

Executive summary

In today's rapidly evolving business landscape, global enterprises face unprecedented challenges. Network resilience has never been more crucial as technology evolves at an unprecedented pace. Yet, traditional connectivity approaches are falling short in meeting the demands of modern business, posing serious issues such as single points of failure, scalability limitations, complex network management, and security vulnerabilities. Simultaneously, the rise of cloud services and globalization adds unprecedented complexity to network requirements.

This InterCloud white paper underscores the critical need for network resilience in global enterprises. It identifies critical issues, explores the limitations of traditional connectivity approaches and explains why a centralized approach to cloud connectivity management can fortify their networks for the challenges of today and tomorrow.

The network resiliency challenge

Global enterprises are navigating a dynamic landscape marked by a multitude of transformative trends and shifts that underscore the paramount importance of network resilience. In a recent Uptime Institute global survey, a quarter of respondents said their most recent outage cost more than \$1 million in direct and indirect costs – highlighting the business case for investment in network resiliency.

Traditional approaches to connectivity are grappling with limitations that hinder their ability to provide the level of reliability and flexibility demanded by modern businesses. These limitations include single points of failure, limited scalability, intricate network management, and security concerns. Simultaneously, the proliferation of cloud services and the globalization of operations have introduced unprecedented complexity into network requirements.

As organizations increasingly rely on cloud-based applications and data, the demand for enhanced performance, scalability, and security has never been more pressing. Network resilience isn't just a matter of avoiding downtime; it's about enabling agility, ensuring seamless global operations, and safeguarding against evolving cyber threats.

Global enterprises encounter a spectrum of challenges when striving to attain network resiliency, especially with the shift to multicloud. These hurdles are diverse and pressing, underscoring the urgency for innovative solutions:

Managing complex cloud environments:

As businesses expand their operations across the globe, harmonizing a patchwork of cloud environments, each with its unique characteristics and requirements, into a cohesive network infrastructure becomes a formidable task.

Why it matters: This challenge directly impacts an organization's ability to streamline its operations and ensure uniformity across a diverse cloud landscape.

Dependable and highperformance connectivity:

The quest for dependable and highperformance connectivity across hybrid and multicloud environments is paramount. Enterprises must grapple with ensuring that data and applications flow seamlessly across this complex landscape while avoiding bottlenecks and latency issues.

Why it matters: Reliable connectivity is essential for maintaining productivity and preventing costly downtime.

Stringent SLA adherence:

Business-critical applications, the lifeblood of modern enterprises, demand nothing less than stringent SLA (Service Level Agreement) adherence. Ensuring that these applications consistently meet performance benchmarks and uptime requirements is an ongoing challenge that necessitates robust network resiliency.

Why it matters: SLA adherence directly impacts customer satisfaction and revenue generation.

Minimizing networking and IT admin overheads:

The imperative to minimize networking and IT administrative overheads while preserving control and flexibility is ever-present. Efficiently managing and maintaining multicloud connectivity without overburdening IT teams is a delicate balancing act that requires innovative solutions to streamline operations.

Why it matters: Reducing administrative overheads translates to cost savings and increased operational efficiency.

To thrive in this rapidly evolving landscape, global enterprises are recognizing that they must adopt innovative solutions like managed cloud connectivity to address these challenges head-on and build networks that are not just robust but adaptable, secure, and primed for the future.

¹Uptime Institute Global Survey of IT and Data Center Managers 2019 -2022 | Andy Lawrence, Lenny Simon

Challenges & limitations of traditional connectivity approaches

Traditional approaches, such as in-house solutions or reliance on telco providers, may not be as effective as a managed cloud connectivity solution for achieving network resiliency. Here are the key reasons why:

Lack of redundancy and high availability

Traditional connectivity approaches often rely on a single provider or a limited number of physical connections, making them vulnerable to single points of failure. In the event of disruptions or outages, the network may experience prolonged downtime, leading to business disruptions.

Impact: Extended downtime can result in financial losses and hinder overall business continuity.

Limited scalability and agility

Traditional connectivity approaches can struggle to scale and adapt to changing network demands. As organizations expand their operations, adopt new cloud services, or experience surges in traffic, traditional approaches may face challenges in provisioning additional capacity or adjusting network configurations.

Impact: Inflexibility in scaling can impede an organization's ability to seize growth opportunities or respond to sudden spikes in demand.



Complex network management

Traditional connectivity approaches often involve complex network management tasks, such as configuring and maintaining VPNs, firewalls, and routing protocols across multiple locations and cloud environments. Managing and troubleshooting these configurations can be time-consuming, resource-intensive, and prone to human error.

Impact: Resource drain and increased risk of operational errors can lead to operational inefficiencies and security vulnerabilities.

Limited visibility and control

Traditional approaches may lack comprehensive visibility into network performance, traffic patterns, and security threats. This limited visibility hampers the ability to proactively monitor and optimize network resiliency.

Impact: Inadequate visibility can result in delayed issue detection and resolution, negatively impacting network performance and overall resiliency.

Security and compliance concerns

Traditional cloud connectivity approaches might not offer robust security features or dedicated connections needed to ensure secure and private communication. This limitation can result in potential data exposure or interception, undermining efforts to maintain cloud security and compliance.

Impact: Security and compliance breaches can lead to reputational damage and legal consequences.

Managed cloud connectivity solutions, such as InterCloud, address these challenges by providing redundancy, scalability, simplified network management, enhanced visibility and control, and robust security features, ensuring organizations can achieve network resiliency in an ever-evolving landscape.



