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Top 5 Reasons to Deploy Cisco Converged Infrastructure

Operational efficiency

Lower TCO

Simplified management

Reduced risk

Choice and flexibility

Applications are the face of your business. Quickly deploy your applications and keep them running optimally with Cisco Converged Infrastructure.

Applications are your business. They represent the difference between the online and in-store experiences, or hailing a traditional taxi and app-based ride share, or watching a DVD and streaming a movie to your TV. The digital experience is the gateway to your customer and the face of your brand. You want customers to choose you.

Apps are becoming more distributed and complex, are under attack more than ever before, and gaps between requirements for your business, developers, and operations expose risk that can cause outages. The answer to these challenges is Cisco Converged Infrastructure because we deliver more.

Highlights

- Deploy a high-performance foundation for your apps

- Leverage our automation and orchestration

- Reduce your total cost of ownership (TCO)

- Simplify with our comprehensive cloud-based management and optimization

- Accelerate deployment with validated designs

- Choose from our broad portfolio of solutions

> **"The effort for us is almost zero! Everything is very intuitive, there is hardly any need for management. This allows us to better use our resources and team for innovation and more strategic tasks."**

Andreas Pohlmann
Deputy Head of IT Function and Technical Manager IT Computer Center, Die Zieglerschen
([Read the case study]())

More innovation, less complexity

Rapidly changing demand and workload diversity have forced your IT organization to create large sets of hardware and software components—and spend time integrating them into a workable solution. A better solution lies in a multidomain approach that has at its foundation Cisco Converged Infrastructure. It is a powerful and unique integration of high-performance computing, networking, and storage coupled with resource and performance management software, multicloud orchestration, and support for multiple deployment models. We offer your IT teams the powerful new tools they need to evolve and succeed in this app-driven age.

The foundation

We helped establish the converged infrastructure market. This began a change to traditional data center deployments, processes, and dynamics bringing in a higher level of technology integration so you don't have to do it yourself. We do this by starting out with our award-winning software-defined infrastructure, Cisco Unified Computing System® (Cisco UCS™), Cisco Nexus® switches, and Cisco Intersight™ software-as-a-service management. Into this we integrate your chosen, enterprise-approved storage systems. Today, we offer a range of converged solutions to meet your needs (Figure 1), including solutions for FlexPod with NetApp, FlashStack with Pure Storage, Cisco and Hitachi Adaptive Solutions, VersaStack with IBM, and VxBlock Systems with Dell EMC.

Cisco Converged Infrastructure

FlexPod with NetApp   FlashStack with Pure Storage   VersaStack Solution with IBM   Cisco and Hitachi Adaptive Solutions for Converged Infrastructure   VxBlock System with Dell EMC

Figure 1 Our broad portfolio of converged infrastructure solutions

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> **"With their combined storage, server, and networking experience, organizations gain technology that can meet the scalability, resiliency, security, and extensibility required to support the dynamic needs of a digitally transformed, data-driven business."**
>
> **Mike Leone**
> Senior Analyst,
> Enterprise Strategy Group

Reason 1: Operational efficiency

Companies need to operate efficiently, capitalize on business opportunities, and remain secure. To meet these needs, IT must become both a source and a facilitator of innovation, pivoting with the company as it changes business models and responds to dynamic demands. Being successful requires new levels of operational efficiency and simplicity.

Fast to deploy

Component solutions or partially integrated infrastructure from other vendors can cause delays in development and deployment schedules. Other solutions force your staff to spend time making everything work together to perform as expected. We take a different approach by integrating best-in-class components and management software so you can focus on strategic business priorities and get products and services to your customers in less time.

Our converged infrastructure solutions let you move from technology silos to a holistic approach that transforms your data center into pools of resources that can be easily allocated and repurposed. Your applications can run more efficiently within, between, and beyond your data center boundaries—and your IT department can evolve to cloud-based management and delivery to accelerate and increase revenue streams.

Application-driven infrastructure

Our converged system solutions also change the way you interact with your infrastructure. You approach deployment from an application perspective by defining application-specific policies. These policies are then used to automatically provision underlying infrastructure: from virtual machines, servers, storage, and networks to security policies and workload placement. As a result, your applications automatically get the infrastructure resources they need, and your business gets the application performance it needs when it needs it.

Accelerated application performance

We are focused on delivering the best application performance so that you can take advantage of cloud, mobility, big data, AI, and other emerging trends. That's why Cisco Converged Infrastructure solutions' blade and rack servers use the latest Intel® Xeon® processors. Although nearly every vendor can set a performance record now and then, consistently reporting world-record performance with every new generation of processor is truly exceptional. Our industry leadership and ability to set and reset world records on application-centric benchmarks are testimony to the fact that we are not just selling servers, we are reinventing the server market.

Business value of Cisco Converged Infrastructure solutions

65% ⏰	**28%** 💲
More time spent on innovation and new projects	Savings on services, outsourcing, and consulting
24% ⬇	**43%** 👥
CapEx reduction for hardware and software	Fewer staff needed to manage
32% 🕐	**29%** ⚙
Faster software installation and management	Less time spent on monitoring, trouble-shooting, & remediation

This example is based on experience with FlexPod as reported by IDC report #US54212519

Reason 2: Lower total cost of ownership

Your management teams recognize that operations—including people, management, software, and facilities—are the largest cost in the data center, far greater than the cost of underlying hardware. When designed and deployed correctly, your infrastructure can work with you, not against you. Cisco Converged Infrastructure solutions can help you get more work done with the same resources and enable your staff to reduce the amount of time they spend "keeping the lights on." With these innovative solutions, your IT staff can consolidate more workloads onto fewer servers so there are fewer components to buy and manage.

