

Easy Ways to Improve Oracle Information Sharing With Data Replication

Replace Oracle Streams

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Agenda

- Introduction to replication
 - Value of replication solutions: scalability, availability and near real-time integration
 - Replication architecture
 - Use case scenarios
- Top 8 ways to improve Oracle information sharing with data replication
 - Summary: Customer Experience through our 8 areas
 - Specifics:
 - Product
 - Support
 - Roadmap and approach
- Next steps
- Q&A



Data replication and value to organizations

Core Service

- Replication is increasingly common as core part of infrastructure
- Part of business continuity plans, HA & performance

High Volume

- Increasing data volumes
- Scalability (load isolation)
- Maintain SLA's

Enterprise Wide

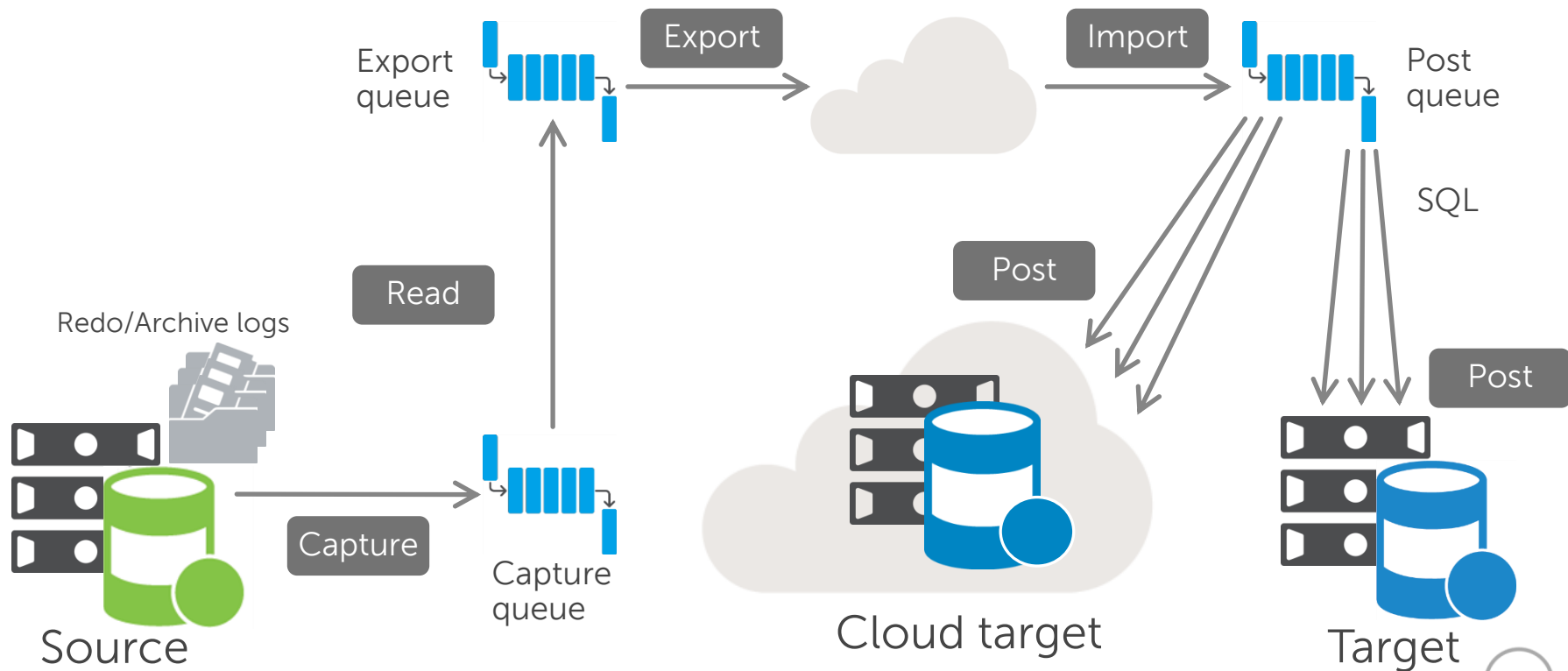
- Heterogeneous support is expected
- Replication for mission critical apps

Availability , Scalability and Data Integration



SharePlex replication architecture

On-premises, remote, or in-the-Cloud



SharePlex: availability, scalability, & near real-time data integration



Anywhere data

Affordably replicate data on-premises, remotely or in-the-cloud for special purposes to Oracle, SQL Server, Hadoop, SAP, etc.



