



RSS-feed

a new way to provide information internationally

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RSS

- ▶ **Really Simple Syndication**
- ▶ **Rich Site Summary**
- ▶ **RDF Site Summary**



RSS is a

- ▶ method of distributing links automatically
- ▶ way to provide links to content on your web site
- ▶ dialect of XML
 - available in two major formats
 - other formats are around (such as Atom)

Why we should use RSS?

- ▶ Do I need to publish RSS feeds for my site?
 - Maybe not. Many sites do not need a RSS feed.
 - RSS was made to share things like headlines, links, and story excerpts
 - New ways to use this technique may be evolving
- ▶ Many media companies use several RSS-feeds on various topics (national, international, political, sports, etc. news)
 - **Our clients are becoming used to this method**
 - **We should use this for our benefit**
- ▶ We should provide "client pull" listings
 - easy way for clients to stay up-to date on news and new updates on our website



What links should I announce?

- ▶ Information that you want to syndicate with others
- ▶ Pages that are hard to find or notice without coming back regularly and browsing
 - few people have time for this unless they are already subscribed to a service at your site.
- ▶ Serve your clients and raise a "flag" with RSS.
- ▶ Here are some examples of items
 - New web-pages
 - New on-line publications
 - Media releases and other news items
 - Events
 - Job announcements



Terminology

- ▶ **Channels or Feeds**
- ▶ **RSS-reader or feedreader**
- ▶ **Blog**
- ▶ **Live bookmark**
- ▶ XML document
 - Used for syndication
 - Contains links to news articles
- ▶ Software designed to read the XML files and show them as lists of links
- ▶ Easily updated public website with postings in date order
- ▶ Technique to provide RSS-feeds as active dropdown lists in web-browsers

How to read RSS feeds?

- ▶ Dedicated RSS- and feed readers
- ▶ Some web-browsers and e-mail software include a built in RSS-reader
 - Mozilla Firefox
 - Live bookmarks
 - Mozilla Thunderbird
 - E-mail, newsgroups and RSS-feeds all-in-one program



RSS Aggregation

- ▶ The practice of gathering multiple RSS channels into one central location is called aggregation
- ▶ An example is GFIS Global Forest Information Service
 - <http://www.gfis.net/>
- ▶ While most aggregator Web sites share a common goal -- gathering content -- they serve different purposes.
- ▶ An aggregator may offer tools, solutions or services
 - These allow partners to customize feeds and minimize the integration and syndication effort.
- ▶ http://en.wikipedia.org/wiki/List_of_news_aggregators



How to get started?

- ▶ List the page link as an "item" in your RSS file and you can have it in RSS readers and "news aggregators" in no time
- ▶ Read a tutorial:
 - E.g. <http://www.mnot.net/rss/tutorial/>
- 1. **Create the XML file**
- 2. **Upload the file to web-server**
- 3. **Advertise your feed URL to aggregators**
- 4. **Include link meta-tags on your pages**
 - `<link rel="alternate" type="application/rss+xml" title="RSS" href="url/to/rss/file" />`
- 5. **Include RSS-icon on your pages**
- 6. **Update your feed regularly**



```
<a type="application/rss+xml" href="feed.rss"></a>
```

Manual entry of items

- ▶ RSS editors – both on-line and Windows based
 - Useful for irregularly updated feeds
 - www.rsspublisher.com
 - ... and many others, pick your choice
- ▶ It is important to validate your RSS code with a validator to make sure that syndication works properly
 - <http://rss.scripting.com/>
 - <http://aggregator.userland.com/validator>
 - <http://feeds.archive.org/validator/>



Required elements

▶ Channel

- title
- link
- description
- There are many optional elements such as: language, copyright, image, pubDate, lastBuildDate, cloud, ttl etc.

▶ Item

- A channel may contain any number of <item>s
- Elements of items: title, link, description, author, category, comments, pubDate, source, etc.

Automatic entry

- ▶ Output from database
- ▶ Many Content Management Software (CMS) packages include RSS-feed output for new content additions
 - check with your service provider

- ▶ Aggregating search engines get feeds from websites
- ▶ "Scraping" to create a RSS feed out of a website
<http://www.mnot.net/rss/tutorial/#Tools>
- ▶ Site Summaries in XHTML
<http://www.w3.org/2000/08/w3c-synd/#>



Which RSS version to choose?

- ▶ XML file structure varies with different versions of RSS
 - Choose the one which applies best to your needs
- ▶ RSS 1.0
 - Designed around the W3C's [RDF \(Rich Data Format\) standard](#).
- ▶ RSS 2.0 (0.91)
 - GFIS (and Metla) is using this
 - It has an easier and lighter structure
 - This is not compatible with 1.0
 - Many editors are able to produce both



XML-structure – channel

<http://www.metla.fi/rss/rss20-news10.xml>

```
<rss version="2.0">
  <channel>
    <title>Metla media releases</title>
    <link>http://www.metla.fi/</link>
    <description>
      10 latest mediareleases from Finnish Forest Research Institute Metla
    </description>
    <pubDate>Tue, 20 Sep 2005 11:28:01 +0300</pubDate>
    <docs>http://blogs.law.harvard.edu/tech/rss</docs>
    <managingEditor>ari.turunen@metla.fi</managingEditor>
    <webMaster>jarmo.saarikko@metla.fi</webMaster>
    <category>News</category>
    <ttl>3600</ttl>
    <generator>rss.pl</generator>
    <image>
      <url>http://www.metla.fi/img/metlav73x16.gif</url>
      <title>
        Finnish Forest Research Institute Metla - Media releases
      </title>
      <link>http://www.metla.fi/ajankohtaista/index-en.htm</link>
    </image>
    <language>en</language>
    <item> ... </item>
  </channel>
</rss>
```

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XML-structure - item

```

<item>
  <title>
    Cloning by tissue culture does not affect genome of silver birch
  </title>
  <link>
    http://www.metla.fi/tiedotteet/2005/2005-09-15-koivugenomi-en.htm
  </link>
  <description>
    Cryopreservation and micropropagation, i.e. cloning by tissue
    culture, are useful methods in forest research and regeneration. To
    enable the use of these methods, it is essential to maintain
    genomic fidelity during tissue culture or cryostorage that may last
    for up to several years. The research done by Metla did not show
    any effects from micropropagation and cryostorage on the growth
    characteristics of birch plants. In addition, no differences were
    observed between the genomes of the donor trees and the regenerated
    plants.
  </description>
  <dc:creator>Metla Communications</dc:creator>
  <dc:date>Thu, 15 Sep 2005 09:00:00 +0300</dc:date>
</item>

```

- ▶ Each channel contains usually several items listed temporally

Link collections for further info

- ▶ http://dmoz.org/Reference/Libraries/Library_and_Information_Science/Technical_Services/Cataloguing/Metadata/RDF/Applications/RSS/
 - * Autodiscovery (6) * Directories (26) * Generators (22)
* News Readers (224) * Specifications (33) * Tutorials (14) * Validators (7)
- ▶ http://en.wikipedia.org/wiki/RSS_file_format
- ▶ <http://www.mnot.net/rss/tutorial/>