

Solution Profile

Enhance Agility, Simplify Data Management, and Optimize Costs

with Hitachi Vantara's Unified Compute Platform for Azure Stack HCI



Transform your hybrid infrastructure with Microsoft's premier hyperconverged platform from Hitachi Vantara.

The Challenges of Maximizing Your Azure Workloads

Businesses are seeking integrated hybrid storage solutions that integrate natively with Azure and scale dynamically across multiple environments. These businesses aim to enhance business agility while facing competition from new applications and services. Meanwhile, IT organizations grapple

with maintaining existing server and storage systems while seamlessly integrating with existing on-premise systems via ongoing data migration. Additionally, Azure's impressive speed and scalability attract customers where the need for application and data storage performance, cost, and regional data compliance drive the adoption of a hybrid cloud approach for greater availability. Data resiliency must consider differing disaster recovery, business continuity, and strategic workload transfer based on business needs and resources of an organization. Lastly, many Azure customers are adopting hybrid cloud strategies to optimize workload distribution, enhance resource utilization, increase budget flexibility, and ensure cost predictability. By transitioning from traditional captive systems to an operationalized as-a-service model, they can also mitigate unexpected data egress charges while retaining the benefits of on-premise storage.

Edge-Core-Cloud Extensibility

Effortlessly and reliably run edge workloads on Hitachi UCP and manage your hybrid cloud with Azure Arc

Reliable Branch/Edge Processing

Run your critical edge applications on Hitachi UCP for Azure Stack HCI with enterprise grade security and scalability and Hitachi enhancement

Effective Hybrid Cloud

Run VM and SQL based apps, VDI, Kubernetes Clusters with AKS and Azure Services on premises with cloud-based efficiency

