CONNECTING THE CLOUD WITH ON DEMAND INFRASTRUCTURE

March 2017

GLOBAL NETWORKING NEEDS A NEW MODEL FOR CONNECTING THE CLOUD. TRADITIONAL NETWORKING MODELS DO NOT MATCH THE NEEDS OR EXPECTATIONS OF CLOUD-FOCUSED BUSINESSES.

Today, network infrastructure needs the same flexible and dynamic characteristics that we see in cloud services. When the network is flexible and dynamic, the industry can move beyond a point-to-point destination-to-destination approach. Enterprises need network services to evolve and be completely tailored to the cloud ecosystem. Network infrastructure must mirror the simplicity, agility and efficiency of the cloud or face becoming obsolete or useless to users.

The future is on-demand network infrastructure that is focused on supporting cloud services that deliver the performance, quality of service (QoS) and agility demanded by enterprises globally. When access to network infrastructure is simple, secure, agile and on demand, it creates new possibilities for cloud service providers, enterprise customers and ultimately end users.

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CLOUD DISCONNECT

There is a disconnect between network infrastructure and the cloud services it is enabling.

Traditional network services were delivered in a model that suited two applications: voice and data. They evolved into better and more efficient ways to deliver voice and data, which met customer expectations at the time and improved on existing ways of doing business.

The model worked because the user needs were simple and required little in terms of performance or flexibility. Gradually, these services were delivered with very little differentiation and as the market has seen, rapid price erosion. But the model worked.

Growth in cloud has changed all that and customer needs have grown from basic connectivity to demanding full cloud-enablement platforms. Cisco Systems forecasts global cloud IP traffic will grow at a CAGR of 30% between 2015 and 2020. Global cloud IP traffic will account for more than 92% of total data centre traffic by 2020.

That's more than a disruption in the market. That's an evolutionary change, which has yet to be reflected in global networking architectures. It is obvious that cloud is the future for enterprises but as a core component of the cloud ecosystem the network needs to catch up.

So what is missing from networking today? It is a friction-free experience when connecting, procuring, managing and delivering infrastructure that supports cloud services. Enterprises are faced with a complex market that is time and resource intensive to navigate and ultimately is not completely tailored to meet their needs.

A FRICTION-FREE EXPERIENCE

Global connectivity does not need to be treated as separate from the cloud ecosystem. Networking access to cloud platforms like Amazon Web Services, Microsoft Azure, Softlayer or Google Cloud Platform can be streamlined with some basic components.

When networking is integrated into the cloud ecosystem then enterprises can have friction-free access to these platforms and support the growth of cloud services in their business knowing the network is available, secure and scalable.
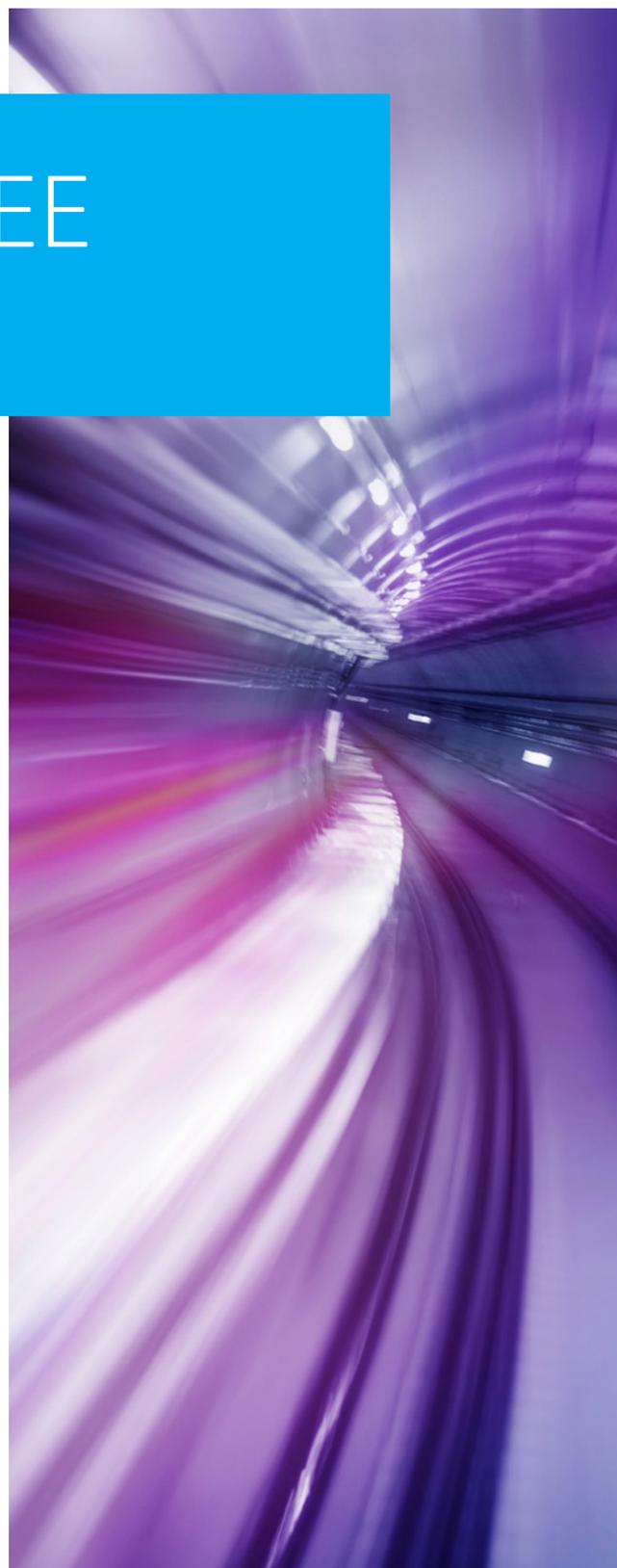
THE KEY COMPONENTS

