

An aerial photograph of a vast, rugged landscape, likely a high-altitude region. The terrain is characterized by dark, rocky mountains and valleys, interspersed with patches of snow and ice. The lighting is soft, suggesting a low sun, which creates long shadows and highlights the textures of the snow and rock. The overall color palette is dominated by blues, greys, and whites, with some darker tones in the shadows.

The Atom Project

Tim Bray, Sun Microsystems

Paul Hoffman, IMC

Recent Numbers

On June 23, 2004 (according to Technorati.com):

- There were **2.8 million** feeds tracked
- **14,000** new blogs were created
- **270,000** new updates were posted

Technology:

How Syndication Works Now

1. Publication makes an XML document available at a well-known URI describing recent updates
2. Clients retrieve it regularly (slow polling)
3. That's all!

Technology:

What's In a Syndication Feed

- One **Channel**: Title, URI, logo, generator, copyright, author
- Multiple **Items**: Author, title, URI, guid, date(s), category(ies), description (excerpt/summary/full-text)

Species of RSS Currently Observed in the Wild

- RSS 0.9: Netscape, RDF-based
- RSS 0.91: Netscape, non-RDF
- RSS 1.0*: Ad-hoc group, RDF-based
- RSS 0.92*: UserLand, non-RDF
- RSS 2.0*: UserLand, non-RDF

* significant market share

Data Format Problems

Too many formats, they're vaguely specified, there are **technical** issues with embedded markup, relative URIs, XML namespaces, and permanent identifiers. The **personality & political** problems are much worse. Scaling and security may be OK, because it's all HTTP.

The Protocol Landscape

The **Blogger** and **MetaWeblog** “APIs” are quick hacks based on XML-RPC. They lack extensibility, standards-friendliness, security, authentication and a future.

Atom, Pre-IETF

- Launched Summer 2003 by Sam Ruby
- Quick buy-in from major vendors
- Quick buy-in from backers of all RSS species, except RSS 2.0
- Active wiki at <http://www.intertwingly.net/wiki/pie>

Atom in the IETF

- Charter
- Documents
- Mailing list
- Not meeting here

Starting the Atompub charter

- Floated in mid-April 2004
- Some tweaking but no major glitches from the first proposal
- Decided to have Sam Ruby be the WG secretary
- Was almost ready for the IESG to approve in mid-May, then....
- The W3C asked the IESG to hold off

W3C and the Atom community

- The W3C lobbied to have the Atom community go to the W3C instead of the IETF
- They showed where the W3C might be more useful to Atom than the IETF
- Lots of debate on the mailing list and the Wiki
- We had an Atom community meeting near the end of May
- On the list, most people felt better about staying with the IETF

Atompub Drafts

- Right now we have two, but we'll probably add at least two more before we're finished
- Atom Format: Lots of XML, lots of semantics
- Atom Publishing protocol: HTTP based, allows posting and editing
- Mostly comes from current blogging world
- Both are doing well, already at -01s
- Will soon probably add an implementers' guide

Mailing List

- Incredibly active: 200 messages a week, 15-20 active posters, mostly implementers
- Diverse group: Software implementers, Feed creators, Feed processing services
- Few IETF regulars

Face-to-face meetings

- Not meeting here this time. Expected <10 people, including some lurkers. We're doing fine on the mailing list so far
- So far, almost no IETF regulars. But having some folks with a history of understanding problems would be useful

Next steps

- Close the big open issues
- Cycle the docs a few more times
- Maybe create an implementer's guide in parallel
- Do some online interop testing (test scenarios already developed)
- Declare victory and avoid future versions of core unless really needed

Major Technical Issues 1

- **Dates:** prior art is patchy, behavior of software is inconsistent, major semantic gaps between publishing models
- **Protocol:** Should it subset HTTP to enable dumb devices? Should there also be a SOAP/WSDL version?
- **Extensibility and versioning:** MustIgnore and MustUnderstand semantics

Major Technical Issues 2

- **Autodiscovery**: Where is the feed for this page?
- **Identifiers** (for feeds and entries): Use URIs?
What flavors? Issues of uniqueness and permanence.
- **Content Packaging**: Arbitrary MIME types?
XML escaping?
- **XML Religion**: Schemas or not? What flavor?

An aerial photograph of a vast, rugged landscape, likely a high-altitude region. The terrain is characterized by dark, rocky mountains and valleys, with patches of snow and ice scattered across the peaks and slopes. The lighting is soft, suggesting a low sun, which creates long shadows and highlights the textures of the rocks and snow. The overall color palette is dominated by blues, greys, and whites, with some darker tones in the shadows.

The Atom Project

Tim Bray, Sun Microsystems

Paul Hoffman, IMC

