VA Smalltalk Update

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Agenda

• Introduction
• Current Release Content
• Futures
• Q&A
Non-Development Activity

- University Outreach – 2012/2013
  - University of Chile -- Roassal Visualization Framework
  - *Looking for more (talk to me if you are interested)*

- User Outreach
  - Conference sponsorship and participation
    - ESUG, STIC, Smalltalks
  - VA Smalltalk Google Group
    - Old forum content (prior to May, 2011) still available (readonly)

- “Videos and Podcasts” pages on website
  - http://www.instantiations.com/resources/st4u_videos.html
  - http://www.instantiations.com/resources/videos.html
New Release

V8.6 is available NOW!
V8.6 Content

- GUI Look and Feel
  - A Scintillating Text Editor
  - Windows Common Controls improvements
A Scintillating Text Editor

- Complete redesign of our default text editor component
  - Built on the modern, popular and well supported Scintilla editing component
  - Compatibility layer provides seamless integration
    - API-compatible with CwText
  - Exposes the full Scintilla API
    - Users can use the new text editor in their own applications
    - Used by Browsers, Inspectors, Workspace, etc.
    - Multiple undo/redo support
    - Supports hardware-accelerated rendering with Microsoft’s DirectWrite technology
Windows Common Controls
DateTimePicker

New attributes
- today shown
- weeks numbered
- multiple selection (a range of dates up to a maximum size as set by the user)
- first day of the week settable
- Bolded dates (May 27)
V8.6 Content continued

• Development Tools
  • Scintillating Browsers, Inspectors and Workspaces
  • Breakpoint improvements
  • ImageShortName preference setting
  • Monticello Importer improvements
  • Cross Development (XD) features for GLORP and Seaside
Scintillating Browsers, Inspectors and Workspaces

- Optional
  - Enabled by default
- Customized color syntax highlighter
  - Additional styling options and features
  - Now available in workspaces and inspectors, too!
- Autocompletion support using VA Assist’s code completion engine with new popup widget
Scintillating Browsers, Inspectors and Workspaces

• New Code Assisting features:
  • \[\]() match highlighting
  • Calltips
  • Text manipulation keyboard shortcuts
  • and much more ...

• New stylizable and configurable margins:
  • Breakpoints
  • Line numbers
Scintilla Debugger Example

```
add: anAssociation

<table>
<thead>
<tr>
<th>hashIndex element elementsSize key</th>
</tr>
</thead>
<tbody>
<tr>
<td>42 -&gt; &quot;Hello Smalltalk&quot;</td>
</tr>
</tbody>
</table>

hashIndex := (key := anAssociation key) hash \ (elementsSize := elements size) + 1.

hashIndex to: elementsSize do: [index]
   (element := elements at: index) = nil ifTrue: [elements at: index put: anAssociation.]
   (elementCount := elementCount + 1) < (elementsSize // 2)
   ifTrue: [self expand].
   ^anAssociation.

element key = key ifTrue:
```

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Breakpoint Improvement

• One-shot breakpoint
  • Removes itself after firing once
Monticello Importer
Improvements

• Imported code version defaults to Monticello version (example: NickAger.257)
• Monticello version info copied to Application Notes to aid cross-referencing

Name: Seaside-Tests-Core-NickAger.257
Author: NickAger
Time: 21 March 2012, 5:49:03 am

tidied WATestingMetadataFileLibrary
ImageShortName Preference

- Preference used to identify windows associated with development image
- Example:
  ```
  [EtBaseTools]
  ImageShortName=SS
  ```
V8.6 Content continued

• Web Interface
  • Servlet multipart messages supported
    • Inbound only
    • Multipart/form and Multipart/mixed
    • Supports Seaside upload function
  • Updated port of Seaside and Grease
    • Grease 1.0.7
    • Seaside 3.0.8 (not frozen)
    • Mostly small bug fixes
    • Configuration maps identify the Metacello package version used for the port:
      • ConfigurationOfGrease-topa.192
      • ConfigurationOfSeaside30-DiegoLont.392
V8.6 Content continued

• Database
  • DB2 currency (tested on 10.5)
  • GLORP port updated to 7.9.1-4
    • Changes in GLORP from 0.3.178 are mainly due to Alan Knight’s work
    • Experimental Host Variable support (default is off)
    • Improved error handling
      • Optional logging of low-level database exceptions
V8.6 Content continued

• Installation
  • New Windows Installer
  • New Environments Management Tool
Windows Installer

Welcome to the InstallShield Wizard for VA Smalltalk 8.6

The InstallShield(R) Wizard will install VA Smalltalk 8.6 on your computer. To continue, click Next.

