

WOML 2011-06-15 Released

A new version WOML modules "2011/06/15" was released today. The biggest change in this release is what hopefully is the last major turn in the multi stage development of [curve handling](#) of WOML features. The curve handling was changed in versions [2009/06/13](#), [2011/03/15](#) and unfortunately also in this latest release.

As of this version the only supported way to use spline curves is through the new `woml:CubicBSplineType` which tries to model the cubic B-spline curve as it's typically interpreted in computer science: a combination of cubic Bezier curves each having four control points. There is a `CubicSplineType`, `BSplineType` and `BezierType` in GML 3.2, but all these are problematic to too complex for WOML purposes:

- The `gml:CubicSplineType` defines a polynomial spline, but it's not composed of cubic Bezier curves.
- The `gml:BSplineType` can be a polynomial or rational curve as specified by ISO 19107:2003. The model unnecessarily complicated and allows for too much freedom for the users when considering the application developers: WOML should only support the basic cubic B-splines for which there is a built-in support in many graphics libraries (see for example the [CubicCurve2D](#) of the Java standard library).
- The `gml:BezierType` extends the `gml:BSplineType` by restricting it's properties. While this is technically possible, restriction of complex types is asking for trouble IMHO. For the application developers the end result is that while certain properties exist in handler objects generated from the XML Schema files, their is forbidden by the schema. When we really only need the four positions of the control points for each bezier segment, the complexity of `gml:BezierType` is very uncomfortable.

Detailed release notes:

- [WOML Core](#)
- [WOML SWO](#)
- [WOML Quantity](#)
- [WOML Textfct](#)

List of all the issues resolved in these releases:

Key	Component <i>/s</i>	P	Summary	Status
WOML-46	WOML Core		CombinedSegmentArrayPropertyType should explicitly model it's segment elements	CLOSED
WOML-45	WOML Core		Use cubic B-splines for smooth curve segments in line and surface objects	CLOSED
WOML-47	WOML Core		AbstractMeteorologicalObjectCollectionType should not be abstract	CLOSED

[3 issues](#)

Please let us know if you have any issues with the new versions of the schemas, or would like additions or changes made in the following versions.