upload-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f aws-s3-streaming-upload-sink-binding.yaml
```

14.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel aws-s3-streaming-upload-sink -p "sink.accessKey=The Access Key" -p "sink.bucketNameOrArn=The Bucket Name" -p "sink.keyName=The Key Name" -p "sink.region=eu-west-1" -p "sink.secretKey=The Secret Key"
```

This command creates the KameletBinding in the current namespace on the cluster.

14.3.2. Kafka Sink

You can use the **aws-s3-streaming-upload-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

aws-s3-streaming-upload-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: aws-s3-streaming-upload-sink-binding
spec:
  source:
```

```
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: aws-s3-streaming-upload-sink
    properties:
      accessKey: "The Access Key"
      bucketNameOrArn: "The Bucket Name"
      keyName: "The Key Name"
      region: "eu-west-1"
      secretKey: "The Secret Key"
```

14.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

14.3.2.2. Procedure for using the cluster CLI

1. Save the **aws-s3-streaming-upload-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f aws-s3-streaming-upload-sink-binding.yaml
```

14.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic aws-s3-streaming-upload-sink -p
"sink.accessKey=The Access Key" -p "sink.bucketNameOrArn=The Bucket Name" -p
"sink.keyName=The Key Name" -p "sink.region=eu-west-1" -p "sink.secretKey=The Secret Key"
```

This command creates the KameletBinding in the current namespace on the cluster.

14.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/aws-s3-streaming-upload-sink.kamelet.yaml

CHAPTER 15. AZURE STORAGE BLOB SINK

Upload data to Azure Storage Blob.

IMPORTANT

The Azure Storage Blob Sink Kamelet is a Technology Preview feature only. Technology Preview features are not supported with Red Hat production service level agreements (SLAs) and might not be functionally complete. Red Hat does not recommend using them in production.

These features provide early access to upcoming product features, enabling customers to test functionality and provide feedback during the development process. For more information about the support scope of Red Hat Technology Preview features, see https://access.redhat.com/support/offerings/techpreview.

The Kamelet expects the following headers to be set:

- **file** / **ce-file**: as the file name to upload

If the header won't be set the exchange ID will be used as file name.

15.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **azure-storage-blob-sink** Kamelet:

Property	Name	Description	Type	Default	Example
accessKey *	Access Key	The Azure Storage Blob access Key.	string		
accountName *	Account Name	The Azure Storage Blob account name.	string		
containerName *	Container Name	The Azure Storage Blob container name.	string		
credentialType	Credential Type	Determines the credential strategy to adopt. Possible values are SHARED_ACCOUNT_KEY, SHARED_KEY_CREDENTIAL and AZURE_IDENTITY	string	**"SHARED_ACCOUNT_KEY"**	
operation	Operation Name	The operation to perform.	string	**"uploadBlockBlob"**	

NOTE

Fields marked with an asterisk (*) are mandatory.

15.2. DEPENDENCIES

At runtime, the **azure-storage-blob-sink** Kamelet relies upon the presence of the following dependencies:

- camel:azure-storage-blob
- camel:kamelet

15.3. USAGE

This section describes how you can use the **azure-storage-blob-sink**.

15.3.1. Knative Sink

You can use the **azure-storage-blob-sink** Kamelet as a Knative sink by binding it to a Knative object.

azure-storage-blob-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: azure-storage-blob-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: azure-storage-blob-sink
    properties:
      accessKey: "The Access Key"
      accountName: "The Account Name"
      containerName: "The Container Name"
```

15.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

15.3.1.2. Procedure for using the cluster CLI

1. Save the **azure-storage-blob-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f azure-storage-blob-sink-binding.yaml
```

15.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel azure-storage-blob-sink -p "sink.accessKey=The Access Key" -p
"sink.accountName=The Account Name" -p "sink.containerName=The Container Name"
```

This command creates the KameletBinding in the current namespace on the cluster.

15.3.2. Kafka Sink

You can use the **azure-storage-blob-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

azure-storage-blob-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: azure-storage-blob-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: azure-storage-blob-sink
    properties:
      accessKey: "The Access Key"
      accountName: "The Account Name"
      containerName: "The Container Name"
```

15.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

15.3.2.2. Procedure for using the cluster CLI

1. Save the **azure-storage-blob-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f azure-storage-blob-sink-binding.yaml
```

15.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic azure-storage-blob-sink -p
"sink.accessKey=The Access Key" -p "sink.accountName=The Account Name" -p
"sink.containerName=The Container Name"
```

This command creates the KameletBinding in the current namespace on the cluster.

15.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/azure-storage-blob-sink.kamelet.yaml

CHAPTER 16. AZURE STORAGE BLOB SOURCE

Consume Files from Azure Storage Blob.

IMPORTANT

The Azure Storage Blob Source Kamelet is a Technology Preview feature only. Technology Preview features are not supported with Red Hat production service level agreements (SLAs) and might not be functionally complete. Red Hat does not recommend using them in production.

These features provide early access to upcoming product features, enabling customers to test functionality and provide feedback during the development process. For more information about the support scope of Red Hat Technology Preview features, see https://access.redhat.com/support/offerings/techpreview.

16.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **azure-storage-blob-source** Kamelet:

Property	Name	Description	Type	Default	Example
accessKey *	Access Key	The Azure Storage Blob access Key.	string		
accountName *	Account Name	The Azure Storage Blob account name.	string		
containerName *	Container Name	The Azure Storage Blob container name.	string		
period *	Period Between Polls	The interval between fetches to the Azure Storage Container in milliseconds	integer	**10000**	
credentialType	Credential Type	Determines the credential strategy to adopt. Possible values are SHARED_ACCOUNT_KEY, SHARED_KEY_CREDENTIAL and AZURE_IDENTITY	string	**"SHARED_ACCOUNT_KEY"**	

NOTE

Fields marked with an asterisk (*) are mandatory.

16.2. DEPENDENCIES

At runtime, the **azure-storage-blob-source** Kamelet relies upon the presence of the following dependencies:

- camel:azure-storage-blob
- camel:jsonpath
- camel:core
- camel:timer
- camel:kamelet

16.3. USAGE

This section describes how you can use the **azure-storage-blob-source**.

16.3.1. Knative Source

You can use the **azure-storage-blob-source** Kamelet as a Knative source by binding it to a Knative object.

azure-storage-blob-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: azure-storage-blob-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: azure-storage-blob-source
    properties:
      accessKey: "The Access Key"
      accountName: "The Account Name"
      containerName: "The Container Name"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

16.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

16.3.1.2. Procedure for using the cluster CLI

1. Save the **azure-storage-blob-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f azure-storage-blob-source-binding.yaml
```

16.3.1.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind azure-storage-blob-source -p "source.accessKey=The Access Key" -p
"source.accountName=The Account Name" -p "source.containerName=The Container Name"
channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

16.3.2. Kafka Source

You can use the **azure-storage-blob-source** Kamelet as a Kafka source by binding it to a Kafka topic.

azure-storage-blob-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: azure-storage-blob-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: azure-storage-blob-source
    properties:
      accessKey: "The Access Key"
      accountName: "The Account Name"
      containerName: "The Container Name"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

16.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

16.3.2.2. Procedure for using the cluster CLI

1. Save the **azure-storage-blob-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the source by using the following command:

```
oc apply -f azure-storage-blob-source-binding.yaml
```

16.3.2.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind azure-storage-blob-source -p "source.accessKey=The Access Key" -p
"source.accountName=The Account Name" -p "source.containerName=The Container Name"
kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

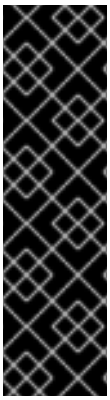
This command creates the KameletBinding in the current namespace on the cluster.

16.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/azure-storage-blob-source.kamelet.yaml

CHAPTER 17. AZURE STORAGE QUEUE SINK

Send Messages to Azure Storage queues.



IMPORTANT

The Azure Storage Queue Sink Kamelet is a Technology Preview feature only. Technology Preview features are not supported with Red Hat production service level agreements (SLAs) and might not be functionally complete. Red Hat does not recommend using them in production.

These features provide early access to upcoming product features, enabling customers to test functionality and provide feedback during the development process. For more information about the support scope of Red Hat Technology Preview features, see https://access.redhat.com/support/offerings/techpreview.

The Kamelet is able to understand the following headers to be set:

- **expiration** / **ce-expiration**: as the time to live of the message in the queue.

If the header won't be set the default of 7 days will be used.

The format should be in this form: PnDTnHnMn.nS., e.g: PT20.345S – parses as 20.345 seconds, P2D – parses as 2 days.

17.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **azure-storage-queue-sink** Kamelet:

Property	Name	Description	Type	Default	Example
accessKey *	Access Key	The Azure Storage Queue access Key.	string		
accountName *	Account Name	The Azure Storage Queue account name.	string		
queueName *	Queue Name	The Azure Storage Queue container name.	string		

NOTE

Fields marked with an asterisk (*) are mandatory.

17.2. DEPENDENCIES

At runtime, the **azure-storage-queue-sink** Kamelet relies upon the presence of the following dependencies:

- camel:azure-storage-queue
- camel:kamelet

17.3. USAGE

This section describes how you can use the **azure-storage-queue-sink**.

17.3.1. Knative Sink

You can use the **azure-storage-queue-sink** Kamelet as a Knative sink by binding it to a Knative object.

azure-storage-queue-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: azure-storage-queue-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: azure-storage-queue-sink
    properties:
      accessKey: "The Access Key"
      accountName: "The Account Name"
      queueName: "The Queue Name"
```

17.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

17.3.1.2. Procedure for using the cluster CLI

1. Save the **azure-storage-queue-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f azure-storage-queue-sink-binding.yaml
```

17.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel azure-storage-queue-sink -p "sink.accessKey=The Access Key" -p
"sink.accountName=The Account Name" -p "sink.queueName=The Queue Name"
```

This command creates the KameletBinding in the current namespace on the cluster.

17.3.2. Kafka Sink

You can use the **azure-storage-queue-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

azure-storage-queue-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: azure-storage-queue-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: azure-storage-queue-sink
    properties:
      accessKey: "The Access Key"
      accountName: "The Account Name"
      queueName: "The Queue Name"
```

17.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

17.3.2.2. Procedure for using the cluster CLI

1. Save the **azure-storage-queue-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

   ```
   oc apply -f azure-storage-queue-sink-binding.yaml
   ```

17.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic azure-storage-queue-sink -p
"sink.accessKey=The Access Key" -p "sink.accountName=The Account Name" -p
"sink.queueName=The Queue Name"
```

This command creates the KameletBinding in the current namespace on the cluster.

17.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/azure-storage-queue-sink.kamelet.yaml

CHAPTER 18. AZURE STORAGE QUEUE SOURCE

Receive Messages from Azure Storage queues.

IMPORTANT

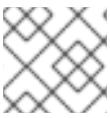
The Azure Storage Queue Source Kamelet is a Technology Preview feature only. Technology Preview features are not supported with Red Hat production service level agreements (SLAs) and might not be functionally complete. Red Hat does not recommend using them in production.

These features provide early access to upcoming product features, enabling customers to test functionality and provide feedback during the development process. For more information about the support scope of Red Hat Technology Preview features, see https://access.redhat.com/support/offerings/techpreview.

18.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **azure-storage-queue-source** Kamelet:

Property	Name	Description	Type	Default	Example
accessKey *	Access Key	The Azure Storage Queue access Key.	string		
accountName *	Account Name	The Azure Storage Queue account name.	string		
queueName *	Queue Name	The Azure Storage Queue container name.	string		
maxMessages	Maximum Messages	Maximum number of messages to get, if there are less messages exist in the queue than requested all the messages will be returned. By default it will consider 1 message to be retrieved, the allowed range is 1 to 32 messages.	int	**1**	



NOTE

Fields marked with an asterisk (*) are mandatory.

18.2. DEPENDENCIES

At runtime, the **azure-storage-queue-source** Kamelet relies upon the presence of the following dependencies:

- camel:azure-storage-queue
- camel:kamelet

18.3. USAGE

This section describes how you can use the **azure-storage-queue-source**.

18.3.1. Knative Source

You can use the **azure-storage-queue-source** Kamelet as a Knative source by binding it to a Knative object.

azure-storage-queue-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: azure-storage-queue-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: azure-storage-queue-source
    properties:
      accessKey: "The Access Key"
      accountName: "The Account Name"
      queueName: "The Queue Name"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

18.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

18.3.1.2. Procedure for using the cluster CLI

1. Save the **azure-storage-queue-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the source by using the following command:

```
oc apply -f azure-storage-queue-source-binding.yaml
```

18.3.1.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind azure-storage-queue-source -p "source.accessKey=The Access Key" -p
"source.accountName=The Account Name" -p "source.queueName=The Queue Name"
channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

18.3.2. Kafka Source

You can use the **azure-storage-queue-source** Kamelet as a Kafka source by binding it to a Kafka topic.

azure-storage-queue-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: azure-storage-queue-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: azure-storage-queue-source
    properties:
      accessKey: "The Access Key"
      accountName: "The Account Name"
      queueName: "The Queue Name"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

18.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

18.3.2.2. Procedure for using the cluster CLI

1. Save the **azure-storage-queue-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f azure-storage-queue-source-binding.yaml
```

18.3.2.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind azure-storage-queue-source -p "source.accessKey=The Access Key" -p
"source.accountName=The Account Name" -p "source.queueName=The Queue Name"
kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

18.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/azure-storage-queue-source.kamelet.yaml

CHAPTER 19. CASSANDRA SINK

Send data to a Cassandra Cluster.

This Kamelet expects the body as JSON Array. The content of the JSON Array will be used as input for the CQL Prepared Statement set in the query parameter.

19.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **cassandra-sink** Kamelet:

Property	Name	Description	Type	Default	Example
connectionHost *	Connection Host	Hostname(s) cassandra server(s). Multiple hosts can be separated by comma.	string		**"localhost"**
connectionPort *	Connection Port	Port number of cassandra server(s)	string		**9042**
keyspace *	Keyspace	Keyspace to use	string		**"customers"**
password *	Password	The password to use for accessing a secured Cassandra Cluster	string		
query *	Query	The query to execute against the Cassandra cluster table	string		
username *	Username	The username to use for accessing a secured Cassandra Cluster	string		
consistencyLevel	Consistency Level	Consistency level to use. The value can be one of ANY, ONE, TWO, THREE, QUORUM, ALL, LOCAL_QUORUM, EACH_QUORUM, SERIAL, LOCAL_SERIAL, LOCAL_ONE	string	**"ANY"**	

NOTE

Fields marked with an asterisk (*) are mandatory.

19.2. DEPENDENCIES

At runtime, the **cassandra-sink** Kamelet relies upon the presence of the following dependencies:

- camel:jackson
- camel:kamelet
- camel:cassandraql

19.3. USAGE

This section describes how you can use the **cassandra-sink**.

19.3.1. Knative Sink

You can use the **cassandra-sink** Kamelet as a Knative sink by binding it to a Knative object.

cassandra-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: cassandra-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: cassandra-sink
    properties:
      connectionHost: "localhost"
      connectionPort: 9042
      keyspace: "customers"
      password: "The Password"
      query: "The Query"
      username: "The Username"
```

19.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

19.3.1.2. Procedure for using the cluster CLI

1. Save the **cassandra-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f cassandra-sink-binding.yaml
```

19.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel cassandra-sink -p "sink.connectionHost=localhost" -p
sink.connectionPort=9042 -p "sink.keyspace=customers" -p "sink.password=The Password" -p
"sink.query=Query" -p "sink.username=The Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

19.3.2. Kafka Sink

You can use the **cassandra-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

cassandra-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: cassandra-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: cassandra-sink
    properties:
      connectionHost: "localhost"
      connectionPort: 9042
      keyspace: "customers"
      password: "The Password"
      query: "The Query"
      username: "The Username"
```

19.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

19.3.2.2. Procedure for using the cluster CLI

1. Save the **cassandra-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f cassandra-sink-binding.yaml
```

19.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic cassandra-sink -p
"sink.connectionHost=localhost" -p sink.connectionPort=9042 -p "sink.keyspace=customers" -p
"sink.password=The Password" -p "sink.query=The Query" -p "sink.username=The Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

19.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/cassandra-sink.kamelet.yaml

CHAPTER 20. CASSANDRA SOURCE

Query a Cassandra cluster table.

20.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **cassandra-source** Kamelet:

Property	Name	Description	Type	Default	Example
connectionHost *	Connection Host	Hostname(s) cassandra server(s). Multiple hosts can be separated by comma.	string		**"localhost"**
connectionPort *	Connection Port	Port number of cassandra server(s)	string		**9042**
keyspace *	Keyspace	Keyspace to use	string		**"customers"**
password *	Password	The password to use for accessing a secured Cassandra Cluster	string		
query *	Query	The query to execute against the Cassandra cluster table	string		
username *	Username	The username to use for accessing a secured Cassandra Cluster	string		
consistencyLevel	Consistency Level	Consistency level to use. The value can be one of ANY, ONE, TWO, THREE, QUORUM, ALL, LOCAL_QUORUM, EACH_QUORUM, SERIAL, LOCAL_SERIAL, LOCAL_ONE	string	**"QUORUM"**	

Property	Name	Description	Type	Default	Example
resultStrategy	Result Strategy	The strategy to convert the result set of the query. Possible values are ALL, ONE, LIMIT_10, LIMIT_100...	string	**"ALL"**	

NOTE

Fields marked with an asterisk (*) are mandatory.

20.2. DEPENDENCIES

At runtime, the **cassandra-source** Kamelet relies upon the presence of the following dependencies:

- camel:jackson
- camel:kamelet
- camel:cassandraql

20.3. USAGE

This section describes how you can use the **cassandra-source**.

