# Red Hat Fuse 7.8

# Release Notes for Red Hat Fuse 7.8

What's new in Red Hat Fuse

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## Legal Notice

## Abstract

These notes provide an overview of the changes between Red Hat Fuse releases.

# Table of Contents

# CHAPTER 1. FUSE 7.8 PRODUCT OVERVIEW

## 1.1. FUSE DISTRIBUTIONS

Fuse 7.8 is provided in the form of three different distributions, as follows:

**Fuse standalone**

The classic distribution of Fuse, supported on multiple operating systems. This distribution is supported for the following container types:

- Apache Karaf

- JBoss Enterprise Application Platform (EAP)

- Spring Boot

**Fuse on OpenShift**

The distribution of Fuse for running integration applications on OpenShift (supported on the Red Hat Enterprise Linux operating system). In this case, the supported container types are provided in the form of docker-formatted container images:

- Java image (for Spring Boot)

- Apache Karaf image

- JBoss EAP image

**Fuse Online**

The distribution of Fuse for non-expert integrators with a simplified workflow accessed through a browser based UI. This distribution is available for the following kinds of deployment:

- On an OpenShift Dedicated (OSD) cluster.

- For installation on an on-premises OpenShift cluster

## 1.2. NEW FEATURES

Fuse 7.8 includes several major component upgrades and a large selection of new features. For details, consult the *new features* sections for each of the Fuse distributions:

- New features for Fuse Online

- New features for Fuse on OpenShift

- New features for Fuse standalone

## 1.3. CVE DEPENDENCY UPGRADES

As a middleware integration platform, Fuse can be integrated with third-party components. Some third-party dependencies of Fuse require version upgrades to limit common vulnerabilities and exposures (CVEs) related to security. The following table lists the third-party version upgrades included with Fuse 7.8 and identifies the action that you need to take to update your existing Fuse applications.

| Third-party dependency | Version Upgrade | Required action for your Fuse applications |
|---|---|---|
| Apache Camel | 2.21 to 2.23 | On Karaf, rebuild your Fuse applications instead of using the Karaf console's patch tool. For a description of Camel 2.22 and 2.23 updates, see the Fuse Migration Guide. |
| Spring Framework | 4.3 to 5.2 | See the Upgrading to Spring Framework 5.x documentation. |
| Spring Boot 1 | 1.x to 2.3 | Spring Boot 1 was deprecated in Fuse 7.7 and it is not supported in Fuse 7.8. You must make code changes in addition to rebuilding your Fuse applications. See the Upgrade to Spring Boot 2 chapter in see the Fuse *Migration Guide*. |

These third-party version upgrades are also included with Fuse 7.8. They do not require additional updates to your existing Fuse applications:

- Hibernate Validator, version 5 to 6

- Jackson, version 2.8 to 2.9

- Spring Boot 2, version 2.1 to 2.3

- Apache CXF, version 3.2 to 3.3

## 1.4. SUPPORTED CONFIGURATIONS

For information about supported configurations, standards, and components in version 7.8, see the following Customer Portal articles:

- Red Hat Fuse Supported Configurations

- Red Hat Fuse Supported Standards

- Red Hat Fuse Component Details

# CHAPTER 2. FUSE ONLINE

Fuse Online provides a web browser interface that lets a business expert integrate two or more different applications or services without writing code. It also provides features that allow the addition of code if it is needed for complex use cases.

Fuse Online runs an integration on OpenShift as a Spring Boot application that uses Apache Camel.

## 2.1. ABOUT FUSE ONLINE DISTRIBUTIONS

Fuse Online is Red Hat's web-based integration platform. Syndesis is the open source project for Fuse Online. Fuse Online runs in these OpenShift environments:

| Host Environment | Installation |
|---|---|
| OpenShift Dedicated | Red Hat installs and provisions Fuse Online on Red Hat infrastructure. |
| OpenShift Container Platform | Customer installs and manages. |

## 2.2. NEW FEATURES IN FUSE ONLINE 7.8

Fuse Online 7.8 provides the following new features:

- **Support for installing in a restricted environment**
  You can install Fuse Online in a restricted environment by using the Fuse Online Operator from the OpenShift OperatorHub. You must mirror all of the Fuse Online images to a location available on your private network.

  Before you install Fuse Online, make sure that the **todo** addon setting in the Fuse Online custom resource is set to **false** (the default). After installing Fuse Online, you can optionally download the ToDo application from https://github.com/syndesisio/todo-example and follow the steps in the Readme file, changing the repository URL to the location available on your private network.

- **Kafka Message Broker connection configuration options**
  When you create a Kafka Message Broker connection, you can now specify key/value pairs that configure Kafka producer and consumer options. For more information see Creating a connection to a Kafka broker in *Connecting Fuse Online to Applications and Services* .

- **Fuse Online Metering labels**
  You can use the OpenShift Metering operator to analyze your installed Fuse Online operator and components to determine whether you are in compliance with your Red Hat subscription. For details, see Fuse Online Metering labels in *Installing and Operating Fuse Online on OpenShift Container Platform*.

- **Support for OData Version 2**
  In addition to existing support for Open Data Protocol (OData) Version 4, the Fuse Online OData connector also supports OData Version 2. For OData Version 2 connections only, when you create or update an entity there are three options that you can set (**Content Only**, **Omit ETag**, and **Omit Json wrapper**). These three options specify the way that data is serialized in a request. For details, see Connecting to OData in *Connecting Fuse Online to Applications and Services*.

- **Support for configuring the following features in the Fuse Online custom resource** as described in in the Descriptions of custom resource attributes that configure Fuse Online section of *Installing and Operating Fuse Online on OpenShift Container Platform* .

  - **Memory and CPU limits**
    You can now set default values for memory and CPU limits for infrastructure components and integrations in a Fuse Online installation. You can also specify memory and CPU limits for a specific integration that may require custom values. For more information, see Adjusting the memory and CPU configuration attributes for an integration in *Integrating Applications with Fuse Online*.

  - **Node affinity and tolerations**
    You can assign Fuse Online pods to a specific OpenShift cluster by defining node affinity and tolerations for Fuse Online infrastructure components and for Fuse Online integrations. For more information, see Configuring Fuse pods in *Installing and Operating Fuse Online on OpenShift Container Platform.*

  - **Additional Maven Arguments**
    You can specify additional Maven options to use when building Fuse Online integrations.

  - **DB connection pool configuration for syndesis-server**
    You can configure these syndesis-server database connection pool properties:

    **ConnectionTimeout**

    **IdleTimeout**

    **LeakDetectionThreshold**

    **MaximumPoolSize**

    **MaxLifetime**

    **MinimumIdle**

  - **JAVA_OPTIONS for syndesis-server and meta components**
    You can use the **JAVA_OPTIONS** option to customize the **syndesis-server** and **meta** components. For example, you can configure the HTTP proxy for the **syndesis-server** and **meta** components. For more information, see Configuring the HTTP proxy in *Installing and Operating Fuse Online on OpenShift Container Platform*.

## 2.3. CHANGES IN FUSE ONLINE 7.8

Fuse Online 7.8 changes Fuse Online 7.7 features as follows:

- **Fuse Online installation by using the OperatorHub for OCP 4.6**
  Starting with Fuse Online 7.8, how you install Fuse Online depends on your OpenShift version.

  - When you install Fuse Online on OCP 4.6, use the Fuse Online Operator from the OperatorHub. (The Fuse Online installation script and templates are not supported on OCP 4.x.) If you are using OCP 4.5, you must upgrade to OCP 4.6 if you want to install Fuse Online 7.8.

  - When you install Fuse Online on OCP 3.11, use the Fuse Online installation script and templates.

- **Upgrading Fuse Online on OCP 4.6.x**

  - On OCP 4.5 (and earlier), the Fuse Online subscription channel is **alpha**. When you install Fuse Online 7.8 on OCP 4.6 (and later), you specify a channel with the **fuse-online-v7.n** format, where **n** is the current release number. For example, for Fuse Online 7.8, the channel is **fuse-online-v7.8**.

  - If you used the install script to install Fuse Online 7.7, you should use the install script to upgrade to Fuse Online 7.8.

- **Slack connector now uses the Bot User OAuth Access Token**
  When you create a Slack connector, you now specify the **Bot User OAuth Access Token** to authorize access to your Slack app. Slack has deprecated the legacy token authorization.

- **Kafka Broker connection auto-discovery works by default**
  Auto-discovery of Kafka brokers now works by default. You no longer need to enable it.

- **Support for enhanced activity tracking**
  Activity tracking, using Jaeger, now works in an OperatorHub-enabled Fuse Online environment. By default, the **jaeger** addon option is enabled. When you install Fuse Online, either from the OperatorHub or by using the command-line script, the Fuse Online installation detects the existence of the OperatorHub and installs Jaeger by using the OperatorHub's subscription functionality. For the limited circumstances in which the OperatorHub is not available, Fuse Online uses its own installation functions to install Jaeger.

## 2.4. UPGRADING FUSE ONLINE INTEGRATIONS

To upgrade a Fuse Online environment that is running on OCP on-site, you must update Fuse Online by using the operator or the install script, and then republish any running integrations as described in Upgrading Fuse Online .

## 2.5. IMPORTANT NOTES FOR FUSE ONLINE

Important notes for the Fuse 7.8 release of the Fuse Online distribution:

- Upgrading to the Fuse 7.8 version of the Fuse Online operator is only possible on OCP 4.6. To install the Fuse 7.8 Online Operator, the recommended upgrade path is first to upgrade OpenShift to version OCP 4.6 and then to upgrade the Fuse Online operator to version 7.8. For more details, see ENTESB-15472.

