Hybrid clouds: the business game-changer

IBM and Citrix help define the next era of cloud innovation

Highlights

- Enables organizations to tap into the best of cloud computing without having to choose a single deployment model

- Turns IT challenges into business opportunities

- Leverages advanced cloud and networking technologies for application delivery services

In the childhood game, "One of these things is not like the other," the goal was to identify what didn't fit in the grouping. IT departments have been given a similar sorting challenge with cloud computing. Does this set of enterprise data need a private cloud to ensure it's protected? Can we go with a public cloud for this application? It's not always a clear choice.

Today, there's a game-changing answer: the hybrid cloud. With the enormous growth and variety of data, and shifting needs of a more mobile workspace, it's harder than ever to put workloads into neat groupings, or deploy a single cloud model. Hybrid clouds combine the best of current cloud models – private, public, community, on premises, off premises, managed – while leveraging existing IT infrastructures. With a dynamic hybrid cloud solution, cloud services expand when you connect two or more clouds that remain unique entities but are bound together virtually to create a seamless, extended cloud environment. Given that level of freedom, analyst firm Gartner said more than 70 percent of companies plan to pursue a hybrid cloud strategy by next year.[1]

Addressing the "new normal" in cloud computing

What these organizations realized is that one size does not fit all enterprise requirements. Even greater than the cost benefits and efficiencies of a public cloud or the security and control of a private one, a hybrid cloud offers an organization the ability to respond rapidly to market changes and connect data and applications to drive value, all with the best-fit infrastructure. This notion of "composability," a way of automatically and transparently pulling together the right resource for that moment, is a key reason hybrid clouds are so appealing. The other: the ability to use existing private cloud infrastructure and software, so prior investments are not necessarily wasted. IBM and Citrix, with a 20-year alliance relationship, offer hybrid cloud solutions for this "new normal."

## Turning a hybrid challenge into a business opportunity

Forty-four percent of business cloud decision makers and users already think cloud computing is pretty complex.[2] A hybrid cloud, it seems, might bump that number up. But a thoughtful strategy, intentional technology and an experienced partner can simplify it, turning the challenge into competitive advantage.
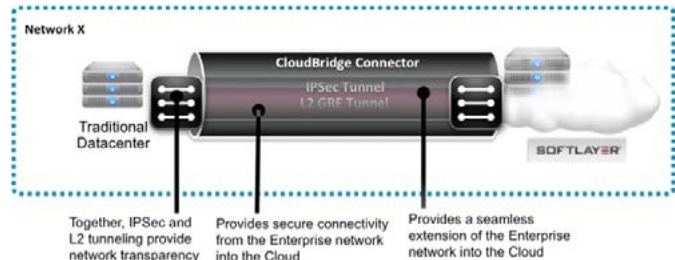
Let's say you have in-house systems of record, such as an enterprise resource planning (ERP) application that stores customer credit card data. You may have a mobile application on a public cloud that clients access or marketing leverages to better understand buyer behavior. At the same time, IT is providing a private cloud infrastructure as a service to the developer team to create a new promotions feature that suggests products based on that emerging client data.

With a hybrid cloud model that not only taps into, but bridges, clouds, an organization is able to reinvent business services and processes quickly using content and capabilities from any source, and continuously adapt to remain competitive. You can set up cloud environments quickly for innovation and add new capabilities, like analytics, and then move back on-premises. Or keep certain parts of an application in the data center, but send the rest to a service provider's cloud.

Architecting the hybrid cloud with advanced technologies

IBM and Citrix bring together advanced technology, enterprise services and significant experience in the cloud space. As the world's most advanced cloud networking platform, Citrix NetScaler is changing datacenter networks into end-to-end service delivery fabrics that orchestrate and optimize the delivery of applications and services. NetScaler provides the application delivery controller (ADC) in the SoftLayer architecture for hybrid clouds.

Cloud computing creates significant networking challenges, including the need to provide rapid, on-demand provisioning of application delivery services.

With its revolutionary TriScale technology, Citrix NetScaler technology can scale up performance to make applications and cloud-based services run 10x better, scale out capacity by 32x, and scale in with more efficient utilization and consolidation of network resources by enabling up to 80 independently managed appliances in a single, multi-tenant platform.

Citrix NetScaler integrates key functionality necessary for the reliable delivery of cloud-based services. Citrix NetScaler includes Citrix CloudBridge Connector which enables IT to make external cloud-networks behave like a natural extension of the enterprise network, as one contiguous network. Citrix CloudBridge Connector fuses IPSec and Layer 2 tunneling, global server load balancing and WAN optimization to provide the location, performance and network transparency required to build hybrid clouds that span on- and off-premise datacenters.

Users are automatically routed to the best-fit location while experiencing LAN-like performance even when accessing services that aren't local to them. A few clicks in a management console make all of the required connections.

"Citrix provides the simplicity and expandability that SoftLayer needs to power Internet-scale global cloud infrastructure, while empowering granular control over cloud services. The ability to scale performance on demand, with no disruption to applications or services, and no wasted network resources, gives our business a tremendous competitive advantage."

- Mac Devine, CTO IBM Cloud Services Division

Connecting partners

The IBM-Citrix alliance has been delivering flexible mobile solutions for the workplace for more than 20 years. When SoftLayer, a cloud leader, became an IBM company in 2013, IBM was already a trusted supplier of enterprise cloud solutions, helping more than 30,000 clients worldwide. But SoftLayer has complemented and extended that position to bring new value to clients looking for cloud direction – particularly those in the small-to-medium business segment to improve widely deployed applications, such as Citrix XenDesktop and Citrix XenApp. As the market leader in web hosting, SoftLayer arrived at IBM with more than 100,000 servers under management in 140 countries. IBM Cloud now powers 270,000 more websites than Amazon Web Services, and has added 4,500 new cloud clients since the SoftLayer acquisition.

SoftLayer also brought an existing 360-degree relationship with Citrix. As noted, Citrix NetScaler is part of the SoftLayer infrastructure, and Citrix also provides CloudBridge Connector as a service on a SoftLayer cloud - the first step for clients moving toward a hybrid cloud. Citrix is also a SoftLayer customer. SoftLayer hosts the Citrix Virtual Demo Center, used by thousands of Citrix sales personnel and business partners to demonstrate Citrix mobility and networking solutions, including hosted virtual desktop solutions. And, to complete the circle, the growing number of global SoftLayer centers – part of IBM's $7 billion investment in cloud initiatives – rely on Citrix technologies in the underlying IT infrastructure, including CloudPlatform, the market-leading open source platform purpose-built to deliver multi-tenant services.

In addition to SoftLayer solutions, IBM also offers additional cloud and managed services, as well as cloud servers, storage and software.

For more information
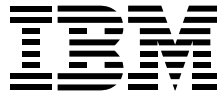
Together, IBM and Citrix can help organizations create true hybrid clouds that optimize your environment to your applications' changing needs at any point in the lifecycle.

To learn more, please visit: ibm.com and citrix.com

Get started today at softlayer.com.

Sources
1. Gartner, Gartner Data Center Conference Poll, December 2012
2. IBM, "Under cloud cover: How leaders are accelerating competitive differentiation," October 2013, CIW03086-USEN-01