



# How to Move Your Oracle Database to “The Cloud”

Clay Jackson  
Database Solutions Sales Engineer

Quest™

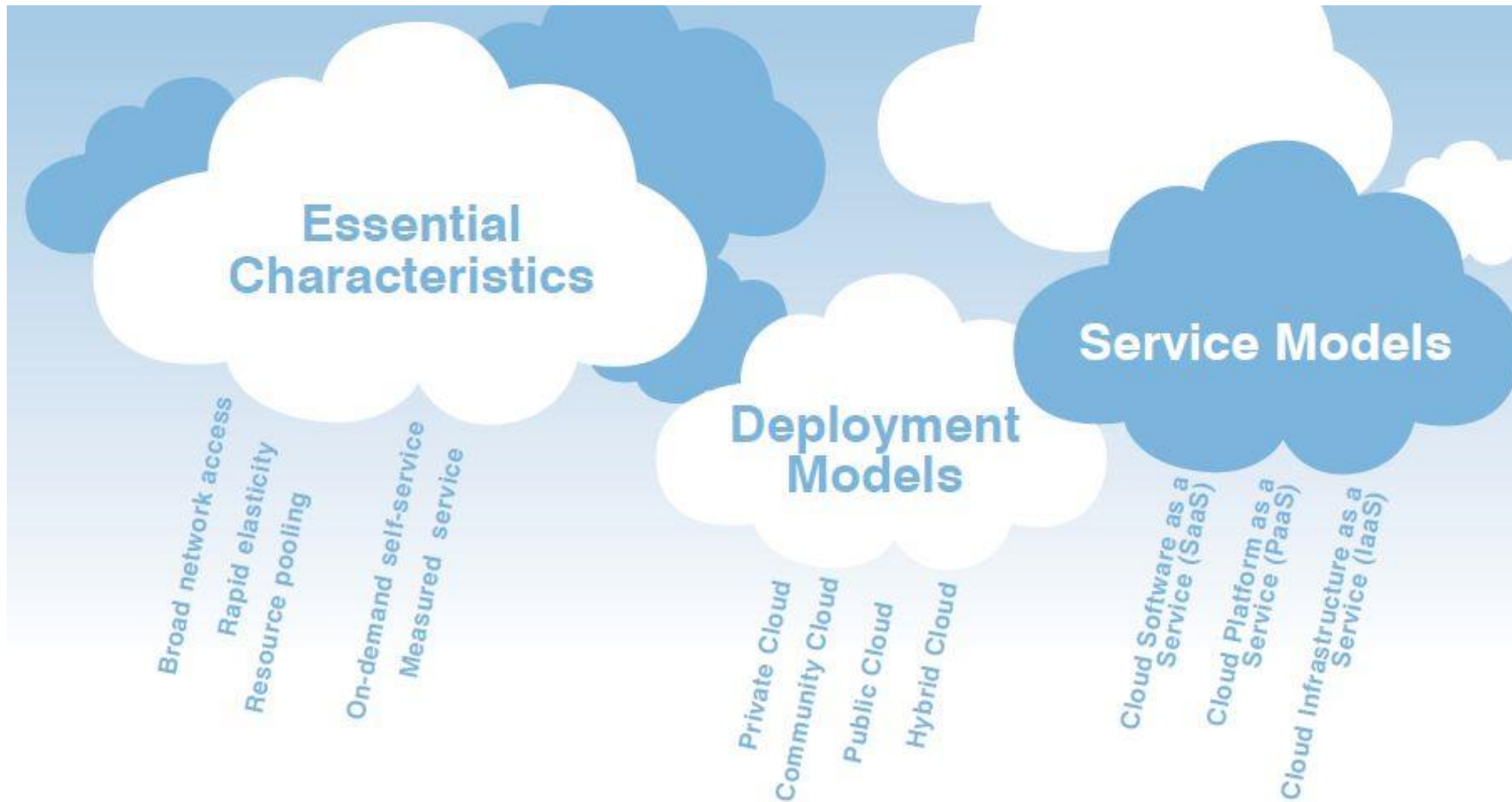
# Agenda:

