

SAP Solution Brief

SAP Solution Extensions

SAP Service Virtualization by HP

Objectives

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Quick Facts

Faster Development Through Virtualization



The Best-Run Businesses Run SAP®

Remove the obstacles that slow down application delivery

Remove the obstacles that slow down application delivery

Today, people expect rapid delivery of error-free applications. But readily available access to limited resources can hamper essential development and testing activity, slowing down developers. With the SAP® Service Virtualization application by HP, you can run simulations of real-world application behavior. The result: [fewer defects and accelerated development](#).

Effective development and testing play a key role in achieving the high quality in software applications that people expect. However, a number of challenges can slow down development teams, especially those working on composite application initiatives such as service-oriented architecture, cloud service integration, and orchestrated business processes.

These projects involve a number of different interrelated components and may rely on services provided by third parties, such as

cloud service providers. In these cases, the development team may be obstructed by security restrictions, loading limits, or expensive pay-per-transaction costs. Or, there may be limitations on when testing can take place, with systems only available at off-peak times.

SAP Service Virtualization enables you to simulate real-world conditions as you create, develop, and test complex composite applications. In this way, you can reduce defects while significantly shortening software development cycles and reducing cost overruns.



Create a parallel reality

Improve performance through in-depth analysis

Support a unified approach

Create a parallel reality

With SAP Service Virtualization, developers can construct complex simulations of software in development, allowing them to create virtual representations that incorporate all the components and dependent systems involved.

Whether accessed in-house or through the cloud, development and testing teams can simulate behavior and performance characteristics for an application. They can even run tests with large data volumes to mimic real-world conditions.

With these virtual services in place, you can eliminate the barriers associated with testing on a live system. You can test business and data services 24x7, without restrictions due to compliance, security, or capacity issues. And with SAP Service Virtualization, you can simulate third-party components that may not otherwise be available for testing or would result in expensive pay-per-transaction costs.



Free yourself from development and testing constraints with SAP Service Virtualization.



Improve performance through in-depth analysis

Create a parallel reality

Improve performance through in-depth analysis

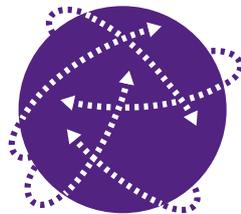
Support a unified approach

The pressure is greater than ever for software developers. People expect their applications to be reliable and always accessible, even on the move. But to achieve these high levels of performance and availability, application teams must be able to test software against a wide range of variables.

How do changes to different components affect performance? What is the maximum data capacity? How will a shift from client-based to cloud-based use impact reliability? Developers must analyze every scenario to identify potential issues.

By creating virtual simulations, performance and load testing teams can gain in-depth insights. They can identify bottlenecks that could negatively affect the user experience, and isolate and resolve problems early in the development process. In addition, they can imitate negative behavior such as malicious attacks on back-end systems and simulate the breakdown of dependent systems to improve security and resiliency.

Once a simulation is complete, learned data recorded by the virtualization can be exported for use in future testing.



With SAP Service Virtualization, you can avoid testing logjams by simulating hard-to-achieve limit conditions.



Support a unified approach

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Support a unified approach

SAP Service Virtualization integrates tightly with other test automation solutions such as the SAP Quality Center application by HP and the SAP LoadRunner application by HP. Using existing test automation tools, you can set up and control virtual environments, adjust simulation parameters, and change the functional and performance characteristics of virtual services. You can then consolidate test results directly into real-time reports for an overview of application performance and functionality.

SAP Service Virtualization provides a single platform for simulating and virtualizing tests. This supports a unified approach and helps you manage complex, ongoing testing regimes across distributed teams. A shared repository for publishing, managing, and leveraging virtual services enables a number of different teams to set up, conduct, and analyze tests on different development areas simultaneously.

By enabling testing teams to work in parallel while focusing on different areas, SAP Service Virtualization can significantly shorten the development cycle. This helps you to get to market first with new functionality.



Share the load and speed up development cycles with distributed testing teams.



Provide measurable value

Provide measurable value

SAP Service Virtualization enables you to improve the efficiency of your application testing processes. You can shorten release cycles by supporting parallel development teams and removing delays due to access restrictions for testing. Budgets for provisioning and managing complex test environments will be reduced through the enablement of shared virtual services. Plus, you can cut expenditures on access to third-party services by eliminating the need for running tests that use pay-per-use components.

This virtualization service also will minimize your risk by identifying defects earlier in the software development process, when they are easier to find and quicker to fix. You'll also

realize and improve quality in your applications because of a broader test coverage that helps optimize application performance and find the best deployment configuration.

With an intuitively visual and technically rigorous solution, SAP Service Virtualization works within existing development and testing environments. Through its integration with other SAP automated testing tools, SAP Service Virtualization leverages existing tester skill sets for functional and performance testing. Testing agility improves across the overall application lifecycle by allowing on-demand, 24x7 access to simulated test environments provisioned in development and test labs.



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Summary

The SAP® Service Virtualization application by HP enables testing teams to create simulations of real-world application behavior in development. This helps to remove delay-causing constraints and speeds up delivery to market.

Objectives

- Support compressed release cycles and enable fast-moving projects
- Minimize delays to mobile, cloud, and composite application projects
- Improve the ability to respond to changing requirements in a flexible and agile manner
- Ensure high levels of performance, reliability, and availability
- Provide shared services that span organizational boundaries
- Reduce cost overruns due to late project deliveries

Solution

- Simulation of real-world application behavior
 - Central repository of shared virtual services, enabling parallel testing by distributed teams
 - Tight integration with other test automation software such as the SAP Quality Center application by HP and SAP LoadRunner application by HP
 - In-depth analysis of various scenarios, including negative behavior and breakdown of dependent systems
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Benefits

- Accelerate release cycles
 - Reduce budget for provisioning and managing complex test environments
 - Decrease third-party access expense
 - Improve quality with broader test coverage
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Learn more

To find out more, call your SAP representative or visit us online at www.sap.com/service-virtualization.



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