

Datasheet

Hitachi Unified Compute Platform CI

The Intelligent Converged Infrastructure for Core and Cloud

Flexibility to Support Any Application at Any Scale

Organizations today face challenges from rapidly changing markets, new technologies and the need to exploit and safeguard ever-increasing amounts of data. IT departments must now deal with new data types from many sources and meet stringent new rules of oversight and compliance.

Hitachi Unified Compute Platform CI (UCP CI) series, the foundation for a modern IT infrastructure, meets these challenges. It allows you to simply build a data-driven IT infrastructure that can host any application, at any scale, and at any location.

The management software, Hitachi Unified Compute Platform Advisor (UCP Advisor) software provides intelligent unified automation of the management of your server, storage and networking components. As a result, you can monitor and allocate both physical and virtual resources rapidly and efficiently. With UCP CI, you can scale compute, storage and network capacity independently. With UCP Advisor, you can manage unified business resource pools across a single or multiple data centers from a single user interface.

UCP CI Capabilities

Flexible, Highly Configurable and Available Converged Infrastructure

Today's digital business must be always available, and organizations must rapidly deploy new business applications despite flat or shrinking budgets. With its prevalidated building blocks of compute, storage and networking guaranteed to work together the first time and deliver predictable performance, UCP CI addresses these needs. Its low-risk path to hybrid cloud provides a solution that can be operational, fast.

Key Platform Features

- UCP CI is a highly configurable integrated infrastructure, in which server, network and storage can be scaled independently, to optimize performance and eliminate overprovisioning costs.
- UCP CI provides a flexible infrastructure for running bare metal, virtualized or containerized environments. It enables



Hitachi Unified Compute Platform CI

customers to increase application density and run multiple workloads on the same UCP system.

- Data resilience and scalability are achieved using a choice of storage options, including industry-leading Hitachi Virtual Storage Platform (VSP) arrays and VMware vSAN HCI storage. This approach gives UCP CI administrators access to a wide range of sophisticated data services, including data protection and disaster recovery options. Customers can optionally leverage their existing storage products.

Hitachi Unified Compute Platform CI

- Performance and scalability is provided by the Hitachi Advanced Server family. DS120 G2, DS220 G2, HA810 G2, HA820 G2, HA810 G3, HA820 G3, HA805 G3, HA815 G3, HA825 G3 and HA840 G3 rack-optimized models deliver scale-out capability and simplify growth. A wide range of GPU options are available on these computer nodes.
- Networking is provided by a choice of top-of-rack switches from Cisco, Arista for IP-Switching offering either 25G or 100G host connectivity and Broadcom for Fibre Channel needs. For IP leaf switches both 24 port and 48 port switches are available. It offers wide range of storage connectivity options like FC, FC-NVMe, iSCSI and NVMe over TCP.
- Hitachi UCP Advisor provides a single management interface to manage complete stack for various operations like configure, monitor, automate, orchestrate and remediate. UCP Advisor integration with VMware vLCM makes Life Cycle operations much smoother. UCP Advisor manages both physical hosts and virtual machines, reducing both deployment and operational costs. The user interface includes native integration with VMware vCenter to simplify operations and speed time to operation.

Solution Architecture

The UCP CI architecture consists of modular building blocks. Its components scale independently and provide organizations with greater configurability, flexibility and agility. Systems can be configured with a wide range of server options (both Intel and AMD) from the Hitachi Advanced Server family. Choose from rackmount systems, such as DS120, which are optimized for scale-out cloud-native architectures. Or, select the enterprise-class DS7000 series systems to provide high performance for business-critical applications and high capacity for in-memory databases, such as SAP HANA.

