Camel 2.7.0 Release

Camel 2.7.0 release
‹ed URL

New and Noteworthy

Welcome to the 2.7.0 release which approx 169 issues resolved (new features, improvements and bug fixes such as...)

> ### ⓘ Dependency changes
>
> The Camel 2.7.0 release has a number of major dependency changes:
>
> - JDK 1.6+ is now required
> - Spring 3.x+ is now required if using Spring
> - slf4j is used as logger instead of commons logging
>
> In other words support for JDK 1.5 and Spring 2.x has been dropped.

- Switched to use slf4j as the logger instead of commons logging.
- Camel now checks state of `Service` during starting/stopping the Lifecycle of the `Service`. This avoids double starting/stopping in case the service was already in the desired state.
- Added support for MDC logging with Camel
- JMS consumer now eager checks if Camel is shutting down and signals that to its `DefaultMessageListenerContainer` which avoids trying to re-connect/failover during shutdown.
- Introduced option to automatic Mock endpoints during testing. This makes testing without having to add Mock endpoints in your routes a breeze. See more details at Mock component documentation.
- Added `assertPeriod` option to Mock endpoint, which is a period im milliseconds, that the Mock will pause and then re-assert itself to ensure the assertion is still valid. This can be used as a threshold when testing with expectations that **exactly** a given number of messages should arrive on the Mock endpoint.
- Added `arrives` DSL to Mock endpoint to allow you to setup expectations about timespan between messages arriving on the Mock endpoint. See more details at Mock component documentation.
- HTTP4 is upgraded to use Apache HttpClient 4.1
- Fixed an issue with File consumer having absolute starting directory and using absolute paths in the `move` option as well
- Fixed concurrent append to the same file in the File producer
- Fixed issue with restarting Quartz causing a failure due trigger name already exists issue for stateful jobs.
- Its now possible to use multiple QuartzScheduler's when deploying multiple Camel applications in the same JVM classloader.
- Quartz update checker is now always disabled, see more details here
- Fixed potential issue installing `camel-ftp` feature in Apache ServiceMix
- New `JdbcMessageIdRepository` for the idempotent consumer EIP in SQL
- Relaxed how aggressive Camel was registering services as MBeans in JMX. Now Camel will by default only registeres MBeans when starting CamelContext or starting new routes. This avoids registering too many MBeans if using dynamic EIP patterns such as Recipient List using different endpoint urls, causing new endpoints and its associated services to be registered in JMX. This would keep growing over time and consume memory as well. You can use the `registerAlways` or `registerNewRoutes` options on `ManagementAgent` to control this behavior. See Camel JMX for more details.
- Redelivery policy and OnException now supports property placeholders in both Java and XML DSLs.
- Introduced `<redeliveryPolicyProfile>` to easily define common profiles for redelivery policies, which you can refer to from `<errorHandler>` or `<onException>` using the `redeliveryPolicyRef` attribute. Also Spring Frameworks property placeholders works with `<redeliveryPolicyProfile>`.
- Improved the XML based Error Handlers to validate configuration on startup, to fail if they have been misconfigured.
- Spring Integration is upgraded to Spring Integration 2.0.
- Added `endChoice()` to the Java DSL to be able to use any EIPs inside the Content Based Router. See more details here
- Property placeholders can now be use for any kind of attributes/options in the EIPs in the Camel routes. For example in the Spring XML file you can now use placeholders for timeout attributes etc. This is possible using the specialized placeholder namespace. See more details at the Using PropertyPlaceholder wiki page. In the Java DSL there is a new `placeholder` option on each EIP you can leverage.
- The `camel-jdbc-aggregator` component is merged into the `camel-sql` component.
- Fix in Mail component for duplicate attachments, and when using starttls.
- Maven 3 is now supported for building

- Tidy up the XML DSL to not allow nesting tags where it doesn't make sense.
- Internal cleanup in route preparation logic to be fully shared for all DSLs (before the XML DSLs and Java DSL was a bit different)
- Fixed InterceptFrom to work with from endpoints defined using ref's or instances (eg everything but uris)
- Fixed HTTP and HTTP4 producers double encoding endpoint uri, when calling external service
- Fixed JMS producer not working with OracleAQ throwing exception on accessing `JMSReplyTo`
- Added support for using OSGi Blueprint property placeholder service with Camel routes. Camel uses convention over configuration so all you have to do is to define the OSGi blueprint placeholder and you can refer to those from the `<camelContext>`. Pay attention to the placeholder tokens using by Camel is {{ }}.
- `<threadPoolProfile>` and `<threadPool>` is now easier to use with property placeholders
- Properties component now supports JVM system properties and OS environment variables in the locations option. For example using `"file:${karaf.home}/etc/foo.properties"` to refer to the `foo.proeprties` file in the Apache Karaf installation.
- Fixed an issue with Recipient List in parallel mode, not reusing background aggregator thread
- Fixed an issue with dependency ordering when using Spring's `depends-on` attribute between multiple `<camelContext>`.
- SERVLET component doesn't hijack Spring to start the web application anymore. Spring and CamelServlet is now independent. See more at important changes to consider when upgrading.
- Fixed all Camel Maven Archetypes to use new Maven format and ensured they all work out of the box.
- Web Console upgraded to Scalate 1.4.1, and the webpages is now precompiled
- JT400 can now execute program calls on the AS/400
- Cache now only mandates a message body for the add and update operations. This makes get operation possible for messages with no existing body.
- Fixed issue when Jetty continuation timeouts has been triggered before Asynchronous Routing Engine has reply ready. This would cause Jetty to log WARN logs about illegal state.

