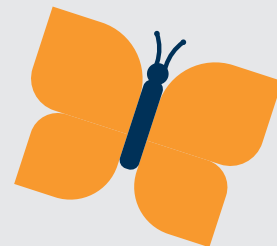
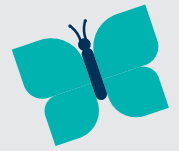




# Driving Innovation in an Era of Digital Transformation

Enabling Agility, Stability, and Cost-Savings with a  
Software-Defined Infrastructure



# The Challenge: Adapting IT for the Digital Business

Today's digital transformation is placing growing demands on IT. The enterprise IT department is now required to meet business needs with agility and flexibility while maintaining data privacy and security for regulatory compliance. As large numbers of consumers expect reliable, leading-edge, on-the-go digital services, IT must provide a flexible and agile infrastructure that enables the business to deliver new and updated services with faster time-to-market speeds.

In an era where IT innovation is hampered by manual tasks that do little more than “keep the lights on,” this is a tall order.

## According to Network World...

**70%**

*“More than 70% of end users expect an IT project to take less than two weeks.”*

**Meanwhile, IT professionals say they don't have the tools needed to speed up delivery:**

**40%**

*40% of IT managers said there is a slow manual process to reconfigure infrastructure to accommodate changes requested by the business units.”<sup>4</sup>*

At the same time, IT must meet the needs of business users who buy public cloud services on their own without regard to security or regulatory compliance. This “shadow IT” effect has the potential to put the business and the privacy of consumer data at risk.

These challenges are not limited to technology companies. Businesses in every industry are experiencing explosive data growth from the digital transformation. Data is generated by mobile technologies like Internet of Things wearables and sensors, digital health apps, online banking, and more. IT organizations in all industries must efficiently store, manage, and protect this data without incurring additional costs. According to Gartner, enterprise IT budgets are flat or increasing only slightly. This requires IT to meet the storage, processing, and networking needs of the digital business while also reducing both capital and operating expenses.<sup>5</sup>

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**IT must meet the needs of business users who buy public cloud services on their own without regard to security or regulatory compliance.**

<sup>4</sup> Network World, “Three Essential Steps to a Software Defined Data Center,” February 20, 2014

<sup>5</sup> Gartner, “Gartner Says Global IT Spending to Reach \$3.5 Trillion in 2017,” October 19, 2016

# The Solution: Gaining Agility, Stability, and Cost-Savings with a Software-Defined Infrastructure

A software-defined infrastructure holds great promise in resolving the many challenges IT organizations face as a result of the digital transformation. Modernizing the data center with a software-defined infrastructure enables IT to manage growing data and enable faster time-to-market with agility, stability, and cost-savings.

## Improve agility with faster provisioning and delivery of resources

In the traditional data center, provisioning resources is complex and time-consuming. However, with a software-defined infrastructure, IT can use automation and cloud-based, self-service capabilities to respond to the needs of the business in hours or days, not weeks or months, and with less manual intervention. This improved agility enables IT to deliver resources more quickly and allows business units to improve time-to-market speeds for new services or applications—ultimately improving their ability to respond to customer needs and gain a competitive advantage.

Moreover, a modern data center with software-defined storage can support unlimited storage, offering agility in scaling as digital operations grow. This enables digital businesses to efficiently host and maintain large data stores including video, graphics, audio, and other TB-sized files, enabling them to support the modern apps their customers desire.

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**A modern data center with software-defined storage can support unlimited storage, offering agility in scaling as digital operations grow.**

## Ensure business continuity with a mature, stable infrastructure

Modernizing the data center with new technologies doesn't compel the enterprise IT organization to give up on the stability and reliability they so desperately need. In fact, the opposite is true. The software-defined infrastructure offers great business continuity, enabling businesses to avoid the pain of unplanned downtime.

For storage specifically, a software-defined infrastructure with no single points of failure offers a highly redundant design for system resiliency and availability. What's more, self-healing capabilities minimize storage administrator involvement and maximize application availability following hardware failures.

To ensure stability and business continuity, the right software-defined platform will be rigorously tested, include 24x7 worldwide technical support, and be fully integrated into update processes so enterprises can easily maintain and patch their workload deployments.

## Reduce costs with streamlined operations, open-source software, and commodity hardware

According to Gartner,

**0.3%** *IT spending in 2016 declined by 0.3%.*

In 2017,

**2.9%** *spending is projected to grow by 2.9%.<sup>6</sup>*

No matter the exact dollar amounts, the fact remains that IT is under pressure to do more with less. Fortunately, the software-defined infrastructure holds great promise in this effort.

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**Automated management and single storage administration tools enable IT to manage the data center with existing IT staff.**

From an operational perspective, IT can reduce OpEx with the efficient management tools available as part of a software-defined infrastructure. Automated management and single storage administration tools enable IT to manage the data center with existing IT staff. No specialized training is required which reduces IT overhead costs.

Additional cost reductions are made possible by the freedom and flexibility afforded by open-source solutions. Open-source solutions require investments only in support and offer the flexibility to work with multiple vendors, avoiding vendor lock-in and the high costs associated with proprietary solutions.

Software-defined infrastructures offer further reductions in CapEx spending by leveraging investments already made in data center infrastructure. When including software-defined storage in the infrastructure, IT organizations can use existing or commodity hardware and realize significant CapEx savings for their expanding storage demands.

**Research shows that this can yield savings of**

**30%** *30% compared to average-capacity NAS solutions*

**and at least**

**50%** *50% over the average, capacity-optimized, mid-range disk array.*

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<sup>6</sup> Ibid.

# Leverage Open-Source for Your Software-Defined Infrastructure

As with any data center modernization effort, it's important to carefully consider all hardware and software options, as they will form the basis of your software-defined infrastructure. Open source solutions offer the freedom and flexibility to leverage existing investments in physical and virtual systems. They also provide quick access to the accelerated innovation provided by the large, open-source

community, with the added benefit of additional testing and support for those features. When deciding on a software-defined infrastructure, only enterprise-level, open-source vendors are flexible and agile enough to enable faster innovation while also ensuring stability, business continuity, and scalability—all in a future-proof design that will endure for years to come.

## SUSE Solutions for the Software-Defined Infrastructure

SUSE, a pioneer in open-source solutions for the enterprise, offers a full set of solutions to transform the data center with a software-defined infrastructure that drives innovation and supports the adoption of DevOps methodologies and processes.

### **SUSE OpenStack Cloud**

dynamically allocates compute, storage, and networking resources on demand with self-service access, in a software-defined infrastructure.

### **SUSE Enterprise Storage**

is built on Ceph technology to reduce CapEx and OpEx by providing a self-managing and self-healing storage infrastructure.

### **SUSE Linux Enterprise Server**

includes support for Docker and Linux container technology to quickly and easily deploy new applications.

### **SUSE Manager**

offers a robust infrastructure management solution, supporting multiple Linux distributions, hardware platforms as well as physical, virtual, and cloud environments.



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online or call SUSE at:**

1-800-796-3700 (U.S. and Canada) or  
1-801-861-4500 (worldwide).

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