20.3.1. Knative Source

You can use the **cassandra-source** Kamelet as a Knative source by binding it to a Knative object.

cassandra-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: cassandra-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: cassandra-source
    properties:
      connectionHost: "localhost"
      connectionPort: 9042
      keyspace: "customers"
      password: "The Password"
      query: "The Query"
      username: "The Username"
```

```
sink:
  ref:
    kind: Channel
    apiVersion: messaging.knative.dev/v1
    name: mychannel
```

20.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

20.3.1.2. Procedure for using the cluster CLI

1. Save the **cassandra-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f cassandra-source-binding.yaml
```

20.3.1.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind cassandra-source -p "source.connectionHost=localhost" -p source.connectionPort=9042 -p "source.keyspace=customers" -p "source.password=The Password" -p "source.query=The Query" -p "source.username=The Username" channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

20.3.2. Kafka Source

You can use the **cassandra-source** Kamelet as a Kafka source by binding it to a Kafka topic.

cassandra-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: cassandra-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: cassandra-source
    properties:
      connectionHost: "localhost"
      connectionPort: 9042
      keyspace: "customers"
      password: "The Password"
      query: "The Query"
      username: "The Username"
```

```
sink:
  ref:
    kind: KafkaTopic
    apiVersion: kafka.strimzi.io/v1beta1
    name: my-topic
```

20.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

20.3.2.2. Procedure for using the cluster CLI

1. Save the **cassandra-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the source by using the following command:

```
oc apply -f cassandra-source-binding.yaml
```

20.3.2.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind cassandra-source -p "source.connectionHost=localhost" -p source.connectionPort=9042 -p "source.keyspace=customers" -p "source.password=The Password" -p "source.query=The Query" -p "source.username=The Username" kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

20.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/cassandra-source.kamelet.yaml

CHAPTER 21. CEPH SINK

Upload data to an Ceph Bucket managed by a Object Storage Gateway.

In the header, you can optionally set the **file** / **ce-file** property to specify the name of the file to upload.

If you do not set the property in the header, the Kamelet uses the exchange ID for the file name.

21.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **ceph-sink** Kamelet:

Property	Name	Description	Type	Default	Example
accessKey *	Access Key	The access key.	string		
bucketName *	Bucket Name	The Ceph Bucket name.	string		
cephUrl *	Ceph Url Address	Set the Ceph Object Storage Address Url.	string		**"http://ceph-storage-address.com"**
secretKey *	Secret Key	The secret key.	string		
zoneGroup *	Bucket Zone Group	The bucket zone group.	string		
autoCreateBucket	Autocreate Bucket	Specifies to automatically create the bucket.	boolean	**false**	
keyName	Key Name	The key name for saving an element in the bucket.	string		

NOTE

Fields marked with an asterisk (*) are mandatory.

21.2. DEPENDENCIES

At runtime, the **ceph-sink** Kamelet relies upon the presence of the following dependencies:

- camel:core
- camel:aws2-s3
- camel:kamelet

21.3. USAGE

This section describes how you can use the **ceph-sink**.

21.3.1. Knative Sink

You can use the **ceph-sink** Kamelet as a Knative sink by binding it to a Knative object.

ceph-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: ceph-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: ceph-sink
    properties:
      accessKey: "The Access Key"
      bucketName: "The Bucket Name"
      cephUrl: "http://ceph-storage-address.com"
      secretKey: "The Secret Key"
      zoneGroup: "The Bucket Zone Group"
```

21.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

21.3.1.2. Procedure for using the cluster CLI

1. Save the **ceph-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f ceph-sink-binding.yaml
```

21.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel ceph-sink -p "sink.accessKey=The Access Key" -p
"sink.bucketName=The Bucket Name" -p "sink.cephUrl=http://ceph-storage-address.com" -p
"sink.secretKey=The Secret Key" -p "sink.zoneGroup=The Bucket Zone Group"
```

This command creates the KameletBinding in the current namespace on the cluster.

21.3.2. Kafka Sink

You can use the **ceph-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

ceph-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: ceph-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: ceph-sink
    properties:
      accessKey: "The Access Key"
      bucketName: "The Bucket Name"
      cephUrl: "http://ceph-storage-address.com"
      secretKey: "The Secret Key"
      zoneGroup: "The Bucket Zone Group"
```

21.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

21.3.2.2. Procedure for using the cluster CLI

1. Save the **ceph-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f ceph-sink-binding.yaml
```

21.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic ceph-sink -p "sink.accessKey=The Access Key" -p "sink.bucketName=The Bucket Name" -p "sink.cephUrl=http://ceph-storage-address.com" -p "sink.secretKey=The Secret Key" -p "sink.zoneGroup=The Bucket Zone Group"
```

This command creates the KameletBinding in the current namespace on the cluster.

21.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/ceph-sink.kamelet.yaml

CHAPTER 22. CEPH SOURCE

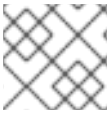
Receive data from an Ceph Bucket, managed by a Object Storage Gateway.

22.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **ceph-source** Kamelet:

Property	Name	Description	Type	Default	Example
accessKey *	Access Key	The access key.	string		
bucketName *	Bucket Name	The Ceph Bucket name.	string		
cephUrl *	Ceph Url Address	Set the Ceph Object Storage Address Url.	string		**"http://ceph-storage-address.com"**
secretKey *	Secret Key	The secret key.	string		
zoneGroup *	Bucket Zone Group	The bucket zone group.	string		
autoCreateBucket	Autocreate Bucket	Specifies to automatically create the bucket.	boolean	**false**	
delay	Delay	The number of milliseconds before the next poll of the selected bucket.	integer	**500**	
deleteAfterRead	Auto-delete Objects	Specifies to delete objects after consuming them.	boolean	**true**	
ignoreBody	Ignore Body	If true, the Object body is ignored. Setting this to true overrides any behavior defined by the **includeBody** option. If false, the object is put in the body.	boolean	**false**	

Property	Name	Description	Type	Default	Example
includeBody	Include Body	If true, the exchange is consumed and put into the body and closed. If false, the Object stream is put raw into the body and the headers are set with the object metadata.	boolean	**true**	
prefix	Prefix	The bucket prefix to consider while searching.	string		**"folder/"**



NOTE

Fields marked with an asterisk (*) are mandatory.

22.2. DEPENDENCIES

At runtime, the **ceph-source** Kamelet relies upon the presence of the following dependencies:

- camel:aws2-s3
- camel:kamelet

22.3. USAGE

This section describes how you can use the **ceph-source**.

22.3.1. Knative Source

You can use the **ceph-source** Kamelet as a Knative source by binding it to a Knative object.

ceph-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: ceph-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: ceph-source
    properties:
      accessKey: "The Access Key"
      bucketName: "The Bucket Name"
      cephUrl: "http://ceph-storage-address.com"
```

```
    secretKey: "The Secret Key"
    zoneGroup: "The Bucket Zone Group"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

22.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

22.3.1.2. Procedure for using the cluster CLI

1. Save the **ceph-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f ceph-source-binding.yaml
```

22.3.1.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind ceph-source -p "source.accessKey=The Access Key" -p "source.bucketName=The Bucket Name" -p "source.cephUrl=http://ceph-storage-address.com" -p "source.secretKey=The Secret Key" -p "source.zoneGroup=The Bucket Zone Group" channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

22.3.2. Kafka Source

You can use the **ceph-source** Kamelet as a Kafka source by binding it to a Kafka topic.

ceph-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: ceph-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: ceph-source
    properties:
      accessKey: "The Access Key"
      bucketName: "The Bucket Name"
      cephUrl: "http://ceph-storage-address.com"
      secretKey: "The Secret Key"
```

```
    zoneGroup: "The Bucket Zone Group"
sink:
  ref:
    kind: KafkaTopic
    apiVersion: kafka.strimzi.io/v1beta1
    name: my-topic
```

22.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

22.3.2.2. Procedure for using the cluster CLI

1. Save the **ceph-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f ceph-source-binding.yaml
```

22.3.2.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind ceph-source -p "source.accessKey=The Access Key" -p "source.bucketName=The Bucket Name" -p "source.cephUrl=http://ceph-storage-address.com" -p "source.secretKey=The Secret Key" -p "source.zoneGroup=The Bucket Zone Group" kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

22.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/ceph-source.kamelet.yaml

CHAPTER 23. EXTRACT FIELD ACTION

Extract a field from the body

23.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **extract-field-action** Kamelet:

Property	Name	Description	Type	Default	Example
field *	Field	The name of the field to be added	string		

NOTE

Fields marked with an asterisk (*) are mandatory.

23.2. DEPENDENCIES

At runtime, the **extract-field-action** Kamelet relies upon the presence of the following dependencies:

- github:openshift-integration.kamelet-catalog:camel-kamelets-utils:kamelet-catalog-1.6-SNAPSHOT
- camel:kamelet
- camel:core
- camel:jackson

23.3. USAGE

This section describes how you can use the **extract-field-action**.

23.3.1. Knative Action

You can use the **extract-field-action** Kamelet as an intermediate step in a Knative binding.

extract-field-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: extract-field-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: "Hello"
```

```
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: extract-field-action
    properties:
      field: "The Field"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

23.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

23.3.1.2. Procedure for using the cluster CLI

1. Save the **extract-field-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the action by using the following command:

```
oc apply -f extract-field-action-binding.yaml
```

23.3.1.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step extract-field-action -p "step-0.field=The Field"
channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

23.3.2. Kafka Action

You can use the **extract-field-action** Kamelet as an intermediate step in a Kafka binding.

extract-field-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: extract-field-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
```

```
    message: "Hello"
steps:
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: extract-field-action
  properties:
    field: "The Field"
sink:
  ref:
    kind: KafkaTopic
    apiVersion: kafka.strimzi.io/v1beta1
    name: my-topic
```

23.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

23.3.2.2. Procedure for using the cluster CLI

1. Save the **extract-field-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f extract-field-action-binding.yaml
```

23.3.2.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step extract-field-action -p "step-0.field=The Field"
kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

23.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/extract-field-action.kamelet.yaml

CHAPTER 24. FTP SINK

Send data to an FTP Server.

The Kamelet expects the following headers to be set:

- **file** / **ce-file**: as the file name to upload

If the header won't be set the exchange ID will be used as file name.

24.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **ftp-sink** Kamelet:

Property	Name	Description	Type	Default	Example
connectionHost *	Connection Host	Hostname of the FTP server	string		
connectionPort *	Connection Port	Port of the FTP server	string	**21**	
directoryName *	Directory Name	The starting directory	string		
password *	Password	The password to access the FTP server	string		
username *	Username	The username to access the FTP server	string		
fileExist	File Existence	How to behave in case of file already existent. There are 4 enums and the value can be one of Override, Append, Fail or Ignore	string	**"Override"**	
passiveMode	Passive Mode	Sets passive mode connection	boolean	**false**	

NOTE

Fields marked with an asterisk (*) are mandatory.

24.2. DEPENDENCIES

At runtime, the **ftp-sink** Kamelet relies upon the presence of the following dependencies:

- camel:ftp
- camel:core
- camel:kamelet

24.3. USAGE

This section describes how you can use the **ftp-sink**.

24.3.1. Knative Sink

You can use the **ftp-sink** Kamelet as a Knative sink by binding it to a Knative object.

ftp-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: ftp-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: ftp-sink
    properties:
      connectionHost: "The Connection Host"
      directoryName: "The Directory Name"
      password: "The Password"
      username: "The Username"
```

24.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

24.3.1.2. Procedure for using the cluster CLI

1. Save the **ftp-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f ftp-sink-binding.yaml
```

24.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel ftp-sink -p "sink.connectionHost=The Connection Host" -p
"sink.directoryName=The Directory Name" -p "sink.password=The Password" -p "sink.username=The
Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

24.3.2. Kafka Sink

You can use the **ftp-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

ftp-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: ftp-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: ftp-sink
    properties:
      connectionHost: "The Connection Host"
      directoryName: "The Directory Name"
      password: "The Password"
      username: "The Username"
```

24.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

24.3.2.2. Procedure for using the cluster CLI

1. Save the **ftp-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f ftp-sink-binding.yaml
```

24.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic ftp-sink -p "sink.connectionHost=The
Connection Host" -p "sink.directoryName=The Directory Name" -p "sink.password=The Password" -p
"sink.username=The Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

24.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/ftp-sink.kamelet.yaml

CHAPTER 25. FTP SOURCE

Receive data from an FTP Server.

25.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **ftp-source** Kamelet:

Property	Name	Description	Type	Default	Example
connectionHost *	Connection Host	Hostname of the FTP server	string		
connectionPort *	Connection Port	Port of the FTP server	string	**21**	
directoryName *	Directory Name	The starting directory	string		
password *	Password	The password to access the FTP server	string		
username *	Username	The username to access the FTP server	string		
idempotent	Idempotency	Skip already processed files.	boolean	**true**	
passiveMode	Passive Mode	Sets passive mode connection	boolean	**false**	
recursive	Recursive	If a directory, will look for files in all the sub-directories as well.	boolean	**false**	

NOTE

Fields marked with an asterisk (*) are mandatory.

25.2. DEPENDENCIES

At runtime, the **ftp-source** Kamelet relies upon the presence of the following dependencies:

- camel:ftp
- camel:core

- camel:kamelet

25.3. USAGE

This section describes how you can use the **ftp-source**.

25.3.1. Knative Source

You can use the **ftp-source** Kamelet as a Knative source by binding it to a Knative object.

ftp-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: ftp-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: ftp-source
    properties:
      connectionHost: "The Connection Host"
      directoryName: "The Directory Name"
      password: "The Password"
      username: "The Username"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

25.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

25.3.1.2. Procedure for using the cluster CLI

1. Save the **ftp-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f ftp-source-binding.yaml
```

25.3.1.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind ftp-source -p "source.connectionHost=The Connection Host" -p
"source.directoryName=The Directory Name" -p "source.password=The Password" -p
"source.username=The Username" channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

25.3.2. Kafka Source

You can use the **ftp-source** Kamelet as a Kafka source by binding it to a Kafka topic.

ftp-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: ftp-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: ftp-source
    properties:
      connectionHost: "The Connection Host"
      directoryName: "The Directory Name"
      password: "The Password"
      username: "The Username"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

25.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

25.3.2.2. Procedure for using the cluster CLI

1. Save the **ftp-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f ftp-source-binding.yaml
```

25.3.2.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind ftp-source -p "source.connectionHost=The Connection Host" -p
"source.directoryName=The Directory Name" -p "source.password=The Password" -p
"source.username=The Username" kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

25.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/ftp-source.kamelet.yaml

CHAPTER 26. HAS HEADER FILTER ACTION

Filter based on the presence of one header

26.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **has-header-filter-action** Kamelet:

Property	Name	Description	Type	Default	Example
name *	Header Name	The header name to evaluate. The header name must be passed by the source Kamelet. For Knative only, if you are using Cloud Events, you must include the CloudEvent (ce-) prefix in the header name.	string		**"headerName"**

NOTE

Fields marked with an asterisk (*) are mandatory.

26.2. DEPENDENCIES

At runtime, the **has-header-filter-action** Kamelet relies upon the presence of the following dependencies:

- camel:core
- camel:kamelet

26.3. USAGE

This section describes how you can use the **has-header-filter-action**.

26.3.1. Knative Action

You can use the **has-header-filter-action** Kamelet as an intermediate step in a Knative binding.

has-header-filter-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: has-header-filter-action-binding
```

```
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: "Hello"
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: insert-header-action
    properties:
      name: "my-header"
      value: "my-value"
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: has-header-filter-action
    properties:
      name: "my-header"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

26.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

26.3.1.2. Procedure for using the cluster CLI

1. Save the **has-header-filter-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f has-header-filter-action-binding.yaml
```

26.3.1.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind --name has-header-filter-action-binding timer-source?message="Hello" --step insert-header-action -p "step-0.name=my-header" -p "step-0.value=my-value" --step has-header-filter-action -p "step-1.name=my-header" channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

26.3.2. Kafka Action

You can use the **has-header-filter-action** Kamelet as an intermediate step in a Kafka binding.

has-header-filter-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: has-header-filter-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: "Hello"
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: insert-header-action
    properties:
      name: "my-header"
      value: "my-value"
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: has-header-filter-action
    properties:
      name: "my-header"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

26.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

26.3.2.2. Procedure for using the cluster CLI

1. Save the **has-header-filter-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f has-header-filter-action-binding.yaml
```

26.3.2.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind --name has-header-filter-action-binding timer-source?message="Hello" --step insert-header-action -p "step-0.name=my-header" -p "step-0.value=my-value" --step has-header-filter-action -p "step-1.name=my-header" kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

26.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/has-header-filter-action.kamelet.yaml

CHAPTER 27. HOIST FIELD ACTION

Wrap data in a single field

27.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **hoist-field-action** Kamelet:

Property	Name	Description	Type	Default	Example
field *	Field	The name of the field that will contain the event	string		

NOTE

Fields marked with an asterisk (*) are mandatory.

27.2. DEPENDENCIES

At runtime, the **hoist-field-action** Kamelet relies upon the presence of the following dependencies:

- github:openshift-integration.kamelet-catalog:camel-kamelets-utils:kamelet-catalog-1.6-SNAPSHOT
- camel:core
- camel:jackson
- camel:kamelet

27.3. USAGE

This section describes how you can use the **hoist-field-action**.

27.3.1. Knative Action

You can use the **hoist-field-action** Kamelet as an intermediate step in a Knative binding.

hoist-field-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: hoist-field-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
```

```
    message: "Hello"
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: hoist-field-action
    properties:
      field: "The Field"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

27.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

27.3.1.2. Procedure for using the cluster CLI

1. Save the **hoist-field-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the action by using the following command:

```
oc apply -f hoist-field-action-binding.yaml
```

27.3.1.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step hoist-field-action -p "step-0.field=The Field"
channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

27.3.2. Kafka Action

You can use the **hoist-field-action** Kamelet as an intermediate step in a Kafka binding.

hoist-field-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: hoist-field-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
```

```
  properties:
    message: "Hello"
steps:
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: hoist-field-action
  properties:
    field: "The Field"
sink:
  ref:
    kind: KafkaTopic
    apiVersion: kafka.strimzi.io/v1beta1
    name: my-topic
```

27.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

27.3.2.2. Procedure for using the cluster CLI

1. Save the **hoist-field-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the action by using the following command:

```
oc apply -f hoist-field-action-binding.yaml
```

27.3.2.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step hoist-field-action -p "step-0.field=The Field"
kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

27.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/hoist-field-action.kamelet.yaml

CHAPTER 28. HTTP SINK

Forwards an event to a HTTP endpoint

28.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **http-sink** Kamelet:

Property	Name	Description	Type	Default	Example
url *	URL	The URL to send data to	string		**"https://my-service/path"**
method	Method	The HTTP method to use	string	**"POST"**	

NOTE

Fields marked with an asterisk (*) are mandatory.

28.2. DEPENDENCIES

At runtime, the **http-sink** Kamelet relies upon the presence of the following dependencies:

- camel:http
- camel:kamelet
- camel:core

28.3. USAGE

This section describes how you can use the **http-sink**.

28.3.1. Knative Sink

You can use the **http-sink** Kamelet as a Knative sink by binding it to a Knative object.

http-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: http-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
```

```
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: http-sink
    properties:
      url: "https://my-service/path"
```

28.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

28.3.1.2. Procedure for using the cluster CLI

1. Save the **http-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f http-sink-binding.yaml
```

28.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel http-sink -p "sink.url=https://my-service/path"
```

This command creates the KameletBinding in the current namespace on the cluster.