- Fuse Online no longer supports Camel K runtime or the KNative connector.

- When Fuse Online is installed and provisioned on Red Hat infrastructure, the account is limited to a specific number of integrations that can be running at one time. For details, see the pricing plan.

- An OpenAPI schema that you upload to Fuse Online might not define input/output types. When Fuse Online creates a custom API client from an OpenAPI schema that does not specify input/output types then it is not possible to create an integration that maps integration data to fields that the API client can process or from fields that the API client processed. If an integration requires data mapping to or from a custom API, then when you upload the OpenAPI schema, click **Review/Edit** to open API Designer, which is an API editing tool, and add input/output type specifications.

- An OpenAPI document that you use for a custom API client connector or for an API provider integration cannot have cyclic schema references. For example, a JSON schema that specifies a

request or response body cannot reference itself as a whole nor reference any part of itself through any number of intermediate schemas.

## 2.6. OBTAINING TECHNICAL SUPPORT FOR FUSE ONLINE

To obtain technical support, in the Fuse Online console, in the left navigation panel, click **Support**. Use the **Support** page to download diagnostic information for all integrations or for one or more integrations that you choose. The page also provides a link for opening a support ticket and providing the diagnostic information that you downloaded.

## 2.7. TECHNOLOGY PREVIEW FEATURES IN FUSE ONLINE

This release includes the Technology Preview features that are listed below.
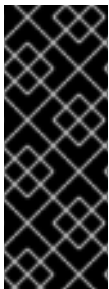
> **IMPORTANT**
>
> Technology Preview features are not supported with Red Hat production service level agreements (SLAs), might not be functionally complete, and Red Hat does not recommend using them in production. These features provide early access to upcoming product features, enabling customers to test functionality and provide feedback during the development process. For more information, see Red Hat Technology Preview features support scope.

- **SOAP API client connector**
  You can add a custom SOAP API client connector and then add a connection for a SOAP API client to Fuse Online integrations. For more information, see Creating SOAP API client connectors.

  This Technology Preview release of the SOAP API client connector has some limitations as described in the Fuse Online section of Known Issues.

- Conditional expressions for mapping data fields
  In the data mapper, you can specify a conditional expression and apply it to one data mapping. For example, a conditional expression can specify evaluation of a source field and how to populate the target field if the source field is empty. The limited set of expressions that you can specify are similar to Microsoft Excel expressions.

- For a REST API client that uses OAuth, when you create an API client connector, you can change the default OAuth2 behavior of connections that you create from that connector. Fuse Online vendor extensions to the OpenAPI specification support the following:

  - Providing client credentials as parameters.

  - Obtaining a new access token based on HTTP response status codes.

# CHAPTER 3. FUSE ON OPENSHIFT

Fuse on OpenShift enables you to deploy Fuse applications on OpenShift Container Platform.

## 3.1. SUPPORTED VERSION OF OPENSHIFT

Fuse on OpenShift is supported on OpenShift Container Platform 4.x and OpenShift Container Platform 3.11. For details of the supported version (or versions) of OpenShift Container Platform to use with Fuse on OpenShift, see the Supported Configurations page.

## 3.2. SUPPORTED IMAGES

Fuse on OpenShift provides the following Docker-formatted images:

- **fuse7/fuse-java-openshift** – Spring Boot

- **fuse7/fuse-karaf-openshift** – Apache Karaf

- **fuse7/fuse-eap-openshift** – Red Hat JBoss Enterprise Application Platform

- **fuse7/fuse-console** – Fuse console

- **fuse7/fuse-console-operator** – Fuse console operator

- **fuse7/fuse-apicurito** – Apicurito REST API editor

- **fuse7/fuse-apicurito-generator** – Apicurito REST application generator

- **fuse7/fuse-apicurito-operator-bundle** – API Designer Operator

## 3.3. NEW FEATURES IN FUSE 7.8 ON OPENSHIFT

Fuse on OpenShift provides following new features in version 7.8:

- Support for installing Fuse on Openshift in a restricted environment
  You can now install Fuse on OpenShift 4.x in a restricted environment, with no Internet access. You must mirror all of the Fuse on OpenShift images to a location available on your private network.

  > **NOTE**
  >
  > The **MAVEN_MIRROR_URL** environment variable (used to configure applications to fetch Maven artifacts from a local Maven repository) works for the Spring Boot and Apache Karaf containers, but not for the JBoss EAP container.

- Fuse Console is now integrated with OpenShift authentication and authorization. For more details, see Role-based access control for the Fuse Console on OpenShift 4.x .

- Spring Boot 2 runtime is now supported on OpenShift.

- Fuse Console operator

Fuse Console operator simplifies the procedures for installing, upgrading, and uninstalling the Fuse Console on OpenShift. For details of how to use the Fuse Console operator, see Set up the Fuse Console.

- Support for installing API Designer Operator in a restricted environment
  You can install API Designer Operator in a restricted environment from the OpenShift OperatorHub. You must mirror Operator catalog and the Fuse on OpenShift images to a location available on your private network.

- Metering labels for Fuse on OpenShift
  You can use the OpenShift Metering operator to analyze usage and statistics of Fuse on OpenShift.

## 3.4. IMPORTANT NOTES

Important notes for the Fuse 7.8 release of the Fuse on OpenShift distribution:

### Upgrading to the Fuse 7.8 version of the Fuse Console and API Designer (Apicurito) operators only possible on OCP 4.6

If you are using operators to install and upgrade Fuse Console and API Designer, you should note that the Fuse 7.8 operators are only available from the OCP 4.6 version of OperatorHub. To install the Fuse 7.8 operators, the recommended upgrade path is first to upgrade OpenShift to version OCP 4.6 and then to upgrade the Fuse operators to version 7.8. For more details, see ENTESB-15472.

### Data Virtualization has been removed

Data Virtualization is deprecated since Fuse 7.7 and has been removed from Fuse 7.8.

### Spring Boot 1 is has been removed

Spring Boot 1 is deprecated since Fuse 7.7 and has been removed from Fuse 7.8. We recommend that you migrate your Spring Boot applications to Spring Boot 2, following the guidance in the Spring Boot 2.0 Migration Guide.

### Container Development Kit (CDK) 3.14 is the recommended version for use with Fuse 7.8 on OpenShift 3.11

We recommend that developers use CDK 3.14 to try out applications on OpenShift 3.11. CDK is not available for OpenShift 4.x.
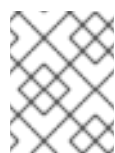
> **NOTE**
>
> CDK is provided only as a convenience for developers and is not a supported OpenShift distribution.

### The **eap-camel-jpa** quickstart has been removed

The **eap-camel-jpa** quickstart has been removed from Fuse 7.8 due to an issue with a dependency.

### The **fabric8-maven-plugin** no longer generates JSON resources

The **fabric8-maven-plugin** no longer generates the following **JSON** resources for Fuse on OpenShift:

- target/classes/META-INF/fabric8/openshift.json

- target/classes/META-INF/fabric8/kubernetes.json

The new plugin generates equivalent **.yml** files, that is, **openshift.yml** and **kubernetes.yml** files. If required, you can still generate the JSON files by setting the following option in the **fabric8-maven-plugin** configuration:

```
<configuration>
    <resourceFileType>json</resourceFileType>
</configuration>
```

### Jolokia not externally accessible on Fuse 7.8

Starting in Fuse 7.8, Jolokia default protocol is switched from HTTP to HTTPS.

# CHAPTER 4. FUSE STANDALONE

## 4.1. SUPPORTED CONTAINERS

Fuse standalone 7.8 is supported on the following runtime containers:

- Spring Boot 2 (standalone)

- Apache Karaf

- Red Hat JBoss Enterprise Application Platform (JBoss EAP)

## 4.2. NEW FEATURES IN FUSE 7.8

The main new features of Fuse standalone in version 7.8 are:

### Camel Weka component for JBoss EAP

The **camel-weka** component is now fully supported for JBoss EAP containers (but *not* for any other container type).
For more information, see the Apache Weka component section of the *Apache Camel Component Reference*.

### Configuration of delivery delay on Camel JMS and Camel AMQP components

The delivery delay option for Camel JMS and Camel AMQP components has been backported to Camel 2.23 (originally, it was implemented for Camel 3.0).
For more information, see the Apache JMS component and Apache AMQP component sections of the *Apache Camel Component Reference*.

### Configuration of Apache Karaf health checks

To avoid the health and readiness check requests being blocked by other long running HTTP processes in the container, the endpoints can be registered into a separate Undertow container.
For more information, see the Enabling Fabric8 Karaf health checks section of the *Fuse on OpenShift Guide*.

### New "-E" option for jasypt:decrypt command

Allows the use of a fixed initialization vector generator for decryption of passwords encrypted with previous versions of Jasypt.
For more information, see the Invoking the **jasypt:decrypt** command section of the *Apache Karaf Security Guide*.

### Updated Camel SAP component libraries

Updated minor version of SAP client libraries to 3.1 as 3.0 is no longer supported.

## 4.3. TECHNOLOGY PREVIEW FEATURES

The following features of Fuse standalone are *Technology Preview* only and are not supported in Fuse 7.8:

### Saga EIP

The Saga Enterprise Integration Pattern (EIP) is a technology preview feature and features only the *In-Memory* Saga service (which is not suitable for a production environments). The LRA Saga service is *not* supported. For more details, see section  Saga EIP  of the "Apache Camel Development Guide".

