Real Application Testing (RAT) Database Migration Validation Service

In today’s highly demanding IT environments, it is vital that your Oracle database platforms are verified and validated following migrations and upgrades to the database environment. For this reason, Oracle Consulting is providing a Database Migration RAT Validation Service so that you can bring your database environments in line with Oracle best practices and take advantage of the latest features for your database performance.

The Service will validate performance comparisons of existing production to post-upgrade/migration/patch on non-prod DB Replay workloads. Verifying performance with feature enablement provides an incremental approach to holistic DB tuning. Oracle Consulting brings the technical skills, proven methodology and tools to validate and verify your database migrations and upgrades.

Validate Your Database Migrations & Upgrades

Oracle Consulting will guide your IT team through a structured approach to validate your Oracle database migration or upgrade, present testing findings, and recommend how to improve performance in the new environment. Using the RAT product service offering, Oracle Consulting will validate a performance comparison of production to migrated pre-production database workloads after resizing, rescaling, or DB consolidation efforts. During Replay, Oracle Consulting will verify database performance with feature enablement including initialization parameter settings, Resource Management plans, and schema object parameters as an incremental approach to holistic DB tuning.

Oracle Consulting can also leverage the SQL Performance Analyzer (SPA) to analyze result sets, and to identify performance settings and top SQL issues.

KEY FEATURES

• A thorough validation of your entire Oracle database upgrade or migration
• Leverages Oracle leading practices to identify database configuration issues
• Knowledge sharing with your IT Team on Oracle database configuration and Real Application Testing (RAT) best practices
• A documented process for delivering database Replay testing with Oracle RAT
• A full range of reports covering Capture/Replay operations and comparisons, as well as reports for recommending optimizations of database SQL and features

KEY BENEFITS

• Faster time-to-value of your database investment
• Extensive experience evaluating Oracle database performance and tuning as an incremental approach to complete database optimization
• Focus on knowledge sharing to enable your staff to understand the validation testing process and technical approach
Capture Your Oracle Database Production Workload

Oracle Consulting will provide up to two contiguous RAT Captures, each 2-6 hours in duration, in sync with a full production-level source server backup. This backup and Captures are used as the basis for reproducing workload traffic as Replays in the target upgraded migration environment. The first Capture is generally provided to sync-up with the restored backup as a warmup for original workload transactions.

Replay Your Workload on a Pre-Production Migrated Database

Oracle Consulting will provide up to three RAT Replays using the Captures taken from the production database following a full restore of the source server backup. Replays can occur in the order they were captured, but then rolled back to a Flashback Snapshot to replay the Capture again. Between rerunning the same Replays, altering database performance characteristics and settings measures the differences before and after the third Replay.

Evaluate Findings from Performance Differences

Oracle Consulting will provide reports that encompass both high-level summary and detailed drill-down information in terms of errors, performance and data divergence to help understand how the Replay fared in comparison to Capture or other Replays. Also available are basic performance comparison reports between Replay and Capture or other Replays, along with advanced analysis using AWR, ASH, and Replay Compare Period reports.

SQL Performance Analyzer (SPA) Quick Check

Oracle Consulting will provide an example SPA Quick Check that allows customers to validate system changes on databases directly, easily, and quickly without impacting end users. SPA Quick Check supports workflows allowing administrators to verify routine DBA tasks such as optimizer statistics gathering, SQL Profile validation, and initialization parameter changes with a single click of a button. The SPA tool is highly optimized and resource controlled, making it viable to test directly in production.

Key Deliverables include:

- RAT Capture/Replay command script template
- Capture/Replay performance analysis summary
- All generated scripts and workload reports
- Engagement summary report
- Knowledge sharing on the RAT method for evaluating your database

EXPERT SERVICES

- OEM Assessment Service
- OEM Startup Service
- OEM Management Pack Service

ADDITIONAL SERVICES AVAILABLE FROM ORACLE CONSULTING

- Oracle Database 19c Upgrade Service
- Oracle Database 19c Post-Upgrade Assessment
- Oracle Database Disaster Recovery Service

FROM ORACLE UNIVERSITY

- Expert-led training for Oracle Database and RAT
- Learning paths and assessments for Oracle technology

WHY ORACLE CONSULTING

- Leading Expertise: Oracle’s own experts providing thought leadership for every Oracle solution.
- Global Scale: 13,000 Oracle experts in 145 countries, serving over 20 million users.
- Unified Methodology: Based on industry standards, high quality results across complex projects.
- Flexible Delivery: Onsite, offsite, and offshore, along with innovative solutions such as Expert Services and Architecture Services.
How We Are Different: Expertise and Experience

Oracle Consulting is focused exclusively on Oracle technologies and we have the experts that others turn to for leading practices in Oracle hardware and software implementations. We know how to optimize your Oracle Cloud or on-premise investment and can provide your business with tightly integrated, comprehensive, superior services throughout your Cloud service or on-premise experience.

Getting Started

Leverage Oracle's methods, tools and extensive experience with customer implementations across diverse industries and geographies. Tight integration across Consulting, Development, Support, Education, and Global Delivery puts the entire Oracle team behind your success. To learn more, contact your local Oracle Consulting representative or visit www.oracle.com/consulting.