- Clear the clouds on (pun intended)
  - ① **What's** “The Cloud”?
  - ② **Why** Should I Move to The Cloud?
  - ③ **How** Do I Move to The Cloud?
- Wrap Up/Q & A

# What's "The Cloud"?

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<http://cioresearchcenter.com/2011/03/the-nist-definition-of-cloud-computing/>

- Deployment Models
  - Private
  - Community
  - Public
  - Hybrid
- Service Models
  - SaaS
  - PaaS
  - IaaS

# Cloud Vendors

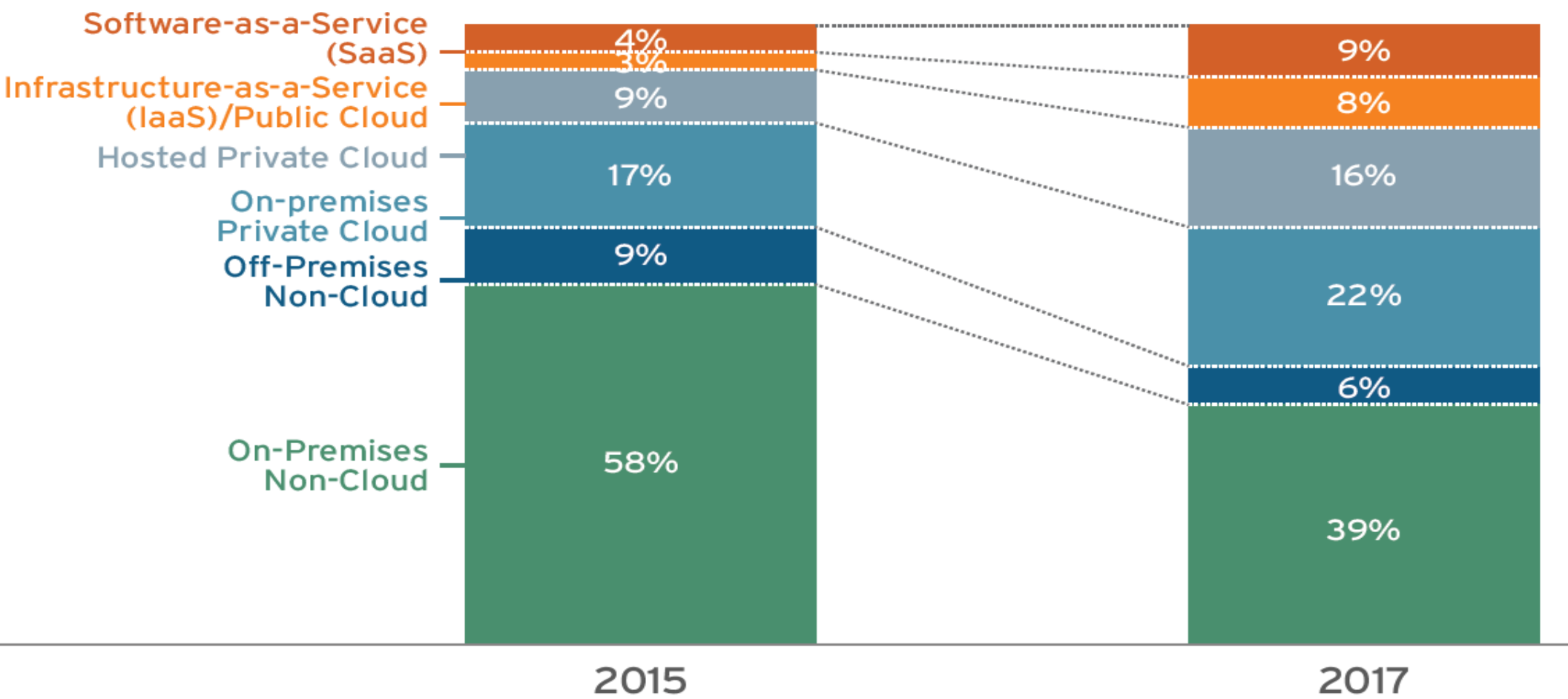
- Amazon
  - EC2 (I)
  - AWS (P/S)
  - S3 (Storage)
- Google
  - App Engine (P)
  - Apps (S)
  - Cloud Storage (Storage)
- Rackspace
  - Cloud Servers (I)
  - Cloud Sites (P)
  - Email (S)
  - Cloud Files (Storage)
- Salesforce
  - Force.com (P)
  - Salesforce.com (S)
  - Services Cloud (I/Storage)
  - Cloud Application Delivery (P)
  - HP Software as a Service (S)
- IBM
  - Smart Cloud Enterprise (I)
  - Cloud Application Delivery (P)
  - Smart Cloud Object Storage (Storage)
- Microsoft
  - Private Cloud (I/Storage)
  - Azure (I/P)
  - Office 365 (S)
- Oracle Cloud
  - Software as a Service (S)
  - Platform as a Service (P)
  - Infrastructure (I/Storage)
- Others
  - Joyent
  - Dell
  - HP