Unified Compute Platform for Azure Stack HCI

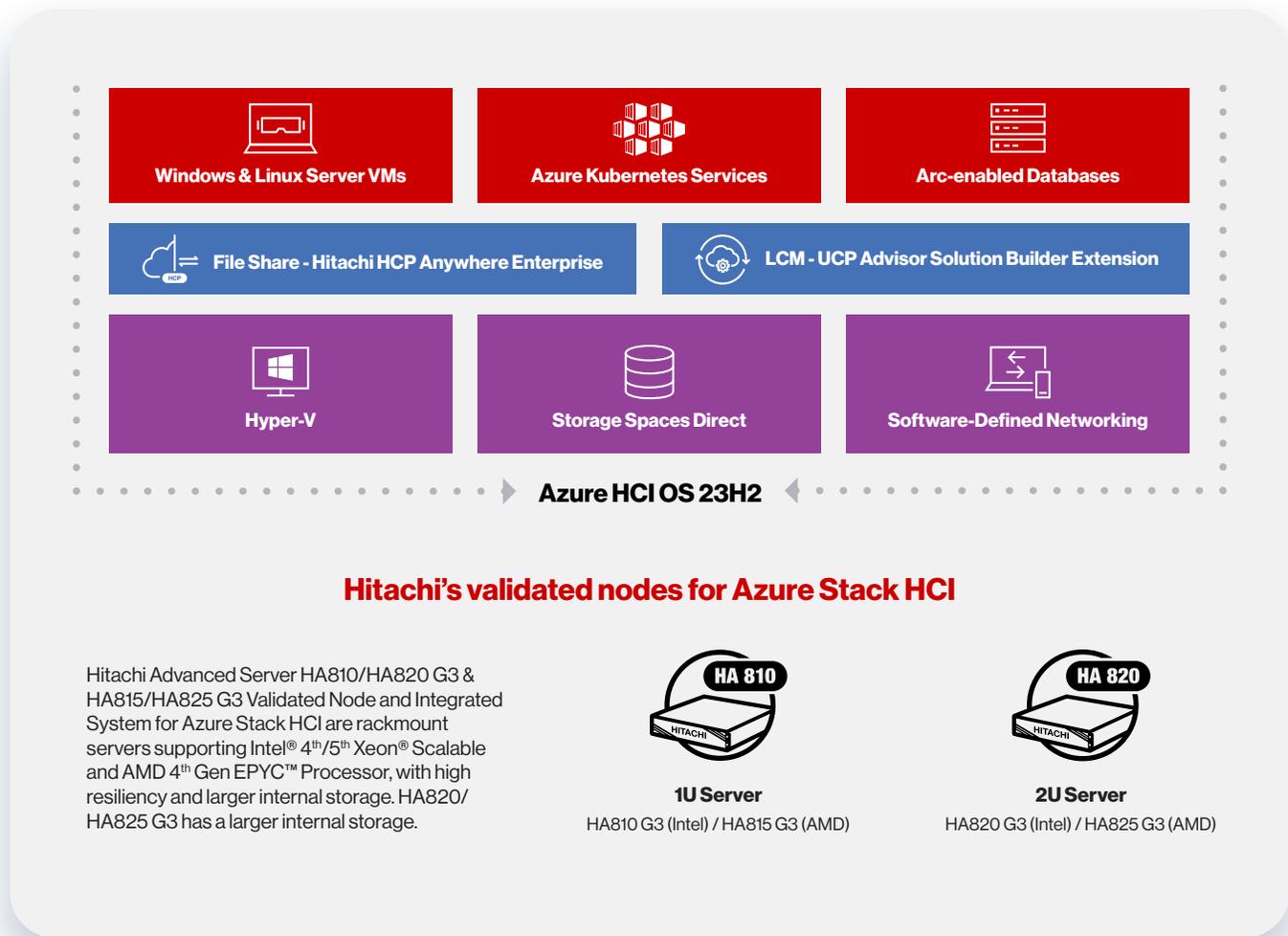


Fig. 1 Hitachi UCP for Azure Stack HCI

The Flexible, Availability, and Optimized Value of Your Hybrid Cloud Solution at Global Scale and Efficiency

[Hitachi Advanced Server HA810/HA820/HA815/HA825 G3](#) Validated Nodes and Integrated System for Azure Stack HCI, combined with Azure Arc integration, offer a powerful, scalable, and secure hybrid cloud solution for businesses of all sizes. This comprehensive solution enables organizations to modernize their data center and edge infrastructure, streamline hybrid cloud and lifecycle management with **UCP Advisor Solution Builder Extension**, and maximize IT resource efficiency. Also enhanced by **Hitachi HCP Anywhere Enterprise for a global file system**, it provides robust data management capabilities. Below are the solution components:

- **Unified Compute Platform:** The UCP G3 validated nodes and Integrated System for Azure Stack HCI provide a

high-performance, reliable foundation for organizations seeking to upgrade their on-prem infrastructure. Built on industry-leading hardware, Hitachi advanced servers deliver robust compute power and storage capacity, excelling in modern workloads.

- **Azure Stack HCI:** As Microsoft's hyper-converged infrastructure solution, Azure Stack HCI enables businesses to run virtualized applications on-premises while seamlessly integrating with Azure for cloud services. This hybrid cloud platform simplifies management and deployment, ensuring data security and compliance across diverse environments.
- **Azure Arc:** Azure Arc extends Azure's management capabilities to resources running on-premises, at the edge, or in multi-cloud environments. With Azure Arc, businesses can monitor, manage, and apply consistent policies across their entire hybrid infrastructure, reducing operational complexity and ensuring a unified governance model.

Unified Compute Platform for Azure Stack HCI

Hitachi **HCP Anywhere Enterprise** on UCP for Azure Stack HCI enhances Azure hybrid cloud management with a **global file system**. It ensures seamless data synchronization across cloud, core, and edge environments. This solution meets enterprise file sharing needs, from document sharing to AI/ML model operations.

Key benefits include up to an **80% reduction in edge footprint**, up to a **65% reduction in network, edge, and cloud storage**, and up to an **80% reduction in backend costs**¹. It also supports seamless NAS migration and offers APIs for automation and analytics, ensuring efficient and secure data management.

The **Solution Builder Extension** (SBE) for Azure Stack HCI simplifies updates, enhances management, and reduces

downtime by leveraging Microsoft's solution update channel to seamlessly deliver vendor updates. This integration ensures systems remain current with the latest features and security patches, minimizing business disruptions.

