

# **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

[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.

# A Simple RSS V2.0 Feed

```
<?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>
```

# A Simple Atom Feed

```
<?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>
```

# Free-Standing Atom Entry

```
<?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>
```

# Another single entry Feed

```
<?xml version="1.0" encoding="utf-8"?>
<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/">
  <div xmlns="http://www.w3.org/1999/xhtml">
<p><i>[Update: The Atom draft-07 snapshot is out.]</i></p>
  </div>
</content>
</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+
  & atomSubtitle?
  & 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)