



Harnessing the Power of a Multicloud Strategy



The speed at which businesses operate has never been more intense. Today's enterprises need to be able to quickly pivot to adapt to market changes and deliver business-enabling solutions. To achieve this agility, many companies have turned to the cloud. This was particularly true during COVID-19 as organizations increasingly leveraged cloud services to support their distributed workforces.

To take the benefits of cloud services to the next level, many businesses—93% according to one study—are adopting a multicloud architecture. A multicloud strategy goes beyond the agility of a single cloud environment, giving businesses access to a broader range of services and locations which promotes operational efficiency, control costs, strengthens security and resilience, and drives performance and business outcomes.

A multicloud strategy is clearly on the minds of many businesses. According to Gartner¹, multicloud was the top "conversation driver" in 2018-2019, and retained the top slot in its 2019-2020 research.

Regardless of what combination of clouds a business utilizes—public or private—a multicloud strategy can deliver tremendous value.

Alignment with Business Objectives

A multicloud strategy allows businesses to leverage the cloud service provider (CSP) with the environment or services that best meet their specific needs. By aligning their

cloud strategies with their business objectives, companies can purposefully choose which clouds support specific applications and data, or align with a CSP for specific services.

Utilizing multiple clouds allows businesses to place workloads where they work best, while considering specific performance, security and compliance requirements. These needs can help decipher between putting workloads in a public or private cloud. Additionally, the leading CSPs, such as Amazon Web Services (AWS), Microsoft Azure and Google Cloud Platform, have their own services and core competencies. For example, many businesses use Azure for access to Office 365. The use of multiple CSPs to gain access to core services is growing as more than half of businesses in one study reported utilizing more than one of the three major CSPs.

Improved Performance

A multicloud strategy can also introduce geographic diversity to enhance performance. By placing data and applications in clouds near concentrations of users—whether internal teams, customer or partners—businesses can minimize latency for improved delivery and download speeds. This also allows businesses to assess the required performance levels and acceptable latency for various workloads to better balance performance and cost. This geo-diversity also offers an opportunity to establish a disaster recovery (DR) solution to minimize downtime and strengthen resiliency.

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On-demand Scalability

Businesses can also quickly and easily scale multicloud storage, compute and connectivity based on demand. This is especially beneficial for development teams as it allows them to quickly configure and deploy large-scale DevOps sandboxes with unlimited resources to accelerate development. This elastic compute allows businesses to quickly test a product and then scale capacity back down when testing is complete to better manage costs.

No Vendor Lock-in

Vendor lock-in is a concern for many businesses as it limits their ability to negotiate on costs, introduce additional services and adapt to changing expectations. With a single cloud deployment, businesses are limited to only the services that vendor supplies. A single cloud also limits a business' ability to negotiate for better pricing. With a multicloud solution, businesses can compare costs and services across providers, choosing the services that best address needs, and then negotiating for discounts and better rates. Integrating multiple clouds also helps businesses better manage usage and cost by only paying for the space and connectivity they need. It can also minimize potentially hefty egress charges.

Minimized Risk

With any IT deployment, security and availability are clear priorities. A multicloud architecture can help businesses architect a solution that minimizes risk while being mindful of budget. By placing sensitive data in a private cloud and other data in a more cost-conscious public cloud, businesses can better control risk and expenses. A multicloud strategy can also help establish a DR solution to minimize downtime and data loss by allowing a business to shift its service to another cloud during a failure or service disruption.

Addressing the Challenges of Multicloud Connectivity

While this modern cloud architecture provides businesses with the agility to quickly scale capacity, position workloads close to end users, and introduce new services from major public cloud providers such as AWS, Azure and Google Cloud, it also introduces a series of challenges.

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Addressing the complexity of multicloud connectivity

Today's fast-paced, distributed business landscape can introduce complexity into connectivity strategies. Businesses are increasingly relying on multiple public cloud providers to deliver a growing portfolio of services. In fact, Gartner expects the use of public cloud services to increase by 76% between the end of 2020 and the end of 2024.²

Gartner also notes that “enterprises are increasingly leveraging internet connectivity from branch locations to cloud resources to reduce cost, increase agility and minimize latency to improve performance.”³ The combination of these distributed cloud workloads and the remote workforce introduced by COVID-19 further increases the complexity of multicloud connections.

Connecting a portfolio of cloud solutions involves managing the various components of the solution—from choosing the providers and provisioning the connections to managing connection performance and the various vendor relationships.

As if that was not challenging enough, the variety of connectivity options—including the public internet, dedicated fiber connections and network-as-a-service (NaaS) offerings—adds another layer of complexity in choosing the appropriate solution as each touts its own benefits and drawbacks.

Managing the many moving pieces involved in devising a multicloud solution that offers direct, private low-latency connections to leading cloud service providers can be difficult. The challenge is choosing the connectivity strategy that best aligns with your business needs.

Balancing risk, performance and costs

As you build your multicloud connectivity strategy, weighing the various connectivity models against the flexibility, performance, security and cost efficiency your business requires can provide insight into the most appropriate solution for your business.