Hitachi Vantara's UCP Advisor Solution Builder Extension for Azure Stack HCI offers these seamless benefits, ensuring a smooth and efficient update process while supporting both HA810/820 G3 and HA815/825 G3 Validated Node and Integrated System models.

[Unify Your Clouds: Azure Arc & Hitachi UCP for Azure Stack HCI - One Control Plane, Infinite Potential.](#)

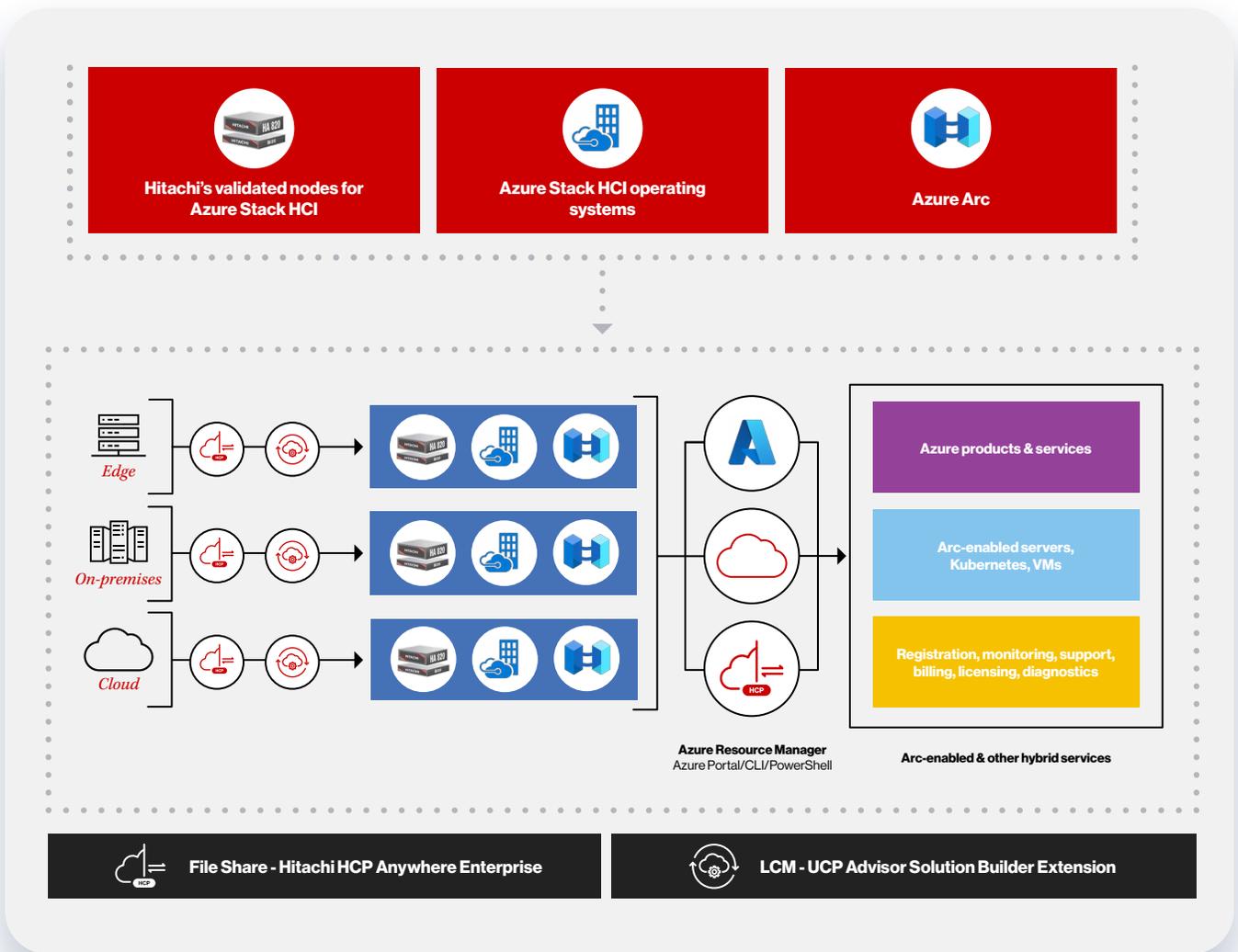


Fig. 2 Unify Your Clouds. Azure Arc and Hitachi UCP for Azure Stack HCI: One Control Plane, Boundless Possibilities.

