

iland saves seven figures while providing cloud-based replication, disaster recovery and desktop virtualization solutions



- Backup/Recovery/Archiving
- Cloud Computing
- Virtualization



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Justin Giardina, CTO, iland



Customer Profile

Company:	iland
Industry:	Technology
Country:	United States
Employees:	26
Web:	www.iland.com

Business Need

iland needed a fully redundant, cloud-ready solution that would provide customers with high availability, scalability, ease of management and financial efficiencies while enabling them to target replication to a remote facility for disaster recovery.

Solution

iland chose Dell as one of its key technology partners to provide server and storage environments through cloud offerings based on Dell™ PowerEdge™ servers and Dell EqualLogic™ iSCSI SAN storage.

Benefits

- More than \$1 million saved across several multi-array implementations of Dell EqualLogic iSCSI storage compared to cost of Fibre Channel SANs
- Able to provide cost-effective disaster recovery capabilities to more customers using built-in replication capabilities of Dell EqualLogic
- Eliminated planned downtime with non-disruptive maintenance
- 95% of iland's growth comes from cloud offerings due to fast set-up and scalability of data processing and storage
- 5-10 minutes to install and configure a new EqualLogic unit
- Global visibility into multiple EqualLogic units via one pane of glass with no-charge SAN HQ software
- 30% less administrative time with EqualLogic iSCSI storage compared to Fibre Channel

Having evolved from a colocation and application hosting company into a cloud infrastructure provider, iland knows a lot about the challenges facing the hosting industry today. "In the past, when our business model focused more on colocation space, there was one problem we were always up against," says Justin Giardina, CTO of the Houston-based company. "That was space. Space was the only commodity we had to offer. Obviously, there are all the good things we build in such as connectivity and security that are extremely valuable, but we were only as good as the amount of floor space we had."

"With Dell EqualLogic, we're able to keep our expenses down and pass the savings on to our customers. Our savings in storage help us offer an affordable business continuity solution."

Justin Giardina, CTO, iland

Now in a world that virtualization has transformed, iland is a provider of cloud computing infrastructure with high-availability cloud data centers in Boston, Washington, D.C., Houston, Los Angeles, Dallas and London. Space is no longer an issue because virtualization has reduced physical server sprawl, and most of the processing capability that customers want to access is on virtual servers.

Seeking 100% Availability

Availability is the basic commodity now. "We can never go down," says Giardina. "Companies utilize us to provide them with infrastructure resources. The responsibility for providing server and storage environments is all ours. The need to build in high availability has pushed us in the direction we have gone with our major technology partners."

iland chose Dell as one of its key technology partners to provide server and storage environments through virtualized cloud offerings or hybrid virtualized offerings, which are a mixture of virtual and dedicated physical servers. Dell has helped iland shrink its data center footprint with high availability cloud solutions on virtualized servers using VMware Enterprise Plus on Dell PowerEdge R905, R805 and R710 servers. The PowerEdge R805 server in particular has become a staple for iland. Featuring up to twice the memory and I/O scalability of previous generation standard 2U 2-socket servers, the PowerEdge R805 helps remove the barriers to running memory and I/O bound applications such as VMware ESX server.

Saving Seven Figures With iSCSI Storage

Small to mid-market companies requiring a dedicated resource pool can utilize the iland Resource Cloud®. With the iland Resource Cloud customers reduce IT costs, eliminate electricity and cooling expenses, and eliminate server sprawl.

iland also provides cloud-based disaster recovery and business continuity services. Its solution, the iland Continuity Cloud®, includes data replication targets for enterprise data, and standby resources that can be activated during disasters to restore data, applications and business services. Seeking a storage solution

Technology at Work

Services

Dell™ Support Services

Hardware

Dell EqualLogic™ PS6000, PS5000 and PS4000 series iSCSI SAN arrays

Dell PowerEdge™ R905, R805 and R710 servers

Software

Dell EqualLogic SAN HeadQuarters (SAN HQ)

Microsoft® Windows Server® 2008

VMware vSphere 4 Enterprise Plus

VMware vCenter Site Recovery Manager

VMware View 4

for its cloud offerings, iland looked for enterprise storage that would provide the same availability that its virtualized server solution provides on a small hardware footprint.

“We were impressed with the density that we could get on a pretty small footprint with Dell EqualLogic iSCSI SANs,” says Giardina. “We chose Dell EqualLogic also because of the software features that are included in the product. Unlike with other vendors, we don’t pay an additional fee if we want to do snapshots or replication. And Dell support through 24-hour and 4-hour response is fantastic. If the storage unit sends an email home, by the time iland receives an alert, there’s already a support person from Dell talking to the company. I also like the fact that I can call Dell support and know those people by name and speak to somebody who’s knowledgeable 24x7. The people on the other end really care.”

iland started purchasing Dell EqualLogic PS4000 and PS5000 series iSCSI SAN arrays and now has standardized on the PS6000 series models, which represent most of the EqualLogic units in iland’s six data centers. By using iSCSI storage instead of Fibre Channel, iland saved more than \$1 million across several multi-array implementations.

