



# 10 FREQUENTLY ASKED QUESTIONS ABOUT MULTI-CLOUD

White Paper

POWERED BY **CloudHealth**

Whether you're a leader of Infrastructure & Operations for a large enterprise or a mid-sized business looking to scale, you'll likely have similar questions about multi-cloud that need answers. Here are VAST's 10 frequently answered questions about multi-cloud and multi-cloud management.

# 1

## What is Multi-Cloud?

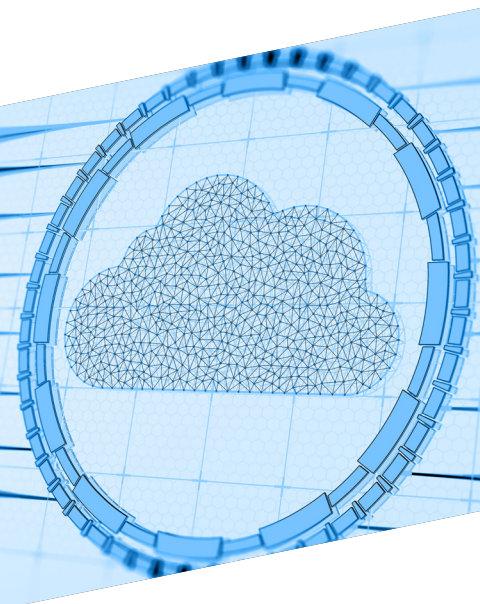
### MULTI-CLOUD IS A DYNAMIC APPROACH TO INFRASTRUCTURE

Remove all the hype and marketing-speak and here's what you're left with:

Multi-cloud is a dynamic strategy of mixing and matching workloads across multiple public cloud vendors (eg. AWS, Azure, Google), managed under one platform, to achieve long term business objectives.

### WHY MULTI-CLOUD?

**Multi-cloud is all about choice.** Companies are moving away from monolithic virtualization and toward a more agile, microservices architecture based on containers or serverless. Multi-cloud sets the stage for platform services, serverless, and composable applications leveraging different cloud services **that only run when required.** You can choose the cloud with the most appropriate service to meet your application and customer needs. As industries move away from static on-premise data centers and toward a modern hybrid approach, multi-cloud becomes essential to meeting demand in the "age of the customer."



## 2

## What's the Difference between Hybrid Cloud and Multi-Cloud?

### HYBRID MODEL COMBINES PUBLIC CLOUD, PRIVATE CLOUD, AND ON-PREMISE.

Large enterprises don't have the luxury of starting from scratch. They have legacy assets that are either too expensive or cumbersome to migrate all at once. Yet for certain business functions, these enterprises need the agility that only the public cloud can provide. That's where hybrid cloud comes in. It's a model that allows enterprises to cherry pick the advantages of cloud, while minimizing disruption to their existing infrastructure. **The primary difference between a hybrid cloud architecture** and a multi-cloud architecture is that hybrid cloud uses a combination of public, private, and data center resources to concurrently support a single application. Multi-cloud on the other hand, involves assembling a best-of-breed portfolio of public vendors to support entire applications.



### HYBRID CLOUD VS. MULTI-CLOUD ISN'T A BINARY DECISION

Hybrid and multi-cloud are just different approaches to the same problem. There's a lot of confusion surrounding the hybrid cloud versus multi-cloud debate — when there really shouldn't be. Multi-cloud is an overarching term that includes hybrid cloud and many other deployment options. You may have some applications or lines of business that use a multi-cloud architecture and other applications that use a hybrid approach. You may have the goal to move entirely to hybrid cloud at some point, with multi-cloud as a stepping stone. Even the most successful tech companies like Apple, Netflix and Facebook **use cloud in different ways.**

*If you're a VP/Director of I&O at the enterprise level, our ebook on "The Enterprise Guide to Hybrid Cloud" can help demystify the issues surrounding hybrid cloud.*



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## What are the Top Benefits and Challenges of Multi-cloud?

### THE ROAD ISN'T EASY - BUT MULTI-CLOUD'S ADVANTAGES ARE SIGNIFICANT

There are always advantages and challenges to adopting any new infrastructure. But with the right approach to multi-cloud management and the right cloud partner, these challenges don't have to be trade-offs.

Advantages of Multi-Cloud +	Challenges of Multi-Cloud -
Agility and responsiveness to drive faster time to market	Greater complexity with more infrastructure to manage across more platforms
Virtually unlimited scalability, enabling you to rapidly respond to business requests	Potential for increased costs
Leverages unique strengths of each vendor	Increased security concerns



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## What's the Right Mix of Public and Private Cloud?

### PUBLIC CLOUD'S GRAVITATIONAL PULL IS CHANGING INDUSTRIES

**Private cloud is a middle ground between public cloud and on-premise IT.**

Its adoption is primarily driven by enterprise concerns around security and their desire to keep all infrastructure behind a single firewall. The biggest drawback is that you lose the scalability and agility of public cloud. This is why industries are slowly shifting toward public cloud when thinking about their infrastructure mix, as public cloud's advantages are more in line with the increasing demands and expectations of customers.



#### Public Cloud Advantages

**Responsive to variable demand** — if your business experiences seasonal peaks and valleys in demand, public cloud can scale seamlessly to meet customer needs.

