Open Source DBMS CUBRID 2008 & Community Activities

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Agenda

• Open Source DBMS CUBRID 2008
• CUBRID Community Activities
Open Source DBMS CUBRID 2008
Open Source DBMS CUBRID 2008

- Proven technology: over 15 years of development
- Switch to open source DBMS in Nov 2008
- Over 25,000 downloads after being open source
- Over 4,000 downloads per month recently
- Over 6,000 active installations
Download Trend

*CUBRID 2008 Release (Open Source DBMS)*

* Total downloads: over 56,000 since June 2006
Enterprise-Level Features

- **RDBMS**
  - Performance and stability
  - Scalability
  - SQL-2 (ANSI SQL 92)
  - Default, not null, unique, primary/foreign key
  - View
  - Trigger

- **Large DB Support**
  - Multi-volume DB
  - Number of DB, table and size: unlimited
  - Number of column: 6,400, size of column: 2GB, number of index: 6,400

- **Scalability & Availability**
  - Multi-volume DB
  - Multi-thread server: multi CPU optimization
  - Replication
  - HA (High Availability)
  - Partition

- **High-performance Architecture**
  - Multi-thread, multi-server
  - Cost Based Optimizer (CBO)
  - Query plan cache
  - Query result cache

- **High-performance Client Architecture**
  - Broker middleware
    - Thread pool management
    - Load balancing
  - Object memory cache

- **Transaction**
  - ACID: commit, rollback, savepoint
  - Transaction concurrency
  - Locking: DB, table, record level
  - Deadlock breaking
  - Distributed transaction: Java

- **Backup/Restore**
  - Transaction concurrency
  - On-line/off-line backup
  - 3-level backup: full, incremental-1, incremental-2
  - Parallel backup/restore
  - Real-time compression backup
  - 3rd-party backup SW support

- **Security and Authentication**
  - Authentication: user, group, object
  - Transaction based authentication

- **Interfaces**
  - Standard API: JDBC, ODBC, OLEDB, PHP, E/SQL, etc
  - Native API: CCI API
  - Java Stored Procedure

- **CUBRID Manager**
  - All OS platform support (developed by Java)
  - Query, diagnosis, tuning, etc
SELECT title, INCR(read_count) FROM bbs WHERE id = ?;

Query Plan Cache
Query Result Cache
JDBC ResultSet Cache (prototype)

Transaction Log based Replication
One-way, Async, On-line Replication
1:1 Replication

Range Partition
List Partition
Hash Partition
HA (High Availability)

- AP Web Server
- Active Server
- Standby Server
- Node Fail
- Replication
- Fail-over
- Automatic Switch-over
- Fail-back
- Automatic Switch-over

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Performance

Features of BBS Apps
- Read count updates
- Hotspot Reads

1 PV = 4~7 Queries
Level 1: 101,000 articles
Level 2: 602,000 articles

- OSS DBMS D1
- Commercial DBMS D2
- Commercial DBMS D3
- CUBRID
CUBRID Manager
CUBRID Community Activities
# Open Source Project

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- **CUBRID Inside**: off-line meeting (bimonthly)
Developer Community Support

2009 Ubuntu Seminar (5/30)

Java Community Conference (2/28)

KIPA OSS Challenge 2009 (7/24~25)

Beautiful Developer Seminar (5/23)

IT Venture Club Conference (5/9)
FOSS Collaboration

Installation Tools

- APMSETUP
  Tools for windows

- AutoSet
  Tools for windows

- APC_Install-tools
  Tools for linux

Applications

- XE
  CMS

- TEXTYLE
  Blog

- TEXTCUBE
  Blog

- Wordpress
  Blog

- GNU BOARD
  BBS

- nFORGE
  Dev Platform

- Tops
  EC
XE Active Installations
About 78,000
Global Project - sf.net

Cubrid Database System

by cubrid

Cubrid database system.

View all files

http://cubrid.sourceforge.net

cubrid database dbms

Latest Reviews

Be the first to post your review of Cubrid Database System. Rate and review a project by clicking thumbs up or thumbs down in the right column.

Project Feed

Show: Everything

Related Projects
Global Community - cubrid.org
CUBRID
more than open source!