



# **Red Hat JBoss Fuse 6.1**

## **JBoss Fuse for xPaaS Release Notes**

What's new in Red Hat JBoss Fuse for xPaaS



# Red Hat JBoss Fuse 6.1 JBoss Fuse for xPaaS Release Notes

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What's new in Red Hat JBoss Fuse for xPaaS

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## Abstract

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

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# CHAPTER 1. WHAT'S NEW

## Abstract

This section describes the main features in version 6.1.1 of the Red Hat JBoss Fuse cartridge and the differences between the cartridge and the standalone JBoss Fuse product.

For detailed information about how to get started, including installation and configuration instructions, see the [JBoss Fuse Cloud Deployment Guide](#) or the [JBoss A-MQ Cloud Deployment Guide](#).

## INSTALLATION COMPONENTS

The JBoss Fuse cartridge is shipped as an RPM package. You download the package from the JBoss Fuse product page on the Customer Portal and install the cartridge with `yum` in the same way you install other OpenShift Enterprise components.

## WHAT'S DIFFERENT IN THE JBOSS FUSE CARTRIDGE

When you create and run JBoss Fuse applications in the OpenShift Enterprise domain, note the following differences between the cartridge and the standalone JBoss Fuse product:

### Fabric management

- Each JBoss Fuse application that you create is deployed with fabric by default.
- Some fabric profiles, such as Gateway and Tomcat, are not supported.
- You cannot create child containers. Each container that you deploy acts as a standalone application in the domain.
- The first application that you create includes the ZooKeeper instance with the user credentials and environment variables that subsequent applications require to run.
- Secured shared file systems are not supported.

### Ports and networking

- You can use only 3 private application ports to connect to the JBoss Fuse applications. The ports are defined in system properties.
- The PublicPortMapper tool maps the private application ports to public ports before external clients can connect to the JBoss Fuse applications.
- UDP connections are not supported.

### High availability

- The first JBoss Fuse application in the OpenShift Enterprise domain acts as the master node in the cluster.
- You must install a standalone JBoss Fuse instance and configure the ZooKeeper ensemble outside of the OpenShift Enterprise domain to manage applications inside the domain.
- You must configure the cluster to use JDBC Master Slave or Replicated LevelDB Store.

- Auto-scaling is not supported.

## TECHNICAL PREVIEW FEATURES

The following features are provided on a technical preview basis and are not fully supported in version 6.1.1:

- Fuse Builder cartridge



## CHAPTER 2. KNOWN ISSUES

This section lists known issues in version 6.1.1 of the JBoss Fuse cartridge.

For general known issues in version 6.1.0 of JBoss Fuse, see the [Known Issues](#) section of the Red Hat JBoss Fuse 6.1 Release Notes.

### Restoring JBoss Fuse applications from a snapshot is not supported

If you create a snapshot of multiple JBoss Fuse applications with the `snapshot -save` command, you cannot restore the snapshots with the `snapshot -restore` command.

### You must delete containers with the same tool that you used to create the containers

For example, if you create a container from the Fuse Management Console and then delete the container from the OpenShift Enterprise command line utility, the utility might not completely remove the container from the fabric. The deleted container then might re-register to the fabric with incomplete information and generate run-time errors or failures.

### You cannot move the primary JBoss Fuse application between nodes

To move a JBoss Fuse application from one OpenShift Enterprise node to another node, you can use the `oo-admin-move` command. However, you cannot move the first application that you created between nodes. You can use the command to move only subsequent applications that you create.

### The PortMapper tool does not translate TLS ports

When you define connection URLs in CXF endpoints, you cannot specify SNI ports that use the TLS protocol, such as `APP_TLS_PORT_1`. Instead, you must specify one of the non-TLS ports, such as `APP_PORT_1`, when you configure the CXF endpoint.

### When the the JBoss Fuse application reconnects to the fabric server, the Karaf log throws an exception

When the connection between the JBoss Fuse application and the fabric server is suspended and then resumed, the following error message might appear in the Karaf log:

```
java.util.concurrent.RejectedExecutionException Task
java.util.concurrent.FutureTask@27458911
rejected from java.util.concurrent.ThreadPoolExecutor@4629cf3b
[Terminated, pool size = 0, active threads = 0, queued tasks = 0,
completed tasks = 9]
...
```

This message reports a problem with an obsolete CuratofFramework listener.

