Query Offloading Case Study
Query Offloading Saves Millions $

Sabre Holdings ™

COMPANY OVERVIEW

A world leader in the travel marketplace, Sabre Holdings merchandises and retails travel products and provides distribution and technology solutions for the travel industry

GoldenGate PROVIDES

- Supports 1.6TB of data movement per day to read-only servers
- Source– Oracle 10g | Target – MySQL
- Current plans to migrate to Oracle 11g on both source and target.

### CHALLENGES / OPPORTUNITIES

- Optimize OLTP system performance – offload all query activity
- Reduce TCO via platform changes and segment "lookers" from "bookers"
- Handle growing data volumes and support heterogeneous systems over life-cycle of Air Travel Shopping Engine (ATSE)
- Maintain data integrity across all systems

RESULTS

- 80% TCO Reduction – Millions $$ saved

"Bookers vs Lookers"
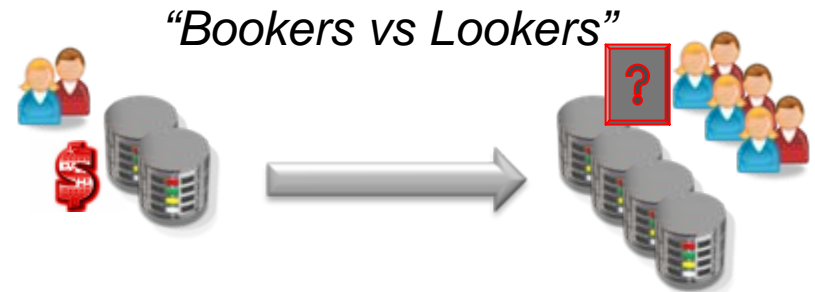
Continuous Availability Case Study

High Availability of Manufacturing Application Meets Stringent SLAs

COMPANY OVERVIEW

Research In Motion (RIM) is a leading designer, manufacturer and marketer of innovative wireless solutions for the worldwide mobile communications market.

CHALLENGES / OPPORTUNITIES

- Experiencing exponent growth and stringent carrier SLA's to meet growing demand for Blackberry devices
- Maintain continuous availably of critical data across all global data centers (4) for manufacturing plants
- All plants see same data and can move devices based on regional demand

GoldenGate PROVIDES

- Active-Active configuration provides same data across worldwide plants
- Improved system performance & response times
- Zero downtime DB migration to new version using phased approach

RESULTS

- All of manufacturing from VP to engineer on plant floor can access most up to date info.
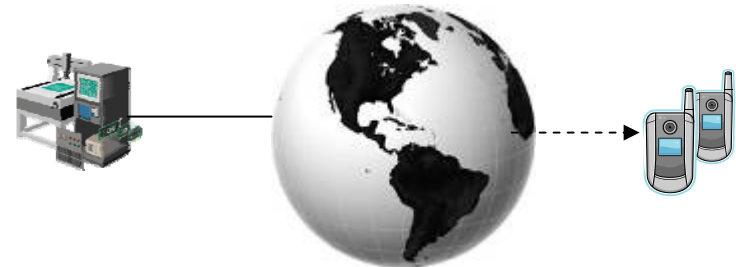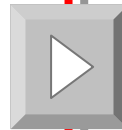
Continuous Availability Use Case

24x7 Fraud Detection & Payment Processing for Blue-Chip Retailers

COMPANY OVERVIEW

Retail Decisions (ReD) is a payment card issuer and a world leader in card fraud prevention and payment processing. A specialist supplier to the payments industry worldwide. Its blue-chip international clients come from the global telecommunications, retail, travel, petroleum, banking and the broader e-commerce sectors

CHALLENGES / OPPORTUNITIES

- Typical Service Level Agreements dictate 99.95% availability & aggressive sub-second average response times
- Must ensure quick, massive scalability
- High cost of downtime -- ReD's clients lose millions of dollars per hour
- Global clients; data centers on 4 continents

Oracle PROVIDES:

- Fraud Detection (ReDShield) using Oracle 9i and 10g databases
- U.S. Payment Processing system, using SQL Server databases – also supports data access for Web apps and Reporting

RESULTS

- "Lightning Fast" implementation
- Time to recover: ZERO minutes
- Reduced database license & infrastructure costs

"We needed a mega-scalable architecture capable of handling increasing e-commerce traffic, while meeting our customers' stringent SLAs." - Chris Uriarte, CTO

Continuous Availability Use Case

During Siebel Upgrade & Database Migration

COMPANY OVERVIEW

HSN is an interactive lifestyle network and retail destination, offering a curated assortment of exclusive products combined with top brand names. HSN incorporates experts, entertainment, inspiration, solutions, tips and ideas to provide an entirely unique shopping experience for its customers.

