

# **Red Hat JBoss Data Grid 6.1**

## **Technical Preview**

Technical Preview Feature Information for Red Hat JBoss Data Grid 6.1 Edition 1

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## Red Hat JBoss Data Grid 6.1 Technical Preview

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#### **Abstract**

Information about Red Hat JBoss Data Grid features including support and technical preview status information.

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## CHAPTER 1. JBOSS DATA GRID TECHNICAL PREVIEW

#### 1.1. ABOUT THE TECHNICAL PREVIEW DOCUMENT

The JBoss Data Grid 6.1 Technical Preview document clarifies some important information related to features and support for JBoss Data Grid, for example:

- The two Usage Modes offered in JBoss Data Grid.
- JBoss Data Grid features that are supported.
- JBoss Data Grid features that are limited to a technical preview.

#### 1.2. ABOUT JBOSS DATA GRID USAGE MODES

JBoss Data Grid offers two usage modes:

- Remote Client-Server mode, which provides a managed, distributed and clusterable data grid server. Applications can remotely access the data grid server using Hot Rod, memcached or REST client APIs. Remote Client-Server mode is supported in JBoss Data Grid.
- Library mode allows the user to build and deploy a custom runtime environment. The Library usage mode hosts a single data grid node in the applications process, with remote access to nodes hosted in other JVMs. Tested containers for JBoss Data Grid 6 Library mode includes Tomcat 7 and JBoss Enterprise Application Platform 6. Library mode is supported in JBoss Data Grid.



#### **WARNING**

Technology Preview features are not supported with Red Hat production service level agreements (SLAs), may not be functionally complete, and are not recommended to be used for production. These features provide early access to upcoming product features, enabling customers to test functionality and provide feedback during the development process.

#### 1.3. JBOSS DATA GRID FEATURES AND USAGE MODES

The following table presents a list of features and indicates the usage mode for each feature. JBoss Data Grid 6.1.0 includes full support for both Remote Client-Server mode and Library mode.

Table 1.1. JBoss Data Grid Features

| Feature                      | Remote Client-Server Mode (Supported) | Library Mode (Supported) |
|------------------------------|---------------------------------------|--------------------------|
| File Cache Store and Loading | ✓                                     | ✓                        |

| Feature                              | Remote Client-Server Mode (Supported) | Library Mode (Supported) |
|--------------------------------------|---------------------------------------|--------------------------|
| JDBC Cache Store and Loading         | ✓                                     | ✓                        |
| Cache Passivation                    | ✓                                     | ✓                        |
| Remote Cache Store                   | ✓                                     | ✓                        |
| Cluster cache store                  | ✓                                     | ✓                        |
| Asynchronous Store                   | ✓                                     | ✓                        |
| Cluster configuration using UDP      | ✓                                     | ✓                        |
| Cluster configuration using TCP      | ✓                                     | ✓                        |
| Mortal and Immortal Data             | ✓                                     | ✓                        |
| Eviction Strategy                    | ✓                                     | ✓                        |
| Expiration                           | ✓                                     | ✓                        |
| Unscheduled Write-Behind Cache store | ✓                                     | ✓                        |
| Write-Through Cache Store            | ✓                                     | ✓                        |
| Clustering Mode (local)              | ✓                                     | ✓                        |
| Clustering Mode (replicated)         | ✓                                     | ✓                        |
| Clustering Mode (invalidation)       | ✓                                     | ✓                        |

