

Hitachi Vantara

eBook

Hybrid Cloud Buyer's Guide

*Strategies for cloud agility,
performance and efficiency*





Executive Summary

As data center infrastructure ages, businesses start to feel the pain of increasing technology costs and diminished agility. While the public cloud can be a simple, scalable way to optimize and modernize, many organizations are turning to the hybrid cloud to gain the flexibility they want with the performance, availability, security and sustainability requirements they actually need.

To implement a hybrid cloud with a balanced architecture of on-premises, hyperscalers, managed co-locations and edge resources and services, many IT teams are choosing to engage with platform-independent partners to reduce complexity.

A single hybrid cloud solution gives businesses a central operating model across all private data centers and cloud partners, so they can focus on managing IT service levels, not infrastructure.

This guide will show you how to enhance agility and overcome operational complexity with the hybrid cloud.

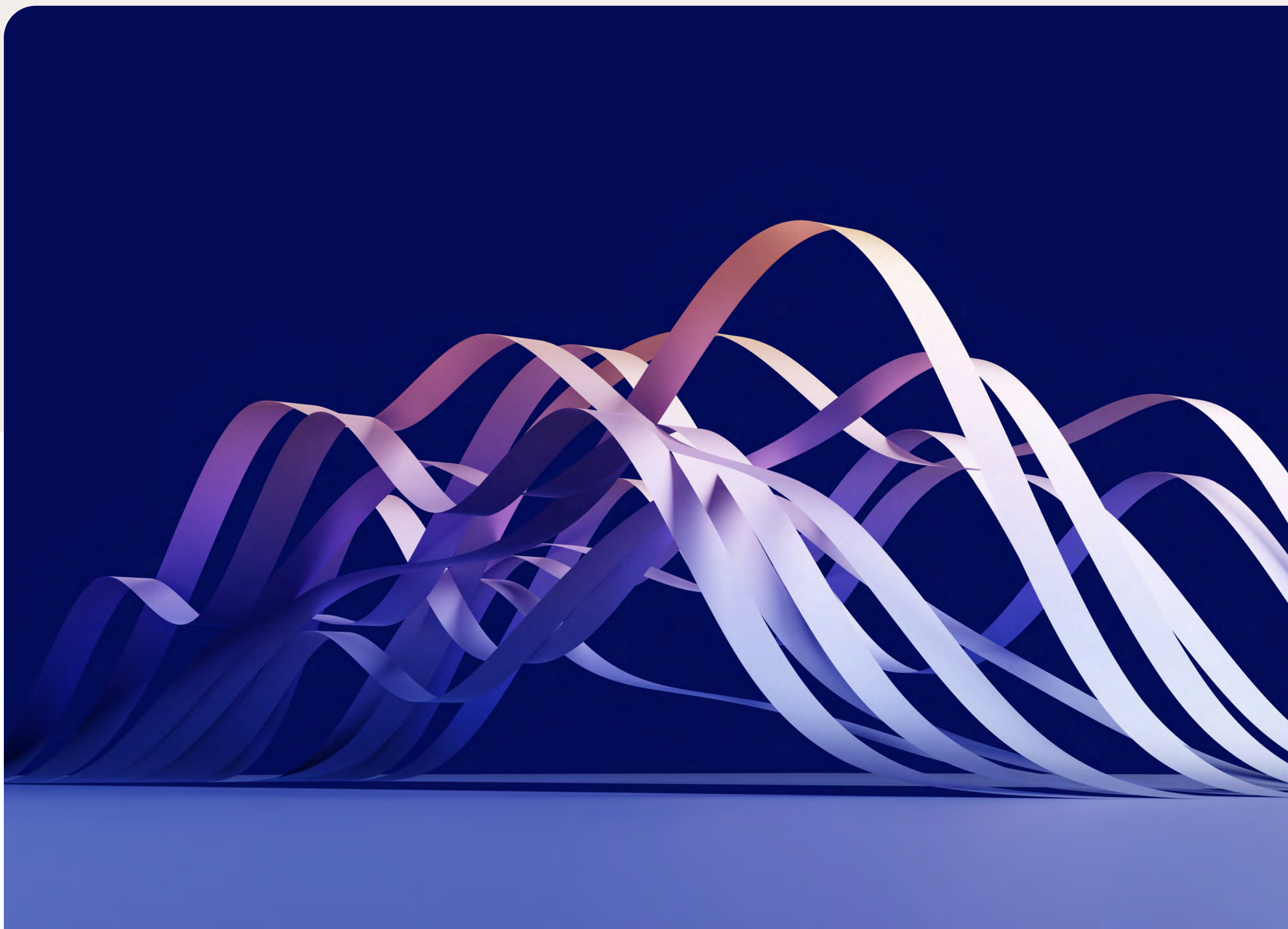


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Why Hybrid Cloud?

