



Red Hat JBoss Fuse 6.3

Release Notes

What's new in Red Hat JBoss Fuse

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JBoss A-MQ Docs Team

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Abstract

These notes provide an overview of the changes between each release of Red Hat JBoss Fuse.

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CHAPTER 1. WHAT'S NEW

Abstract

This section describes the main features and changes in version 6.3.

1.1. NEW FEATURES

The main new features in version 6.3 are:

- JBoss Fuse tooling is available in [Red Hat JBoss Developer Studio](#) starting with Developer Studio 11.0. Previously, Fuse tooling was available in Red Hat JBoss Developer Studio Integration Stack.
- The look and feel of the Fuse tooling Camel route editor has been revised.
- The Camel CDI component has been rewritten to provide better integration with the [JSR 299: Contexts and Dependency Injection](#) (CDI) programming model. See [chapter "Camel CDI" in "Deploying into Apache Karaf"](#) for more details.
- New Camel Braintree component (**camel-braintree**) provides integration with various payment systems, including PayPal. See [chapter "Braintree" in "Apache Camel Component Reference"](#) for more details.
- New Camel ServiceNow component (**camel-servicenow**) provides integration with the ServiceNow REST API. See [chapter "ServiceNow" in "Apache Camel Component Reference"](#) for more details.
- RH-SSO adapter for JBoss Fuse is now supported in combination with the 6.3.0 Roll Up 2 patch version of JBoss Fuse. See the section [JBoss Fuse Adapter](#) from the *RH-SSO 7.1 Securing Applications and Services Guide* for more details.



NOTE

JBoss Fuse 6.3.0 Roll Up 1 is the minimum required version, but 6.3.0 Roll Up 2 is recommended.

1.2. IMPORTANT NOTES

Oracle JDK 1.7 is incompatible with Maven central repository

Due to recent changes in the security requirements for connecting to the Maven central repository, Oracle JDK 1.7 is no longer compatible with Maven central and is unable to download Maven artifacts. We recommend that you upgrade to Oracle JDK 1.8 to avoid this issue. See [Section 4.2, "List of Known Issues"](#) for more details.

New Maven repository

Since JBoss Fuse 6.3, the JBoss Fuse Maven artifacts are available *only* from the following Maven repositories:

- <https://maven.repository.redhat.com/ga>

- <https://maven.repository.redhat.com/earlyaccess/all>

Hence for JBoss Fuse 6.3, you need to edit your Maven **settings.xml** file, replacing the old **repo.fusesource.com** repository URLs (at <https://repo.fusesource.com/nexus/content/repositories/releases> and <https://repo.fusesource.com/nexus/content/groups/ea>) with the new Maven repository URLs.



NOTE

Older versions of JBoss Fuse (prior to 6.3) continue to use the old Maven repositories.

ActiveMQ runtime can now be wired to JMS 2.0 API bundle in OSGi

In JBoss Fuse 6.3, the ActiveMQ runtime has been modified so that it is compatible with and can be wired to the JMS 2.0 API bundle. This does *not* imply that ActiveMQ supports JMS 2.0. In fact, ActiveMQ still supports JMS 1.1 only. This change does mean, however, that it is now possible to deploy an ActiveMQ broker (which is a JMS 1.1 application) alongside a JMS 2.0 compliant application in the same OSGi container. This can be useful, for example, if you want to deploy two different messaging products in the same Apache Karaf container.

Upgraded Jetty from 8.1.x to 9

In the Apache Karaf container, Jetty (which provides the default HTTP servlet container for Karaf) has been upgraded from Jetty 8.1.x to Jetty 9. This has a significant impact on the Jetty container configuration, affecting settings in the **etc/org.ops4j.pax.web.cfg** file, in the **etc/jetty.xml** file, and in the Camel Jetty endpoint. For more details, see [chapter "Securing the Jetty HTTP Server" in "Security Guide"](#) and [chapter "Securing the Camel Jetty Component" in "Security Guide"](#) .

Apache Karaf package name changed from jboss-fuse-full to jboss-fuse-karaf

The package name for the Apache Karaf distribution of JBoss Fuse has changed from **jboss-fuse-full-ProductVersion.zip** to **jboss-fuse-karaf-ProductVersion.zip** in this release.

CXF security changes

Note the following important changes to CXF security in this release:

- The STS (Security Token Service) now issues tokens using the RSA-SHA256 signature algorithm by default (previously RSA-SHA1), and the SHA-256 digest algorithm (previously SHA-1).
- The SAML/XACML functionality previously available in the **cxfrt-security** module is now in the **cxfrt-security-saml** module.

New interceptor required for transactional RFC SAP endpoints

A new interceptor object is provided in JBoss Fuse 6.3, which is needed to configure transactional RFC destinations properly for the Camel SAP component. For details, see [section "Interceptor for tRFC and qRFC destinations" in "Apache Camel Component Reference"](#).

Make Quickstart Examples Available

In previous releases, profiles for quickstart example were available by default. The new default behavior is that profiles for quickstart examples are not available in a new fabric. To create a fabric in which you

can run the quickstart examples, edit the `$FUSE_HOME/fabric/io.fabric8.import.properties` file by uncommenting the line that starts with the following:

```
# importProfileURLs =
```

If you create a fabric without doing this and you want to run the quickstart examples, follow these steps to make them available:

1. Edit the `$FUSE_HOME/quickstarts/pom.xml` file to add a fabric I/O plugin, for example:

```
<plugin>
  <groupId>io.fabric8</groupId>
  <artifactId>fabric8-maven-plugin</artifactId>
  <version>1.2.0.redhat-630187</version>
</plugin>
```

2. In the `$FUSE_HOME/quickstarts` directory, change to the directory for the quickstart example you want to run, for example:

```
cd beginner
```

3. In that directory, execute the following command:

```
mvn fabric8:deploy
```

You would need to run this command in each directory that contains a quickstart example that you want to run.

CHAPTER 2. DEPRECATED AND REMOVED FEATURES

Abstract

After recent planning activities for JBoss Fuse 7.0, additional features have been deprecated for 7.0, as listed under [Section 2.2, "April 2017 6.3 Addendum"](#).

If you need any assistance or have any questions about the upcoming changes in Fuse 7, please contact support@redhat.com.

2.1. CUMULATIVE LIST OF DEPRECATED 6.X FEATURES

A complete list of the features that are deprecated from the JBoss Fuse 6.x family of products (including those from previous minor releases) is given in the knowledge base article, [JBoss Fuse 6.x Deprecated and Removed Features](#).

2.2. APRIL 2017 6.3 ADDENDUM

Features that were deprecated in the context of planning for the next major release, 7.0, of JBoss Fuse.

Embedded ActiveMQ broker will be removed in 7.0

In JBoss Fuse 7.0, JBoss Fuse on Karaf will no longer provide an embedded ActiveMQ Broker. Customers should connect to a supported remote broker directly. For more information on our supported brokers please refer to the [messaging lifecycle](#).

Geronimo transaction manager will be replaced in 7.0

In JBoss Fuse 7.0, the Geronimo transaction manager in the Karaf container will be replaced by [Narayana](#).

JBoss Fuse integration pack will be removed in 7.0

In JBoss Fuse 7.0, support for running rules and processes will be provided by components shipped with Red Hat JBoss BPM Suite and Red Hat JBoss BRMS.

Jetty container will be replaced in 7.0

In JBoss Fuse 7.0, the Jetty container will be replaced by [Undertow](#). Initially, this change applies only to internal use of the Jetty container (for example, in the Karaf container). Other Jetty components will be removed in a future release

Karaf console commands for child container administration will be removed in 7.0

In JBoss Fuse 7.0, the Karaf console commands for child container administration (commands prefixed by **admin:**, such as **admin:create**, **admin:list**, and so on) will be removed.

SwitchYard will be removed in 7.0

In JBoss Fuse 7.0, SwitchYard will be removed, and you should use Apache Camel directly instead. For more detailed information, see the knowledge base article, [SwitchYard Support Plan After Releasing JBoss Fuse 7](#).

2.3. OCTOBER 2016 GA

Features that were deprecated or removed at the time of the JBoss Fuse release in October 2016.

Support for Fabric8 1.x will be removed in the next major release of JBoss Fuse

In the next major release of JBoss Fuse (planned as JBoss Fuse 7.0), Fabric8 v1 will be replaced by Fuse Integration Services (FIS), which includes components of Fabric8 v2 technology. FIS provides a set of tools and Docker-formatted images that enable development, deployment, and management of integration microservices within OpenShift.

Although FIS has a different architecture, it fulfills the same provisioning, automation, central configuration and management requirements that Fabric8 v1 provides. For more information, please see [Red Hat JBoss Fuse Integration Services 2.0 for OpenShift](#).

Please contact Fuse Support with any questions or concerns.

bin/deletefabric8 script has been removed

The **bin/deletefabric8** script has been removed in this release.

Camel components for Google App Engine are deprecated

The [GAE components](#) for Apache Camel are deprecated in JBoss Fuse 6.3 and will be removed from a future release of JBoss Fuse.

Camel Netty component is deprecated

The Camel Netty component and the SwitchYard Camel Netty component are both deprecated in JBoss Fuse 6.3 and will be removed in a future release of JBoss Fuse. It is recommended that you use the Camel Netty4 component instead.

Camel jBPM component is deprecated

The Camel jBPM component (**camel-jbpm**) is deprecated in JBoss Fuse 6.3 and will be removed in a future release of JBoss Fuse.

Camel LevelDB component is deprecated on all operating systems except for Linux

Since JBoss Fuse 6.3, the Camel LevelDB (**camel-leveldb**) component is deprecated on all operating systems except for Red Hat Enterprise Linux. In future, the Camel LevelDB component will be supported only on Red Hat Enterprise Linux.

Tanuki based wrapper for installing JBoss Fuse as a service is deprecated

The Tanuki based wrapper scripts—generated using the **wrapper:install** Karaf console command—for installing JBoss Fuse as a service are deprecated since JBoss Fuse 6.3 and will be removed in a future release of JBoss Fuse. To install the Apache Karaf container as a service, it is recommended that you use the new **karaf-service-*.sh** scripts from the **bin/contrib** directory instead.

Smooks is deprecated

Since JBoss Fuse 6.3, the Smooks component for SwitchYard is deprecated and will be removed in a future release of JBoss Fuse.

BPEL is deprecated

BPEL (based on the [Riftsaw](#) project) is no longer being actively developed and will be removed from a future release of JBoss Fuse. If you are currently using BPEL, it is recommended that you consider migrating to the Red Hat JBoss BPM Suite (which is supported through the JBoss Fuse Integration Package).

Design Time Governance is deprecated

The Design Time Governance component is deprecated since 6.2.1 and not included with the product.

Runtime Governance is deprecated.

Since JBoss Fuse 6.3, the Runtime Governance (RTGov) component is deprecated and will be removed in a future release of JBoss Fuse.

S-RAMP is deprecated

The SOA Repository Artifact Model and Protocol (S-RAMP) component is deprecated since 6.2.1 and will be removed from a future release.

bin/patch script is deprecated

The **bin/patch** script (**bin\patch.bat** on Windows O/S) is deprecated and will be removed in a future release.

Spring Dynamic Modules (Spring-DM) is deprecated

Spring-DM (which integrates Spring XML with the OSGi service layer) is deprecated since 6.2.1 and you should use the Blueprint framework instead. Using Blueprint does not prevent you from using the Java libraries from the Spring framework: the latest version of Spring is compatible with Blueprint.

Apache OpenJPA is deprecated

The [Apache OpenJPA](#) implementation of the Java Persistence API (JPA) is deprecated since 6.2.1. It is recommended that you use the [Hibernate](#) implementation instead.

CHAPTER 3. UNSUPPORTED FEATURES

APACHE ARIES BLUEPRINT WEB MODULE IS UNSUPPORTED

The Apache Aries [Blueprint Web](#) module is *not* supported in JBoss Fuse. The presence of an example featuring Blueprint Web in the community edition of Apache Camel (provided in **extras/apache-camel-2.17.0.redhat-630xxx.zip**) does *not* imply that this feature is supported in JBoss Fuse.

THE PHP SCRIPTING LANGUAGE IS NOT SUPPORTED IN APACHE CAMEL ON APACHE KARAF

The PHP scripting language is *not* supported in Camel applications on the Apache Karaf container, because there is no OSGi bundle available for PHP. The PHP scripting language is deprecated in Camel applications on the JBoss EAP container and on the Spring Boot container.

THE PYTHON SCRIPTING LANGUAGE IS NOT SUPPORTED IN APACHE CAMEL ON APACHE KARAF

The Python scripting language is *not* supported in Camel applications on the Apache Karaf container, because there is no OSGi bundle available for Python. The Python scripting language is deprecated in Camel applications on the JBoss EAP container and on the Spring Boot container.

THE INTEGRATION PACK IS NOT SUPPORTED IN FABRIC DEPLOYMENTS

The Integration Pack is *not* supported in Fabric and cannot be installed in a fabric container. For more details, see [ENTESB-5796](#).

CHAPTER 4. KNOWN ISSUES

4.1. CVE SECURITY VULNERABILITIES

As a middleware integration platform, JBoss Fuse can potentially be integrated with a large number of third-party components. It is not always possible to exclude the possibility that some third-party dependencies of JBoss Fuse could have security vulnerabilities. This section documents known security vulnerabilities affecting third-party dependencies of JBoss Fuse 6.3.

[[CVE-2017-12629](#)] Multiple CVEs related to jackson-databind security vulnerability

Applications that use the FasterXML **jackson-databind** library to instantiate Java objects by deserializing JSON content are potentially vulnerable to a *remote code execution* attack. The vulnerability is not automatic, however, and it can be avoided if you take the appropriate mitigation steps.

At a minimum, the following prerequisites must all be satisfied before an attack becomes possible:

1. You have enabled polymorphic type handling for deserialization of JSON content in **jackson-databind**. There are two alternative ways of enabling polymorphic type handling in Jackson JSON:
 - a. Using a combination of the **@JsonTypeInfo** and **@JsonSubTypes** annotations.
 - b. By calling the **ObjectMapper.enableDefaultTyping()** method. This option is particularly dangerous, as it effectively enables polymorphic typing globally.
2. There are one or more *gadget classes* in your Java classpath, which have not yet been blacklisted by the current version of **jackson-databind**. A gadget class is defined as any class that performs a sensitive (potentially exploitable) operation as a side effect of executing a constructor or a setter method (which are the methods that can be called during a deserialization). The gadget blacklist maintained by the Jackson JSON library is the last line of defence against the remote code execution vulnerability.

It is the existence of a large number of gadget classes which explains why there are many individual CVEs related to the **jackson-databind** vulnerability. There are different CVEs related to different kinds of gadget class.

If you do need to use the **jackson-databind** library in your application, the most important measure you can take to mitigate the risk is this: *avoid polymorphic type handling in Jackson JSON and on no account should you call the **ObjectMapper.enableDefaultTyping()** method.*

[[CVE-2020-11972](#)] CVE-2020-11972 camel-rabbitmq: camel: RabbitMQ enables Java deserialization by default which could lead to remote code execution [fuse-6.3.0]

In the version of Apache Camel provided with Fuse 6.3 (which is Camel 2.17), the Camel RabbitMQ component enables java deserialization, by default, without any means of disabling which can lead to arbitrary code being executed. To avoid this security vulnerability, we recommend that you do not use the Camel RabbitMQ component in Fuse 6.3.

4.2. LIST OF KNOWN ISSUES

The following list describes known issues in version 6.3:

[[ENTESB-13343](#)] Maven resolution of remote repository artifacts are broken on Oracle JDK7 [and IBM JDK7]

Due to recent changes in the security requirements for connecting to the Maven central repository, Oracle JDK 1.7 and IBM JDK7 is no longer compatible with Maven central and is unable to download Maven artifacts. Specifically, Maven resolution through the internal Fuse Maven proxy from HTTPS secured repositories is broken on Oracle JDK7 and IBM JDK7. We recommend that you upgrade to Oracle JDK 1.8 to avoid this issue.

[[ENTESB-11757](#)] [QUICKSTART] camel-linkedin quickstart is not working

In Fuse 6.3, the Camel LinkedIn component is no longer able to communicate with the LinkedIn server, because it is implemented using the LinkedIn Version 1.0 API, which is no longer supported by LinkedIn. The Camel LinkedIn component will be updated to use the Version 2 API in a future patch release of Fuse 6.3.

[[SWITCHYARD-2936](#)] Add support for Integration Pack with Kie 6.4.0

For SwitchYard projects in JBoss Fuse 6.3, and in the associated Integration Pack, there is no longer a backward compatibility layer, so we have added support for the Integration Pack BPM & Rules components (Fuse-specific) as well as the SwitchYard ones (more basic components for community releases). When you specify an Integration Pack and Kie version for your SwitchYard project, the appropriate components are selected. There is a known issue, however, if you select both varieties of BPM or Rules components and don't have Integration Pack versions specified. If you accidentally check both of them and are not using the Integration Pack, simply uncheck the **(Integration Pack)** version on the **Capabilities** page. Other supported components are not affected.

[[ENTESB-6038](#)] Error loading situations when using Postgres

RTGov 6.2.1 and 6.3 configured with Postgres for the OverlordRTGov datasource fails to load situations in the RT-Gov UI. You can work around this problem by modifying the **standalone-full.xml** configuration file as follows:

```
<configuration name="overlord-rtgov">
  <properties>

    <!-- ADD THIS -->
    <property name="hibernate.transaction.factory_class"
value="org.hibernate.transaction.JTATransactionFactory"/>
    <property name="hibernate.transaction.manager_lookup_class"
value="org.hibernate.transaction.JBossTransactionManagerLookup"/>

    <!-- REMOVE/COMMENT THIS -->
    <!--property name="JpaStore.jtaPlatform"
value="org.hibernate.service.jta.platform.internal.JBossAppServerJtaPlatform"/-->

    <!-- ... other properties -->
  </properties>
</configuration>
```

[[ENTESB-6079](#)] The domain-camel.xml in Fuse on EAP doesn't work OOTB

The **domain-camel.xml** domain configuration file in Fuse on EAP does not work at the earlier patch levels of JBoss EAP 6.4. You need to use JBoss EAP 6.4.7 or later for this configuration file to work.

[[ENTESB-4995](#)] Classloader leak in wildfly-camel ContextCreateHandlerRegistryService

JBoss Fuse on JBoss EAP with a small metaspace can lead to **OutOfMemoryError**. SwitchYard is unaffected by this.

[[ENTESB-6033](#)] Qpid jms client hangs when used in camel route

The Camel AMQP component, which is based on the Qpid JMS client, freezes when it is used in a Camel route. This is because the associated **camel-amqp** Karaf feature depends on the wrong version of the Qpid Proton-J library. This issue will be fixed in an upcoming patch.

[[ENTESB-4850](#)] No bean could be found in the registry for: ConnectionFactory of type: javax.jms.ConnectionFactory

In certain circumstances, when deploying multiple Camel JMS endpoints into a JBoss EAP container, the following error can be thrown:

```
org.apache.camel.NoSuchBeanException: No bean could be found in the registry for:
ConnectionFactory of type: javax.jms.ConnectionFactory
```

This error can occur either in a SwitchYard application or in a Camel on EAP (Wildfly Camel) application. There are two known workarounds for this issue:

Workaround 1: Use the **org.jboss.server.bootstrap.maxThreads** system property

If you face this issue, you can start JBoss EAP with the **org.jboss.server.bootstrap.maxThreads** system property with a value less than or equal to **3** to resolve the issue, as follows:

```
$ ./bin/standalone.sh -c standalone-full.xml -Dorg.jboss.server.bootstrap.maxThreads=3
```

Note that the default value of **org.jboss.server.bootstrap.maxThreads** is (number of processors)*2 and setting it to a value lower than the default may slow the startup time of JBoss EAP.

Workaround 2: Use the **org.switchyard.deployment.disableAutoStartup** SwitchYard domain property

If the first workaround does not work for you, you can then disable auto start-up of SwitchYard bindings by setting the **org.switchyard.deployment.disableAutoStartup** domain property to **true** to resolve the issue.

```
<switchyard xmlns="urn:switchyard-config:switchyard:1.0" xmlns:sca="http://docs.oasis-open.org/ns/opencsa/sca/200912" [...]>
  [...]
  <domain>
    <properties>
      <property name="org.switchyard.deployment.disableAutoStartup"
value="{org.switchyard.deployment.disableAutoStartup:true}"/>
    </properties>
  </domain>
</switchyard>
```

Note that if you disabled auto start-up of SwitchYard bindings, you need to manually start the bindings after the applications are deployed.

[[ENTESB-5653](#)] Profile-import fails on Windows paths (with backslashes)

When using the **profile-import** Karaf console command with Windows paths (using backslashes), the command fails, because the backslashes are left out. The workaround is to use forward slashes instead. For example:

```
JBossFuse:karaf@root> profile-import file:C:/jboss-fuse-6.3.0.redhat-xxx/out.zip
```

[[ENTESB-5231](#)] PHP script language does not work

The PHP scripting language is *not* supported in Camel applications on the Apache Karaf container, because there is no OSGi bundle available for PHP.

[[ENTESB-5232](#)] Python language does not work

The Python scripting language is *not* supported in Camel applications on the Apache Karaf container, because there is no OSGi bundle available for Python.

[[ENTESB-5911](#)] bpel-jms-binding is not working on solaris11sparc

The **bpel-jms-binding** example from Apache Karaf **quickstarts/switchyard** does not work on the Solaris 11 operating system.

[[ENTESB-5892](#)] Jetty - Applications: Links in the list are wrong

In the Fuse Management Console (Hawtio console) on the Apache Karaf container, when you navigate to the **Jetty** menu tab, the URL links for the Jetty applications shown on this page are incorrect.

[[ENTESB-5117](#)] [[patching](#)] Add patch feature by default to admin:create child containers

By default, child containers created using the **admin:create** Karaf console command do not support the new JBoss Fuse patching mechanism, because the requisite **patch** feature is not available. You can work around this limitation by creating a child container using the following command:

```
admin:create --featureURL mvn:io.fabric8.patch/patch-features/1.2.0.redhat-630xxx/xml/features -  
-feature patch test
```

Where 1.2.0.redhat-630xxx might need to be replaced by whatever version of fabric8 you are using in your container.

[[ENTESB-5911](#)] bpel-jms-binding is not working on solaris11sparc

The **bpel-jms-binding** quickstart for SwitchYard on Apache Karaf (in the **quickstarts/switchyard/bpel-jms-binding** directory) does not work on Solaris 11, due to a **ClassNotFoundException** error.

[[ENTESB-5892](#)] Jetty - Applications: Links in the list are wrong

If you click on the **Jetty** tab of the Fuse Management Console (Hawtio), the links appearing in the **Url** column of this page are incorrect.

[[ENTESB-4297](#)] Conflict in Saxon implementations (switchyard-bpel, camel-saxon)

In the Apache Karaf container, the **switchyard-bpel** feature and the **camel-saxon** feature cannot both be installed at the same time, because they use conflicting versions of the Saxon parsing library. In testing we have seen classpath issues such as the following when both features are installed together:

```
Caused by: java.lang.NoSuchMethodException:
```

```
net.sf.saxon.Controller.setMessageEmitter(net.sf.saxon.event.Receiver)
at java.lang.Class.getMethod(Class.java:1786)
at org.apache.camel.builder.xml.XsltBuilder.doStart(XsltBuilder.java:616)
... 42 more
```

[[ENTESB-5447](#)] Cannot add openjpa, camel-hbase, or camel-hdfs features to featuresBoot

If you add any of the features, **openjpa**, **camel-hbase**, or **camel-hdfs**, to **featuresBoot** in the **etc/org.apache.karaf.features.cfg** file, this will result in an OSGi wiring error. All of these features are deprecated in any case.

[[CAMEL-10237](#)] Problem setting JMSX JMS properties on OracleAQ

The Camel JMS component is affected by a regression error that can cause problems integrating with Oracle AQ. This issue has already been fixed in the Apache Camel community project and the fix will be made available in a patch for JBoss Fuse 6.3.

[[ENTESB-3982](#)] If changing the BPEL data source, you may need to restart EAP

If you install a new data source for BPEL in JBoss EAP, it might be necessary to restart the JBoss EAP container—instead of simply executing **:reload**—in order for the data source to be recognized.

[[ENTESB-4408](#)] Patching functionality in Fuse Management Console (Hawtio) temporarily disabled

The patching functionality in the Fuse Management Console (Hawtio) has been disabled since JBoss Fuse 6.2.1. This is because the Hawtio UI has not been updated to use the new patching mechanism. To install Fabric patches, use the Karaf console instead. This issue will be fixed in a future release.

[[ENTESB-3938](#)] JBoss Fuse 6.2.1 takes a long time to start up on OpenStack

When a JBoss Fuse 6.2.1 container is deployed on RHEL Openstack Platform, it can take a long time (several minutes) for the container to start up. A workaround is to add the following option to the JVM that starts the container (for example, by setting the **JAVA_OPTS** environment variable):

```
-Djava.security.egd=file:/dev/./urandom
```

The extra dot in the pathname, as in `./`, is required.



NOTE

The effect of the workaround is to replace the default **/dev/random** by **/dev/urandom**. The alternative is faster, but less random than **/dev/random**. This has an impact on any security packages that depend on this device to generate entropy and random numbers.

[[ENTESB-4390](#)] Some quickstarts using SAAJ API fail on IBM JAVA

When using the Apache Karaf container with IBM Java version 1.7.0, the following quickstarts can fail:

- **bean-service**
- **soap-attachment**

With the following error:

```
java.lang.IllegalAccessException: Class com/sun/org/apache/xerces/internal/dom/ElementImpl illegally
```

```

accessing "package private" member of class
com/sun/org/apache/xerces/internal/dom/CoreDocumentImpl
  at
com.sun.org.apache.xerces.internal.dom.ElementImpl.synchronizeData(ElementImpl.java:1159)
  ...

```

This appears to be a problem with the IBM JDK. You can work around the problem as follows:

1. Remove **saaj-api** from endorsed libraries:

```
rm lib/endorsed/org.apache.servicemix.specs.saaj-api-1.3-2.5.0.jar
```

2. Before invoking the **./bin/fuse** script, set the **JAVA_OPTS** environment variable as follows:

```
JAVA_OPTS=-Xshareclasses:none
```

[[AESH-324](#)] Don't require special chars within arguments to be escaped

The S-RAMP query language currently requires you to escape special characters in a function argument. For example, in the following query you must escape the single quotes around **'submit.*'** using the backslash character:

```
/s-ramp/wsd/Operation[xp2:matches(@name,\'submit.*\']]
```

[[ENTESB-3980](#)] ERROR: duplicate key value violates unique constraint

"pg_type_typname_nsp_index"

After a clean installation of S-RAMP to JBoss EAP 6.4.0 with a PostgreSQL database and after first navigation to the **Artifacts | Dashboard** page, the following exception is thrown.

```

...
Caused by: org.postgresql.util.PSQLException: ERROR: duplicate key value violates unique
constraint "pg_type_typname_nsp_index"
  Detail: Key (typename, typnamespace)=(artificerartifact, 136381) already exists.
  at
org.postgresql.core.v3.QueryExecutorImpl.receiveErrorResponse(QueryExecutorImpl.java:2198)
  ...

```

This error has no effect on the S-RAMP functionality, however, and can safely be ignored.

[[FABRIC-963](#)] Cannot create a fabric on a Windows 7 operating system with Java 7

To connect to the ZooKeeper server, you must change the connectivity type from IPv6 to IPv4. For the detailed solution, see the following Customer Portal article: [Cannot create fabric in JBoss Fuse 6.1 Beta on Windows 7](#)

[[ENTESB-2443](#)] Google Mail API - Sending of messages and drafts is not synchronous

When you send a message or draft, the response contains a Message object with an ID. It may not be possible to immediately get this message via another call to the API. You may have to wait and retry the call.

[[ENTESB-2458](#)] Google Mail Component - Import of message throws sometimes SocketTimeoutException

Importing a message may throw a **java.net.SocketTimeoutException** if the send operation was called before. Workaround: After a send call wait for few moments before calling import.

[[ENTESB-2365](#)] Google Drive API bug - Response of permission insert operation mostly does not contain emailAddress property

Response of permission insert operation sometimes does not return **emailAddress** property even if the value of request property type was set to user. Nevertheless the permission is successfully inserted.

[[ENTESB-2332](#)] Google Drive API JSON reponse for changes returns bad count of items for the first page

Google Drive API JSON reponse for changes returns bad count of items for the first page. Setting `maxResults` for a list operation may not return all the results in the first page. You may have to go through several pages to get the complete list (that is by setting `pageToken` on new requests).

[[ENTESB-3039](#)] [HTTP Gateway] apis mapping rules don't work right after deployment

If the `zooKeeperPath` property in the `io.fabric8.gateway.http.mapping-apis.properties` is changed, a gateway node restart will be required.

[[ENTESB-2929](#)] can't install features camel-avro camel-hbase camel-hdfs2

camel-avro, **camel-hbase**, **camel-hdfs2** are not supported on Solaris / AIX. The `camel-hdfs2` feature can only run if you have **libsnapjava.dylib** in `java.library.path`. You must manually setup **libsnapjava.dylib** in Red Hat JBoss Fuse before installing these features.

```
JBossFuse:karaf@root> features:info camel-hdfs2
Description of camel-hdfs2 2.15.0.redhat-620133 feature
```

[[ENTESB-2924](#)] Insight - Elasticsearch: JsonPretty error: Unable to get property 'toLowerCase' of undefined or null reference (:7999:6)

Insight Elasticsearch page is not supported in IE. The error occurs when clicking rectangles with numbers at Insight - Elasticsearch page.

