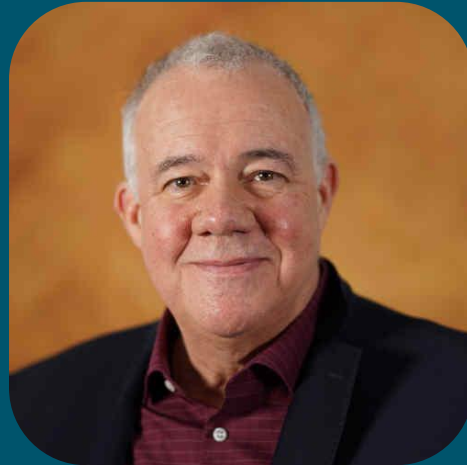


SHAREPLEX

Skills 101 Series

SharePlex Unveiled: Discover the Power You Didn't Know You Had

Bill Brunt
SW Sales Engineer





Agenda

- Intended audience
- Value of replication powered by SharePlex
- What is replication?
- Deeper dive into use cases
- Differentiation
- Q&A

Who Uses SharePlex?



Intended Audience

Do you have database responsibility or influence?



This presentation is the broadest coverage.
The art of the possible.

The Power of Replication



Value of Replication – 4 main use cases



AI Ingestion



Scalability



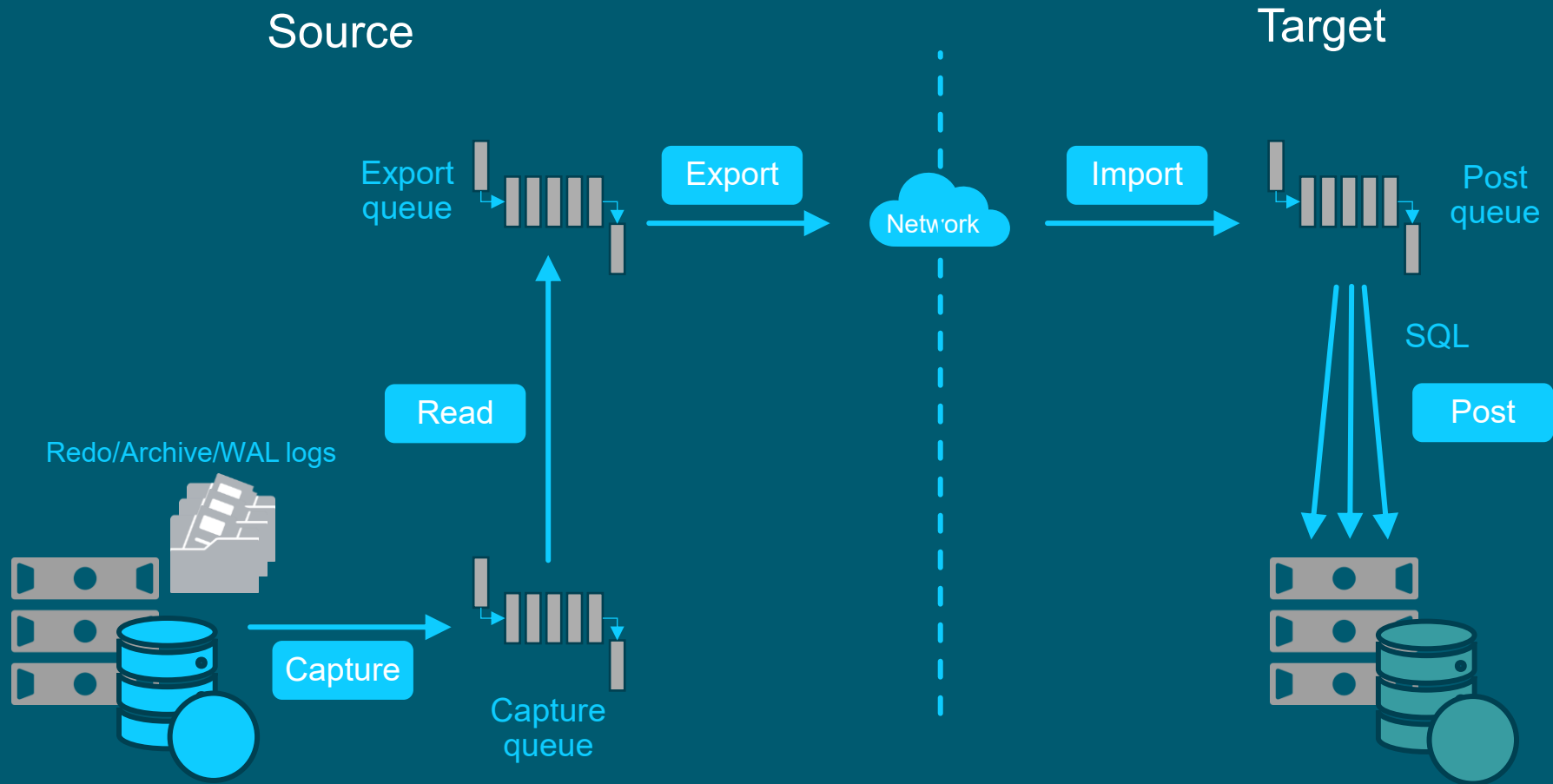
High Availability



Integration

What is replication?

Architecture – near real time, high volume, low overhead



AI in Action: Instant Access & Smarter Data



AI: Always available confidential instant replay

Auditing without the performance impact.



Traditional Data Ingestion

Direct Connect



- Limited to most recent only data
- Glimpses of changes
- Large ingest = large resource consumption

OR

Refreshed snapshot



- Static point in time
- Limited change visibility
- Dated, not time sensitive.



SharePlex Change Data Capture (CDC)

Unlocking the value of your data



- Every transactions becomes an insert
- Complete History – including commits, before image
- Contextual metadata

AND

Optimization / Privacy



- Extremely low overhead
- Granular to columns and or rows
- PL/SQL: format preserving encryption, NIST

AI: Example transaction

Quoting and re quoting for sales

3 Sets of transactions on Sales Order Line Details

Event	QuoteNo	LineNo	SKU	Qty	Amount	Discount	Extended
First request	1234	1	TOR	10	1,200	20%	9,600
	1234	2	TDP	4	200	20%	640
	1234	3	TFM	1	1,200	20%	960

TOR/TDP comes out	1234	1	TOR/TDP	10	1,200	20%	9,600
	1234	2	TFM	1	1,200	20%	960

