



GeoSocial Networks for Real Life Interactions

TheGeoSocialE™ Platform Architecture

Overview

TheGeoSocialE™ Platform is the world's first hyper-local web based community platform. With full geo-mapping of people, places and events, TheGeoSocialE platform enables organizations to create online and in person communities where they share information and interact with their audiences and employees, locally and globally, online and back in the real world.

By promoting higher proximity between community members and actual physical connections via real life events, organizations increase their members satisfaction and trust while deepening their sense of belonging and level of engagement around the organization

TheSocialE™ Platform is PHP-MySQL based. It typically runs on the LAMP (Linux, Apache, MySQL, PHP) stack of technologies, but it can also potentially run on proprietary platforms such as SUN's GlassFish or WAMP (Windows, Apache, MySQL, PHP).

The platform's user interface is browser-based, using the latest Web 2.0 techniques, including AJAX.

Platform Key Technology Features

- Unique Geo-local query engine
- Scalability
- High-Availability
- Supports multiple mapping providers
- Geo-IP provider diversity
- Platform independent
- Supports various caching mechanisms
- Vast web-browser support
- Supports various mail-distribution mechanisms
- Amazon AWS (Elastic Compute Cloud) images available
- Language support

Technology Overview

Some of the key decisions made during the development of www.peuplade.fr web-site are reflected today in TheSocialE™ platform and its features. Most noteworthy is the use of PHP/MySQL open source technologies as the basis for the platform. Additionally, because of the need to support large numbers of users, appropriate mechanisms were introduced into the platform in order to enable it to support horizontal and vertical scaling.

Unique Geo-local query engine

One of the key features of the platform is its Geo-local query engine. The engine enables the platform to display data sorted according to its proximity-relevancy for the user. Most of the queries in the platform combine Geo-local data. The platform uses a unique, scalable, optimized Geo-local query algorithm that enables it to combine Geo-enabled data in almost every query that is issued in the system.

Scalability and High-Availability

Based on the LAMP stack of technologies, the platform can scale-up to millions of users. The LAMP stack is used in many Very-Large-Scale web platforms such as Facebook and many more. Except from its ability to scale, the platform is configured to support hardware and software based load-balancing, thus enabling full high-availability.

Support for multiple mapping providers

Maps are a crucial part of the platform's tools. TheSocialE™ Platform combines a mapping-provider plug-in architecture that enables it to connect to any mapping provider with a relatively minor effort. Currently, the platform supports both Google Maps™ and AtlasCT™ mapping platforms.

Geo-IP provider diversity

Another key feature of the platform is its ability to recognize the proximate address of anonymous users and provide them with local data when they first interact with the site. The platform achieves this ability by using 3rd party Geo-IP providers that use the IP of the user to estimate his real address. Geo-IP providers usually charge a small amount on each IP query. TheSocialE™ Platform has a Geo-IP plug-in architecture that enables the client to decide which Geo-IP provider he likes to use. Additionally, the platform combines a Geo-IP caching architecture that queries the Geo-IP provider database only when the IP comes from a new IP-zone. Querying is done to the Geo-IP provider only when needed, thus saving money.

Platform Independence

Since TheSocialE™ Platform is based on the LAMP stack of technologies - it is platform-independent. The platform enables the client to choose the hardware and the operating systems he likes to use.

Caching mechanisms

TheSocialE™ platform combines caching mechanisms that enables it to scale well in high-stress conditions. The platform has cache plug-in objects that can be used to connect it to different caching mechanisms if needed.

Browser support

The platform supports most browsers in the market including: Microsoft® Internet Explorer, Mozilla Firefox, Apple Safari, Opera and Google Chrome.

Mail mechanism support

A key feature in the platform enables it to send mailings and newsletters to end-users, based on their approval. The platform consists of an administration site that enables the system administrator or moderator to prepare newsletters and pack the list of e-mails for distribution, supporting standard formats for mail distribution

Amazon AWS support

Amazon Elastic Compute Cloud (Amazon EC2) is a web service that provides resizable compute capacity in the cloud. It is designed to make web-scale computing easier.

AMIs (Amazon Machine Images) exist for TheSocialE™ Platform to be run on Amazon AWS hosting environments. This enables the client to host his social web site on Amazon's AWS, and to scale his ability to support large numbers of users in a mouse-click.

Language Support

TheSocialE™ Platform is resource-file based and unicode-ready, thus enabling it to seamlessly support foreign languages. Current supported languages are English, French and Hebrew.