Public Internet

Many businesses rely on the internet for its accessibility and cost efficiency. However, as a shared connection, the internet offers limited control over the security and performance of your connections. This means that your business-critical workloads may be competing for bandwidth with recreational YouTube or social media users, potentially resulting in congestion, increased latency and dropped traffic. For many businesses, the cost savings of this public connection does not offset the potential performance issues and exposure. To address this concern, many organizations seek private, dedicated Layer 2 connectivity options to avoid dealing with shared Layer 3 public networks like the internet.



Dedicated Fiber Connections

A dedicated fiber connection provides a direct, private, physical connection to a major cloud provider. This solution offers optimal security and performance as your businesses is the only one utilizing the connection. However, this intense security comes with a hefty price tag. As businesses continue to introduce multicloud strategies, the expense of this option may outweigh its gold-star security and performance.

Organizations that use this connection also lack the flexibility to scale bandwidth up and down based on fluctuating needs, instead paying for a specific bandwidth for a contracted term regardless if they are using the full capacity.

NaaS

NaaS offers a flexible alternative that allows your business to easily add and scale connections on-demand based on evolving requirements. This solution is less expensive than a dedicated connection, yet provides an enhanced level of security and performance over what the internet offers as it utilizes the network of the NaaS provider. Billing is also consumption based to avoid long-term contracts for unused capacity.

Evaluating Multicloud Connectivity Solutions

The increased use of diverse cloud deployments has many businesses reevaluating their connectivity strategies. According to Gartner, "41% of businesses expect to add interconnection services from their current data center supplier as a consequence of COVID-19."⁴

To improve the efficacy and performance of a multicloud strategy, businesses need to consider how to connect to these diverse clouds to promote an effective, high-performing cloud ecosystem that aligns with business expectations. [One study](#) revealed that 58% of businesses measure multicloud success by improved performance, while 52% gauge it by cost savings and 41% by delivery time. Achieving these metrics requires a level of knowledge and experience your organization may not have internally.

Whatever success looks like for your organization, consider the following when evaluating multicloud connectivity solutions.

Does your data center provider offer a national footprint?

Connecting your business everywhere it needs to be without introducing unnecessary latency can be a challenge. A data center provider with a national footprint can offer the network and diverse locations to access leading cloud service providers near concentrations of users to minimize latency and improve

the end user experience. It can also provide a geo-diverse disaster recovery (DR) solution.

By using a single provider to connect to multiple regions, you can also simplify vendor management for your IT team.

Does your data center provider own and manage their network?

Businesses want to be able to control and consume connectivity the same way they consume compute resources. As a result, control over the network that provides the connections continues to be a driver for businesses evaluating cloud connectivity. Data center providers that own and manage their own network infrastructure offer enhanced security and control over the connections and are accountable for its performance, if an issue occurs.

The public internet lacks this control and can introduce unwanted latency, lack-luster performance and potential risk into your connectivity strategy.

How easily can you scale connectivity?

To address continually evolving business demands, businesses need to be able to quickly and easily scale capacity and add

new cloud connections, as needed. The ability to scale bandwidth in either direction, on demand, can be pivotal in optimizing performance and controlling costs.

While many businesses need to scale a connection to match business growth, some businesses require additional capacity in the short term. Online retailers may scale up capacity during the holiday season, and scale it back down when the season ends. DevOps can increase capacity to support a sandbox environment and return it to normal when testing is complete.

In addition to ensuring peak performance, this flexibility can also keep expenses in check, as network-as-a-service (NaaS) connectivity solutions offer usage-based billing.

The ease of this elasticity is equally important. Data center providers that offer user-friendly, self-service interfaces can help speed deployment time and promote efficiency.

Does your colocation provider offer professional services?

If your business lacks the internal expertise to devise a connected multicloud infrastructure on its own, consider leveraging the expertise of a professional services team. Regardless of the complexity of your needs, these skilled professionals can provide your business with the level of support you need as you design and implement your multicloud connectivity environment—from outlining your connectivity options to successfully configuring, testing and turning up the service.

Flexential Cloud Fabric: Delivering secure, scalable connectivity

Flexential's Cloud Fabric is a NaaS solution that allows your business to seamlessly connect to cloud service providers using Flexential's dedicated 100 gigabyte (GB) network backbone across its portfolio of 38 data centers in 19 locations. With Cloud Fabric, businesses can quickly procure a physical port from Flexential and use its self-service interface to establish any number of flexible, secure virtual connections to Amazon Web Services (AWS), Microsoft Azure and Google Cloud. The portal also allows your business to scale capacity on demand and view the status of your connections using the web, an API or a mobile device.

Flexential's private network also ensures heightened control over the security and performance of your connections. The combination of Cloud Fabric and Flexential's geographically diverse data centers allows your organization to leverage a single provider to reach the places your business needs to go. This eliminates reliance on third-party solutions, providing a single partner to work with as you continue to strengthen and define your digital strategy.

Cloud Fabric is also prorated to the day, allowing your business to scale capacity as required, while only paying for what you use—offering a significant cost savings over a dedicated connection. Flexential's single, consolidated bill also simplifies invoice management for your IT and accounting teams.



