

Cloud Automated Testing Framework (CAT)

Automated testing and validation of cloud services and applications

Digital transformation has fueled the need for real-time changes in business and delivery requirements. Enterprises are therefore looking for flexible and scalable delivery models that deliver value without compromising product performance, quality, or data security. Cloud platforms offer highly customizable infrastructure, enable easy scaling of system power according to availability, and assure minimum service levels even in case of failure.

However, manually validating workload functionalities is a complex, error-prone process. With rapid requirement changes, multiple cloud environments, dynamic infrastructure, and frequent releases, enterprises face several challenges like:

- Ensuring correctness, completeness, and credibility of the data
- Validating an end-to-end functional scenario on the cloud environment
- Ensuring security compliance
- Simulating end-to-end intended behavior of workloads on the cloud
- Ensuring authorization/authentication of shared workloads on a multi-tenant environment
- Integrating testing with all the components

Key benefits

1. Up to 70% effort savings
2. 50% cost savings compared to manual testing
3. 50% reduction in testing cycle time
4. Continuous integration for software improvement
5. Improved test execution efficiency with end-to-end automation
6. Preventive measure approach to uncover data issues during initial phases

Our solution

Our automated, easy-to-use Cloud Agnostic Test (CAT) framework accelerates the testing of workloads and cloud apps and reduces errors through automation. It improves the quality of cloud apps, and migrated data and workloads, while reducing total cost of ownership (TCO).

What's possible?

- Validate the functionalities of workloads and cloud apps
- Ensure authorization and authentication
- Validate continuously for data integrity and authenticity
- Get optimum test coverage

Data validation testing

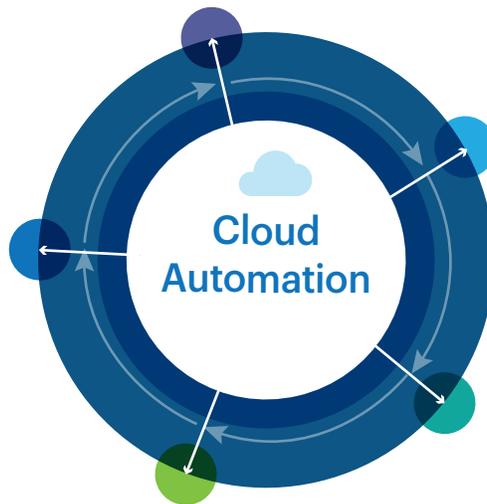
- Data completeness validation
- Data cleansing validation
- Data attribute validation
- Data transformation validation
- Business rule validation

Performance testing

- Latency testing
- Failover testing
- Stress/load testing
- Concurrent testing

Functional testing

- Smoke testing
- Regression testing
- System testing
- Integration testing
- Exploratory testing
- API testing
- Browser compatibility testing



Specialized testing

- Virtualization testing
- Migration testing
- DR testing
- Multi-tenancy testing
- Interoperability testing
- Business workflow testing
- Configuration testing

Cloud infrastructure testing

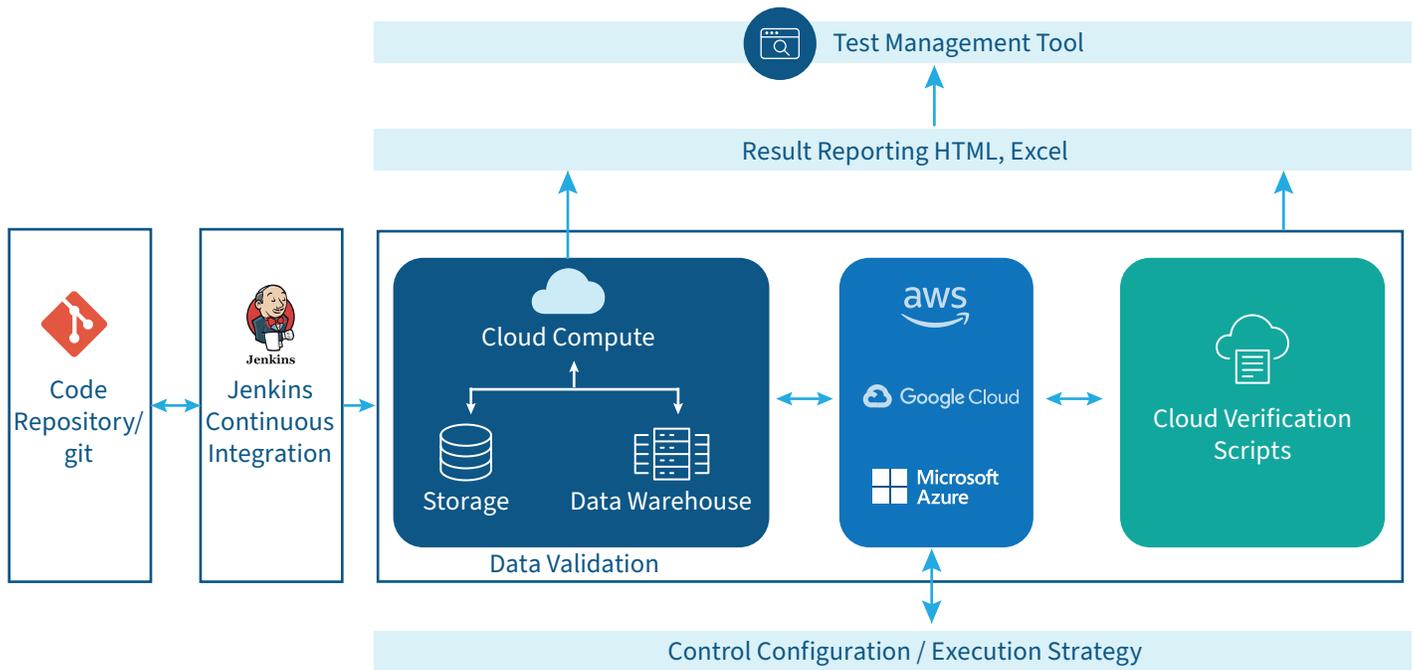
- Infra testing
- Deployment testing
- Availability testing

Our offerings

Key features

Flexibility to design and automate verification test scenarios with configuration components. This enables users to design scenarios based on their business needs.

Design and configure custom Data Quality (DQ) rules to validate migrated data using simple SQL queries. DQ rules highlight data discrepancy and persist execution results for each iteration.



Our approach

Here's how our solution-based approach works:

- **Control Configuration** configures functional scenarios and DQ rules
- **Data Validation** designs DQ rules that run with the cloud compute and report data discrepancies based on defined configurations
- **Cloud Verification Scripts** run functional scenarios
- After each run, a test execution report is generated. This solution can also be extended with the existing test management tool to leverage reporting.

Impetus has helped several Fortune 1000 enterprises across industries achieve their cloud transformation goals. With accelerators for testing, adoption, and management and an experienced team, we can help you automate testing and validation of data, apps, and workloads to reduce the errors, reduce TCO, and improve overall quality.

To know more, write to us at inquiry@impetus.com today.

IMPETUS

Impetus Technologies is focused on enabling a unified, clear, and present view for the intelligent enterprise by enabling data warehouse modernization, unification of data sources, self-service ETL, advanced analytics, and BI consumption. For more than a decade, Impetus has been the 'Partner of Choice' for several Fortune 500 enterprises in transforming their data and analytics lifecycle. The company brings together a unique mix of software products, consulting services, and technology expertise. Our products include LeapLogic – industry's only platform for automated transformation of legacy systems to any modern or cloud-native stack and Gathr – an all-in-one data pipeline platform.

To learn more, visit www.impetus.com or write to inquiry@impetus.com.