Don't need TFM but want Qty 20 for TOR/TDP	1234	1	TOR/TDP	20	1,200	20%	19,200
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7/2/2025 INSERT
7/2/2025 INSERT
7/2/2025 INSERT
7/2/2025 COMMIT

7/3/2025 UPDATE BEFORE IMAGE set SKU=TOR where LineNo=1
7/3/2025 UPDATE AFTER IMAGE set SKU=TOR/TDP where LineNo=1
7/3/2025 DELETE where LineNo=2
7/3/2025 UPDATE BEFORE IMAGE set LineNo=3 where LineNo=3
7/3/2025 UPDATE AFTER IMAGE set LineNo=2 where LineNo=3
7/3/2025 COMMIT

7/7/2025 DELETE where LineNo=2
7/7/2025 UPDATE BEFORE IMAGE set Qty=10 where LineNo=1
7/7/2025 UPDATE AFTER IMAGE set Qty=20 where LineNo=1
7/7/2025 COMMIT



AI: Metadata augmentation

Who/What/When/Where

SHAREPLEX_SOURCE_TIME	Time, according to Oracle operation applied on source.
SHAREPLEX_SOURCE_USERID	Oracle UserID as a number that performed the operation.
SHAREPLEX_SOURCE_OPERATION	INSERT, UPDATE, DELETE, TRUNCATE, DROP COLUMN, UPDATE BEFORE, UPDATE AFTER and COMMIT
SHAREPLEX_SOURCE_SCN	An SCN (System Change Number) in Oracle is a monotonically increasing number that uniquely identifies a point in time in the Oracle database. Every committed transaction is assigned an SCN. Oracle uses SCNs to ensure read consistency—so queries see a consistent snapshot of the data.
SHAREPLEX_SOURCE_ROWID	Oracle's ROWID or Composed of object number or DATA_OBJECT_ID in DBA_OBJECTS, relative file number of datafile within table space, block number in that file (smallest read by Oracle) and position within a block as a block can have multiple rows.
SHAREPLEX_SOURCE_TRANS	Transaction ID
SHAREPLEX_SOURCE_SEQ	Sequence of changes within a transaction.
SHAREPLEX_SOURCE_HOST	Name of source host.
SHAREPLEX_QUEUENAME	Queue name which SharePlex moved the change through.
SHAREPLEX_SOURCE_ID	User defined source identifier.
SHAREPLEX_CHANGE_ID	Unique change id maintained by SharePlex.



