

VASmalltalk[™]

Today and Tomorrow

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Principal Software Architect







- Introduction
- History
- VA SmalltalkTM 8.0
- Future Directions
- Q&A













- First saw (Digitalk) Smalltalk in 1987; first used Smalltalk shortly thereafter
- Joined original IBM Smalltalk prototype team in 1990
- Joined IBM VisualAge Smalltalk development team as a founding member in 1991
- Team Lead and Chief Architect of IBM VisualAge Smalltalk from 1997 to 2007
- Retired from IBM and joined Instantiations in February 2007 to lead VA Smalltalk development team







Product History



- 2004 Instantiations provides VisualAge® Smalltalk support for IBM
- 2005 Instantiations licenses VisualAge Smalltalk
- 2005 VA Smalltalk 7.0
- 2006 VA Smalltalk 7.0.1
- 2007 VA Smalltalk 7.5, 7.5.1 and 7.5.2
- 2009 VA Smalltalk 8.0, 8.0.1









VA Smalltalk 8.0



- Seaside
- Browser and Tools Enhancements
- Web Services Enhancements
- Revised Documentation
- Small Enhancements
- What's Missing?







VA Smalltalk 8.0 Driving Forces



- Industry-accepted functionality
 - Seaside and friends
- Modernization
 - Browsers
- Compatibility
 - ANSI Exceptions, Internationalization
- Performance
 - Under the covers









Seaside – what is it?



- Framework for developing sophisticated web apps
 - Base for higher-function frameworks
- Layered abstraction over HTTP and HTML
- Quickly build highly-interactive apps
 - HTML concepts exposed in Smalltalk
 - HTML markup hidden









Scriptaculous – what is it?



- Scriptaculous
 - Javascript libraries
 - Visual effects engine
 - Drag and drop (including sortable lists)
 - Ajax controls











- jQuery Core
 - Fast, concise JavaScript Library
 - Simplifies HTML document traversing, event handling, animating, and Ajax interactions
- jQuery UI
 - Abstractions for low-level interaction and animation, advanced effects and high-level, theme-able widgets









VA Smalltalk V8.0 Seaside



- Seaside 2.9alpha3 +
 - Core
 - jQuery
 - Scriptaculous
 - RSS
 - Slime
 - Extension to RB Smalllint
- Seaside Tools
- Seaside Porting Layer

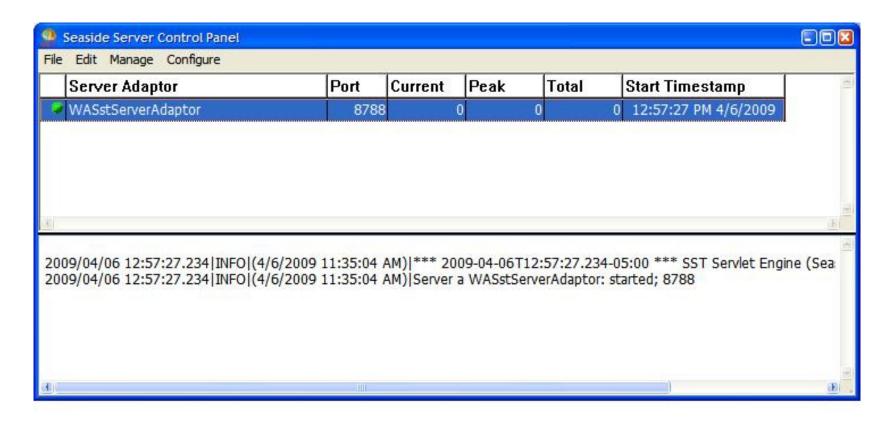












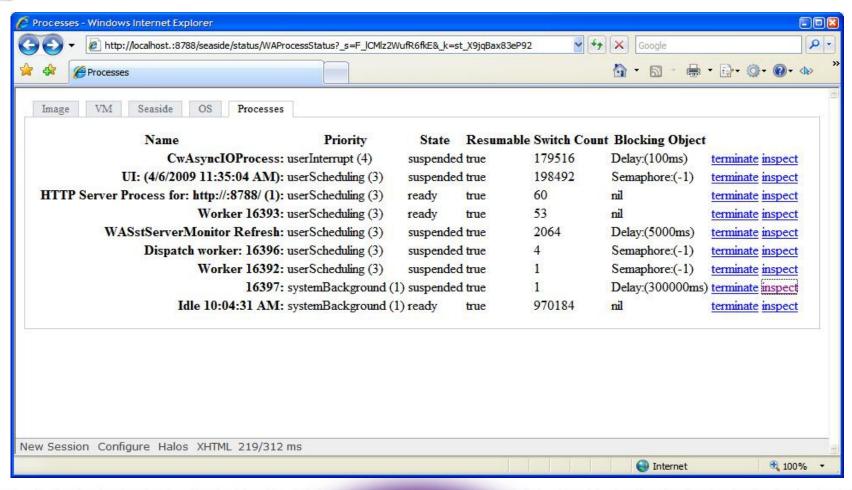




















Seaside Porting Layer



- Classes and class extensions to enable porting of Seaside
 - Driven <u>primarily</u> by needs of Seaside
 - Content is changing (as Seaside changes)
 - Implementation modeled on Squeak
 - Useful for doing other ports
 - Portions promoted to Base over time





