Red Hat Fuse 7.10

Release Notes for Red Hat Fuse 7.10

What's new in Red Hat Fuse

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Red Hat Fuse 7.10 Release Notes for Red Hat Fuse 7.10

What's new in Red Hat Fuse
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Abstract

These notes provide an overview of the changes between Red Hat Fuse releases.
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MAKING OPEN SOURCE MORE INCLUSIVE

Red Hat is committed to replacing problematic language in our code, documentation, and web properties. We are beginning with these four terms: master, slave, blacklist, and whitelist. Because of the enormity of this endeavor, these changes will be implemented gradually over several upcoming releases. For more details, see our CTO Chris Wright’s message.
CHAPTER 1. FUSE 7.10 PRODUCT OVERVIEW

1.1. FUSE DISTRIBUTIONS

Fuse 7.10 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 7.10 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. FUSE 7.10.1 NOTES

For Fuse on OpenShift 7.10.1, the BASEURL for image streams is https://raw.githubusercontent.com/jboss-fuse/application-templates/application-templates-2.1.0.fuse-sb2-7_10_1-00010-redhat-00001.
For **Fuse Online**, to upgrade from Fuse Online 7.9.x to 7.10.1, follow the instructions in Section 2.4, “Upgrading from Fuse Online 7.9.x to 7.10.1 requires manual upgrade steps”.

For **Fuse standalone**, set the 7.10.1 **fuse.version** property to the corresponding BOM version as listed in Section 4.4.1, “BOM File for Fuse 7.10.1”.

See also Section 8.4, “Bugs resolved in Fuse 7.10 and 7.10.1”.

### 1.4. IMPORTANT NOTES

Fuse 7.10 includes a fix for the Log4j 2.x security issue, **CVE-2021-44228** (popularly known as Log4Shell).

Fuse 7.10.1 also includes the following fixes for the Log4j 2.x security issue:

- **CVE-2021-4104**
- **CVE-2022-23307**
- **CVE-2022-23302**
- **CVE-2022-23305**

### 1.5. SUPPORTED CONFIGURATIONS

**IMPORTANT**

For running Fuse in Apache Karaf, we recommend OpenJDK 8u282 or OpenJDK 8u302. Do not use OpenJDK 8u292, which has a known issue affecting the credential store (see ENTESB-16417). OracleJDK 1.8.0_291 is also affected by this issue.

For information about supported configurations, standards, and components in version 7.10, 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:

<table>
<thead>
<tr>
<th>Host Environment</th>
<th>Installation</th>
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<tbody>
<tr>
<td>OpenShift Dedicated</td>
<td>Red Hat installs and provisions Fuse Online on Red Hat infrastructure.</td>
</tr>
<tr>
<td>OpenShift Container Platform</td>
<td>Customer installs and manages.</td>
</tr>
</tbody>
</table>

2.2. NEW FEATURES IN FUSE ONLINE 7.10

Fuse Online 7.10 provides the following new features:

- **Support for connecting to Red Hat Managed Kafka**
  To support connecting to Red Hat Managed Kafka, the Kafka Message Broker connector includes the following fields:
    - Security Protocol
    - SASL Mechanism
    - Username
    - Password
    - SASL Login Callback Handler Class
    - OAuth Token Endpoint URI
  For more information, see Chapter 15, "Connecting to Kafka" in Connecting Fuse Online to Applications and Services.

- **Integration labels**
  When you save an integration, you can apply one or more labels to it. A label is a key-value pair tag that you can apply to an integration (or other OpenShift resource) for later filtering and selecting in OpenShift. For example, an OpenShift admin user can filter the list of running pods or deployments by label.

- **Integration environment variables**
  Optionally, when you save an integration, you can set one or more environment variables that Fuse Online applies to the integration Pod. You can use these environment variables to set Spring Boot configuration options, for example, to set SERVER_MAX_HTTP_HEADER_SIZE. Existing environment variables set manually are preserved.
Note that setting these environment variables in Fuse Online when you save an integration does not change or impact any other environment settings set manually, for example, through the OpenShift web console interface.

- **Maven mirror setting**
  You can specify the Maven repository that you want Fuse Online to use for accessing Maven artifacts when it builds integrations. In the Syndesis custom resource, specify the Maven repository as the value of the `components:server:features:maven:mirror` setting.

### 2.3. CHANGES IN FUSE ONLINE 7.10

Fuse Online 7.10 changes Fuse Online 7.9 features as follows:

- **To enable the sample Postgres database, use the `todo addon` option**
  In previous releases, if you want to include a sample database and sample database connector in your Fuse Online installation, set the `demoData` option in the Fuse Online custom resource. Starting with Fuse Online 7.10, you enable the sample database and connector by setting the `todo addon` option, which also includes the sample Todo app for testing integrations.

- **Kafka broker URIs are auto-discovered for AMQ Streams**
  If you use AMQ Streams (API versions v1beta1 or v1beta2), when you create a new Kafka Message Broker connection in Fuse Online, the Kafka Broker URI is auto-discovered and shown in the Kafka Broker URI drop-down list.

- **Disconnected environment requires setting environment variables**
  For Fuse Online to install and work in a disconnected environment, you must set the following environment variables to `syndesis-oauthproxy`:
  
  - HTTPS_PROXY
  - HTTP_PROXY
  - NO_PROXY

- **deployIntegrations flag no longer available**
  The `deployIntegrations` option in the Fuse Online custom resource that controlled whether integrations were deployed has been removed.

### 2.4. UPGRADING FROM FUSE ONLINE 7.9.X TO 7.10.1 REQUIRES MANUAL UPGRADE STEPS

If you installed Fuse Online 7.9.x and you want to upgrade to Fuse Online 7.10.1, you must first manually upgrade to Fuse Online 7.10.0.

1. In the Administrator perspective of the OpenShift Container Platform web console, navigate to Operators > Installed Operators.

2. Click the Red Hat Integration Fuse Online 7.9.3 Operator.

3. Click the Subscription tab.

4. Verify that Update approval is set to Manual:
   - If Update approval is set to Manual, skip to the next step.
- If Update approval is set to Automatic:
  a. Click Automatic.
  b. In the Change Update Approval Strategy dialog, select Manual and then click Save.

5. Under Update channel, click 7.9.3.

6. For the Change subscription update channel, select 7.10.x.
   Note: The latest, candidate, and stable channels are Technology Preview features.

