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SIMPLIFYING THE JOURNEY TO MULTICLOUD WITH INTERCONNECTION

An **Equinix** and **Iguana Solutions** Briefing Paper

WHY READ

As enterprises seek to respond to the challenges associated with the post-Covid reality and the opportunities presented by the digital economy, the move to multicloud architectures is gathering pace.

But as firms make the transition, they're finding that multicloud is not the panacea for all ills. Indeed, it presents specific challenges of its own.

Interconnection has a vital role to play in overcoming these challenges and enabling you to realise the full potential of multicloud. It's one of the reasons why interconnection services are now growing at an exponential rate.

IN THIS PAPER, WE LOOK AT:

- THE FORCES DRIVING THE MOVE TO MULTICLOUD
- THE PROBLEMS YOU'RE LIKELY TO FACE AS YOU MAKE THAT JOURNEY
- HOW INTERCONNECTION SOLVES THE CHALLENGES ASSOCIATED WITH THE MOVE TO MULTICLOUD
- WHY EQUINIX IS THE WORLD'S LEADING INTERCONNECTION PROVIDER
- HOW IGUANA SOLUTIONS HELPS YOU TAKE ADVANTAGE OF INTERCONNECTION TO SIMPLIFY YOUR MULTICLOUD JOURNEY

MULTICLOUD MOMENTUM

By 2022, at least 60% of global GDP will be digitised, with growth in every industry fuelled by digitally-enhanced offerings, operations and relationships.[1] As enterprises seek to respond to the opportunities presented by the digital economy – and support new, real-time interactions between people, things, locations and data – traditional on-premise infrastructures are failing to deliver.

A number of factors are driving the move away from traditional infrastructures.

The importance of ecosystems

Businesses are becoming increasingly interconnected, needing to connect to ever more diverse ecosystems of suppliers, partners and customers. Digital ecosystems will account for more than $60 trillion in revenue by 2025 – that's more than 30% of global corporate revenue.[2]

Research from Accenture has shown that almost half of over 1,252 global business leaders are actively seeking ecosystems, with 66% of those surveyed believing participation will enable their business to innovate and 60% anticipating increased revenue growth.[3]

Supply chain digitisation

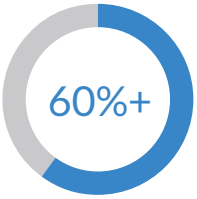
As the economy becomes increasingly digital, so are supply chains. Firms are now using innovative technology, such as Internet of Things (IoT) and Artificial Intelligence (AI), to integrate and automate their entire supply chains.

One survey of manufacturers found that new technology was expected to be the biggest driver of supply chain change, with data and analytics plus IoT topping the list.[4] .

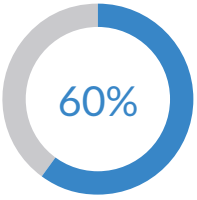
Moving IT closer to customers

Firms also need to reach customers in different ways and in different places, enabling seamless omni-channel interactions across globally-dispersed customer bases.
The Covid crisis has accelerated the shift to online sales, which was already under way, with retail ecommerce sales forecast to increase by 50% between 2020-2023 – up from $4.93 trillion to $6.52 trillion.[5]

As a result, moving the location of IT services closer to customers is now increasingly important.



of global GDP predicted to be digitised by 2022[6]



of global business leaders anticipating increased revenue growth from participation in ecosystems[7]

20+

The number of major countries that now require their citizens' data to be stored on physical servers located in the country[8]

Restrictive regulations

At the same time, regulations governing where data is hosted and how it's managed are becoming more restrictive. More than 20 major countries now require their citizens' data to be stored on physical servers located in the country.[9]

Remote working

The limitations of traditional infrastructures, and the reliance on highly-centralised resources, have been highlighted by the Covid crisis. The sudden switch to entirely remote workforces all needing access to corporate IT systems, and massively increased in demand for online collaboration tools, led to significant performance issues. The network links users relied on to access centralised systems, public cloud platforms and the internet all experienced unprecedented congestion.

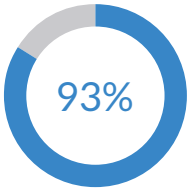
Centralised architectures are crumbling

Traditional, centralised architectures are unable to support the demands of today's digital business. The need to simultaneously become more agile and efficient, while supporting real-time interactions at scale, is driving many businesses to move towards a hybrid, cloud-based infrastructure strategy. The increased reliance on cloud-based collaboration tools and cloud-based solutions for the likes of VDI and VPN gateways, has accelerated this trend. In one survey, 61% of IT professionals cited speed and agility as the #1 goal for their companies migrating to the cloud.[10]

Different platforms for different gains

The need to support diverse workloads, and locate services closer to their users, means that enterprises increasingly need to utilise a range of public cloud platforms. Each one offers different technology and location advantages.