Workaround: Ignore the message.

### The Fuse Builder cartridge does not support HTTPS connections

To connect to the Maven repository of the Fuse Builder cartridge, you must use an HTTP connection.

### You cannot use the publicip resolver when you create a JBoss Fuse application

The `publicip` resolver connects the application to the Git repository of the OpenShift Enterprise node. However, the resolver might not translate the public IP address of the node correctly and redirect the connection to an HTML page.

### **Some OpenShift Enterprise processes might stop before the JBoss Fuse application is created**

In some environments, you cannot create the JBoss Fuse application because some OpenShift Enterprise components, such as `mcollective` and `rhc`, reach the maximum timeout limit and stop before the application is created.

For general information about the default timeout values of OpenShift Enterprise components, see the [Component Timeout Value Location](#) section of the OpenShift Enterprise Administrator Guide.

Workaround: Increase the timeout values of the OpenShift components. For a detailed description of this workaround, see the following knowledge base article:  
<https://access.redhat.com/solutions/1238583>

## CHAPTER 3. RESOLVED ISSUES

### 3.1. ESB

Table 3.1, “ESB Issues Resolved in 6.1.1” lists the issues resolved in version 6.1.1.

Table 3.1. ESB Issues Resolved in 6.1.1

Issue	Description
ENTESB-1078	jms quickstart hangs when installing feature (kit -311)
ENTESB-1326	notices generation doesn't work for Maven 3.1.1
ENTESB-1394	Cannot create a child container with specifying hadoop profiles on Windows 7
ENTESB-1460	Fabric profile edits go through maven proxy after uploading file to fabric maven repository
ENTESB-1464	HTTP Gateway Profile does not activate
ENTESB-1548	Unable to rollback 6.0 R1 patch after 6.0 R1P3 has been rolled back
ENTESB-1567	[JBoss Fuse 6.1] java.lang.ClassNotFoundException: weblogic.jndi.WLInitialContextFactory
ENTESB-1570	jetty.xml in child container is not getting detected
ENTESB-1707	Use Activator for FAB URL handler instead of Blueprint
ENTESB-1710	Fabric is not starting in 385 build affecting standard/OSE
ENTESB-1714	FileNotFoundException when deleting bundle from deploy folder
ENTESB-1734	Fuse Cartridge Quickstarts readme file need instructions about deploying to gear
ENTESB-1740	example-cxf, example-camel-cxf examples broken on OpenShift
ENTESB-1759	NPE on fabric:container-delete when the gear has been already removed in OpenShift
ENTESB-1761	http/mq gateway binds to 0.0.0.0 by default on OSE
ENTESB-1768	'Local IP' on container's 'Settings' tab should be the value of "OPENSIFT_FUSE_IP" env variable
ENTESB-1773	NPE when deleting the root container
ENTESB-1780	fabric:join should not rename container's name

Issue	Description
ENTESB-1788	Wrong hostname used for intercontainer connection
ENTESB-1801	ActiveMQ stays disconnected from the group after zookeeper connection SUSPENDED / RECONNECTED
ENTESB-1810	fabric:container-create-openshift command ignore the parameter [number]
ENTESB-1819	Meet error when deleting two containers from Hawito
ENTESB-1828	Indescriptive error message when openshift fails to create an openshift fuse container
ENTESB-1830	secure.soap quickstart "java.lang.ClassNotFoundException: org.apache.karaf.jaas.boot.principal.RolePrincipal not found by org.jboss.quickstarts.fuse.secure-soap"
ENTESB-1860	mq-amq profile using obsolete env variables OPENSIFT_FUSE_AMQ_*PORT
ENTESB-1872	example-cxf example registers the local IP address instead of the public one in the fabric registry
ENTESB-1874	Feature in profile is not fully provisioned
ENTESB-1917	fabric-cxf-demo-client "java.lang.IllegalArgumentException: The AlternateAddressList is empty, please fresh the list shortly."
ENTESB-1918	example-cxf FabricLoadBalancerFeature broken, registers relative service URLs
ENTESB-1919	openshift broker.xml storeUsage / tempUsage don't fit into the xpaas node profile
ENTESB-1924	Hawtio allows to create a container with currently existing name
ENTESB-1929	OPENSIFT_FUSE_DOMAIN_DNS reset to the currently created container when OPENSIFT_FUSE_ZOOKEEPER_URL specified
ENTESB-1931	External ZooKeeper uses incorrect cartridge manifest
ENTESB-1938	Creating containers with patches fails
ENTESB-1940	--gear-size parameter of container-create-openshift should be renamed
ENTESB-1965	Duplicate version declarations in org.jboss.fuse.bom:jboss-fuse-parent
ENTESB-2004	PortMapper does not translate io.fabric8.camel.FabricComponent
ENTESB-2035	SNI port for MQTT and STOMP mapping inconsistency