28.3.2. Kafka Sink

You can use the **http-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

http-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: http-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: http-sink
    properties:
      url: "https://my-service/path"
```

28.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

28.3.2.2. Procedure for using the cluster CLI

1. Save the **http-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f http-sink-binding.yaml
```

28.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic http-sink -p "sink.url=https://my-service/path"
```

This command creates the KameletBinding in the current namespace on the cluster.

28.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/http-sink.kamelet.yaml

CHAPTER 29. INSERT FIELD ACTION

Adds a custom field with a constant value to the message in transit

29.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **insert-field-action** Kamelet:

Property	Name	Description	Type	Default	Example
field *	Field	The name of the field to be added	string		
value *	Value	The value of the field	string		

NOTE

Fields marked with an asterisk (*) are mandatory.

29.2. DEPENDENCIES

At runtime, the **insert-field-action** Kamelet relies upon the presence of the following dependencies:

- github:openshift-integration.kamelet-catalog:camel-kamelets-utils:kamelet-catalog-1.6-SNAPSHOT
- camel:core
- camel:jackson
- camel:kamelet

29.3. USAGE

This section describes how you can use the **insert-field-action**.

29.3.1. Knative Action

You can use the **insert-field-action** Kamelet as an intermediate step in a Knative binding.

insert-field-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: insert-field-action-binding
spec:
  source:
    ref:
      kind: Kamelet
```

```
    apiVersion: camel.apache.org/v1alpha1
    name: timer-source
  properties:
    message: '{"foo":"John"}'
steps:
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: json-deserialize-action
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: insert-field-action
  properties:
    field: "The Field"
    value: "The Value"
sink:
  ref:
    kind: Channel
    apiVersion: messaging.knative.dev/v1
    name: mychannel
```

29.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

29.3.1.2. Procedure for using the cluster CLI

1. Save the **insert-field-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f insert-field-action-binding.yaml
```

29.3.1.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind --name insert-field-action-binding timer-source?message='{"foo":"John"}' --step json-deserialize-action --step insert-field-action -p step-1.field='The Field' -p step-1.value='The Value' channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

29.3.2. Kafka Action

You can use the **insert-field-action** Kamelet as an intermediate step in a Kafka binding.

insert-field-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
```

```
kind: KameletBinding
metadata:
  name: insert-field-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: '{"foo":"John"}'
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: json-deserialize-action
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: insert-field-action
    properties:
      field: "The Field"
      value: "The Value"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

29.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

29.3.2.2. Procedure for using the cluster CLI

1. Save the **insert-field-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f insert-field-action-binding.yaml
```

29.3.2.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind --name insert-field-action-binding timer-source?message='{"foo":"John"}' --step json-deserialize-action --step insert-field-action -p step-1.field='The Field' -p step-1.value='The Value' kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

29.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/insert-field-action.kamelet.yaml

CHAPTER 30. INSERT HEADER ACTION

Adds an header with a constant value to the message in transit

30.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **insert-header-action** Kamelet:

Property	Name	Description	Type	Default	Example
name *	Name	The name of the header to be added. For Knative only, the name of the header requires a CloudEvent (ce-) prefix.	string		
value *	Value	The value of the header	string		

NOTE

Fields marked with an asterisk (*) are mandatory.

30.2. DEPENDENCIES

At runtime, the **insert-header-action** Kamelet relies upon the presence of the following dependencies:

- camel:core
- camel:kamelet

30.3. USAGE

This section describes how you can use the **insert-header-action**.

30.3.1. Knative Action

You can use the **insert-header-action** Kamelet as an intermediate step in a Knative binding.

insert-header-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: insert-header-action-binding
spec:
  source:
    ref:
```

```
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: timer-source
  properties:
    message: "Hello"
steps:
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: insert-header-action
  properties:
    name: "The Name"
    value: "The Value"
sink:
  ref:
    kind: Channel
    apiVersion: messaging.knative.dev/v1
    name: mychannel
```

30.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

30.3.1.2. Procedure for using the cluster CLI

1. Save the **insert-header-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f insert-header-action-binding.yaml
```

30.3.1.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step insert-header-action -p "step-0.name=The Name" -p
"step-0.value=The Value" channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

30.3.2. Kafka Action

You can use the **insert-header-action** Kamelet as an intermediate step in a Kafka binding.

insert-header-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: insert-header-action-binding
spec:
```

```
source:
  ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: timer-source
  properties:
    message: "Hello"
steps:
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: insert-header-action
  properties:
    name: "The Name"
    value: "The Value"
sink:
  ref:
    kind: KafkaTopic
    apiVersion: kafka.strimzi.io/v1beta1
    name: my-topic
```

30.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

30.3.2.2. Procedure for using the cluster CLI

1. Save the **insert-header-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f insert-header-action-binding.yaml
```

30.3.2.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step insert-header-action -p "step-0.name=The Name" -p
"step-0.value=The Value" kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

30.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/insert-header-action.kamelet.yaml

CHAPTER 31. IS TOMBSTONE FILTER ACTION

Filter based on the presence of body or not

31.1. CONFIGURATION OPTIONS

The **is-tombstone-filter-action** Kamelet does not specify any configuration option.

31.2. DEPENDENCIES

At runtime, the **is-tombstone-filter-action** Kamelet relies upon the presence of the following dependencies:

- camel:core
- camel:kamelet

31.3. USAGE

This section describes how you can use the **is-tombstone-filter-action**.

31.3.1. Knative Action

You can use the **is-tombstone-filter-action** Kamelet as an intermediate step in a Knative binding.

is-tombstone-filter-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: is-tombstone-filter-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: "Hello"
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: is-tombstone-filter-action
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

31.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

31.3.1.2. Procedure for using the cluster CLI

1. Save the **is-tombstone-filter-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the action by using the following command:

```
oc apply -f is-tombstone-filter-action-binding.yaml
```

31.3.1.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step is-tombstone-filter-action channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

31.3.2. Kafka Action

You can use the **is-tombstone-filter-action** Kamelet as an intermediate step in a Kafka binding.

is-tombstone-filter-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: is-tombstone-filter-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: "Hello"
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: is-tombstone-filter-action
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

31.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

31.3.2.2. Procedure for using the cluster CLI

1. Save the **is-tombstone-filter-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the action by using the following command:

```
oc apply -f is-tombstone-filter-action-binding.yaml
```

31.3.2.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step is-tombstone-filter-action
kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

31.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/is-tombstone-filter-action.kamelet.yaml

CHAPTER 32. JIRA ADD COMMENT SINK

Add a new comment to an existing issue in Jira.

The Kamelet expects the following headers to be set:

- **issueKey** / **ce-issueKey**: as the issue code.

The comment is set in the body of the message.

32.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **jira-add-comment-sink** Kamelet:

Property	Name	Description	Type	Default	Example
jiraUrl *	Jira URL	The URL of your instance of Jira	string		**"http://my_jira.com:8081"**
password *	Password	The password or the API Token to access Jira	string		
username *	Username	The username to access Jira	string		

NOTE

Fields marked with an asterisk (*) are mandatory.

32.2. DEPENDENCIES

At runtime, the **jira-add-comment-sink** Kamelet relies upon the presence of the following dependencies:

- camel:core
- camel:jackson
- camel:jira
- camel:kamelet
- mvn:com.fasterxml.jackson.datatype:jackson-datatype-joda:2.12.4.redhat-00001

32.3. USAGE

This section describes how you can use the **jira-add-comment-sink**.

32.3.1. Knative Sink

You can use the **jira-add-comment-sink** Kamelet as a Knative sink by binding it to a Knative object.

jira-add-comment-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: jira-add-comment-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: insert-header-action
    properties:
      name: "issueKey"
      value: "MYP-167"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
    properties:
      jiraUrl: "jira server url"
      username: "username"
      password: "password"
```

32.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

32.3.1.2. Procedure for using the cluster CLI

1. Save the **jira-add-comment-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f jira-add-comment-sink-binding.yaml
```

32.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind --name jira-add-comment-sink-binding timer-source?message="The new
comment"\&period=60000 --step insert-header-action -p step-0.name=issueKey -p step-
0.value=MYP-167 jira-add-comment-sink?
password="password"\&username="username"\&jiraUrl="jira url"
```

This command creates the KameletBinding in the current namespace on the cluster.

32.3.2. Kafka Sink

You can use the **jira-add-comment-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

jira-add-comment-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: jira-add-comment-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: insert-header-action
    properties:
      name: "issueKey"
      value: "MYP-167"
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: jira-add-comment-sink
    properties:
      jiraUrl: "jira server url"
      username: "username"
      password: "password"
```

32.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

32.3.2.2. Procedure for using the cluster CLI

1. Save the **jira-add-comment-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f jira-add-comment-sink-binding.yaml
```

32.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind --name jira-add-comment-sink-binding timer-source?message="The new
comment"\&period=60000 --step insert-header-action -p step-0.name=issueKey -p step-
0.value=MYP-167 jira-add-comment-sink?
password="password"\&username="username"\&jiraUrl="jira url"
```

This command creates the KameletBinding in the current namespace on the cluster.

32.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/jira-add-comment-sink.kamelet.yaml

CHAPTER 33. JIRA ADD ISSUE SINK

Add a new issue to Jira.

The Kamelet expects the following headers to be set:

- **projectKey** / **ce-projectKey**: as the Jira project key.
- **issueTypeName** / **ce-issueTypeName**: as the name of the issue type (example: Bug, Enhancement).
- **issueSummary** / **ce-issueSummary**: as the title or summary of the issue.
- **issueAssignee** / **ce-issueAssignee**: as the user assigned to the issue (Optional).
- **issuePriorityName** / **ce-issuePriorityName**: as the priority name of the issue (example: Critical, Blocker, Trivial) (Optional).
- **issueComponents** / **ce-issueComponents**: as list of string with the valid component names (Optional).
- **issueDescription** / **ce-issueDescription**: as the issue description (Optional).

The issue description can be set from the body of the message or the **issueDescription**/**ce-issueDescription** in the header, however the body takes precedence.

33.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **jira-add-issue-sink** Kamelet:

Property	Name	Description	Type	Default	Example
jiraUrl *	Jira URL	The URL of your instance of Jira	string		**"http://my_jira.com:8081"**
password *	Password	The password or the API Token to access Jira	string		
username *	Username	The username to access Jira	string		

NOTE

Fields marked with an asterisk (*) are mandatory.

33.2. DEPENDENCIES

At runtime, the **jira-add-issue-sink** Kamelet relies upon the presence of the following dependencies:

- camel:core
- camel:jackson

- camel:jira
- camel:kamelet
- mvn:com.fasterxml.jackson.datatype:jackson-datatype-joda:2.12.4.redhat-00001

33.3. USAGE

This section describes how you can use the **jira-add-issue-sink**.

33.3.1. Knative Sink

You can use the **jira-add-issue-sink** Kamelet as a Knative sink by binding it to a Knative object.

jira-add-issue-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: jira-add-issue-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: insert-header-action
    properties:
      name: "projectKey"
      value: "MYP"
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: insert-header-action
    properties:
      name: "issueTypeName"
      value: "Bug"
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: insert-header-action
    properties:
      name: "issueSummary"
      value: "The issue summary"
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: insert-header-action
    properties:
      name: "issuePriorityName"
      value: "Low"
```

```
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
    properties:
      jiraUrl: "jira server url"
      username: "username"
      password: "password"
```

33.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

33.3.1.2. Procedure for using the cluster CLI

1. Save the **jira-add-issue-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f jira-add-issue-sink-binding.yaml
```

33.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind --name jira-add-issue-sink-binding timer-source?message="The new
comment"\&period=60000 --step insert-header-action -p step-0.name=projectKey -p step-
0.value=MYP --step insert-header-action -p step-1.name=issueTypeName -p step-1.value=Bug --
step insert-header-action  -p step-2.name=issueSummary -p step-2.value="This is a bug" --step
insert-header-action -p step-3.name=issuePriorityName -p step-3.value=Low jira-add-issue-sink?
jiraUrl="jira url"\&username="username"\&password="password"
```

This command creates the KameletBinding in the current namespace on the cluster.

33.3.2. Kafka Sink

You can use the **jira-add-issue-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

jira-add-issue-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: jira-add-issue-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

```
steps:
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: insert-header-action
  properties:
    name: "projectKey"
    value: "MYP"
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: insert-header-action
  properties:
    name: "issueTypeName"
    value: "Bug"
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: insert-header-action
  properties:
    name: "issueSummary"
    value: "The issue summary"
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: insert-header-action
  properties:
    name: "issuePriorityName"
    value: "Low"
sink:
  ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: jira-add-issue-sink
  properties:
    jiraUrl: "jira server url"
    username: "username"
    password: "password"
```

33.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

33.3.2.2. Procedure for using the cluster CLI

1. Save the **jira-add-issue-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f jira-add-issue-sink-binding.yaml
```

33.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind --name jira-add-issue-sink-binding timer-source?message="The new comment"\&period=60000 --step insert-header-action -p step-0.name=projectKey -p step-0.value=MYP --step insert-header-action -p step-1.name=issueTypeName -p step-1.value=Bug --step insert-header-action  -p step-2.name=issueSummary -p step-2.value="This is a bug" --step insert-header-action -p step-3.name=issuePriorityName -p step-3.value=Low jira-add-issue-sink?jiraUrl="jira url"\&username="username"\&password="password"
```

This command creates the KameletBinding in the current namespace on the cluster.

33.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/jira-add-issue-sink.kamelet.yaml

CHAPTER 34. JIRA TRANSITION ISSUE SINK

Sets a new status (transition to) of an existing issue in Jira.

The Kamelet expects the following headers to be set:

- **issueKey** / **ce-issueKey**: as the issue unique code.
- **issueTransitionId** / **ce-issueTransitionId**: as the new status (transition) code. You should carefully check the project workflow as each transition may have conditions to check before the transition is made.

The comment of the transition is set in the body of the message.

34.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **jira-transition-issue-sink** Kamelet:

Property	Name	Description	Type	Default	Example
jiraUrl *	Jira URL	The URL of your instance of Jira	string		**"http://my_jira.com:8081"**
password *	Password	The password or the API Token to access Jira	string		
username *	Username	The username to access Jira	string		

NOTE

Fields marked with an asterisk (*) are mandatory.

34.2. DEPENDENCIES

At runtime, the **jira-transition-issue-sink** Kamelet relies upon the presence of the following dependencies:

- camel:core
- camel:jackson
- camel:jira
- camel:kamelet
- mvn:com.fasterxml.jackson.datatype:jackson-datatype-joda:2.12.4.redhat-00001

34.3. USAGE

This section describes how you can use the **jira-transition-issue-sink**.

34.3.1. Knative Sink

You can use the **jira-transition-issue-sink** Kamelet as a Knative sink by binding it to a Knative object.

jira-transition-issue-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: jira-transition-issue-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: insert-header-action
    properties:
      name: "issueTransitionId"
      value: 701
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: insert-header-action
    properties:
      name: "issueKey"
      value: "MYP-162"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
    properties:
      jiraUrl: "jira server url"
      username: "username"
      password: "password"
```

34.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

34.3.1.2. Procedure for using the cluster CLI

1. Save the **jira-transition-issue-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

   ■

```
oc apply -f jira-transition-issue-sink-binding.yaml
```

34.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind --name jira-transition-issue-sink-binding timer-source?message="The new comment 123"\&period=60000 --step insert-header-action -p step-0.name=issueKey -p step-0.value=MYP-170 --step insert-header-action -p step-1.name=issueTransitionId -p step-1.value=5 jira-transition-issue-sink?jiraUrl="jira url"\&username="username"\&password="password"
```

This command creates the KameletBinding in the current namespace on the cluster.

34.3.2. Kafka Sink

You can use the **jira-transition-issue-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

jira-transition-issue-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: jira-transition-issue-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: insert-header-action
    properties:
      name: "issueTransitionId"
      value: 701
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: insert-header-action
    properties:
      name: "issueKey"
      value: "MYP-162"
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: jira-transition-issue-sink
    properties:
      jiraUrl: "jira server url"
      username: "username"
      password: "password"
```

34.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

34.3.2.2. Procedure for using the cluster CLI

1. Save the **jira-transition-issue-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f jira-transition-issue-sink-binding.yaml
```

34.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind --name jira-transition-issue-sink-binding timer-source?message="The new comment 123"\&period=60000 --step insert-header-action -p step-0.name=issueKey -p step-0.value=MYP-170 --step insert-header-action -p step-1.name=issueTransitionId -p step-1.value=5 jira-transition-issue-sink?jiraUrl="jira url"\&username="username"\&password="password"
```

This command creates the KameletBinding in the current namespace on the cluster.

34.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/jira-transition-issue-sink.kamelet.yaml

CHAPTER 35. JIRA UPDATE ISSUE SINK

Update fields of an existing issue in Jira. The Kamelet expects the following headers to be set:

- **issueKey** / **ce-issueKey**: as the issue code in Jira.
- **issueTypeName** / **ce-issueTypeName**: as the name of the issue type (example: Bug, Enhancement).
- **issueSummary** / **ce-issueSummary**: as the title or summary of the issue.
- **issueAssignee** / **ce-issueAssignee**: as the user assigned to the issue (Optional).
- **issuePriorityName** / **ce-issuePriorityName**: as the priority name of the issue (example: Critical, Blocker, Trivial) (Optional).
- **issueComponents** / **ce-issueComponents**: as list of string with the valid component names (Optional).
- **issueDescription** / **ce-issueDescription**: as the issue description (Optional).

The issue description can be set from the body of the message or the **issueDescription**/**ce-issueDescription** in the header, however the body takes precedence.

35.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **jira-update-issue-sink** Kamelet:

Property	Name	Description	Type	Default	Example
jiraUrl *	Jira URL	The URL of your instance of Jira	string		**"http://my_jira.com:8081"**
password *	Password	The password or the API Token to access Jira	string		
username *	Username	The username to access Jira	string		

NOTE

Fields marked with an asterisk (*) are mandatory.

