Viasuisse *Provides High Availability, Real-Time Traffic Information with MySQL Cluster*

Viasuisse AG is the leading traffic information service provider in Switzerland and is focused on providing accurate and reliable traffic information to the general public. Viasuisse's primary challenge was to develop a simple and efficient solution that enabled customers to retrieve real-time traffic details via telephone. Viasuisse is a paid service, so reliability and availability of the information is critical to their success.

The Visuisse solution has been live since March 2005 and is hosted in a data processing center at Swisscom, a leading telecom company. Using a mobile or landline telephone, users are able to easily retrieve real-time traffic information using voice-recognition technology. The Viasuisse service is available in multiple languages including German, French, and Italian. Users access the type of traffic information they need, such as information on highways, mountain passes, truck stops, or railroad traffic.

To ensure the traffic information is continuously available, Viasuisse selected MySQL Cluster, a high-performance, fault-tolerant open source database. In order to automate the delivery of the information, Viasuisse chose to implement EXCELSIS (www.excelsisnet.com), a leading provider of speech portalsand voice solutions.

viasuisse

"MySQL Cluster allowed us to easily implement our high availability application requirements. Plus, MySQL Cluster has proven to deliver the very high performance and reliability our service demands."

Mark Bögli
CEO
Viasuisse AG

MySQL

Many Requirements - One Solution

Since ease of use was one of the primary project goals, Viasuisse decided that a speech driven service would be the best fit. Viasuisse also estimated it would initially need to accommodate approximately 1 million calls in the first year. Plus, users would need to receive traffic information from multiple sources 24 hours/day, 365 days/year.

Additional requirements included:

- Cost-effective solution that scales with the volume of calls
- Seamless integration with existing back-end systems
- Multi-language support for German, Italian, and French
- Access to usage and operating statistics

To meet these requirements, Viasuisse chose MySQL Cluster. MySQL Cluster combines MySQL, the world's most popular open source database, and a fault tolerant database clustering storage engine.

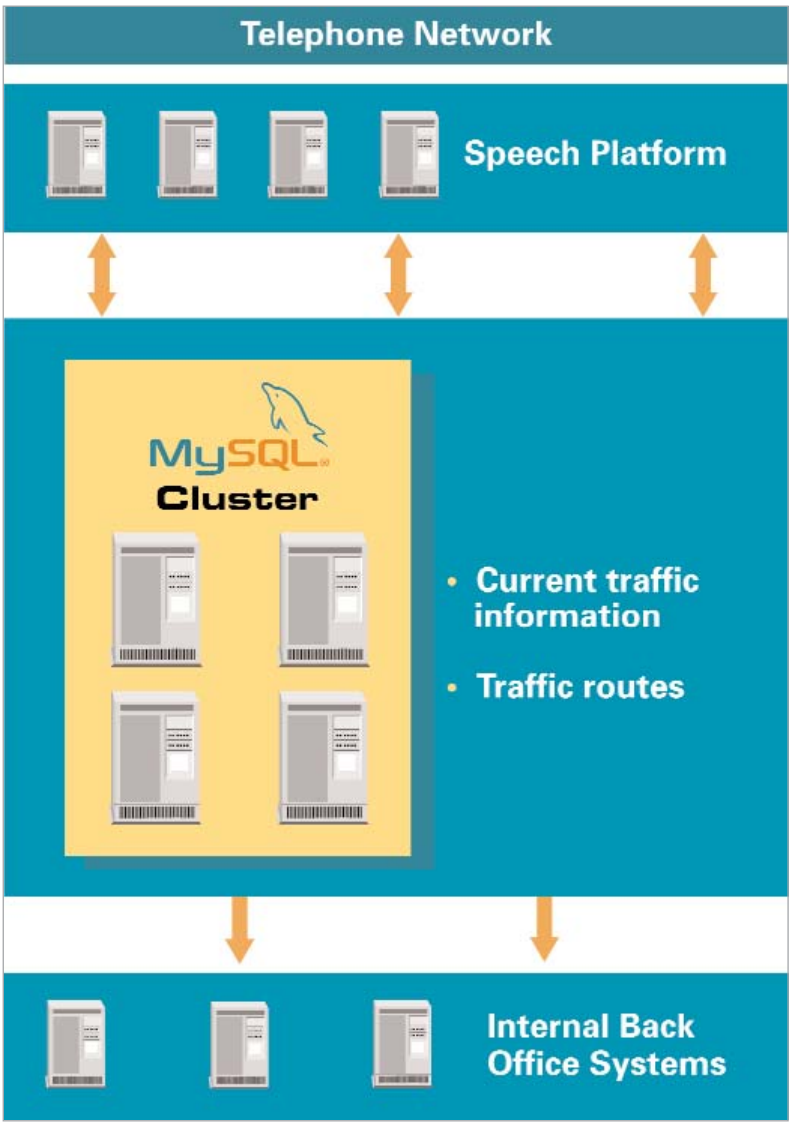
It is a high-performance, in-memory database. Data resides in main memory and is replicated across all database nodes in a cluster. Therefore, MySQL Cluster does not require an expensive 'Shared Disk' storage architecture. In addition, MySQL Cluster supports load-balancing and high-performance failover to deliver 99.999% high-availability.

