



The Linux Storage People

Case Study

University of Alaska: Learning How EtherDrive Storage Saves \$

Coraid SR1520 Provides Low Cost Solution for University Collaborative Classroom Services

Introduction

The College of Rural and Community Development at the University of Alaska is creating an integrated social software service for collaborative classroom communities, using WordPress Multi-User and a PMWiki Farm. University instructors use the new service to create collaborative classroom communities across Rural Alaska.

This summer Alaska Native high-schools and undergraduate science students will be blogging, vlogging, and podcasting their experiences at an on-site Summer Science Camp in Nunivak Island. They will be virtually teamed with a similar group of Native South Pacific Islanders in a similar camp doing podcasts and videocasts of science news and notes. The technology used includes digital cameras, iPods with microphones, WordPress, and Sorenson Squeeze video compression software.

The Challenge

Build Affordable Scalable Storage For The Services

What UAF needed was multiple Terabytes of data storage that provided low logistical overhead and affordable scalability. Previous collaboration tools were scattered and space limited and the user-experience was disjointed. The community server provides adequate bandwidth and space with a consistent interface to for all classroom and individual blogs, video blogging, podcasting, and wiki communities.

The Solution

Coraid EtherDrive SR1520 Storage

The University of Alaska selected Coraid's SR1520 as the disk storage solution for both the online class files as well as it's archiving needs . Storage for the class files are handled by two mirrored SR1520s using LVM to connect to servers with Cat 6 switches running Linux Mandriva 2006. 400 GB disks are



Challenge

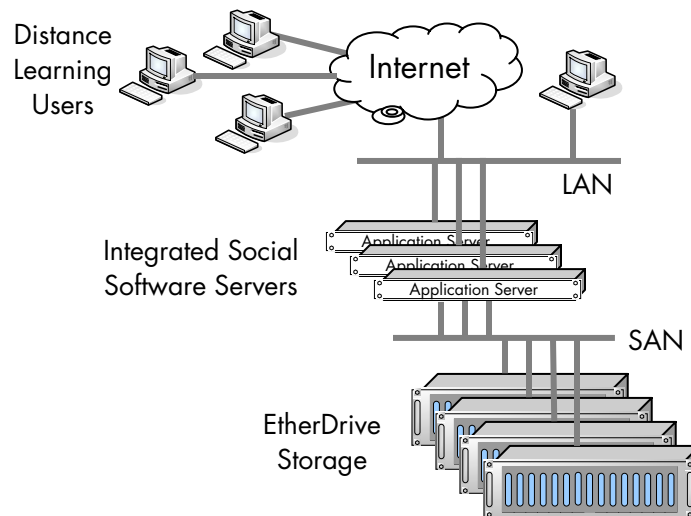
Affordable, Scalable Storage for University Classroom Collaboration

Solution

Coraid EtherDrive SR1520 used as scalable, shared storage pool

Results

Simple, Scalable, Network Storage Solution at greater than **50%** cost savings over alternative technologies



configured into RAID 5 sets. Archiving needs are being met by an additional SR1520. They are using XSF as the file system.

Alternatives Considered

The Center for Distance Education previously used individual computers for its archiving needs. Class files were stored on internal hard drives in various systems and servers. Backup was done using an Adec Fast Stor 22 which was only able to handle 1.7TB. The need was growing by 900GB per month. "We have saved thousands of dollars using EtherDrive Storage, but more importantly our IT resources can now handle our growing needs for expandability!", said Joshua Kugler, Sys Admin, UAF

Summary

Storage Type	Application and Backup Storage
Operating System	Linux, Mandriva 10.1 and 10.2
Application Software	Blackboard On-line Teaching, Elluminate! Web Conferencing, HorizonLive On-line Presentation Tool, Word Press, Backula, Samba CIFS Filer
Storage Size	24TB
Coraid Products Used	Multiple SR1520 Storage Appliances
RAID Configuration	RAID5 storage volumes, using XFS filesystem and LVM2
Disk Size/Mfg	400GB Western Digital & Hitachi
Cost Savings	Less than half the cost of iSCSI or NAS solutions
Key Decision Factors	cost/GB, no HBA, low complexity, low overhead, low logistical overhead, better control of data access, more secure