apache-camel-spring-boot-1.x (0.0.1)

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Table of Contents

1. Introduction	2
2. Implementation	3
2.1. camel spring configuration	3
2.2. move all files from directory	3
2.3. move files via jms	3
2.4. change filename by using camel header.	5
2.5. process exchange	5
2.6. easier exchange	
2.7. choice	7
3. BOM	9
4. Links	n

Travis CI status: [Build Status]

Chapter 1. Introduction

Reference documentation

See Travis CI integration tests for details

generated by generator-jvm yeoman generator (java-spring-boot_1.x)

Chapter 2. Implementation

2.1. camel spring configuration

src/main/resources/application.properties

```
camel.springboot.main-run-controller=true
```

2.2. move all files from directory

source directory: /tmp/camel-in/ destination directory: /tmp/camel-out/

src/main/java/daggerok/app/MoveFilesCamelConfig.java

2.3. move files via jms

source directory: /tmp/camel-jms-in/ process queue: files destination directory: /tmp/camel-jms-out/

```
@Slf4j
@Configuration
@RequiredArgsConstructor
public class MoveFilesViaJmsCamelConfig {
  @Bean
  public RouteBuilder moveFilesViaJmsRoute() {
    return new RouteBuilder() {
      @Override
      public void configure() throws Exception {
        from("file:///tmp/camel-jms-in")
            .routeId("in-dir-to-jms")
            .transform()
            .body(GenericFile.class, genericFile -> {
              final File file = File.class.cast(genericFile.getFile());
              try (final FileInputStream inputStream = new FileInputStream(file)) {
                final InputStreamReader streamReader = new InputStreamReader
(inputStream);
                final BufferedReader in = new BufferedReader(streamReader);
                return in.lines().collect(joining());
              } catch (IOException e) {
                log.error(e.getLocalizedMessage());
                throw new RuntimeException(e);
              }
            })
            .to("jms:queue:files")
        from("jms:queue:files")
            .routeId("jms-to-out-dir")
            .to("file:///tmp/camel-jms-out")
      }
    };
 }
}
```

```
@Component
@RequiredArgsConstructor
class ApplicationJmsComponentCustomizer implements ComponentCustomizer<JmsComponent> {
    final ConnectionFactory connectionFactory;
    @Override
    public void customize(JmsComponent component) {
        component.setConnectionFactory(connectionFactory);
    }
}
```

2.4. change filename by using camel header

source directory: /tmp/camel-filename-in/ destination directory: /tmp/camel-filename-out/

setup camel header to change output filename in pattern: uuid-changed.txt

```
@Configuration
@RequiredArgsConstructor
public class ChangeFilenameHeaderCamelConfig {
 @Bean
 public RouteBuilder filenameHeaderRoute() {
    return new RouteBuilder() {
      @Override
      public void configure() throws Exception {
        from("file:///tmp/camel-filename-in")
            .routeId("change-filename-header")
            .setHeader("CamelFileName", () -> format("%s-changed.txt", UUID.
randomUUID().toString()))
            .to("file:///tmp/camel-filename-out");
      }
    };
 }
}
```

2.5. process exchange

source directory: /tmp/camel-exchange-in/ destination directory: /tmp/camel-exchange-out/

man in a middle: do additional stuff with message during camel pipeline (for instance, log message body):

```
@Configuration
@RequiredArgsConstructor
public class ExchangeProcessorCamelConfig {
 public RouteBuilder processExchangeRoute() {
    return new RouteBuilder() {
      @Override
      public void configure() throws Exception {
        from("file:///tmp/camel-exchange-in")
            .routeId("exchange-processor")
            .process().exchange(exchange -> {
              final Message inputMessage = exchange.getIn();
              final Object body = inputMessage.getBody(String.class);
              log.info("handling message body in exchange consumer: {}", body);
            })
            .to("file:///tmp/camel-exchange-out");
     }
   };
 }
}
```

2.6. easier exchange

source directory: /tmp/camel-easier-exchange-in/ destination directory: /tmp/camel-easierexchange-out/

```
@Configuration
@RequiredArgsConstructor
public class EasierExchangeProcessorCamelConfig {
 public RouteBuilder easierExchangeRoute() {
    return new RouteBuilder() {
      @Override
      public void configure() throws Exception {
        from("file:///tmp/camel-easier-exchange-in")
            .routeId("easier-exchange")
            .process()
            .message(message -> {
              final String body = message.getBody(String.class);
              final Map<String, Object> headers = message.getHeaders();
              log.info("easy body: {}", body);
              headers.entrySet().parallelStream()
                  .filter(e -> "CamelFileLength".contains(e.getKey()))
                  .forEach(e -> log.info("header({}): {}", e.getKey(), e.getValue()));
            })
            /* // absolutely same, even more easier!
            .body(String.class, (body, headers) -> {
              log.info("easiest: {}", body);
              headers.entrySet().parallelStream()
                  .filter(e -> "CamelFileLength".contains(e.getKey()))
                  .forEach(e -> log.info("header({}): {}", e.getKey(), e.getValue()));
            })
            .to("file:///tmp/camel-easier-exchange-out");
      }
   };
 }
}
```

2.7. choice

source directory: /tmp/camel-choice-in/ destination directory: /tmp/camel-choice-out/

```
@Configuration
@RequiredArgsConstructor
public class ChoiceCamelConfig {
  @Bean
  public RouteBuilder choiceRoute() {
    return new RouteBuilder() {
      @Override
      public void configure() throws Exception {
        from("file:///tmp/camel-choice-in")
            .routeId("choice")
            .choice()
            .when(exchange -> {
              final String body = exchange.getMessage().getBody(String.class);
              return !body.toLowerCase().contains("err");
            })
            .to("file:///tmp/camel-choice-out")
            .otherwise()
            .to("file:///tmp/camel-choice-error")
            .endChoice()
      }
   };
 }
}
```

Chapter 3. BOM

maven

gradle

```
dependencyManagement {
  imports {
    mavenBom "org.apache.camel:camel-spring-boot-dependencies:$apacheCamelVersion"
```

Chapter 4. Links

GitHub repo GitHub pages