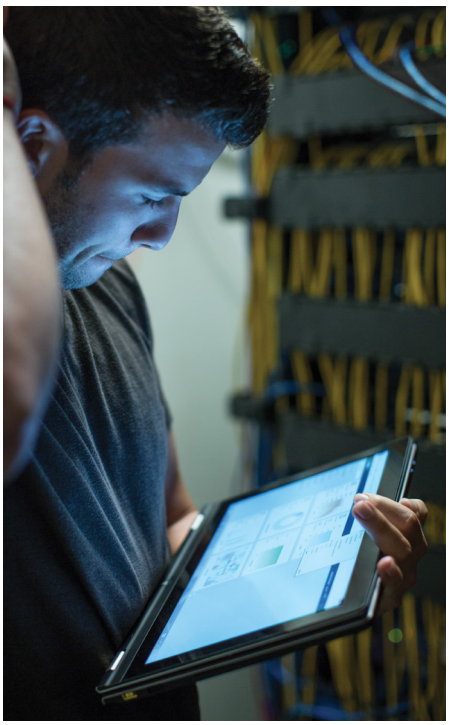
SOLUTION BRIEF

Realizing the Possibilities of Self-Service with SDI

How software-defined infrastructure supports greater business agility and IT control—at a lower cost.



A foundation for agile, innovative business

Perhaps more than any trend in recent years, the advent of cloud computing has reshaped how business leaders think about and use technology to pursue strategic goals and respond to competitive threats. Today, the vast majority of enterprise data centers run on traditional, static systems that limit flexibility and responsiveness. As a result, enterprise IT has struggled to support strategic solutions in line with the accelerating pace of business. In fact, a recent CIO survey revealed that 54 percent of business executives feel that their company's IT group is an obstacle to their mission.[1] Desperate for solutions that provide a competitive edge, business decision-makers are turning elsewhere for new services, increasingly investing in third parties while shrinking internal IT budgets.

That doesn't have to be the story, though. Data centers moving to software-defined infrastructure (SDI) can set up self-service capabilities on top of that foundation to balance IT needs for control of applications and infrastructure with business needs for rapid innovation.

With SDI, IT organizations can provision and test new services in minutes instead of months.[2] At the same time, SDI, together with a cloud-management platform, can put IT in full control of workload deployment, whether it's on premises or off. Most importantly, IT can build a unified services catalog on their infrastructure that paves the way for self-service for IT and business users. Overall, this combination of easy, rapid access to new services, along with tighter control over workloads, is a strong incentive for renewed internal IT investments. It's also imperative to staying relevant.

54% OF BUSINESS EXECUTIVES **FEEL HINDERED BY IT.**[1]

ACCELERATE IT PROVISIONING FROM MONTHS TO MINUTES.[2]

Empowerment, control, *and* efficiency through self-service

With SDI, a cloud-management platform—also known as an orchestration layer—enables consistent management and policy enforcement across private and public clouds, along with self-service capabilities. IT can build and rely on a centralized, unified catalog of custom and third-party services, like API functionality. Many of the resources can then be combined using policy-driven automation, enabling much faster completion of work streams. In addition to streamlining its own workloads, IT can extend the benefits of self-service to business consumers, which adds value on several levels.

Faster deployment, greater agility for business
SDI orchestration dashboards can empower business users to access and combine the applications, data, and IT services they need on their own. For example, on-demand enables a simple response to an emerging opportunity—or threat. Moreover, they can still easily rely on third-party solutions where it makes sense.

Increased IT control and visibility
By enabling the provisioning and management of resources based on the unique requirements of an application, orchestration software improves IT's ability to manage everything from uptime and performance to security and compliance considerations across hybrid cloud environments. A fully orchestrated SDI also has fewer deployment bottlenecks than public cloud offerings, which can bring costs in line with public cloud for many types of workloads. Just consider that a fully implemented SDI can reduce the relative cost of a virtual machine by up to 66% compared to organizations just starting SDI.[3] Ultimately, the combination of simplified deployment at a competitive cost can enable businesses to repatriate workloads that were previously moved off site.

Improved performance and cost transparency for everyone
Orchestration software makes it easier to monitor how IT resources are being used, enabling billback or chargeability for services to specific departments. IT gets a clear window into which departments are driving infrastructure investments, along with an improved ability to forecast and plan for big events. This increased visibility can also facilitate better alignment of IT spend with business priorities while illuminating areas for improvement.

