



IPTC Mirror

Advancing Architecture

The new News Architecture is the core of the current IPTC standards programme. Development has required a high level of activity before, during, and since, the AGM to deal with many complex technical considerations and keep the project moving forward.

The decision to refocus standards development efforts on a new News Architecture (NAR) - which will be used as a base for all future IPTC Standards - was taken in January 2005 and significant progress had been made by the IPTC AGM in early June.

Reasons behind development of the NAR were outlined by Laurent Le Meur (AFP), chairman of the News Architecture Working party:

- 1) Simplify the processing of news objects.
- 2) Treat news, events, sports results and other news-related information in the same way.
- 3) Use the latest XML technologies.
- 4) Make it compact.
- 5) Make it storage-friendly
- 6) Make it semantically rich.
- 7) Keep compatibility with the current model.

News industry standard

In comparison to other information exchange standards it was pointed out that a key feature of the NAR is that it is intended as a business to business standard specifically intended for the news industry - typically news suppliers "push" information to their customers, who generally 'duplicate' parts of the

supplier's database.

Structure model

A document introducing the news structure model - based on requirements developed by IPTC - and looking at its implementation in XML was commissioned from consultants - Jay Cousins (Riv-Com) and Ulf Wingstedt (Cnet) - with the final version of the NAR Implementation Guidelines (AIG) released to delegates in May.

The NAR Working Party acknowledged that the AIG meets IPTC expectations, and has decided to adopt several of the recommendations made in the document, along with the model for common components. However, it was felt that the spreadsheet template designed for production of Common Components was too detailed, and this will not be used for the time being.

Work areas

There are four main work areas within the News Architecture Working Party, each area being dealt with by a separate Working Group: processing (News Management); conceptual (News Structure); metadata framework; and a set of common components.

News Management

News Management deals with the revision (including update, embargo and delete) of items that have been published. Chairman of the Working Group dealing with this (under the NAR Working Party) is Stuart Myles (Dow Jones), who explained that the process involves the use of specific management components but also involves relationships between items, and the news envelope.

News management is an area where different conformance levels will be involved, and it is envisaged that there will be a basic core profile and a power profile, with provision for further extensions by users.

Exchange models

Consideration was also given to the exchange models that would have to be supported and a brief survey of delegates at the AGM showed that the push/broadcast model was widely used with pull/syndication being less popular - though many organisations use both approaches.

Unified model

Overall the aim is to produce a unified management model for all types of items and exchange models; a description of how to process news, simpler implementation for both news producers and news consumer, the wider adoption of IPTC standards, and - hopefully -

Summary

News Architecture Working Party

Reasons for NAR development outlined - [Page 1](#). Structure model document produced by consultants and adopted - [Page 1](#). New Vice-Chairman appointed - [Page 2](#).

News Architecture Working Group - [Page 1](#).

Exchange model support - [Page 1](#).

News Structure Working Group

Conceptual model structure - [Page 2](#).

News Metadata Framework Working Group

Metadata classes, containers and targets and (scheme, code) pairs described - [Page 2](#).

Common Components Working Group - [Page 2](#).

Mainstream Data - [Page 2](#).

Colour Space Workflow Questionnaire - [Page 3](#)

Publicity and Presentations. IPTC Web site usage - [Page 3](#). Technical presentations - [Page 3](#).

The IPTC Mirror has hyperlinks for [web addresses](#) and for [page references](#).

more customers for the information provided by IPTC members.

News Structure

The NAR conceptual model was considered to be stable by the time of the AGM, and a draft document dealing with the structure was re-released for public comment in mid June.

The structure is based on a set of simple items (objects), all of which are managed in the same way, with the same set of metadata.

News item - typically a news report which may be of any media type and in any format.

Topicitem - a representation of a concept, using a dedicated structure for each type - taken together NewsItems and TopicItems can be used to create a news-related ontology.

Package item - allows the grouping of items.

A set of properties shared by all items will be used for management with the properties including a persistent unique identifier, version information, type, provider, date of issue and modification and status. Other information is handled by the common components.

Links provide named relationships between news objects so that, for example, a news item may be associated with another news item, or with events, people organisations and locations.

News Metadata Framework (NMDF)

Working Group Chairman Mischa Wolf (Reuters) said that the intention was to integrate metadata from news instances into the Semantic Web and that it should be easy to understand and use, and support a range of needs.

Metadata classes

There are a number of metadata classes to be considered: a plain string value; a (scheme, code) pair representing a concept in a taxonomy; a structured record (or a pointer to such a record); strings representing, for example, date, time, duration and size; and codes representing concepts in a taxonomy and controlled through an XML Schema.

Containers and targets

Metadata containers (XML elements or attributes) can be explicitly defined by IPTC standards, or created through the mark-up of text

within a label.

Pieces of metadata describe specific data, and this data is called the target of the metadata. As with containers, targets may be explicitly defined in a IPTC standard or created through the mark-up of text within a label.

(scheme, code) pairs

Controlled vocabularies for the NMDF may be in the form of schemes, which are taxonomies - ranging from simple (a flat list) to complex (a structures thesaurus with internal relationships). Each scheme is identified by a URI (Uniform Resource Identifier), and since URIs can be long and difficult to use in XML a (short form) alias is defined for each scheme.

