Connected, LLC Now Gets Less Outages and More Redundancy

EXECUTIVE SUMMARY

Customer:
Connected, LLC

Location:
St. Louis, MO

Industry:
Telecommunications

Business Challenges

+ Extensive outages due to lack of redundancy on critical customer facing systems
+ Slow data center response to hardware failures
+ Week long setup time for new clients
+ Cumbersome virtualization architecture

US Signal Solution

+ Implemented VMware vSphere which allowed for quick disaster recovery in the case of server failure
+ Implemented VMware vCloud Director for rapid provisioning
+ Added Cloud Storage, MPLS, and VPN options to their existing product set

Business Results

+ Secure and reliable Dedicated Resource Pool that is fully redundant
+ 5 minute setup time for new clients
+ Rapid turn up times for additional resources as needed
+ Expanded service offerings
+ Significant reduction in outages
+ Proactive notification and response by the dedicated US Signal Team

About the Customer

Connected, LLC is a St. Louis-based company offering business phone systems with a suite of features and services. Phone systems are cloud-hosted to target today's mobile and distributed business world.

The Situation

Services were hosted in a 3rd party data center, leveraging dedicated blade servers, and virtualized with an open source platform. For cost efficiency, the dedicated blade servers were not redundant and the open source virtualization platform OpenVZ was chosen. The architecture and design of the cloud-based services presented two critical problems: 1) A lack of hardware redundancy lead to extensive service outages, and 2) OpenVZ could not provide for acceptable speed to deployment of new customer services.

All too often, a physical blade server would go down, causing phone system outages for all the customers on that particular server. This would happen anywhere from 1-3 times a week. When this issue occurred, the hosting provider was slow to respond and operated with a lack of urgency.

Connected, LLC was also using an Asterisk-based phone system for their hosted PBX (private branch exchange) solution with a single virtual machine (VM) dedicated to each customer. With OpenVZ, the build out process took more than a week for one VM. This included building the VM, installing the phone system, and getting it ready for customer specific settings. Even after the VMs were built and the phone system was installed, the structural integrity wasn't 100%. Connected, LLC needed to find an infrastructure that was stable as well as efficient.

The US Signal Solution

Connected, LLC found US Signal's Cloud Hosting services to be a great fit. A Dedicated Resource Pool replaced the previous dedicated blade/OpenVZ virtualization solution. A Dedicated Resource Pool, through the use of vCloud Director, has the ability to subdivide CPU, memory (RAM) and storage for each Linux-based PBX that is built per customer.

The vCloud platform has also been able to provide Connected, LLC with a more efficient way of building new customer phone systems. Since vCloud Director supports VM template catalogues, they built one PBX VM template that had all the basic settings that every customer would need (e.g. phone server install, admin tools, SIP provider settings, etc). When new customer services are ordered, Connected, LLC is able to deploy a customer VM in a matter of five minutes, compared to a week or more.

Connected, LLC has also been able to enhance their offerings with the use of other Cloud Hosting and Network solutions. US Signal Cloud Storage was implemented and is used to offer a backup target for their customers' voicemail storage. Additionally, Connected, LLC is able to give their customers a "clean" path to their hosted PBXs by selling quality private WAN (MPLS, VES) services provided by US Signal. Connectivity options are now available — Connected, LLC is able to offer their customers Internet or Private WAN connectivity to their hosted phone system services.

Business Results

The dedicated computing and storage resources are hosted on a "farm" of blade servers; single blade server failures are no longer an issue as the infrastructure has inherent resiliency and redundancy. Since Connected, LLC provides a fully hosted PBX solution for a wide variety of businesses, it is imperative that their phone systems never go down. The redundancy US Signal's vCloud platform has been able to provide has been unmatched by its competitors.

A subsequent advantage revolves around scalability. As opposed to ordering and deploying new blade servers at the time of expansion, Connected, LLC is now able to leverage US Signal's rapid provisioning; receiving additional compute and storage resources in their Dedicated Resource Pool within a matter of 4 hours.

With their previous hosting platform, Connected, LLC was unable to get all the benefits that they now have with US Signal. By moving to US Signal's vCloud platform, Connected, LLC has been able to accomplish their goals of stability, agility, and efficiency, which has allowed them to provide much better service to their customers.

ABOUT US SIGNAL

US Signal is a leading data center provider, offering connectivity, cloud hosting, data protection, and disaster recovery services — all powered by its wholly owned and operated, robust fiber network. US Signal also helps customers optimize their IT resources through the provision of managed and professional services.

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