

MULTI-CLOUD: DEFINITIONS VARY BUT INTEGRATION IS ESSENTIAL

Ask 10 people to define “multi-cloud” and you’ll get 10 similar but different answers. These differing perspectives call attention to some very important considerations—especially when it comes to integration and management. Here’s an overview of what’s top of mind when industry influencers think multi-cloud.

Multi-cloud has certainly proven inevitable, and for good reason. “As enterprises shift more and more of their IT and computing workloads to cloud environments, they’re discovering that a one-size-fits-all cloud environment isn’t practical or doesn’t meet their needs. As a result, most enterprises end up with an amalgam of cloud computing implementations—a mixture of public cloud and private cloud” says [Jeff Rutherford](#), marketing consultant for B2B technology companies with Jeff Rutherford Media Relations. “This mixture of public cloud and private cloud computing—all designed to meet an enterprise’s unique IT needs—is the definition of multi-cloud,” says Rutherford, though other influencers add that “across multiple platforms” is another key facet.

As [Brian Zheng](#), director of product management for Cloud at Pegasystems Inc., describes: “A multi-cloud environment includes multiple cloud types and vendors—a mixture of multiple IaaS and SaaS.”

INTEGRATION MAKES THE DECIDING DIFFERENCE

Then how do we distinguish multi-cloud from hybrid? For Ofir Nachmani, founder and CEO at IOD Cloud Research, hybrid cloud is a mix of public and private clouds, and classified as “only a sub-category of multi-cloud.” On the other hand, [Joe Weinman](#),

author of *Cloudnomics* and *Digital Disciplines*, delineates more strictly, using the term “hybrid for a mix of private and public,” while restricting “multi-cloud to the use of multiple public clouds.” He further contends that a plurality of clouds “that have nothing to do with each other isn’t true ‘multi-cloud’ due to the lack of integration.”

This leads to a very important tuning in definition. [Steve Spott](#), CTO at Sonitrol New England, reaffirms that multi-cloud is really about how multiple platforms work together. His definition: “... the utilization of disparate cloud service providers (infrastructure, software, etc.) in cooperation with one another.” And [Dr. Tyrone Grandison](#), CIO at Institute for Health Metrics and Evaluation, adds that “multi-cloud is a cloud environment that integrates many computing services in service of one’s mission.”

In fact, according to [Ed Featherston](#), VP Principal Architect at Cloud Technology Partners, it doesn’t necessarily matter what level of integration that is, whether at “an application integration level or potentially at enterprise integration levels.” Above and beyond differing definitions of multi-cloud, then, what really matters is the integration among all the separate clouds.

MANAGING BY DEFINITION

And where there is integration, there is orchestration. So it’s not a huge leap to further tune our definition in terms of management. “Multi-cloud is the ability to manage, orchestrate, and secure workloads across clouds with the same level of control as you would have in a single data center,” says [Greg Ness](#), vice president of

marketing at Vidder. And that management, says [Mike D. Kail](#), CIO at Cybric, "should be performed via a single control-plane interface for security, compliance, and resource management."

Another important aspect of management is the data equation. [Bill Thirsk](#), vice president of information technology and CIO at Marist College, stresses how critical it is that "one dataset stored over there must fully integrate with another application running over here, and they must be both secured [and managed] from home."

And don't forget the skills and talent question. [John Engates](#), CTO for Rackspace, highlighted this critical challenge. "Multi-cloud also demands the skills and expertise to competently leverage the various cloud platforms you've chosen. The challenge is that each cloud platform is different and a 'multi-cloud engineer' is about as easy to find as a unicorn. Succeeding with multi-cloud means having access to experienced cloud engineers who are competent in all of the various components of your multi-cloud environment and who stay up to date on the developments of each cloud provider as they launch new services and products."

In the end, we're talking about a coming together of sorts. "A multi-cloud environment is a company's architecture in which various cloud computing providers are brought together—be it for infrastructure, IaaS, Software, SaaS, etc.," according to [Samuel Pavin](#), brand strategist and tech influencer at Samuel Pavin Group Limited. And that's what is important.

So while definitions of multi-cloud vary, IT decision-makers are clear that coordination and seamless management across all the disparate elements is essential.

REAPING THE REWARDS

A properly managed multi-cloud environment:

- Ensures that "control/agility/security is defined by software, APIs, and automation versus hardware" – Ness
- Enables you to leverage the "best cloud for the workload requirements." – Kail
- Helps establish the right mix with "everything you need to run your enterprise." – Thirsk
- Reduces "reliance on a single vendor and may potentially increase flexibility." – Grandison
- Improves ability to "keep a competitive edge." – Pavin
- Offers "best of breed services, flexibility, and risk mitigation." – Zheng
- Empowers purchase decisions "based more on business drivers and less on technological limitations." – Zheng

BOTTOM LINE

Circling back to our beginning, there is no one-size-fits-all solution. That is exactly what makes a properly managed multi-cloud environment so critical to digital success.

Put simply by [Isaac Sacolick](#), president and CIO at StarCIO LLC: "Some applications will run optimally in AWS, others in Azure, and others might require running in a private cloud. Managing a multi-cloud environment is inevitable for many enterprises and what will be needed are common security, management, and monitoring tools. Enterprises will also need continuous integration and deployment capabilities that work across multiple cloud technologies."

When it comes to cloud, those are certainly words to live by.