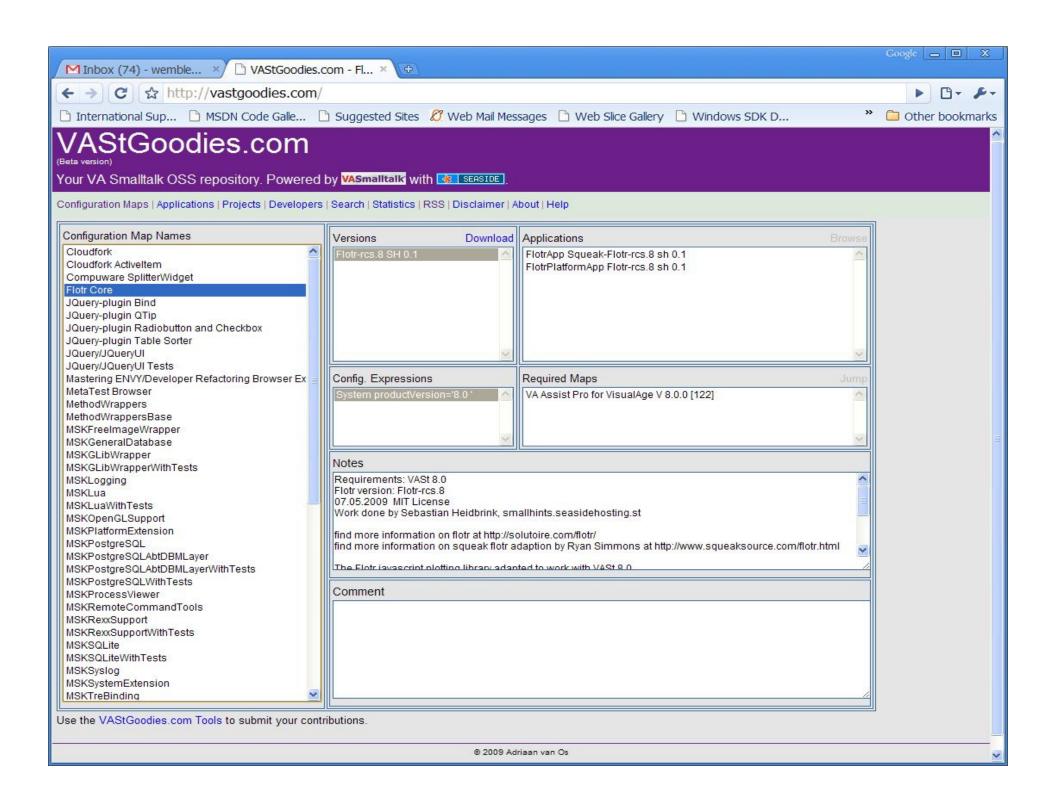


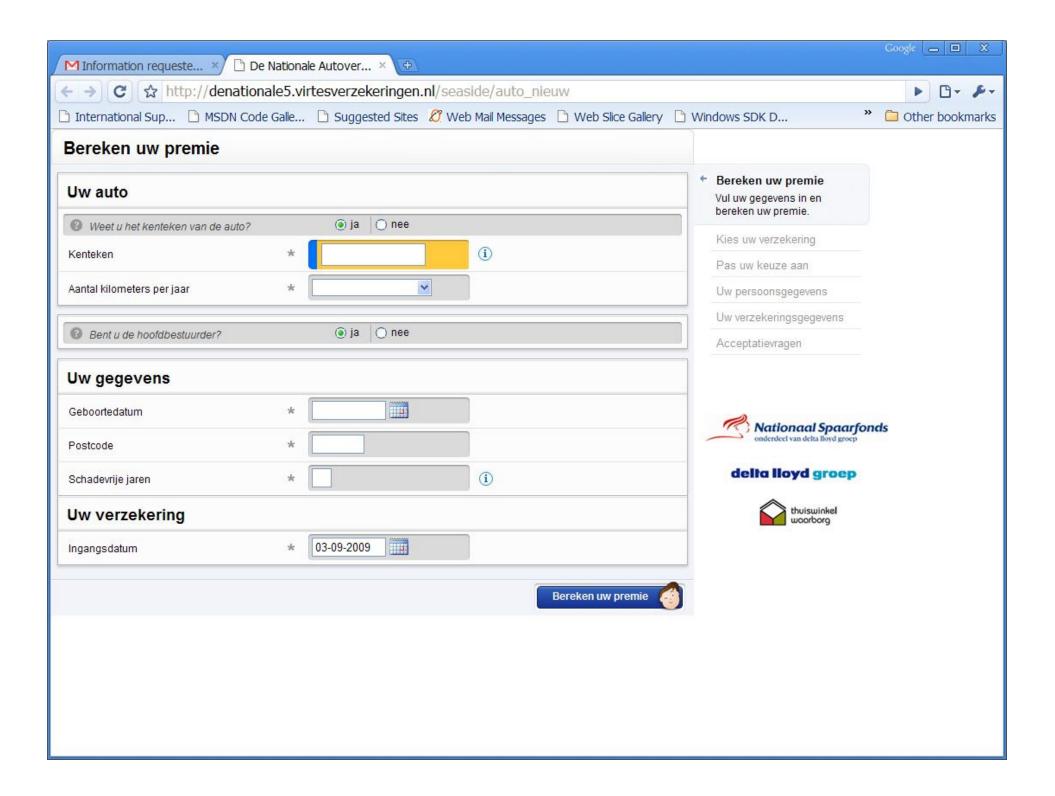


VA Smalltalk Seaside Cautions



- Seaside is alpha level
 - API changes likely
- Seaside Flow unsupported
 - No #wait: because no continuations
 - <some code>.
 r := self call: aComponent. "NO, does
 self wait:"
 <more code using r>.









