QUEST SOFTWARE®

SharePlex
for Oracle

"**Profoundly alters the economics of Oracle computing**

Simple, Affordable, ZeroIMPACT Oracle Data Replication

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ighlights

SharePlex® Product Overview

SharePlex® for Oracle profoundly alters the economics of Oracle computing. SharePlex is the ultimate data replication solution for ***Business Critical Applications***.

SharePlex simplifies data replication to what is specifically needed to fit your business — replicate multiple copies of Oracle data locally, remotely or in-the-cloud for special purposes:

- ✓High Availability and Disaster Recovery
- ✓Operational Reporting
- ✓Migrations or Upgrades
- ✓Business Intelligence and Data Warehousing
- ✓Scalability (RAC alternative)
- ✓Change Tracking

arePlex® for Oracle is a "*Data Availability Solution"* for Oracle databases that is ffordable, simple to use & easy to manage.

- ✓ SharePlex has been a leading database replication product **since 1998**, with a global presence
- ✓ Gartner 2010 Recommends SharePlex for Oracle to reduce costs with **Oracle Standard Edition** use
- ✓ IDC 2010 shows SharePlex with over **19.1% of the Replication market share** compared to our closest rival Oracle 25% (inclusive of GoldenGate, Data Guard, Active Data Guard and Streams)

Worldwide Database Replication Revenue Market Share 2010

Other 42.3%
Quest 19.1%
Oracle 25.0%
IBM, 13.6%
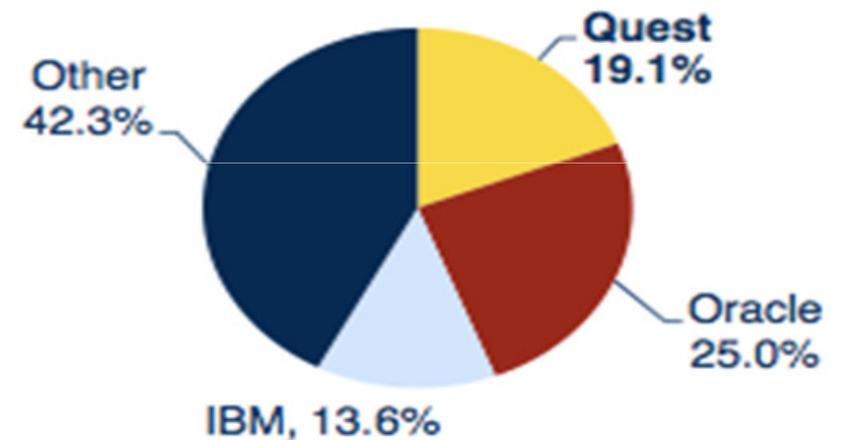
Market = $171 Million

harePlex® Market Presence

350+ Industries

1400+ Accounts

23,500+ Installations

Banking/Financial
Telecom
National Security
Technology

57 Countries
Americas
EMEA
APAC-J

Worldwide
F500-2000
Global 200
SMB

What Makes SharePlex® Different?

Fully automated and easy to use
- Download, install and use in just 15 minutes
- Expedite staff learning curve with 5 minute how-to videos
- Learn from the experts 24x7 in the SharePlex® Community with online forums & blog

Support for a multitude of platforms (mix and match)
- Including Oracle Standard and Enterprise Edition, RAC, Exadata and Oracle 8i to 11g

Get all the functionality in one low price
- Flexible licensing options (perpetual or term)

Achieve scalability with or without RAC
- Does not require RAC Clusterware software

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harePlex® Embedded Utilities – No Added Cost!

y features for consideration when choosing a replication product

harePlex® comes packaged with all the tools needed to manage & maintain your replication environment

Compare/Repair

✓ Validates the integrity of data between the source and target.
✓ If a discrepancy is found, it fixes the anomaly.

Sync Utility

✓ Built on top of Oracle export & import; allows an object to be instantiated or re-synchronized.
✓ Handles in-flight changes to the object

SharePlex® Manager

✓ Graphical user interface that allows users to monitor & manage all their SharePlex® installations. Alerts to issues.