7. Under Upgrade status, click Upgrade available.

8. Click Preview InstallPlan and then Approve.

9. Verify that the operator has fully completed the upgrade to Fuse Online 7.10.0:
   a. Navigate to the Operators > Installed Operators page and then click Red Hat Integration Fuse Online. The Operator Details page opens.
   b. Select the Sydnesis tab. The status for the Fuse Online instance (the default name is app) initially shows Installed (to indicate that Fuse Online 7.9.3 is installed). It then progresses through several phases (Installing, Starting, and Installed). When it reaches the Installed phase again, the upgrade to 7.10.0 is complete.

10. Navigate back to the Operators > Installed Operators page, and then click Upgrade available for the Red Hat Integration Fuse Online operator.

11. Click Preview InstallPlan and then Approve.

12. Verify that the operator has fully completed the upgrade to Fuse Online 7.10.1:
   a. Navigate to Networking > Routes and then click on the location link for syndesis to open the Fuse Online web console.
   b. In the upper right corner of the Fuse Online console, click the ? icon and then select About.
   c. Verify that the About page includes 7_10_1 in the version number.

2.5. 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 and then republish any running integrations as described in Upgrading Fuse Online.

On OCP 4.9, when you upgrade to 7.10 by using the operator, the following warning is displayed during the Fuse Online Operator upgrade process:

W1219 18:38:58.064578 1 warnings.go:70] extensions/v1beta1 Ingress is deprecated in v1.14+, unavailable in v1.22+; use networking.k8s.io/v1 Ingress

This warning appears because clients (that Fuse Online uses for the Kubernetes/OpenShift API initialization code) access a deprecated Ingress version. This warning is not an indicator of complete use of deprecated APIs and there is no issue with upgrading to Fuse Online 7.10.

2.6. IMPORTANT NOTES FOR FUSE ONLINE

Important notes for the Fuse 7.10 release of the Fuse Online distribution:
- 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.

- Since Fuse 7.8, 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.

- On OCP 4.9 (or later), the application-monitoring project no longer works. It is a prerequisite for monitoring Fuse Online integrations and infrastructure components with Prometheus and Grafana.

  To workaround this issue, you can use the built-in OpenShift monitoring stack (in the openshift-monitoring namespace) to use the openshift-user-workload-monitoring feature and the grafana-operator to use the ops addon as described in the following Adding Fuse Online monitoring resources (Prometheus and Grafana) on OCP 4.9 (or later) procedure.

### 2.6.1. Adding Fuse Online monitoring resources (Prometheus and Grafana) on OCP 4.9 (or later)

#### Prerequisites

- Fuse Online is installed and running on OCP 4.9 (or later) on-site.

- The **oc** client tool is installed and it is connected to the OCP cluster in which Fuse Online is installed.

- You have **admin** access to the OCP cluster.

- Your Fuse Online installation is configured with the **ops addon** enabled. If required, you can enable it with this command:

```
oc patch syndesis/app --type=merge -p '{"spec": {"addons": {"ops": {"enabled": true}}}}'
```

#### Procedure

1. If there is an existing openshift-monitoring configuration, skip to Step 2.

   Otherwise, create an openshift-monitoring configuration, that sets the user workload monitoring option to **true** and then skip to Step 3:

   ```
   oc apply -f - <<EOF
   apiVersion: v1
   kind: ConfigMap
   metadata:
   name: cluster-monitoring-config
   EOF
   ```
namespace: openshift-monitoring
data:
  config.yaml:
    enableUserWorkload: true
EOF

2. If there is an existing openshift-monitoring configuration:
   a. Check the existing openshift-monitoring configuration to determine whether the user workload monitoring option is set to true:

   ```
ooc get -n openshift-monitoring cm/cluster-monitoring-config -ojsonpath='{.data.config.yaml}'
   ```

   If the result is enableUserWorkload: true, the user workload monitoring option is set to true. Skip to Step 3.

   If the result shows any other configurations, continue to the next step to enable the monitoring of user workloads by editing the ConfigMap.

   b. Open the ConfigMap file in an editor, for example:

   ```
ooc -n openshift-monitoring edit cm/cluster-monitoring-config
   ```

   c. Set enableUserWorkload to true. For example:

   ```
apiversion: v1
kind: ConfigMap
metadata:
  name: cluster-monitoring-config
namespace: openshift-monitoring
data:
  config.yaml:
    enableUserWorkload: true
   ```

   d. Save the ConfigMap file.

3. Use the following command to watch the status of the pods in the openshift-user-workload-monitoring namespace:

   ```
ooc -n openshift-user-workload-monitoring get pods -w
   ```

   Wait until the status of the pods is Running, for example:

   ```
prometheus-operator-5d989f48fd-2qbzd   2/2     Running
prometheus-user-workload-0             5/5     Running   prometheus-user-workload-1
5/5     Running
thanos-ruler-user-workload-0           3/3     Running
thanos-ruler-user-workload-1           3/3     Running
   ```

4. Verify that the Fuse Online alert rules are enabled in Prometheus:
   a. Access the internal prometheus instance
oc port-forward -n openshift-user-workload-monitoring pod/prometheus-user-workload-0 9090

b. Open your browser to **localhost:9090**

c. Select **Status** > **Targets**. You should see three **syndesis** endpoints.

d. Press **CTRL-C** to terminate the **port-forward** process.

5. From the OperatorHub, install the Grafana Operator 4.1.0 to a namespace of your choosing, for example, to the **grafana-middleware** namespace.

6. Add a cluster role and a cluster role binding to allow the **grafana-operator** to list nodes and namespaces:

   a. Download the cluster role YAML file from the **grafana-operator** website:

```
curl https://raw.githubusercontent.com/grafana-operator/grafana-operator/master/deploy/cluster_roles/cluster_role_grafana_operator.yaml > tmp_role.yaml
```

   b. Add cluster permission for the **grafana-operator** to read other namespaces and nodes:

```
cat <<EOF >> tmp_role.yaml
- apiGroups:
  - ""
- resources:
  - namespaces
  - nodes
- verbs:
  - get
  - list
  - watch
EOF
```

```
oc apply -f tmp_role.yaml
```

```
oc apply -f - <<EOF
apiVersion: rbac.authorization.k8s.io/v1
kind: ClusterRoleBinding
metadata:
  name: grafana-operator
roleRef:
  name: grafana-operator
  kind: ClusterRole
  apiGroup: ""
subjects:
  - kind: ServiceAccount
    name: grafana-operator-controller-manager
    namespace: grafana-middleware
EOF
```

7. Enable the **grafana-operator** to read Grafana dashboards from other namespaces by using the **DASHBOARD_NAMESPACES_ALL** environment variable to limit the namespaces:
8. Check that the grafana pods are recreated:

```bash
oc -n grafana-middleware get pods -w
```

