



# VA Smalltalk V8.0.2 Update

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# VA Smalltalk V8.0.2

- Seaside 3.0 update
- GLORP initial release
- Platform currency and enhancements
- Database currency and enhancements
- Class library enhancements
- SUnit 4.0 release
- Documentation updates

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# Seaside 3.0

- Seaside is an open source framework for developing sophisticated web applications
  - Layered abstraction over HTTP and HTML
    - HTML concepts exposed in Smalltalk
    - HTML markup hidden
  - Base for higher-function frameworks
  - Quickly build highly interactive applications
- Scriptaculous and jQuery frameworks build on base
  - JavaScript libraries
  - Programmed through Smalltalk artifacts

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(Beta version)

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<p><b>Configuration Map Names</b></p> <ul style="list-style-type: none"> <li>Cloudfork</li> <li>Cloudfork Activeltem</li> <li>Compuware SplitterWidget</li> <li><b>Flotr Core</b></li> <li>jQuery-plugin Bind</li> <li>jQuery-plugin QTip</li> <li>jQuery-plugin Radiobutton and Checkbox</li> <li>jQuery-plugin Table Sorter</li> <li>jQuery/JQueryUI</li> <li>jQuery/JQueryUI Tests</li> <li>Mastering ENVY/Developer Refactoring Browser Ex</li> <li>MetaTest Browser</li> <li>MethodWrappers</li> <li>MethodWrappersBase</li> <li>MSKFreedImageWrapper</li> <li>MSKGeneralDatabase</li> <li>MSKGLibWrapper</li> <li>MSKGLibWrapperWithTests</li> <li>MSKLogging</li> <li>MSKLua</li> <li>MSKLuaWithTests</li> <li>MSKOpenGLSupport</li> <li>MSKPlatformExtension</li> <li>MSKPostgreSQL</li> <li>MSKPostgreSQLAbtDBMLayer</li> <li>MSKPostgreSQLAbtDBMLayerWithTests</li> <li>MSKPostgreSQLWithTests</li> <li>MSKProcessViewer</li> <li>MSKRemoteCommandTools</li> <li>MSKRexSupport</li> <li>MSKRexSupportWithTests</li> <li>MSKSQLite</li> <li>MSKSQLiteWithTests</li> <li>MSKSyslog</li> <li>MSKSystemExtension</li> <li>MSKTreBinding</li> </ul>	<p><b>Versions</b> <a href="#">Download</a></p> <ul style="list-style-type: none"> <li>Flotr-rcs.8 SH 0.1</li> </ul>	<p><b>Applications</b> <a href="#">Browse</a></p> <ul style="list-style-type: none"> <li>FlotrApp Squeak-Flotr-rcs.8 sh 0.1</li> <li>FlotrPlatformApp Flotr-rcs.8 sh 0.1</li> </ul>
	<p><b>Config. Expressions</b></p> <ul style="list-style-type: none"> <li>System productVersion="8.0"</li> </ul>	<p><b>Required Maps</b> <a href="#">Jump</a></p> <ul style="list-style-type: none"> <li>VA Assist Pro for VisualAge V 8.0.0 [122]</li> </ul>
	<p><b>Notes</b></p> <p>Requirements: VAST 8.0          Flotr version: Flotr-rcs.8          07.05.2009 MIT License          Work done by Sebastian Heidbrink, smallhints.seasidehosting.st</p> <p>find more information on flotr at <a href="http://solutoire.com/flotr/">http://solutoire.com/flotr/</a>          find more information on squeak flotr adaption by Ryan Simmons at <a href="http://www.squeaksource.com/flotr.html">http://www.squeaksource.com/flotr.html</a></p> <p>The Flotr javascript plotting library adapted to work with VAST 8.0</p>	
	<p><b>Comment</b></p>	

Use the VASTGoodies.com Tools to submit your contributions.

