



Newsletter

April 2008

Introducing QUATRO PLUS

QUATRO Plus is a two year follow-on project and runs from October 2007 to September 2009. QUATRO Plus aims to build on the success of the original QUATRO project which built a common platform to enable all types of labelling systems to be machine-readable. This provides end users with the ability to check that the label is trustworthy and that certain criteria are met. Quality labels, also called trustmarks, can be used for any type of digital content and therefore on a variety of devices, the two most common applications being websites and content for mobile phones. Machine-readable labels enable the label data to be processed so that it can be displayed as text (currently implemented through the ViQ tool) or as logos displayed next to search results (as done by the Quatro LADI tool) so that end users can see immediately which websites have been reviewed by labelling authorities in the search results before the sites are visited.

End users need to know whether a label is valid and that the information can be trusted. Besides quality, labels may convey other information such as a site's suitability for children or that the information is accurate, e.g. for medical information.

Websites with quality labels carry a logo. In most cases, there is no means of checking the validity of the label or its trustworthiness. Even if clicking the logo results in the display of a database entry confirming the logo's validity, last review date etc., there is no indication whether this information is reliable or not.

QUATRO Plus offers a substantial improvement. It provides the means for users navigating the web with a common web browser to be notified when quality labels are present (using appropriate graphics) and, if they are, whether they are valid or not. QUATRO provides secure communication so that the end user

can be assured that the label information is trustworthy. By the end of Year 1 in October, the project will have tools available which will allow end users to annotate existing labels and create their own labels. The overall architecture will be improved to be more robust and secure and the existing tools extended to include the new facilities. In addition, QUATRO will be fully compliant with the W3C recommendation, POWDER, for content labelling.

Curious how it works? Go to <http://www.quatro-project.org/index.php?q=node/31>

QUATRO PLUS... who is it for ?

Labelling authorities



IQUA is a Spanish Quality Labelling Authority and Quatro Plus project member

The Quatro system is designed to make trustmarks, quality seals and other content labels more valuable to scheme operators, more attractive to service providers and more visible and useful to end users. Quatro can be implemented with existing trust marks or labelling schemes without any need to re-engineer the existing label administration infrastructure or change the assessment criteria used. However, some technical additions will be required.

The basic concept is that, in addition to a logo graphic, the Labelling Authority issues its clients with a machine-readable label that encodes the various assertions made by the Labelling Authority about the



QUATRO Plus is co-funded by the European Union

website in question. For example, a label may include an assertion that the labelled website has a suitable privacy policy, that the publisher is clearly identified, and that it meets legal practice in one or more identified countries. Whilst it is possible to include a coarse-grained statement that “this website has the example.org Seal of Approval,” the granular data is important for the interoperability and independence of labels offered by different Labelling Authorities.

Labelling Authorities are distinct in the domains of interest they address, their objectives and especially in the criteria they use in deciding whether or not to award their trustmark. Recognising this, Quatro does not mandate that all Labelling Authorities switch to a common set of criteria. However, there are a relatively small number of criteria that research shows are highly likely to be used by any Labelling Authority, no matter what their particular area of concern may be. Therefore, if a machine that can recognise the labels issued by one Labelling Authority finds a label issued by another, it will understand the common elements from the Quatro vocabulary. Thus, each Labelling Authority benefits from the common system without any loss of its own distinguishing features and commercial interests.

For full details of how Labelling Authorities can participate in QUATRO PLUS go to: “How to make your trustmark machine-readable” at <http://quatro-project.org/files/file/howto.htm>.

It should be noted that one of the aims of Quatro Plus is to provide a tool that will enable Labelling Authorities to issue machine-readable labels without the need for in-depth knowledge of the underlying technologies used.

End users

The social networking phenomenon will continue to develop and empower end users, whether through use of services such as MySpace, LinkedIn and Bebo or the contribution of reviews and opinions which can be further used



Quatro Plus is aimed at end users of all ages

to create aggregated ratings and recommendations (e.g. similar to Trip Advisor ratings and ‘Amazon recommends’). Quatro Plus will develop tools to enable end users within social networking environments to express their views on quality labels and aggregate these views to provide further useful information such as indicators on levels of trustworthiness. These end user tools, which are currently under development, will be covered in detail in the next newsletter.

Domain experts



WMA is a Labelling Authority with domain experts in medicine

QUATRO PLUS will extend its labelling facilities to enable nominated ‘experts’, i.e. organisations and individuals associated with particular knowledge domains, to publish their views as quality labels. Typical ‘experts’ are academics working in particular fields, professionals such as medical doctors, architects, teachers, people associated with cultural, arts and sporting activities and the organisations representing these (who are often additionally publishers and providers of information for their sectors). Labelling tools (known as the Labelling Management Environment or LME) will be developed to enable experts to easily and quickly generate labels for the relevant content and also to manage associated vocabularies. Since the latter are usually created specifically for a domain, QUATRO PLUS will also offer advice on vocabulary creation and maintenance.

