onecom

The Complete Guide

To Managing Multi-Cloud

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Managing Multi-Cloud

> ***Good multi-cloud management means not letting complexity overshadow operational advantage***

Migrating your business infrastructure to the cloud offers advantages that are so game-changing, it's becoming the rule, not the exception, to leverage them. Cloud service providers (CSPs) have risen to meet this need, focusing on specialisms to help them stand out in this exciting market.

Increasingly, businesses are cherry-picking the best of each CSP by building a multi-cloud infrastructure. A well-managed multi-cloud deployment empowers business capabilities, using the best-in-class CSP for each capability to compete at the highest levels.

But, as businesses continue to expand their multi-cloud environments, they risk losing the core benefits of cloud computing. Complexity, cost, and management of complex infrastructures begin to outweigh the cloud's core principles, turning a technology advantage into a costly burden.

Core principles of the cloud

| Flexibility | Accessibility | Scalability | Security |

CIOs want the benefits of the idea of cloud computing – the core principles that make it the most powerful business innovation of our time. They don't want to have to deal with time-consuming and costly complexity.

In this guide to managing multi-cloud environments, you'll get an overview of the market-leading CSPs and how their specialisms can enhance business operations. You'll learn the common challenges enterprises face in managing a multi-cloud environment, and the solutions Onecom offers to overcome them.

Definitions

Cloud
Run applications in a single cloud environment, whether private or public

Hybrid-Cloud
Run applications simultaneously and seamlessly in a public cloud and on-premises

Multi-Cloud
Create an environment to run applications from two or more cloud computing services, drawing on the best features of each

Why Choose Multi-Cloud?

As the cloud infrastructure market grows and evolves, the benefits of committing to a single cloud start to give diminishing returns. The longer and deeper entrenched an environment is, the less flexible and scalable it becomes.

Business agility is one of the core tenets of cloud computing. And given the speed of innovation in cloud, enterprises need ready access to the very best services and products, regardless of which cloud they live on.

The big three CSPs, Amazon Web Services (AWS), Microsoft Azure, and Google Cloud Platform (GCP), control almost 70% of the cloud market. Each platform has unique strengths that, together, make it possible to deliver a variety of business outcomes.

An enterprise can build a new mobile app on AWS, migrate an older Windows app to Azure for modernisation, and have their analytics team use Google Machine Learning to optimise and iterate.
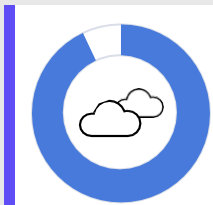
93% of enterprises have a multi-cloud strategy

Flexera

Amazon Web Services

With extensive functionality, AWS's development capabilities are unmatched. It dominates the market thanks in part to an 11-year head start and Amazon's huge investment in its platform.

AWS's suite of tools and products naturally results in a complex billing system. But, thanks to its colossal market share, it's continuing to drive down the cost of cloud computing.
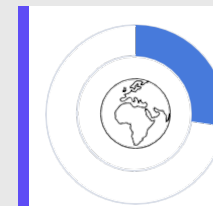
AWS controls over 30% of the global cloud market

Canalys

Microsoft Azure

Few companies have an enterprise background like Microsoft's. C-level executives with long-standing relationships with the vendor know that they can commit most of their enterprise computing needs all in one place. From productivity and enterprise software, all the way up to flexible cloud computing resources for their developers, they have one contact and one vendor.

Because it provides many of the same tools as AWS (self-service and instant provisioning, autoscaling, plus security, compliance, and identity management features), Azure is seen as the safe bet for cloud adoption.

> *Azure operates across 56 regions in 21 countries*
>
> *Microsoft*

Google Cloud Platform

While all three vendors are strong in machine learning, Google is seen as the market specialist. Its industry-leading tools in deep learning and AI, ML, and data analytics offer significant advantages.

GCP also stands out in the service department, in particular the way customers can engage Google engineers for co-development. Google has also heavily embraced open source, and its culture of innovation attracts likeminded, "unicorn-style" customers looking to capture some of that Google magic.

> *Apple spends up to $600 million on GCP*
>
> *CRN*

Challenges of Multi-Cloud Environments

Creating a multi-cloud environment gives you more power and more flexibility. But there are challenges to this approach.

Security & Compliance Challenges

To make the most of multi-cloud, you need to tackle the security and compliance challenges represented by unique portals, app migration, and the complexities of managing access.

The biggest challenge to cloud security is that as soon as you take things off-premises, your perimeter vanishes. Multi-cloud environments are a mix of services and endpoints managed by public cloud providers, employee-owned devices, and web-enabled smart devices. You need some way of maintaining visibility over this complex network.

