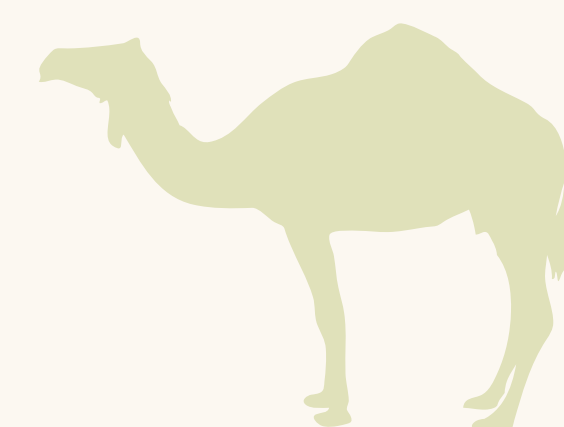




Apache Camel Components



Automating Tasks

Component / ArtifactId / URI	Description
Timer / camel-core in org.apache.activemq timer:timerName[?<options>]	Used to generate message exchanges when a timer fires. Events can only be consumed from this endpoint.
Quartz / camel-quartz quartz:groupname/timerName[?<options>]	Provides a scheduled delivery of messages using the Quartz 1.x scheduler.
Quartz2 / camel-quartz2 quartz2:groupname/timerName[?<options>]	Provides a scheduled delivery of messages using the Quartz 2.x scheduler.

Amazon

Component / ArtifactId / URI	Description
AWS-CW / camel-aws aws-ddb://tableName[?<options>]	For working with Amazon's CloudWatch (CW).
AWS-DB / camel-aws aws-ddb://tableName[?<options>]	For working with Amazon's DynamoDB (DDB).
AWS-SDB / camel-aws aws-sdb://domainName[?<options>]	For working with Amazon's SimpleDB (SDB).
AWS-SES / camel-aws aws-ses://from[?<options>]	For working with Amazon's Simple Email Service (SES).
AWS-SNS / camel-aws aws-sns://topicName[?<options>]	For Messaging with Amazon's Simple Notification Service (SNS).
AWS-SQS / camel-aws aws-sqs://queueName[?<options>]	For Messaging with Amazon's Simple Queue Service (SQS).
AWS-S3 / camel-aws aws-s3://bucketName[?<options>]	For working with Amazon's Simple Storage Service (S3).

Basics

Component / ArtifactId / URI	Description
Bean / camel-core bean:beanName[?<options>]	Uses the Bean Binding to bind message exchanges to beans in the Registry. Is also used for exposing and invoking Plain Old Java Objects (POJOs).
Class / camel-core class:className[?<options>]	Uses the Bean Binding to bind message exchanges to beans based on the class name. Is also used for exposing and invoking POJOs.
Context / camel-context [context:camelContextId:localEndpointName[?<options>]]	Used to refer to endpoints within a separate CamelContext to provide a simple black box composition approach so that routes can be combined into a CamelContext and then used as a black box component inside other routes in other CamelContext.
Data Format / camel-core dataformat:name[:marshal unmarshal][?<options>]	For working with Data Formats as if it was a regular Component supporting Endpoints and URIs.
Exec / camel-exec exec://executable[?<options>]	For executing system commands.
Language / camel-core language://languageName[:script][?<options>]	Executes Languages scripts.
Printer / camel-printer lpr://hostName:port]/printerPath[?<options>]	Facilitates creation of printer endpoints to local, remote and wireless printers. The endpoints provide the ability to print camel directed payloads when utilized on camel routes.
Properties / camel-core properties://key[?<options>]	Facilitates using property placeholders directly in endpoint URI definitions.
Ref / camel-core ref:name	Component for lookup of existing endpoints bound in the Registry.

Chat

Component / ArtifactId / URI	Description
IRC / camel-irc irc:login@hostName:port]/#room[?<options>]	For Internet Relay Chat (IRC) communication.
XMPP / camel-xmpp xmp://[login@hostName:port]/[participant[?<options>]	Working with the Extensible Messaging and Presence Protocol (XMPP).

Clusters

Component / ArtifactId / URI	Description
JGroups / camel-jgroups in camel-extra jgroups:clusterName[?<options>]	Provides exchange of messages between Camel infrastructure and JGroups clusters.
ZooKeeper / camel-zookeeper zookeeper://zookeeperServer:port]/[path][?<options>]	Working with ZooKeeper clusters.