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http://denationale5.virtesverzekeringen.nl/seaside/auto\_nieuw

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## Bereken uw premie

### Uw auto

ja  nee

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Kenteken \* 
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Aantal kilometers per jaar \* 
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### Uw gegevens

Geboortedatum \* 
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Postcode \* 
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Schadevrije jaren \* 
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### Uw verzekering

Ingangsdatum \* 
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**thuiswinkel waarborg**

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# Seaside Cautions

- Seaside 3.0 is not quite Golden
  - API changes may still happen, but unlikely
- Seaside Flow (currently) unsupported by VA Smalltalk
  - No #wait: because no continuations
    - <some code>.  
r := self call: aComponent. "NO, does self wait:"  
<more code using r>.
    - <some code>.  
self show: aComponent onAnswer: [ :r |  
<more code using r ] . "YES"

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# GLORP Initial Release

- Generic Lightweight Object-Relational Persistence (GLORP)
  - Open Source framework for Object/Relational database access
  - With concepts reminiscent of popular TOPLink product
  - Provides:
    - Mapping of objects into relational databases
    - Transactions for change grouping
    - Non-intrusive implementation
    - Support for queries based on objects and data
    - High performance through optimized database access
  - Level 0.3.178+
  - Documented in [Database Guide](#)

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# GLORP Basics

- Create a session object
  - Made from an accessor object
  - Which is made from a connection object
  - Which is made from a login object
- Within a unit of work, make changes
- Use session to query existing data
- Create new objects and add them
  - Sub-objects are automatically noted
- Commit or rollback the unit of work



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# GLORP Mapping

- Simple mapping is one-to-one
  - Describe a table
  - Create an object that looks like a row
  - Describe that object and its mapping
- Complex mappings
  - One row becomes variant object type
  - Multiple rows combine for one value
- Can map existing objects to RDB

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# GLORP Descriptor

- What a table contains
- What objects will participate
- How to map them
- Very flexible system
- When in doubt, refer to the unit tests for examples

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# Platform Currency and Enhancements

- Support added for Ubuntu 9.04 (32- and 64-bit)
  - No code changes

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# Platform Currency and Enhancements (cont.)

- Windows executables are digitally signed
  - Enhanced security
  - Windows Logo Certification requirements

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# Platform Currency and Enhancements (cont.)

- Windows power management events supported
  - GUI apps can react to Sleep/Hibernate and Resume
  - New protocol on `Subapplication` class
    - `#suspending`
    - `#resume`
  - Useful for resetting sockets, reconnecting development manager, etc.
  - Documented in [Smalltalk User's Guide](#)

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# Database Currency and Enhancements

- Support added for Oracle 11g
  - No Oracle 11 specific function (compatibility only)
  - No code changes

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# Database Currency and Enhancements (cont.)

- Support added for Oracle function calls
  - Eliminates need to wrap function calls in stored procedures
  - Examples of usage shown in [Database Guide](#)

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# Database Currency and Enhancements (cont.)

- Support added for Anonymous SQL blocks
  - Provides ability to send user-defined data types
  - Provides ability to retrieve user-defined data types
  - Supported in Oracle
  - Added to DB2 9.7, VA Smalltalk support not tested yet
  - Examples of usage shown in [Database Guide](#)



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# Class Library Enhancements

- Method pragmas
  - Allow you to annotate methods with user-defined processing information
  - Stored as literals in instances of `CompiledMethod`
  - `Pragma` class has protocol for finding and processing annotations
  - Provided for [Pier Content Management System](#) port
  - Documented in [Programmer's Reference](#)

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# Class Library Enhancements (cont.)

- Instance- and class-based exceptions are now polymorphic
  - Providing clearer and more efficient handling of errors
  - Brings back function dropped in VAST 6.0.1
  - Example:

```
^ [ (Array new: 3) at: 4 ]
   on: Error do: [ :ex |
       Transcript cr; show: ex messageText. ex
   return ]
```

*Primitive failed in: Object>>#at: due to Index out of range in argument 1*

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# SUnit 4.0

## Just in Time Resources

- Resources are made available just-in-time:
  - First test that needs it prompts setup
  - Later tests that need it can see whether it has been (or failed to be) setup
  - Tear down guaranteed at end of run; can be done anytime
- Resource-processing is ordered
  - a test's resources are setup in order and torn down in reverse order
  - a resource's resources are setup before it is setup and torn down after it is torn down

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# SUnit 4.0

## Class Changes

- Once upon a time there were three classes ...  
`TestCase`, `TestSuite` and `TestResult`
- And then there was a fourth ...  
`TestResource` to manage resources
- And now a fifth ...  
`TestAsserter` - abstract superclass of  
`TestCase`  
`TestResource`  
any user-created `TestCase` delegate class
- Result is resources understand `#assert:...` protocol
  - `#setUp` and `#isAvailable` run inside the handler

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# SUnit 4.0

## Class Changes (cont.)

- Logging
  - TestCase methods moved to the class-side
  - #isLogging, and #failureLog (and #logFailure: is now on both sides)

So, who here overrides #isLogging or #failureLog?

