


FILNET CASE STUDY

Prince William Network (PWN) / Prince William County Schools *GEO Connects Distance Learning Portal*

CLIENT	 Prince William Network (PWN also PWNNet) / Prince William County Schools Virginia Department of Education Old Dominion University
PROJECT	Website Development & Design
WEBSITE	http://pwnet.org/ http://geoconnects.pwnet.org/
TECHNOLOGY	Filnet Tango, HTML, PHP, JavaScript, DHTML, Perl, Linux, MySQL, CD-ROM
DURATION	06.2003 – 06.2006

world geography connects
Before 1500 AD

Old Dominion University
Distance Learning Course
for Virginia Teachers

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- Login

Fall 2005 Course: October 17 - November 28

Join Don Zeigler on a world tour with foreword by Michael Wood

Online Course for Virginia Teachers in Partnership with **Virginia Department of Education**,
Prince William County Public Schools, and **Old Dominion University**

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 A **Filnet, Inc.** Solution

Overview

Prince William Network (PWNet) is the award-winning distance-learning arm of Prince William County Public Schools. It is the result of teachers and school media professionals cooperating to provide high level instruction and staff development to teachers, students, parents, and administrators across the country. The types of programming offered include state standards of learning training; math, geography and history courses; education professional development; and performing arts programming via satellite. Prince William Network created several of its e-learning programs in partnership with Filnet, Inc. Since 1996, this partnership has produced a series of customized e-learning programs for both students and educators.

As a free offering of PWNet that began on March 5, 2002 to support the Virginia Standards of Learning (VSOL) for teaching World History to 1500 AD, GeoConnects is a partnership between Prince William County Public Schools, Virginia Department of Education, and Old Dominion University. The purpose of GeoConnects course is to help teachers incorporate more geography into the World History curriculum. Geography Connects or GeoConnects is just one of many programs offered by PWNet and powered by Filnet technology solutions.

Challenge

PWNet is recognized for its superior broadcast standards and its state-of-the-art facilities based in Prince William County, Virginia. When the award-winning institution sought to develop an e-learning program, it expected similar levels of quality. PWNet leaders looked for a partnership that would provide the best online learning and training experiences for students and educators within the state and across the United States.

PWNet recruited its long time technology solutions partner Filnet to build applications to manage its unique online course. The GeoConnects site would have to allow users to register online, send e-mail notifications, provide discussion boards and forums as well as incorporate a grading system for reporting purposes. On the backend, the administration area would have to be user-friendly and menu-driven. Further, the GeoConnects administration area would have to require very little training, so that nontechnical staff could make site updates as needed. Moreover, the system would have to allow for easy features upgrades.

Solution

Prince William Network's strategy was to fuse its already successful broadcasting programs with web technologies. This included building a robust infrastructure to serve as the entryway into a variety of subject material for students and teachers. The solution required design, development, implementation, and hosting capabilities. Filnet stepped-in to deliver the right solution for the school district's needs.

The first priority was to create a portal to access the complete range of PWNet programs including GeoConnects. Since the site would evolve over time and add new programs and/or modules, it had to be scalable in size and complexity. Accordingly, Filnet developed a simple, yet dynamic, platform as the base of PWNet online training services. This platform would enable the site to remain stable through generations of new program implementations that could, over time, become increasingly sophisticated.

Open source solutions like Linux, PHP, Perl, and MySQL were chosen as core technologies for the platform. The site also includes a content management solution (Filnet's Tango) that allows programs developers and managers to save money by putting content on the website by themselves without the assistance of a webmaster or IT specialist.

