



Solution Sheet

# Rapid, De-risked Data Warehouse Migration

Due to the siloed nature of legacy data systems, business teams often have to wait in infuriatingly long data queues to get the dashboards they need to make data-driven decisions. This leads to slow decisions and loss of market share. While enterprises turn to the cloud to address this, they are often stumped by the complexity and risks of modernizing their data platform using the cloud.

They spend months, if not years, finalizing their cloud data platform only to realize that they have migrated less than 25% of their workloads successfully. While others never seem to get past the process of identifying the right tool from a vast technology landscape with countless choices.

- Protracted migration timelines.
- Innumerable choices in picking the right modern data warehouse.
- High complexity in migrating workloads successfully.
- Too long to see tangible outcomes.

## Persistent’s Data Warehouse Migration Methodology

Having delivered 100s of cloud migrations and having created multiple accelerators in the process, we have created a conveyor belt like factory model for successful cloud migrations focused on delivering tangible

business value quickly. The methodology helps you rapidly migrate your data platform to the cloud so that you can supply the right data and dashboards to business users when they need it.

- Fast-track your migration journey
- De-risk your migration by testing key use cases
- Seamlessly migrate from trial to production
- Establish on-going TCO and overhead with complete cost visibility

# How It Works

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## Technology Evaluation

- \ Get the inventory report of your source system usage including schema, data, queries, users, roles, and statistics
- \ Generate random data that closely represents production data
- \ Automatically load data, migrate queries, and run ETL jobs
- \ Evaluate and optimize performance, scalability, and concurrency

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## Architectural Blueprint

- \ Leverage Persistent Data Foundry, a pre-integrated data platform stack deployed on your cloud
- \ Experience the end-to-end integrated data pipeline
- \ Get pre-integrated tools to monitor the health and costs of all data products
- \ Enable authentication, authorization, SSO, encryption, and compliance

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## Process Blueprint

- \ Migration assessment with tools that crawl your current stack and assess inventory
- \ Migration planning with breakdown, sub-project creation, effort estimates, migration cost
- \ Track deliverables such as migration artifacts, reports and dashboards, utilities
- \ One portal across all users with assured performance, scalability, and concurrency

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## Actual Migrations

- \ 20+ accelerators to automate data migration, code migration, and validation
- \ Complete schema migration including databases, schema, tables, views, roles, users and access control
- \ One-time incremental data migration
- \ Code migration including queries, UDFs, stored procs, verification, and confidence score
- \ Iterative migration and verification with comprehensive verification reports and accuracy dashboards

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## Monitor, Optimize, Leverage

- \ Comprehensive health monitoring using alerts and automated recovery
- \ Security monitoring and enablement with discovery, encryption, access control, and audits
- \ Individual and project wise cost control through prediction and spotting outliers
- \ Leverage repeatability with our prebuilt samples of advanced features

# Accelerators to Fast-track your Migration



## Migration Assessment

- \ Inventory report of source system usage
- \ Synthetic Data Generation simulating production data and automatically load data, migrate queries, run ETL jobs
- \ Evaluate and optimize performance, scalability, concurrency



## Code Migration

- \ DDL generator
- \ SQL query migration
- \ Migration of views
- \ Informatica job migrations



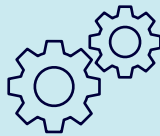
## Data Migration

- \ Bulk and incremental data migration
- \ CDC-based approach using tools like FiveTran, HVR, Rivery etc. or custom scripting leveraging Python, S3, Airflow and native Snowflake commands



## Migration Verification

- \ Compare table data and query results and ensure NO schema, data, precision loss during migration
- \ Ignore safe differences like format, floating point precision, result set ordering, etc.



## Utility Accelerators

- \ Synthetic data generator for dev, QA and performance testing
- \ Performance test suite



## Migration Command Center

- \ Central access to all migration accelerators
- \ Store migration artifacts
- \ Track migration progress

# Customer Story: Accelerated Migration of a Legacy Data Warehouse

## Challenges

- \ Leading provider of mortgage and real-estate marketplace solutions needed to reduce high data warehouse operating costs and centralize reporting.
- \ High operating cost of on-prem data platform, Oracle Exadata, led to desire to migrate to pay-per-use cloud infrastructure.
- \ Soon to be decommissioned on-prem data center.
- \ Multiple ETL tools hampered centralized reporting.
- \ No possibility of “as-is” migration from Exadata to Snowflake using Oracle’s cursor-based row-by-row processing.

## Solution

- \ Developed migration procedures with bulk load to address Oracle’s cursor-based processing.
- \ Single view of Exadata architecture. Eliminated non-standard nomenclature from schema names. Clear demarcation between staging, data warehouse and datamart layers that was previously lacking.
- \ An entirely new data warehouse architecture with Snowflake. Consolidated all ETL tools - Perl, Informatica, Pentaho, Talend into Rivery.
- \ Detailed trainings on Snowflake and Rivery.

## Outcomes

- \ Migrated **1500+** tables, **250** stored procedures to Snowflake.
- \ Centralized reporting and **cut down its high on-premises operating costs** with Snowflake.
- \ **Simplified configuration of additional customer and service lines** with templated procedures.

Accelerate your migration to the cloud today.

Contact Us

## About Persistent

With 12,000+ employees around the world, Persistent Systems (BSE & NSE: PERSISTENT) is a global solutions leader delivering digital business acceleration, enterprise modernization, and next-generation product engineering across industries and geographies. By mobilizing data with a modern platform, Persistent’s Data-Driven Business & Intelligence offerings give enterprises a continuous flow of insights to unlock growth.

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