[[ENTESB-2773](#)] [platform AIX HPUX] camel-leveldb missing native library

The **camel-leveldb** feature is *not* supported on IBM AIX, HP-UX, and Oracle Solaris operating systems.

[[ENTESB-2513](#)] OSE Fuse JVM sometimes dies with SIGABRT

RHEL customers need to upgrade `openjdk` to `java-1.7.0-openjdk-1.7.0.79-2.5.5.3.el6_6` or later which will fix the **SIGABRT**.

[[ENTESB-2069](#)] Container which is created from Hawtio can not start if restarting openshift node

After restarting OpenShift, containers created from Hawtio cannot be started. This happens because the containers started before the ZooKeeper starts running will fail to start. The workaround is to wait for the start and keep restarting until we get connected to ZooKeeper.

[[ENTESB-4490](#)] Integration Pack Maven Repository is missing some CXF artifacts

For users intending to use the Integration Pack with Maven, the Integration Pack **pom.xml** files do not consistently define the versions for the **camel-cxf** and **cxf** Maven artifacts. For an explanation of how to set up the Maven dependencies in this case, see [chapter "Configuring Maven Dependencies" in "Integration Guide"](#).

[[FUSED-1716](#)] The examples/samples projects is missing from `apache-camel-2.17.0.redhat-630187/apache-cxf-3.1.5.redhat-630187.zip`

JBoss Fuse 6.3 does not provide a code sample for how to deploy an Apache CXF web service endpoint. Documentation for an unsupported example has been removed from the end of the JBoss Fuse 6.3 document, "Deploying into a Web Server".

There is an [Apache Camel CXF JAX-WS example that is available from the upstream Wildfly Camel project](#). This example requires the Undertow servlet container, which is not supported in JBoss Fuse 6.3. Red Hat expects to provide a supported sample in a future release.

CHAPTER 5. RESOLVED ISSUES

5.1. GENERAL - 6.3.0

Table 5.1, “General Issues Resolved in 6.3.0” lists the issues resolved in version 6.3.0.

Table 5.1. General Issues Resolved in 6.3.0

Issue Number	Description
ENTESB-1769	"Error in initialization script: Command not found: shell:if" after fabric:create on fuse with P2
ENTESB-3546	Cannot access LinkedIn API with camel-linkedin
ENTESB-3939	fuse EsbProfileRedeployTest fails consistently
ENTESB-4160	BPEL - Domain mode - Deployment throws MySQLIntegrityConstraintViolationException
ENTESB-4415	Multiple Error messages while updating JBoss A-MQ using new patch mechanism
ENTESB-4435	Fix hardcoded link to activemq nms zip
ENTESB-4480	[Patch mechanism] Missing startup bundles when migrating container joined via fabric:join command
ENTESB-4495	Hibernate and Bundle ClassLoaders out of sync on Bundle Refresh
ENTESB-4622	Please update file name from jboss-fuse-full to jboss-fuse-karaf
ENTESB-4711	[JBoss A-MQ distro, Fabric, offline] A-MQ distro will not create a fabric when no access to internet
ENTESB-4732	JBoss Fuse 6.2.1 quickstarts/custom readme should be updated to indicate jboss fuse zip needs to be added to local repo
ENTESB-4770	fix swagger dependencies in Fuse BOM
ENTESB-4773	Corrupted Screenshots in camel-sap-binding quickstart
ENTESB-4786	Fuse quickstart builds fail with missing pom
ENTESB-4804	Corrupt war file in jboss-fuse-full-6.2.1.redhat-084.zip (GA)
ENTESB-4875	Update dependencies for CXF secure-soap quickstart
ENTESB-4876	CXF features fails to install on jboss-fuse-full-6.3.0.redhat-012.zip

Issue Number	Description
ENTESB-4903	[Solaris 11] local: not found when starting fuse
ENTESB-4925	don't start camel-jetty8 in fuse by default
ENTESB-4961	Fuse and A-MQ both have the amq:(esb:)check-for-user and amq:(esb:)create-admin-user
ENTESB-5003	[Win+Karaf-service] Can't run .exe on win server 2012r2
ENTESB-5105	Some profiles in fabric doesn't work out of the box in Fuse running in offline env
ENTESB-5140	Verify that quickstarts do not refer to SNAPSHOT versions
ENTESB-5172	Unable to install cxf-secure-rest quickstart
ENTESB-5213	Bump licence headers to 2016
ENTESB-5484	security-propagation-jms connector.jks needs to be copied differently
ENTESB-5630	container-list on child fails with illegal state exception in 630085 build
ENTESB-5647	Need to add MRRC earlyaccess repo
ENTESB-5669	Quickstarts pom has duplicates in pluginRepositories in 6.3.0.redhat-095 build
ENTESB-5687	camel-sap quickstart can't be build
ENTESB-5751	Fuse 6.3 Jenkins build has 6 test failures
ENTESB-5774	Fabric8 profiles for Camel quickstarts
ENTESB-5781	Can't install camel-amq quickstart on build jboss-fuse-6.3.0.redhat-131
ENTESB-5786	rest and secure-rest quickstarts are missing changes from fabric8
ENTESB-5799	All .jpps in switchyard quickstarts are corrupted
ENTESB-5833	quickstarts/custom assembly cannot be started without modification
ENTESB-5844	Should enable fork option in codegen plug-in for quickstarts/cxf/camel-cxf-contract-first
ENTESB-5893	secure-soap quickstart doesn't work on fabric
ENTESB-5926	rest and secure-rest quickstarts do not work on fabric

Issue Number	Description
ENTESB-5927	jboss-fuse-karaf-6.3.0.redhat-157.zip contains empty quickstart folders
ENTESB-5951	Shell SCR bundle redeploy loop with camel-amq quickstart
ENTMQ-1447	Unable to apply patch to JBoss AM-Q 6.2.0 SSH-containers
ENTMQ-1517	The jboss-a-mq-6.3.0.redhat-012.zip does not startup properly
ENTMQ-1548	Duplicate entries in etc/config.properties shipped with A-MQ 6.2
ENTMQ-1774	A-MQ 6.2.1 R2 errors on startup without Internet access

5.2. MESSAGING - 6.3.0

Table 5.2, “[Messaging Issues Resolved in 6.3.0](#)” lists the issues resolved in version 6.3.0.

Table 5.2. Messaging Issues Resolved in 6.3.0

Issue Number	Description
AMQ-5854	Duplicate messages when failover is done during prepare phase of two phase commit.
AMQ-5856	allowLinkStealing option is not working when using mqtt over websocket
AMQ-5857	Message content stored twice while sending
AMQ-5865	Enable "getRemoteAddress()" method in WebSocket Requests
AMQ-5870	Lazy create if MQTTProtocolConverter in the WebSocket transport needs to be thread safe
AMQ-5875	Removing a destination when using mKahaDB can cause an IllegalStateException
AMQ-5890	AMQP: possible NPE when handling disposition with Modified state
AMQ-5891	AMQP: update to proton-j 0.10
AMQ-5895	FilteredDestinations do not work when loaded by runtimeConfigurationPlugin
AMQ-5903	Message headers are lost when using the Broker Component for Camel
AMQ-5914	Pull consumer hang when message expires in flight.
AMQ-5933	NullPointerException in SelectorAwareVirtualTopicInterceptor

Issue Number	Description
AMQ-5972	Policy entries not applied in correct order
AMQ-6000	Pause/resume feature of ActiveMQ not resuming properly
AMQ-6005	Slave broker startup corrupts shared PList storage
AMQ-6013	Restrict classes that can be serialized in ObjectMessages
AMQ-6014	Offline Durable Topic Subscription exceeds memory limits
AMQ-6029	wss transport don't work with certificate authentication properly
AMQ-6031	AMQP: use System.nanoTime() when deriving time to tick the transport with for idle-timeout handling
AMQ-6046	Concurrent access to a Transport from WebSocket client can deadlock
AMQ-6055	SASL PLAIN auth with AMQP doesn't take authzid into account
AMQ-6059	DLQ message lost after broker restarts
AMQ-6060	"Will message" retain property is not respected
AMQ-6065	Allow selective use of broker systemExitOnShutdown from DefaultIOExceptionHandler
AMQ-6066	Performance issue in OrderedPendingList
AMQ-6068	RAR - cannot reset clientId on pooled managed connection
AMQ-6069	Purging a Queue can lead to OOM error with prioritized messages
AMQ-6070	originalDestination property of advisory messages set to message id in error
AMQ-6071	Log info about corrupted journal records at WARN level
AMQ-6073	WebSockets no longer working on most browsers
AMQ-6074	AMQ4126Test#testOpenwireNIOSSLWithCertificate fails with JDK8
AMQ-6083	Broker starts on corrupted kahadb despite checkForCorruptJournalFiles="true" and ignoreMissingJournalfiles="false"
AMQ-6086	Broker stop and start are not at all thread safe - we can do better
AMQ-6088	Runtime configuration does not properly apply policy updates

Issue Number	Description
AMQ-6094	Memory Leak with abnormal disconnecting consumers
AMQ-6102	JMX SubscriptionViewMBean reset statistics method doesn't reset
AMQ-6113	Add the X-Frame-Options" header for the WebConsole
AMQ-6121	Messages can continually expire from DLQ and back
AMQ-6122	Potential Deadlock when a duplicate message is read from the store for the DLQ destination
AMQ-6124	failover backup transports do not update the brokerInfo leaving stale org.apache.activemq.ActiveMQConnection#getBrokerName
AMQ-6125	Potential NPE in session rollback if no default redelivery policy configured
AMQ-6128	browsing priority queue can return messages in different order than they will be consumed
AMQ-6131	Durable subscription rewrote in journal can be to aggressive and cause message loss on recovery
AMQ-6133	Message updates can cause message loss on recovery
AMQ-6137	Special escape characters in LIKE selectors do not work as expected
AMQ-6142	ActiveMQBytesMessage decompress throws DataFormatException incorrect header check
AMQ-6146	Use proper JSTL tags in the WebConsole
AMQ-6151	Redelivered messages bypass priority ordering
AMQ-6152	KahaDB scheduler log files not being deleted
AMQ-6168	STOMP: Connection should be closed on receiving an invalid STOMP Frame with unknown action value.
AMQ-6169	STOMP: Invalid frames are logged in warn messages
AMQ-6170	X-Frame-Options are not set for static content
AMQ-6171	legal colon in broker name breaks vm transport
AMQ-6183	Provide the DispatchAsync value on Subscriptions to the SubscriptionViewMBean

Issue Number	Description
AMQ-6194	Deleting a temporary queue creates a warning message in the broker
AMQ-6199	cursorMemoryHighWaterMark configuration not applied to topic subscription
AMQ-6206	properties in stomp non persistent messages are not reflected in the message size used for usage tracking
AMQ-6207	KahaDB: corruption of the index possible on sudden stop of the broker
AMQ-6208	The connector's jmx attribute UpdateClusterClients is not correct
AMQ-6211	Synchronize creating of JMX OpenType objects
AMQ-6214	JAAS bug that causes user group membership not reloaded dynamically when reload is true
AMQ-6215	priority message dispatch can be affected by jms browser or expiry processing paging messages in error
AMQ-6218	Message content returns null occasionally from Virtual Topic to the consumer
AMQ-6221	ActiveMQTextMessage should synchronize on state changes
AMQ-6222	Message content can be cleared by mistake when isReduceMemoryFootprint is enabled
AMQ-6235	SimpleDiscoveryAgent doesn't honor it's configured initialReconnectDelay
AMQ-6240	Producer cannot be terminated when slow consumer is detected
AMQ-6246	STOMP: Unprefixed composite destination values not properly parsed
AMQ-6248	Failover - transport connected to one broker fails due to error in connection to another broker
AMQ-6250	MultiKahaDBTransactionStore should have null protection in close
AMQ-6254	Durable wildcard subscription causes memory leak after broker restart
AMQ-6256	ConcurrentStoreAndDispatch can lead to inconsistent message states using VM Transport
AMQ-6263	AMQP: Using JMS Transformer, preserve the type of the original MessageID
AMQ-6264	Deadlock on destination map - slow topic sub with slowConsumerAdvisory
AMQ-6275	Error when using ws transport connector

Issue Number	Description
AMQ-6285	MessageDatabase doesn't properly cleanup the checkpoint scheduler on shutdown
AMQ-6286	Queue order lost on repeated redelivery
AMQ-6288	Message ack compaction needs to acquire the checkpoint lock
AMQ-6290	JMS Pool reconnection logic not always reliable
AMQ-6303	Message ack rewrite does not always set the right journal file type code
AMQ-6305	AMQP: Drain requests can go unanswered in certain cases.
AMQ-6317	ActiveMQ createSchemaStatements are not executed on init if a previous createSchemaStatement failed on execution
AMQ-6340	Queue order lost on consumer close in some cases
AMQ-6350	PooledConnectionFactory throws 'IllegalStateException: Pool not open' after re-init
AMQ-6361	Message can remain inflight after consumer side expiration acknowledgements
AMQ-6370	JDBC message store - jdbc connection pool - potential deadlock with cleanup task when pool exhausted
AMQ-6372	KahaDB reader pool not releasing unused open files till deletion - too many open files
AMQ-6376	IOException on pageln should involve IOExceptionHandler
AMQ-6378	KahaDb recover from corrupt metadata state locations that can be rebuilt
AMQ-6389	LoggingBrokerPlugin logs a message size equal to 0
AMQ-6392	Allow host name mapping with publishedAddressPolicy on a transportConnector
AMQ-6406	kahadb concurrentStoreAndDispatch - duplicate suppression in cursor needs to wait for possible store add
AMQ-6413	kahadb concurrentStoreAndDispatch - producer audit managed by store is skipped
CAMEL-1022	DOT generator (Visualizer) - Doen't handle that pipeline is default
COLLECTIONS-580	[COLLECTIONS-580] Arbitrary remote code execution with InvokerTransformer

Issue Number	Description
ENTESB-4902	Fuse 6.2.1 failed to handle maven repository url with special characters like "@" for authentication parameters.
ENTESB-4957	missing package org.apache.geronimo.osgi.locator for features:install pax-*-tomcat
ENTESB-5647	Need to add MRRC earlyaccess repo
ENTESB-5818	Upgrade httpclient version to latest, at a minimum > 4.3.4
ENTESB-5872	Unable to send JSON/Object to activemq in Camel
ENTESB-5935	intermittent ServerModel LinkageError when connecting to ssh container
ENTMQ-1160	When ActiveMQ encountered exception during rollback, the message is stuck instead of retry the rollback.
ENTMQ-1180	Offline Durable Topic Subscription exceeds memory limits
ENTMQ-1419	Second connection request with Durable subscriber throws "Setting clientID on a used Connection is not allowed"
ENTMQ-1421	Broker starts on corrupted kahadb despite checkForCorruptJournalFiles="true" and ignoreMissingJournalfiles="false"
ENTMQ-1426	originalDestination property of advisory messages set to message id in error
ENTMQ-1428	AMQ4126Test#testOpenwireNIOSSLWithCertificate fails with JDK8
ENTMQ-1434	StompSubscriptionRemoveTest hangs on Solaris with JDK8
ENTMQ-1484	Implementation of AMQ-6077 in Fuse 6.2.1 is incomplete
ENTMQ-1517	The jboss-a-mq-6.3.0.redhat-012.zip does not startup properly
ENTMQ-1584	Threads Blocked On ActiveMQConnection.ensureConnectionInfoSent
ENTMQ-1656	Enable configuration for mqtt-over-ws transport
ENTMQ-1681	Issue with message ordering after transaction rollback
ENTMQ-1683	*:help missing descriptions for activemq commands
ENTMQ-1708	The connection to 'tcp://...' is taking a long time to shutdown
ENTMQ-1791	Regression in from ENTMQ-703 leads to metrics issue for temp transactional queues

Issue Number	Description
ENTMQ-1822	Broker Unable To Recover After Exceeding File Descriptor Limit
ENTMQ-1823	Two clustered A-MQ nodes using JDBCPersistentAdaptor and lease database locker were active the same time
ZOOKEEPER-2380	[ZOOKEEPER-2380] Deadlock between leader shutdown and forwarding ACK to the leader
ZOOKEEPER-2383	[ZOOKEEPER-2383] Startup race in ZooKeeperServer

5.3. SWITCHYARD

Table 5.3, “SwitchYard Issues Resolved in 6.3.0” lists the issues resolved in version 6.3.0.

Table 5.3. SwitchYard Issues Resolved in 6.3.0

Issue	Description
CXF-6431	Attachment serialization does not conform to the relevant specs
CXF-6665	ClassCastException in SoapActionInInterceptor
ENTESB-3814	Add missing camel-sap converters to TypeConverter file
ENTESB-3822	Smooks transformer needs "org.milyn" OSGi package
ENTESB-4070	policy-security-basic throws error when executing test
ENTESB-4137	Unable to create SAP destination endpoints if there is no SAP server endpoint.
ENTESB-4320	jca-inflow-activemq quickstart not working
ENTESB-4356	Switchyard JPA does not work on IBM JDK
ENTESB-4398	Arbitrary remote code execution with InvokerTransformer
ENTESB-4433	camel-mqtt-binding not working on Fuse
ENTESB-4436	policy-security-saml quickstart throws error when undeploying
ENTESB-4445	Add all missing switchyard-* artifacts to switchyard bom
ENTESB-4739	HTTPS endpoint address doesn't work with HTTP proxy for RESTEasy reference binding

Issue	Description
ENTESB-4747	No SwitchYard schema is included in Fuse 6.2.1
ENTESB-4777	Unable to install switchyard-http feature
ENTESB-4815	Camel Enrich route not marshalled properly after 2.15.2->2.16.1 update
ENTESB-4850	No bean could be found in the registry for: ConnectionFactory of type: javax.jms.ConnectionFactory
ENTESB-4895	Switchyard application with two services based on a WSDL fails to deploy using Java 8
ENTESB-5016	bpel-jms-binding QS on Fuse/Karaf : Username [karaf] or password is invalid
ENTESB-5018	camel-amqp-binding quickstart : unsatisfied requirement
ENTESB-5025	rest-binding error : dual dependency chains
ENTESB-5027	ftp-binding quickstart ReadMe Fuse section needs changes
ENTESB-5055	Add deltapike module to switchyard
ENTESB-5084	SwitchYard: Karaf build test failure
ENTESB-5113	Message trace modifies character encoding
ENTESB-5140	Verify that quickstarts do not refer to SNAPSHOT versions
ENTESB-5146	Enable smooks bundle in features.xml
ENTESB-5164	Change geronimo servlets 3.0 spec use to javax.servlets
ENTESB-5194	can't install feature switchyard-demo-security-propagation-jms
ENTESB-5195	can't install switchyard-demo-policy-security-basic
ENTESB-5208	bpel: wait timer longer than 30 seconds causes process to wait indefinitely
ENTESB-5221	bpel-xts-subordinate-wsba quickstart deployment fails
ENTESB-5258	Re-enable org.switchyard.karaf.test.quickstarts.CamelMQTTBindingQuickstartTest
ENTESB-5264	camel Mail changes to only accept lower-cased "cc/bcc" in 2.17
ENTESB-5283	SecurityServices info should be cached for performance

Issue	Description
ENTESB-5360	ClassNotFoundException: javax.jws.WebService from Module org.apache.camel.cxf:main
ENTESB-5385	Fix Readme.md in "security-propagation-jms" quickstart
ENTESB-5416	Switchyard features url adds old version of activemq features url (5.9.0)
ENTESB-5418	hawtio camel inconsistent with karaf camel:context-list
ENTESB-5447	bundle geronimo-servlet_2.5_spec/1.2 may cause various wiring chain issues
ENTESB-5491	SY camel-jms-binding Fuse instructions need to add karaf user to etc/users.properties
ENTESB-5564	transform-datamapper quickstart is missing instructions for Fuse
ENTESB-5602	camel-mqtt-binding - no message received with IBM java
ENTESB-5610	CNFE: org.apache.el.ExpressionFactoryImpl not found via camel-dozer
ENTESB-5647	Need to add MRRC earlyaccess repo
ENTESB-5664	Transform-datamapper quickstart has problems with target folder
ENTESB-5689	Align SwitchYard
ENTESB-5700	[fabric:create] Error executing command: Unable to create zookeeper server configuration
ENTESB-5711	Threading issue with Weld Switchyard and cxf-ws-policy
ENTESB-5881	Cannot install rest-binding quickstart with Java 7
ENTESB-5935	intermittent ServerModel LinkageError when connecting to ssh container

5.4. ROUTING

Table 5.4, "Routing Issues Resolved in 6.3.0" lists the issues resolved in version 6.3.0.

Table 5.4. Routing Issues Resolved in 6.3.0

Issue	Description
AMQ-5652	IdGenerator not optimal in port restricted enviroments.
ARIES-1544	Blueprint property resolution fails for setters with derived type
CAMEL-1000	Trace interceptor does not work with Spring-event component

Issue	Description
CAMEL-1001	ExceptionType handledPolicy is not exposed in the XSD
CAMEL-1003	seda component - will lose message if its stopped while it polls
CAMEL-1019	unexpected result in pressure testing
CAMEL-1023	camel:dot - pipeline is drawn as a multicast
CAMEL-6069	java.io.IOException: Permission denied from MarkerFileExclusiveReadLockStrategy.acquireExclusiveReadLock on NAS
CAMEL-6256	Camel xmpp dynamic router is not sending incoming messages to openfire upon first failed groupchatroom join
CAMEL-6336	camel cdi uses postconstruct to inject in cdi beans
CAMEL-6720	SoapJaxbDataFormat not handling correctly SOAP action with request wrapper element
CAMEL-7443	Remote Print URI changed to UNC Name
CAMEL-7500	Concurrent modification of exchange during retry after netty TCP failure leads to further processing of failed messages
CAMEL-7565	SFTP using PollEnrich with "disconnect=true" and "delete=true" does NOT delete the file
CAMEL-7822	Feature camel-google-drive is failing
CAMEL-7849	Decrypting properties via Jasypt outside of <camelContext>
CAMEL-7884	camel-netty4-http does not work for HTTP POST requests on routingSlip
CAMEL-7897	Camel consumes & discards activemq messages after suspension
CAMEL-7921	The soapAction HTTP header is not correctly set when running the CXF client in POJO mode using Camel
CAMEL-8163	socketFactory must also be set in MailConfiguration when STARTTLS is used
CAMEL-8193	Frequent BlockingOperationExceptions under load
CAMEL-8241	Exec command failures using Java 8 on Unix
CAMEL-8270	camel-rabbitmq: exchangeName in URI must be optional, i.e. default "" exchange
CAMEL-8302	Rabbitmq shouldn't require/bind queue if not specified

Issue	Description
CAMEL-8393	Redelivery doesn't work correctly on Dynamic Routers
CAMEL-8431	Consume all files in aws S3 bucket where deleteAfterRead = false
CAMEL-8437	Simple bean call doesn't like parenthesis in parameter values
CAMEL-8455	camel-linkedin - update_key option should be optional in getHistoricalStatusUpdateStatistics
CAMEL-8456	Remove addCompanyUpdateComment endpoint from camel-linkedin
CAMEL-8457	Correct return types of some endpoints in camel-linkedin
CAMEL-8458	camel-linkedin - public_profile_url option should be String
CAMEL-8460	camel-spring-boot - Routes restart during startup
CAMEL-8461	camel-netty-http does not respect client's keep-alive setting
CAMEL-8462	HttpServerChannelHandler should not store the instance of HttpRequest
CAMEL-8464	Remove likeCompanyUpdate endpoint from camel-linkedin
CAMEL-8466	Feature camel-linkedin is missing dependencies for xalan, xerces and xmlresolver
CAMEL-8467	Update camel-linkedin and camel-box components to use servicemix bundle for htmlunit
CAMEL-8469	Several enum types should generate lower case values in camel-linkedin
CAMEL-8470	Several small fixes for camel-linkedin
CAMEL-8471	Port IdGenerator not optimal in port restricted environments.
CAMEL-8475	CamelSpringDelegatingTestContextLoader and TestNG
CAMEL-8476	Unexpected behavior in fault handling with doTry/doCatch
CAMEL-8479	TrapReceiveTest is failed within Camel 2.15.0
CAMEL-8480	camel-catalog has unnecessary imports if it cannot access some other artifacts
CAMEL-8484	File language - Should support file extensions with multiple dots such as tar.gz
CAMEL-8492	BeanInfo introspection ignores overridden methods

Issue	Description
CAMEL-8498	CamelContextFactoryBean missing setEndpoints method
CAMEL-8500	ClassCastException when something other than PropertiesComponent is bound to "properties" JNDI name
CAMEL-8504	Failed to process Schematron XSLT templates and/or rules on windows
CAMEL-8505	Missed CamelSchematronValidationStatus header
CAMEL-8510	NPE will be thrown from doAppend() of PaxLoggingConsumer during load testing
CAMEL-8515	Camel marshal/unmarshal - Should catch throwable in case dataformat causes an java.lang.Error
CAMEL-8519	Salesforce component security listener does not replace old auth header
CAMEL-8520	Camel XMPP doesn't use a DNS resolver to look at SRV records
CAMEL-8521	camel-script - Should try all classloaders before throwing IAE
CAMEL-8530	can't install camel-github feature in karaf
CAMEL-8540	S3Consumer uses maxMessagesPerPoll incorrectly
CAMEL-8546	No LanguageResolver found for language=js
CAMEL-8547	Usage of camel-xmlbeans depends on TCCL
CAMEL-8556	AnnotationTypeConverterLoader treats package as class
CAMEL-8566	Feature camel-cxf doesn't install all required dependencies
CAMEL-8568	Feature camel-swagger doesn't install all required dependencies
CAMEL-8573	Feature camel-hbase doesn't install all required dependencies
CAMEL-8574	Feature camel-hdfs doesn't install all required dependencies
CAMEL-8575	Salesforce component doesn't properly retries the request when doing re-login
CAMEL-8578	camel-http - May double encode uri when using HTTP_URI or HTTP_QUERY headers
CAMEL-8584	Circuit breaker does not honour halfOpenAfter period
CAMEL-8585	The lazy load option doesn't unlock the file

Issue	Description
CAMEL-8587	Exceptions from multicast aggregators are not propagated to the global exception handler
CAMEL-8589	url.getPort returning -1, needs additional check
CAMEL-8592	NPE in AbstractListAggregationStrategy if empty list
CAMEL-8597	Elasticsearch component ignores indexType header set from endpoint URL
CAMEL-8607	Camel endpoint RAW password unsafe characters
CAMEL-8609	Remove open-jpa bundle from camel-jpa feature
CAMEL-8624	Bean component - Potential NPE in BeanInfo
CAMEL-8626	Leaking exchangesInFlightKeys in ManagedRoute
CAMEL-8628	camel-dozer component fails when multiple expressions are used in a mapping
CAMEL-8636	camel-kafka need to commit the last batch of messages when the auto commit is false
CAMEL-8639	Camel FTP component cannot recover after network failure
CAMEL-8643	Http Post from a streaming client sometimes fails to parse
CAMEL-8646	Camel doesn't allow intercept and advice on the same route
CAMEL-8649	Camel RAW() cannot handle String of %2050
CAMEL-8660	camel-ftp - Disconnect when no messages dont call disconnect
CAMEL-8663	Namespaces defined on the SOAP envelope get lost in PAYLOAD mode
CAMEL-8665	Throttler EIP - Using method call for message per sec exp fails in spring
CAMEL-8672	Restlet Rest Component properties are ignored
CAMEL-8673	ConcurrentModificationException when creating dynamic routes
CAMEL-8674	Camel-Netty4 does not set remote UDP address in headers
CAMEL-8678	Infinite recursion in TransactionErrorHandler toString method
CAMEL-8682	Context scoped OnException should not be stopped if a route is stopped
CAMEL-8683	Using load balancer in onException adds duplicate outputs for each route defined

Issue	Description
CAMEL-8687	SyslogConverter doesn't handle the structured data rightly
CAMEL-8688	Removed StreamCache when doing a Wiretap
CAMEL-8689	camel-dozer: Multiple contexts / bundles - Does not use the correct classloader
CAMEL-8690	Camel HDFS2 - ShutdownHookManager class not found when shutting down OSGi framework
CAMEL-8694	java.lang.NullPointerException in at org.apache.camel.component.netty4.http.NettyHttpProducer\$NettyHttpProducerCallback.done
CAMEL-8702	when occurs "Connection reset by peer", netty4 client's EventLoopGroup select thread won't shut down
CAMEL-8707	camel-smpp: smpps doesn't work over proxy
CAMEL-8708	SOAP unmarshalling shouldn't fail for Faults that lack an optional Detail element
CAMEL-8713	ParallelAggregate option when using parallel mode does not run in parallel
CAMEL-8715	camel-sql - Should close ResultSet
CAMEL-8717	camel-kafka feature miss kafka-clients bundle
CAMEL-8718	Connection leak with ftp consumer and invalid credentials
CAMEL-8737	camel-salesforce - Unable to generate DTOs for Filtered Lookup fields
CAMEL-8738	Referring to constants using type
CAMEL-8742	RabbitMqConsumer did not retry if connection failed
CAMEL-8745	Swagger requires context name with quotes
CAMEL-8746	Jasypt with BridgePropertyPlaceholderConfigurer is not handling spring property injection with defaults anymore
CAMEL-8747	camel-rx - Should leverage UoW when subscribe or observe
CAMEL-8748	DozerBeanMapper cannot instantiate DozerThreadContextClassLoader
CAMEL-8756	KafkaConsumer doesn't stop consuming when suspended, preventing graceful route shutdown