With the help of MySQL consultants, EXCELSIS designed a high-availability, and high performance database architecture based on MySQL Cluster. This work provided the foundation for EXCELIS to develop one of the first speech-driven information applications using MySQL Cluster.

The main components of Viasuisse real-time traffic information application include:

- The voice solution that delivers real-time traffic information using the innovative Insonic Speech Solutions Platform from EXCELSIS
- Application interfaces used to fetch traffic information from multiple sources including police traffic control centers, traffic sensors, and the Swiss Federal Railway
- High reliability, scalablity, and performance using an optimized and redundant set of system components

Highly Available Traffic Information



MySQL Cluster enables Viasuisse to deploy highly available services without interruption.

Before releasing the production version, the entire system was load-tested for performance, scalability, and failover. By load-testing the system, Viasuisse could rest assured that they could meet and exceed the load volumes anticipated during peak travel hours.

During a recent flood, the Viasuisse application was able to handle 120,000 calls/week and 30,000 calls/day from travellers.

To test updated and enhanced versions of the application before they go into production, a virtual development and test infrastructure was created using VMWare ESX Server. In addition to virtualizing the speech portal, EXCELSIS developers are also able to virtualize the MySQL Cluster components. Instead of requiring multiple servers, the environment can be virtualized on a single server, saving hardware costs and administration overhead.

Thousands of travelers rely on the Viasuisse real-time, high availability traffic information service daily, proving that MySQL Cluster is an ideal solution for cost-effectively deployed business critical applications.

Why Industry Leaders Depend on MySQL

Technical Environment

Hardware:	2x DELL PowerEdge 2850
OS:	Red Hat Enterprise 3
CPU:	Intel XEON 2,8 GHz
RAM:	2 GB
Hard Disks:	3x 72 GB U320
Database:	MySQL Cluster
Number of Users:	Up to 450 simoultaneously
Drivers:	Connector/J
Languages:	Java und PHP
Web container:	Apache, Tomcat and JBoss

About MySQL

MySQL AB develops and supports the MySQL database server, the world's most popular open source database. Over six million installations use MySQL to power high-volume Web sites and other critical business systems — including industry-leaders like The Associated Press, Yahoo, NASA, Sabre Holdings and Suzuki.

MySQL is an attractive alternative to higher-cost, more complex database technology. Its awardwinning speed, scalability and reliability make it the right choice for corporate IT departments, Web developers and packaged software vendors. MySQL is available through an open source GPL licence or MySQL Network, a comprehensive offering of certified software and premium support services.

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

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