

DON'T UNDERMINE YOUR MOVE TO HYBRID CLOUD WITH THE WRONG INFRASTRUCTURE CHOICES

Hybrid cloud has proved itself as an efficient, flexible and agile IT architecture for enterprises that want "the best of both worlds." A well-thought-out and meticulously executed integration of on-premises infrastructure and cloud computing environments gives organizations the flexibility to put the right resources in the right place at the right time. Doing that properly requires a new approach to IT infrastructure, one based on the concepts of convergence, right-sizing and choice.

One of the great aspects of cloud computing is the versatility and flexibility it affords enterprise IT decision-makers in constructing computing architecture that shifts and adapts as needed. For more and more organizations, this means engineering an environment that is one part on-premises infrastructure and one part (or multiple parts) in the cloud.

Hybrid cloud has rapidly become the IT architecture of choice for a wide range of enterprises that want to leverage the benefits of on-premises infrastructure along with the positives of cloud economics. Data, applications, services and workloads can reside on-premises or in the cloud, and can be migrated back and forth to meet changing business needs. That's why hybrid cloud is a huge, fast-growing market segment: Research indicates global hybrid cloud revenues will exceed \$170 billion by 2025, representing a compound annual growth rate of 21.7% from 2018 to 2025.¹

¹ "Hybrid Cloud Market to Reach \$171.93 BN by 2025 at 21.7% CAGR," Allied Market Research, October 2018.

But to get the most of hybrid cloud environments, organizations should give a lot of thought to designing the best IT infrastructure platform that is far more simple and cost efficient than a traditional data center. These modern IT platforms deliver greater enterprise-class flexibility without compromising on agility or security.

Converged infrastructure is such an approach. By using pre-tested, tightly integrated and validated stacks combining server, storage, networking and virtualization, IT professionals can swiftly deploy a lightweight yet highly scalable solutions. Doing so allows them to achieve a smaller data center footprint, the performance, low latency, always available and the functionality necessary to support workloads that go from on-prem to the cloud, and back again.

WHY HYBRID CLOUD IS A MUST—ESPECIALLY FOR DATA-DRIVEN ORGANIZATIONS

Never have organizations had so much data to store, manage, analyze and report on. And, not only has the sheer volume of data exploded, but so have the velocity and variety of data. This has put tremendous pressure on organizations to manage this data tsunami more efficiently. In order to handle all this data properly so it can be utilized to drive improved business outcomes—or, “outcomes that matter” in the language of the line-of-business teams—IT professionals have increasingly turned to hybrid cloud architectures in order to leverage the best of both worlds.

Rather than simply move all workloads and all data to the cloud, organizations have embraced the many benefits of preserving a modern, future-proof and agile on-premises infrastructure with a cloud option. In fact, many organizations that initially moved certain workloads and applications to the cloud now are migrating at least some data, workloads and applications back to an on-premises environment.

There are several reasons for this trend:

- Cloud may have a low barrier to entry, but cloud is not necessarily always less expensive than on-premises infrastructure for production systems at scale.
- Data—the “new oil” for today’s economy—is less accessible and harder to share, blend and analyze for some workloads in the cloud.
- Data gravity—the concept that data actually remains put, while applications and infrastructure migrate to where the data resides—is a real and powerful force that helps define the need for hybrid cloud models.
- Cloud brings new challenges in areas such as data management, security and regulatory compliance.



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In short, cloud is a great architecture for many workloads, applications and processes. But it is the data that drives outcomes that matter, and that data is going to be accessed from whatever infrastructure and whatever location is most efficient for the organization. That means hybrid cloud.

WHY CONVERGED INFRASTRUCTURE IS A GREAT FIT FOR HYBRID CLOUD

Of course, traditional IT lacks the manageability, cost efficiency, flexibility, availability, performance and scalability required for today's hybrid cloud architectures. The days of traditional infrastructure riddled with complexities are long gone because that approach does not synch up with the agility and scalability that hybrid cloud environments deliver.

