

# Database CUBRID

# Open Source Relational Database for Large Datasets with Excellent Processing Capabilities

CUBRID is an open source DBMS optimized for online transaction processing (OLTP) with excellent read/write functions. Running in a 3-tier architecture consisting of application, broker, and server, it helps build systems with flexibility and this in turn ensures high performance, reliability, and scalability required for mission-critical applications. Users can easily install and use CUBRID using a web-based console on Samsung Cloud Platform.

Key RDBMS Features	Complying with ANSI SQL standards, CUBRID is highly compatible with Oracle/MySQL and it supports expanded SQL such as hierarchical query and recursive query using common table expression (CTE). During commit/rollback/savepoint operations, it guarantees the integrity of the transaction and maintains a consistent database for failover and data restoration.
High-Performance Processing	Multi-version concurrency control(MVCC) allows the execution of concurrent transactions by multiple users and multi-thread/multi-server architecture allows for distributed processing of huge traffic volumes. Disk I/O optimization helps resolve performance bottlenecks and supports high-performance index, enabling high-performance processing of large datasets.
High Availability	CUBRID HA allows users to configure high availability based on the user guide. When there is a failover on an active server (Master node), CUBRID enables automatic failover to a standby server (Slave node) to ensure seamless service operation. When the service load needs to be distributed, a multiplexing configuration is also possible by adding a replica server.
Easy DB Configuration	Based on Red Hat Enterprise Linux (RHEL) OS, users can immediately install DB on Samsung Cloud Platform and utilize the monitoring and billing features. The installed DBMS will automatically make configurations and manage DB based on the user environment.

# **Service Architecture**



## Key Features

#### Support high performance

- Multi-Version Concurrency Control(MVCC) support
- Multi-thread and multi-server architecture
- Connection pooling/load balancing/proxy features provided by broker middleware
- Support high-performance index (e.g. multi-range, covered, reverse, skip-scan, function based, filtered index)

#### • Support DB scalability

- Automatically add multi-volume and volume
- Load balancing and service expansion through 1 to N replicated configuration
- Data splitting through table partitioning

#### DB provisioning and management

- Auto-provisioning, lifecycle management
- Choose VM based on the required spec
- Provide additional storage other than the OS disk
- Provide subnet/IP, NAT IP and Security Group integrated setting
- X Separate manual to be provided for management features such as multi-node configuration, monitoring, backup/restoration (User configuration item)

# Pricing

- Billing

   Open source DB is provided free of charge, VM usage is charged
- Default options and user-added options
  - Default option : OS S/W, OS installation disk (100GB), 1 public IP
  - Additional charges based on user-added product/option (e.g. Reserved IP)

% Users must comply with the provider's policy for CUBRID software licenses in the cloud.

FOR MORE INFORMATION

### SAMSUNG SDS

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