Issue	Description
ENTESB-2043	Jolokia port is hardcoded for Fuse Builder cart
ENTESB-2081	Can't create AMQ cartridge as root container
ENTESB-2085	NPE in org.fusesource.mq.fabric.ActiveMQServiceFactory...\$1.apply when redeploying mq-amq containers
ENTESB-2089	Fuse shell prints admin password to console in open text
ENTMQ-581	A broker that shuts down as part of losing its persistence store is not unregistered from Zookeeper.
ENTMQ-628	Replicated LevelDB fabric8 nodes should not register in fabric discovery until they become a master
ENTMQ-700	Containers with brokers deployed stops after 12-14 hours
ENTMQ-752	NullPointerException when trying to restart broker via JMX with restartAllowed="true"
MR-904	camel-xstream feature doesn't provide correct bundle version

## 3.2. MESSAGING

Table 3.2, “Messaging Issues Resolved in 6.1.1” lists the issues resolved in version 6.1.1.

**Table 3.2. Messaging Issues Resolved in 6.1.1**

Issue Number	Description
AMQ-2876	Message received from Queue before its expiration and acknowledged after it, is put to deadletter queue in error
AMQ-3454	Contention on a mutex during a stress when using SimpleAuthenticationPlugin
AMQ-4182	Memory Leak for ActiveMQBytesMessage with Compression as true
AMQ-4349	ActiveMQ 5.8.0 throws nullpointer exception while shutting down (NIO + LevelDB + pending Non Persistent Messages)
AMQ-4485	Skipped message dispatch with concurrent transacted sends at cursor memory limit
AMQ-4555	Locking in SimpleCachedLDAPAuthorizationMap can lead to delays in Message dispatch.
AMQ-4719	Enable "Link Stealing" as an option on a Connector

Issue Number	Description
AMQ-4930	java.lang.OutOfMemoryError: Java heap space Exception when sending big amount(1000+) of 1M non persistent messages to broker
AMQ-4952	When duplicate message occur from network producer, messages blocked by cursor audit are blocked till restart
AMQ-5068	Support hardening/persisting the JMSRedeliveryFlag across restarts
AMQ-5080	RAR - missing messages on master slave failover
AMQ-5119	broker redeliveryPlugin: after message redelivery, all subsequent "producer.send()" using same message are "scheduled" for delivery to queue rather than delivered to queue as normal
AMQ-5121	Browse command is no more working with Karaf
AMQ-5140	ArithmeticException: / by zero in HealthView.healthList() when using JMX-Health-Operations
AMQ-5146	RedeliveryPolicy exceeded for crashing consumer
AMQ-5156	Multiple tests using durable subs are failing
AMQ-5189	Rollback on XASession when closing back to pool
AMQ-5212	Deadlock with duplicate detection and dlq processing in kahadb
AMQ-5241	Spurious WARN FailoverTransport - Transport .. failed, reason: , attempting to automatically reconnect java.io.EOFException
AMQ-5256	AMQP WARN Transport Connection failed: java.io.IOException
AMQ-5266	Stuck Messages in Single Broker when using JDBC Persistent Store
AMQ-5274	Stuck messages and CPU churn when aborted transacted message expires
AMQ-5279	failover redelivery to alternative consumers with pending transaction causes rollback *and* dlq processing
AMQ-5288	Return proper error codes to MQTT client on failed connect.
AMQ-5307	MQTT Transport codec does not properly deal with partial read of frame header
AMQ-5311	XAException message should encode the xaErrorCode
AMQ-5379	AMQP - allow setting prefetch size