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Driving Forces for Change

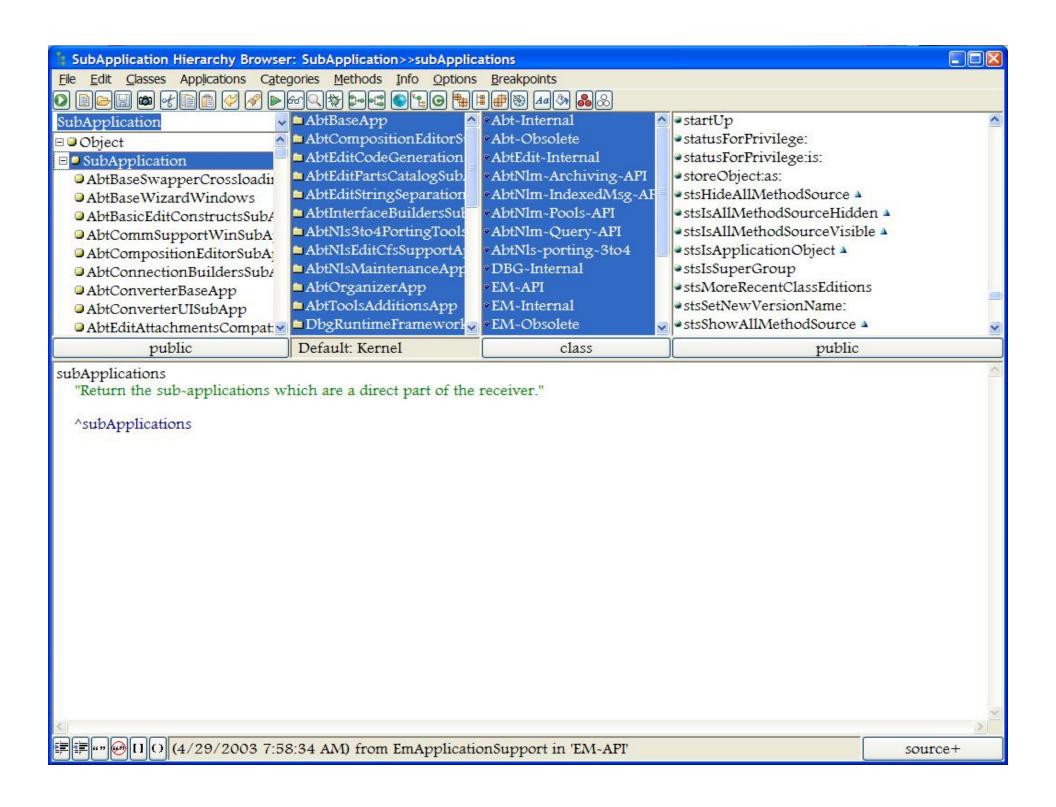


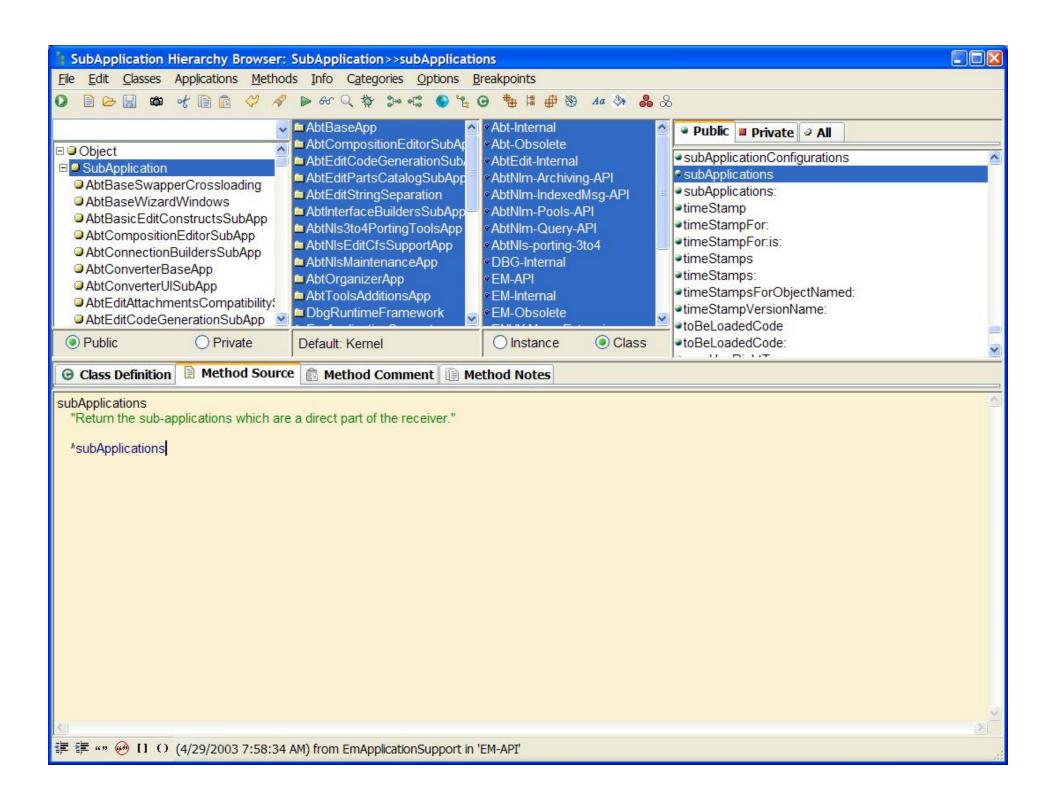
- User requests for modernized browsers
- User requests for functional merge
 - Standard browsers, VA Assist browsers, Trailblazer, Refactoring browser
- Multiple input channels
 - Conference attendees
 - VA Smalltalk Online Forum













