

# Reduce Dev and Test Cycles and Speed Time-to-Market with CA Service Virtualization

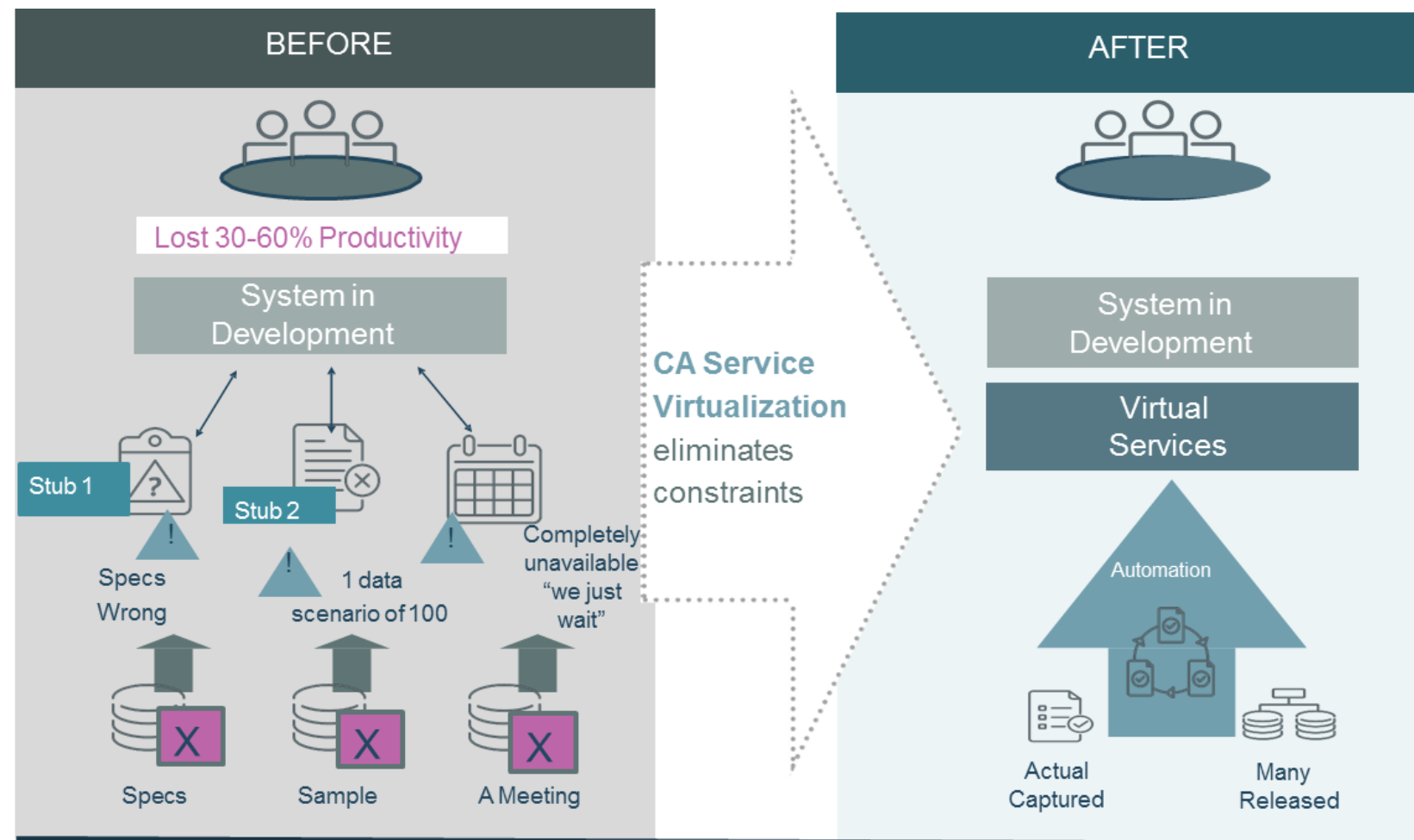
The patented capabilities in CA Service Virtualization eliminate constraints through its unique ability emulate a system's dynamic behavior, performance and data so the need for integration with dependent systems during development and testing is eliminated or reduced. It helps overcome:

- 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.

## Business challenges

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. And, 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.



## Key benefits and results

- **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.

Marquee benefits yielding **\$3M** per year in savings are detailed on the reverse side of this document in order to show examples of business value achievable through this CA Service Virtualization approach



For more information, please visit [ca.com/servicevirtualization](http://ca.com/servicevirtualization)

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# Business Value Estimations

CA Service Virtualization benefits can be quantified via a wide range of benefit scenarios. A selection of these is listed below to show common areas measured.



Business Value Proposition	Business Value Enabler	Specific Measurement	Solution Area	Impact <sup>1</sup> Range	Key Resources Affected	Average <sup>2</sup> Resource Value	Projected <sup>3</sup> Savings / yr
Reduction in development, test and QA costs	automation of unit testing without code writing and improved testing through removal of dependency constraints	cost reduction in development, test and QA resource labor	Service Virtualization	20 - 30%	developer, testing, and QA FTEs	52	\$1,690,000
Reduction in costs of infrastructure environments required for test, development and QA	reduce or eliminate maintaining multiple environments, testing tools, responders, and external user access fees through virtualization	cost savings in unnecessary IT infrastructure	Service Virtualization	10 - 30%	test and development environment equipment expense	\$2,400,000	\$480,000
Savings from shifting defects to the left in the SDLC	auto-capture of traffic during late stage testing cycles provides automation test regressions suites for early stages	cost reduction in defect remediation	Service Virtualization	30 - 40%	bug fix support FTEs	11	\$500,500
Reduction in lab setup and test data setup costs	eliminating or minimizing the need for real test data and underlying systems, simplifying a complicated process	cost reduction in test data setup costs	Service Virtualization	40 - 60%	test data setup FTEs	1.5	\$97,500
Improved time to value for revenue generating applications	faster development through all phases of the software development lifecycle	revenue stream from early release	Service Virtualization	90 - 100%	revenue related to new application releases	\$180,000	\$171,000

This table shows some **key benefits** of **CA Service Virtualization**. Your Broadcom representative can also share additional and more detailed ROI business case examples for this solution by engaging the Broadcom Business Value Analytics Team. This team works with Broadcom's customers to develop and analyze a comprehensive set of assumptions and environment specific metrics in order to build customized projective business cases.



1. The Impact Ranges shown above are estimations derived from the analysis of benchmark data which is a composite of data derived from industry analyst published information, interviews with subject matter experts and experiential data from prior projective analyses.
  2. The Average Resource column shows resource values representative of those used in business case analyses by the Broadcom Business Value Analytics Team.
  3. The Projected Savings may be representative results for organizations whose Average Resource values are similar to those in this table. Labor rates for all FTEs are assumed to be \$65/hour. Actual calculations may include additional parameters. Your Broadcom representative can provide detailed benefit calculations for values in this column.
- Please note, the values expressed in this table are not a guarantee of achievable results and will vary depending upon your current infrastructure, people, and processes as well as the appropriate, effective implementation, adoption, and use of the solution.