Issue	Description
CAMEL-8757	SO_TIMEOUT not really set on SFTP connections
CAMEL-8758	NPE for CacheComponent
CAMEL-8764	Camel-Spring-Redis: Jedis bundle require commons-pool2
CAMEL-8765	JpaConsumer - May poll too soon before JPA stuff is initialized
CAMEL-8768	hdfs2 component overwrite option is also being applied to directory filesystem path
CAMEL-8770	Camel Blueprint - depends-on does not work
CAMEL-8771	Add MaxChannelMemorySize and MaxTotalMemorySize for OrderedMemoryAwareThreadPoolExecutor
CAMEL-8774	DefaultJettyHttpBinding preserves CONTEXT_ENCODING from the request even HTTP response doesn't contain the header
CAMEL-8780	Camel exec component have trouble to load arguments list from message header
CAMEL-8782	Configuring endpoints using reference lookup may fail with matching primitive types with their Object counterpart types
CAMEL-8783	Transacted not working correctly in scala
CAMEL-8784	Policy, Validate, Wiretap Scala DSL don't work out of box
CAMEL-8785	StackOverFlowError using Custom InterceptStrategy
CAMEL-8786	The ServletContext init parameters check is not right in CamelServletContextListener
CAMEL-8798	weaveAddLast throwing UnsupportedOperationException when route have a ChoiceDefinition
CAMEL-8803	Conflicting classes in camel-jetty9 Maven artifact dependencies
CAMEL-8804	NullPointerException in RestSwaggerReader
CAMEL-8805	NullPointerException on RestletComponent.disconnect
CAMEL-8810	Camel CXF may propagate wrong Content-Length headers
CAMEL-8812	Memory leak in HL7MLLPNettyDecoder
CAMEL-8816	Elasticsearch component fails in an OSGi environment due to missing names.txt

Issue	Description
CAMEL-8829	ConcurrentModificationException while logging
CAMEL-8841	camel:context-inflight returns 'Object name cannot be null'
CAMEL-8858	Camel-Hazelcast: HazelcastComponentHelper miss some operations in mapping
CAMEL-8864	Camel-Aggregator JDBC repository always overwrites old exchange
CAMEL-8871	null body after exception from transform method
CAMEL-8874	camel-blueprint-archetypes should have test dependency of camel-test-blueprint
CAMEL-8884	camel:run with CDI has been reported to not work
CAMEL-8885	ConsumeLockEntity without ConsumeDelete
CAMEL-8887	Exceptions on routes SFTP and SEDA or DISRUPTOR (probably others)
CAMEL-8888	Camel-Aws EC2: Add getMessageForResponse to the producer as the other components already do
CAMEL-8895	camel-swagger component throws exception, when multiple different camel-contexts in jmx
CAMEL-8898	ElementNotFoundException on LinkedIn authentication
CAMEL-8900	Javadoc parser in API Component Framework misses first method with void return type in JDK7
CAMEL-8901	NBSP characters in camel-kafka:KafkaConfiguration parameter
CAMEL-8902	Camel Facebook - Endpoint URI must contain a parameter
CAMEL-8904	Breadcrumb ID changes when using netty4-http as a producer
CAMEL-8905	encoding problems in jsonpath
CAMEL-8909	Jasypt CLI outputs help twice
CAMEL-8914	Unable to shutdown endpoint when intercepted with interceptSendToEndpoint
CAMEL-8916	Support autoCreate=true in ftp/ftps/sftp consumers
CAMEL-8923	Kafka: Topic name lookup from message headers in the producer causes infinite loop

Issue	Description
CAMEL-8927	camel-ahc-ws - Do not swallow exception when connecting
CAMEL-8933	mail consumer (imap) polls continuously (not using the default polling interval)
CAMEL-8945	Loop - Should break out looping if exception happened during routing
CAMEL-8949	Netty 3 component spins on receiving TCP RST
CAMEL-8950	Injected Quartz2 scheduler doesn't have access to CamelContext in jobs
CAMEL-8951	RecipientList with RAW parameter do not work
CAMEL-8954	Lock information is not handovered together with Exchange on-completion synchronizations
CAMEL-8955	Processor for .pollEnrich incorrectly handles provided AggregationStrategy
CAMEL-8957	adviceWith() doesn't work with loadBalance().failover()
CAMEL-8963	camel:route-suspend karaf command doesn't work as expected
CAMEL-8964	CamelContext - API for control routes may cause Route not to update it state
CAMEL-8967	Karaf Camel command for route profile has karaf rbac problem
CAMEL-8978	Setting of SOAP headers via the Camel Header "org.apache.cxf.headers.Header.list" not working for CXF data format "PAYLOAD"
CAMEL-8984	BlueprintCamelContext OSGi service is not unregistered when context is stopped
CAMEL-8988	Can't manually trigger quartz2 jobs
CAMEL-8989	SJMS drops messages with null body even if allowNullBody is true
CAMEL-9005	Yammer - Endpoint "received" does not work
CAMEL-9012	Olingo2's batch process generates the invalid request
CAMEL-9013	Camel HTTP no longer supporting chunked transfer encoding with Tomcat
CAMEL-9017	Camel-Hazelcast: HazelcastAggregationRepository::confirm should check useRecovery before using persistedCache
CAMEL-9019	ManagedRuntimeEndpointRegistry was not enlisted in JMX

Issue	Description
CAMEL-9022	JacksonTypeConverter breaks CSV marshalling
CAMEL-9026	ClassNotFoundException: kafka.serializer.StringEncoder
CAMEL-9027	camel-sjms - Parse destinationName from endpointUri having colon in the name
CAMEL-9029	JGroups managed routes can be started too early
CAMEL-9030	The instructions for camel-example-box-osgi are incorrect
CAMEL-9031	Dependency missing in camel-kafka feature
CAMEL-9032	Bean component - Should filter out abstract methods
CAMEL-9035	unbind smpp connection bug
CAMEL-9037	DefaultJmsMessageListenerContainer leaks threads
CAMEL-9043	Fix camel-example-cxf-osgi/blueprint examples
CAMEL-9048	camel-core causes restart of karaf console if it is refreshed
CAMEL-9049	Websocket Component not shutting down embedded jetty server on component shutdown
CAMEL-9057	Camel Example Servlet REST generates java.lang.NoClassDefFoundError: scala/xml/PrettyPrinter
CAMEL-9059	Jetty exposes its endpoint without component name
CAMEL-9065	Exchange created needs to be aware of its FROM endpoint.
CAMEL-9079	XPathBuilder - Evaluate without exchange inconsistent response
CAMEL-9087	camel-pgevent payload always null
CAMEL-9089	Ambiguous URI in Rest API
CAMEL-9090	camel-cxf - test dependency not in test scope?
CAMEL-9092	MQTT consumer receives duplicate messages after broker restart
CAMEL-9094	Can't use custom FTPParser on OSGI
CAMEL-9099	[camel-script] wrong detection of script engine factories

Issue	Description
CAMEL-9101	RabbitMQ specific message properties are forwarded as message headers
CAMEL-9104	HttpHelper concats fixed endpoint URI query parameters with CamelHttpPath header in wrong order
CAMEL-9106	URI option mapMailMessage doesn't obey peek=true option
CAMEL-9112	Problem upgrading to Camel 2.14.3 in Karaf 3.0.4
CAMEL-9121	activemq-camel pulls in outdated version of commons-pool2
CAMEL-9122	Ruby script cannot access request object
CAMEL-9124	RedeliveryPattern should support property placeholders
CAMEL-9126	camel-swagger may see unrelated type=context mbeans
CAMEL-9127	SmpConsumer throws IllegalArgumentException if the delivery receipt contains vendor specific optional parameters
CAMEL-9130	"need to add the dependency of jedis as redis client lib"
CAMEL-9139	Reading parameter not configurable via header in camel-facebook
CAMEL-9140	Missing configuration properties in camel-facebook
CAMEL-9142	dropped support for multiple blueprint descriptors in unit tests
CAMEL-9143	Producers that implement the ServicePoolAware interface cause memory leak due to JMX references
CAMEL-9144	Regression with camel-jackson 2.15.3
CAMEL-9150	Seda suspend/resume should not trigger start/stop logic
CAMEL-9151	Wrong statistics for subroutes
CAMEL-9159	wireTap("log: ...") leads to script engine error
CAMEL-9161	Camel spring-boot not finding routes when using spring-cloud
CAMEL-9164	errorHandlerRef causes NoSuchBeanException on uninstall
CAMEL-9166	Some functionality broken in Camel-8857

Issue	Description
CAMEL-9171	camel-xmpp processes no messages when running in Karaf
CAMEL-9177	combination of JPA-Component, loop and wiretap throws entitymanger closed exception
CAMEL-9183	java.lang.IllegalArgumentException: Unsupported namespaces: [http://camel.apache.org/schema/blueprint]
CAMEL-9191	camel-example-spring-jms ServerRoutes contains invalid URI parameter methodName
CAMEL-9195	Memory leak in UndertowProducer
CAMEL-9196	CLONE - DefaultShutdownStrategy shutdown timeout of 0 will never timeout and go in negative time
CAMEL-9199	RabbitMQ Consumer threads crash when sending partially serializable objects
CAMEL-9200	Context component conflates endpoints with the same local id from different CamelContexts
CAMEL-9202	Flatpack: Body reader never closed
CAMEL-9205	REST endpoint with CORS sends invalid header value for Access-Control-Allow-Origin
CAMEL-9208	camel-netty4-http does not resolve nettyHttpBinding option
CAMEL-9215	Missing .handled(true) in Camel 2.16.0 when using wiretap and newExchangeBody
CAMEL-9217	URI validation verifies usage of & char incorrectly
CAMEL-9220	swagger - Model schema not including nested objects
CAMEL-9223	IllegalArgumentException when reverting fields using property placeholders
CAMEL-9227	No type converter available to convert from Bean to List
CAMEL-9230	CXFRS NPE when response code not in Response.Status
CAMEL-9231	camel-example-spring-ws - Does not work
CAMEL-9233	ZipFileDataFormat doesn't take exchange's charset into account
CAMEL-9235	No type converter available when destination is super type
CAMEL-9238	NPE while GenericFile.changeFileName

Issue	Description
CAMEL-9243	Invocation of Bean fails when Bean extends and abstract which implements the actual method
CAMEL-9245	camel-paho - Endpoint should allow a flexible naming.
CAMEL-9246	camel-cxf proxy with MTOM does not get attachment back when RPC/literal style WSDL used
CAMEL-9247	rest-dsl with api-doc should allow multiple rest's
CAMEL-9248	Exception is thrown when receiving a message where JMSDestination is null
CAMEL-9255	documentType not used for XPath predicates in XML DSL
CAMEL-9257	route stop/start doesn't work for camel-websocket producer
CAMEL-9259	enableTrace of the Main class doesn't work
CAMEL-9269	NotifyBuilder.fromRoute() does not work for some endpoint types
CAMEL-9270	rest-dsl - CORS support doesn't work with Restlet 2.3
CAMEL-9272	openweathermap.org requires an APPID id since 09/10/2015
CAMEL-9276	Netty4 component allows multiple consumers to bind to the same {host}:{port}
CAMEL-9277	FTP shutdown whole context on startup if throwExceptionOnConnectFailed true
CAMEL-9281	Http4 component removes trailing slashes from http requests (producer)
CAMEL-9282	IndexOutOfBoundsException if SoapAction parameter is empty
CAMEL-9290	netty4 consumer in clientMode only reconnects once
CAMEL-9311	Concurrency issue with the dynamic router
CAMEL-9313	CamelBlueprintTestSupport - can't initialize ConfigAdmin configurations
CAMEL-9316	LevelDBAggregationRepository is logging warnings when exchange is already complete on first aggregation
CAMEL-9318	org.apache.camel.component.twitter.TwitterEndpointEvent cannot be cast to org.apache.camel.component.direct.DirectEndpoint
CAMEL-9319	SshClient resource leak when used from ProducerTemplate

Issue	Description
CAMEL-9321	Blueprint example and archetype does not work when executed with camel:run
CAMEL-9331	Thread leak in Http4Endpoint, doStop() does not close() the httpClient
CAMEL-9340	FileIdempotentRepository fails to create fileStore when no path is specified
CAMEL-9347	camel-blueprint - Fix auto lookup of transaction policy
CAMEL-9362	Camel CDI component should not require the PAX CDI Camel capability
CAMEL-9366	CXFRS "skipFaultLogging" attribute doesn't work in Spring
CAMEL-9368	Netty4 producer hangs when connection is prematurely closed
CAMEL-9374	camel-mail - The dummyTrustManager do not work
CAMEL-9375	camel-tarfile - TarSplitter includes one extra empty entry at the end
CAMEL-9381	Upgrade camel-amqp to the latest qpid-jms-client
CAMEL-9384	Host HTTP header should contain a port number if it differs form 80
CAMEL-9386	Camel-git: Support credentials in clone operation
CAMEL-9391	Set parameter enableEventsResending should be before Atmosphere wrap request
CAMEL-9398	NullPointerException when connectionKey is not valid
CAMEL-9405	Amazon SQS message deletion behaviour change on exception
CAMEL-9406	Request Reply via RabbitMQ not handling reply correctly
CAMEL-9411	Remove old stuff
CAMEL-9417	SOAP 1.2 Fault processing should use value of ReasonText to build exception message
CAMEL-9423	dependency on restlet in camel-rx module does have default scope
CAMEL-9424	CronScheduledRoutePolicy regression introduced with 2.16, setting both start and stop route times fails with duplicate trigger
CAMEL-9425	base.path, host, and schemes are all ignored for generating the swagger definitions
CAMEL-9426	spring-boot with rest-dsl with api-doc registers multiple instances with multiple RouteBuilders

Issue	Description
CAMEL-9431	camel-spring-boot - TypeConverter autoconfiguration leads to invalid shutdown sequence
CAMEL-9432	Bindy CSV separator not treated as regex but fixed character in all cases
CAMEL-9438	Unable to use camel-example-cxf
CAMEL-9439	Cannot use camel-geocoder in Karaf
CAMEL-9442	Query string gets decoded when bridging from netty-http to http4
CAMEL-9444	Incorrect exceptions handling from Splitter
CAMEL-9459	Cannot install camel-kubernetes in karaf
CAMEL-9462	HTTP 1.1 Host header be dealt wrongly in proxy & load balancer
CAMEL-9468	Bindy fails to marshal objects in Spring Boot
CAMEL-9480	IdempotentConsumer - If exception from repo it should be able to handle by onException
CAMEL-9483	Deploying bundle with Camel routes packaged in KAR fails randomly
CAMEL-9491	statement.maxRows not working as expected camel jdbc
CAMEL-9503	OnCompletion - restores the rollback only last in the wrong key
CAMEL-9505	RabbitMQConsumer don't use Camel ExceptionHandler BEFORE requeing message
CAMEL-9506	STOMP component does not handle stream objects
CAMEL-9509	camel-cometd is not working with camel 2.15.2
CAMEL-9522	Groovy does not work with spring boot
CAMEL-9526	Blueprint depends-on can no longer contain multiple bean ids
CAMEL-9527	camel-netty4 - Should not log stacktrace when client has received reply
CAMEL-9528	Camel loadbalancing example is broken
CAMEL-9532	Default value given in RestOperationParamDefinition not output in swagger api
CAMEL-9543	Discovering new type converters in OSGi wipes out those manually added
CAMEL-9545	Dozer classloading may fail with spring based context

Issue	Description
CAMEL-9553	Twitter consumer doesn't respect the delay parameter
CAMEL-9555	Setting <code>deadLetterHandleNewException</code> to false breaks <code>DeadLetterChannel</code> default exception handling
CAMEL-9557	Facebook consumer throws <code>IllegalArgumentException</code> with reading parameters
CAMEL-9558	<code>DefaultErrorHandler</code> logs despite "handled true"
CAMEL-9560	RabbitMQ InOut Producer generates a null body response when a <code>correlationId</code> is used
CAMEL-9566	<code>camel-asf-ws</code> component does not reconnect to the web socket
CAMEL-9569	Idempotent Consumer EIP - Memory leak when add/remove routes
CAMEL-9576	<code>ClassLoadingAwareObjectInputStream</code> cannot handle deserializing proxies with mixed JDK & non-JDK interfaces
CAMEL-9582	<code>swagger-api</code> docs not working in only using xml without any java route
CAMEL-9593	<code>camel-example-swagger-cdi</code> is not producing valid swagger definition
CAMEL-9599	<code>camel-cxfrs</code> - When responding then do not use <code>content-length</code> from input
CAMEL-9607	<code>chmod</code> does not work for the File producer without setting a charset
CAMEL-9608	<code>camel-jpa</code> consumer fails to poll after transaction timeout
CAMEL-9611	Restlet GET request should not try to stringify the exchange body
CAMEL-9613	<code>camel-spark-rest</code> - Adds duplicate <code>content-type</code>
CAMEL-9614	xsd <code>schemalocation</code> for osgi blueprint is using http instead of https
CAMEL-9636	<code>CamelBlueprintTestSupport</code> - initialization error in case of empty <code>cm:property-placeholder</code>
CAMEL-9640	Query string gets decoded when bridging from <code>netty*-http</code> to <code>netty*-http</code>
CAMEL-9641	Simple backwards parser bug if using file
CAMEL-9656	Using SpringBoot <code>HealthEndpoint</code> bean throws <code>AmbiguousMethodCallException</code>
CAMEL-9658	Path gets decoded when bridging HTTP endpoints

Issue	Description
CAMEL-9660	HTTP producers crash when Exchange.HTTP_URI header contains unencoded unsafe characters
CAMEL-9664	DefaultRestletBinding.populateRestletRequestFromExchange uses wrong mediaType comparison
CAMEL-9665	camel-ahc-ws Consumer does not connect
CAMEL-9666	Safe copy of DefaultExchange does not propagate 'fault' property
CAMEL-9667	Resequencer does not work with asynchronous producers
CAMEL-9668	Add lzf to DataFormatsDefinition
CAMEL-9670	Camel-ftp: No error message on invalid credentials
CAMEL-9672	ClassCastException with interceptFrom
CAMEL-9673	doTry .. doFinally should run the finally block for fault messages also
CAMEL-9680	Stream caching is broken under Spring Boot
CAMEL-9686	camel-aws - Using cron scheduler on aws-s3 do not work
CAMEL-9687	camel-swagger - Should use resolved placeholders in output
CAMEL-9698	camel-servlet karaf feature misses dependency on camel-core
CAMEL-9700	seda - discardIfNoConsumers=true do not call on completions
CAMEL-9703	Infinispan endpoint requires infinispan-query-dsl
CAMEL-9710	Camel Dozer Component - Fails to load custom function due to NPE
CAMEL-9713	Can not set custom Jetty HttpClient to producer endpoint
CAMEL-9714	camel-boon - Unmarshal to Map does not work
CAMEL-9728	change Reader to InputStream if the camel-cxf endpoint use RAW MESSAGE DataFormat
CAMEL-9730	NPE in camel-jaxb when using in OSGi running from CamelTestBlueprint
CAMEL-9731	Camel-josql: the sql script language does not work
CAMEL-9732	camel-swagger-java - Issue in appendModels in the reader

Issue	Description
CAMEL-9738	Thread leak for camel-mina2 consumers
CAMEL-9739	Mina2Consumer exception handler do close session also for IOException
CAMEL-9767	CDI deployment problem in JBoss EAP 6.3
CAMEL-9774	CXFPayload may lose CDATA sections under stream caching
CAMEL-9777	camel-zipfile - Using zip iterator with dataformat may fail
CAMEL-9779	camel-netty4-http - Using no port number issue
CAMEL-9780	Cannot install camel-hazelcast in Karaf 3.x
CAMEL-9784	Camel polling the files from S3 only once if deleteAfterRead is false
CAMEL-9793	PropertyPlaceholder not loading Property, thinks it is a Parameter
CAMEL-9794	camel-http4 - The producer should check the response header in the reply for content-type
CAMEL-9805	camel-sql - body not copied from in to out when using outputHeader and outputType=SelectOne when sql doesn't return a result
CAMEL-9807	Blocking of CXF consumer endpoint by http GET request
CAMEL-9812	Camel leaves Kafka consumers running after shutdown
CAMEL-9819	camel-jetty8 test missing dependency
CAMEL-9820	SFTP readLock=changed does not work with readLockMinAge option
CAMEL-9821	camel-cxf should be able to handle InOnly MEP for the RAW MESSAGE dataFormat
CAMEL-9834	WatchConsumer does not properly set watchIndex
CAMEL-9841	NPE in MIME-Multipart Data Format if no file name is defined on attachment
CAMEL-9851	Zookeeper RoutePolicy failing to create znode
CAMEL-9852	Camel-weather: freegeoip.net is no longer available. Need switch to something else.
CAMEL-9853	Camel-CXF: Possible NPE in DefaultCXFBinding
CAMEL-9854	CXF Stream Cache contains duplicate namespace definition

Issue	Description
CAMEL-9862	Potential NPE in UndertowComponent.unregisterConsumer
CAMEL-9866	@PropertyInject doesn't work with Spring-Boot
CAMEL-9874	Camel Jetty consumer endpoint incorrectly handles multipart/form-data
CAMEL-9876	Error handling in splitter is broken with version 2.17.0
CAMEL-9881	Aggregator completionPredicate unusable with scala DSL
CAMEL-9887	onCompletion not called on Splitter configured with CompletionAwareAggregationStrategy and shareUnitOfWork=true
CAMEL-9890	Migrate Camel-websocket to Jetty9
CAMEL-9891	ApplicationReadyEvent not dispatched if camel.springboot.main-run-controller = true
CAMEL-9896	Deadletter Failure processor is invoked even if error handling strategy defines to continue routing
CAMEL-9903	DumpRouteStatsAsXml do not work when jmx domain is customized
CAMEL-9906	camel-sql - Should allow null values as a valid value
CAMEL-9911	RestBindingMode auto not honored
CAMEL-9920	Handle SocketTimeoutException on accept
CAMEL-9921	Dozer variable mapping doesn't work on karaf
CAMEL-9926	HTTP Proxy support in Salesforce component is broken with upgrade to Jetty9
CAMEL-9929	camel-restlet - Using synchronous=false with no error handler leak inflight exchange
CAMEL-9933	Camel-CSV marshalling breaks characters not in default charset
CAMEL-9941	Blueprint bug ARIES-1544 causes issues in Olingo2 configuration
CAMEL-9950	Camel-Websocket: NPE in case minThreads, maxThreads and getThreadPool equals to null
CAMEL-9951	Setup default values for thread-connected properties in WebSocket component
CAMEL-9953	Camel-ssh: Review logic in doStart and doStop in the SshConsumer and SshProducer
CAMEL-9960	create ReaderInputStream align encoding with Exchange

Issue	Description
CAMEL-9968	camel restlet not populating body form parameters correctly for x-www-form-urlencoded
CAMEL-9972	Explicitly add Connection Close HTTP header with a parameter in URI
CAMEL-9973	CdiCamelExtension.shouldDeployDefaultCamelContext throws NPE with primitive injection points
CAMEL-9978	Camel-Kafka: configuration type mismatch for parameter acks
CAMEL-9981	CamelSpringJUnit4ClassRunner registers listeners twice
CAMEL-9984	RabbitConsumer.stop() doesn't stop underlying AutorecoveringConnection obtained from supplied ConnectionFactory
CAMEL-9986	MIME-Multipart Data Format is inconsistent if trying to unmarshal non-MIME data
CAMEL-9995	Camel-JMS: includeAllJMSXProperties parameter doesn't work
ENTESB-2799	Improper Handling of Spring NullPointerException
ENTESB-4223	Feature camel-spring security does not install spring-security-config bundle
ENTESB-4811	Camel 2.17.x.redhat-6-3-x-checkin has multiple test failures
ENTESB-4957	missing package org.apache.geronimo.osgi.locator for features:install pax-*-tomcat
ENTESB-5007	Unable to install camel-websocket and camel-cometd feature
ENTESB-5134	Fuse on EAP: Hawtio findComponentNames lookup fails
ENTESB-5180	can't install camel-cdi - incorrect dependency in features.xml
ENTESB-5181	can't install feature camel-hdfs
ENTESB-5187	can't install feature camel-hbase
ENTESB-5211	NullPointerException in camel-cxf consumer with dataFormat=MESSAGE and JMS transport at the end of Camel route
ENTESB-5237	Can't pass a large, form-encoded POST body through camel-jetty
ENTESB-5406	can't install feature camel-ignite
ENTESB-5407	gson two dependency chains jclouds, camel-ironmq

Issue	Description
ENTESB-5440	camel-cassandraql component does not preserve headers
ENTESB-5457	Camel WebSocket consumer cannot create server (NullPointerException)
ENTESB-5509	jms failing on osgi.wiring.package=javax.jms)(version>=1.1.0)!(version>=2.0.0)
ENTESB-5516	Null Pointer On Deployment When Jetty Bean is used in Blueprint with REST DSL
ENTESB-5543	fix camel-jetty* features
ENTESB-5570	Upgrade jgroups version (TCCL issue)
ENTESB-5575	HDFS2 component - ClassNotFoundException - org.apache.htrace.SamplerBuilder
ENTESB-5647	Need to add MRRC earlyaccess repo
ENTESB-5666	woodstox-core-asl : Jar is not a bundle
ENTESB-5700	[fabric:create] Error executing command: Unable to create zookeeper server configuration
ENTESB-5935	intermittent ServerModel LinkageError when connecting to ssh container
ENTESB-5950	can't install feature camel-olingo2
ZOOKEEPER-2380	[ZOOKEEPER-2380] Deadlock between leader shutdown and forwarding ACK to the leader
ZOOKEEPER-2383	[ZOOKEEPER-2383] Startup race in ZooKeeperServer
ENTESB-4715	support for camel-sap in Fabric mode
ENTESB-5616	Fix SAP Component build of SAP Data Layer update site
ENTESB-5801	Can't build camel-sap-repository in brew

5.5. CAMEL ON JBOSS EAP

Table 5.5, “Camel on JBoss EAP Issues Resolved in 6.3.0” lists the issues resolved in version 6.3.0.

Table 5.5. Camel on JBoss EAP Issues Resolved in 6.3.0

Issue	Description
ENTESB-5838	camel-restlet throws NCDFFE for URLEncodedUtils

Issue	Description
ENTESB-5867	Use of ' <code>body.replaceAll()</code> ' leads to logger warning
ENTESB-5780	Add support for camel-ldap
ENTESB-5675	Add support for camel-smpp
ENTESB-5724	Cannot build wildfly-camel / missing slf4j-log4j12 artefact
ENTESB-5667	Braintree module.xml dependency problem
ENTESB-5636	3rd party alignments to Red Hat versions
ENTESB-5647	add MRRC EA repo to support alpha releases
ENTESB-5578	python-2.5.3.jar contains natives and needs investigation
ENTESB-5511	Ensure that jackson annotations are visible to deployment ClassLoader
ENTESB-5503	Update to fuse-patch-2.4.0
ENTESB-5505	Fix bug where camel subsystem config could be added multiple times
ENTESB-5485	Remove hard coded namespace from camel-servergroup XML
ENTESB-5282	Add REST DSL test coverage for Jackson annotated classes
ENTESB-5380	Align with Camel bsh dependency version
ENTESB-5255	Upgrade to fuse patch 2.3.0
ENTESB-5314	Upgrade to jboss-eap-6.4.7.GA (7.5.7.Final-redhat-3)
ENTESB-5282	Add JacksonDataFormat marshalling test coverage for Jackson annotated classes
ENTESB-5141	Update to camel 2.17
ENTESB-5137	Increase timeout values for camel-braintree integration tests
ENTESB-5205	Need to add org.slf4j dependency to org.apache.camel.xml module
ENTESB-5134	Hawtio findComponentNames lookup fails
ENTESB-5028	Add spring-context-support module to Fuse on EAP
ENTESB-3335	Reinstate hawtio tests

Issue	Description
ENTESB-4995	Fix potential classloader leaks in ContextCreateHandlerRegistryService
ENTESB-4664	Add camel-braintree component
ENTESB-5072	Update to fuse-patch-2.1.0
ENTESB-4281	Remove references to community documentation from README files
ENTESB-5006	Expose HttpOperationFailedException from org.apache.camel.component.http4
ENTESB-4769	Rework example to not use unsupported embedded ActiveMQ broker
ENTESB-4389	Add hawtio fuse branding plugin to the ditro
ENTESB-4618	Dozer classloading may fail with spring based context
ENTESB-4900	Dozer cannot find org.apache.el.ExpressionFactory
ENTESB-4606	Port camel-swagger-java to Fuse EAP
ENTESB-4828	elasticsearch may incorrectly wire to the default lucene slot
ENTESB-4607	Port camel-elasticsearch to Fuse-EAP
ENTESB-4790	Examples fail with camel-2.16-redhat
ENTESB-4780	Update to camel-2.16
ENTESB-4615	Remove references to obsolete configuration files
ENTESB-4520	Fix bug with email form field
ENTESB-4227	Add module dependencies to support JPA idempotent consumers
ENTESB-4214	Unable to configure JDBC idempotent consumers

5.6. WEB SERVICES

Table 5.6, “Web Services Issues Resolved in 6.3.0” lists the issues resolved in version 6.3.0.