UCP CI supports Hitachi's VSP arrays, including VSP 5000, E-Series, as well



Compute	For virtualized environments <ul style="list-style-type: none"> • Up to 128 Hitachi Advanced Server HA810 G2 and other high-density rackoptimized servers, DS120 G2, DS220 G2, HA810 G2 HA820 G2, HA810 G3, HA820 G3, HA840 G3, HA805 G3, HA815 G3 and HA825 G3 (Up to 16 HA810 G2/ G3 servers in a single rack configuration)
Storage Options	<ul style="list-style-type: none"> • Hitachi Virtual Storage Platform (VSP) • VSP One Block 24, VSP One Block 26, VSP One Block 28 • VSP 5000 series: 5100, 5200, 5500, 5600 • VSP E Series arrays: E590, E790 and E1090 • VSP F series all-flash arrays: F1500, F900, F800, F700, F600, F400, F370, F350 • VSP G series hybrid-flash arrays: G1500, G1000, G900, G800, G700, G600, G400, G370, G350 • Local node storage, including VMware vSAN • Other vendor storage virtualized through VSP family
Software	<ul style="list-style-type: none"> • Hitachi Unified Compute Platform Advisor • For VMware vSphere <ul style="list-style-type: none"> • VMware vCenter • VMware vSphere • Hitachi opsCenter
Network	<ul style="list-style-type: none"> • Cisco Ethernet networking switches • Arista Ethernet networking switches • Broadcom Fibre Channel SAN switches

Table 1. Hitachi Unified Compute Platform CI: Infrastructure Overview¹

¹ Partial list of components

Hitachi Unified Compute Platform CI

as all-flash VSP F series and hybrid-flash VSP G series. These systems provide industry-leading performance and reliability, including a 100% data availability guarantee. They support Hitachi value added software for AI operations and data services, such as data protection, disaster recovery and bottomless backup for applications and virtual machines. Flexible network infrastructure options from Cisco, Arista and Broadcom ensure Ethernet and Fibre Channel networking is tightly integrated and managed, and offers the same high availability as the other elements of the stack. Available tools include Hitachi Ops Center Analyzer, which manages and monitors the IT infrastructure to ensure that services maintain compliance with service level agreements (SLAs).

Hitachi Unified Compute Platform Advisor

UCP CI is managed by UCP Advisor automated management software, which provides complete, secure, end-to-end management and automation for all Hitachi platforms. UCP Advisor enables life-cycle management and application policies for infrastructure across multiple workloads (virtualized, bare metal, containers, mission-critical applications and big data) for faster and easier deployment and streamlined IT modernization. With UCP Advisor, you can:

- Accelerate and simplify deployments of converged infrastructure.
- Automate provisioning, service catalog, custom workflows and API integration for a modern data strategy with ubiquitous data services.

- Reduce risk and increase effectiveness with predefined server provisioning.
- Use policy-based automation to enable the development and execution of policies, practices and procedures.

Summary

Hitachi Unified Compute Platform CI enables you to rapidly deploy IT infrastructure for a modern data center that is fully tested and validated. It delivers the enterprise scale, flexibility, performance and resiliency required for workloads, from modern cloud-native applications to legacy mission-critical databases. You gain the foundation you need to manage the increased volume, complexity and regulatory compliance requirements of data that business requires today. This is a foundation that can support the tools you need to extract insights, uncover new efficiencies and exploit new revenue opportunities.

Entire stack (compute, network, storage) can be purchased from Hitachi Vantara, including white glove installation and any support call for entire stack can get started with Hitachi Vantara.

With UCP CI, Hitachi offers a streamlined, integrated and automated platform for enterprise data centers and hybrid cloud deployments. It improves time to production, makes enterprise-class applications more agile and resilient, and has the flexibility to grow as business needs demand. And, it provides a single source of legendary service.

About Hitachi Vantara

Hitachi Vantara is transforming the way data fuels innovation. A wholly owned subsidiary of Hitachi, Ltd., we're the data foundation the world's leading innovators rely on. Through data storage, infrastructure systems, cloud management and digital expertise, we build the foundation for sustainable business growth.



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