



Technologies

The SmartCal system is a set of applications (Calendar, Search Engines, RSVP/Invitation Manager, Reminder and Digest Servers, etc.) built on top of a scalable, patent-pending infrastructure designed for web and wireless applications. The following describes the core technologies that are part of the underlying infrastructure.

Template Based Application Server

The Application Server provides a scalable platform that supports web, wireless, XML, and text-based applications and services. The Application Server can be distributed across multiple servers to form a cluster, which provides one way to scale the overall system.

Technical Highlight: SmartCal has effectively used the template system to build a set of templates that can be reused in each view. Thus making changes to the look and feel for all views is simple and straightforward.

Pipelined Object Database Engine

The patent-pending Object Database Information Management System provides an abstraction that allows databases to be distributed across multiple servers, including operating in a heterogeneous environment (Oracle, DB2, MySQL, etc.).

Technical Highlight: SmartCal load balances its databases by distributing the individual databases across multiple servers. Additional servers can be easily added in order to maximize throughput.

Real-time Localization Facility

The Localization Facility allows real-time creation and modification of product localizations (translations including regional dialects, currency formats, date formats, etc.). This facility also allows localizations to be performed by non-technical staff in a fraction of the time usually required for this process. This facility allows provides support for on-going maintenance of localizations as new features are developed and the product evolves.

Technical Highlight: The SmartCal product is developed in English, and the Localization Facility has been used to translate SmartCal into German and Spanish. Each translation took approximately 60 hours and was done by non-technical individuals.

Cobranding Engine

The Cobranding Engine provides support for changing a product's look and feel (colors, fonts, graphics, page headers & footers, etc.) in real-time. This allows for seamless integration of a product into a partner's existing services (web and wireless). Basic customization of a product can be done in a matter of minutes and a full integration with a web site completed in a few hours.

Technical Highlight: Cobranding is what makes SmartCal look like it's an integrated part of a customer's site. Colors, graphics, headers and footers are all customizable. A typical SmartCal cobrand can be produced in under an hour. Cobrand customizations can also involve product functional changes and enhancements, not just look-n-feel changes.

Extensible Search Engine Platform

The Search Engine Platform was designed to be scalable and extensible. The Search Engine supports searching by keywords, date ranges, objects, and locations, including support for proximity filtering.

Technical Highlight: Most online calendars have at best rudimentary search capabilities. SmartCal has already implemented the third generation of its search subsystem with even more features and better performance than its predecessors.

Proximity Sorting and Filtering Technology

The Proximity Sorting and Filtering technology provides a means for geocoding, sorting, and filtering objects based on latitude/longitude points. Latitude/longitude points can be derived from traditional address mapping services, GPS systems, or emerging wireless technologies.

Technical Highlight: Every object with a location (e.g. events, calendars, contacts) is automatically geocoded and views can filter the items a user sees based on distance from their own location. This, along with other kinds of filtering, allows very practical time and location based queries such as: *Show me all the theatrical events on May 5th within 15 miles of my home, or show me all of my contacts that are within 20 miles of my office.*

External Publishing Engine

The Application Server was designed to allow the publication of objects to external, web based, search engines. The External Publishing Engine takes URLs provided by the Application Server and submits them to a predetermined list of external search engines via HTTP or email requests.

Technical Highlight: SmartCal can submit events to external search engines so people browsing the net will find lots of links to published calendars (of course, this feature is optional and viewing events is subject to SmartCal's security mechanism).