

SunDB Database Manual

Introduction

SunDB is a high-performance distributed database system designed for modern applications. This manual provides comprehensive documentation on SunDB's features, configuration, and best practices.

Replication

SunDB provides robust replication capabilities to ensure data availability and reliability. The replication system uses a master-slave architecture with automatic failover support.

Replication Configuration

Parameter	Default Value	Description
replication.threads	4	Number of replication threads
replication.batch_size	1000	Records per batch
replication.timeout	30s	Replication timeout
replication.retry_interval	5s	Retry interval on failure

Performance Optimization

SunDB includes several features for performance optimization:

- Query optimization with cost-based optimizer
- Automatic index selection
- Memory management and caching
- Parallel query execution

Security Features

SunDB implements comprehensive security measures including:

- Role-based access control
- Data encryption at rest and in transit
- Audit logging
- SSL/TLS support