

Annual Report 2010

Key Accomplishments

Releases:

- Four stable releases of GeoTools 2.6 and six development releases of GeoTools 2.7 with a beta finished up at the end of the year.

Lots of great new features:

- in the referencing area: support for Mollweide, EckertIV, Winkel Tripel, Policonic, better generation of prj files with ESRI naming, EPSG database updates, concurrency improvements - thanks Andrea
- in the database area: SQL Driven Views, Teradata store, Spatialite store, updates to support recent versions of PostGIS - Thanks Andrea, Jesse and Justin
- in the rendering area: symbology encoding 1.1 data structure now supported, dash array support for graphic strokes and stability improvements over simple lines, fast polygon clipping, transforming data on the fly during rendering, injecting environment variables in style sheets, new options and assorted improvements for the labeling engine, light multithreading in rendering and a set of other speedups - Thanks Andrea, Michael and Justin
- in the raster data area: mosaic improvements to support heterogeneous mosaics, time and elevation, raster reprojection speedups, external overviews for GeoTIFF data, performance improvements, ability to extract very large portions of a mosaic at native resolution without incurring in OOM - thanks Andrea, Daniele, Michael and Simone
- application schema support (complex features) graduated to supported status along with a number of fixes and improvements, both functionality and performance wise

FOSS4G:

- A great showing at FOSS4G with many presentations based on GeoTools powered software; and a "Geospatial for Java" workshop - thanks Jody and Justin

Documentation:

- A large effort on improving documentation and introductory tutorials - thanks Michael and Jody

Areas for Improvement

- The use of the CodeHaus wiki for user docs has tapered off due to restrictive controls designed to combat spam. This has left us in a no-mans-land where current documentation is not available.
- We have done a poor job of involving "downstream" projects dependent on GeoTools. Noticeable is the delay in 52N upgrading to a modern version of the library, and in the balance of active developers drawing from early adopters.

Opportunities to Help

The GeoTools community would like to thank contributors that provided patches, our users for their feedback and the companies providing sponsorship to fix bugs and add new features. Thanks to our development team for making this a great year. If you would like to join any of the above activities stop by our email list - you are welcome to take part.

A few specific call outs:

- Does your project use GeoTools? Please get involved, we would like to get your voice involved in the future direction of the library.
- This year we are looking for editors, sensible questions and ideas for the GeoTools user guide.
- As always patches make open source great, please contribute in code!

Outlook for 2011

GeoTools is shaping up for an excellent year in 2011, you can get a sneak peak by viewing the change proposals already underway.

- The GeoTools 2.7 release mentioned above has now been released
- The app-schema work is scheduled to be completed - thanks to AuScope for this fascinating work
- We have a couple of great ideas scheduled to land this year.
 - We are "re-versioning" so the next major release of GeoTools will be 8.0 (and based on Java 6)
 - We also have a lot of work going into Web Feature Service 2.0 support; with all the new capabilities that implies for Filter, Data Access, Joins, Temporal support and more!
 - Access to the latest GDAL (without patches) thanks to ImageIO-Ext progress
- The big news is the porting of our user guide to Sphinx - weighing in at over 100,000 words with diagrams and "live" code examples