CLOUD GATEWAY

5 Hybrid Cloud Use Cases

Seamlessly adopt a hybrid approach in your organisation

Hybrid Cloud

Many organisations are looking at cloud repatriation - bringing workloads and applications back from public cloud to on-premise data centres - due to escalating operational costs and specific security and compliance needs. According to an IDC survey this is a growing trend, with 80% of respondents reporting repatriation activities.

The benefits that cloud can bring to businesses are widely understood. The cloud promised to transform businesses with speed, security and scale. However, it can only achieve that if it's the right tool for the job.

The same IDC survey reported that 93.2% of survey respondents are moving to adopt a hybrid cloud approach in order to address their business needs. The survey found that these infrastructures were generally made up of one or two public clouds plus one or two private cloud environments. Hybrid cloud strategies are becoming the enterprise 'norm'.

Operating across a hybrid cloud infrastructure is essential for organisations to keep their business competitive and reduce costs, whilst maintaining performance and ensuring regulation and legislation compliance, and protecting against cyber threats.

In this ebook, we'll be sharing 5 hybrid cloud use cases to identify where your organisation can seamlessly adopt a hybrid strategy, with full visibility and control of your network.

5 Hybrid Cloud Use Cases

Availability, recovery and continuity

Traditionally, these have been seen as separate issues to mitigate and prepare for. However, looking at the future of work, they should be considered as one.

From a technical perspective historically, business continuity and disaster recovery would consist of one 'live' data centre and one that was cold and shut down - only to be spun up and warmed up in the case of a disaster.

In the new way of working, where remote culture will remain more prevalent than it ever has before, there's no need to prepare your network to move the workforce and address these three areas separately. With 70% of employees stating that they will maintain a flexible, remote working structure, the need to move an already remote workforce is removed.

Fundamentally, hybrid cloud brings organisations the ultimate in choice. Being able to use the best proposition for business needs, be that public cloud, private cloud or on-premise, from one or many vendors - or even a myriad of choices within all of these - ultimately hybrid cloud gives organisations the availability needed, at a risk profile that suits the business.

Recovery and continuity should be built to be able to immediately make use of the different paths and resources that are available to the organisation, through the hybrid cloud infrastructure. Public cloud is marketed as being the best suited solution for recovery and continuity. For each organisation, with varying needs and operating in different industries, this may not be the blanket truth. Having a blend of options afforded by hybrid cloud infrastructure truly provides the best proposition for dealing with availability, recovery and continuity in a way that suits specific business needs.

Private networking

With industry hype around public cloud, organisations are taking a de facto stance that when deploying a hybrid cloud strategy, public cloud is the default hosting solution with bolt-on or layered private architectures alongside to achieve strategic objectives. Currently it's very rare for companies to approach infrastructure from a private cloud first perspective.

Whilst it's technically possible to use public cloud on a private comms network, this must ultimately be routed through a data centre, such as Equinix's global interconnection platform. In order to access the cloud exchange, there must be a presence in the data centre itself. This naturally, and more easily opens up the choice and possibility for the organisation to take a hybrid cloud position, bringing agility and pace of change to the business for overall competitive advantage.

Public cloud was originally designed to be used to and from the internet only. However the internet isn't always the right answer. Hybrid cloud infrastructure lends itself to a better blend of hybrid comms; private comms, point to point comms, VPNs, internet underlay. By return, this gives an organisation flexible hybrid cloud capabilities including, but most importantly not limited to, public cloud. Due to the nature of private networking, the option and availability of on-premise environments is opened up for the organisation.

For organisations with an internet only or public cloud only desire, private networking will facilitate that strategy, securely. However for a truly future-proofed solution, private networking opens up the capability for decisions based on the best architecture for business needs and avoiding solutions defining requirements within the company.
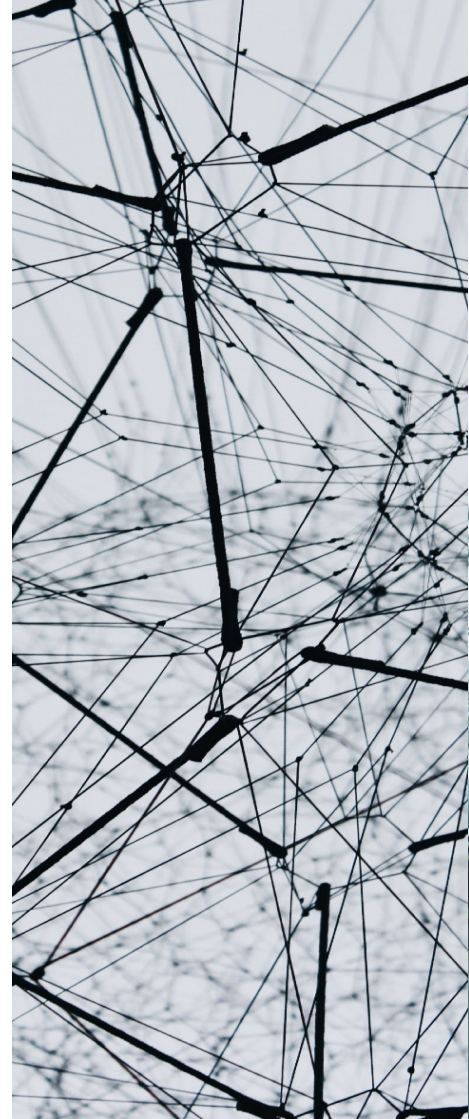
Optimise cost efficiencies

