

IMPETUS

# Automated Netezza Workload Transformation

SOLUTION BRIEF

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To achieve greater scalability and tighter integration with their enterprise big data warehouse and cloud computing initiatives, many Netezza users are exploring various growth options. These options fall into two broad categories:

**1**

Convert to an IBM alternate solution, such as Power Systems

**2**

Move to an open source-based big data warehouse architecture

As a result, many Netezza users today want to move their increasingly important enterprise analytics processing to a new platform — choosing to shift away from dependence on a single vendor architecture in order to take advantage of the flexibility that the open source revolution is delivering.

But to make this move, enterprises must confront the complexity of transforming Netezza warehouse workloads to big data. Manual identification and transformation of EDW, ETL, analytical and reporting workloads is complicated, tedious, time-consuming and error-prone.

Here are the benefits our solution offers over manual transformation:

**4x**  
Faster

**100%**  
Reliable

**5x**  
Developer  
Productivity

**100%**  
Enterprise  
Ready

**300%**  
ROI

# Simplify and Accelerate

The Impetus Workload Transformation Solution transforms your Netezza warehouse workloads to big data on cloud, on premise or hybrid; with speed, reliability, and no coding required. It simplifies and accelerates the transformation process by:

- Automatically moving the Netezza schema to an optimized big data model
- Automatically identifying the right transformation candidates
- Providing an automated logic transformation to your choice of supported query engines
- Identifying and transforming the underlying procedural and SQL queries in the Netezza shell scripts into Spark SQL/HQL
- Certifying/ auditing transformed entities automatically
- Replacing the Netezza command line calls to Hive Beeline calls

## The Impetus Netezza Transformation Process



### ASSESSMENT

Right position the workloads



### VALIDATION

Validate data, metadata, queries



### TRANSFORMATION

Transform complete logic



### EXECUTION

Execute transformed scripts



### MIGRATION

Migrate schema, data, view, report

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## Fast. Reliable. Automated.

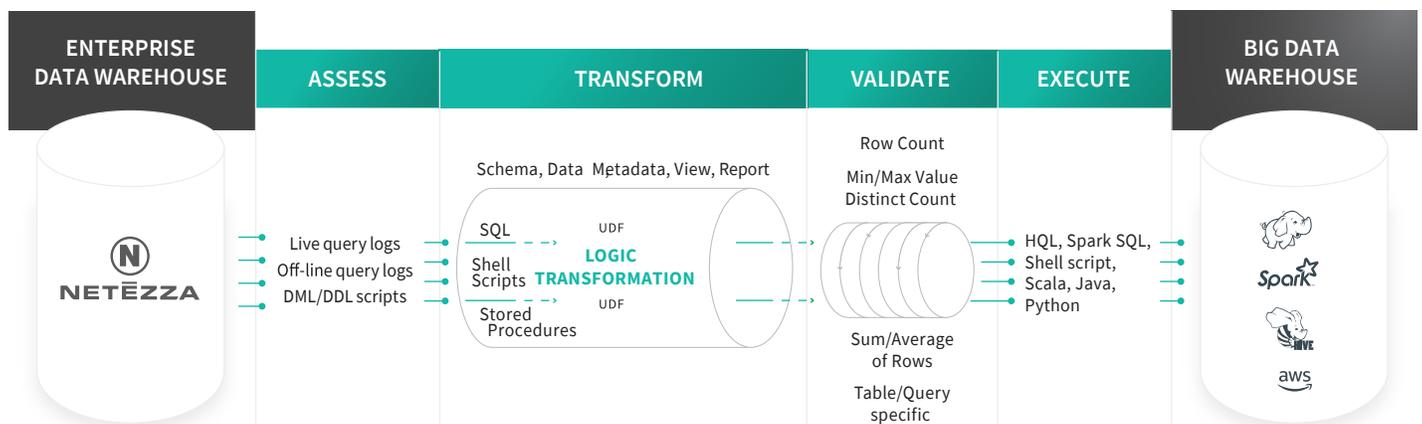
The Impetus Workload Transformation Solution replaces manual Transformation with powerful automation to accelerate the process, reduce the effort and save time.

It provides:

- **Automated inventory & profiling of current workloads.**
- **Right positioning of workloads:** Enables a data-driven assessment to prioritize workloads for transformation and optimization.
- **Optimized transformation:** Migrates data (historical and incremental) and schema with great ease. It also tunes the schema on the fly. Improves CPU/ memory usage, cache hit ratio and disk I/O by partitioning, clustering, bucketing, etc.
- **Leave behind transformed source code:** Executes the transformed scripts with standard code that is executable on any standard big data environment.
- **Automated validation framework:** Certifies a successful migration. Built-in validations for migrated data, metadata and other workloads.
- **Automated legacy code transformation:** Automatically transforms the legacy code and logic with the industry's first, patent pending, intelligent transformation engine built on years of successful transformation expertise. Also, Notebook Editor provides great flexibility to simultaneously edit the transformed queries, and to validate their syntax. Further, predict performance of transformed queries on target that highlighting the ideal candidates for optimization.

# Key Features

- Self-service data-driven assessments
- One click transformation - data, workloads
- UI-driven, automated script transformation
- Output artifacts: SQL, Java, Scala, Shell, Python
- Data structure optimizations
- Choice of query engine: Hive and Spark SQL
- Notebook-based online transformation
- Transformation engine made extensible to generic sources
- Query performance prediction on target
- Detailed migration reports
- Automated metadata harvesting and publishing
- Monitoring, audit logs
- Supports end-to-end EDW transformation
- Extensible, repeatable, verifiable framework
- Drag & drop-based workflow



To learn more about our Netezza transformation solutions contact us at [inquiry@impetus.com](mailto:inquiry@impetus.com)

## IMPETUS

Impetus is focused on creating big business impact through Big Data Solutions for Fortune 1000 enterprises across multiple verticals. The company brings together a unique mix of software products, consulting services, Data Science capabilities, and technology expertise. It offers full life-cycle services for Big Data implementations and real-time streaming analytics, including technology strategy, solution architecture, proof of concept, production implementation and on-going support to its clients. To learn more, visit [www.impetus.com](http://www.impetus.com) or write to us at [inquiry@impetus.com](mailto:inquiry@impetus.com).