| Feature   | Remote Client-Server Mode (Supported) | Library Mode (Supported) |
|---|---------------------------------------|--------------------------|
| Clustering Mode (distribution)  | ✓                                     | ✓                        |
| L1 Caching  | ✓                                     | ✓                        |
| Asynchronous Clustering Modes   | ✓                                     | ✓                        |
| Marshalling   | ✓                                     | ✓                        |
| Management using JMX  | ✓                                     | ✓                        |
| Cross-Datacenter Replication  | ✓                                     | ✓                        |
| JBoss Operations Network (JON) Integration and Plugin                 | ✓                                     | ✓                        |
| Asymmetric Cluster  | ✓                                     | ✓                        |
| Connection Pooling with JDBC cache stores                             | ✓                                     |                          |
| Using JBoss Application Server 7's standalone.xml file configuration  | ✓                                     |                          |
| REST Interface  | ✓                                     |                          |
| Memcached Interface   | ✓                                     |                          |
| Hot Rod Client, Protocol,<br>Statistics, Transport and<br>Marshalling | <b>✓</b>                              |                          |
| Rolling Updates for Hot Rod<br>Caches                                 | ✓                                     |                          |
| CDI   |                                       | ✓                        |

| Feature   | Remote Client-Server Mode (Supported) | Library Mode (Supported) |
|---|---------------------------------------|--------------------------|
| Read-only store   |                                       | ✓                        |
| READ_COMMITTED Isolation<br>Mode                              |                                       | ✓                        |
| REPEATABLE_READ Isolation Mode                                |                                       | ✓                        |
| Lazy Deserialization  |                                       | ✓                        |
| Asynchronous API  |                                       | ✓                        |
| Using config.xml  |                                       | ✓                        |
| Using APIs  |                                       | ✓                        |
| Using the config.xml file in conjunction with APIs            |                                       | ✓                        |
| Custom Interceptors   |                                       | ✓                        |
| Listeners and Notification for cache manager-level events     |                                       | ✓                        |
| Synchronous and Asynchronous Notifications                    |                                       | ✓                        |
| Configuration of the Asynchronous<br>Notification Thread Pool |                                       | ✓                        |
| Per Invocation Flags  |                                       | ✓                        |
| Grouping API  |                                       | ✓                        |
| Java Transactional API (JTA) Support and Configuration        |                                       | ✓                        |

| Feature   | Remote Client-Server Mode (Supported) | Library Mode (Supported) |
|---|---------------------------------------|--------------------------|
| Java Transactional API (JTA) Deadlock Detection |                                       | ✓                        |
| Transaction Recovery                            |                                       | ✓                        |
| Transaction and Batching                        |                                       | ✓                        |
| Key Affinity                                    |                                       | ✓                        |
| Distributed Execution Framework with Map/Reduce |                                       | ✓                        |

## 1.4. TECHNICAL PREVIEW FEATURES

The following features are included in JBoss Data Grid 6.1 as a technical preview only:

- The Query Module (Library mode)
- Command Line Interface



### **IMPORTANT**

For details about the support for a technical preview feature, refer to Technical Preview Support

## **APPENDIX A. REVISION HISTORY**

Revision 6.1-10.400 2013-10-31 Rüdiger Landmann

Rebuild with publican 4.0.0

Revision 6.1-10 Mon Aug 05 2013 Misha Husnain Ali

Published with new product name.

Revision 6.1-9 Wed Mar 20 2013 Misha Husnain Ali

Updated holder and year entities.

Revision 6.1-8 Fri Mar 15 2013 Misha Husnain Ali

BZ#909777 Virtual nodes removed (now deprecated).

Revision 6.1-7 Thurs Mar 14 2013 Misha Husnain Ali

BZ#909777 Minor changes requested.

Revision 6.1-6 Wed Mar 13 2013 Gemma Sheldon

BZ#909777 Removed New Features and Enhancements section. This information is available in the Release Notes.

Revision 6.1-5 Wed Mar 13 2013 Gemma Sheldon

Removed reference to Beta. Removed reference to 6.0.1.

Revision 6.1-4 Thurs Mar 07 2013 Misha Husnain Ali

Added asymmetric cluster to features.

Revision 6.1-3 Wed Mar 06 2013 Misha Husnain Ali

Updated for BZ#909777

Revision 6.1-2 Fri Feb 15 2013 Misha Husnain Ali

Updated according to Martin's comments.