Update SBGN-ML and LibSBGN





- Community project started in 2009
 - facilitate development of SBGN supporting tools
 - increase interoperability between these tools
- Electronic implementation of SBGN
 - exchange format for SBGN maps: SBGN-ML
 - XML schema based
 - express semantics, relationships and geometry
 - software library to interact with SBGN maps: LibSBGN
 - object model and API (C++, C#, Java)
 - key features: reading, writing, validation, conversion and layout

M.P. van Iersel, A.C. Villéger, T. Czauderna, S.E. Boyd, F.T. Bergmann, A. Luna, E. Demir, A. Sorokin, U. Dogrusoz, Y. Matsuoka, A. Funahashi, M.I. Aladjem, H. Mi, S.L. Moodie, H. Kitano, N. Le Novère, F. Schreiber: **Software support for SBGN maps: SBGN-ML and LibSBGN**. Bioinformatics, 28(15):2016-2021, 2012.

- Wiki http://www.sbgn.org/LibSBGN
- SourceForge project http://sourceforge.net/projects/libsbgn/
- Mailing list <u>sbgn-libsbgn@lists.sourceforge.net</u>
- Tools supporting SBGN-ML http://www.sbgn.org/LibSBGN/ClientTools
- Databases supporting SBGN-ML Reactome, MetaCrop
- Rendering comparison pipeline http://libsbgn.sourceforge.net/render-comparison/





- Milestone 1 (released January 2011)
- Milestone 2 (released December 2011)
 - support for all three languages
 - exchange shape, position, size
 - exchange edge routing
 - extensions and notes
 - validation based on Schematron





- Milestone 3
 - external references (SBML, BioPAX)
 - COMBINE archive session yesterday
 - complete support for submaps
 - proposal accepted
 - implementation nearly finished
 - complete support for (any) compartment shape
 - proposal compiled during HARMONY 2013
 - support for color and line thickness
 - presentations by Martijn and Frank
 - level and version attribute for a map





- Milestone 3 (spring 2014?)
 - external references (SBML, BioPAX)
 - complete support for submaps
 - complete support for (any) compartment shape
 - support for color and line thickness
 - level and version attribute for a map





 internet media type (MIME type) for SBGN-ML "application/sbgn+xml"





LibSBGN Community

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