

The ultimate choice for embedded databases

Birdstep RDM Server 8.0

Birdstep RDM Server 8.0 is an embeddable database management system employing a client/server architecture that is used when business critical information must be immediately available, reliably, and redundant. Compatible with 32-bit and 64-bit platforms, RDM Server 8.0 is ideally suited for business critical applications found in network management, office automation, financial services and telecommunication systems. With the introduction of data replication, highly available applications and fault tolerant systems are now solved out of the box protecting vendor's investment and revenue.

Like all Birdstep RDM Database Management Systems, RDM Server is deployed with the developer's application, thus giving you control and predictability over the application's data management. As a result, RDM Server is completely transparent to the end user. And since our database management tools are embedded within your application, a database administrator is not needed!

RDM Server provides you with maximum flexibility in deployment – whether you want to use industry standard interfaces or low level interfaces, Birdstep RDM Server puts you in control. Using Birdstep RDM Server 8.0, businesses can rely on the fact that their database applications will handle heavy peak user loads and transaction rates; along with Birdstep RDM Server's automatic recovery system and replication, data redundancy and integrity is impeccable. Some of the key benefits offered by Birdstep RDM Server 8.0 are:

- ***New Feature! Active-Passive Replication***
Data redundancy, fault tolerance, and high availability are all keywords tied into data replication. With RDM Servers advanced replication engine, application databases can be replicated to solve these problems.
- ***New Feature! Pluggable Transaction Logging Architecture.***
Applications with specific transaction logging or replication needs can now be solved through this new and exciting capability.
- ***New Feature! JDBC v4.0***
Keeping up with system interoperability, RDM Server releases support for JDBC v4.0 supporting the latest Java database development API's.
- VLDB Support - RDM Server can now handle an amazing 18 quintillion data records per table!
- In-Memory Tables - Highly configurable in-memory support. The developer can now configure parts of its data model in memory or on persistent storage.
- Dynamically Alter Tables – Adds enhanced Dynamic DDL functionality with the capability to add or drop columns, modify column data types and size, rename columns, and add/drop foreign key.
- Supports both native 32-bit and 64-bit systems in heterogeneous environments.
- A single-step migration utility to simplify updating previous RDM Server databases to RDM Server 8.0.
- Amazing architectural flexibility. Link your application directly to the engine libraries for unbeatable performance. Link to client libraries for remote access. You can do both concurrently for seamless hybrid operation.
- Provides 128-bit encryption security for applications where confidentiality is a must.

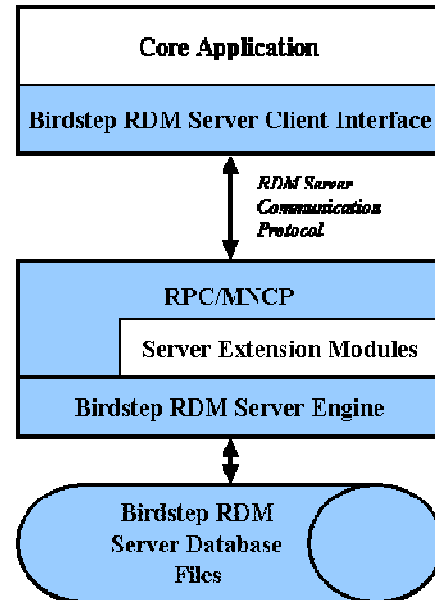
Birdstep RDM Server is designed with features that specifically meet your business needs, giving you a strong foundation for application development with unique tools for performance enhancement and database customization.

The architecture of a typical RDM Server client-server application is shown in the diagram. The shaded areas represent RDM Server components.

The core application consists of:

- The client-side program that accesses the server through the RDM Server client interface libraries. (For example, SQL and/or remote procedure calls.)
- The application-specific server extensions that run on the server.

Communication is provided by the Remote Procedure Call (RPC)/Server Multiple Network Control Processor (MNCP) interface.



Database Specifications

- **Maximum Database Size: 70 Quadrillion Bytes**
- **Maximum Number of Keys: 18 Quintillion per Column**
- **Maximum Number of Rows: 18 Quintillion per Table**
- **Maximum Open Files: No hard limit**
- **Maximum Table Size: 32K x 18 Quintillion = 576 EB**

Native Languages Supported

- C
- C++

Standards Supported

- ANSI SQL-89 Level 2
- ANSI SQL-92 Partial
- Unicode
- ADO.NET
- ODBC v3.51
- Type 4, JDBC 3.0 and 4.0
- PHP
- XML

Data Types Supported

- BLOBs
- Character
- Date
- DBADDR (ROWID)
- Decimal/Numeric
- Floating Point – 32bit and 64bit
- Integer – 8bit, 16bit, 32bit and 64bit
- Time
- Timestamp
- Unicode

Operating Systems Supported

- HP-UX
- AIX
- Solaris
- Windows
- Linux
- QNX Neutrino
- FreeBSD