Building success in the cloud

Citrix customers are recognized in the Gartner Magic Quadrant for Public Cloud Infrastructure-as-a-Service.
Cloud computing is the biggest technology disruption in decades and the market potential for new cloud services is far from fulfilled. Service providers and telcos of all sizes are responding to this tremendous opportunity as customers seek the agility, innovation and economics that cloud services enable.

Citrix cloud solutions are driving success for some of the biggest brands in the world, including many of the companies recognized in the Gartner Magic Quadrant for Public Cloud Infrastructure-as-a-Service.1 With hundreds of successful clouds in production, Citrix solutions are a clear choice for cloud providers.

Purpose-built solutions to meet the unique needs of cloud providers
The world’s leading cloud providers recognize that they need more than just the cloud basics, such as self-service, resource pooling and multi-tenancy, to succeed and differentiate their offerings. They need open and flexible cloud solutions that free them from vendor lock-in so they can leverage existing investments and choose the best possible components for their cloud. They need access to source code and open APIs to innovate and build value-added services. Their customers want to choose the architecture and hypervisor that’s right for them. Citrix cloud solutions deliver all of this and more.

Proven expertise and broad experience helping cloud providers succeed
Meeting all of the technical requirements for a cloud solution alone are not enough to succeed. A partner with proven expertise that can help cloud providers quickly and profitably bring their solutions to market is equally important. Citrix solutions have been the first choice of cloud providers because of the company’s investment in a hands-on approach to building clouds with some of the biggest brands in the world. In this paper, we explore how Citrix has helped Datapipe, SoftLayer and Tata Communications, all cloud pioneers that were recognized in the Gartner Magic Quadrant for Public Cloud Infrastructure-as-a-Service, build successful solutions that were right for their business and their customers.

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1 Gartner: Magic Quadrant for Public Cloud Infrastructure as a Service, December 8, 2011. Gartner does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings. Gartner research publications consist of the opinions of Gartner’s research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to the research, including any warranties of merchantability or fitness for a particular purpose.
Datapipe evolves their virtualization platform into a comprehensive cloud solution with Citrix CloudPlatform.
Of course CloudPlatform had to meet the technical muster, be hypervisor-neutral, have access to source code and API's, but those are just table stakes. What helped us choose Citrix was the partnership, support and collaboration with the Datapipe team. That was number one.

Ed Laczynski
VP of Cloud Strategy and Architecture at Datapipe

Datapipe is a global computing and IT services provider helping customers outsource complex IT problems from a single vendor. Datapipe’s unique ability to react quickly, solve problems and understand their distinct customers’ needs has made them a leader with Fortune 500 and Global 2000 companies. Datapipe provides services from nine strategically located data centers in the United States, United Kingdom, Hong Kong and China.

The challenge: evolve to meet the cloud demand

With the growth for cloud services, Datapipe sought to evolve their already successful virtualization platform—Stratosphere—to meet new demands. Customers wanted to control their infrastructure without having to always use managed services and Datapipe needed a cloud architecture that could be replicated globally to capitalize on new markets. Maintaining consistency for their existing managed services customers was another key to the success of the platform. “We wanted to evolve Stratosphere without having to change or alienate our existing customers,” says Ed Laczynski, the VP of Cloud Strategy and Architecture at Datapipe.

Datapipe explored various options for their new cloud platform. They looked into developing a custom cloud platform, but knew the development costs and schedule wouldn’t meet their business and time to market objectives. They also researched cloud solutions from different hardware vendors, but didn’t want to be locked into a proprietary solution. “Hardware vendors wanted to sell us an entire closed solution. We wanted the openness to pick and choose best solutions for each and every part of our cloud,” remarks Laczynski.

The solution: a 360 degree cloud solution

After researching their options, Datapipe selected Citrix CloudPlatform™ powered by Apache CloudStack for the flexibility, openness and feature richness it afforded them. CloudPlatform evolved Stratosphere into what Laczynski calls a “360 degree cloud solution,” where Datapipe provides public, private, hybrid and managed cloud services from a single platform. “One of the cool things about CloudPlatform was the ability to have different cloud models without having different products or architectures,” says Laczynski.

