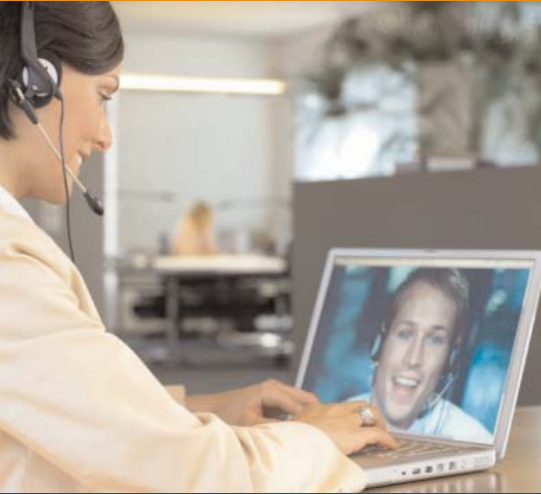# Italtel enables Networking Convergence using MySQL Cluster Carrier Grade Edition

Technical Environment

Hardware: ATCA Pentium M 32 bit and Intel 64 bit system with Xeon processor

OS: Wind River PNE 2.0

Database: MySQL Cluster Carrier Grade Edition

"We decided to use MySQL for our products because we found that it had wide-spread, proven deployments -- and met our stringent reliability and scalability requirements for the communications industry."

Franco Serio
Chief Technology Officer, Italtel

About Italtel

Italtel is an acknowledged leader in Next-Generation Network solutions. The Italtel product suite is focused on providing communications operators and Internet Service Providers with technology and solutions for creating and managing new, revenue generating services.

The Business Challenge

Social networking is a driving force on the Internet, allowing advertisers to target a rapidly growing market with millions of users. Social networking sites enable users to create online profiles and build personal networks. These 'Web 2.0' sites have found it challenging to integrate voice with other services such as Web, Email, and instant messaging. Existing IMS products have brough providers closer to this integration, but don't provide tight integration of Web content.

To solve this problem for providers, Italtel has delivered their next-generation service platform, TSB -- "The Service Box". It provides true integration of social networking sites with mobile telephony, allowing users to interact via Web, voice, instant messaging, and SMS from any device while able to maintain their real or virtual identity, and provides presence and location based services.

For the TSB platform, Italtel needed a full-featured, highly reliable, and easily scalable database. To satisfy Italtel's unique requirements, their architecture consists of a very flexible subscriber database -- capable to scale from a few thousand upto millions of subscribers. The combination of both a small and large subscriber and services databases increases the importance of being able to incrementally scale the solution and control costs.

The MySQL Solution

To select a database for their next generation product suite, Italtel evaluated many databases, including telecom-specific software as well as more general purpose RDBMS platforms. MySQL Cluster Carrier Grade Edition combined the flexibility of a general purpose database with unprecedented reliability and scalability for Italtel's next generation products to satisfy the requirements to scale from a few thousand to millions of subscribers.

The Italtel solution is based on ATCA hardware, making it easier to deploy and maintain. By using MySQL Cluster Carrier Grade Edition and commodity ATCA hardware, Italtel is delivering a new IMS Suite that enables service providers to deliver a new set of converged, social networking services at a reduced TCO.
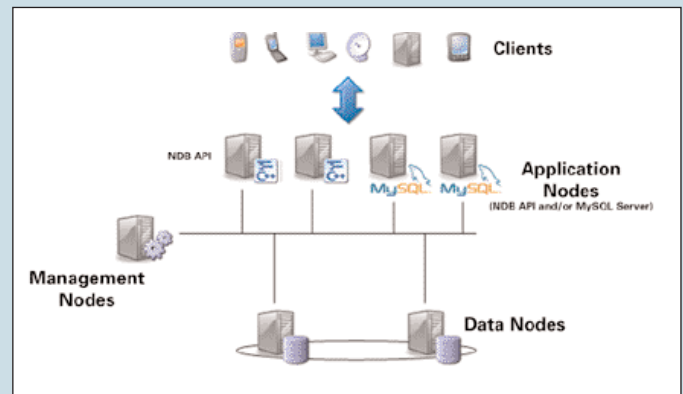
Based upon MySQL Cluster, Italtel's marriage of Web innovation and mobile connectivity opens the door to additional user-focused features such as using Location Based Services to tell customers when their network contacts are nearby, or allowing users to upload new video content to their own sites.

MySQL Cluster Carrier Grade Edition

MySQL Cluster Carrier Grade Edition provides the telecom industry with a true real-time database combined with the flexibility of a relational database and the cost savings of open source. It is specifically designed to meet the business and technical challenges currently facing NEPs and CSPs with the next-generation of services and applications for converged networks. MySQL Cluster Carrier Grade enables telecom organizations to:

- Increase Performance – Satisfies the real-time and low latency requirements of Subscriber-Centric Networks with the best price to performance ratio in the industry

- Maximize Reliability and Availability – A parallel server architecture coupled with geographic replication allows for no single point of failure and delivery of 5 nines of availability (99.999%)

- Promote Interoperability and Flexibility – Compatible with database-independent APIs or existing subscriber models

- Lower Total Cost of Ownership (TCO) – Incrementally scale your applications in a linear fashion on ATCA based, Linux Systems

MySQL Cluster Carrier Grade Edition has a flexible distributed architecture which gives you complete control over the level of performance, reliability and scalability you need to match your application requirements.

About Sun's MySQL Database

MySQL is the most popular open source database software in the world. Many of the world's largest and fastest growing organizations use MySQL to save time and money powering their high-volume Web sites, critical business systems, and packaged software.
At http://www.mysql.com , Sun provides corporate users with commercial subscriptions and services, and actively supports the large MySQL open source developer community.

About Sun Microsystems, Inc.

Sun Microsystems (NASDAQ:JAVA) develops the technologies that power the global marketplace. Guided by a singular vision -- "The Network is the Computer" -- Sun drives network participation through shared innovation, community development and open source leadership. Sun can be found in more than 100 countries and on the Web at http://sun.com .

www.mysql.com