Presentation by Michael Hucka at
COMBINE 2011
http://co.mbine.org/events/COMBINE_2011
Sunday, 4 September 2011

General updates about SBML and SBML Team activities

Michael Hucka and the rest of the SBML Team

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Outline

1. SBML.org Updates

2. SBML Development

3. SBML Team Software

SBML.org updates

SBML Software Guide changes

New version of the SBML software survey

Forthcoming in the SBML Software Guide

More data about SBML software in the world

More *accurate* data about SBML software in the world

Statistics about SBML software in the world

- Examples: data on 81 software tools reported between May–July

Supports
SBML Level 3
36%

Does not yet
support Level 3
64%
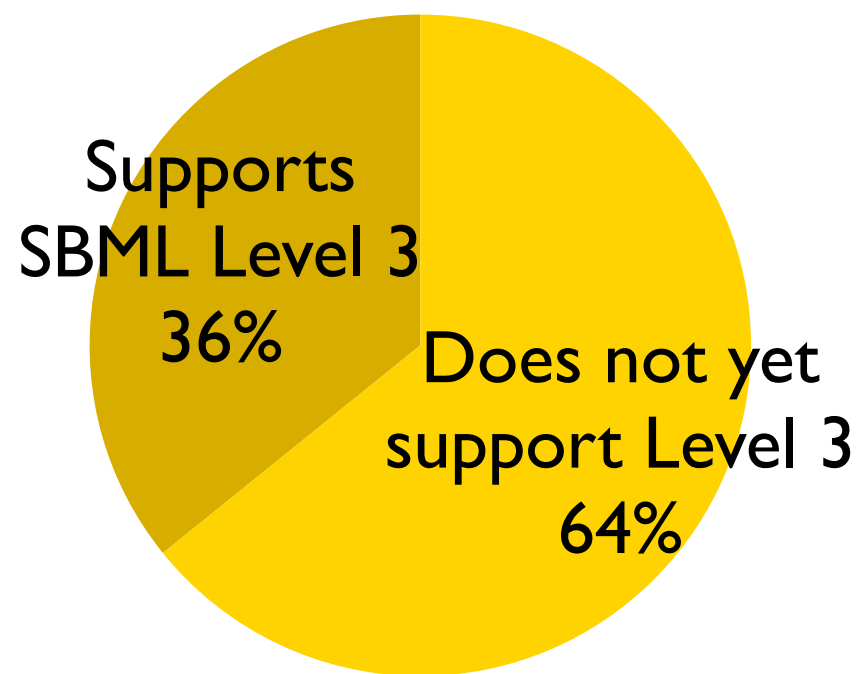
Percentage supporting
SBML Level 3