### 4.3.1. Fuse Tooling support for Apache Camel

Fuse Tooling provides a cross-platform, cross-IDE approach to Camel application development, with Apache Camel language support extensions or plugins for Visual Studio Code, Eclipse IDE, and Eclipse Che.

For Visual Studio Code, you can also add an extension that provides WSDL to Camel Rest DSL support.

Note: These features are already included by default with Fuse Tooling for Red Hat CodeReady Studio.

**Visual Studio Code features**

> **NOTE**
>
> VS Code Apache Camel extensions are community features. They are not supported by Red Hat.

The Language Support for Apache Camel extension provides features for Camel URIs, such as the following:

For XML DSL and Java DSL:

- You can navigate to endpoints in the VS Code **Outline** panel and in the  **Go > Go to Symbol in File** navigation panel.

- When you type, the editor provides code completion for Camel components, attributes, and the list of attribute values.

- When you hover over a Camel component, the editor shows a brief description of the component (from the Apache Camel component reference).

- As you edit the file, the editor performs an Apache Camel validation check on the Camel code.

- You can specify a specific Camel Catalog version by selecting **File → Preferences → Settings → Apache Camel Tooling → Camel catalog version**.

- You can use "Quick fix" features to address invalid enum values and unknown Camel URI component properties.

For XML DSL only:

- You can navigate to Camel contexts and routes in the VS Code **Outline** panel and in the  **Go > Go to Symbol in File** navigation panel.

- When you type, the editor provides code completion for referenced IDs of **direct**, **direct VM**, **VM** and **SEDA** components.

- You can find references for **direct** and **direct VM** components in all open Camel files.

For Properties:

- Completion for Camel component property

- Diagnostic

The WSDL 2 Camel Rest DSL extension (wsdl2rest implementation) provides WSDL to Camel Rest DSL support. By specifying an existing WSDL file, you can use this extension to generate a Camel Rest DSL + CXF solution for REST-style access. The WSDL file can be located either on your local file system or from an accessible web URL.

To access the **Language Support for Apache Camel** and **WSDL to Camel Rest DSL** features, you add one or more extensions.

The Apache Camel Extension Pack installs the following VS Code extensions:

- Language Support for Apache Camel

- OpenShift Connector

- Java Extension Pack

- Spring Boot extension pack

- Project initializer by Red Hat

- WSDL 2 Camel Rest DSL

- XML Language Support

- AtlasMap Data Transformation editor

- Didact Tutorial

- Tooling for Apache Camel K

Optionally, you can install the extensions individually.

For more details, see the following readme files:

- Readme for Apache Camel Extension Pack

- Readme for Apache Camel Language Server Protocol for Visual Studio Code

- Readme for WSDL to Camel Rest DSL

**Eclipse IDE features**

The **Language Support for Apache Camel** Eclipse plug-in provides the following features for Camel URIs:

In the generic Eclipse text editor for both XML DSL and Java DSL:

- When you type, the editor provides code completion for Camel components, attributes, and the list of attribute values.

- When you hover over a Camel component, the editor shows a brief description of the component (from the Apache Camel component reference).

When you use the Eclipse XML or Java editor, only the auto-completion feature is provided.

To access the **Language Support for Apache Camel**features, you install the Eclipse plug-in from the Eclipse Marketplace. For more details, see the readme file for Apache Camel Language Server Protocol for Eclipse IDE.

**Eclipse Che features**

The **Language Support for Apache Camel**plugin for Eclipse Che 7 provides features for Camel URIs in XML DSL and Java DSL.

- When you type, the editor provides code completion for Camel components, attributes, and the list of attribute values.

- When you hover over a Camel component, the editor shows a brief description of the component (from the Apache Camel component reference).

- When you save the file, the editor performs an Apache Camel validation check on the Camel code.

To activate this plugin for Eclipse Che, you can use the "Apache Camel based on Spring Boot" stack or edit your workspace configuration.

## 4.4. BOM FILES FOR FUSE 7.8

To configure your Maven projects to use the supported Fuse 7.8 artifacts, use the BOM versions documented in this section.

### 4.4.1. BOM File

To upgrade your Fuse standalone applications to use the 7.8 dependencies, edit the Maven **pom.xml** and change the versions of the BOMs and Maven plugins listed in the following table:

Table 4.1. Maven BOM and plugin versions for 7.8 using the BOM

| Container Type | Maven BOM or Plugin Artifact groupId/artifactId | Version for Fuse 7.8 |
|---|---|---|
| Spring Boot 2 | **org.jboss.redhat-fuse/fuse-springboot-bom** | **7.8.0.fuse-sb2-780038-redhat-00001** |
| | **org.jboss.redhat-fuse/fabric8-maven-plugin** | **7.8.0.fuse-sb2-780038-redhat-00001** |
| | **org.jboss.redhat-fuse/spring-boot-maven-plugin** | **7.8.0.fuse-sb2-780038-redhat-00001** |
| Apache Karaf | **org.jboss.redhat-fuse/fuse-karaf-bom** | **7.8.0.fuse-sb2-780038-redhat-00001** |
| | **org.jboss.redhat-fuse/karaf-maven-plugin** | **7.8.0.fuse-sb2-780038-redhat-00001** |
| JBoss EAP | **org.jboss.redhat-fuse/fuse-eap-bom** | **7.8.0.fuse-sb2-780038-redhat-00001** |

For more details about using the BOM, see the Migration Guide.

## 4.5. IMPORTANT NOTES

Important notes for the Fuse 7.8 release of the Fuse standalone distribution:

### Fuse on EAP is upgraded to use JBoss EAP 7.3.2 (from JBoss EAP 7.2)

The Fuse 7.8 release now runs on the JBoss Enterprise Application Platform (EAP) 7.3.2 container (upgraded from JBoss EAP 7.2 in the previous release of Fuse). For more details, see JBoss EAP 7.3.0 Release Notes.

### Camel upgraded from version 2.21 to version 2.23

Fuse 7.8 (on Apache Karaf, JBoss EAP 7.3 and Spring Boot 2.3) now supports Camel 2.23, previously Camel 2.23 was only supported on Spring Boot 2.1.3.

### Upgrading Fuse on Karaf

In this release there are a number of upgrades which affect major and minor component versions. Most OSGi bundles set version ranges that exclude the next major version or sometimes even a minor version, so do not use the Fuse on Apache Karaf patch mechanism to upgrade an Apache Karaf container to Fuse 7.8.

A new installation must be performed, for more details on upgrading to Fuse 7.8 on Karaf, see Fuse Migration Guide.

### Red Hat Decision Manager (RHDM) and Red Hat Process Automation Manager (RHPAM) are not compatible with Apache Karaf in this release

The Apache Karaf container provided in Fuse 7.8 is not compatible with RHDM and RHPAM, due to incompatible dependencies. This incompatibility will be fixed in a forthcoming release.

### Camel JMX component restriction

As a result of CVE-2020-11971, it is no longer possible to instantiate a JMX Connector instance in the Camel JMX component. It is recommended that you use the default JVM JMX connection instead which does not have this security vulnerability.

### Camel Netty4 component restriction

As a result of CVE-2020-11973, serialization of Java objects in the **camel-netty4** component is not allowed. The only encoder/decoder allowed is **StringEncoder**.

### Spring Boot support

Spring Boot 1 was deprecated in Fuse 7.7 and has now been removed in Fuse 7.8. Spring Boot 2.3 is now supported.

# CHAPTER 5. DEPRECATED AND REMOVED FEATURES

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

## 5.1. DEPRECATED

The following features are deprecated in Fuse 7.8 and may be removed in a future release:

**Fuse Online install script for installation on OCP 4**

Since Fuse 7.8, the Fuse Online install script is deprecated for installing Fuse Online on OpenShift Container Platform (OCP) 4.x versions. On OCP 4.x versions, we recommend that you use the Fuse Online Operator. The Fuse Online install script is still supported for installing Fuse Online on OCP 3.11.

**PHP, Python, and Ruby scripting languages are deprecated in Camel applications**

The PHP, Python, and Ruby scripting languages are deprecated in Camel applications since Fuse 7.4 and will be removed in a future release. The Camel community has deprecated PHP, Python, and Ruby since Camel 2.19 (see CAMEL-10973). This applies to all Fuse containers types: Apache Karaf, JBoss EAP, and Spring Boot.

**HP-UX OS is deprecated**

The HP-UX operating system is deprecated since Fuse 7.2 and support for this operating system could be removed in a future release of Fuse. In particular, note that the JBoss EAP 7.2 container has already dropped support for HP-UX and, consequently, any future version of Fuse on JBoss EAP that runs on JBoss EAP 7.2 will *not* be supported on HP-UX.

**Camel MQTT component is deprecated**

The Camel MQTT component is deprecated in Fuse 7.0 and will be removed in a future release of Fuse. You can use the Camel Paho component instead, which supports the MQTT messaging protocol using the popular Eclipse Paho library.

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

Since 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.

**BatchMessage class from the Camel SJMS component is deprecated**

The BatchMessage class from the Camel SJMS component is deprecated in Fuse 7 (deprecated in Apache Camel since version 2.17) and may be removed from a future version of Apache Camel and Fuse.

