



# Newsletter

November 2009



## POWDER becomes an official W3C Recommendation

POWDER (the Protocol for Web Description Resources) became an official W3C Recommendation on 1st September 2009. This gives POWDER the same status as other well-known Web standards such as HTML and XML. It's also important for Quatro Plus as we are the first application to fully implement POWDER. The Quatro Plus platform and all the tools provided are fully POWDER compliant. In fact, the project was also mentioned in the W3C press release where Phil Archer, the Working Group Chair, said: "With support from the EU we are examining POWDER and general trustmarks (in the Quatro Plus project) and identifying quality health-related Web resources (the MedIEQ project)."

The POWDER WG progress has been reported regularly in this newsletter along with details of the Recommendation. To explain POWDER in the wider context of the World Wide Web: this new standard is another building block towards the Semantic Web, described by Sir Tim Berners Lee as the Web in which computers will be able to interpret different sets of data and make connections between them, providing meaning and intelligence to information available on the Internet. So POWDER will not only provide standard data about websites (such as who created the label and what sort of information is contained in the website) but this information can in turn be used as data in further applications.

An example of this is provided by the Quality

Social Network (QSN) tool where user preferences can be set and actions taken based upon the descriptors in labels recognised by the QSN. For example, the Youth Panels who participated in the pilots developed a vocabulary which contained a number of negative descriptors such as violence or sexual content. User preferences can be set to prevent access to websites with these label attributes.

POWDER doesn't just apply to quality labels - descriptors can include information about almost anything such as a website's subject matter, copyright and other rights, status - in fact, many areas which are already covered by existing metadata standards such as Dublin Core. The new Recommendation has been designed to be as flexible as possible whilst providing a structure for describing web resources.

Quatro Plus has added another dimension to quality labels by introducing the rating facility which enables end users to record their agreement or otherwise with an existing quality label. By aggregating these ratings (and with the possible application of weighting the ratings according to the trust rating of the person providing the rating), a further measure of label reliability can be created. This also helps build up the 'Web of Trust'. A good example of a simple but very effective rating aggregation system is mywot.com and we hope that quality labels will eventually become as popular as this.



Phil Archer, iSieve

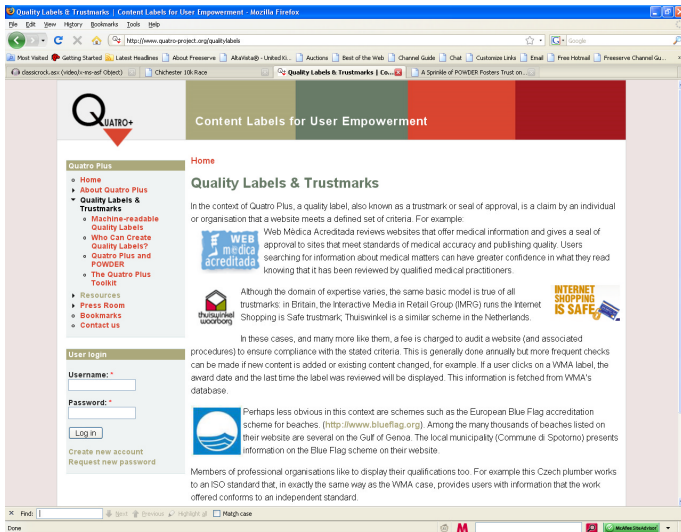
*Press release - see:*  
[http://www.redorbit.com/news/technology/1746488/a\\_sprinkle\\_of\\_powder\\_fosters\\_trust\\_on\\_the\\_web/](http://www.redorbit.com/news/technology/1746488/a_sprinkle_of_powder_fosters_trust_on_the_web/)



QUATRO Plus is co-funded by the European Union



## New Website launched



<http://www.quatro-project.org/>

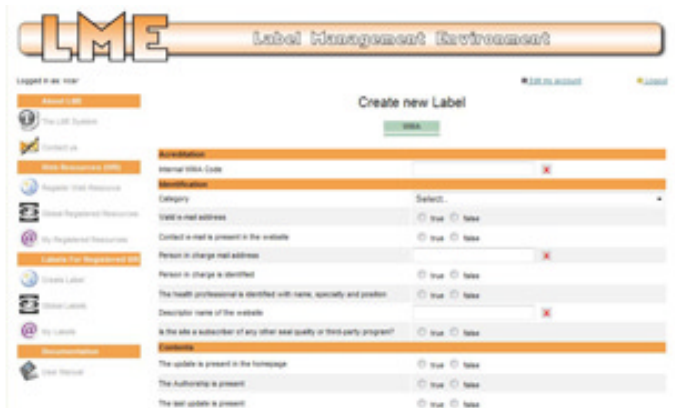
The Quatro Plus website has been completely revamped with a new, fresh interface and new content. As the project has reached the end of its EU funding, the team has transformed the website into a resource for quality labelling with new information about trustmarks and quality labels, access to the tools and applications developed in the project (under Services) and links to related organisations and projects.