35.2. DEPENDENCIES

At runtime, the **jira-update-issue-sink** Kamelet relies upon the presence of the following dependencies:

- camel:core
- camel:jackson

- camel:jira
- camel:kamelet
- mvn:com.fasterxml.jackson.datatype:jackson-datatype-joda:2.12.4.redhat-00001

35.3. USAGE

This section describes how you can use the **jira-update-issue-sink**.

35.3.1. Knative Sink

You can use the **jira-update-issue-sink** Kamelet as a Knative sink by binding it to a Knative object.

jira-update-issue-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: jira-update-issue-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: insert-header-action
    properties:
      name: "issueKey"
      value: "MYP-163"
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: insert-header-action
    properties:
      name: "issueTypeName"
      value: "Bug"
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: insert-header-action
    properties:
      name: "issueSummary"
      value: "The issue summary"
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: insert-header-action
    properties:
      name: "issuePriorityName"
      value: "Low"
```

```
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
    properties:
      jiraUrl: "jira server url"
      username: "username"
      password: "password"
```

35.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

35.3.1.2. Procedure for using the cluster CLI

1. Save the **jira-update-issue-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f jira-update-issue-sink-binding.yaml
```

35.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind --name jira-update-issue-sink-binding timer-source?message="The new
comment"\&period=60000 --step insert-header-action -p step-0.name=issueKey -p step-
0.value=MYP-170 --step insert-header-action -p step-1.name=issueTypeName -p step-1.value=Story
--step insert-header-action  -p step-2.name=issueSummary -p step-2.value="This is a story 123" --
step insert-header-action -p step-3.name=issuePriorityName -p step-3.value=Highest jira-update-
issue-sink?jiraUrl="jira url"\&username="username"\&password="password"
```

This command creates the KameletBinding in the current namespace on the cluster.

35.3.2. Kafka Sink

You can use the **jira-update-issue-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

jira-update-issue-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: jira-update-issue-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

```
steps:
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: insert-header-action
  properties:
    name: "issueKey"
    value: "MYP-163"
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: insert-header-action
  properties:
    name: "issueTypeName"
    value: "Bug"
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: insert-header-action
  properties:
    name: "issueSummary"
    value: "The issue summary"
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: insert-header-action
  properties:
    name: "issuePriorityName"
    value: "Low"
sink:
  ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: jira-update-issue-sink
  properties:
    jiraUrl: "jira server url"
    username: "username"
    password: "password"
```

35.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

35.3.2.2. Procedure for using the cluster CLI

1. Save the **jira-update-issue-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f jira-update-issue-sink-binding.yaml
```

35.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind --name jira-update-issue-sink-binding timer-source?message="The new comment"\&period=60000 --step insert-header-action -p step-0.name=issueKey -p step-0.value=MYP-170 --step insert-header-action -p step-1.name=issueTypeName -p step-1.value=Story --step insert-header-action  -p step-2.name=issueSummary -p step-2.value="This is a story 123" --step insert-header-action -p step-3.name=issuePriorityName -p step-3.value=Highest jira-update-issue-sink?jiraUrl="jira url"\&username="username"\&password="password"
```

This command creates the KameletBinding in the current namespace on the cluster.

35.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/jira-update-issue-sink.kamelet.yaml

CHAPTER 36. JIRA SOURCE

Receive notifications about new issues from Jira.

36.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **jira-source** Kamelet:

Property	Name	Description	Type	Default	Example
jiraUrl *	Jira URL	The URL of your instance of Jira	string		**"http://my_jira.com:8081"**
password *	Password	The password to access Jira	string		
username *	Username	The username to access Jira	string		
jql	JQL	A query to filter issues	string		**"project=MyProject"**

NOTE

Fields marked with an asterisk (*) are mandatory.

36.2. DEPENDENCIES

At runtime, the **jira-source** Kamelet relies upon the presence of the following dependencies:

- camel:jackson
- camel:kamelet
- camel:jira

36.3. USAGE

This section describes how you can use the **jira-source**.

36.3.1. Knative Source

You can use the **jira-source** Kamelet as a Knative source by binding it to a Knative object.

jira-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: jira-source-binding
```

```
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: jira-source
    properties:
      jiraUrl: "http://my_jira.com:8081"
      password: "The Password"
      username: "The Username"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

36.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

36.3.1.2. Procedure for using the cluster CLI

1. Save the **jira-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the source by using the following command:

```
oc apply -f jira-source-binding.yaml
```

36.3.1.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind jira-source -p "source.jiraUrl=http://my_jira.com:8081" -p "source.password=The Password" -p "source.username=The Username" channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

36.3.2. Kafka Source

You can use the **jira-source** Kamelet as a Kafka source by binding it to a Kafka topic.

jira-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: jira-source-binding
spec:
  source:
    ref:
      kind: Kamelet
```

```
    apiVersion: camel.apache.org/v1alpha1
    name: jira-source
  properties:
    jiraUrl: "http://my_jira.com:8081"
    password: "The Password"
    username: "The Username"
sink:
  ref:
    kind: KafkaTopic
    apiVersion: kafka.strimzi.io/v1beta1
    name: my-topic
```

36.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

36.3.2.2. Procedure for using the cluster CLI

1. Save the **jira-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f jira-source-binding.yaml
```

36.3.2.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind jira-source -p "source.jiraUrl=http://my_jira.com:8081" -p "source.password=The
Password" -p "source.username=The Username" kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

36.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/jira-source.kamelet.yaml

CHAPTER 37. JMS - AMQP 1.0 KAMELET SINK

A Kamelet that can produce events to any AMQP 1.0 compliant message broker using the Apache Qpid JMS client

37.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **jms-amqp-10-sink** Kamelet:

Property	Name	Description	Type	Default	Example
destinationName *	Destination Name	The JMS destination name	string		
remoteURI *	Broker URL	The JMS URL	string		**"amqp://my-host:31616"**
destinationType	Destination Type	The JMS destination type (i.e.: queue or topic)	string	**"queue"**	

NOTE

Fields marked with an asterisk (*) are mandatory.

37.2. DEPENDENCIES

At runtime, the **jms-amqp-10-sink** Kamelet relies upon the presence of the following dependencies:

- camel:jms
- camel:kamelet
- mvn:org.apache.qpid:qpid-jms-client:0.55.0

37.3. USAGE

This section describes how you can use the **jms-amqp-10-sink**.

37.3.1. Knative Sink

You can use the **jms-amqp-10-sink** Kamelet as a Knative sink by binding it to a Knative object.

jms-amqp-10-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: jms-amqp-10-sink-binding
spec:
  source:
```

```
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: jms-amqp-10-sink
    properties:
      destinationName: "The Destination Name"
      remoteURI: "amqp://my-host:31616"
```

37.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

37.3.1.2. Procedure for using the cluster CLI

1. Save the **jms-amqp-10-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f jms-amqp-10-sink-binding.yaml
```

37.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel jms-amqp-10-sink -p "sink.destinationName=The Destination Name" -p "sink.remoteURI=amqp://my-host:31616"
```

This command creates the KameletBinding in the current namespace on the cluster.

37.3.2. Kafka Sink

You can use the **jms-amqp-10-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

jms-amqp-10-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: jms-amqp-10-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
```

```
  ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: jms-amqp-10-sink
  properties:
    destinationName: "The Destination Name"
    remoteURI: "amqp://my-host:31616"
```

37.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

37.3.2.2. Procedure for using the cluster CLI

1. Save the **jms-amqp-10-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f jms-amqp-10-sink-binding.yaml
```

37.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic jms-amqp-10-sink -p
"sink.destinationName=The Destination Name" -p "sink.remoteURI=amqp://my-host:31616"
```

This command creates the KameletBinding in the current namespace on the cluster.

37.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/jms-amqp-10-sink.kamelet.yaml

CHAPTER 38. JMS - AMQP 1.0 KAMELET SOURCE

A Kamelet that can consume events from any AMQP 1.0 compliant message broker using the Apache Qpid JMS client

38.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **jms-amqp-10-source** Kamelet:

Property	Name	Description	Type	Default	Example
destinationName *	Destination Name	The JMS destination name	string		
remoteURI *	Broker URL	The JMS URL	string		**"amqp://my-host:31616"**
destinationType	Destination Type	The JMS destination type (i.e.: queue or topic)	string	**"queue"**	

NOTE

Fields marked with an asterisk (*) are mandatory.

38.2. DEPENDENCIES

At runtime, the **jms-amqp-10-source** Kamelet relies upon the presence of the following dependencies:

- camel:jms
- camel:kamelet
- mvn:org.apache.qpid:qpid-jms-client:0.55.0

38.3. USAGE

This section describes how you can use the **jms-amqp-10-source**.

38.3.1. Knative Source

You can use the **jms-amqp-10-source** Kamelet as a Knative source by binding it to a Knative object.

jms-amqp-10-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: jms-amqp-10-source-binding
spec:
```

```
source:
  ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: jms-amqp-10-source
  properties:
    destinationName: "The Destination Name"
    remoteURI: "amqp://my-host:31616"
sink:
  ref:
    kind: Channel
    apiVersion: messaging.knative.dev/v1
    name: mychannel
```

38.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

38.3.1.2. Procedure for using the cluster CLI

1. Save the **jms-amqp-10-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the source by using the following command:

```
oc apply -f jms-amqp-10-source-binding.yaml
```

38.3.1.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind jms-amqp-10-source -p "source.destinationName=The Destination Name" -p
"source.remoteURI=amqp://my-host:31616" channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

38.3.2. Kafka Source

You can use the **jms-amqp-10-source** Kamelet as a Kafka source by binding it to a Kafka topic.

jms-amqp-10-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: jms-amqp-10-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: jms-amqp-10-source
```

```
    properties:
      destinationName: "The Destination Name"
      remoteURI: "amqp://my-host:31616"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

38.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

38.3.2.2. Procedure for using the cluster CLI

1. Save the **jms-amqp-10-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f jms-amqp-10-source-binding.yaml
```

38.3.2.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind jms-amqp-10-source -p "source.destinationName=The Destination Name" -p
"source.remoteURI=amqp://my-host:31616" kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

38.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/jms-amqp-10-source.kamelet.yaml

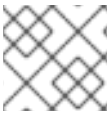
CHAPTER 39. JMS - IBM MQ KAMELET SINK

A Kamelet that can produce events to an IBM MQ message queue using JMS.

39.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **jms-ibm-mq-sink** Kamelet:

Property	Name	Description	Type	Default	Example
channel *	IBM MQ Channel	Name of the IBM MQ Channel	string		
destinationName *	Destination Name	The destination name	string		
password *	Password	Password to authenticate to IBM MQ server	string		
queueManager *	IBM MQ Queue Manager	Name of the IBM MQ Queue Manager	string		
serverName *	IBM MQ Server name	IBM MQ Server name or address	string		
serverPort *	IBM MQ Server Port	IBM MQ Server port	integer	**1414**	
username *	Username	Username to authenticate to IBM MQ server	string		
clientId	IBM MQ Client ID	Name of the IBM MQ Client ID	string		
destinationType	Destination Type	The JMS destination type (queue or topic)	string	**"queue"**	



NOTE

Fields marked with an asterisk (*) are mandatory.

39.2. DEPENDENCIES

At runtime, the **jms-ibm-mq-sink** Kamelet relies upon the presence of the following dependencies:

- camel:jms

- camel:kamelet
- mvn:com.ibm.mq:com.ibm.mq.allclient:9.2.5.0

39.3. USAGE

This section describes how you can use the **jms-ibm-mq-sink**.

39.3.1. Knative Sink

You can use the **jms-ibm-mq-sink** Kamelet as a Knative sink by binding it to a Knative object.

jms-ibm-mq-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: jms-ibm-mq-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
    properties:
      serverName: "10.103.41.245"
      serverPort: "1414"
      destinationType: "queue"
      destinationName: "DEV.QUEUE.1"
      queueManager: QM1
      channel: DEV.APP.SVRCONN
      username: app
      password: passw0rd
```

39.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

39.3.1.2. Procedure for using the cluster CLI

1. Save the **jms-ibm-mq-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f jms-ibm-mq-sink-binding.yaml
```

39.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind --name jms-ibm-mq-sink-binding timer-source?message="Hello IBM MQ!" 'jms-ibm-mq-sink?
serverName=10.103.41.245&serverPort=1414&destinationType=queue&destinationName=DEV.QUEUE.1&queueManager=QM1&channel=DEV.APP.SVRCONN&username=app&password=passw0rd'
```

This command creates the KameletBinding in the current namespace on the cluster.

39.3.2. Kafka Sink

You can use the **jms-ibm-mq-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

jms-ibm-mq-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: jms-ibm-mq-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: jms-ibm-mq-sink
    properties:
      serverName: "10.103.41.245"
      serverPort: "1414"
      destinationType: "queue"
      destinationName: "DEV.QUEUE.1"
      queueManager: QM1
      channel: DEV.APP.SVRCONN
      username: app
      password: passw0rd
```

39.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

39.3.2.2. Procedure for using the cluster CLI

1. Save the **jms-ibm-mq-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

   -

```
oc apply -f jms-ibm-mq-sink-binding.yaml
```

39.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind --name jms-ibm-mq-sink-binding timer-source?message="Hello IBM MQ!" 'jms-ibm-mq-sink?
serverName=10.103.41.245&serverPort=1414&destinationType=queue&destinationName=DEV.QUEUE.1&queueManager=QM1&channel=DEV.APP.SVRCONN&username=app&password=passw0rd'
```

This command creates the KameletBinding in the current namespace on the cluster.

39.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/jms-ibm-mq-sink.kamelet.yaml

CHAPTER 40. JMS - IBM MQ KAMELET SOURCE

A Kamelet that can read events from an IBM MQ message queue using JMS.

40.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **jms-ibm-mq-source** Kamelet:

Property	Name	Description	Type	Default	Example
channel *	IBM MQ Channel	Name of the IBM MQ Channel	string		
destinationName *	Destination Name	The destination name	string		
password *	Password	Password to authenticate to IBM MQ server	string		
queueManager *	IBM MQ Queue Manager	Name of the IBM MQ Queue Manager	string		
serverName *	IBM MQ Server name	IBM MQ Server name or address	string		
serverPort *	IBM MQ Server Port	IBM MQ Server port	integer	**1414**	
username *	Username	Username to authenticate to IBM MQ server	string		
clientId	IBM MQ Client ID	Name of the IBM MQ Client ID	string		
destinationType	Destination Type	The JMS destination type (queue or topic)	string	**"queue"**	

NOTE

Fields marked with an asterisk (*) are mandatory.

40.2. DEPENDENCIES

At runtime, the **jms-ibm-mq-source** Kamelet relies upon the presence of the following dependencies:

- camel:jms
- camel:kamelet
- mvn:com.ibm.mq:com.ibm.mq.allclient:9.2.5.0

40.3. USAGE

This section describes how you can use the **jms-ibm-mq-source**.

40.3.1. Knative Source

You can use the **jms-ibm-mq-source** Kamelet as a Knative source by binding it to a Knative object.

jms-ibm-mq-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: jms-ibm-mq-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: jms-ibm-mq-source
    properties:
      serverName: "10.103.41.245"
      serverPort: "1414"
      destinationType: "queue"
      destinationName: "DEV.QUEUE.1"
      queueManager: QM1
      channel: DEV.APP.SVRCONN
      username: app
      password: passw0rd
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

40.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

40.3.1.2. Procedure for using the cluster CLI

1. Save the **jms-ibm-mq-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the source by using the following command:

```
oc apply -f jms-ibm-mq-source-binding.yaml
```

40.3.1.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind --name jms-ibm-mq-source-binding 'jms-ibm-mq-source?
serverName=10.103.41.245&serverPort=1414&destinationType=queue&destinationName=DEV.QUEU
E.1&queueManager=QM1&channel=DEV.APP.SVRCONN&username=app&password=passw0rd'
channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

40.3.2. Kafka Source

You can use the **jms-ibm-mq-source** Kamelet as a Kafka source by binding it to a Kafka topic.

jms-ibm-mq-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: jms-ibm-mq-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: jms-ibm-mq-source
    properties:
      serverName: "10.103.41.245"
      serverPort: "1414"
      destinationType: "queue"
      destinationName: "DEV.QUEUE.1"
      queueManager: QM1
      channel: DEV.APP.SVRCONN
      username: app
      password: passw0rd
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

40.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

40.3.2.2. Procedure for using the cluster CLI

1. Save the **jms-ibm-mq-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

   -

```
oc apply -f jms-ibm-mq-source-binding.yaml
```

40.3.2.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind --name jms-ibm-mq-source-binding 'jms-ibm-mq-source?
serverName=10.103.41.245&serverPort=1414&destinationType=queue&destinationName=DEV.QUEU
E.1&queueManager=QM1&channel=DEV.APP.SVRCONN&username=app&password=passw0rd'
kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

40.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/jms-ibm-mq-source.kamelet.yaml

CHAPTER 41. JSON DESERIALIZE ACTION

Deserialize payload to JSON

41.1. CONFIGURATION OPTIONS

The **json-deserialize-action** Kamelet does not specify any configuration option.

41.2. DEPENDENCIES

At runtime, the **json-deserialize-action** Kamelet relies upon the presence of the following dependencies:

- camel:kamelet
- camel:core
- camel:jackson

41.3. USAGE

This section describes how you can use the **json-deserialize-action**.

41.3.1. Knative Action

You can use the **json-deserialize-action** Kamelet as an intermediate step in a Knative binding.

json-deserialize-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: json-deserialize-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: "Hello"
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: json-deserialize-action
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

41.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

41.3.1.2. Procedure for using the cluster CLI

1. Save the **json-deserialize-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the action by using the following command:

```
oc apply -f json-deserialize-action-binding.yaml
```

41.3.1.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step json-deserialize-action channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

41.3.2. Kafka Action

You can use the **json-deserialize-action** Kamelet as an intermediate step in a Kafka binding.

json-deserialize-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: json-deserialize-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: "Hello"
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: json-deserialize-action
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

41.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

41.3.2.2. Procedure for using the cluster CLI

1. Save the **json-deserialize-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f json-deserialize-action-binding.yaml
```

41.3.2.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step json-deserialize-action
kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

41.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/json-deserialize-action.kamelet.yaml

CHAPTER 42. JSON SERIALIZE ACTION

Serialize payload to JSON

42.1. CONFIGURATION OPTIONS

The **json-serialize-action** Kamelet does not specify any configuration option.

42.2. DEPENDENCIES

At runtime, the **json-serialize-action** Kamelet relies upon the presence of the following dependencies:

- camel:kamelet
- camel:core
- camel:jackson

42.3. USAGE

This section describes how you can use the **json-serialize-action**.

42.3.1. Knative Action

You can use the **json-serialize-action** Kamelet as an intermediate step in a Knative binding.

json-serialize-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: json-serialize-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: "Hello"
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: json-serialize-action
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

42.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

42.3.1.2. Procedure for using the cluster CLI

1. Save the **json-serialize-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f json-serialize-action-binding.yaml
```

42.3.1.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step json-serialize-action channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

42.3.2. Kafka Action

You can use the **json-serialize-action** Kamelet as an intermediate step in a Kafka binding.

json-serialize-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: json-serialize-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: "Hello"
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: json-serialize-action
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

42.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

42.3.2.2. Procedure for using the cluster CLI

1. Save the **json-serialize-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the action by using the following command:

```
oc apply -f json-serialize-action-binding.yaml
```

42.3.2.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step json-serialize-action
kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

42.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/json-serialize-action.kamelet.yaml

CHAPTER 43. KAFKA SINK

Send data to Kafka topics.

