

CA Service Virtualization

Key Benefits

- **Parallel development and testing.** Enable multiple development and testing teams to work in parallel, eliminating schedule 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 conditions
- **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 needed systems.
- **Test more, test often, test always.** CA Service Virtualization includes CA Application Test, a built-in test suite providing deep support for automated functional, UI, mobile, and performance testing.
- **Seamless integration.** Built from the ground up to 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 development and testing teams face a barrage of bottlenecks as they strive to deliver. Examples of bottlenecks, also known as constraints, include lack of access to a mainframe partition or an ERP system, unavailable test data, and access to third-party systems. Constraints are also created by development teams working in parallel seeking access to the same environments. CA 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 for faster delivery, lower costs, and higher quality of innovative new software applications.

Business Challenges

Today's hypercompetitive environment is defined by innovative software applications tied to your most important products and solutions—making them more user friendly, exciting, and profitable. Yet, as software becomes more and more critical to your business' success, your technology teams are driven to deliver software faster with ever-higher expectations for quality and usability. The growing complexity of your applications means your technology teams face a barrage of bottlenecks as they strive to deliver better business results. Furthermore, current processes and tools are failing to overcome these limitations such as:

- **Unavailable systems.** Systems become constrained due to schedules, security restrictions, contention between teams or because they are still under development.
- **Poor performing applications.** Downstream systems and mockups may not provide the functional behavior or performance response needed, network connections in the test lab do not reflect production network conditions, and 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.

Solution Overview

The patented capabilities in CA Service Virtualization eliminate constraints through its unique ability to emulate a system's dynamic behavior, performance, and data so the need for integration with dependent systems during development and testing is eliminated or reduced.

Solution Overview (con't)

It helps overcome:

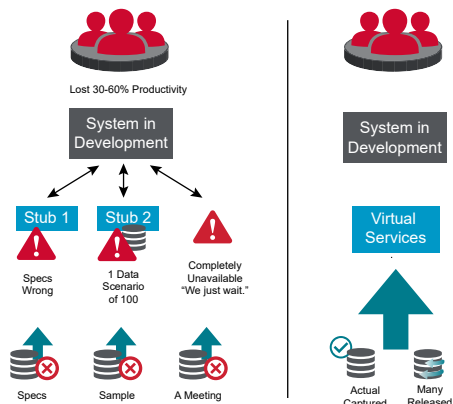
- **Infrastructure constraints.** Reduce the amount of hardware and software needed for a highly scalable, productive, unconstrained development, and testing environment.
- **External service constraints.** Eliminate barriers and streamline development by simulating dependent systems including mainframes, external service providers, and ERP systems.
- **Parallel development constraints.** Allow projects to be developed in parallel instead of a classic serial, waterfall model, accelerating development, and time-to-market.
- **Test scenario constraints.** Dramatically simplify the creation and management of development and testing processes, such as test data, system configuration, and other non-value-add activities.

Critical Differentiators

CA Technologies invented and patented service virtualization technology. As the market leader, CA offers the deepest, broadest and most compelling solution available.

- CA Service Virtualization is much more than just a set of functions. It is part of an **enterprise-grade platform** that fully accounts for usability, scalability, performance, security, and enterprise adoption.
- **Learning mode** monitors traffic between the dependent and target systems to automate the creation and updating of virtual

CA Service Virtualization reduces development and test cycles to speed time to market. Before & After



services. Teams can be assured that testing is being completed against the most up to date version.

- Features the broadest and deepest out-of-the-box **protocol support** across front-end, middleware, and backend technologies.
- **Opaque Data Processing (ODP)** uses patented algorithms to automatically find the relationships inside of nearly any data source, radically reducing the time required to create virtual services. With ODP you can stop asking “Does my tool support that protocol?” and just start building.

Customer Success

- **Fortune 100 Global Bank.** Avoided US\$30M in infrastructure and performance lab configuration costs in year one by replacing manually coded *stubs* and responders with CA Service Virtualization
- **Major telco.** Reduced development and testing cycle times by more than 40 percent within the first three months of

the project, for a first-quarter ROI of 450 percent

- **Leading airline.** Saved more than US\$1.5M per month in application service fees across 12 development and integration teams
- **Property and casualty insurer.** Reduced 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 percent

Related Products and Solutions

- **CA Continuous Application Insight.** Gain deep application insight while automating the creation of regression test cases and virtual services.
- **CA Application Test.** A complete, automated validation solution for the application economy.
- **CA Data Finder.** Quickly design, find, create and provision *fit-for-purpose* test data for efficient, cost-effective test cycles.