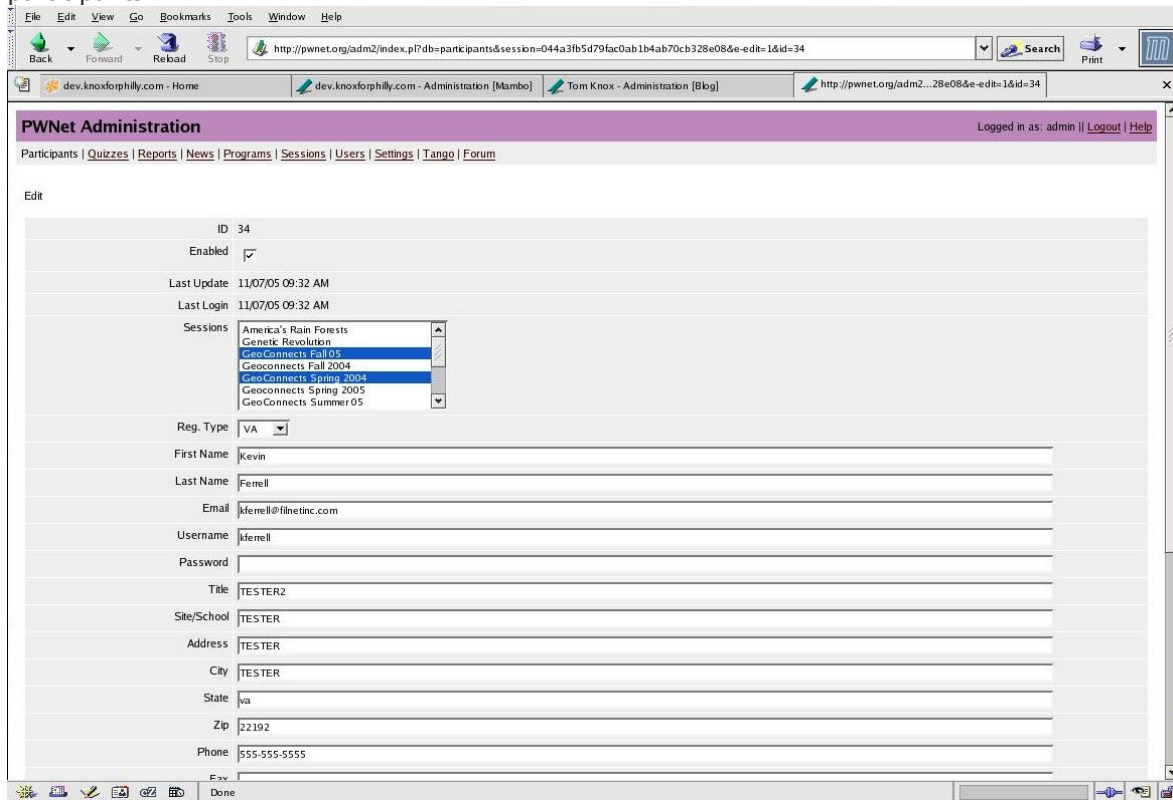
Filnet customized elements of PWNnet to meet the project's specific needs. Filnet developed instructional tools, such as a grading and notification system for PWNnet instructors and facilitators. Additionally, Filnet developed the unique appearance of each GeoConnects, delivering a unique branded identity to the user while maintaining the architectural integrity to preserve the user experience.

Broadcast e-mail notification, discussion boards, mailing lists, chat rooms are functional highlights that make PWNnet's offering dynamic and of great value to students and staff. Filnet developed a special discussion forum feature for users of GeoConnects online course. This discussion forum allows users to have online study sessions, and share ideas and thoughts. Filnet built a customized application using Perl to meet PWNnet's specifications. This solution allows only registered users of online courses to participate in discussion forums. In other words, GeoConnects participants are the only users permitted to post messages and share ideas in the GeoConnects forum.

Filnet also developed a registration system for GeoConnects that allows participants to register for the online course. PWNnet employee can access a secure website that displays the registered users profile and their email addresses in a database listing that allows them to select these registrants individually or as a group to receive an email announcement. The secure backend website includes a template for writing the email, spell checking it, adding an attachment, and sending it either as a web-based or plain text email. This system is coded using a combination of PHP webpages and Perl scripts. As an add on, the system also collects bounced email addresses into a database that automatically alerts PWNnet employee's that certain email addresses have expired.

Another key priority for GeoConnects was accessibility. Filnet tested each site thoroughly for cross-platform and multi-browser compatibility before the launch to ensure that all users had the best possible experience.

Filnet also developed the accompanying CD-ROM for GeoConnects program using open source technology. The interactive CD-ROM is created with HTML, PHP, and JavaScript. Filnet implemented its Tango content management software to update pages and content as needed. Filnet also built into the CD-ROM an auto-run and flash introduction. When lessons are built, the web pages are downloaded and then burned to compact discs. PWNnet then makes copies of the master and distributes them to the registered participants.



Results

The Prince William Network and Filnet partnership enhanced PWNet's already outstanding and award-winning broadcasts by incorporating emerging multimedia and Internet technologies into its program. Using open-source technology, Filnet developed sophisticated applications to manage the online program including registration, e-mail notification, discussion boards/forums, and a grading system. The menu-driven administration area on the backend is user-friendly and requires very little training so that nontechnical staff can modify that site as needed.

Filnet's winning solution—which combined Internet and CD-ROM technologies—increased the popularity of the GeoConnects program. The Filnet solution also increased communications between instructors, facilitators, teachers, and students; added additional learning material to the program; and raised the overall value of the program. Even more, GeoConnects provided PWNet additional reach, allowing for learning to be carried to the far corners of the world and delivered into schools and homes across Virginia and United States. Additionally, the customized discussion forums is a value add to GeoConnects users who share ideas and thoughts with their peers and fellow students.

The GeoConnects project supports various platforms including Apple OSX and Microsoft Windows XP/Win2K. Participants of the GeoConnects online course can view the site using common browsers applications such as MSIE 6.0 (Win Only) Netscape 7.1, Mozilla Firefox 0.9, Camino (Mac Only). The site is also 508 compliant so that persons living with disabilities may readily access the site's features.