WOML version 2011-03-15 released

Yesterday we managed make the release versions "2011/03/15" of all four WOML modules (Core, SWO, Quantity and Textfct). This version contains some major changes in the schemas, including upgrade to GML 3.2, abandoning the interpolated versions of the curve geometries and introduction of data "time series" feature types. It was decided that it would be a good thing to combine these changes, which we know means some changes in the application code, with the move from GML 3.1 to GML 3.2. GML 3.2 schema is pretty different from the 3.1 version, contains a lot more types and elements, and uses them from several other namespaces, like the ISO/TC211 metadata and data quality (http://www.isotc211.org/2005/gmd) . For this reason application developers should reserve some time to add support for this new WOML version.

For the ones interested in the history of WOML, the predecessor of WOML, FMI Meteorological Objects schema, was already upgraded to used GML 3.2 once with it's version 2009/09/07 released in September 2009. Due to the (assumed) incompatibility of GML 3.2. with WFS 1.1, this change was reverted in the next release. Now finally after 2.5 years we are bold enough to go for it again 😄

Some highlights of the changes:

- WOML 2011/03/15 is based on GML 3.2.1. The previous versions were based on GML 3.1.1. OGC Web Feature Service (WFS) 1.1.1 only mandates that if the requested return format is GML 3.1, the response features must be a GML 3.1 FeatureCollection. If the requested return format is something else (like GML 3.2), the return encoding does not have to use GML 3.1. Thus the spec does not force the use of the older GML version with WFS 1.1.
- The optional interpolated versions of the primary geometries of line and surface objects are now removed entirely, because of the added complexity with little real benefit to the using applications. See a previous blog post for more discussion on this issue.
- It is now possible to use `gml:Bezier` curve segments in the geometries of WOML line and surface objects. Previously only `gml:CubicSpline` and `gml:LineStringSegment` were supported. **Note**: Please tell us what you think of this change? Should we continue to support both Cubic Spline and Bezier curve segments in future versions? Which curve segment types would you prefer?
- WOML collection types (like `WeatherForecast` and `MeteorologicalAnalysis` may now only contain other WOML features. In previous versions the collection extended the the (now deprecated) `gml:AbstractFeatureCollection`. The reason behind this change is to simplify the job of the applications parsing WOML data: They now better what to expect to find inside the WOML collections. The downside is the decreased flexibility if WOML collections: You can no longer mix features from other schemas with the WOML features inside a WOML collection.
- Updated and improved documentation in the WOML Wiki:
  - All the UML diagrams have been updated to match the changes in the new version.
  - UML class diagram has been added to Textfct page.
  - A Usage examples page has been added to WOML Wiki. Ask for more XML examples to be included if you require them.

List of all the issues resolved in these releases:

Key	Component/s	P	Summary	Status
WOML -11	Wiki	≫	Provide complete usage examples for WeatherForecast for the WOML wiki	CLOSED
WOML -37	WOML Core	≫	AbstractMeteorologicalObjectCollectionType should be structured according to the new GML 3.2 feature collection model	CLOSED
WOML -35	WOML Core	≫	Restructure and rename DataResourceType	CLOSED
WOML -32	WOML Core	≫	Remove interpolated geometries from line and surface objects	CLOSED
WOML -27	WOML Core	≫	Evaluate the best curve model for spline curves: gml:CubicSpline, gml:Bezier or both	CLOSED
WOML -10	WOML Core, WOML Quantity, WOML SWO, WOML Textfct	≫	Upgrade into GML 3.2	CLOSED
WOML -36	WOML Core	≫	Make NumericalModelRunType to extend DataSourceReferenceType	CLOSED
WOML -34	WOML Core	≫	Add "title" element to ResourceReferenceType	CLOSED
WOML -33	WOML Core	≫	Deprecate ValidTimePeriod and create new type SimpleTimePeriod	CLOSED
WOML -28	WOML Core	≫	Evaluate the benefits and costs of making WOML:ForecastType extend the O&M Observation	CLOSED
WOML -38	WOML Quantity	≫	Create features for time series data for points and areas	CLOSED
WOML -39	WOML Quantity	≫	"indetermined" property of FlowDirectionMeasureType should be optional	CLOSED
WOML -41	WOML SWO	≫	StormType should not be abstract	CLOSED
WOML -40	WOML SWO	≫	The name of cloudAreaPropertyType should be CloudAreaPropertyType	CLOSED
WOML -43	WOML Textfct	≫	Remove too restrictive enumerations from ForecastTextSection and WarningTextSection	CLOSED

15 issues