## 5.2. REMOVED IN FUSE 7.8

**Spring Boot 1**

Spring Boot 1 is no longer supported in Fuse 7.8. We recommend that you migrate your Spring Boot applications to Spring Boot 2, following the guidance in the Spring Boot 2.0 Migration Guide .

**Camel K runtime in Fuse Online**

Camel K runtime in Fuse Online (technology preview feature) is no longer supported in Fuse 7.8.

**Camel XmlJson component has been removed in 7.8**

The Camel XmlJson (**camel-xmljson**) component has been removed in Fuse 7.8.

## 5.3. REMOVED IN FUSE 7.5

The following features were removed in Fuse 7.5:

### Support for integration with MS SQL Server 2014 has been dropped in 7.5

MS SQL Server 2014 is no longer tested and supported for integrations with Fuse 7.5. We recommend that you use one of the more recent versions of MS SQL Server instead — for example, MS SQL Server 2016 or 2017.

### Camel LinkedIn component has been removed in 7.5

The **camel-linkedin** component has been removed in Fuse 7.5.

> **IMPORTANT**
>
> Although removed from Fuse 7.5, the **camel-linkedin** component is likely to be restored in a later release.

## 5.4. REMOVED IN FUSE 7.3

The following features were removed in Fuse 7.3:

### Camel YQL component has been removed in 7.3

The Camel YQL component has been removed in Fuse 7.3.

### OpenJPA and OpenJPA3 Karaf features have been removed in 7.3

The **openjpa** feature and the **openjpa3** feature have been removed from the Apache Karaf container in 7.3. For a Java Persistence Architecture (JPA) implementation, use the supported **hibernate** feature instead.

### camel-jetty Karaf feature has been removed in 7.3

The **camel-jetty** feature has been removed from the Apache Karaf container in 7.3, because it uses Jetty 8. Use the **camel-jetty9** feature instead.

### pax-jms-oracleaq Karaf feature has been removed in 7.3

The **pax-jms-oracleaq** feature has been removed from the Apache Karaf container in 7.3, because it requires 3rd party, non-free Oracle AQ libraries.

### camel-elasticsearch component has been removed from Fuse on EAP (Wildfly Camel) in 7.3

The **camel-elasticsearch** component has been removed from Fuse on EAP (Wildfly Camel) in 7.3. Use the newer **camel-elasticsearch-rest** component instead.

## 5.5. REMOVED IN FUSE 7.2

The following features were removed in Fuse 7.2:

### Camel XMLRPC component has been removed in 7.2

The Camel XMLRPC component has been removed in Fuse 7.2.

### Camel Netty component has been removed in 7.2

The Camel Netty component has been removed in Fuse 7.2. It is recommended that you use the Camel Netty4 component instead.

## 5.6. REMOVED IN FUSE 7.0

The following features were removed in Fuse 7.0:

### Support for Red Hat JBoss Operations Network (JON) has been removed in 7.0

Since Fuse 7.0, Fuse on Karaf no longer supports JON and no longer provides JON plugins for integrating with the JON runtime.

### Embedded ActiveMQ broker has been removed in 7.0

Since Fuse 7.0, Fuse on Karaf no longer provides an embedded ActiveMQ Broker. Customers should connect to a supported remote broker directly. For more information on our supported brokers, refer to the "Supported Messaging Providers" section of the Red Hat Fuse Supported Configurations page.

### Fuse integration pack has been removed in 7.0

Support for running rules and processes is provided by components shipped with Red Hat JBoss BPM Suite and Red Hat JBoss BRMS.

### Karaf console commands for child container administration have been removed in 7.0

Since Fuse 7.0, the Karaf console commands for child container administration are *not* supported. That is, the console commands prefixed by **instance:** (Karaf 4.x syntax) and the console commands prefixed by **admin:** (Karaf 2.x syntax) are not supported.
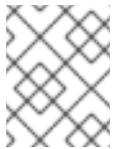
> **NOTE**
>
> In the Fuse 7.0 GA release, the **instance:** commands are not removed. This is a known issue.

### SwitchYard has been removed in 7.0

Since Fuse 7.0, SwitchYard has been removed, and you should use Apache Camel directly instead. For more detailed information, see the knowledge base article, SwitchYard Support Plan After Releasing Fuse 7.

### Support for Fabric8 1.x has been removed in 7.0

Since Fuse 7.0, Fabric8 v1 has been replaced by Fuse on OpenShift (previously, Fuse Integration Services), which includes components of Fabric8 v2 technology. Fuse on OpenShift provides a set of tools and Docker-formatted images that enable development, deployment, and management of integration microservices within OpenShift.

Although Fuse on OpenShift has a different architecture, it fulfills the same provisioning, automation, central configuration and management requirements that Fabric8 v1 provides. For more information, see Fuse on OpenShift Guide.

### Camel components for Google App Engine have been removed in 7.0

The Camel components for Google App Engine (**camel-gae**) have been removed in Fuse 7.0.

### Camel jBPM component has been removed in 7.0

The Camel jBPM component (**camel-jbpm**) has been removed in Fuse 7.0.

### Tanuki based wrapper for installing Fuse as a service has been removed in 7.0

The Tanuki based wrapper scripts — generated using the **wrapper:install** Karaf console command — for installing Fuse as a service have been removed in Fuse 7.0. 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 has been removed in 7.0

Since Fuse 7.0, the Smooks component for SwitchYard has been removed.

### BPEL has been removed in 7.0

BPEL (based on the Riftsaw project) has been removed from Fuse 7.0. If you are currently using BPEL, it is recommended that you consider migrating to the Red Hat JBoss BPM Suite.

**Design Time Governance has been removed in 7.0**

The Design Time Governance component has been removed in 7.0.

**Runtime Governance has been removed in 7.0**

Since Fuse 7.0, the Runtime Governance (RTGov) component has been removed.

**S-RAMP has been removed in 7.0**

The SOA Repository Artifact Model and Protocol (S-RAMP) component has been removed in Fuse 7.0.

**bin/patch script has been removed in 7.0**

The **bin**/**patch** script (**bin\patch.bat** on Windows O/S) has been removed in a Fuse 7.0.

**Spring Dynamic Modules (Spring-DM) is not supported in 7.0**

Spring-DM (which integrates Spring XML with the OSGi service layer in Apache Karaf) is not supported in Fuse 7.0 and you should use the Blueprint framework instead. Using Blueprint XML 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 not supported in 7.0**

The Apache OpenJPA implementation of the Java Persistence API (JPA) is not supported in Fuse7.0. It is recommended that you use the Hibernate implementation instead.

## 5.7. REPLACED IN FUSE 7.0

The following features were replaced in Fuse 7.0:

**Geronimo transaction manager has been replaced in 7.0**

In Fuse 7.0, the Geronimo transaction manager in the Karaf container has been replaced by Narayana.

**Jetty container has been replaced in 7.0**

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

# CHAPTER 6. UNSUPPORTED FEATURES IN FUSE 7.8

The following features are unsupported in Red Hat Fuse 7.8.

**Apache Karaf EclipseLink feature is unsupported**

The Apache Karaf EclipseLink feature is **not** supported in Fuse, because this feature depends on JPA 2.2, while the Karaf container for Fuse 7.2 is aligned with JPA 2.1.

**Apache Aries Blueprint Web module is unsupported**

The Apache Aries Blueprint Web module is **not** supported in Fuse. The presence of an example featuring Blueprint Web in the community edition of Apache Camel (provided as a separate download) does **not** imply that this feature is supported in 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.

# CHAPTER 7. KNOWN ISSUES

The following subsections describe the known issues in version 7.8.

## 7.1. CVE SECURITY VULNERABILITIES

As a middleware integration platform, 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 Fuse could have security vulnerabilities. This section documents known common vulnerabilities and exposures (CVEs) related to security that affect third-party dependencies of Fuse 7.8.

*ENTESB-8113* CVE-2018-10237 guava: Unbounded memory allocation in AtomicDoubleArray and CompoundOrdering classes allow remote attackers to cause a denial of service [fuse-7.0.0]

Google Guava versions 11.0 through 24.1 are vulnerable to unbounded memory allocation in the **AtomicDoubleArray** class (when serialized with Java serialization) and the **CompoundOrdering** class (when serialized with GWT serialization). An attacker could exploit applications that use Guava and deserialize untrusted data to cause a denial of service — for more details, see CVE-2018-10237. To avoid this security vulnerability, we recommend that you:

- Never deserialize an **AtomicDoubleArray** instance or a **CompoundOrdering** instance from an unknown source.

- Avoid using Guava versions 24 and earlier (although in some cases it is not possible to avoid the earlier versions).

To make it easier to avoid the earlier (vulnerable) versions of Guava, Fuse 7.7 has configured its Maven Bill of Materials (BOM) files for all containers to select Guava 27 by default. This means that if you incorporate a Fuse BOM into your Maven project (by adding a dependency on the BOM to the **dependencyManagement** section of your POM file) and then specify a dependency on the Guava artifact *without* specifying an explicit version, the Guava version will default to the version specified in the BOM, which is version 27 for the Fuse 7.7 BOMs.

But there is at least one common use case involving the Apache Karaf (OSGi) container, where it is not possible to avoid using a vulnerable version of Guava: if your OSGi application uses Guava and Swagger together, you are obliged to use Guava 20, because that is the version required by Swagger. Here we explain why this is the case and how to configure your POM file to revert the earlier (vulnerable) Guava 20 library. First, you need to understand the concept of a *double OSGi chain*.

