


What RSS might mean for libraries and learning environments?



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September 19, 2003



Goals of this talk

- Tutorial, background materials, further exploration
- Explore RSS's relevance to the CDL and learning environments.
- Think about what RSS has to teach us as we build new infrastructure and tools (like the IU's Scholar's Box)
- Touch upon some issues on the longer-term horizon (RDF and the semantic web; semantic interoperability)



What is RSS?

- RSS stands for "Rich Site Summary" or "RDF Site Summary" or.... RSS is a family of **XML formats** used to syndicate content ranging from news items, weblog entries, and “pretty much anything that can be broken down into discrete items” (quote from Mark Pilgrim. “[What is RSS?](#)”])



Essential Elements of RSS

- A *channel* made up of series of *items*
- A *channel* is described by a *title*, *link*, *description*, and (optional) *language*
- An *item* is composed of a *title*, *link*, and *description*.



Versions of RSS

RSS versions and recommendations				
Version	Owner	Pros	Status	Recommendation
0.90	Netscape		Obsoleted by 1.0	Don't use
0.91	UserLand	Drop dead simple	Officially obsoleted by 2.0, but still quite popular	Use for basic syndication. Easy migration path to 2.0 if you need more flexibility
0.92, 0.93, 0.94	UserLand	Allows richer metadata than 0.91	Obsoleted by 2.0	Use 2.0 instead
1.0	RSS-DEV Working Group	RDF-based, extensibility via modules, not controlled by a single vendor	Stable core, active module development	Use for RDF-based applications or if you need advanced RDF-specific modules
2.0	UserLand	Extensibility via modules, easy migration path from 0.9x branch	Stable core, active module development	Use for general-purpose, metadata-rich syndication



Sample RSS documents

- Look at examples drawn from M. Pilgrim's “[What is RSS?](#)”
- RSS 0.91 [[local](#), [wiki](#)]
- RSS 1.0 [[local](#), [wiki](#)]
- RSS 2.0 [[local](#), [wiki](#)]



Popularity/Ubiquity of RSS

- Publishers: [BBC](#), [NY Times](#)
- UC Berkeley: [UCMP](#), [iNews](#)
- Lots of tools (e.g., blogging tools) – resulting in RSS produced by "ordinary people" (IU's main page, RY's [blog](#) and [latest wiki changes](#))
- (Compare to METS or IMS-CP)



Flow of Content via RSS

- Read news sources and weblogs by “*subscribing*” to *syndicated* RSS feeds which are then gathered by *RSS aggregators* (e.g., [SharpReader](#))
- The recasting/reuse/rewriting of bits and pieces of news and weblog entries in the writing of new content (e.g., Radio Userland)



RSS/Blogging Ecosystem

- Publishers, big and small
- RSS Aggregators and readers
- Writing tools: individuals creating RSS without their necessarily knowing it
- Emerging infrastructure: e.g., RSS oriented search engines and social network analysis systems
- Possibilities for extensibility within the RSS framework and desire for applications of RSS beyond original design specification



Crosswalks to RSS

- My “Webnet talk” – “RSS is only the beginning”
 - RSS is perhaps the most active used XML format for content syndication. However, there is so much interesting digital content to syndicate, aggregate and reuse that is not currently in RSS format. This content resides in our libraries, museums, scholarly repositories, government archives. I will talk about using other key XML formats in the educational, library, and technology worlds that can be used to allow content to be reused and recontextualized. I will look at the question of how digital cultural heritage materials and scholarly works can be "ripped, mixed, and burned" in recombinatorial, bricolage authoring.
- Commentary from CETIS:
“Transformers!”
- I use amazon.com and CDL materials.



Amazon.com and RSS

- [Lockergnome](#)
- [OnFocus](#)
- Discussion on [Amazon.com](#)



A model? Allconsuming.net

- an intriguing model for web services [SOAP, REST] enabled book commentary aggregation site.
- I crosswalked my (xml) “currently reading list” to RSS 2.0 via XSLT and displayed it in my blog. (Some rss now available from site)
- We have some preliminary work in this area.



What about the Ed. Tech community?

- Look at [Syndicating Learning Objects with RSS and Trackback](#)
- [TheFuss](#) for a list of links
- Stephen Downes' [Edu rss](#): “The purpose of this release is to demonstrate the idea of RSS aggregation and filtering - after all, if we can do this for RSS feeds, we can do it even more easily with learning object metadata or RSS-LOM.”



Exploiting RSS extensibility

- RSS 2.0: via embedding of namespace qualified tags
- RSS 1.0: via RDF-based extensibility
- In RSS, can we *embed* materials (e.g., METS objects) and/or *make reference* to materials to exploit syndication ecosystem – or do we want to generalize?



RSS 1.0, RDF, and the Semantic Web

- I wish I could make it all clear for you – but that's the area I'm struggling with myself.
- Better blending of disparate materials?
- Better prospect for semantic interoperability?



Atom after RSS?

- Work is underway for “writing specifications for syndicating, archiving and editing episodic web sites” Why?
- The effort is currently named “Atom”
- Atom 0.2 is the latest as of this presentation.
- Who knows whether RSS will be superseded by Atom....



Hints on Technical Implementation

Again, Mark Pilgrim to the rescue:

- [“What is RSS?”](#)
- [“Parsing RSS at All Costs”](#)
- [“Inside the RSS Validator”](#)
- [Feed Validator](#) [[code](#)]
- A big list of RSS-related resources:
[TheFuss](#)



Conclusions

- Lot of potential for flow of content – but we haven't yet realized it.
- RSS aggregators need to evolve into fuller systems for such a generalized content flow network
- The ultimate value of RDF can be great but is unknown
- Need for a lot of experimentation yet