Citrix helped expand the services Datapipe offered on top of Stratosphere. The hypervisor neutral approach meant they could add new hypervisors while
supporting existing solutions. In addition, Datapipe is providing load balancing and traffic management services with Citrix NetScaler® and subscription based virtual desktop and applications using Citrix XenDesktop® and Citrix XenApp®.

The ability of CloudPlatform to meet technical requirements was not the only factor that led Datapipe to their decision. They looked closely at the support and expertise different vendors provided and found that Citrix was the most prepared and eager to help bring the solution to fruition. “Of course CloudPlatform had to meet the technical muster, be hypervisor-neutral, have access to source code and API’s, but those are just the table stakes. What helped us chose Citrix was the support and the collaboration with the Datapipe team. That was number one,” explains Laczynski.

The benefit: top line growth, bottom line savings
CloudPlatform is helping Datapipe drive top line growth and bottom line efficiencies. Expanding into new markets with a compelling, differentiated cloud solution has increased the number of larger, more strategic opportunities that were previously out of reach. “We’re seeing strategic growth, larger RFPs and getting recognized by industry analysts like Gartner,” says Laczynski. CloudPlatform also brings datacenter efficiencies, enabling them to scale without adding more bodies giving them cost savings at the bottom line, all the while providing a better service than before.

Now customers are finding a cloud solution that lets them choose the type of services and support that’s right for them. “Everyone is looking for cloud services, but their needs are different. CloudPlatform gives them flexibility and choice without forcing them into a single cookie-cutter cloud service,” says Laczynski. With self-service as a key capability, customers are happy because they can provision workloads on-demand and only pay for what they consume. Meanwhile, managed service customers are equally satisfied with faster, more nimble one-hour deployments compared to five-day deployments in the past.
SoftLayer provides on-demand private clouds with Citrix CloudPlatform.
With Citrix CloudPlatform providing the cloud orchestration layer behind SoftLayer Private Clouds, we’re essentially giving someone their own private cloud. At the push of a button, our customers can connect their datacenter to ours or build whatever type of cloud they want in a matter of hours, with the scale, choice and control they demand.

Nathan Day
Chief Scientist for SoftLayer

SoftLayer is a leading cloud infrastructure provider that offers global, on-demand datacenter and hosting services empowering enterprises with complete access, control, security and scalability for their computing resources. With datacenters strategically located in the United States, Asia and Europe, SoftLayer provides a worldwide network that delivers unparalleled reliability and performance. SoftLayer is the largest privately held Infrastructure-as-a-Service (IaaS) provider in the world, with 100,000 servers under management and 25,000 leading-edge customers ranging from technology startups to global enterprises.

The challenge: offering a flexible private cloud

Traditionally, most private cloud solutions offered by service providers have been comprised of a portion of their public cloud that was carved out for dedicated use. Virtual machines, storage and networking options made available by the service provider typically limited the customer’s overall architecture choice. This meant that customers had to work within the boundaries set by the service provider.

In addition, management of cloud resources—compute, storage, databases and networks—was challenging. “We have customers with fairly large server deployments, hundreds or even thousands of physical servers or virtual machines and they were creating their own management tools, because they lacked an efficient method for managing their cloud,” said Nathan Day, Chief Scientist at SoftLayer. Because of the demand for more choice, flexibility and improved cloud management, SoftLayer set out to build a flexible private cloud solution.

The solution: on-demand, custom-built private clouds

SoftLayer looked at a variety of different cloud orchestration platforms for the foundation of SoftLayer Private Clouds, and ultimately selected Citrix CloudPlatform, powered by Apache CloudStack. “The combination of product maturity, industry adoption, an open source solution and feature richness made going to market with Citrix quick and easy,” explained Day. The open source nature of CloudPlatform also provides proven scalability for SoftLayer, and the confidence that the solution will continue to evolve.
It was critical that existing automation systems and infrastructure investments could be integrated into the solution. The automated virtual server infrastructure for SoftLayer is built on Citrix XenServer and Citrix NetScaler and is used for load balancing and acceleration. “We’ve automated the deployment of the Citrix solutions with our APIs and definitely wanted them to be part of the private cloud solution,” says Day.