The Kamelet is able to understand the following headers to be set:

- **key** / **ce-key**: as message key
- **partition-key** / **ce-partitionkey**: as message partition key

Both the headers are optional.

43.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **kafka-sink** Kamelet:

Property	Name	Description	Type	Default	Example
bootstrapServers *	Brokers	Comma separated list of Kafka Broker URLs	string		
password *	Password	Password to authenticate to kafka	string		
topic *	Topic Names	Comma separated list of Kafka topic names	string		
user *	Username	Username to authenticate to Kafka	string		
saslMechanism	SASL Mechanism	The Simple Authentication and Security Layer (SASL) Mechanism used.	string	**"PLAIN"**	
securityProtocol	Security Protocol	Protocol used to communicate with brokers. SASL_PLAINTEXT, PLAINTEXT, SASL_SSL and SSL are supported	string	**"SASL_SSL"**	

NOTE

Fields marked with an asterisk (*) are mandatory.

43.2. DEPENDENCIES

At runtime, the `kafka-sink Kamelet relies upon the presence of the following dependencies:

- camel:kafka
- camel:kamelet

43.3. USAGE

This section describes how you can use the **kafka-sink**.

43.3.1. Knative Sink

You can use the **kafka-sink** Kamelet as a Knative sink by binding it to a Knative object.

kafka-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: kafka-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: kafka-sink
    properties:
      bootstrapServers: "The Brokers"
      password: "The Password"
      topic: "The Topic Names"
      user: "The Username"
```

43.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

43.3.1.2. Procedure for using the cluster CLI

1. Save the **kafka-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f kafka-sink-binding.yaml
```

43.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel kafka-sink -p "sink.bootstrapServers=The Brokers" -p
"sink.password=The Password" -p "sink.topic=The Topic Names" -p "sink.user=The Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

43.3.2. Kafka Sink

You can use the **kafka-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

kafka-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: kafka-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: kafka-sink
    properties:
      bootstrapServers: "The Brokers"
      password: "The Password"
      topic: "The Topic Names"
      user: "The Username"
```

43.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

43.3.2.2. Procedure for using the cluster CLI

1. Save the **kafka-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f kafka-sink-binding.yaml
```

43.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic kafka-sink -p "sink.bootstrapServers=The Brokers" -p "sink.password=The Password" -p "sink.topic=The Topic Names" -p "sink.user=The Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

43.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/kafka-sink.kamelet.yaml

CHAPTER 44. KAFKA SOURCE

Receive data from Kafka topics.

44.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **kafka-source** Kamelet:

Property	Name	Description	Type	Default	Example
topic *	Topic Names	Comma separated list of Kafka topic names	string		
bootstrapServers *	Brokers	Comma separated list of Kafka Broker URLs	string		
securityProtocol	Security Protocol	Protocol used to communicate with brokers. SASL_PLAINTEXT, PLAINTEXT, SASL_SSL and SSL are supported	string	**"SASL_SSL"**	
saslMechanism	SASL Mechanism	The Simple Authentication and Security Layer (SASL) Mechanism used.	string	**"PLAIN"**	
user *	Username	Username to authenticate to Kafka	string		
password *	Password	Password to authenticate to kafka	string		
autoCommitEnable	Auto Commit Enable	If true, periodically commit to ZooKeeper the offset of messages already fetched by the consumer.	boolean	**true**	
allowManualCommit	Allow Manual Commit	Whether to allow doing manual commits	boolean	**false**	

Property	Name	Description	Type	Default	Example
autoOffsetReset	Auto Offset Reset	What to do when there is no initial offset. There are 3 enums and the value can be one of latest, earliest, none	string	**"latest"**	
pollOnError	Poll On Error Behavior	What to do if kafka threw an exception while polling for new messages. There are 5 enums and the value can be one of DISCARD, ERROR_HANDLER, RECONNECT, RETRY, STOP	string	**"ERROR_HANDLER"**	
deserializeHeaders	Automatically Deserialize Headers	When enabled the Kamelet source will deserialize all message headers to String representation. The default is **false**.	boolean	**true**	
consumerGroup	Consumer Group	A string that uniquely identifies the group of consumers to which this source belongs	string		"my-group-id"

NOTE

Fields marked with an asterisk (*) are mandatory.

44.2. DEPENDENCIES

At runtime, the `kafka-source Kamelet relies upon the presence of the following dependencies:

- camel:kafka
- camel:kamelet
- camel:core

44.3. USAGE

This section describes how you can use the **kafka-source**.

44.3.1. Knative Source

You can use the **kafka-source** Kamelet as a Knative source by binding it to a Knative object.

kafka-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: kafka-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: kafka-source
    properties:
      bootstrapServers: "The Brokers"
      password: "The Password"
      topic: "The Topic Names"
      user: "The Username"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

44.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

44.3.1.2. Procedure for using the cluster CLI

1. Save the **kafka-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f kafka-source-binding.yaml
```

44.3.1.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind kafka-source -p "source.bootstrapServers=The Brokers" -p "source.password=The
Password" -p "source.topic=The Topic Names" -p "source.user=The Username" channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

44.3.2. Kafka Source

You can use the **kafka-source** Kamelet as a Kafka source by binding it to a Kafka topic.

kafka-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: kafka-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: kafka-source
    properties:
      bootstrapServers: "The Brokers"
      password: "The Password"
      topic: "The Topic Names"
      user: "The Username"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

44.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

44.3.2.2. Procedure for using the cluster CLI

1. Save the **kafka-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the source by using the following command:

```
oc apply -f kafka-source-binding.yaml
```

44.3.2.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind kafka-source -p "source.bootstrapServers=The Brokers" -p "source.password=The
Password" -p "source.topic=The Topic Names" -p "source.user=The Username"
kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

44.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/kafka-source.kamelet.yaml

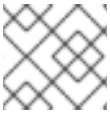
CHAPTER 45. KAFKA TOPIC NAME MATCHES FILTER ACTION

Filter based on kafka topic value compared to regex

45.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **topic-name-matches-filter-action** Kamelet:

Property	Name	Description	Type	Default	Example
regex *	Regex	The Regex to Evaluate against the Kafka topic name	string		



NOTE

Fields marked with an asterisk (*) are mandatory.

45.2. DEPENDENCIES

At runtime, the **topic-name-matches-filter-action** Kamelet relies upon the presence of the following dependencies:

- camel:core
- camel:kamelet

45.3. USAGE

This section describes how you can use the **topic-name-matches-filter-action**.

45.3.1. Kafka Action

You can use the **topic-name-matches-filter-action** Kamelet as an intermediate step in a Kafka binding.

topic-name-matches-filter-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: topic-name-matches-filter-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: "Hello"
  steps:
```

```
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: topic-name-matches-filter-action
  properties:
    regex: "The Regex"
sink:
  ref:
    kind: KafkaTopic
    apiVersion: kafka.strimzi.io/v1beta1
    name: my-topic
```

45.3.1.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

45.3.1.2. Procedure for using the cluster CLI

1. Save the **topic-name-matches-filter-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f topic-name-matches-filter-action-binding.yaml
```

45.3.1.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step topic-name-matches-filter-action -p "step-
0.regex=The Regex" kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

45.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/topic-name-matches-filter-action.kamelet.yaml

CHAPTER 46. LOG SINK

A sink that logs all data that it receives, useful for debugging purposes.

46.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **log-sink** Kamelet:

Property	Name	Description	Type	Default	Example
showHeaders	Show Headers	Show the headers received	boolean	**false**	
showStreams	Show Streams	Show the stream bodies (they may not be available in following steps)	boolean	**false**	

NOTE

Fields marked with an asterisk (*) are mandatory.

46.2. DEPENDENCIES

At runtime, the **log-sink** Kamelet relies upon the presence of the following dependencies:

- camel:kamelet
- camel:log

46.3. USAGE

This section describes how you can use the **log-sink**.

46.3.1. Knative Sink

You can use the **log-sink** Kamelet as a Knative sink by binding it to a Knative object.

log-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: log-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
```

```
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: log-sink
```

46.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

46.3.1.2. Procedure for using the cluster CLI

1. Save the **log-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f log-sink-binding.yaml
```

46.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel log-sink
```

This command creates the KameletBinding in the current namespace on the cluster.

46.3.2. Kafka Sink

You can use the **log-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

log-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: log-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: log-sink
```

46.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

46.3.2.2. Procedure for using the cluster CLI

1. Save the **log-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f log-sink-binding.yaml
```

46.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic log-sink
```

This command creates the KameletBinding in the current namespace on the cluster.

46.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/log-sink.kamelet.yaml

CHAPTER 47. MARIADB SINK

Send data to a MariaDB Database.

This Kamelet expects a JSON as body. The mapping between the JSON fields and parameters is done by key, so if you have the following query:

'INSERT INTO accounts (username,city) VALUES (:#username,:#city)'

The Kamelet needs to receive as input something like:

'{ "username":"oscerd", "city":"Rome"}'

47.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **mariadb-sink** Kamelet:

Property	Name	Description	Type	Default	Example
databaseName *	Database Name	The Database Name we are pointing	string		
password *	Password	The password to use for accessing a secured MariaDB Database	string		
query *	Query	The Query to execute against the MariaDB Database	string		**"INSERT INTO accounts (username,city) VALUES (:#username,:#city)"**
serverName *	Server Name	Server Name for the data source	string		**"localhost"**
username *	Username	The username to use for accessing a secured MariaDB Database	string		
serverPort	Server Port	Server Port for the data source	string	**3306**	

NOTE

Fields marked with an asterisk (*) are mandatory.

47.2. DEPENDENCIES

At runtime, the **mariadb-sink** Kamelet relies upon the presence of the following dependencies:

- camel:jackson
- camel:kamelet
- camel:sql
- mvn:org.apache.commons:commons-dbcp2:2.7.0.redhat-00001
- mvn:org.mariadb.jdbc:mariadb-java-client

47.3. USAGE

This section describes how you can use the **mariadb-sink**.

47.3.1. Knative Sink

You can use the **mariadb-sink** Kamelet as a Knative sink by binding it to a Knative object.

mariadb-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: mariadb-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: mariadb-sink
    properties:
      databaseName: "The Database Name"
      password: "The Password"
      query: "INSERT INTO accounts (username,city) VALUES (:#username,:#city)"
      serverName: "localhost"
      username: "The Username"
```

47.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

47.3.1.2. Procedure for using the cluster CLI

1. Save the **mariadb-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f mariadb-sink-binding.yaml
```

47.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel mariadb-sink -p "sink.databaseName=The Database Name" -p
"sink.password=The Password" -p "sink.query=INSERT INTO accounts (username,city) VALUES
(:#username,:#city)" -p "sink.serverName=localhost" -p "sink.username=The Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

47.3.2. Kafka Sink

You can use the **mariadb-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

mariadb-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: mariadb-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: mariadb-sink
    properties:
      databaseName: "The Database Name"
      password: "The Password"
      query: "INSERT INTO accounts (username,city) VALUES (:#username,:#city)"
      serverName: "localhost"
      username: "The Username"
```

47.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

47.3.2.2. Procedure for using the cluster CLI

1. Save the **mariadb-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f mariadb-sink-binding.yaml
```

47.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic mariadb-sink -p "sink.databaseName=The Database Name" -p "sink.password=The Password" -p "sink.query=INSERT INTO accounts (username,city) VALUES (:#username,:#city)" -p "sink.serverName=localhost" -p "sink.username=The Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

47.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/mariadb-sink.kamelet.yaml

CHAPTER 48. MASK FIELDS ACTION

Mask fields with a constant value in the message in transit

48.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **mask-field-action** Kamelet:

Property	Name	Description	Type	Default	Example
fields *	Fields	Comma separated list of fields to mask	string		
replacement *	Replacement	Replacement for the fields to be masked	string		

NOTE

Fields marked with an asterisk (*) are mandatory.

48.2. DEPENDENCIES

At runtime, the **mask-field-action** Kamelet relies upon the presence of the following dependencies:

- github:openshift-integration.kamelet-catalog:camel-kamelets-utils:kamelet-catalog-1.6-SNAPSHOT
- camel:jackson
- camel:kamelet
- camel:core

48.3. USAGE

This section describes how you can use the **mask-field-action**.

48.3.1. Knative Action

You can use the **mask-field-action** Kamelet as an intermediate step in a Knative binding.

mask-field-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: mask-field-action-binding
spec:
  source:
    ref:
      kind: Kamelet
```

```
    apiVersion: camel.apache.org/v1alpha1
    name: timer-source
  properties:
    message: "Hello"
steps:
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: mask-field-action
  properties:
    fields: "The Fields"
    replacement: "The Replacement"
sink:
  ref:
    kind: Channel
    apiVersion: messaging.knative.dev/v1
    name: mychannel
```

48.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

48.3.1.2. Procedure for using the cluster CLI

1. Save the **mask-field-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f mask-field-action-binding.yaml
```

48.3.1.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step mask-field-action -p "step-0.fields=The Fields" -p
"step-0.replacement=The Replacement" channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

48.3.2. Kafka Action

You can use the **mask-field-action** Kamelet as an intermediate step in a Kafka binding.

mask-field-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: mask-field-action-binding
spec:
  source:
```

```
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: "Hello"
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: mask-field-action
    properties:
      fields: "The Fields"
      replacement: "The Replacement"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

48.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

48.3.2.2. Procedure for using the cluster CLI

1. Save the **mask-field-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the action by using the following command:

```
oc apply -f mask-field-action-binding.yaml
```

48.3.2.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step mask-field-action -p "step-0.fields=The Fields" -p
"step-0.replacement=The Replacement" kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

48.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/mask-field-action.kamelet.yaml

CHAPTER 49. MESSAGE TIMESTAMP ROUTER ACTION

Update the topic field as a function of the original topic name and the record's timestamp field.

49.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **message-timestamp-router-action** Kamelet:

Property	Name	Description	Type	Default	Example
timestampKeys *	Timestamp Keys	Comma separated list of Timestamp keys. The timestamp is taken from the first found field.	string		
timestampFormat	Timestamp Format	Format string for the timestamp that is compatible with java.text.SimpleDateFormat.	string	**"yyyyMMdd"**	
timestampKeyFormat	Timestamp Keys Format	Format of the timestamp keys. Possible values are 'timestamp' or any format string for the timestamp that is compatible with java.text.SimpleDateFormat. In case of 'timestamp' the field will be evaluated as milliseconds since 1970, so as a UNIX Timestamp.	string	**"timestamp"**	
topicFormat	Topic Format	Format string which can contain '$[topic]' and '$[timestamp]' as placeholders for the topic and timestamp, respectively.	string	**"topic-$[timestamp]"**	

NOTE

Fields marked with an asterisk (*) are mandatory.

49.2. DEPENDENCIES

At runtime, the **message-timestamp-router-action** Kamelet relies upon the presence of the following dependencies:

- mvn:org.apache.camel.kamelets:camel-kamelets-utils:1.0.0.fuse-800048-redhat-00001
- camel:jackson
- camel:kamelet
- camel:core

49.3. USAGE

This section describes how you can use the **message-timestamp-router-action**.

49.3.1. Knative Action

You can use the **message-timestamp-router-action** Kamelet as an intermediate step in a Knative binding.

message-timestamp-router-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: message-timestamp-router-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: "Hello"
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: message-timestamp-router-action
    properties:
      timestampKeys: "The Timestamp Keys"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

49.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

49.3.1.2. Procedure for using the cluster CLI

1. Save the **message-timestamp-router-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f message-timestamp-router-action-binding.yaml
```

49.3.1.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step message-timestamp-router-action -p "step-
0.timestampKeys=The Timestamp Keys" channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

49.3.2. Kafka Action

You can use the **message-timestamp-router-action** Kamelet as an intermediate step in a Kafka binding.

message-timestamp-router-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: message-timestamp-router-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: "Hello"
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: message-timestamp-router-action
    properties:
      timestampKeys: "The Timestamp Keys"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

49.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

49.3.2.2. Procedure for using the cluster CLI

1. Save the **message-timestamp-router-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the action by using the following command:

```
oc apply -f message-timestamp-router-action-binding.yaml
```

49.3.2.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step message-timestamp-router-action -p "step-0.timestampKeys=The Timestamp Keys" kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

49.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/message-timestamp-router-action.kamelet.yaml

CHAPTER 50. MONGODB SINK

Send documents to MongoDB.

This Kamelet expects a JSON as body.

Properties you can set as headers:

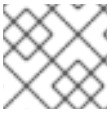
- **db-upsert** / **ce-dbupsert**: if the database should create the element if it does not exist. Boolean value.

50.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **mongodb-sink** Kamelet:

Property	Name	Description	Type	Default	Example
collection *	MongoDB Collection	Sets the name of the MongoDB collection to bind to this endpoint.	string		
database *	MongoDB Database	Sets the name of the MongoDB database to target.	string		
hosts *	MongoDB Hosts	Comma separated list of MongoDB Host Addresses in host:port format.	string		
createCollection	Collection	Create collection during initialisation if it doesn't exist.	boolean	**false**	
password	MongoDB Password	User password for accessing MongoDB.	string		
username	MongoDB Username	Username for accessing MongoDB.	string		

Property	Name	Description	Type	Default	Example
writeConcern	Write Concern	Configure the level of acknowledgment requested from MongoDB for write operations, possible values are ACKNOWLEDGED, W1, W2, W3, UNACKNOWLEDGED, JOURNALED, MAJORITY.	string		



NOTE

Fields marked with an asterisk (*) are mandatory.

