

Cisco Integrated System for Microsoft Azure Stack

Cisco® Integrated System for Microsoft Azure Stack delivers a hybrid cloud solution that accelerates growth and simplifies management and control, all backed by two trusted technology innovators.

There is no better infrastructure than Cisco Unified Computing System™ (Cisco UCS®) to deliver on the promise of cloud computing solutions and the power of Microsoft Azure cloud. With Cisco Integrated System for Microsoft Azure Stack, you get the power of the world's most robust cloud platform on a computing system designed to provide optimal performance for virtual workloads and deliver on that promise, Cisco UCS.

Cisco Integrated System for Microsoft Azure Stack will help accelerate your business growth and innovation with an efficient, elastic cloud consumption model that meets the growing needs of your stakeholders. Free essential IT resources from low-value administrative tasks and achieve full control of your new hybrid environment through automation and policy-based management tools. Bolster confidence in your IT environment supported by Cisco and Microsoft—proven innovators and trusted technology partners that are the market leaders in hybrid cloud infrastructures.

Update to make it a bit more direct:

The power of Microsoft Azure in your Data Center:

Hybrid cloud agility for Microsoft Azure services enables on-premises governance, security, and performance.

Developers can create an agile Microsoft Platform-as-a-Service (PaaS) environment with Application Programming Interface (API) portability and identical user interface to the Azure public cloud.

Only Fully Redundant Azure Stack:

Commodity Azure Stack system designs have numerous single points of failure, the BMC/Management switch and systems management server. With Cisco's integrated approach to Azure Stack there are no single points of failure throughout the entire platform. BMC/Management switching and general systems management is embedded within the fabric interconnects.

Industry Leading Performance:

Cisco's fully integrated Azure Stack has been designed to have industry leading performance by using 40 Gigabit Ethernet end-to-end from the network interface card in the server through to the top-of-rack switch while integrating Non-Volatile Memory of PCI express (NVMe) in each server to ensure maximum performance, allowing growth of the cluster and ensuring maximum virtual machine density.

Best of Breed Technology End-to-End:

Utilising Cisco Nexus® 9000 Cloud Scale switching technology enables you to be ready for next generation network analytics, security capabilities and easily grow your platform.

Automated Installation Procedure:

Cisco UCS service profiles, integrated policy, templates and open Application Programming Interfaces (API's) enables administrators to easily deploy servers with exactly the same configuration from firmware versions to BIOS settings. These technologies have enabled Cisco to develop freely available deployment tools to ensure an automated, consistent configuration of your Azure Stack in minutes leveraging Cisco best practices.

Microsoft Azure Stack on the system designed for cloud:

Cisco UCS

The Cisco Azure Stack built on industry leading server technology Cisco UCS. Cisco UCS is built for rapid scalability and hybrid cloud workloads with policy-based management, API enabled automation, and hardware abstraction. With proven operational advantages, 40-percent faster infrastructure deployment and 38-percent reduction in ongoing management costs compared to conventional server infrastructure.

Table 1. Lists the Features and Benefits of Cisco Integrated System for Microsoft Azure Stack.

Feature	Benefit
The power of Microsoft Azure in your data center	Hybrid cloud agility for Microsoft Azure services enables on-premises governance, security, and performance. Developers can create an agile Microsoft platform-as-a-service (PaaS) environment with application programming interface (API) portability and identical user interface to the Azure public cloud.
No single points of failure	Commodity system designs use a single BMC switch and system management server. With Cisco, we embed the BMC capability in our servers and fabric interconnects. Cisco UCS Manager runs on the pair of fabric interconnects.
Maximized performance within the cluster	Incorporating nonvolatile memory express Peripheral Component Interconnect (NVMe PCI) cards with the server nodes and 40 Gigabit Ethernet from the network interface card (NIC) through the top-of-rack switch, we can position your organization to maximize the performance of each cluster and allow for future growth and virtual-machine density.
Your data center standards used for best benefit	Cisco Nexus® networking switches and technology extends your networking standard to the Azure Stack. Our system is installed in your system racks.
Automated installation scripts	Service profile templates automate the complete setup of your system. These templates reduce setup time from hours to minutes and leverage best practices.
Microsoft Azure Stack on the system designed for cloud: Cisco UCS	The solution is built for rapid scalability and hybrid cloud workloads with policy-based management, application programming interface (API)-enabled automation, and hardware abstraction. Proven operational advantages are proven, with 40-percent faster infrastructure deployment and 38-percent reduction in ongoing management costs compared to conventional server infrastructure.