Portals

Procurement and management of global network infrastructure must move online. Just as the buying and selling of goods and services in other industries leverage eCommerce-based customer experiences, network infrastructure procurement can be web-based. That gives customers and suppliers the ability to rapidly provision services and move beyond the largely email and phone call based procurement of today.

The advantage of web portals is that they enable anywhere, anytime purchasing and adjustment of network services. This gives cloud-based businesses a familiar level of transparency into active connections, service quality, service level agreements (SLAs), pricing, and even Google Maps based visibility of enterprise locations and destinations.

Automation

If network services are enabled by a portal or an API, provisioning must be supported by new levels of automation on a global scale. Automation is key to network agility and providing cloud services with the flexibility to grow and scale.

Networks that do not have automation as a centrepiece of their model still rely on human intervention and often have long delivery times. This slows the rollout of cloud services and takes the control away from the user. Automation is about giving users the ability to adjust and scale services rapidly and removing the limits or barriers to customising and shaping network services to meet their specific business needs.

When a portal is in place and is supported by automation on a global scale, network infrastructure can be accessed and provisioned the same way you buy cloud services from providers like Amazon Web Services. It matches the agility available in other services and aligns networking with the cloud world.

Security and QoS

To harness the full power of the cloud, the network needs to cater for hybrid cloud scenarios, offering the full combination of public IP access and private Ethernet WAN with QoS and visibility for full secure network control.

Matching the right access technology with the right network architecture creates the robust environment enterprises and cloud service providers are looking for.

Application performance is critical in today's cloud offerings as well as real-time visibility into network performance, such as latency, jitter, throughput are all vital components to provider a fully assured solution.

On Demand Infrastructure

The final piece of the puzzle is true end-to-end connectivity from enterprise location or data centre sites to destinations around the world. On demand infrastructure requires a platform that brings together networks from a variety of providers and enables them to be accessed via a single relationship. When networks are preconnected to a single platform, enterprises can build their own networks and connect users to different clouds wherever they may be in the world.

On demand infrastructure delivered with this model is simple and efficient. It doesn't require procurement teams to build relationships with service providers around the world or understanding local market dynamics and pricing. They can simply use the portal to access all the available infrastructure in the world from a web browser.

It is particularly time and cost efficient when connecting enterprise locations, as the access network can be complex to manage and maintain globally. On demand infrastructure with preconnected networks removes this requirement and simplifies it into just mouse clicks.

HOW DOES IT WORK IN THE REAL WORLD?

There are only a handful of companies worldwide that can offer a networking model that delivers access to the leading cloud providers in this way. Telehouse in the London Docklands hosts one of the largest business ecosystems in the world, with unrivaled access to global connectivity providers, Internet exchanges and Internet service providers.

