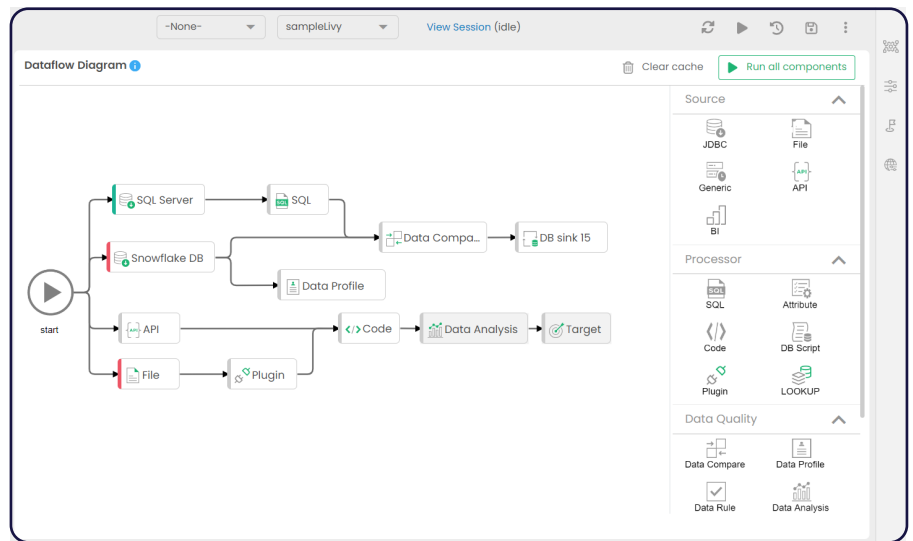


"Datagaps' ETL Validator has improved the data quality at every stage in our pipeline and reduced the downtime at migrations, data structure updates and daily operations" - Data Architect at NYU

ETL Validator, a module within DataOps Suite to efficiently handle and validate Big Data ETL/ELT Pipelines. Built on patented architecture, it leverages Apache Spark as the underlying engine. Data Engineers, Tests, Analysts can easily and quickly be deployed into data intensive operations. With in-product as well as integrated reporting and notification systems, management can save tremendous amount operational and overhead costs.



**60%** Reduction in Migration Testing Time

**35%** Reduction in Migration Time

**40%** Reduction in Data Quality Testing Time

**30%** Reduction in Total Cost of Operation

## Popular Supported Sources and Integration





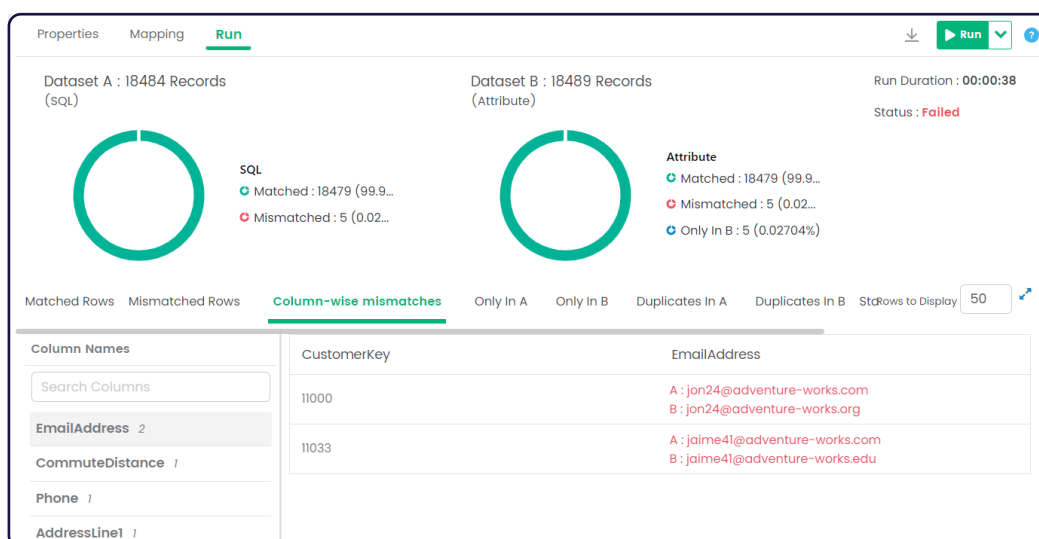
## Feature List

- Zero Code Deployment
- Container-Based Security
- Enterprise Collaboration
- SQL, Python, Scala and Plugin Support
- Automated Reporting System
- Data Compare Node
- Metrics Comparison Node
- Metadata Comparison and Validation Nodes
- Data Migration Wizard
- Scheduling Capabilities
- API, Flat File and BI Connector
- Email and Slack Notification
- CI/CD Enablement
- Data Profiling Node
- Data Rules Node
- Data Pipelines and Conditional Processing

## Data Compare

The Data Compare Node is an easy to deploy dataset / transformation comparison node that is setup in less than 5 clicks. With column-wise mismatches and thresholding parameters, every use-case of comparison can be validated easily.