In 2020, 93% of enterprises surveyed said they have a multicloud strategy, with an average of 2.2 public and 2.2 private clouds per organisation.[11] Indeed, the hybrid cloud market is expected to more than double between 2018 and 2023 – up from $44.6 billion in 2018 to $97.64 billion in 2023.[12]



The percentage of enterprises surveyed who said they have a multicloud strategy[13]

$97,64bn

$44,6bn

The expected rise in value of the hybrid cloud market between 2018 and 2023[14]

TRANSITION CHALLENGES

To ensure a smooth and successful move to multicloud, you need an understanding of the problems you're likely to face. Here's an overview of the key transition challenges.

Performance and availability

Relying on the public internet to connect to cloud platforms leads to performance and availability issues which degrade services. This became painfully apparent when the Covid-19 crisis led to massive spikes in internet traffic.

However, purely private networks don't provide a scalable solution. Traditional hub and spoke WAN architectures quickly become overloaded. You're faced with either accepting the escalating costs of bandwidth upgrades, or suffering latency issues that degrade users' experiences.

With increased levels of remote working likely to continue even after the Covid-19 crisis, a reliance on centralised access to public cloud platforms will become increasingly unsustainable. Already, 74% of companies have said that they intend to shift some employees to working remotely permanently.[15]

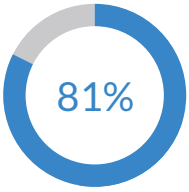
Security and compliance

With data and applications distributed across a mix of private infrastructure and multiple public cloud platforms, and with more users accessing company systems and data from remote 'off-net' locations, a range of new security and compliance issues arise. Over half – 54% – of security professionals believe that public cloud environments have a higher risk of security breaches compared to on-premises.[16]

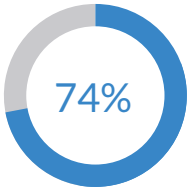
Transitioning to multicloud means rethinking your security model, including:

- What tools to use
- How much you want to control yourself and to what extent you want to utilise third-party security services
- How to ensure that the security model of the public cloud providers is aligned with your own

One survey of cybersecurity professionals found that only 16% felt that traditional security tools are sufficient to manage security across the cloud.[17] Gartner predicts that "through 2022, at least 95% of cloud security failures will be the customer's fault."[18]



The percentage of organisations identifying security as a top cloud challenge[19]



The percentage of organisations identifying compliance as a top cloud challenge[20]

Management complexity and cost

Operating a distributed architecture involving multiple cloud platforms introduces additional management complexity and cost. A recent survey of IT and network managers found that complexity was now the #1 challenge they faced in relation to their WANs.[21]

A common scenario is for a business to build its management toolset around a particular vendor's technology, such as VMWare, Citrix, Microsoft or Oracle. As they move workloads and data to public cloud platforms, they need to employ new tools to get full visibility and control. They may also end up with applications that have different components running in different places, increasing the management challenge.

Retaining flexibility

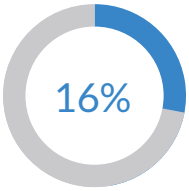
As you transition more workloads and data to cloud platforms, you need to avoid lock-in. It is vital to retain the flexibility to accommodate changes dictated by technology, commercial or business pressures. Although public cloud platforms often operate a 'pay-as-you-go' model, there may still be contractual commitments which reduce flexibility.

Skills gaps

Few IT teams have experience of managing a major cloud migration. Recruiting people who can plan and manage your transition can be difficult. Over three quarters – 77% – of enterprises report a lack of skills in multiple cloud disciplines.[22]

Avoiding disruption

Your migration needs to be carefully planned to avoid application downtime and to maintain data integrity and security. For organisations with very big databases, the time taken to complete a migration can also be a major issue.



The percentage of cybersecurity professionals who felt that traditional security tools are sufficient to manage security across the cloud[23]

THE ROLE OF INTERCONNECTION

Interconnection is key to overcoming the challenges of migrating to a distributed, multicloud architecture, simplifying the journey and providing an essential building block of the global digital economy.

With interconnection, you can directly and securely connect an increasingly distributed global mix of employees, partners and customers – as well as your most valuable asset: your data.

