

EVALUATE, MIGRATE, AND OPERATE KEY/ VALUE WORKLOADS WITH PREDICTABLE GOVERNANCE AND OPERATIONS.

Percona supports Valkey and Redis across standalone, Sentinel, and Cluster topologies with 24x7 access to upstream-level experts. We help teams evaluate Valkey versus Redis, validate operational readiness, and manage change securely without vendor lock-in.

“Percona has truly transformed the way we manage our databases. One of our biggest goals was to have peace of mind, knowing that our databases are safe, backed up, and running smoothly, and Percona has more than delivered on that.”

— **Hirad Roshandel**, BSenior Vice President of Technology at Property.ca Inc.



Percona for
Valkey



Percona for
Redis

► Valkey/Redis decision and readiness

Valkey versus Redis is a governance and lifecycle choice as well as a technical one. Percona can help make the decision explicit by documenting:

- Server versions and topology
- Persistence mode and durability expectations (RDB / AOF)
- Replication and failover mechanics
- Client libraries and connection behavior
- Feature usage that affects compatibility (commands, scripts)

Percona offers readiness assessments and migration/no-migration recommendations, citing concrete risk drivers and mitigations.

► Compatibility inventory (clients, commands, scripts, extensions)

Most key/value surprises show up at integration boundaries. Percona can deliver a documented compatibility inventory and risk register tied to observed usage, including:

- Client libraries (pooling, retries, reconnect/backoff)
- Command usage patterns that create operational risk under load or failover
- Lua/script usage where present
- Modules/plugins as an assessment scope: what's deployed, what it depends on, and what must change for a safe migration

► Failure modes made observable and testable

Percona focuses on the failure patterns that repeatedly cause production incidents. Work includes baseline metrics selection (latency distribution, memory/eviction, replication health, persistence activity, client errors) and mapping each signal to an operator response, including:

- Persistence misconfiguration and recovery semantics
- Replication lag/divergence and failover behavior
- Memory pressure, eviction policy, hot-key risk
- Client-side cascades during instabilitywhat it depends on, and what must change for a safe migration

► Executable upgrades and migrations

Upgrades and migrations are treated as repeatable change execution with explicit rollback and rehearsed recovery:

- Inventory (versions, topology, persistence, clients, usage)
- Change design (sequence, rollback triggers, success criteria)
- Performance validation vs baseline
- Recovery rehearsal with recorded RTO/RPO
- Artifacts (runbooks, checklists, configuration diffs)

In-memory key/value workloads depend on behavior under failure, not just steady-state throughput. High Availability is shaped by topology (Standalone, Sentinel, Cluster), persistence (RDB/AOF), and client defaults (timeouts, pooling, retries, reconnect backoff). Percona makes those behaviors explicit by validating failover and recovery semantics, mapping signals to operator actions, and packaging the result as runbooks plus a rehearsed rollback plan for upgrades or migrations.

High Availability topologies

Standalone, Sentinel, and Cluster are reviewed against availability requirements. Failure scenarios (node loss, partition, replica divergence) are documented with expected behavior and operator steps.

Persistence and recovery

RDB/AOF configuration is reviewed and tested. Restore procedures are executed to validate integrity and recovery time. RTO/RPO targets are recorded and proven through rehearsal.

Performance and memory control

Memory, eviction behavior, latency distribution, and hot-key risk are baselined. Tuning actions are tied to measurable thresholds. Changes are tracked to prevent silent regression.

Support and Services

Expert Support

Expert Support is reactive, 24x7 support for troubleshooting, incidents, and performance issues across PostgreSQL, MySQL, MongoDB, and Valkey/Redis.

- Fast issue resolution that minimizes downtime impact
- Deep performance tuning that prevents unnecessary scaling
- Post-incident guidance that reduces repeat failures and cost drift

ExpertOps

ExpertOps Proactive Database Management is hands-on, ongoing database operations for teams that want expert-level daily management without hiring expert DBAs.

- Continuous tuning & rightsizing reduce cloud waste
- Replica, storage, & configuration cleanup prevent environment sprawl
- Operational coverage for staffing gaps

Expert Consulting & Services

Expert Consulting and Services offer project-based expertise for architecture, migrations, EOL upgrades, hardening, and modernization efforts.

- Architecture reviews that identify unnecessary replicas and HA overhead
- Migrations and EOL upgrades that avoid costly rework
- Health checks to uncover I/O waste, sizing issues, and configuration drift