Issue Number	Description
ENTMQ-678	HTML in message header can prevent ActiveMQ Web Console from displaying correctly
ENTMQ-684	Stomp Tests hang on Solaris
ENTMQ-685	[ ActiveMQ 5.9.0.redhat-610379] - NullPointerException at org.fusesource.hawtdispatch.package\$RichExecutor.execute() during shutdown
ENTMQ-703	Stuck Messages in Single Broker when using JDBC Persistent Store
ENTMQ-792	When an AMQP client receives some messages from a queue, all JMSRedelivered headers of the remained messages are changed to true.
ENTMQ-815	mqtt: incorrect wild card replacement in mqtt topics

### 3.3. ROUTING

Table 3.3, “Routing Issues Resolved in 6.1.1” lists the issues resolved in version 6.1.1.

**Table 3.3. Routing Issues Resolved in 6.1.1**

Issue	Description
CAMEL-7141	Custom HeaderFilterStrategy does not work when set it on either component or endpoint uri
CAMEL-7338	CxfClientCallback should not populate camel exchange OUT message if no response comes back to cxf producer and camel exchange pattern is InOnly
CAMEL-7347	camel-netty - Should return 404 instead of 503 if context-path did not match a route
CAMEL-7391	camel-netty - NettyProduce should use timer from component instead of creating new timer per producer
CAMEL-7398	Salesforce recently changed their login API to use new OAuth fields, which breaks the camel-salesforce component
CAMEL-7399	Camel Salesforce integration tests fail with ClassNotFoundException
CAMEL-7423	Netty HTTP producer ignores requestTimeout option
CAMEL-7426	camel-http component should skip reading the form body if it is bridgeEndpoint
CAMEL-7427	camel-netty-http component should skip reading the form body if it is bridgeEndpoint
CAMEL-7456	Camel PropertiesComponent ignores custom parser in Blueprint

Issue	Description
CAMEL-7462	camel-netty-http doesn't use "Expect: 100-continue" correctly
CAMEL-7472	camel-netty - SingleUDPNettyServerBootstrapFactory should wait synchronously for the outcome of joining a UDP multicast group so that we know if the attempt was successful or not
CAMEL-7506	[NettyHttp] Remove headerFilterStrategy option after resolving
CAMEL-7545	Having multiple camelContext in same blueprint bundle may only register the 1st in the OSGi service registry
CAMEL-7546	Avoid clash of CamelContext managementName in OSGi
CAMEL-7593	camel-netty-http consumer uses a fixed 1mb chunked frame size
CAMEL-7642	Netty consumer should return error on invalid request
CAMEL-7714	AdviceWith - Does not honor autoStartup option
CAMEL-7736	Failure to create producer during routing slip or similar eip causes exchange causes error handler not to react properly
CAMEL-7885	Timer - Restarting a timer endpoint may not trigger at expected time the first time
CAMEL-7920	Refresh of the camel-jaxb bundle results a strange behaviour
ENTESB-1326	notices generation doesn't work for Maven 3.1.1
MR-833	Make Log component and EIP compatible with log4j MDC Sift Appender
MR-855	Netty HTTP consumer doesn't handle "Expect: 100-continue" header
MR-893	[Netty HTTP] Slash appended after parameters

### 3.4. WEB SERVICES

Table 3.4, “Web Services Issues Resolved in 6.1.1” lists the issues resolved in version 6.1.1.

**Table 3.4. Web Services Issues Resolved in 6.1.1**

Issue	Description
CXF-5679	WS-S after upgrade fails with org.apache.ws.security.WSSecurityException: The signature or decryption was invalid



Issue	Description
CXF-5697	WHICH_JARS inconsistent with lib/ contents for 2.7.11
CXF-5724	Extra text and comments after </soapenv:Body> are treated as part of SOAP body by CXF
ENTESB-1326	notices generation doesn't work for Maven 3.1.1
SF-488	Warning message when browsing a list of all CXF web services in JBoss Fuse
SF-491	add fuse snapshot maven repo into xkms itests
CXF-5635	Optimize Logging interceptors

### 3.5. CONTAINER

Table 3.5, “Container Issues Resolved in 6.1.1” lists the issues resolved in version 6.1.1.