Interconnection is now the cornerstone of integrating, securing and scaling digital business. Enterprise consumption of interconnection bandwidth is forecast to experience 7x growth by 2022.[24]

7x

The forecast growth rate by 2022 of enterprise consumption of interconnection bandwidth[26]

THE ADVANTAGES OF INTERCONNECTION

Private, secure and fast connections

Interconnection hubs, such as those provided by Equinix, offer private, secure and fast connections to multiple cloud providers. They are increasingly being utilised by businesses to simplify their journey to multicloud architectures. The fastest growing category of interconnection is enterprises connecting to cloud and IT services providers, which is forecast to grow at 112% CAGR through to 2022.[25]

Better quality, higher speeds

Eliminating dependency on the public internet, interconnection improves user experience and application performance by providing private, high-speed, low-latency connectivity to public cloud platforms. You can take advantage of direct, dedicated connections to public cloud platforms, with speeds up to 10Gb. Moreover, pressures on private networks can be reduced by enabling traffic to cloud providers to be offloaded onto direct connections within the interconnection hubs.

Utilising interconnection hubs to locate resources closer to the cloud platforms, rather than in centralised data centres, enables you to take advantage of very low-latency connectivity. Equinix, for example, offers direct connections to leading cloud providers of less than 5 milliseconds in many markets – ideal for mission-critical, low latency workloads.

Improved performance, reduced costs

By enabling private networks to be re-architected to meet the needs of distributed user communities and distributed ecosystems – including using virtual network hubs to move cloud access closer to users – interconnection improves performance and reduces costs. More traffic can be kept in-region, and the distance between users and the services they need is shortened.

Interconnection hubs also optimise connectivity between your own private infrastructure hubs, providing flexible, scalable and efficient connections between applications and data repositories across different cities, countries and regions.

Simplified management

Provisioning and management are simplified with connectivity to multiple cloud providers that is controlled via a single interface and accessed via a single port.

Software-defined interconnection enables easy discovery of and connection to new cloud providers. You can easily tie in a new hosted application or add a new cloud provider.

Minimised risk

Security and compliance risks are reduced by enabling security control points to be deployed within interconnection hubs – closer to the clouds, customers, employees and partners that you need to connect to.

Taking an interconnection-first approach, combined with a zero-trust model, enables control of all business communication through traffic exchange points, with local private data repositories and multicloud application and services integration. You can manage constant change in your multicloud architecture, while maintaining control at the zero-trust exchange points.

Easy workload and data movement

Easing migration challenges and reducing lock-in risk, interconnection hubs enable workloads and data to be quickly, securely and easily moved to, and between, cloud providers.

112% CAGR

The forecast growth rate of enterprises connecting to cloud and IT services providers – the fastest growing category of interconnection[27]

PLATFORM EQUINIX® : THE WORLD'S DIGITAL INFRASTRUCTURE PLATFORM

Equinix enables you to bring together and interconnect the infrastructure you need to fast track your digital advantage.

Ensuring your success as a digital leader, Platform Equinix brings together all the right places, partners and possibilities to create the foundational infrastructure you need. With a global footprint of 210+ data centres, you can locate adjacent to public clouds and networks to create best-of-breed hybrid multicloud architectures. You can also build physical or virtual infrastructures on the industry's most consistent, secure and sustainable platform. And you can deploy in proximity to customers, geographies and locations to achieve low-latency high performance.

Equinix is the only digital infrastructure company with private access to all major public cloud platforms, including Amazon Web Services, Google Cloud Platform, Microsoft Azure and Oracle Cloud. More than 210 data centres across 5 continents meet the colocation and connectivity needs of any enterprise.

Equinix Fabric™ is a vital enabler of the journey to multicloud. It directly, securely and dynamically connects distributed infrastructure and digital ecosystems on Platform Equinix via global, software-defined interconnection.

Available across 40+ locations, Equinix Fabric is designed for scalability, agility and connectivity over a self-service portal or API. Through a single port, you can discover and reach any cloud provider on demand, locally or across metros, to drive your digital future forward.

FACILITATE YOUR TRANSITION TO MULTICLOUD WITH IGUANA SOLUTIONS

As a privileged partner in the **modernization of its clients' IT platforms**, Iguana Solutions is helping more and more companies to set up hybrid platforms as part of so-called **multicloud** strategies.

Whether it is to take advantage of the infinite growth capacity of the public cloud while having the possibility of hosting their data within their Private Cloud, or to directly connect different Cloud platforms to each other in order to secure and accelerate the exchange of data, companies are seeing more and more interest in implementing a multicloud strategy.

However, while there are many ways to implement this strategy, there is a common solution to achieve it: **interconnexion**.

As a trusted Equinix partner, **Iguana Solutions** allows you to leverage the power of cloud interconnection to address your needs.

By harnessing the power of Platform Equinix®, Iguana Solutions empowers you to meet the challenges of multicloud, and thus enjoy all the benefits of a distributed IT infrastructure.

Specializing in complex managed infrastructures based on hybrid solutions, Iguana Solutions offers you the expertise, advice and value-added services you need to plan and successfully migrate to a fully optimized multicloud infrastructure: do not hesitate to contact us to talk about your project.

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