With common workload management and data services across the core, cloud and edge infrastructures, hybrid cloud gives you the freedom to build and deploy apps whenever you need them on whatever platform best fulfills the service-level agreement (SLA).

With a central, flexible platform in place, you can innovate quickly, while optimizing for performance, cost, compliance, availability, security and scalability.

Benefits of the Right Hybrid Cloud



Innovate anywhere



Accelerate production



Optimize costs



Buying Criteria for Hybrid Cloud

To implement a central operating model across all storage and cloud partners, look for the following criteria when evaluating the hybrid cloud:





Checklist:

- ✓ Acquisition cost
- ✓ Operational overhead
- ✓ Training required for people, software
- ✓ Ability to consume resources as required vs. upfront

Cost Optimization

To improve ROI and achieve cost predictability, businesses need flexible approaches for budgeting technology acquisition, utilization and operations — all while maximizing the value of current infrastructure investments.

Organizations can choose to pay for new technology projects using traditional capital expenses (CapEx), flexible as-a-service subscriptions, or pay-as-you-go consumption models — depending on financial goals.

A unified hybrid cloud empowers organizations to optimize asset utilization and put efficient cost controls in place, helping to prevent budget overruns. By strategically analyzing and placing workloads — including mission-critical apps and consolidated application data — in the environment best suited to their needs, businesses can boost performance and compliance. AI-powered automation can orchestrate resource allocation, reducing manual effort and allowing teams to do more with fewer resources. This strategy ensures that technology investment is aligned with business growth, efficiency and value throughout the hybrid cloud.



Did you know?

Hitachi Vantara's hybrid cloud solution offers 3-4x lower TCO.

Hitachi Vantara's hyperconverged cloud infrastructure solutions blend with existing SAN systems to provide a seamless storage architecture.



Checklist:

- ✓ Accelerate infrastructure deployment and configuration
- ✓ Turbocharge mission-critical apps with a high-performance infrastructure
- ✓ Accelerate modern workloads, from AI and data analytics to HPC, with an AI-driven infrastructure
- ✓ Meet data locality requirements

Performance

Businesses need high performance and low latency across architectures to support business-critical applications and AI workloads, all while avoiding resource contention.

Hybrid cloud platforms enable product development and engineering teams to innovate with flexible, extensible solutions they can trust.

Whether running on-premises, in the cloud, or bursting to public clouds for peak demands, unified hybrid cloud infrastructure delivers the bandwidth and responsiveness needed to optimize workload placement. This empowers teams to build, deploy and run applications and AI models faster — releasing new services on the platform that best fits performance, compliance and business goals.



Did you know?

Hitachi Vantara's hybrid cloud solution offers:

- **Zero** cloud lock-in
- **80%** faster time to production



Checklist:

- ✓ 100% data availability
- ✓ Eight 9s of uptime

Availability

To maximize revenue and deliver on SLAs, business applications must run seamlessly across both on-premises and cloud environments without performance issues, downtime or data loss caused by system failures, outages or security breaches. A hybrid cloud platform provides centralized, automated protection and disaster recovery capabilities that quickly restore data and services, maintaining business continuity and resilience in any event.

Look for the highest availability guarantee to ensure business operations are always on. The right hybrid cloud should provide built-in resilience that protects customers against data and application loss if a component, node, rack or site fails. The backup and recovery plan should also specify how quickly you can restore data in case of a breach, ensuring no data is lost.



Did you know?

Hitachi Vantara delivers the fastest enterprise storage with 100% Data Availability Guarantee, consistently ranked highest by Gartner for RAS (reliability, availability and serviceability).

<https://www.hitachivantara.com/en-us/solutions/sustainability/data-center-ecosystem.html>



Checklist:

- ✓ Ransomware protection/recovery
- ✓ Integrated solution for faster recovery
- ✓ Various methods for ensuring only authorized user access

Security

Businesses often hesitate on a convenient cloud-first strategy for security reasons. When you can't trust your data to be managed by third-party platforms, choose a cloud-smart strategy that combines on- and off-premises resources on a common platform for enhanced central control.

A hybrid cloud with a common platform allows development teams to write, build, test and run lightweight containerized applications more quickly while allowing infrastructure teams to maintain security and compliance with IT policies, using familiar proven management tools. IT teams can continue to protect against cyberthreats with granular data protection, advanced security fabric and micro-segmentation for business continuity.



Did you know?

Hitachi Vantara in partnership with VM2020 provides the world's fastest ransomware recovery from immutable snapshots for VMware® environments.