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ey Features

- Fully Automated
- Easy to Use
- High Integrity Data
- Low Overhead
- Affordable
- Flexible Datatype Support
- Flexible Platform Support
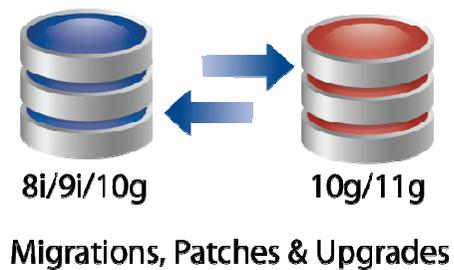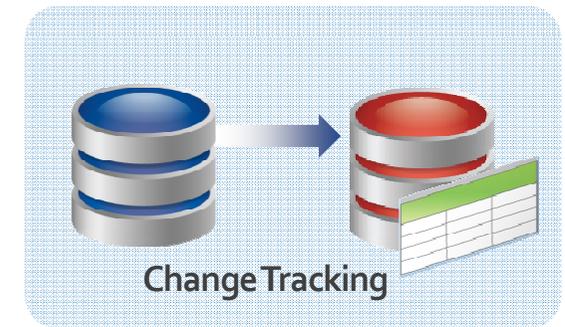- Time Savings

harePlex® for Oracle - Product Architecture
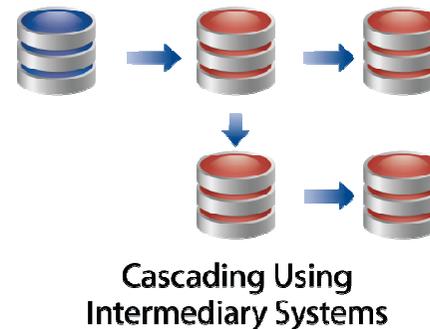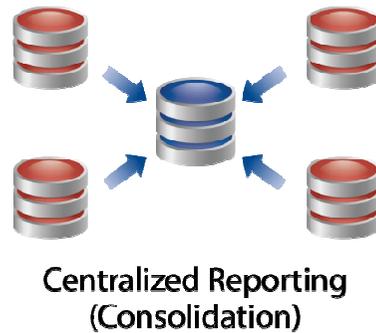
cal, Remote or in-the-Cloud

Export Queue

Export

Import

Post Queue

SQL

Read

Redo/Archive logs
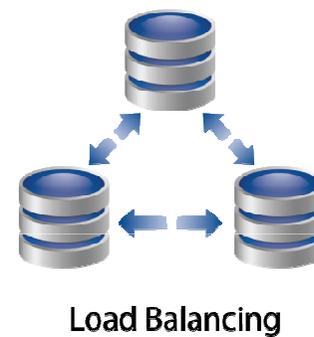
Post

Post

Capture

Capture Queue

Source

Cloud Target

Target

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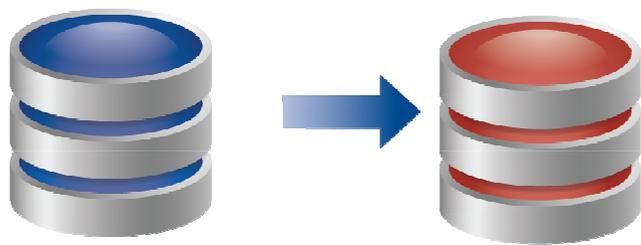
Use Case Scenarios

harePlex® ZeroIMPACT Use Case Scenarios

cal, Remote or in-the-Cloud

Operational Reporting, Archiving or Data Warehousing

High Availability/ Disaster Recovery

Data Distribution/ Distributed Processing

Load Balancing

Centralized Reporting (Consolidation)

Cascading Using Intermediary Systems

Change Tracking

8i/9i/10g   10g/11g

Migrations, Patches & Upgrades

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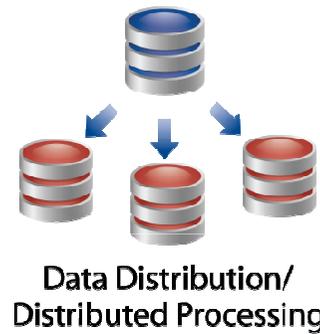
ffload Operational Reporting

Operational Reporting, Archiving or Data Warehousing

- Ad hoc querying, reporting, data warehousing or Business Intelligence can be run from a secondary copy of the instance (all or a subset).

