



## Cisco UCS Mini, Powered by Pivot3

By eliminating the external SAN, Pivot3 dramatically simplifies the UCS Mini platform into a compact, easy-to-manage, data center in a box solution

**84%**  
STORAGE  
EFFICIENCY

**43%**  
REDUCTION IN  
CAPEX AND OPEX\*

**99.9999%**  
AVAILABILITY

The Cisco Unified Computing System (UCS) Mini is a transformative solution for meeting the demands of modern data center challenges. Optimized for small-to-medium-sized (SMB) business, and remote office and branch office (ROBO) implementations, the UCS Mini optimizes your data center strategy for Tier One applications, delivering server, storage, and networking in an easy-to-deploy, compact form factor.

In order to meet a broader spectrum of business services, UCS Mini has almost always required the use of an external storage area network (SAN), and its accompanying cost and complexity. Until now.

Dynamic Hyperconvergence provider Pivot3, in partnership with Cisco, removes that cost and complexity of maintaining an external SAN and consequently reduces the costs associated with rack space, power, cooling, and administrative resources while significantly reducing your data center footprint by up to 54%. By unifying the compute and storage resources contained in each UCS Mini blade, Pivot3 and Cisco deliver a simplified, self-contained and unified platform designed for efficiency, resiliency, and game-changing performance.

Pivot3's patented operating system maximizes and optimizes usable storage capacity and unifies the resources of individual server blades in an aggregated pool of shared CPU, Cache, and Memory. The Pivot3-powered UCS Mini platform is seamlessly managed through an intuitive, self-monitoring, self-managing user interface.

Together, Pivot3 and Cisco deliver a modular computing fabric that unifies storage, compute, network and virtualization integrated into a single architecture. The result is a harmonized platform that increases agility to non-disruptively scale capacity and performance on the fly as your organizational needs expand. The combined solution automates deployment and orchestration capabilities of both Pivot3 and Cisco via UCS Director to simplify management, making both remote and centralized IT staff more efficient.

The combined solution meets the highest customer standards of performance and data protection with the assurance that your IT infrastructure will operate at peak levels, during load, stress and failure. Cisco UCS Mini, powered by Pivot3, maximizes the use of existing resources, accelerates time-to-value and streamlines operations so your IT staff can deploy, manage, and globally protect your business services with an optimized experience at an affordable price.

### The Benefits of Cisco UCS Mini and Pivot3 Hyperconverged Solution

Lower Operating Costs	Modular Scalability	Maximum Return on Infrastructure Investment	Extreme Resiliency & High Availability
UCS Mini becomes self-contained data center	Scale for compute, performance and capacity	High Performance and Efficiency	Eliminates downtime and risk associated with data loss
FABRIC INTERCONNECT, ENTERPRISE STORAGE, AND COMPUTE ALL IN ONE CHASSIS	EXPANDABLE TO 16 SERVERS UP TO 40TB OF USABLE STORAGE	COMBINED THE RESOURCES OF AN INDIVIDUAL BLADE INTO AN AGGREGATED POOL OF COMBINED CPU, CACHE, MEMORY AND STORAGE	BUILT-IN SERVER FAILOVER FULL SERVER NODE OR 5 DRIVE
FULLY INTEGRATED INFRASTRUCTURE –NO EXTERNAL STORAGE REQUIRED	CISCO UCS CENTRAL SOFTWARE FOR MULTI-SITE REMOTE MANAGEMENT	MINIMIZES OVERHEAD TO INCREASE DENSITY OF VIRTUAL MACHINES	FAULT TOLERANCE WITH PATENTED ERASURE CODING
UNIFIED POOL OF STORAGE CAPACITY			PREVENTATIVE MAINTENANCE & PREDICTIVE SPARING

## Cisco UCS Mini and Pivot3 Hyperconverged Infrastructure

Optimize the data center by unifying compute and storage for your small to medium-sized business or for remote office requirements. Cisco UCS® Mini, powered by Pivot3 delivers a total virtualized IT infrastructure solution that unlocks enterprise capabilities in a small, efficient form factor. By adopting a modular, building-block approach through unifying compute, fabric, storage, and virtualization in a single architecture, your organization can rapidly scale deployments and increase responsiveness to line of business requests as needs grow.