Hitachi Vantara provides zero-worry software and firmware upgrades for the entire infrastructure stack with VMware vSphere® lifecycle management.



Checklist:

- ✓ Enhanced data compression technology to reduce energy consumption
- ✓ Storage virtualization to decarbonize legacy systems
- ✓ Central portal with overview of past, current and future energy consumption
- ✓ A partner that takes a holistic approach, including decarbonizing offices and factories

Sustainability

Your hybrid cloud can help you get more from your existing storage solutions, while bringing down energy consumption at the same time. For example, enhanced data compression technology allows you to store more user and AI-generated data using the capacity your company has already purchased. This is especially important as AI workloads often produce large volumes of data that need to be stored, accessed and processed efficiently.

With centralized data, you can get a clear overview of past, current and future energy consumption, taking into account electricity, CO₂ emissions, overall carbon footprint and potential cost savings. This visibility is essential for optimizing infrastructure to support AI training and inference workloads sustainably.



Did you know?

Hitachi Vantara offers the only virtual storage platform and products to hold the Carbon Footprint of Products (CFP) certification by the Japan Environmental Management Association for Industry.

Hitachi Vantara storage solutions are certified to reduce your energy consumption by up to 60% (CFP, Energy Star®).



Strategy Recommendations

Integrate your cloud workloads into a streamlined hybrid cloud platform

Innovate

Seamlessly spanning across on-premises, hyperscalers, managed colocation, edge and offline sites, our one-stop hybrid cloud solution maximizes innovation.

Automate

Turnkey integrated cloud solution and policy-based automation significantly expedite business value. Low-latency infrastructure accelerates AI workloads and business applications.

Consolidate

Optimize your hybrid cloud infrastructure with high-performance platforms that enable greater workload efficiency and maximize the value of your existing storage investments.

Optimize

Reduce costs of IT and cloud operations by analyzing and rebalancing workloads across on-and off-premises sites.



Build a Future-Ready Hybrid Cloud and Workload Platform

Seamless integration, limitless possibilities, better operational cost flexibility

Hitachi hybrid cloud solutions help you accelerate business services, efficiently manage and scale AI workloads, drive new revenues and retain customers, while maintaining cloud-like velocity with better operational cost flexibility.



Hitachi Vantara delivers unified, resilient, scalable storage that solves hybrid cloud data management, security and cost-control challenges.

Everflex

Transforms hybrid infrastructure through consumption-based storage as a service. Gain 360 degree observability, automation and orchestration across on-premises public and private clouds to reduce TCO by 50%.

VSP One Block

Delivers software-defined block storage with sub-millisecond latency, compact density and nondisruptive scaling. It powers mission-critical hybrid cloud workloads through inline deduplication, compression encryption and NVMe oF support.

VSP One SDS

Sets the standard for software-defined block storage in compact high-density form factors. Deliver sub-millisecond latency for mission critical databases and virtualization. Scale to petabytes nondisruptively with inline deduplication compression and encryption. Support NVMe oF for ultra-low latency over fabrics like Fibre Channel and Ethernet.

VSP One File

Supports structured data via NFS SMB protocols with granular access controls and quotas. Enable high-throughput sharing for collaboration and content management. Integrate with hybrid cloud for seamless data mobility and policy enforcement.

VSP One Object

Manages exabyte-scale unstructured data for AI analytics archives and compliance. Provide Amazon S3[®] compatible access with robust durability and multitenancy. Support massive parallelism for next-gen workloads like media genomics and IoT.

VSP 360

VSP 360 provides unified management across the entire portfolio for single-pane-of-glass control. Automate lifecycle tasks, monitor health and drive sustainability with policy-driven workflows and power-efficient designs.

EcoSystem Partnerships

Integrate with these cloud providers



Amazon Web Services®

Flexible foundation to accelerate operations, simplify management and reduce the TCO of VMware-powered hybrid cloud.



Microsoft Azure®

Modernize local infrastructure with a future-ready hybrid cloud solution designed to accelerate innovation, simplify management, and meet data residency needs.



Google Cloud Platform®

Accelerate innovation and operational consistency across multicloud infrastructure with Google Anthos™ container orchestration and management.



E Q U I N I X

Equinix®

Cloud Connect for Equinix provides a defined path to hybrid cloud. Manage, move and protect vital data seamlessly, while driving greater resiliency, agility and efficiencies in IT operations.



Hitachi Vantara

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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Corporate Headquarters
2535 Augustine Drive
Santa Clara, CA 95054 USA
hitachivantara.com | community.hitachivantara.com

Contact Information
USA: 1-800-446-0744
Global: 1-858-547-4526
hitachivantara.com/contact