Content Repositories

Component / ArtifactId / URI	Description
CMIS / camel-cmis cmis://cmisServerUri[?<options>]	Uses the Apache Chemistry client API to interface with Content Management Interoperability Services (CMIS).
JCR / camel-jcr jcr://user:password@repository/path/to/node[?<options>]	Storing a message in a Java Content Repository (JCR) compliant repository like Apache JackRabbit.

Endpoint Communications

Component / ArtifactId / URI	Description
Direct / camel-core direct:someName[?<options>]	Synchronous call to another endpoint from same CamelContext.
Direct-VM / camel-core direct-vm:someName[?<options>]	Synchronous call to another endpoint in another CamelContext running in the same Java virtual machine (JVM).
Disruptor / camel-disruptor disruptor:someName[?<option>]	Provides asynchronous SEDA behavior much as the standard SEDA Component, but utilizes a Disruptor instead of a BlockingQueue.
Disruptor VM / camel-disruptor disruptor-vm:someName[?<option>]	Same as Disruptor, but the buffers of the Disruptor VM endpoints also provide support for communication across CamelContexts instances so you can use this mechanism to communicate across web applications.
SEDA / camel-core seda:someName[?<options>]	Asynchronous call to another endpoint in the same Camel Context; staged event-driven architecture (SEDA).
VM / camel-core vm:queueName[?<options>]	Asynchronous call to another endpoint in the same JVM.

ESB

Component / ArtifactId / URI	Description
JBI / servicemix-camel in org.apache.servicemix jbi:serviceName[?<options>]	For Java Business Integration (JBI) integration such as working with Apache ServiceMix.
NMR / apache-servicemix-nmr in org.apache.servicemix.nmr nmr://serviceName[?<options>]	Integration with the Normalized Message Router bus in Apache ServiceMix.
Vert.x / camel-vertx vertx:eventBusName	Working with the Vert.x event bus.

Feeds

Component / ArtifactId / URI	Description
Atom / camel-atom atom:atomUri[?<options>]	Working with Apache Abdera for atom integration, such as consuming an atom feed.
RSS / camel-rss rss:uri[?<options>]	Working with ROME for Rich Site Summary (RSS) integration.

File I/O and Transfer

Component / ArtifactId / URI	Description
File / camel-core file://nameOfFileOrDirectory[?<options>]	Sending messages to a file or polling a file or directory.
Flatpack / camel-flatpack flatpack:[fixed delim]:configFile[?<options>]	Processing fixed width or delimited files or messages using the FlatPack library.
FTP / camel-ftp ftp:contextPath[?<options>]	Sending and receiving files over File Transfer Protocol (FTP).
FTPS / camel-ftp ftps://[Username@]hostName:port]/directoryName[?<options>]	Sending and receiving files over FTP Secure (TLS and SSL).
HDFS / camel-hdfs hdfs://hostName:port]/[path][?<options>]	For reading/writing from/to an Hadoop Distributed File System (HDFS) filesystem.
SCP / camel-jsch scp://hostName:port]/destination[?<options>]	Support for the scp protocol using the Client API of the Java Secure Channel (JSch) project.
SFTP / camel-ftp sftp://[Username@]hostName:port]/directoryName[?<options>]	Sending and receiving files over FTP Secure (FTP and SSH).
Stream / camel-stream stream:[in out err file header url][?<options>]	Read or write to an input/output/error/file stream rather like unix pipes.

Google

Component / ArtifactId / URI	Description
GAuth / camel-gae ghttp:contextPath[?<options>]	Used by web applications to implement an OAuth consumer.
GHttp / camel-gae ghttp:contextPath[?<options>]	Provides connectivity to the URL fetch service of Google App Engine but can also be used to receive messages from services.
OGin / camel-gae glogin://hostName:port]/[?<options>]	Used by Camel applications outside Google App Engine (GAE) for programmatic login to GAE applications.
GTask / camel-gae gtask://queueName[?<options>]	Supports asynchronous message processing on Google App Engine by using the task queueing service as message queue.
GMail / camel-gae gmail://user@gGoogleMail.com[?<options>]	Supports sending of emails via the mail service of Google App Engine.
Guava EventBus / camel-guava-eventbus guava-eventbus:busName[?<options>]	The Google Guava EventBus allows publish-subscribe style communication between components without requiring the components to explicitly register with one another.

