

WHAT IS MULTI-CLOUD? IT'S TIME TO GET PRECISE ABOUT CLOUD DEFINITIONS

It's not often that you can look into the sky and see a single cloud, rather than a mish-mash of disparate clouds of different shapes, sizes and potential. That also applies to IT, where it is increasingly rare to see an IT environment that doesn't rely on multiple cloud providers with multiple platforms. It would be too easy to label this environment as "hybrid cloud" and add to the confusion over cloud terminology. So let's take a look at what we're really talking about.

Hybrid cloud means different things to different people, and it certainly contributed to some confusion in early discussions over cloud adoption strategies and budgets. Some defined hybrid cloud as an architecture that utilizes both public cloud and private cloud; others assumed it meant a blend of cloud with traditional on-premise systems.

"As it turns out, there's quite a few people and markets out there who interpret hybrid cloud as a strategy wherein they consume resources from multiple cloud vendors, sometimes redundant to one another and sometimes splitting risk," [Cheryl J. Ajluni observes in a column for Windows IT Pro](#). "Such resources might include infrastructure, platform and software services, security, and on-demand management, just to name a few. But that's not a hybrid cloud. It's actually a multi-cloud."

Let's not muddle the hybrid model any further! It's high time the industry put a stake in the ground and clarified cloud rather than add to the confusion.

DISTINCTION WITH A DIFFERENCE

How does multi-cloud differ from hybrid cloud?

[John Engates of Rackspace provides some perspective in his blog](#): "The term 'multi-cloud' refers to any environment where applications are deployed across two or more cloud platforms. Those can include any combination of public clouds (such as Amazon Web Services, Microsoft Azure, or OpenStack); private clouds (whether powered by Microsoft Hyper-V, OpenStack, or VMware); and dedicated servers."

Hybrid, according to Engates, "is actually a specific type of multi-cloud architecture. It typically refers to an environment that combines public or private cloud services with more-traditional deployment models, such as on-premise or managed hosting, and includes orchestration among the various platforms."

Those last few words, regarding orchestration, are why it's important to be clear about what you're buying into. In particular, business and IT need to be talking the same language to ensure that such misunderstandings don't lead to problems.

SIZING UP THE DIFFERENCES

There are pros and cons to hybrid and multi-cloud approaches.

In [a recent CIO.com column](#), IDG Network contributor Joe Weinman explains that a "broad variety of types of hybrids can offer a similarly broad set of benefits: operations cost reduction,

capital expense reduction, migration cost minimization, network backbone cost optimization coupled with end-user or thing latency minimization, and so forth.”

The key with those hybrid models is that they are designed and built to function as a single application architecture. The multi-cloud approach is more open-ended, with enterprises reliant on different cloud services from different cloud service providers that may or may not have well-developed integration capabilities.

Another way to look at it is: Hybrid represents a “pay me now” approach with custom integration built in; multi-cloud is more of a “pay me later” for add-on tools and services designed to help you manage inherently different resources.

GRASPING THE OPPORTUNITY

Many organizations may be willing to pay up front for what seems like a more manageable hybrid cloud solution, but that ship may have already sailed.

Engates points out that many large enterprises are running multi-cloud environments whether they want to or not: “Various teams across the business often choose different cloud providers and provision resources to best suit their individual needs. This sometimes happens on an ad hoc basis with little or no input from IT, and is known as Shadow IT.”

But there are many reasons to grab hold of the multi-cloud reality. You get to choose the best cloud service to suit a particular workload, lower the likelihood of vendor lock-in and gain greater leverage in negotiating the finances of your services.

DEALING WITH COMPLEXITIES

On the flip side, there are complexities with multi-cloud that you’ll have to manage. That includes integration issues between different services, tracking costs and managing billing, and managing multiple vendors and administrative interfaces.

In a ComputerWorld UK article regarding the findings of its Cloud Price Index report, [Owen Rogers, research director of the digital economics unit at 451 Research, discusses the trade-offs](#): “We found with the Cloud Price Index that end users who did use multiple cloud could save up to 74 percent on their direct expenditure. But the challenge is in managing all these different environments together.”

But where there’s an IT challenge, there are plenty of innovators willing to help out. “This is where the brokers have the real opportunity,” Rogers writes. “They can be the ones who bring them all together, and they can do the management and the support element, so end users get all the benefits of being able to choose the best cloud without having, necessarily, to manage them all.”

[The research firm MarketsAndMarkets recently estimated](#) that the

multi-cloud management will grow from \$939.3 million in 2016 to \$3.4 billion by 2021, with the major drivers including “need for avoidance of vendor lock-ins, increased agility & automation, and achieving the right level of governance.”

Consultant and InfoWorld columnist [David Linthicum recently advised](#) enterprises to “pay attention to the companies innovating in cloud governance and management – they could well be the secret sauce that let your cloud workloads scale as intended when so much is running in the cloud.”

Ultimately, multi-cloud will offer the enterprise freedom of choice to run each workload on the ideal cloud, and the flexibility to move those workloads as needed, when needed. But it’s important that we come to agreement on what we mean by multi-cloud so that business understands what it’s buying into and IT can select the right partners to help it achieve the desired outcomes.