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Product Brief

Service Virtualization

Key Benefits

- **Parallel development and testing**. Enable multiple development and testing teams to work in parallel, eliminating bottlenecks and speeding time to market.
- **Infrastructure requirement reduction**. Eliminate much of the concurrent demand for environments created by high-velocity development and test processes.
- **Shift left and test more**. Test earlier in the software lifecycle, when issues are easier and less expensive to resolve.
- **Performance readiness**. Load test at the component level with production-level condition.
- **Elimination of costs for third-party services**. Avoid costs by simulating needed third-party services.

Key Features

- **Service and application emulation**. Replace fragile stubs and mocks with dynamic, robust simulations that accurately model the behavior, data, and performance of crucial systems.
- **Test more, test often, test always**. Service Virtualization includes Test Data Manager, a built-in test suite that provides deep support for automated, functional, UI, mobile, and performance testing.
- **Seamless integration**. Integrate with development and test tools such as Selenium, Eclipse, and major testing suites.

Overview

The growing complexity of application architectures, along with globally distributed organizations, means that development and testing teams face a barrage of bottlenecks as they strive to deliver. Bottlenecks, also known as constraints, include lack of access to a mainframe partition or an ERP (enterprise resource planning) system, unavailable test data, and restricted access to third-party systems. Constraints are also created by development teams working in parallel seeking access to the same environments.

Service Virtualization eliminates these constraints by creating simulations of needed systems and making them available throughout the software development lifecycle. Developers, testers, and performance teams work in parallel. The result is faster delivery, lower costs, and higher quality of innovative new software applications.

Business Challenges

In today's hyper-competitive environment, innovative software applications are tied to your most important products and solutions, making them more user friendly, exciting, and profitable. As software becomes more and more critical to your business' success, your technology teams are driven to deliver software at ever-faster rates with ever-higher expectations for quality and usability. The growing complexity of your applications means that your technology teams face a growing number of bottlenecks as they strive to deliver better business results. Furthermore, current processes and tools are failing to overcome the following limitations:

- **Unavailable systems**. Systems are constrained by development and usage schedules, security restrictions, and competition between teams for resources.
- **Poor performing applications**. Downstream systems and mock-ups might not provide the functional behavior or performance response that teams need. Because network connections in the test lab do not reflect production network conditions, end-user performance suffers.
- **Costly third-party access fees**. Developing or testing against cloud-based or other shared services can result in costly usage fees.

Solutions Overview

Service Virtualization eliminate constraints through its groundbreaking, patented ability to emulate a system's dynamic behavior, performance, and data. With Service Virtualization, you no longer need to integrate with dependent systems during development. Furthermore, you can reduce or eliminate much of the testing that you are doing today.

Solutions Overview (cont.)

Service Virtualization helps overcome the following constraints:

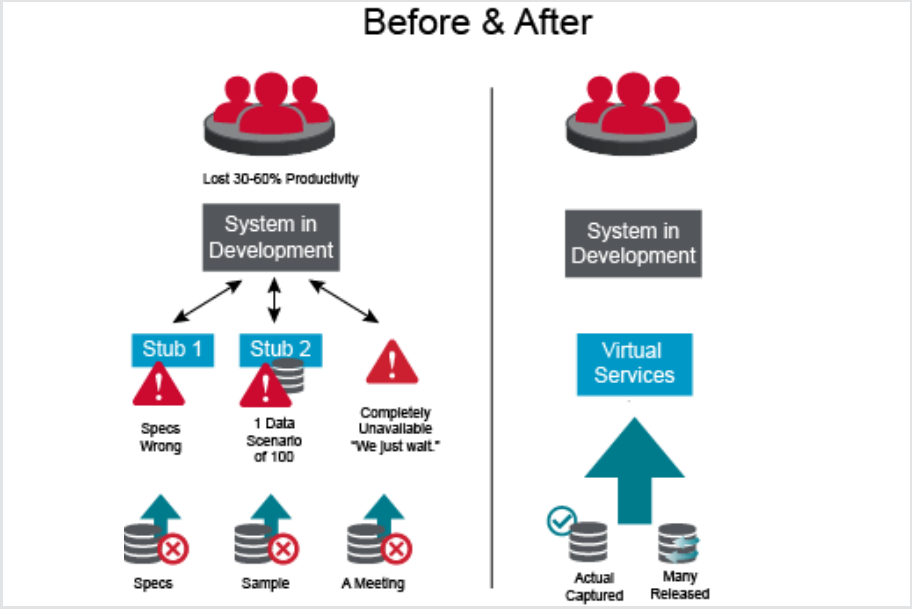
- **Infrastructure constraints**. Service Virtualization reduces the amount of hardware and software that you need for a highly scalable, productive, and unconstrained development and testing environment.
- **External service constraints**. Service Virtualization eliminates barriers and streamlines development by simulating dependent systems, including mainframes, external service providers, and ERP systems.
- **Parallel development constraints**. Service Virtualization allows projects to be developed in parallel instead of a classic waterfall model, accelerating development and time-to-market.
- **Test scenario constraints**. Service Virtualization dramatically simplifies the creation and management of development and testing processes, including the creation of test data and the configuration of systems.

Critical Differentiators

Service Virtualization is part of an enterprise-grade platform that offers the following features for usability, scalability, performance, security, and adoption:

- **Learning mode**. Learning mode monitors traffic between the dependent and target systems to automate the creation of and updating of virtual services. Teams can assure that testing is being completed against the most up to date version.

Service Virtualization reduces development and test cycles to speed time to market.



- **Support for the technologies that you use**. The broadest and deepest out-of-the-box protocol support for front-end, middleware, and backend technologies.
- **Opaque Data Processing (ODP).** ODP uses patented algorithms to automatically find the relationships in nearly any data source, radically reducing the time required to create virtual services.

Customer Success

Fortune 100 global bank. Avoided $30 million in infrastructure and performance lab configuration costs in year one by replacing manually coded stubs and responders with Service Virtualization.

Major telco. Reduced development and testing cycle times by more than 40% within the first three months of the project, for a first-quarter ROI of 450%.

Leading airline. Saved more than $1.5 million per month in application service fees across 12 development and integration teams.

Property and casualty insurer. Reduced the cycle times for new IT functionality releases by six weeks per three month cycle, thereby doubling IT delivery capacity, while decreasing errors discovered in pre-production or production by 90%.

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For product information, visit our website at: ca.com.

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