



Red Hat JBoss Data Grid 7.1

7.1.1 Release Notes

Known and Resolved Issues for JBoss Data Grid 7.1.1

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Abstract

The JBoss Data Grid 7.1.1 Release Notes list and provide descriptions for a series of bugzilla bugs. The bugs highlight issues that are known problems and resolved issues for the release.

Table of Contents

CHAPTER 1. INTRODUCTION TO JBOSS DATA GRID 7.1.1	3
1.1. INTRODUCTION TO RED HAT JBOSS DATA GRID 7.1	3
1.2. ABOUT RED HAT JBOSS DATA GRID	3
1.3. OVERVIEW	3
CHAPTER 2. APPLYING PATCHES TO JBOSS DATA GRID	4
2.1. PATCHING EXISTING SERVER INSTANCES	4
2.2. ROLLING BACK THE SERVER VERSION	4
CHAPTER 3. SUPPORTED CONFIGURATIONS	6
3.1. SUPPORTED CONFIGURATIONS	6
CHAPTER 4. COMPONENT VERSIONS	7
4.1. COMPONENT VERSIONS	7
CHAPTER 5. KNOWN ISSUES	8
5.1. KNOWN ISSUES	8
CHAPTER 6. RESOLVED ISSUES	11
6.1. RESOLVED ISSUES	11

CHAPTER 1. INTRODUCTION TO JBOSS DATA GRID 7.1.1

1.1. INTRODUCTION TO RED HAT JBOSS DATA GRID 7.1

Welcome to Red Hat JBoss Data Grid 7.1. As you become familiar with the newest version of JBoss Data Grid these Release Notes provide you with information about new features, as well as known and resolved issues. Use this document in conjunction with the entire JBoss Data Grid documentation suite, available at the Red Hat Customer Service Portal's [JBoss Data Grid documentation page](#).

1.2. ABOUT RED HAT JBOSS DATA GRID

Red Hat's JBoss Data Grid is an open source, distributed, in-memory key/value data store built from the Infinispan open source software project. Whether deployed in client/server mode or embedded in a Java Virtual Machine, it is built to be elastic, high performance, highly available and to scale linearly.

JBoss Data Grid is accessible for both Java and Non-Java clients. Using JBoss Data Grid, data is distributed and replicated across a manageable cluster of nodes, optionally written to disk and easily accessible using the REST, Memcached and Hot Rod protocols, or directly in process through a traditional Java Map API.

1.3. OVERVIEW

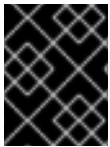
This document contains information about the known issues of Red Hat JBoss Data Grid 7.1. Customers are requested to read this documentation prior to installing this version.

CHAPTER 2. APPLYING PATCHES TO JBOSS DATA GRID

2.1. PATCHING EXISTING SERVER INSTANCES

Micro releases for the JBoss Data Grid server are distributed as a patch. This is for your convenience, as the new version will not completely replace the installation. The base version to be patched is the x.y.0 release, and the patches x.y.# (micro release or cumulative patch) may be applied to that instance. The patch can be rolled back (including the configuration) if there is any issue during the patching process, and any subsequent patches may be applied in the same way.

JBoss Data Grid provides patches for server instances only (Remote Client-Server mode). All other distributions, such as EAP modules, clients, and JBoss Data Grid Library mode, are provided as full releases.



IMPORTANT

To avoid issues with classloading, you should not apply patches to JBoss Data Grid while the server is running.

To apply a patch to JBoss Data Grid, do the following:

1. Download the patch from the Red Hat Customer Portal at <https://access.redhat.com/downloads/>
2. Stop the server instance that you want to patch if it is running.
Either use the Administration Console to stop the server or enter **Ctrl-C** in the terminal where JBoss Data Grid is running.
3. Open a terminal and change to the **JDG_HOME** directory.

```
$ cd JDG_HOME
```

4. Apply the patch as follows:

```
$ bin/cli.sh "patch apply /path/to/jboss-datagrid-7.1.x-server-patch.zip"
```

5. Start the server with either the **standalone.sh** or **domain.sh** script, for example:

```
bin/standalone.sh -c clustered.xml
```

2.2. ROLLING BACK THE SERVER VERSION

You can roll back patches to revert the JBoss Data Grid server to the previously installed version.



