

CLOUD CONNECTIVITY

Things That Your Provider Should Have Told You



5 Must-know Things When Managing Your Cloud Connectivity

Demand for cloud connectivity is continually rising globally, whether that be to support a private, public, hybrid or multi-cloud environment. The global pandemic has further caused a surge in this growth in terms of adoption, infrastructure, and development, with cloud spending rising like never before.

Managing cloud across the enterprise WAN has become increasingly important – especially when involving multiple clouds, sites and remote users. This means it is now critical to take a closer look at the WAN architecture in order to maximise cloud efficiency, performance and security. Many enterprises have turned to providers to deploy cloud-first technologies such as SD-WAN for better visibility and control across the WAN. However, many have ignored the importance of the underlying network. Furthermore, not all service providers today have the expertise to ensure end-to-end guidance and technical support across solution design and day-to-day operations.

In this eGuide, we list down five must-know things that your service provider may not have told you about but is critical to the success of managing cloud connectivity across your WAN.

Cloud's Biggest Hidden Costs

Data egress fees can be one of the cloud's biggest hidden costs, a key factor that is usually overlooked by enterprises.

Most cloud providers allow you to input your data for free (ingress) but will charge a large fee whenever your applications write data out from the cloud to your users, other applications and sites (egress).

A cloud solution that does not incorporate the impact of data leaving the cloud environment can lead to significant data egress costs especially when your deployment of workloads and applications in the cloud increases.



P Tips

You should leverage a private network backbone for direct connection to your cloud services. This way, you get a "private highway via a private gateway" between the clouds and your network. Not only does this approach reduce packet loss and offer greater security of data in transit, but in many instances, also greatly reduces the cost of data egress.

For multi-cloud environments, enterprises should consider having an overlay controller to orchestrate connectivity directly between clouds utilising private connectivity transport. Not only does this help to reduce data egress cost, it can also reduce transit and tromboning impacts on data as it moves between clouds, users and sites.

Solutions for Managing Multi-Cloud Sprawl

Strategically distributing your applications and data between multiple cloud providers can achieve greater efficiencies and economies of scale. However, when using more than one cloud, operational visibility and control can often be challenging, not forgetting the need to deal with multiple service providers. Over time, multi-cloud spawl can result in IT governance challenges, security inconsistencies and in many cases, higher costs.

🖗 Tips

You should work with a service provider that can simplify the connectivity between the clouds, sites and users.

It is important to consolidate multi-cloud deployments into a unified networking strategy which includes security and orchestration.

Having a single, common controller and service provider for managing multiple cloud network environments up to the VPC/VNET level can enhance operational visibility, security and control across the network. You should look at solutions that enable you to build a repeatable network architecture based on native cloud constructs.

For an even more advanced architecture like SASE, SD-WAN integrated with cloud security should be considered.

SD-WAN Network Underlay Matters

More often than not, the transport component of a network is overlooked when moving to multi-cloud.

For enterprises with multiple clouds over multiple sites, simply overlaying SD-WAN on low-cost broadband is not a 'one size fits all' connectivity option that suits every application, user and location. This can lead to congestion and application performance issues for end-users.

Beware of service providers that solely offer SD-WAN over your existing network or suggest SD-WAN with Internet for an appealing short-term ROI saving.



Tips

The path that your data takes is just as dependent on the quality of the transport as a car journey is dependent on the quality of the roads it drives across. Likewise, the underlay transport network is just as important as the SD-WAN service.

Get your service providers to first work with you on your cloud connectivity strategy and architecture based on your mission-critical applications and business needs.

Your solution needs to support a growing mix of private and public cloud services across different locations whilst giving you control over a flexible network infrastructure that supports your different levels of application and performance requirements.

Architecture Design Matters

As companies deploy more functions and services in the cloud, the need to consider how remote functions interact becomes increasingly important.

To tailor for a high-performance multi-cloud architecture, you must consider three levels of architectural design.

The first two are part of your Business Architecture – the functional architecture of your applications, and your data and workload construct. The last point refers to the design of your network, based on the interaction of your business architecture, how critical your applications are, as well as external interfaces.



🖗 Tips

Your networking design underpins the performance of your cloud functions.

However, it should be designed based on the needs you have from your Business Architecture and how it interacts with itself, your users, partners and external sources.

You can design a flexible network underlay that focuses on the mission-critical elements, whilst utilising overlay solutions to manage the whole process end-to-end.



Alternatives to Point-to-Point Cloud

Most cloud providers offer direct connectivity for interfacing with their cloud. While such point-to-point connections to the cloud can be an acceptable option, they offer little value in terms of flexibility and scalability - once you buy a port, some cloud providers make it difficult to scale up the bandwidth and require you to buy an additional port.

In addition, when enterprises move to multi-cloud providers, they face challenges of managing different interfaces from each provider.

🍄 Tips

Find a provider that can provide secure, scalable and on-demand direct interface with leading cloud providers. Such providers should not only offer the direct cloud connectivity that you need in the present, but can also connectivity to multiple clouds and a range of other flexible solutions. This is important for future-proofing your connectivity and creating new opportunities to scale operations and support grow through a multi-cloud strategy.





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Fast, Flexible, And Fit For The Future

You can simplify and accelerate your cloud journey by finding a provider that goes beyond the basics.

With a comprehensive approach to the underlay and overlay network technologies that offer opportunities to efficiently connect to multiple cloud providers, you can confidently move forward with an expert partner and reap the benefits of your cloud strategy.



Epsilon Telecommunications is a leading global connectivity provider. We serve enterprise, carrier and channel customers with a portfolio of next-gen connectivity, voice and colocation services. Together with Infiny, our award-winning NaaS, we offer on-demand connectivity that comes with visibility and control.

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