MiCORE™ SOLUTIONS

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Oracle Exadata Database Machine

Engagement Snapshots

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All engagement snapshots are grouped by project type and related industry.

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About MiCORE Solutions, Inc.

We help companies manage their data to drive better business decisions.

MiCORE Solutions, Inc. is a data management and consulting company. We provide services and solutions to support database architecture, data administration, data storage, database operations, data analytics, and data security.

We are committed to supporting our clients' requirements by delivering cost effective, reliable, and high quality solutions that help drive innovation and maximize return on IT investments.

- Headquartered in Reston, Virginia
- Founded in 2008
- Established by former Oracle consulting professionals
- Oracle Gold Partner
- GSA Schedule IT/70, Contract Number GS35F0359

About Our Consultants

Our team of dedicated consultants specialize in optimizing, architecting, and managing complex Oracle environments. That specialization – along with our passion for the latest technologies from Amazon, Microsoft®, Splunk, Google, and other cutting-edge service partners – allows us to build creative, cost-effective, and reliable solutions that meet your business requirements and maximize the value of your investments.

We Make IT Personal.

At MiCORE, we skillfully blend our extensive technical knowledge and experience with industry best practices to deliver solutions that meet your specific business requirements.

We're extremely proud of the fact that we work hard to earn your trust so that we can turn our skills and experience into a solution that we've built together. That's what we truly deliver.

ORACLE ON ORACLE:
MIXED WORKLOADS

Telecommunications

This company manufactures communications network equipment and solutions to serve many of the world's largest carriers and service providers. The company empowers its clients to navigate and grow with today's emergent business models by transitioning service-driven networks that transform the way they compete.

Why Exadata?

- The company selected the Oracle Exadata platform (Exadata, Exalogic, Exalytics) to use as the foundation for building out their next generation applications. Previously, the platform consisted of Solaris Sparc, Linux, and Windows servers and NetApp storage servers.
- Looking for a solution to consolidate the platform, Exadata was chosen because it provides the scalability, performance and advantage of consolidating workloads without impacting SLA deliverables.
- The client's application landscape included Oracle E-Business Suite, Oracle Hyperion, Oracle OBIEE, Oracle Access Manager, Oracle SOA, Oracle IPM, Oracle GTM/OTM, and Data Warehouse.

Key Solutions: Technologies Used

- Oracle Exadata Database Machine (3 x 1/2 racks)
- Oracle Exalogic (3 x 1/8 racks)
- Oracle Exalytics (3 servers)
- Oracle Data Guard
- Oracle Business Intelligence
- Data Warehouse Implementation
- Oracle Golden Gate
- Oracle SOA
- Oracle Identity Management
- Oracle Hyperion

MiCORE Role

- Implemented Oracle Business intelligence software suite on Exalytics servers and migrated legacy systems to the Exadata Platform.
    - Migrated Oracle OBIEE 10g running on Windows to OBIEE 11g on Exalytics.
    - Migrated Hyperion from Windows servers to Oracle Exalytics.
- Migrated and upgraded Data Warehouse from Oracle 11gR1 on Solaris to Oracle 12c on Exadata.
- Installed and configured Oracle SOA on Exadata platform, and migrated existing services to new platform.
- Implemented Global Single Sign-On solution using Oracle Access Manager and Oracle Internet Directory running on Exadata platform.
- Migrated Oracle IPM to Exadata platform and performed post migration upgrade to latest certified version.
- Assisted in custom WebLogic based application implementations on Exalogic platform.

- Assisted in implementing Golden Gate for data replication from Oracle E-Business Suite to Data Warehouse database.
- Assisted in implementing DR for applications running on the Exadata Platform.

Benefits

- The company's new, unified single platform enables ease of patching, administration, and maintenance.
- Exalogic enables virtualization of middle tiers and the ability to deploy and scale middle tier servers as needed.
- Exadata provides reliable, scalable database platform with high availability and predictable performance across the company's mixed workloads.

Information Technology & Services

This company provides innovative technology and solutions for mission-critical national security programs. Serving almost 50 federal agencies through nearly 1,000 contracts, this company supports major national missions, including military readiness, terrorist threat detection, information security, and border protection.

Why Exadata?

- The company was overwhelmed by a complex network of multiple databases, and decided to embark on a consolidation and simplification effort.
- The Exadata platform was selected in order to boost performance, reduce total cost of ownership, and provide a unified central data repository for reporting.
- The Application Landscape included PeopleSoft HR and Financials along with homegrown applications.

Key Solutions: Technologies Used

- Oracle Exadata (2 x 1/4 racks)
- Oracle Data Guard
- Oracle Real Application Clusters
- Oracle Advanced Security
- Oracle PeopleSoft applications for HR and Financials

MiCORE Role

- Analyzed application characteristics and database workloads; Created an optimal plan for migrating databases to Exadata from Linux servers.
- Assisted in consolidation of two PeopleSoft Financial databases into a single global Financial database.
- Assisted in moving applications to RAC-enabled databases to meet high availability and workload performance requirements.
- Configured Oracle Data Guard and standby databases for Disaster Recovery (DR).
- Performed scheduled quarterly patching for the two Exadata servers.
- Assisted in troubleshooting and optimizing the Exadata platform.

Benefits

- Consolidated 50 databases on a single Exadata platform. Migrated all instances to a single server to handle incoming data.
- Realized cost savings from decommissioning servers. On track to reap cost savings from license consolidation and ease of maintaining unified infrastructure.
- Data Guard replicates data between two U.S. cities.

