

## Infosys Service Virtualization

In the race to become digital, organizations need to rapidly embrace service-oriented architecture (SOA) or move to microservices. This shift however brings in its own set of challenges related to system constraints, unstable test environments, third party APIs, and test data set-up dependencies. The result is cost, quality and time implications that can derail the initiative.

The Infosys Service Virtualization (SV) approach addresses these key challenges to ensure high quality while eliminating loss of cost and time. Further, our SV testing offering helps shift-left of the application (system under test) QA cycle and supports agile, CI/CD, digital and DevOps initiatives in the organization.

### How Infosys SV testing works

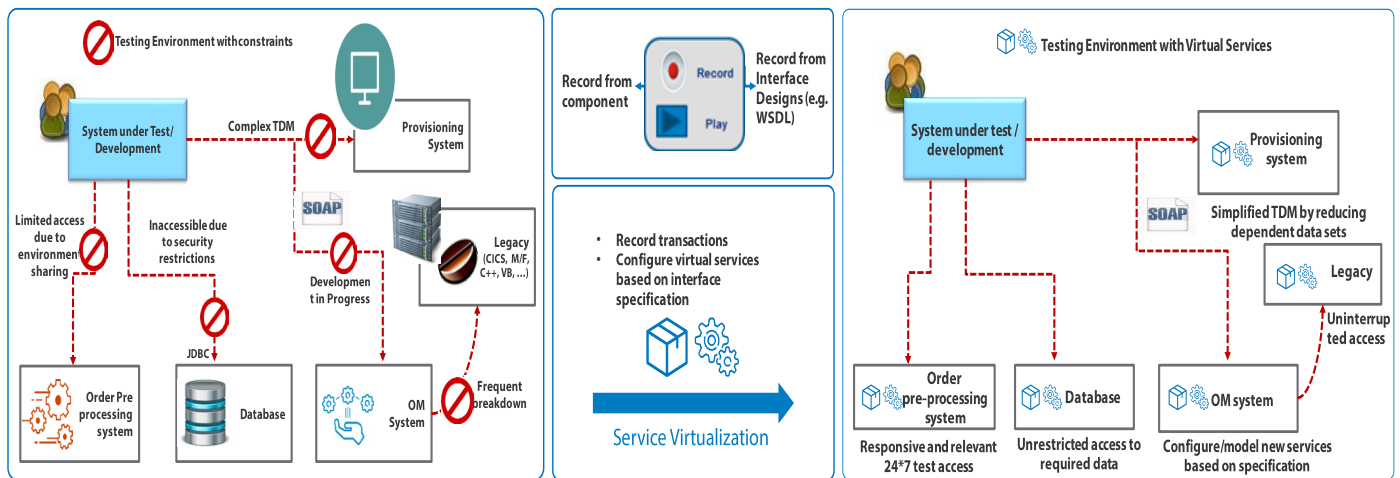


Fig 1: Infosys Service Virtualization can transform your testing operations

### Benefits

#### 1. Stay on-time and shift left

- Catch defects early in the Testing cycle
- Improve test coverage with reduced environment dependency
- Start development even without system interface availability
- Build virtual services for interfaces under development and systems that lack documentation

#### 2. Reduce infrastructure cost

- Develop virtual services for infrastructure systems to
- End dependence on maintenance-heavy and pay-per-use third party systems
- Eliminate the need for enterprise systems (mainframe, CRM, ERP, etc.) in development/test environments all the time
- Provide “in-a-box” environment down to a developer’s desktop

#### 3. Streamline test data management

- Slash time to access resources thus speeding up execution
- Reduce repeated test data set-ups and creation of multiple types of data that consume time and delay testing

#### 4. Enhance performance testing readiness

- Remove constraints by isolating flaws and enhance productivity of performance teams
- Reduce costs involved in building and maintaining stubs with limited functionality

## Infosys SV testing offering stands apart

- Over 500 service virtualization experts
- More than 15 active clients across banking, insurance, telecom, utilities, retail, manufacturing, healthcare, etc.
- Over 20,000 services virtualized
- More than 3,000 app test cases supported through SV
- Over 25 successful programs covering transformation, DevOps and legacy modernization
- Strong alliances with CA, IBM, HP, Smartbear and Parasoft



Key Activities	Our Differentiators	Benefits
<p><b>Identify Apps</b></p> <ul style="list-style-type: none"> <li>- Identify key applications for virtualization</li> <li>- Include the applications that are not 'the core object of UAT testing' yet impact UAT</li> </ul>	<ul style="list-style-type: none"> <li>- Business value analysis framework for SV</li> <li>- Frameworks for identifying apps for SV</li> <li>- Service virtualization strategy for roadmap definition and operating model</li> <li>- Tool selection strategy</li> </ul>	<ul style="list-style-type: none"> <li>- By prioritizing the right application for SV, ROI can be realized 20% ahead of plan</li> <li>- Right tool can ensure that the solution addresses the purpose</li> </ul>
<p><b>Virtualize Key Apps</b></p> <ul style="list-style-type: none"> <li>- Identify key applications for virtualization</li> <li>- Include the applications that are not 'the core object of UAT testing' yet impact UAT</li> </ul>	<ul style="list-style-type: none"> <li>- Data-driven stub development framework</li> <li>- Auto switch capability to route between real and virtual services</li> <li>- Environment monitoring solution – raises ticket automatically when services are down</li> <li>- Services dashboard</li> </ul>	<ul style="list-style-type: none"> <li>- 25% improved productivity due to ready frameworks and reusable components</li> <li>- Optimized stub development process can reduce overall development time by 10%</li> </ul>
<p><b>Release</b></p> <ul style="list-style-type: none"> <li>- Test virtualized components using E2E scenarios</li> <li>- Extend virtualized operations to remaining potential systems / components</li> <li>- Achieve 'ALWAYS ON' E2E and UAT</li> </ul>	<ul style="list-style-type: none"> <li>- Reporting framework for major KPIs like environment availability, test coverage, data set-up time and test quality</li> <li>- Frameworks for identifying apps for SV</li> <li>- End-to-end automation framework –using LISA SV and injection of test cases on strategy</li> </ul>	<ul style="list-style-type: none"> <li>- Automation suite makes stubs easily adaptable to the E2E journey</li> <li>- Dashboard for better representation of ROI helps in better decision-making</li> </ul>

Offering	Context	Tool used	Impact /Benefits
Core API Testing and SV	A leading global bank had undertaken a program to build APIs on core banking systems without making any changes to the systems. This was a project with tight deadlines.	CA DevTest	<ul style="list-style-type: none"> <li>• 100% CI/CD and progressive automation</li> <li>• 90% reduction in rework effort on test scripting</li> <li>• 70% reduction in test case preparation effort</li> <li>• 25% reduction in test execution effort</li> </ul>
ESB Testing and SV	A leading European bank is developing an improved real-time dashboard for APIs with automated health checks every 5 minutes.	HP UFT	<ul style="list-style-type: none"> <li>• 80% of the regression test suite automated yielding 50% reduction in regression test window</li> <li>• Progressive automation covering 90% of System Test cases in agile projects achieved</li> <li>• API automation helped achieve cost savings of 0.5 M USD</li> </ul>

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



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