

**DATASHEE1** 

## Performance, Flexibility, and Reliability To Maximize Hybrid Cloud Benefits as You Simplify Operations

# Hitachi Unified Compute Platform CI: The Intelligent Converged Infrastructure for Core and Cloud

## Flexibility To Run 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 to optimize the performance of your application and eliminate the cost of overprovisioning. 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. UCP CI meets these needs with its prevalidated building blocks of compute, storage, and networking that are guaranteed to work together the first time and deliver predictable performance. 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 lets you 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 hyperconverged infrastructure. This approach gives you access to a wide range of sophisticated data services, including data protection and disaster recovery options. Optionally, you can use your existing storage products.
- Performance and scalability are provided by the Hitachi Advanced Server family. DS120 G2, DS220 G2, HA810 G2, HA820 G2, HA810 G3 and HA820 G3 rack-optimized models deliver scale-out capability and simplify growth. Enterprise-class DS7000 series servers perform and scale up to meet the needs of demanding businesscritical applications.
- A choice of top-of-rack switches from Cisco, Arista, and Broadcom flexibly satisfies IP-switching and Fibre Channel needs and customer preferences.
- Hitachi UCP Advisor provides a single management interface and provides integrated automation and management of both physical hosts and virtual machines, reducing both deployment and operational costs.

#### **Solution Architecture**

The UCP Clarchitecture consists of modular building blocks. Its components scale independently and give you greater configurability, flexibility, and agility.

Systems can be configured with a wide range of server options 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 enterpriseclass 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 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 valueadded software for Al 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, offering the same high availability as the other elements of the stack. Available tools include Hitachi Infrastructure Analytics Advisor (HIAA), which manages and monitors the IT infrastructure to ensure compliance with service level agreements (SLAs).

A single source of trusted support cares for every system component with 24/7 monitoring and end-to-end support.

#### Hitachi Unified Compute Platform Cl: Infrastructure Overview (Partial list of components)

Compute	For virtualized environments:  • Up to 128 Hitachi Advanced Server HA810 G2 and other high-density rack-optimized servers, DS120 G2, DS220 G2, HA810 G2 HA820 G2, HA810 G3 and HA820 G3 (Up to 16 HA810 G2 servers in a single rack configuration)
Storage Options	<ul> <li>Hitachi Virtual Storage Platform (VSP)</li> <li>VSP 5000 Series: 5100, 5200, 5500, 5600</li> <li>VSP E Series arrays: E590, E790 and E1090</li> <li>VSP F Series all-flash arrays: F1500, F900, F800, F700, F600, F400, F370, F350</li> <li>VSP G Series hybrid-flash arrays: G1500, G1000, G900, G800, G700, G600, G400, G370, G350</li> <li>Local node storage, including VMware vSAN</li> <li>Other vendor storage virtualized through VSP family</li> </ul>
Software	Hitachi Unified Compute Platform Advisor     For VMware vSphere:     VMware vCenter     VMware vSphere
Network	Cisco Ethernet networking switches     Arista Ethernet networking switches     Broadcom Fibre Channel SAN switches

#### **Hitachi Unified Compute Platform Advisor**

UCP Cl is managed by UCP Advisor management software, which provides complete, easier, secure, end-to-end management and automation for all Hitachi platforms. It is a VMware vCenter plug-in to deliver a consistent management experience. UCP Advisor enables life-cycle management for all infrastructure components including compute, networking, and storage for streamlined IT modernization. With UCP Advisor you can:

- Automate and accelerate provisioning, service catalog, custom workflows, and API integration for a comprehensive enterprise cloud with ubiquitous data
- Reduce risk and increase effectiveness with predefined server provisioning. Policy-based automation enables the development and execution of policies, practices, and procedures.

#### Summary

Hitachi Unified Compute Platform CI lets you rapidly deploy IT infrastructure for a modern data center. It delivers the enterprise scale, flexibility, performance, and resiliency required for workloads from modern cloud-native applications to mission-critical databases.

UCP Cl offers you a streamlined, integrated, and automated platform for enterprise data centers and hybridcloud deployments. It improves time to production, makes enterprise-class applications more agile and resilient, and has the flexibility to grow as your business needs demand. What's more, it provides a single source of legendary Hitachi service and support.











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