

SMS Notification Service

SMS notification services commonly follow a similar pattern: A user sends an SMS requesting to take part in a notification service. The request is immediately confirmed to the user. A special event finally triggers the actual notification procedure when the user is automatically informed about concerns of interest.

The Department for Pervasive Computing has developed a generic **SMS framework for realtime notification**, cooperating with major mobile network operators in Austria and Switzerland. The main focus in this framework concentrates on realtime systems, database management and fault tolerance.

The SMS notification service has been successfully utilized in several mass SMS games and running competitions within the last years. The realtime SMS result service at the **Vienna City Marathon** and the **real,- Berlin Marathon** can be regarded as the most prominent showcases since 2000.

Key Issues

- Real-time notification
- Pervasive Computing techniques
- Database Management
- Fault Tolerance

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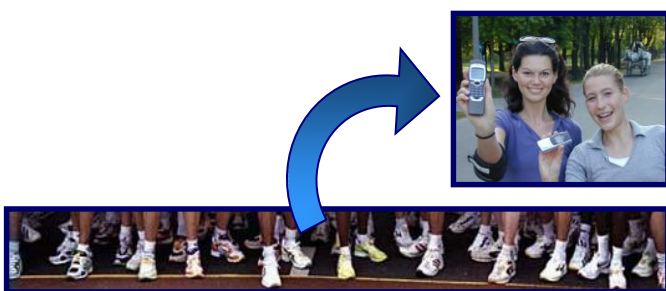
Cooperation Partners:

Mobile Network Operators
Conect Austria one GmbH
Telering
Swisscom

Time Measurement
Mika Frielingsdorf
Pentek Timing

Sponsors

Vienna City Marathon
real,- Berlin Marathon
Eskimo
Nestle
Otto
BMW

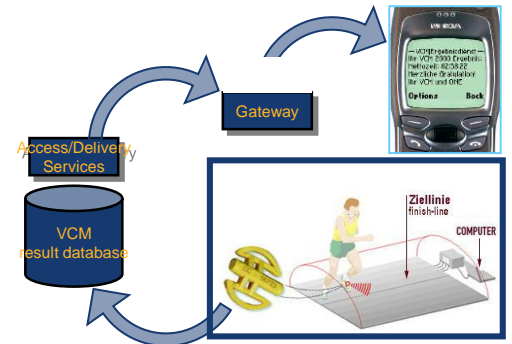


Approach

The framework for SMS realtime notification establishes bi-directional, multithreaded and asynchronous connections via SMPP to mobile network operators, which route all arriving Short Messages destined to an MSISDN to the framework kernel. After parsing, evaluating and logging the incoming SMS, an automatic reply to the origin MSISDN takes the same way back via the provider to the final destination.

For running competitions the initial registration process can also be accomplished via the internet. The triggering event for starting the notification process is activated through an RFID tag every runner carries on one of his shoes.

In cooperation with international time measurement companies the corresponding result records to an RFID tag could be transformed to a textual notification and sent to the subscribers in realtime.



Showcases

- Vienna City Marathon (2000-2004)
- real,- Berlin Marathon (2000-2004)
- Nestle (2003)
- Ironman (2003)
- Otto (2003)
- SurfWM Podersdorf (2003)
- Forum ONE (2002-2003)
- Grazer Altstadtkriterium (2002)
- Ski-Opening Arlberg (2002)
- Eskimo (2002)
- One-Roaming (2002)
- Life-Ball (2001)
- BMW Mini Promotion (2001)