Reliable Scalability & Availability



Scalability via Replication

Workload isolation



Transaction Mix

- OLTP - Small but numerous transactions i.e. CDR, order processing, etc.
- Batch processing Material Resource Planning (MRP)
- Reporting – single report(s) traversing entire tables or large sections across joined tables – crushing load, increases and degrades OLTP response time i.e., end of month close with General Ledger Trial Balance .

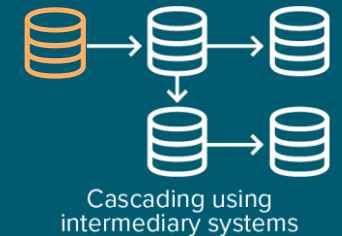
Offload Operational Reporting for **Better Analytics & Performance**

- Optimize your reporting environment
- Table, row or column partitioning
- Separate databases



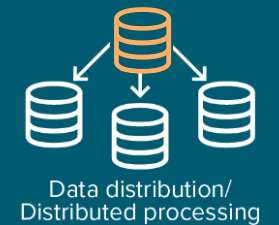
Cascade to **Intermediary Systems**

- Cascade or fan to or from multiple databases
- No Oracle software required on a store and forward node
- No SharePlex charge license on intermediary systems.
- No distance limitations



Reliable Data Distribution & **Distributed Processing**

- Great for 1 reporting database where it said “it was great when it started but it is slow now.
- Unlimited number of targets
- All targets are local
- Provide only the data required
- Optimized target environment
- Table, row or column selectivity



Availability via SharePlex

Nothing beats database replication for availability



Outage Event Types

- Planned: Changes in one or more of hardware, operating system, database and or application.
- Unplanned
 - Power failure, widespread and extended, 10-15% due to UPS failures
 - “Backhoe fade” – particularly in growing urban/suburban areas where carriers have co-located fiber.
 - Etc, etc.

Ensure High Availability & **Fast** Disaster Recovery

- Provide HA above and beyond native capabilities
- Avoid downtime to meet SLAs
- Avoid losses due to data unavailability
- No distance limitations



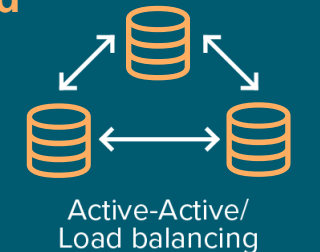
Minimize Downtime for Migrations, Patches & Upgrades

- Support application, database, operating system and hardware changes, including Oracle-PostgreSQL interoperability
- Minimize downtime required to move to a new platform.
- Eliminate risk with a failback option
- Support multiple dry-runs.



Active-Active Replication & **Scalability** Through **Load Balancing**

- Eliminate the database as a single point of failure
- Bi-Directional replication
- Built-in conflict resolution
- Support heterogeneous OS, Oracle/PostgreSQL databases and versions



Where Next Meets Now.

Database Migration with SharePlex

High value in replication

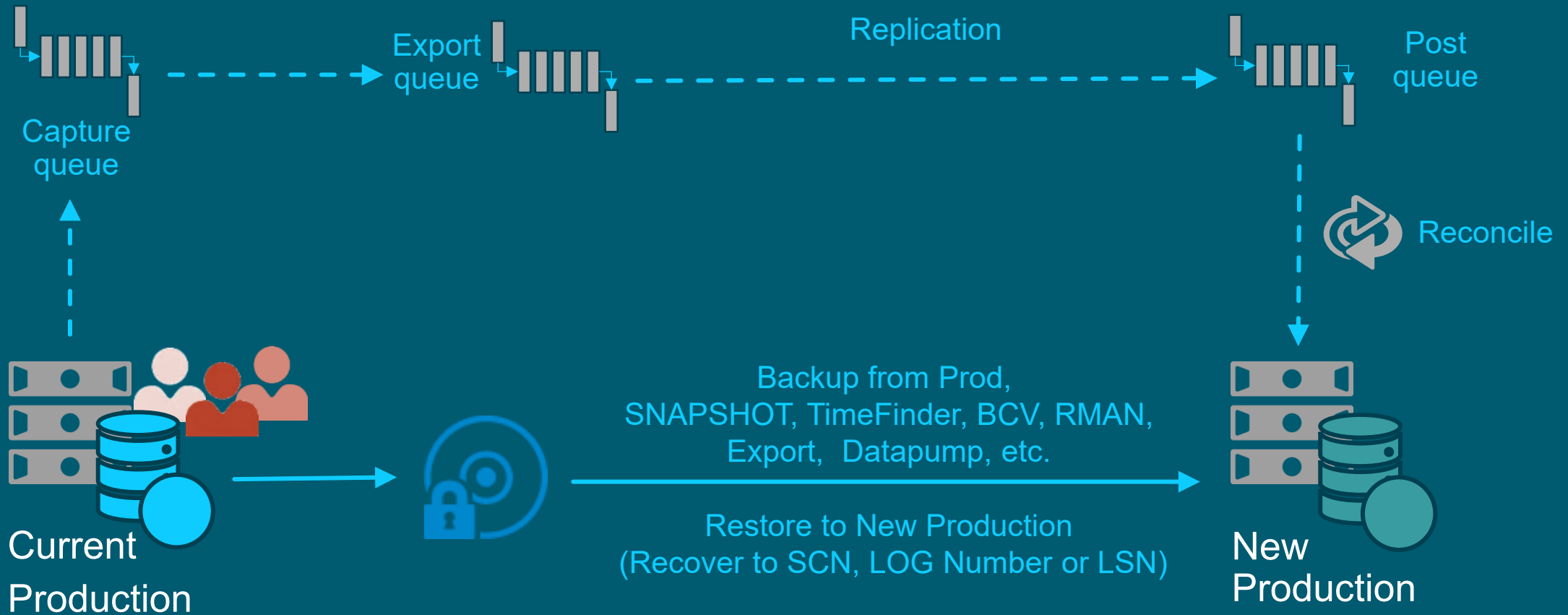
Hard to believe...

