



# RSS

Syndication, pipes  
and web content  
republishing

*Thanks to Erik Wilde, UC Berkeley  
dret@berkeley.edu*

# RSS is...

- A family of XML formats used to publish frequently updated works
  - blog entries, news headlines, audio, and video
- A mechanism for content syndication and user aggregation
  - emerging business models for video & music
  - potential scholarly publishing models

# Updated Content

- Early Web content was **static content**
  - or updated very infrequently
  - not a requirement to reuse content in different contexts
- Frequently **updated content** quickly became a very common scenario
  - as commercial interests took over the Web, users should have a reason to re-visit a site
  - presenting a stream of new content creates the image of a live Web site

# Beyond HTML

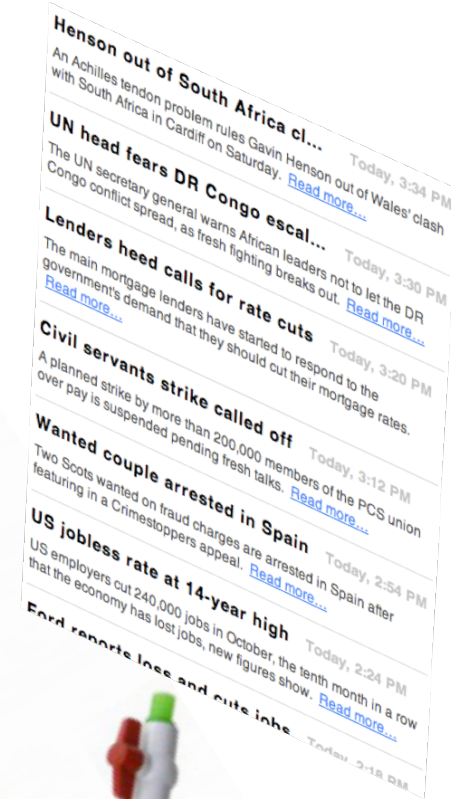
- Two major use cases where HTML is not sufficient
  1. users want an efficient way to get the updated content from a site
  2. sites want to aggregate updated content from other sites and re-publish it
- Syndication formats are designed to support these two use cases
  - container formats for updated items
  - a small amount of metadata about these items for automated processing & styling

# Aggregation Intermediaries

- User-configured portals mediate between content providers and readers
  - users select a number of feeds as their preferred information sources
  - the feeds can be presented on a single personalized Web page
  - *by sharing and re-publishing items, users are becoming aggregation intermediaries*



# RSS Feeds



RSS is a way for information displayed in a multimedia web page to be communicated across the web as a list of time-stamped items.

While the stories are in list form, they can be filtered or processed in lots of ways.

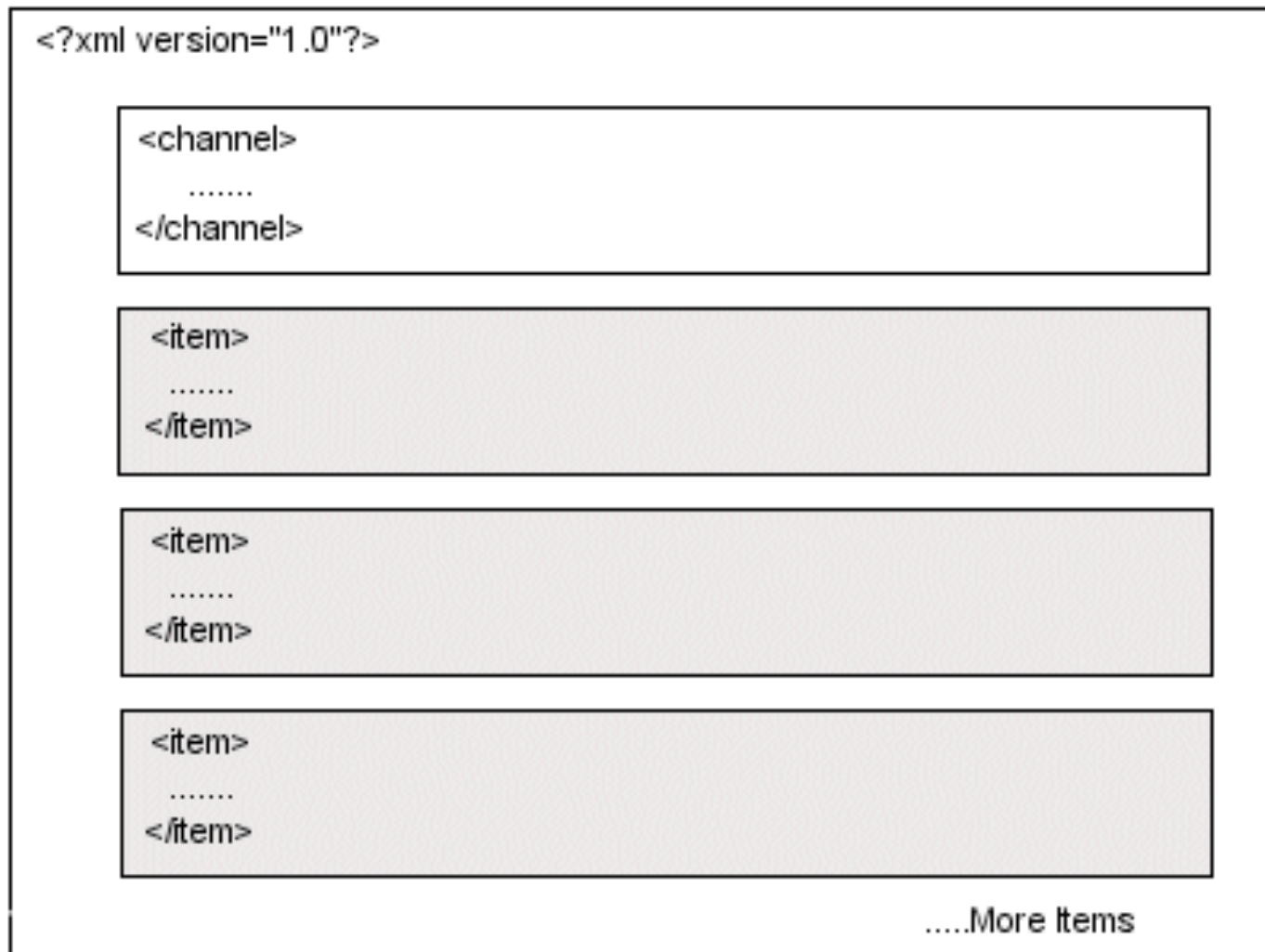
The list of items (aka RSS feed) can be displayed as a table of contents, as a summary, or in bespoke browser interface or 'widget'.