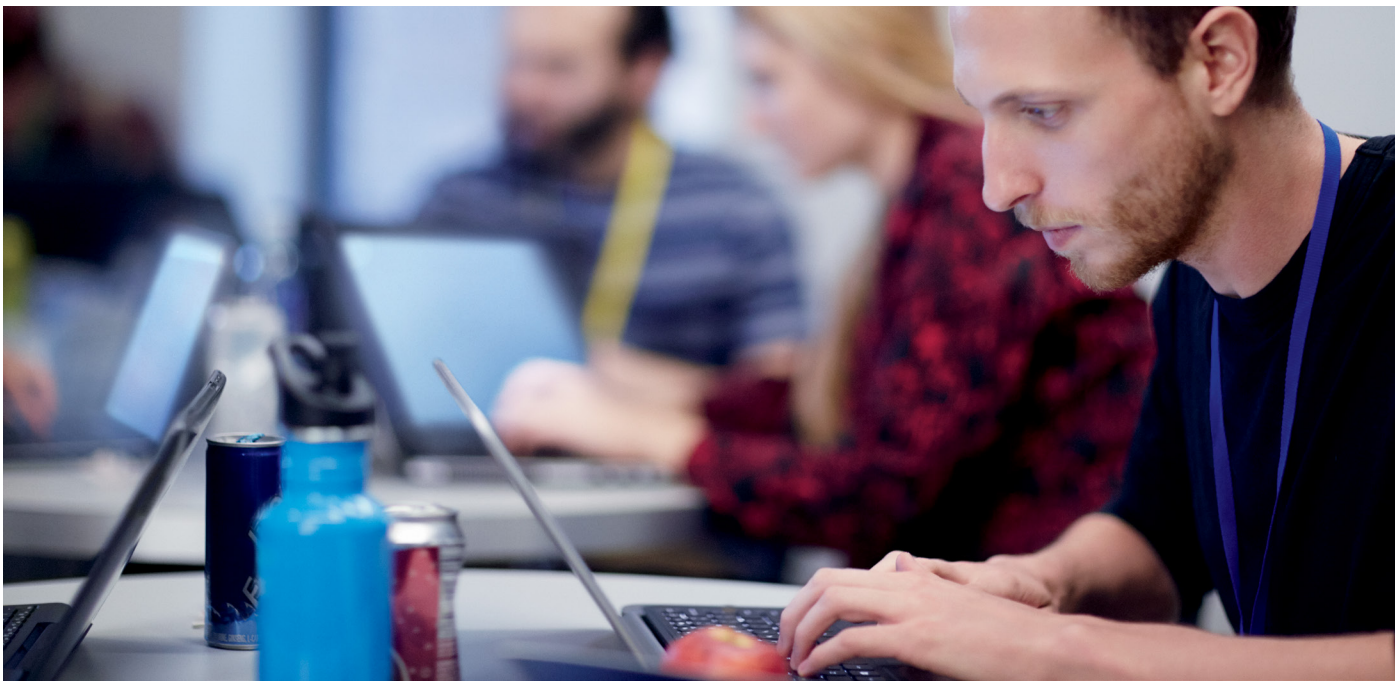
Realizing these benefits all comes down to one thing: an SDI with a leading-edge orchestration layer. Let's take a look at what it takes to set up self-service in enterprise environments.

Choosing a reliable orchestration platform

Microsoft, VMware, and OpenStack are all moving to provide comprehensive orchestration, management, monitoring, and self-service capabilities for IT, along with portal-based self-service for LOB users.

- **VMware vCloud Suite*** provides an enterprise-ready cloud management platform that supports self-service with a unified service catalog and pre-built content library for building applications.
- **Windows Azure* Pack** integrates with Microsoft* System Center, Windows Server*, and SQL Server* to offer a self-service portal, cloud services, and more.
- **OpenStack Horizon*** provides a web-based dashboard for deploying and managing OpenStack and third-party services.

Over time, IT can use orchestration technology to build a catalog of standardized application and middleware services, with clearly defined costing considerations, for use across the business. A self-service catalog will not only help business decision-makers address pressing challenges faster, it will free up time for IT to focus on strategic projects.



Seeing the potential of orchestration and self-service capabilities

What does this mean for businesses? These three real-world examples highlight the many ways orchestration and self-service help drive innovation while improving the bottom line.

Hospitality – Orchestration capabilities helped the IT team at an international lodging company cut the provisioning time for applications from six weeks to just 30 minutes. The increased efficiency helped lower IT operating costs.[4]

Automotive – A leading luxury automobile manufacturer used self-service IaaS to accelerate delivery of cloud-native applications—while lowering costs—by helping to simplify infrastructure management and maintenance.[4]

E-commerce – A major online automobile marketplace relies on orchestration software to minimize system downtime and significantly reduce operating costs. It even improved consolidation ratios of virtual machines to CPUs from around 8:1 to 60:1—or better—on average.[4]

Better for IT, better for business

The combination of self-service capabilities in a hybrid cloud environment is not the solution for every business challenge; in some cases, traditional IT approaches will still make sense. But increasingly, across all kinds of use cases, self-service provides an unprecedented opportunity for breaking down barriers to innovation and responsiveness. And it not only gives IT more control over managing infrastructure, it can also help strengthen the strategic relationship between IT and LOB decision-makers.

Ignite business agility, lower costs, and return control to IT with a hybrid cloud-management platform running on Intel® architecture.

Get started at **intel.com/cloud**

Learn more about the VMware vCloud Suite* at **intel.com/vmware**

Learn more about the Windows Azure* Pack at **intel.com/microsoftdatacenter**

For more complete information about performance and benchmark results, visit intel.com/benchmarks.

Intel® technologies may require enabled hardware, specific software, or services activation. Performance varies depending on system configuration. No computer system can be absolutely secure. Check with your system manufacturer or retailer or learn more at intel.com.

Cost reduction scenarios described are intended as examples of how a given Intel-based product, in the specified circumstances and configurations, may affect future costs and provide cost savings. Circumstances will vary. Intel does not guarantee any costs or cost reduction.

1. "The Case for Orchestration of Cloud Infrastructure." Intel, 2016.

2. "Planning Guide: Data Center Optimization." Intel IT Center, 2015.

3. Intel Finance, 2014. SDI assumes future benefits. Results have been estimated based on internal Intel analysis for informational purposes only; actual results may vary depending on workload, configuration, and other factors.

4. "VMware Cloud Management Platform." VMware, 2016.

Copyright © 2016 Intel Corporation. All rights reserved. Intel, the Intel logo, Intel. Experience What's Inside, the Intel. Experience What's Inside logo, Intel Inside, and the Intel Inside logo are trademarks of Intel Corporation or its subsidiaries in the U.S. and/or other countries.

*Other names and brands may be claimed as the property of others.