There's a general perception that the cloud is cheap - or cheaper. That's wrong. There's a perception that cloud is more cost effective than on-premise or private cloud. It's not. In both cases, it really depends on what the business requirement is as to what solution is best.

There are many examples where public cloud is absolutely the right tool for the job, as opposed to buying additional hardware to put in a data centre. There are many examples including SANs (storage area networks), amongst others, that don't necessarily lend themselves to be best placed in the public cloud.

Using a hybrid architectural approach provides the organisation with the option to optimise costs across the ecosystem. If cost is King within an organisation's objectives, then hybrid cloud opens up the most cost effective route or the cheapest route to take, be that public or private infrastructure.

One reason that organisations opt for public cloud environments is the appearance that they don't want just one option and to be in a monolithic structure. However, putting all of the infrastructure reliance on just one provider can have a huge impact on availability and engages long and expensive vendor lock-in agreements, creating the monolith that was to be avoided.

Cost efficiency doesn't always have to come down to pounds, shillings and pence. Having the flexibility of an agile, hybrid cloud network could mean that the organisation can harness the capability to spin up environments immediately. This improves time to market and revenue realisation. By having all of the options available, cost becomes something which can truly be managed.

M&A and partner ecosystems

History has shown that the big winners from the post-financial crisis, following the 2008 downturn, were those companies that acquired quality assets. Surveys show that while there will be increased diligence and longer deal timetables, 23% of senior and C-level executives are reporting no impact on their M&A intent, based on the increased number of opportunistic targets.

Bringing two companies together brings inherent challenges where each party has a different partner, technology or process for every common architecture. A Microsoft 'house' won't seamlessly gel with an AWS 'house' for example. This places increased pressure on network infrastructure. Integration needs to be achieved in a manner that allows both companies to continue business as usual but with one eye on the future goal. Hybrid cloud infrastructure can provide secure connectivity from anywhere to anything, which allows for full transition and transformation to the new company entity. Everything should be seamless with no user, be they employee, partner or customer, noticing or being adversely impacted by change.

Whilst a business is in the process of integrating it cannot fully recognise the benefits underpinning the acquisition or partnership business case. A newly formed business has to integrate at pace to deliver value and prevent the targeted synergies from eroding, whilst ensuring continued regulatory compliance in relevant cases.

A hybrid cloud model delivers organisations a lever for integration and transition, offering connectivity to multiple cloud providers and services. The fast consolidation of services brings reduced cost and complexity and architectural consistencies. The hybrid architectural approach acts as a fundamental component for continued acquisition and integration, and business evolution into the future.

Right tool, right job = flexibility

The global cloud computing industry has evolved exponentially with new cloud models and services, such as containerisation, being developed, adopted and deployed.

Organisations have key focal points for their move to the cloud in order to enable their wider digital transformation strategies. However, the promises of speed, security and scale haven't been seen by many companies as they chose just one vendor and tried to squeeze their requirements into this new shiny solution – complete square peg, round hole scenario. As a result some companies have suffered financial losses and transformation setbacks due to vendor lock-in.

What this means is that organisations now have the ultimate in consumer value – choice. The tools to be able to listen to business needs and implement combined technology solutions, to truly create an agile network and business transformation, are readily available in a hybrid model. Organisations must take time to understand business needs and find the right solutions which solve those, rather than being attracted to shiny tech and getting lost in the solution.

A single vendor may promise uptime SLAs of 99.9%, which translates to 1 trading day of downtime a year. For some organisations that would be a tremendous cost to the business. A hybrid cloud approach mitigates downtime risk and ensures that customers receive uninterrupted services and continue to be happy. Building hybrid architecture into the blueprint gives organisations the entire gamut of technology options.

A hybrid infrastructure model gives you the control and flexibility to decide what will operate on-premise and what will be migrated to the cloud. This ensures better protection for the business against lock-in vendor contracts and escalating costs, plus provides you with choices for smooth migration and transformation in the future.

The 3 considerations of hybrid cloud connectivity

CONNECT
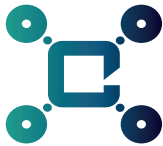
How much bandwidth will you need? Evaluate your workloads and applications so you have a clear view of the amount of traffic that will flow between your private and public clouds. Site connectivity could be made up of existing MPLS, data centre cross connect or SD-WAN over the internet. Ensure your provider can help you to start small and scale up as necessary without long SLAs delaying your transformation projects.