- Use more technology and reduce your effort – customers tell us 40% reduction in effort
- Dramatically reduce downtime
- Eliminate risk through failback should new system have issues.

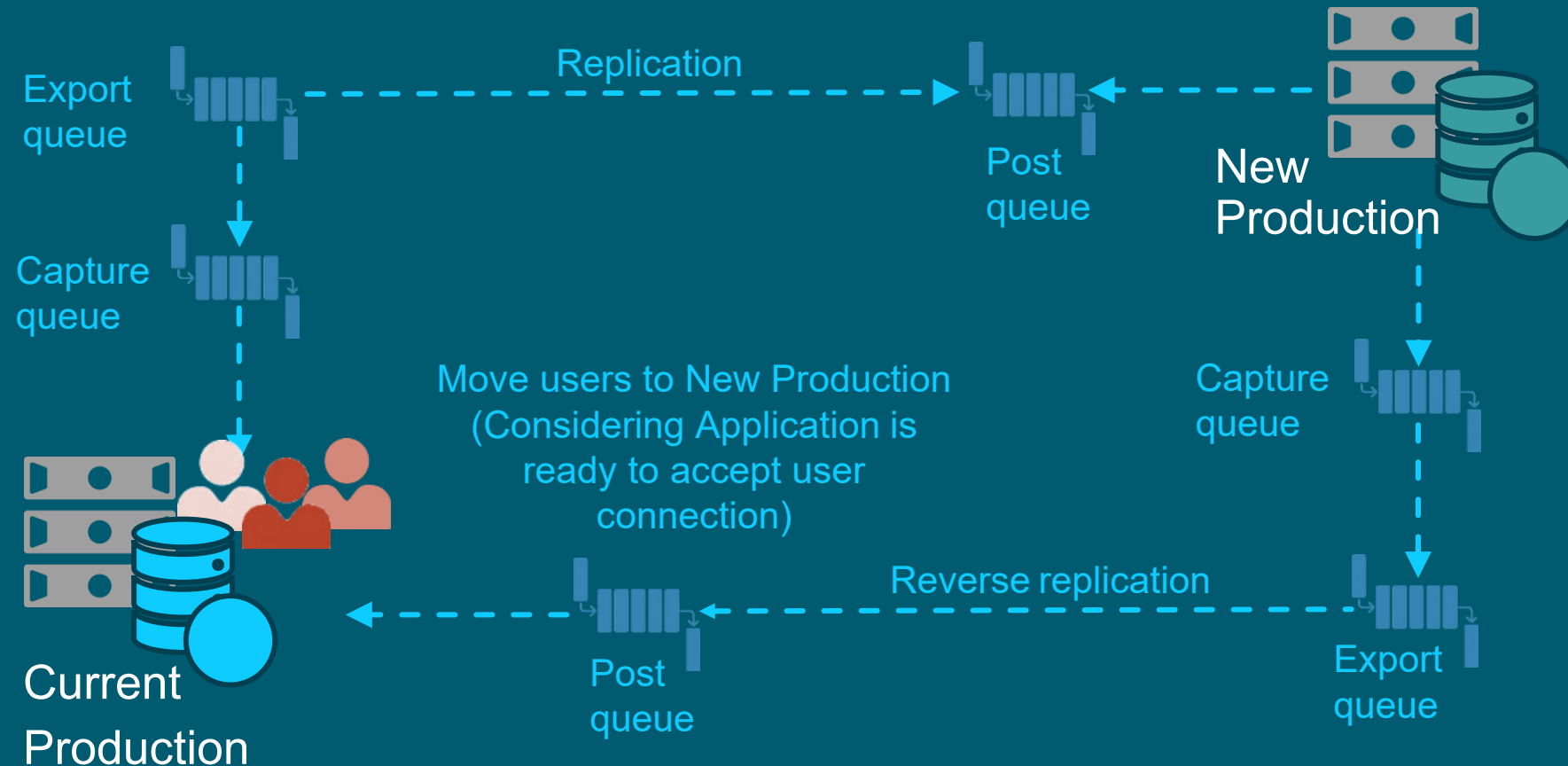
Sunil Nookala, Senior IT Manager, Dell Database Practice:

