

Database Solutions

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MySQL and PHP

The database solution of choice by Electronic Publications is a combination of MySQL and PHP which we have running on three of our servers, configured with Linux as an operating system. We are also running MySQL and PHP on our Mac computers with OS X.

MySQL is an open source database management system. SQL refers to Structured Query Language, a language that accesses databases. SQL functions are implemented through a highly optimized library. This management system is multi-threaded, so there is a fast thread based memory allocation system.

PHP is a scripting language that allows for user-friendly server side web application development. PHP gives a web server a method of interfacing with MySQL.

On George Mason's web site, Electronic Publications has used MySQL and PHP to develop the "Daily Gazette," Today at Mason, the Center for the Arts Calendar, the Viewfinder, and the TAC Gallery, as well as a Production Content Management System for the Publications Division.

Content Management

Our primary goal in developing these applications is content management.

Advantages of Using MySQL and PHP

1. Fast speed and secure (multithreaded)
2. Runs on multiple platforms
3. Open source solution which should be compatible with the university's movement to an open sourced LAN infrastructure
4. Both MySQL and PHP are free and downloadable from an Internet Browser
5. PHP, a scripting language, is relatively easy to program
6. Apache, the most popular, freely downloadable, Internet web server, runs PHP as a module

Daily Gazette: Everyone is familiar with the Daily Gazette, but not as familiar with the back end interface of the Gazette, which allows a Public Relations Coordinator to input the news stories to a database. These stories are retrieved through a user interface page, developed in PHP, which accesses data from the database. In the case of the "Daily Gazette," the content that is managed is text. See: <http://gazette.gmu.edu>

Viewfinder: The Viewfinder is an image database that provides users an opportunity to get images from an image database through any Internet Browser. Script development in

PHP allows users the capability of acquiring images through general searching and browsing, and keyword searches. The TAC Gallery additionally allows for searching by date. See: <http://viewfinder.gmu.edu>