Pushing the VA Smalltalk Editor Onward and Upward

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VAST 8.6
(current release)

- Goals
  - Modernize the editor
  - Maintain compatibility with legacy editor
  - Custom scanner used for both syntax coloring and source analysis
  - A few new visual effects if time permits

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VAST 8.6.1
(future release)

- Goals
  - Performance Improvements/Memory Reduction
  - Editor Themes
  - Real-time Code Analytics
  - Interactive Refactoring
    - (Near) Context-switchless workflow using visual effects for feedback and conflict detection

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Performance Improvements Memory Reduction

- Direct-Communication
  - Bypass Windows Message Queue in favor of platform function call
  - Up to 25x performance increase during intense communications

- Direct-Access API
  - The text buffer of the internal editor is used directly to avoid copying data into Smalltalk
  - Useful for algorithms requiring read-only access to large portions of the text content (i.e. parse-tree input, text search)

- Huge memory reduction

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Editor Theme

Bracket Matching

- Uses indicator underlays as default styling
- Margin marker used to indicate offscreen matches

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Comment Folding

- Auto-Collapse
  - All comments
  - First comment
  - First method comment

- Folding Threshold
  - User can specify then number of lines in a comment before folding is considered

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Code Analytics

- Demo
  - Lint Analysis
  - Type Analysis
  - Interactive Refactoring
  - Action List Calltips

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Code Completion

- Auto-Insert arguments for calls to 'super' with same selector
- Define Accessors

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