Maximum availability

Ensure high availability and disaster recovery

Risk-free Migrations

Minimize risk and downtime associated with migrations and upgrades



Better Performance

Improve performance of OLTP systems



Offload Reporting

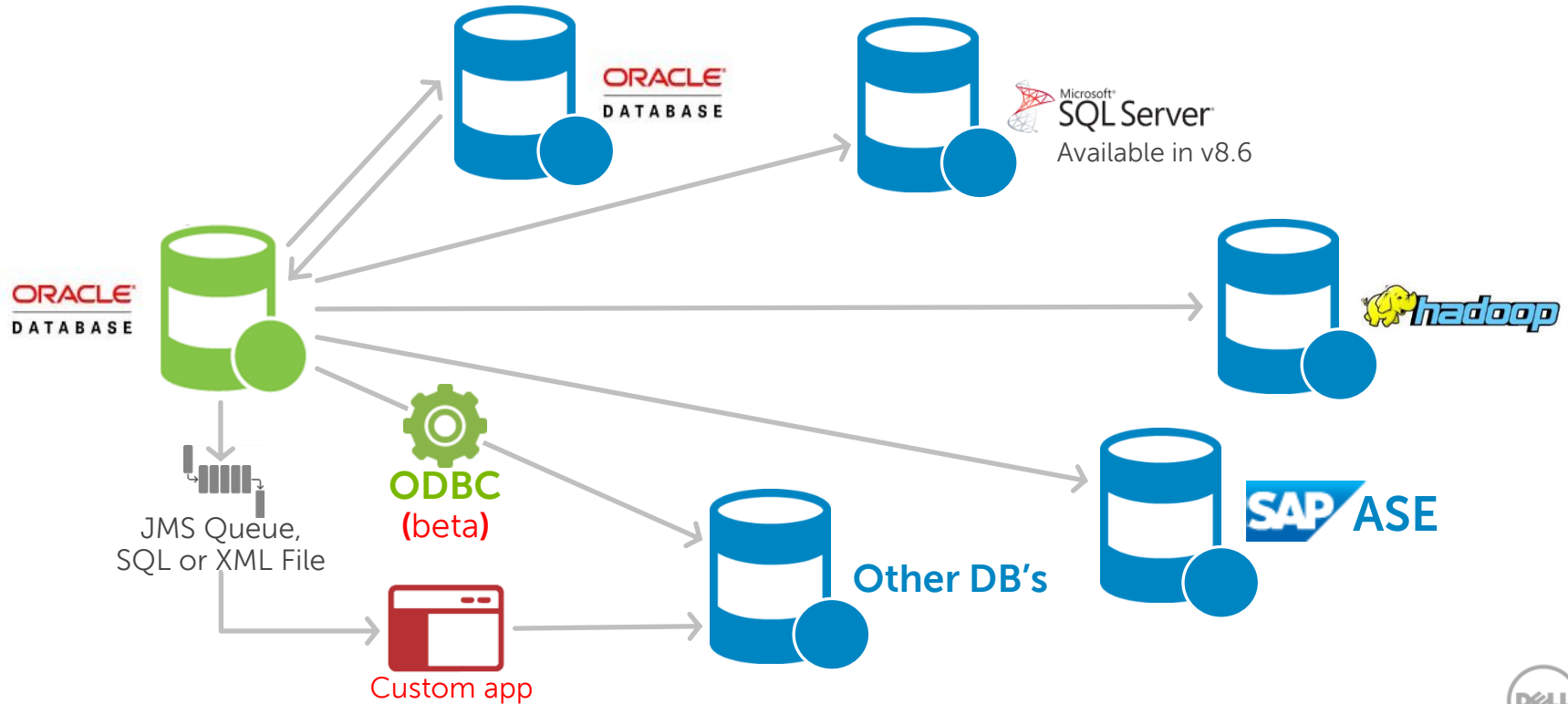
Harness real-time reporting and data warehousing