**Double OSGi chain**

Bundles in the OSGi runtime are *wired* together using package constraints (package name + optional version/range) — imports and exports. Each bundle can have multiple imports and usually those imports wire a given bundle with multiple bundles. For example:

```
BundleA
+-- BundleB
|   +-- BundleCa
+-- BundleCb
```

Where **BundleA** depends on **BundleB** and **BundleCb**, while **BundleB** depends on **BundleCa**. **BundleCa** and **BundleCb** should be the same bundle, if the export the same packages, but due to version (range) constraints, **BundleB** uses (*wires to*) a different revision/version of **BundleC** than **BundleA**.

Rewriting the preceding diagram to reflect what happens when you include dependencies on both Guava and Swagger in an application:

```
org.jboss.qe.cxf.rs.swagger-deployment
+-- Guava 27
+-- Swagger 1.5
   +-- reflections 0.9.11
      +-- Guava 20
```

If you try to deploy this bundle configuration, you get the error, **org.osgi.framework.BundleException: Uses constraint violation**.

**Reverting to Guava 20**

If your project uses both Guava and Swagger libraries (directly or indirectly), you should configure the **maven-bundle-plugin** to use an explicit version range (or no range at all) for the Guava bundle import, as follows:

```
<Import-Package>
    com.google.common.base;version="[20.0,21.0)",
    com.google.common.collect;version="[20.0,21.0)",
    com.google.common.io;version="[20.0,21.0)"
</Import-Package>
```

This configuration forces your OSGi application to revert to the (vulnerable) Guava 20 library. It is therefore particularly important to avoid deserializing **AtomicDoubleArray** instances in this case.

*CVE-2017-12629* Solr/Lucene –security bypass to access sensitive data – CVE–2017–12629

Apache Solr is a popular open source search platform that uses the Apache Lucene search engine. If your application uses a combination of Apache Solr with Apache Lucene (for example, when using the Camel Solr component), it could be affected by this security vulnerability. Please consult the linked security advisory for more details of this vulnerability and the mitigation steps to take.

> **NOTE**
>
> The Fuse runtime does *not* use Apache Solr or Apache Lucene directly. The security risk only arises, if you are using Apache Solr and Apache Lucene together in the context of an integration application (for example, when using the Camel Solr component).

## 7.2. FUSE ONLINE

The Fuse Online distribution has the following known issues:

*ENTESB-15063* Unable to override maven repositories

In Fuse 7.8, if you are running Fuse Online in an offline (disconnected from the internet) environment and you have configured the Fuse Online custom resource (CR) to use a custom Maven repository on your local network, for example:

```
...
    server:
      features:
```

```
    maven:
      append: false
      repositories:
        customRepo1: http://192.0.2.0:8080
  ...
```

Then there are particular circumstances where other Maven repositories are consulted, in addition to the specified **customRepo1**, in spite of the fact that the **append: false** flag is specified in the CR. For example, this can happen if Fuse Online is configured to use extensions that download Maven dependencies while they are building. Typically, this issue causes longer build times, because the incorrect Maven repositories are consulted **before** the specified custom Maven repository, which wastes time during the build process.

### *ENTESB-15348* Syndesis-jaeger uses unproductized image on OCP 3.11

In Fuse 7.8, if you are attempting to install Fuse Online on OCP 3.11 with the Jaeger add-on enabled (enhanced activity tracking), it is possible you might encounter the following error:

> Unknown desc = toomanyrequests: You have reached your pull rate limit. You may increase the limit by authenticating and upgrading: https://www.docker.com/increase-rate-limit

This happens because the productised Jaeger container references Dockerhub images, which are out of Red Hat's control. To work around this issue, you can either wait until rate limit window times out, or disable the Jaeger add-on.

### *ENTESB-15292* Creating connection from API connector prefills old values

In Fuse 7.8, if you have an existing API client connector (for example, a connector listed under **Customizations** > **API Client Connectors**) and you edit the connector to change the **Base URL** field in the connector definition, you will find that this change does not get reflected in any API connections that you create using this connector. That is, the **Base path** field of the connections you create are defaulted to the *old* value of **Base URL**, before you made the change. To work around this issue you can simply change the **Base path** field in the connection to the new value, instead of relying on the default value from the API client connector.

### *ENTESB-14518* Jaeger operator installed by Syndesis 1.11 affects other namespaces

In Fuse 7.8, when you install Fuse 7.8 Online (Syndesis 1.11) on an OpenShift cluster, the Jaeger Operator (which gets installed along with Fuse Online) is configured to manage *All namespaces* by default. A side effect of this behavior is that, in the case where you already have Fuse 7.7 Online (Syndesis 1.10) installed on a cluster and then you install Fuse 7.8 Online in a different namespace, the Jaeger Operator installed with Fuse 7.8 Online tries to manage the (older) Jaeger instance installed on the Fuse 7.7 Online namespace. The result is that a new **syndesis-jaeger** pod — in addition to the existing **syndesis-jaeger** pod — appears in the Fuse 7.7 Online namespace and the new **syndesis-jaeger** pod enters the **CrashLoopBackOff** state. The original Fuse 7.7 Online instance is not affected and the crashed **syndesis-jaeger** pod can be safely ignored.

### *ENTESB-14237* Missing patch body in FHIR Patch operation

Starting in Fuse 7.7, specifying the JSon Patch as described in step 7 of the procedure Updating specified fields in a resource on a FHIR server does not work, because the value of the JSon Patch is not used by the connector and the error **Unable to determine encoding of patch** is raised by the integration.

To work around this issue, you can instead open up the settings for JSon Patch in the Data Mapper, as described in step 9.ii, and directly set the values of the fields, **op**, **path**, and **value** in the Data Mapper (see also the screenshots in ENTESB-14237 ).

### *ENTESB-13966* Discovery of deployed integration API seems disabled but not really

Starting in Fuse 7.7, after creating a new integration containing an API, the integration detail page wrongly implies that 3scale discovery is disabled for this integration. Additionally, the integration detail page does not show the API URL. By clicking this button three times (click **Enable**, then click **Disable**, then click **Enable**), you can resynchronize the page so that 3scale discovery is enabled and the API URL is displayed.

*ENTESB-14114* SOAP connector - No icon auto-generated

If you do not provide an icon for the SOAP connector, Fuse Online does not generate an icon for you.

## 7.3. FUSE ON OPENSHIFT

This section lists issues that affect the deployment of Fuse applications on OpenShift. For details of issues affecting specific containers, see also the sections for Spring Boot, Fuse on Apache Karaf, and Fuse on JBoss EAP. The Fuse on OpenShift distribution has the following known issues:

*ENTESB-15642* **Candidate permutation failed due to a conflict between imports when migrating from Fuse 7.7 to 7.8 BOM**

In Fuse 7.8, if you create a Karaf custom distribution (for example, based on the Fuse 7.8 Karaf **custom** quickstart) and then deploy this custom distribution to OpenShift, you might encounter an OSGi import conflict involving **javax.xml.bind**. This import conflict occurs because the Karaf system bundles export more than one version of the JAXB API package (that is, versions 2.2 and 2.3). Standalone Apache Karaf is not affected by this, because it ensures that the proper versions (both 2.2 and 2.3) of the JAXB packages are available through system bundle (that is, **bundle 0**). This ensures that when other features (like CXF ones) are installed, those features don't have to install their own JAXB API bundles, thus preventing the API conflict.
To work around this problem you should add the following line to the POM of your Karaf custom distribution:

```
<library>mvn:org.apache.servicemix.specs/org.apache.servicemix.specs.jaxb-api-
2.3/${version.org.apache.servicemix.specs.jaxb};type:=endorsed;export:=true</library>
```

Where you need to replace **${version.org.apache.servicemix.specs.jaxb}** in the above example with the relevant literal version in your POM file, because properties defined in a Maven BOM file are **not** carried over to the POM file. To discover the relevant value of the **version.org.apache.servicemix.specs.jaxb** property, start with the **fuse-karaf-bom** BOM file referenced in the **dependencyManagement** section of your POM and follow the chain of recursively imported BOM files, until you find the one that contains the definition of **version.org.apache.servicemix.specs.jaxb**. For example, for Fuse 7.8 you can find the value of the **version.org.apache.servicemix.specs.jaxb** property in the https://maven.repository.redhat.com/ga/org/jboss/fuse/jboss-fuse-parent/7.8.0.fuse-780038-redhat-00001/jboss-fuse-parent-7.8.0.fuse-780038-redhat-00001.pom BOM file.

*ENTESB-15472* **Fuse 7.8 operators not visible in operatorhub when using OCP 4.5**

In Fuse 7.8, the Fuse operators (Fuse Console, Fuse Api Designer and Fuse Online) are available on the OperatorHub only when using OCP 4.6. For versions OCP 4.5 and below the Fuse 7.8 Operators are not available on the OperatorHub. To install the Fuse 7.8 operators, the recommended upgrade path is first to upgrade OpenShift to version OCP 4.6 and then to upgrade the Fuse operators to version 7.8.

*ENTESB-15034* **Missing labels on Openshift Service Object in FMP quickstart spring-boot-camel-rest-3scale**

In Fuse 7.8, the **spring-boot-camel-rest-3scale** quickstart is missing the labels and annotations that would enable the deployed service to be automatically discovered by 3scale. To work around this problem, follow the instructions in the section Criteria for a discoverable service from the 3scale

*Admin Portal Guide* to add the missing labels and annotations manually to the service object YAML definition.