Affected Windows

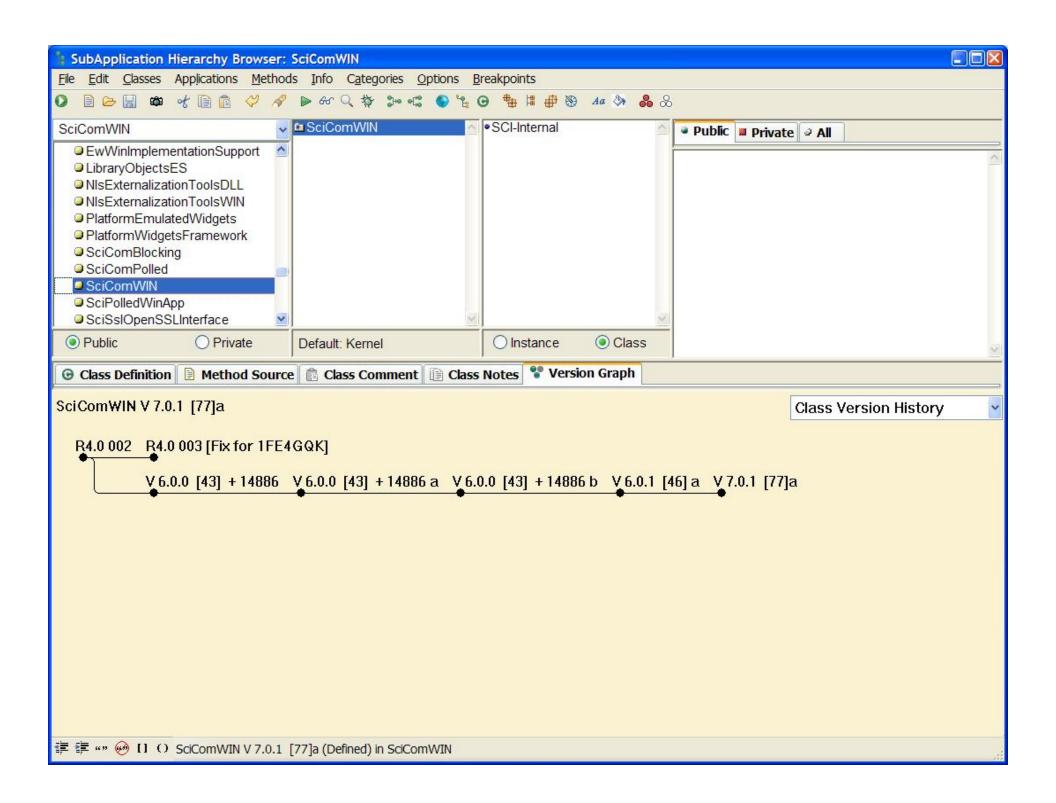


- All EtWindow children (toolbar)
- Classes browser
- Class browser
- Application browser
- Shadow application browser
- Script browser



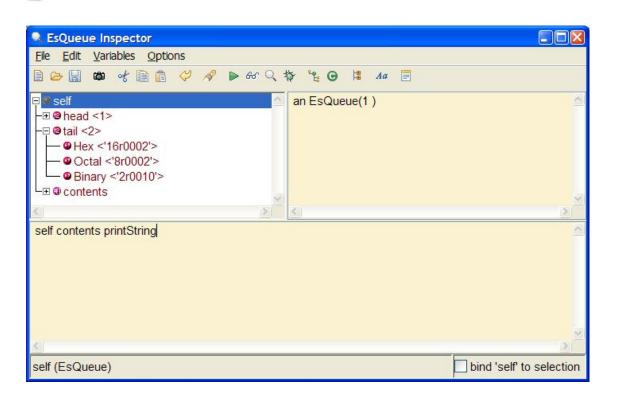












- Integer shows decimal, hex, octal, and binary
- Workspace contents discarded on inspector close
- Use Options menu to toggle workspace on/off