**Table 3.5. Container Issues Resolved in 6.1.1**

Issue Number	Description
ARIES-1014	inconsistencies in org.apache.aries.proxy versions
ARIES-885	In container managed mode, a single non thread safe entity manager is used to service all requests when no transaction is active
ENTESB-1681	Conccurent access issue for Aries JPA + Hibernate
FELIX-3360	Bundle location is statically set for dynamically bound bundles
FELIX-3712	FileInstall throws Interrupted exception when refreshed
FELIX-3714	Error when when fragment bundle is updated
FELIX-4071	ConcurrentModificationException in DirectoryWatcher.bundleChanged
ENTESB-1726	Use EventAdmin to provide an audit trail of events, but it's lacking the authenticated Subject who performed the action

### 3.6. FUSE FABRIC

Table 3.6, “Fuse Fabric Issues Resolved in 6.1.1” lists the issues resolved in version 6.1.1.

**Table 3.6. Fuse Fabric Issues Resolved in 6.1.1**

Issue Number	Description
FABRIC-593	Provisioning a profile stalls at "Installing" state forever
FABRIC-1121	Unable to deploy FAB to fabric containers
FABRIC-1090	Ports out of sync when removing a container from fabric which has been "joined" and added back to fabric
FABRIC-1052	Unable to recreate fabric on Windows
FABRIC-1051	Profile updates get slower and slower
FABRIC-1068	Cannot change Fabric registry default port
FABRIC-1041	Camel-insight not able to store camel exchanges into ES
FABRIC-1043	Using wrap protocol with OSGi header options in a feature file does not work
FABRIC-1770	JBoss Fuse cartridge exposes credentials over http
FABRIC-1443	CVE-2014-0114 Apache Struts 1: Class Loader manipulation via request parameters [fuse-6]

### 3.7. CONSOLE

Table 3.7, “Console Issues Resolved in 6.1.1” lists the issues resolved in version 6.1.1.

**Table 3.7. Console Issues Resolved in 6.1.1**

Issue Number	Description
ENTESB-1326	notices generation doesn't work for Maven 3.1.1
ENTESB-1573	NullPointerException when adding a features url
ENTESB-1609	Can not install fuse as system service on AIX7.1
ENTESB-1627	Command console not working on HP-UX
ENTESB-1735	Fuse is closed when "u" char is pressed
KARAF-2910	Properties login module seems to leak a PropertiesInstaller reference results in OOM
KARAF-2982	Command history is off by one

Issue Number	Description
KARAF-3021	Keyboard still read after log:tail cancelled
KARAF-3044	Can't shutdown karaf via wrapper on AIX
KARAF-3056	Upgrade to JLine 2.12

## CHAPTER 4. ENHANCEMENTS

### 4.1. ESB

Table 4.1, “ESB Enhancements in 6.1.1” lists the enhancements in version 6.1.1.

Table 4.1. ESB Enhancements in 6.1.1

Enhancement	Description
ENTESB-1733	[Fuse cartridge] Command container-create-child should be removed/hidden
ENTESB-1765	[Fuse cartridge] Command "create-container-openshift" default OSE broker preconfigured
ENTESB-1811	fabric:container-create-openshift add '--gear-size' parameter when creating containers.
ENTESB-1818	openshift:application-create add "gear-size" parameter

### 4.2. MESSAGING

Table 4.2, “Messaging Enhancements in 6.1.1” lists the enhancements in version 6.1.1.

Table 4.2. Messaging Enhancements in 6.1.1

Enhancement	Description
AMQ-5114	AbortSlow*ConsumerStrategy with abortConnection=false; ensure consumers are always removed from the broker
AMQ-5163	Enable durable topic subscriptions using individual ack mode.
AMQ-5214	Security errors for sync commands are only logged at debug levels
AMQ-5264	Allow optional manual transaction management on a rar managedConnection
AMQ-5292	Add support for publishing to MQTT '\$' Topics (that start with the prefix '\$')
AMQ-3519	Allow getJMSRedelivered flag to survive a restart
KARAF-3068	Update to Spring 3.2.9.RELEASE_1
AMQ-5077	Improve performance of virtual topic fanout and persistent asyncSend

### 4.3. ROUTING

Table 4.3, “Routing Enhancements in 6.1.1” lists the enhancements in version 6.1.1.