Content providers



The Web is often perceived as a place where no one is quite who they say they are and where people can easily be fooled by websites that ‘look good’. Against this background, and the sheer volume of material available online, the need to get your content verified by a third party has never been greater. Trustmarks and quality labels of various kinds prove that you are prepared to open your content and practices to inspection and that you offer products, services or information that is ‘Quality Assured’.

QUATRO takes this one step further, allowing you to get the maximum possible benefit from partner trustmarks, by making them visible to various tools that end users and other content providers use to collect and assess your content.

The majority of trustmarks, even the very well known ones, are wholly invisible to search engines and Semantic Web applications such as web services as they are not machine-readable. QUATRO trustmarks, on the other hand, can be found.

Furthermore, it is noteworthy that many users take a trustmark logo on face value and don’t click it to see if it is valid. QUATRO tools again increase the value of trustmarks by authenticating labels automatically.

To see which labelling authorities already use QUATRO go to <http://www.quatro-project.org/index.php?q=node/22>

QUATRO and the Safer Internet plus Programme

QUATRO Plus is funded through the Safer Internet plus Programme which is also responsible for funding

the INHOPE network of hotlines where the public can report illegal content and the INSAFE network of national nodes performing awareness-raising activities and running helplines. Two members of QUATRO Plus, ECP.NL and SW602, are the national awareness nodes for the Netherlands and the Czech Republic respectively. The obvious question for many familiar with INHOPE and INSAFE is how does QUATRO fit with these activities? The answer to this is that the national hotlines and awareness nodes provide tools and knowledge and promote the use of filters to help protect minors from harmful content and unsafe practices when engaging with digital content. QUATRO, on the other hand, allows end users to make informed choices about labelled content that they may come across and furthermore, helps people to identify and share good quality information and resources and to build up a ‘web of trust’.

POWDER Your Data With Trust



The aim of the QUATRO Plus project, to make trustmarks and quality seals machine readable and interoperable, is only possible on a large scale if there is an underlying technology that is open, easily implemented and widely recognised. It is for this reason that there is a close correlation between the project and a working group at the World Wide Web Consortium (W3C). Three project members: Università degli Studi dell’Insubria, NCSR Demokritos and FOSI are in both. Formally known as the Protocol for Web Description Resources but more generally referred to by its acronym of POWDER, the emerging W3C standard emphasises several key elements that it shares with QUATRO Plus.

Description Resources (DRs) must be attributed, that is, you must know who is making the claims, so that you can authenticate the data (i.e. ask: did you really say that this site was good?)

The scope of a DR must be unambiguous yet flexible. It may be appropriate to describe a whole website,

a section of a website or a collection of websites. Furthermore it must be possible to define the scope in a way that matches the way the content is arranged on the site already without any need for re-engineering.

The description itself should, ideally, use a controlled vocabulary, that is, pre-defined terms that have the same meaning wherever they are applied. This makes it much easier to discover, aggregate and promote content that meets particular criteria.

The POWDER working group has had to resolve a number of significant technical problems. First and foremost, defining a website is not as straightforward as it may seem. As Web properties have evolved, the idea that a domain name like 'example.com' always defines a set of pages and images that share certain characteristics is no longer valid. Social Networking sites are obvious examples where <http://sns.example.com?id=12345> might be wholly different from <http://sns.example.com?id=67890>. Professionally produced content can also vary significantly across literally millions of pages on the same 'website.'

Operationally, POWDER has been designed to fit in with the workflows of the biggest content providers through to amateur publishers and everything in

between. This has meant creating a very simple structure for Description Resources that can be edited by hand with minimal technical knowledge. However, if the meaning of those DRs is to be processed by machines then the data must be encoded in a much more semantically-rich manner. POWDER achieves this by defining an algorithm, known as a GRDDL Transform, that can generate 'Semantic POWDER' from the simple input.

The experience gained through implementing the technology in QUATRO Plus will provide critical feedback and real-world experience to the POWDER Working Group. This will sit alongside feedback from other independent implementations when the call goes out for these in the summer of 2008. Full details are available at <http://www.w3.org/2007/powder/>



Phil Archer is the CTO for FOSI. He combines this role with chairing the POWDER Working Group and being an active member of QUATRO, promoting the benefits of quality labels and providing guidance on their technical implementation based on his extensive ICRA experience.

QUATRO+ Consortium Members



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



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



The Family Online Safety Institute (FOSI) is a labelling provider and early adopter of QUATRO.



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



The Internet Quality Agency (IQUA) is a Labelling Authority for Spanish language websites.



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.

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