IMPORTANT

You should roll back patches only after applying a patch that results in unexpected behavior or undesirable effects. Rolling back patches is not intended for general uninstall functionality.

To revert a JBoss Data Grid patch, do the following:

1. Stop the server instance that you want to roll back if it is running.
Either use the Administration Console to stop the server or enter **Ctrl-C** in the terminal where JBoss Data Grid is running.
2. Open a terminal and change to the **JDG_HOME** directory.

```
$ cd JDG_HOME
```

3. Find the ID of the patch that you want to roll back.

```
$ bin/cli.sh "patch history"
```

4. Roll back the server version as follows:

```
$ bin/cli.sh "patch rollback --patch-id=PATCH_ID --reset-configuration=false"
```



WARNING

Use caution when specifying the **reset-configuration** option.

--reset-configuration=false does not revert the server configuration. Because applying patches can change the server configuration, it is possible that the server does not restart if you roll back the patch but do not roll back the configuration. In this case, you should verify the server configuration and manually adjust it as needed before starting the server.

--reset-configuration=true reverts the server configuration to the pre-patch state. Any changes to the server configuration after the patch was applied are removed.

If conflicts exist when you attempt to roll back the patch, the operation fails and warnings occur. Enter **patch --help** to list available arguments that you can use to resolve the conflicts.

5. Start the server with either the **standalone.sh** or **domain.sh** script.

CHAPTER 3. SUPPORTED CONFIGURATIONS

3.1. SUPPORTED CONFIGURATIONS

Supported hardware and software configurations for JDG 7.1 are available on the Customer Portal at <https://access.redhat.com/articles/2435931>.

CHAPTER 4. COMPONENT VERSIONS

4.1. COMPONENT VERSIONS

The full list of component versions used in Red Hat JBoss Data Grid 7.1 are available on the Customer Portal at <https://access.redhat.com/site/articles/488833>.

CHAPTER 5. KNOWN ISSUES

5.1. KNOWN ISSUES

JDG-96 - Cache events are incompatible with CDI 1.1 in JDG 7

When using CDI annotations with the CDI 1.1 API, such as the version found within JBoss EAP 7, a `java.lang.RuntimeException` is thrown; this exception is thrown as the cache events used by JBoss Data Grid 7.1.1 include content that has been removed by CDI 1.1.

This is a known issue in JBoss Data Grid 7.1.1. This issue is resolved in the CDI 1.2 API; to workaround this issue attach the listeners manually, as outlined in the following steps:

1. Remove CDI annotations from the listener bean, including removing all `@Observes` annotations from methods.
2. Add Listener annotations on desired methods; for example, `@CacheStarted`.
3. Manually register listeners using `AdvancedCache#addListener`.

JDG-436 - JMX operation `ClusterCacheStats.resetStatistics()` not working

When executing the JMX operation `ClusterCacheStats.resetStatistics()` none of the cluster statistics are reset.

This is a known issue in JBoss Data Grid 7.1.1, and to workaround this issue execute `Statistics.resetStatistics()` on each server individually.

JDG-474 - CLI - container and cache commands don't work in domain mode

When executing `container` or `cache` based commands through the CLI in domain mode the following message is displayed:

```
Container does not exists
```

This is a known issue in JBoss Data Grid 7.1.1, and no workaround exists at this time.

JDG-244 - Spark connector fails with CCE when compatibility mode is enabled

When attempting to insert values into a cache using the Spark connector while compatibility mode is enabled the request will fail with a `ClassCastException`.

