



## NexentaStor™ Use Case:



**Award-winning electro/mechanical production & manufacturing company standardizes on NexentaStor™ to manage their primary storage needs.**

### Business Overview

Intermountain Electronics, Inc.® ([www.intermountainelectronics.com](http://www.intermountainelectronics.com)) is headquartered in Price, Utah and designs, engineers, manufactures, and services custom electrical distribution and control equipment for mining, power generation, refineries, utility providers, and all levels of government. Celebrating their 25<sup>th</sup> year of operation, Intermountain Electronics (IE) is one of the top 75 fastest growing companies in Utah and has won several awards including Best of State in their category in 2009 and 2010 as well as Utah's 2009 Manufacturer of the Year award.

### Challenges

As an electro-mechanical design and manufacturing company, IE faces the following challenges regarding data storage:

- ◆ **Continuous Data Growth:** Industrial design and manufacturing produces massive amounts of data and requires a robust data storage solution to match it. As one of the fastest growing companies in Utah, IE needs to expand capacity to handle the rising activity of its engineers. To accommodate ever-increasing amounts of data, IE needs a solution that is highly scalable and flexible to meet their business demands. Costly legacy solutions have a "data silo" approach to storing and managing data that does not meet these flexibility and scalability requirements.
- ◆ **Lowering Data Unavailability Through Reduced Down Time:** Engineering is the core of IE's equipment design and manufacturing business so access to data is crucial to IE's engineers. IE needs a storage solution with highly available data that allows multiple users to access the same data at the same time from different devices so that engineering projects are carried out with minimal interruption. Stored data can become corrupt and lose integrity over time. Legacy vendors run back-end processes to scrub data, check for errors and correct them when they can. Over large datasets, however, data scrubbing processes must look at massive amounts of data. This can significantly slow down your system and hinder the data availability.
- ◆ **Redesigning Storage Infrastructure to Contain Costs:** Since IE depends so much on reliable availability of data, it is crucial to not only set up primary storage, but also backup storage so that IE can protect themselves against catastrophe. Intermountain hopes to recover from disaster quickly by setting up a remote secondary storage configuration in which they back up important data on a regular basis. Naturally, IE wants to do all this without the high premiums and restrictions set forth by more traditional solutions.

### Business Impact

- ➔ Simultaneous access to files by multiple users on multiple devices in multiple locations.
- ➔ Reliable and efficient data backup means effective and flexible disaster recovery.
- ➔ Scalable storage that's easy and cost-effective.



## Solution Overview

NexentaStor™ is the leading hardware-independent storage solution built upon the ZFS file system. Intermountain Electronics, after considering all their configuration options and services from other storage vendors (e.g., Dell EqualLogic, Left Hand Networks, etc.), standardized on NexentaStor to offer a unified storage strategy. This includes managing IE's primary/backup storage and disaster recovery solutions. Below are some highlights of IE's use of NexentaStor:

- ◆ **End-to-End Comprehensive Storage Management:** IE needed one comprehensive storage solution that not only could manage their primary storage, but also came with rich features including backup, disaster recovery and high availability. Thanks to the power of NexentaStor, Intermountain can use a single system to manage all their business processes as they relate to storage.
- ◆ **Quickly Recover from Catastrophe:** Accurate primary data storage and reliable backups are crucial to successfully engineer, manufacture, maintain, and sell industrial equipment. There are many concerns for database administrators when it comes to data security, not the least of which is disaster recovery. If IE loses their data in a local or regional disaster, business will come to a stop. The wise thing to do for data-driven enterprises is to back up data to servers separate from primary servers. IE has done just that and trusts NexentaStor to effectively and reliably back up their important data.
- ◆ **Multi-User Access to Data:** High availability data storage is a must for IE. Currently, Intermountain has a sizable engineering team working on projects that require many users to access the same stored data at the same time. As one of the fastest growing firms in Utah, IE's engineering department (and the company as a whole) is likely to keep increasing their head-count, resulting in even more users requiring access to the same data. NexentaStor supports high availability storage and IE trusts that their information will be available no matter where or when it's accessed, who needs to access it, or what device is used to do so.

“After evaluating Dell EqualLogic and Left Hand Networks, we decided on Nexenta for it's rich feature set. By far it gave us the best performance for the price point.”

-Zac Woodward, Intermountain Electronics

## NexentaStor Benefits

NexentaStor helps enterprise customers implement cost-effective, high performance storage by taking advantage of NexentaStor features like in-line de-duplication, unlimited snap-shots, thin provisioning, and hybrid storage pooling. Below are some NexentaStor benefits which apply to use cases like Intermountain's:

- ◆ **Lower Operational Costs & Affordable Capacity Expansion:** NexentaStor's ZFS de-duplication technology paired with optimized commodity hardware makes capacity expansion affordable. NexentaStor deploys hybrid storage pools which allow you to spread large datasets across multiple servers without necessitating a volume manager. This frees IE to mix and match hardware, easily migrate data between servers as needed, and maximize the utilization of their storage space. In summary, ZFS reduces the number of hard drives needed to store the same amount of data and increases data retrieval speeds.
- ◆ **Green-Minded Storage Efficiency:** NexentaStor not only supports in-line de-duplication of data, but also file compression and thin provisioning to enable efficient management of large datasets by using fewer hard drives and generating a lower carbon footprint. The results: fewer servers purchased, lower power consumption and increased administrative efficiency translating to average storage cost savings of 70% compared with legacy storage solutions.
- ◆ **“Future-Proofed” Scalability:** With average data growth increasing exponentially, now more than ever scalability is a must for any storage configuration. NexentaStor gives you virtually limitless scalability and combines with commodity hardware so you can expand capacity for far less than proprietary storage solutions. Think of it as future-proofing your storage infrastructure: as business grows, so does data and the need for storage space. By using a highly scalable solution like NexentaStor, your organization will be poised to handle whatever increases in storage infrastructure that you'll encounter.

### 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.



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