

jlibSEDML utilities

– specific and generic implementations –

SED-ML – what to support?

- ▶ DOM functionality – generic...
 - Validation: **on demand**? live?
 - Editing: add GUI? add scripting support?
- ▶ Run functionality – partially specific...
 - Model languages: **SBML**, **VCML**, others?
 - Simulators (solvers): **VCell**, **Copasi**, others?
 - Post-processing: interpolation, normalization, **other**?
 - Plotters: **VCell**, GnuPlot, others?
- ▶ VCell integration – specific...
 - **BioModel**, MathModel
 - FieldData, MergeData

jlibSEDML – implementation

- ▶ DOM functionality
 - Read XML
 - Validate XML
 - Write XML
- ▶ Extra functionality – somewhat generic...
 - Fetch models
 - Edit/modify objects
 - Apply changes to model
 - Execute tasks
 - Produce data output
 - Produce graphic output
- ▶ Extra functionality – really specific...
 - VCell integration
 - ▶ “Native” VCell client support
 - ▶ VCML internal mappings

jlibSEDMML – current organization

- ▶ org.sedml package
 - Read XML
 - Write XML
 - Edit document
- ▶ org.sedml.validation package
 - Validate XML
- ▶ org.sedml.utils package
 - Fetch models
 - Apply changes to model
- ▶ org.sedml.applications.* packages
 - Execute tasks
 - Produce data output
 - Produce graphic output