

# ScaleArc for MySQL, v 3.11

## New and Existing Features

### New Features in ScaleArc for MySQL, v 3.11

Feature	Description	Benefit
Amazon Aurora (MySQL compatibility) support	Leverages the Aurora APIs to extend ScaleArc's capabilities into Aurora Leverages Aurora's native HA capabilities	Makes ScaleArc's load balancing, read/write split, caching, and other performance and scalability features available to Amazon Aurora users
Query load balancing within transactions	Enables distribution of reads and writes within transactions	Enables ScaleArc's auto read/write split for scale-out capabilities to apps written with wrapped transactions
MySQL 5.7 support	Supports integration with MySQL 5.7	Extends ScaleArc's uptime, performance, and scalability features to the latest MySQL release
HA improvements	Integrates Corosync and Pacemaker heartbeat tools	Increases resiliency between ScaleArc instances
Online documentation	Full searchable documentation available on <a href="http://www.scalearc.com">www.scalearc.com</a> site	Dramatically simplifies the process of installing, configuring, troubleshooting, and maximizing benefits of ScaleArc software

## Existing Features in ScaleArc for MySQL

Feature	Description	Benefit
Cloud support of ScaleArc high availability active/passive mode	Extends support for configuration synch between ScaleArc instances to enable active/passive mode in the cloud	Brings auto failover and continuous availability to cloud deployments
Auto failover across data centers	Adds multi-data center topologies to ScaleArc's auto failover framework	Delivers continuous uptime for applications
Auto failover	Detects MySQL server failures and performs role changes within the ScaleArc cluster	Enables automatic database failover that prevents application errors Automates failover by handling both replication and client connection upon database failure
Connection multiplexing	Aggregates multiple client connections into fewer server connections	Reduces server connection count and churn Increases server performance and availability
Query-response caching	Uses agentless pattern-based in-memory NoSQL cache for query responses	Provides instant scale up without app modifications Extends life of servers, increases ROI
Surge protection	Manages client connection surges, queuing excess traffic when all server connections are busy	Increases uptime during traffic surges Reduces app errors during peak loads Buffers traffic during auto failover
Read/write split	Distributes reads to slaves and writes to master servers on behalf of the app Supports read/write split for stored procedures	Provides transparent scale out with no application modifications
Load balancing	Directs queries based on optimum server response time and replication status	Increases app uptime and availability Improves application performance
Query routing	Routes queries/stored procedures to different database servers based on regex rules	Avoids the time and effort needed to modify application code to increase write capacity Routes reporting workloads away from production database servers
Authentication offload for MySQL users	Authenticates MySQL client connections on behalf of the server – with support for old and new password formats	Improves performance by reducing server compute cycles

## Existing Features in ScaleArc for MySQL (cont.)

Feature	Description	Benefit
SSL offload	Supports SSL encryption for both client and server connections	Enables compliance for organizations requiring end-to-end SSL encryption
Real-time SQL analytics	Logs all SQL traffic and charts query finger prints on a heat map	Reduces troubleshooting effort Highlights poorly performing queries
RESTful API	Supports integration with existing monitoring and management tools and processes	Simplifies configuration, management, and monitoring of the ScaleArc software

## Supported MySQL Versions

MySQL 4.0, 5.0, 5.1, 5.5, 5.6, 5.7 – MariaDB, Percona, XtraDB cluster