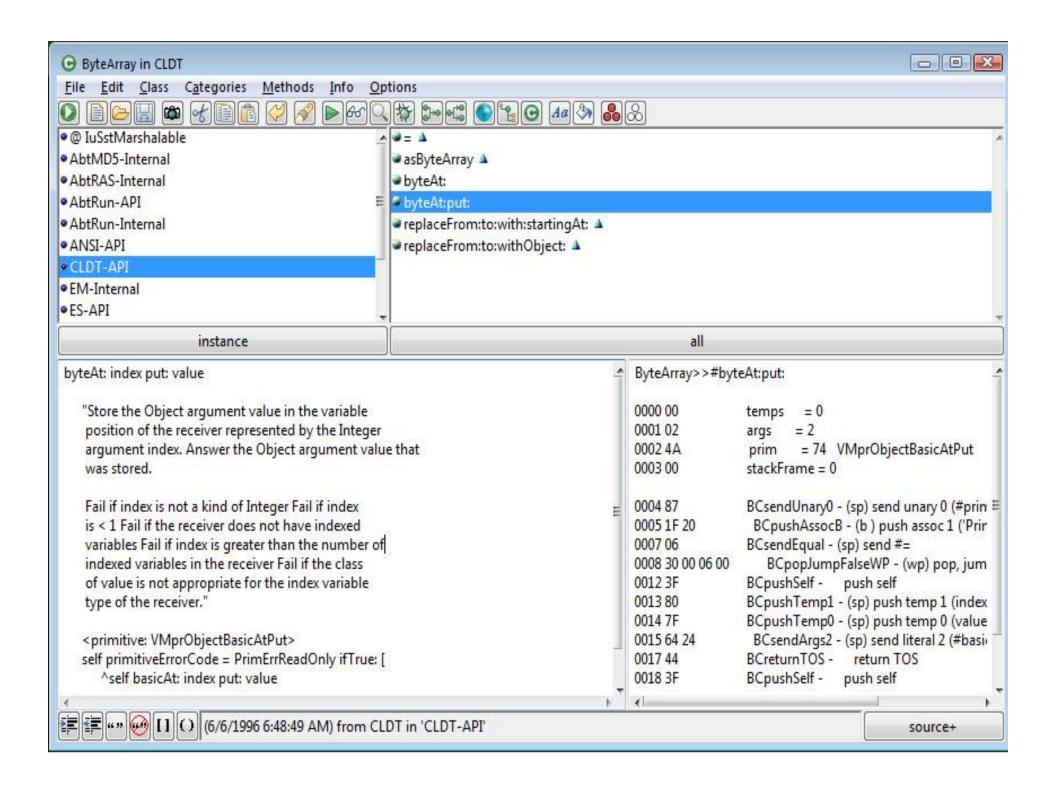


- Refactoring Browser enhancements
 - contributed by Niall Ross
 - Changes reflected in MED RB Extensions
- SUnit Browser enhancements
 - contributed by Niall Ross













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Web Services Enhancements



- Framework extensions
 - Document/literal and Document/literal wrapped WSDL
- Web Services Cookbook
 - Step-by-step "How do I" for deploying and invoking
 - Debugging tips
 - Serialization/de-serialization customization future
 - Hosting a web service future
- Xml Basic Tools Goodie Upgrade To Wizard