PROTECT

Data should be encrypted at rest and in transit. Use UTM capabilities for granular policy control. Your provider should offer URL filtering, DNS inspection, DPI, anti-virus/anti-malware as well as IPS/IDS monitoring tools for full control of your network security. Having the ability to do TLS intercept/SSL inspection will give greater visibility inside the payload, but this requires additional security, processes and overhead. Evaluate the level of security your environments and traffic needs.

INSPECT

Deploying your hybrid cloud connectivity solution isn't a one off project. Once infrastructure has been deployed it must be monitored, either through a managed service or in-house, dependent on in-house capabilities. Ensure you have advanced monitoring and analytics for in-depth traffic analysis and full network visibility. Your provider should also enable offloading of network events to your own SOC/SIEM for further analysis.

Start your hybrid journey

A number of tools are needed for full visibility of your end-to-end hybrid cloud environment. These include log management, application performance management and network performance management, plus others.

It's essential to build secure connectivity infrastructure that gives you more visibility and control. If something isn't working please don't be afraid to go and change it. You need a sustainable model so you don't spend more time reworking your pipeline and governance. Go with what's best for your business requirements – there's no one pattern that will fit everyone.

PaaS
IaaS
SaaS
CSP
WWW

IaaS
PaaS
CSP
SaaS

PSN/HSCN

ON-PREM
DC

Private Cloud

WAN
1 2 3
SITES
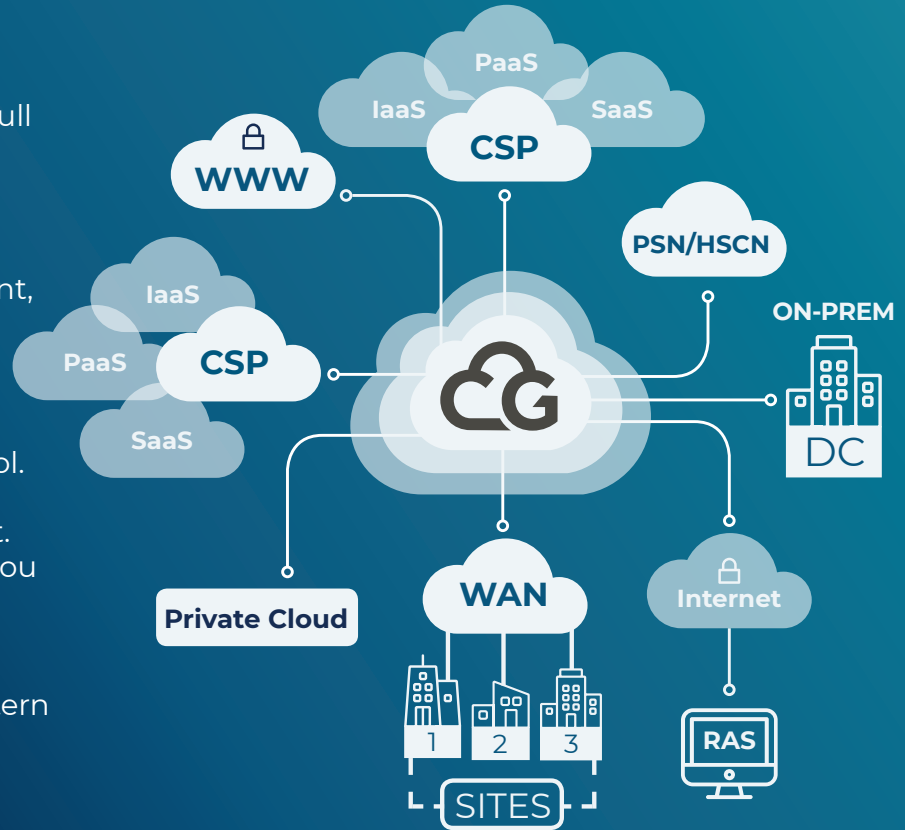
Internet
RAS

About Cloud Gateway

Cloud Gateway provides a truly cloud-native hybrid cloud connectivity platform (PaaS) which securely connects anything on your estate with multiple cloud service providers, the PSN, HSCN and the internet.

The Cloud Gateway platform allows organisations of any size to harness the power and flexibility of hybrid cloud and multicloud but with greater control, pace and visibility. Cloud Gateway secures all your internet and network traffic, with built-in flexibility to address continuous and future change and reduce your operating costs. By centralising connectivity, organisations have a single, timely and accurate source of truth, ensuring regulation and legislation compliance and protecting you from cyber threats.

Visit us at **www.cloudgateway.co.uk**
Contact us on **info@cloudgateway.co.uk**
Twitter: **@cloudgatewayltd**
LinkedIn: **linkedin.com/company/cloudgateway**