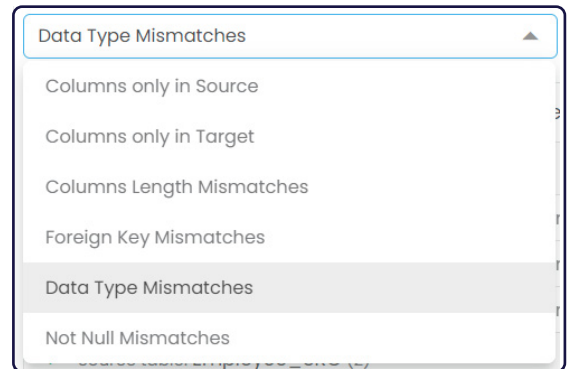
The suite comes with a Migration Wizard Tool that automates the creation of comparison test cases for easy migration testing.





## Easy Metadata Compare

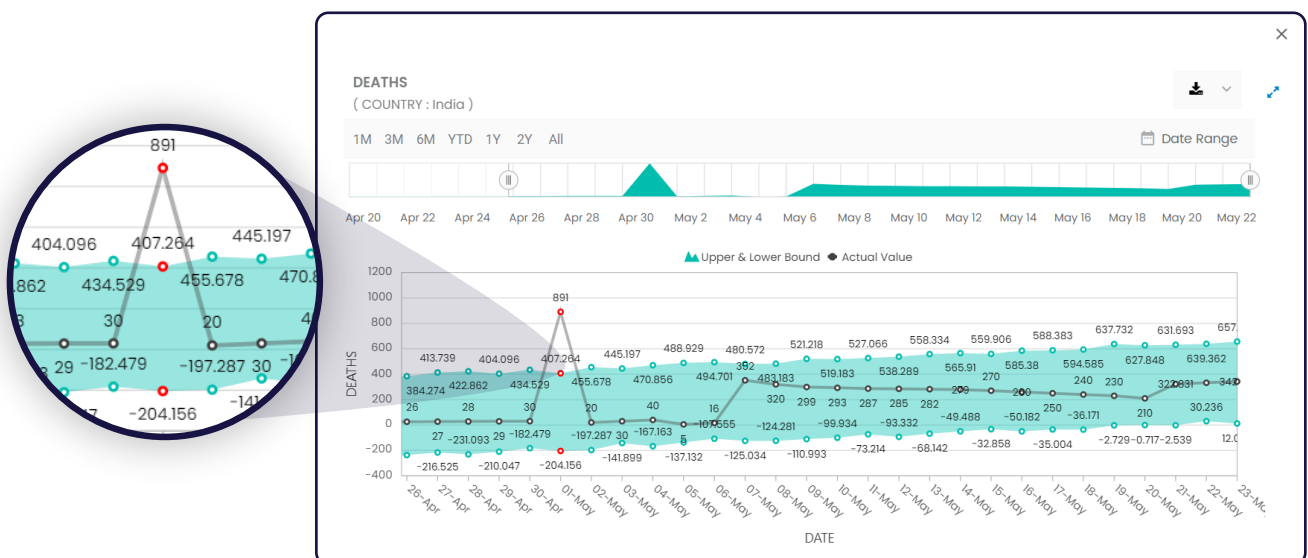
With a single node, 2 compete schemas' metadata can be compared instantly with detailed reporting on lengths, type, foreign key mismatch, non-null and exclusive column difference.



Source Schema ...	Target Schema ...	Target Table Na...	Source Column ...	Target Column N...	Source Data Type	Target Data Type
Source table: Customer_SRC (3)						
dbo	dbo	Customer_SRC	YearlyIncome	YearlyIncome	float	money
dbo	dbo	Customer_SRC	NumberCarsOwned	NumberCarsOwned	decimal	tinyint
dbo	dbo	Customer_SRC	Name	Name	nvarchar	varchar
Source table: Employee_SRC (2)						
dbo	dbo	Employee_SRC	Title	Title	varchar	nvarchar
dbo	dbo	Employee_SRC	FirstName	FirstName	varchar	nvarchar

## Anomaly Detection

Using ML and Prediction techniques, metrics can be tracked, and users can be notified in case of statistically significant anomalies are found the dataset.





## Profiling

Within ETL Validator, a Profiling node can be applied to a dataset to track various aggregates, frequency and patterns within the data.

The aggregations help point out anomalies such as sharp changes in mean, lengths, min-max, decimal points and such. Frequency Analysis is used to keep track of the nature of distribution in the datasets. Pattern analysis keep track of the string patterns and # of digits in a particular dataset.

Aggregate	Profile Value	Average (from previous batch runs)	Trend
Row Count	50	50	
Null(%)	0.0	0	N/A
Null count	0	0	N/A
Distinct(%)	100.0	100	
Distinct count	50	50	
Constancy	0.02	0.02	
Min Value	N/A	N/A	N/A
Frequency Analysis		Pattern Analysis	
Value	Count	Pattern	Count
AB89294	1 (2%)	XX99999	50 (100%)
AB64352	1 (2%)		