“Because SharePlex allowed us to synchronize the preproduction environment with the live environment quickly and easily, we achieved an estimated time savings of up to 40 percent for the end-to-end migration.”

Database Migration with SharePlex



Migration steps using a physical copy



Migrating Databases Made Easy



Availability with unplanned events

Near real time – very low but not zero recovery point objective (RPO)

Business Continuity Plan establishes:

- Recovery Point Object (RPO) – what data will be present (or lost) when the the disaster recovery (DR) is invoked i.e., all data with zero transaction or some amount of time that transactions are lost – SharePlex, when keeping up is just a few seconds i.e. from zero to just 2 to 3 seconds.
- Recovery Time Objective (RTO) – how long will it take to recover the database for operation. With SharePlex, it is zero seconds as the database is up and running already.

Availability for Application upgrades

Very complex but have done.

Complexity occurs because:

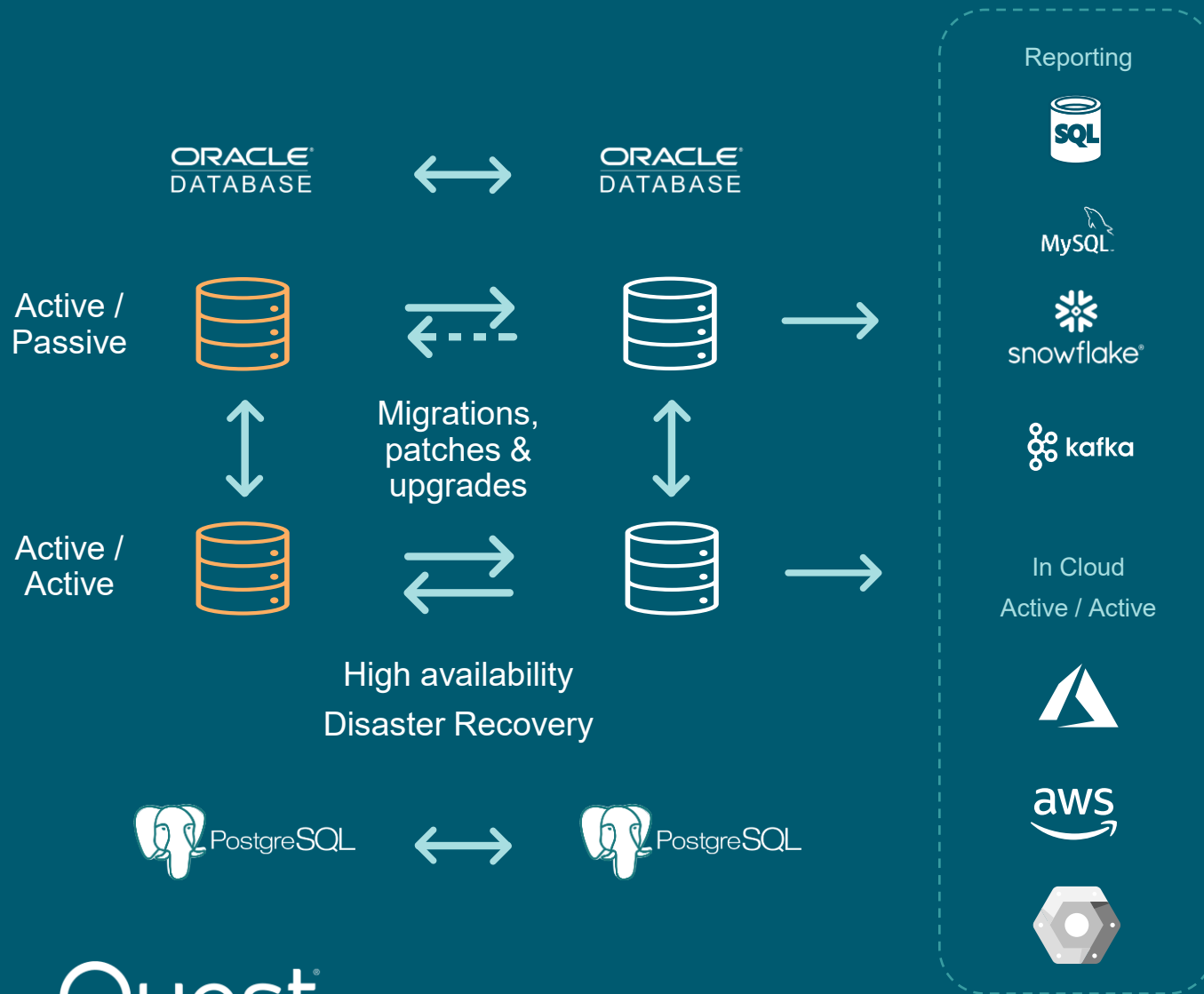
- Requires restrictions to critical functions in application
- Analyze for schema changes
- Code and test for revised transactions