Table 5.6. Web Services Issues Resolved in 6.3.0

Issue	Description
COLLECTIONS-580	[COLLECTIONS-580] Arbitrary remote code execution with InvokerTransformer
CXF-1194	Schema Validation & MTOM fails
CXF-4109	UriInfo getHost caches first request's host and always returns that on subsequent calls
CXF-4817	JAX-RS AsyncResponse implementation needs to call AsyncContext.complete after the request is done
CXF-5348	Exception mappers implementing ExceptionMapper through an abstract class are not mapped to the declared exception
CXF-5640	CXF bundle is not compatible with new spring features from Karaf
CXF-5688	Problem Parsing FIQL Involving Enums
CXF-5744	@XmlTransient behavior change in WSDL fault content
CXF-5788	JMS replyToDestination doesn't work
CXF-5795	Reading the entity from a Response with 202 - Accepted causes NullPointerException
CXF-5844	Annotations inherited from interface not merged with annotations from implementing method
CXF-5846	ClassCastException in org.apache.cxf.jaxrs.provider.BinaryDataProvider & SourceProvider
CXF-5862	NullPointerException in class CustomizationParser
CXF-5878	Disabling policy engine causes NPE
CXF-5897	Relax setter method name restriction for @context injection
CXF-5898	Feature wss4j should be updated after saaj-impl version change
CXF-5899	JAX-RS 2.0 Configuration injection is not supported if DynamicFeature is not registered
CXF-5900	websocket destination in osgi fails to start after being stopped
CXF-5904	wadl2java -inheritResourceParams don't generate parent parameter
CXF-5906	Claim Manager only parses first claim value
CXF-5910	Filters registered by DynamicFeatures match on overloaded resource methods.

Issue	Description
CXF-5911	SoapFault's lang property is not set in case of SOAP 1.1 faults
CXF-5913	logStackTrace Property Not Implemented in MapEventLogger
CXF-5916	WADL contains wrong parameter name for parameter beans
CXF-5917	SAML Response Validator does not decrypt if EncryptedKey is the assertion element child
CXF-5920	JAX-RS Link implementation (LinkBuilder) loses context path
CXF-5938	LuceneQueryVisitor is not reusable / not thread-safe
CXF-5943	Throw error in exceptionmapper
CXF-5946	ensure unregister cxf http transport Servlet OSGi service before we re-register it
CXF-5949	LogBrowser not working
CXF-5952	wadl2java: process representation params
CXF-5953	wadl2java: generate full class name for representation parameter
CXF-5958	incorrect OSGi header in cxf-core bundle
CXF-5961	wadl2java: 'required = false' don't generated for @Multipart argument
CXF-5963	LuceneQueryVisitor should use analyzer to create query properly
CXF-5964	JAX-RS Contexts are injected into Application class too late
CXF-5966	NPE in MessageContextImpl when setting ResponseBuilder entity in an ExceptionMapper
CXF-5968	Setting use.async.http.conduit property causes IllegalArgumentException
CXF-5969	CXF does not pass a generic type to ParamConverterProvider
CXF-5970	review org.apache.cxf.jaxrs.provider.ProviderFactory.Message*ReaderComparator
CXF-5972	Fix all karaf features definitions
CXF-5974	WADLGenerator sets representation media type to application/octet-stream by default
CXF-5976	incompatible with javax.xml.bind.JAXBElement error when using List<JAXBElement<Book>> as resource method param

Issue	Description
CXF-5978	Incomplete dependencies in archetype cxf-jaxrs-service
CXF-5980	JAX-RS 2.0 client: response.readEntity(new GenericType<...>{ }) fails with "unexpected element" UnmarshalException
CXF-5988	Provide support for a pluggable parameter conversion mechanism for JAX-RS client side proxies
CXF-5989	Query Params not showing up in WADL when declared using @BeanParam
CXF-5992	Cannot set org.apache.cxf.stax.maxAttributeCount
CXF-5995	ClientProxyImpl problem with handling @BeanParams with null headers/cookies.
CXF-5999	Moving JiBX related systests into its own module.
CXF-6000	Wrong default algorithm is used for TrustManagerFactory instantiation
CXF-6003	jaxrs:server "basePackages" attribute doesn't initialize REST services properly
CXF-6007	WebClient does not resend request in Digest authentication for HTTP methods GET, HEAD, DELETE, OPTIONS (with no body).
CXF-6010	NPE in MessageModeOutInterceptor.validateFaultDetail for faults with no <detail>
CXF-6015	Path parameters containing semicolon are truncated due to missing encoding
CXF-6020	UriInfo.getAbsolutePath() missing path separator between servlet url and relative url
CXF-6021	WebClient has Accept defaulted to application/xml
CXF-6027	oauth2 client redirect uris are never valid
CXF-6030	javax.xml.ws.soap.SOAPFaultException: Fault string, and possibly fault code, not set for cxf.
CXF-6032	NullPointerException while validating cert for SAML HOK
CXF-6034	Wrong schemaLocation if jax-ws-catalog is used
CXF-6037	in JAX-RS search there is no support for java.sql.Time in fiql
CXF-6038	Repeatedly invoking setHandlerChain() can cause a build up of handler interceptors on the chain

Issue	Description
CXF-6040	need use servicemix wrapped opensaml 2.6.1_2
CXF-6041	Corba Binding is throwing a ObjectNotActive Corba exception being thrown back to application code on endpoint/bus shutdown
CXF-6045	Setting an entity from ClientRequestFilter has no effect if no entity is already set
CXF-6057	WADL to Java code generator does not support the documented "encoding" flag
CXF-6058	NPE in cxf-rt-transport-http org.apache.cxf.transport.http.Headers line 280
CXF-6059	wsdl:fault wsdl2java fails with IllegalArgumentException
CXF-6060	Calling readEntity() on Response created by Response.build() causes NullPointerException
CXF-6061	The publish attribute on jaxws:endpoint doesn't support placeholder in spring configuration
CXF-6062	Interceptors added in Spring Bus configuration are ignored
CXF-6066	JAX-RS 2.0 Client implementation is OOM prone due to its strongly referencing WebTargets
CXF-6067	ProviderFactory fails to analyze generic types correctly with some class hierachies
CXF-6071	CXF's WSDL2Java tool can generate impl classes that jdk compiler will refuse to compile
CXF-6072	jaxrs securityContext.getUserPrincipal is broken if login is done during the request
CXF-6073	cxf-wsn installation in Karaf fails
CXF-6075	NPE may occur at websocket destination under high load
CXF-6076	MediaType parameter not parsed correctly
CXF-6077	In OSGi, the wsdl extensor loaders may not be able to generate their special ExtensibilityELEMENTs
CXF-6078	AnnotationUtils.getAnnotatedMethod for abstract classes not inherit from interface
CXF-6089	XmlAccessorOrder.ALPHABETICAL, Exception.getMessage() duplicate WSDL elements generated
CXF-6090	java.lang.NullPointerException when running wsdl2java

Issue	Description
CXF-6091	Server is not properly stopped with MultipleEndpointObserver
CXF-6092	When there is bad connection/timeout, ClientImpl throws NullPointerException
CXF-6094	wSDL2java - Default key managers cannot be initialized
CXF-6096	http components transport is missing a dependency on commons-logging
CXF-6101	Accept Header not Respected with Response from Custom MessageReader
CXF-6103	Nullable field, in a json payload, was sent as "@nil":"true" instead of an empty string
CXF-6105	CXF 3.x does not use the older WS-SecurityPolicy 1.1 namespace
CXF-6106	ClientResponseFilterInterceptor wraps client response exchange message into ClientRequestContextImpl - as a result code can't access client request context
CXF-6109	Incorrect TrustException constructor in AbstractSTSCient
CXF-6111	JavascriptGetInterceptor.isRecognizedQuery is always false
CXF-6112	org.apache.cxf.jaxrs.impl.ResourceContextImpl#getResource should support a custom ResourceProvider
CXF-6115	Transferable.transferTo can cause infinite loop or stack overflow
CXF-6118	Schema Validation refinements
CXF-6122	JAX-RS proxy client with @QueryParam is not encoding the parameter value
CXF-6127	Check thrown Exception's cause for SOAPFaultException
CXF-6137	WADL generation does not correctly support query parameters
CXF-6138	JAXB unmarshaller Properties can't be configured
CXF-6139	WADLGenerator may produce a schema invalid resource id
CXF-6143	SSL/TLS hostname verification does not strictly follow HTTPS RFC2818
CXF-6145	WS-RM demo server throws exception
CXF-6146	Demo wsdl_first_xmlbeans fails to build
CXF-6147	Part of demo wsdl_first_soap12 doesnt work

Issue	Description
CXF-6149	ContainerRequestContextImpl hasEntity() always returns true for non-GET requests. Similar for ClientResponseContextImpl
CXF-6151	Apache-cxf wsdlvalidator returns error in mime:part
CXF-6152	WSDLValidator may throw ClassCastException under verbose mode
CXF-6153	OAuthRequestFilter throws NullPointerException when "Authorization" header is missing
CXF-6155	Exceptions thrown from ParamConverter generate 500 response
CXF-6160	AsyncResponse infinite loops
CXF-6163	WSDL Javascript generator for xsd:any elements is not correct when any is optional
CXF-6166	Parsing Bug in org.apache.cxf.jaxrs.provider.json.JsonMapObjectReaderWriter
CXF-6172	WS-Discovery should work also in IPv6 only environment
CXF-6176	org.apache.cxf.jaxrs.bus.providers property is not taken in account in cxf bus
CXF-6178	Missing io.netty.util.Version
CXF-6184	HTTPConduit "transport.retransmit.url" property may have side-effects in case of non-redirect retransmits
CXF-6187	JMS sample fails "connectionFactory may not be null"
CXF-6188	Authorization loop using "CurrentWindowsCredentials"
CXF-6189	Improve memory usage of UrlUtils
CXF-6192	Cxf Clustering Blueprint handler doesn't create the distribute feature rightly
CXF-6194	[multipart] Server handle Collection argument as single element
CXF-6198	No SOAPFault for HTTP error code 400
CXF-6204	JAX-RS Set-Cookie parser uses case-sensitive keys
CXF-6209	Bug in processing Signed/Encrypted Elements policies with multiple XPath
CXF-6210	XPath evaluation failure on the client side causes all subsequent evaluations to fail
CXF-6211	JAX-RS client runtime ignores Content-Type set directly from MessageBodyWriter

Issue	Description
CXF-6217	JmsPullPoint does not protect against external entities
CXF-6221	CDI integration extension does not detect annotations on Karaf
CXF-6222	Password can end up in log file
CXF-6228	Using XSLTFeature with large messages creates unremovable temporary files
CXF-6229	EndpointReferenceUtils.getSchema does NOT cache negative schema parsing
CXF-6233	STS client only sends AppliesTo on first RST call
CXF-6234	Invalid ?wsdl response with relative imports/includes when using jaxws-catalog.xml
CXF-6235	wsdl2java behaves differently from cxf-codegen-plugin
CXF-6236	proxyAuthSupplier not used in HTTPConduit.setHeadersByAuthorizationPolicy
CXF-6241	WS-RM doesn't work with WS-Security configured with @EndpointProperties
CXF-6245	Loading non-existent class org.apache.cxf.xmlbeans.XmlBeansWrapperHelper in WrapperClassOutInterceptor is causing performance issues
CXF-6246	missing osgi import of javax.jws
CXF-6250	WebSocket conduit fails to process String based responses and throws NPE
CXF-6252	JAXRS Async Client hangs in case of Connection errors
CXF-6256	Unexpected response code
CXF-6257	Creating and Endpoint using JAX-WS API, getting the binding and then publishing causes a NullPointerException
CXF-6260	JAXRS Async Client can not handle InvocationCallback TypeVariable
CXF-6272	SCT Renew in Secure Conversation
CXF-6274	NullPointerException in DestinationSequence because of RMCaptureInInterceptor not in interceptor chain
CXF-6284	JAX-RS servlet run-time leaks additional strong references
CXF-6285	NPE in SwaggerFeature.calculateDefaultResourcePackage

Issue	Description
CXF-6294	Cannot activate TLSv1.2 cipher suites on client on Java7
CXF-6295	String cannot be cast to org.apache.ws.security.validate.Validator
CXF-6297	JAX-RS BeanValidation feature fails with NPE in JAXRSBeanValidationOutInterceptor on sub-resource call
CXF-6300	cipherSuite configuration does not work with HTTPJ servers
CXF-6302	JAXRS endpoints with URL encoded addresses can not be located
CXF-6304	AuthorizationCodeGrantHandler sets the approved scopes as the requested ones
CXF-6306	AuthorizationCodeGrantService does not record a single pre-registered redirect uri in a session if current request has no redirect uri set
CXF-6307	Wrong select the message body reader
CXF-6309	Client processing exception has its cause set to the original exception wrapped in Fault
CXF-6313	SamHeaderOutInterceptor does not set headers on the message if it had none
CXF-6314	WebSocket transport should not require dependency to jetty
CXF-6315	Optional WS-Addressing policy doesn't return required soap headers
CXF-6317	Authorization not possible with multiple service beans
CXF-6319	Regression: failing namespace resolution after CXF-5891
CXF-6320	Zero-length entity should throw 400 on pre-packaged provider
CXF-6321	Make sure global JAX-RS filters are applied once per request even if made to sub-resource
CXF-6322	AbstractSearchConditionParser not working with UUID fields
CXF-6327	Invalid Policy exception for EndorsingSupportingTokens with more than one token assertions
CXF-6331	Wrap exceptions in JAXRSBeanValidationInvoker into Fault so that these exceptions are exposed to ExceptionMapper-s
CXF-6332	Wadl Genertion: @Description cannot be bound to field
CXF-6336	Client ParamConverterProvider may be lost if Client runs in the server scope

Issue	Description
CXF-6338	Reversed logic in AbstractJwtHandler#validateSignature
CXF-6340	Return value of AsyncResponseImpl.cancel() not follow JAXRS 2.0 javadoc
CXF-6343	EncryptedHeader not properly processed or generated
CXF-6347	CXF bundle activators not called in Eclipse/Equinox
CXF-6352	ContainerResponseContext.getLinks() loses links if they have no 'rel' parameter
CXF-6356	NPE when calling ServiceUnavailableException.getRetryTime()
CXF-6359	NullPointerException when certAlias specified but no keyManagers are configured
CXF-6361	HttpConduit is not detecting the redirect loop properly
CXF-6366	JAX-RS Client runtime does not encode forward slashes in Matrix parameters
CXF-6367	JAX-RS Client runtime does not check BeanParam bean fields
CXF-6368	Unexpected response code
CXF-6369	org.apache.cxf.jaxrs.impl.ConfigurationImpl does not comply with SPEC
CXF-6370	wrong usages for System.arraycopy in org.apache.cxf.jaxrs.impl.AsyncResponseImpl
CXF-6371	WADL Generator does not always correctly deal with generic types
CXF-6373	CompletionCallback can not get the Throwable if error occurs in other interceptor (no serviceinvokerInterceptor)
CXF-6375	Providers.getMessageBodyReader throws NPE
CXF-6377	Wrong media type of response
CXF-6378	LinkBuilderImpl does not resolve relative links against baseUri
CXF-6379	Separate HTTP headers for multiple header values not possible - bug in CXF-3714 fix
CXF-6380	Context provider not working
CXF-6388	NPE has been swallowed in org.apache.cxf.jaxrs.impl.AsyncResponseImpl
CXF-6389	set initialSuspend=true incorrectly when resume the asyncresponse

Issue	Description
CXF-6390	JAXRS Async Client does not always wrap the client side exceptions into ProcessingException
CXF-6392	Schema imports are not handled correctly in generated WSDL and XSD files
CXF-6393	JAXRS Async Client unwraps a parameterized type given to InvocationCallback
CXF-6395	Call setTimeout() in a second request cause illegalStateException from web container.
CXF-6398	AlgorithmSuitePolicyValidator rejects enveloped-signature Transform
CXF-6402	JettyHTTPServerEngine cannot set a provided Jetty Server
CXF-6403	Potential memory leak in PolicyBasedWSS4JInInterceptor and AbstractWSS4JStaxInterceptor
CXF-6406	WS-RM persistence with RMTxStore does not work with JNDI Lookup
CXF-6408	HTTP Conduit throws NPE exception for "invalid" 401 HTTP response
CXF-6415	WS-RM client persistent tests are failing
CXF-6429	Provider matching when nested generic type
CXF-6431	Attachment serialization does not conform to the relevant specs
CXF-6434	SOAPAction value may not be extracted correctly for SOAP 1.2 with Attachments
CXF-6435	Support base64 for attachment encoding in CXF
CXF-6436	NPE in DefaultLogEventMapper when running on cameltransport
CXF-6442	Possible uses constraint violation because of different servlet API versions
CXF-6444	CrossOriginResourceSharingFilter.java should not set Origin=* when Credentials=true
CXF-6446	WADL JavaDocProvider misses operation markers for the docs built with Java 8
CXF-6450	Bad handling of JAX-RS generic interfaces
CXF-6451	Set-Cookie Header incorrectly parsed
CXF-6458	CXF 3.1.0 memory leak (Tomcat)

Issue	Description
CXF-6464	The derived key versions of sign/encrypt in SymmetricBindingHandler don't support attachments
CXF-6466	Closing JAX-RS clients from finalize affects clients sharing the same conduit
CXF-6467	Jaxrs client handles array type property in a form object as a single element
CXF-6468	Secure Conversation Renew is missing Instance creation
CXF-6469	schemaLocation in xsd import is not rewritten correctly in Java 8
CXF-6472	Cannot create ContextResolver for class extending HttpServletRequest, HttpServletResponse, etc.
CXF-6473	Double signatures while using AsymmetricBindingHandler
CXF-6474	UriTemplate should not always ignore an empty/null group value
CXF-6475	problems using CXF as a JAX-RS 2.0 client
CXF-6479	Denial of Service: Regular Expression in StringUtils
CXF-6480	InjectionUtils createThreadLocalServletApiContext better error message for invalid @Context classes
CXF-6481	Jetty HTTPJ session manager Blueprint configuration is not effective
CXF-6484	Regression in Content-id format
CXF-6488	Binding style vs part type R2203 And R2204 problems in wsdl document
CXF-6489	Cannot set ClientSecretVerifier in AbstractTokenService
CXF-6491	wadl2java produces incorrect Consumes annotation for multiple representations on POST methods
CXF-6492	AbstractHTTPDestination class incorrectly assume only one empty space after "Basic" in Authorization header value.
CXF-6493	cxfrt-transport-http-3.1.1.jar contains OSGi interface classes
CXF-6495	Inconsistent RMAsserion may be built for 3.0.x
CXF-6502	JAXRSInInterceptor throw java.lang.IndexOutOfBoundsException if content-type header is empty

Issue	Description
CXF-6506	Client-side message context value HTTP_REQUEST_HEADERS is not shared between SOAP handlers
CXF-6507	WSRM 3.0 may store corrupted message
CXF-6512	The host property is missing in Swagger2 feature's configuration properties
CXF-6513	CXF Using async WebClient with load distribution failover strategy leads to memory leak
CXF-6515	provider sorting not right
CXF-6517	Regression in 3.1.2 attachment handling
CXF-6519	WS-RM - Invalid response for CloseSequence
CXF-6522	ThreadLocalInvocationHandler doesn't handle InvocationTargetException
CXF-6527	WSDLRefValidator reject valid target reference URI/IRI
CXF-6528	JAX-RS "lastModified" generates timestamp with non-standard format
CXF-6534	Kerberos delegation not possible if Authorization given
CXF-6535	Swagger2Feature's properties cannot be set when using Blueprint
CXF-6536	XML pretty printing produces double line spacing if incoming XML contains linefeeds
CXF-6542	Setting the signature digest algorithm on the SAMLCallback does not work for WS-Security
CXF-6543	It's not possible to specify the signature + digest algorithms for self-signed SAML Assertions with JAX-RS
CXF-6547	HTTPTransportActivator Does Not Propagate Servlet Init Parameters
CXF-6548	LoggingOutInterceptor logs the wrong Content-Type for some scenarios
CXF-6550	AsyncConduitHTTPFactory will throw NPE if passed properties are null
CXF-6551	Digest authentication to intermediate HTTP proxy fails with 407 without retry
CXF-6552	Multiple chained schema imports not handled correctly
CXF-6553	Unable to override Content-Type on GET requests

Issue	Description
CXF-6558	DefaultEncryptingOAuthDataProvider.getAccessToken throws SecurityException on invalid accessToken format
CXF-6559	AbstractOAuthDataProvider.refreshAccessToken method can't handle an invalid refresh token
CXF-6561	ResourceOwnerGrantHandler: ResourceOwnerLoginHandler can't return null or throw exception
CXF-6570	FormattedServiceListWriter - meta http-equiv value not quoted
CXF-6574	Issue with Digest Authentication
CXF-6575	WS-A Action generation defect
CXF-6577	MessageContextImpl needs to get a property from a current message first
CXF-6579	Inflated tokens can be corrupted if compression ratio is greater than 2:1
CXF-6580	wsdl2java - Issue with import to default namespace
CXF-6582	Support newer symmetric signature algorithms with WS-SecurityPolicy
CXF-6583	MessageListenerTest#testLocalTransaction fails intermittently
CXF-6584	EncryptSignature is ignored
CXF-6585	Possible to send invalid Soap 1.2 faults
CXF-6588	NPE in providers.getMessageBodyReader
CXF-6590	MAPCodec: memory leak with sync client when soapfaults returned from endpoint
CXF-6591	Aegis DataSourceType.getBytes fails to close the InputStream fetched from DataSource, which prevents the underlying file to be deleted on Windows
CXF-6592	Maven[cxf-java2wadl-plugin] when stylesheetReference are set, package ended with Nullpoint Error
CXF-6593	Some thread-local contexts may get lost on the client side after a refresh
CXF-6595	CXF Karaf feature file: set dependency = true in the jta bundle for CXF
CXF-6599	CXF ProxyHelper might cause OOM like conditions

Issue	Description
CXF-6600	Sudden repeating NPE on token request by STSClient
CXF-6601	Swagger2Feature can hit a NPE when running in localtransport
CXF-6602	Digest algorithms are not set properly when derived keys are used
CXF-6606	Encoded characters in URI are decoded multiple times during preprocess
CXF-6607	Cached STS-issued tokens are not renewed on expiry in delegation scenario
CXF-6609	Data Race in org/apache/cxf/transport/http/HTTPConduit.prepare
CXF-6614	"Comparison method violates its general contract" in DestinationRegistryImpl.getSortedDestinations
CXF-6615	the order of attributes in SubjectDN of certificate shouldn't be significant
CXF-6616	need always close the CipherOutputStream when the encryption is done to get the complete content
CXF-6621	Schema imports are not handled correctly in generated WSDL and XSD files when using catalog rewrites
CXF-6629	ConcurrentModificationException at AbstractResourceInfo.clearProxies()
CXF-6630	Cannot call setAttribute with a null name
CXF-6632	Memory leak due to literal keys in WSDLDefinition map
CXF-6637	@GZIP and similar CXF annotations are not recognized if set on super classes
CXF-6638	AsyncHTTPConduit does not allow body payloads with "PATCH" method
CXF-6640	[Locale Issue] HTTP header Issue for IOS 9 + Chinese Language user
CXF-6641	JWE elliptic curve error
CXF-6642	Memory Leak in ResponseImpl.readEntity()
CXF-6648	Wildcard Content-Type is set for GET
CXF-6653	NPE may result while generating a SequenceFault in WS-RM 1.1
CXF-6655	Error Invalid address. Endpoint address cannot be null

Issue	Description
CXF-6657	CXF Failover using JAXRS prevents header retrieval from ResponseExceptionMappers
CXF-6664	NullPointerException in LinkBuilderImpl#getResolvedUri when linkheader url has a matrix parameter
CXF-6667	Closing a source sequence in WS-RM may lead to inconsistent sequence status
CXF-6668	[wadl2java] @Multipart annotation generated, @QueryParam expected
CXF-6670	Problem with casting ParamConverter responses to primitive types
CXF-6671	Ambiguous JAXRSServerFactoryBean.setApplication() breaks Spring injection
CXF-6673	StaticService setEndpoints(List<String>) doesn't work correctly
CXF-6675	Update commons-collections from 3.2.1 to 3.2.2
CXF-6676	Incorrect Interface Method Name Generation
CXF-6677	Content-Type is empty on POST request with empty body
CXF-6679	@Context HttpServletRequest request.getParameterMap() can't contain post parameters by application/x-www-form-urlencoded
CXF-6682	NullPointerException in LinkBuilderImpl#getResolvedUri when only baseUri is set
CXF-6688	ClientProxylImpl does not populate class-level path params if BeanParam holds the values
CXF-6693	CXF fails to parse Cookie header when it contains \$ character
CXF-6694	SpringResourceFactory does not work with constructor-autowired beans
CXF-6699	DefaultAddress not set in HTTPConduit class
CXF-6701	JAXRS Proxy impl does not check field JAXRS annotations on BeanParam super classes
CXF-6705	Incorrect version in Import-Package for javax.validation for CXF Core
CXF-6706	Bean validation seems to not be working in OSGi
CXF-6709	HttpServletRequest.getInputStream is empty
CXF-6711	Aegis Databinding Deserialization Vulnerability
CXF-6720	AbstractHTTPDestination#WrappedOutputStream.close() calls flush after close

Issue	Description
CXF-6721	NullPointerException for some responses containing SoapFault.
CXF-6729	Version 1 NewCookie is not compliant with RFC 2109
CXF-6730	ClassCastException TransportBinding cannot be cast to AbstractSymmetricAsymmetricBinding in AbstractBindingBuilder
CXF-6743	Inconsistent versions of jax-rs specs can lead to OSGi pain
CXF-6744	Exceptions thrown from methods annotated with @Suspended result in no response at all
CXF-6748	the qop,nc,algorithm parameter in http auth header must not be enclosed between double quotation
CXF-6749	ClassLoader leak on FileUtils.createTmpDir()
CXF-6753	OAuth2 audience support is incomplete
CXF-6754	Determin Media Type in Response
CXF-6759	WADL2JAVA Tools Generated Source has Duplicate Method Name
CXF-6761	JAX-RS ClientImpl does not set TLSClientParameters on HTTPConduit when only HostnameVerifier is configured
CXF-6763	STS requires ClaimHandler even in ClaimMapping only scenarios
CXF-6764	Should add RI JAXB Namespacemapper support
CXF-6768	WS-Discovery missing schema when internet connection not present
CXF-6769	Underscores in values of FIQL search expressions are incorrectly escaped
CXF-6770	PrettyLoggingFilter not working well when using camel-cxf-transport
CXF-6772	HttpClientPolicy browserType is reported as BrowserType header
CXF-6783	ReflectionServiceFactoryBean generates invalid WSDL if anonymousWrapperTypes==true
CXF-6785	AbstractHTTPDestination should handle the case when pathInfo of HttpServletRequest is null
CXF-6787	not sufficient WadlGenerator presence detection
CXF-6793	InvocationCallback doesn't try to get response class type

Issue	Description
CXF-6795	WS-Discovery add support for discovery on localhost
CXF-6799	java.lang.ClassCastException: sun.reflect.generics.reflectiveObjects.ParameterizedTypeImpl cannot be cast to java.lang.reflect.TypeVariable
CXF-6805	cxfrt-transport-http adds Content-Type header to GET request
CXF-6806	don't mark the optional "encoding" parameter as required for cxfrt-java2wadl-plugin
CXF-6809	SAMLRequest ID must not start with a Number
CXF-6810	JAX-RS Client one way requests do not work with jms-transport
CXF-6812	WebTargetImpl should always check if client is closed first
CXF-6813	MediaTypeHeaderProvider doesn't check the illegal media type string like "s//tt;type=text/plain"
CXF-6814	ClientRequestFilter should be added with descending order of priority
CXF-6819	ConfigurationImpl returns wrong value for isRegistered(Object obj)
CXF-6820	LinkBuilderImpl#link() doesn't throw exception for invalid input
CXF-6823	Duplicate injectedProviders in ProviderFactory impacting throughput by ~30%
CXF-6828	[OAuth] AbstractGrant set wrong value(scope) for audience
CXF-6832	Attachment content-disposition modification-date not parsed correctly
CXF-6836	Swagger2 tests need to be updated to do a more robust JSON or YAML comparison
CXF-6838	AsyncResponse doesn't use 204 when body is empty
CXF-6842	Unwrap exception nested with WebApplicationException
CXF-6845	Some methods in MessageUtils prone to NPE
CXF-6849	Form parameter names including '%' are not decoded properly
CXF-6850	javax.ws.rs.core.Request implementation doesn't match Accept-Encoding: * for any encoding value
CXF-6867	Envelope and Body element prefixes changed when processing messages without headers

Issue	Description
CXF-6887	http-hc: NPE and incorrept assumption that there is only one bus
CXF-6939	can't install cxf-http-async feature
CXF-7008	Regression: CXF-5788 - JMS replyToDestination doesn't work
CXF-7026	o.a.c.transport.http.osgi.HttpServiceTrackerCust service leak
CXF-7034	should close HttpServiceTracker in HTTPTransportActivator
ENTESB-4398	Arbitrary remote code execution with InvokerTransformer
ENTESB-4933	When cxf service is deployed to child container SwaggerFeature uses root container port instead
ENTESB-4942	missing requirements for features:install cxf-jaxrs-cdi
ENTESB-4957	missing package org.apache.geronimo.osgi.locator for features:install pax-*-tomcat
ENTESB-5008	quiet a few test failure on cxf 3.1.x.redhat-6-3-x-patch branch with JAVA8
ENTESB-5410	please fix duplicate javax.mail in fuse
ENTESB-5442	Swagger2Feature throws an exception
ENTESB-5460	CXF and Camel need olingo version alignment in Fuse
ENTESB-5589	NCDFE when using JAX-WS schema validation on IBM java
ENTESB-5647	Need to add MRRC earlyaccess repo
ENTESB-5700	[fabric:create] Error executing command: Unable to create zookeeper server configuration
ENTESB-5777	can't install cxf-databinding-jibx
ENTESB-5907	CXF's JMSConfiguration replyToDestination does not have any effect
ENTESB-5935	intermittent ServerModel LinkageError when connecting to ssh container
ENTESB-5938	After Multiple Profile Deployments Fabric Container Runs Out of PermGen Space
FEDIZ-156	SAMLRequest ID must not start with a Number
WSS-549	Don't write out a ReferenceList if there are no elements to encrypt

5.7. FUSE ON JBOSS EAP

Table 5.7, “Fuse on EAP Issues Resolved in 6.3.0” lists the issues resolved in version 6.3.0.

