

Hybrid Cloud Services, Automation, and Other Innovations for the Global Marketplace: An Interview with Cisco Executive Rob Lloyd



Sungard AS recently sat down with Rob Lloyd, president of development and sales at Cisco, to discuss the trend toward hybrid cloud services and to describe what the new Cisco® Intercloud initiative and Application Centric Infrastructure means to customers. These innovations have been embraced by Cisco ecosystem service provider partner Sungard Availability Services, whose offerings bring new flexibility, cost-effectiveness, agility, and options to customers looking at cloud solutions.

SGAS: Why are hybrid cloud services becoming so popular today?

RL: We're beginning to see around the world that business decision makers are looking at cloud delivery models as one of the options that will allow them to move much more quickly to achieve their business objectives. Whether they want to introduce a new experience in a store, a new sales platform, a new supply chain platform, or a new analytics capability, cloud solutions can be the fast, cost-effective, and efficient answer. We also see a growing concern about security, including data privacy and information protection. CIOs need to balance the desire to move quickly and use a combination of software or cloud platforms with the desired control, security, and policies in place.

Those objectives and concerns are leading customers around the world to a deployment model called hybrid cloud. A hybrid cloud deployment allows them to offer both the agility and flexibility of using SaaS [software-as-a-service] platforms and/or external cloud platforms for software development, backup services, or incremental capacity. At the same time, they can create some of those attributes in their own IT infrastructure, in their own data centers, which will allow them to inexpensively and quickly deploy compute, network, storage, and security resources for applications that they choose to run internally. This hybrid cloud model combines the best technology options in delivering a private cloud that offers elastic, dynamic, and inexpensive infrastructure, with a public cloud or external services that meet the customer's business requirements. This is resonating with enterprise, government, and a very large number of commercial customers.

SGAS: Is the Cisco Intercloud initiative Cisco's effort to package the hybrid cloud concept for a business audience?

RL: Cisco Intercloud is a series of innovations and technologies that enable the seamless integration of both private and value-based public clouds. It offers businesses deployment options that meet compliance, security, and agility requirements. Today Intercloud is built on a number of innovations that enable open and secure deployment of workloads between different cloud delivery models while at the same time providing the control and flexibility to use all those assets according to a policy and strategy that meet the compliance, regulatory, and cultural business requirements of each customer. Those cultural requirements are different by geography and industry.

SGAS: What do you mean by different cultural requirements?

RL: For example, in different places in the world there is more of a willingness to place workloads outside of the enterprise than in other places. In Europe, for example, there is a stronger belief that data should be managed only in the country where that data lives. In certain industries, they might say that they don't want to use a public cloud. But they actually are using public cloud services even though they don't think they are. A business culture is an important determinant of the willingness to build this kind of mosaic of delivery models. Often industry regulations play an important role as well. There are particular regulations in healthcare, financial services, and other industries that dictate very specific guidelines for how and where data is to be stored.

SGAS: This year and last, there have been several well-publicized cyberthefts and breaches. This after several years of accelerating confidence in and adoption of cloud services. Is the popularity of the hybrid cloud model an answer to the desire for enhanced security?

RL: Security will be an ongoing issue. Business leaders are weighing in and saying, hey listen, we need to make sure that as we deploy information technology it's going to allow us to protect our company information, it will keep us out of the headlines, and it will be based on security, control, and policy. If we set a policy that says that this data will not leave our data centers, or our country, then we need to ensure that the policy is followed. As it turns out, Cisco innovations and technologies are fundamental to allowing IT to create a policy relative to cloud usage. We then enforce that policy and give companies control over how they use their own cloud infrastructure—or a public cloud provider—in a way that matches that policy and ensures that the policy continues to be enforced. This is a very important construct for enterprise customers today.

Data loss and concerns about data sovereignty have introduced complexities that Cisco Intercloud is able to resolve. Sometimes there are regulatory, compliance, or national initiatives that global companies need to follow. And therefore it's not just about one mega data center in Iceland that is going to solve your issues but rather a purpose-built integration of different clouds that have been provided by value-based providers focused on enterprise-class applications and security. And the basic construct of Intercloud is to connect those in a way that customers can use to meet their requirements, whether they be special regulations, cultural, or industry-specific.

SGAS: Is the Cisco Application Centric Infrastructure (ACI) related to Intercloud?

RL: The ACI vision is simple. It's a holistic data center architecture with centralized automation and policy-driven application profiles. This vision could encompass a company's entire data center infrastructure, including compute, network, storage, and security resources. What we're really talking about with ACI is the ability to create a profile for each application that is deployed in the enterprise and then automate the underlying infrastructure in a way that fits that application. If I have SAP, or Microsoft Exchange, or a custom Web application running, each of those may have a different characteristic as to where and how that application will be run in the data center, and how and when a policy needs to be deployed in the WAN or access layer. The vision of ACI is to create a series of policies that allow the underlying infrastructure to be automated, using some of the innovations we've brought to the data center and the overall network. Creating enterprise-class application policies and automating the deployment of the underlying infrastructure, and then helping to deliver that same policy, not only in a business's private cloud but in the managed service or public cloud that they choose to select from a company like Sungard AS, is an important differentiator. ACI is about per-application profiles and portability of those profiles between different delivery models, including the hybrid cloud model. For example, a customer running ACI could create a security policy for a specific application and run it in their private cloud, and then host or run that same application in a public cloud delivered by a company like Sungard AS, which is also running ACI, to create that consistency of policy for security, QoS, or latency.