# RSS History

- The Myth of RSS Compatibility provides a good overview
  - <http://diveintomark.org/archives/2004/02/04/incompatible-rss>
- RSS is a schoolbook example for why standards are a good thing
  - RSS 0.9 was created for the My Netscape portal in March 1999
  - RSS 0.91 (a simplification) was introduced in July 1999 (as an interim solution)
  - RSS was without an owner, and different parties claimed/denied ownership
  - RSS 1.0 was created by an informal developer group
  - RSS 0.92 (and 0.93 and 0.94) were published without acknowledging RSS 1.0
  - finally, RSS 2.0 was released as a follow-up to the RSS 0.9x versions
- Using RSS has become an exercise in managing a menagerie of versions

# Basic RSS Structure





# RSS 0.91

```
<rss version="0.91">
<channel>
  <title>XML.com</title>
  <link>http://www.xml.com/</link>
  <description>XML.com features a rich mix of information and services for
    the XML community.</description>
  <language>en-us</language>
  <item>
    <title>Normalizing XML, Part 2</title>
    <link>http://www.xml.com/pub/a/2002/12/04/normalizing.html</link>
    <description>In this second and final look at applying relational
      normalization techniques to W3C XML Schema data modeling, Will
      Provost discusses when not to normalize, the scope of uniqueness and the
      fourth and fifth normal forms.</description>
  </item>
```

items are inside the channel

# RSS 1.0

```
<rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#" xmlns="http://purl.org/rss/1.0/" ...>
<channel rdf:about="http://www.xml.com/cs/xml/query/q/19">
  <title>XML.com</title>
  <link>http://www.xml.com/</link>
  <description>XML.com features a rich mix of information and services for the XML community.</description>
<items>
  <rdf:Seq>
    <rdf:li rdf:resource="http://www.xml.com/pub/a/2002/12/04/normalizing.html"/>
    <rdf:li rdf:resource="http://www.xml.com/pub/a/2002/12/04/som.html"/>
    <rdf:li rdf:resource="http://www.xml.com/pub/a/2002/12/04/svg.html"/>
  </rdf:Seq>
</items>
</channel>
<item rdf:about="http://www.xml.com/pub/a/2002/12/04/normalizing.html">
  <title>Normalizing XML, Part 2</title>
  <link>http://www.xml.com/pub/a/2002/12/04/normalizing.html</link>
  <description>In this second and final look ....</description>
  <dc:creator>Will Provost</dc:creator>
  <dc:date>2002-12-04</dc:date>
</item>
```

RDF declares a set of resources to be part of the channel

Each item uses RDF statement syntax to give metadata **about** the resource. *Each item is outside the channel element.*

# RSS 2.0

```
<rss version="2.0" xmlns:dc="http://purl.org/dc/elements/1.1/">
<channel>
<title>XML.com</title>
<link>http://www.xml.com/</link>
<description>XML.com features a rich mix of information and services for the XML
  community.</description>
<language>en-us</language>
<item>
<title>Normalizing XML, Part 2</title>
<link>http://www.xml.com/pub/a/2002/12/04/normalizing.html</link>
<description>In this second and final look at applying relational normalization techniques to
  W3C XML Schema data modeling, Will Provost discusses when not to normalize, the scope of
  uniqueness and the fourth and fifth normal forms.</description>
<dc:creator>Will Provost</dc:creator>
<dc:date>2002-12-04</dc:date>
</item>
```

Combination of RDF-style metadata declarations, but no RDF. Items back inside the channel.

# Case for Content Management

- RSS is very rarely produced by hand
  - by definition, RSS contains redundant information for a specific purpose
- If a Content Management System (CMS) is used, RSS can be generated
  - basic metadata can be generated by the CMS (title, author, date)
  - better tagging of content results in better tagging of feeds
  - well-tagged feeds are better foundations for large-scale reuse of feed items
- Blogging is simply a specialized case of a CMS
  - Web-based interface for controlling everything
  - strictly time-ordered sequenced of published items
  - navigation features primarily based on the time-specific facets of the blog (maybe tags)
  - all blogging tools include feed support

# Widgets

*Widgets (or gadgets) are visual components for a web page. Some are useful, some are clever, some are just pretty.*



Collection of repository items (articles, lectures, artwork etc) that you see as an HTML page are exported across the web as an RSS feed.



