Hopefully you have heard of MoReq2 by now - after all, it was announced in March this year. Regardless, if you have any interest in managing electronic records, then you ought to know about it, as MoReq2 is set to usher in a new generation of electronic records management software. This article describes MoReq2, and goes into some detail about its contents.

What is MoReq2?

MoReq2 is short for "Model Requirements for the management of electronic records". It follows, naturally enough, the original MoReq that was published around the turn of this century. It is a specification of requirements for a generic electronic records management system, or ERMS (often also called EDRMS). In this respect, it is similar to the PRO 2002 specification for ERMS (often called the TNA 2002 specification since the PRO changed its name); indeed the original MoReq and the PRO 2002 are very closely related. But MoReq2 is different from the PRO work - and indeed from the comparable specifications from Germany, Norway, USA, Australia and many other countries in three important respects:

- It is international, as it contains no national requirements and respects international standards as much as possible.
- It is cross-sectoral, being intended for use in all kinds of organisation in the public, private or not-for-profit sectors.
- It specifies many requirements for closely-related technologies that are not strictly a part of the records management discipline, but that are often considered practically essential in the modern office environment, such as document management, collaboration, content management integration, and e-mail integration.

By contrast, the other existing specifications are all intended for the public sector (or part of the public sector) in one country; and most contain little or nothing about the related technologies.

The MoReq2 development process

The original impetus for MoReq2 came from the DLM Forum[1]; development was funded by the European Commission.

It probably goes without saying that, because MoReq2 is the newest specification, it has built on the experiences of the other specifications. The development process was highly consultative, and over 220 people from more than 30 countries agreed to act as volunteer reviewers. We are extremely grateful to all the participants - many from the Records Management Society - who contributed their perspectives, expertise and critical faculties to this initiative.

Special features of MoReq2

The MoReq2 specification defines "best practice" for ERM software. It defines what software has to be able to do in order to qualify as a good, generic, electronic records management package. Inevitably, this means that MoReq2 represents a superset of possible requirements - it includes (for example) everything that a large complex company might need to manage its unstructured electronic records, while allowing for these to be omitted if the software is used in a smaller, simpler setting. As a result, MoReq2 is rather longer than other specifications - about 800 formally-stated requirements - but not all of these are "mandatory", and some are in parts of the specification that are entirely optional.

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Modularity

In keeping with this philosophy, MoReq2 is highly modular - more than any earlier specification. The "core module" defines the requirements that are considered essential for the good management of records. Unlike many other specifications, this includes practical requirements for administration, for usability, for interfacing, and for other non-functional features. Perhaps more interestingly, it also includes mandatory requirements for integration with both an e mail application and scanning or imaging sub-systems. This conscious decision has led to some debate: are e-mail and scanning interfaces truly essential for the good management of electronic records? Clearly we believe that they are, in almost all real-life settings that will rely on electronic records management; but, to be fair, if you don't care about e-mail or scanned images, then these requirements will not be relevant.

MoReq2 also includes no less than 13 optional modules, dealing with features as varied as the management of physical records, national security markings, and content management system integration. These features, and those in the other ten modules, will be essential for some users but of no interest to others, which is why they are packaged in individual optional modules.

Some of the optional modules represent requirements that are assuming increasing importance, such as distributed working (holding records in more than one place), offline and remote working, and collaborative working.

Software suppliers seeking MoReq2 compliance certification will need to demonstrate that their software complies with all the mandatory requirements of the core module. They will be at liberty to choose any combination of optional modules to be tested, and the certification will specify which optional modules have been tested. This will allow users to choose products that have the combination of features they require for their business needs.

1 Management of Physical Files and Records
2 Disposition of Physical Records
3 Document Management and Collaborative Working
4 Workflow
5 Casework
6 Integration with Content Management Systems
7 Electronic Signatures
8 Encryption
9 Digital Rights Management
10 Distributed Systems
11 Offline and Remote Working
12 Fax Integration
13 Security Categories

The 13 optional modules in MoReq2

Evolution, not revolution

One of the mandates handed down to us for MoReq2 was that it should represent an evolutionary step on from the original MoReq - not a revolutionary advance. So you will find a recognisable physical structure (similar chapter and section headings) and the same basic assumptions about hierarchic classification.

[1]The Document Lifecycle Management Forum - see www.dlm-network.org.

MoReq2 in detail

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What you won't find in MoReq2 is anything revolutionary - so no virtual folders, no non-hierarchical records management, and (following much debate) no possibility of mixing files and classes at the same point in the hierarchy.

Case working and case management

A weakness of the original MoReq specifications - and of all other records management specifications - was the treatment of case working. This has been greatly enhanced in MoReq2.

One of the key features of any records management environment is access controls, not only to limit access to the content of records, but also to limit access to some system functions. An obvious example is that in many situations, the ability to open new classes and files has to be restricted to administrative users with special access rights. However, in businesses handling large numbers of cases, "normal" users need precisely this capability, as do some legacy applications. MoReq2 recognises these two different access models and allows for them.