Kick-start Big Data Projects

Optimize analytics and the use of business intelligence applications

SharePlex: empower your **real-time enterprise** with 24-hour operations and dynamic business adaptability



SharePlex use cases: **on-premises, remote, or in-the-cloud**

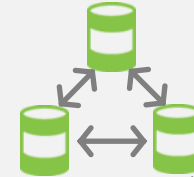
Availability



High availability/
Disaster recovery



Migrations/ Patches/
Upgrades

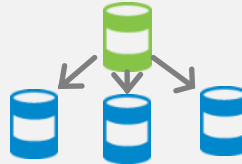


Active-Active/
Load balancing

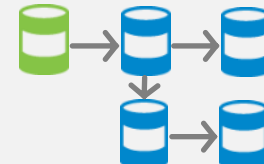
Scalability



Operational reporting/
Archiving

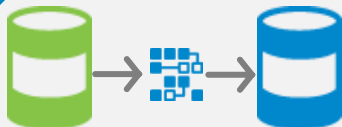


Data distribution/
Distributed processing



Cascading using
intermediary systems

Integration



Data integration/
Data warehousing



Change history/
Metadata repository



Centralized reporting/
Consolidation

Migrations, patches and upgrades



What does this use case do?

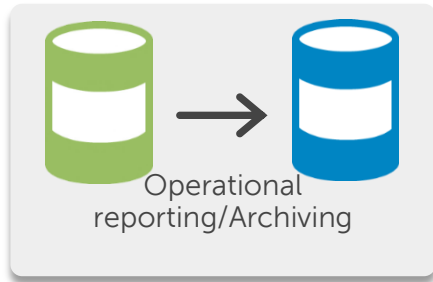
- Platform Migration of: database version, storage, hardware platform, operating system or sometimes all four.
- Migrate to other RDBMS (Microsoft SQL Server, SAP ASE)
- Application version

Listed in order of increasing complexity and effort

Value of SharePlex in Migration

- The brand: ZeroIMPACT Migration, use this case and spelling.
- Dramatically reduce downtime
- Eliminate risk if there is failure in migration
- Reduce costs and potential mistakes by performing the changes during working hours.
- Support unlimited practice runs from production environment with no impact.

Offload reporting for better analytics and performance



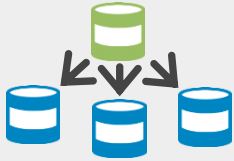
What does this use case do?

- Load isolation
- Selective to object, columns, rows
- Optimized reporting environment with different table spaces, indexes, partitioning, block sizes and more (depending on target DB).
 - Oracle EE or SE, SQL Server, Hadoop, ODBC-enabled, or other DB
 - Not allow deletes to reporting

Value of SharePlex in Reporting

- OLTP experience
 - Higher performing
 - Consistent, without disruption
- Removes concerns of large extract process
- Unlimited scaling
- Configured based on customer requirements
 - Reporting database can be only what is needed.
 - Smaller, locally and geographically dispersed database for reporting which can provide high performance for local data
 - Alternatively, the reporting database can be an archive system to allow the OLTP to be trimmed.

Broadcast data where needed and or faster performance



Data distribution/
Distributed
processing

What does this use case do?

- Load isolation multiplier
- Selective to object, columns, rows
- Optimized reporting environment
- Often local copies
- Combine with other use cases, i.e. cascade

Value of SharePlex in Broadcast

- Better response times via local copy.
- Provide only the data required in the select locations via horizontal and vertical partitioning
- Linear scaling via unlimited number of targets and scaling.
- Lower network costs if reporting activity heavy.
- Removes sensitive columns or rows where access should not be granted.

What makes SharePlex different?

Overall: a great customer experience

1

Flexible/creative pricing

- Prod/non-prod
- Perpetual
- Term
- EE vs SE



2

Superior TCO

- Tightly coupled architecture
- Consistency/ platform independent



3

World-class 24x7 support

- NPS 74.3% avg
- CSAT 96.5% avg
- 6 ACE Awards, 5 in row



4

Professional services

- Project based
- Global
- References



5

Agile development

- In spirit with ad-hoc functionality
- In letter with formal methodology



6

Unique capabilities

- Optimistic commit
- Compare/Repair
- In flight data integrity
- Live activate, more...