- Reduces contention, data footprint and improves performance on your production system.

- Avoids performance degradation from times of high-volume reporting such as month, quarter or year end.

- Immediate business benefits can be achieved offsite. Can be placed on Standard Edition database or in-the-cloud as a cost-effective SaaS Model to provide 24x7 reporting without production impact.

igh Availability and Disaster Recovery
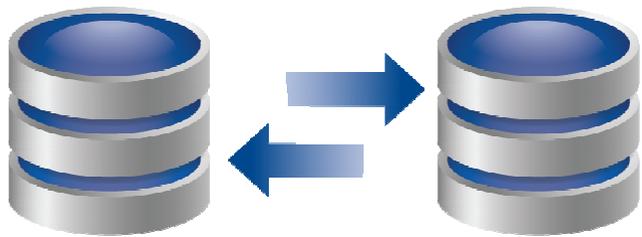
High Availability/ Disaster Recovery

| Availability	Downtime per Year
99.999	5.26 Minutes
99.99	52.56 Minutes
99.9	8.76 Hours
99.8	17.52 Hours
99.7	26.28 Hours
99.6	1.46 Days
99.5	1.83 Days
99.4	2.19 Days
99.3	2.56 Days
99.2	2.92 Days
99.1	3.29 Days
99.0	3.65 Days

- Ensure Business Continuity to meet five 9's SLA requirements for unplanned & planned downtime.

- Provides an alternate copy of production data for failover in the event of maintenance or downtime.

- Ensures production databases are available 24x7.

- Ensures high-level of User Experience and avoids loss in revenues or end-user satisfaction due to loss of critical data

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igrations, Upgrades and Patches

8i/9i/10g   10g/11g

Migrations, Patches & Upgrades
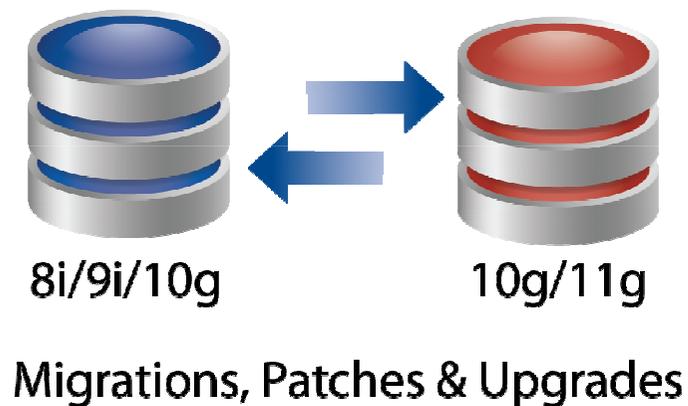
- Migration of application version, database version, hardware platform or sometimes all three.

- Decrease downtime by switching users to the replica system while the migration is being performed on production.

- Eliminate risk providing a failback if the changes have undesired effect. Supports multiple dry-runs.

- Reduce costs and mistakes by performing the changes during working hours.

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ata Distribution and Distributed Processing
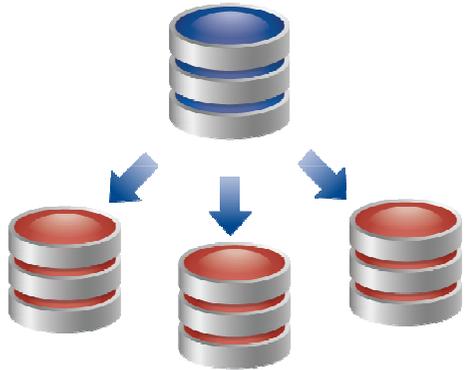
Data Distribution/
Distributed Processing

- Databases are geographically dispersed over WAN, LAN or Satellite.

- Distribute data to different servers, keeping all copies of the database current.

- Copies can all be different database versions & indexed differently.

- Replicate all or a subset.