This is a known issue in JBoss Data Grid 7.1.1, and to workaround this issue disable compatibility mode.

JDG-826 - Deadlock during stopping CacheManager

When a new cache is started during server shutdown it can result in a deadlock.

This is a known issue in JBoss Data Grid 7.1.1, and to workaround this issue do not start any caches while the server is shutting down.

JDG-841 - Rolling Upgrades from JDG 6.6.0 or earlier ignore cache store

The rolling upgrade procedure from JBoss Data Grid 6.6.0 and before records all the keys in the source cluster and transfers these keys to the target cluster. This operation does not persist the entry in the cache store.

This is a known issue in JBoss Data Grid 7.1.1, and no workaround exists at this time.

JDG-840 - Rolling Upgrades from JDG 6.6.0 or earlier migrates all data to a single node

When performing a rolling upgrade from JBoss Data Grid 6.6.0 or before all of the data is migrated to a single node instead of being distributed across the cache.

This is a known issue in JBoss Data Grid 7.1.1, and no workaround exists at this time.

JDG-831 - Rolling Upgrade from 6.1 to 7 not working

When attempting to synchronize data during a rolling upgrade the following error is thrown:

```
[standalone@localhost:10990 /] /subsystem=datagrid-infinispan/cache-
container=clustered/replicated-cache=sample-cache:synchronize-
data(migrator-name=hotrod)
{
  "outcome" => "failed",
  "failure-description" => "DGISPN0118: Failed to invoke operation:
java.lang.ClassNotFoundException: org.infinispan.util.ByteArrayKey from
[Module \"org.infinispan.persistence.remote:main\" from local module
loader @42f30e0a (finder: local module finder @24273305 (roots:
/opt/jboss-datagrid-7.0.0-server/modules,/opt/jboss-datagrid-7.0.0-
server/modules/system/layers/base))]",
  "rolled-back" => true
}
```

This is a known issue in JBoss Data Grid 7.1.1, and no workaround exists at this time.

JDG-869 - Deploying a task requires server reload

After deploying a task to the server any attempts to call this task result in an **Unknown task 'localScript_throwingException'** error.

After restarting or reloading the server the task executes without issue.

This is a known issue in JBoss Data Grid 7.1.1, and no workaround exists at this time.

JDG-823 - JPA cache store in weblogic and Postgresql 9.3 produces error

Any attempts to use the JPA cache store with weblogic and Postgresql 9.3 results in a **NoSuchMethodError**:

```
java.lang.NoSuchMethodError: javax.persistence.Table.indexes()
[Ljavax/persistence/Index;
  [java] at
org.hibernate.cfg.annotations.EntityBinder.processComplementaryTableDefi
nitions(EntityBinder.java:1100)
  [java] at
org.hibernate.cfg.AnnotationBinder.bindClass(AnnotationBinder.java:772)
  [java] at
org.hibernate.boot.model.source.internal.annotations.AnnotationMetadataS
ourceProcessorImpl.processEntityHierarchies(AnnotationMetadataSourceProc
essorImpl.java:245)
  [java] at
org.hibernate.boot.model.process.spi.MetadataBuildingProcess$1.processEn
tityHierarchies(MetadataBuildingProcess.java:222)
  [java] at
org.hibernate.boot.model.process.spi.MetadataBuildingProcess.complete(Me
tadataBuildingProcess.java:265)
  [java] at
org.hibernate.jpa.boot.internal.EntityManagerFactoryBuilderImpl.metadata
(EntityManagerFactoryBuilderImpl.java:847)
```

```
[java] at
org.hibernate.jpa.boot.internal.EntityManagerFactoryBuilderImpl.build(En
tityManagerFactoryBuilderImpl.java:874)
  [java] at
org.hibernate.jpa.HibernatePersistenceProvider.createContainerEntityMana
gerFactory(HibernatePersistenceProvider.java:135)
    [java] at
org.hibernate.ejb.HibernatePersistence.createContainerEntityManagerFacto
ry(HibernatePersistence.java:50)
      [java] at
weblogic.persistence.BasePersistenceUnitInfo.initializeEntityManagerFact
ory(BasePersistenceUnitInfo.java:461)
        [java] at
weblogic.persistence.BasePersistenceUnitInfo.initializeEntityManagerFact
ory(BasePersistenceUnitInfo.java:454)
        [...]
```

This is a known issue in JBoss Data Grid 7.1.1, and no workaround exists at this time.