The benefits of a centralized managed connectivity approach

A centralized managed connectivity approach offers several key benefits when it comes to achieving network resiliency. Here are the top five advantages:

Enhanced redundancy and high availability

A managed cloud connectivity solution provides built-in redundancy and high availability by leveraging diverse network paths and multiple cloud providers. It ensures continuous connectivity even in the face of disruptions or outages, minimizing downtime and ensuring business continuity.

2. Scalability and agility

With a managed cloud connectivity approach, organizations can easily scale their network infrastructure to meet changing demands. The solution offers on-demand provisioning of additional capacity, enabling organizations to rapidly adjust bandwidth, add new connections, or expand into new cloud regions.

3. Simplified network management

A managed cloud connectivity solution simplifies network management by providing a centralized platform and expert support. It reduces the complexity

of configuring and maintaining VPNs, firewalls, and routing protocols across multiple locations and cloud environments.

4. Comprehensive visibility and control

Managed cloud connectivity solutions offer advanced monitoring tools, real-time analytics, and centralized dashboards that provide comprehensive visibility into network performance, traffic patterns, and security threats. This visibility enables organizations to proactively detect and resolve issues, optimize network performance, and ensure network resiliency.

5. Robust security and compliance

Managed connectivity solutions prioritize security and encryption to protect data in transit. These solutions establish secure tunnels and encrypted connections, ensuring the confidentiality and integrity of data as it moves between different locations or cloud environments.

By adopting a centralized managed connectivity approach, organizations can harness these benefits to not only enhance network resiliency but also drive operational efficiency and improve the overall quality of their network services.



The InterCloud approach

InterCloud's managed cloud connectivity solution is designed to empower enterprises with neutrality, agility, simplicity, security, and enhanced multicloud networking capabilities. By effectively addressing the limitations of traditional connectivity approaches, InterCloud enables enterprises to achieve resilient, efficient, and optimized network connectivity across their global operations.

InterCloud's centralized managed platform is built upon several foundational principles that ensure network resiliency and flexibility:

Comprehensive connectivity options

InterCloud provides a diverse range of connectivity options, including private connectivity, service hubs, and managed peering. This flexibility empowers global enterprises to tailor their network infrastructure for maximum resiliency and performance.

Global reach and redundancy

With a presence in multiple geographic locations and strategic partnerships, InterCloud ensures redundancy and reliability in network connections across the globe. This global reach minimizes the risk of disruptions and strengthens network adaptability.

Neutrality for optimal connectivity

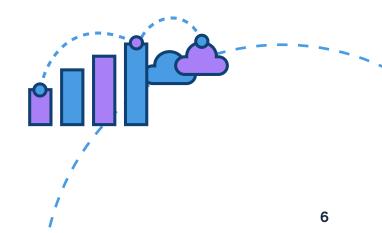
InterCloud's emphasis on neutrality allows customers to benefit from the best connectivity routes without being locked into a single vendor. This neutrality enhances network adaptability and costeffectiveness.

Robust security measures

Security is a top priority for InterCloud, with features such as traffic segmentation, isolation capabilities, and compliance expertise safeguarding against threats. These security measures protect the integrity of data as it moves across the network.

Agility and compliance support

InterCloud's agility, support for regulatory compliance, Network Functions Virtualization (NFV) services, and cloud-to-cloud interworking further enhance network resiliency. This adaptability ensures that enterprises can meet evolving network requirements.





Benefits of InterCloud

InterCloud's solution and range of managed services offer several compelling benefits for enterprises seeking to optimize their network connectivity:

Global and consistent connectivity:

InterCloud's solution is fully agnostic and complementary with any network provider, offering flexibility and costeffective consumption-based models.

Single end-to-end network performance SLA:

InterCloud provides a unified, managed service with a robust SLA, ensuring reliable and highperformance connectivity across hybrid and multicloud environments.

Simplified operations and management:

InterCloud's platform offers centralized tools for monitoring, observability, and management of cloud connectivity services. This streamlines performance management, reduces networking and IT admin overheads, and enhances operational efficiency.

Application-level customization and scalability

InterCloud's service portfolio enables enterprises to build customizable connectivity solutions, choose their network functions, and scale rapidly to meet evolving needs.

Enhanced security and compliance:

InterCloud's comprehensive security features, along with centralized management and customizable connectivity policies, ensure data security, compliance. and governance.







Act now for network resiliency

Network resilience is vital. It keeps businesses running smoothly, boost customer satisfaction, and meets strict service standards. Without it, operational costs soar, and data breaches and downtime can devastate both finances and reputation.

As businesses grow and evolve, sticking to old connectivity methods brings risks.

Traditional solutions, like in-house setups or telecom providers, limit your resilience and ability to adapt to challenges or future needs.

That's why managed cloud connectivity is crucial. It ensures your network is ready for anything with built-in backup, scalability, simple management, and strong security.

Don't wait for disaster to strike. Take action now to boost your network's resilience. Contact us today to learn how our solutions can make your network resilient, efficient, and ready for the future.



About InterCloud

InterCloud's end-to-end global connectivity platform eliminates the complexity in deploying the cloud, giving businesses full control over the security, sovereignty, and performance of their critical data traffic with complete peace of mind.

Working with organisations to help them transform global connectivity, reduce network complexity, and accelerate growth and innovation, InterCloud is a trusted advisor to some of the world's leading brands when it comes to leveraging the cloud for future success.

With offices across Europe, the company's platform is underpinned by its team of cloud experts who guide customers to implement effective strategies to leverage the power of the cloud across their organization – making global connectivity a driver for business performance.

www.intercloud.com