1 Based on Hitachi Vantara Global Customer Testing 2023-24



| Model | All-flash SAS | NVMe |
|------------------|---|----------------------------------|
| Form Factor | 1U | |
| Processor | 4 th and 5 th Generation Intel® Xeon® Scalable Processors | |
| Number of cores | 16 cores to 120 cores (4 th Gen) & 16 cores to 128 cores (5 th Gen) | |
| Memory* | 128 GiB or more up to 8TiB | |
| GPU Support | NVIDIA A2 for 4 th Gen & NVIDIA (A2, L4) for 5 th Gen | |
| Storage Capacity | SDD 1.6TB or more up to 153.6TB | NVMe 1.6TB or more up to 153.6TB |
| Network adapter | Up to 100 Gbps | |

Fig. 3 Hitachi Advanced Server HA810 G3 (OS pre-installed prior to shipping)



| Model | All-flash SAS | NVMe |
|------------------|--|----------------------------------|
| Form Factor | 2U | |
| Processor | 4 th and 5 th Generation Intel® Xeon® Scalable Processors | |
| Number of cores | 16 cores to 120 cores (4 th Gen) & 16 cores to 128 cores (5 th Gen) | |
| Memory* | 128 GiB or more up to 8TiB | |
| GPU Support | NVIDIA (A16, A100) for 4 th Gen & NVIDIA (A16, L4, L40, L40S, A100) for 5 th Gen | |
| Storage Capacity | SDD 1.6TB or more up to 368.6TB | NVMe 1.6TB or more up to 368.6TB |
| Network adapter | Up to 100 Gbps | |

Fig. 4 Hitachi Advanced Server HA820 G3 (OS pre-installed prior to shipping)

Solution Key Benefits

- **Performance Excellence:** Deliver high-performance, optimized Azure Stack HCI with Hitachi Vantara's nodes.
- **Hybrid Cloud Simplification:** Streamline management and operations with seamless Azure integration.
- **Future-Ready Scalability:** Adapt easily to evolving business requirements.
- **Robust Security:** Protect data across locations with comprehensive measures.
- **Accelerated Innovation:** Foster innovation using on-demand Azure application services.
- **Legacy App Consolidation:** Efficiently run and maintain legacy apps on Azure Stack HCI.
- **Resilient Scalability:** Expand capacity and ensure fault tolerance with Azure Stack HCI.
- **Reliable Branch Office Modernization:** Agile, scalable Azure Stack HCI deployments with Hitachi UCP, networking, GPUs, and [Arc-enabled services](#).
- **Hybrid Application Development:** Accelerate app lifecycle management in Azure and deploy those apps with Azure Arc on the edge footprint with Hitachi UCP.
- **High Performance Edge Computing:** Harness Hitachi UCP and Azure Arc for real-time data processing and performant SQL databases with portal management.



65%

Reduction in network, edge, and cloud storage

Unified Compute Platform for Azure Stack HCI



| Model | NVMe |
|------------------|----------------------------------|
| Form Factor | 1U |
| Processor | AMD 4th Gen EPYC Processors |
| Number of cores | 16 cores to 256 cores |
| Memory* | 128 GiB or more up to 6TiB |
| GPU Support | N/A |
| Storage Capacity | NVMe 1.6TB or more up to 153.6TB |
| Network adapter | Up to 100 Gbps |

Fig. 5 Hitachi Advanced Server HA815 G3 (OS pre-installed prior to shipping)



| Model | NVMe |
|------------------|----------------------------------|
| Form Factor | 2U |
| Processor | AMD 4th Gen EPYC Processors |
| Number of cores | 16 cores to 256 cores |
| Memory* | 128 GiB or more up to 6TiB |
| GPU Support | N/A |
| Storage Capacity | NVMe 1.6TB or more up to 368.6TB |
| Network adapter | Up to 100 Gbps |