The result was that CloudPlatform seamlessly connected into the existing SoftLayer architecture. Instead of starting at square one, CloudPlatform gave SoftLayer a simple way to easily offer a turnkey cloud, ready for whatever their customers wanted to do.

**The benefit: total choice and control for customers**

With CloudPlatform, customers can design a cloud that’s exactly right for them, including custom configurations that span everything from servers, storage and network to geographic location. This degree of control and choice helps customers deliver their applications and manage workloads for maximum efficiency, user experience and elasticity.

SoftLayer is also providing cloud mobility, making it easy to move between an on-premise cloud and SoftLayer private cloud. “Instead of designing apps for a particular service provider’s proprietary cloud, customers can design and deliver apps via any number of clouds that run on CloudPlatform,” explains Day.

“With Citrix CloudPlatform providing the cloud orchestration layer behind SoftLayer Private Clouds, we’re essentially giving someone their own private cloud. At the push of a button our customers can connect their datacenter to ours or build whatever type of cloud they want in a matter of hours, with the scale, choice and control they demand,” says Nathan Day.
Tata Communications selects Citrix CloudPlatform for delivering cloud services.
While we were doing due diligence after narrowing our selection to Citrix, we quickly realized that by choosing Citrix we would get award-winning software and an executive team that brought years of experience and expertise.

Mara McMahon
Director of Product Management
Global Data and Mobility Solutions at Tata Communications

With a leadership position in emerging markets, Tata Communications is a leading global provider of cloud and other managed solutions, delivering services to multinational enterprises, service providers and Indian consumers. They have one of the most advanced and largest submarine cable networks, a Tier-1 IP network and nearly one million square feet of datacenter and collocation space worldwide.

The challenge: quickly enter the cloud market
When Tata Communications set out to build a new Infrastructure-as-a-Service (IaaS) called InstaCompute, they needed a cloud platform that fulfilled their technical requirements and the business objectives. From a technology perspective, they needed a proven and reliable solution that could easily integrate with existing infrastructure technologies and provide their customers with the control and flexibility they demanded. From the business side, they wanted to quickly enter the market with a competitively priced solution. “Our team had an extensive list for choosing a cloud vendor that could quickly take us to market and act as a partner in the process, versus simply buying software,” said Mara McMahon, Director of Product Management, Global Data and Mobility Solutions at Tata Communications.

The solution: Citrix CloudPlatform and industry expertise
During the search for a cloud platform, a variety of different sources mentioned the name Citrix. Tata Communications found that Citrix had an impressive reputation in cloud computing communities and offered a highly scalable and reliable solution. After meeting with Citrix representatives, they understood Citrix was a true cloud platform partner who had the willingness and capability to guide them throughout the InstaCompute deployment. “While we were doing due diligence after narrowing our selection to Citrix, we quickly realized that by choosing Citrix we would get award-winning software and an executive team that brought years of experience and expertise,” explains McMahon.

Because time to market was a key success factor, Tata Communications looked closely at the partnership and support offered by different cloud platform providers. “Tata Communications chose Citrix because of its ability to get the organization to market with a highly scalable and reliable cloud platform that enables us to address the growing demand for global, affordable cloud computing services,” says McMahon.
The benefit: choice, control and cost

Businesses are looking for cloud innovations like InstaCompute to help overcome the IT management bottlenecks and constraints of tight budgets. Citrix CloudPlatform, powered by Apache CloudStack enabled Tata Communications to deliver differentiated and flexible cloud services that can be tailored to the customer’s needs.

On-going management of InstaCompute posed a potential challenge for an organization as large as Tata Communications. However, CloudPlatform enabled Tata Communications to delegate administration permissions and control access levels for InstaCompute users without increasing costs. “Having management controls in our cloud gave us the freedom and flexibility we needed when handling telecommunication accounts all over the world, ensuring security and reliability—along with all the speed and agility—that cloud computing has to offer,” explains McMahon.

With so many potential users for the InstaCompute cloud, cost was obviously a huge factor. The open source approach of CloudPlatform offered Tata Communications a lower cost option without diminishing features or performance. “Additionally, India has a highly price-sensitive market and Citrix was able to not only hit the price point required, but helped us go from production to market in less than nine months,” says McMahon. “We look forward to continuing our relationship with Citrix and its CloudPlatform technology.”