# Why Should I Move to the Cloud?

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# Operational and Analytic Database Deployments



Source: 451 Research, Voice of the Enterprise: Cloud Computing, Q2 2015



# How Do I Move to Cloud?

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# Options for Migration to The Cloud

- Conversions
  - Don't migrate, convert
  - Convert OnPremise Application to SaaS
- Move w/o History
  - Start fresh with same software but no historical data
- Just Do It (Big Bang)
  - Take the downtime and risk
  - Use Backup and Restore
  - Long downtimes for large databases
- The Alternative
  - Use a Replication Solution

# SharePlex The Golden Alternative

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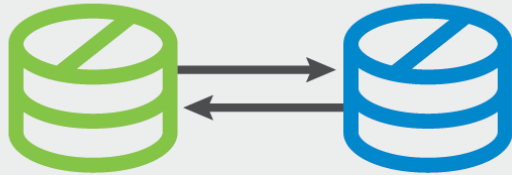


# What Is SharePlex

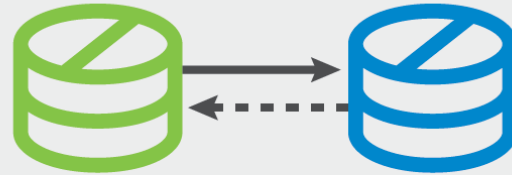
- Redo Log Based Database Replication
  - Read the redo log for changes
  - Ship the changes from old to new in near-real time
  - Biggest latency is the network
- Requires source and target have identical data to start
  - Backup/copy consistent to an SCN
- Remove the risk/downtime associated with migration
- Maintain synchronization between databases
  - On-Premise to Cloud
  - Cloud to On-Premise