## The Quatro Plus Toolkit

The two original applications developed in the original Quatro project, the LADI and ViQ, as well as the proxy server, QUAPRO, have been extensively updated in Quatro Plus and some new applications created to provide a wide range of tools suited to different types of end users. These are summarised here.

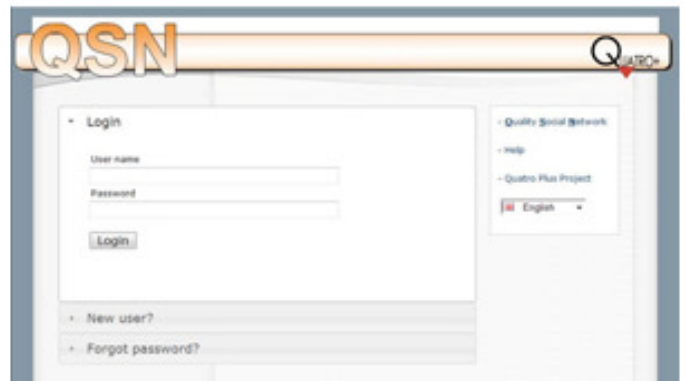
### LME: the Label Management Environment

The LME is a tool specifically for the creation and maintenance of quality labels. It is aimed at people who are reasonably knowledgeable about labels such as Labelling Authority employees who assess web sites and resources or domain experts who work in very specific subject areas, for example academics at universities. The user



can access one or more predefined vocabularies (i.e. one or more quality labels schemes) for use in creating new labels and updating existing labels. It currently supports the creation of labels expressed in RDF-CL and the POWDER format.

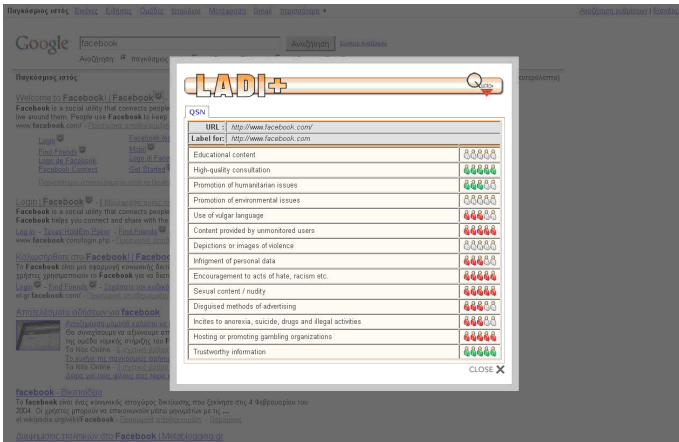
### QSN: the Quality Social Network



The QSN is a Social Network Application with an added dimension - quality labels. The QSN has all the standard features of a Social Network such as registration, user profiles, message exchange and building of connections with other members but also allows members to collect and store (anonymously) both user-defined labels for Web resources and user-defined ratings of third-party labels. The latter are aggregated to an indication of reliability of existing labels. User defined labels can be shared with all the other members within the QSN, as are the ratings, depending on the permission levels set by the individual user. The QSN was the tool used by the Youth Panels for the pilots during the project.



### LADI+: the Search Engine Wrapper



LADI+ is a search tool that annotates results from major search engines with information about related content and quality labels. This enables end users to find out about the content of a Web site, its authoritative and reliability before visiting the site itself. Results for which quality labels exist are marked with a blue shield icon - to see the label information users click on the icon and a new "popup" window will appear displaying the labelling information in a human-readable format. LADI+ is available as the GreaseMonkey add-on for the Mozilla Firefox browser and through the Trixie script engine for Internet Explorer.

### ViQ+: the Quality Visualizer



The ViQ notifies users when a requested Web resource is associated with content labels and displays the contents of the labels. ViQ+ is implemented on top of the GreaseMonkey script engine, a framework that is compatible with

almost every major modern browser. ViQ+ re-renders the content of the page the user is visiting and annotates it with a bar indicating the presence or absence of a content/quality label for this page and an active icon. The labelling information is displayed by clicking on the icon.

