GoWireless

Confidently implements NexentaStor™ to tame challenges of fast growth today and to lay groundwork for cloud computing tomorrow

Business Overview

GoWireless (www.gowireless.net), established in 1995, is an Exclusive Verizon Wireless Premium Retailer headquartered in Las Vegas, Nevada. GoWireless is one of the leading retailers of wireless communication tools across the United States. GoWireless offers a consumer friendly atmosphere, professional salesmanship and industry leading customer service. With 50% growth in stores in just over a year, GoWireless is experiencing enviable growth.

Challenges

The challenges faced by GoWireless include:

- Extremely high growth in retail stores (100 stores / 50% increase in just over a year), strained not only storage but also networking components to their limit.

- As retail transactions and corresponding backoffice operations are the lifeblood of a retail operation, maintaining performance is a necessity. But, without a change, bottlenecks at multiple points were likely to appear.

- Storage vendor lock-in prevented GoWireless from being able to build a best-of-breed solution for their unique needs.

- Having implemented both Microsoft Hyper-V and VMware vSphere virtualization, GoWireless found that administration costs were rising. Also, the storage needs of multiple Virtual Machines actually increased the storage burden.

- GoWireless had to be able to ensure high availability and reliability by identifying and replacing failed hard drives without requiring a reboot.

- To investigate performance and reliability complaints, IT needed real-time tools for identifying overall issues and for drilling down to the underlying components and causes.

Business Impact

- ❖ GoWireless built a best-of-breed solution for their unique business needs that Improved performance, reliability, availability, and IT productivity AND can scale with their amazing business growth.

- ❖ Nexenta solution provided 50% more storage at 60% less cost as compared to expanding their legacy storage environment.

- ❖ Future needs of the organization, both short and long term, can be met using Nexenta's product lineup.
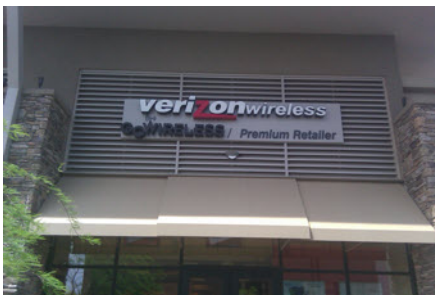
Solution Overview

PogoLinux, a Nexenta reseller, responded to GoWireless' needs with a NexentaStor solution. Dell PowerEdge servers form the server environment. To upgrade network capabilities, GoWireless implemented a Dell PowerConnect switch with 10 Gb Ethernet blades. For cost efficiency, the existing legacy storage system was retained but virtualized workloads were migrated to Nexenta.

> **"The Nexenta solution out of the box gave us 50% more storage at 60% less cost. More importantly, Nexenta already provides all the functionality that we want to implement over the next couple of years plus is innovating leading-edge approaches such as deduplication that legacy vendors probably won't match."**
>
> **Jefferson Nunn, I.T. Director, GoWireless**

Nexenta was installed on a Supermicro chassis and expander box with a combination of high-speed SAS plus cost-effective SATA drives. By implementing redundant 2 Gbps iSCSI connections from the storage to the switch, the Nexenta array more than doubled the throughput capabilities as compared to the capabilities of the existing legacy storage system. The Nexenta products were implemented and customized by the Nexenta Professional Services team.

The Nexenta SAN powers about 15 different virtual servers across three virtual server hosts. These servers are a mix of web servers, database servers and mail servers. The Nexenta VMDC Plugin provides cross-vendor virtualization support while the Target 2.0 Plugin provides a convenient way to manage the iSCSI target implementation.

Results

The Nexenta solution provides wide-ranging capabilities:

- End User Performance: The solution provides better end to end performance for GoWireless' internal users.

- Virtualization Management: Management of this mixed virtualization environment is streamlined and efficient due to the VMDC's capabilities for Virtual Machine cloning, provisioning, and templating.

- Storage efficiency: Nexenta's core capabilities have maximized the use of storage capacity. Thin provisioning enables an application to add storage just when needed. As GoWireless has many Virtual Machines, Nexenta's capabilities to store only one master copy per VM save a significant amount of storage.

- Administrator Productivity: Productivity of the IT team has been improved. The NexentaStor Graphical User Interface is overall more productive than legacy vendor approaches. In particular, the GUI makes it very easy to set up new storage volumes.

- Real-time problem detection: Nexenta's problem reporting capabilities are comprehensive. GoWireless is able to display system status in real-time, identify any potential problems, and then drilldown to understand the cause, and then resolve.

- Reliability and Availability: Overall, system reliability has increased. NexentaStor makes it possible for GoWireless to identify a failing hard disk drive, to ensure that it is taken out of service without losing data, and then to replace the drive without requiring a reboot or a service interruption.

- Data integrity: NexentaStor provides features not found in legacy storage solutions. GoWireless particularly likes the built-in antivirus scanning and end to end data integrity capabilities.

Future Direction

In the very near future, GoWireless is interested in implementing the deduplication capabilities of NexentaStor 3.0 to further increase storage efficiency.

GoWireless is already engaged in cloud computing. Looking out to the 2011-12 timeframe, they plan to take increasing advantage of the virtualization efficiencies in the VMDC Plugin to streamline provisioning for virtual servers. They plan on increasing availability even further via use of the NexentaStor High Availability plugin. They further plan to make their data protection capabilities more robust via use of the Continuous Data Protection (CDP) Plugin.

About PogoLinux

Founded in 1999, Pogo Linux, Inc. (www.pogolinux.com) is a workstation, server, and storage vendor based in Seattle, Washington. With a multi-OS focus and in-house technical expertise, the company is dedicated to providing affordable, reliable, and energy efficient Linux, Solaris, and Windows-based systems. From a single database server to a complete data center deployment, Pogo Linux offers a wide range of systems for just about every project or IT budget.

nexenta
Enterprise class storage for everyone

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About Nexenta

Founded in 2005 and privately held, Nexenta Systems, Inc., has developed NexentaStor™, the leading OpenStorage enterprise class storage solution and sponsors NexentaCore, an operating system that combines the high performance and reliability of OpenSolaris with the ease of use and breadth of applications of Linux. Both solutions leverage the revolutionary file system ZFS.