50.2. DEPENDENCIES

At runtime, the **mongodb-sink** Kamelet relies upon the presence of the following dependencies:

- camel:kamelet
- camel:mongodb
- camel:jackson

50.3. USAGE

This section describes how you can use the **mongodb-sink**.

50.3.1. Knative Sink

You can use the **mongodb-sink** Kamelet as a Knative sink by binding it to a Knative object.

mongodb-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: mongodb-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
```

```
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: mongodb-sink
  properties:
    collection: "The MongoDB Collection"
    database: "The MongoDB Database"
    hosts: "The MongoDB Hosts"
```

50.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

50.3.1.2. Procedure for using the cluster CLI

1. Save the **mongodb-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f mongodb-sink-binding.yaml
```

50.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel mongodb-sink -p "sink.collection=The MongoDB Collection" -p
"sink.database=The MongoDB Database" -p "sink.hosts=The MongoDB Hosts"
```

This command creates the KameletBinding in the current namespace on the cluster.

50.3.2. Kafka Sink

You can use the **mongodb-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

mongodb-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: mongodb-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: mongodb-sink
    properties:
```

```
collection: "The MongoDB Collection"
database: "The MongoDB Database"
hosts: "The MongoDB Hosts"
```

50.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

50.3.2.2. Procedure for using the cluster CLI

1. Save the **mongodb-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f mongodb-sink-binding.yaml
```

50.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic mongodb-sink -p "sink.collection=The MongoDB Collection" -p "sink.database=The MongoDB Database" -p "sink.hosts=The MongoDB Hosts"
```

This command creates the KameletBinding in the current namespace on the cluster.

50.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/mongodb-sink.kamelet.yaml

CHAPTER 51. MONGODB SOURCE

Consume documents from MongoDB.

If the persistentTailTracking option will be enabled, the consumer will keep track of the last consumed message and on the next restart, the consumption will restart from that message. In case of persistentTailTracking enabled, the tailTrackIncreasingField must be provided (by default it is optional).

If the persistentTailTracking option won't be enabled, the consumer will consume the whole collection and wait in idle for new documents to consume.

51.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **mongodb-source** Kamelet:

Property	Name	Description	Type	Default	Example
collection *	MongoDB Collection	Sets the name of the MongoDB collection to bind to this endpoint.	string		
database *	MongoDB Database	Sets the name of the MongoDB database to target.	string		
hosts *	MongoDB Hosts	Comma separated list of MongoDB Host Addresses in host:port format.	string		
password *	MongoDB Password	User password for accessing MongoDB.	string		
username *	MongoDB Username	Username for accessing MongoDB. The username must be present in the MongoDB's authentication database (authenticationDatabase). By default, the MongoDB authenticationDatabase is 'admin'.	string		

Property	Name	Description	Type	Default	Example
persistentTailTracking	MongoDB Persistent Tail Tracking	Enable persistent tail tracking, which is a mechanism to keep track of the last consumed message across system restarts. The next time the system is up, the endpoint will recover the cursor from the point where it last stopped slurping records.	boolean	**false**	
tailTrackIncreasingField	MongoDB Tail Track Increasing Field	Correlation field in the incoming record which is of increasing nature and will be used to position the tailing cursor every time it is generated.	string		

NOTE

Fields marked with an asterisk (*) are mandatory.

51.2. DEPENDENCIES

At runtime, the **mongodb-source** Kamelet relies upon the presence of the following dependencies:

- camel:kamelet
- camel:mongodb
- camel:jackson

51.3. USAGE

This section describes how you can use the **mongodb-source**.

51.3.1. Knative Source

You can use the **mongodb-source** Kamelet as a Knative source by binding it to a Knative object.

mongodb-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
```

```
metadata:
  name: mongodb-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: mongodb-source
    properties:
      collection: "The MongoDB Collection"
      database: "The MongoDB Database"
      hosts: "The MongoDB Hosts"
      password: "The MongoDB Password"
      username: "The MongoDB Username"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

51.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

51.3.1.2. Procedure for using the cluster CLI

1. Save the **mongodb-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f mongodb-source-binding.yaml
```

51.3.1.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind mongodb-source -p "source.collection=The MongoDB Collection" -p
"source.database=The MongoDB Database" -p "source.hosts=The MongoDB Hosts" -p
"source.password=The MongoDB Password" -p "source.username=The MongoDB Username"
channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

51.3.2. Kafka Source

You can use the **mongodb-source** Kamelet as a Kafka source by binding it to a Kafka topic.

mongodb-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
```

```
metadata:
  name: mongodb-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: mongodb-source
    properties:
      collection: "The MongoDB Collection"
      database: "The MongoDB Database"
      hosts: "The MongoDB Hosts"
      password: "The MongoDB Password"
      username: "The MongoDB Username"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

51.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

51.3.2.2. Procedure for using the cluster CLI

1. Save the **mongodb-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the source by using the following command:

```
oc apply -f mongodb-source-binding.yaml
```

51.3.2.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind mongodb-source -p "source.collection=The MongoDB Collection" -p
"source.database=The MongoDB Database" -p "source.hosts=The MongoDB Hosts" -p
"source.password=The MongoDB Password" -p "source.username=The MongoDB Username"
kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

51.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/mongodb-source.kamelet.yaml

CHAPTER 52. MYSQL SINK

Send data to a MySQL Database.

This Kamelet expects a JSON as body. The mapping between the JSON fields and parameters is done by key, so if you have the following query:

'INSERT INTO accounts (username,city) VALUES (:#username,:#city)'

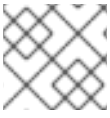
The Kamelet needs to receive as input something like:

'{ "username":"oscerd", "city":"Rome"}'

52.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **mysql-sink** Kamelet:

Property	Name	Description	Type	Default	Example
databaseName *	Database Name	The Database Name we are pointing	string		
password *	Password	The password to use for accessing a secured MySQL Database	string		
query *	Query	The Query to execute against the MySQL Database	string		**"INSERT INTO accounts (username,city) VALUES (:#username,:#city)"**
serverName *	Server Name	Server Name for the data source	string		**"localhost"**
username *	Username	The username to use for accessing a secured MySQL Database	string		
serverPort	Server Port	Server Port for the data source	string	**3306**	



NOTE

Fields marked with an asterisk (*) are mandatory.

52.2. DEPENDENCIES

At runtime, the **mysql-sink** Kamelet relies upon the presence of the following dependencies:

- camel:jackson
- camel:kamelet
- camel:sql
- mvn:org.apache.commons:commons-dbcp2:2.7.0.redhat-00001
- mvn:mysql:mysql-connector-java

52.3. USAGE

This section describes how you can use the **mysql-sink**.

52.3.1. Knative Sink

You can use the **mysql-sink** Kamelet as a Knative sink by binding it to a Knative object.

mysql-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: mysql-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: mysql-sink
    properties:
      databaseName: "The Database Name"
      password: "The Password"
      query: "INSERT INTO accounts (username,city) VALUES (:#username,:#city)"
      serverName: "localhost"
      username: "The Username"
```

52.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

52.3.1.2. Procedure for using the cluster CLI

1. Save the **mysql-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f mysql-sink-binding.yaml
```

52.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel mysql-sink -p "sink.databaseName=The Database Name" -p
"sink.password=The Password" -p "sink.query=INSERT INTO accounts (username,city) VALUES
(:#username,:#city)" -p "sink.serverName=localhost" -p "sink.username=The Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

52.3.2. Kafka Sink

You can use the **mysql-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

mysql-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: mysql-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: mysql-sink
    properties:
      databaseName: "The Database Name"
      password: "The Password"
      query: "INSERT INTO accounts (username,city) VALUES (:#username,:#city)"
      serverName: "localhost"
      username: "The Username"
```

52.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

52.3.2.2. Procedure for using the cluster CLI

1. Save the **mysql-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f mysql-sink-binding.yaml
```

52.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic mysql-sink -p "sink.databaseName=The Database Name" -p "sink.password=The Password" -p "sink.query=INSERT INTO accounts (username,city) VALUES (:#username,:#city)" -p "sink.serverName=localhost" -p "sink.username=The Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

52.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/mysql-sink.kamelet.yaml

CHAPTER 53. POSTGRESQL SINK

Send data to a PostgreSQL Database.

This Kamelet expects a JSON as body. The mapping between the JSON fields and parameters is done by key, so if you have the following query:

'INSERT INTO accounts (username,city) VALUES (:#username,:#city)'

The Kamelet needs to receive as input something like:

'{ "username":"oscerd", "city":"Rome"}'

53.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **postgresql-sink** Kamelet:

Property	Name	Description	Type	Default	Example
databaseName *	Database Name	The Database Name we are pointing	string		
password *	Password	The password to use for accessing a secured PostgreSQL Database	string		
query *	Query	The Query to execute against the PostgreSQL Database	string		**"INSERT INTO accounts (username,city) VALUES (:#username,:#city)"**
serverName *	Server Name	Server Name for the data source	string		**"localhost"**
username *	Username	The username to use for accessing a secured PostgreSQL Database	string		
serverPort	Server Port	Server Port for the data source	string	**5432**	

NOTE

Fields marked with an asterisk (*) are mandatory.

53.2. DEPENDENCIES

At runtime, the **postgresql-sink** Kamelet relies upon the presence of the following dependencies:

- camel:jackson
- camel:kamelet
- camel:sql
- mvn:org.postgresql:postgresql
- mvn:org.apache.commons:commons-dbcp2:2.7.0.redhat-00001

53.3. USAGE

This section describes how you can use the **postgresql-sink**.

53.3.1. Knative Sink

You can use the **postgresql-sink** Kamelet as a Knative sink by binding it to a Knative object.

postgresql-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: postgresql-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: postgresql-sink
    properties:
      databaseName: "The Database Name"
      password: "The Password"
      query: "INSERT INTO accounts (username,city) VALUES (:#username,:#city)"
      serverName: "localhost"
      username: "The Username"
```

53.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

53.3.1.2. Procedure for using the cluster CLI

1. Save the **postgresql-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f postgresql-sink-binding.yaml
```

53.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel postgresql-sink -p "sink.databaseName=The Database Name" -p "sink.password=The Password" -p "sink.query=INSERT INTO accounts (username,city) VALUES (:#username,:#city)" -p "sink.serverName=localhost" -p "sink.username=The Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

53.3.2. Kafka Sink

You can use the **postgresql-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

postgresql-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: postgresql-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: postgresql-sink
    properties:
      databaseName: "The Database Name"
      password: "The Password"
      query: "INSERT INTO accounts (username,city) VALUES (:#username,:#city)"
      serverName: "localhost"
      username: "The Username"
```

53.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

53.3.2.2. Procedure for using the cluster CLI

1. Save the **postgresql-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f postgresql-sink-binding.yaml
```

53.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic postgresql-sink -p "sink.databaseName=The Database Name" -p "sink.password=The Password" -p "sink.query=INSERT INTO accounts (username,city) VALUES (:#username,:#city)" -p "sink.serverName=localhost" -p "sink.username=The Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

53.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/postgresql-sink.kamelet.yaml

CHAPTER 54. PREDICATE FILTER ACTION

Filter based on a JsonPath Expression

54.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **predicate-filter-action** Kamelet:

Property	Name	Description	Type	Default	Example
expression *	Expression	The JsonPath Expression to evaluate, without the external parenthesis. Since this is a filter, the expression will be a negation, this means that if the foo field of the example is equals to John, the message will go ahead, otherwise it will be filtered out.	string		**"@.foo =~ /.*John/"**

NOTE

Fields marked with an asterisk (*) are mandatory.

54.2. DEPENDENCIES

At runtime, the **predicate-filter-action** Kamelet relies upon the presence of the following dependencies:

- camel:core
- camel:kamelet
- camel:jsonpath

54.3. USAGE

This section describes how you can use the **predicate-filter-action**.

54.3.1. Knative Action

You can use the **predicate-filter-action** Kamelet as an intermediate step in a Knative binding.

predicate-filter-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
```

```
metadata:
  name: predicate-filter-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: "Hello"
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: predicate-filter-action
    properties:
      expression: "@.foo =~ /.*John/"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

54.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

54.3.1.2. Procedure for using the cluster CLI

1. Save the **predicate-filter-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the action by using the following command:

```
oc apply -f predicate-filter-action-binding.yaml
```

54.3.1.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step predicate-filter-action -p "step-0.expression=@.foo
=~ /.*John/" channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

54.3.2. Kafka Action

You can use the **predicate-filter-action** Kamelet as an intermediate step in a Kafka binding.

predicate-filter-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
```

```
kind: KameletBinding
metadata:
  name: predicate-filter-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: "Hello"
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: predicate-filter-action
    properties:
      expression: "@.foo =~ /.*John/"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

54.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

54.3.2.2. Procedure for using the cluster CLI

1. Save the **predicate-filter-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f predicate-filter-action-binding.yaml
```

54.3.2.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step predicate-filter-action -p "step-0.expression=@.foo
=~ /.*John/" kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

54.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/predicate-filter-action.kamelet.yaml

CHAPTER 55. PROTOBUF DESERIALIZE ACTION

Deserialize payload to Protobuf

55.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **protobuf-deserialize-action** Kamelet:

Property	Name	Description	Type	Default	Example
schema *	Schema	The Protobuf schema to use during serialization (as single-line)	string		**"message Person { required string first = 1; required string last = 2; }"**

NOTE

Fields marked with an asterisk (*) are mandatory.

55.2. DEPENDENCIES

At runtime, the **protobuf-deserialize-action** Kamelet relies upon the presence of the following dependencies:

- github:openshift-integration.kamelet-catalog:camel-kamelets-utils:kamelet-catalog-1.6-SNAPSHOT
- camel:kamelet
- camel:core
- camel:jackson-protobuf

55.3. USAGE

This section describes how you can use the **protobuf-deserialize-action**.

55.3.1. Knative Action

You can use the **protobuf-deserialize-action** Kamelet as an intermediate step in a Knative binding.

protobuf-deserialize-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: protobuf-deserialize-action-binding
spec:
  source:
    ref:
```

```
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: timer-source
  properties:
    message: '{"first": "John", "last":"Doe"}'
steps:
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: json-deserialize-action
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: protobuf-serialize-action
  properties:
    schema: "message Person { required string first = 1; required string last = 2; }"
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: protobuf-deserialize-action
  properties:
    schema: "message Person { required string first = 1; required string last = 2; }"
sink:
  ref:
    kind: Channel
    apiVersion: messaging.knative.dev/v1
    name: mychannel
```

55.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

55.3.1.2. Procedure for using the cluster CLI

1. Save the **protobuf-deserialize-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f protobuf-deserialize-action-binding.yaml
```

55.3.1.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind --name protobuf-deserialize-action-binding timer-source?
message='{"first":"John","last":"Doe"}' --step json-deserialize-action --step protobuf-serialize-action -p
step-1.schema='message Person { required string first = 1; required string last = 2; }' --step protobuf-
deserialize-action -p step-2.schema='message Person { required string first = 1; required string last =
2; }' channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

55.3.2. Kafka Action

You can use the **protobuf-deserialize-action** Kamelet as an intermediate step in a Kafka binding.

protobuf-deserialize-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: protobuf-deserialize-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: '{"first": "John", "last":"Doe"}'
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: json-deserialize-action
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: protobuf-serialize-action
    properties:
      schema: "message Person { required string first = 1; required string last = 2; }"
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: protobuf-deserialize-action
    properties:
      schema: "message Person { required string first = 1; required string last = 2; }"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

55.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

55.3.2.2. Procedure for using the cluster CLI

1. Save the **protobuf-deserialize-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f protobuf-deserialize-action-binding.yaml
```

55.3.2.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind --name protobuf-deserialize-action-binding timer-source?
message='{"first":"John","last":"Doe"}' --step json-deserialize-action --step protobuf-serialize-action -p
step-1.schema='message Person { required string first = 1; required string last = 2; }' --step protobuf-
deserialize-action -p step-2.schema='message Person { required string first = 1; required string last =
2; }' kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

55.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/protobuf-deserialize-action.kamelet.yaml

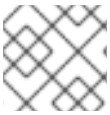
CHAPTER 56. PROTOBUF SERIALIZE ACTION

Serialize payload to Protobuf

56.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **protobuf-serialize-action** Kamelet:

Property	Name	Description	Type	Default	Example
schema *	Schema	The Protobuf schema to use during serialization (as single-line)	string		**"message Person { required string first = 1; required string last = 2; }"**



NOTE

Fields marked with an asterisk (*) are mandatory.

56.2. DEPENDENCIES

At runtime, the **protobuf-serialize-action** Kamelet relies upon the presence of the following dependencies:

- github:openshift-integration.kamelet-catalog:camel-kamelets-utils:kamelet-catalog-1.6-SNAPSHOT
- camel:kamelet
- camel:core
- camel:jackson-protobuf

56.3. USAGE

This section describes how you can use the **protobuf-serialize-action**.

56.3.1. Knative Action

You can use the **protobuf-serialize-action** Kamelet as an intermediate step in a Knative binding.

protobuf-serialize-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: protobuf-serialize-action-binding
spec:
  source:
    ref:
```

```
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: timer-source
  properties:
    message: '{"first": "John", "last":"Doe"}'
steps:
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: json-deserialize-action
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: protobuf-serialize-action
  properties:
    schema: "message Person { required string first = 1; required string last = 2; }"
sink:
  ref:
    kind: Channel
    apiVersion: messaging.knative.dev/v1
    name: mychannel
```

56.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

56.3.1.2. Procedure for using the cluster CLI

1. Save the **protobuf-serialize-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f protobuf-serialize-action-binding.yaml
```

56.3.1.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind --name protobuf-serialize-action-binding timer-source?
message='{"first":"John","last":"Doe"}' --step json-deserialize-action --step protobuf-serialize-action -p
step-1.schema='message Person { required string first = 1; required string last = 2; }'
channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

56.3.2. Kafka Action

You can use the **protobuf-serialize-action** Kamelet as an intermediate step in a Kafka binding.

protobuf-serialize-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: protobuf-serialize-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: '{"first": "John", "last":"Doe"}'
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: json-deserialize-action
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: protobuf-serialize-action
    properties:
      schema: "message Person { required string first = 1; required string last = 2; }"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

56.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

56.3.2.2. Procedure for using the cluster CLI

1. Save the **protobuf-serialize-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f protobuf-serialize-action-binding.yaml
```

56.3.2.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind --name protobuf-serialize-action-binding timer-source?
message='{"first":"John","last":"Doe"}' --step json-deserialize-action --step protobuf-serialize-action -p
step-1.schema='message Person { required string first = 1; required string last = 2; }'
kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

56.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/protobuf-serialize-action.kamelet.yaml

CHAPTER 57. REGEX ROUTER ACTION

Update the destination using the configured regular expression and replacement string

57.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **regex-router-action** Kamelet:

Property	Name	Description	Type	Default	Example
regex *	Regex	Regular Expression for destination	string		
replacement *	Replacement	Replacement when matching	string		

NOTE

Fields marked with an asterisk (*) are mandatory.