Fig. 6 Hitachi Advanced Server HA825 G3 (OS pre-installed prior to shipping)

- Disaster Recovery and Business Continuity:** Integrate Hitachi UCP with Azure Site Recovery, Backup, and Arc for robust recovery strategies.
- Intelligent Resource Scaling:** Utilize Azure Arc for data-driven decisions with scaling and optimization across on-prem and edge Hitachi UCP nodes.
- Extend with Hitachi edge portfolio:** Leverage Hitachi's broad range of additional portfolio offerings including software defined object storage for edge.
- Streamlined Policy Enforcement:** Utilize Azure Arc for consistent security and compliance policies across Hitachi UCP hosted apps, VMs and containers services.
- In-Depth Monitoring and Insights:** Leverage Azure Arc's centralized monitoring for performance insights on Hitachi UCP deployments.
- Cloud-Native Workload Support:** Run cloud-native applications with [Azure Kubernetes Services \(AKS\) on Hitachi UCP and extend Azure services with Azure Arc.](#)

Unified Compute Platform for Azure Stack HCI

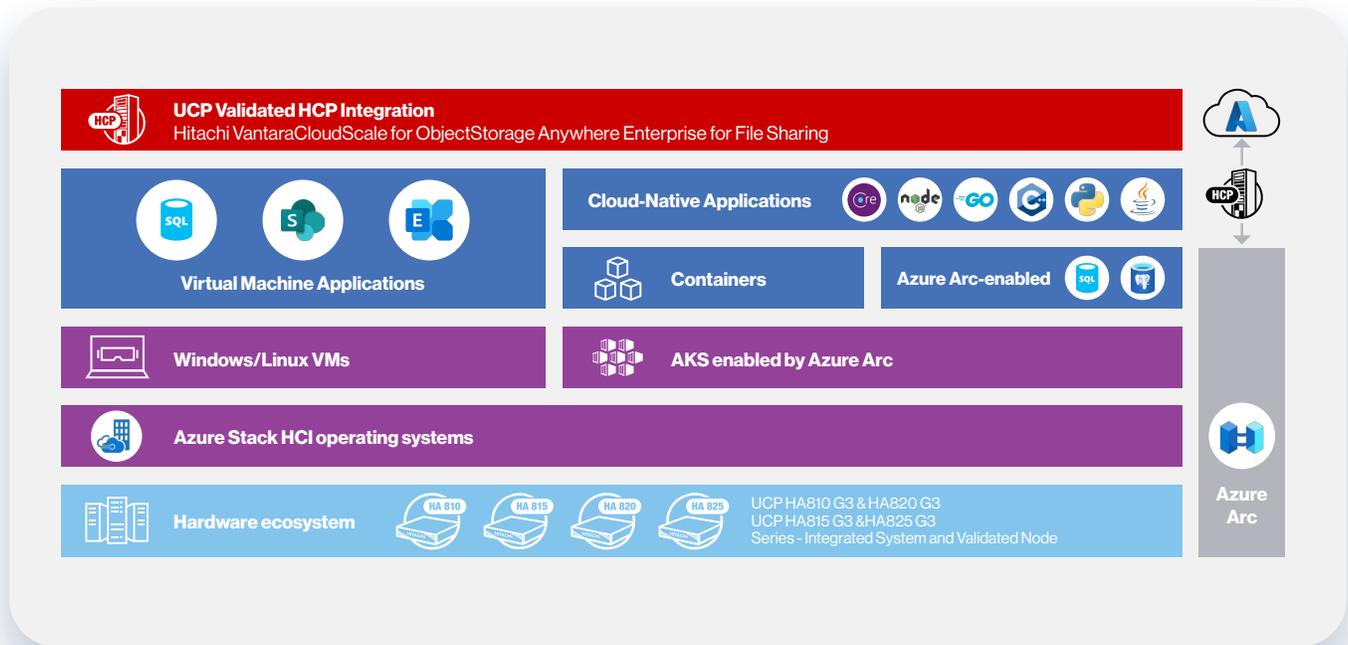


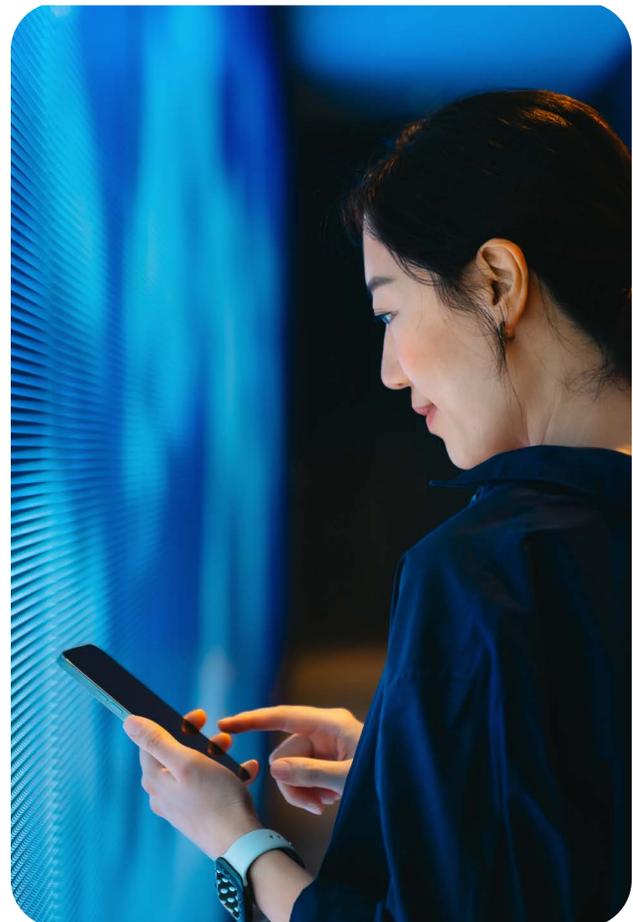
Fig. 7 Unified Compute Platform for Azure Arc and Azure Stack HCI

Discover Hitachi's Unified Compute Platform Solution for Azure