MIRIAM — 16
SBO — 14
SBGN — 13
BioPAX — 6
CellML — 3
SED-ML — 3
MFAML — 1
PNML — 1
SBOL — 1

0   5   10   15   20

Total # tools supporting other standards

Updated SBML Level 3 package activity table

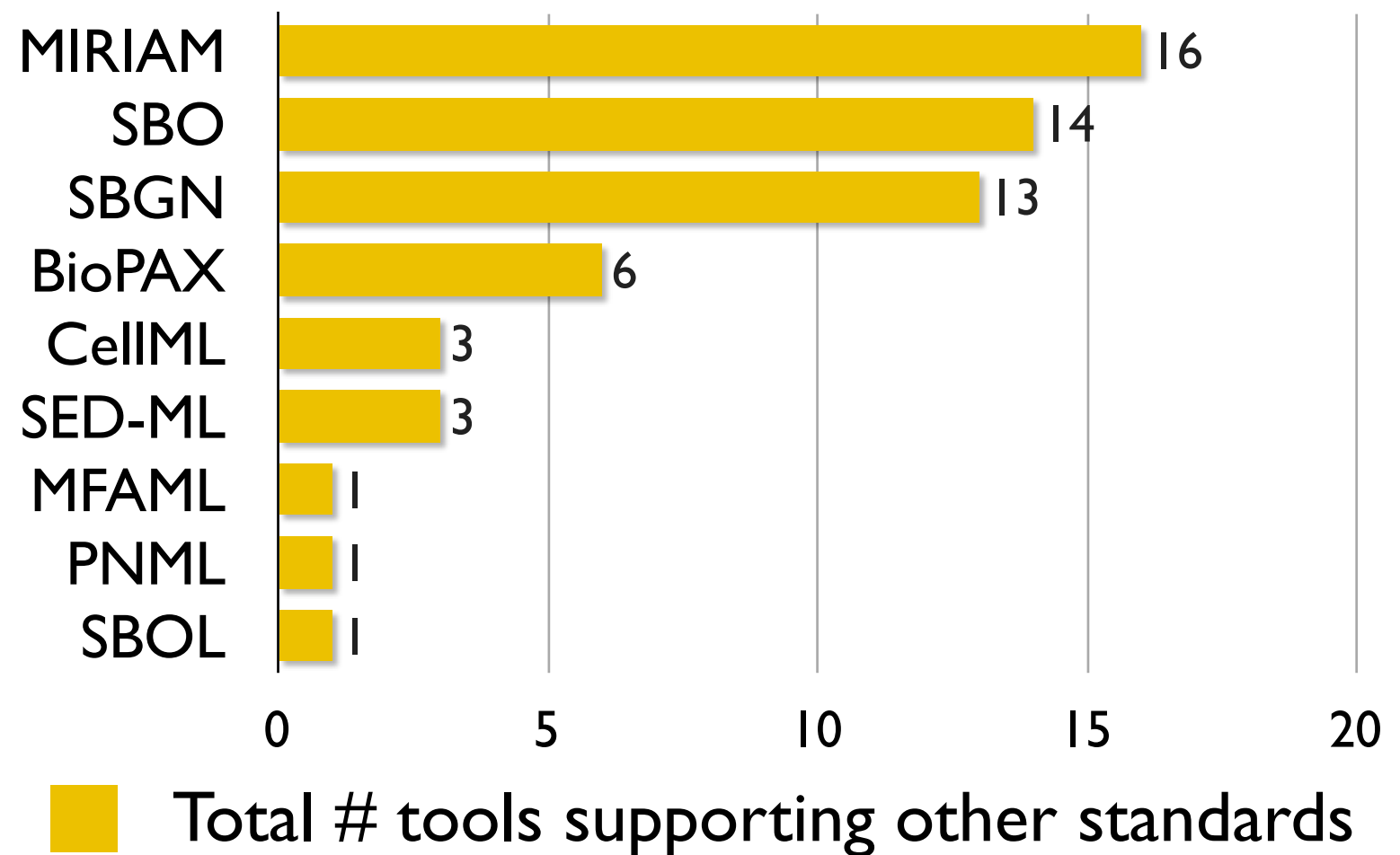| Name	Label	Description	PWG list	Prop. Stat.	Spec. Stat.	libSBML
Level 3 Core	core	The core portion of SBML Level 3.	sbml-discuss			
Layout	layout	Support for storing the spatial topology of a model's network diagram. Adjunct to the *render* package, below.	sbml-layout			
Flux Balance Constraints	fbc	Support for constraint-based (a.k.a. steady-state) models.	sbml-flux			
Rendering	render	Support for defining the graphical symbols and glyphs used in a diagram of the model. Adjunct to the *layout* package above.	sbml-render			
Hierarchical Model Composition	comp	A means for defining how a model is composed from other models.	sbml-comp			
Qualitative Models	qual	Support for models wherein species don't represent quantity of matter & processes are not reactions per se. (E.g.: Boolean nets.)	sbml-qual			
Annotations	annot	Support for richer annotation syntax than the regular annotations in SBML Level 3 Core.	sbml-annot			
Spatial Processes	spatial	Support for describing processes that involve a spatial component, and describing the geometries involved.	sbml-spatial			
Groups	groups	Support for groups of SBML entities. This partially replaces the Level 2 SpeciesType and CompartmentType constructs with a	sbml-groups			
Required Elements	req	elements that have been changed by the	sbml-required			