7

Solid roadmap

- Goal: "Best replication solution in the world"
- New functionality
- Continuous improvements



8

Dell difference

- End to end solution provider
- Winning with integrity, Ethisphere 2014 & 15 "World's most ethical company"



SharePlex Differentiators



Optimistic commit: With SharePlex your data is always current!

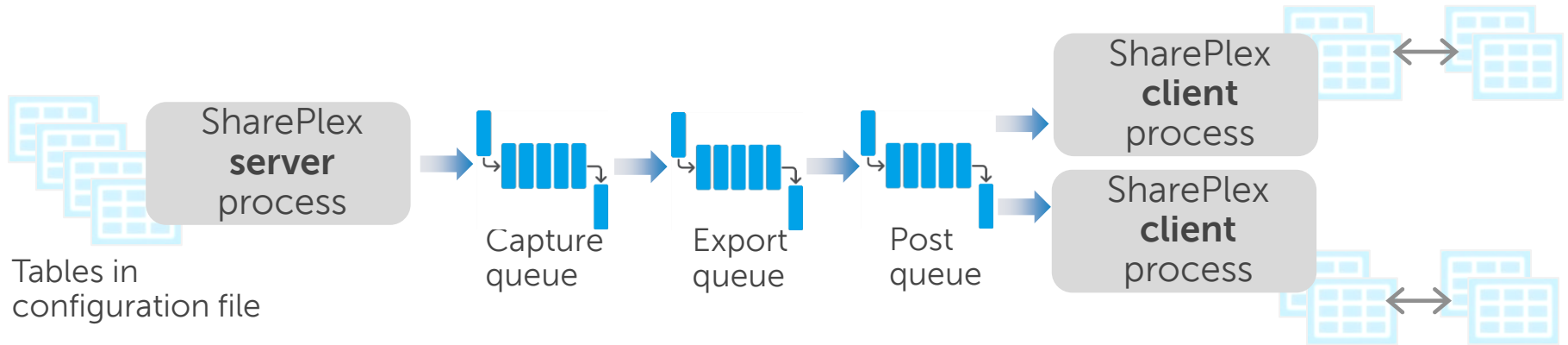
Process Breakdown
Batch run time
Times per day
Batch run time of follow on process
Number of follow on batch processes
Total Time of Latency
Minutes per day
Percentage of day where latency is approximately

- Long running transactions today?
- Long running transactions ever?
- Why is RPO so far behind?

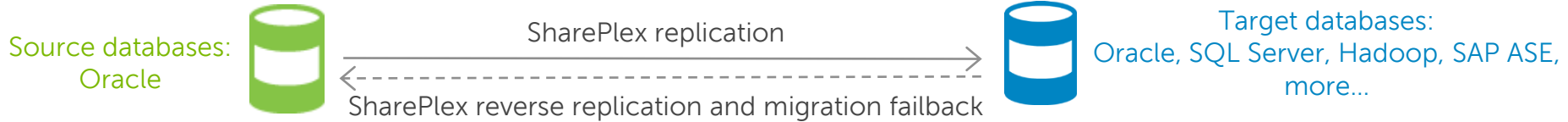


Compare and Repair are integrated into solution

- Included at **no cost!**
- LIVE...while replication is occurring **without incurring out of sync**
- **Throttle controls:** speed vs. impact



SharePlex is a tightly **coupled architecture**



- **Automatic replication configuration set up** - define what and where to replicate and SharePlex automatically creates the necessary processes and queues. Wild card capable.
- **Memory-based queues** with disk-based backup storage
 - Analyze utility helps **Balancing across SharePlex queues**
- **Fault tolerance** - Replication processes will automatically restart if it stops or is killed
- **Cluster failover support** – automatic fail-over to another machine in a cluster
- **Flexible, configurable replication** – schemas, tables, columns, subset of rows
- **Conflict resolution** – built in conflict resolution, can be customized
- **Change data capture and transformation** – built in CDC, change tracking, change history and can manipulate or transform data prior to posting to target.
- **Compare and Repair utility** – allows table(s) to be compared and synchronized without downtime
- **SharePlex Manager** - Graphical user interface to monitor & manage all SharePlex installations. Alerts to issues.