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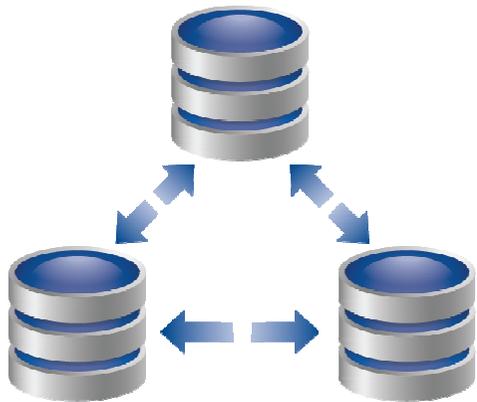
oad Balancing

Load Balancing

- Data Replication in place of RAC

- Applies conflict resolution as required by the circumstance and as defined by your business rules and needs.

- Provides the fastest possible fail over time that can be achieved using any technology in a WAN environment.

- Copies can all be different database versions & indexed differently.

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entralized Reporting/Consolidation
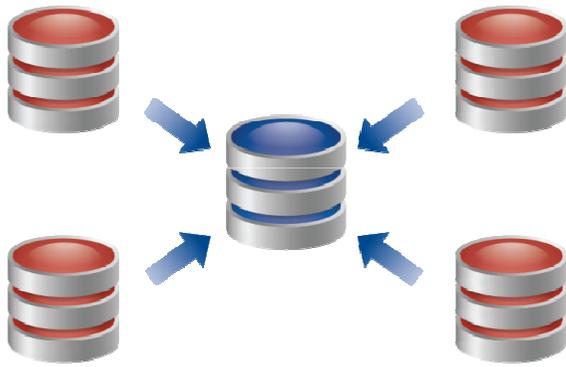
Centralized Reporting
(Consolidation)

- Consolidation of store(s) or multiple facilities can provide real-time replicate data to the corporate office over LAN, WAN, Cloud or Satellite networks.

- Supports large topologies of remote offices / stores to consolidate data centrally.

- Posting files can be managed by start/stop to control the flow of data real-time, hourly, daily or as requested to disseminate copies of production data wherever needed.

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ascading to Intermediary Systems
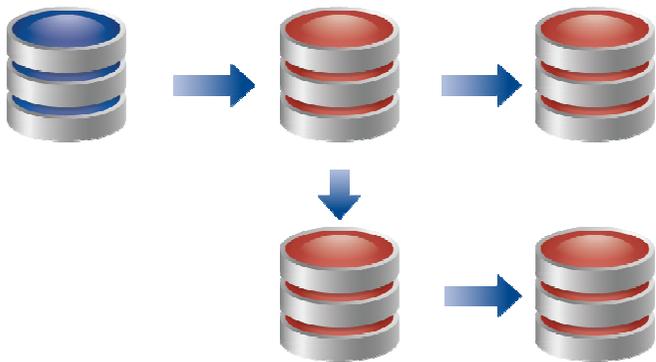
Cascading Using
Intermediary Systems

- Provides regional distribution then allows for district and store distribution of data.

- Replicate data between long distances and to targets not directly connected.

- No Oracle software is required on this node if it will only be acting to store and forward.

- Cascading or Fanning the data allows for different data to reach desired targets without sending all the network packets forward to every target location.

- Move data past firewall thru secure servers without the need of Oracle licensing on transporting servers.