CLOUD SERVICE PROVIDERS

Microsoft Azure

Office 365

TELEHOUSE *Cloud Link*

COLOCATION

OFFICES
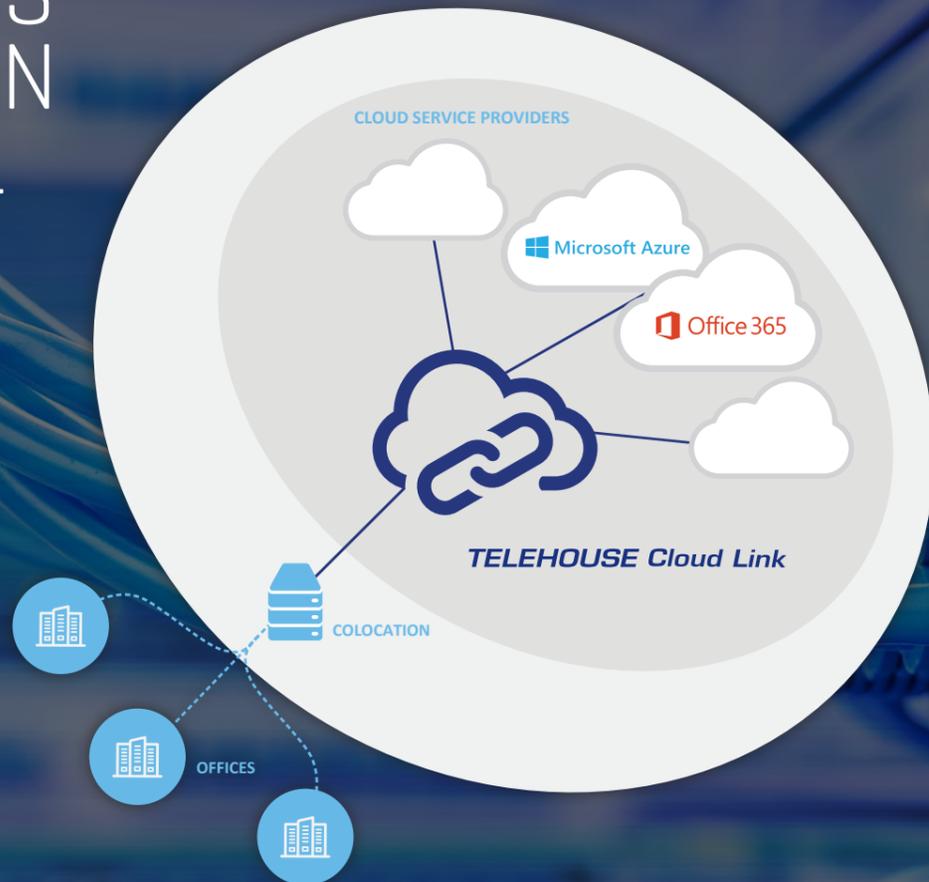
The unrivalled connectivity available at Telehouse London Docklands makes it the ideal environment for enterprises and service providers to build their hybrid IT solutions, and for Cloud providers to host their infrastructure.

"Single point of contact to support customers' needs 24/7"

Telehouse recently launched Telehouse Cloud Link, a connectivity exchange that provides its customers with private, secure and low latency connections to multiple cloud service providers – further enhancing this connectivity.

This means one physical connection to the platform can enable enterprises to connect to multiple cloud service providers through a virtual LAN connection.

TELEHOUSE CLOUD LINK HAS A NUMBER OF KEY BENEFITS:

Telehouse customers can now provision connections instantly through the online portal, and can scale bandwidth as their business demands. Furthermore the dedicated IT Operations Centre provides a single point of contact to support our customers' needs 24/7. This ability to connect to multiple clouds through a single source removes the complexity of traditional network procurement.

Guaranteed Bandwidth
Bypass the internet for a more predictable service - scale bandwidth as your business demands

Private and Secure
Direct, private and secure connections to Cloud providers providing peace of mind

Maximum Uptime
Cloud connections are fully redundant and Telehouse offer colocation uptime SLA's of 99.999%

Seamless
The dedicated online portal allows you to seamlessly procure and manage access to Cloud providers in real time

