

Zero Downtime Migration by Cintra

Traditional database cutovers force you to choose between long maintenance windows, high business risk, or both. Cintra replaces that trade-off with a continuous-replication, zero-downtime migration model that keeps applications online while data streams in real time to the new platform.

Using Oracle Zero Downtime Migration (ZDM), GoldenGate, and Cintra's own automation, we deliver seamless, high-speed migrations for mission-critical Oracle workloads—whether you're moving to AWS RDS/EC2, Oracle Database@AWS, Oracle Database@Azure, OCI, Exadata, or modernized on-prem infrastructure.

With Cintra's reverse replication fallback architecture, your migration window is fully reversible: if applications don't behave as expected, you can instantly roll back to the original environment without data loss.

- 25+ years of Oracle engineering leadership
- Zero-downtime, zero-disruption migration patterns
- Multi-cloud coverage: AWS, Azure, OCI, Exadata & on-prem

From risky cutovers to reversible zero-downtime migrations

Modernize, upgrade, and move mission-critical Oracle environments with no outage, no customer impact, and built-in rollback. Cintra delivers zero-downtime migrations across AWS, Azure, OCI, Exadata, and on-premises platforms using Oracle ZDM, GoldenGate, and proven migration automation.

- Zero Downtime Migration Readiness
- Zero Downtime Migration Execution
- Ongoing Optimization & Modernization

Why Cintra for Mission-Critical Migrations?

Organizations stuck on legacy platforms face operational and financial barriers that often seem insurmountable. That's where Cintra comes in with:

- **Oracle Migration Experts**

Cintra has assessed and migrated hundreds of Oracle estates, bringing deep expertise in performance, modernization, HA/DR, and licensing optimization. Our teams specialize in mission-critical systems where downtime isn't an option.

- **Zero Disruption**

We combine Oracle ZDM, GoldenGate, and Cintra migration automation to deliver continuous replication and smooth, seconds-level cutovers—keeping customers and internal users online throughout.

- **Multi-Cloud Flexibility**

Migrate Oracle to Oracle on any platform—AWS, OCI, Azure, Exadata, or on-premises—using a consistent, proven zero-downtime approach.

- **Reverse Replication Fallback**

Our reverse replication fallback pattern keeps the original source in sync from the new target after cutover, giving you a fully synchronized fallback environment, instant rollback capability, and a truly zero-risk cutover window.

Zero Downtime Migration Readiness

A structured readiness and architecture phase to make your migration predictable, reversible, and fully documented before a single cutover step is taken.

We analyze workloads, validate HA/DR, profile performance, and design a detailed migration runbook for your target platform (cloud, Exadata, or on-premises) so every dependency and risk is understood in advance.

KEY DELIVERABLES

Assessment & Readiness

- Workload analysis across databases and applications.
- HA/DR validation to ensure resilience is maintained or improved.
- Performance profiling to understand load patterns and peak behavior.
- Detailed migration runbook preparation, including timelines and roles.

Target Design

- Oracle architectures aligned to AWS, Azure, OCI, Exadata, or on-prem best practices.
- Alignment with existing HA/DR strategies and recovery objectives.
- Design of replication paths, cutover strategy, and fallback options.

Risk & Cutover Planning

- Identification of technical and operational risks.
- Reverse replication fallback strategy baked into the plan.
- Clear “go/no-go” checkpoints and rollback criteria.

OUTCOMES

- A predictable, documented migration plan for mission-critical Oracle workloads.
- Confidence that HA/DR, performance, and licensing requirements are understood.
- Stakeholder alignment on scope, timing, and risk mitigation.

Zero Downtime Migration Execution

This is where the plan becomes reality: live replication, seamless cutover, and built-in fallback, executed by Cintra's specialist Oracle migration teams.

Using GoldenGate and ZDM automation, we keep your source and target in continuous sync. When you're ready, we perform a tightly controlled, seconds-level switchover to the new platform with full data integrity validation.