57.2. DEPENDENCIES

At runtime, the **regex-router-action** Kamelet relies upon the presence of the following dependencies:

- github:openshift-integration.kamelet-catalog:camel-kamelets-utils:kamelet-catalog-1.6-SNAPSHOT
- camel:kamelet
- camel:core

57.3. USAGE

This section describes how you can use the **regex-router-action**.

57.3.1. Knative Action

You can use the **regex-router-action** Kamelet as an intermediate step in a Knative binding.

regex-router-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: regex-router-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
```

```
  properties:
    message: "Hello"
steps:
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: regex-router-action
  properties:
    regex: "The Regex"
    replacement: "The Replacement"
sink:
  ref:
    kind: Channel
    apiVersion: messaging.knative.dev/v1
    name: mychannel
```

57.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

57.3.1.2. Procedure for using the cluster CLI

1. Save the **regex-router-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f regex-router-action-binding.yaml
```

57.3.1.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step regex-router-action -p "step-0.regex=The Regex" -p
"step-0.replacement=The Replacement" channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

57.3.2. Kafka Action

You can use the **regex-router-action** Kamelet as an intermediate step in a Kafka binding.

regex-router-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: regex-router-action-binding
spec:
  source:
    ref:
      kind: Kamelet
```

```
    apiVersion: camel.apache.org/v1alpha1
    name: timer-source
  properties:
    message: "Hello"
steps:
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: regex-router-action
  properties:
    regex: "The Regex"
    replacement: "The Replacement"
sink:
  ref:
    kind: KafkaTopic
    apiVersion: kafka.strimzi.io/v1beta1
    name: my-topic
```

57.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

57.3.2.2. Procedure for using the cluster CLI

1. Save the **regex-router-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f regex-router-action-binding.yaml
```

57.3.2.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step regex-router-action -p "step-0.regex=The Regex" -p
"step-0.replacement=The Replacement" kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

57.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/regex-router-action.kamelet.yaml

CHAPTER 58. REPLACE FIELD ACTION

Replace field with a different key in the message in transit.

- The required parameter 'renames' is a comma-separated list of colon-delimited renaming pairs like for example 'foo:bar,abc:xyz' and it represents the field rename mappings.
- The optional parameter 'enabled' represents the fields to include. If specified, only the named fields will be included in the resulting message.
- The optional parameter 'disabled' represents the fields to exclude. If specified, the listed fields will be excluded from the resulting message. This takes precedence over the 'enabled' parameter.
- The default value of 'enabled' parameter is 'all', so all the fields of the payload will be included.
- The default value of 'disabled' parameter is 'none', so no fields of the payload will be excluded.

58.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **replace-field-action** Kamelet:

Property	Name	Description	Type	Default	Example
renames *	Renames	Comma separated list of field with new value to be renamed	string		**"foo:bar,c1:c2"**
disabled	Disabled	Comma separated list of fields to be disabled	string	"none"	
enabled	Enabled	Comma separated list of fields to be enabled	string	"all"	

NOTE

Fields marked with an asterisk (*) are mandatory.

58.2. DEPENDENCIES

At runtime, the **replace-field-action** Kamelet relies upon the presence of the following dependencies:

- github:openshift-integration.kamelet-catalog:camel-kamelets-utils:kamelet-catalog-1.6-SNAPSHOT
- camel:core
- camel:jackson
- camel:kamelet

58.3. USAGE

This section describes how you can use the **replace-field-action**.

58.3.1. Knative Action

You can use the **replace-field-action** Kamelet as an intermediate step in a Knative binding.

replace-field-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: replace-field-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: "Hello"
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: replace-field-action
    properties:
      renames: "foo:bar,c1:c2"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

58.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

58.3.1.2. Procedure for using the cluster CLI

1. Save the **replace-field-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the action by using the following command:

```
oc apply -f replace-field-action-binding.yaml
```

58.3.1.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step replace-field-action -p "step-
0.renames=foo:bar,c1:c2" channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

58.3.2. Kafka Action

You can use the **replace-field-action** Kamelet as an intermediate step in a Kafka binding.

replace-field-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: replace-field-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: "Hello"
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: replace-field-action
    properties:
      renames: "foo:bar,c1:c2"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

58.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

58.3.2.2. Procedure for using the cluster CLI

1. Save the **replace-field-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f replace-field-action-binding.yaml
```

58.3.2.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step replace-field-action -p "step-
0.renames=foo:bar,c1:c2" kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

58.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/replace-field-action.kamelet.yaml

CHAPTER 59. SALESFORCE SOURCE

Receive updates from Salesforce.

59.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **salesforce-source** Kamelet:

Property	Name	Description	Type	Default	Example
clientId *	Consumer Key	The Salesforce application consumer key	string		
clientSecret *	Consumer Secret	The Salesforce application consumer secret	string		
password *	Password	The Salesforce user password	string		
query *	Query	The query to execute on Salesforce	string		**"SELECT Id, Name, Email, Phone FROM Contact"**
topicName *	Topic Name	The name of the topic/channel to use	string		**"ContactTopic"**
userName *	Username	The Salesforce username	string		
loginUrl	Login URL	The Salesforce instance login URL	string	**"https://login.salesforce.com"**	

NOTE

Fields marked with an asterisk (*) are mandatory.

59.2. DEPENDENCIES

At runtime, the **salesforce-source** Kamelet relies upon the presence of the following dependencies:

- camel:jackson
- camel:salesforce
- mvn:org.apache.camel.k:camel-k-kamelet-reify
- camel:kamelet

59.3. USAGE

This section describes how you can use the **salesforce-source**.

59.3.1. Knative Source

You can use the **salesforce-source** Kamelet as a Knative source by binding it to a Knative object.

salesforce-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: salesforce-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: salesforce-source
    properties:
      clientId: "The Consumer Key"
      clientSecret: "The Consumer Secret"
      password: "The Password"
      query: "SELECT Id, Name, Email, Phone FROM Contact"
      topicName: "ContactTopic"
      userName: "The Username"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

59.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

59.3.1.2. Procedure for using the cluster CLI

1. Save the **salesforce-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f salesforce-source-binding.yaml
```

59.3.1.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind salesforce-source -p "source.clientId=The Consumer Key" -p "source.clientSecret=The Consumer Secret" -p "source.password=The Password" -p "source.query=SELECT Id, Name, Email,
```

```
Phone FROM Contact" -p "source.topicName=ContactTopic" -p "source.userName=The Username"
channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

59.3.2. Kafka Source

You can use the **salesforce-source** Kamelet as a Kafka source by binding it to a Kafka topic.

salesforce-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: salesforce-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: salesforce-source
    properties:
      clientId: "The Consumer Key"
      clientSecret: "The Consumer Secret"
      password: "The Password"
      query: "SELECT Id, Name, Email, Phone FROM Contact"
      topicName: "ContactTopic"
      userName: "The Username"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

59.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

59.3.2.2. Procedure for using the cluster CLI

1. Save the **salesforce-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f salesforce-source-binding.yaml
```

59.3.2.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind salesforce-source -p "source.clientId=The Consumer Key" -p "source.clientSecret=The Consumer Secret" -p "source.password=The Password" -p "source.query=SELECT Id, Name, Email, Phone FROM Contact" -p "source.topicName=ContactTopic" -p "source.userName=The Username" kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

59.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/salesforce-source.kamelet.yaml

CHAPTER 60. SALESFORCE CREATE SINK

Creates an object in Salesforce. The body of the message must contain the JSON of the salesforce object.

Example body: { "Phone": "555", "Name": "Antonia", "LastName": "Garcia" }

60.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **salesforce-create-sink** Kamelet:

Property	Name	Description	Type	Default	Example
clientId *	Consumer Key	The Salesforce application consumer key	string		
clientSecret *	Consumer Secret	The Salesforce application consumer secret	string		
password *	Password	The Salesforce user password	string		
userName *	Username	The Salesforce username	string		
loginUrl	Login URL	The Salesforce instance login URL	string	**"https://login.salesforce.com"**	
sObjectName	Object Name	Type of the object	string		**"Contact"**

NOTE

Fields marked with an asterisk (*) are mandatory.

60.2. DEPENDENCIES

At runtime, the **salesforce-create-sink** Kamelet relies upon the presence of the following dependencies:

- camel:salesforce
- camel:kamelet

60.3. USAGE

This section describes how you can use the **salesforce-create-sink**.

60.3.1. Knative Sink

You can use the **salesforce-create-sink** Kamelet as a Knative sink by binding it to a Knative object.

salesforce-create-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: salesforce-create-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: salesforce-create-sink
    properties:
      clientId: "The Consumer Key"
      clientSecret: "The Consumer Secret"
      password: "The Password"
      userName: "The Username"
```

60.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

60.3.1.2. Procedure for using the cluster CLI

1. Save the **salesforce-create-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f salesforce-create-sink-binding.yaml
```

60.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel salesforce-create-sink -p "sink.clientId=The Consumer Key" -p "sink.clientSecret=The Consumer Secret" -p "sink.password=The Password" -p "sink.userName=The Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

60.3.2. Kafka Sink

You can use the **salesforce-create-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

salesforce-create-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: salesforce-create-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: salesforce-create-sink
    properties:
      clientId: "The Consumer Key"
      clientSecret: "The Consumer Secret"
      password: "The Password"
      userName: "The Username"
```

60.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

60.3.2.2. Procedure for using the cluster CLI

1. Save the **salesforce-create-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f salesforce-create-sink-binding.yaml
```

60.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic salesforce-create-sink -p "sink.clientId=The Consumer Key" -p "sink.clientSecret=The Consumer Secret" -p "sink.password=The Password" -p "sink.userName=The Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

60.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/salesforce-create-sink.kamelet.yaml

CHAPTER 61. SALESFORCE DELETE SINK

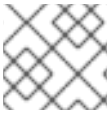
Removes an object from Salesforce. The body received must be a JSON containing two keys: sObjectId and sObjectName.

Example body: { "sObjectId": "XXXXX0", "sObjectName": "Contact" }

61.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **salesforce-delete-sink** Kamelet:

Property	Name	Description	Type	Default	Example
clientId *	Consumer Key	The Salesforce application consumer key	string		
clientSecret *	Consumer Secret	The Salesforce application consumer secret	string		
password *	Password	The Salesforce user password	string		
userName *	Username	The Salesforce username	string		
loginUrl	Login URL	The Salesforce instance login URL	string	**"https://login.salesforce.com"**	



NOTE

Fields marked with an asterisk (*) are mandatory.

61.2. DEPENDENCIES

At runtime, the **salesforce-delete-sink** Kamelet relies upon the presence of the following dependencies:

- camel:salesforce
- camel:kamelet
- camel:core
- camel:jsonpath

61.3. USAGE

This section describes how you can use the **salesforce-delete-sink**.

61.3.1. Knative Sink

You can use the **salesforce-delete-sink** Kamelet as a Knative sink by binding it to a Knative object.

salesforce-delete-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: salesforce-delete-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: salesforce-delete-sink
    properties:
      clientId: "The Consumer Key"
      clientSecret: "The Consumer Secret"
      password: "The Password"
      userName: "The Username"
```

61.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

61.3.1.2. Procedure for using the cluster CLI

1. Save the **salesforce-delete-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f salesforce-delete-sink-binding.yaml
```

61.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel salesforce-delete-sink -p "sink.clientId=The Consumer Key" -p
"sink.clientSecret=The Consumer Secret" -p "sink.password=The Password" -p "sink.userName=The
Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

61.3.2. Kafka Sink

You can use the **salesforce-delete-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

salesforce-delete-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: salesforce-delete-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: salesforce-delete-sink
    properties:
      clientId: "The Consumer Key"
      clientSecret: "The Consumer Secret"
      password: "The Password"
      userName: "The Username"
```

61.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

61.3.2.2. Procedure for using the cluster CLI

1. Save the **salesforce-delete-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f salesforce-delete-sink-binding.yaml
```

61.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic salesforce-delete-sink -p "sink.clientId=The Consumer Key" -p "sink.clientSecret=The Consumer Secret" -p "sink.password=The Password" -p "sink.userName=The Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

61.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/salesforce-delete-sink.kamelet.yaml

CHAPTER 62. SALESFORCE UPDATE SINK

Updates an object in Salesforce. The body received must contain a JSON key-value pair for each property to update and sObjectName and sObjectId must be provided as parameters.

Example of key-value pair: { "Phone": "1234567890", "Name": "Antonia" }

62.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **salesforce-update-sink** Kamelet:

Property	Name	Description	Type	Default	Example
clientId *	Consumer Key	The Salesforce application consumer key	string		
clientSecret *	Consumer Secret	The Salesforce application consumer secret	string		
password *	Password	The Salesforce user password	string		
sObjectId *	Object Id	Id of the object. Only required if using key-value pair.	string		
sObjectName *	Object Name	Type of the object. Only required if using key-value pair.	string		**"Contact"**
userName *	Username	The Salesforce username	string		
loginUrl	Login URL	The Salesforce instance login URL	string	**"https://login.salesforce.com"**	

NOTE

Fields marked with an asterisk (*) are mandatory.

62.2. DEPENDENCIES

At runtime, the **salesforce-update-sink** Kamelet relies upon the presence of the following dependencies:

- camel:salesforce

- camel:kamelet

62.3. USAGE

This section describes how you can use the **salesforce-update-sink**.

62.3.1. Knative Sink

You can use the **salesforce-update-sink** Kamelet as a Knative sink by binding it to a Knative object.

salesforce-update-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: salesforce-update-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: salesforce-update-sink
    properties:
      clientId: "The Consumer Key"
      clientSecret: "The Consumer Secret"
      password: "The Password"
      sObjectId: "The Object Id"
      sObjectName: "Contact"
      userName: "The Username"
```

62.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

62.3.1.2. Procedure for using the cluster CLI

1. Save the **salesforce-update-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f salesforce-update-sink-binding.yaml
```

62.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel salesforce-update-sink -p "sink.clientId=The Consumer Key" -p
"sink.clientSecret=The Consumer Secret" -p "sink.password=The Password" -p "sink.sObjectId=The
Object Id" -p "sink.sObjectName=Contact" -p "sink.userName=The Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

62.3.2. Kafka Sink

You can use the **salesforce-update-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

salesforce-update-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: salesforce-update-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: salesforce-update-sink
    properties:
      clientId: "The Consumer Key"
      clientSecret: "The Consumer Secret"
      password: "The Password"
      sObjectId: "The Object Id"
      sObjectName: "Contact"
      userName: "The Username"
```

62.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

62.3.2.2. Procedure for using the cluster CLI

1. Save the **salesforce-update-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f salesforce-update-sink-binding.yaml
```

62.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic salesforce-update-sink -p "sink.clientId=The Consumer Key" -p "sink.clientSecret=The Consumer Secret" -p "sink.password=The Password" -p "sink.sObjectId=The Object Id" -p "sink.sObjectName=Contact" -p "sink.userName=The Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

62.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/salesforce-update-sink.kamelet.yaml

CHAPTER 63. SFTP SINK

Send data to an SFTP Server.

The Kamelet expects the following headers to be set:

- **file** / **ce-file**: as the file name to upload

If the header won't be set the exchange ID will be used as file name.

63.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **sftp-sink** Kamelet:

Property	Name	Description	Type	Default	Example
connectionHost *	Connection Host	Hostname of the FTP server	string		
connectionPort *	Connection Port	Port of the FTP server	string	**22**	
directoryName *	Directory Name	The starting directory	string		
password *	Password	The password to access the FTP server	string		
username *	Username	The username to access the FTP server	string		
fileExist	File Existence	How to behave in case of file already existent. There are 4 enums and the value can be one of Override, Append, Fail or Ignore	string	**"Override"**	
passiveMode	Passive Mode	Sets passive mode connection	boolean	**false**	

NOTE

Fields marked with an asterisk (*) are mandatory.

63.2. DEPENDENCIES

At runtime, the **sftp-sink** Kamelet relies upon the presence of the following dependencies:

- camel:ftp
- camel:core
- camel:kamelet

63.3. USAGE

This section describes how you can use the **sftp-sink**.

63.3.1. Knative Sink

You can use the **sftp-sink** Kamelet as a Knative sink by binding it to a Knative object.

sftp-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: sftp-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: sftp-sink
    properties:
      connectionHost: "The Connection Host"
      directoryName: "The Directory Name"
      password: "The Password"
      username: "The Username"
```

63.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

63.3.1.2. Procedure for using the cluster CLI

1. Save the **sftp-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the sink by using the following command:

```
oc apply -f sftp-sink-binding.yaml
```

63.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel sftp-sink -p "sink.connectionHost=The Connection Host" -p
"sink.directoryName=The Directory Name" -p "sink.password=The Password" -p "sink.username=The
Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

63.3.2. Kafka Sink

You can use the **sftp-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

sftp-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: sftp-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: sftp-sink
    properties:
      connectionHost: "The Connection Host"
      directoryName: "The Directory Name"
      password: "The Password"
      username: "The Username"
```

63.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

63.3.2.2. Procedure for using the cluster CLI

1. Save the **sftp-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f sftp-sink-binding.yaml
```

63.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic sftp-sink -p "sink.connectionHost=The Connection Host" -p "sink.directoryName=The Directory Name" -p "sink.password=The Password" -p "sink.username=The Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

63.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/sftp-sink.kamelet.yaml

CHAPTER 64. SFTP SOURCE

Receive data from an SFTP Server.

64.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **sftp-source** Kamelet:

Property	Name	Description	Type	Default	Example
connectionHost *	Connection Host	Hostname of the SFTP server	string		
connectionPort *	Connection Port	Port of the FTP server	string	**22**	
directoryName *	Directory Name	The starting directory	string		
password *	Password	The password to access the SFTP server	string		
username *	Username	The username to access the SFTP server	string		
idempotent	Idempotency	Skip already processed files.	boolean	**true**	
passiveMode	Passive Mode	Sets passive mode connection	boolean	**false**	
recursive	Recursive	If a directory, will look for files in all the sub-directories as well.	boolean	**false**	

NOTE

Fields marked with an asterisk (*) are mandatory.