New Enterprise Integration Patterns

- None

New Components

- Context
- Hazelcast
- DNS
- MyBatis

New DSL

- `<setFaultBody>` added to XML DSL
- `endChoice` added to Java DSL
- `placeholder` added to Java DSL

New Annotations

- None

New Data Formats

- None

New Languages

- Spring Expression Language

New Examples

- `camel-example-osgi-rmi`
- `camel-example-servlet-tomcat`

New Tutorials

- None

New Archetypes

- `camel-archetype-web` added to generate a project to deploy camel routes as a WAR

API breaking

- `FATAL` has been removed from `org.apache.camel.LoggingLevel`. Use `ERROR` instead.
- `org.apache.camel.processor.Logger` has been renamed to `org.apache.camel.processor.CamelLogger`, and it now uses slf4j as the logger.
- Removed `getLeftValue` and `getRightValue` methods on `BinaryPredicate`.

- The `ref` attribute on `<redeliveryPolicy>` has been removed. Instead use `redeliveryPolicyRef` attribute on `<onException>` or `<error Handler>` tags.
- The `<batch-config>` and `<stream-config>` tags in XML DSL in the Resequencer EIP must now be configured in the top, and not in the bottom. So if you use those, then move them up just below the `<resequence>` EIP starts in the XML.
- The `JdbcAggregationRepository` is moved from the `camel-jdbc-aggregator` component to the `camel-sql` component. The full qualified class name changed from `org.apache.camel.component.jdbc.aggregationRepository.JdbcAggregationRepository` to `org.apache.camel.processor.aggregate.jdbc.JdbcAggregationRepository`.
- `sortBody` methods removed from Java DSL. You can use `sort(body())` instead.
- The Sort EIP in XML DSL is now configured the expression directly. Which means you no longer need to use `<expression>` enclosing the expression. Instead you set the expression directly, just as the other EIPs does.
- Method `parsePropertyValue` renamed to `parseProperty` and have additional parameters in the `PropertiesParser` interface.

Known Issues

- The Tracer may not output all details for some situations such as when using `onCompletion` or `intercept` etc.
- Not all Examples have ANT build.xml files to run the example using ANT.
- `camel-script` which uses `ScriptEngineManager` from the JDK, cannot load script engines from packages outside the JDK (i.e. when running in OSGi).
- Stopping a route after using `adviceWith` maybe cause issues with error handlers, see CAMEL-3534
- The project cannot fully build the site using Maven (eg running `"mvn site"`. There is no plan to make this work as the project do not use the maven site.
- The CXF Tomcat Example does not work on Tomcat 7 due a bug in Apache CXF 2.3.3 that camel-cxf uses by default. When CXF 2.3.4 is released you can upgrade and the example should work.
- The `camel-spring-ws` feature does not work in Apache ServiceMix or Apache Karaf.
- The `camel-cache` feature cannot load the `ehcache-failsafe.xml` file.
- The default cacheLevel on JMS is always `CACHE_CONSUMER`. However this impacts performance when using transacted=true. The workaround is to set `cacheLevelName=CACHE_NONE` if you use transaction.
- Stopping a route having a context scoped error handler, may cause the error handler to stop as well, causing it to not work if it was used by other routes, see CAMEL-3878

Important changes to consider when upgrading

- Java 1.6 or better is required
- Spring 3.0.5 or better is required, when using Spring
- Apache CXF 2.3.3 or better is required, when using CXF
- Switched to use slf4j as the logger instead of commons logging. That means you may have to included `slf4j-log4j12` as dependency if you are using log4j.
  See documentation at slf4j for more details.
- If you have developed custom Camel Components and your `Endpoint` class extends `DefaultEndpoint` then its advised to use the `doStart` and `doStop` instead of `start` and `stop`.
- You can not access the attachment by using Message.getAttachement(id) if the camel-cxf endpoint works in POJO data format, please access the attachment objects from the camel message body.
- camel-restlet has been upgraded from Restlet 1.1.x to 2.0.5
- SERVLET does not startup Spring XML file anymore. You should startup the XML file using 100% Spring style using the ContextLoaderListener in the web.xml. See the the Servlet Tomcat Example example for details.
- Camel Maven Archetypes the archetype `camel-archetype-war` has been renamed to `camel-archetype-webconsole`.

Getting the Distributions

Binary Distributions

Description	Download Link	PGP Signature file of download
Windows Distribution	apache-camel-2.7.0.zip	apache-camel-2.7.0.zip.asc
Unix/Linux/Cygwin Distribution	apache-camel-2.7.0.tar.gz	apache-camel-2.7.0.tar.gz.asc

ⓘ **The above URLs use redirection**

The above URLs use the Apache Mirror system to redirect you to a suitable mirror for your download. Some users have experienced issues with some versions of browsers (e.g. some Safari browsers). If the download doesn't seem to work for you from the above URL then try using FireFox

Source Distributions

Description	Download Link	PGP Signature file of download
Source for Windows	apache-camel-2.7.0-src.zip	apache-camel-2.7.0-src.zip.asc

Source for Unix/Linux/Cygwin	apache-camel-2.7.0-src.tar.gz	apache-camel-2.7.0-src.tar.gz.asc

Getting the Binaries using Maven 2

To use this release in your maven project, the proper dependency configuration that you should use in your Maven POM is:

```
<dependency>
  <groupId>org.apache.camel</groupId>
  <artifactId>camel-core</artifactId>
  <version>2.7.0</version>
</dependency>
```

SVN Tag Checkout

```
svn co http://svn.apache.org/repos/asf/camel/tags/camel-2.7.0
```

Changelog

For a more detailed view of new features and bug fixes, see the:

- release notes for 2.7.0