CHAPTER 6. RESOLVED ISSUES

6.1. RESOLVED ISSUES

JDG-521 - CVE-2016-0750 hotrod client: unchecked deserialization in marshaller util [jdg-7]

The Hot Rod Java client in JBoss Data Grid automatically deserialized byte array message contents in certain events. A malicious user could exploit this flaw by injecting a specially-crafted serialized object to attain remote code execution or conduct other attacks.

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-875 - Cross-Site Replication: inconsistent data with multiple site masters in ASYNC mode

When attempting to configure cross-site replication with multiple site masters, data inconsistencies are possible due to updates being routed differently for each request. This can result in the same key traversing two separate routes, leading to differing values.

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-878 - Administration console - remote sites are not displayed correctly on cache container page

When two caches were configured each with a different remote site, after clicking on a cache container, both remote sites were displayed on both cache cards.

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-885 - Administration console - Indexing tab allows invalid configuration to be set

Indexing is not a valid configuration for invalidation caches; however, it was possible to define this element using the Administration console. The indexing tab is not available for the invalidation-cache now.

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-951 - LDAP Authorization Common RoleName Mapper Case Insensitive CN extraction

Previously, when enabling security with JBoss Data Grid with an LDAP backend using **common-role-name-mapper** for authorization, the role name failed to extract when its attribute in the distinguished name was **cn** instead of **CN**.

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-964 - Administration console - Incorrect data field columns used on cache nodes page

Previously, in the **Nodes** table of the Administration Console, an average read time value was displayed under the following columns: **Total reads**, **Total failed reads**, **Total writes**, and **Total failed writes**. With this update, **Total failed writes** is removed and the correct data for **Total reads**, **Total failed reads**, and **Total writes** is displayed.

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-966 - Administration console - going back to General status tab from Nodes tab loses cache context

After navigating to the **Nodes** tab of a non-default cache, when going to the **General Status** tab a redirect to the **General Status** tab of the default cache occurred, not the non-default cache, as expected.

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-1001 - JDG modules for EAP does not include all necessary indexes

The CDI Quickstart Guide demonstrates injection of Infinispan caches into a web application using CDI. Previously, the guide instructed the reader to bundle the JBoss Data Grid EAP modules with the application. However, this is not the recommended way to setup CDI. The quickstart now specifies the JDG EAP modules be installed directly on the server.

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-1042 - Refuse to store an index on an ASYNC Cache

When ASYNC caches were in use JBoss Data Grid could not handle out-of-order operations.

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-1044 - Conditional remove doesn't work with storeAsBinary

When using `storeAsBinary` if the stored value was a `MarshaledValue` and it didn't match the passed in unmarshalled value, the conditional `RemoveCommand` would fail.

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-1055 - Improve Compatibility between Rest and HotRod for text content

With text based content, writing via Hot Rod and reading via Rest worked, but not the other way around. Writing via Rest and reading via Hot Rod required deploying a modified `StringMarshaller` in the server.

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-1150 - API docs states incorrectly 'Experimental'

Methods `buildQueryBuilderForClass` and `getClusteredQuery` were both listed as experimental in the API docs. This was corrected.

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-1180 - Rest Server should allow custom maxContentLength

Previously, JBoss Data Grid did not allow a custom `maxContentLength`. With this update, a new attribute named `max-content-length` has been added that allows the maximum content length of a POST/PUT request to be specified.

