Stella, the Next Generation

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Wellesley, Massachusetts

Presented by
Bob Eberlein
Goals

- To show some of the new things in Stella
  - How it works
    - Building models and interfaces
    - Deploying interfaces
  - Explain design choices
    - Brief overview of features
  - Example – from concept to web
    - Hands on
- To discuss our K-12 plans
  - Get some feedback on what is in and out
Looking Back

- STELLA
  - Easy to use
    - For teachers to develop and present models
    - By the learners for developing models
  - Rigid by design
    - Strict in many ways, lenient in others
  - Nonstandard attribute setting (Idiosyncratic)
    - Palette for colors
    - Dialogs for storytelling
    - Limited font control
Development Goals

- Maintain ease of use
  - Basic mechanics the same
  - Standardize the selection and customization process

- Retain rigidity where it counts
  - With more accommodation
    - Delay Converters

- Standard attribute setting
  - Cascaded styles using a panel
  - Very few dialogs
Introducing Stella Architect

- Modeling (Stella Professional)
  - Same basic structure
  - More flexible
  - Better looking

- Interface (Stella Designer)
  - Web from the start
    - Page based
  - Analogous building tools

Stella, the Next Generation
Basic Building

- Drop objects on the page
  - That is unchanged

- Set properties of things on the page
  - Evolved from dialog in earlier versions
  - The Panel in V10
  - Incorporated styling in version 1
  - Multiple objects changeable together

- Connecting things is enhanced
  - Better control, beziers, see as you move
Map, Model, Equations, Interface

- Model Window
  - Map and Model Views
  - Equation Viewer

- Interface Window
  - Separate, but connected
    - Professional no Interface window
    - Designer no Model window
Toolbars and Panels

- Toolbars
  - Dockable

- Panels
  - Dockable
  - Moveable
  - Joinable
  - Used for persistent content

- The Find Window is still there
  - And the equation viewer
More Analytics

- Causal Lens
  - See a variable and what causes it
    - Built in comparatives
  - Plus on equation causes and uses

- Selection History
  - Record of activity

- Simulation Log
  - Bounds checking
  - Used for other messages on open
The Interface Window

- Same object and property model
  - Easy to use

- Everything is page based
  - Interface
  - Story
  - Templates

- Properties are used to set operation and appearance
Publishing

- From the menu
  - Very simple and fast
  - WYSIWYG (with Chrome)
    - Some variation with other browsers
- Hosted content
  - sims.iseesystems.com
  - Runs in browser
Example (group work)

- **Topic**
  - Population with limited resources
    - Or another

- **Model**
  - The mechanics of building, not expecting surprises

- **Interface**
  - Don’t forget a story

- **Publication**
What’s next for K-12

- Simpler version
  - Enough for 95% of classroom use
  - Modeling only

- Deployment targets
  - Desktop
  - Chromebook

- Technology stack
  - Possibilities and probabilities

- Discussion and feedback