# Data platform and workloads modernization to native cloud stack

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

Modernizing legacy workloads has become a strategic imperative for enterprises to drive the speed, scale, and agility needed to gain a competitive edge. Moving legacy data architecture to the cloud can help them enhance operational resiliency, improve productivity, enable faster innovation, and fuel growth.

Despite these benefits, businesses have several concerns:

- Will there be any business downtime?
- How do I transform years of complex business logic and code?
- Will my workloads be optimized for the new environment?
- Do I need to identify and prioritize workloads manually?
- How do I ensure seamless operationalization of workloads in the target environment?

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 a cloud-native stack of your choice.

# **Key Benefits**

Up to 95% automation

50-75% reduced time-to-market

90% reduction in risk

2x cheaper

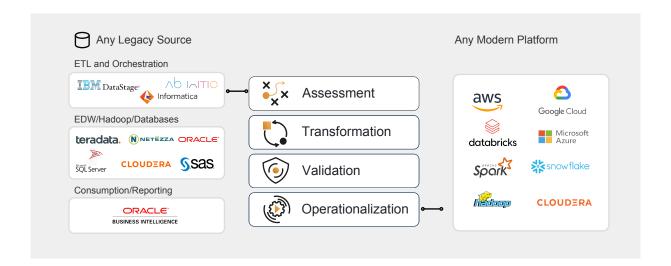
1.5x faster validation

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

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# How it works

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



## **STEP 1: Assessment**

- Lists entire inventory for diverse workloads
  - Assesses ETL scripts, DML and DDL scripts, procedures, scheduler/orchestrator scripts(jobs), etc.
  - Provides actionable insights and prescriptive recommendations
- Identifies complex interdependencies to group workloads for offload
  - Plots an end-to-end lineage showing interdependencies between different kinds of workloads
  - Provides advanced filters according to workload type and an interactive graphical interface to deep dive into specific flows
- Advanced blueprinting of the target architecture
  - Strategizes schema optimization and tuning parameters as per specific target nuances for improving CPU usage, memory usage, cache hit ratio, and disk I/O
  - Provides comprehensive, configurable recommendations for workload parallelism to ensure optimum performance on the target
  - Provides actionable recommendations for future-state functional component architecture and tech stack components

### **STEP 2: Transformation**

- Transforms diverse workloads and migrates schema and data to the target store of choice
  - DML scripts, DDL scripts, ETL scripts, scheduler scripts, analytics scripts, orchestration scripts, stored procedures, etc.
- End-to-end packaging
  - Transforms core business logic to cloud-native wrappers or orchestrators
  - Re-packages to an open programing language of choice
  - Ensures end-to-end transformation of scheduler/orchestrator scripts to production-ready jobs on target
  - Ensures end-to-end execution on staging and production environments after system integration testing
- Notebook-based inline query editor to address errors or apply any optimization
- Extensible, repeatable, and verifiable tool and methodology
  - Converts code to a variety of target stores and formats, enabling enterprise-wide usage

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### STEP 3: Validation

- Pipeline-based automated validation of the transformed code
  - Validates code at the row and cell level and reports errors
  - Instantly verifies the transformed code
- Data-based validation of the converted code
  - Auto-generates sample dataset based on complex query conditions – ideal for unit testing of the transformed queries
  - Feeds the customer-provided dataset for testing on real datasets – suitable for integration testing of the transformed queries

## **STEP 4: Operationalization**

- Delivers a target-specific executable package
  - Cloud-native orchestration and execution on production

- Ensures optimal performance through parallel execution
  - Provides parallel execution recommendations through exhaustive data-driven assessment
  - Generates required artifacts in the transformation output
  - Executes the generated artifacts in parallel on production
- Supports productionalization
  - Supports end-to-end transitioning into production and operationalization
  - · Optimizes capacity
  - Stabilizes environment through a parallel-run period
  - Ensures implicit data governance and compliance on the cloud
  - Ensures continuous integration and delivery
  - Monitors operations
  - Provides runbook documentation, training, and handholding

# Support your multi-cloud, cloud-to-cloud, and hybrid architecture strategy

Sources (% of automation possible)				<b>→</b>	Targets
EDW	%	ETL/Hadoop/Analytics	%	<b>Transform</b> DMLs, DDLs, procedures, ETLs, jobs,	AWS – EMR, Redshift, Glue, Spark
Teradata	80-95%	Ab Initio	80-95%		Azure – HDInsight, Synapse, Spark
Netezza	80-95%	Informatica	80-95%		GCP – BigQuery, Dataproc, Spark
Oracle	60-90%	ODI	60-90%	Shell scripts, source-native	
SQL Server	60-90%	DataStage	60-90%	scripts to cloud-native equivalent or PySpark, PyScala, PyHive	Snowflake – Query, ELT  Databricks – Databricks Lakehouse,
Vertica	80-95%	SAS	80-95%		Databricks Notebook, Spark
		Hadoop	70-80%		Spark – PySpark, Spark Scala
					GCP – BigQuery, Dataproc, Spark

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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.

#### 30% performance improvement by converting **Netezza and Informatica to Azure-Databricks stack**

Reduced overall cost by 20% while ensuring data availability in a single layer and operationalized Power BI reports on the new environment

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#### Automated assessment and transformation of Informatica workflows and Oracle EDW to AWS

~80% auto-conversion to save 50% cost and time compared to the manual transformation

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### Telecom giant saves millions with automated Teradata transformation to modern data platform

Releases 20% Teradata capacity by migrating 1000 BTEQ scripts containing 16,000 queries, 750 mLoad, TPT, and FExp scripts

**READ MORE** 

Data platform modernization significantly reduces passenger wait time for United Airlines

End-to-end transformation of workloads enabling batch and real-time feeds, data catalog, and governance. Serverless pipelines for easy scalability

**READ MORE** 

Start your end-to-end workload transformation journey today! To learn more, write to us at info@leaplogic.io

# 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 or www.impetus.com