

2008 Accomplishments

Active Directory

KPBSD's Active Directory infrastructure was upgraded to support Server 2008. The updates bring additional features and stability to our existing directory services database, now used for everything from computer logins, to authentication for the District's main website. This upgrade was a prerequisite to future planned updates, including the upcoming transition to Exchange 2007.

VMWare Infrastructure Upgrades

In keeping up-to-date on our highly-successful virtualization platform, the VMWare ESX system was upgraded to version 3.5 during the summer months and expanded in capacity. Three additional Dell PowerEdge 1955 blades were added to the cluster, giving us a staggering total of 87GHz of processor capacity backed by 72GB of memory. This project has been extremely successful in allowing us the flexibility to rapidly provision and deploy new technologies or adjust our "traditional" computing infrastructure on an as-needed basis.

DBS QuickSale POS

Another round of food service terminal upgrades to the latest software version (2.7). This upgrade brings about balance transfer capability and a much more stable infrastructure for demographic information and balance transfer between schools.

New Servers

15 new Dell PowerEdge 2900 servers were deployed throughout the District as KPBSD makes the jump to Server 2008 and a 64-bit computing architecture. Schools receiving the new school servers were Kenai Middle, Soldotna Middle, Homer Middle, Chapman, Moose Pass, McNeil Canyon, Soldotna EI, Cooper Landing, Nanwalek, Hope, Port Graham, Razdolna, Paul Banks, Nikiski North Star, and Kachemak Selo.

Database Migrations, Software Upgrades

In an effort to move away from aging technology, numerous services were shuffled around to new hardware or moved into the VMWare ESX cluster. Most notably, the database server servicing many District services (Angel, Software Database, Computer management, Web site) was migrated to new hardware and upgraded to SQL Server 2005. Many other software packages (such as the Angel LMS) were upgraded to support the latest available features.

Upgrade disk on Skyview server

Three 300GB serial attached SCSI hard drives in a RAID5(600GB of useable space with 1 drive for redundancy) was installed in Skyview's school's server for network based storage for their video editing class. This allows students to save their video projects to the school server and allows them access from anywhere in the school to continue their work throughout the year. This solution phased out the external USB hard drives that Skyview was using. Eric wrote a program to allow the Video tech teacher to choose which students would have access to the video share as well as have a shortcut appear on their desktop upon student login.

Switched Internet Service Provider July 1

Like all our telecommunications services, Internet services are bid out through the E-Rate process. GCI won the bid from ACS as our Internet Service Provider for the next three years. Ted Notter was responsible for the seamless transition.

Re-Wired McNeil Canyon

Schools wired before we standardized on common wiring procedures (03/1995) weren't able to take full advantage of the IP telephony now commonplace in the district. McNeil Canyon was the last of those early schools needing re-wiring and is now ready for IP phone installation later this year.

Network Bandwidth Improvements

The bandwidth from Soldotna to Seward was doubled from two 1.5 MB circuits to one 6.0 MB circuit.

Bandwidth from Seward to Moose Pass and Cooper Landing was increased to 10MB taking them off DSL.

Network equipment upgrades

Cisco Ethernet switches in McNeil Canyon, Moose Pass, Cooper Landing, Homer Middle, Razdolna

Cisco routers in Cooper Landing and Moose Pass

Website Redesign Launches

Ektron CMS400 product upgraded to version 7.5. This was a major re-architecture of our existing site (previously running on Ektron CMS400 6.1) as well as a vast redesign (thanks to webmaster Jesse Glaves). The new site features additional usability features such as enhanced search capabilities, a re-designed form search, a newly-introduced Board Policy search, as well as a vast number of navigational adjustments to make exploring the site that much easier. Our webmaster, Jesse Glaves, continues to strive to make the site as interactive, user-friendly, and content-rich as possible given the vast number of content items now hosted (nearing 4000 distinct "items" as of this summer's upgrade).



OneStop Student Portal Launches

We are pleased to announce the public launch of the KPBSD OneStop Student Portal. In cooperation with counselors and district staff, this website has been developed to organize and gather information for ease of access by students, counselors, teachers, and parents.

This includes information on Scholarships, Enrichment, Workforce Development, Tech Prep, Distance, Jump Start, Workplace Experience, and Summer Opportunities.

The site is fully functional and available freely to those inside or outside of the school district.

Tech Plan

The day after students left for summer vacation, we swung into our annual summer computer replacement mode. This was Year 9 of the tech plan. Year 9 is the second complete cycle of the tech plan that began in July of 2000. 656 brand new or one year old Connections computers were placed in these 11 district schools; Cooper Landing, Hope, K-Beach,

Redoubt, Sterling, Tustumena, Ninilchik, Paul Banks, Kachemak-Selo, Razdolna, and West Homer.

Dell Optiplex GX240s replaced by Year 9 Tech Plan computers were shuffled to 20 district schools to replace the older Dell GX150s. The GX150s were the first of the black computers and were used in Year 2 and Year 3 of the Tech Plan. The GX150s and their predecessor, the white GX110s (used in Year 1), are all but extinct in the district. The oldest computers in common use in the district are the GX240s that entered service in Year 3 and Year 4 of the Tech Plan. As newer Tech Plan computers come in each year, the oldest computers district-wide are displaced.

We sold 190 computers to the public during 8 scheduled sales throughout the summer. We had a substantial number of unsold machines heading to the borough surplus property auction this year. Memory was stripped from those surplus machines and installed in computers throughout the district.

E-Rate audit

The district underwent an in-depth E-Rate audit by KPMG, LLP on funds received in 2006.

Alaska Association of School Boards Consortium for Digital Learning 1:1 Laptop Initiative.

Information Services staff has played a role in the application process that led to the successful selection of Nikiski Jr/Sr High school and Razdolna for the state funded 1:1 laptop initiative. Nikiski will target this year's 7th graders and Razdolna will target 7-12th graders.

We have also researched wireless technology and have worked with vendors to design optimum wireless solutions for both schools.