9. Optionally, view the grafana-operator logs:

```bash
oc -n grafana-middleware logs -f `oc -n grafana-middleware get pods -oname|grep grafana-operator-controller-manager` -c manager
```

10. Add a Grafana custom resource to start a Grafana server pod, for example:

```yaml
oc apply -f - <<EOF
apiVersion: integreatly.org/v1alpha1
kind: Grafana
metadata:
  name: grafana-middleware
  namespace: grafana-middleware
spec:
  config:
    auth:
      disable_signout_menu: true
    auth.anonymous:
      enabled: true
    log:
      level: warn
      mode: console
    security:
      admin_password: secret
      admin_user: root
  dashboardLabelSelector:
    - matchExpressions:
      - key: app
        operator: In
        values:
        - grafana
        - syndesis
      ingress:
        enabled: true
EOF
```

11. Allow the grafana-operator to read monitoring information:

```bash
oc -n grafana-middleware adm policy add-cluster-role-to-user cluster-monitoring-view -z grafana-serviceaccount
```

12. Add a GrafanaDatasource to query thanos-querier:

```bash
oc apply -f - <<EOF
apiVersion: integreatly.org/v1alpha1
kind: GrafanaDataSource
metadata:
EOF
```
name: prometheus-grafanadatasource
namespace: grafana-middleware
spec:
  datasources:
  - access: proxy
    editable: true
    isDefault: true
    jsonData:
      httpHeaderName1: 'Authorization'
      timeInterval: 5s
      tlsSkipVerify: true
      name: Prometheus
    secureJsonData:
      httpHeaderValue1: "Bearer $(oc -n grafana-middleware serviceaccounts get-token grafana-serviceaccount)"
      type: prometheus
      url: "https://$(oc get route thanos-querier -n openshift-monitoring -ojsonpath='{.spec.host}')"
  name: prometheus-grafanadatasource.yaml
EOF

13. View the grafana server log:

   oc logs -f `oc get pods -l app=grafana -oname`

14. Access the grafana URL and view the Fuse Online dashboards:

   echo "https://"$(oc -n grafana-middleware get route/grafana-route -ojsonpath='{.spec.host}')"

2.7. 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.

2.8. 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.

- Data Mapper supports CSV data
  For any Fuse Online connector that has an action for which you can define a data shape, you
  now have the option to specify a CSV instance (in addition to the options to specify JSON
  schema, JSON instance, XML schema, or XML instance). For example, in a Webhook
connection, you can specify a CSV file as a data output type for an action.

- **Fuse Online auditing**
  Fuse Online supports basic auditing for changes made by any user to the following Fuse Online components:
  
  - **Connections** - The **Name** and any other fields shown on the connector’s **Details** page in the Fuse Online web console.
  
  - **Connectors** - The **Name** field.
  
  - **Integrations** - The **Name** field.

- **Conditional expressions for mapping data fields**
  In the data mapper, you can specify a conditional expression and apply it to a 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.

- **Document scope for user-defined properties in data mapper**
  In the data mapper, you can specify a scope for properties that you define for source and target mappings. In the **Mapping Details** panel, click **Add (+)** next to **Properties**. In the **Create Property** dialog, for the new **Scope** option, you can select the current message header, a message header from a previous step, or **Camel Exchange Property** for Camel-specific properties.

- **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 OPENSHEET

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

3.1. SUPPORTED VERSION OF OPENSHEET

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:

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<th>Image</th>
<th>Platform</th>
<th>Supported architectures</th>
</tr>
</thead>
<tbody>
<tr>
<td>fuse7/fuse-java-openshift-rhel8</td>
<td>Spring Boot</td>
<td>AMD64 and Intel 64 (x86_64)</td>
</tr>
<tr>
<td>fuse7/fuse-java-openshift-jdk11-rhel8</td>
<td>Spring Boot</td>
<td>AMD64 and Intel 64 (x86_64), IBM Z and LinuxONE (s390x), IBM Power Systems (ppc64le)</td>
</tr>
<tr>
<td>fuse7/fuse-karaf-openshift-rhel8</td>
<td>Apache Karaf</td>
<td>AMD64 and Intel 64 (x86_64)</td>
</tr>
<tr>
<td>fuse7/fuse-karaf-openshift-jdk11-rhel8</td>
<td>Apache Karaf</td>
<td>AMD64 and Intel 64 (x86_64)</td>
</tr>
<tr>
<td>fuse7/fuse-eap-openshift-jdk8-rhel7</td>
<td>Red Hat JBoss Enterprise Application Platform</td>
<td>AMD64 and Intel 64 (x86_64)</td>
</tr>
<tr>
<td>fuse7/fuse-eap-openshift-jdk11-rhel8</td>
<td>Red Hat JBoss Enterprise Application Platform</td>
<td>AMD64 and Intel 64 (x86_64)</td>
</tr>
<tr>
<td>fuse7/fuse-console-rhel8</td>
<td>Fuse console</td>
<td>AMD64 and Intel 64 (x86_64), IBM Z and LinuxONE (s390x), IBM Power Systems (ppc64le)</td>
</tr>
<tr>
<td>fuse7/fuse-console--rhel8-operator</td>
<td>Fuse console operator</td>
<td>AMD64 and Intel 64 (x86_64), IBM Z and LinuxONE (s390x), IBM Power Systems (ppc64le)</td>
</tr>
<tr>
<td>fuse7/fuse-apicurito-generator-rhel8</td>
<td>Apicurito REST application generator</td>
<td>AMD64 and Intel 64 (x86_64)</td>
</tr>
<tr>
<td>fuse7/fuse-apicurito-rhel8</td>
<td>Apicurito REST API editor</td>
<td>AMD64 and Intel 64 (x86_64)</td>
</tr>
<tr>
<td>fuse7/fuse-apicurito-rhel8-operator</td>
<td>API Designer Operator</td>
<td>AMD64 and Intel 64 (x86_64)</td>
</tr>
</tbody>
</table>
3.3. NEW FEATURES IN FUSE 7.10 ON OPENSФHT

Fuse on OpenShift provides the following new features in version 7.10:

- **Fuse Console performance tuning (OpenShift 4.x only)**
  You can tune the performance of the Fuse Console by setting any of the `clientBodyBufferSize`, `proxyBuffers`, and `subrequestOutputBufferSize` environment variables.
  
  **Note:** This feature is not supported on OpenShift 3.11.

- **Support for JDK 11**
  Fuse 7.10 offers support for building the Fuse on OpenShift quickstarts using JDK 11.

- **Running quickstarts with openshift-maven-plugin**
  Fuse 7.10 uses new `openshift-maven-plugin` when building and running the Fuse on OpenShift quickstarts with Maven archetypes.