This program is protected by copyright law and international treaties.

VA Smalltalk
Windows Installer
continued

• Built with industry-standard InstallShield
  • Provides Install/Repair/Uninstall from single executable

• 2 Downloadable Install Packages
  • Code
    • Installs Client and Manager by default (for standalone)
    • Optional installation of only Client or Manager (for shared code library)
  • Documentation
    • Smaller code download when you don’t want local documentation
    • Allows between-release updates to match on-line documentation
Windows Installer
continued

- Environments shortcut installed on:
  - Start Menu
  - Desktop (optional)
- Launch Environments to create and start a new development image
Environments Tool

Create New Environment

Name:
Glorp Development

Type
○ Full
○ Basic

Server Name (leave blank for File I/O):
192.168.1.10

Manager:
c:\Managers\mgr86.dat

Show optional items

Dune  Cancel

Basic
Full
Glorp Development
Roassal
Seaside
V8.6 Content
continued

- New supported platforms
  - Fedora 19
  - Ubuntu 13.04
  - Windows 8.1
Looking to the Future
Future Releases

• Release schedule is about once a year
  • Depends on volume of content
  • Current content information in Product Roadmap
    • http://www.instantiations.com/products/roadmap.html

• Content based on requirements from:
  • Direct customer interactions
  • Forums
  • Support cases
  • Internals
Future Releases
Candidate Items

• Base classes
  • Portable Colors
  • Translucent Colors
• Internationalization
  • Unicode/UTF-8 (including VM and system APIs)
    • Based on International Components for Unicode (ICU) module
• Web interface
  • Seaside 3.1/Grease 1.1
  • Seaside REST
  • Continuation support
  • Web services debugging support/doc
  • Web services tooling improvements
  • Validating XML parser
Future Releases
Candidate Items

- Infrastructure
  - **Announcements** (sufficient for Roassal)
  - **Full .zip, .gz, and inflate/deflate support**
  - Consolidate product settings using Settings Framework
  - Settings Dialogs to complement Settings Framework
  - Consolidate product logging using Logging Framework

- Middleware
  - DB2 Stored Procedures improvements
  - GLORP Programmer’s Reference
  - ‘Simple’ DB support (SQLite)
  - MQ currency
  - TCP/IP V6
  - 0MQ
Future Releases
Candidate Items

• GUI Look-and-Feel
  • **Icon/image support enhancements**
    • Support for alpha-channel (blending)
    • Support for .PNG file (R/W)
  • GTK+ 3.x on Linux
  • **Windows Common Controls additions**
    • TreeView is next
  • Back-port widgets from add-ons (ex: UML Designer)
Future Releases
Candidate Items

• Development Tools
  • **Scintilla Browser improvements**
  • **Updated EMSRV**
    • Full file system support on UNIX
    • Libraries > 2GB on Linux
    • Removal of multi-processor check on Windows
  • **Roassal**
    • Redesigned Change Browser & Merge Tool
• Installation
  • **UNIX .RPM install package**
  • **Environments improvements**
  • “Quiet” install (no UI)
Future Releases
Candidate Items

• Security
  • ‘Full’ security framework -- OpenSSL 1.0 wrappers
  • ‘Basic’ security framework (consolidate existing OpenSSL wrappers)

• Performance and Scalability
  • Incremental garbage collection
  • 64-bit Smalltalk
  • Class library performance hotspots
  • Integrate KES/Stats goodie for object monitoring

• Platform
  • Windows Services control moved from C to Smalltalk
Future Releases
Candidate Items

• External Interfaces
  • JNIport (currently available on VAStGoodies.com)
  • .NET/C#
  • Other

• Class Libraries
  • Collection hashing policies
  • Sorted collection sorting policies

• Other
  • We’re always looking for suggestions
How Do You Get VA Smalltalk?

- Download evaluation copy

- Buy development licenses

- Download development build
  - Announced in VA Smalltalk Google Group

- Be a committer on an Open Source project
  - [http://www.instantiations.com/company/open-source.html](http://www.instantiations.com/company/open-source.html)

- Work for an educational institution
  - [http://www.instantiations.com/products/academic-license-program.html](http://www.instantiations.com/products/academic-license-program.html)
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Questions?