HTTP

Component / ArtifactId / URI	Description
AHC / camel-ahc ahc:http[s?]/hostName:port]/[resourceUri][?<options>]	To call external HTTP services using Async Http Client.
Cometd / camel-cometd cometd://hostName:port]/channelName[?<options>]	HTTP-based event routing bus used to deliver messages using the Jetty Cometd implementation of the Bayeux Protocol.
HTTP / camel-http http:hostName:port]/[resourceUri][?<options>]	For calling out to external HTTP servers using Apache HTTP Client 3.x.
HTTP4 / camel-http4 http:hostName:port]/[resourceUri][?<options>]	For calling out to external HTTP servers using Apache HTTP Client 4.x.
Jetty / camel-jetty jetty:hostName:port]/[resourceUri][?<options>]	For exposing services over HTTP.
Servlet / camel-servlet servlet:relativePath[?<options>]	For exposing services over HTTP through the Servlet which is deployed into the Web container.

Java Message Service

Component / ArtifactId / URI	Description
ActiveMQ / activemq-camel in org.apache.activemq activemq:[topic]:destinationName	For JMS Messaging with Apache ActiveMQ.
ActiveMQ Journal / activemq-core activemq:journal:directoryName[?<options>]	Uses ActiveMQ's fast disk journaling implementation to store message bodies in a rolling log file.
JMS / camel-jms jms:[queue :topic]:destinationName[?<options>]	Working with JMS provider.
RabbitMQ / camel-rabbitmq rabbitmq://hostName:port]/exchangeName[?<options>]	For JMS Messaging with RabbitMQ.
SJMS / camel-sjms sjms:[queue :topic]:destinationName[?<options>]	From the ground upwards implementation of a JMS client.
Stomp / camel-stomp stomp:queue:destinationName[?<options>]	For communicating with Stomp compliant message brokers, like Apache ActiveMQ or ActiveMQ Apollo.
ZeroMQ / camel-zeromq in camel-extra zeromq:[tcp ipc]://hostName:port[?<options>]	For JMS Messaging with ZeroMQ.

LDAP

Component / ArtifactId / URI	Description
LDAP / camel-ldap ldap:hostname:port][?<options>]	Performing searches on Lightweight Directory Access Protocol (LDAP) servers.
Spring LDAP / camel-spring-ldap spring-ldap:springLdapTemplateBean[?<options>]	Camel wrapper for Spring LDAP. Spring LDAP is a Java library for simplifying LDAP operations, based on the pattern of Spring's JdbcTemplate.

Mail

Component / ArtifactId / URI	Description
IMAP / camel-mail imap://[Username@]hostName:port][?<options>]	Receiving email using Internet Message Access Protocol (IMAP).
IMAPS / camel-mail imaps://[Username@]hostName:port][?<options>]	Receiving email using secured IMAP.
POP3 / camel-mail pop3://[Username@]hostName:port][?<options>]	Receiving email using Post Office Protocol (POP3) and JavaMail.
POP3S / camel-mail pop3s://[Username@]hostName:port][?<options>]	Receiving email using secured POP3 and JavaMail.
SMTP / camel-mail smtp://[Username@]hostName:port][?<options>]	Sending email using Simple Mail Transfer Protocol (SMTP) and JavaMail.
SMTPS / camel-mail smtps://[Username@]hostName:port][?<options>]	Sending email using secured SMTP and JavaMail.

Maintenance and Monitoring

Component / ArtifactId / URI	Description
Browse / camel-core browse:someName	Provides a simple BrowseableEndpoint which can be useful for testing, visualisation tools or debugging. The exchanges sent to the endpoint are all available to be browsed.
ControlBus / camel-core controlbus:command[?<options>]	ControlBus EIP that allows to send messages to Endpoints for managing and monitoring your Camel applications.
JMX / camel-jmx jmx://platform[?<options>]	For working with Java Management Extensions (JMX) notification listeners.
Log / camel-core log:loggingCategory[?<options>]	Uses Jakarta Commons Logging to log the message exchange to some underlying logging system like log4j.
Nagios / camel-nagios nagios://hostName:port][?<options>]	Sending passive checks to Nagios using JSendNSCA. Nagios supports IT Infrastructure Monitoring.
SNMP / camel-snmpp snmp://hostName:port][?<options>]	Polling OID values and receiving traps using SNMP via SNMP4J library.