Improve Multicloud Performance and Spend with Predictive Analytics

Optimizing the cloud environment is a rising priority for enterprises, especially as they continue to deploy multicloud strategies that can complicate cloud management and introduce a series of issues such as cloud sprawl, excess spend, security concerns and lagging performance. While having control over the cloud environment can help address these issues, gaining control is only half the battle. To truly optimize cloud deployments, enterprises need to proactively monitor and manage their clouds. This requires ongoing, real-time insight into cloud compute, capacity and storage.

Hosted Private Cloud – Advanced Access provides control over the cloud environment at the hypervisor level, and a recent enhancement to this industry-first tool pairs real-time metrics and powerful analytics to help enterprises assess and proactively manage operations across multiple clouds.

The case for analytics

Enterprises have widely adopted analytics to help them make more data-driven decisions and achieve better results. According to one study, 77% of respondents used analytics to aid decision making and 65% used them to help speed decisions.

The power of analytics is recognized across all vertical markets. Marketing organizations run analytics to assess the success of a campaign. Manufacturers utilize analytics to identify bottlenecks and improve the efficiency of their processes. Sports teams engage analytics to assess player performance and habits to gain a competitive edge. In the IT arena, leveraging analytics can head off or more quickly identify issues such as strained capacity, ineffective workload placements and overspending before they impact operational performance or stability.

Advanced metrics and reporting capabilities

The advanced metrics and reporting functionality within

Flexential's HPC - Advanced Access integrates artificial intelligence (AI) and machine learning (ML) with thousands of performance indicators and utilization metrics across compute, network and storage to provide a level of visibility and predictive analytics that was previously unavailable. This insight allows enterprises to proactively assess the health of their cloud operations to optimize performance through enhanced security, better cloud configurations, advanced capacity planning, and improved deployment and migrations across multiple public and private cloud environments. This can all help enterprises achieve a more rapid return on investment (ROI).

By leveraging this AI-driven, real-time insight, cloud managers achieve critical information and automated responses and a series of capabilities designed to continually strengthen the cloud environment.

Optimized Environment

Using AI and ML, HPC - Advanced Access provides the advanced metrics and reporting capabilities that deliver a new level of visibility into virtual and physical environments. Through predictive analytics and smart alerts, cloud managers can proactively identify and mitigate issues to potentially decrease downtime by more than half.* With real-time insight into the cloud environment, authorized users can also intentionally place workloads in the most appropriate environment to promote uptime, performance, security and more. The built-in technologies also allow cloud managers to predict, prevent and troubleshoot issues by correlating metrics, events, logs and configurations data to detect anomalies across multiple clouds more quickly. It also fosters more future-focused decisions.

Efficient Capacity Management

Offering enterprises 30% more visibility* into their cloud environments, this new functionality allows cloud managers to better recognize and address capacity issues and balance workloads before they impact operations. Without this visibility,

capacity management is more reactive as cloud managers wait for performance to decline before making changes. Multicloud and hybrid cloud environments challenge this scenario even more as enterprises lack a holistic view of operations across all deployments. This can make it more difficult to reclaim and effectively reuse IT resources. Predictive capacity analytics also allow enterprises to forecast and plan for future capacity requirements.

Efficient Cost Management

The predictive cost analytics achieved via AI help organizations reduce costs and improve efficiency. Enterprises can effectively forecast future demand and provide actionable recommendations to prevent expensive performance or operational issues that can impact the bottom line. This is a key feature as an estimated 30% of cloud spend is wasted. The advanced metrics and reporting capabilities can also improve resource utilization costs by proactively addressing issues to minimize the time IT teams spend troubleshooting and fixing problems. By proactively avoiding issues, IT teams free up their time, allowing them to devote more attention to revenue-driving projects. In whole, these efficiencies can translate to a 2.4x ROI and 53% reduction in IT costs.⁵

Analytics and Intelligent Remediation

The intelligence built into the enhanced HPC - Advanced Access capabilities also automates reclamation, proactively right-sizes virtual machine (VM) workloads and enables policy-based automation to identify, remediate and regulate IT operational processes, standards, capacity and storage provisioning.

Integrated Compliance

With six out-of-the-box compliance templates, HPC - Advanced Access helps ensure environments adhere to common regulatory requirements. The combination of integrated compliance and automated remediation reduces risk and enforces IT regulatory standards.

A final thought

As enterprises continue to look for ways to be more efficient and optimize multicloud environments, having control over and visibility into cloud operations can deliver tremendous value. The ability to more quickly and effectively make business-enabling decisions to control costs and improve performance can deliver a better environment and, ultimately, a competitive advantage for any enterprise.

Sources:

- (1) Gartner, Cool Vendors in Enhanced Internet Services and Cloud Connectivity, September 22, 2020.
- (2) Gartner, Voice of the Enterprise Datacenters 2020.
- (3) Gartner, Cool Vendors in Enhanced Internet Services and Cloud Connectivity, September 22, 2020.
- (4) Gartner, Voice of the Enterprise Data Center, 2020.
- (5) VMware vRealize Customer Benchmarking Study 2020