Table 5.7. Fuse on EAP Issues Resolved in 6.3.0

Issue	Description
ENTESB-4160	BPEL - Domain mode - Deployment throws MySQLIntegrityConstraintViolationException
ENTESB-4513	Exclude itests directory from Camel quickstarts distribution
ENTESB-4747	No SwitchYard schema is included in Fuse 6.2.1
ENTESB-5112	Fuse on EAP Quickstarts fail to build on Fuse 6.3
ENTESB-5255	Failed installation of fuse-eap-installer into the newest jboss-eap
ENTESB-5328	Fuse EAP installer does not work on Windows
ENTESB-5485	Fuse on EAP can't start in domain mode
ENTESB-5503	Fuse EAP installer cannot upgrade from Fuse 6.2.1 to Fuse 6.3 on Windows
ENTESB-5647	Need to add MRRC earlyaccess repo

5.8. CONTAINER - 6.3.0

Table 5.8, “Container Issues Resolved in 6.3.0” lists the issues resolved in version 6.3.0.

Table 5.8. Container Issues Resolved in 6.3.0

Issue Number	Description
COLLECTIONS-580	[COLLECTIONS-580] Arbitrary remote code execution with InvokerTransformer
ENTESB-1609	Can not install fuse as system service on AIX7.1
ENTESB-3997	admin:create && admin:start doesn't work after 6.2 P2 patch
ENTESB-4055	Improve Hawt.io Performance
ENTESB-4156	On Windows offline patching causes "javax.management.InstanceAlreadyExistsException: org.fusesource.insight:type=Log Query"
ENTESB-4223	Feature camel-spring security does not install spring-security-config bundle

Issue Number	Description
ENTESB-4231	Unable to unzip RC4 prepatched zip on windows 2012 RC4
ENTESB-4398	Arbitrary remote code execution with InvokerTransformer
ENTESB-4443	null log msg causes org.apache.felix.eventadmin.impl.adapter.LogEventAdapter to be removed
ENTESB-4447	Incompatible TypedQuery exception is thrown when application(Using JPA-Hibernate) bundle is refreshed/re-installed
ENTESB-4450	admin:connect default username is not the sme as admin:create
ENTESB-4458	bin\client.bat doesn't work on windows
ENTESB-4495	Hibernate and Bundle ClassLoaders out of sync on Bundle Refresh
ENTESB-4616	Space in path results in bin/karaf: line 417: [: /home/fuse/te: binary operator expected
ENTESB-4742	Default "org.osgi.framework.system.packages.extra" configuration should be empty
ENTESB-4838	Camel on EAP bundles Spring version other than Karaf
ENTESB-4886	6.2.1 Patching mechanism should support applying rollup patch to non-fabric child containers
ENTESB-4889	Xslt Transformation seems to be broken in Fuse 6.2.1
ENTESB-4902	Fuse 6.2.1 failed to handle maven repository url with special characters like "@" for authentication parameters.
ENTESB-4903	[Solaris 11] local: not found when starting fuse
ENTESB-4921	problem with installing / uninstalling features in fuse 6.3
ENTESB-4935	admin script report wrong pid and wrong status
ENTESB-4954	can't install feature camel-spring-redis
ENTESB-4955	deltaspikes-* features can't be installed (versions 1.3.0 or 1.5.1)
ENTESB-4957	missing package org.apache.geronimo.osgi.locator for features:install pax-*-tomcat
ENTESB-4960	ssh:sshd command lists default values twice
ENTESB-4967	Karaf Wrapper fails if Path to KARAF_HOME Contains Spaces

Issue Number	Description
ENTESB-4980	[Karaf-service] Karaf-service.sh script does nothing on Debian (in docker)
ENTESB-4997	redirect parent and child instance std out to a karaf.out file
ENTESB-4999	Apply the same logic of ENTESB-4935 to karaf.bat script
ENTESB-5003	[Win+Karaf-service] Can't run .exe on win server 2012r2
ENTESB-5015	Aries JPA unable inject jpa context in blueprint
ENTESB-5045	[Karaf-service.sh] Not working on AIX and HPUX
ENTESB-5058	6.3.0 DR2 doesn't start on Windows
ENTESB-5065	localhost:8181/hawtio/index.html not available (404)
ENTESB-5067	"The syntax of the command is incorrect" error when running "shutdown -f"
ENTESB-5104	In JBoss Fuse shell, when running grep, there will be 3 ANSI reset sequence on each line.
ENTESB-5118	Invalid BundleContext when installing patch feature to admin:created container
ENTESB-5131	[6.3] Can't start fuse on solaris 10
ENTESB-5132	[6.3] Solaris 10 does not like a first empty row in the service file
ENTESB-5157	Not able to login when user belongs to jaas PublicKeyLoginModule.
ENTESB-5179	Maven proxy behavior broken
ENTESB-5191	Apparent mismatch between command count with tab completion
ENTESB-5217	Feature Installation - no Refresh of Fragment-Host bundle upon installation of fragment bundle
ENTESB-5323	javax.management.openmbean.KeyAlreadyExistsException thrown by hawtio-osgi-jmx
ENTESB-5332	Fuse doesn't start after unexpected termination
ENTESB-5366	Fuse client fails with java.security.InvalidAlgorithmParameterException
ENTESB-5370	Aries transaction manager fails with background connection validation
ENTESB-5395	Wildcard in NCName for Camel CXF Transport in Blueprint

Issue Number	Description
ENTESB-5399	Fuse on windows does not start without data directory
ENTESB-5401	fix pax-http-tomcat jaxp-api dependencies
ENTESB-5410	please fix duplicate javax.mail in fuse
ENTESB-5540	Exceptions in log after *:help - Service cannot be cast: org.apache.felix.scr.impl.ScrGogoCommand
ENTESB-5550	Bundle "spring-security-config" from servicemix does not contain spring metadata
ENTESB-5588	Switchyard reference throws ClassCastException with IBM java
ENTESB-5608	Revert hard coded v1.7 jdk for darwin in karaf launch script introduced via KARAF-2921
ENTESB-5620	wrapper:install on solaris11 lacks instructions to symlink scripts
ENTESB-5647	Need to add MRRC earlyaccess repo
ENTESB-5683	get Exception when enter "tab" from karaf console
ENTESB-5700	[fabric:create] Error executing command: Unable to create zookeeper server configuration
ENTESB-5716	Can't create child on 111, 115
ENTESB-5760	Can't create child on ssh container
ENTESB-5762	Can't resolve any of the quickstarts in build #125
ENTESB-5792	We are not properly replacing versions in client.bat in jboss-fuse-6.3.0.redhat-131
ENTESB-5795	ldap connection pool not created when using ssl (ldaps)
ENTESB-5850	javax.management.openmbean.KeyAlreadyExistsException thrown at JMX org.apache.karaf - services
ENTESB-5860	Camel-amq quickstart is not processing files
ENTESB-5869	Exception when Encrypting with PGPDDataFormat
ENTESB-5917	6.2.1 R3 prevents base DN lookup in Tivoli LDAP Server
ENTESB-5935	intermittent ServerModel LinkageError when connecting to ssh container
ENTESB-5942	karaf jaas modules test failing on IBM JDK

Issue Number	Description
ENTESB-5961	hawtio not showing activemq tab
ENTESB-6101	Fuse won't start with IBM java
ENTMQ-1683	*:help missing descriptions for activemq commands
KARAF-3240	BundleWatcher should not depend to pax-url-mvn
KARAF-3327	Incorrect LC_CTYPE parsing
KARAF-4005	Different locations for KARAF_HOME and KARAF_BASE
KARAF-4024	role.policy "group" ceased to function
KARAF-4123	Provide a more dynamic default for serviceUrl configuration
KARAF-4150	bin/status fails if KARAF_DEBUG is set
KARAF-4247	Issues with LDAP caching
KARAF-4330	Instance script doesn't return correct PID number if root instance is started two times
KARAF-4348	[RBAC] Wildcard PIDs chosen before more specific ones
KARAF-4373	Karaf.bat script produces "The syntax of the command is incorrect" even if it is working properly
KARAF-4499	Can't start a crashed server on Windows
KARAF-4607	ldap connection pool not created when using ssl (ldaps)
KARAF-4659	Ability to disable ldap listeners
KARAF-4686	ClassLoader leak with RmiRegistryFactory and sun.rmi.transport.tcp.TCPEndpoint
KARAF-4687	ClassLoader leak with java.lang.Exception and karaf.exception library

5.9. FUSE FABRIC - 6.3.0

Table 5.9, "Fuse Fabric Issues Resolved in 6.3.0" lists the issues resolved in version 6.3.0.

Table 5.9. Fuse Fabric Issues Resolved in 6.3.0

Issue Number	Description
COLLECTIONS-580	[COLLECTIONS-580] Arbitrary remote code execution with InvokerTransformer
CURATOR-126	IllegalStateException in performBackgroundOperation during close
ENTESB-1769	"Error in initialization script: Command not found: shell:if" after fabric:create on fuse with P2
ENTESB-2699	EnsembleRemove.applyEnsembleConfiguration() Throws StringIndexOutOfBoundsException
ENTESB-3449	Profile-rename Error executing command: versionId when not specifying version
ENTESB-3945	Profile import in fabric results in Container 'root' does not exist
ENTESB-4012	profile-import and profile-refresh don't download the latest snapshot
ENTESB-4073	Creating fabric with profile fabric leads to duplicated profile
ENTESB-4138	JMX mbean operation `setProfileProperty` is not working as expected.
ENTESB-4167	fabric-git-server defaults to admin role and may only be associated with one role
ENTESB-4225	Unable to scale down using fabric:profile-scale command
ENTESB-4362	jgit errors affecting patch management
ENTESB-4367	General patching problems on Windows
ENTESB-4369	Standby Fuse container in active/standby configuration does not expose an SSH service since 6.2
ENTESB-4374	Fabric - Services - MQ, Wiki: Patch branches are visible as versions
ENTESB-4387	[Patch mechanism] Command patch:fabric-synchronize has wrong description
ENTESB-4393	[Patch mechanism] Provision status freezes on installing when upgrading child container
ENTESB-4398	Arbitrary remote code execution with InvokerTransformer
ENTESB-4399	Insight: quickly and periodically refreshes Hawtio and throws errors on remote Fabric containers
ENTESB-4415	Multiple Error messages while updating JBoss A-MQ using new patch mechanism

Issue Number	Description
ENTESB-4422	[Patch mechanism] Option --upload in command patch:fabric-install doesn't work on Windows
ENTESB-4431	[Patch mechanism] Unable to upgrade ssh container with build 073 (container doesn't start)
ENTESB-4432	[Patch mechanism] Cannot create child or ssh container after 6.2.0 to 073 migration in offline environment
ENTESB-4437	zk group - deal with partial creation of sequential node
ENTESB-4443	null log msg causes org.apache.felix.eventadmin.impl.adapter.LogEventAdapter to be removed
ENTESB-4451	[Patch mechanism] Upgrading child container reverts user.properties to karaf default version
ENTESB-4462	[Patch mechanism] Unable to rollback child container to 1.0 after upgrade
ENTESB-4469	NullPointerException during patch:install
ENTESB-4470	Invalid boolean value exception after rollback
ENTESB-4472	[Patch mechanism] Upgrading SSH container results into wrong merged system.properties and general problem with reconnecting to fabric
ENTESB-4474	patch 6.2 GA >> 621 build 73 >> build 078 fails on "auth" bundle on windows
ENTESB-4482	[patching] patch:list shows patch as installed even-though installation failed with exception
ENTESB-4485	Provisioning containers fails with a java.lang.NullPointerException for Maven-URL
ENTESB-4489	Prevent hitting central.maven.org at Fabric creation
ENTESB-4491	[patching] NPE in bin/setenv resolver
ENTESB-4494	Fix Maven worrisome message about repos without ids
ENTESB-4496	NoNode for /fabric/registry/maven/proxy/download/p_0000000002
ENTESB-4497	[patching] Changes in org.ops4j.pax.logging.cfg do not propagate to newer version
ENTESB-4508	HTTP proxy does not work for osgi:install and profile artifact resolution at the same time
ENTESB-4574	HTTP Gateway and URL parameters

Issue Number	Description
ENTESB-4610	Fabric gateway fails because of incorrect use of ShutdownTracker
ENTESB-4622	Please update file name from jboss-fuse-full to jboss-fuse-karaf
ENTESB-4694	[itests] ExampleCamelClusterTest fails in 6-3-x branch
ENTESB-4710	[itests] ExampleCamelCxfTest problems in 6-3-x branch
ENTESB-4742	Default "org.osgi.framework.system.packages.extra" configuration should be empty
ENTESB-4761	Transitive Dependency on org.osgi.core 4.1.0 Breaks Unit Tests
ENTESB-4770	fix swagger dependencies in Fuse BOM
ENTESB-4781	fabric8 6.3 build fails with missing pom for quickstarts
ENTESB-4796	Setting KARAF_DATA Results in Error When Creating Fabric
ENTESB-4808	[itests] ServiceFactoryTest.testZkDisconnectFastReconnect fails sometimes on 6-3-x
ENTESB-4816	[patching] Fix detection of fabric env when initializing patch management
ENTESB-4820	mvn fabric8:zip does not work for quickstart examples.
ENTESB-4827	[itests] ProfileManagement.JolokiaTest/ProfileManagementProxyTest fail sometimes
ENTESB-4834	"start-level" property in <feature> element and 'start="false"' in <bundle> element didn't work in Fuse 6.2.1
ENTESB-4841	Fabric8 - NullPointerException from GitDataStore when having hostname with underscore
ENTESB-4845	java.lang.ClassNotFoundException: net.sf.ehcache.distribution.RMICachePeer_Stub (no security manager: RMI class loader disabled)
ENTESB-4862	Hawtio-Viewing history on profile files throws exception
ENTESB-4886	6.2.1 Patching mechanism should support applying rollup patch to non-fabric child containers
ENTESB-4888	OSGi configurations to the feature does not work in fabric mode if config name contains "-" character.
ENTESB-4894	fabric:create command terminates a script

Issue Number	Description
ENTESB-4902	Fuse 6.2.1 failed to handle maven repository url with special characters like "@" for authentication parameters.
ENTESB-4903	[Solaris 11] local: not found when starting fuse
ENTESB-4918	The fabric:profile-export Command Does Not Export Sub-folders or Specific Profiles
ENTESB-4939	When Creating a A Fabric with External Repo Configuration is Lost Unless Manually Edited in Files
ENTESB-4946	wiring chain issue with package javax.servlet.http
ENTESB-4956	Fabric8 HTTP gateway does not respond to container version changes without a restart
ENTESB-4957	missing package org.apache.geronimo.osgi.locator for features:install pax-*-tomcat
ENTESB-4970	Http gateway logs "listening at port 9000" before being unable to bind to that port.
ENTESB-4971	admin permission is added to first user in users.properties automatically by fabric:create command
ENTESB-4992	patch:add allows to add empty folder
ENTESB-4994	repeated Elasticsearch warning "Error executing request: MapperParsingException[failed to parse]; nested: JsonParseException[Non-standard token 'NaN': enable JsonParser.Feature.ALLOW_NON_NUMERIC_NUMBERS to allow]"
ENTESB-5003	[Win+Karaf-service] Can't run .exe on win server 2012r2
ENTESB-5012	Unnecessary default values in help of some commands
ENTESB-5014	[6.3.015] Can't create SSH container
ENTESB-5022	Authentication Error when Adding Containers to Ensemble
ENTESB-5029	A fabric server generated by "fabric:container-create-ssh" with "--ensemble-server" option will record ERROR log during it's boot up phase
ENTESB-5034	container-edit-jvm-options can not delete a jvm option and it also duplicates all "-D" options
ENTESB-5060	fabric:create causes java.lang.NullPointerException
ENTESB-5065	localhost:8181/hawtio/index.html not available (404)
ENTESB-5075	Fabric - issue with external git repo and provisioning

Issue Number	Description
ENTESB-5085	Patch commands are only available with Fabric container provisioned with the jboss-fuse-full profile
ENTESB-5105	Some profiles in fabric doesn't work out of the box in Fuse running in offline env
ENTESB-5107	Cannot create fabric with user as member as Administrator group via bin/client script
ENTESB-5109	fabric:join command should display a message if container is already connected to fabric
ENTESB-5119	Problem with authentication when creating fabric
ENTESB-5120	[patching] Patching admin:created container causes that all previously installed features are removed
ENTESB-5124	cxfr/rest quickstart "mvn -Ptest" fails
ENTESB-5138	[patching] patch:fabric-install removes previously added features from default profile
ENTESB-5172	Unable to install cxfr-secure-rest quickstart
ENTESB-5174	WARN from jetty happens very regular
ENTESB-5175	All containers have to run while executing fabric:wait-for-provisioning
ENTESB-5179	Maven proxy behavior broken
ENTESB-5186	container-stop operation may report wrong outcome
ENTESB-5191	Apparent mismatch between command count with tab completion
ENTESB-5206	"Client is not started" Exception
ENTESB-5213	Bump licence headers to 2016
ENTESB-5225	fabric:container-delete command does not display an appropriate message
ENTESB-5228	[Fabric] Support empty passwords in external git repos
ENTESB-5242	Patch:show command throws NPE in case of inexistent patch
ENTESB-5253	Profile update via git results in CheckoutConflictException
ENTESB-5254	Container-create-ssh does not respect --new-user and --new-user-password
ENTESB-5257	jsr311-api bundle not included in the distro

Issue Number	Description
ENTESB-5298	profile-export does not export profiles
ENTESB-5361	Container-delete does not fail when the credentials are invalid
ENTESB-5395	Wildcard in NCName for Camel CXF Transport in Blueprint
ENTESB-5396	[patching] Upgrade of container is overriding profile properties
ENTESB-5400	ChildContainers don't have correct RBAC configuration.
ENTESB-5402	SSHContainers don't have correct RBAC configuration.
ENTESB-5424	Pushing invalid branch name to fabric git breaks version-list
ENTESB-5433	Fabric8 Maven Plugin with Multi-module Maven projects only append last module to the bundle list of the created profile on Jboss Fuse 6.2.1.
ENTESB-5437	Fabric HTTP GW does not recognize query params
ENTESB-5443	fabric8 jboss-fuse-full profile is missing some ACL entries for fabric:* commands
ENTESB-5448	camel-cxf-contract-first building fails with ibm1.8 java
ENTESB-5453	beginner/camel-log example uses invalid timer value
ENTESB-5456	java.lang.NullPointerException at io.fabric8.insight.elasticsearch.plugin.InsightIndicesHousekeeperService
ENTESB-5461	profile-refresh command does not update the content of added features.xml
ENTESB-5463	Creating version with invalid name responds with Profile name is invalid
ENTESB-5475	Missing javax.mail jar with the correct version
ENTESB-5478	Downloading of artifacts is frozen due to some file locks in local repository
ENTESB-5488	SSH container cannot resolve SNAPSHOT artifacts uploaded to fabric
ENTESB-5490	fabric:profile-refresh is deleting the folder under the profiles.
ENTESB-5492	[patching] handle overrides.properties better
ENTESB-5513	Fabric maven proxy is not reachable by agent
ENTESB-5517	[patching] allow patch descriptor files starting with jboss-fuse- or jboss-a-mq- name

Issue Number	Description
ENTESB-5562	fabric:create should validate the value passed to "resolver" param
ENTESB-5591	Fabric git pushes rejected due to non fast forward
ENTESB-5619	[itests] ARQ/pax-exam tests affected by package refresh
ENTESB-5633	[patching] Problems upgrading pax-cdi, pax-web, jclouds features
ENTESB-5634	[patching] Migrate serialized container metadata during patching
ENTESB-5635	fabric join not allowing FQDN names throwing Container name 'abc.domain' is invalid. Container name must be: lower-case letters, numbers, and _ or - characters
ENTESB-5647	Need to add MRRC earlyaccess repo
ENTESB-5682	Status of installed 6.2.1 R2 and R3 patch on standalone container is false
ENTESB-5691	Remove fabric-groovy from fabric feature
ENTESB-5700	[fabric:create] Error executing command: Unable to create zookeeper server configuration
ENTESB-5714	JVM options for Fabric managed containers are not aligned
ENTESB-5716	Can't create child on 111, 115
ENTESB-5728	Hawtio throws "Cannot connect to Jolokia to access this Java process" exception for user with role Monitor, while trying to access container perspective
ENTESB-5741	"org.eclipse.jgit.api.errors.JGitInternalException: Invalid ref name: baseline-ssh-fabric8-1.2.0.redhat-621117"
ENTESB-5759	A lot of connection refused in log when creating ssh in offline mode
ENTESB-5760	Can't create child on ssh container
ENTESB-5761	Ssh container in offline mode contains PatchException: can't find baseline
ENTESB-5762	Can't resolve any of the quickstarts in build #125
ENTESB-5816	Changing ZooKeeper settings invalidates ZK client session
ENTESB-5820	HTTP gateway does not show CXF endpoints after container restart
ENTESB-5832	Fabric - Wiki: Void profiles version "container-history" appeared

Issue Number	Description
ENTESB-5836	PatchException during AMQ container fabric:join
ENTESB-5854	etc/org.apache.karaf.features.cfg overwritten with default values on first start
ENTESB-5898	instance.properties not updated after ensemble-add
ENTESB-5904	jmx.acl.whitelist.properties across profiles
ENTESB-5914	patch:add allows to add incorrect file
ENTESB-5926	rest and secure-rest quickstarts do not work on fabric
ENTESB-5935	intermittent ServerModel LinkageError when connecting to ssh container
ENTESB-5938	After Multiple Profile Deployments Fabric Container Runs Out of PermGen Space
ENTESB-5947	Increase default ZooKeeper Retry and Retry Interval
ENTESB-5951	Shell SCR bundle redeploy loop with camel-amq quickstart
ENTESB-5957	Many fabric8 patching tests are failing on windows with UnsupportedOperationException
ENTESB-5958	Fabric - Services - Containers: Containers list disappears when a container migrated to a version not containing one of the current profiles
ENTESB-5986	REST Endpoints are registered under /fabric/registry/clusters/apis/ws/ instead of ..apis/rest
ENTESB-6003	handle PID file delete during patching
ENTESB-6011	Unable to patch fabric root container, when registered as system service on windows
ENTESB-6032	Unable to rollback standalone child container
ENTMQ-1314	PatchException: Invalid baseline-root-amq-6.2.1.redhat-071 specified
ENTMQ-1517	The jboss-a-mq-6.3.0.redhat-012.zip does not startup properly
ENTMQ-1724	Broker in fabric master/slave set up is shut down late when it loses connection to zookeeper
KARAF-3092	Remove \${services-\${karaf.framework}} variables from org.osgi.framework.system.capabilities
KARAF-4155	Fall to feature start-level

Issue Number	Description
SUREFIRE-1187	[SUREFIRE-1187] JUnit4 Provider created unnecessary Runner instance
ZOOKEEPER-2380	[ZOOKEEPER-2380] Deadlock between leader shutdown and forwarding ACK to the leader
ZOOKEEPER-2383	[ZOOKEEPER-2383] Startup race in ZooKeeperServer

5.10. MANAGEMENT CONSOLE - 6.3.0

Table 5.10, "Issues Resolved in 6.3.0:" lists the issues resolved between Fuse MQ Enterprise 7.1 and 6.3.0.

Table 5.10. Issues Resolved in 6.3.0:

Issue Number	Description
ENTESB-2401	[user experience] hawtio fabric wiki page missing picture
ENTESB-3387	RH Access - Links in RHA main menu vanish when mouse over
ENTESB-3504	The labels for the Actions submenu on the Wiki page disappear on mouse over
ENTESB-3515	Hawtio provides delete button for root container but it cannot be delete
ENTESB-3956	OSGi: fast switching OSGi tabs causes exception
ENTESB-3957	OSGi - Bundles: Clicking links in a Bundle details page opens the welcome page instead of collapsing a pane content
ENTESB-4021	Camel: Route diagram isn't displayed in IE
ENTESB-4055	Improve Hawt.io Performance
ENTESB-4080	Can't delete queue created in Hawtio when name contains ":"
ENTESB-4165	ActiveMQ - Chart: PersistenceAdapter tree item has "View chart' under Chart tab and no data
ENTESB-4166	ActiveMQ - Browse: Checkboxes at message rows works badly after messages list is manually refreshed
ENTESB-4176	Camel - Camel Contexts - Attributes: Wrong ordering of some columns with text
ENTESB-4177	Camel - Camel Contexts - Attributes: Contexts table isn't refreshed after any context deleted

Issue Number	Description
ENTESB-4183	Filtering is case sensitive
ENTESB-4185	OSGi - Bundles - Table view: Ordering of Version column content is wrong
ENTESB-4186	OSGi - Features: Filtering is case sensitive
ENTESB-4193	OSGi - Services: Bundle (number value) column ordering is lexicographical
ENTESB-4194	OSGi - Declarative Services: Activate button is enabled when Activated service is selected, Deactivate as well
ENTESB-4209	Preferences - Core - Host identification: All colors in color palette are white (IE10)
ENTESB-4219	About page contains unnecessarily 2 same links
ENTESB-4232	Containers - Profiles: Stop, Start, Delete buttons shouldn't be there
ENTESB-4234	Container detail - Provision list: Filtering is case sensitive
ENTESB-4246	Fabric - Wiki: Deleting default version causes exception and disables Wiki page
ENTESB-4253	Fabric - Services - APIs: "APIs, Container, Version" table columns allow only one direction of ordering
ENTESB-4256	Fabric - Services - EIPs: Diagram filtering is case sensitive
ENTESB-4331	Cross Site Scripting Vulnerabilities
ENTESB-4350	Camel on EAP - filtering is not working
ENTESB-4352	Camel on EAP - Route Diagram - ns_error_failure
ENTESB-4365	Unnecessary down arrow
ENTESB-4366	Camel on EAP - Routes - Clear messages should delete message
ENTESB-4370	Camel Debug - Create breakpoint button is not intuitive
ENTESB-4372	Cross in filter field is not unified
ENTESB-4375	Fabric - Services - APIs: Quickstarts link points to a blank page
ENTESB-4379	Camel on EAP - Creating endpoint without choosing component
ENTESB-4380	Camel on EAP - checkboxes are not editable

Issue Number	Description
ENTESB-4381	Camel on EAP - Type converters - Enable/Disable statistics
ENTESB-4385	ContextCreateHandler executed on non camel enabled deployments
ENTESB-4391	Null user on EAP
ENTESB-4404	No automatic reload after Camel Preferences change
ENTESB-4405	Preferences - ID label does not work
ENTESB-4407	Camel on EAP - Showing / Hiding Inflight counter does not work
ENTESB-4417	Preferences - Server Logs: Log batch size setting doesn't work
ENTESB-4418	Camel - two Create Endpoint buttons do different things
ENTESB-4516	Location of containers is displayed differently under Containers and Services tabs
ENTESB-4575	OSGi - getElementByTagName error
ENTESB-4766	Authorization not working for Hawtio on EAP
ENTESB-4862	Hawtio-Viewing history on profile files throws exception
ENTESB-4892	"viewer" has some rights unexpected in hawtio
ENTESB-4919	Child container does not inherit the location from its parent
ENTESB-4928	Missing convertBodyTo icon
ENTESB-4933	When cxf service is deployed to child container SwaggerFeature uses root container port instead
ENTESB-4934	Possible to Create Duplicate Container Processes in Hawtio
ENTESB-4937	Hawtio fails to show custom bundles in OSGi default view
ENTESB-4996	Viewer role able to create/delete queues and messages via Hawtio
ENTESB-5013	hawtio jetty threadpools tab shows no data
ENTESB-5037	Hawtio - clicking on Services/EIPs results in java.lang.SecurityException: Authentication Failed
ENTESB-5059	Fabric - Wiki: Several icons missing in the left navigation with checkboxes

Issue Number	Description
ENTESB-5062	Fabric: missing all tabs except "Containers"
ENTESB-5088	Hawtio JavaScript error when accessing Quartz tab
ENTESB-5191	Apparent mismatch between command count with tab completion
ENTESB-5196	Vanishing items at various menus
ENTESB-5198	Logs: Often Parse error when loading logs
ENTESB-5199	Fabric - Containers - Profiles: Clicking profile's tags causes exception
ENTESB-5200	Fabric - Containers,Services: Remove Stop button when Root container selected
ENTESB-5209	Deleting topics doesn't have a confirmation dialog
ENTESB-5213	Bump licence headers to 2016
ENTESB-5226	Hawtio change behavior of Activate/Deactivate buttons in OSGi/Declarative Services
ENTESB-5244	Fabric - Wiki - Delete version dialog: Change warning for default version
ENTESB-5252	Clicking on Jetty tab shows "Are you sure?" screen for a moment
ENTESB-5324	Health tab in Hawtio not being displayed for fabric containers
ENTESB-5441	Scaling Save and Cancel buttons are not disabled after cancel
ENTESB-5525	Fabric - Containers - Location: Filtering field filters containers instead of locations
ENTESB-5566	Multiple roles defined in hawtio.roles property not working in EAP
ENTESB-5596	OSGi - Declarative Services - {{row.id}} shows up
ENTESB-5622	User with Read-only privilege can delete/move messages through hawtio
ENTESB-5629	Authenticator.checkIfSubjectHasRequiredRoleOnWebsphere method is missing logic to handle multiple roles
ENTESB-5647	Need to add MRRC earlyaccess repo
ENTESB-5657	Fabric - Profiles - Deploy: Creating a new container with profiles version other than default fails
ENTESB-5768	Fabric - Wiki - profile detail: typing in add artifact field is mirrored to another text field

Issue Number	Description
ENTESB-5818	Upgrade httpclient version to latest, at a minimum > 4.3.4
ENTESB-5921	There is not Delete button in Hawtio for SSH container
ENTESB-5935	intermittent ServerModel LinkageError when connecting to ssh container
ENTESB-5958	Fabric - Services - Containers: Containers list disappears when a container migrated to a version not containing one of the current profiles
ENTESB-5976	Hawtio on EAP shows wrong Context Root
ENTMQ-1078	Some characters in the name of queue should not be allowed
ENTMQ-1850	ActiveMQ - Browse: Un/checking all messages doesn't work properly after any message deleted

5.11. JON PLUG-INS

Table 5.11, "JON Plug-In Issues Resolved in 6.3.0" lists the issues resolved in version 6.3.0.