*ENTESB-15317* **Apicurito generator pods are not ready**

In Fuse 7.8, the health check port for the Apicurito generator pod does not start up. To work around this problem, the health check has been configured to ping HTTP port 8080 (which does start up), instead of HTTP port 8181, which is usually used for the health check probe.

*ENTESB-12238* **[SB2] Quickstarts arquillian test fail**

Starting in Fuse 7.5.0, some of the Spring Boot 2 quickstarts (generated either from Maven archetypes or quickstart templates) fail to build and deploy to OpenShift. The following Spring Boot 2 Maven archetypes are affected:

- **spring-boot-camel-archetype**

- **spring-boot-camel-infinspan-archetype**

- **spring-boot-cxf-jaxrs-archetype**

- **spring-boot-cxf-jaxws-archetype**

And the following Spring Boot 2 templates:

- **spring-boot-2-camel-template**

- **spring-boot-2-camel-infinspan-template**

- **spring-boot-2-cxf-jaxrs-template**

- **spring-boot-2-cxf-jaxws-template**

To work around this issue, after generating a Maven project for one of these quickstarts, edit the project's Maven **pom.xml** file to add the following dependency:

```
<dependency>
  <groupId>org.assertj</groupId>
  <artifactId>assertj-core</artifactId>
  <version>2.4.1</version>
  <scope>test</scope>
</dependency>
```

*ENTESB-10577* **Apicurito does not support YAML Open API spec files**

Starting in Fuse 7.4 on OpenShift, Apicurito generates OpenAPI specification files in YAML format *by default*, but is not capable of re-importing the generated YAML file. Only JSON format can be imported into Apicurito at the moment.

## 7.4. FUSE ON APACHE KARAF

Fuse on Apache Karaf has the following known issues:

*ENTESB-8140* **Start level of hot deploy bundles is 80 by default**

Starting in the Fuse 7.0 GA release, in the Apache Karaf container the start level of hot deployed bundles is 80 by default. This can cause problems for the hot deployed bundles, because there are many system bundles and features that have the same start level. To work around this problem and ensure that hot deployed bundles start reliably, edit the **etc/org.apache.felix.fileinstall-deploy.cfg** file and change the **felix.fileinstall.start.level** setting as follows:

```
felix.fileinstall.start.level = 90
```

*ENTESB-7664* **Installing framework-security feature kills karaf**

The **framework-security** OSGi feature must be installed using the **--no-auto-refresh** option, otherwise this feature will shut down the Apache Karaf container. For example:

```
feature:install -v --no-auto-refresh framework-security
```

## 7.5. FUSE ON JBOSS EAP

Fuse on JBoss EAP has the following known issues:

*ENTESB-15308* **Camel CXF not compatible with EAP-7.3.3.GA-redhat-00004**

For Fuse 7.8 on EAP, we have found that Camel CXF is not compatible with EAP version 7.3.3. To work around this problem, you can install Fuse 7.8 on EAP version 7.3.2 instead.

*ENTESB-14244* **Add SOAP to Rest example that secures endpoint with Keycloak - update readme**

In Fuse 7.7, there is an error in the README instructions for the new SOAP to Rest quickstart (**camel-soap-rest-bridge**). In the **Prerequisites** section, the command for installing the RH SSO EAP Adapter is given as:

```
./bin/jboss-cli.sh --file=bin/adapter-elytron-install-offline.cli
```

But the correct command is actually:

```
./bin/jboss-cli.sh --file=bin/adapter-elytron-install-offline.cli -Dserver.config=standalone-full.xml
```

*ENTESB-13168* **Camel deployment on EAP domain mode is not working on Windows**

Starting in Fuse 7.6.0, for Fuse on JBoss EAP, the Camel subsystem cannot be deployed on JBoss EAP in domain mode on Windows OS.

## 7.6. FUSE TOOLING

Fuse Tooling has the following known issue:

*FUSETOOLS-3393* **Camel debugger automatic binding does not work with Fuse 7.8, Camel 2.25.1+ and Camel 3.2.0+**

Due to the removal of the JMX RMI Connector feature from Fuse 7.8, the Camel Debugger does not work when you right-click a project and select the **Debug as** > **Local Camel Context** option. To workaround the issue, follow these steps:

1. In the **JMX navigator** view, connect the process created for the Camel project.

2. Expand the project to see the **Camel** node.

3. Right-click on the Camel node and then select **Edit routes**.

*FUSETOOLS-3393* **Remote debugging is no longer supported**

Due to the removal of the JMX RMI Connector feature from Fuse 7.8, using the Fuse Tooling Camel Debugger for remote debugging is not supported. For remote debugging, you must configure Jolokia and create a specific JMX connection through Jolokia.

## 7.7. APACHE CAMEL

Apache Camel has the following known issues:

*ENTESB-15343* **XSLT component not working properly with IBM1.8 JDK**

In Fuse 7.8, the Camel XSLT component does not work properly with the IBM 1.8 JDK. The problem occurs because the underlying Apache Xerces implementation of XSLT does not support the **javax.xml.XMLConstants#FEATURE_SECURE_PROCESSING** property (see XERCESJ-1654).

*ENTESB-11060* **[camel-linkedin] V1 API is no longer supported**

Since Fuse 7.4.0, 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 release of Fuse.

*ENTESB-7469* **Camel Docker component cannot use Unix socket connections on EAP**

Since Fuse 7.0, the **camel-docker** component can connect to Docker only through its REST API, not through UNIX sockets.

*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-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-2332* **Google Drive API JSON response for changes returns bad count of items for the first page**

Google Drive API JSON response 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).

# CHAPTER 8. FIXED ISSUES IN FUSE 7.8

The following sections list the issues that have been fixed in Fuse 7.8:

- Section 8.1, "Enhancements in Fuse 7.8"

- Section 8.2, "Feature requests in Fuse 7.8"

- Section 8.3, "Clarifications in Fuse 7.8"

- Section 8.4, "Bugs resolved in Fuse 7.8"

## 8.1. ENHANCEMENTS IN FUSE 7.8

The following table lists the enhancements in Fuse 7.8.

Table 8.1. Fuse 7.8 Enhancements

| Issue | Description |
| --- | --- |
| ENTESB-15109 | Upgrade to arquillian-core-1.4.0.Final |
| ENTESB-14442 | Backport CAMEL-15050 - Templating components - Variable map to be limited to body/headers |
| ENTESB-14056 | Update the inline editor styling |
| ENTESB-13824 | Please consider certifying WebSphere MQ 9.1 |
| ENTESB-14080 | Add an option to configure delivery delay for amqp/jms component |
| ENTESB-14508 | Add RBAC support to the Fuse console operator |
| ENTESB-14461 | Backport CAMEL-15358 - IndexOutOfBoundsException when polling |
| ENTESB-13781 | Default Grafana dashboards for Fuse on Openshift and Fuse Standalone |
| ENTESB-14382 | Add support for Log4J2 to SLF4J |
| ENTESB-14525 | Move Tech Preview Images to GA |
| ENTESB-11132 | Automate client certificate issuance by the Fuse Console operator |
| ENTESB-14466 | Add Support and Documentation for Encrypted Property Placeholders in Spring / Spring Boot |
| ENTESB-14267 | Support for disconnected installs - APICurito Operator |
| ENTESB-13777 | Include Artemis plugin in Fuse Console |

| Issue | Description |
|---|---|
| ENTESB-10469 | Add MAVEN_MIRROR_URL parameter to templates |
| ENTESB-14400 | Provide metering labels for Fuse on Openshift (FMP) |
| ENTESB-14539 | Fuse 7 OpenShift console should support a per-network zone deployment model |
| ENTESB-13020 | Define and use a standard template for quickstarts |
| ENTESB-13607 | Support for changed OLM metadata format in 7.8 |
| ENTESB-14424 | Deterministic deployments for Fuse Console |
| ENTESB-14727 | Backport CAMEL-15532 - Multicast parallel processing with timeout: Stream Cache file not deleted |
| ENTESB-14342 | Remove Camel-K 0.3.4 from Fuse Online 7.x |
| ENTESB-14902 | Implement a way of applying a specific CVE fix (Karaf) |
| ENTESB-14332 | Certify Fuse 7.7 with OCP4.5 |
| ENTESB-13622 | Fuse Online: unable to configure syndesis-meta pvc type |
| ENTESB-13623 | Fuse Online: unable to configure syndesis-prometheus pvc type |
| ENTESB-12840 | Enable including error messages in API Provider by default |
| ENTESB-13828 | Add EAP version into UMB message for 7.7 |
| ENTESB-14459 | [CAMEL-15377] Remove deprecation for transactedInOut option with documentation describing usage cases |
| ENTESB-13815 | Backport CAMEL-15013 - Template components - Add option to turn on|off allow using header with override template |
| ENTESB-13157 | Bump Snakeyaml to version 1.26 |
| ENTESB-14762 | Release Fuse 7.7 operators as bundles in new format (OLM) |
| ENTESB-14046 | Define restConfiguration with servlet component on Fuse 7 to demonstrate servlet level security + Karaf JAAS |
| ENTESB-14654 | Ability to configure the server DB connection pool from the custom resource |

| Issue | Description |
|-------|-------------|
| ENTESB-14484 | do fuse bin/client script certain about the default user if etc/users.properties have multiple users |
| ENTESB-14399 | Provide metering labels for APICurito operator and code generator. |
| ENTESB-14790 | Provide metering labels for Fuse Console (template based install) |
| ENTESB-14869 | Expose JAVA_OPTIONS for syndesis server/meta components |
| ENTESB-14027 | Prometheus exporter for standalone Fuse 7 on Karaf |
| ENTESB-14398 | Adopt the new label format for Fuse Online |
| ENTESB-13480 | Backport CAMEL-14893 : camel-grpc – Should handle if exchange failed as onError |

## 8.2. FEATURE REQUESTS IN FUSE 7.8

The following table lists the features requests in Fuse 7.8.