http://sbml.org/Community/Wiki

SBML Development

SBML Development Process Progress

http://sbml.org/Documents/SBML_Development_Process

Elaboration of process for Level 3 packages

Updated SBML Level 3 Development Process – SBML.org

http://sbml.org/New_dev_process

[edit] *Contents of the voting form*

The voting form for package proposals will reflect the principles described in the section on **architectural principles**. To encourage thoughtful and thorough consideration of the proposed packages with respect to those **architectural principles**, the form will request voters to address the points individually, and ask for an overall assessment as a separate question. The following is an outline of the basic content of the voting form:

Utility: the package addresses a problem whose solution SBML users are likely to find useful.
☐ Agree ☐ Disagree ☐ Insufficient information ☐ Abstain

Biological orientation: the package's overall aim is to support the description of biological processes and phenomena.
☐ Agree ☐ Disagree ☐ Insufficient information ☐ Abstain

Coherence: the package extends SBML in a way that follows naturally from Level 3 Core and other packages.
☐ Agree ☐ Disagree ☐ Insufficient information ☐ Abstain

Orthogonality: within reason, the package does not duplicate the purpose or data captured by other packages.
☐ Agree ☐ Disagree ☐ Insufficient information ☐ Abstain

Overall assessment of the package proposal:
☐ *Accept*: proposal addresses a need that SBML should cover, and the approach clearly follows the stated principles
☐ *Reject*: proposal does not address a need that SBML should cover
☐ *Revise*: approach either does not follow the stated principles, or there is insufficient information to tell if it does
☐ *Abstain*: I cannot fully assess the proposal as given, or do not wish to state an opinion

In addition to the above, the voting form will include comment boxes that allow voters to provide more detailed feedback about the proposal and why they voted they way they did.

[edit] *Formula for assessing the outcome*

To assess the outcome of the vote, the SBML Editors will use only the question titled "*Overall assessment of the package proposal*" in the form **described above**. The formula to be used is as follows:

1. For the decision to be *accept*, 50% or more of the non-abstaining voters must have chosen the *accept* option.
2. For the decision to be *reject*, more than 50% of the non-abstaining voters must have chosen the *reject option*.