Messaging

Component / ArtifactId / URI	Description
AMQP / camel-amqp amqp:[queue :topic]:destinationName[?<options>]	For Messaging with the Advanced Message Queuing Protocol (AMQP).
Esper / camel-esper in camel-extra esper:serviceName[?<options>]	Working with the Esper Library for Event Stream Processing.
JavaSpace / camel-javaspaces javaspaces:jini://hostName[?<options>]	Sending and receiving messages through JavaSpace.
JT400 / camel-jt400 jt400://user:pwd@system[:path_to_dtacq][?<options>]	For integrating with data queues on an AS/400 (i.e., System i, IBM i, i5, etc.) systems.
Kestrel / camel-kestrel kestrel://[addressList]:queueName[?<options>]	For producing to or consuming from Kestrel queues.
MQTT / camel-mqtt mqtt:name[?<options>]	Component for communicating with MQ Telemetry Transport (MQTT) machine-to-machine (M2M) message brokers.
SIP / camel-sip sip://user@hostName:port][?<options>]	Publish/Subscribe communication capability using the Session Initiation Protocol (SIP) protocol.
SIPS / camel-sip sips://user@hostName:port][?<options>]	Publish/Subscribe communication capability using the secured Session Initiation Protocol (SIP) protocol.
SMPP / camel-smpp smpp://[Username@]hostName:port][?<options>]	To send and receive SMS using Short Messaging Service Center using the JSMPF Library.
SMPPS / camel-smpp smpps://[Username@]hostName:port][?<options>]	To send and receive secured SMS using Short Messaging Service Center using the JSMPF Library.
Quickfix / camel-quickfix quickfix:configFile[?<options>]	Implementation of the QuickFix for Java engine which allows to send/receive FIX messages.

Networking

Component / ArtifactId / URI	Description
DNS / camel-dns dns:operation[?<options>]	To lookup domain information and run Domain Name System (DNS) queries using DNSJava.
HL7 / camel-hl7 mina2:[tcp://hostName:port][?<options>]	For working with the HL7 MLLP protocol and the HL7 model using the HAPI Library.
MINA / camel-mina mina:[tcp udp vm]:hostName:port][?<options>]	Working with Apache Multipurpose Infrastructure for Network Applications (MINA) 1.x. Transmission Control Protocol (TCP), User Datagram Protocol (UDP) and Virtual Machine (VM) protocol are supported.
MINA2 / camel-mina2 mina2:[tcp udp vm]:hostName:port][?<options>]	Working with Apache MINA 2.x. Transmission Control Protocol (TCP), User Datagram Protocol (UDP) and Virtual Machine (VM) protocol are supported.
Netty / camel-netty netty:[tcp udp]://hostName:port][?<options>]	Working with TCP and UDP protocols using Java NIO based capabilities offered by the Netty project.
Netty HTTP / camel-netty-http netty-http:[http port]/contextPath[?<options>]	Netty HTTP server and client using the Netty project.

OSGi

Component / ArtifactId / URI	Description
EventAdmin / camel-eventadmin eventadmin:topic[?<options>]	Receiving OSGi EventAdmin events.
Pax Logging / camel-paxlogging paxlogging:appender	Receiving Pax-Logging events in OSGi.

Persistence

Component / ArtifactId / URI	Description
CouchDB / camel-couchdb couchdb:hostname:port]/database[?<options>]	To integrate with Apache CouchDB.
DB4o / camel-db4o in camel-extra db4o://className[?<options>]	For using a db4o datastore as a queue via the db4o database for objects library.
EJB / camel-ejb ejb:ejbName[?<options>]	Uses the Bean Binding to bind message exchanges to Enterprise Java Beans (EJBs). It works like the Bean component but just for accessing EJBs. Supports EJB 3.0 onwards.
HBase / camel-hbase hbase://table[?<options>]	For reading/writing from/to an HBase store (Hadoop database).
Hibernate / camel-hibernate in camel-extra hibernate://entityName[?<options>]	For using a database as a queue via the Hibernate library.
iBATIS / camel-ibatis ibatis://statementName[?<options>]	Performs a query, poll, insert, update or delete in a relational database using Apache iBATIS.
JDBC / camel-jdbc jdbc:dataSourceName[?<options>]	For performing Java Database Connectivity (JDBC) queries and operations.
JPA / camel-jpa jpa://entityName[?<options>]	For using a database as a queue via the Java Persistence API (JPA) specification for working with OpenJPA, Hibernate or TopLink.
Krati / camel-krati krati://datastorePath[?<options>]	For producing to or consuming to Krati datastores.