Space & Defense

This company supports mission-critical programs that impact national security, intelligence, healthcare, citizen services, and international development. Through deep experience in technology, engineering, and program management, this company delivers targeted services and solutions to high-priority challenges.

Why Exadata?

- The company's current platform was not meeting the SLA for daily processing and analytical reporting. Needing a high performance platform, Exadata was chosen in an effort to decrease costs, increase processing and reporting capabilities, and to provide a centralized data store for reporting.
- Application landscape included Costpoint and OnBase OLTP applications with a homegrown data warehouse.

Key Solutions: Technologies Used

- Oracle Exadata (1/4 rack high performance disks + 1/8 rack development platform)
- Oracle Real Application Clusters
- Oracle Data Guard
- Oracle Advanced Security
- Advanced Compression
- Costpoint and OnBase applications
- IBM Cognos Analytics

MiCORE Role

- Analyzed application characteristics and database workloads; Created an optimal plan for migrating databases to Exadata from Linux servers.
- Assisted in configuring OLTP and Data Warehouse databases in Exadata environment.
- Assisted in moving applications to RAC-enabled databases to meet high availability and workload performance requirements.
- Configured Oracle Data Guard and standby databases for Disaster Recovery (DR) and created Standard Operational Procedure document to assist internal team going forward.
- Performed scheduled quarterly patching for the two Exadata servers and assisted in troubleshooting and optimizing the Exadata platform.

Benefits

- Highly available and secured platform with faster analytical processing performance.
- Enabled a single source of data for both OLTP and data warehouse reporting.
- Consolidated 20 databases on a single Exadata platform and moved all instances to a single server to handle all incoming data.
- Cost savings from decommissioning servers. On track to reap cost savings from license consolidation and ease of maintaining unified infrastructure.
- Oracle Data Guard replicates data between two U.S. cities over 1,000 miles apart.

Construction

With a network of 100+ locations across North America, this company delivers modular space solutions for the construction, education, energy, industrial, commercial, healthcare, and government markets.

Why Exadata?

- The company was experiencing performance and reliability issues with its existing JD Edwards installation. As such, they sought to implement a new platform on which to migrate its JD Edwards environment databases. Previously, the platform consisted of IBM servers, Linux, and IBM Storage.
- The Oracle Exadata platform was selected to serve as the cornerstone of the company's next generation applications. Exadata provides the scalability, performance, and advantage of consolidating workloads without impacting SLA.
- Application landscape included Oracle JD Edwards, Oracle Hyperion, third party application databases, and data warehouse.

Key Solutions: Technologies Used

- Oracle Exadata (2 x 1/4 racks)
- Oracle Data Guard
- Data Warehouse
- Oracle Hyperion

MiCORE Role

- Analyzed application characteristics and database workloads; Created an optimal plan for migrating databases to Exadata from legacy IBM servers.
- Assisted in moving applications to RAC-enabled databases to meet high availability and workload performance requirements.
- Performed cross-platform migration of 24 databases from IBM AIX to Oracle Linux on Exadata.
- Configured Oracle Data Guard and standby databases for Disaster Recovery (DR).

Benefits

- A unified single platform enables ease of patching, administration, and maintenance.
- Exadata provides a reliable, scalable database platform with high availability and predictable performance across mixed workloads.
- Significant performance increases: Exadata improved nightly processing of ERP and reporting jobs by 400%. The company also realized a 50% reduction in overnight run time for batch jobs.
- Exadata allowed the company to consolidate and prioritize workloads of Development, Test, and Production Environments running on multiple IBM servers into a single Exadata Database Machine.
- Zero business disruption as a result of the migration.

EXADATA PATCHING

Data Analytics & Computer Software

This company develops analytics, business intelligence, and data management software to help other organizations better understand market trends, client requirements, business performance, information security, and risk management. Customers leverage this technology to transform large quantities of data into actionable business insights.

Why Exadata?

- Client company required a platform to provide its flagship business analytics application via a Software-as-a-Service (SaaS) delivery model. The Exadata platform was selected in order to consolidate workloads and centralize the application on a highly performing engineered system.
- The size, complexity, and required patching frequency of the new Exadata environment precluded the option of relying on Oracle Platinum Services to complete routine patching exercises.
- Client was expending a significant amount of time and money to divert internal resources to perform necessary patching after hours and on weekends – So they sought an outside vendor to provide a predictable, cost-effective strategy for routine patching of their complex Exadata system.

Key Solutions: Technologies Used

- Oracle Exadata (7 x 1/2 Racks)
- Oracle Real Application Clusters
- Oracle Database Vault
- Oracle Transparent Data Encryption
- Flagship Data Analytics Application
- Software-as-a-Service Delivery Model

MiCORE Role

- Conducted a comprehensive assessment of the client company's Exadata environments and provided documentation of the database environment to use for future reference.
- Implemented a primary team of resources to provide initial onsite discovery, consultation, and support for the customer's Exadata patching needs.
- Ongoing senior support services for customer's bi-annual Exadata patching exercises include configuration, implementation, and monitoring. A thorough review of each patch is performed prior to application, to check for known bugs that may interfere with the patching cycle.

Benefits

- Realized time and cost savings from working with a primary team of resources that remains consistent across patch cycles - thus eliminating the need to train newly assigned resources each time a patching exercise is scheduled to occur.
- Exadata patches are performed with greater ease and certainty of success.
- All Exadata environments are operating at peak performance with ideal patch levels, providing increased application security and predictability.