Eliminating Downtime

iland appreciates the high availability features of Dell EqualLogic storage that help keep its customers’ data and applications accessible 24x7. “When a new firmware comes out from Dell EqualLogic that addresses, for example, a locking issue with the ESX server or a performance issue with iSCSI, we really like the fact that all our SANs have dual controllers and we can upgrade firmware on the fly,” says Giardina. “And we have never experienced the failure of an array with EqualLogic.”

Giardina comes from the corporate world, where scheduled maintenance windows used to be par for the course. “In my past experience, maintenance was always done late at night or on the weekend,” says Giardina. “We had to send out that email to give people notice, and there was always someone who wasn’t happy. The way we have architected our servers and storage, there’s never a need to disrupt customers. The EqualLogic arrays can fail over, and the ESX servers can

be brought out of the cluster to be patched if needed without causing downtime. And the networking infrastructure that connects the storage arrays is redundant, so we can even take a switch offline and upgrade its firmware, and bring it back online without disrupting service.”

For additional protection against downtime through disaster recovery planning, iland is using replication between its sites and automating disaster recovery using VMware vCenter Site Recovery Manager, which is enabled through the vStorage API’s integration with EqualLogic Auto-Replication.

Cost-Effective Disaster Recovery

iland’s cloud-based data replication and recovery solutions built on Dell EqualLogic storage are saving its customers money compared to traditional disaster recovery solutions—and bringing DR capabilities within reach of more organizations. For example, a healthcare provider that could not afford to build and maintain a secondary data center leveraged the iland Continuity Cloud to gain enterprise-class data protection and business continuity capabilities.

“With Dell EqualLogic, we’re able to keep our expenses down and pass the savings on to our customers, who benefit in major ways,” says Giardina. “Our savings in storage help us offer an affordable business continuity service. Not only do other vendors charge separately for the replication software, but if you upgrade and add another controller head, you have to pay twice as much in maintenance. With Dell EqualLogic, you don’t pay for software at all, and there are no forklift upgrades.”

Greater Than The Sum Of Its Parts

iland also benefits from the simplified scaling architecture of Dell EqualLogic. “When you add extra capacity, you’re adding members with new controllers that double your network I/O,” says Giardina. “The built-in load-balancing features of EqualLogic tie the new member into the existing storage, and you can load balance across units. So as you scale with EqualLogic—as you add spindles or disks to your groups, add network ports and front-end cache—your systems just keep getting faster and faster. Whereas with other solutions, that’s not the case at all.”

“Cloud infrastructure accounts for 95 percent of our growth over the past two years. The high availability and simplified, fast scalability of the Dell PowerEdge and Dell EqualLogic platform has played a vital role in achieving our customers’ goals.”

Dante Orsini, Vice President of Business Development, iland

Adding a new unit of Dell EqualLogic storage involves taking the unit out of the box and plugging it in. Supply the unit with networking information and a group password, and the unit is ready to put in production. "It takes between five and ten minutes to get it online and configured," says Giardina.

iSCSI is supported by all major operating systems, so no specific hardware has to be in the servers. Microsoft Windows Server 2008 has a built-in iSCSI software initiator, so all the administrator has to do is create a volume on the EqualLogic SAN, turn on the iSCSI software initiator, and supply a user name and password and an IP address.

The speed with which iland can provide new capacity has been critical to its success as a cloud provider, which is a major piece of iland's business. "Cloud infrastructure accounts for 95 percent of our growth over the past two years," says Dante Orsini, Vice President of Business Development, iland. "The high availability and simplified, fast scalability of the Dell PowerEdge and Dell EqualLogic platform has played a vital role in achieving our customers' goals. When our customers want to expand, they expect a very fast response from us, and that's what they get."

30% Less Administrative Time

From an administrative perspective, the Dell EqualLogic SAN HQ administration and monitoring interface provides iland with a streamlined method of performing system administration tasks.

"We have many multi-array Dell EqualLogic implementations in each of our data centers, and SAN HQ enables us to see them all under one pane of glass," says Giardina. "We can see if there are any errors. We can look at performance data and history—we can see any issue going on with any of the arrays across the board. And we get that for free. It's a very powerful feature."

Another advantage for the system administrator is the fact that Dell EqualLogic is a preferred partner with VMware. "VMware actually offers native EqualLogic support," says Giardina. "So when you add a Dell EqualLogic array to an ESX 4 server, it knows that it's an EqualLogic and takes advantage of the functionality and features that are built in. That speaks volumes, because it further simplifies the deployment of the arrays. A senior person doesn't have to be involved. A data center technician can do it. On the whole, storage administration takes 30 percent less time with Dell EqualLogic."

Leveraging VMware View, iland offers a virtualized desktop offering called the iland Workforce Cloud®. Customers are able to compute at data center speeds and have access to their desktops from anywhere. "We're doing some exciting things with Dell," says Orsini. "The high availability, scalability, ease of management and financial efficiencies that the Dell platform brings to our current cloud offerings are equally important to our desktop virtualization initiative."



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