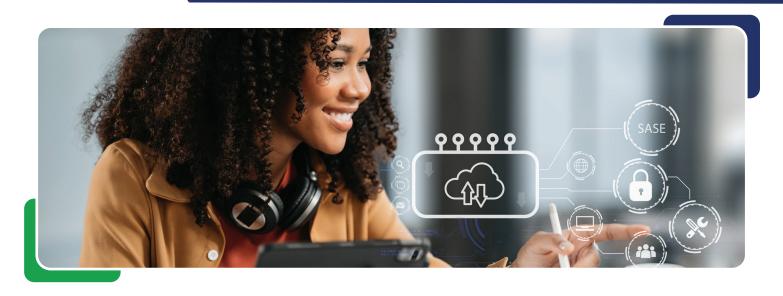


@atapult: Modernization and Migration Factories for AWS



GenAl Data Migration Factory



Data Migration Roadblocks

As enterprises strive for agility, scalability, and long-term growth, migrating data to the cloud has become a strategic imperative. AWS offers a robust platform to drive innovation, optimize costs, and enhance operational flexibility. However, transitioning to a modern cloud environment presents several challenges that organizations must navigate:

Cost Management



High data duplication and large-scale migrations add expenses

Complex Dependencies



Migrating tightly coupled data assets and application modules is challenging

Compliance Controls



Implementing industry-specific governance, security, and regulatory controls is complex

Resource Constraints



Limited availability of skilled experts across AWS and other cloud platforms

High Efforts



Schema conversion and selecting best-fit AWS architectural patterns require significant efforts

The SNAP Methodology: Your Strategic Path to AWS Migration

eatapult: GenAI Data Migration Factory delivers a risk-minimized, high-performance data migration to AWS using an AI-powered, factory-driven approach. Our SNAP (Strategize-Navigate-Automate-Persist) methodology, enhanced with GenAI capabilities, accelerates migration while maintaining compliance, optimizing costs, and minimizing business disruption. Designed for scalability and future readiness, our migration factory enables organizations to streamline data transition across databases/warehouses, data objects and scripts, and data pipelines, and ETL while delivering:

~30%

Faster Workload Migration ~40%

Process Automation Through
Al-powered Qatapult and Codeaira



Database / Data Warehouse Schema

Current DB / DWH understanding

Automated schema discovery, dependency mapping & migration complexity analysis for





Tool(s) Used:

codeaira

Data Migration Assistance

Schema conversion:







Amazon Aurora PostgreSQL





Teradata

Amazon Redshift

Tool(s) Used:



AWS Schema **Converstion tool**



Amazon Q Developer

Automated Data Reconciliation

Test case generation & reconciliation at cell level for source to target





Oracle

Aurora





Teradata

Amazon Redshift

Tool(s) Used:

codeaira



Data Objects & Scripts

DB/ DWH Objects Analysis

Inventory details (scripts, triggers, stored procedures) gathering & analysis



Tool(s) Used:

codeaira

Data Object Conversion

Stored procedures & DB scripts











Amazon Redshift

Tool(s) Used:

codeaira



Amazon Q Developer

Automated DB Script Valiadation

Unit test case creation for script output comparison





PostGreSQL





Snowflake

Amazon Redshift

Tool(s) Used:

codeaira

Data Pipeline & ETL

Data Pipeline Assessmentt

ETL complexity, lineage & E2E flow assessment for



Inventory capture (job details, transformations & functions) & analysis for



Ab Initio

Tool(s) Used:

codeaira

Legacy ETL Translation

ETL script conversion & optimization from





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Ab Initio



Tool(s) Used:

codeaira

Automated ETL Validation & Deployment

Unit Testing for ETL conversion

Sas vp IVIIIO As

SAS/ Ab Initio



Pyspark

CI/CD script generator:



GitLab code generation

Tool(s) Used: codeaira



Amazon Q Developer

Debugging Assistant

DB scripts & pipeline code (Snowflake stored procedures, Oracle SQL scripts etc.)

explanation, commenting, Q&A for easy debugging

Tool(s) Used: Codeaira

Transforming Customer Data Management with a Scalable Digital Hub for a Fortune 500 Insurer



Challenges

- Lack of a microservices ecosystem, leading to inefficiencies in data access
- Inconsistent customer experience between group and individual segments
- No unified customer data, resulting in fragmented information and operational challenges



Solution

- Designed a three-layered, target-state architecture for improved scalability and efficiency
- Expanded customer profiles with 374 attributes and developed a unified data model for enhanced insights
- Implemented an event-driven architecture with API networks for real-time data updates
- Deployed a cloud-based API Gateway and data-as-a-service solution for seamless data management



Business Impact

- Enabled a single, unified view of the customer across group, individual, and new lines of business
- Eliminated data silos by centralizing data storage in a single, accessible location
- Achieved seamless integration through system, process, and experience APIs
- Strengthened digital infrastructure for downstream applications

Accelerating Your AWS Journey with Confidence

AI-Powered Innovation

- Purpose-built Microsolutions and Reusable Blueprints
- Smart Utilities (Bi-directional Sync, Data Reconciliation, Landing Zone Framework) for Rapid Transformation
- Automated Remediation and Optimization

AWS Mastery

- ▶ 14 AWS Competencies
- Global F2000 customer success
- Well-Architected Framework Alignment
- > AWS MAP Funding Expertise

Expert Delivery

- AWS-Certified Professionals
- ➤ Talent Combining Tech, Business & Domain Expertise
- Proven SNAP Methodology
- > 24/7 Global Support

Reach out to



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Quantiphi is an award-winning Al-first digital engineering company driven by the desire to reimagine and realize transformational opportunities at the heart of the business. Since its inception in 2013, Quantiphi has solved the toughest and most complex business problems by combining deep industry experience, disciplined cloud, and data-engineering practices, and cutting-edge artificial intelligence