- **Support for IBM Power Systems, IBM Z, and LinuxONE**
  Fuse 7.10 adds support for IBM Power Systems(ppc64le), IBM Z, and LinuxONE (s390x) on Red Hat OpenShift Container Platform 4.9 and later.

**NOTE**

In Fuse 7.10, installing the Fuse on OpenShift imagestreads and templates on IBM Power Systems, IBM Z, and LinuxONE is **not** supported. Only the components that can be installed with Fuse on OpenShift Operators are supported on IBM Power Systems, IBM Z, and LinuxONE.

3.4. IMPORTANT NOTES

Important notes for the Fuse 7.10 release of the Fuse on OpenShift distribution:

**OpenJ9 images for IBM Z and IBM Power Systems are deprecated**

OpenJ9 images for IBM Z and IBM Power Systems are deprecated for Fuse 7.10. The OpenJDK11 Builder and Runtime images have been updated to support multiple architectures.

**Support for Fuse 7.10 on OpenShift Container Platform (OCP) 4.9**

Fuse 7.10 contains updates that enable it to work with OpenShift Container Platform (OCP) 4.9. If you plan to upgrade to OCP 4.9, you must upgrade Fuse to version 7.10 **before** you upgrade OCP to version 4.9. Earlier versions of Fuse (prior to 7.10) do not support OCP 4.9.

**Data Virtualization has been removed**

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

**Spring Boot 1 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.

**Fabric8 Maven plugin is removed**

Fabric8 Maven plugin is completely removed from Fuse 7.10 and replaced with OpenShift Maven plugin since Fuse 7.10. Use OpenShift Maven plugin to build and deploy your applications.

**Running quickstarts with JDK11**
Use the correct JDK11 profile during the compile time if you want to use JDK11 based image at runtime. When building and deploying the quickstarts using JDK11, ensure that you have installed JDK11 on your build machine and then build your quickstarts using the correct JDK11 profile.

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.

**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 7.10 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 7.10

The main new features of Fuse standalone in version 7.10 are:

Java 11 is supported for Apache Karaf

Java 11 is now supported on the Apache Karaf runtime.

4.3. TECHNOLOGY PREVIEW FEATURES

The following features of Fuse standalone are Technology Preview only and are not supported in Fuse 7.10:

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 environment). 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.

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

To access the Language Support for Apache Camel 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
- 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 AtlasMap Data Transformation editor

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).

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 7.10 AND FUSE 7.10.1

To configure your Maven projects to use the supported Fuse 7.10 and 7.10.1 artifacts, use the BOM versions documented in this section.

4.4.1. BOM File for Fuse 7.10.1

To upgrade your Fuse standalone applications to use the 7.10.1 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 7.10.1 using the BOM

<table>
<thead>
<tr>
<th>Container Type</th>
<th>Maven BOM or Plugin Artifact groupId/artifactId</th>
<th>Version for Fuse 7.10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring Boot 2</td>
<td>org.jboss.redhat-fuse/fuse-springboot-bom</td>
<td>7.10.0.fuse-sb2-7_10_1-00008-redhat-00001</td>
</tr>
</tbody>
</table>
### 4.4.2. BOM File for Fuse 7.10

To upgrade your Fuse standalone applications to use the 7.10 dependencies, edit the Maven `pom.xml` and change the versions of the BOMs and Maven plugins listed in the following table:

**Table 4.2. Maven BOM and plugin versions for 7.10 using the BOM**

<table>
<thead>
<tr>
<th>Container Type</th>
<th>Maven BOM or Plugin Artifact groupId/artifactId</th>
<th>Version for Fuse 7.10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring Boot 2</td>
<td><code>org.jboss.redhat-fuse/fuse-springboot-bom</code></td>
<td><code>7.10.0.fuse-sb2-7_10_0-00014-redhat-00001</code></td>
</tr>
<tr>
<td></td>
<td><code>org.jboss.redhat-fuse/spring-boot-maven-plugin</code></td>
<td><code>7.10.0.fuse-sb2-7_10_0-00014-redhat-00001</code></td>
</tr>
<tr>
<td>Apache Karaf</td>
<td><code>org.jboss.redhat-fuse/fuse-karaf-bom</code></td>
<td><code>7.10.0.fuse-sb2-7_10_0-00008-redhat-0001</code></td>
</tr>
<tr>
<td></td>
<td><code>org.jboss.redhat-fuse/karaf-maven-plugin</code></td>
<td><code>7.10.0.fuse-sb2-7_10_0-00008-redhat-0001</code></td>
</tr>
<tr>
<td>JBoss EAP</td>
<td><code>org.jboss.redhat-fuse/fuse-eap-bom</code></td>
<td><code>7.10.0.fuse-sb2-7_10_0-00008-redhat-0001</code></td>
</tr>
</tbody>
</table>

For more details about using the BOM, see the [Migration Guide](#).

### 4.5. IMPORTANT NOTES

Important notes for the Fuse 7.10 release of the Fuse standalone distribution:

Java 11 is supported for Apache Karaf

---

For more details about using the BOM, see the [Migration Guide](#).
The Fuse 7.10 release now supports Java 11 on the Apache Karaf runtime.

Creating a connection to MongoDB using the MongoClients factory

From Fuse 7.10, use `com.mongodb.client.MongoClient` instead of `com.mongodb.MongoClient` to create a connection to MongoDB (note the extra `.client` sub-package in the full path). This affects any user applications that use `camel-mongodb`, which will now need to create a connection bean as a `com.mongodb.client.MongoClient` instance. Moreover, the methods exposed by this class are not exactly the same as the old class which could require more refactoring of user code.

For example, create a connection to MongoDB as follows:

```java
import com.mongodb.client.MongoClient;

You can then create the MongoClient bean as shown in following example:

```java
return MongoClients.create("mongodb://admin:password@192.168.99.102:32553");
```
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 7.10 and may be removed in a future release:

OpenWire protocol is deprecated
Since Fuse 7.10, use of the OpenWire protocol (which could be used to connect AMQ Broker instances) is deprecated. Note that the OpenWire protocol is also deprecated in AMQ Broker since AMQ Broker version 7.9.0.

wsdl2rest tool is deprecated
Since Fuse 7.10, the wsdl2rest command line tool is deprecated. The WSDL 2 Camel Rest DSL extension for VS Code is also deprecated.

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 7.10

fabric8-maven-plugin
The fabric8-maven-plugin has been completely removed from Fuse 7.10. We recommend that you use the openshift-maven-plugin instead for building and deploying Maven projects in Fuse on
OpenShift. The plugin is maintained by Eclipse JKube, which provides extensive documentation for the plugin.

5.3. 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.

5.4. 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.

5.5. 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.

5.6. 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.

5.7. 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 Fuse 7.0. It is recommended that you use the Hibernate implementation instead.

### 5.8. 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 7.10

The following features are unsupported in Red Hat Fuse 7.10.

**camel-leveldb component is not supported for Fuse on the IBM PowerPC and Z platforms**

When Fuse is installed on the IBM PowerPC or IBM Z platforms, the Camel LevelDB component is not supported.

**Installation of Fuse Console using the Operator is not supported on OCP 3.11**

Installation of the Fuse Console using the Operator is not supported and does not work on OpenShift Container Platform (OCP) 3.11. The recommended way to install Fuse Console on OCP 3.11 is to use templates.

**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 7.10.

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 7.10.

CVE-2020-13936

**CVE-2020-13936 velocity: arbitrary code execution when attacker is able to modify templates**

An attacker that is able to modify Velocity templates may execute arbitrary Java code or run arbitrary system commands with the same privileges as the account running the Servlet container. This applies to applications that allow untrusted users to upload/modify velocity templates running Apache Velocity Engine versions up to 2.2.

Fuse 7.9 (and later) has modified its dependencies to ensure that it uses only the Velocity version (that is, version 2.3) that has been fixed to protect against this security vulnerability. If your application code has any explicit dependencies on the Apache Velocity component, we recommend that you upgrade these dependencies to use the fixed version.

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 (and later) 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).

CVE-2021-30129 mina-sshd-core: Memory leak denial of service in Apache Mina SSHD Server
A vulnerability in sshd-core of Apache Mina SSHD allows an attacker to overflow the server causing an OutOfMemory error. This issue affects the SFTP and port forwarding features of Apache Mina SSHD version 2.0.0 and later versions. It was addressed in Apache Mina SSHD 2.7.0. This vulnerability in Apache Mina SSHD was addressed by SSHD-1004, which deprecates certain cryptographic algorithms that have this vulnerability. In Fuse 7.10 on Karaf and Fuse 7.10 on JBoss EAP, these deprecated algorithms are still supported (for reasons of backwards compatibility). However, if you are using one of these deprecated algorithms, it is strongly recommended that you refactor your application code to use a different algorithm instead.

In Fuse 7.10, the default cipher algorithms have changed as follows.

<table>
<thead>
<tr>
<th>Fuse 7.9</th>
<th>Fuse 7.10</th>
<th>Deprecated in Fuse 7.10?</th>
</tr>
</thead>
<tbody>
<tr>
<td>aes128-ctr</td>
<td>aes128-ctr</td>
<td></td>
</tr>
<tr>
<td>aes192-ctr</td>
<td>aes256-ctr</td>
<td></td>
</tr>
<tr>
<td><a href="mailto:aes128-gcm@openssh.com">aes128-gcm@openssh.com</a></td>
<td><a href="mailto:aes256-gcm@openssh.com">aes256-gcm@openssh.com</a></td>
<td></td>
</tr>
<tr>
<td>arcfour128</td>
<td>arcfour128</td>
<td>yes</td>
</tr>
<tr>
<td>aes128-cbc</td>
<td>aes128-cbc</td>
<td></td>
</tr>
<tr>
<td>aes192-cbc</td>
<td>aes256-cbc</td>
<td></td>
</tr>
<tr>
<td>3des-cbc</td>
<td>3des-cbc</td>
<td>yes</td>
</tr>
<tr>
<td>blowfish-cbc</td>
<td>blowfish-cbc</td>
<td>yes</td>
</tr>
</tbody>
</table>

In Fuse 7.10, the default key exchange algorithms have changed as follows.

<table>
<thead>
<tr>
<th>Fuse 7.9</th>
<th>Fuse 7.10</th>
<th>Deprecated in 7.10?</th>
</tr>
</thead>
<tbody>
<tr>
<td>diffie-hellman-group-exchange-sha256</td>
<td>diffie-hellman-group-exchange-sha256</td>
<td></td>
</tr>
<tr>
<td>ecdh-sha2-nistp521</td>
<td>ecdh-sha2-nistp521</td>
<td></td>
</tr>
<tr>
<td>ecdh-sha2-nistp384</td>
<td>ecdh-sha2-nistp384</td>
<td></td>
</tr>
<tr>
<td>ecdh-sha2-nistp256</td>
<td>ecdh-sha2-nistp256</td>
<td></td>
</tr>
</tbody>
</table>
### 7.2. FUSE ONLINE

The Fuse Online distribution has the following known issues:

**ENTESB-17674** Monitoring Fuse Online with Prometheus and Grafana on OCP 4.9 (or later) requires workaround

On OCP 4.9 (or later), the application-monitoring project no longer works. It is a prerequisite for monitoring Fuse Online integrations and infrastructure components with Prometheus and Grafana. To workaround this issue, you can use the built-in OpenShift monitoring stack (in the openshift-monitoring namespace) to use the openshift-user-workload-monitoring feature and the grafana-operator to use the ops addon as described in the Important notes for Fuse Online section of these release notes.

**ENTESB-17796** CSV parameters are not updated in AtlasMap step

In a Fuse Online integration, if you change the value of a CSV parameter, you must also edit all mapping steps that use that data shape by making some change (for example, add and then remove a constant value) to update the mapping.

Note that Data Mapper support for CSV data is a Technology Preview feature.

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

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

Since 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-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.

### 7.3. FUSE ON OPENS SHIFT

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-17895** [Fuse Console] Upgrade subscription does not update Hawthio

In Fuse 7.10, if you update the Fuse Console by changing the Operator subscription channel to version 7.10, the Fuse Console remains on version 7.9. Even if the the Fuse Console containers and pods have the label 7.10, they are still using the 7.9 images. To work around this problem, perform the upgrade by removing the older version of Fuse Console and then making a fresh install of Fuse Console version 7.10.

**ENTESB-17861** Apicurito generator cannot generate Fuse Camel Project

In Fuse 7.10, the API Designer (Apicurito) does not work properly, if it is installed via the Apicurito Operator (giving an Invalid Cert Error). To work around this problem:


2. Accept the certificates.

3. Switch to the application and click on the generate button again.

**ENTESB-17848** fis-image-streams is using non-groupfied API resources (deprecated)

In Fuse 7.10, when installing the image streams for Fuse on OpenShift (for example, using the command like `oc create -n openshift -f ${BASEURL}/fis-image-streams.json` on OCP 4, you could see warning messages like the following:

