



# List of used Apache Camel modules

Customer Care Center

written as part of the lecture

Workflow Modeling and Proces Management – 188.924

advised by

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# 1 Used Apache Camel Modules

## **aggregator**

We implemented a custom aggregation strategy where two exchanges are combined. Due to the expression *constant(true)*, the custom *FileAggregationStrategy* is called for each message. The custom strategy concatenates the old with the new body, separated by two *new lines*.

*Appears in classes: BackupLogsRoute, FileAggregationStrategy*

## **bean**

Instead of processors we used beans for the computation of the business logic

*Appears in classes: MailRoute, FacebookRoute, TwitterRoute, EmployeeSimulationRoute, BackupLogsRoute*

## **camel-core (direct-queue)**

Direct queues are used to split the routes in smaller parts and exchange different messages between these parts

*Appears in classes: EmployeeSimulationRoute, FacebookRoute, MailRoute, TwitterRoute*

## **camel-core (file)**

File is used to write logs/backups of requests to files

*Appears in classes: MailRoute, TwitterRoute, FacebookRoute, CustomRouteBuilder, BackupLogsRoute,*

## **camel-core (seda-queue)**

This kind of queue allows asynchronous invocation and is mainly used in context with the xml conversion and the dropbox upload as well as file output of log files. Multiple concurrent consumers speed the process up (multiple parallel threads)

*Appears in classes: BackupLogsRoute, FacebookRoute, MailRoute, TwitterRoute*

## **camel-dropbox**

Is used to save logs and messages in xml format to dropbox

*Appears in classes: MailRoute, BackupLogsRoute, FacebookRoute, TwitterRoute*

## **camel-facebook**

New Facebook requests are polled and existing ones answered

*Appears in classes: FacebookRoute, EmployeeSimulationRoute*

## **camel-google-calendar**

For every new business case an event in google calendar is created

*Appears in classes: MailRoute, FacebookRoute, TwitterRoute*

## **camel-mail**

Customer requests which were sent per mail are polled and answered

*Appears in classes: MailRoute, EmployeeSimulationRoute*

## **camel-mongodb**

Besides the backup in dropbox business cases are also saved to mongodb

*Appears in classes: MailRoute, FacebookRoute, TwitterRoute, EmployeeSimulationRoute*

## **camel-quartz2**

Time-planner used to regularly answer and close facebook, mail and twitter requests as well as upload log files

*Appears in classes: BackupLogsRoute, EmployeeSimulationRoute*

## **camel-twitter**

Customer tweets are polled and answered

*Appears in classes: TwitterRoute, EmployeeSimulationRoute*

**camel-velocity**

Is used to create the template for the mail auto-reply function

*Appears in classes: MailRoute*

**content enricher**

Behaviour is implemented by a custom bean *EmployeeFacebookSimulationProcessor*, which enriches the header of the message by the *Facebook PostID*, *Post message* and the corresponding *FacebookBusinessCase*. The same behaviour is implemented for the *TwitterBusinessCase*

*Appears in classes: EmployeeSimulationRoute*

**filter**

The filter is used to screen incoming mails if they contain "spam" in the message body

*Appears in classes: MailRoute*

**log component**

Used to log incoming messages to the console

*Appears in classes: MailRoute, FacebookRoute, TwitterRoute*

**log eip**

Used to log different things (e.g. successful upload to dropbox)

*Appears in classes: MailRoute, TwitterRoute, FacebookRoute, EmployeeSimulationRoute*

**message translator**

Incoming messages are marshalled into xml files

*Appears in classes: MailRoute, FacebookRoute, TwitterRoute*

**parallelprocessing**

Was used to address multiple receivers (parallel sending)

*Appears in classes: MailRoute, FacebookRoute, TwitterRoute*

**multicast**

See parallelprocessing

*Appears in classes: MailRoute, FacebookRoute, TwitterRoute*

**polling**

Polling is used to continuously fetch new messages in regular intervals

*Appears in classes: FacebookRoute, TwitterRoute*

**recipientlist**

In combination with "simple" recipientLists are used to dynamically determine the target file name for the files which are uploaded to dropbox

*Appears in classes: MailRoute, BackupLogsRoute, FacebookRoute, TwitterRoute*

**splitter**

The splitter component is used for splitting a *collection of FacebookBusinessCases* retrieved from the MongoDB, which get processed sequentially by the *MongoDbBusinessCaseProcessor* bean.

*Appears in classes: FacebookRoute*

**transformer**

The transform component is used at the global exception routes, transforming (aka setting the body of the out message) to a String representation of the corresponding handled *exception message*, which gets logged in the corresponding folder structure later on.

*Appears in classes: CustomRouteBuilder*

**wiretap**

Wiretap is used to forward a message to two destinations (often to write to a queue to write content in a file and upload it to e.g. dropbox in the other path)

*Appears in classes: MailRoute, BackupLogsRoute, EmployeeSimulationRoute, TwitterRoute*