Multi-Cloud
Access multiple Cloud providers through a single connection
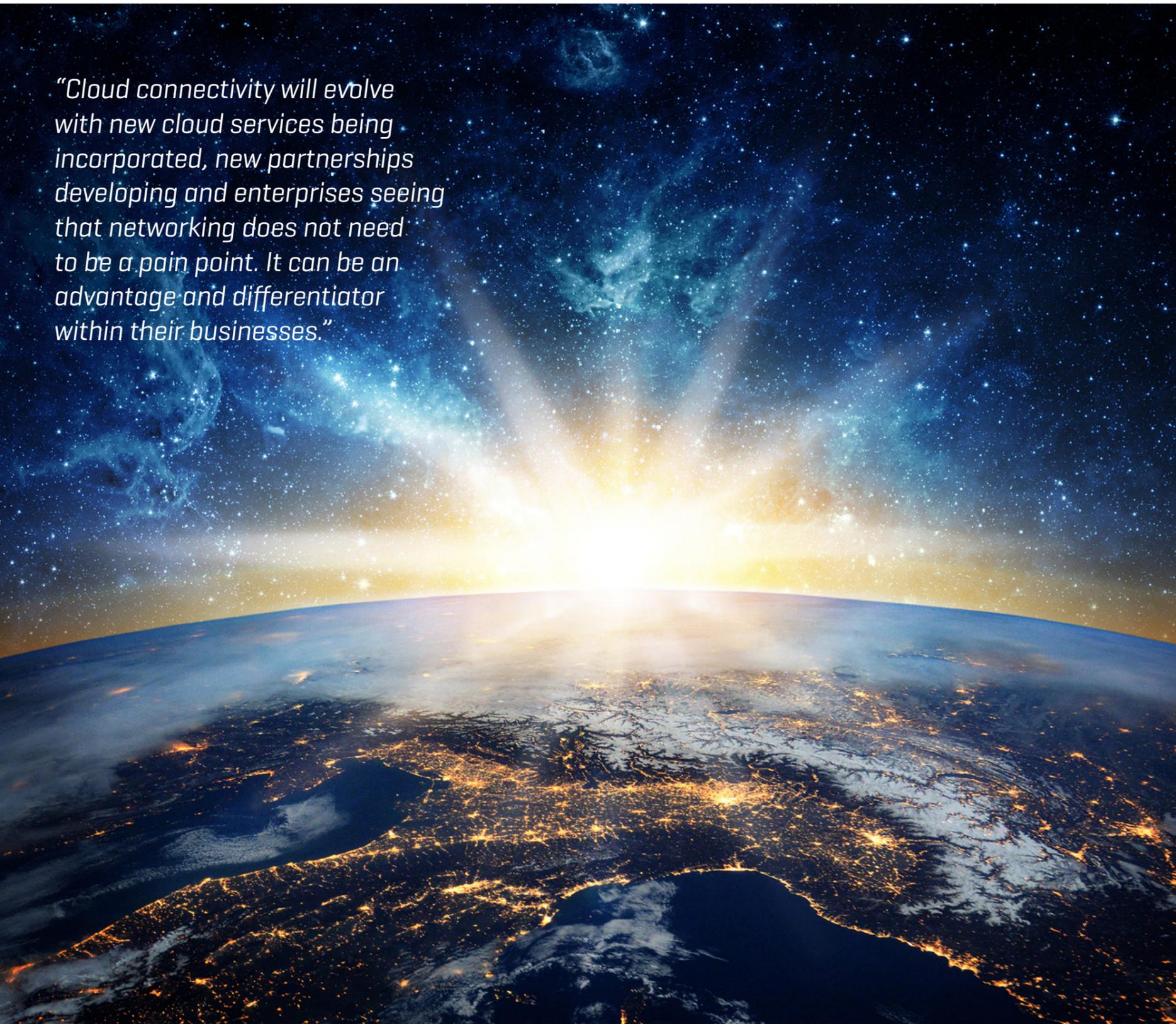
"Cloud connectivity will evolve with new cloud services being incorporated, new partnerships developing and enterprises seeing that networking does not need to be a pain point. It can be an advantage and differentiator within their businesses."

Telehouse Cloud Link enables the next-generation of connectivity and cloud services. Once this new model is applied within the enterprise there will be freedom to develop and grow cloud services with foundation in flexible on demand infrastructure.

Cloud connectivity will evolve with new cloud services being incorporated, new partnerships developing and enterprises seeing that networking does not need to be a pain point. It can be an advantage and differentiator within their businesses.

As platforms and portals evolve, users will be able to see network quality and performance in real-time and be able to troubleshoot any issues that might pop up. With real-time network monitoring built into the portal, users will have one central control panel for their entire network infrastructure and be able to push cloud innovations even further. Visibility and transparency mean that the control is in the hands of the user and they can see how well their network is supporting their cloud services.

This will be key to the development of new services and the overall evolution of cloud. Guaranteed quality increases opportunities for innovation and removes the limits on what cloud services can do for an enterprise.

It also will show the way forward for the rapid rollout of the Internet of Things and accelerate the delivery of complex and global applications. It is too complex, time consuming and awkward to do it any other way. When network infrastructure mirrors the cloud services it delivers, it will accelerate the deployment of the Internet of Things and expand the possibilities of networked world.

The first step is changing the networking model and supporting cloud connectivity with a fully integrated platform.

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For more information visit:
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