Table 8.2. Fuse 7.8 Feature Requests

| Issue | Description |
|-------|-------------|
| ENTESB-14568 | Backport CAMEL-14533 – camel-ftp: fileExist=Append and tempPrefix options do not work together |
| ENTESB-14569 | Backport CAMEL-15420 – camel-http dynamic aware removes Exchange.HTTP_QUERY header if Exchange.HTTP_PATH header not specified |
| ENTESB-13846 | Allow Kafka consumer/producer config tuning |
| ENTESB-14015 | Unable to set CPU requests and limits for Components and Integrations |
| ENTESB-13779 | Add Support for OData v2 |
| ENTESB-13803 | Support nodeAffinity and toleration configuration for Fuse Online components |

## 8.3. CLARIFICATIONS IN FUSE 7.8

The following table lists the clarifications in Fuse 7.8.

Table 8.3. Fuse 7.8 Clarifications

| Issue | Description |
| --- | --- |
| ENTESB-13702 | [React-UI] Add new mapping in the "show mapping table" view |
| ENTESB-13531 | Spec.Components.Prometheus.Rules clarification |

## 8.4. BUGS RESOLVED IN FUSE 7.8

The following table lists the resolved bugs in Fuse 7.8.

Table 8.4. Fuse 7.8 Resolved Bugs

| Issue | Description |
| --- | --- |
| ENTESB-10577 | Apicurito is not capable of re-importing a generated YAML file. |
| ENTESB-15457 | [POST-GA] Fuse Console 7.8 Operator has wrong digest and can't be installed |
| ENTESB-15407 | The Fuse Console Operator upgrade from version 7.7 to 7.8 does not work |
| ENTESB-14443 | Fuse 7.7 CodeReady studio quickstart for Karaf uses wrong BOM version |
| ENTESB-15417 | wrong RoleBinding on spring-boot-camel-config-7.8.0.fuse-sb2-780029 |
| ENTESB-12238 | [SB2] Quickstarts arquillian test fail |
| ENTESB-14363 | SSH Integration fails with Camel 2.23.x |
| ENTESB-14640 | Restore and document Azure credentials |
| ENTESB-15238 | [Apicurito] Wrong label syntax in fuse-apicurito.yml |
| ENTESB-14728 | Unable to install 16 features |
| ENTESB-14280 | undertow component on Rest DSL truncates big responses |
| ENTESB-15160 | Quickstarts build test fail because of unknown CA |
| ENTESB-15306 | CRD conflicts between Camel K and Fuse Online |
| ENTESB-14391 | Elasticsearch server conflicts with lucene and log4j2 config |
| ENTESB-14486 | camel-springboot - Flaky test StreamCachingTest |
| ENTESB-15132 | Syndesis doesn't fill in host and basePath during creating API connector |

| Issue | Description |
|---|---|
| ENTESB-14783 | jgit version is wrong in Fuse Karaf bom (should match jgit from Camel) |
| ENTESB-15024 | Malformed relatedImages section in bundle images |
| ENTESB-15426 | Arquillian - Missing Rerun Failing Test property cause test failure at first attempt |
| ENTESB-14100 | Failed to define class UndertowSecureRestDslCdiIntegrationTest |
| ENTESB-14636 | javax.xml.bind missing version in Karaf |
| ENTESB-14940 | karaf-cxf-rest-archetype from catalog 2.2.0.fuse-sb2-780022-redhat-00001 includes spring-boot-bom |
| ENTESB-14194 | SOAP connector cannot be created |
| ENTESB-14202 | Camel 2's openapi-osgi example references camel-bundle-plugin 3.x |
| ENTESB-14976 | Missing/Wrong 'javax.activation' version in Karaf |
| ENTESB-15396 | Fuse Online upgrade doesn't work |
| ENTESB-14734 | Command history throws java.lang.reflect.InvocationTargetException |
| ENTESB-14253 | Arquillian test fail on quickstarts |
| ENTESB-14649 | Restore and document DigitalOcean credentials |
| ENTESB-15236 | Apicurito operator config.yaml doesn't match upstream |
| ENTESB-14384 | Default build doesn't skip already downloaded licenses |
| ENTESB-15411 | db-backup get stuck on ImagePullBackOf on 3.11 |
| ENTESB-14067 | There are missing dependencies in offline repo |
| ENTESB-15274 | API Provider response is always 200 for 2xx responses |
| ENTESB-11638 | Fabric8 quickstart karaf-camel-amq does not work correctly (probably missing configuration) |
| ENTESB-14455 | Remove the DV Operator - due to the operator bundle changes |
| ENTESB-14444 | [Apicurito] remove all mentions that UI image can be changed via CR |

| Issue | Description |
| --- | --- |
| ENTESB-14632 | Fix few Camel features that use unresolved version placeholders |
| ENTESB-13272 | Jaeger is disabled by default on OperatorHub |
| ENTESB-15273 | When the fields get empty during editing API Connector, they disappear. |
| ENTESB-14093 | Component camel-milo is not aligned to common netty component across runtimes |
| ENTESB-15090 | Boosters points to incorrect fuse bom version |
| ENTESB-15116 | eap-camel*-template and karaf*-template still refer non-productized version |
| ENTESB-14511 | Quickstarts fails on OCP 4.6 |
| ENTESB-15286 | json bindingMode in RestConfiguration overrides the existing content-type header and unable to set charset:utf-8 |
| ENTESB-14642 | Restore and document Twilio credentials |
| ENTESB-14458 | Upgrade versions for cdi-api, servlet-api, jboss-transaction-api in wildfly-camel-examples |
| ENTESB-14405 | Bouncycastle version from Camel incompatibility with EAP |
| ENTESB-15269 | Some quickstarts does not have Readiness/Liveness Probe |
| ENTESB-14374 | Camel 2.23 test failures after version alignment |
| ENTESB-14949 | Syndesis jaeger is not installed on OCP 3.11 by Fuse Online install script |
| ENTESB-13275 | Missing Jaeger resources after OperatorHub installation |
| ENTESB-15152 | Unable to validate AWS connections |
| ENTESB-14474 | jaxb-api dependency issue in fabric8-project-bom-fuse-karaf |
| ENTESB-13501 | Invalid transitive dependency in ActiveMQ |
| ENTESB-15268 | Syndesis 7.8 operator outdated description |
| ENTESB-15162 | EAP docs/fuse/licenses/licenses.xml error |
| ENTESB-15349 | Linked documentation is for version 7.7 instead of version 7.8 |

| Issue | Description |
|-------|-------------|
| ENTESB-14537 | Possible race with greenmail redepoyment |
| ENTESB-14097 | Failed to define class org.apache.poi.openxml4j.util.ZipSecureFile |
| ENTESB-15233 | FMP no istag created into namespace when using option -Dnamespace.use.existing |
| ENTESB-12116 | Hawtio online not productized |
| ENTESB-14516 | Elasticsearch may wait forever on http://docker:9200/_cat/nodes |
| ENTESB-14617 | Restore and document openweather credentials |
| ENTESB-14591 | camel-master component fails with "java.lang.NoClassDefFoundError: org/apache/curator/shaded/com/google/common/cache/CacheBuilder" exception |
| ENTESB-15361 | Default value for postgres-exporter links to wrong image |
| ENTESB-13556 | Slack Connector legacy token will no longer work May 2020 |
| ENTESB-15009 | XMLSecurity drops whitespace after XML header |
| ENTESB-15129 | EAP image containse UBI repo |
| ENTESB-14641 | Restore and document Box credentials |
| ENTESB-14086 | camel-netty4 - RequestTimeout seems not working as expected |
| ENTESB-14984 | Operator bundle is missing some image names in CSV yaml |
| ENTESB-15318 | Permission denied during S2I build of application templates on Fuse 7.7 |
| ENTESB-14542 | Using the "Publish messages" for AMQP connection still need a response from the temp queue |
| ENTESB-14616 | Restore and document SAP credentials |
| ENTESB-14792 | Managed paths metadata fail to parse when entry contains whitespace |
| ENTESB-14479 | 7.8 fabric8-maven-plugin not deploying quickstarts |
| ENTESB-14014 | [React-UI] Mapping preview - when the input is deleted, the result field isn' cleaned too |

