

Basis for the Award

During the May 2002 Government Technology Conference, the California Air Resources Board (ARB) was one of four departments receiving an "Outstanding Information Systems Award" from the Executive Institute for 2002. Bill Fell, ARB Webmaster, accepted the award on ARB's behalf in recognition of ARB's Internet and Intranet Services Program and Text Search Facility. If you have any questions, please contact Mr. Fell at (916) 322-3260 or via email at wfell@arb.ca.gov.

System name:

ARB WEB Program and Text Search Facility

Describe the capability implemented:

In response to the Governor's challenge for innovation and improvements in government-to-citizen interactions, the ARB transformed how it coordinates and documents its programs, and how program activities are shared with employees and the public alike. The effort required reshaping internal business processes, from top-to-bottom, emphasizing collaboration among staff, divisions and partners, with a shared vision, and strategy for implementing that vision. The result is that nearly all individual as well as workgroup work products now include a Web page and list serve component, enabling the ARB to continuously develop, refresh, archive and share program information via ARB's Internet and Intranet websites.

The ARB now provides access to nearly 100% of all internal and public documents. Its website offers a growing body of work--over 100,000 files--that includes: the activities and histories of ARB's 33 program areas; board meeting calendars, monthly meeting agendas and supporting documents; governing state and federal statutes; district rules and regulations; and access to key data bases and environmental GIS websites.

The underlying strength of ARB's website is in its unique text search facility. This facility indexes the universe of documents daily, grouping by major ARB program or topic, and uses embedded metatags to score each document based on the user's own search arguments. Through the use of a simple drop-down menu, high scoring documents within a selected program or topical area are quickly retrieved. The index supports a variety of document types: html, text, and pdf; and it can be extended to include any other document type convertible to text.

The software used by this search facility is free and "open source" and available from the ARB website at: <http://www.arb.ca.gov/db/search/swishe/swishe.htm>.

The website also makes extensive use of electronic mailing list services. ARB sponsors over 200 such e-mailing lists, updating over 50,000 clients of programmatic changes as they occur.

Describe the technology used:

Individuals and workgroups constitute "owners" of Web page content. Content is organized not by division or organization, but by program: Multi-divisional teams are often involved in supporting a single program's page. The Governor's standard portal "look and feel" is administered by a single Gatekeeper, but as Web page owners, staff can add, change and delete content. They are also empowered to define the metatags used by the search engine to quickly retrieve documents. By pushing the responsibility for electronic publishing out to the desktop (i.e., to approximately 25% of all ARB staff), ARB is a proponent of Metcalfe's Law.

All documents are continuously catalogued using a combination of a free and robust open source file indexing program--SWISH-e--and a custom-built Web interface, using Perl, CGI, HTML, and JavaScript. The application uses custom management reports, automation scripts written in an unix shell script, a thoroughly documented business process for implementing Dublin Core metatags, and a rational syntax for setting title tags. The application will scale as the number of documents and links increase.

ARB's internet presence is almost entirely dependent upon open source software including Linux, Apache, MySQL/PostgreSQL, PHP/Perl, Majordomo, Swish-e, etc. All future applications including existing system re-writes are strong candidates for open source solutions.

Describe the benefits derived or expected:

The ARB has become more open, more transparent to the public, with a greater customer focus as a result of its continuing e-government efforts. Simply put, employees and the public can quickly retrieve far greater information than ever before. The goal is to continue anticipating the needs of its clients--stakeholders and employees--and improve the ARB internet services accordingly. Making these services easy to use, providing useful and relevant information with a minimum of "clicks" is also a major objective.

The ARB's website is also now the cornerstone of its operational recovery plan: Business continuity is assured with the loading of Web backup files onto any server connected to the Internet.