

craigslist Relies on MySQL to Serve Millions of Classified Ads

craigslist was founded in 1995 as a down-to-earth community site where people could address everyday needs such as finding a job or a place to live. craigslist's approach revolutionized the ease and speed with which people could create an online community that would facilitate the exchange of ideas, goods and services.

craigslist has become a phenomenon simply as a result of its stellar reputation and word-of-mouth promotion. According to Alexa Traffic Rankings, craigslist is one of the Top100 most trafficked web sites in the world. Its popularity has spread to over 40 international cities. Every month, craigslist receives 5 million unique visitors, and serves about 1 billion page views.

craigslist has been using MySQL and the open source LAMP (Linux, Apache, MySQL, Perl) stack from the very start. Initially, craigslist evaluated other open source databases along with MySQL. However after rigorous testing, craigslist quickly found that MySQL was extremely reliable, high-performance and scalable. In less than 4 years, MySQL has enabled craigslist to grow from 250,000 page views to over 27 million page views daily - virtually all of which are generated out of MySQL!



craigslist

"craigslist infrastructure could not have handled the exponential growth in traffic without MySQL.

In the last 4 years, MySQL has enabled us to grow from 250,000 page views a day to over 27 million page views today."

Craig Newmark
Founder and Customer
Service Representative
craigslist.org



Using MySQL to Provide Critical Functions

Classified Ads

Classified Ads are at the heart of craigslist with everyday people offering and looking for work, housing, music lessons, collectibles, event tickets and everything in between. About 3 million classified ads are submitted to craigslist each month for housing, jobs, services, and personals. In fact, according to Forrester Research craigslist has emerged as the “most efficient” job-recruiting Web site nationwide. It exceeded the effectiveness ratings for Monster.com, HotJobs.com and CareerBuilder.com. It is craigslist’s popularity with employers and job seekers that has enabled it to become financially successful and profitable.

craigslist manages its classified ads using MySQL Server. A single database master handles all the updates which are replicated to multiple slaves for read only access. The replicated slaves are load balanced to efficiently serve the site and are also used to run backups.

Search

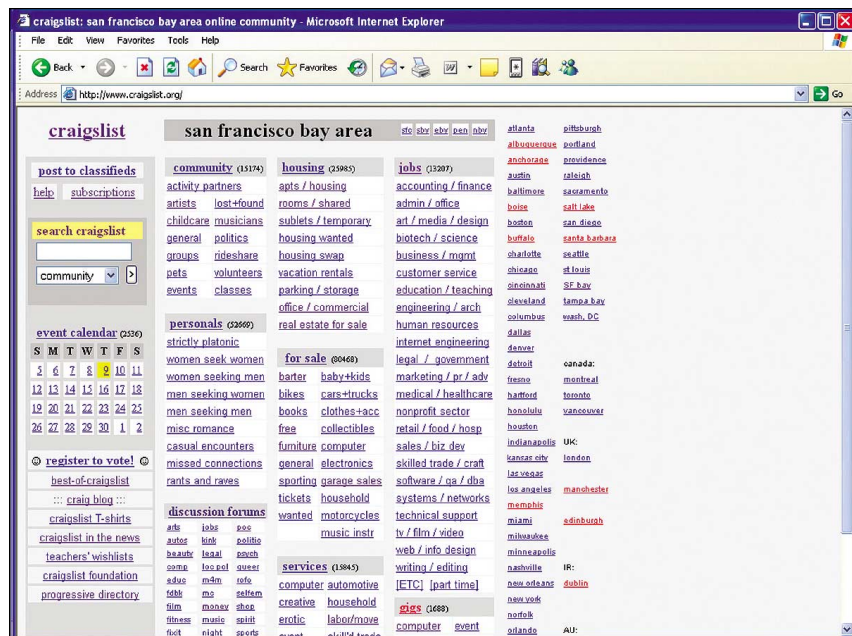
Extensive search capabilities enable users to instantly search across millions of classified ads and forum entries to quickly find the product and services they are looking for. Searches can be narrowed by city, sub-region, and category. The combination of MySQL’s speed and Full Text Search has enabled craigslist to serve their users by enabling people to effectively help each other out with everyday tasks.

craigslist uses MySQL to serve approximately 50 million searches per month at a rate of up to 60 searches per second.

Forums

Over 50 forums give millions of Craigslist users the opportunity to openly seek advice, get questions answered, and discuss topics ranging from automotive and cuisine, to night life and weddings.

To power Forums, craigslist uses replicated MySQL servers in a master-slave configuration. craigslist Forums receive about 1 million new postings and serve about 75 million page views each month. Approximately 18 million posting are live at any given time.



Three million classified ads are submitted to craigslist each month.

Providing High-Performance, Scalable Growth

craigslist has consistently focused on the simplicity and usefulness of their site. Their exponential growth can be primarily attributed to them listening to their virtual community. Significant MySQL features that have enabled craigslist to scale their business include:

Reliability – MySQL provides craigslist with an extremely high-degree of availability, so that millions of users have a trusted and efficient means to connect with others in the local community and exchange goods and services.

Performance – The performance of MySQL allows craigslist to be in the Top 100 fastest and most trafficked sites on the Internet. Site performance is one of key differentiators for craigslist.

Full Text Search – Full Text Search enables users to accurately and intuitively search across millions of Classified listings and Forum entries.

Replication – Classified Ads, Forums, and Search use numerous replicated and load balanced slave servers to serve the site and provide backup copies.



Technical Environment

<i>Hardware:</i>	Supermicro 4U 7043-P8
<i>CPU:</i>	Dual Intel Xeon 3.2 512KB
<i>OS:</i>	Suse Linux
<i>RAM:</i>	4GB
<i>Hard Disk:</i>	36GB
<i>Storage:</i>	Raid 10 with 6-10 disks
<i>Language:</i>	Perl

“The speed and reliability of MySQL is unmatched. There is no better database!”

Craig Newmark

Founder and Customer Service Representative
craigslist.org



Technical Environment (Continued)

Classified Ads

Database: MySQL 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

Search

Database: MySQL Server
Database Size: 2.2GB, 554 tables
Number of rows in largest table: 77,209
Total rows: 1,000,000

Forums

Database: MySQL Server
Database Size: 11GB, 74 tables
Number of rows in largest table: 18,864,215
Total rows: 30,000,000

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 corporations such as Yahoo!, Sony Pictures Digital Entertainment, Motorola, Lucent Technologies, NASA, HP, Xerox and Cisco rely on the ultra-fast, highly-reliable 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