But you can't just ringfence your entire network. Flexibility and accessibility are two of the cloud's key benefits. Without an agile approach to security, you risk losing them. Employees expect to be able to collaborate and access resources from just about anywhere and at any time, using all sorts of devices and without any negative impact on their productivity.

Having multiple clouds and data centres in different places across the world can offer great flexibility and compliance. But compliance isn't automatic. It's all too easy to run an application in an unapproved environment. Again, visibility over your environment is a key challenge here, as well as staying up to date with the latest legislation.

44% of enterprises say security and compliance is the biggest challenge to multi-cloud adoption

Lunavi

Visibility & Governance

With the rise of public cloud, developers and application teams have embraced the opportunity to access resources in minutes instead of weeks. While shorter provisioning times for public cloud presents clear benefits to any enterprise, IT teams need visibility and governance over these resources to reduce risk and ensure compliance.

But the speed and volume of virtual machines are only one side of the story. When we consider the benefit of remote access, the issue becomes more complex still. IT teams need to govern and communicate with developers working all over the world. This creates a logistical challenge of operational management that reaches beyond the technical.

Multiple CSPs Means Multiple Skill Sets

The more Saas, IaaS, and PaaS solutions you embrace, the more skilled teams you need. This is most commonly a problem in enterprises that want to move from a single to a multi-cloud environment. The investment in Azure accreditations isn't helpful when you move your analytics team over to GCP.

All the major CSPs offer support and training for developers and managers. And while it you can manage a multi-cloud environment without so much expertise, the only way to maximise the potential of a cloud service is to have access to experts in that service. But, with an IT skill gap already impacting businesses worldwide, this can be a costly endeavour.

OneCloud Managed Service Platform

As the CSP market continues to evolve and specialise, multi-cloud environments will become even more complex. What enterprises need is a way to control their portfolio of cloud services and vendors in a single, managed way. So that's what we created.

The OneCloud Managed Service Platform is delivered as a single cloud service. It allows you to keep the agility and operational simplicity of a cloud solution no matter how complex your environment needs to be. Powered by best-in-class applications from leading CSPs, and supported by cloud experts, our platform lets you work smarter.

- Remove duplication

- Improve efficiency

- Complete transparency

- Improved cost management

This is all delivered through a single portal for implementation, reporting, and invoice management.

Transparency and Oversight

Our OneCloud Managed Service Platform improves the management of your environment. It provides a single view to monitor and manage resources being used across your enterprise. It also gives you greater control over your portfolio of CSPs and services.

With a single view of your environment, it's easier to make informed decisions, roll out best practice processes, and use the best assets for your needs.

Costs and Subscriptions

One of the challenges to multi-cloud costs is losing the ability to leverage your buying power. You can secure a great Azure deal through your relationship via your Office subscription, but it won't apply to any AWS products you wish to buy.

We leverage our buying power through our partnerships with all the CSPs to offer you the same discounts you'd enjoy as if you were using a single cloud with a single partner. There's only one name on your invoice, so your accounts teams have a much clearer picture, and your IT team has one central point of contact for all your business critical cloud services - whether that's amending your subscription or more complex change management.

Security

Best practice security processes and methodologies apply across all cloud platforms. Two-step authentication, principles of least privilege, and encryption all play a roll across your environment.

Onecom's OneCloud Managed Service Platform allows you to perform these processes with minimal duplication of effort. It also provides monitoring and reporting from a single source, ensuring oversight without having to explore every asset individually.

Support

The partnership between our curious and dedicated teams with the leading CSPs has expanded our knowledge base considerably. This provides our customers with a cost-effective way to fill skill gaps where required and access expert advice at any time. We also provide 24/7 technical support to meet the needs of the always-on culture.

Automation

Our OneCloud Managed Service Platform offers more than a single window of complex multi-cloud environments. We deploy machine learning and automation to help optimise your cloud assets and remove those simple, but time-consuming management tasks.

One of the major assets of the cloud is that you only pay for what you use. But as multi-cloud environments grow, keeping tabs on open instances and resources becomes more time-consuming. Our Cloud Managed Service Platform assesses your usage, adjusts your dashboards, and allows you to take full advantage of the "pay as you go" cloud model.

Talk to Onecom

We support over 150k users across hundreds of organisations with leading cloud technology. For the last 17 years, we've helped businesses to work smarter with technology – seamlessly bridging cloud, data, mobility services into one platform. Our goal is to make your organisation operate efficiently, anywhere, any time.

To experience our Cloud Managed Service Platform for yourself and see how we can turn your cloud environment from a cost centre to a growth facilitator, book an Art of the Possible Session today.

Book Now ⟩