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Change Tracking
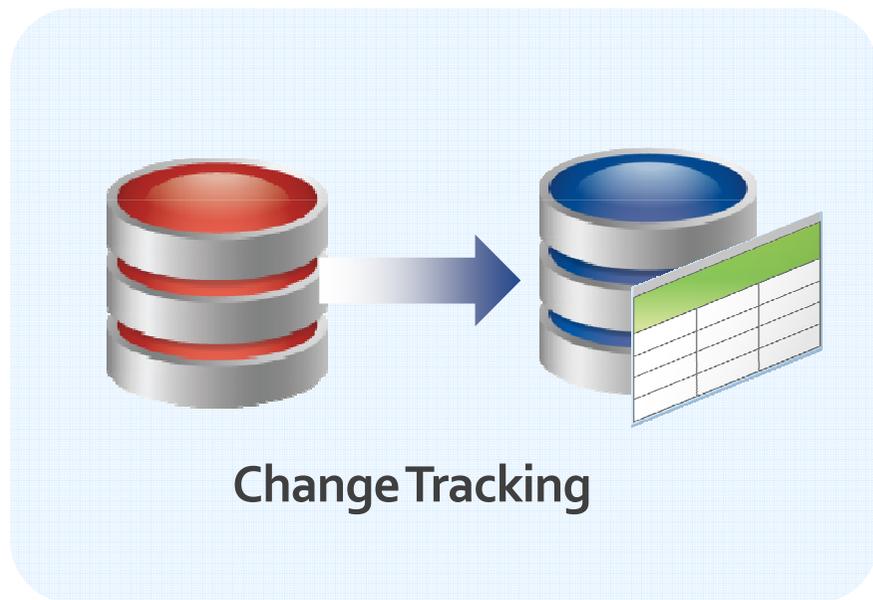
Change Tracking

- For auditing and discovery purposes

- Keep track of changes made to a defined set of tables

- Records all changes including user id, timestamp, SCN, source row id, key values, transaction id, operation type

- Store the change tracking data on the primary server or a secondary server

SharePlex® Differentiators

harePlex® Differentiators

arePlex® for Oracle

Simple, Affordable, ZeroIMPACT Oracle Data Replication

provide solutions for Critical Business Applications

0% of our business is about 99.999% availability

Data protection of unique situations – situations that matter 24x7x365.

he true use cases that emerge from our customers are situations where they want to do omething to insure 100% availability. Customers adjust the product to work in a way to fit their usiness…not choosing a product and making the business fit the product.

Vhy? Because the business requires it.

e are here to deliver against those critical business needs.

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ompetitive Differentiators

nture Technology: Over +1400 Customers, +23,500 Installs, +350 Industries

aves time

- Simplistic Manageability
- Proven Reliability
- Less Complexity
- Application Transparency
- Hardware Commoditization
- Use Case Discovery

Quality of Investment

- Performance & Scalability
- Data Accuracy
- Data Repair
- Flexibility

Return on Investme

- Lower Price Point
- Unmatched Support
- Expert Services

ifferentiator: Simplicity & Manageability

elf-Contained

ALL the necessary integrated tools designed for easier setup
- ✓ Administration: Operational GUI Management tool
- ✓ Validation checks: Corruption detection & repair, failback

Smaller physical footprint
- ✓ No additional software cost
- ✓ No added hardware required to provide this functionality

Better data type support for LOBs

mple

Operationally simple to use, comes with automation

Replicate all tables, a subset of tables, and a subset of data in tables

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ifferentiator: Reliability

eneral Recovery

Built-in recovery mechanism to safeguard against failures – process, network, system,Oracle

Extremely stable, a proven technology since 1998

ata Recovery

Many recovery processes from Physical to Logical

Patented unique logic guarantees the synchronization of the data using a physical copy

➢ **Physical -** Hot Backup, Disk Snapshot, RMAN, LiteSpeed for Oracle

➢ **Logical -** Point in time recovery; Compare/Repair, Copy command, Export/Import

ifferentiator: Transparency

Application Changes

Applications utilizing SharePlex require no application changes

Works with Application-Ready appliances to provide instant user access in event of failure

saster Resiliency

Transparent Oracle database replication

Transparent transition to target Oracle RDBMS, regardless of topology

Transparent fail-over

ifferentiator: Commoditization

w-Cost Industry Standard Servers

Mix Hardware Vendor's Servers and Operating Systems

Sophisticated OS not required, Complex hardware not required

Provides Enterprise-Class Computing

Mainframe-Class Reliability

inux becomes an attractive option

Oracle Standard Edition becomes an option

mmon IT architecture needs:

Non-platform specific

Mixed versions of Oracle are supported

Different target indices are supported

ifferentiator: Use Case Discovery

uest 15 minute download/install + Full Technical Support

Quest Sandbox
- No test environment – No Problem
- Scheduled 2 day use; easy setup use cases
- Configured Use case in Surgient Cloud (Quest Acquisition)

