RED HAT JBOSS DATA GRID

DATASHEET

DESCRIPTION

A data grid is an in-memory distributed database designed for fast access to large volumes of data and scalability. Data grids commonly provide a complementary layer to the relational database and the application.

FEATURES

- In-memory, distributed caching
- Map/reduce
- Elastic scalability
- Advanced querying
- Data replication
- Processing for streaming data
- Transaction capabilities
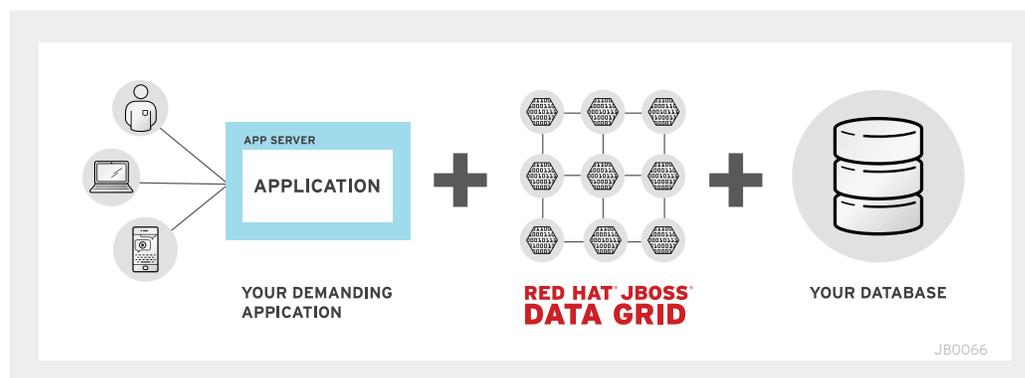- NoSQL data store

BENEFITS

- Accelerate application performance
- Maintain user experience during traffic surges
- Independently update and manage your application, its data store and the traditional database
- Achieve greater business and technical agility for application development and deployment
- Deploy into hybrid cloud environments

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OVERVIEW

APP SERVER
APPLICATION

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YOUR DEMANDING
APPICATION

**RED HAT JBOSS®
DATA GRID**

YOUR DATABASE

JB0066

Red Hat® JBoss® Data Grid, an in-memory distributed database, provides fast access to data and elastic scalability for large data volumes, allowing developers to meet tough requirements related to data retention, response time, and uptime. JBoss Data Grid offers a complementary layer to the existing data tier and compatibility with applications written in any language, using any framework and platform via multiple APIs such as memcached, Hot Rod, and REST. With management tooling and other advanced functionality included, JBoss Data Grid is an ideal technology for supercharging today's modern applications while giving organizations a cost-effective, adaptable solution for meeting both immediate and long term IT goals.

FEATURES

HIGH AVAILABILITY TO ACCESS DATA

As the amount of data grows, reads and writes to traditional back-end data stores cause major performance bottlenecks for web applications. By ensuring that the right data is in-memory and highly available within and across datacenters, Red Hat JBoss Data Grid acts as a complementary layer to the application and its relational stores. This allows applications to meet data-retention requirements, promote extremely fast and scalable read-write performance, and meet uptime service-level agreements (SLAs).

ELASTIC SCALE TO MAINTAIN FAST RESPONSE TIMES

Many applications struggle to adapt to surges in read and write requests during events such as seasonal business spikes, marketing and promotions, and external market changes. These applications need a cost-effective, non-disruptive way to achieve elastic scale and guarantee required response times. JBoss Data Grid makes it simple to add or remove nodes. And, all the work that ensures your data remains distributed and replicated is performed in the background.

RED HAT JBOSS DATA GRID IN ACTION

SCHOLASTIC BUILDS STORIA, A DIGITAL READING MANAGEMENT SOLUTION FOR E-BOOKS

- Scholastic is a large, global publisher and distributor of educational books, technology, and media. They wanted to give users a seamless experience between web and mobile applications, which was particularly challenging to accomplish during back-to-school traffic spikes.

