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DON'T GET HUNG UP IN CLOUD SPRAWL

Every technology advance brings its own unintended consequences. When it comes to enterprise computing, it seems like history repeats itself: First we had server sprawl; then virtualization-enabled consolidation of servers, but that also spawned virtual machine (VM) sprawl. Now, IT organizations must be wary of cloud sprawl.

Without appropriate measures, businesses could find that cloud scalability and ease of provisioning further exacerbate IT sprawl. As enterprises seek greater agility and put more power in the hands of users, it's important for IT to ensure it isn't creating another Frankenstein that stomps out ROI.

"Cloud sprawl is a common challenge for enterprise IT teams," TechTarget observes. "It occurs when organizations spin up new cloud resources that they don't necessarily need, thereby driving up costs and making cloud bills, often surprisingly, high."

For many, if not most, organizations, cloud use extends far beyond what may be a very limited official portfolio of sanctioned cloud services. Whether by design or happenstance, they're effectively trying to keep tabs on an increasingly complicated multi-cloud environment.

"Many large enterprises find themselves managing a multi-cloud state whether they want to or not," Rackspace CTO John Engates writes. "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."

STIFLING NOT AN OPTION

Engates cautions against IT rushing around trying to stamp out this phenomenon. "It's important for IT to identify and understand the technologies being used within the business, but curtailing Shadow IT entirely is often difficult to accomplish and can stifle innovation," he advises.

That puts IT departments in a tough bind. They don't want to appear to be a barrier to innovation and agility, but it's likely they'll ultimately get blamed for runaway costs of unbridled sprawl.

"It's not unusual for an organization to wind up spending double, triple or even four times as much as necessary because people are using applications that already exist within the enterprise," Joseph Guarino, CEO of independent consulting firm Evolutionary IT, tells CIO Insight.

GET A GRIP

IT organizations should not despair that sprawl is out of their control. Rather, they should be figuring out why it is happening and how to make it manageable.

"Companies often cite three reasons for cloud sprawl: a lack of central coordination over cloud resources, suboptimal use of multiple cloud providers, and overprovisioning resources for an application," writes Tom Nolle, president of CIMI Corp. "All of these, however, can be avoided with careful cloud resource management."

There's an obvious starting point for getting a grip on the issue.

"The first step is usually to audit your technology footprint and identify all the specific services your employees use," says Engates. "Next, you need to ensure you have access to the requisite expertise—whether internally or through partners like Rackspace. You also need to determine whether or not you need cloud brokers and/or cloud management tools to be successful."

Cloud services brokers (CSBs) are intermediaries between cloud users and cloud providers. An experienced CSB should be able to provide benefits that many enterprises could take advantage of: knowledge of vendor pricing models, expertise learned from previous client engagements, and objective insight into what expectations are reasonable.

"As provider prices and capabilities change, the cloud broker will advise clients to move workloads," Trevor Pott writes in an article for The Register. "Depending on how deeply integrated the cloud broker's software is with the customer's infrastructure, they may even be able to trigger workload migrations for the customer."

GOING-IT-ALONE OPTIONS

Some enterprises may be reluctant to add such an intermediary into the mix. Indeed, it's not unreasonable to view the broker role as something that IT should be doing as part of its job in matching user needs with service provider capabilities. The reality, though, is that many IT organizations are already overloaded with tasks and responsibilities. They simply may not be able to dedicate resources to this effort.

Others, though, may feel they can go it alone with a cloud management platform (CMP) that automates the selection and provisioning of different clouds based on the needs of the workloads, costs, and performance, among other factors.

These platforms are growing in popularity and numbers of competitors. Market research firm IDC says it expects 80% of enterprises will need to purchase new management solutions for the multi-cloud requirements over the next few years.

Determining the right CMP may be a time-consuming, potentially confusing exercise in and of itself, however, and some question the value. A recent ZDNet article quotes noted cloud computing expert Bernard Golden as saying that "a management tool that encapsulates the individual cloud providers and provides a single management framework … typically means using a lowest-common-denominator application management approach, which often forfeits use of functionality that resides within a provider's IaaS/PaaS offerings."

CAN'T THIS BE LESS COMPLICATED?

OK, maybe a little despair is warranted. "The truth is that tools, including CSBs and CMPs, won't save a company from multicloud's complexities and issues," writes cloud computing expert David Linthicum.

Linthicum also argues that "CMP and CSB tools provide some relief for underlying native cloud services, but the cost to implement these tools often outweighs any value gained. Moreover, as cloud computing evolves, the tools likely won't keep up. IT admins will bypass the tools to deal with the native clouds more often than anyone expects." Then, he adds, there's the likelihood that the cloud providers will buy up the tools, ending any likelihood of neutrality in cloud selection.

Unless an enterprise can dedicate resources to managing CSBs and CMPs, the most likely route to relief is to engage a managed cloud services provider that supports and manages the leading cloud platforms. By definition, such a company is dedicated to managing multi-cloud intricacies. To find out more, go to https://www.rackspace.com/professional-services.