CHALLENGES / OPPORTUNITIES

- Eliminate downtime during major Siebel upgrade from version 6.2 to 8.0

- Additionally, upgrade Oracle database 8i to 10g with no downtime

- Conduct a phased migration approach to allow time for training & testing

- Minimal business disruption

Oracle PROVIDES:

- Continuous availability during major migration project.

- Active-Active configuration provided data synchronized across old & new systems

- Provided upgrade & downgrade logic between old and new Siebel versions

RESULTS

- Enabled migration of 1500+ users to new system

- Reduced risk with live parallel running of both old and new

- Zero downtime

- No disruption to the business & continuous order processing on mission critical system

Real Time Data Integration Case Study

Better BI to Reduce Customer Churn

COMPANY OVERVIEW

DIRECTV is a $17 billion provider of satellite-based television services. DIRECTV's 7,500 employees operate the company's broadcast centers, monitor satellites, and deliver service to about 17 million U.S. and over 5 million Latin American customers.

GoldenGate PROVIDES

- Real-time data integration from Siebel CRM on Oracle to central Teradata Warehouse
- 1,500 service agents log 600,000 customer calls p/day
- GoldenGate moves 150-200 million records per day with 1.5 second latency.

CHALLENGES / OPPORTUNITIES

- Maintain high quality customer service in competitive market – reduce churn!
- Centralize customer information for a single view to support sales, marketing, support & field service
- Significantly reduce data latency in central data warehouse for all queries & reports – edict for < 15 minutes!

RESULTS

- Significantly reduced churn by 25%
- All business units have access to real-time business data.

Real-Time Business Intelligence

Real-Time Data and BI Enables Intra-Day Business Optimizations

COMPANY OVERVIEW

Overstock.com is an online "closeout" retailer offering high-quality, brand-name merchandise, including bed-and-bath goods, home décor, kitchenware, watches, jewelry, electronics and computers, sporting goods, apparel and designer accessories among other products at discount prices.

CHALLENGES / OPPORTUNITIES

- Better understand customer purchasing behavior
- Provide timely information to support marketing, merchandising & operational decisions
- Improve shopping database reliability & uptime

Oracle PROVIDES:

- Support for high availability & disaster tolerance across Oracle production sites
- Zero-downtime system migration and upgrade
- Enable active data warehouse roll-out in 90 days with real-time data feeds
- Complements Oracle Data Integrator for data transforms on target

RESULTS

- Customer analysis now done in minutes, rather than days
- Dashboard reports using real-time data for P&L & customer profitability
- Google Adwords adjusted based on real-time data reports
- Ranked #4 in customer service by *National Retail Federation*

Customer Case Study
Continuous Availability of ATM Network for High Quality Customer Service

Bank of America

COMPANY OVERVIEW

Bank of America is one of the world's largest financial institutions, serving individual consumers, small- and middle-market businesses and large corporations with a full range of banking, investing, asset management and other financial and risk management products and services.

CHALLENGES / OPPORTUNITIES

- Continuous Availability of 18,000 ATM network serving 60+ million cardholders
- Provide customer with availability anywhere via online, POS, branch and mobile banking
- Detect and alert fraud activity
- Scale to mange growing data volumes

Monet PROVIDES

- Active-active replication across 4 geographically dispersed data centers and hot fail-over to central disaster recovery center
- Enables ongoing system migrations and maintenance with no downtime.
- Load balancing across multiple data centers
- Ability to automatically fail-over in event of any outage

RESULTS

- Continuous uptime for 18,000 ATM's
- Reduced risk with Active-Active configuration
- Handles growing data volumes - 1,000+ transactions per second
- Reduced risk and maintain high level of customer satisfaction

Customer Case-Study
Market Transparency with Real-time Data Access

COMPANY OVERVIEW

The New York Independent System Operator (NYISO) is the not-for-profit corporation responsible for operating New York's bulk electricity grid, administering the state's competitive wholesale electricity markets, and conducting comprehensive long-term planning for its electric power system.

