

Toward an Open Rights Management Interoperability Framework

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Introduction

With Xerox's upcoming unveiling of an XML-based version the Digital Property Rights Language (DPRL), I've been pondering to what extent Xerox and other rights management players (e.g. InterTrust) will work towards open standards. In particular, I'm curious to see if they'll work to foster a *rights management interoperability framework* analogous to (or perhaps falling within) the likes of ICE, cXML (Ariba), BizTalk (Microsoft), e-speak (HP), etc. From my understanding of Xerox's Rights Management Framework (RMF), this would minimally involve defining a set of tags such that the messaging aspects of RMF (perhaps RMF's *rights services layer*) could be expressed as XML-based messages that multiple applications/services could deal with.

After participating for some time in various international "rights metadata" discussions, it is clear to me that a critical element to true distributed rights management will an open, service-level framework that enables peer-to-peer interoperation of rights management services and agents. On a broader scale, I've been trying to collect these thoughts as a working concept that I'm calling **RightsTalk**. I envision that the definition and evangelism for RightsTalk would be managed under a structure called **RightsTalk.org**. Here is a very rough sketch of my thinking:

What is RightsTalk?

- RightsTalk would be an *XML framework* for the integration of *distributed rights management applications*
- RightsTalk would include:
 - a *design framework* for XML schema
 - a *set of XML tags* used in messages sent between applications
 - RightsTalk would be used to produce *XML schemas* in a consistent manner
 - *RightsTalk would not be a "standard"*
 - The goal of RightsTalk would be to establish a service-level basis for interoperability between rights management services
 - A secondary goal would be to accelerate the rapid adoption of XML in the rights management domain

RightsTalk Guiding Principles

- RightsTalk would assume that application integration takes place by message passing
- Individual applications and services would only need to be able to format, transmit, receive, and consume *standardized XML documents*
- RightsTalk messages would allow application integration at the *business process level*
 - business processes use *request-based* communications
 - messages map nicely onto such a request structure
 - *XML-based messaging* captures the essence of business communications while allowing flexibility
- Many "conduits" for messaging currently exist

RightsTalk Guidelines: Schema Syntax

- Would describe how to format RightsTalk documents in XML
- Could use DTDs or *XML-Data*, an XML vocabulary for defining schemas that allows data typing
 - <http://www.w3.org/TR/1998/NOTE-XML-data-0105/>
- RightsTalk schema syntax would include optional guidelines for message handling tags
- XML inheritance from other RightsTalk schemas

RightsTalk Guidelines: XML Tags

- Set of mandatory XML tags
- These tags would define conventions for:
 - declaring message identity
 - establishing clear namespace boundary for schemas
- The RightsTalk framework would include elements to define message handling characteristics

RightsTalk Tag Specification

- Message Structure
 - General Structure
 - Small number of mandatory tags for XML docs & messages
 - Include definitions, codes and structure definitions
- Message Identity
 - Determined by standard tag set
 - Includes basic doc type, design version and design origin
- RightsTalk Framework Usage
 - RightsTalk-encoded docs would have to be recognizable as such
 - RightsTalk-encoded docs would have to adhere to all RightsTalk rules
- Message Routing
 - Enables business-process-level interchange of rights management messages

For further reading:

Xerox & DPRL: <http://www.contentguard.com>

Intertrust: <http://www.intertrust.com>

ICE: <http://www.w3.org/TR/NOTE-ice>

CXML: <http://www.cxml.org/home/>

BizTalk: <http://www.biztalk.org>

e-speak: <http://www.internetsolutions.enterprise.hp.com/espeak/index.html>

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