VA Smalltalk 8.0



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Revised Documentation

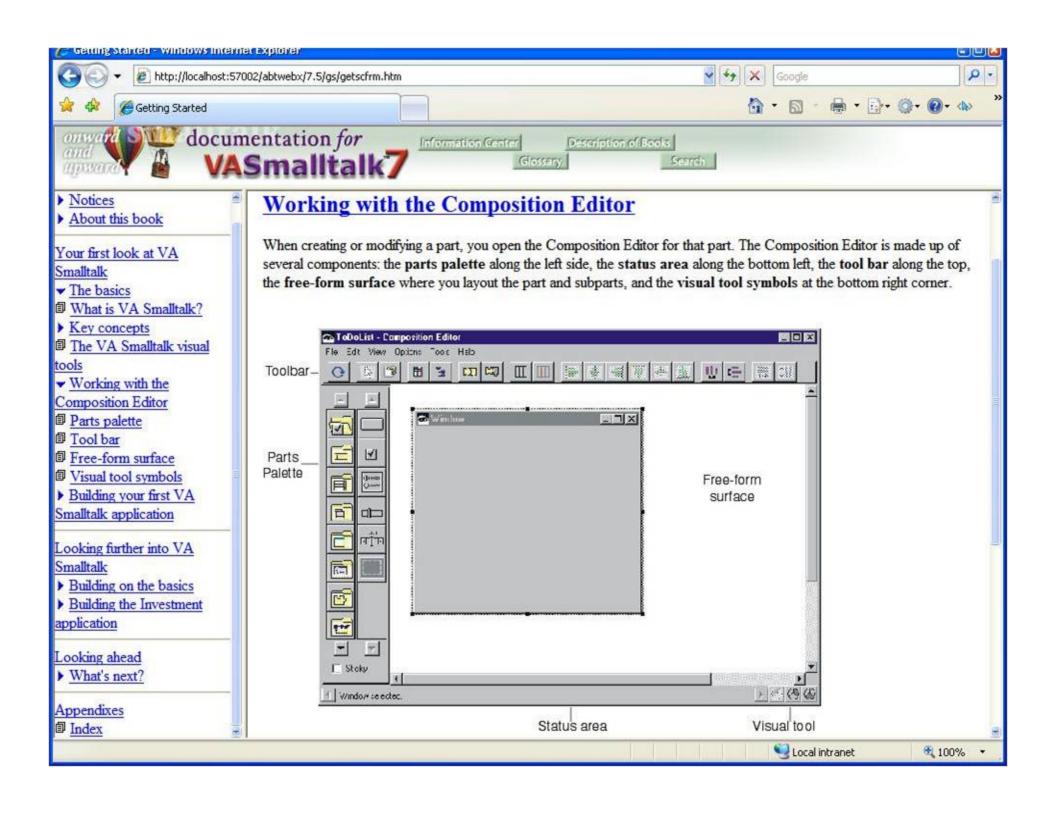


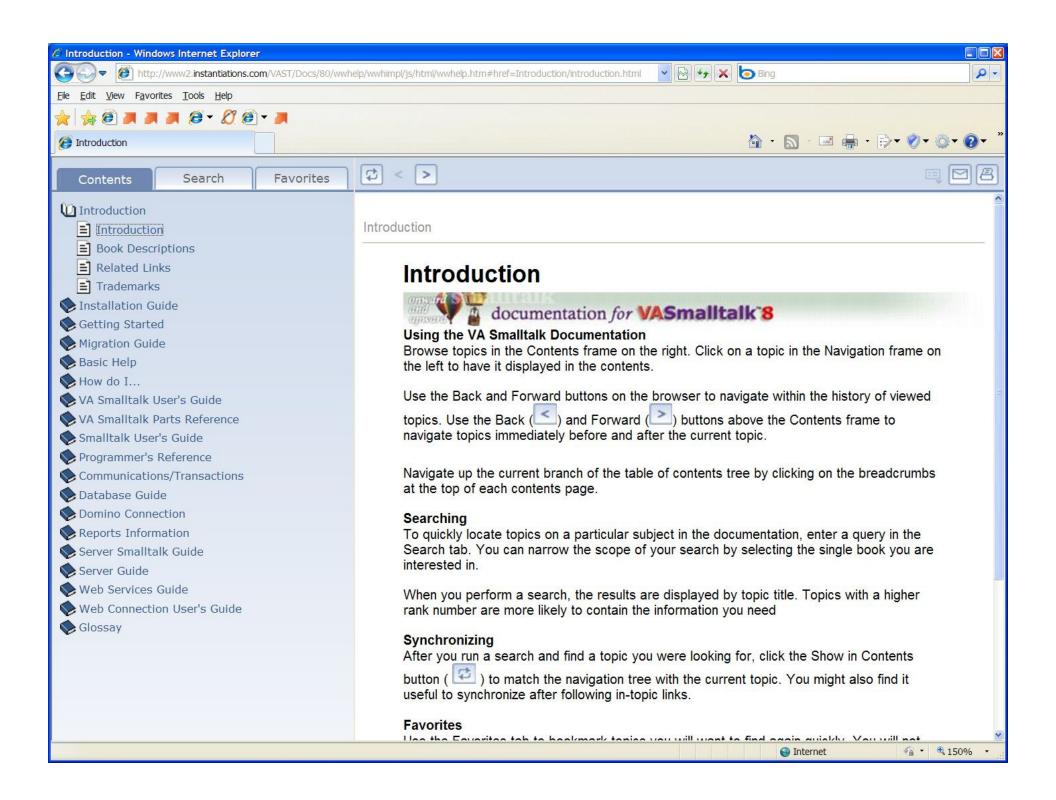
- Content
 - First significant content revision since IBM VisualAge Smalltalk V6.0
- Delivery mechanism = WebWorks
 - VA Smalltalk Documentation Server is gone
 - All capability available from web or local
 - Web will get 'between release' updates
 - Between release' updates rolled up for next release
 - PDF books future
- Appearance
 - Uses CSS for formatting

