RSS and Atom
A quick overview

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RSS/Atom History

1995 – MCF (MetaContent Framework) – Ramanathan Guha
1997 – CDF (Channel Definition Format) IE4/ActiveDesktop
1998 – Netscape “Project 60” SPF (Site Preview Format)
1999 – RDF-SPF 0.9 renamed to RSS 0.9
1999 – RSS 0.91 dropped RDF syntax
2000 – RSS 1.0 (RDF, namespaces, modules)
2000 – RSS 0.92 published by Userland (based on 0.91)
2002 – RSS V2.0 released and declared frozen by Winer
2003-2004 – Pie, Echo, Necho, Atom … (Sam Ruby, et al)
2005 – Atom V1.0 will become IETF RFC
RSS/Atom use today

LinkCounts Overview | Top 100 by InLinked Sites | Top 100 by OutLinked Sites | Site Stats

**LinkCounts for Sunday May 22nd, 2005**

- 274,674 sites created 884,731 new blog entries.
- 1,424,480 outlinks were created to 160,224 other sites.
- 96,055 sites (35% of those with new entries) created outlinks.
- 6,430 sites (2% of those with new entries) had both inlinks and outlinks.
- 284,111 syndication feeds had new entries.
- 5% of the 5,489,810 recently active feeds monitored by PubSub had new entries.
- 3% of the 10,207,424 feeds monitored by PubSub had new entries.
<?xml version="1.0" encoding="utf-8"?>
<rss version="2.0">
  <channel>
    <title>Minimal RSS V2.0 Feed</title>
    <link>http://example.org/index.html</link>
    <description>The Mininimal Feed</description>
    <item>
      <pubDate>Sat, 07 Sep 2004 00:00:01 GMT</pubDate>
      <description>An Item</description>
    </item>
  </channel>
</rss>
<?xml version="1.0" encoding="utf-8"?>
<feed xmlns="http://purl.org/atom/ns#draft-ietf-atompub-format-08">

  <title>Example Feed</title>
  <id>tag:example.com,2005;ExampleFeed</id>
  <link href="http://example.org/">
  <updated>2003-12-13T18:30:02Z</updated>
  <author>
    <name>John Doe</name>
  </author>

  <entry>
    <title>Atom-Powered Robots Run Amok</title>
    <link href="http://example.org/2003/12/13/atom03"/>
    <id>urn:uuid:1225c695-cfb8-4ebb-aaaa-80da344efa6a</id>
    <updated>2003-12-13T18:30:02Z</updated>
    <summary>Some text.</summary>
  </entry>

</feed>
<?xml version="1.0" encoding="utf-8"?>
<entry xmlns="http://purl.org/atom/ns#draft-ietf-atompub-format-08">
  <title>Atom-Powered Robots Run Amok</title>
  <link href="http://example.org/2003/12/13/atom03"/>
  <id>urn:uuid:1225c695-cfb8-4ebb-aaaa-80da344efa6a</id>
  <source>
    <title>Example Feed</title>
    <id>tag:example.com,2005;ExampleFeed</id>
    <link href="http://example.org/" rel="alternate"/>
    <link href="http://example.org/atom.xml" rel="self"/>
    <updated>2003-12-13T18:30:02Z</updated>
    <author>
      <name>John Doe</name>
    </author>
  </source>
  <updated>2003-12-13T18:30:02Z</updated>
  <summary>Some text.</summary>
</entry>
<feed xmlns="http://purl.org/atom/ns#???">
  <title type="text">dive into mark</title>
  <subtitle type="html">
    A &lt;em&gt;lot&lt;/em&gt; of effort went into making this effortless
  </subtitle>
  <updated>2005-04-02T12:29:29Z</updated>
  <id>tag:example.org,2003:3</id>
  <link rel="alternate" type="text/html" hreflang="en" href="http://example.org/>
  <copyright>Copyright (c) 2003, Mark Pilgrim</copyright>
  <generator uri="http://www.example.com/" version="1.0">
    Example Toolkit
  </generator>

  <entry>
    <title>Atom draft-07 snapshot</title>
    <link rel="alternate" type="text/html" href="http://example.org/2005/04/02/atom"/>
    <link rel="enclosure" type="audio/mpeg" length="1337" href="http://example.org/audio/ph34r_my_podcast.mp3"/>
    <id>tag:example.org,2003:3.2397</id>
    <updated>2005-04-02T12:29:29Z</updated>
    <published>2003-12-13T08:29:29-04:00</published>
    <author>
      <name>Mark Pilgrim</name>
      <uri>http://example.org/</uri>
      <email>f8dy@example.com</email>
    </author>
    <contributor>
      <name>Sam Ruby</name>
      <uri>http://intertwingly.net/blog/</uri>
    </contributor>
    <contributor>
      <name>Joe Gregorio</name>
      <uri>http://bitworking.org/</uri>
    </contributor>
    <content type="xhtml" xml:lang="en" xml:base="http://diveintomark.org/">
      <p>[Update: The Atom draft-07 snapshot is out.]
    </div>
  </entry>
</feed>
Atom enhancements to RSS

Clarity in the specification
• Carefully worded with every word fought over at length on IETF mailing lists
• RNG specifications provided to reduce ambiguity

atomFeed =
  element atom:feed {
    atomCommonAttributes,
    (atomAuthor?
      & atomCategory*
      & atomContributor*
      & atomCopyright?
      & atomGenerator?
      & atomIcon?
      & atomId?
      & atomImage?
      & atomLink+
      & atomSubtitile?
      & atomTitle
      & atomUpdated
      & extensionElement*),
    atomEntry*
  }
Atom Enhancements to RSS

- Thoroughly specified, less ambiguous
- Designed with Matching API
- Well-defined Content Model
- Support for content types
- Support for linked, rather than embedded, content
- Broader range of solutions addressed
- Defined method for encryption and digital signatures
- Defined Extensibility Model
- Mandatory globally unique Entry IDs
- Mandatory timestamps
Atom Enhancements to RSS

- Distinction between Summary and Content
- Distinction between author and contributor
- Free Standing Atom Entry Documents (supports API and “Atom over XMPP”)
- Atom:source elements preserve attribution on copy
- atom:updated to flag "significant" changes
- Multiple "enclosures" via link element
- Relative URI support via xml:base
- Support for xml:lang
- I18N support enhanced by use of IRI’s
- Support for RFC3339 dates (ISO-like dates)