WHAT WE DO

Live Replication

- Real-time data synchronization from source to target using GoldenGate and ZDM.
- Continuous validation of replication health and data consistency.
- Support for complex topologies (RAC, Exadata, multi-site).

Seamless Cutover

- Carefully orchestrated cutover window with minimal user impact.
- Seconds-level switchover where applications redirect to the new platform.
- End-to-end data integrity checks before and after cutover.

Reverse Replication & Stabilization

- GoldenGate or Data Guard continues to replicate from the new target back to the original source.
- Fully synchronized fallback environment maintained for a defined window.
- Instant rollback capability if applications require it, providing zero-risk cutover.

BUSINESS OUTCOMES

Zero-Outage Migration

- No planned downtime for customers or internal users.
- No "big-bang" cutover risk or lengthy maintenance windows.

Zero-Risk Cutover

- Reversible migration window with bidirectional replication.
- Confidence to migrate even in complex, high-availability enterprise environments.

Ongoing Optimization & Modernization

Once your environment is running on the new platform, Cintra focuses on stabilization, tuning, and modernization, so you realize the full value of the move from day one.

We provide post-migration hypercare, performance tuning, licensing efficiency improvements, and operational handover, plus the roadmap to your next modernization step, including Oracle version upgrades and migrations to PostgreSQL.

CORE COMPONENTS

Hypercare & Stabilization

- Close monitoring during the post-cutover window.
- Rapid response to performance or stability issues.
- Fine-tuning of parameters and replication settings as needed.

Performance & Licensing Optimization

- Tuning to leverage new platform capabilities (cloud, Exadata, modern hardware).
- Optimization of Oracle TCO through improved licensing efficiency.
- Validation that performance, scalability, and resilience have improved from day one.

Modernization Roadmap

- Platform upgrades (e.g. 11g/12c > 19c > 23ai).
- On-prem to AWS RDS, Oracle Database@AWS, Oracle Database@Azure, OCI.
- RAC/Exadata to Exadata modernizations.
- Oracle to PostgreSQL migrations as a structured follow-on transformation path.

Continuous Value

- Faster cloud adoption and modernization cycles.
- Optimized Oracle TCO and licensing.
- Higher performance, scalability, and resilience from the new platform.

Engagement Models

Choose the level of engagement that matches your migration goals—from targeted readiness to full-lifecycle modernization support.

ASSESSMENT

Zero Downtime Migration Readiness & Architecture Review

A fixed-scope engagement focused on readiness, risk, and architecture. Ideal if you need a clear, low-risk migration plan before committing to a major platform move.



- Workload, HA/DR, and performance analysis.
- Target architecture and migration runbook design.
- Defined reverse replication fallback strategy.

PROJECT

Zero Downtime Migration Execution

An outcome-focused project to deliver your zero-downtime migration into cloud, Exadata, or modernized on-prem infrastructure.

- Live replication, seamless cutover, and reversible migration window.
- Hypercare and stabilization until the new platform is fully proven.
- Ideal for mission-critical Oracle workloads where downtime is unacceptable.

MANAGED SERVICE

Ongoing Optimization & Future Migrations

For organizations with continual change (new regions, new platforms, new versions) Cintra can remain engaged to support future zero-downtime migrations and ongoing optimization.

- Support for repeated migrations and upgrades using the same ZDM framework.
- Continuous tuning and licensing efficiency improvements.
- Strategic roadmap for modernization, including PostgreSQL adoption.

Idea For

Cintra's Zero Downtime Migration services are designed for organizations where any outage is a business-level event:

- Enterprises upgrading Oracle (11g/12c > 19c > 23ai) with no room for downtime.
- Organizations moving from on-prem Oracle to AWS RDS/EC2, Oracle Database@AWS, Oracle Database@Azure, or OCI.
- RAC/Exadata customers modernizing to new Exadata platforms.
- Teams planning Oracle → PostgreSQL migrations but needing a no-disruption journey.
- High-availability environments where maintenance windows are shrinking or no longer acceptable.