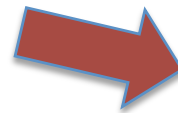
A widgetmaker web site lets you design and create a widget using an RSS feed of your choice.

RSS feed:

- item 1,
- item 2,
- item 3...

*This widget makes a 3D gallery display from the previews of each item in my "latest publications" feed*

# Using Widgets on Your Site



```
<object classid="clsid:d27cdb6e-ae6d-11cf-96b8-444553540000" codebase="http://fpdownload.macromedia.com/pub/shockwave/cabs/flash/swflash.cab#version=9,0,0,0" type="application/x-shockwave-flash" width="400px" height="331px" id="kickWidget_66545_20449" align="middle"><param name="movie" value="http://serve.a-widget.com/kickapps/service/getWidgetSwf.kickAction"/><param name="FlashVars" value="affiliateSiteId=66545&amp;widgetId=20449&amp;width=400&amp;height=331"/><param name="quality" value="high"/><param name="wmode" value="transparent"/><param name="allowFullScreen" value="true"/><param name="menu" value="false"/><param name="allowNetworking" value="all"/><param name="allowScriptAccess" value="always"/><embed src="http://serve.a-widget.com/kickapps/service/getWidgetSwf.kickAction"
```



The widget site stores your design and gives you some HTML to copy and paste into your web page to invoke the widget.

RSS feed:

- item 1,
- item 2,
- item 3...

**ECS**  
Electronics & Computer Science  
University of Southampton

University of Southampton > ECS > JAM > Leslie Carr

Les Carr  
... research  
... teaching  
... other

**Research Page of Leslie Carr**

My area of research is in general hypertext systems and the semantic web, with particular applications to digital libraries, and research dissemination. My research is currently focussed in areas of open access, knowledge management and bibliometrics. I am actively engaged in the Open Access initiative, managing the roll-out of the EPrints repository software to the University and the wider academic community in the UK and internationally, providing support for software installation and institutional change and evaluating the effect of EPrint repositories on scholarly communication and research assessment.

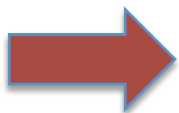
I am technical director of the EPrints repository software, the manager of the ECS School research repository and I sit on the steering committee of the Southampton Institutional Repository. I also run EPrints Commercial Services, which provides paid for repository solutions for Universities and research organisations. The large portfolio of repository research projects (listed below) in which I participate are helping to define the role of repositories in the international research environment, changing academic practice and scholarly communication.

Over the last three years I have been adapting the successful Open Hypermedia work that I undertook in the 1990s to take advantage of recent developments in Knowledge Management and the Semantic Web through previous funding from EPSRC (COHSE, WICK) and my participation in the AKT project. I have also been developing and promoting the Open Access scholarly paradigm, and investigating its quantitative impact on scientific dissemination and E-Science through funding from JISC (OpCIT, OPSIS, EPrints, EBank, TARDis). Through the EPSRC AKT IRC project I am attempting to tie together these two streams of research into a new area 'semioetrics' combining advanced uses of metadata and knowledge techniques with the digital library repository management. This work is particularly relevant to E-Science and Cyberinfrastructure, as it investigates the combination of datamining and network analysis together with community information provision and management techniques.

I have chaired the programme committee for the ACM Hypertext conference in 2003, been General Chair of the Fifteenth Internal World Wide Web Conference in 2006 and am General Chair of the Open Repositories Conference in 2008.

# Spruce up your own home page with a widget from **widgetbox.com**

My recent papers from a **research repository** RSS feed



*Note the use of document thumbnails.*

**ECS**  
Electronics & Computer Science  
University of Southampton

Site Search Enter keywords here go

Home UG Admissions Research Postgraduates People Alumni Contact Intranet

University of Southampton > ECS > IAM > Leslie Carr

Les Carr  
... research  
... teaching  
... other

**Leslie Carr - EPrints**

**Recent Posts**

**Towards smart storage for repository preservation services**

The move to digital is being accompanied by a huge rise in volumes of (born-digital) content and data. As a result the curation lifecycle has to be redrawn. Processes such as selection and evaluation for preservation have to be driven by automation. Manual processes will not scale, and the traditional signifiers and selection criteria in older...

**Releasing the Power of Digital Metadata: Examining Large Networks of Co-Related Publications**

Bibliographic metadata plays a key role in scientific literature, not only to summarise and establish the facts of the publication record, but also to track citations between publications and hence to establish the impact of individual articles within the literature. Commercial

**Leslie Carr**

I'm a researcher in the [Intelligence, Agents, Multimedia](#) at the University of Southampton. Since the 1980's I have experimented with multimedia information systems, novel ways of constructing hypertexts, digital libraries and knowledge management systems.



As a practical application of the above ideas (time to *change the world* instead of just *thinking deep thoughts*), I am working with Open Access and Institutional Repositories. My goal is to encourage researchers and scientists to become responsible curators of their own intellectual assets, and to build the information environments that enable that goal and also that take advantage of it (repositories, literature analysis services, community maps, new idea trackers).

I'm fascinated by the way that humans can take advantage new information sources (like Google or the Semantic Web) and whether these things can help to make us genuinely smarter. Can Google make someone behave like an expert? And if so, can we change the way that we teach children or undergraduates ?

