



**WHITEPAPER**

MemSQL Enterprise  
Feature List

2017

# MemSQL Enterprise Feature List

## DEPLOYMENT

Provision and deploy MemSQL anywhere according to your desired cluster configuration.

### **On-Premises:**

Maximize infrastructure investments

### **Self-Service Cloud:**

Install MemSQL on AWS, Microsoft Azure, and Google Cloud

### **Fully Managed Cloud:**

Install MemSQL on AWS, Microsoft Azure, and Google Cloud

## DATA INGESTION

Connect MemSQL with your data ecosystem across streaming, batch load, and application environments so you can analyze your live and historical data in a single scalable system.

### **MemSQL Pipelines:**

Ingest data from Apache Kafka and Amazon S3 with a single command

### **Exactly-Once Semantics:**

Achieve guaranteed message delivery for precise reporting and analysis

### **Data Import:**

Import from existing systems using native data load functions

*“MemSQL as a core technology in our IT infrastructure allows us to ingest granular data more rapidly with higher scalability and efficiency.”*

**Mike DePrizio**  
Senior Architect



*“We’re now able to aggregate statistics across the entire US as well as glue on to complex streams for complex analysis. We like to say we gave the gift [of MemSQL] to a lot of groups at Comcast..”*

**Christopher Lintz**

Senior Principle Architect



**ANALYSIS**

Achieve ultra fast query response on live and historical data using ANSI compliant SQL.

**Sophisticated Insights**

Perform fast SQL operations for instant response to BI dashboards, reports, and machine learning applications

**Stored Procedures**

Build powerful custom functions with procedural SQL and leverage the performance of query compilation and distributed processing

**Geospatial**

Store, query, and index geographic data types including polygons and points to support location analytics

**JSON Optimized**

Store and query JSON data as a column-type and analyze multi-attribute objects

**Multi-Statement Transactions**

Multi-statement transactions allow a set of DML statements to be combined into a single transaction

**Compiled Queries**

Compile repeat queries into low level machine code to deliver real-time response for analytic queries

**Fully Distributed Joins**

Scale out distributed JOINS across any table or column for simple query access

## **DURABLE DISTRIBUTED STORAGE**

The highly scalable distributed system balances data and queries across a cluster of industry-standard hardware for maximum performance, concurrency, and availability

### **Distributed Storage**

Store and process data across clusters and maximize resilience and performance

### **Big Data Capacity**

Store petabytes of data on low cost disk and cloud storage for archive requirements while maintaining instant retrieval for analysis

### **Massively Parallel**

Scale out shared nothing architecture with a parallel execution engine for read and write queries delivering real-time performance

### **Full Durability to Disk**

Write transactions directly to disk or write to memory with full data persistence and archiving

### **In-Memory or On-Disk Tables**

Use memory for transactional workloads and cleanup while using disk for historical data and analysis

### **Compressed On-Disk Tables**

Optimize column store disk compression resources for storing up to petabytes of data

*“Every business user is requesting speed and the ability to move at an incredibly iterative pace, we need to be able to provide that and in-memory allows us to do so.”*

**JR Cahill**  
Principal Architect

*Kellogg's*

## **SIMPLE UNIFIED MANAGEMENT**

MemSQL Ops is a simple and powerful web interface for MemSQL cluster information, configuration, deployment, and monitoring.

### **Monitor Performance and Capacity**

Respond to issues and ensure your cluster is always online and operating within server capacity

### **Provision and Deploy**

Provision and deploy MemSQL according to your desired cluster configuration

### **High Availability**

Redundancy protect against data loss and ensures data consistency with replication

### **Cluster Management**

Automate and simplify common tasks including adding, dropping, restoring, rebalancing partitions

### **Administration and Scaling**

Manage data replication and restore without pausing or going offline

### **Cross Data Center Replication**

Synchronize one cluster with another over a broad network connection

## SECURITY

Meet or exceed data security requirements without compromising database performance. Easily manage how users and roles access data to meet intensive workloads for web scale or regulated environments.

### **Role-Based Access Control (RBAC)**

Manage simple or robust security configurations by user role and group while maintaining maximum performance

### **Encryption**

Data encryption is supported at time of ingest and when delivered across nodes using SSL. Use third party storage encryption while data is stored in MemSQL

### **Authentication**

Manage existing account access with PAM (Pluggable Authentication Module) and SAML authentication support

### **Audit Logging (Add On)**

Configurable database logging writes all activities to a secure external location to support information security tasks such as tracking user access, investigating suspicious activities and validating access control policies

### **Strict Mode (Add On)**

Prevent permissive data access from rogue database administrators using strict security configuration control to protect against insider threats

### **Password Policy**

Ensure strong password compliance and best practice with policy controls over length, complexity, and usage configuration

## **INTEGRATIONS**

Leverage the MySQL wire protocol or JDBC/ODBC interface to integrate with existing middle-ware or technology investments

### **Cloud**

Amazon Web Services, Microsoft Azure or Google Cloud Platform

### **On-Premises**

Deploy on virtualization and container services like Docker and VMware

### **Relational**

Oracle, SQL Server, MySQL, Postgres, Teradata, SAP, and more

### **Streaming**

MemSQL Pipelines, Apache Kafka, Amazon S3, HDFS, Apache Spark

### **Query**

ANSI SQL, JSON, Geospatial

### **BI Tool**

Tableau, Looker, Zoomdata, and Microstrategy

## **SUPPORT**

MemSQL support packages are tailored to your business, whether you're a startup or a global enterprise

### **Business Hours Support**

On-Call Support : 9am - 5pm PST

Get support in less than 2 hours for critical issues

### **Additional Service Packages**

Accelerate deployment and optimize production operations. Specific packages include; Quick Start, Ingest ETL, Operational Readiness and Performance Tuning.

## **READY TO GET STARTED WITH MEMSQL?**

Schedule a personal demo with one of our product experts to answer all of your questions and learn how our customers are benefiting from using MemSQL.

**Go to:**

**[MEMSQL.COM/DEMO](https://memsql.com/demo)**