# SharePlex value proposition – One product, many use cases

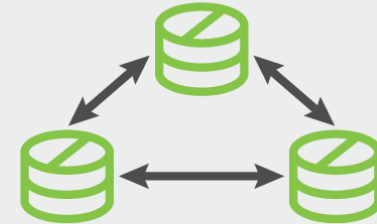
## Availability



High availability/  
Disaster recovery

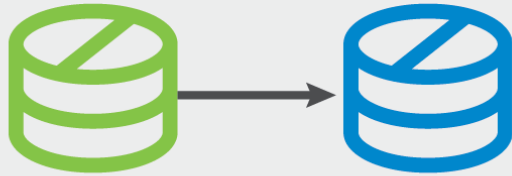


Migrations, patches  
and upgrades

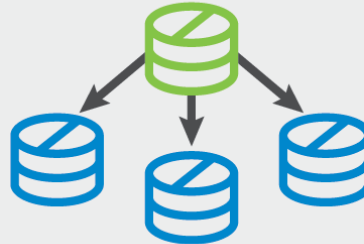


Active-Active/  
Load balancing

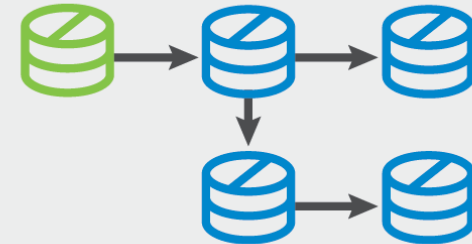
## Scalability



Operational  
reporting/Archiving

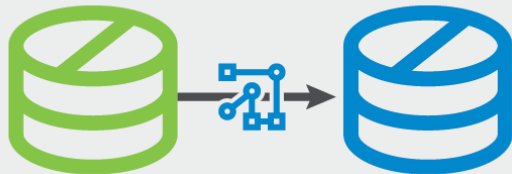


Data distribution/  
Distributed processing

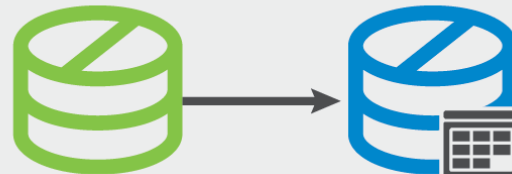


Cascading using  
intermediary systems

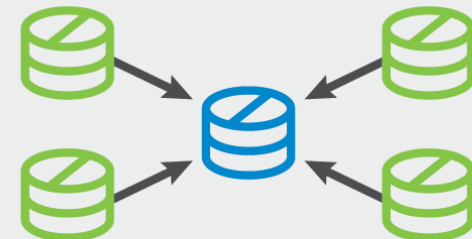
## Integration



Data integration/  
Data warehousing



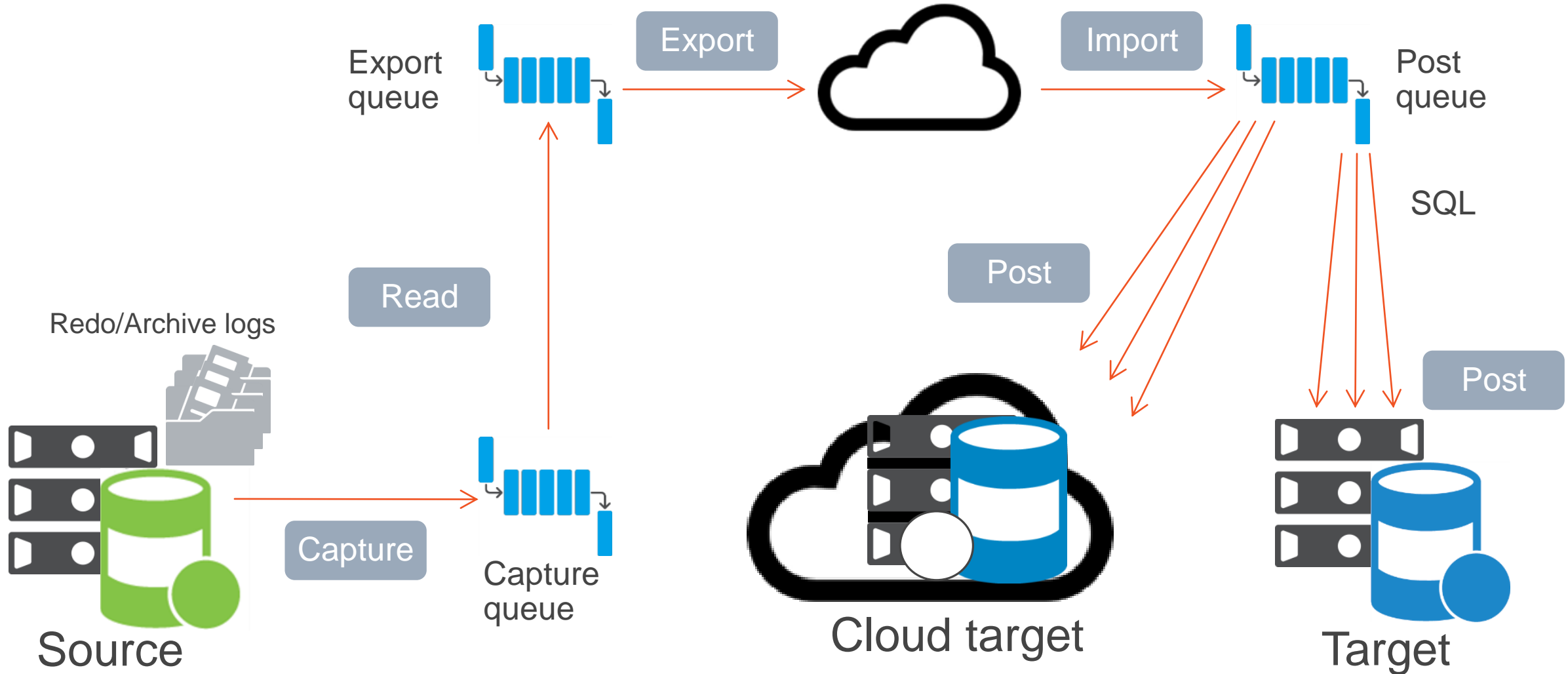
Change history/  
Metadata repository



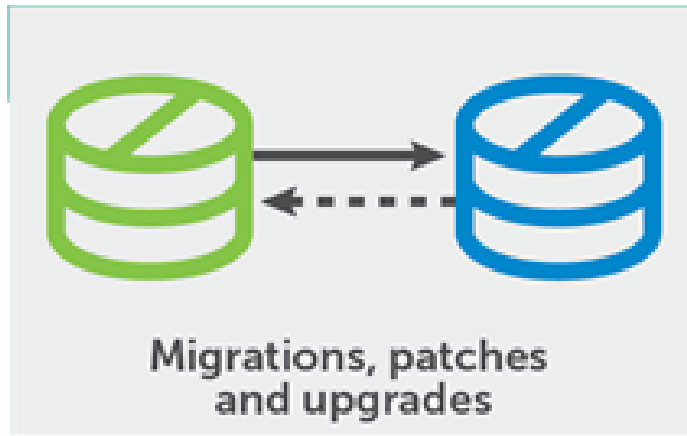
Centralized reporting/  
Consolidation

# SharePlex product architecture

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