**Activities in brief:** I am a fellow of the [Web Science Research initiative](#), the technical director of the [EPrints Repository software team](#) and next year's [Open Repositories conference](#) chair. I am the manager of the [ECS repository](#) and I also blog about the experience as [RepositoryMan](#).

I am Course Leader for the [MSc in Web Technologies](#), and teach on the [Advanced Programming](#), the [Scripting Languages \(JavaScript\)](#), and the [Hypertext and Web Technologies](#) modules in our degree courses as well

**Students rate ECS as UK's best**

HEFCE's 2006 National Student Survey gives [ECS the highest ratings in the UK](#) for Computer Science and Electronics.

**Look who's talking**

Professor Tim Berners-Lee, from the Intelligence, Agents, Multimedia Group talks to the [BCS IT Now](#) magazine about [future challenges of the Web](#).

**NEW: ECS Undergraduate Prospectus 2009 (PDF 2MB)**

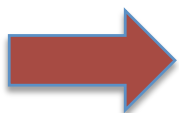
**Find out about our MSc Programme**

**Apply for a PhD**

This *widget* was created for me by **widgetbox.com** using a repository feed that delivers my recent publications. I just had to paste the HTML it made into my Web page.

# ...or one from KickApps.com...

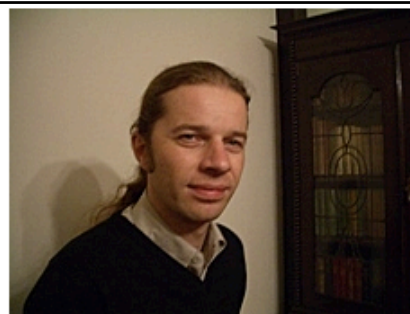
Recent analyses from a **data repository** RSS feed



Note the use of *chemical structure thumbnails.*

## Simon Coles, Manager of the National Crystallography Centre

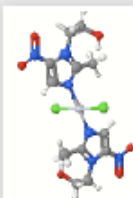
*My role as manager is primarily to actively lead the team, by example, in the activities of collection, refinement and publication of crystal structure data. On a daily basis I am responsible for overseeing the administrative aspects of the service, ensuring the smooth running of the laboratory and interacting with our users.*



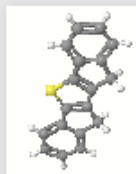
I personally devise and conduct more advanced experiments than those generally provided, such as variable temperature and charge density investigations. This is part of my remit to provide more in-depth, or research-based, experiments and seek new direction for service activities, in order to maintain our position as a world-leading facility.

### Latest Crystal Structures

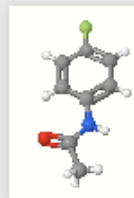
☰ MORE    ↔ SHARE



[trans-Dichloro...](#)  
Coles, Simon J. and Hursthouse, Michael B. and Maurya, M. R. and Azam, A. (2008) University of Southampton, Crystal Structure Report Archiv...



[10,11-Dihydrod...](#)  
Coles, Simon J. and Hursthouse, Michael B. and Skabara, Peter J. and Afonina, Inna and Kanibolotsky, Alexander (2008) University...



[N-\(4-fluorophe...](#)  
Huth, Susanne L. and Threlfall, Terry L. and Hursthouse, Michael B. (2008) University of Southampton, Crystal Structure Report Archiv...

At a higher level it is my duty to define procedure and protocol for the operation of the Service and assist in the generation of reports to our funding bodies and management panel. In addition I contribute to the pursuit of funding to operate the service and further its capabilities. Another strand of my work for the service is promotion, outreach and training. In this respect I regularly present aspects of service work at international conferences and author journal articles describing our novel developments that further the field of chemical crystallography. As part of our training program it is

Just because a subject is scientific or technical doesn't mean that a visual representation of its data can't promote better communication.



# Create a pagecast at PageFlakes.com

A brief bio and flattering photo

*the only bit that I had to write!*

My school's latest news items RSS feed

The screenshot shows a PageFlakes pagecast for 'ECS Page for Dr Leslie Carr'. The layout includes several sections:

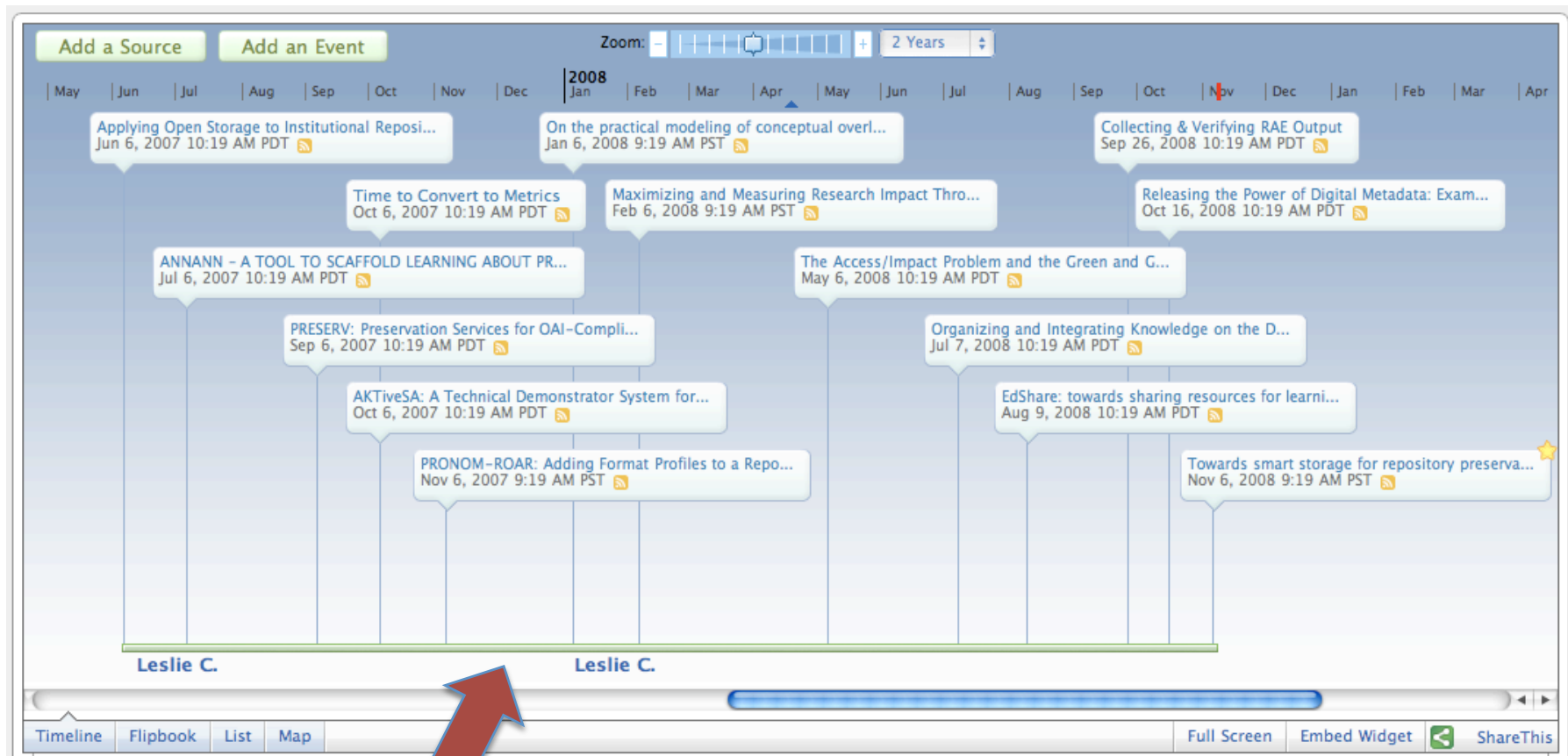
- Dr Leslie Carr (7):** A bio and photo of Dr Leslie Carr. The bio text reads: "Leslie Carr I am a fellow of the Web Science Research initiative, the technical director of the EPrints Repository software team and the manager of the ECS repository. I am Course Leader for the MSc in Web Technologies, and teach on the Advanced Programming, the Scripting Languages (JavaScript), and the Hypertext and Web Technologies modules in our degrees courses."
- ECS News (6):** A list of news items, including "UK consulate staff visit Mountbatten Building", "New device to improve transistor quality", and "Lajos Hanzo receives IET Achievement Award".
- Leslie Carr - Latest Publications (7):** A list of publications, including "Towards smart storage for repository preservat...", "Releasing the Power of Digital Metadata: Exami...", "Collecting & Verifying RAE Output", and "EdShare: towards sharing resources for learnin...".
- ECS Students (12):** A grid of photos of students.
- Leslie Carr - Latest Teaching Materials (5):** A list of teaching materials, including "COMP3016 Web Technology - Introductory Lecture", "COMP3016 Web Technology - Strand 'Web Science'...", and "COMP3016 Web Technology - Strand 'Web Science'...".

Recent blog entries from my students' RSS feed

My recent lectures from the teaching repository RSS feed

My recent papers from the research repository RSS feed

# Create a timeline at dipity.com



My recent papers from the same **research repository** feed as before. Same data, new visualisation. Here, the datestamp from each article is used to place it on the timeline.