Also, in case management settings, individual case files are typically referred to by a case identifier assigned by a legacy application (such as an application number, a licence number, or an address). In non-case applications, on the other hand, files are referred to by some combination of a name and a file number assigned automatically by the ERM system. MoReq2 allows for different combinations of these features in different parts of the organisation.

Finally, MoReq2 includes a completely novel feature for applications that call for very high volumes of simple case records, allowing these to be captured without the need for a usual "file". Probably the most contentious development in MoReq2, this rather "niche"-oriented requirement should only be used in these unusual circumstances. Its presence serves to illustrate the encyclopaedic range of records management requirements that MoReq2 aims to cover.

Sub-files

Also useful for, but not limited to, case working is the requirement for a new feature: sub-files. This feature arises largely out of observation of real-life needs to subdivide files of records. When combined with the existing facility to divide files into volumes, the result is a flexible set of requirements that can cope with almost any requirement - but to allow for less sophisticated users that do not require this complexity, MoReq2 also requires that the ERM system must be able to operate without sub-files, without volumes, or without both.

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Import and Export

The requirements dealing with import and export do not add much that is fundamentally new, but they do clarify the requirements in many detailed ways. MoReq2 specifies, for example, what it means to export and import records in terms of the record content, the metadata and the audit trails; what it means to import a classification scheme; how the system should behave in the event of some foreseeable error conditions, and so on. This increased precision and clarity is a theme that runs right through MoReq2.

E-mail integration

Rather than just stating that the ERM system needs to "integrate" with e-mail in some undefined function, as some other specifications do, MoReq2 provides detailed guidance on what such integration means. This includes requirements to retain the e-mail header information (an important tool if the authenticity or provenance of an e-mail message is later questioned), and requirements giving options for the capture of messages and attachments. It also provides a detailed mapping of metadata fields - an essential constituent of well-managed electronic records - to the formal definitions of e-mail header fields. For example, it specifies that the author metadata must come from the "addr spec" field defined in the formal specification of e-mail messages.

Metadata model

Requirements for e-mail metadata, and for the case file identifiers described above, are examples of the extensive metadata required to manage electronic records properly. In fact good management requires much more metadata than may immediately be obvious, and this is defined formally in a metadata model that is appended to MoReq2. Each metadata element - and there are 158 elements, or 345 counting the combinations of element and entity - is described in detail, complete with usage rules, sources etc. This model, which is designed to comply with the ISO standard for records management metadata,[2] will not be needed by most users outside the vendor community. It is being used to provide the basis for the XML metadata model.

Flexible retention management

MoReq2 allows for more flexibility in specifying how long records have to be retained, and what should happen to them at the end of their retention - the key function of records management, in some views. It allows for retention to be managed at any level of aggregation, for individual records, and even for specified record types. This capability is designed in part to cater for data protection requirements better than existing systems - so you can envisage an aggregation that has a particular retention schedule, except for specified record types within it (those identified as containing personal data) that have a shorter retention. Naturally, MoReq2 specifies what must happen in the event of conflict between retention schedules; however, because the kinds of conflict are more numerous than before (because of the additional functionality), MoReq2 does not attempt to resolve conflicts using any algorithmic rules.

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Distributed records management

Many early adopters of electronic records management have struggled with systems that did not manage distributed records stores well. The behaviour of distributed systems, common in many large organisations, is actually quite complex when it comes to records, involving not just records and copies of records, but also the classification scheme, metadata, audit trails, and governance over all of these. MoReq2 is the first specification to set out requirements for this, in an attempt to minimise the pain for future users of distributed systems.

Manageability and usability

MoReq2 addresses manageability and usability in several ways. The most novel is based on a series of requirements for the ERM system to allow processes to be interrupted then restarted smoothly. As with much else in MoReq2, this is based on observation of the difficulties encountered by users in real life settings.

Vital records

Finally, determined records management traditionalists will no doubt be pleased to hear that MoReq2 contains requirements dealing with vital records. Although we suspect that this feature would rarely be used for electronic records management, MoReq2 does require that an ERMS is able to restore vital records first in the event of a system restore.

And the rest…

This is just a taster. There is a lot more in MoReq2 than can be described here, including a reference model, a comprehensive (and hyperlinked) glossary, a standards model, and enough cross-referencing to satisfy almost anyone.

MoReq2 Resources

The MoReq2 requirements specification is accompanied by a full suite of test materials. This is intended for software compliance testing, and the DLM Forum is working to set up a compliance testing regime later in 2008 - not a trivial undertaking given it needs to be accepted in all 27 countries of the European Union.

We are also well advanced in the development of an XML Schema for MoReq2. When this is completed, it will provide a major enhancement to the fraught process of transferring records between systems or to an archive. At the time of writing, an outline schema has been published for comment; the full schema is expected by Autumn 2008.

Several countries have started to translate MoReq2. As these translations become available, we will post them on the MoReq2 project Web site, along with all of the MoReq2 resources, a Frequently Asked Questions list, and further supporting documentation. All are freely available; the project Web site's URL is <www.moreq2.eu>

The Author

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[2] ISO 23081 -1:2006 - Records management processes - Metadata for records