Streamlined processing of replication implementations

SharePlex's design works with whatever database you're replicating to.

- Configure once and run
- All SharePlex processes talk to one another
- Cascading deletes via constraints
- Triggers are handled
- Built in encryption and compression
- And more...



Support Differentiators



Technical Support is Unparalleled in the industry



The Confirmit ACE (Achievement in Customer Excellence) Awards program recognizes outstanding achievement in customer satisfaction, employee satisfaction, and partner satisfaction. Receiving a Confirmit ACE Award is a distinct honor that demonstrates both rigorous application of customer feedback processes and outstanding performance as measured by those processes. The Confirmit ACE Award shows the world an organization's effectiveness and success in satisfaction and loyalty.

- 6 Time Winner!
2011, 2012, 2013, 2014 & 2015 (copies of press releases available).
- 98.75% customer satisfaction rating
- 75% Net Promoter Score (NPS)
- Rich set of resources: service requests, KB articles, videos, quarterly newsletter, product feature webcasts



Net Promoter Score (NPS)

W Net Promoter - Wikipedia x

en.wikipedia.org/wiki/Net_Promoter

Create account Log in

Article Talk

Read Edit View history Search

Net Promoter

From Wikipedia, the free encyclopedia

Net Promoter or **Net Promoter Score (NPS)** is a management tool that can be used to gauge the loyalty of a firm's customer relationships. It serves as an alternative to traditional customer satisfaction research and claims to be correlated with revenue growth.^[1]

An NPS that is positive (i.e., higher than zero) is felt to be good, and an NPS of +50 is excellent.^[2]

Net Promoter Score (NPS) measures the loyalty that exists between a provider and a consumer. The provider can be a company, employer or any other entity. The provider is the entity that is asking the questions on the NPS survey. The consumer is the customer, employee, or respondent to an NPS survey.

Contents [hide]

- 1 How It Works
- 2 Criticism of NPS
- 3 See also
- 4 References
- 5 External links

How It Works [edit]

NPS is based on a direct question: **NPS is based on a direct question: How likely is it that you would recommend our company/product/service to a friend or colleague? The scoring for this answer is most often based on a 0 to 10 scale.**^[3]

Promoters are those who respond with a score of 9 or 10 and are considered loyal enthusiasts. Detractors are those who respond with a score of 0 to 6 - unhappy customers. Scores of 7 and 8 are passives, and they will only count towards the total number of respondents, but not directly affect the formula. NPS is calculated by subtracting the percentage of customers who are Detractors from the percentage of customers who are Promoters.^[4]

Companies are encouraged to follow front-line employees and management feedback they provided through the

Additional questions can be included to assist with understanding the perception of various products, services, and lines of business. These additional questions help a company rate the relative importance of these other parts of the business in the overall score. This is especially helpful in targeting resources to address issues that most impact the NPS. The NPS marketplace is dominated by providers that offer a full suite of metrics, reporting, analytics, best practices and consulting services. In the most advanced systems promoters are given the opportunity to promote immediately using social media connectors.^[6]



Market Agility



Efficient **Break/Fix** process

41 minutes from start to finish:

1. Collect logs in repository
2. Analyze
3. Identify issues
4. Code change
5. Compile
6. Transfer
7. Apply
8. and...Start replication

*"It has been great support from you guys and thanks a ton for making it work, just in time :)
Appreciate all the hard work put in for making the PoC a success!"*

DBA – American printing and imaging manufacturer



Enhancements are geared to **help our customers**

"We have been able to achieve close to 100 percent uptime for years at a time on our critical databases using SharePlex."

*"I can't remember the last outage we had due to a database issue. If we see we have an issue on a server, **our applications simply failover to a healthy database server** and avoid the problem."*

*"We can perform rolling upgrades to new database versions, do hardware or software maintenance on our servers, or even take systems out — **all without interrupting service for our customers.**"*

Ken Jones, Senior Vice President of IT Operations, priceline.com

*"Based on a fast replication process that never fails, **SharePlex is helping us reduce the risk** of potential business losses and poorly informed marketing and advertising decisions."*

*"By replicating changes made by subscribers quickly, SharePlex helps the marketing team **tailor products and promotions to customers based on their specific needs**, which increases loyalty and revenues."*

Navdeep Kumar, Director Data Services and Security, eHarmony



Solid Roadmap



Consistent **Experience**

Consistent Experience across database platforms

- 95% or more of what you learn with replicating in one platform will apply to another.
- Example for Database connection setup:
 - For Oracle, ora_setup
 - For SQL Server, mss_setup

Lowest possible TCO, Performance and more



Oracle Streams replacement



Oracle Streams is deprecated, now what?