MongoDB / camel-mongodb mongodb:connectionBean[?<options>]	Interacts with MongoDB databases and collections. Offers producer endpoints to perform CRUD-style operations and more against databases and collections, as well as consumer endpoints to listen on collections and dispatch objects to Camel routes.
MyBatis / camel-mybatis mybatis://statementName[?<options>]	Performs a query, poll, insert, update or delete in a relational database using MyBatis.
SQL / camel-sql sql:queryCommand[?<options>]	Performing Structured Query Language (SQL) queries using JDBC.
Spring Neo4j / camel-spring-neo4j in camel-extra spring-neo4j:http://hostName:port]/database[?<options>]	Component for producing to Neo4j datastore using the Spring Data Neo4j library.

Platform Support

Component / ArtifactId / URI	Description
Activiti / activiti-camel activiti:camelProcess:serviceTask	For working with Activiti, a light-weight workflow and Business Process Management (BPM) platform which supports BPMN 2.
APNS / camel-apns apns:[notification consumer]?[?<options>]	For sending notifications to Apple iOS devices.
Salesforce / camel-salesforce salesforce:topic[?<options>]	To integrate with Salesforce.
SAP NetWeaver / camel-sap-netweaver sap-netweaver:hostName:port][?<options>]	To integrate with SAP NetWeaver Gateway.

Remote Services

Component / ArtifactId / URI	Description
Avro / camel-avro avro:[transport]:[hostName]:[port]/[messageName][?<options>]	Working with Apache Avro for data serialization.
Jclouds / camel-jclouds jclouds:[blobstore compute]:[provider id][?<options>]	For interacting with cloud compute & blobstore service via Jclouds.
JCIFS / camel-jcifs in camel-extra smb://userName@hostName/shareName[?<options>]	This component provides access to remote file systems over the CIFS/SMB networking protocol by using the JCIFS library.
RMI / camel-rmi rmi://hostName:port][?<options>]	Working with Remote Method Invocation (RMI).
SSH component / camel-ssh ssh:[Username]:password@hostName:port][?<options>]	For sending commands to a SSH server.

Search Engines

Component / ArtifactId / URI	Description
ElasticSearch / camel-elasticsearch elasticsearch://clusterName[?<options>]	For interfacing with an ElasticSearch server.
Lucene / camel-lucene lucene:searcherName[:insertQuery][?<options>]	Uses Apache Lucene to perform Java-based indexing and full text based searches using advanced analysis/tokenization capabilities.
Solr / camel-solr solr://hostName:port]/solr[?<options>]	Uses the Solr client API to interface with an Apache Lucene Solr server.

Security

Component / ArtifactId / URI	Description
Crypto (Digital Signatures) / camel-crypto crypto:[sign verify]:name[?<options>]	Used to sign and verify exchanges using the Signature Service of the Java Cryptographic Extension.
XML Security / camel-xmlsecurity xmlsecurity:[sign verify]:name[?<options>]	Used to sign and verify exchanges using the XML signature specification.

Social Media

Component / ArtifactId / URI	Description
Facebook / camel-facebook facebook://endpoint[?<options>]	Providing access to all of the Facebook APIs accessible using Facebook4J.
Twitter / camel-twitter twitter://endpoint[?<options>]	Enables the most useful features of the Twitter API by encapsulating Twitter4J.
Yammer / camel-yammer yammer://function[?<options>]	Allows you to interact with the Yammer enterprise social network.

Special support

Component / ArtifactId / URI	Description
Cache / camel-cache cache://cacheName[?<options>]	The cache component facilitates creation of caching endpoints and processors using EHCache as the cache implementation.
Geocoder / camel-geocoder geocoder:[address lat lng]:latitude:longitude[?<options>]	Supports looking up geocoders for an address, or reverse lookup geocoders from an address.
Hazelcast / camel-hazelcast hazelcast://[type]:cacheName[?<options>]	Hazelcast is a data grid supporting map, multimap, SEDA, queue, set, atomic number and simple clusters.
RCode / camel-rcode in camel-extra rcode://hostName:port]/operation[?<options>]	Uses Rserve to integrate Camel with the statistics environment R.
Routebox / camel-routebox routebox:routeBoxName[?<options>]	Facilitates the creation of specialized endpoints that offer encapsulation and a strategy/map based indirection service to a collection of camel routes hosted in an automatically created or user injected camel context.
Weather / camel-weather weather://name[?<options>]	Polls the weather information from Open Weather Map.

