



## Lycos Europe Migrates to MySQL Reduces TCO by 90%

Lycos Europe is one of the leading Internet destinations in Europe operating a pan-European network of websites in nine languages – English, German, French, Italian, Spanish, Russian, Swedish, Danish, and Dutch. Lycos Europe offers a combination of online products and services including search, communication services, content channels, Internet access, homepage building, and online communities. Every month Lycos Europe serves 3 billion pages to 25 million users. Lycos Europe generates significant revenue from advertising and service fees.

Lycos Europe was using a proprietary database from one of the 'big 3' database providers running on a cluster of high-end HP Tru64 Unix servers to power their portal services. The company began to investigate alternative database and hardware combinations that could decrease their Total Cost of Ownership (TCO) without sacrificing the quality of their services. Lycos Europe chose to migrate to MySQL® and Linux to take full advantage of commodity database and hardware.



*"With MySQL we were able to reduce our annual database costs by more than 90%.*

*MySQL significantly reduced our license, support and maintenance fees!"*

Per Larsson  
Lycos Europe



## 90% Total Cost of Ownership Savings

Lycos Europe was spending an excessive amount of money on database software and hardware. Database support and maintenance alone was costing Lycos Europe more than € 100,000 per year. When Lycos Europe was planning the development of their ISP-services and WebServices, they decided they would architect their solution on the LAMP (Linux, Apache, MySQL, PHP) open source stack with a mix of additional Java application

servers. This implementation quickly proved successful and cost Lycos Europe a fraction of their traditional solution. Replacing their existing database solution with MySQL resulted in more than a 90% savings.

As a result, the company decided to migrate all company portal services to MySQL, displacing one of the leading proprietary databases in the market. The migration process went smoothly.

Lycos Europe was able to move their biggest database (25Gb) to MySQL and get it up and running in less than a day. Lycos Europe today has approximately 1 Terrabyte of data handled by 100 MySQL servers. At peak traffic, up to 25,000 concurrent users are online and 1 Gb of data per second is delivered to users. Lycos Europe has put a total of six man-months work into the migration project.

*“The MySQL migration project was completed six weeks ahead of schedule. We found that MySQL expertise already existed in-house.”*

**Per Larsson**  
Lycos Europe

The screenshot shows the Lycos Europe website in a browser window. The browser title is "Lycos - Welcome @ Lycos Europe". The website features the Lycos logo with the tagline "meet you there" and a navigation menu with links for "Email & Free", "Search", "Flirt & Chat", "Build a site", "Entertainment", and "Shopping". Below the navigation is a search bar with a "go" button and options for "Web", "UK", "Images", "Shopping", "Domain names", and "Local Search". The main content area is titled "Welcome @ Lycos Europe" and displays a grid of country-specific links with flags: Lycos Europe, Danmark, Deutschland, España, France, Italia, Nederland, Österreich, Svizzera Suisse Schweiz, Sverige, and United Kingdom. On the right side, there is a financial widget for "lycos@XETRA" showing a last trade of 17:36:03 and a price of 0,85. Below this is a "XETRA-Chart" and a "Latest Report" section for "Q1 Rep. 2004". The "Next Event" section lists "Q2 Report" on "July 27". The footer contains the copyright notice "Copyright © 2004 Lycos, Inc. All Rights Reserved." and a status bar at the bottom indicates "Transferring data from www.lycos-europe.com...".

## High Availability (HA) Solution Tailor-made

As the new systems were installed, Lycos technicians set up a tailor-made HA-solution, where MySQL servers on different machines are paired. Each server monitors its twin. If one server goes down, the twin immediately takes over its task without the users noticing any disruption in services providing guaranteed reliability.

### Additional Hardware Savings

MySQL has enabled Lycos Europe to significantly reduce their hardware costs. Through the efficiency and speed of MySQL, Lycos Europe has not only been able to migrate their database from expensive SMP machines to commodity boxes from Dell, but they've also been able to reduce the number of machines required to run their applications from 13 to 4.

"Since we're able to run MySQL on commodity hardware from Dell, we have freed up € 200K annually to be spent on product development and more powerful hardware. We're

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talking about cost savings exceeding 90%", says Per Larsson who has been responsible for the project at Spray Networks AB, a Swedish subsidiary of Lycos Europe.

In addition to the € 200K yearly savings, Lycos Europe expects to also significantly reduce administration costs. Lycos Europe has found that MySQL is much easier to maintain with minimal specialized resources. The combination of fewer machines and easier administration has resulted in reduced management costs.



### Next Steps

"We're incredibly satisfied with the migration of our portals to MySQL. Functionality is great and the TCO numbers speak for themselves", says Per Larsson at Lycos.

"The project has been completed within 6 months without any disturbances in services or unexpected surprises. Meticulous preparations and a flexible attitude towards change have been keys to our success. We're already discussing how to move our mail-services to MySQL as well."

## Technical Environment

A typical MySQL configuration:

<i>Hardware:</i>	Dell 6650
<i>OS:</i>	Debian Linux
<i>CPU:</i>	Quad Pentium Processor (2.6 GHz)
<i>RAM:</i>	8 GB
<i>Hard Disk:</i>	SAN EMC 8830
<i>Database:</i>	MySQL Server

## About MySQL

MySQL AB develops and markets a family of high performance, affordable database servers and tools. The company's flagship product is MySQL, the world's most popular open source database, with more than 5 million active installations. Many of the world's largest organizations, including Yahoo!, Sabre Holdings, Cox Communications, The Associated Press and NASA, are realizing significant cost savings by using MySQL to power Web sites, business-critical enterprise applications and packaged software. MySQL AB is a second generation open source company, with dual licensing that supports open source values and methodology in a profitable, sustainable business.

For more information about MySQL, please go to [www.mysql.com](http://www.mysql.com).



The World's Most Popular Open Source Database

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