SGAS: So what is really new is the automation of all of these functions across architectures?

RL: Yes. We're moving away from human intervention, which causes errors and security issues. If something like a denial-of-service attack happens, our customers have a response to that. They tighten down the edge, they quarantine certain resources, etc. Having that response automated, having the scripts already written, having them deployed automatically to the underlying infrastructure and dynamically removed once that threat has been dealt with—that's what we're delivering with ACI. We're bringing automation and less error to the deployment and programming of networks, data centers, and security.

SGAS: Is Cisco actively wooing service providers such as Sungard to join in the ACI and Cisco Intercloud initiatives?

RL: Yes. That's the Cisco Intercloud strategy, to attract the best service providers in the world, an ecosystem with data centers all around the globe, where application policies can be deployed in the private cloud or replicated in the public cloud. ACI enables our cloud partners like Sungard AS to focus on the value-based workloads, or mission-critical applications, and the areas where customers are looking for a premium experience with a focus on security and enterprise-class application performance. That's what our partnership is built on: a shared vision of how Cisco Intercloud is deployed and the value we see emerging with ACI, which is deployed using our Cisco APIC [Cisco Application Policy Infrastructure Controller]. Sungard was the first service provider in the world to build a public cloud offer based on the Cisco APIC. And Sungard shares our view that it is with the value-based workloads where security and application performance are vital and where we can provide a differentiated experience.

These technology solutions, along with the hybrid cloud model, provide customers with a lot of flexible options. You might develop an application using the Sungard AS public cloud and then import that application into your data center in your private cloud when you want to scale it around the world. You may then want to deploy that application in a country in which you don't have a data center, and you might need another partner to deliver this experience. It might be a Cisco partner. When we look at the fact that most of our customers serve a multinational marketplace, the footprint of a Sungard AS in Canada, the United States, and Europe handles part of the multinational requirement, but the partnerships that we can bring on top of that are part of the value of the Cisco Intercloud ecosystem.

SGAS: Where do you think cloud services are going in the next few years?

RL: The fastest growing part of cloud is hybrid cloud. The research we've done shows that the hybrid cloud market will grow by about 40 percent per year in the next few years. That means that the infrastructure in the data center, combined with external services (managed, hosted, or public cloud) will be the fastest-growing part of the market. Today, at a high level, we see that approximately 14 percent of IT spending is in SaaS or cloud delivery. We expect that in the next four years that will grow to about 20 percent. That means there will still be a significant amount of infrastructure that will be run privately.

The opportunity is in providing the flexibility of public and private clouds. For example, a retailer could build and use their infrastructure and capacity for 10 ½ months of the year and then rent extra capacity for Thanksgiving through Christmas in a public cloud to lower overall costs, and do so in a much more efficient way. That's a hybrid cloud use case for which a provider like Sungard AS has a tremendous offer. The customer may use cloud services to avoid building a separate data center, if they could replicate it with a dynamic backup service using a cloud provider, meeting their compliance and resilience requirements at a much lower cost. I truly believe that the largest portion of spending in the growth of cloud will be in the hybrid cloud model. And there are use cases where customers will run all of their infrastructure in the public cloud. But there is evidence today that the economics of the hybrid cloud can be much more efficient than a public-only cloud deployment. I believe the economic model that will make sense to customers in the next five years will be a combination of the efficiency that they can deliver themselves combined with the efficiency and scale that can be delivered by a partner like Sungard AS.

For More Information

Explore the many ways hybrid and other cloud services can help you maximize your IT budget, accelerate strategic initiatives, and take advantage of the latest technologies and network, compute, storage, and management architectures. As a leader in cloud services, Sungard Availability Services has a range of services to meet the needs of diverse companies. Sungard AS data centers are based on the industry-leading Cisco Unified Computing System™ servers, EMC vStorage arrays, VMware virtualization technologies, and VCE Vblock™ Systems. Sungard AS was recently cited as a Cisco partner in the creation of the world's largest global Intercloud—a network of clouds—and was identified as one of the leading disaster recovery-as-a-service (DRaaS) providers by Forrester Research.¹

¹ "The Forrester Wave™: Disaster-Recovery-as-a-Service Providers, Q1 2014: A Dozen Cloud-Based Resiliency Players Battle It Out for Top Honors," by Rachel A. Dines with Stephanie Balacouras and Heather Belanger, January 17, 2014.