Quest POC includes an SC's remote assistance
- We ensure your success during the trial period and LIVE
- Either on premise or in the cloud

contrast Oracle Provides "as-is" no help & their terms:

rial Programs Included With Orders
We may include additional programs with an order which may be used for trial purposes only. You will have 30 days from ne delivery date to evaluate these programs. Any use of these programs after the 30 day trial period requires you to btain the applicable license. Programs licensed for trial purposes are provided "as is" and we do not provide technical upport or any warranties for these programs.

ifferentiators: Performance & Scalability

educe Latency

ransaction begins as soon as it starts on the source = reduces lag time for large transactions.

educe I/O Overhead

Uses memory and disk for processing replications. In most cases, replication very low I/O on disk.

ustomer Achieving Maximum Availability:

Verizon Wireless Critical Business Units http://bit.ly/iastV3

- Guaranteed SLA 99.999% for 90M customers and 35K Customer Service personnel. DR separatio of 2500 miles (United States East coast to West coast).
- Provisioning & Billing
- Customer Care
- Content Management (next slide)

RAC + Data Replication

Database Deployment Architecture – Content Management
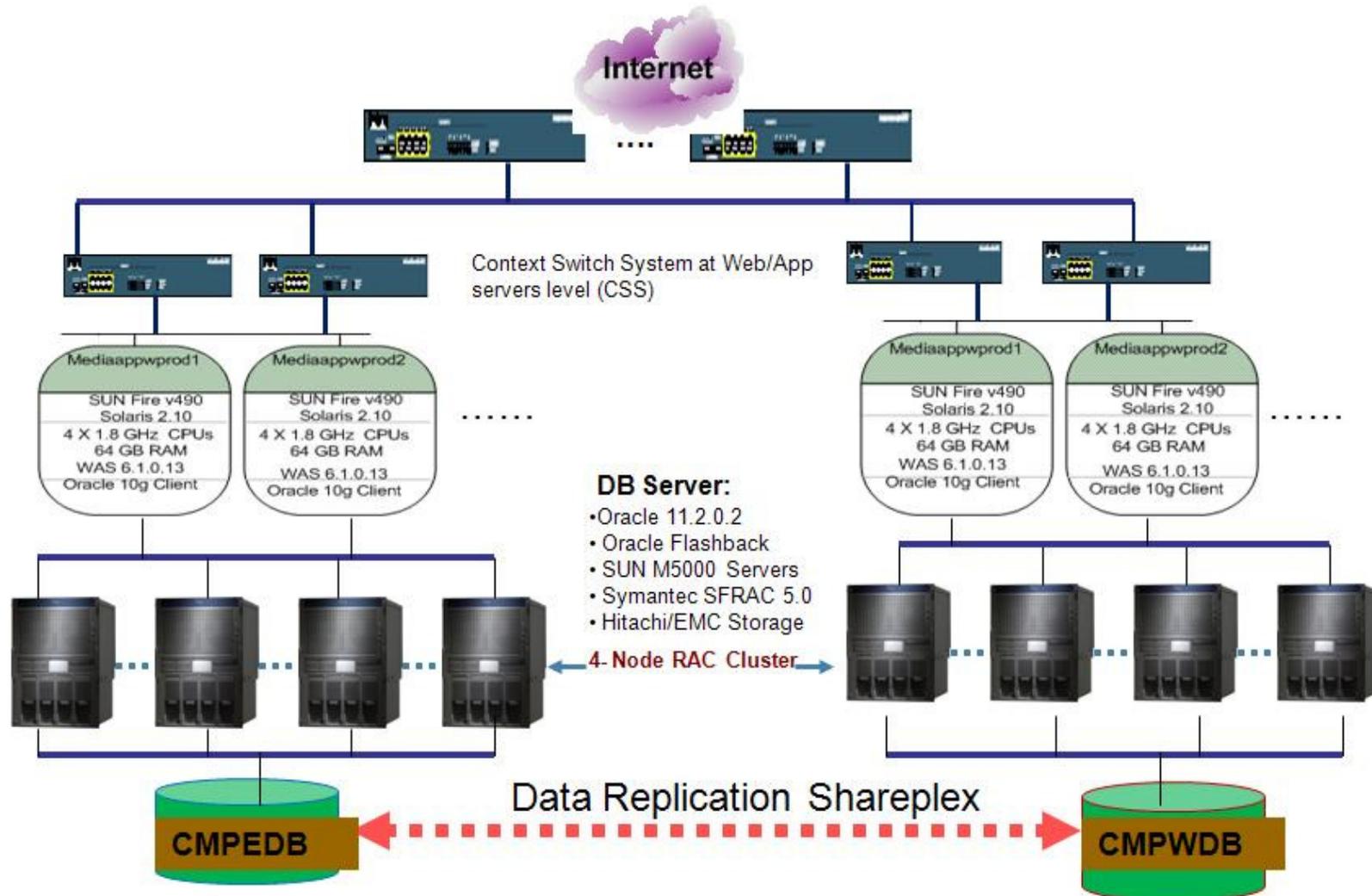
ifferentiator: Data Accuracy

