FEED: RSS/ATOM, PODCAST
Social Web, Spring 2010
Jae-wook Ahn

FEEDS

- Feed = “A document (often XML-based) which contain content items, often summaries of stories or weblog posts with web links to longer versions”
- Feed > RSS, Atom

FEED? RSS? ATOM?

- RSS = Rich Site Summary
- RSS = RDF (Resource Description Framework) Site Summary
- RSS = Really Simple Syndicate
- ATOM
- Podcast

RSS (REVISION) HISTORY

RSS VERSIONS

- Version distribution collected by an RSS search engine (Feb 2010)
- 2.0 > 1.0 > 0.91 > 0.92

COMPARISON OF RSS VERSIONS

<table>
<thead>
<tr>
<th></th>
<th>RSS 0.91</th>
<th>RSS 0.92</th>
<th>RSS 2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categories on channel or item</td>
<td>X</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Elements on the channel: language, copyright, docs, lastBuildDate, managingEditor, pubDate, rating, skipDays, skipHours, generator, ttl</td>
<td>X</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>Item enclosures</td>
<td>X</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Elements on items: authors, comments, pubDate</td>
<td>X</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>Item count limitation</td>
<td>15</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>Notes</td>
<td>Channel-level metadata only</td>
<td>Allows both channel and item metadata</td>
<td>-</td>
</tr>
</tbody>
</table>

ATOM

- =ECHO, =PIE
- Independent development for the same purpose as RSS
- Improved control, internalization options, more precise and standardized tag definitions, ability to add features without enhancing the core structure
- LiveJournal, Blogger, MovableType

RSS INFRASTRUCTURE

- Ellen Finkelstein. (2005) Syndicating Web Sites with RSS Feeds for Dummies
WHY RSS (FEEDS)?

• News all in one place
• News when you want it
• Only the news you want
• Freedom from e-mail overload
• Easy republishing

• RSS is all about publishing and subscribing to content

REVEALING RSS IN WEB PAGES

Web page → RSS content in XML format → RSS reader

www.chronicle.com

Figure 1-4: An RSS feed contains the four components shown here.

Figure 1-3: Two of the most commonly used buttons that allow viewers to subscribe to your RSS feed.

WHY RSS (FEEDS)?

• Easier publishing
• Simpler writing process
• Subscribers don’t feel being pushed
• Not subject to spam filters
• Links back
• Relevance and timeliness

REVEALING RSS IN WEB PAGES

Don’t let the format of a feed scare you! I explain more about XML in the “What is XML?” section of Chapter 7. For now, you just need to know that this is a specially-formatted, plain text document. You generally save the RSS document to your Web server, perhaps in the same location as your Web page.

Figure 1-4 shows the infrastructure of an RSS feed. Figure 1-3 shows how one feed gets from a Web site to a viewer, but in practice, many Web sites have more than one feed and most viewers subscribe to several from a single site. In fact, subscribing to lots of RSS feeds is the whole point!

WHO IS USING RSS?

Everybody! Well, almost everybody. Of course, you have two players in this game to consider — those creating news feeds and those subscribing to them.
BY VISIBLE LINKS/ICONS

- No actual standard
- Browsers’ convention, since Mozilla (mid 2005)

BY HIDDEN RSS LINKS

```html
<link rel="alternate" type="application/atom+xml" title="Personalized Adaptive Web Systems (PAWS) group - Atom" href="http://pawsgroup.blogspot.com/feeds/posts/default" />
```

RSS CONTENT

- RSS 0.90 to 2.0 family
- XML
- `<channel>` & `<item>` parts
  Feed information (channel)
  Each article content (item)
- Additional features with higher versions — 0.90 to 2.0
- RSS 1.0 & Atom are in different formats!
RSS READER

Don't let the format of a feed scare you! I explain more about XML in the “What is XML?” section of Chapter 7. For now, you just need to know that this is a specially-formatted, plain text document. You generally save the RSS document to your Web server, perhaps in the same location as your Web page.

Figure 1-4 shows the infrastructure of an RSS feed.

Figure 1-4 shows how one feed gets from a Web site to a viewer, but in practice, many Web sites have more than one feed and most viewers subscribe to several from a single site. In fact, subscribing to lots of RSS feeds is the whole point!

Who is using RSS?

Everybody! Well, almost everybody. Of course, you have two players in this game to consider — those creating news feeds and those subscribing to them.

RSS READER/AGGREGATOR

- Software for reading RSS feeds
- Parses RSS feeds (in XML) and displays (attaching style sheets)
- Called RSS aggregator — because it aggregates many sources of data in one place
- Desktop software → Dedicated, Web browsers, E-mail client
- Web service

RSS READER — DESKTOP SOFTWARE

RSS READER — SERVICE

21

22

23

24
RSS REPUBLISHING EXAMPLE: YOURNEWS

• Adaptive news filtering system
• Read/gather RSS feeds
• Reproduce news list (personalize) — filtering & re-ranking
• Re-publish it in a native interface or through RSS feeds again

WEB SYNDICATION

• Web syndication is a form of syndication in which website material is made available to multiple other sites. Most commonly, web syndication refers to making web feeds available from a site in order to provide other people with a summary of the website’s recently added content (for example, the latest news or forum posts).

REPRODUCED (PERSONALIZED) LIST
RECEIVING PERSONALIZED RSS FEED

PODCAST

- Podcast = Broadcast to iPod
- Personal broadcast over the internet (Not restricted iPod)
- Delivered over RSS feeds
- Variants
  - Classic Podcast : Audio only
  - Video Podcast : Audio + Video
  - Enhanced Podcast : Audio + additional synchronized data (pictures)

PODCAST SOFTWARE

- Podcast client software lets users subscribe to and manage podcasts.
- Podcatchers

PODCASTING SCENARIO

Publisher (Provider)

Internet

Download + Usage (Subscription model)
RSS ENCLOSURE

- RSS enclosures are a way of attaching multimedia content to RSS feeds by providing the URL of a file associated with an entry, such as an MP3 file to a music recommendation or a photo to a diary entry.
- `<enclosure>` tag, an optional child of the `<item>` element
- `<enclosure url="http://example.com/file.mp3" length="123456789" type="audio/mpeg" />`

SUMMARY

- RSS — subscription-based model for published contents delivery
- Benefits for publishers and subscribers
- XML-based simple content structure
- Syndicatable (re-publishable)
- Podcast — multimedia RSS