| Issue | Description |
| --- | --- |
| ENTESB-15386 | [Apicurito] Wrong import of SpringBootServletInitializer |
| ENTESB-14549 | XNIO "ConnectionCount" attribute in MBean returns "-1" |
| ENTESB-15406 | Apicurito bundle contains upstream CSV |
| ENTESB-14491 | Camel subsystem ignores socket.binding.port-offset |
| ENTESB-14101 | Failed to define class io.netty.util.internal.logging.Log4J2Logger |
| ENTESB-15421 | Syndesis fails when updating via operatorhub |
| ENTESB-14341 | The karaf health check uses the same servlet container as user traffic |
| ENTESB-15317 | Apicurito generator pods are not ready |
| ENTESB-14566 | MailIntegrationTest may not receive expected number of messages |
| ENTESB-13155 | camel-restdsl-openapi-plugin nullpointerexception |
| ENTESB-15155 | Features camel-milo, camel-thrift, camel-zipkin are not working |
| ENTESB-14631 | Package org.tallison.isoparser has unsatisifed external dependency on package junit |
| ENTESB-14736 | Securing via JMX does not work |
| ENTESB-14757 | CXF SB2 is broken |
| ENTESB-15131 | API Provider integration returns empty result |
| ENTESB-14090 | SSL server socket already in use for APNS server |
| ENTESB-14870 | Upgrade to camel-2.23.2.fuse-780026 |
| ENTESB-14931 | Investigate BOM differences across runtimes |
| ENTESB-14236 | camel-cdi - MandatoryJtaTransactionPolicy and NeverJtaTransactionPolicy miss to call the runnable work |
| ENTESB-15357 | Fuse Online install script get stuck on waiting for Jaeger operator on OCP4 when another Fuse Online is installed |
| ENTESB-15296 | Unable to use CVE respin image without manual intervention |

| Issue | Description |
| --- | --- |
| ENTESB-15420 | karaf quickstarts references wrong image in readme |
| ENTESB-15148 | CXF is incompatible with javax.activation version in Karaf |
| ENTESB-15299 | CVP error on Fuse Console bundle |
| ENTESB-13674 | SSL certificate issue with XMPP Server |
| ENTESB-15242 | FMP fabric8 goal mismatch between Fuse 7.7 and 7.8 |
| ENTESB-14517 | Error pulling image configuration: toomanyrequests |
| ENTESB-14615 | Restore and document ServiceNow credentials |
| ENTESB-15363 | After upgrade Fuse Online 7.6 to 7.7 via fuse online update script, the jaeger-operator SA not contains syndesis pull secret [OCP 3.11 only] |
| ENTESB-14910 | NoSuchMethodError: com.google.common.util.concurrent.MoreExecutors.sameThreadExecutor |
| ENTESB-14752 | Fuse 7.8 CI broken - incomplete UMB handed over |
| ENTESB-14380 | Google APIs no longer accessible |
| ENTESB-14771 | spring-boot-camel-soap-rest-bridge-archetype broken |
| ENTESB-15038 | AS2 component doesn't work on Karaf |
| ENTESB-14099 | Failed to define class org.apache.camel.script.osgi.Activator |
| ENTESB-15149 | Could not initialize class org.apache.cxf.attachment.AttachmentUtil |
| ENTESB-14612 | quickstarts not working |
| ENTESB-14089 | Netty server port address already in use for Atomix |
| ENTESB-15027 | syndesis-public-oauthproxy cant start when installed using operatorhub |
| ENTESB-15267 | spring-boot-camel-config quickstart fail after fabric8 changes |
| ENTESB-13592 | CXF over JMS: Connections leak after broker recovery |
| ENTESB-15340 | After cleanup Apicurito cannot be installed via operator |

| Issue | Description |
| --- | --- |
| ENTESB-15309 | Apicurito operator image contains apicurito-generator image |
| ENTESB-14007 | producer timeout settings does not work with camel-cxfrs |
| ENTESB-15424 | Quickstarts don't expose routes on OCP 4.x |
| ENTESB-13827 | Missing license info for artifacts referenced in fuse layer |
| ENTESB-14975 | Misalignments with Component alignment document |
| ENTESB-15065 | fabric8-maven-plugin error applying RoleBinding |
| ENTESB-15099 | After moving to stax2 4.x / woodstox 5.x, camel-fhir has OSGi problems |
| ENTESB-15007 | Wrong jasypt-version for Fuse 7.7 |
| ENTESB-15069 | Apicurito bundle 1.8-4 fails to start |
| ENTESB-14388 | Atlasmap - multiple properties with same name allowed |
| ENTESB-14623 | Unable to build syndesis 1.11.x |
| ENTESB-14776 | Invalid resource request - Syndesis meta |
| ENTESB-14600 | Split/concatenate on CSV rows does not work correclty |
| ENTESB-13788 | Migrate Kafka integration testing to docker |
| ENTESB-14445 | Atlasmap - initial constant & property type not reflected in backend |
| ENTESB-14434 | Application monitoring stack does not work with Syndesis 1.11.x |
| ENTESB-14026 | SOAP Connector serviceName & portName not set properly |
| ENTESB-14436 | Upstream image centos/postgresql-96-centos7 is being used in product |
| ENTESB-14117 | backport PR8678 |
| ENTESB-14025 | SOAP Connector fix inability to handle URL ending in ?WSDL |
| ENTESB-14386 | fuse-console-operator-container image does not pass CVP operator gates |
| ENTESB-14507 | Autodiscover Kafka broker doesn't work on OCP 4.5 |
| ENTESB-14489 | FuseOnlinePostgresExporterDown rule is not parsable |

| Issue | Description |
|---|---|
| ENTESB-14768 | Install operator installs custom resource as well |
| ENTESB-14410 | Unable to enable TODO and Jaeger addons |
| ENTESB-14198 | When reconfiguring webhook step the http responses can't be changed |
| ENTESB-14456 | Operator prints Installing addon on each loop |
| ENTESB-14635 | Unable to get PlatformTransactionManager OSGI service |
| ENTESB-14775 | fuse-eap-openshift image is based on incorrect EAP base image |
| ENTESB-14197 | Integration summary page is missing integration status |
| ENTESB-14941 | Wrong bom version referencing when create quickstarts from application templates |
| ENTESB-13110 | Postgres version check runs on each reconcile even without upgrade |
| ENTESB-14013 | [React-UI] Mapping preview tab - mapping preview not interactive |
| ENTESB-14596 | More Syndesis are not able to be installed at the same time |
| ENTESB-14064 | API Client Connector Detail Page UI issues |
| ENTESB-13854 | API Client + SOAP Connector wizard security fields are hidden by default |
| ENTESB-14068 | Allow user to set additional maven arguments for integration builds |
| ENTESB-14048 | API Client Connector form doesn't validate security fields |
| ENTESB-14024 | SOAP Client Connector should show Address field |
| ENTESB-13992 | Errors in crc script cause jaeger-operator to crash and prevent install of remaining addons |
| ENTESB-14338 | Camel opentracing cannot load types from ServiceLoader |
| ENTESB-14092 | Infinispan library infinispan-query-dsl is not alligned to EAP infinispan version |
| ENTESB-13768 | Fuse on windows does not start without data directory |
| ENTESB-14749 | Regression: [ENTESB-4766] Authorization not working for Hawtio on EAP |

| Issue | Description |
| --- | --- |
| ENTESB-14601 | Fuse 7.7 on OpenShift quickstarts fail on OCP 4.4 |
| ENTESB-14939 | Archetypes from 2.2.0.fuse-sb2-780022-redhat-00001 reference to wrong BOM |
| ENTESB-14633 | Use Jackson 2.9.x in Fuse Karaf BOM |
| ENTESB-15025 | AMQ Broker image override by RELATED_IMAGE_AMQ doesnt work |
| ENTESB-14964 | Apicurito UI cannot be accessed from standard route |
| ENTESB-14966 | Unproductized hawtio-wildfly artifact |
| ENTESB-14905 | Address field missing in editing SOAP connector |
| ENTESB-14562 | Missing property portName in SOAP connector |
| ENTESB-14564 | SOAP connector cannot be created |
| ENTESB-14753 | SOAP Connector - no error shown if unable to load wsdl from URL |
| ENTESB-14838 | SOAP connector can't use XML Schema Choice type as AtlasMap doesn't support it |
| ENTESB-13988 | WebHook returns different response code as was set |
| ENTESB-15040 | IBM MQ 9.1.0.6 client cannot be installed in Karaf |
| ENTESB-14873 | (Upgrade) Failing second Jaeger operator after Fuse Online update 7.7 to 7.8 |
| ENTESB-14301 | Opentracing doesn't work with Kafka Component |
| ENTESB-14415 | [Fuse Console] Hawtio is up/down continuously on Fuse OpenShift 4 |
| ENTESB-14953 | FHIR Patient items are not able to use in data mapper |
| ENTESB-14952 | no templates for **karaf\***|**eap\*** quickstarts |
| ENTESB-14189 | Atlasmap source CSV → target CSV causing java.lang.IndexOutOfBoundsException |
| ENTESB-14780 | After replacing ClusterRoleBindings to RoleBindings, Kafka autodiscovery and PublicAPI don't work |

| Issue | Description |
|---|---|
| ENTESB-15031 | Unable to create backup - db version mismatch |
| ENTESB-14751 | Unable to specify nonexistent kafka topic when some topic is already created |
| ENTESB-14767 | Kafka connection modification warning |
| ENTESB-14897 | Camel-k should be removed in 7.8 but it is still present in the CRD |
| ENTESB-14979 | fuse-apicurito.yaml not found into application-templates |
| ENTESB-14541 | Jaeger subscription not removed after deleting syndesis CR |
| ENTESB-14866 | Jaeger subscription isnt created when some of the resources already exist |
| ENTESB-14651 | Autodiscovering Kafka works only for one Syndesis instance on the OCP at the same time |
| ENTESB-14924 | No productised tag exists for application-templates |
| ENTESB-14453 | camel-sap: verify support SAP JCo 3.1 (3.0 out of support October 2020) |
| ENTESB-14874 | SyndesisDB is not ready after update Fuse Online 7.7 to 7.8 |
| ENTESB-15064 | Not all dependencies needed for building Fuse Online integrations present in offline manifest |