SAFE SOFTWARE

FME Reader and Writer for GeoRSS

Key Facts

Capabilities: Read and write all GeoRSS standards for both RSS and Atom web feeds

Benefits: Take advantage of one of the web's newest methods of spatial data distribution – with speed and ease

FME 2007 and later FME versions allow FME users to take advantage of one of the web's newest methods of distributing spatial data - RSS or Atom feeds that include location information, or GeoRSS-enabled feeds. Using FME's GeoRSS reader, regularly updated information provided by any geo-tagged feed can be quickly overlaid on a custom base map, either in FME's Universal Viewer, or in an FME-supported mapping application.

FME's GeoRSS writer allows FME users to easily publish a feed with embedded location information.In addition to processing GeoRSS feeds, the reader and writer can also be used to create and consume traditional (non spatially-enabled) RSS or Atom feeds.
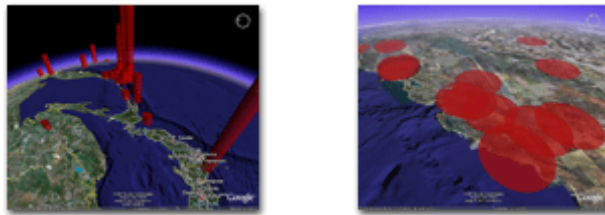
These screenshots show information obtained from a GeoRSS feed provided by the USGS. Each histogram represents the location of a recent earthquake, with magnitude indicated by the height of the histogram. The GeoRSS feed was transformed into a KML file in FME's Workbench application, then visualized in Google Earth.

FME's GeoRSS Reader Specifics

FME's GeoRSS reader supports the following XML feed formats:

- RSS versions 0.91, 0.92 and 2.0
- Atom versions 0.3 and 1.0.

The following GeoRSS geometry formats are supported:

- W3C Geo
- GeoRSS Simple
- GeoRSS GML Profile

The GeoRSS reader can read a file stored locally, or a web stream. A web feed is specified by entering the feed's URL address as the source data location.

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Reader Modes

The GeoRSS reader can operate in two modes, either Normal Mode or Update Mode.

In Normal Mode, the reader imports the entire feed. A map feature is returned for each geo-tagged entry in a feed, plus a single additional feature containing all the meta-data about the feed. Typically, the metadata feature will not have location data (or geometry).

In Update Mode, only new entries in a feed are retrieved, allowing updates to be added to an existing map. The GeoRSS reader distinguishes updates from previously read entries by storing and checking both the ID number and modification date of each entry. If an entry's ID number indicates it has been processed previously and the modification date has not changed from the previous processing, no feature will be returned for that entry. If the modification date has changed, a feature will be returned.

Source data settings for the GeoRSS reader allow the user to specify the following:

- normal or update mode
- destination location for storing files that have already been read
- how long each new entry -including ID and modification dates - should be stored for
- a proxy address - if required for Internet security

FME's GeoRSS Writer Specifics

FME's GeoRSS writer supports the following XML feed formats:

- Atom 1.0
- RSS 2.0

The following GeoRSS geometry formats are supported:

- W3C Geo – point feature geometry supported
- GeoRSS Simple – all feature geometries supported: point, line, polygon and box-shaped
- GeoRSS GML Profile – all feature geometries supported: points, lines, polygons, donuts and boxes

For More Information

- View two example mashups showing a GeoRSS feed created with FME. The maps allow FME users to quickly check if an FME training course is scheduled in their area within the next few months. (*Mashup 1*, *Mashup 2*)
- Read Safe's *blog posting about the new GeoRSS support* in FME.
- Read a brief overview of *web feeds and GeoRSS standards*.
- Check out an example FME workspace that creates GeoRSS content.
- View a list of *publicly available GeoRSS feeds*.