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# Documentation Updates

- *Web Services Guide*
  - Added [Getting Started: Web Services in a Day](#)
  - Added [Cookbook](#) with debugging hints, XML de-serialization tips, and guidance on securing a Web service
- *Smalltalk User's Guide*
  - Added [Application behavior when Windows Power Management events occur](#)
  - Moved *Namespace support* to the *Programmer's Reference*
- *Programmer's Reference*
  - Added [Pragmas](#), [Namespace pragmas](#), and [Annotation pragmas](#)
- *Database Guide*
  - Added [GLORP Tutorial](#), [Anonymous PL/SQL Blocks](#), and [Function Calls using Native Oracle](#)

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# VA Smalltalk V8.0.1

- Seaside 3.0 alpha5
- Continued Web Services enhancements
- Additional enhancements for tabbed browsers
- Windows 7 (32-/64-bit)
- “cdecl” calling convention on Windows
- Improved error diagnostics for memory allocation
- Enhanced SST resource management for faster execution using less memory

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# VA Smalltalk V8.0

- Seaside 2.9 alpha3 Core, jQuery, Scriptaculous, RSS, porting layer and development tools
- Enhanced Web Services supporting "Document Literal/Document Literal Wrapped" style
- Enhanced IDE with tabbed browsers, native Windows widgets, inspector improvements, a new Method List Pane, Text Pane, Version Graph Tab, more
- New documentation delivery system (web or local) with improved navigation, formatting and updated content



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# Looking to the Future

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# VA Smalltalk Priority Technologies

- Internationalization
- Web interface
- Database
- GUI Look and Feel
- Development Tools
- Security
- Performance
- Platforms
- Other

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# VA Smalltalk V8.0.3 estimated Nov 2010

- Internationalization
  - Unicode/UTF-8
  - Message extraction tool
- Web interface
  - **Seaside 3.0**
  - Web services tooling improvements
- Database
  - GLORP improvements
  - GLORP Programmer's Reference

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# VA Smalltalk V8.0.3 (cont.)

- Development Tools
  - Integrate SUnit into browsers
  - New 'Settings' framework and dialogs
- Security
  - Basic security framework
- Platform
  - **Windows Server 2008 R2**
  - **Ubuntu 10.04**
  - Fedora Core 13
  - Windows Services in Smalltalk

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# VA Smalltalk V8.0.3 (cont.)

- Improved install/uninstall
  - Single installer for Client and Manager
  - Install/Repair/Uninstall
  - Seamless on Windows 7 with User Account Control (UAC)

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# VA Smalltalk Future Releases

- Internationalization
  - Unicode/UTF-8 improvements
- Web interface
  - Seaside 3.1
  - SST Servlet multipart forms
  - Web services debugging tools/doc
  - Validating XML parser
- Database
  - Active Records built on GLORP

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# VA Smalltalk: Future Releases (cont.)

- GUI Look and Feel
  - Additional Windows common widgets
  - Browser improvements
  - Additional icon/image support
- Security
  - “Full” security framework based on OpenSSL 1.0
- Performance
  - Class library hot-spots
  - Incremental garbage collection
- TCP/IP V6

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# How Do I Get VA Smalltalk?

- Download evaluation copy
- Buy development licenses



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# Development Builds

- An experiment in
  - Early delivery
  - Continuous integration
  - **1** for V8.0.1, **2** for V8.0.2
- Availability
  - Announced on VA Smalltalk Forum and comp.lang.smalltalk
  - Download from VA Smalltalk website
  - Irregular schedule
  - Documentation updated to match build
  - Windows and Linux only
- Fix-list for build on VA Smalltalk forum

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# Open Source Project Committer

- Instantiations will donate a perpetual VA Smalltalk license
  - to committers
  - working on non-commercial open source project
  - Hint: release something to VAStGoodies.com
- **No charge**
- Details: [Instantiations' Donations to Open Source Projects](#) page

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  - Teaching staff
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- **No charge**
- Details: [Purchasing Smalltalk Products](#) page