64.2. DEPENDENCIES

At runtime, the **sftp-source** Kamelet relies upon the presence of the following dependencies:

- camel:ftp
- camel:core

- camel:kamelet

64.3. USAGE

This section describes how you can use the **sftp-source**.

64.3.1. Knative Source

You can use the **sftp-source** Kamelet as a Knative source by binding it to a Knative object.

sftp-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: sftp-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: sftp-source
    properties:
      connectionHost: "The Connection Host"
      directoryName: "The Directory Name"
      password: "The Password"
      username: "The Username"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

64.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

64.3.1.2. Procedure for using the cluster CLI

1. Save the **sftp-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f sftp-source-binding.yaml
```

64.3.1.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind sftp-source -p "source.connectionHost=The Connection Host" -p
"source.directoryName=The Directory Name" -p "source.password=The Password" -p
"source.username=The Username" channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

64.3.2. Kafka Source

You can use the **sftp-source** Kamelet as a Kafka source by binding it to a Kafka topic.

sftp-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: sftp-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: sftp-source
    properties:
      connectionHost: "The Connection Host"
      directoryName: "The Directory Name"
      password: "The Password"
      username: "The Username"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

64.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

64.3.2.2. Procedure for using the cluster CLI

1. Save the **sftp-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f sftp-source-binding.yaml
```

64.3.2.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind sftp-source -p "source.connectionHost=The Connection Host" -p
"source.directoryName=The Directory Name" -p "source.password=The Password" -p
"source.username=The Username" kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

64.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/sftp-source.kamelet.yaml

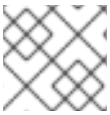
CHAPTER 65. SLACK SOURCE

Receive messages from a Slack channel.

65.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **slack-source** Kamelet:

Property	Name	Description	Type	Default	Example
channel *	Channel	The Slack channel to receive messages from	string		**"#myroom"**
token *	Token	The token to access Slack. A Slack app is needed. This app needs to have channels:history and channels:read permissions. The Bot User OAuth Access Token is the kind of token needed.	string		



NOTE

Fields marked with an asterisk (*) are mandatory.

65.2. DEPENDENCIES

At runtime, the **slack-source** Kamelet relies upon the presence of the following dependencies:

- camel:kamelet
- camel:slack
- camel:jackson

65.3. USAGE

This section describes how you can use the **slack-source**.

65.3.1. Knative Source

You can use the **slack-source** Kamelet as a Knative source by binding it to a Knative object.

slack-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
```

```
kind: KameletBinding
metadata:
  name: slack-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: slack-source
    properties:
      channel: "#myroom"
      token: "The Token"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

65.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

65.3.1.2. Procedure for using the cluster CLI

1. Save the **slack-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the source by using the following command:

```
oc apply -f slack-source-binding.yaml
```

65.3.1.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind slack-source -p "source.channel=#myroom" -p "source.token=The Token"
channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

65.3.2. Kafka Source

You can use the **slack-source** Kamelet as a Kafka source by binding it to a Kafka topic.

slack-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: slack-source-binding
spec:
  source:
```

```
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: slack-source
    properties:
      channel: "#myroom"
      token: "The Token"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

65.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

65.3.2.2. Procedure for using the cluster CLI

1. Save the **slack-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f slack-source-binding.yaml
```

65.3.2.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind slack-source -p "source.channel=#myroom" -p "source.token=The Token"
kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

65.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/slack-source.kamelet.yaml

CHAPTER 66. MICROSOFT SQL SERVER SINK

Send data to a Microsoft SQL Server Database.

This Kamelet expects a JSON as body. The mapping between the JSON fields and parameters is done by key, so if you have the following query:

'INSERT INTO accounts (username,city) VALUES (:#username,:#city)'

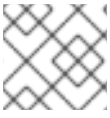
The Kamelet needs to receive as input something like:

'{ "username":"oscerd", "city":"Rome"}'

66.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **sqlserver-sink** Kamelet:

Property	Name	Description	Type	Default	Example
databaseName *	Database Name	The Database Name we are pointing	string		
password *	Password	The password to use for accessing a secured SQL Server Database	string		
query *	Query	The Query to execute against the SQL Server Database	string		**"INSERT INTO accounts (username,city) VALUES (:#username,:#city)"**
serverName *	Server Name	Server Name for the data source	string		**"localhost"**
username *	Username	The username to use for accessing a secured SQL Server Database	string		
serverPort	Server Port	Server Port for the data source	string	**1433**	



NOTE

Fields marked with an asterisk (*) are mandatory.

66.2. DEPENDENCIES

At runtime, the **sqlserver-sink** Kamelet relies upon the presence of the following dependencies:

- camel:jackson
- camel:kamelet
- camel:sql
- mvn:org.apache.commons:commons-dbcp2:2.7.0.redhat-00001
- mvn:com.microsoft.sqlserver:mssql-jdbc:9.2.1.jre11

66.3. USAGE

This section describes how you can use the **sqlserver-sink**.

66.3.1. Knative Sink

You can use the **sqlserver-sink** Kamelet as a Knative sink by binding it to a Knative object.

sqlserver-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: sqlserver-sink-binding
spec:
  source:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: sqlserver-sink
    properties:
      databaseName: "The Database Name"
      password: "The Password"
      query: "INSERT INTO accounts (username,city) VALUES (:#username,:#city)"
      serverName: "localhost"
      username: "The Username"
```

66.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

66.3.1.2. Procedure for using the cluster CLI

1. Save the **sqlserver-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f sqlserver-sink-binding.yaml
```

66.3.1.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind channel:mychannel sqlserver-sink -p "sink.databaseName=The Database Name" -p
"sink.password=The Password" -p "sink.query=INSERT INTO accounts (username,city) VALUES
(:#username,:#city)" -p "sink.serverName=localhost" -p "sink.username=The Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

66.3.2. Kafka Sink

You can use the **sqlserver-sink** Kamelet as a Kafka sink by binding it to a Kafka topic.

sqlserver-sink-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: sqlserver-sink-binding
spec:
  source:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
  sink:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: sqlserver-sink
    properties:
      databaseName: "The Database Name"
      password: "The Password"
      query: "INSERT INTO accounts (username,city) VALUES (:#username,:#city)"
      serverName: "localhost"
      username: "The Username"
```

66.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

66.3.2.2. Procedure for using the cluster CLI

1. Save the **sqlserver-sink-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the sink by using the following command:

```
oc apply -f sqlserver-sink-binding.yaml
```

66.3.2.3. Procedure for using the Kamel CLI

Configure and run the sink by using the following command:

```
kamel bind kafka.strimzi.io/v1beta1:KafkaTopic:my-topic sqlserver-sink -p "sink.databaseName=The Database Name" -p "sink.password=The Password" -p "sink.query=INSERT INTO accounts (username,city) VALUES (:#username,:#city)" -p "sink.serverName=localhost" -p "sink.username=The Username"
```

This command creates the KameletBinding in the current namespace on the cluster.

66.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/sqlserver-sink.kamelet.yaml

CHAPTER 67. TELEGRAM SOURCE

Receive all messages that people send to your Telegram bot.

To create a bot, contact the @botfather account using the Telegram app.

The source attaches the following headers to the messages:

- **chat-id** / **ce-chatid**: the ID of the chat where the message comes from

67.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **telegram-source** Kamelet:

Property	Name	Description	Type	Default	Example
authorizationToken *	Token	The token to access your bot on Telegram. You you can obtain it from the Telegram @botfather.	string		

NOTE

Fields marked with an asterisk (*) are mandatory.

67.2. DEPENDENCIES

At runtime, the **telegram-source** Kamelet relies upon the presence of the following dependencies:

- camel:jackson
- camel:kamelet
- camel:telegram
- camel:core

67.3. USAGE

This section describes how you can use the **telegram-source**.

67.3.1. Knative Source

You can use the **telegram-source** Kamelet as a Knative source by binding it to a Knative object.

telegram-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
```

```
  name: telegram-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: telegram-source
    properties:
      authorizationToken: "The Token"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

67.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

67.3.1.2. Procedure for using the cluster CLI

1. Save the **telegram-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the source by using the following command:

```
oc apply -f telegram-source-binding.yaml
```

67.3.1.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind telegram-source -p "source.authorizationToken=The Token" channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

67.3.2. Kafka Source

You can use the **telegram-source** Kamelet as a Kafka source by binding it to a Kafka topic.

telegram-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: telegram-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: telegram-source
```

```
    properties:
      authorizationToken: "The Token"
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

67.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

67.3.2.2. Procedure for using the cluster CLI

1. Save the **telegram-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f telegram-source-binding.yaml
```

67.3.2.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind telegram-source -p "source.authorizationToken=The Token"
kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

67.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/telegram-source.kamelet.yaml

CHAPTER 68. THROTTLE ACTION

The Throttle action allows you to ensure that a specific sink does not get overloaded.

68.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **throttle-action** Kamelet:

Property	Name	Description	Type	Default	Example
messages *	Messages Number	The number of messages to send in the time period set	integer		**10**
timePeriod	Time Period	Sets the time period during which the maximum request count is valid for, in milliseconds	string	**"1000"**	

NOTE

Fields marked with an asterisk (*) are mandatory.

68.2. DEPENDENCIES

At runtime, the **throttle-action** Kamelet relies upon the presence of the following dependencies:

- camel:core
- camel:kamelet

68.3. USAGE

This section describes how you can use the **throttle-action**.

68.3.1. Knative Action

You can use the **throttle-action** Kamelet as an intermediate step in a Knative binding.

throttle-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: throttle-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
```

```
    name: timer-source
  properties:
    message: "Hello"
steps:
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: throttle-action
  properties:
    messages: 1
sink:
  ref:
    kind: Channel
    apiVersion: messaging.knative.dev/v1
    name: mychannel
```

68.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

68.3.1.2. Procedure for using the cluster CLI

1. Save the **throttle-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the action by using the following command:

```
oc apply -f throttle-action-binding.yaml
```

68.3.1.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step throttle-action -p "step-0.messages=10"
channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

68.3.2. Kafka Action

You can use the **throttle-action** Kamelet as an intermediate step in a Kafka binding.

throttle-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: throttle-action-binding
spec:
  source:
    ref:
      kind: Kamelet
```

```
    apiVersion: camel.apache.org/v1alpha1
    name: timer-source
  properties:
    message: "Hello"
steps:
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: throttle-action
  properties:
    messages: 1
sink:
  ref:
    kind: KafkaTopic
    apiVersion: kafka.strimzi.io/v1beta1
    name: my-topic
```

68.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

68.3.2.2. Procedure for using the cluster CLI

1. Save the **throttle-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f throttle-action-binding.yaml
```

68.3.2.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step throttle-action -p "step-0.messages=1"
kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

68.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/throttle-action.kamelet.yaml

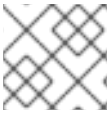
CHAPTER 69. TIMER SOURCE

Produces periodic events with a custom payload.

69.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **timer-source** Kamelet:

Property	Name	Description	Type	Default	Example
message *	Message	The message to generate	string		**"hello world"**
contentType	Content Type	The content type of the message being generated	string	**"text/plain"**	
period	Period	The interval between two events in milliseconds	integer	**1000**	
repeatCount	Repeat Count	Specifies the maximum limit of the number of fires	integer		



NOTE

Fields marked with an asterisk (*) are mandatory.

69.2. DEPENDENCIES

At runtime, the **timer-source** Kamelet relies upon the presence of the following dependencies:

- camel:core
- camel:timer
- camel:kamelet

69.3. USAGE

This section describes how you can use the **timer-source**.

69.3.1. Knative Source

You can use the **timer-source** Kamelet as a Knative source by binding it to a Knative object.

timer-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
```

```
kind: KameletBinding
metadata:
  name: timer-source-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: "hello world"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

69.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

69.3.1.2. Procedure for using the cluster CLI

1. Save the **timer-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f timer-source-binding.yaml
```

69.3.1.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind timer-source -p "source.message=hello world" channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

69.3.2. Kafka Source

You can use the **timer-source** Kamelet as a Kafka source by binding it to a Kafka topic.

timer-source-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: timer-source-binding
spec:
  source:
    ref:
      kind: Kamelet
```

```
    apiVersion: camel.apache.org/v1alpha1
    name: timer-source
  properties:
    message: "hello world"
sink:
  ref:
    kind: KafkaTopic
    apiVersion: kafka.strimzi.io/v1beta1
    name: my-topic
```

69.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

69.3.2.2. Procedure for using the cluster CLI

1. Save the **timer-source-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the source by using the following command:

```
oc apply -f timer-source-binding.yaml
```

69.3.2.3. Procedure for using the Kamel CLI

Configure and run the source by using the following command:

```
kamel bind timer-source -p "source.message=hello world" kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

69.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/timer-source.kamelet.yaml

CHAPTER 70. TIMESTAMP ROUTER ACTION

Update the topic field as a function of the original topic name and the record timestamp.

70.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **timestamp-router-action** Kamelet:

Property	Name	Description	Type	Default	Example
timestampFormat	Timestamp Format	Format string for the timestamp that is compatible with java.text.SimpleDateFormat.	string	**"yyyyMMdd"**	
timestampHeaderName	Timestamp Header Name	The name of the header containing a timestamp	string	**"kafka.TIMESTAMP"**	
topicFormat	Topic Format	Format string which can contain '$[topic]' and '$[timestamp]' as placeholders for the topic and timestamp, respectively.	string	**"topic-$[timestamp]"**	

NOTE

Fields marked with an asterisk (*) are mandatory.

70.2. DEPENDENCIES

At runtime, the **timestamp-router-action** Kamelet relies upon the presence of the following dependencies:

- github:openshift-integration.kamelet-catalog:camel-kamelets-utils:kamelet-catalog-1.6-SNAPSHOT
- camel:kamelet
- camel:core

70.3. USAGE

This section describes how you can use the **timestamp-router-action**.

70.3.1. Knative Action

You can use the **timestamp-router-action** Kamelet as an intermediate step in a Knative binding.

timestamp-router-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: timestamp-router-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: "Hello"
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timestamp-router-action
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

70.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

70.3.1.2. Procedure for using the cluster CLI

1. Save the **timestamp-router-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the action by using the following command:

```
oc apply -f timestamp-router-action-binding.yaml
```

70.3.1.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step timestamp-router-action channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

70.3.2. Kafka Action

You can use the **timestamp-router-action** Kamelet as an intermediate step in a Kafka binding.

timestamp-router-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: timestamp-router-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
    properties:
      message: "Hello"
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timestamp-router-action
  sink:
    ref:
      kind: KafkaTopic
      apiVersion: kafka.strimzi.io/v1beta1
      name: my-topic
```

70.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

70.3.2.2. Procedure for using the cluster CLI

1. Save the **timestamp-router-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f timestamp-router-action-binding.yaml
```

70.3.2.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step timestamp-router-action
kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

70.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/timestamp-router-action.kamelet.yaml

CHAPTER 71. VALUE TO KEY ACTION

Replace the Kafka record key with a new key formed from a subset of fields in the body

71.1. CONFIGURATION OPTIONS

The following table summarizes the configuration options available for the **value-to-key-action** Kamelet:

Property	Name	Description	Type	Default	Example
fields *	Fields	Comma separated list of fields to be used to form the new key	string		

NOTE

Fields marked with an asterisk (*) are mandatory.

71.2. DEPENDENCIES

At runtime, the **value-to-key-action** Kamelet relies upon the presence of the following dependencies:

- github:openshift-integration.kamelet-catalog:camel-kamelets-utils:kamelet-catalog-1.6-SNAPSHOT
- camel:core
- camel:jackson
- camel:kamelet

71.3. USAGE

This section describes how you can use the **value-to-key-action**.

71.3.1. Knative Action

You can use the **value-to-key-action** Kamelet as an intermediate step in a Knative binding.

value-to-key-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: value-to-key-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: timer-source
```

```
    properties:
      message: "Hello"
  steps:
  - ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
      name: value-to-key-action
    properties:
      fields: "The Fields"
  sink:
    ref:
      kind: Channel
      apiVersion: messaging.knative.dev/v1
      name: mychannel
```

71.3.1.1. Prerequisite

Make sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

71.3.1.2. Procedure for using the cluster CLI

1. Save the **value-to-key-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.
2. Run the action by using the following command:

```
oc apply -f value-to-key-action-binding.yaml
```

71.3.1.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step value-to-key-action -p "step-0.fields=The Fields"
channel:mychannel
```

This command creates the KameletBinding in the current namespace on the cluster.

71.3.2. Kafka Action

You can use the **value-to-key-action** Kamelet as an intermediate step in a Kafka binding.

value-to-key-action-binding.yaml

```
apiVersion: camel.apache.org/v1alpha1
kind: KameletBinding
metadata:
  name: value-to-key-action-binding
spec:
  source:
    ref:
      kind: Kamelet
      apiVersion: camel.apache.org/v1alpha1
```

```
    name: timer-source
  properties:
    message: "Hello"
steps:
- ref:
    kind: Kamelet
    apiVersion: camel.apache.org/v1alpha1
    name: value-to-key-action
  properties:
    fields: "The Fields"
sink:
  ref:
    kind: KafkaTopic
    apiVersion: kafka.strimzi.io/v1beta1
    name: my-topic
```

71.3.2.1. Prerequisites

Ensure that you've installed the **AMQ Streams** operator in your OpenShift cluster and created a topic named **my-topic** in the current namespace. Make also sure you have **"Red Hat Integration - Camel K"** installed into the OpenShift cluster you're connected to.

71.3.2.2. Procedure for using the cluster CLI

1. Save the **value-to-key-action-binding.yaml** file to your local drive, and then edit it as needed for your configuration.

2. Run the action by using the following command:

```
oc apply -f value-to-key-action-binding.yaml
```

71.3.2.3. Procedure for using the Kamel CLI

Configure and run the action by using the following command:

```
kamel bind timer-source?message=Hello --step value-to-key-action -p "step-0.fields=The Fields"
kafka.strimzi.io/v1beta1:KafkaTopic:my-topic
```

This command creates the KameletBinding in the current namespace on the cluster.

71.4. KAMELET SOURCE FILE

https://github.com/openshift-integration/kamelet-catalog/value-to-key-action.kamelet.yaml