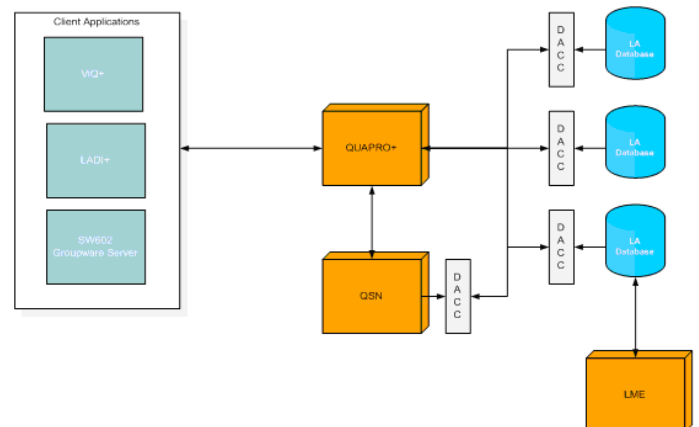
### QLS: The QSN Label Sniffer

The QSN Label Sniffer (QLS) is a client application aiming to exploit the labelling information generated by QSN members. When a user is visiting a web page, QLS detects links to other web resources present in the page and contacts QUAPRO+ to retrieve QSN labels for these resources. The presence of a label is then communicated to the user via an appropriate icon next to the link and the user can display the label information by clicking on the icon in the same way as for the ViQ.

### The Software 602 Groupware Server

The Groupware Server, a product of Software 602, incorporates two applications of the QUATRO Plus technologies, the e-mail annotator and the semantic proxy. The e-mail annotator searches for URLs inside the body of an e-mail message and annotates these with an icon. The Semantic Proxy exploits labelling information and the content analysis provided by Filter-X in order to customize access for the users of the Groupware 602 Server application.

### QUAPRO+: the QUATRO+ Proxy





QUAPRO+ is the central server-based application which receives requests from its end-user applications (like ViQ+, LADI+ and the QSN), identifies labels, evaluates them and responds accordingly. The QUAPRO+ set of web services are responsible for discovering, evaluating and processing quality labels expressed in the RDF-CL or the POWDER protocol. The proxy communicates with Labelling Authority databases via a Data Access interface (DAcc) using the Simple Object Access Protocol (SOAP) with output available in POWDER, RDF-CL, HTML and plain text formats.

### Coming Next ...

The future development of the QUATRO platform depends on a number of factors. Firstly, Quatro Plus is essentially the first use case for POWDER and to some extent, relies on the success of this new W3C Recommendation. Both POWDER and Quatro Plus are part of the building blocks of the Semantic Web which is going to require time and effort to encode both existing and new

information in order for this to become a reality. Secondly, Quatro Plus is also flexible enough to incorporate additional technologies such as filter-X to provide additional levels of protection. Machine-readable label technology can be applied to many different domains in addition to medical information and child safety - academic disciplines, cultural information and public sector information are examples of other areas which could benefit from quality labels. Ultimately, quality and labels will only become far more widely used than in the current specialist applications if their use is made mandatory, for example for child protection purposes, or if a major search engine started using quality labels and possibly their ratings as part of their URL ranking system for the search results. The latter would provide a strong commercial incentive for producing high quality content and getting labelled.

The project partners are keen to exploit the technology developed so far and also in future research ventures. We will also be pleased to discuss any future ideas and proposals with potential new partners.

## QUATRO+ Consortium Members



MDR Partners, UK - Co-ordinator and Project Manager.



National Centre for Scientific Research "Demokritos" (NCSR), Greece is the Technical Co-ordinator.



ECP.NL (PRO-SEC) are the SIAP Awareness Node for the Netherlands and lead the dissemination activities.



Coolwave Limited is a small technology company based in the UK responsible for the LADI tool.



Medical Association of Barcelona (COMB) provides quality labels for Spanish language medical information websites.



University of Milan (UNIMI) are providing usability expertise to ensure that all QUATRO tools are fit for purpose.



University of Insubria (UNINSUBRIA) are leading the development of Social Networking facilities.



Software602 are a technology provider and are also the Czech combined SIAP Node.



i-sieve is providing technology for filtering and creating white lists.

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