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- ## What does RSS stand for?
- Real Simple Syndication
 - RDF Site Summary
 - Rich Site Summary

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Earlier syndication approaches

- Information Content and Exchange (ICE) Protocol
 - Supports catalogs, subscriptions, push/pull
- Channel Definition Format (CDF, MS)
- BackWeb (SW downloads, automatic pull)
- Pointcast (desktop news, push-based initially)

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Content vs. Links

- RSS aimed at syndication of links, rather than direct content
 - Not so much publishing as an alert service for addition or changes on a web site
- Site provides a feed (channel), which is a list of links
 - With meta-data per channel and per links

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Basic component

Item or *Entity*: Link + descriptive meta-data

Could put content in description

```
<item>
  <title>Homework 6</title>
  <link>http://www.cs.pdx.edu/
    ~maier/cs510iri/hw6.pdf</link>
  <description>Homework 6 covers
    clustering; it is due 20 February.
  </description>
</item>
```

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Pull technology

RSS, in all its versions, is a pull technology

- Site makes feed available at a known address
- Clients use a tool (called an *aggregator*) to poll multiple feeds.

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What is in an item?

Usually at least

- Link
- Title
- Description

Other common elements

- Unique identifier
- Date
- Author

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RSS 2.0

Simplest, easiest to hand-author

```
<rss version="2.0">
<channel>
  <title>Census Bureau Population Estimates: PopClocks</title>
  <link>http://www.census.gov/main/www/popclock.html</link>
  <description>Daily US and World Population Estimates from the US Census Bureau
  </description>
  <language>en-us</language>
  <copyright>None</copyright>
  <docs>http://blogs.law.harvard.edu/tech/rss</docs>
  <item>
    <title>US Population Estimate:301,262,712 at 05:14 GMT(EST+5) Feb 27, 2007
    </title>
    <link>http://www.census.gov/population/www/popclockus.html</link>
    <category>Federal Government Statistics</category>
  </item>
  <item>
    <title>World Population Estimate:6,578,948,574 at 05:14 GMT(EST+5) Feb 27, 2007
    </title>
    <link>http://www.census.gov/cgi-bin/ipc/popclockw</link>
    <category>Federal Government Statistics</category>
  </item>
</channel>
</rss>
```

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RSS 1.0

More complicated, uses RDF (serialized in XML)

Has modules for extensibility, uses namespaces to distinguish

- Dublin Core

- `<DC:creator>David Maier</DC:creator>`

- Update frequency

- Taxonomy – supports topics

- Qualified Dublin core

- Date: available, issued, modified
 - Relation: replaces

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Handout: Example feeds

Discuss:

- RSS 1.0 or RSS 2.0?
- What does the channel meta-data tell you about the feed?
- Are any extension modules being used?
- Are the syndicators using various RSS elements in the same manner?

Note: *Parts of the longer feeds have been elided.*

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How are feeds produced?

1. By hand
2. Web-site scraper (local or 3rd party)
3. By-product of content-management system
4. Auto-generated along with site
5. Create feed, construct site from it

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What are people doing with RSS?

- Flickr – feed per tag?
- Blog posts and comments
- Geo-coded feeds
 - `<geo:latitude>` `<geo:longitude>`
 - Using with mapping services to produce mash-ups

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