flight Data Integrity

Checks data integrity when applied to the target

Ensures validity of the target in case a process changes the data accidentally

mmediate notification of compromise in the data integrity

stantiation

Ensures integrity of the data and check-point for instantiation by making sure all
pen transactions are taken care of, so the replica copy is guaranteed accurate

ta Movement

Copy command is created to instantiate the replicate table. We take into accoun
ransactions on the table

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ifferentiator: Data Repair

Oracle has
NO tool!

ta Validation

Validation checks, corruption detection and repair

Compare/Repair embedded feature guarantees the data compare is correct

Handles all transactions for objects while compare takes place

ansaction Integrity

Provides option to repair rows that are dissimilar between the source and the arget

Reduced downtime related to bringing applications online in the event data is compromised

erational Reporting Accuracy

Corrections in-line versus waiting on a full rebuild of the database

ifferentiator: Flexibility

plication Configuration

tart replication from any point in time

efine tables to schema for replication

efine rows or columns to replicate with no security concerns

lexible configurations to gain throughput from multiple SQL apply to multiple capture

lultiple copies of the software run as non-superuser

ontrol bandwidth usage through TCP window sizing

lultiple mechanisms to synchronize the data from physical copy to logical copy

ll Use Cases supported in the Cloud under SaaS

ution Offerings

Real-Time Decision Server" for ad-hoc queries or web-based access, created from a Operational Reporting instance.

ynchronized Oracle standby, data warehouse, data mart or data mining for instant Business Intelligence real-time.

ifferentiator: Unmatched Support

port & Escalation:

lobal presence

ndustry-leading 96.8% over-all customer satisfaction in 2011

upport Standard of 24x7

xtensive knowledge base access on Quest Support Portal

xpert advice at SharePlex® Community

uest Staff available to Customers & Prospects

ustomer Advisory Boards (CABs)

ndustry Experts on Staff

Access:

00% Backing 24x7 Maximum Availability Solution

stant Problem Solving

egular updates, releases, patches

14 years Proven Technology

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ifferentiator: Expert Services

uest Software Services:

- Global presence
- Proven methods & best practices for accelerating time-to-value
- Consultants with deep product and industry knowledge
  - ✓ All Use Cases
- SharePlex® Migration Center of Expertise
  - ✓ Onsite Migrations
  - ✓ Remote Migrations
  - ✓ "GO-LIVE" Services
- 5,000+ successful engagements
- SharePlex service costs are minimal compared to competitive solutions

Why SharePlex® Over Oracle's Solutions

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Simplicity At Work™

ORACLE®

SharePlex®

One single, integrated solution.

Many Use Cases, one product.

No additional modules needed.

Single cost License.

Download and go in minutes.

Works with Oracle technologies.