That's why so many organizations are embracing converged infrastructure (CI) for hybrid cloud environments. CI is purpose-built for the cloud in all its iterations, but especially for hybrid cloud because it acts as both an efficient pathway to the cloud and as a more efficient and agile alternative to traditional on-premises infrastructure.

Among the many characteristics of CI that lends itself well to hybrid cloud environments are:

- Nearly unlimited, nearly real-time scalability.
- Agile Provisioning.
- Cloud-ready migration tools.
- Virtualization and containerization are progressive steps to cloud computing.
- Dynamic component scaling (for instance, the ability to just add more storage drives rather than buying an entire new cluster).
- Consumption-based, more predictable pricing model.
- Optimized for cloud migration and hybrid-cloud environments.



HOW CISCO AND HITACHI VANTARA ADDRESS HYBRID CLOUD REQUIREMENTS

IT professionals looking for the right CI solution as part of their hybrid cloud environment are fortunate that two industry leaders—Cisco and Hitachi Vantara—have collaborated to develop and market a line of CI solutions.

Cisco and Hitachi Adaptive Solutions for CI stand out from the many competitive offerings because the solution leverages the long-standing industry leadership and respective technology strengths of the two companies in an easily deployed, flexible and cost-efficient architecture. For instance, the combination of Cisco's market leadership in both networking and servers, and Hitachi's demonstrated technical innovation in storage, means IT decision-makers enjoy the ability to uncover, extract and use data in a more strategic manner, and use that data for improved business outcomes.

In fact, it's appropriate to look at Cisco and Hitachi Adaptive Solutions for CI as a "stairway to data value." For instance, consider how an application deployed on those CI solutions yields data insights that then can be migrated—using Hitachi Data Instance Director—to Hitachi Content Platform, where metadata can be extended to make it more accessible by business users throughout the

enterprise. Then, the same data could be combined with data extracted from other sources to produce a picture of something related to a key business function. And, that visual representation can be produced automatically and intuitively without being prompted or requested by a business user.

Cisco's emphasis on "intent-based networking" is a unique characteristic in the CI solutions space, helping IT departments deliver enhanced data-centric functionality in a modern—and future—hybrid cloud environment. Intent-based networking allows the Cisco and Hitachi Adaptive Solutions for CI to align with specific business intentions. Whether it's designed to ensure the highest-possible levels of availability during the frantic end-of-quarter rush for financial departments or the ability to pinpoint minute changes in consumer demand during holiday seasons, intent-based networking helps set the Cisco/Hitachi CI solution apart from competitive offerings. Intent-based networking also lends itself well to today's hybrid cloud environments because it supports both data gravity and workload migration, two key characteristics of hybrid cloud.

Together, the Cisco and Hitachi Vantara partnership provides a CI solution that is unique and differentiated from competitive offerings. The Cisco and Hitachi Adaptive Solutions for CI are architected with several key principles in mind, including a commitment to a data-driven architecture and the ability to combine world-class engineering with enterprise-grade global service and support. The combination of Cisco and Hitachi delivers best-of-breed infrastructure

components in an easily deployed, simple-to-scale package, along with great management tools that help relieve IT professionals from the burden of manual monitoring and management of infrastructure. Instead, they can spend more time working closely with line-of-business colleagues hoping to use technology to make better, smarter, faster decisions that result in outcomes that matter—just like the motivation for moving to a hybrid cloud architecture in the first place.

CONCLUSION

Hybrid cloud has proven its place as an invaluable and essential part of any organization's digital transformation strategy. That's because hybrid cloud's key benefits—including agile provisioning, flexibility, workload migration, data protection, availability and cost efficiency—align tightly with most enterprises' goals to use data for economic value and improved business outcomes, while ensuring a future-proofed architecture.

For organizations looking to modernize their IT infrastructure for a hybrid cloud model, converged infrastructure is the way to go. And, while there are many options for IT professionals to consider in the CI solutions space, the powerful partnership of Cisco and Hitachi Vantara offers an unmatched combination of best-of-breed infrastructure components, integration by design, easy deployment, and global service and support capabilities.

Click [here](#) to learn more about Cisco and Hitachi Adaptive Solutions for Converged Infrastructure.