Further elaboration of package voting criteria

Writing L3 package specs

Proper draft spec. for Hierarchical Model Composition almost ready

New LaTeX templates for SBML package specifications

SBML Editor vote coming up

Chris

Jim

Lucian

Sarah

Frank

Yours truly

One new editor being replaced

- Nominations & voting open to anyone on sbml-discuss mailing list
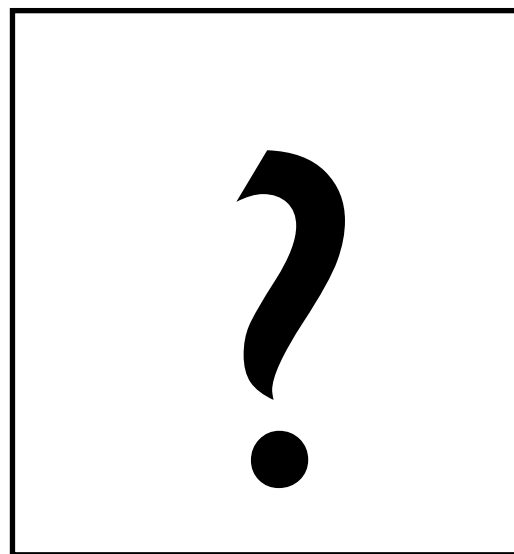
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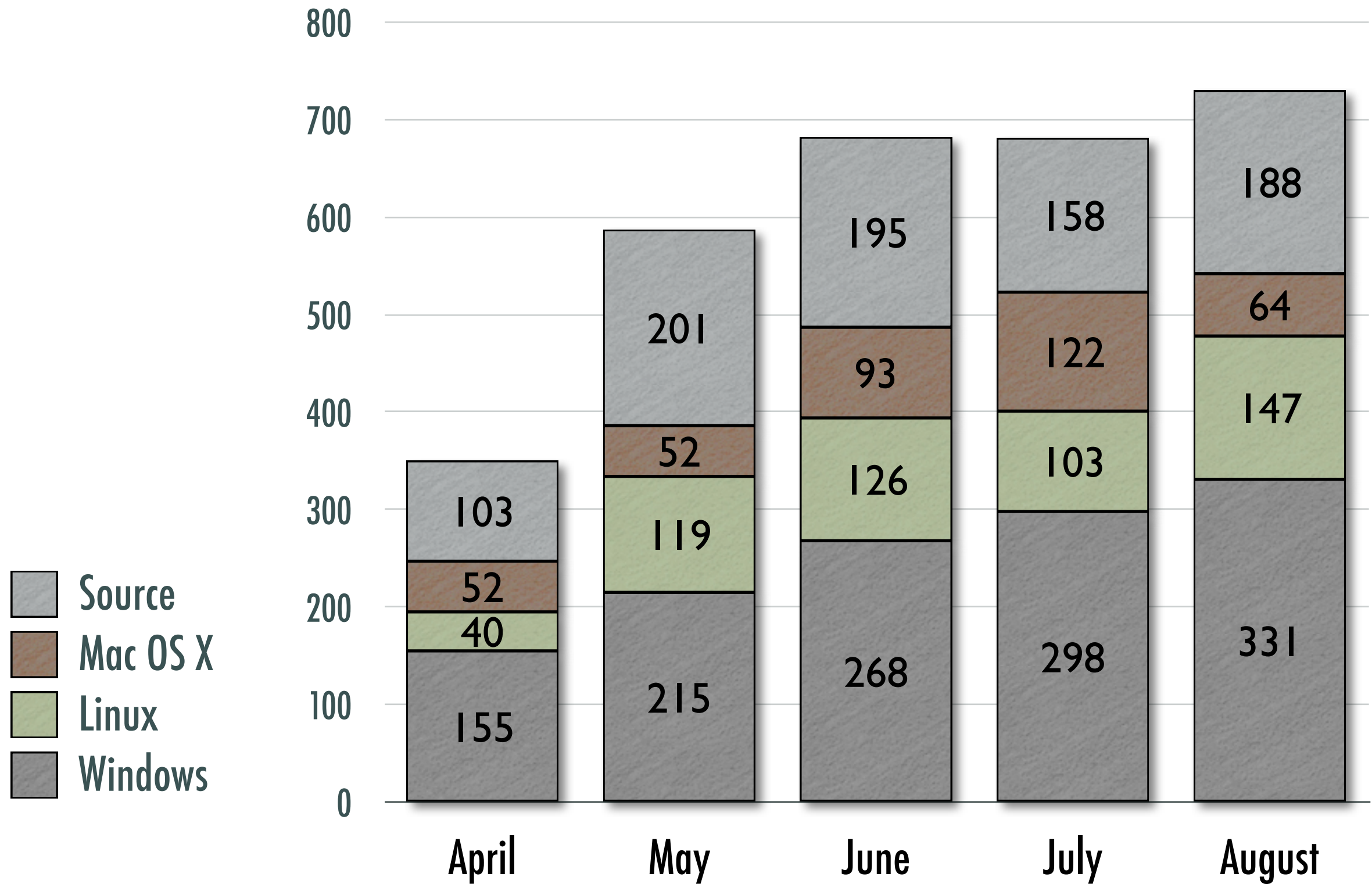

Sarah

?

Frank

Yours truly

One new editor being replaced

- Nominations & voting open to anyone on sbml-discuss mailing list

SBML Team Software

libSBML 5.0.0: over 3400 downloads since April

Downloads of all libSBML 5.0.0 distributions since April

Other software news

LibSBML, JSBML, SBMLToolbox, Online SBML Validator, others....

... Listen to Sarah, Frank, Nico & Andreas