**Outsourced cloud architecture with cost/competence advantage** — allow your team to focus on more strategic projects, rather than managing physical infrastructure.

**Geographically dispersed** — gain improved business resiliency and improved availability during disasters.



#### Private Cloud Advantages

**Responsive to stable demand** — if demand for your business services is fairly stable year round, a stable private cloud infrastructure is less complex to manage.

**Leverage existing infrastructure assets** — you already have investments in data center infrastructure, private cloud allows you to use it to its full potential, maximizing ROI.

**Completely in your organization's control** — when it comes to security and compliance, some organizations need to keep certain critical applications within their four walls.

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### What is a Multi-Cloud Strategy?

#### MULTI-CLOUD DOESN'T HAPPEN BY ACCIDENT

A multi-cloud strategy is a deliberate approach to cloud transformation and migration. On a high level, here are three steps to an effective multi-cloud strategy:

- **Aligning infrastructure to business needs:** ensure that your multi-cloud approach is tailored to the objectives of the business
- **Creating a plan to bridge the gap between current and ideal states:** perform an infrastructure audit, identify gaps, and define a multi-cloud architecture roadmap
- **Measuring progress against the plan:** with workloads migrating to different cloud vendors, it's important to have a multi-cloud management system in place from day one to track all the moving parts

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### How do I Migrate Data to the Cloud to Reduce it Spend?

#### DATA CENTER MIGRATION ASSESSMENT MADE EASY

If you are primarily concerned with saving money when migrating to the cloud, here are the two primary costs to consider outside of selecting the right vendors:

- **Total cost of ownership (TCO)**
- **Cost of migration**

Analyzing TCO ensures that you're moving the right (i.e. most expensive) resources to the cloud. Analyzing migration costs assesses the degree of difficulty in the move and builds the business case for budget approvals. For more details on cloud migration, see how VAST View™ can help **you streamline the process** - with faster results and predictable outcomes.





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### What's the Value Proposition of the Multi-Cloud Management?

#### VISIBILITY: YOU CAN'T MANAGE WHAT YOU CAN'T SEE

One of the biggest risks of multi-cloud is information blindness.

**There are three pillars to visibility in a multi-cloud environment:**

- **Integrated platform:** a platform covering public cloud, private cloud and on-premise workloads that's visible through a single pane of glass. Avoid disruption with a solution that integrates with the core set of tools that you rely heavily on.
- **Detailed analytics:** you need to be able to visualize cost, usage, performance, and security at the level of individual business units or teams. Use these reports to see longer term trends for your cloud operations to help with capacity planning and to make sure you are continuously improving.
- **Comprehensive reporting:** all the reports you need to show executives and line of business leaders at your fingertips. Get the reports you need faster - no spreadsheets required.



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### How can I be Confident in the Performance and Reliability of Multi-Cloud?

#### BRING YOUR EXISTING METRICS AND TOOLS TO THE NEW PLATFORM

Infrastructure serves as the backbone of the business. As an I&O leader, you and your organization need to have full confidence in the reliability of your multi-cloud infrastructure. Some of the necessary features include the ability to:

- **Manage utilization down to an hourly basis,**
- **Poll usage and performance data,**
- **Drill down to specific business groups to optimize for performance & cost**

**Better yet, why not bring your existing metrics and tools to the multi-cloud management platform? This way, you can evaluate and monitor performance in a familiar context.**

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## How does Multi-Cloud Management Save me Time and Money?

### ‘GOVERNANCE AS CODE’ WILL SAVE YOU TIME

In any I&O team, a lot of time is wasted on tedious tasks. **‘Governance as code’** on a multi-cloud management platform automates these tasks with policies to build self-reinforcing behaviors. Ultimately, this frees up employee time to focus on high value work. Learn how customers save one full day per week using the VAST View™ Platform.

### CFO LEVEL REPORTING WILL SAVE YOU MONEY

As an I&O leader, helping finance get the right visibility into cost, usage, and performance can make your job a lot easier. Using just **three cloud cost reports**, a business case can practically build itself, turning the CFO into a strong ally for the infrastructure team. Even something as granular as justifying a Reserved Instance (RI) purchase on AWS for a specific business unit, can often result in immediate cost savings. **Ask us how much you can save using VAST’s RI analysis.**

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## How Should I think about Security in the Multi-Cloud?

### AN OUNCE OF PREVENTION IS WORTH A POUND OF CURE

Multi-cloud is a fast paced environment where the benefits can scale quickly — but so can your mistakes. Without proper access controls and identity management, users can intentionally or unintentionally create security flaws with catastrophic outcomes.

### ‘SECURITY AS CODE’ IN THE MULTI-CLOUD

The objective of multi-cloud security is to stay ahead of vulnerabilities. This is best done by integrating automated security policies into your multi-cloud management platform. Similar to how ‘governance as code’ uses policies to free up employee time, ‘security as code’ can provide a deep view into access control, network security, data security, application security and audit trails. It can automatically identify, flag, and escalate misconfigurations based on security best practices — so you can remediate these risks without interrupting your business.

**Ready to get started  
on your multi-cloud  
management journey?**

**Get in touch for  
a 15 minute demo  
of the VAST View™  
platform.**



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