- With JBoss Data Grid, Scholastic was able to achieve a resilient, reliable scalable environment with zero downtime, and improved response time from over 10 seconds to under two seconds. With Red Hat and JBoss Data Grid, Scholastic both met immediate budget limitations and deadlines and became able to respond to longer-term business and technical demands.
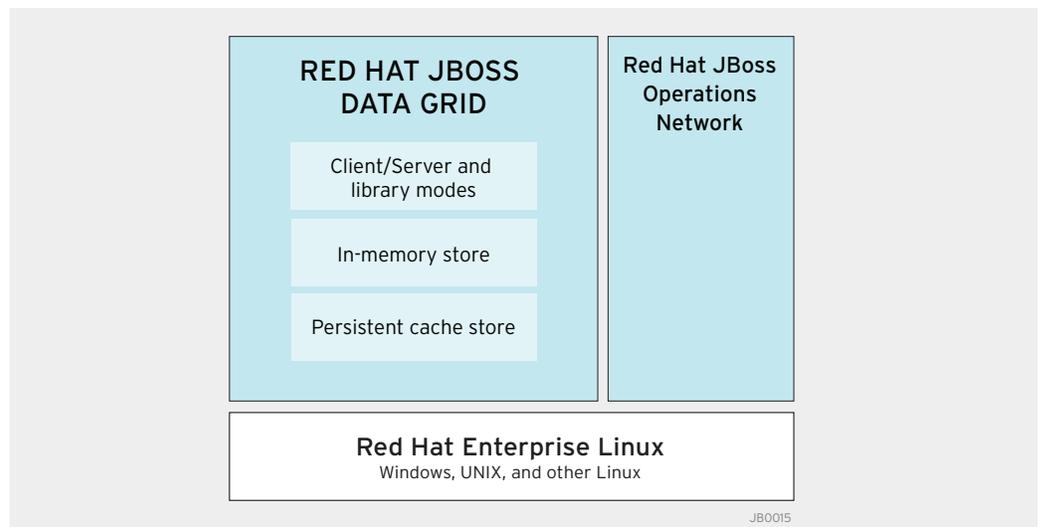
SUPPORT FOR OPEN HYBRID CLOUD ENVIRONMENTS

Most companies have diverse IT environments. Applications and infrastructure are on-premise and in the cloud, legacy and contemporary. Applications are often tightly coupled to proprietary, closed databases, preventing businesses from achieving the flexibility they need for hybrid solutions. JBoss Data Grid can act as a data abstraction layer, decoupling the application, cache, and database. As a result, businesses gain control over the lifecycles, maintenance, and costs of each component independently.

FLEXIBILITY TO DEPLOY YOUR DATA, YOUR WAY

Meet both immediate and long term IT goals and avoid vendor lock-in and licensing costs with a straightforward open source subscription. Gain the flexibility to deploy your data, your way. Connect the data grid to any application and any platform via multiple protocols (for example, REST, Hot Rod, and memcached) and a Java™ API. With JBoss Data Grid, you have the flexibility you need to innovate faster, in a smarter way.

PRODUCT COMPONENTS

JBoss Data Grid consists of:

- Two deployment modes:

  - Library mode for deployment with the same Java Virtual Machine (JVM) as a Java application.

  - Client/Server mode to separate the application from its cache, allowing JBoss Data Grid to scale and be maintained independently. With Client/Server mode, JBoss Data Grid can connect to any type of application (Java, C++, C#, and so on) via the memcached, Hot Rod, or REST protocol.

- A persistent cache store, for optional permanent storage of cached entries and restoration after a data grid shutdown.

- The in-memory store, which is the main component for storage and retrieval of the key-value entries.

Additionally, JBoss Data Grid includes JBoss Operations Network for a single point of control to deploy, manage, and monitor JBoss Data Grid and your other JBoss Middleware applications and services.

CERTIFIED INTEGRATION WITH:

• Red Hat JBoss Enterprise Application Platform

• Red Hat JBoss Fuse

• Red Hat JBoss Data Virtualization

• Red Hat JBoss Web Server

• Red Hat JBoss Data Virtualization

• Spring Framework

HOW CAN I GET RED HAT JBOSS DATA GRID?

JBoss Data Grid is generally available from Red Hat and its partners world-wide.

INCLUDED WITH JBOSS DATA GRID

MANAGEMENT AND MONITORING TOOLING WITH RED HAT JBOSS OPERATIONS NETWORK

Red Hat JBoss Operations Network provides a single point of control to deploy, manage, and monitor Red Hat JBoss Middleware applications. The built-in management and monitoring tooling allows you to effectively administer all of your Red Hat JBoss Middleware application environments, helping you improve operational efficiency, reduce costs, and ensure a positive experience for your users.

INTEGRATED DEVELOPER ENVIRONMENT WITH RED HAT JBOSS DEVELOPER STUDIO

Red Hat JBoss Developer Studio is an Eclipse-based integrated developer environment (IDE) bundled with tools for developing, testing, and deploying rich web applications, enterprise applications, and service-oriented architecture (SOA) services. There is no need to buy multiple subscriptions to build and test on Red Hat JBoss products or pay production SLAs to get support. It's all included.

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Download Red Hat JBoss Data Grid. All of our products are open source, which means you can install them, run a demo, and develop a proof-of-concept. Eliminate risk by trying the software before you buy.
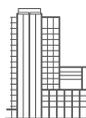
Learn more: http://www.jboss.org/products/datagrid/overview/

Explore a rich library of resources. Get up to speed fast by viewing a webinar, trying out a tutorial, or watching a demo.

Learn more: http://www.jboss.org/products/datagrid/resources/

Get involved. Open source software belongs to you. Blog, join a user group, contribute code, or test upcoming releases.

Learn more: http://www.jboss.org/products/datagrid/community/

ABOUT RED HAT

Red Hat is the world's leading provider of open source solutions, using a community-powered approach to provide reliable and high-performing cloud, virtualization, storage, Linux, and middleware technologies. Red Hat also offers award-winning support, training, and consulting services. Red Hat is an S&P company with more than 80 offices spanning the globe, empowering its customers' businesses.

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