# or a calendar at 30boxes.com

KULTUR EPrints Repository

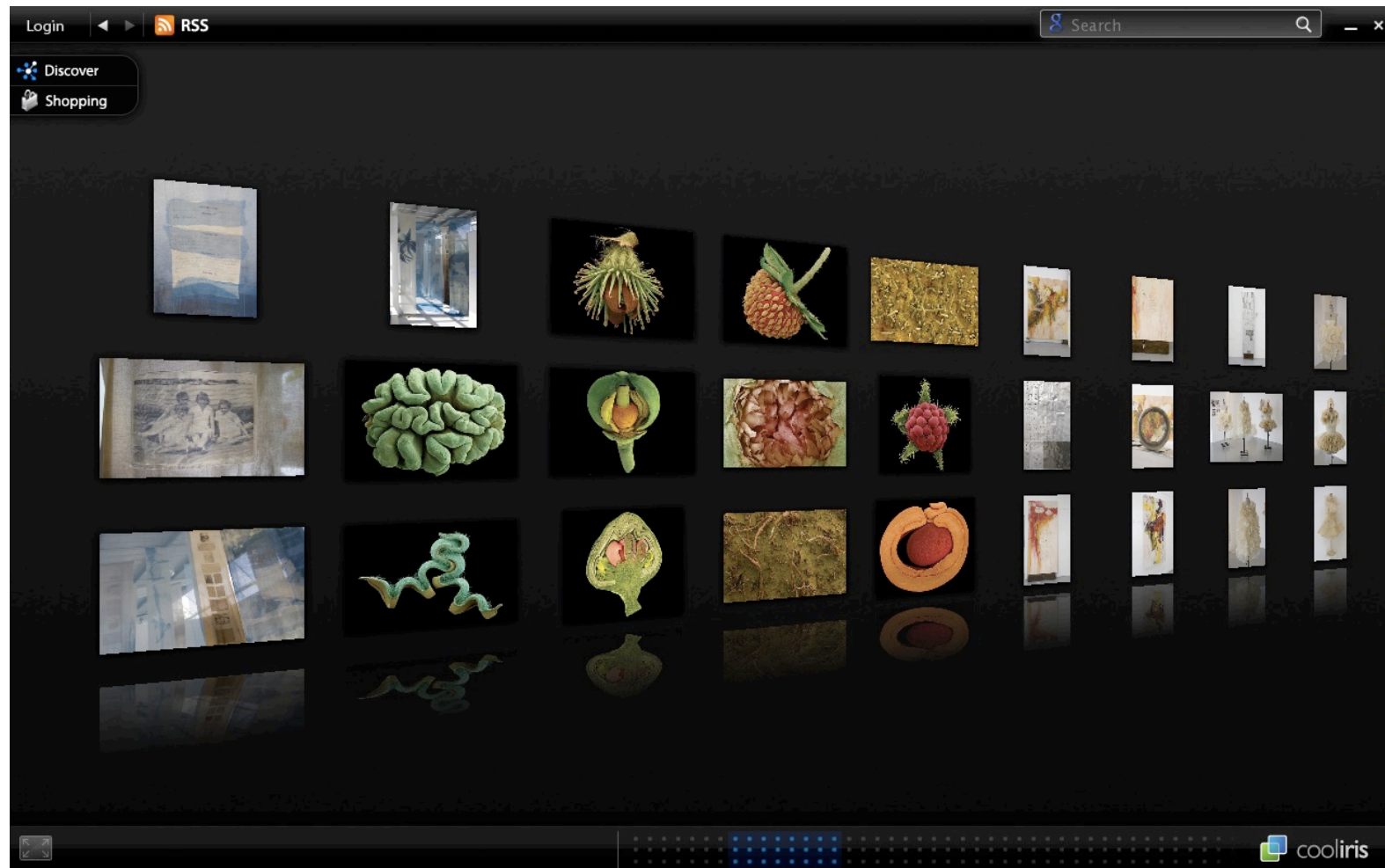
SEP	Mon 29	Tue 30	OCT Wed 1	Thu 2	Fri 3	Sat 4	Sun 5
			Film in the city: a report on the film & video sub-Sector in London				
	6	7	8	9		11	12
		14	15		17	18	19
	20		21	In the Loop: Knitting Past, Present and Future.	24	25	26
	27		28	29		NOV 1	2

30 Share your life with 30 Boxes | Build one of these timelines!

2008

Recent deposits from the **KULTUR project art repository** RSS feed. Once again, the datestamp from each article is used to place it on the calendar. Thumbnails optional.

# Display your collection on an image wall at cooliris.com



These images come from the **KULTUR project art repository** RSS feed. You can see them in a widget, or a special browser.

...it's useful for viewing large collections of visual material



The image wall also works well with thumbnail images of posters from a research repository.

# Variety of Ways of Using RSS

- RSS consumed directly by browser
  - Flash widget
  - AJAX
- RSS consumed by server-side cgi script to produce HTML page
  - use bespoke PHP library (e.g. splinteredfeed)
  - use XSLT
- RSS consumed by command-line XSLT to produce
  - dynamic HTML page
  - static HTML page
  - static data for incorporation into dynamic HTML
- *BEWARE security sandboxes!!*

# RSS XSLT example (pt 1)

```
<?xml version="1.0" encoding="utf-8"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:xhtml="http://..." xmlns:rdf="http://..."
  xmlns:rss="http://..." xmlns:dc="http://.../">
<xsl:output method="html"/>

<xsl:template match="rdf:RDF">
  <ul id="deliciouslist">
    <xsl:apply-templates select="rss:item"/>
  </ul>
</xsl:template>
```

Turn the RDF element  
into an unordered list...

Download complete example from <http://www.splintered.co.uk/experiments/69/>

# RSS XSLT example (pt 2)

```
<xsl:template match="rss:item">
  <li>
    <a>
      <xsl:attribute name="href">
        <xsl:value-of select="rss:link" />
      </xsl:attribute>
      <xsl:value-of select="rss:title" />
    </a>
  </li>
</xsl:template>

</xsl:stylesheet>
```

...and turn the each item into an <li> element containing a link to the item's URL.



# Delicious Bookmark List

The screenshot shows the Delicious website interface. At the top, there's a navigation bar with 'delicious' logo, 'Home', 'Bookmarks', 'People', and 'Tags' menus. A search bar is on the right. The main content area is titled 'Patrick H. Lauke's Bookmarks' and includes links for 'Bookmarks', 'Network', 'Tags', and 'Subscriptions'. Below this, there's a 'splintered' section with a search input and a 'Bookmarks 1761' indicator. The list of bookmarks is sorted by 'Most Recent'. Each entry includes a date, title, 'SAVE' button, and a count in a blue box. Tags are shown as small grey buttons below each entry. On the right side, there's a 'Tags' section with 'Top 10 Tags' and 'All Tags'.