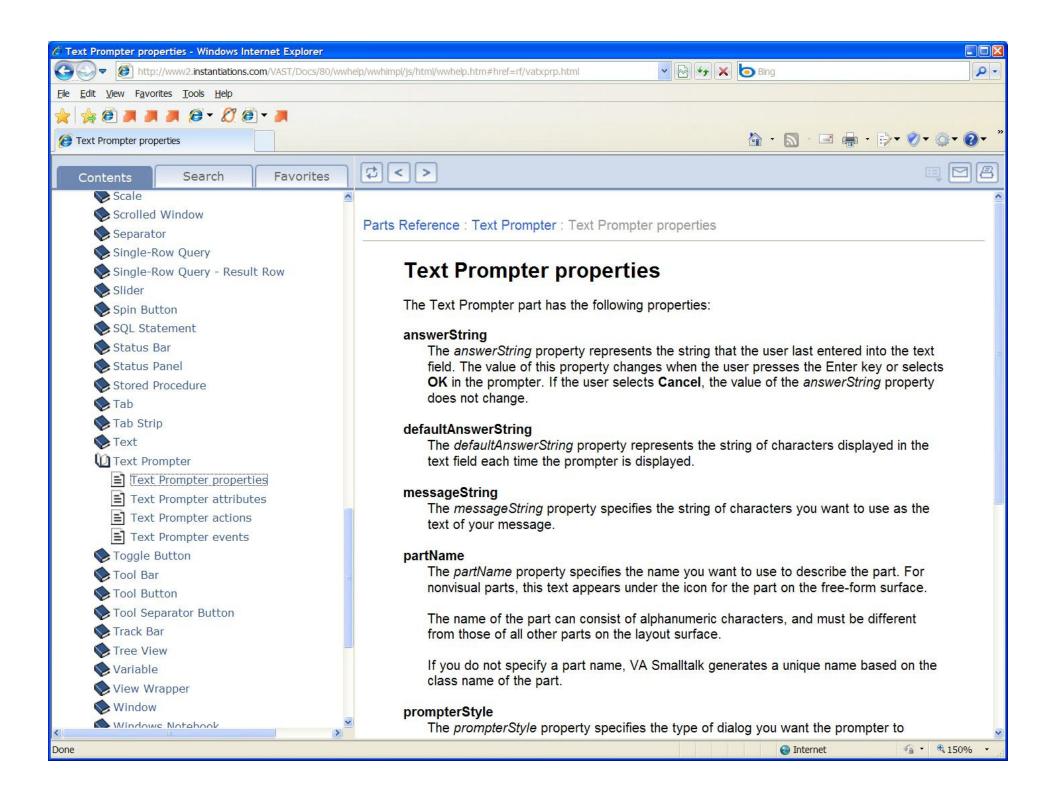


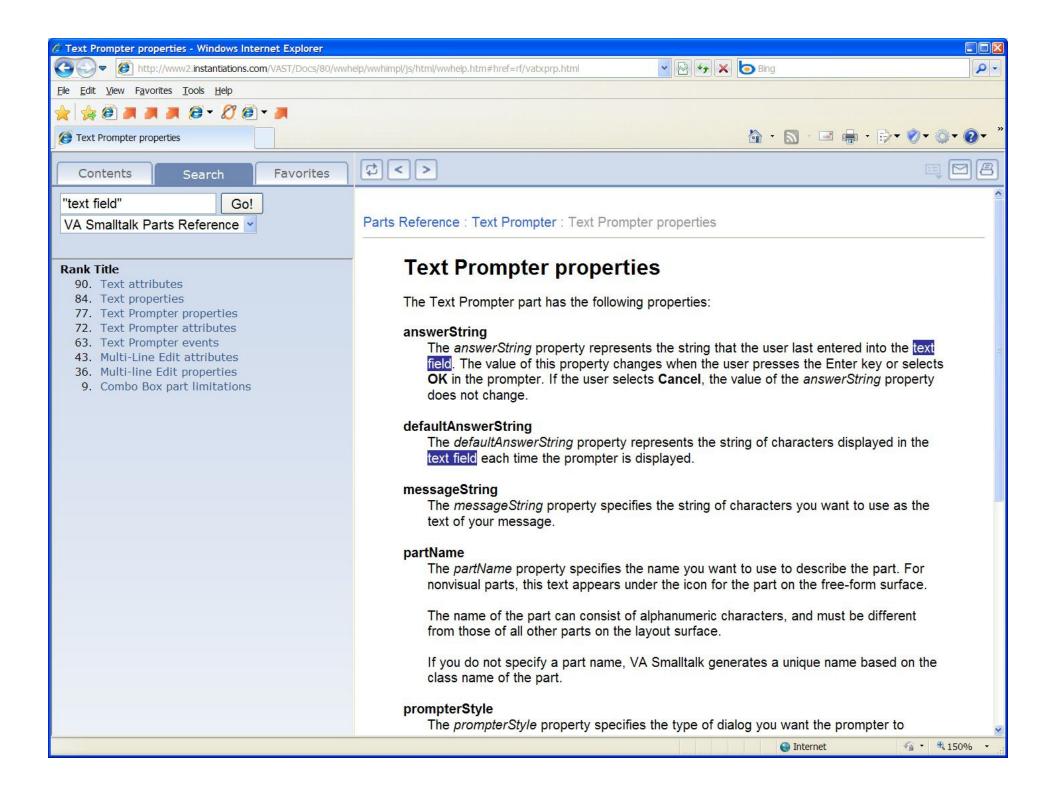


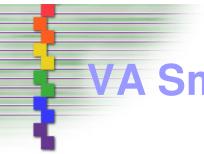












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- Theme support on Windows XP
- XD image parameter import/export
- ENVY/Image Interactive Test Suites added to provide additional examples
- Simple benchmarking methods
 - #sampleAndBrowse
 - #traceAndBrowse









Goodies from VA Smalltalk



- Mechanism for delivery of
 - not-quite-ready features
 - Existing website goodies
- Location
 - In product code repository
 - UML Designer
 - **.**...
 - In VAStGoodies.com repository









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Unsupported Platforms



- OS/2
 - Hasn't officially shipped since VAST V6.0.1
 - Most code REMOVED
 - Some tidbits remain, but do not function
 - Being removed as we find it











- Full Unicode (UTF-8) support
 - Staged into V8.0.x









VA Smalltalk V8.0.1 Planned Content



- Seaside 3.0 Beta
 - Some porting extensions promoted to Base **
- VASTGoodies.com Tools
- Unicode (UTF-8) initial support
- Portable ProgressView part added to CE palette **









VA Smalltalk V8.0.1 Planned Content (continued)



- Windows Server 2008 and Windows 7 official support
- cdec1 calling convention supported on Windows **
 - EsEntryPoint support future









VA Smalltalk V8.0.1 Planned Content (continued)



- UNIXProcess defaults to bash on Linux
- UNIX install enhancements **
 - No csh symbolic link needed on Linux
 - Legacy X11 directories created and linked to system X11 directories on Linux
 - Install directory automatically created
- Sections of Web Services Cookbook on VA Forum









- Seaside 3.0 GA (if available)
 - Seaside Flow
 - Development tools
 - Class browser
 - Profiler
 - Deployment tools
 - Sample packaging instructions
 - Runtime startup
 - Seaside on Apache, etc.
 - FastCGI or AJP or ...