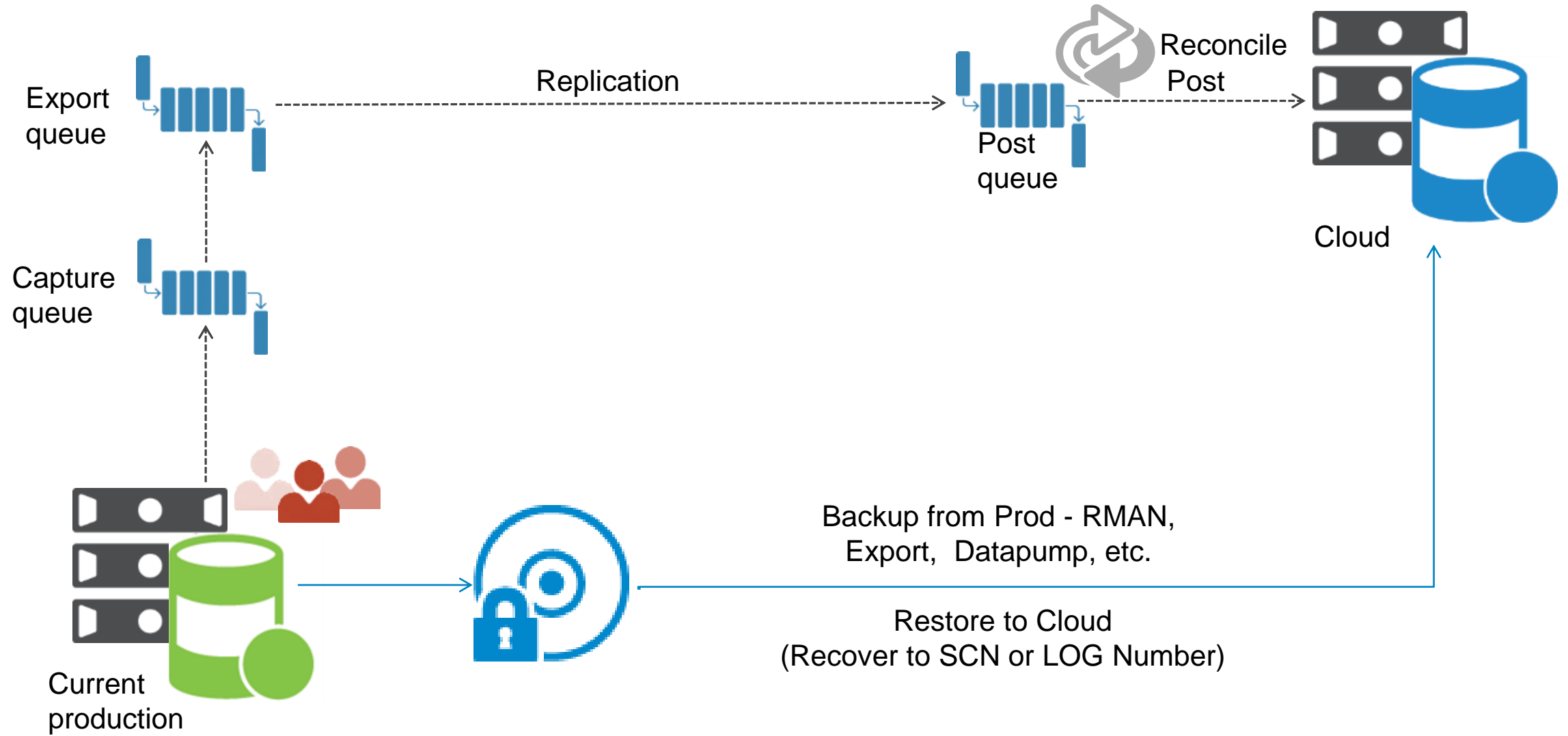


# Dramatically reduce downtime for **migrations**, patches and upgrades



- Migration/upgrade of application version, database version, storage, hardware platform, operating system or sometimes all five.
- Migrate to other RDBMS like Microsoft SQL Server, Hadoop, SAP ASE and more.
- Dramatically reduce downtime—continuous replication until ready to switch users to new system
- Reduce costs and potential mistakes by performing the changes during working hours.
- (Oracle) Eliminate risk providing a failback if the changes have undesired effect.
- Supports multiple dry-runs.

# SharePlex migration steps using a physical copy





# The Details – Migration Using SharePlex

- Set up and Start Replication
  - Stop Post – just capture the redo
- Get a Consistent Copy
  - Can use any method
    - Amazon DMS
    - Oracle Clone (Pluggable Database)
    - Export/Import (Data Pump)
    - RMAN
  - Consider be an “Intermediate Database”
  - Record the SCN/Log

# The Details – Migration Using SharePlex

- Instantiate the target
  - Copy and Recover
- Reconcile to recorded SCN or Log
- Start Post
  - Catch up
- Full Synchronization

# SharePlex 8.6.6 Cloud Support

	AWS RDS		AWS EC2		Azure Marketplace		Azure SQLService	
	Source	Target	Source	Target	Source	Target	Source	Target
Oracle		X	X	X		X		
SQLServer		X		X		X		X
PostgreSQL (community edition)		X		X		X		
EnterpriseDB				X		X		
Fujitsu				X		X		

# SharePlex is DBTA trend-setting product in data and information management and Best Streaming Data Solution



# Join me for a Webinar on February 28<sup>th</sup>

- 10:00 AM PST
- See a Live Demo of Replication from on-premise Oracle to Amazon RDS
- <https://www.quest.com/event/webcast-database-migration-to-the-cloud-with-quest-shareplex8121979>

# Questions



Thank you!

To learn more about SharePlex™  
visit [www.Quest.com/shareplex](http://www.Quest.com/shareplex)

