

## United States Geological Survey (USGS) Web and Intranet Development

Aquilent's database-driven, online professional social networking solution allows scientists to connect to individuals with similar interests and skills, encouraging worldwide collaboration and increasing the knowledge of the scientific community and the general public.

### the objective\_

United States Geological Survey (USGS) scientists from the Western Region asked the USGS National Center in Reston, VA, to create a social networking application allowing fellow scientists and professionals (internally and externally) to share their scientific profiles, projects, and publications.

### the solution\_

Aquilent's solution included the collaboration of USGS subject matter experts (SME's) by involving them with a project management style and rapid software development process to mitigate risk and increase the value of the final product. Not only did the SME's get involved with requirements and usability processes, they were integral to testing the alpha and beta products. An application feedback button gave them the ability to give instant feedback while development continued. Using technologies such as Microsoft SharePoint also allowed the team

members to update issues and action items in a timely manner. The final product is based on PHP coding, a MySQL backend database all within an unique bi-furcated environment allowing the user to create their own web site while in draft mode for their internal review, and then publish their web site which is released to a review team and published for the world to understand what individual or collective USGS scientists are researching.

Thanks to this effort, Aquilent was able to provide an easy-to-use application that allows USGS professionals to create and use a professional social network known as the USGS Professional Pages.



## the payoff\_

The USGS Professional Pages website allows scientists and non-scientists to search through a large database to find individuals with similar interests and skill sets, giving them the ability to collaborate on projects and make sure efforts aren't duplicated. This encourages worldwide collaboration and increases the knowledge sharing of the science community as well as the general public.

USGS Professional Pages is an easy-to-use application that allows a USGS professional to build a structured professional website (with a supervisor's approval). The site captures contact information automatically using their Lotus Notes account. It includes their picture as well as content areas such as Resumes/Vita, Research or Project Focus, Publications, USGS Topics, and an Optional Content area. When listing publications, the system allows the user to retrieve publications from the USGS publications warehouse and easily link to those publications for sharing. Users can also create their own list of external publications.

### HIGHLIGHTS

- > Encourages worldwide collaboration on scientific projects.
- > Creates a database of USGS professionals and individuals interested in science projects.
- > Facilitates the building of a professional social network to share and capture community-specific knowledge and information.
- > Allows scientists to search database to find individuals with similar interests and skill sets.
- > Helps reduce duplication of efforts.

This screenshot shows a detailed professional profile for Jeff Wynn. The page includes a header with the USGS logo and navigation links. The main content area features a profile picture of Jeff Wynn, his title 'Research Geophysicist' at the 'U.S. Geological Survey, Western Region, Southwest area, Geology discipline', and a 'Short Biography' section. Below this, there are sections for 'EMPLOYMENT' (listing roles at the University of California, Stanford University, and the U.S. Geological Survey), 'RESEARCH ACTIVITIES' (listing research on geophysical techniques and mineral resource evaluation), 'EDUCATIONAL QUALIFICATIONS', and 'Publications'. A 'Where Professionals Connect and Collaborate' section is also visible. The page is rich with text and includes a small image of a volcanic eruption.

This screenshot shows the search interface of the USGS Professional Pages website. It features a search bar with fields for 'Name', 'State', 'Keyword', and 'Strategy Area'. Below the search fields, there is a 'Find a USGS Professional' button. A note indicates that the search is currently for a single term expression. The page also includes a 'Where Professionals Connect and Collaborate' section and a footer with contact information and a 'Page Last Modified' date of July 31, 2009.