RAIMA

RaimaDB 16.0 Datasheet

RaimaDB is a high-performance database management system that is optimized for operating systems commonly used within the embedded market. The database engine has been developed to fully utilize multi-core processors, run with minimal memory, and support both in-memory and on-disk storage. It provides a subset of the ANSI/ISO standard SQL that is suitable for running on a wide variety of computers and embedded operating systems which may have limited resources.

Key Features

- Performance
- Automatic Locking
- Portability
- SQL/Core Compatibility
- Upgradability
- In-Memory Optimizations
- SQL/PL
- Dynamic DDL
- Comprehensive API
- REST-ful Interface
- Administrative GUI
- Geospatial Data
- Time Series
- Replication
- SSL support

Core Package

Performance - Improved perfor- mance over previous version of the RaimaDB and competitor products.

Automatic Locking: Reduced need for developers to individually lock every table in a relationship. The RaimaDB now automatically locks any related and relevant tables with one lock by the user.

Portability - Database content is independent of the CPU architec- ture, allowing databases to be copied between platforms, or concurrently accessed by computers with different operating systems or CPU architectures.

SQL/Core Compatibility – The RaimaDB combines the Core and SQL database definition languages into a single DDL. The file format will support Core and SQL, as well as consolidating the catalog and database definition files. Primary and foreign key references will be a core level feature. Additional NULL support is a core level feature.

Upgradability - Database upgrada- bility, with respect to database mi-gration from prior RaimaDB versions, can be done through import/ export functionality.

Dynamic DDL - This feature is im- portant to meet customer feature demand for the ability to create and alter database and table definitions, which enhances the customer appli- cation upgrade scenarios.

Comprehensive API - RaimaDB 16.0 further enhances programmer efficiency by offering a comprehen- sive and modern cursor API for da-tabase command, control and navi- gational access.

Some of Our Partners

Secure Sockets Layer Support (SSL) - Raima now supports SSL encryption for the communication layer. A newly con- figurable option allows for the developer to fully control which connections to the RaimaDB need SSL encryption with minimal performance impact.

REST-ful Administrative GUI (Raima Control Center)

A newly supported REST-ful admin GUI has been added to the database server functionality.

CRUD: (create, read, update and delete) operation to the database through simple database access buttons.

Diagnostics: RaimaDB engine sta- tus: memory usage, CPU usage, database size, table size, users con- nected, etc. are all viewable upon immediate connection.

Administration: Database status can be modified.

SQL Query Support: Full SQL query support has been added in a new query builder page.

Enterprise Package

All of the core features in addition to:

SQL - SQL ISO 2012 standard support

SQL PL - SQL Persistent Procedural Language is a major ease-of-use enhancement in RDM. This feature follows the ISO standard for SQL scripted procedures and allows for programming constructs to be used purely through SQL.

SQL Stored Procedures - SQL Stored procedures allow for a precompiled batch of SQL statements to be executed together to perform a specific task.

JDBC 4.2 Type 4 - JAVA connectivity API. Allows for database connection through JAVA.

ODBC 3.9 - ODBC standard API for database connections.

3rd Party Utility Support - Allows for database reporting tools to be used to pull data from RaimaDB such as Tableau, Microsoft Access, Microsoft Excel, etc.

Replication support - RaimaDBs high speed Raima to Raima replication API and utility.

Database Specifications

- **Max. Databases Open Simultaneously:** No Limit
  Maximum Rows Per Database: No Limit
- **Maximum Size of Database File:** Limited only by file system
- **Maximum Tables Per Database:** No Limit
- **Maximum Records Per Table:** No Limit
- **Maximum Keys Per Database:** No Limit
- **Max. Row Size:** No Limit
- **Maximum Fields Per Table:** No Limit
- **Security:** AES Encryption with 128/192/256 bits
- **RAM Requirements:** Minimum 300K, User configurable

Supported Platforms:

- Microsoft Windows
- Linux, Embedded Linux (ARM,
- Mac OS X
- Green Hills Integrity
- QNX
- Wind River VxWorks
- Wind River Linux
- Autosar
- Barebones

Modes of Operation

- Single-thread
- Multi-thread

Download a trial version:

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Headquarters: 3214 W. McGraw St., Suite #212, Seattle, WA 98199, USA T: +1 206 748 5300
Europe: Forneburingen 33, Oslo, Norway : +47 97075600