**Table 4.3. Routing Enhancements in 6.1.1**

Enhancement	Description
CAMEL-6665	Recipient list - Delimiter with value false should disable using delimiter
CAMEL-6694	Make Log component and EIP compatible with log4j MDC Sift Appender
CAMEL-7138	Netty Http: Store the value of raw HTTP query in the header
CAMEL-7156	SpringCamelContext should shut down cleanly
CAMEL-7280	camel-quartz2 - Add options to configure job as durable
CAMEL-7393	Recipient List - Allow to define cache size, so you can tweak that or turn it off
CAMEL-7394	camel-netty-http - Add support for HTTP_PATH for dynamic-to
CAMEL-7469	Make CamelBlueprintTestSupport tests more predictable
CAMEL-7491	Added an option in throttler to throw <code>RejectExecutionException</code> instead of delaying the exchange
CAMEL-7520	Support to setup the handler even the Jetty server is created
CAMEL-7649	camel-jms - The <code>QueueBrowseStrategy</code> need support for JMS Selector
KARAF-3068	Update to Spring 3.2.9.RELEASE_1
MR-873	Upgrade to Netty 3.9.2
CAMEL-7737	camel-fop - Fails unit test

## 4.4. CONTAINER

[Table 4.4, “Container Enhancements in 6.1.1”](#) lists the enhancements in version 6.1.1.

**Table 4.4. Container Enhancements in 6.1.1**

Enhancement	Description
ARIES-1038	be able to easily use Blueprint inside a WAR in any servlet container using <code>blueprint-noosgi</code> and a <code>ServletContextListener</code> to boot up all the blueprint XML files
ARIES-1069	Publish a single interface for better integration of the <code>TransactionManager</code> with other low-level components
ARIES-1082	Add a way to use property placeholders to define filters on service references

Enhancement	Description
ARIES-998	Support a subset of blueprint outside OSGi
FELIX-4316	Packages imported dynamically should also be imported statically with an optional flag
FELIX-4317	SCR implementation should avoid using <code>bundleContext.getBundle()</code>
FELIX-4339	Make the use of escape characters deterministic
FELIX-4343	[DS] rationalize log levels
FELIX-3997	Provide an abstract bundle extender
FELIX-2702	File Install should be smarter about starting failed bundles

## 4.5. CONSOLE

Table 4.5, “[Console Enhancements in 6.1.1](#)” lists the enhancements in version 6.1.1.

**Table 4.5. Console Enhancements in 6.1.1**

Enhancement	Description
KARAF-2789	Upgrade to sshd 0.11.0
KARAF-2623	Karaf client script only returns a non zero status if there is exception
KARAF-3045	Simplify console branding
KARAF-3068	Update to Spring 3.2.9.RELEASE_1

## CHAPTER 5. SUPPORTED CONFIGURATIONS

For information about supported configurations, standards, and components in version 6.1, see the following Customer Portal articles:

- [Red Hat JBoss Fuse 6.1 Supported Configurations](#)
- [Red Hat JBoss Fuse 6.1 Supported Standards](#)
- [Red Hat JBoss Fuse 6.1 Platform Components](#)
- [Red Hat JBoss A-MQ 6.1 Supported Configurations](#)
- [Red Hat JBoss A-MQ 6.1 Supported Standards and Protocols](#)

## CHAPTER 6. APACHE DEPENDENCIES

The following Apache projects are used in version 6.1:

### **Apache ActiveMQ**

Red Hat JBoss Fuse includes Apache ActiveMQ 5.9

### **Apache Karaf**

Red Hat JBoss Fuse includes Apache Karaf 2.3

### **Apache CXF**

Red Hat JBoss Fuse includes Apache CXF 2.7

### **Apache ServiceMix**

Red Hat JBoss Fuse includes Apache ServiceMix 4.5

### **Apache Camel**

Red Hat JBoss Fuse includes Apache Camel 2.12