No external SAN required in a fully integrated, compact infrastructure

Pivot3 maximizes the storage in each blade and aggregates all capacity into single high performance shared storage pool



**SELF-CONTAINED DATA CENTER**

**SCALABLE COMPUTE & STORAGE**

**SOFTWARE-DEFINED SAN**

**RESILIENCY AND HIGH AVAILABILITY**

**APPLICATION SUPPORT**

UP TO 16 X B200 M4 BLADES AND 2 5108 BLADE SERVER CHASSIS

CISCO UCS MANAGER

UP TO 40TB USEABLE SOLID-STATE STORAGE CAPACITY

VMWARE VSPHERE AND VCENTER



Patented scalar erasure coding protects data much better than RAID technology, able to withstand simultaneous failure of five disks or an entire blade plus two additional disks

Virtual Servers, Virtual Desktops, Microsoft Applications, Video Cameras, Backup/Recovery, Replication

## Use Cases for Pivot3 and Cisco UCS Mini Hyperconverged Infrastructure

<b>Small and Medium-Sized Businesses</b>	SMBs typically need fewer servers than large businesses. Many have few or no full-time IT staff members. With a Cisco UCS Mini and Pivot3 Hyperconverged solution, SMBs can have an easy-to-manage solution that can grow as business grows. Because the solution is easy to deploy and manage and does not require an external SAN, you can spend more time running your business and less time worrying about maintenance and upgrades. Less Complexity = Greater Agility.
<b>Remote / Branch / Retail Environments</b>	Remote and branch offices are often challenged by having limited onsite IT operations staff, need solutions that don't rely on specialized on-site IT personnel, and work within limited space. A Pivot3 enabled Cisco UCS Mini Hyperconverged solution offers an efficient, cost effective solution for IT infrastructure in a Remote/Branch Office and Retail setting, one that is easily remotely managed and reduces CAPEX and OPEX and enhances the continuity of business operations while reducing the cost and complexity.
<b>Data Centers</b>	A Pivot3 and UCS Mini Hyperconverged solution enables enterprise clients to create denser footprints through combining compute, storage and networking fabric into a modular and scalable footprint. This proven architecture enables a highly performant and efficient storage platform to meet any and all workload requests. Many clients also need remote data centers for meeting legislative and data residency requirements. The Pivot3/Cisco platform is an ideal, rapid to deploy platform.
<b>Service Providers</b>	Managed Service Providers and Internal IT Service Providers require a resilient, modular and highly performant infrastructure solution that is rapid to deploy, easy to manage and minimizes external complexity. Pivot3 optimizes the UCS Mini into a tightly-coupled platform, eliminating the complexity and cost of an external SAN, meeting the needs of Internal IT, Managed Service Providers and Small to Large Enterprises.

## Pivot3 and Cisco UCS Mini Hyperconverged Solution Elements

<b>Cisco UCS B200 M4 Blade Server</b>	Blade Server harnesses the power of the Intel Xeon processor E5-2600 v2 product family, up to 768 GB of RAM, two hard drives, and 10 Gigabit Ethernet to deliver exceptional levels of performance, memory expandability, and I/O throughput for nearly all applications.
<b>Cisco UCS 5108 Blade Server Chassis</b>	The blade server chassis for the Cisco UCS Mini can accommodate up to eight half-width Cisco UCS B200 M4 Blade Servers.
<b>Cisco UCS 6324 Fabric Interconnect</b>	This fabric interconnect provides the same unified server and networking capabilities as the top-of-rack Cisco UCS 6200 Series Fabric Interconnects. The Cisco UCS 6324 Fabric Interconnect embeds the connectivity within the Cisco UCS 5108 Blade Server Chassis to provide a domain of up to 15 servers: 8 blade servers and up to 7 direct-connect rack servers.
<b>Cisco UCS Manager</b>	Provides unified, embedded management of all software and hardware components in a Cisco UCS Mini solution. It offers an intuitive GUI, a command-line interface (CLI), and a robust API to manage all system configuration and operations.
<b>Pivot3 vSTAC Operating System</b>	Pivot3's patented vSTAC OS, built on a foundation of VMware vSphere® 6.0, unifies compute and storage within a hyperconverged platform. Pivot3 on Cisco UCS enables market leading storage efficiency, increasing the usable storage of a traditional SAN's 65% with up to 84% usable installed capacity.

Pivot3 delivers smarter infrastructure solutions that provide maximum resource utilization, deliver sustained business operations and guaranteed application performance. Today, Pivot3 has more than 2,000 customers and 16,000 successful hyperconverged deployments in 53 countries in mission- and business-critical infrastructures such as healthcare, government, finance, transportation, education, gaming, entertainment, retail and video surveillance.

**For more information about hyperconverged solutions from Pivot3, please email [sales@pivot3.com](mailto:sales@pivot3.com) or call:**

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**To learn more about Pivot3, visit [Pivot3.com](http://Pivot3.com).**