Spring

Component / ArtifactId / URI	Description
Spring Event / camel-spring spring-event://default	Working with Spring Application Events.
Spring Batch / camel-spring-batch spring-batch:jobName[?<options>]	To bridge Camel and Spring Batch.
Spring Integration / camel-spring-integration spring-integration:default[channelName[?<options>]]	The bridge component of Camel and Spring Integration.
Spring Redis / camel-spring-redis spring-redis://hostName:port][?<options>]	Component for consuming and producing from a Redis key-value store.

Templates

Component / ArtifactId / URI	Description
FreeMarker / camel-freemarker freemarker:templateName[?<options>]	Generates a response using a FreeMarker template.
Mustache / camel-mustache mustache:templateName[?<options>]	Generates a response using a Mustache template.
MVEL / camel-mvel mvel:templateName[?<options>]	Generates a response using an MVFLEX Expression Language (MVEL) template.
Scalate / scalate-camel in org.fusesource.scalate scalate:templateName	Generates a response using a Scalate template.
StringTemplate / camel-stringtemplate string-template:templateName[?<options>]	Generates a response using a String Template.

Testing

Component / ArtifactId / URI	Description
DataSet / camel-core dataset:name[?<options>]	For load and soak testing, the DataSet provides a way to create huge numbers of messages for sending to components or asserting that they are consumed correctly.
Mock / camel-core mock:name[?<options>]	For testing routes and mediation rules using mocks.
Stub / camel-core stub:someOtherCamelUri[?<options>]	Allows you to stub out some physical middleware endpoint for easier testing or debugging.
Test / camel-spring test:expectedMessagesEndpointUri[?<options>]	Creates a Mock endpoint which expects to receive all the message bodies that could be polled from the given underlying endpoint.

Web Services

Component / ArtifactId / URI	Description
CXF / camel-cxf cxf:[bean:cxfEndpoint]/someAddress[?<options>]	Working with Apache CXF for web services integration.
CXF Bean / camel-cxf cxf:bean:serviceBeanRef[?<options>]	Process the exchange using a JAX-WS or JAX-RS annotated bean from the registry.
CXFRS / camel-cxf cxf:rs:[bean:rsEndpoint]/someAddress[?<options>]	Working with Apache CXF for RESTful services integration.
Restlet / camel-restlet restlet:restletUri[?<options>]	Component for consuming and producing Restful resources using Restlet.
Spring Web Services / camel-spring-ws spring-ws:[mapping-type]:someAddress[?<options>]	Client-side support for accessing web services, and server-side support for creating your own contract-first web services using Spring Web Services.

Websocket / camel-websocket websocket://hostName:port]/resourceUri[?<options>]	Communicating with Websocket clients.
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XML

Component / ArtifactId / URI	Description
Bean Validation / camel-bean-validator bean-validator:something[?<options>]	Validates the payload of a message using the Java Validation API (JSR 303). Hibernate Validator is the reference implementation.
FOP / camel-fop fop:outputFormat[?<options>]	Renders the message into different output formats using Formatting Objects Processor (FOP), which is driven by XSL formatting objects (XSL-FO).
MSV / camel-msv msv:someLocalOrRemoteResource[?<options>]	Validates the payload of a message using the MSV Library.
RNC / camel-jing rnc:[relativeOrAbsolutePath][?<options>]	Validates the payload of a message using RelaxNG Compact Syntax.
RNG / camel-jing rng:[relativeOrAbsolutePath][?<options>]	Validates the payload of a message using RelaxNG.
SIAX / camel-stax stax:[contentTypeHandlerClassName myHandler]	Process messages through a Simple API for XML (SAX) ContentHandler.
XQuery / camel-saxon xquery:someXQueryResource	Generates a response using an XQuery template.
XSLT / camel-core xslt:templateName[?<options>]	Generates a response using an Extensible Stylesheet Language Transformations (XSLT) template.
Validation / camel-core validation:someLocalOrRemoteResource[?<options>]	Validates the payload of a message using XML Schema and Java API for XML Processing (JAXP) Validation.