

# Intelligent and automated data platform and workloads modernization to Snowflake

Auto-migrate ETL, EDW, analytics, and Hadoop workloads

Modernizing legacy workloads to a cloud-based data platform like Snowflake provides a decoupled data architecture, eliminates the need for complex remodeling, and facilitates unified data across hybrid sources.

Enterprises moving to Snowflake can experience benefits such as full SQL support, serverless architecture, strong partnerships with BI and ETL tools, and ease of maintenance. However, moving workloads from legacy environment to Snowflake has multiple challenges like:

- · Risk of business disruption
- Inadequate, out-of-sync, or missing documentation of legacy systems
- No insight into usage, complexity, and dependencies across workloads and environments
- Uninformed decision-making without proper data-driven assessment and recommendations
- Risk of losing business logic and legacy code during conversion
- Meeting the SLAs using Snowflake services while keeping the price-performance ratio in control
- Huge manual effort that turns costly with overruns and inefficiency

LeapLogic, an Impetus product for automated workload transformation, addresses all these concerns. Its intelligent grammar engine identifies optimization opportunities at schema, code, and execution levels and automatically converts all types of workloads, logic, and workflows to Snowflake-native stack.

#### **Key Benefits**

Up to 95% automation

**50-75%** reduced time-to-market

90% reduction in risk

2x cheaper

1.5x faster validation

**100%** preservation of investment in business logic

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## What's possible?

#### For data warehouse

- Plan a phased migration instead of a 'big bang'
- · Mitigate risks beforehand with no downtime
- Handle proprietary elements like BTEQs efficiently
- Ensure optimization to meet production SLAs
- · Consider all workloads in totality
- · Stabilize fast with a minimal parallel run period
- Cut over and retire your legacy data warehouse
- Strategize for people and processes

#### For analytics and reporting workloads

- Assess usage patterns with automation accelerators.
   E.g., SAS
  - o ETL mostly SQL + some SAS procedural
  - SAS procedural mostly statistical
  - SAS advanced algorithms
- Convert code to Snowflake-native stacks
- Map the conversion target for each usage pattern
- Enable datasets and migrate them as cloud stores or access them via JDBC

#### For ETL

- Assess code complexity, usage patterns, etc.
- Identify and analyze complex interdependencies.
   For example, for Informatica, it can be from XML files to workflows and then to mappings and transformations. Similarly, for DataStage, identify and analyze all jobs and components for each script and job activity, sequencer, lookup, aggregator, Transformer stage, join, etc.
- Transform core business logic to Snowflake-equivalent format
- Package for production-ready jobs
- Validate scripts for Snowflake-equivalence of all use cases

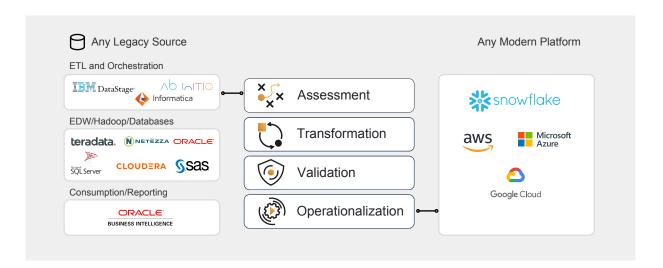
#### For Hadoop

- Assess infrastructure and workload inventory
- Map infrastructure and workloads on Snowflake
- Assess TCO and forecast for Snowflake
- Detect and optimize patterns
- Navigate complexities and risks
- · Migrate efficiently at scale

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### How it works

LeapLogic enables end-to-end transformation, operationalization, and transitioning of workloads in four steps:



#### STEP 1: Assessment

- Integrated assessment for several workload types
- · Comprehensive inventory listing
- Workload prioritization as per the business use case
- · Dependency analysis
- Advanced blueprint of Snowflake stack
- Optimization opportunities for schema, code, and orchestration
- Prescriptive recommendations
- Phased migration plan with timelines and cost estimates

#### **STEP 2: Transformation**

- Intelligent grammar engine supporting a variety of workloads and formats
- End-to-end transformation, packaging, and orchestration to Snowflake-native format
- Notebook-based inline editor for query optimizations
- Delivers a verified, executable package with performance SLAs met
- Extensible, repeatable, and verifiable methodology

#### STEP 3: Validation

- Pipeline-based automated validation
  - o Sample or customer data-based code validation
- Auto-generation of reconciliation scripts
- Automated SQL/query and business level validation
- Cell-to-cell validation reports
- · Data type and entity-level matching

#### **STEP 4: Operationalization**

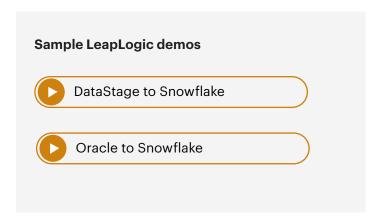
- · Productionization and go-live
- Infrastructure as code
- Execution using cloud-native orchestrators
- Automated DevOps, including CI/CD, etc.
- Target environment stabilization
- · Smooth cut-over

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# Enterprise success stories

LeapLogic has helped several large enterprises transform their workloads to the cloud while preserving years of business logic, workflows, and execution rules

# Hadoop modernization to Snowflake enabled a single source of truth Migrated 800+ production-grade Hive scripts with 75% automation in less than 2 months



Start your end-to-end workload transformation journey today! To learn more, write to us at <a href="mailto:info@leaplogic.io">info@leaplogic.io</a>

#### leaplogic

LeapLogic automates the transformation of legacy data warehouse, ETL, analytics, and Hadoop to native cloud platforms. Owned by Impetus Technologies Inc., LeapLogic partners with AWS, Azure, Databricks, GCP, and Snowflake to de-risk migrations. For over a decade, Impetus Technologies has been the 'Partner of Choice' for several Fortune 500 enterprises in transforming their data and analytics lifecycle, including modernization to the cloud, data lake creation, advanced analytics, and BI consumption. The company brings together a unique mix of engineering services, technology expertise and software products

To learn more, visit  $www.leaplogic.io\ {\it or}\ www.impetus.com$