- SST Servlet multipart forms
- Unicode (UTF-8) support partial
- Glorp object/relational database mapper
 - ActiveRecord support future
- ANSI Smalltalk
 - Timezone
- OpenSSL
 - Currency (OpenSSL 1.0)
 - Security framework
 - Wrap OpenSSL security interfaces











- Platforms
 - Ubuntu 9.04
 - Fedora Core 11
 - •
- Performance (hotspot analysis)
 - Base classes
 - XML parser
 - VM
 - •









Ongoing (continued)



- VM Enhancements
 - Investigate 64 bit (extended memory addressing)
 - Investigate incremental garbage collection
- Look & Feel
 - More browser enhancements
 - More native Windows widgets
 - Improved icon support
 - .png support
 - .tiff improvements









Ongoing (continued)



- Improved install/uninstall
 - Single installer for Client and Manager
 - Install/Repair/Uninstall
 - Seamless on Vista and Windows 7 with User Account Control (UAC)
- Windows Services in Smalltalk
 - Eliminate special startup executable
 - More flexibility in structuring services
- TCP/IP V6









Ongoing (continued)

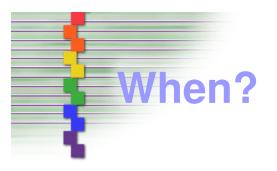


- Web Services
 - XML editor (enhancement to current XML Viewer)
 - XML <-> Smalltalk classes translation
 - Automated definition of Smalltalk-based web service
 - Diagnostic tools
 - TCP/HTTP/SOAP Monitor
 - Performance Monitor









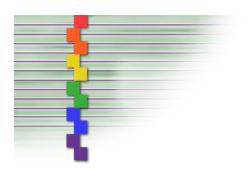


- Planned release dates:
 - 10/2009 VA Smalltalk V8.0.1
 - 04/2010 VA Smalltalk V8.0.2
- Check website for latest information











GETTING VA SMALLTALK











- Download evaluation copy
- Buy development licenses











- Download evaluation copy
- Buy development licenses
- Download development build







V8.0.1 Development Builds



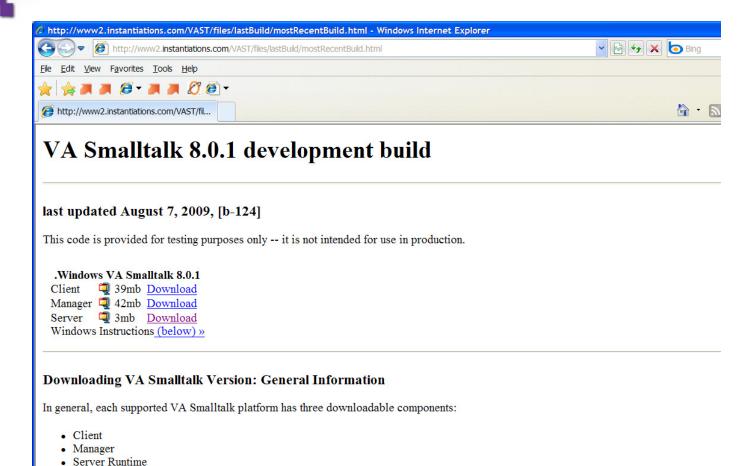
- An experiment in
 - Early delivery
 - Continuous integration
- Availability
 - From VA Smalltalk website
 - Irregular schedule
 - Documentation updated to match build
 - Windows and Linux only
- Fix List for build on VA Smalltalk forum







V8.0.1 Development Build Example













- Download evaluation copy
- Buy development licenses
- Download development build
- Be a committer on an Open Source project









Open Source project committer



- Instantiations will donate a perpetual VA Smalltalk license
 - to committers
 - working on non-commercial open source project
- No charge
- Details on the VA Smalltalk home page
 - Click on OPEN SOURCE
 DEVELOPERS
 CLICK HERE
- Click on Company at the top of any page











- Download evaluation copy
- Buy development licenses
- Download development build
- Be a committer on an Open Source project
- Be an educational institution











- Accredited educational institutions
 - Teaching staff
 - Students
- No charge
- Details: Pricing & How to Purchase link on VA Smalltalk homepage









More info about VA Smalltalk



General Info: vast@instantiations.com

Sales: sales@instantiations.com

Support: vast-support@instantiations.com

John O'Keefe: john_okeefe@instantiations.com

Forum: www.instantiations.com/forum/viewforum.php?f=12

Website: www.instantiations.com/vast

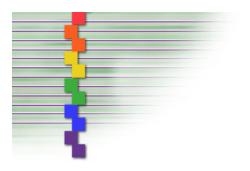
Slides available at

http://www.instantiations.com/VAST/more/st+news+events.html











Q & A