Date	Title	Count	Tags
10 NOV 08	Biscuit Tin - Random is good	33	design, flash, photography, api, flickr, mashup
	The next President of the United States - The Big Picture - Boston.com	1133	photography, obama, politics
09 NOV 08	Callie Shell - Obama - Digital Journalist	837	photography, politics, obama
	YouTube - YouTube Captions and Subtitles	4	youtube, accessibility, cc, caption
	mindforks: Using .attr for ARIA in jQuery UI	2	jquery, aria, wai-aria, javascript, accessibility
03 NOV 08	WordPress › Youtuber « WordPress Plugins	8	wordpress, youtube, web, development, plugin, video
	Audio Player Wordpress plugin - 1 Pixel Out	2723	flash, web, development, wordpress, plugin, audio
	Twitter API Wiki / FrontPage	166	api, twitter, web, development, social, web2.0

This is the page that we're going to get a feed from...



# As an RSS Feed

## Delicious/splintered

<b>Biscuit Tin - Random is good</b>	Monday, 1:34 PM
<b>The next President of the United States - The Big Picture - Boston.com</b>	Monday, 8:02 AM
<b>Callie Shell - Obama - Digital Journalist</b>	Monday, 7:55 AM
<b>YouTube - YouTube Captions and Subtitles</b>	Monday, 2:02 AM
<b>mindforks: Using .attr for ARIA in jQuery UI</b>	Monday, 2:01 AM
<b>WordPress › Youtuber « WordPress Plugins</b>	Nov 3, 2:02 PM
<b>Audio Player Wordpress plugin - 1 Pixel Out</b>	Nov 3, 2:00 PM
<b>Twitter API Wiki / FrontPage</b>	Nov 3, 11:23 AM
<b>The Google Maps Image Cutter - UCL Centre for Advanced Spatial Analysis</b>	Nov 2, 1:26 AM
<b>QuirksBlog: Slides from acessible Ajax workshop at Fundamentos Web</b>	Oct 30, 10:52 PM
<b>northtemple - JavaScript and screen readers</b>	Oct 30, 10:51 PM
<b>Vintage and Retro Typography Showcase I Inspiration I Smashing Magazine</b>	Oct 27, 2:59 PM
<b>Rubitone (Rubik + Pantone)</b>	Oct 27, 2:58 PM
<b>China Channel Firefox Add-on - Experience the censored Chinese internet at home!</b>	Oct 27, 2:34 AM
<b>Hack that Phone - Make and use themes with WinterBoard - Section 2 ...</b>	Oct 26, 11:07 PM

...this is what the feed looks like in an RSS reader...

# Processed with SplinteredFeed

- As an HTML document
- Not much improvement – but it's just a start 😊

- [Biscuit Tin - Random is good](#)
- [The current President of the United States - The Big Picture - Boston.com](#)
- [Callie Shell - Obama - Digital Journalist \(in: photography politics obama\)](#)
- [YouTube - YouTube Captions and Subtitles](#)
- [mindforks: Using .attr for ARIA in jQuery UI](#)
- [WordPress > Youtuber < WordPress Plugins](#)
- [Audio Player Wordpress plugin - 1 Pixel Out](#)
- [Twitter API Wiki / FrontPage](#)
- [The Google Maps Image Cutter - UCL Centre for Advanced Spatial Analysis](#)
- [QuirksBlog: Slides from accessible Ajax workshop at Fundamentos Web](#)
- [northtemple - JavaScript and screen readers](#)
- [Vintage and Retro Typography Showcase | Inspiration | Smashing Magazine](#)
- [Rubitone \(Rubik + Pantone\)](#)
- [China Channel Firefox Add-on - Experience the censored Chinese internet at home!](#)
- [Hack that Phone - Make and use themes with WinterBoard - Section 2 ...](#)

...and this is the result of the transformation.

# Yahoo Pipes: sed for RSS

The screenshot shows a Yahoo Pipes workflow titled "Repository Platform News Feed\*". The workflow consists of the following steps:

- Sources:** Three "Fetch Feed" blocks are connected to a "Union" block. Their URLs are:
  - `http://eprintsnews.blogspot.com/fe`
  - `http://www.dspace.org/index.php?`
  - `http://fedora-commons.org/conflue`
- Regex:** Two "Regex" blocks are connected to the "Union" block. Both are configured to "replace" the start of the "item.title" field with "DSpace:". The first block's configuration is: "replace" with "DSpace:".
- Sort:** A "Sort" block is connected to the "Regex" blocks. It is configured to "Sort by" "item.y.published" in "descending" order.
- Pipe Output:** The final output of the pipeline.

The "Debugger" at the bottom shows the output of the "Sort" step (15 items):

```
Time taken: 0.528594s Refresh
DSpace: DSpace Foundation and Fedora Commons Receive Grant from the Mellon Foundation for DuraSpace
link http://www.dspace.org/index.php?option=com_content&view=article&layout=fulltext&Itemid=56
y:title DSpace Foundation and Fedora Commons Receive Grant from the Mellon Foundation for DuraSpace
y:id
category News - News
title DSpace: DSpace Foundation and Fedora Commons Receive Grant from the Mellon Foundation for DuraSpace
pubDate Tue, 11 Nov 2008 07:07:03 +0100
```

# Yahoo Pipes: sed for RSS

The screenshot shows a Yahoo Pipes workflow titled "Repository Platform News Feed". It consists of the following steps:

- 1. Take THREE independent blog feeds that you want to mash together**: Three "Fetch Feed" blocks are connected to the workflow. Each block has a "URL" input field with the following addresses:
  - `http://leprintsnews.blogspot.com/feed`
  - `http://www.dspace.org/index.php?option=com_content&view=category&layout=blog&Itemid=56`
  - `http://fedora-commons.org/confluence`
- 2. Prepend each item's title with the name of its blog**: Two "Regex" blocks are used. Each block has a "replace" input field with the text `item.title` and a "replace" button. The workflow uses these blocks to modify the titles of the fetched feeds.
- 3. Mash them all up together (union + sort by time)**: A "Union" block is used to combine the outputs of the three feeds. This is followed by a "Sort" block with the following configuration:
  - Sort by: `item.y.published`
  - in: `descending`
  - order: `order`
- 4. So you end up with a combined blog feed, whose items can still be distinguished. E.g. tech, science & political news.**: The final output is shown in a "Debugger" window, displaying a list of news items with their titles and publication dates. The items are:
  - `DSpace: DSpace Foundation and Fedora Commons Receive Grant from the Mellon Foundation for DuraSpace`
  - `link http://www.dspace.org/index.php?option=com_content&view=category&layout=blog&Itemid=56`
  - `y:title DSpace Foundation and Fedora Commons Receive Grant from the Mellon Foundation for DuraSpace`
  - `y:id`
  - `category News - News`
  - `title DSpace: DSpace Foundation and Fedora Commons Receive Grant from the Mellon Foundation for DuraSpace`
  - `pubDate Tue. 11 Nov 2008 07:07:03 +0100`

# Result: Pipes used in widgets

Widgets showing latest news from...

The screenshot shows the 'Repositories Worldwide' website with the 'eprints' logo in the top right. A navigation bar contains 'HOME', 'SOFTWARE', 'SERVICES', and 'OPEN ACCESS'. Below the navigation bar is a main content area with a text block titled 'The Wider View'. Three widget columns are displayed below:

- Repository Platform News** (light blue background):
  - Text: 'The latest news from the DSpace, EPrints and Fedora platforms.'
  - Section: 'Repository Platform News'
  - Section: 'Recent Posts'
  - Post 1: 'DSpace: DSpace Foundation and Fedora Commons Receive Grant from the DSpace Foundation'
  - Post 2: 'Fedora: 10-31-08 Update'
  - Post 3: 'Fedora: 10-17-08 update'
  - Post 4: 'Fedora: Trippi 1.4.1 Released'
  - Post 5: 'EPrints: EPrints exhibiting at Berlin Open Access Days on 9/10 October'
  - Post 6: 'DSpace: Upcoming Events'
  - Post 7: 'DSpace: NewSpace Link'
  - Post 8: 'EPrints: Mechanically Defined Documents'
  - Post 9: 'About'
- Repository Bloggers** (light red background):
  - Text: 'Repository managers and developers who blog about their experiences.'
  - Section: 'Repository Community Bloggers'
  - Section: 'Recent Posts'
  - Post 1: 'DorotheaSal: The purpose of a keynote' (with text: 'I watch people liveblogging talks, and keynotes especially, over on FriendFeed.')'
  - Post 2: 'DorotheaSal: ...again' (with text: 'What I just realized today, watching one such stream of reactions to a conference keynote, is that a keynote doesn't have to be right to be good. It's got to resonate...')
  - Post 3: 'DorotheaSal: ...again' (with text: 'I approach JISC reports with a combination of skepticism and grounded, but they do make me des...')
  - Post 4: 'The latest (and) on repository metadata interoperability, is a classic of the genre. Smart, grounded...'
  - Post 5: 'StuartLewis: A benefit of the SWORD' (with text: 'A benefit of the SWORD...')
  - Post 6: 'About'
- Repository Agendas** (light green background):
  - Text: 'Repositories serve lots of agendas. Here is news of open access and preservation.'
  - Section: 'Repository Agendas'
  - Section: 'Recent Posts'
  - Post 1: 'Curation: Data publishing and the fully-supported paper' (with text: 'Cameron Neylon's Science in the Open blog is a very good value. It's kept me up to date on many of the latest aspects of open science, and there's lots of good stuff there. Of course, Cameron's focus is indeed on open science rather than data, but...')
  - Post 2: 'Curation: Some interesting posts elsewhere' (with text: 'I'm sorry for the gap in posting; I've been taking a couple of weeks of leave at the end of my trip to Australia. Since return I've been catching up on my blog reading, and there are some interesting posts around.')'
  - Post 3: 'A couple of people (Robin Rice and...'
  - Post 4: 'Open Access: Alma Swan on "Reasons researchers really rate repositories"'
  - Post 5: 'About'

...different open source products...

...twelve independent bloggers...

...various techno-political issues

# Not So Simple Syndication

- Syndication is a powerful concept
- RSS versions make the RSS life harder than necessary
- Current RSS versions are stable, but many extensions exist
- Eventually RSS will be replaced by [Atom](#)

# Suggested Exercises

- Make a Web page from a BBC News feed using XSLT
- Make an HTML fragment as above, but embed it into another news page using `<iframe>` in the HTML, AJAX on the client browser or PHP include on the server.
- Create a KickApps carousel widget from a Flickr RSS feed and embed it in a web page
- Mash several news feeds together using Yahoo Pipes, filtering on “Global Warming” or “Climate Change”
- Generate your own RSS feed from from *e.g.* your lecture timetable.