CHALLENGES / OPPORTUNITIES

- The '**freshest' data** is required to track pricing, bidding and purchasing so the correct 'buy' and 'sell' price is displayed
- Trades must be monitored in 'real-time' to for **ensure market visibility** and integrity
- **Offload all query and analysis** from production system
- Relying on nightly '**batch' loads caused delays** in uncovering issues

Oracle PROVIDES:

- **Query Offloading** from Comprehensive Bid Management System to an ODS
- **Real-time Data Integration** to monitor market performance
- **Zero-downtime database upgrade** from Oracle 9i to Oracle 10g

RESULTS

- Real-time transaction management, issue resolution and automated analysis
- Better marketplace performance and lower cost of ownership

GoldenGate has provided the data integration solution we were looking for. We look forward to rolling this product out for other projects across the organization."
John Bubb, Product Manager, Business Intelligence Products, NYISO

GoldenGate for Healthcare

Key Partners:

GE Healthcare

GE   CERNER

Key Customers:

Kettering Health Network℠

Jefferson University Hospitals

MONTEFIORE Medical Center

Adventist HEALTH SYSTEM

MEMORIAL HERMANN

- **Industry Challenges**
  - Paperless Patient Records
  - Data-Driven Medicine
  - Staff and Critical Supply Management
- **GoldenGate Provides**
  - Continuous availability of data that is a pre-requisite to going completely electronic
  - Real time data for intelligence in the business of healthcare
- **Benefits**
  - Protect patient data in the event of system outages and other failures
  - Save time for health care providers by delivering unified view of all current test results and patient history
  - Improve patient outcomes through safety analyses such as drug interaction analysis
  - business intelligence

*"When your doctors and patients are relying on a system to deliver care, such as with **POE**, that system needs to be industrial strength. In matters of life and death, downtime is not an option."*

- Jack Wolf, CEO, Emerging Health Information Technology

GoldenGate for Banking / Financial Services

Key Partners: ACI

Key Customers: VISA | us bank | First Data | PROSA | UBS | Bank of America | Liberty Mutual | Swedbank | CHASE Paymentech | VOCALINK | ADP

- **Industry Challenges**
  - Escalating threats of fraud
  - Increased competition in risk management
  - System rationalization and cost reduction
  - 100% reliability and uptime
- **GoldenGate Provides**
  - Continuous availability of transactional and historical data
  - Real time data for better intelligence regarding fraud, risk, and business optimization
- **Benefits**
  - Meet the most stringent SLAs for latency, availability, scalability
  - IT Managers can sleep better at night
  - Protect against planned and unplanned downtime
  - Lower risk and cost with better, up to date customer intelligence

"We can maintain our level of customer service no matter what. We have been using this full dual site Active/Active solution with GoldenGate continuously since 2006 with no outages or service issues."

- Magnus Kleveby, Systems Area Manager, Swedbank

GoldenGate for ECommerce & Retail

Key Customers:

- **Industry Challenges**
  - Promotion Optimization
  - Logistics & Distribution: Real time Warehouse Management
  - Align per Customer Costs to Revenues
  - Cost-effective Systems that Handle Peak Loads

- **GoldenGate Provides**
  - Real time data integration for optimizing logistics and customer promotions
  - Query offloading to reduce system costs
  - Data distribution to support applications in a hub/spoke business structure

- **Benefits**
  - Improved customer reach and shopper to buyer conversion
  - Increased operational efficiency
  - Maintain margins in good and bad times

"Our requirements seemed simple: find a solution that can transfer our customer data in real-time while keeping up with peak volumes and with the ability to… meet the future needs of the business. In actuality, GoldenGate was one of the only solutions…that is able to handle all three requirements with ease."

– J Seelan, DBA Manager, 1-800-Flowers.com

GoldenGate for Communications

Key Partners:

amdocs

Key Customers:

RIM BlackBerry

at&t

SinglePoint

RELIANCE Communications
Anil Dhirubhai Ambani Group

DIRECTV

- **Industry Challenges**
  - Operational efficiency (OPEX reduction)
  - Transformation of the network & OSS/BSS to Next-generation technology
  - Convergence is driving product bundling
  - Faster time-to-launch for new services

- **GoldenGate Provides**
  - Zero downtime for planned and unplanned events
  - Real time data for customer service and customer analysis
  - Real time data to enable new services

- **Benefits**
  - Introduce new services rapidly
  - Support Real-time services (gaming, conferencing)
  - Handle growth and peaks with reliability
  - Eliminate downtime

"…deployment of real time data integration software from GoldenGate morphed the original technical problem into a business opportunity. In fact, the DIRECTV CEO recently awarded the marketing group an award for *decreased customer churn*, which was substantially affected by the availability of realtime data through the BI solution.*"*

- Jack Gustafson, Director of Data Warehousing at DIRECTV

ORACLE IS THE INFORMATION COMPANY