Table 5.11. JON Plug-In Issues Resolved in 6.3.0

Issue	Description
ENTESB-5213	Bump licence headers to 2016
FUSEJON-128	StorePercentUsage measurement value is returned by the plug-in as an integer rather than decimal

CHAPTER 6. ENHANCEMENTS

6.1. GENERAL - 6.3.0

Table 6.1, “General Enhancements in 6.3.0” lists the enhancements in version 6.3.0.

Table 6.1. General Enhancements in 6.3.0

Enhancement	Description
ENTESB-4221	Please tidy up jetty port references in our configuration files
ENTESB-4479	Update Jenkins jobs to use Flaky Test Plugin and Surefire rerun failing tests option
ENTESB-4685	Package javadocs with distro
ENTESB-5246	Security Enhancements To Address Vulnerabilities
ENTMQ-1473	[A-MQ, Kahadb] change default config/behaviour to shutdown broker when "java.io.IOException: No space left on device"
ENTESB-4386	Use system specific init scripts
ENTESB-5050	Package Javadoc for Karaf
ENTESB-4296	Patch management needs a productised build
ENTESB-5451	Remove legacy patch artifacts from Fuse 6.3
ENTESB-5803	[patching] split patch-core to impl and api bundles

6.2. MESSAGING - 6.3.0

Table 6.2, “Messaging Enhancements in 6.3.0” lists the enhancements in version 6.3.0.

Table 6.2. Messaging Enhancements in 6.3.0

Enhancement	Description
ENTESB-3176	Set OriginalDestination AMQ message property before sending it to DLQ
ENTESB-4135	Update to the JMS 2.0 API
ENTMQ-1432	[A-MQ,kahadb] add configuration so broker will not start if storeUsage limit is not available on the disk
ENTMQ-1498	Work with JMS 2.0 osgi dependency

Enhancement	Description
ENTMQ-1525	[A-MQ, RuntimeConfigurationBroker] allowing policy that applies to multiple destination to be updated.
ENTMQ-1528	JDBC Concurrency
ENTMQ-1628	Stand-alone A-MQ has DBCP2, whilst OSGi version has DBCP1.4
ENTMQ-1836	Temporary store index/log files splitting
ENTMQ-1885	configurable hostname for published address strategy
AMQ-5289	Track forwards across a network in destination statistics
AMQ-5578	preallocate journal files
AMQ-5603	Consider preallocation of journal files in batch increments
AMQ-5621	Unit tests cleanup
AMQ-5636	Upgrade the bundled DBCP component. The current one is very old and buggy.
AMQ-5845	AMQP: Include broker version information in the Connection properties
AMQ-6001	AMQP: Refill sender credit faster to avoid throttling fast producers
AMQ-6015	AMQP: Report more meaningful error conditions when an incoming send fails
AMQ-6077	Better configuration of restricted classes for clients
AMQ-6100	Virtual topic message destination should be the target queue
AMQ-6116	Improve security context authorization cache
AMQ-6126	The corePoolSize value of the TaskRunnerFactory created Executor should be configurable
AMQ-6147	AMQP: Update Proton-J to 0.12.1
AMQ-6149	Pre-configure jolokia
AMQ-6164	queue sendLock prevents concurrent journal updates
AMQ-6167	examples/other/perfharness misses readme and uses broken link.
AMQ-6184	Improve nio transport scalability

Enhancement	Description
AMQ-6203	KahaDB: Allow rewrite of message acks in older logs which prevent cleanup
AMQ-6228	Max Frame Size Error exception shows incorrect values at times
AMQ-6239	Performance issue in PrioritizedPendingListIterator
AMQ-6259	Enable configuration for mqtt-over-ws transport
AMQ-6276	Remove fileserver webapp
AMQ-6277	KahaDB does journal recovery for last append in error in normal restart case
AMQ-6278	Revisit the log level in LeaseDatabaseLocker
AMQ-6292	ACK rewrite task does unnecessary syncs
AMQ-6304	Container-id field blank on sending an AMQP 1.0 open frame to the client
AMQ-6336	QueueBrowser delivers expired messages
AMQ-6403	Allow splitting the temporary message store
CAMEL-8522	Set OriginalDestination AMQ message property before sending it to DLQ
AMQ-3519	Allow getJMSRedelivered flag to survive a restart
AMQ-5847	AMQP: Support transactions that span multiple session for a single TXN
AMQ-6037	AMQP: Add support for sending scheduled message using message annotations
AMQ-6362	Add an option to time out connection attempts when blocked in ensureConnectionInfoSent
ENTMQ-1659	Consider preallocation of journal files in batch increments
AMQ-5962	Update HTTP Client and Core versions
AMQ-5980	Update to the latest Jetty version
AMQ-6084	Have an option to error out if a limit is exceeded
AMQ-5957	Update outdated dependencies used by broker.
AMQ-6044	AMQP: Add support for testing transactions with the test client.

Enhancement	Description
AMQ-6093	Remove deprecated getXURL methods from the BrokerServiceMBean
AMQ-6107	AMQP: Remove deprecated prefetch size configuration option from the transport
AMQ-6178	AMQP: Update Qpid JMS to 0.9.0
AMQ-6181	Upgrade to Joda-time 2.9
AMQ-6309	AMQP: Static code analysis of activemq-amqp
ENTESB-5636	3rd party alignments - built from source strict alignments
ENTMQ-1565	The Readme File For The Stomp Extras Example Needs More Details

6.3. SWITCHYARD

Table 6.3, “SwitchYard Enhancements in 6.3.0” lists the enhancements in version 6.3.0.

Table 6.3. SwitchYard Enhancements in 6.3.0

Enhancement	Description
ENTESB-4135	Update to the JMS 2.0 API
ENTESB-4479	Update Jenkins jobs to use Flaky Test Plugin and Surefire rerun failing tests option
ENTESB-4587	SY: Support property replacement in 'from' and 'to' camel definitions
ENTESB-4596	SY: Property expansion for soap binding
ENTESB-5100	Transform message to String automatically in HttpMessageComposer#decompose method
ENTESB-5162	SOAP - Externalize binary content in the payload as an attachment automatically
ENTESB-5239	Upgrade Xalan bundle to 2.7.2_3
ENTESB-5597	Change endpoint in camel-bindy camel context
ENTESB-4944	Can't install switchyard-http
ENTESB-5150	Fuse 6.3 SwitchYard version alignment
ENTESB-4196	Align versions of JBoss Logging distributed in Fuse to 3.3.0.Final

Enhancement	Description
ENTESB-4448	Upgrade SwitchYard to OverlordCommons 2.0.18.Final-redhat-2
ENTESB-4824	Resolve issues with CamelAMQPBindingQuickstartTest.java
ENTESB-5021	camel-dozer quickstart needs a Fuse section of instructions
ENTESB-5412	Re-enable tests in jboss-as7/standalone/dist/pom.xml
ENTESB-5636	3rd party alignments - built from source strict alignments

6.4. ROUTING

Table 6.4, “Routing Enhancements in 6.3.0” lists the enhancements in version 6.3.0.

Table 6.4. Routing Enhancements in 6.3.0

Enhancement	Description
ENTESB-4135	Update to the JMS 2.0 API
ENTESB-4597	Review examples shipped in extras directory for camel & cxf
ENTESB-5375	Avoid creating an empty default Camel context in Camel CDI
ENTESB-5877	Support cassandra-core 3.x in camel-cassandraql feature and bundle
ENTESB-5184	Create camel component for ServiceNow
CAMEL-1002	Quartz support should allow stateful jobs
CAMEL-1005	should we have an annotation - maybe @Handler or something which can mark a method as being the default method invoked by the Bean Binding if no other Camel annotations are used to bind parameters
CAMEL-1011	improve the Bean Ref usage on DOT files generated
CAMEL-1024	[IDEA] could we refactor the expression implementations (invoking JavaScript / Groovy / Ruby / XPath / XQuery et al) so they are easy to invoke from any library - not just from an Exchange?
CAMEL-3907	Component camel-sql needs the ability to process sql from the body of the exchange
CAMEL-4576	Make exception throwing as flexible in XML as in Java DSL

Enhancement	Description
CAMEL-4917	To avoid to confuse end users, a different name should be used for output position of CSV and not position as now (pos vs postion)
CAMEL-5398	Optimize String.replaceAll() to cache Patterns where suitable
CAMEL-5402	Parameter Binding Annotations used for Camel Proxy
CAMEL-5452	DoCatch doesn't notify ExchangeFailureHandledEvent
CAMEL-5561	allow camel:run to auto detect OSGI-INF/*.xml for blueprint XML files or META-INF/beans.xml for CDI to avoid users having to customize camel-maven-plugin configuration on a per project basis
CAMEL-5857	Add server side encryption to header options when constructing an ObjectMetadata for a PUT in the S3Producer
CAMEL-5958	Bindy ignores bean class type
CAMEL-6062	Placeholder cannot be determined in camel property definition
CAMEL-6094	Cannot specify which converter to use when several can do the same conversion
CAMEL-6269	MainSupport in camel-core should make it easier to have callbacks when starting / stopping etc
CAMEL-6338	camel-cdi shouldn't use deltapsike bean manager provider in the CamelExtension
CAMEL-6406	Add support to ObjectHelper.getException() for Java 1.7 Throwable.getSuppressed()
CAMEL-6439	camel-jms - Add thread pool for handling timeout when doing request/reply and allow to configure this thread pool
CAMEL-6469	Add StatusLine object to exchange in populateResponse
CAMEL-6646	Support static method calls on OGNL expressions
CAMEL-6858	Delayer EIP - Add JMX attribute to know if any messages are delayed
CAMEL-6913	Add dynamic unmarshalling capability to JiBX data format
CAMEL-6934	Create new Address for every openConnection call
CAMEL-6944	Add exchangeld in the toString() method of the DefaultExchange
CAMEL-6955	Migrate camel-hl7 and camel-syslog from mina to netty

Enhancement	Description
CAMEL-7054	CamelNetty - No way to get ChannelGroup
CAMEL-7193	Assertions are applied an extra, unnecessary time after an assertion period
CAMEL-7247	No way to 'abort' the onCompletion action of the MailConsumer
CAMEL-7454	Camel-Quartz2 Scheduler Name Difference
CAMEL-7463	Why tokenize (and some others) does not support properties substitution?
CAMEL-7474	Error blocks mail-consumer
CAMEL-7528	Aggregate - Allow aggregation repository to report back in-flight exchanges for in-memory repos
CAMEL-7638	Use response input stream directly in http producer
CAMEL-7683	Upgrade camel-hbase component to hbase 0.98.0-hadoop2
CAMEL-7753	xslt component - Store warning/errors etc as exchange properties so end users can get hold of those
CAMEL-7800	camel-swagger - Upgrade to swagger that is pure Java based
CAMEL-7813	Make camel-jms more robust for replyTo
CAMEL-7905	New option to ignore missing consumers on direct endpoints
CAMEL-7907	Add support for JMSCorrelationIDAsBytes to jms component
CAMEL-7974	Provide CircuitBreaker state in an exchange property
CAMEL-7985	camel-test-blueprint - Upgrading to newer felix fails with NPE in fileinstall
CAMEL-8027	Add ByteArrayCodec implementation for udp to camel-netty4
CAMEL-8075	Camel sftp should send a command to check if the connection is broken
CAMEL-8147	Using @ManagedResource on an Endpoint removes all the default JMX properties
CAMEL-8175	camel-swagger - Add support for multiple CamelContexts
CAMEL-8243	Enhance the Infinispan module to add support for HotRod events
CAMEL-8258	camel-twitter - Support Streaming from User Endpoint including Direct Messages

Enhancement	Description
CAMEL-8323	Provide ability to specify node type
CAMEL-8381	XML XSD enriched documentation should maybe word wrap for easier read in raw format
CAMEL-8392	Upgrade Camel-Gora to Gora 0.6
CAMEL-8397	Support Salesforce Analytics
CAMEL-8410	Add stream caching for CxfPayload
CAMEL-8415	DefaultExchangeHolder - Only transfer primitive headers/properties
CAMEL-8438	[Aggregation] [Optimistic Locking] [Hazelcast] Binary representation of same exchanges are different
CAMEL-8446	Camel Toolbox - Add support for @UriParam / @UriParams on component level
CAMEL-8452	Camel route model - Preserve {{ }} placeholders in model
CAMEL-8459	Java DSL - Align beanRef as bean to be similar to xml dsl
CAMEL-8468	Usage of camel-xstream depends on TCCL
CAMEL-8473	DeadLetterChannel - Add onPrepare
CAMEL-8478	IdempotentRepository - Add clear operation
CAMEL-8483	MongoDB Endpoints: Allow ReadPreference to be set on consumers
CAMEL-8488	Java DSL - Improved CBR to detect if endChoice vs end was invalid used
CAMEL-8489	camel-sjms - Allow to create empty message for null body
CAMEL-8491	Camel POJO producer/consumer should defer starting until CamelContext is starting
CAMEL-8497	Add extra capabilities to the github component
CAMEL-8503	camel-jms - Have replyTo options for concurrent consumers
CAMEL-8506	Add SEARCH operation to Elasticsearch component
CAMEL-8509	camel-catalog - Add api to parse endpoint uri and reverse
CAMEL-8511	Properties component - Add encoding option to use when reading the properties files

Enhancement	Description
CAMEL-8512	Simple - Add exchange as function to access the exchange easily
CAMEL-8513	FTP consumer - Add option to use a larger buffer size so download is faster
CAMEL-8514	camel-castor should depend on castor-xml
CAMEL-8516	Salesforce component does not return the list of matching records for HTTP status code 300
CAMEL-8517	Salesforce session handling must declare shared fields volatile
CAMEL-8522	Set OriginalDestination AMQ message property before sending it to DLQ
CAMEL-8523	Spring Boot should automagically load XML routes definitions from classpath
CAMEL-8525	Aggregate - Expose statistics about completed exchanges
CAMEL-8526	EIPs - Expose more statistics for the different EIPs in Java and JMX
CAMEL-8527	Processor in routes should be IdAware so we can easily map from/to its model definition
CAMEL-8528	rest-dsl - Allow producers to control what content-type header to return
CAMEL-8532	Spring Boot applications should block the main thread of the execution
CAMEL-8541	Camel main TestSupport class is incompatible with the CDI specification
CAMEL-8543	Support easy configuration of HTTP proxy parameters for Camel salesforce component and maven plugin
CAMEL-8544	Camel - Dynamic router - unsupported cacheSize attribute
CAMEL-8545	Allow camel-swagger component to run in an internal container
CAMEL-8552	camel-jackson should provide Map => Object converter
CAMEL-8554	camel-jackson should provide Map => Object converter
CAMEL-8558	Camel Catalog - Add humanize component name
CAMEL-8560	camel-mail - Make it easier to configure sort term in XML DSL
CAMEL-8561	Camel Catalog - Add better description of components and others

Enhancement	Description
CAMEL-8562	Removing a route - Should check if the route input endpoint is static and used by other routes
CAMEL-8564	Add support for dataformat ref parameter
CAMEL-8569	Ability to easily extract email attachments
CAMEL-8571	Split EIP - Should use new message id per splitted message
CAMEL-8572	Upgrade aws sdk java version and add support for DynamoDB v2
CAMEL-8576	Added a option to let camel netty take the message body as byte buffer
CAMEL-8579	Upgrade to jclouds 1.9.x
CAMEL-8586	File component optimization required for file response body
CAMEL-8593	JmsEndpoint.configureListenerContainer() some debug logs miss {}
CAMEL-8598	Set default timeouts on workflows registered by the camel-aws / aws-swf component
CAMEL-8600	Change the ftp default separator to be Unix style
CAMEL-8601	Add Support for SFDC-specific Field Types To The Camel SFDC Component
CAMEL-8615	Update Dropbox-core-sdk from 1.7.6 to 1.7.7
CAMEL-8616	Update Twitter4j to latest version
CAMEL-8617	camel-vertx - Add timeout during startup to wait for EventBus to be ready
CAMEL-8618	Camel Catalog - Remove the label commands
CAMEL-8620	Update LightCouch version from 0.1.3 to 0.1.6
CAMEL-8621	Update Apache Kafka version from 0.8.1.1 to 0.8.2.0
CAMEL-8622	Update Apache PdfBox from version 1.6.0 to version 1.8.9
CAMEL-8623	Update Dropwizard Metrics from version 3.1.0 to 3.1.1
CAMEL-8632	httpBindingRef & httpBinding for the servlet component documentation
CAMEL-8634	Wire tap - Should emit event notification about sending to tapped endpoint

Enhancement	Description
CAMEL-8635	XStream no longer supports dynamic CL updates
CAMEL-8640	BacklogTracer allocates 100k elements for an array even it is not enabled
CAMEL-8642	Support to use custom classloader when deserializeJavaObjectFromStream in HttpHelper
CAMEL-8645	Camel Netty component should not intercept consumers with httpMethodRestrict=OPTIONS
CAMEL-8647	Make Camel OSGI Extender Subsystem-Aware
CAMEL-8653	camel-kafka need to commit the last batch offset when shutdown the consumer
CAMEL-8666	Infinispan add other operations to the available
CAMEL-8670	Add spring-ws:uripath endpoint mapping
CAMEL-8681	Camel-Infinispan: use Lifespan and Max Idle Time in the implementation
CAMEL-8684	Load balancer model should not implement processor
CAMEL-8685	Netty should resolve OPTIONS prefix matches earlier
CAMEL-8686	Camel-Infinispan Replace operation can use options Lifespan and Max Idle Time
CAMEL-8691	Camel-docker: Add FollowRedirects and LoggingFilter options to client configuration
CAMEL-8692	Improve the PredicateBuilder with the missing vargs and list or helper method
CAMEL-8693	java.net.URISyntaxException: Invalid uri syntax: Trailing & marker found error should be configurable or skipped
CAMEL-8695	Update apns library to 1.0.0.Beta6
CAMEL-8698	Camel-Infinispan: Add size operation
CAMEL-8700	Camel-OpenShift: Add new operations to available set
CAMEL-8703	Camel-Openshift: Scaling management operations and gitUrl feature
CAMEL-8706	Increase set of parameters for elasticsearch component
CAMEL-8709	Camel-Infinispan: Add Async operations to available set
CAMEL-8710	Make auth configurable for Google app components

Enhancement	Description
CAMEL-8711	JMS Session not exposed to Camel route
CAMEL-8712	User the Netty Timer per Component
CAMEL-8714	Camel-Openshift: Add Environment Variables management
CAMEL-8716	camel-http - Make it easier to extend DefaultHttpBinding and have default no-arg ctor
CAMEL-8725	explainEndpointJson should order the options according to the given order from the endpoint
CAMEL-8726	Camel-Openshift: Add multiple environment variables to application
CAMEL-8728	Hazelcast idempotent repository - Should use locks
CAMEL-8729	Add query all capabilities in hazelcast map producers
CAMEL-8730	Camel-Hazelcast: Add replace operation to map producer
CAMEL-8731	Camel-Hazelcast: Add clear operation to map and multimap producers
CAMEL-8732	File consumer - Allow to sort by random
CAMEL-8733	Camel-Hazelcast: Add the possibility to specify a ttl related to a specific key
CAMEL-8734	camel-netty-http - Should ignore case of context-path
CAMEL-8735	Camel-Hazelcast: Add putIfAbsent operation to map producer
CAMEL-8736	Create new component using Hazelcast JCache implementation
CAMEL-8739	Camel-Hazelcast: Add Replicated Map support
CAMEL-8750	Camel-Infinispan: Add Remove, RemoveAsync, Replace, ReplaceAsync operation for a specific value
CAMEL-8752	camel-fop - Allow to set output format easier
CAMEL-8753	camel-twitter - Allow to configure http proxy on component level
CAMEL-8755	No Message History on deadLetterChannel
CAMEL-8761	Idempotent Consumer EIP - Allow to commit when EIP scope ends
CAMEL-8763	Default error handler should use default redelivery delay of 1 sec

Enhancement	Description
CAMEL-8766	camel-cache - CacheConfiguration - parseURI not needed
CAMEL-8767	camel-elasticsearch - ElasticsearchConfiguration should be a plain pojo
CAMEL-8779	camel-mail - Message copy can be optimized if mapMessage=false
CAMEL-8790	Kafka producer hard coded to use Strings
CAMEL-8795	camel-kafka - Support for Scala 2.11
CAMEL-8799	Make it possible for JsonPath to suppress PathNotFoundException
CAMEL-8801	CamelContext auto-configuration should be conditional
CAMEL-8807	camel-ftp - Add option to turn off sendNoop as alive check
CAMEL-8811	No data coding headers in deliverSM
CAMEL-8818	Set default for SO_TIMEOUT in camel-ftp
CAMEL-8820	Allow to do post logic when creating expression/predicate from routes
CAMEL-8821	Support to disable the stream caching in camel-servlet from the camel context
CAMEL-8824	Add startTimestamp to JMX attributes
CAMEL-8826	Add timezone parameter to Cron Scheduler Route Policy
CAMEL-8835	Replace PojoSR with felix-connect
CAMEL-8836	Remove the joda-time bundle camel-elasticsearch
CAMEL-8842	Camel-Hazelcast: Add addAll and removeAll operation to list
CAMEL-8843	Camel-AWS EC2: Add DescribeInstancesStatus operation to available set
CAMEL-8844	Treat absolute FTP directories as invalid and convert to relative
CAMEL-8845	Property placeholder - service lookup should use underscore instead of dash
CAMEL-8846	camel-archetype-web - Should use servlet as example
CAMEL-8849	Camel-Hazelcast: Add retainAll operation to list
CAMEL-8850	Camel-AWS EC2: Add rebootInstances operation

Enhancement	Description
CAMEL-8851	Camel-AWS EC2: Enabling/Disabling monitoring on instances
CAMEL-8852	Camel JCR doesnt include Connection to a repository workspace except the default one
CAMEL-8856	Camel-Hazelcast: Add evict and evictAll operation to hazelcast map
CAMEL-8857	Camel SCR should create OSGi service for CamelContext
CAMEL-8863	Camel-Hazelcast: Add valueCount operation to multimap
CAMEL-8865	Remove version from URL in Camel web examples
CAMEL-8868	Camel-Hazelcast: Add remainingCapacity operation to queue
CAMEL-8870	Remove version from URL in Maven web archetype
CAMEL-8872	Camel-Hazelcast: Add new operations to HazelcastAtomicNumber producer
CAMEL-8876	Add an option for HttpProducer to ignore response body avoiding stream caching
CAMEL-8877	Camel-Hazelcast: Add containsKey and containsValue operation to map Producer
CAMEL-8879	Camel-sjms doesn't treat InOnly and InOut equally
CAMEL-8882	Camel-AWS EC2: Add options to Run Instance command
CAMEL-8883	Camel-Hazelcast: Add containsKey and containsValue operation to ReplicatedMap and MultiMap Producer
CAMEL-8893	Upgrade to CXF 3.1.x
CAMEL-8894	Support to reconnect the server in ClientMode.
CAMEL-8897	camel-example-servlet-rest-tomcat should include rest-dsl query params docs
CAMEL-8903	Camel-Infinispan: Add ClearAsync operation to producer
CAMEL-8910	Camel-JClouds: Add new operations to JClouds Compute Service Producer
CAMEL-8918	Camel-Jclouds: Add countBlobs and removeBlob operation to Blobstore component
CAMEL-8920	Camel-JClouds: Add new operations to Blobstore component
CAMEL-8921	Cleanup a bit on the example-cdi and archetype

Enhancement	Description
CAMEL-8922	Camel-Jclouds: Use ObjectHelper to check if headers exists
CAMEL-8924	camel-maven-plugin - The goal that generates the list of components etc
CAMEL-8925	camel-vertx - Upgrade to vertx 3
CAMEL-8926	camel-spring - contextScan should allow to exclude non-singletons
CAMEL-8930	Add removeHeader and family to route DSL
CAMEL-8935	camel-spring-ws - Expose more options
CAMEL-8941	Restlet supports binary files only with media type application/octet-stream
CAMEL-8942	aws-sqs - Make it easier to configure http proxy
CAMEL-8943	camel-jetty should use jetty9 as default
CAMEL-8944	Routing engine - When UoW done let the route context be present so MDC logging is possible
CAMEL-8946	Original SSLHandshakeException was overridden by Camel Netty Http producer
CAMEL-8948	CamelBlueprintTestSupport tests have issues with namespace handlers
CAMEL-8956	camel-cxf - The namespace parser should use FactoryBean
CAMEL-8960	direct component - Should defer failing if no active consumer until camel context is started
CAMEL-8961	Update Camel-Docker to support docker-java 1.4.0
CAMEL-8965	Wire Tap EIP - Support dynamic uris
CAMEL-8966	Add a dynamic to that is simpler to use than recipient list
CAMEL-8970	File consumer - Add option to turn on/off whether to delete orphaned marker lock files
CAMEL-8972	ClassLoader leak reported in Apache tomcat
CAMEL-8974	DefaultPropertiesParser does not support the system properties mode
CAMEL-8976	netty-http - Allow to configure max size of headers
CAMEL-8977	Enrich and PollEnrich - Add option ignoreInvalidEndpoint

Enhancement	Description
CAMEL-8980	Add Camel-git feature
CAMEL-8981	camel-test-spring - Allow to use UseOverridePropertiesWithPropertiesComponent
CAMEL-8983	Add random function to simple
CAMEL-8986	Add specialized mbean for enrich and pollEnrich
CAMEL-8987	Vert.x endpoints should support mutliple consumers
CAMEL-8990	camel-guice - Upgrade to v4
CAMEL-8991	rest-dsl - Add support for toD
CAMEL-8992	EIPs with Expression - Allow to detail those in jmx friendly information
CAMEL-8994	Large memory use on Large core count(512) servers
CAMEL-8995	camel-restlet - Should defer UoW done until after writing response
CAMEL-9003	Allow multiple producers with differing request timeouts
CAMEL-9010	camel-stream - When using scanStream it should be able to deal if the file is deleted or not present
CAMEL-9011	Circuit Breaker LB - Only supports 1 processor so validate it has only 1
CAMEL-9015	JMX agent - JVM system properties should always take precedence
CAMEL-9016	<jmxAgent> in XML DSL should not output default values when dumped
CAMEL-9020	Splunk component should use TLS instead of SSLv3
CAMEL-9023	Use Redis String instead of Set as datatype for idempotent consumer
CAMEL-9033	Abstract undertow HttpHandler creation
CAMEL-9036	Camel-Hazelcast: Add support for set Data Structure
CAMEL-9039	Feature camel-core contains bundles, which should be made optional for micro-services deployment
CAMEL-9044	aws-sns - Make it easier to configure http proxy
CAMEL-9045	Camel-aws: Make it easier to configure http proxy

Enhancement	Description
CAMEL-9050	Camel-cassandraql: Add loadbalancingpolicy as uri option
CAMEL-9052	HTTPHeaderFilterStrategy should filter any Camel header on consumer side as well
CAMEL-9054	sftp - Reduce logging noise from JSCH
CAMEL-9055	camel-aws - SQS should not allow handover the delete task
CAMEL-9056	Aggregator - Allow to clear closed correlation key cache
CAMEL-9061	Java DSL - Allow to configure parallel processing and similar using a string configuration type
CAMEL-9062	Java DSL - ValueBuilder should build expressions as languages so they model can be dumped
CAMEL-9063	Add useGetBytesForBlob option in camel-jdbc
CAMEL-9064	File language - Add functions to get extension in single mode
CAMEL-9066	Include any headers unmarshalled by SoapJaxbDataFormat in content marshalled by the same.
CAMEL-9068	Log output to show which route is shutdown and has a pending message
CAMEL-9069	Add processor to immediately handle exception while in retry loop
CAMEL-9078	camel-http - Allow to configure the success range for http status codes
CAMEL-9086	Add support for relative path requests in netty http
CAMEL-9088	camel-pgevent - Use prepared statement and close resources
CAMEL-9093	Provide an unparsed read mode for olingo2
CAMEL-9096	rest-dsl - Reuse logic for matching best rest path to use
CAMEL-9102	CxfEndpoint could use loggingSizeLimit = -1 for no size limit
CAMEL-9105	Camel DefaultHttpBinding should convert response Date headers to HTTP-friendly format
CAMEL-9115	camel-restlet - Should doneUoW using restlet callback
CAMEL-9116	camel-sjms - Should use same binding to/from JMS messages as camel-jms

