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## CRA Policy Blog Available as an RSS Channel

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**By Tim Finin**

The CRA Policy Blog [1] is now available as an RSS channel. CRA hopes to make more of its Web content available via RSS soon. If you use an RSS reader, you can just subscribe to the Policy Blog [2] and skip the rest of this article. If you are not sure how to spell RSS, keep reading to learn what it is and what it can do for you.

RSS (Rich Site Summary ) is a way to disseminate information on the Web that is somewhere between the push of email and the pull of browsing web portals. In that sense, it is like the venerable Unix newsgroups, but differs in that anyone can start an RSS channel by putting it on the Web and the content is under your complete control. RSS is viewed as a lightweight tool for the syndication of web site content to be incorporated into web pages, portals, and personalized information sources. As more and more information becomes available via RSS feeds, it is becoming a valuable tool to deal with the overwhelming amount of information available today.

### How It Works

RSS is a XML standard for publishing 'summaries' of articles or news items—for example, a headline, date, short description, and a link to the full item. The full specifications define about 20 metadata fields and the XML encoding supports additional extensibility. Information providers, like the CRA, Slashdot, The New York Times, and bloggers publish RSS 'feeds' or 'channels' as XML files at an advertised URLs. As the original content changes, for example, new stories are posted to Slashdot, the corresponding RSS channel is updated, typically including only the 10 or 15 most recent items. Most blogging systems can automatically update an RSS feed containing the summaries of recent items at the same time as it publishes the regular blog pages. RSS files are also easy to maintain with simple programs or to generate from other sources such as databases.

Information consumers use an RSS reader or aggregator program or web service to view items from the RSS channels to which they have subscribed, and subsequently read the full articles they find of interest. These client programs also help users discover new RSS channels, manage subscriptions, and organize them into categories. In a sense, RSS provides a way for you to construct a personalized news page that draws its content from just the RSS sources you want.

It is also possible to incorporate RSS headlines and links into HTML web pages. For example, your lab might publish an RSS feed of the 10 most recent publications which your lab's home pages include in an inset box. Most popular web portal systems, like PHP-Nuke and IBM's WebSphere, have facilities to include content from RSS feeds and there are simple Javascript programs to insert RSS content in an HTML page.

### Getting Started

The best way to explore what is available and how you might use it is to get an RSS reader. Basic reader functions include finding channels based on key words, subscribing and unsubscribing, organizing your channels into hierarchies and, of course, browsing through the new items in your subscribed channels and reading some of them. More sophisticated readers have advanced functions, such as selecting

or aggregating items and re-publishing them in your own channel. Some readers, like Bloglines [3], operate as web services and can be used from any browser, while others are programs you install and run on your local computer. NetNewsWire [4] is a simple yet powerful reader for MAC OS X, SharpReader [5] is a good choice for Windows, and Straw [6] works well on Linux under Gnome.

Once you see the volume and range of information that is readily available via RSS and find out how easy it is to access, you may want to publish your own RSS channel. You might, for example, have a channel of your lab's most recent publications or the upcoming seminars and talks you are hosting. The quickest way to experiment is to use a web-based system like RSS-xpress [7] to create and edit an RSS channel manually. Using a web-logging system like MovableType [8] is probably the easiest way to maintain a channel, but it is also relatively simple to generate RSS files from content in a database or even flat files using systems like PHP or JSP.

### **What Comes Next**

RSS was first defined by David Winer in 1997 as an XML format for his UserLand software, and was quickly adopted by Netscape as the format for syndicating content in the Netcenter portal. It has evolved since then and currently exists in several versions (0.91, 1.0 and 2.0). RSS v1.0 is a W3C recommended standard [9], is based on the semantic web [10] language RDF [11], and opens up exciting opportunities that make RSS much more useful. Most clients can handle the basic operations on all three RSS formats, but intelligent clients can do much more with the RDF version.

RDF is an XML-based language to define computer-understandable vocabulary that people and programs can use to describe things of interest, such as web sites, newspaper articles, email messages, people, book, events, web services, and so on. RDF mimics human languages in that it allows one to introduce new terms (individuals, classes, and properties) that are defined (partially, at least) in terms of existing terms. The RDF-based Web Ontology Language OWL [12] supports advanced capabilities, such as logical inference and translating descriptions using different ontologies (e.g., mapping a location specified as a Zip code to one using latitude and longitude.) When used with RSS, RDF allows a channel publisher to include additional information about the items.

For example, suppose the Baltimore Sun publishes an RSS feed of events going on in Maryland. In addition to the basic RSS fields, the Sun could also include RDF descriptors for the type of event (e.g., concert, sports, or seminar), location (e.g., by zip code), or cost (e.g., minimum cost in US\$.) While basic RSS clients might not understand these additional annotations and would thus choose to ignore them, a more sophisticated client could do interesting things if it understood the tags. You might configure such a client to display free or inexpensive concerts on a map and to insert them on your calendar.

### **For More Information**

There is a lot of information on RSS available on the web, as well as several books [13].

[1] <http://www.cra.org/govaffairs/blog/>

[2] <http://www.cra.org/govaffairs/blog/index.rdf>

[3] <http://www.bloglines.com/>

[4] <http://ranchero.com/netnewswire/>

[5] <http://www.sharpreader.net/>

[6] <http://www.nongnu.org/straw/>

[7] <http://rssxpress.ukoln.ac.uk/>

[8] <http://www.movabletype.org/>

[9] <http://web.resource.org/rss/1.0/>

[10] <http://www.sciam.com/article.cfm?articleID=00048144-10D2-1C70-84A9809EC588EF21>

[11] <http://www.w3.org/RDF/>

[12] <http://www.w3.org/2001/sw/WebOnt/>

[13] Ben Hammersley, Content Syndication with RSS, O'Reilly & Associates, 2003.

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