```
W1119 13:27:43.408688  22220 shim_kubectl.go:55] Using non-groupfied API resources is deprecated and will be removed in a future release, update apiVersion to "image.openshift.io/v1" for your resource
```
You can safely ignore these warning messages.

**ENTESB-17836** [Fuse Console] A newly added route is not displayed in the Camel tree

In Fuse 7.10, after deploying an application, the route (or routes) is not displayed in the Camel tree on the Fuse Console. You can work around this issue by refreshing the page, which should make the route appear.

**ENTESB-17741** [Fuse Console] Open pod details leads to Page Not Found

In Fuse 7.10, after deploying some quickstarts, if you open the Discover page of the Fuse Console, click on the drop-down menu of the pod (3 dots icon), and then click on Pod detail page, you will get a Page Not Found error.

**ENTESB-16814** Monitoring resources are linked wrongly from the documentation

Since Fuse 7.8, the locations of the monitoring resources referenced in section 2.5.2. Setting up Prometheus of the Fuse on OpenShift Guide are incorrect and return a 404 exception. This documented procedure will be fixed in a post-GA documentation update.

### 7.4. FUSE ON APACHE KARAF

Fuse on Apache Karaf has the following known issues:

**ENTESB-18018** Fuse 7.10 AR10 offliner validation problems

In Fuse 7.10, two of the quickstarts do not get installed with the offliner tool: camel-sap and camel-cxf-contract-first. The missing artifacts are available from the (online) Red Hat Maven repository, however.

**ENTESB-17819** camel-grpc does not work on fuse-karaf

In Fuse 7.10, the Camel GRPC component does not work on the Apache Karaf container. This will be fixed in a later release of Fuse.

**ENTESB-16417** Credential store is using PBEWithSHA1AndDESede by default

The security API in OpenJDK 8u292 and in OracleJDK 1.8.0_291 returns an incomplete list of security providers, which causes the credential store in Apache Karaf to fail (because the required security provider appears to be unavailable). The underlying issue that causes this problem is https://bugs.openjdk.java.net/browse/JDK-8249906. We recommend that you use the earlier OpenJDK version, OpenJDK 8u282, or the later OpenJDK version, OpenJDK 8u302, which do not have this bug.

**ENTESB-16526** fuse-karaf on Windows cannot restart during patch:install

While running patch:install in the Apache Karaf container on the Windows platform, under certain circumstances you might encounter the following error when the patch:install command attempts an automatic restart of the container:

```bash
Red Hat Fuse starting up. Press Enter to open the shell now...
100%
[========================================================================]
[Karaf started in 18s. Bundle stats: 235 active, 235 total]
[.tmpdir’ is not recognized as an internal or external command, operable program or batch file.
There is a Root instance already running with name ~14 and pid ~13. If you know what you are doing and want to force the run anyway, SET CHECK_ROOT_INSTANCE_RUNNING=false and re run the command.