Enhancement	Description
CAMEL-9118	camel-pgevent, use pg_notify for sending notifications with postgres verion 9 and above
CAMEL-9119	XSLT errors should not be ignored
CAMEL-9131	Camel components - Add more labels to group the options
CAMEL-9145	Upgrade camel-hbase component to hbase 1.1.1 on Hadoop 2.7.1
CAMEL-9153	ThreadPoolRejectedPolicy does not implement Abort as expected
CAMEL-9158	camel-univocity-parsers should initialize in doStart and not use reset flag
CAMEL-9160	Dynamic to - Should use language: as prefix when using other languages
CAMEL-9163	PGP Data Format: Support PGP Messages without Compressed Data packet
CAMEL-9173	camel-artchetype-scr - Should be a simple route example
CAMEL-9174	Main - Make it easier to configure CamelContext before its started
CAMEL-9175	Simple random function - Should trim the min/max values
CAMEL-9178	Apache Camel is not able to read map-id in Dozer mapping xml but does not throw any error
CAMEL-9179	Add uptime to route so we can easily see per route how long time they have been running
CAMEL-9184	Throttler: Rejected message whe rejectExecution=true
CAMEL-9192	camel-elsql - Allow using simple language as named parameters
CAMEL-9193	Aggregator in preCompletion mode should also timeout if the new group does not receive further messages
CAMEL-9194	camel-elasticsearch search request only supports map object
CAMEL-9201	Improved Camel CDI component
CAMEL-9203	camel-amqp should provide qpid dependencies
CAMEL-9204	Provide AMQP component factory method for AMQP 1.0
CAMEL-9207	Make it easy to collate/group N items from a message body with the splitter
CAMEL-9213	CamelContext - explainEndpointJson should not include component properties

Enhancement	Description
CAMEL-9219	Base64 Spring XML tests and documentation
CAMEL-9225	camel-exec - Enrich exception with stdout/stderr
CAMEL-9232	camel-paho - Create exchange correct
CAMEL-9239	camel-sjms - Add completionInterval to batch jms
CAMEL-9240	Abstract CXF endpoint creation for WildFly integration
CAMEL-9244	camel-paho - Endpoint must implement publishing of retained messages option
CAMEL-9249	timer - Allow to specify a delay of -1 or something to indicate loop asap forever
CAMEL-9251	rest-dsl - Allow to configure api-doc route id
CAMEL-9256	Paho file persistence store should be configurable
CAMEL-9258	camel-boon - Serializing/Deserializing Lists, Maps with camel-boon
CAMEL-9263	camel-servlet - Allow to configure the context path without leading slash
CAMEL-9271	Extending RouteDefinition
CAMEL-9274	StreamCache does not work correctly with MarshalProcessor and pretty much all DataFormats
CAMEL-9275	camel-jackson - Allow to use a custom ObjectMapper instance
CAMEL-9278	camel-undertow - Should support multiple rest services
CAMEL-9285	controlbus - Allow to grab current route id so you can control current route easier
CAMEL-9286	Log component - Include log formatter options in docs
CAMEL-9297	Expose more configuration options from Camel's XStream component
CAMEL-9298	camel-netty4 - Connection timeout is already done by netty itself
CAMEL-9303	PropertiesComponent - Allow service host and port to be specified individually
CAMEL-9305	PropertiesComponent.isDefaultCreated method only check the absence of defined locations
CAMEL-9306	XML Signature: Header "CamelXmlSignatureTransformMethods" for Transform Methods

Enhancement	Description
CAMEL-9309	camel-jetty - Make it easier to turn on/off java transport over http
CAMEL-9314	Improve error logging in Kura router
CAMEL-9315	KuraRouter should provide consumer template
CAMEL-9317	camel-salesforce's XStream to use a system property to configure its setting
CAMEL-9325	camel-spring-boot - Allow to use spring xml easier
CAMEL-9326	JndiRegistry should default to use CamelInitialContextFactory if no env factory specified
CAMEL-9328	KuraRouter should provide required and optional service resolvers
CAMEL-9329	Kura router should provide OSGi compendium services
CAMEL-9330	Main - enableHangupSupport should be default enabled
CAMEL-9332	Support @MockEndpoint and @MockEndpointAndSkip in Spring Boot
CAMEL-9333	KuraRouter should try to load XML routes from ConfigAdmin
CAMEL-9335	camel-netty-http - Suppress Connection reset by peer WARNs
CAMEL-9339	camel-cdi - If starting camel-cdi main and no camel found then log a WARN about this
CAMEL-9342	Metrics component should log at debug level
CAMEL-9345	Migrate example to rest-dsl
CAMEL-9346	camel-sql - Add transacted option
CAMEL-9349	ResourceHelper - Allow to load resource from registry
CAMEL-9351	Kura router should offer SCR programming model
CAMEL-9352	camel-jms - Add transferFault option
CAMEL-9355	Current Throttler implementation is not accurate and does not work in a multi-threaded route
CAMEL-9356	Allow delivery receipts with empty shortMessage field
CAMEL-9357	KuraRouter should provide default routes configuration

Enhancement	Description
CAMEL-9358	Support UPDATE request in elastic-search component
CAMEL-9359	DefaultExchangeHolder.marshall() logs NULL header values to WARN
CAMEL-9365	camel-metrics - Allow to configure naming pattern for route policy
CAMEL-9369	Acknowledge messages for RabbitMQ InOut exchange when transferring exception
CAMEL-9371	Add support of Swagger for restlet component
CAMEL-9373	Camel JSSE security - Allow to use custom trust manager
CAMEL-9377	[test-blueprint] support configadmin as source of initial properties for BP camel context
CAMEL-9379	Camel BOM should not include tooling dependencies
CAMEL-9380	Method call expression - Validate bean name for mistake
CAMEL-9382	netty4-http - Hostname should allow without double slash
CAMEL-9388	Provide properties-based AMQP connection discovery
CAMEL-9390	Camel-git: Allow to specify username/email on a commit operation
CAMEL-9395	Reduce the number of default services registered in JMX
CAMEL-9399	Provide support for Publisher Acknowledges
CAMEL-9400	Camel-Elasticsearch: Add Multiget Operation support
CAMEL-9409	wiretap - Allow to use endpoint injected instance
CAMEL-9410	camel-netty-http - should default to port 80 and 443
CAMEL-9427	camel-jetty - Should also support rest-dsl with api-doc
CAMEL-9434	camel-catalog - Add did you mean functionality
CAMEL-9436	camel-catalog - Make it easy to include extra components
CAMEL-9437	Fix checkstyle indentation violation for generated API test cases
CAMEL-9441	Camel-Elasticsearch: Add an operation to know if an index exists or not
CAMEL-9446	camel-swagger-java - Support allowedValues in model generated

Enhancement	Description
CAMEL-9447	camel-swagger-java - Add type for response model
CAMEL-9450	rest-dsl - Configuration allow to use # to refer to beans to be looked up
CAMEL-9454	camel-gora - Should preserve headers
CAMEL-9455	Enhance Google Calendar service account with user impersonation support
CAMEL-9456	Component docs - Add information if a component is deprecated
CAMEL-9457	Camel Main - Stop from JMX should trigger stop of the Main/JVM
CAMEL-9461	camel-sql - Allow to load sql from resource
CAMEL-9469	Properties component - Should include component docs
CAMEL-9470	Add consumer option to component docs
CAMEL-9471	Tokenizer - Add option to skip first
CAMEL-9472	Add multi value to component docs
CAMEL-9473	camel-mail - The from/to/cc/bcc options should be like others and in component docs
CAMEL-9474	camel-jpa - Add consumer options to component docs
CAMEL-9475	Simple - Calling method should favor best matching type
CAMEL-9479	bean/class component - Should use bean. prefix for bean options
CAMEL-9482	Remove some deprecated options on http/http4/servlet
CAMEL-9486	Camel component docs - Add support for username password configured in userinfo part of uri
CAMEL-9488	Camel script - Add missing languages
CAMEL-9492	camel-netty-http - The http/https protocol should be mandatory
CAMEL-9495	camel-hipchat - Should require url for hipchat server
CAMEL-9496	camel-hbase - The mapping options in the uri should use prefix
CAMEL-9500	CamelVersionHelper cannot handle version qualifier

Enhancement	Description
CAMEL-9501	Support to setup the filter InitParameter from Jetty URI
CAMEL-9504	OnCompletion - Keep caught exception so it can access the exception
CAMEL-9508	camel-sjms to support jms 2.0 in osgi manifest
CAMEL-9511	Setting Kafka's endpoint configuration by reference overrides everything instead of merging
CAMEL-9515	Does not handle an expired iterator exception
CAMEL-9517	Validator Component: add clearCachedSchema method to ValidatorEndpoint
CAMEL-9518	Swagger may see non-camel MBeans
CAMEL-9523	Use setStopRow on org.apache.hadoop.hbase.client.Scan
CAMEL-9524	file - Allow to turn on off probe content type
CAMEL-9531	Camel catalog - method call, tokenizer and xtokenizer do not use @XmlValue
CAMEL-9534	XsltComponent: fix support for Saxon-B (and Woodstox)
CAMEL-9539	toString of Exchange/Message should only output id
CAMEL-9549	camel-schematron - More fine grained error messages when compiling the schema
CAMEL-9550	File consumer - Use Filter while deleting orphaned marker lock files
CAMEL-9551	ErrorHandler - Should not log message body by default
CAMEL-9559	camel-undertow - Allow to configure SSL on component level
CAMEL-9564	EndpointHelper.resolveReferenceListParameter should not return immutable lists
CAMEL-9572	Validator Component: Support custom resource resolver which depends on dynamic resource URI of the endpoint
CAMEL-9577	Only support suspension if a component has custom logic
CAMEL-9578	Reduce object creation in InfinispanProducer
CAMEL-9579	Replace deprecated entry listener signature in HazelcastMapConsumer

Enhancement	Description
CAMEL-9580	XSLT Component: Support custom URI resolver which depends on dynamic resource URI of the endpoint
CAMEL-9583	camel-jackson - Allow the FallbackTypeConverter to convert to/from string types
CAMEL-9584	LevelDB - Allow serializable objects in headers
CAMEL-9594	Use swagger.json instead of api-doc in examples
CAMEL-9595	Camel-Kubernetes consumer should use DefaultConsumer and not ScheduledPollConsumer
CAMEL-9596	REST DSL - Jetty component ignores custom HTTP Binding
CAMEL-9601	camel-restlet - Should support the Accept header
CAMEL-9603	Support producer in Kinesis
CAMEL-9604	camel-jpa - Endpoint should be singleton
CAMEL-9605	Allow camel-gson to unmarshall more type by default
CAMEL-9609	camel-aws - SQS allow to configure attribute names easier
CAMEL-9610	Chmod does not work properly with "recursive=true"
CAMEL-9616	Support looking up MetricRegistry by type only in the Metrics component
CAMEL-9620	Support IGNORE_RETURN_VALUES for write ops in Infinispan component
CAMEL-9621	camel-restlet - The producer should support message body as bytes or streams
CAMEL-9624	Add Infinispan remote query support
CAMEL-9625	rest-dsl - Marshal should only happen if content-type is json or xml
CAMEL-9627	Splitup camel-cxf into modules so REST dont pull in old SOAP stuff
CAMEL-9628	camel-cxf - RsEndpoint should be enlisted in JMX
CAMEL-9629	camel-cxf - Allow to configure providers easily from endpoint
CAMEL-9632	Allow for adding ResponseHeader info to documentation.
CAMEL-9635	Continuation settings are only evaluated on first creation for each port/connector

Enhancement	Description
CAMEL-9644	Improve camel-hbase component
CAMEL-9649	Do not require @XmlRootElement annotation in JAXB FallbackTypeConverter
CAMEL-9653	Bean language - Add support for calling purely static methods
CAMEL-9654	camel-undertow - rest-dsl should support {name} placeholders from path
CAMEL-9655	rest-dsl - Default hostname should be 0.0.0.0
CAMEL-9657	Problems with DefaultCamelContext constructor calling Container.Instance.manage()
CAMEL-9675	Improve loop EIP to act like a while loop
CAMEL-9677	FallbackTypeConverter that are CamelContextAware should have it injected
CAMEL-9684	camel-infinispan : add support for setting query builder in InifispanConfiguration
CAMEL-9693	camel-infinispan : disable building tests on JDK < 1.8
CAMEL-9696	test component - Allow to pass in uri options to endpoint
CAMEL-9697	Test component - Allow to receive in any order, or split using expression
CAMEL-9699	Change the default for DataSets used as sources to zero
CAMEL-9704	rest-dsl - Options requests should not be routed
CAMEL-9705	rest-dsl - Do not allow duplicate verbs
CAMEL-9706	MockEndpoint: isEqualTo predicate does not handle arrays correctly
CAMEL-9711	camel-sql - Allow to use IN queries where the parameter is expanded
CAMEL-9715	Log EIP - Allow to configure the log name globally
CAMEL-9720	camel-spring-boot - Make it easy to keep the JVM running
CAMEL-9726	camel-swagger-java - Add support for yaml
CAMEL-9735	camel-tarfile throws OutOfMemoryError when splitting large files
CAMEL-9736	SolrComponent gets the wrong Content Type
CAMEL-9740	Improve camel-infinispan

Enhancement	Description
CAMEL-9745	Splitter - Should skip null messages if iterator returns null
CAMEL-9752	Quartz2 Scheduled route too many workers
CAMEL-9761	camel-swagger-java - Allow to use custom CORS headers for api-docs
CAMEL-9769	camel-spring-javaconfig - Make the main class easier
CAMEL-9775	Clean configuration meta-datat description
CAMEL-9776	camel-braintree: add uri param to configure advanced options
CAMEL-9782	camel-spring-boot - Allow to configure options on CamelContext using auto config
CAMEL-9790	camel-kafka 2.17 not throwing TimeoutException back which is throw by Kafka client
CAMEL-9791	DeadLetterChannel not triggered on RejectedExecutionException
CAMEL-9796	Internal Access still displayed, no change to JSON generated
CAMEL-9798	camel-cdi - Add support for injecting default ProducerTemplate
CAMEL-9808	SFTP: Enable configuration of bulk requests
CAMEL-9811	camel-cdi - Add support for consumer template injection
CAMEL-9815	Add URI parameter to skip the declaration of the exchange
CAMEL-9818	Camel kafka consumer adds legacy (deprecated properties) in the kafka consumer
CAMEL-9831	Camel-http4: Make possible to use System Properties for configuration
CAMEL-9833	Add mapHttpMessage option to allow to turn off mapping by default
CAMEL-9838	Add ends with operator to simple language
CAMEL-9859	Re-enable Netty4 Channel Options.
CAMEL-9860	csv dataformat - Should have quoteMode option in model
CAMEL-9875	CamelBlueprintTestSupport lacks support for multiple PID loading
CAMEL-9899	camel-rx - Use a worker pool for tasks such as stopping consumers

Enhancement	Description
CAMEL-9900	camel-jms - provide option for MessageListenerContainer for reply managers to stop quicker when CamelContext is stopping
CAMEL-9904	Avoid creating an empty default Camel context in Camel CDI for empty deployments
CAMEL-9905	TarAggregationStragegy should delete temporary files
CAMEL-9915	Allow to use the tarfile data format in XML marshal/unmarshal
CAMEL-9925	Update Salesforce component to use Jetty9
CAMEL-9927	Reduce object creation in RedisProducer
CAMEL-9932	sql-stored - Add support for arrays in grammar
CAMEL-9937	camel-catalog - Add api to validate time pattern
CAMEL-9955	Add uptimeMillis as JMX attribute to CamelContextMBean
CAMEL-9957	camel-kafka producer sends the message in an async way
CAMEL-9962	Add a field in the consumer to define if it subscribed to the topic or not
CAMEL-9963	camel-blueprint - Namespace parser should skip placeholders for component dependencies
CAMEL-9966	Restlet - Should not enable stream by default
CAMEL-9996	Use passed in Camel Context in org.apache.camel.spi.RestConsumerFactory#createConsumer implementations
CAMEL-1004	make it easy to start/stop routes by their definition (RouteBuilder or Route class)
CAMEL-3552	camel-pdf component
CAMEL-3910	Add "Sticky Failover" support in the camel load balancer
CAMEL-4596	enrich and pollEnrich should accept an expression for dynamic uris
CAMEL-4725	camel-sql - Add support for Callable statements
CAMEL-5583	Add ning-compress as data format
CAMEL-5911	seda/vm - Add option to discard message if no active consumers

Enhancement	Description
CAMEL-6098	Add script to the DSL to invoke a expression language and allow noop changes on the Exchange
CAMEL-6415	camel-twitter - Support for the User Stream Endpoint
CAMEL-6649	AWS Simple Email Service - add attachment support
CAMEL-7152	HttpProducer loses response data (specifically which headers where returned)
CAMEL-7378	camel-mongodb: Investigate returning DBCursor to enable streaming of large result sets
CAMEL-7425	Add EventDrivenPollingConsumer option to specify timeout
CAMEL-7433	Please create a preCompletionPredicate for camel aggregator
CAMEL-7434	Provide a way to force the completion of a aggregate exchange from an external event
CAMEL-7609	Add option "shareUnitOfWork" to pattern "enrich"
CAMEL-7808	camel-boon json parser
CAMEL-7833	create an extension of the RX Observable<T> to add more of the Camel DSL in there (e.g. to() or to go back to the general camel DSL)
CAMEL-7865	Support to carry file attributes on file endpoint
CAMEL-7877	json DataFormat: support the prettyPrint option by all the supported JSON libraries
CAMEL-7982	camel-git - A generic git component
CAMEL-7999	Camel Toolbox - Easy information about all Camel components and the release for tooling
CAMEL-8054	Use SharedEntityManager to reduce connections
CAMEL-8093	Adding Message headers for sinceid, maxid, user
CAMEL-8211	Camel commands - camel-component-info
CAMEL-8269	camel-salesforce: support for Salesforce Apex API
CAMEL-8317	XML DSL - Allow to use bean property style to configure endpoint options
CAMEL-8413	camel-stomp - Allow to configure SSL
CAMEL-8465	Add groups/getPosts endpoint to camel-linkedin

Enhancement	Description
CAMEL-8487	Custom arguments to RabbitMQ queues
CAMEL-8496	Create Camel Paho component
CAMEL-8507	camel-rabbitmq - Support for the mandatory and immediate flags
CAMEL-8531	Make it easy to get the management mbean for a given process by its id
CAMEL-8538	Add inOut support for the RabbitMQ component
CAMEL-8563	camel-ftp - Add support for account option for login
CAMEL-8565	Support for camel-gson to handle generic types
CAMEL-8656	camel-test - Add option to dump route stats to file
CAMEL-8696	Allow ApnsNotification/EnhancedApnsNotification instances to be send to apns endpoints
CAMEL-8727	File consumer - Add read lock that is based on idempotent repository
CAMEL-8740	DeadLetterChannel - Add SPI so custom components can prepare message for DLC
CAMEL-8762	Support for adding multiple services with same interface in CamelBlueprintTestSupport
CAMEL-8777	Calendar component - support for Google Service Accounts
CAMEL-8808	Create Grape component
CAMEL-8817	Expose additional geolocation parameters in standard search
CAMEL-8825	Add support to AWS EC2 inside Camel-AWS component
CAMEL-8832	Add =~ operation as equals ignore case operation to simple language
CAMEL-8834	Camel-AWS EC2: Add describeInstances Operation
CAMEL-8837	camel-archetype-cdi
CAMEL-8855	camel-jpa - Add support for JPA producer to delete records
CAMEL-8861	Add a factory to support custom websocket sub-protocol
CAMEL-8873	Management api for ErrorHandler to expose stats about pending exchanges scheduled for redelivery

Enhancement	Description
CAMEL-8880	Enable ability to expose Camel JMX service using IP address via API
CAMEL-8936	camel-test-cdi - Create a test module for cdi
CAMEL-8952	Expression or predicates - allow to refer to external script on file/classpath
CAMEL-8969	Add component for CoAP
CAMEL-8996	camel-undertow - Add support for Exchange.HTTP_QUERY
CAMEL-8997	Camel-Git: Add a show branches operation
CAMEL-9006	Add ability to use the same rest route for multiple components
CAMEL-9014	Add statistics for usage of endpoints in EIPs
CAMEL-9085	Create a Camel-Kubernetes/Openshift v3 Component
CAMEL-9097	XSLT Aggregation Strategy
CAMEL-9111	Camel Tarfile component
CAMEL-9128	Camel-Hazelcast: Add a Ringbuffer producer
CAMEL-9129	Create OptionsVerbDefinition - REST
CAMEL-9156	camel-swagger-java - Add JMX and Camel commands
CAMEL-9157	JMX - Add dataformat as mbean category
CAMEL-9162	camel-elsql component
CAMEL-9172	JOLT Component
CAMEL-9180	camel-cmis Lazy Initialize Session Facade
CAMEL-9186	Camel-Scala: Ability to add route policy in the Scala DSL based route definition
CAMEL-9187	Add support in endpoint for setting splunk event host field
CAMEL-9189	Jackson XML Mapper Data format
CAMEL-9206	add Kerberos Security into camel-HBase
CAMEL-9212	Enable dynamic values in the headerName / propertyName

Enhancement	Description
CAMEL-9224	Camel specific commands for spring boot shell
CAMEL-9252	Batch camel messages
CAMEL-9267	camel-nats - A java client component for the nats broker
CAMEL-9268	camel-okhttp - Using the popular okhttp client
CAMEL-9280	Allow passing custom headers to the proxy server in camel-smpp component
CAMEL-9283	Data Format for MIME-Multipart
CAMEL-9312	Rest DSL should support defaulting values for query strings
CAMEL-9364	Add ability to receive onOpen/onClose/onError websocket events through camel rout.
CAMEL-9376	Camel-Kubernetes: add a Namespace-based consumer
CAMEL-9385	Create Apache Spark component
CAMEL-9389	camel-metrics - Allow to capture message history easily
CAMEL-9392	Add ability to pass parameters within websocket url and handle them in onOpen event
CAMEL-9393	Add ability to send a message to multiple defined connections with guaranty of delivery
CAMEL-9416	Creation of Camel-MLLP component
CAMEL-9418	camel-elasticsearch: make client.transport.sniff configurable
CAMEL-9430	Create camel-component for braintreepayments
CAMEL-9445	camel-ignite: New Apache Ignite component
CAMEL-9449	Allow to specify custom exit code when camel exits due to expired Duration
CAMEL-9452	Camel-Elasticsearch: Support Multisearch operation
CAMEL-9453	Camel-Git: Add support for cherry-pick operation
CAMEL-9507	Support suppressing body from aws-s3 consumer
CAMEL-9542	Allow HttpClient configuration (proxy, connection pooling, etc) for camel-geocoder component

Enhancement	Description
CAMEL-9544	Option to add headers to MIME-Multipart in DataFormat
CAMEL-9586	Create camel-etcd
CAMEL-9591	Support Saxon integrated extension functions
CAMEL-9633	quartz2 - Add support for specifying custom calendar
CAMEL-9637	camel-netty - Allow to reuse previous Channel in next call
CAMEL-9645	Add messageHistory function to simple to allow to dump it anywhere
CAMEL-9648	IronMQ Component
CAMEL-9652	camel-spark-rest - Add support for hosting swagger api
CAMEL-9659	Create new component for GridFS
CAMEL-9661	YAML DataFormat
CAMEL-9679	Support for Hessian serialization - add new Data Format
CAMEL-9681	Add an option to enable/disable cache creation
CAMEL-9685	camel-infinispan : support continuous query in consumer
CAMEL-9707	Add ListDataSet and FileDataSet
CAMEL-9719	Spring Boot Starter
CAMEL-9737	Create camel component for ServiceNow
CAMEL-9916	SJMS component is not currently nodev/XML route compatible
CAMEL-9943	Expose mail session as a URI option for camel-mail endpoints
CAMEL-1009	create a 'mvn guice:run' plugin so we can run Guice based Camel applications easily in maven
CAMEL-1012	redeliveryPolicyType should use attributes for simple values
CAMEL-1014	ExpressionType is missing in Spring DSL
CAMEL-1017	we have two loadbalancetype

Enhancement	Description
CAMEL-8906	Application hangs when Spring Boot Actuator shutdown hook is used
CAMEL-1008	remove more context-free DSL methods
CAMEL-4074	Remove machine specific testcase setups from CXF test
CAMEL-5319	openjpa profile doesn't work in camel-bam
CAMEL-6976	camel-itest-cdi - Fails due recent changes in camel-cdi etc
CAMEL-7263	Remove camel:dot
CAMEL-7634	camel-facebook - Upgrade facebook4j to 2.x
CAMEL-8198	Upgrade to JAXB 2.2.11
CAMEL-8454	Correct a comment in files generated by camel-api-component-maven-plugin
CAMEL-8533	camel-ognl exposes servicemix ognl bundle
CAMEL-8548	upgrade commons-codec version to 1.10
CAMEL-8577	BOM does not publish scriptengine dependencies
CAMEL-8591	Upgrade to restlet 2.3.x
CAMEL-8614	camel-linkedin and camel-olingo2 should use same Maven coord as others
CAMEL-8627	Update Infinispan version from 6.0.2.Final to 7.1.1.Final
CAMEL-8629	Update AWS SDK from version 1.9.17 to version 1.9.30
CAMEL-8637	Upgrade Jetty version to 9.x in Camel-CometD
CAMEL-8644	Update Google Gson version from 2.3 to 2.3.1
CAMEL-8648	Update Docker-java version from 0.10.5 to 1.2.0
CAMEL-8650	camel-docker - Add to karaf features
CAMEL-8651	Update Ehcache from version 2.9.1 to 2.10.0
CAMEL-8652	Update MongoDB Java Driver to 2.13.1 and Embed-Mongo to 1.47.2
CAMEL-8655	Create Spring Boot examples and archetypes

Enhancement	Description
CAMEL-8658	Replace SMX bundles of commons-logging with Apache versions
CAMEL-8659	Update commons-lang to 2.6 (xmljson)
CAMEL-8661	Use managed version of jackrabbit in hdfs and hbase features
CAMEL-8662	Use managed version of avro in hdfs2 feature
CAMEL-8664	Update MongoDB Java Driver from 2.13.1 to 3.0.0
CAMEL-8671	Update XStream from version 1.4.7 to version 1.4.8
CAMEL-8677	Update iCal4j from version 1.5.0.2 to version 1.6.0
CAMEL-8679	Update Openshift Java Client Version from 2.5.0.Final to 2.7.0.Final
CAMEL-8697	Update olingo-odata2-api from version 2.0.0 to version 2.0.3
CAMEL-8741	Upgrade jsch
CAMEL-8759	Try enabling google error prone source code detector
CAMEL-8760	Upgrade Netty 3
CAMEL-8772	camel-salesforce - Add documentation to its endpoint options
CAMEL-8802	Upgrade to CXF 3.0.5
CAMEL-8809	Upgrade AWS SDK bundle to version 1.10.2
CAMEL-8839	Camel-Hazelcast: Add clear operation to List
CAMEL-8840	Camel-AWS EC2: Add Security Groups support when creating and running instances
CAMEL-8867	Upgrade GAE bundle version to 1.9.23
CAMEL-8928	spring-security not part of the camel BOM
CAMEL-8959	Remove old code from camel-cxf no longer needed due the CXF 3.0+ upgrade
CAMEL-8982	Upgrade Freemarker to version 2.3.23
CAMEL-9021	depends on non-free JAR
CAMEL-9028	BOM does not export scala-library

Enhancement	Description
CAMEL-9038	Make the existing tests of <code>camel-olingo2</code> automatically executable
CAMEL-9051	Upgrade <code>ServiceMix-Specs</code> to 2.4.0
CAMEL-9077	<code>camel-bindy</code> - Wonder if it outputs numbers using thousand separators
CAMEL-9080	Update to <code>elasticsearch</code> 1.7.1
CAMEL-9082	Upgrade <code>ServiceMix Specs</code> to 2.5.0
CAMEL-9113	Upgrade <code>Infinispan</code> to 8.x
CAMEL-9114	Upgrade <code>Jgroups</code> to version 3.6.7.Final
CAMEL-9120	Add <code>Camel-Undertow</code> to Camel features
CAMEL-9132	Upgrade <code>Kafka</code> to 0.8.2.2
CAMEL-9209	<code>camel-jbpm</code> - use logging jar from maven central
CAMEL-9228	Update to <code>undertow-1.3.0</code>
CAMEL-9242	Upgrade <code>slf4j-api</code> to 1.7
CAMEL-9265	Use <code>servicemix-specs</code> version of <code>jsr311-api</code>
CAMEL-9300	<code>DeltaSpike</code> container control dependency in Camel CDI should be optional
CAMEL-9302	Add <code>camel-jolt</code> to features
CAMEL-9307	Remove unnecessary call to <code>setCamelContext</code> when adding a component by name
CAMEL-9334	Upgrade to <code>spring 4.2x</code> .
CAMEL-9337	Add <code>readme.txt</code> to all examples
CAMEL-9338	Upgrade <code>camel-spring-integration</code>
CAMEL-9360	Upgrade to <code>elasticsearch 2.x</code>
CAMEL-9361	Upgrade <code>Kafka</code> to 0.9.0
CAMEL-9402	Upgrade <code>Spring Dependency</code> to 4.1.9.RELEASE or later
CAMEL-9403	<code>camel-examples</code> should not be in BOM