**Completed for one of the world's logistics company
For the logistics module
while upgrading Oracle E-Business Suite (EBS)**

Always On: Resilient Data & Application Connectivity



Cross-Platform | Data Integration



1. Version / OS / Edition Agnostic

2. Heterogeneous Targets

3. Posts to:

1. Databases

2. Streaming

3. Files

Sources and Targets

Type	Target databases	Oracle (Source)	PostgreSQL (Source)	Licensed
Database	Oracle	✓	✓	Oracle: Core / vCPU (EE), Physical CPU Socket (Oracle SE), vCPU (Oracle SE). Postgres Core/vCPU
	PostgreSQL	✓	✓	Oracle: Core / vCPU (EE), Physical CPU Socket (Oracle SE), vCPU (Oracle SE). Postgres Core/vCPU
	SQL Server	✓	✓	Core / vCPU
	MariaDB	✓		Per Instance
	MySQL	✓		Per Instance
	Snowflake	✓	✓	Stream
Data Streaming	Azure Event Hub	✓		Stream
	JMS	✓		Stream
	Kafka	✓	✓	Stream
File Output	JSON	✓		Stream
	SQL	✓		Stream
	XML	✓		Stream

SharePlex: The Leader in Data Replication



SharePlex: Inventor of Oracle Replication

SharePlex has been providing low-latency, high-volume mission, critical replication for Oracle databases for over 25 years.



Why do customers buy SharePlex?

- Reduced Total Cost of Ownership (TCO)
- High-performance, low-overhead operation
- Simple to use out-of-the-box
- Differentiated product features (eg compare-repair, conflict resolution, monitoring)
- Unrivalled, award-winning, Technical Support
- Optimistic commit – lower latency

Data Integration

Numerous architectures



Change history/
Metadata repository

Change History for **Minimal Impact Auditing**

- Granular tracking of data changes
- Records metadata
- Offload history
- Very low database overhead



Centralized reporting/
Consolidation

Effective and efficient Reporting & Consolidation

- Consolidation for archiving, data store, data warehouse, data lake or event data
- Consolidate all or subsets from multiple databases.
- Databases can be geographically dispersed
- Different database versions and OS platforms



Data Integration / Data
Warehousing

Make Better Use of your Data and Support **Analytics**

- Use PL/SQL on the target to transform data
- Combine multiple tables
- Perform aggregations, data lookups and validation

Questions?



Support
Award
winning 24x7
support



Better
operations
Zero downtime
and data lost



Trusted partner
to global
organizations with
95% satisfaction



Looking Forward to Seeing You There!

Skills 101 – SharePlex

Season 2 Episode 2

Sharper AI: The Power of Instant Replay

August 6th, 2025

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SW Sales Engineer



www.quest.com/data-management-skills-training

Quest
Where Next Meets Now.