If you encounter this error, simply restart the Karaf container manually.
```
**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-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 issues:

**ENTESB-17705** [Hawtio] Logout button disappears

In Fuse 7.10, after logging in and logging out several times in a row, theLogout button is not shown. To work around this issue, you can refresh the page one or more times and the Logout button should reappear.

**FUSETOOLS-3567** Fuse 7.10.0.AR7 on Karaf cannot be started in CodeReady Studio with Java 11

Starting with CodeReady Studio 12.22, Fuse Tooling will support it.

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 7.10

The following sections list the issues that have been fixed in Fuse 7.10:

- Section 8.1, "Enhancements in Fuse 7.10"
- Section 8.2, "Feature requests in Fuse 7.10"
- Section 8.3, "Component Upgrades in Fuse 7.10"
- Section 8.4, "Bugs resolved in Fuse 7.10 and 7.10.1"

8.1. ENHANCEMENTS IN FUSE 7.10

The following table lists the enhancements in Fuse 7.10.

Table 8.1. Fuse 7.10 Enhancements

<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTESB-17591</td>
<td>Update AtlasMap to 2.3.0</td>
</tr>
<tr>
<td>ENTESB-17610</td>
<td>Update AtlasMap to 2.3.1</td>
</tr>
<tr>
<td>ENTESB-17355</td>
<td>Update AtlasMap to 2.3.0-M.3</td>
</tr>
<tr>
<td>ENTESB-16734</td>
<td>RHEL8 based image for syndesis-db</td>
</tr>
<tr>
<td>ENTESB-16809</td>
<td>Camel Clients Getting Started with Managed Kafka</td>
</tr>
<tr>
<td>ENTESB-16517</td>
<td>[ FoO ] Plan for API deprecation in OCP 4.9 (Fuse 7.10)</td>
</tr>
<tr>
<td>ENTESB-17694</td>
<td>[ Fuse Console ] Make Operator Metadata image multiarch</td>
</tr>
<tr>
<td>ENTESB-17290</td>
<td>[ Build ] UI deprecated dependencies update</td>
</tr>
<tr>
<td>ENTESB-17405</td>
<td>Add Java 11 Maven profile to Fuse on OpenShift quickstarts</td>
</tr>
<tr>
<td>ENTESB-14379</td>
<td>Fuse Online: Upgrade to Patternfly 4.4.x and React 17</td>
</tr>
<tr>
<td>ENTESB-16485</td>
<td>[ Fuse Console ] Create CVP for Fuse Console Operator</td>
</tr>
<tr>
<td>ENTESB-14750</td>
<td>Provide metering labels for Fuse on Openshift Console (Operator)</td>
</tr>
<tr>
<td>ENTESB-15863</td>
<td>Default CR options should be consistent and user-friendly</td>
</tr>
<tr>
<td>ENTESB-17662</td>
<td>Update AtlasMap to 2.3.2</td>
</tr>
<tr>
<td>ENTESB-17480</td>
<td>Fuse Online 7.10 Component Alignment</td>
</tr>
</tbody>
</table>
### 8.2. FEATURE REQUESTS IN FUSE 7.10

The following table lists the feature requests in Fuse 7.10.

**Table 8.2. Fuse 7.10 Feature Requests**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTESB-17153</td>
<td>Set environment variables for syndesis-oauthproxy</td>
</tr>
<tr>
<td>ENTESB-14559</td>
<td>allow labeling the integrations from when saving and publishing them</td>
</tr>
</tbody>
</table>

### 8.3. COMPONENT UPGRADES IN FUSE 7.10

The following table lists the component upgrades in Fuse 7.10.

**Table 8.3. Fuse 7.10 Component Upgrades**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTESB-17359</td>
<td>Upgrade protobuf to 3.10.0</td>
</tr>
<tr>
<td>ENTESB-17320</td>
<td>Upgrade to Netty 4.1.67.Final-redhat-00001</td>
</tr>
<tr>
<td>ENTESB-17270</td>
<td>Upgrade to 7.4.1.GA-redhat-00003</td>
</tr>
<tr>
<td>ENTESB-17322</td>
<td>Upgrade to Narayana 5.11.3.Final-redhat-00001</td>
</tr>
<tr>
<td>ENTESB-17321</td>
<td>Upgrade to Hibernate 5.3.21.Final-redhat-00001</td>
</tr>
<tr>
<td>ENTESB-17319</td>
<td>Upgrade to BouncyCastle 1.69</td>
</tr>
<tr>
<td>ENTESB-17311</td>
<td>Upgrade to ASM 9.2</td>
</tr>
</tbody>
</table>
### 8.4. BUGS RESOLVED IN FUSE 7.10 AND 7.10.1

The following tables list the resolved bugs in Fuse 7.10 and 7.10.1.

#### Table 8.4. Fuse 7.10.1 Resolved Bugs

<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTESB-17986</td>
<td>CVE-2021-4104 log4j: Remote code execution in Log4j 1.x when application is configured to use JMSAppender [fuse-7]</td>
</tr>
<tr>
<td>ENTESB-18326</td>
<td>CVE-2022-23302 log4j: Remote code execution in Log4j 1.x when application is configured to use JMSSink [fuse-7]</td>
</tr>
<tr>
<td>ENTESB-18327</td>
<td>CVE-2022-23305 log4j: SQL injection in Log4j 1.x when application is configured to use JDBCAppender [fuse-7]</td>
</tr>
</tbody>
</table>

#### Table 8.5. Fuse 7.10 Resolved Bugs

<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTESB-17968</td>
<td>CVE-2021-44228 log4j-core: Remote code execution in Log4j 2.x when logs contain an attacker-controlled string value [ fuse-7 ]</td>
</tr>
<tr>
<td>ENTESB-17597</td>
<td>[ Hawtio ] Spring Boot 2 fails on Windows machine</td>
</tr>
<tr>
<td>ENTESB-17588</td>
<td>Invalid authentication type for Postgresql</td>
</tr>
<tr>
<td>ENTESB-17603</td>
<td>Camel-infinispan not working on karaf + jdk11</td>
</tr>
<tr>
<td>ENTESB-17590</td>
<td>wildfly-camel build fails with camel-2.23.2.fuse-7_10_0-00012</td>
</tr>
<tr>
<td>ENTESB-17646</td>
<td>jdk11 + karaf + cxf codewriter instance issue</td>
</tr>
<tr>
<td>Issue</td>
<td>Description</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ENTESB-17642</td>
<td>Not possible to install feature hibernate-validator-groovy</td>
</tr>
<tr>
<td>ENTESB-17640</td>
<td>Quickstart spring-boot-camel-xa contains wrong image reference for jdk11</td>
</tr>
<tr>
<td>ENTESB-17636</td>
<td>Misalignments with Component alignment document in 7.10.AR6</td>
</tr>
<tr>
<td>ENTESB-17643</td>
<td>Collapse Repeating Delimiters checkbox is not shown right after a mapping is created</td>
</tr>
<tr>
<td>ENTESB-17708</td>
<td>Move source jar maven plugin to prod profile for quickstarts</td>
</tr>
<tr>
<td>ENTESB-17700</td>
<td>No Class Def Found errors when client bin command in Karaf</td>
</tr>
<tr>
<td>ENTESB-17660</td>
<td>Karaf cannot start when Elytron is set as PersistenceManager</td>
</tr>
<tr>
<td>ENTESB-17414</td>
<td>Fuse console won’t start on ppc64le</td>
</tr>
<tr>
<td>ENTESB-17409</td>
<td>Missing fuse-karaf-openshift-jdk11-rhel8 in fis-image-streams.json</td>
</tr>
<tr>
<td>ENTESB-17445</td>
<td>fuse-karaf + jdk11 - javax.xml.ws wrong Import-package version</td>
</tr>
<tr>
<td>ENTESB-17466</td>
<td>Apicurito 7.10 bundle uses 7.9 channel</td>
</tr>
<tr>
<td>ENTESB-17527</td>
<td>Camel 2.23 downstream failures</td>
</tr>
<tr>
<td>ENTESB-17654</td>
<td>Client script does not work on Karaf</td>
</tr>
<tr>
<td>ENTESB-17377</td>
<td>DataMapper constant can be saved without any values</td>
</tr>
<tr>
<td>ENTESB-17226</td>
<td>PubSubIntegrationTest fails with Invalid grant: account not found</td>
</tr>
<tr>
<td>ENTESB-16765</td>
<td>Fuse on Karaf using jdk11 / open-jdk11 gives NoClassDefFoundError while blueprint installation</td>
</tr>
<tr>
<td>ENTESB-16504</td>
<td>[ Fuse Console ] Spring Boot Camel quickstart fails</td>
</tr>
<tr>
<td>ENTESB-16987</td>
<td>[ Hawtio ] Broken layout for drop-down menu in OSGi → Features</td>
</tr>
<tr>
<td>ENTESB-16990</td>
<td>DataMapper multi spaces delimiter in split transformation behaves as &quot;double spaces&quot; delimiter.</td>
</tr>
<tr>
<td>ENTESB-16425</td>
<td>Spring Boot Camel AMQ S2I quickstart has unreachable link in Readme.adoc</td>
</tr>
<tr>
<td>Issue</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ENTESB-16283</td>
<td>Missing metering labels on spring-boot-camel-xa quickstart</td>
</tr>
<tr>
<td>ENTESB-17611</td>
<td>Camel 2.23 downstream failures with openjdk11</td>
</tr>
<tr>
<td>ENTESB-17281</td>
<td>Missing API Connector review page when API contains error</td>
</tr>
<tr>
<td>ENTESB-17253</td>
<td>Quickstart spring-boot-camel-amq still contains README.md file</td>
</tr>
<tr>
<td>ENTESB-17411</td>
<td>Fuse Online 7.10 bundle can’t create an index</td>
</tr>
<tr>
<td>ENTESB-17399</td>
<td>AtlasMap exception in an integration</td>
</tr>
<tr>
<td>ENTESB-17406</td>
<td>Old metering labels in build Fuse Online 7.10 AR4</td>
</tr>
<tr>
<td>ENTESB-17478</td>
<td>[Fuse Console] Metadata image points to fuse console operator 1.9 image</td>
</tr>
<tr>
<td>ENTESB-17416</td>
<td>CSV Instance Parameters are disappeared during edit webhook step</td>
</tr>
<tr>
<td>ENTESB-17282</td>
<td>Fuse Online UI enhancement after PF update</td>
</tr>
<tr>
<td>ENTESB-17280</td>
<td>Maven-deploy-plugin version alignment</td>
</tr>
<tr>
<td>ENTESB-17328</td>
<td>Wrong fuse-karaf productization version</td>
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<td>ENTESB-17329</td>
<td>Wrong metadata values, labels, appName, metering labels in quickstarts templates</td>
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<td>ENTESB-17308</td>
<td>Camel Hystrix component doesn’t work on karaf</td>
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<td>ENTESB-17396</td>
<td>Misalignments with Component alignment document in 7.10.AR4</td>
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<td>ENTESB-17385</td>