Enhancement	Description
CAMEL-9404	Create .MD Readme for top folder
CAMEL-9412	Correct camel-example-swagger-cdi documentation
CAMEL-9413	camel-examples - update readme about correct version
CAMEL-9414	Update quickfixj to v1.6.1
CAMEL-9420	camel-paho : provide dynamic qos and retained option
CAMEL-9429	Upgrade to ActiveMQ 5.13.1
CAMEL-9433	Update to javax-mail 1.5.5
CAMEL-9458	Cannot install camel-ignite in karaf
CAMEL-9464	Camel-chunk: use Chunk-templates bundle in OSGi feature instead of wrapping the jar
CAMEL-9467	Camel-Kafka: Upgrade to kafka 0.9 and use the Java client instead of Scala
CAMEL-9494	Camel-Facebook: Use the OSGi bundle instead of wrapping the jar
CAMEL-9513	Upgrade the Servlet API to 3.1
CAMEL-9514	camel-netty4 maximumPoolSize option is ignored
CAMEL-9520	DdbStreamConsumer should inherit ?pollStrategy from DdbStreamEndpoint
CAMEL-9536	org.codehaus.mojo:taglist-maven-plugin:maven-plugin:2.10 does not exist
CAMEL-9556	Main - We should @deprecate enableHangupSupport
CAMEL-9573	Multicast and RecipientList - ShareUnitOfWork should rework a bit
CAMEL-9618	File endpoint - Move some options from generic to file as they are file specific
CAMEL-9646	Upgrade Xalan bundle to 2.7.2_3
CAMEL-9662	Expose cxf-rt-transport-http through BOM
CAMEL-9691	camel-infinispan : cleanup uri options
CAMEL-9709	Define jackson version in dependency management
CAMEL-9712	Define lucene version in dependency management

Enhancement	Description
CAMEL-9717	Define kafka version in dependency management
CAMEL-9722	Explicitly define cxf transitive dependencies
CAMEL-9723	Move spring-boot-starter-sample to examples so we can collapse the camel-spring-boot-starter module
CAMEL-9725	camel-example-osgi-cdi - Some maven warns
CAMEL-9757	camel-gae - Deprecate
CAMEL-9760	Google drive component syntax inconsistency
CAMEL-9781	Installing camel in Karaf 3.0.x
CAMEL-9806	Add camel-IronMQ Karaf feature
CAMEL-9825	Exclude CDI generated proxies from context tracker
CAMEL-9902	Remove ServiceMix scripting-api from Karaf features
CAMEL-9913	Upgrading Beanshell for CVE-2016-2510
CAMEL-9976	camel:rest-show command requires only context name as argument and not route Id
ENTESB-5384	Camel-JacksonXML: Some tests fails
ENTESB-5444	Switch Camel-Dropbox to servlet-api 3.1.0
ENTESB-5636	3rd party alignments - built from source strict alignments
CAMEL-8699	Camel-example-cxf: Remove ref from LoadBalance tag
CAMEL-8869	Switching httpClient from 4.3.x to 4.4.x break tests
CAMEL-8886	camel-cxf - 2 tests fails
CAMEL-8919	NettyUDPMulticastAsyncTest failing on Windows
CAMEL-8985	camel-jetty - A test fails
CAMEL-9072	camel-test-blueprint - Custom converter test fails
CAMEL-9211	Increase the number of Karaf integration tests

Enhancement	Description
CAMEL-9229	Wrong folder name for jacksonxml test resources
CAMEL-9407	Camel-Elasticsearch: Re-enable cluster tests
CAMEL-9490	FacebookMethodsTypeHelperTest.testGetType fails with IllegalArgumentException Exception
CAMEL-9493	camel-mlp - Use dynamic assigned port number for testing
CAMEL-9615	camel-itest-karaf - Some failed tests
CAMEL-9708	Multiple tests not using equality predicate correctly
CAMEL-9827	MongoDB - The unit tests have some issues
CAMEL-8501	BOM does not publish restlet dependencies
CAMEL-9835	Enable kafka consumer to subscribe to multiple topics
ENTESB-4479	Update Jenkins jobs to use Flaky Test Plugin and Surefire rerun failing tests option

6.5. WEB SERVICES

Table 6.5, “Web Services Enhancements in 6.3.0” lists the enhancements in version 6.3.0.

Table 6.5. Web Services Enhancements in 6.3.0

Enhancement	Description
ENTESB-4135	Update to the JMS 2.0 API
ENTESB-4597	Review examples shipped in extras directory for camel & cxf
ENTESB-5239	Upgrade Xalan bundle to 2.7.2_3
CXF-3344	Runtime Exceptions should not be wrapped. Exceptions should not be logged and rethrown in AbstractFaultChainInitiatorObserver
CXF-4242	Add exception name to faultstring/detail/stackTrace
CXF-5193	Support fixed data type
CXF-5311	Support OAuth2 JWT token
CXF-5439	Introduce annotations for marking CXF interceptors and features to enable the auto-discovery

Enhancement	Description
CXF-5582	Enhance CXF LogBrowser to receive Log events in real time via WebSocket
CXF-5606	WADL to Java code generator should translate wadl:doc into Java documentation
CXF-5669	Create JAX-RS service for managing 3rd party client registrations
CXF-5674	CXF Support in "Audience Restriction" of SAML 2 (SOAP)
CXF-5854	Add property "refreshTemplates" to XSLTJaxbProvider
CXF-5891	ReadHeadersInterceptor performances improvement
CXF-5902	Provide utility support for Jwe composite AesCbcHmac content encryption algorithm
CXF-5908	Making Claims clonable
CXF-5914	Extend AbstractPolicyProvider.getEffectivePolicy() with optional message parameter
CXF-5922	Secure CXF WSDL with standard HTTP Authentication
CXF-5925	JEXL Support for STS Claim Mappings
CXF-5926	Extend SSL KeyManagers with password callback handler
CXF-5927	Claim Mapping Utils
CXF-5929	WADL to Java code generator should support mappings to parameterized types
CXF-5932	Monitor contention at org.apache.cxf.jaxrs.utils.JAXRSUtils.processParameters(OperationResourceInfo, MultivaluedMap, Message)
CXF-5934	Make WadlGenerator more easily extensible
CXF-5937	CXF Servlets should optionally react to X-Forwarded headers
CXF-5944	Get Jwe and Jws code to the stage where it can be documented
CXF-5948	wadl2java -inheritResourceParams: put parent param first
CXF-5954	Jwe and Jws JAX-RS filters should be able to use JWK stores
CXF-5956	wadl2java: support 'repeating' attribute for response param
CXF-5959	support to specify instance.id of ManagedBus

Enhancement	Description
CXF-5960	Provide a default encrypting OAuth2 provider
CXF-5962	Make LogBrowser sample also run in OSGi
CXF-5975	SecurityToken::isExpired: add clock skew option
CXF-5979	Allow some headers to be returned in WebSocket's streaming responses
CXF-5984	Provide a simple way start a decoupled servlet endpoint
CXF-5986	wadl2java maven plugin: add support for filename wildcards
CXF-5990	Integration custom parser
CXF-6006	StreamingOutput in JAXRS client proxies
CXF-6009	Monitor contention at org.apache.cxf.transport.http.Headers
CXF-6019	WSDLGetUtils: original exception isn't logged by exceptions in WSDL parser
CXF-6042	Support certificate constraints in JAX-RS XML Signature
CXF-6043	Multi User BaseDN Support for LdapClaimsHandler
CXF-6046	Enhance SwaggerFeature to support JAX-RS annotations
CXF-6047	Extend the STSTokenValidator to be able to call the issue binding
CXF-6048	Support roles in the AuthPolicyValidatingInterceptor
CXF-6051	Support sp13:Nonce + sp13:Created in the UsernameTokenInterceptor
CXF-6054	Add a property to allow using unsigned saml tokens as principals
CXF-6064	Improve WADL Generator Extensibility for ID generation
CXF-6074	Add configured XmlAdapters
CXF-6079	static-resource-list cache control
CXF-6081	Make it easier to control the way AccessTokenService checks the passwords
CXF-6084	Critical Header for JWS
CXF-6087	Add a way to exclude (multiple) SSL/TLS protocols in the HTTPJ namespace

Enhancement	Description
CXF-6098	Use RSA-SHA256 by default when issuing tokens in the STS
CXF-6107	Supporting (Un)marshaller aware XML Readers and Writers in jaxb data binding
CXF-6110	AbstractSTSCClient MEX: download XML schema from Location
CXF-6120	Optionally disable the creation of the JMS Security Context for incoming messages
CXF-6124	Switch http transport to use HttpService for OSGi
CXF-6131	JAX-RS resource spring auto-discovery doesn't work in OSGi
CXF-6133	Introduce Jwe and Jws exception classes to make it easier to provide dedicated JAX-RS exception mappers
CXF-6135	CXF should be installable in karaf 4 minimal
CXF-6141	KeyType information in STS Audit Log
CXF-6142	OAuth2 AccessTokenValidator needs to accept more parameters
CXF-6148	Adding support for xsd:choice in Javascript generator
CXF-6150	Override XSLTJaxbProvider xsl path at runtime
CXF-6157	Support storing of OAuth2 redirection state in a session token
CXF-6162	Adding support for xsd:group ref in Javascript generator
CXF-6164	OAuthClientUtils Consumer class needs to be moved to a standalone class
CXF-6167	Add an ability to specify SOAP error parser for Javascript client
CXF-6168	Avoid ServletController synchronizing on the destination by default
CXF-6173	Unable to configure CXF StAX properties on a per-endpoint/client basis if a JAX-WS handler is configured
CXF-6175	STS: warning message is not informative, in case if service doesn't match
CXF-6191	Avoid Spring usage by configuration in ClassHelper
CXF-6199	Allow scalability for slow services on jms
CXF-6200	CXF JAX-RS Model extension should be usable without custom service classes

Enhancement	Description
CXF-6206	JAASLoginInterceptor: Return proper unauthorized response when JAAS login with basic auth fails
CXF-6220	JWA algorithm representation code needs to be cleaned up
CXF-6223	Support message property for encryption certificate
CXF-6227	JAX-WS client performance improvements
CXF-6232	Refactor CXF's Atmosphere based WebSocket transport for more flexible and extensible handling
CXF-6238	Java2WADL : Generating response status attribute
CXF-6244	ContentDisposition should support UTF-8 filenames
CXF-6251	Allow org.apache.cxf.logging.enabled to have a value of "pretty" for pretty printing
CXF-6255	WSS4JInInterceptor: "Security header, but it's a fault"
CXF-6267	Refactor issuing and renewing SAML token functionality into utility class
CXF-6268	Make cxf-codegen-plugin toolchains aware during maven build
CXF-6277	Enhance the X509TokenValidator to also validate X509Data DOM Elements
CXF-6282	Add ability to have proxies implement AutoCloseable
CXF-6283	Support binary attributes in the LDAPClaimsHandler
CXF-6286	Make request logging more Modular
CXF-6308	Make WebSocket transport's embedded jetty mode to use atmosphere if available
CXF-6329	Allow multiple atmosphere interceptors to be configured for the websocket transport
CXF-6333	Support Inclusive C14N via security policy
CXF-6334	Add the ability to plug in custom security policy validators for various assertions
CXF-6335	Explicitly set HTTPConduit on client inbound message
CXF-6337	Support the redirection directly via the injected JAX-RS ServletContext context
CXF-6341	Add atmosphere when installing feature cxf-transport-websocket-server

Enhancement	Description
CXF-6344	Support system file location for JexlClaimMapper scripts
CXF-6345	Support Logging in JexlClaimMapper scripts
CXF-6353	provide a not typed way to configure cxf jaxrs clients
CXF-6363	Introduce JwsHeaders
CXF-6372	Generating distinct claim values for multi-value LDAP attributes
CXF-6381	Upgrade to pax exam 4.5.0 and allow to test with karaf 4
CXF-6394	Add an option to add the namespace map of the container element in the message
CXF-6399	Add attributes transform handling in transform feature
CXF-6400	Make ws-security.callback-handler optional for generating a WS-Security signature
CXF-6401	Change the order that the set of security results are searched to create a security context
CXF-6404	HTTPConduit performance improvements
CXF-6407	Use default JVM cipher suites if no filters are specified
CXF-6411	Improve NoOsgi Blueprint Integration
CXF-6414	Add a way of including TLS protocols in the Jetty server
CXF-6417	Investigate how the logging of binary attachment parts can be disabled
CXF-6419	Update JMSEndpoint properties using EndpointInfo
CXF-6420	Maven cxf-java2ws-plugin copies to the maven repository only the last wsdl of multiple services/executions - overwrites the others
CXF-6421	Slim Exchange map down
CXF-6425	Check for external transactions in PollingMessageListenerContainer
CXF-6438	Optimize ExtensionInvocationHandler
CXF-6440	New metrics component doesn't record metrics for Rest resources
CXF-6470	Make SimplePrinciple Serializable

Enhancement	Description
CXF-6476	Introduce Swagger v1.5 feature (v2.0 specification)
CXF-6478	Introduce the option to disable using query parameters to populate the form maps
CXF-6482	Old javax.servlet.http version in oauth2 bundle
CXF-6483	Sort ConfigurerImpl Matchers by a number of literal characters
CXF-6498	Update JAX-RS 2.0 ClientImpl to support CXF features
CXF-6499	WADL Generator should optionally ignore path params for the same path method evaluation
CXF-6508	JAASLoginInterceptor should allow named Principals
CXF-6509	CXF is mysterious about invalid JAX-RS bean classes
CXF-6521	RS SAML Out Interceptors should be able to reuse tokens set by STSTokenOutInterceptor
CXF-6525	Support for http://docs.oasis-open.org/wss/oasis-wss-SwAPProfile-1.1#Attachment-Content-Only when using WSS-Policy
CXF-6557	Use the default swagger-ui html page in swagger2 sample
CXF-6562	ResourceOwnerGrantHandler: doesn't have getter for loginHandler
CXF-6565	DOM4JProvider should support suppressing XML declarations
CXF-6566	Update WADLGenerator to avoid converting existing resources to DOM
CXF-6568	Default WebApplicationExceptionHandler should be optionally made less specific
CXF-6571	Adding an option in Swagger2Feature to scan non-swagger annotated resources
CXF-6572	OAuth2 Hawk Scheme requests
CXF-6586	Missing some bean properties in Swagger2Feature
CXF-6610	Throttling Interceptors can not abort but only delay overflowing requests
CXF-6623	Add support for nested @BeanParam's
CXF-6625	Wadl-to-Java should be able to generate custom method annotation classes
CXF-6633	Enhance Swagger feature with optional dynamic basePath, tags and Javadocs handling

Enhancement	Description
CXF-6634	Move DocumentationProvider interface out of .model.wadl. package
CXF-6643	Upgrade Apache HTrace to 4.0
CXF-6644	Move Basic JSON parser code into a dedicated module
CXF-6645	Introduce a 'jose.debug' property
CXF-6658	Make ServletContextResourceResolver optionally ignored
CXF-6661	WADLGenerator should optionally include xsi schemaLocation
CXF-6663	Scope based authorization support for OAuth2 RS endpoints
CXF-6686	Provide AccessTokenValidator RFC7662
CXF-6690	WADL2Java should try to split complex XJC parameters
CXF-6695	SwaggerFeature: add support for @MatrixParam and @BeanParam
CXF-6712	[cxf-java2wadl-plugin] Add parameter encoding to goal parsejavadoc
CXF-6716	java2ws should log a warning message for a Holder parameter annoated with WebParam.Mode.IN property
CXF-6722	OAuthDataProvider needs to have methods for listing client tokens
CXF-6732	Allow SOAPAction to be overwritten via RequestContext property
CXF-6736	Support login_hint at OidcClientCodeRequestFilter
CXF-6738	Reduce contention on org.apache.cxf.binding.soap.SoapTransportFactory\$SoapEndpointInfo
CXF-6739	Reduce memory pressure in org.apache.cxf.attachment.AttachmentDeserializer
CXF-6766	Option to disable XMLConstants.FEATURE_SECURE_PROCESSING in XSLTJaxbProvider
CXF-6767	OSGI ServletImporter should be able to accept extra properties
CXF-6771	JAX-RS ContextProvider should be able to support Servlet contexts
CXF-6774	Allow ClientImpl to be thread-safe
CXF-6779	Swagger Feature should become discoverable

Enhancement	Description
CXF-6786	avoid Error log from NamePasswordCallbackHandler
CXF-6789	SwaggerFeature default resource package calculation should try to support multiple resource classes better
CXF-6802	Decode ContentDisposition filename encoded with codepoints only
CXF-6808	Update JWS/JWE utils to load named properties
CXF-6826	Cache MediaTypeHeaderProvider.valueOf(String mType) results
CXF-6827	OAuthRequestFilter should be able to cache token validation results
CXF-6831	should be able to configure the certStore key type
CXF-6837	Add cache for MessageBodyReader/Writer
CXF-6840	xsd:import without schemaLocation does not get resolved in SchemaHandler
CXF-6861	Introduce a typed JAXBElement provider
CXF-6903	add a NameDigestPasswordCallbackHandler for JAASLoginInterceptor
CXF-6910	don't need setSocketTimeout when create ahc RequestConfig
CXF-5118	Create CXF interceptor which will use HTTPS client certificates to create JAAS SecurityContext
CXF-5607	Support for CXF OAuth2 endpoints participating in OpenId-Connect flows
CXF-5909	TLS Authenticated Handshake and Authentication/Authorization with JAAS by TLS Certificate
CXF-5923	Create sample to demonstrate usage of search extension with Lucene and Tika
CXF-5996	respect client cache headers
CXF-6028	Improved metrics
CXF-6053	Support JWS JSON Serialization
CXF-6085	JWE JSON Serialization
CXF-6132	Provide JAX-RS ServletContainerInitializer

Enhancement	Description
CXF-6215	Introduce JAX-RS DefaultMethod extension
CXF-6242	Ability to configure the format of the marshalling / unmarshalling exceptions that are thrown by JAXB when schema validation is enabled.
CXF-6264	Provide Swagger to CXF UserResource converter
CXF-6360	Integration with Apache HTrace
CXF-6477	Add "publish" attribute to jaxrs blueprint bean
CXF-6735	Enable/Disable SecurityTokenReference with configuration for CXF/.NET interoperability
CXF-6784	WS-Notification subscription should support renew
FEDIZ-134	Create light-weight OIDC IDP
CXF-5855	Introduce support for Server Sent Events
CXF-4780	Enhance JAASAuthenticationFilter to support FORM login
CXF-4913	Add 'validate' option to WADL to Java generator
CXF-5886	Provide a default Ehcache based OAuth2 provider
CXF-5901	Investigate how WebSocket Transport can support CORS
CXF-5941	Update JAX-RS version to 2.0.1
CXF-5993	Update to Jettison 1.3.6
CXF-6052	Upgrade the Karaf version to support JDK8
CXF-6121	Update to Jettison 1.3.7
CXF-6165	Create OIDC OAuth2 demo
CXF-6253	Upgrade async-http-client to 1.9.8
CXF-6278	Introduce MessageDigestInputStream utility class
CXF-6279	Introduce X509 Certificate Path validation utility code
CXF-6280	Consider providing a DirectAccessToken JAXRS service

Enhancement	Description
CXF-6391	Create JAX-WS and JAX-RS Spring Boot demo
CXF-6397	Upgrade atmosphere to 2.3.0
CXF-6449	Upgrade Atmosphere to 2.3.2
CXF-6487	OIDC RP code needs to pass a verification test
CXF-6490	Create OIDC Authentication Only demo
CXF-6503	Investigate if WADL JavaDocProvider can report JavaDocs of inherited methods
CXF-6530	Add a webapp version of Swagger2Feature sample using spring
CXF-6541	Add an OSGi version of Swagger2Feature sample using blueprint
CXF-6725	Remove deprecated JOSE configuration properties
CXF-6726	Complete JOSE documentation
CXF-6815	Upgrade Reflections bundle to version 0.9.10_3
CXF-6818	Upgrade to latest Jetty8 8.1.19.v20160209
CXF-6853	Support encoded value in @ApplicationPath
ENTESB-4708	[6.3] Summary of problems with version alignment
ENTESB-5636	3rd party alignments - built from source strict alignments
CXF-6070	NPE while calling a webservice using a clientproxy
CXF-6129	CXF STS basic systests failure
CXF-6130	all tests in org.apache.cxf.osgi.itests failed
CXF-6202	Create JWS JoseCookBook tests
CXF-6318	Execute JAXRS WebSocket systests with and without atmosphere
CXF-6346	Unit test failures with JDK8
CXF-6068	Make org.apache.cxf.binding.soap.interceptor.ReadHeadersInterceptor compatible with WebSphere 7

Enhancement	Description
CXF-6704	Upgrade to httpclient 4.5.x
CXF-6790	change accessibility of WadlGenerator.getBaseUri(...) to protected

6.6. FUSE ON JBOSS EAP

[Table 6.6, "Fuse on EAP Enhancements in 6.3.0"](#) lists the enhancements in version 6.3.0.

Table 6.6. Fuse on EAP Enhancements in 6.3.0

Enhancement	Description
ENTESB-4479	Update Jenkins jobs to use Flaky Test Plugin and Surefire rerun failing tests option
ENTESB-4685	Package javadocs with distro
ENTESB-5072	Update to fuse-patch-2.1.0

6.7. CONTAINER - 6.3.0

[Table 6.7, "Container Enhancements in 6.3.0"](#) lists the enhancements in version 6.3.0.

Table 6.7. Container Enhancements in 6.3.0

Enhancement	Description
KARAF-4343	Upgrade to Xalan 2.7.2_3
KARAF-4449	Upgrade to Aries proxy-impl 1.0.5
ENTESB-4135	Update to the JMS 2.0 API
ENTESB-4479	Update Jenkins jobs to use Flaky Test Plugin and Surefire rerun failing tests option
ENTESB-4674	jmxRole configuration not inherited from parent when creating child container
ENTESB-4787	Fabric child container's initial properties should default to those of its parent
ENTESB-4839	System scripts: provide Systemd templates to manage Karaf child instances
ENTESB-4865	Improve support for Solaris 10 init scripts
ENTESB-4989	Improve fuse init scripts
ENTESB-5215	Add "-Xshareclasses:none" to DEFAULT_JAVA_OPTS for IBM Java

Enhancement	Description
ENTESB-5553	Use Red Hat build of winsw
ENTESB-5632	Download brew tanuki libs rather than checking them into source
ENTESB-4386	Use system specific init scripts
ENTESB-4440	upgrade to jetty 9
ENTESB-5236	Need DigestPasswordLoginModule so PasswordDigest can work with Karaf JAAS realm
ARIES-1395	Add a structure-only option to Blueprint xml-validation feature
KARAF-2921	bin/karaf selecting the wrong Java VM on a computer with Java 8 installed
KARAF-3016	Be able to redirect child instance std out in a file
KARAF-4243	Add apache ignite to feature repo:add shorthand
KARAF-4351	[RBAC] Optimize access to JMXSecurityMBean.canInvoke(Map)
KARAF-4520	Add DigestPasswordLoginModule so PasswordDigest can work with Karaf JAAS realm
KARAF-4523	JMXSecurityMBean bulk canInvoke should be robust even if bulkQuery contains duplicate operations
KARAF-4157	Provide system script to start Karaf without service wrapper
ENTESB-4953	incorrect version imports in features:install camel-spring-security
ENTESB-5243	Upgrade pax-url to version >= 2.4.7
ENTESB-1335	Use Red Hat Tanuki build in Fuse 6.1
ENTESB-4708	[6.3] Summary of problems with version alignment
ENTESB-5376	Remove spring-dm support
ENTESB-5408	Upgrade to Pax Logging 1.8.5
ENTESB-55	Starting FuseESB on Windows shows karaf in the window title bar
ENTESB-5636	3rd party alignments - built from source strict alignments
KARAF-4349	Use the same approach of KARAF-4330 in karaf.bat script

Enhancement	Description
KARAF-4363	ssh:sshd command shows default values twice

6.8. FUSE FABRIC - 6.3.0

Table 6.8, “Fabric Enhancements in 6.3.0” lists the enhancements in version 6.3.0.

Table 6.8. Fabric Enhancements in 6.3.0

Enhancement	Description
KARAF-4449	Upgrade to Aries proxy-impl 1.0.5
ENTESB-2705	Appending value to property in default profile breaks property file
ENTESB-3155	mq-create : use default-version when no version is specified, instead of 1.0
ENTESB-4135	Update to the JMS 2.0 API
ENTESB-4221	Please tidy up jetty port references in our configuration files
ENTESB-4222	Improve the recovery of fuse ensemble cluster
ENTESB-4581	Fabric8 jvm options for nodes should be applied when node is started using bin/karaf
ENTESB-4583	Need a way to change the user credentials for managing SSH containers
ENTESB-4598	Need a way to set "autopurge.purgeInterval" of Zookeeper.
ENTESB-4600	[patching] Add warning or error when applying patch for Fuse 6.1 on Fuse 6.2
ENTESB-4674	jmxRole configuration not inherited from parent when creating child container
ENTESB-4684	Request to provide additional status in the fabric:container-list command
ENTESB-4726	Upgrade swagger to 1.5.4
ENTESB-4787	Fabric child container's initial properties should default to those of its parent
ENTESB-4917	Enhance Exception Reporting In FabricFeaturesServiceImpl
ENTESB-5041	Add option to "fabric:requirements-export" command to indent requirements-export json output
ENTESB-5052	Update the camel-cxf-code-first and camel-cxf-contract-first quickstarts so they don't use the same endpoints

Enhancement	Description
ENTESB-5182	Please include org.springframework/spring-webmvc in Fuse BOM
ENTESB-5479	Fabric should externalize jolokia-access.xml, or provide similar configuration facilities
ENTESB-5533	unable to delete resource from fabric:profile-edit --delete
ENTESB-5537	[patching] Make it easier to patch patching mechanism itself
ENTESB-5805	beginner/camel-log-wiki example uses invalid timer value
ENTESB-4340	Delete bin/deletefabric8 script
ENTESB-4386	Use system specific init scripts
ENTESB-4440	upgrade to jetty 9
ENTESB-4441	upgrade to CXF 3.1
ENTESB-4852	Support AMQ 7 clients and camel connector
ENTESB-4901	Missing --manual-ip parameter for fabric:container-resolver-set manualip
ARIES-1395	Add a structure-only option to Blueprint xml-validation feature
CAMEL-9039	Feature camel-core contains bundles, which should be made optional for micro-services deployment
ENTESB-4806	Race condition in Fabric environment deploying SAP Components to child container
ENTESB-5243	Upgrade pax-url to version >= 2.4.7
ENTESB-4708	[6.3] Summary of problems with version alignment
ENTESB-4857	Disable geolP by default
ENTESB-5408	Upgrade to Pax Logging 1.8.5
ENTESB-5636	3rd party alignments - built from source strict alignments
ENTESB-5764	[maven] Verify whether fabric-maven should serve SNAPSHOTs from defaultRepositories
ENTESB-5803	[patching] split patch-core to impl and api bundles

6.9. MANAGEMENT CONSOLE - 6.3.0

Table 6.9, “Enhancements in 6.3.0” lists the enhancements in 6.3.0.

Table 6.9. Enhancements in 6.3.0

Enhancement	Description
ENTESB-4479	Update Jenkins jobs to use Flaky Test Plugin and Surefire rerun failing tests option
ENTESB-4581	Fabric8 jvm options for nodes should be applied when node is started using bin/karaf
ENTESB-4599	Hawtio: Update Camel tab for new or removed camel contexts/routes [Fabric mode]
ENTESB-5479	Fabric should externalize jolokia-access.xml, or provide similar configuration facilities
ENTESB-5791	Jolokia - Allow to override all the defaults at startup time
ENTESB-4708	[6.3] Summary of problems with version alignment
ENTESB-5004	Update Fuse Jenkins to use Build Pipelines
ENTESB-5636	3rd party alignments - built from source strict alignments

6.10. JON PLUG-INS

Table 6.10, “JON Plug-In Enhancements in 6.3.0” lists the enhancements in version 6.3.0.

Table 6.10. JON Plug-In Enhancements in 6.3.0

Enhancement	Description
FUSEJON-126	AMQ Restart via JBoss ON fails sometimes

CHAPTER 7. SUPPORTED CONFIGURATIONS

7.1. INFORMATION ON THE CUSTOMER PORTAL

For information about supported configurations, standards, and components in version 6.3, see the following Customer Portal articles:

- [Red Hat JBoss Fuse Supported Configurations](#)
- [Red Hat JBoss Fuse Supported Standards](#)
- [Red Hat JBoss Fuse Component Details](#)
- [Red Hat JBoss A-MQ Supported Configurations](#)
- [Red Hat JBoss A-MQ Supported Standards and Protocols](#)