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-1211 - WARN messages shown during startup for JDG (EAP) CDI modules

The following warning messages were shown if an application with module dependencies was started:

```
WARN [org.jboss.as.weld] JBAS016017: Using deployment classloader to load proxy classes for module org.infinispan.jcache:jdg-7.1. Package-private access will not work. To fix this the module should declare dependencies on [org.jboss.weld.core, org.javassist]
```

```
WARN [org.jboss.as.weld] JBAS016017: Using deployment classloader to load proxy classes for module org.infinispan.cdi.embedded:jdg-7.1. Package-private access will not work. To fix this the module should declare dependencies on [org.jboss.weld.core, org.javassist]
```

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-1212 - Package 3rd party licenses content

Add licensing information for third party packages used by JBoss Data Grid. In `jboss-datagrid-`

7.1.1-server.zip, there is a **docs/licenses** directory. Under that directory, the files **jdg/licenses.html** and **jdg/licenses.xml** document the licenses of third party packages used by JDG.

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-1215 - Rest logging handler category is wrong in infinispan-logging.xml

In the JBoss Data Grid sources zip archive, **infinispan-logging.xml** did not set the correct category for the rest logging handler. It was **RestAccessLoggingHandler** when it should have been **org.infinispan.rest.logging.RestAccessLoggingHandler**.

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-1217 - Remove log4j from uber jars

Previously, log4j was enabled by default. However, JBoss Data Grid supports multiple logging methods and is logging agnostic. As such, it is no longer enabled by default. It should be a manually provided dependency if needed.

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-1219 - "org.hibernate.search.exception.SearchException: Not a valid ScoreDoc index" under high load

Using a spatial query in library mode with a web application under high load could cause an exception.

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-1220 - JDG 7.1.0 logging is not compatible with EAP 7.1.0.DR16+

JBoss Enterprise Application Platform 7.1.0 included jboss-logging 3.3.1, but JBoss Data Grid 7.1.0 includes jboss-logging 3.3.0. Update jboss-logging in JDG 7.1.1 to 3.3.1 to be compatible with EAP 7.1.0.

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-1240 - Do not require a trust store for the HotRod server configuration builder

When configuring the Hot Rod server for SSL the validation code required a trust store to be enabled when one wasn't actually needed.

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-1262 - DSL queries filtering only on type are always executed without index

In a query if the WHERE clause was empty, or a tautology (true), the query was wrongly executed unindexed even though the index should at least be used for filtering on type. Example queries that could cause this are below:

```
FROM org.infinispan.test.Person
// and:
qf.from(Person.class).build();
```

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-1277 - @public packages missing from API documentation

The following packages were missing from the API documentation:

- org.infinispan.cdi.common
 - org.infinispan.objectfilter
 - org.infinispan.persistence.levelldb
 - org.infinispan.persistence.levelldb.configuration
 - org.infinispan.scripting
- This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-1283 - Quickstart spark issues

In the Spark Quickstart **README.md** file there were references to **ispn-cli.sh** and **ispn-cli.bat** but the filenames are actually **cli.sh** and **cli.bat**. Additionally, the Spark version referenced was 1.6+ but the quickstart actually works with version 2.0.2+.

This issue is resolved as of JBoss Data Grid 7.1.1.

JDG-1311 - CVE-2017-12629 lucene: Solr: Code execution via entity expansion [jdg-7.1.0]

It was found that Apache Lucene would accept an object from an unauthenticated user that could be manipulated through subsequent post requests. An attacker could use this flaw to assemble an object that could permit execution of arbitrary code if the server enabled Apache Solr's Config API.

JBoss Data Grid included only the Lucene components relevant to this flaw, and was not vulnerable to the second portion of the vulnerability, the code execution exploit. As such, the impact of this flaw was determined to be Moderate.

This issue is resolved as of JBoss Data Grid 7.1.1.