<td>hawtio 2 should not simply remove hawtio-log Karaf feature (and MBean)</td>
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<td>ENTESB-17341</td>
<td>nodeAffinity and toleration are not set in an integration pod</td>
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<td>ENTESB-17337</td>
<td>Invalid JSON template file for Spring Boot Rhosak Quickstart</td>
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<td>Upgrade Fuse Online 7.9 → 7.10 doesn’t work on OCP 3.11</td>
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<td>ENTESB-17343</td>
<td>Linked documentation is for version 7.9 instead of version 7.10</td>
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<td>RedisConstants.COMMAND header is not take into consideration when using GET command</td>
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<td>ENTESB-17332</td>
<td>Wrong Karaf Framework version in Fuse Karaf Images</td>
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<td>Issue</td>
<td>Description</td>
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<td>ENTESB-17330</td>
<td>Wrong image reference in Archetypes</td>
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<td>ENTESB-17256</td>
<td>Missing ServiceAccount labels in S2I SpringBoot Rhosak Quickstart</td>
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<td>View logs links points to an unexisting page</td>
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<td>Autodiscovery AMQ streams web element doesn’t have data-testid</td>
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<td>Syndesis/Fuse online logo does not link to the home page</td>
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<td>Missing metering labels on spring-boot-camel-rhosak quickstart</td>
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<td>Illegal reflective access by org.jolokia.util.ClassUtil while running quickstarts with JDK11</td>
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<td>Camel springboot BOM references non-existent artifact</td>
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<td>Remove the deployIntegrations flag from the CR</td>
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<td>Creating API Client Connector and Connection - duplicate username and password section</td>
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<td>Wrong labels on fuse circuit breaker booster don’t allow services and routes to work</td>
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<td>500 response isn't displayed in the validation UI page</td>
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<td>Misalignments with Component alignment document in 7.10.AR7</td>
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<td>Camel 2.23 downstream failures in 7.10.AR7</td>
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<td>ENTESB-17773</td>
<td>spring-boot-camel-drools route exception</td>
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<td>Karaf quickstarts does not support java 11</td>
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<td>ENTESB-17748</td>
<td>Deleted or renamed ENVs are still presented in the integration pod</td>
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<td>ENTESB-17734</td>
<td>Deleting CSV parameters works until the second attempt</td>
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<td>Istio Booster - status</td>
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<td>Authentication failure on Karaf with public key while using ssh feature</td>
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<td>ClassCastException with com.mongodb.client.MongoClient</td>
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<td>libthrift-0.14.0.redhat-00001 not compatible with cassandra</td>
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<td>ENTESB-17776</td>
<td>[Apicurito] Metadata points to older generator image</td>
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<td>Elastic Search Rest cannot be used on SpringBoot</td>
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<td>4 Features not installed</td>
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<td>Wrong metadata values, labels, appName, metering labels in pom.xml</td>
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<td>ENTESB-17815</td>
<td>History command does not show previous history</td>
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<td>ENTESB-17769</td>
<td>CVE-2020-13949, ensure Syndesis contains correct version of libthrift</td>
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<td>ENTESB-17699</td>
<td>CVE-2020-27218, Ensure that Syndesis is using fixed net.sf.ehcache:ehcache</td>
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<td>CVE-2021-29425, Ensure that Syndesis is using fixed commons-io</td>
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<td>ENTESB-17598</td>
<td>SSH client libraries incompatible with camel-ftp and camel-jsch</td>
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<td>Cannot access Fuse Online on disconnected environment</td>
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<td>Dependency version of springboot is missing in a particular integration build</td>
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<td>Integration with OData (v2 only) connector is not able to start</td>
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<td>Fuse Camel project generated by Apicurito Generator not exposes management port</td>
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<td>karaf-camel-amq quickstart restarts camel context during startup</td>
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<td>Fuse Online image (7.10) builds are failing due to wrong arches: arm64, ppc64le, s390x</td>
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<td>ENTESB-17697</td>
<td>CVE-2021-37136, Ensure that Syndesis is using fixed io.netty:netty-codec</td>
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<td>ENTESB-17770</td>
<td>CVE-2021-3629, ensure Syndesis contains correct version of undertow</td>
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<td>ENTESB-17772</td>
<td>CVE-2021-20220, ensure Syndesis contains correct versions of undertow</td>
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<td>CVE-2020-27223, Ensure that Syndesis is using fixed org.eclipse.jetty/jetty-http</td>
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<td>CVE-2021-27568, Ensure that Syndesis is using fixed net.minidev:json-smart</td>
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<td>ENTESB-17853</td>
<td>AR8 Fuse Online bundle replaces an older version</td>
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<td>CVE-2021-37714, ensure syndesis contains correct version of jsoup</td>
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<td>Camel 2.23.2 downstream failure on s390x</td>
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<td>Salesforce authentication error</td>
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<td>Update all productized xml examples to use a correct xsd</td>
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<td>Integration with MongoDB connector is not able to start</td>
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<td>The repository cache contains corrupt maven-tooling JAR</td>
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<td>Creating custom OpenAPI clients broken</td>
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<td>S2I Spring Boot Camel Rhosak quickstart has wrong selector in template</td>
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<td>Use OpenShift Maven Plugin instead of Fabric8 Maven Plugin in Fuse Apicurio Generator</td>
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<td>ENTESB-17618</td>
<td>ZookeeperIntegrationTest intermittently fails in Jenkins</td>
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<td>Native libraries for SAP</td>
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<td>After CRD is updated on OCP3, oc get syndesis don’t work for a couple of minutes</td>
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<td>ENTESB-17858</td>
<td>AR9 Fuse smoke tests failing</td>
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<td>CVE-2021-34428, ensure Syndesis contains correct versions of jetty</td>
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<td>AR8 Apicurito bundle replaces an older version</td>
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<td>Artifacts missing when using offliner for Fuse 7.10 AR7</td>
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<td>Issue</td>
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<tr>
<td>ENTESB-16971</td>
<td>MongoDB3 component always connects to localhost</td>
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