All components are connected through a unified fabric that delivers high-performance data and storage networking to simplify deployment, help ensure the quality of the user experience, and reduce operating costs. Integrated network services provide high-speed connectivity and high availability, accelerate

application performance, and reduce the security risks associated with multitenant environments. These solutions also reduce cabling, power, and cooling requirements and automate routine tasks to increase productivity.

Reason 3: We bridge your apps and infrastructure

Cisco Intersight™ is a lifecycle management platform for your infrastructure, regardless of where it resides (Figure 2). In your enterprise data

Figure 2 Cisco Intersight delivers lifecycle management not just infrastructure configuration

center, at the edge, in remote and branch offices, at retail and industrial sites–these locations present unique management challenges and have typically required separate tools. We enable you to automate the deployment and management of your entire converged infrastructure to simplify set-up and reduce the risk of configuration errors. Cisco Intersight software as a service (SaaS) unifies and simplifies your experience of managing Cisco Converged Infrastructure solutions. Intersight software delivers a new level of cloud-powered intelligence that supports lifecycle management with continuous improvement. It is tightly integrated with the Cisco® Technical Assistance Center (TAC) to catch failures before they happen. Expertise and information flow seamlessly between Cisco Intersight and IT teams, providing global management of Cisco infrastructure–anywhere.

Remediation and problem resolution are supported with automated upload of error logs for rapid root-cause analysis.

Intersight Workload Optimizer

Cisco Intersight Workload Optimizer provides the visibility, real-time analytics, and automation needed to optimize IT infrastructure and deliver application performance (Figure 3). This real-time decision engine drives continuous health in your IT systems by continuously analyzing workload consumption, costs, and compliance constraints and matching them to IT resources to prevent performance bottlenecks. The software determines when, where, and how to move and resize workloads, allocates and reallocates resources as needed, and maximizes elasticity with public cloud resources to assure that your workloads always perform as expected. Our

Visibility
Application and infrastructure interdependencies and impact on business performance

Action
Full-stack automation to continuously optimize resources to applications

Insight
Analytics to drive the right resource decisions

Figure 3 Cisco Intersight Workload Optimizer adds visibility, insight, and action to your management capabilities

DevOps ready

Organizations are adopting container management platforms to facilitate continuous integration and continuous delivery (CI/CD) methodologies. These platforms can simplify deployment and management of containers, but they require solving new problems, such as:

- Creating container management that is consistent across the data center, public cloud, and the edge

- Establishing enterprise-grade end-to-end visibility, security, and networking

- Enabling the same agility and new features that your developers experience in the public cloud

- Delivering support for specialized applications such as AI, ML, and edge computing

- Managing a distributed stack to support these capabilities in all domains

We deliver a common set of services to support containerized, virtualized, and bare-metal deployments.

For more information

- [Cisco Converged Infrastructure](#) solutions

- [Cisco Intersight](#) management

- [Cisco UCS](#)

- [Cisco Design Zone](#)

- [FlexPod](#) solutions with NetApp

- [FlashStack](#) solutions with Pure Storage

- [Cisco and Hitachi Adaptive Solutions for CI](#)

- [VersaStack](#) solutions with IBM

- [VxBlock](#) solutions with Dell EMC

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solution takes a top-down approach to deliver excellence. You get the insight you need to power your digital transformation, helping ensure that your customers, partners, vendors, and employees have a better experience on an ongoing basis.

- **Your IT staff** can align their efforts with customer priorities, improve IT and business agility, and deliver better application performance.

- **Your developers** can deliver applications that are designed and architected to run well.

- **Your IT operations** teams can be assured that your applications have continuous access to the physical, virtual, and cloud resources they need to perform.

Reason 4: Reduced risk

Deployment delays and service disruptions affect your company's profitability. That's why it's important to deploy infrastructure correctly the first time. Cisco Validated Designs reduce risk and guesswork by giving your architects and administrators a guidebook for implementing solutions. Working with our storage partners, we test, validate, and document solutions so that you can get environments up and running quickly and with confidence. Validated designs are available for popular infrastructure use cases, applications, and technology transition points, such as virtualized infrastructure, private clouds, desktop

virtualization, enterprise applications, big data, AI, remote- and branch-office deployments, and industry-specific markets.

Reason 5: More choice and flexibility

There's no perfect solution or one-size-fits-all approach that can support every nuance of every business application situation. Our spectrum of products lets you choose from a family of solutions that are designed to work together for your organization. We have established a large partner ecosystem, including top storage vendors (NetApp, Pure Storage, Hitachi, IBM, and Dell EMC), software vendors (including Microsoft, Oracle, Red Hat, SAP, and SUSE) to deliver optimized solutions to cover your entire operational lifecycle. Our collaboration and validation with partners gives you access to the newest technologies fast. We help your IT staff and reduce the risk as you transition your existing data center environments to deliver a better digital experience.

We deliver

Cisco Converged Infrastructure solutions let you focus on your business applications and deliver Fast IT. With these innovative solutions, you can transform your data center into a fast, agile, smart, and secure environment.