

County Government *Turns to MySQL* to Help Support its Citizens

Pottawattamie County is located in southwestern Iowa, part of the metropolitan area for Omaha, Nebraska. Like most local governments around the world, it strives to increase the efficiency of the services it provides to its community while operating within a closely-monitored budget.

Traditionally, small government entities have been reluctant to embrace leading-edge technology for fear of risk and complexity. However, the Pottawattamie County Information Technologies (PCIT) department has implemented open source software, such as the MySQL database, throughout their organization. They chose this new type of computing infrastructure because it allows them to deliver more reliable and cost-effective solutions in less time than previously possible.

As recently as 2002, the county's back-office computing department was inefficient, significantly under-equipped, and in need of a complete overhaul. They only had five dedicated Windows NT servers — filled with incompatible proprietary software, security vulnerabilities and prone to frequent system-wide crashes.

The county's supervisors hired Thomas Broniecki as Information Technologies Director to bring in a new team and fresh approach. One of his first decisions was to rebuild the entire environment upon the LAMP open source software stack, made up of the Linux operating system, Apache Web server, MySQL database, and PHP/Perl scripting languages.



"MySQL is much easier to administer and extend than our legacy Informix and Microsoft SQL Server databases. We have standardized on MySQL for all our new database application development."

Thomas Broniecki

Information Technologies Director Pottawattamie County, Iowa



More Choice & Control Over Their Data



"We are migrating our Informix client/server system to a Web-based MySQL application running on Linux. MySQL has been so dependable and easy to configure that we can trust it more than Informix. It just plain works!"

Thomas Broniecki

Information Technologies Director Pottawattamie County, Iowa Previously, the Microsoft SQL Server and Informix database running on their Windows NT servers provided little flexibility. Now, the department is using MySQL in all its new database projects. MySQL's ease of development allows them to create and deploy powerful Web-enabled database systems very quickly. They appreciate MySQL's simplicity as well as its robustness and adaptability.

In less than two years, PCIT has shown considerable progress towards its goal of becoming an effective, enterprise-level IT organization. The department's internal staff has been doubled, and now supports 14 Dell PowerEdge servers running Linux. PCIT has modernized and Web-enabled most of the county's administrative systems, resulting in a remarkable ROI. The county has now completed building them a new home a \$300,000 state-of-the-art network operations center, complete with specialized heating/cooling systems, an uninterruptible power source and advanced Tyco fire supression.

Fast and Secure Web Access to Public Records

The County Recorder's department manages hundreds of thousands of important civic documents such as birth and marriage certificates, as well as boat licenses and real estate transactions. In the past, due to a restrictive and complex client/server application based on Informix, it was difficult and time-consuming to track down and get copies of these records. Pottawattamie residents now have fast and secure access to this public information over the Internet through a Web site powered by MySQL.

MySQL enables PCIT to accomplish this by mirroring the data from the old Informix database, populating key public information, safely locking out non-public information and working with a Perl interface to display both data and scanned document images. The next planned step is to eliminate the reliance on Informix by replacing it completely.

A Back-End Data Warehouse Based on Robust Open Standards

PCIT is also migrating the county's proprietary packaged data warehouse application to MySQL in order to gain more direct control over their data. This new system of multiple MySQL database servers will manage and provide decision support for the most critical governmental operations like finance, administration and HR/payroll. High availability of the county's most important information will be ensured through automatic fail-over and back-up/recovery.

The ability to build such complex database applications internally with MySQL has made PCIT's work much easier and its systems more reliable and stable. Previously, such projects would have been outsourced to external vendors who would have developed expensive and overly-specialized products. Because of its integration with the LAMP stack and other open source standard technologies, MySQL is a safer investment for organizations like PCIT that are concerned about too much reliance on outside vendors and platform lock-in.

According to Thomas Broniecki, MySQL delivers flexibility, stability and security in a platform-independent database solution. Pottawattamie County's IT department has benefited greatly from MySQL and Linux, by being able to better manage and allocate computing resources to produce improved, lower-cost services to local constituents.

Reliability – PCIT has found its deployed MySQL applications to be much easier to administer and maintain than its legacy Informix or Microsoft SQL Server databases.

Ease of Use & Deployment – Development with MySQL is so straightforward that PCIT has quickly Web-enabled some of the county's old paper-based systems.

Scalability – MySQL has met all the department's database needs, no matter how large or small.

No Platform Lock-in – MySQL's open source approach gives PCIT more options, reducing their reliance on a single company or technology.





MySQL is a key part of the LAMP open source software stack. Organizations such as PCIT are standardizing on LAMP because of its lower cost and freedom from lock-in. "We've achieved quick and cost-effective business results with MySQL. It would not have been possible without MySQL's tight integration with Linux, Perl and other platformindependent open source software."

Thomas Broniecki

Information Technologies Director Pottawattamie County

Technical Environment

Hardware:	Dell PowerEdge 1750 and 2600
CPU:	Dual Intel Xeon 2.4GHz
OS:	Red Hat Enterprise Linux 3
RAM:	2GB DDR SDRAM
Hard Disk:	36GB
Storage:	Raid 10 with 6-10 disks
Languages:	Perl, PHP, C++
Database:	MySQL Database Server
Database Size:	• 12GB
	 Number of rows in largest
	table: 5,858,957
	• Total rows:31,000,000
	 74 tables
Archive	
Database Size:	• 40 GB, 16 tables
	 Number of rows in largest

table: 35,753,713

Total rows: 100,000,000

About MySQL

MySQL AB develops, markets, and supports the MySQL database server, the world's most popular open source database. With over five million active installations, MySQL has quickly become the core of many high-volume, business-critical applications.

Major industry-leading organizations such as Google, Sabre Holdings, The Associated Press, Suzuki and NASA rely on the ultra-fast, highlyreliable MySQL database. MySQL is available under the free software/Open Source GNU general public license (GPL) or a non-GPL commercial license.

For more information about MySQL, please go to **www.mysql.com**.



The World's Most Popular Open Source Database