Functionality

Disaster Recovery
Operational Reporting
High Availability
Migrations / Upgrades
Real-time CDC
Peer to Peer/Active to Active
Scalability / Load Balancing
Data Transformation
Data Warehousing / ETL
Monitoring/Management
Data Comparison
Data Repair *

* **SharePlex unique feature**

Oracle Data Guard
Oracle Streams
Oracle GoldenGate
Oracle RAC
Oracle Data Integrator
Management Pack for Oracle GoldenGate
Oracle GoldenGate Veridata

✓*Too many product*
✓*Different use case different product*
✓*Non-integrated too*
✓*Multiple licenses, more cost*
✓*Adds complexity*

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SharePlex® What's New

What's New in SharePlex®

SharePlex® v7.6	SharePlex® Manager v2.2
Performance: ▪ Native 64 bit SharePlex	**Performance:** ▪ API Support

Feature:
▪ Oracle Advanced Compression
  ✓ Support for 11gR2
▪ SecureFile LOB support
▪ Interval Datatype
▪ Column Level TDE
▪ DDL Filtering
▪ Change Tracking
▪ Pre-defined Conflict Resolution
  ✓ Date resolution
▪ Simplify licensing & Interface
  ✓ Licensing
  ✓ Streamline compare command & status
	Feature:
	▪ Configuration Management
	▪ Event Management
	▪ Enhanced backend support

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SharePlex® Release Map

SharePlex® Manager 1.1
- Security role
- Control to SharePlex

SharePlex® Manager 2.2
- Enhanced backend support
- API

SharePlex® Manager 1.0
- Integrated GUI interface with Foglight for Enterprise monitoring

SharePlex® Manager 2.0
- Configuration
- Event management

SharePlex® Manager 1.2
- Support for Windows,
- Performance enhancements
- Parameter editing Support

Timeline: 2008 — 2009 — 2010 — 2011

SharePlex® 6.0
- Supports IOT
- Full ASM support for Oracle 10g
- Offers different level of supplemental logging

SharePlex® 7.0
- Wildcard support
- Enhanced batch processing

SharePlex® 7.6
- Advance Compression
- Column Level TDE
- 64 bit SharePlex
- Secured File LOB
- Interval Datatype
- Simplify License and Interface
- Change Tracking – DB, Flat files

SharePlex® 6.1
- Support for Oracle 11g
- Platform support
- Full rollback handling

SharePlex® 7.5
- Performance Enhancements

SharePlex® Customers

dustry Leaders Depend on Quest

Finance	Retail	Telecom	Healthcare	Automotive	Public Sector	Technology
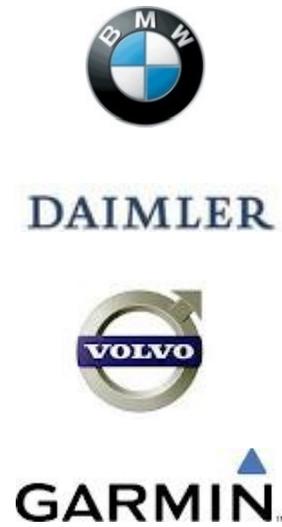
As Well As Hundreds of other Companies…

A Leading Provider of Flash Memory Technology

e Case: Migration and Failover

wo attempts at migration:

- January 2011 failed from an in-house migration plan
- June 2011 Contacted Quest Software

Environment Specifics

- From HPUX, Oracle 9i to Linux RH, Oracle 11g using intermediate server

- 458 GB Database, 450 GB of Redo/Day

- Client requested Compare/Repair for Validation -- in sync as advertised

- Reverse Replication set up without issue

- SharePlex was unaffected by customer issues

Results

- Rave Reviews from Upper Mgmt, confidence from their customers
  - DBA Team attributed SharePlex as making a huge difference in making this a smooth migration
- Using SharePlex saved 27 hours of downtime

Offload's Operational Reporting

acle Enterprise Edition to Oracle Standard Edition Data Replication

Environment

– High availability database with 250 GB

– SharePlex replication between two locations

– Oracle 10g→11gR2

– AIX OEE, Windows 2008 OSE, SQL Server

Business Problem

– Ad hoc business reports for the customer

– Impacting production system is critical

– Error prone Export/Import, ETL process = 6 hours nightly

SharePlex Solution

– Offload 150GB of data to OSE

– Resource and cost savings

– Improved IT staff's reputation and relationship with BU's

Thank You