Designed for edge, core, or managed CoLo environments, UCP empowers you to build, deploy, and manage hybrid applications and data at your own pace. Enjoy enterprise-level flexibility and scalability with Azure-integrated offerings. UCP ensures unparalleled resiliency with disaster recovery, cost-effective redundancy, and seamless data synchronization. Optimize costs, lower risks, and maximize ROI by modernizing IT infrastructure, automating processes, enhancing Azure interoperability, and providing agile operational flexibility. Choose UCP for unmatched flexibility, consistent resiliency, and superior efficiency in your Azure hybrid cloud environment. Let us help you modernize your hybrid multi-cloud infrastructure.

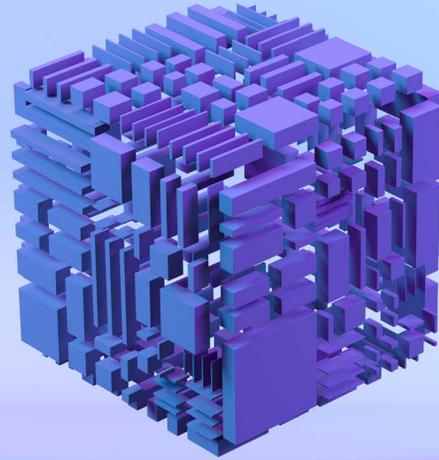
Modernize your hybrid multi-cloud infrastructure.

Designed for edge, core, or managed CoLo environments, UCP empowers you to build, deploy, and manage hybrid applications and data at your own pace.



Additional Resources

- [Microsoft Recommends Hitachi Vantara Premier Solutions](#)
- [Azure Arc-enabled data services Kubernetes validation with Hitachi Partnership](#)
- [Hitachi Vantara can accelerate for Microsoft Azure Hybrid Environment and advance your data storage business needs into the future](#)
- [Learn more about the Hitachi Vantara Unified Compute Platform for Azure Stack HCI Solution](#)



Let us help you modernize and futureproof your hybrid multi-cloud infrastructure

[Learn more](#) →

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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