



# INFOSYS CLOUD TESTING SERVICES

As businesses embrace cloud technologies at various stages in their cloud transformation journeys, there are several unanswered questions and apprehensions that make this transformation challenging. Consequently, it takes longer to realize the ultimate target state and the business benefits they want to achieve.

During this process, enterprises need a trusted partner to help with the right set of

validations, build the confidence to roll out to production, and make the shift as seamless as possible.

**Infosys Cloud Testing services** help clients minimize non-production issues with shift-left and shift-right testing strategies for cloud transformation projects such as custom application migration, legacy modernization, cloud-native application, and SaaS packages.

Our layered approach covers quality across poly/multi-cloud deployment models such as public, private, community, and hybrid and service models such as IaaS, PaaS, and SaaS. Our assessment framework provides a strategy to determine the scope of testing based on the type of migration (rehost, refactor, re-platform, re-architect, remediate).

## Infosys Comprehensive Cloud Testing Solution

The Infosys Cloud Testing solution focuses on five key areas in the digital transformation pyramid:

- Assessment
- Infrastructure validation
- Data quality
- Functional testing
- Non-functional testing

### Assessment

Customers are often unaware of the risks associated with their cloud migration journey. This results in failure owing to erroneous and untested workload migration patterns and also underestimating the complexity of validation for the interconnected application and technology landscape.

Infosys Cloud Quality Assessment and Transformation (ICQAT) framework aligned with Azure Cloud Adoption Framework (CAF) helps assess risks early and mitigate them with a well-planned validation strategy that is comprehensive across functional and non-functional requirements.

### Infrastructure validation

An important aspect in the cloud

transformation journey is to validate if the infrastructure is correctly set up ensuring services such as compute, networking, storage, and also whether the databases are durable, secure, scalable, and accessible.

Infosys Cloud Infrastructure Validation is a platform that helps run the desired state infrastructure configuration checks covering:

- Validation of cloud components as per requirement specifications across various categories such as compute, storage, accessibility, database, networking, and governance
- Network and instance testing
- Operational readiness testing
- Resiliency checks by simulating static and dynamic attacks

### Data quality

With today's rapid and exponential changes in data volume, variety, and velocity, organizations may encounter errors and redundancies in their records. In this context, Infosys Cloud Data Validation Solution is a best-in-class cloud-native data automation solution that helps streamline and accelerate testing of data integration and data analytics platforms.

Infosys Data Quality Engineering Platform is a hyper automation platform that performs end-to-end data validations. Key

focus areas include:

- Cloud data modernization validation
- Integrated hyper automation platform with low-code/no-code
- Automation supported by smart AI solutions
- AI-led next-gen test data management solutions
- Seamless integration with external testing and defect management tools
- Support for complex data integration workflows
- Ready to use and pluggable processors (289+) and micro solutions (45+)
- Technology-agnostic and cloud-native solutions

### Functional testing

To ensure seamless functioning of cloud-based applications, their functionalities must be tested and validated for accessibility, connectivity, and availability.

Infosys Cloud Quality Assurance Workbench automates the mapping of business rules, data operations, and testable components from legacy systems to APIs/microservices with an engine to auto-execute tests pre and post-modernization.

## Non-functional testing

End-user experience depends on the application's performance. Therefore, the application should be secure against vulnerabilities and resilient enough to overcome any failures.

Non-functional testing helps secure cloud, performance adherence, scalability, and high availability standards. Infosys Cloud Performance Validation Solution (ICPVS) can help automate chaos engineering and monitor cloud platforms. Infosys has

developed tools such as Infosys Automated Performance Assurance (IAPA) and Infosys Automated Performance Testing Platform for Microservices (IMPT) for additional testing. Applications can be tested for load tolerance, fault tolerance, data tolerance, and latency.

In addition, Infosys validates the security of the cloud environment and applications using application security testing, penetration testing, and infrastructure security testing.

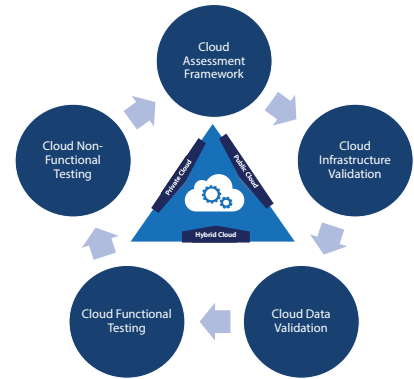


Figure 1: Comprehensive Infosys Cloud Testing Solution

## Infosys Tools – Differentiators

At Infosys, we bring vast experience and knowledge from working in different domains and verticals with our partners, to ensure faster time-to-market, reduced cost of quality, and increased productivity through our tools and accelerators. Our solutions accelerate quality engineering for reliability of the cloud platform. They are built to identify risks and vulnerability early in the lifecycle making sure the platform is highly available and performs key validations at each phase of cloud deployment. We have developed over 3000+ reusable assets and more than 15 QA solutions with 8 of these being cloud-native and available on hyperscaler marketplaces such as Azure, AWS, and GCP.

## Infosys Tools Advantage

- Infosys Cloud Quality Assessment and Transformation Framework (ICQAT) results in 40% faster test cycles leveraging the right strategy

- Infosys Cloud Infrastructure Validation (ICIV) provides 45% reduction in cloud infrastructure and security test effort
- Infosys Data Testing Workbench (IDTW) delivers a 50% reduction in data validation cycle time

## Why Choose Infosys

As an end-to-end cloud testing partner, Infosys helps organizations conduct relevant testing for cloud migrations and cloud-native builds to achieve faster time-to-market. We achieve this by leveraging:

- Proven expertise and experience in cloud transformation and validation
- Proprietary frameworks to kick-start testing
- Large repository of test scenarios
- Automated testing solutions
- Strategic planning and strong program governance
- Process optimization and operational excellence
- Cost optimization and trusted quality assurance

## Success Stories

### 70% productivity increase and 40% faster time-to-market for a leading Australian bank

Infosys implemented end-to-end cloud assurance framework as part of the client's cloud-first strategy. We performed Azure data lake validation and DevOps integrated infrastructure as code (IaC) Azure platform readiness validation.

### 100% test coverage for a large European retailer

Infosys Cloud Quality Assessment and Transformation Framework helped achieve full test coverage for the client through an exhaustive test strategy. This involved making the right tool recommendations for functional, data, interfaces, and non-functional testing for the Azure cloud migration project.

Infosys Cobalt is a set of services, solutions and platforms for enterprises to accelerate their cloud journey. It offers over 14,000 cloud assets, over 200 industry cloud solution blueprints and a thriving community of cloud business and technology practitioners to drive increased business value. With Infosys Cobalt, regulatory and security compliance, along with technical and financial governance comes baked into every solution delivered.

For more information, contact [askus@infosys.com](mailto:askus@infosys.com)

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