- Oracle Streams is deprecated in Oracle 12.1c
- What are you using Streams for?
 - Capture, propagate and apply DML and perhaps DDL for tables and other objects in a “streaming” fashion
 - [Data and event movement within or between Oracle databases](#)
- About the Streams technology
 - [Capture, Stage, Propagate, Apply](#)
 - Apply can:
 - As is
 - Detect conflicts / run DML Handlers
 - Augment with meta data
- Synchronous and [Asynchronous](#)
 - What’s the difference?
 - Why use one over the other?

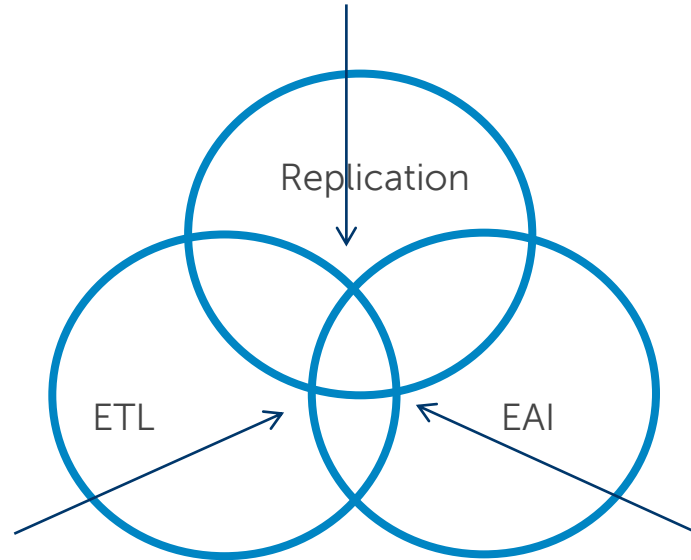


Methods for data sharing

Sophistication / Simplicity



- **Dell SharePlex**
- Oracle GoldenGate
- Oracle Streams
- ETL
- Change Data Capture
- Oracle Data Guard
- Export/Import
- Disk Mirror splits



10 easy steps to migrate from Oracle Streams to SharePlex

Step 1

Install SharePlex on both source and target systems

Step 2

Create SharePlex configuration file on the source system

Step 3

"Stop post" on the target system

Step 4

Activate the configuration on the source system

Step 5

Check for long running transactions on the source system

10 easy steps to migrate from Oracle Streams to SharePlex (continued)

Step 6

Find the last SCN applied by Streams on the target system

Step 7

Run **SharePlex reconcile** to synchronize the source and target systems

Step 8

Start **SharePlex poster** on the target system

Step 9

Monitor **SharePlex** as long as required until satisfied

Step 10

Use **SharePlex Compare / Utility** to audit out of sync conditions

Next steps



Visit the SharePlex webpage

www.dellsoftware.com/SharePlex

- Datasheets, videos, case studies, white papers, technical briefs, events, webcasts, etc.

Schedule a Proof of Concept (POC)

- Download free 30-day trial software (complimentary SC and Support assistance)
- On your own test environment
- Dell Cloud Sandbox

Join the SharePlex Community

<http://en.community.dell.com/techcenter/information-management/shareplex/>

- Beta's, discussions, blogs, expert advice, demo's, technical documents, etc.



A high-angle photograph of a group of approximately 25 students sitting on a paved surface, arranged in a large circle. The students are dressed in school uniforms, including dark jackets, white shirts, and ties. The ground is a light-colored, textured pavement with some faint circular markings. The word "Questions" is overlaid in a large, white, sans-serif font on the left side of the image. The lighting is bright, casting distinct shadows of the students onto the ground.

Questions

Thank you