Within the taxonomy each node (concept) is represented by a code, so that each node can be represented by a URI formed by adding the code to the scheme URI. This allows concepts to be uniquely identified by (scheme, code) pairs.

Common Components

Intended for use across the range of IPTC standards, Common Components can be considered as

NAR Vice-Chair

Mischa Wolf (Reuters) has agreed to take on the responsibility of Vice-Chairman of the News Architecture Working Party.

building blocks that may be used individually or in combination.

A guide to the activities of the Common Components Working Group was provided by Jayson Lorenzen (Business Wire) who explained that an initial set of Common Components has been identified, and assigned to individuals to produce proposals.

It is recognised that there a lot of available resources in this area - such as iCal, the FOAF (friend of a friend) project and the W3C signature initiative - but the first step is to establish the IPTC requirements, and then see if external modules can meet the requirements

It was pointed out that the development of a minimum set of common components should have a high priority as they are needed for the new standards - such as NewsML2 and EventsML.

Mainstream Data

Services offered by Mainstream Data include: managed satellite transmission networks, streaming Internet solutions; hosted custom web sites; multimedia 'edge' servers and software; and news filtering and display software.

Established over twenty years ago, Mainstream's services are used by a number of IPTC members, and a demonstration of some of their products was given at the AGM by Scott E Calder, Mainstream President and CEO.

NewsView is a Windows application that lets users at remote sites receive news, photos, and other multimedia content, with profiling and searching capabilities

Also part of the Medias News Suite, the **Medias Server** allows remote sites to receive, store, assimilate, and display content in a variety of ways. It receives content using any of Mainstream's transmission technologies (satellite and terrestrial) and also serves as an application platform for content manipulation and display.



Scott E Calder, Mainstream President and CEO, described the services offered by Mainstream in a presentation at the AGM.

Public release

As part of the continuing development process (see www.iptc.org/dev) a number of documents have been released for public review and comment. These are: News Metadata Framework Requirements Document (rev 34) - released June 2005 prior to the News Standards Summit; News Metadata Framework Tech Specification (rev 6) - released July 2005; News Structure Model Document (rev 14) - July 2005; and Common Components Library Spec (rev 2) - July 2005.

Development documents

Documents dealing with areas that are still under active development are also available to IPTC delegates in the "Members Only" section of the IPTC web site - <http://www.iptc.org/membersonly/data/dev/>.

Participation

Involvement of more members in the development process (which carried out using is by e-mails and regular teleconferences) would be welcome and members are encouraged to join the appropriate discussion groups.

These groups can be found in the Yahoo Groups section of the IPTC

Colour space questionnaire

A Colour Space Task Force has been established, and is looking at ways of establishing the best way of retaining and using the EXIF header information which is added to images in most colour cameras. A new Yahoo group has been set up for this Task Force and can be found at:

<http://groups.yahoo.com/group/iptc-colourspace-dev>

Task Force leader Harald Loeffler (Ifra) has created a questionnaire to help establish the basic workflow from photographer (with a digital camera) through the news agency to the client.

This information should help establish where in the workflow, and with which software package, the EXIF digital may get lost. The questionnaire is in the files section of the Yahoo group and members are requested to download the questionnaire, complete, and return it.

'Members Only' web site - <http://www.iptc.org/membersonly/mo-forums01.php>.

Consultancy

As anticipated further use is being made of consultants to provide specialised expertise and to speed to development process.

A XML Schema to implement the basic structures of the News Architecture is being developed by Jay Cousins (Riv-Com and Ulf Wingstedt (Cnet) with draft versions having been circulated to members of the IPTC News Architecture development group.

Another area where the specialised input of a consultant was considered appropriate is in the News Metadata Framework. A meeting between IPTC and W3C representatives was held in early July to discuss metadata issues.

Following this Mark Birbeck - a metadata expert working with the XHTML2 / RDF WG - was asked to study how the IPTC News Metadata Framework requirements, along with the NAR Technical Specification and the XML implementation draft, could be reconciled with the W3C RDF abstract model.

Publicity and Presentations

The IPTC web pages are an important element in the public presentation of IPTC's work and achievements. Public Relations Committee Chairman Walter Baranger (New York Times) and Michael Steidl (IPTC Managing Director) have carried out a review of the website statistics for iptc.org and nif.org.

These had shown very high levels for downloads - for example typical weekly figures were over 100 downloads for the NewsCodes and for the IPTC Core. Older standards such as the IIM and IPTC 7901 were also popular, as were the IPTC publications.

The Management Committee have asked the PR Committee to look at the site with a view to reducing the costs of the web service.

Presentations

IPTC Presentations have been held at NEXPO, in March, and the News Standards Summit in May. Although turnout at the IPTC event at NEXPO was

rather low it appeared that this was due to shortcomings in timing and promotion. The information gained will be used to improve future events.

News Summit

Mischa Wolf (Reuters) reported that the News Standards Summit had been a successful event with around 50 attendees. Presentation files and audio recordings of the speakers are available on the NSS site ([www.http://www.newssummit.org/2005/program.asp](http://www.newssummit.org/2005/program.asp)). Consideration was being given to the possibility of further events in both Europe and the USA during 2006.



A free-standing banner has been produced to help improve visibility of the IPTC presence at conferences, seminars and similar events.

Published by the **International Press Telecommunications Council**
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