Cloud-Ready, Integrated System for Microsoft Azure Stack

Cisco Integrated System for Microsoft Azure Stack delivers accelerated growth and innovation, simplified management and control, and earned confidence and trust, all backed by two trusted technology innovators.

- **Single-vendor source:** All major system components are designed, developed, manufactured by Cisco. Controlling the product roadmaps and management interface points provides long-term confidence.
- **Systems management:** Cisco UCS Manager is embedded within the fabric interconnect. A separate systems management server is not required, saving you money, space, and power in your data center.
- **Freedom of choice for Azure Services:** You control whom you purchase through, either directly from Microsoft or through a Microsoft Cloud Service Partner (CSP).
- **Ease of scalability:** You can use Cisco UCS Manager to add a system node to a cluster without requiring professional services assistance. (With Microsoft support node addition in future releases).
- **Proven operational advantages:** Infrastructure deployment is 40-percent faster and ongoing management costs are reduced by 38 percent compared to conventional server infrastructure.

Table 2. Gives Information About System Components

Product Family	Platforms Supported	Cisco IOS® Images (Feature Sets) Supported
UCS	C240 M4L	Choice of processors from 12 to 22 cores E5-2650v4 E5-2660v4 E5-2683v4 E5-2695v4 E5-2698v4 E5-2699v4 Choice of memory per node: 256GB, 512GB, or 768GB Each server has 64TB storage capacity
NEXUS 9000 switch	93180LC-EX	
Cisco Fabric Interconnect	UCS-MAFI-6332	UCS Fabric interconnect which supports UCS manager to manage your system and its workloads

System Requirements

Table 3 lists system requirements.

Table 3. System Requirements

C240 M4L Servers	Any increment from a minimum of 4 to a maximum of 12
93180LC-EX Nexus 9000 switch	Two (included in the fixed bill of materials)
FMSFI – 6332 Gen 3 fabric interconnect	Two (included in the fixed bill of materials)
Onsite installation	Included

Ordering Information

Table 4 gives ordering information.

Table 4. Ordering Information

Part #	Product Description
Fixed Bill of Materials	Ordering is easy. Simply choose the number of server nodes (4–12), pick one of six processors, and one of three memory levels. The ordering system ensures that all nodes have the same configuration and automatically adds in all other system elements to complete your Cisco Integrated System for Microsoft Azure Stack.

Cisco and Partner Services for Azure Stack

Services and support come through Cisco and our authorized installation partners. Cisco provides all support through a coordinated resolution and escalation process co-developed with Microsoft. Services from Cisco and certified partners can assist you with your cloud journey with planning and design services that align technology with business goals and can increase the accuracy, speed, and efficiency of your deployment.

Cisco Capital

Financing to Help You Achieve Your Objectives

Cisco Capital can help you acquire the technology you need to achieve your objectives and stay competitive. We can help you reduce CapEx. Accelerate your growth. Optimize your investment dollars and ROI. Cisco Capital financing gives you flexibility in acquiring hardware, software, services, and complementary third-party equipment. And there's just one predictable payment. Cisco Capital is available in more than 100 countries. [Learn more.](#)

Get Started Now

Start accelerating your business growth and innovation through the power of a hybrid cloud with Cisco Integrated System for Microsoft Azure Stack in your data center. Gain the benefits of Microsoft Azure Stack with a cloud-ready infrastructure solution designed for rapid scalability and cloud-native applications. Use the Cisco ONE™ Enterprise Cloud Suite Cloud Management package to automate deployment and management of applications across 20 hybrid cloud environments, including Microsoft Azure Stack and Microsoft Azure. For more information, visit: <https://www.cisco.com/go/microsoft-azure-stack>.




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