

# 2.7.x

The GeoTools 2.7.x branch started out with a code sprint at FOSS4G 2009 addressing a number of items of [Technical Debt](#) and cleanup.

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[RnD](#) and [proposals](#) completed for the 2.6.x branch:

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- [FeatureStore modifyFeature by Name](#) — modifyFeatures(Name,Value,Filter)
- [Query as Class](#) — Query vs DefaultQuery
- [Remove DataStore getView method](#) — Remove DataStore.getView method
- [Allow inserts to use existing feature ID](#) — Insert using existing FIDs
- [XPath NamespaceSupport](#) — xpath across deep waters
- [Refactor OpenGIS](#)
- [Rendering transformations](#) — Because transforming datasets is more powerful than transforming just geometries

Available [2.7 Downloads](#):

- [2.7.0](#)
- [2.7.1](#)
- [2.7-beta1](#)
- [2.7-M0](#)
- [2.7-M1](#)
- [2.7-M2](#)
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## Usability Targets

### Documentation

Our initial research into the use of Sphinx has gone well; we would like to explore making more of the user guide available in this format.

### Simplification

There are a number of opportunities for simplification; and every time we teach a GeoTools training course we learn more!

You will notice a common theme in the 2.7 proposals; a number of them are directed at simplifying the number of concepts and classes encountered during the initial getting started series of documentation.

## Research Targets

### Application Schema

Continued work on Application Schema support by the AuScope team. Focused on handling polymorphism (ie when a relationship between features may be decided on a case by case basis).

### Geometry 3D

Geometry 3D work by the java-collab mailing list (thanks to the deegree team for starting the ball rolling). This is the subject of

- Update November 2009: While we had a breakout session after foss4g with deegree it did not go anywhere; we will try again when deegree3 is released
- Update April 2010 deegree3 is showing signs of being readyish

### N-Dimensional GridCoverage

The new Coverage-API for N-Dimensional Coverage access has been heavily revisited in order to allow handle a fully comprehensive set of metadata containing informations about the Coverage spatio-temporal domain and multi-dimensional range set.

Most of the work has been already done and we sucesfully used it sucesfully on some of our projects. The low level part, based on the JAI ImageIO-Ext for ND data interfaces, produces a very good set of metadata, and the GeoTools Coverage API module is already able to map an retrieve the correct image index from complex datasets.

Actually we have working plugins for NetCDF-CF, HDF4 and GRIB-1 datasets and also others.

Also a GeoServer 1.7.6 WCS 1.0 ND prototype have been produced to support the new Coverage API above, and actually we are developing a brand new stable and efficient version of WCS 1.0/1.1 for GeoServer trunk.

The development requires some steps before completing, which we are going to list below:

1. Finalize and test the gt-temporal unsupported module as well as the new WCS 1.0 EMF bindings [almost done](#)
2. Finalize and test the WCS 1.0 EMF bindings for GeoServer trunk (hopefully release 2.1) [almost done](#)
3. Finalize and test the new gt-coverage-api data access module
4. Finish the development of the GeoServer WCS 1.0/1.1 ND business logic