



instantiations

VA Smalltalk Update

26th ESUG Conference

Cagliari, Italy – September 12, 2018

Seth Berman

President & CEO

Instantiations, Inc.

Agenda

- › Company Update
- › Early Customer Access Program
- › Current Release
- › Next Release
- › How to Get VA Smalltalk
- › Q & A

Company Update

Organization Change & Staff Investment



Seth Berman appointed to
President & CEO



Mariano Martinez Peck
joined the team

Customer Expansion & Software Advancements

- › Current customers are upgrading
- › New customers are being added
- › VA Smalltalk 64-bit!

Early Customer Access Program

- › Zero-Install version of VA Smalltalk
 - › Self-contained, no changes to the system required
 - › Built using the latest internal development builds
- › Download and install fixpacks
- › Access to incubating projects
 - › VA Smalltalk on Raspberry PI
- › All customers are automatically enrolled
instantiations.com/ecap

Current Release

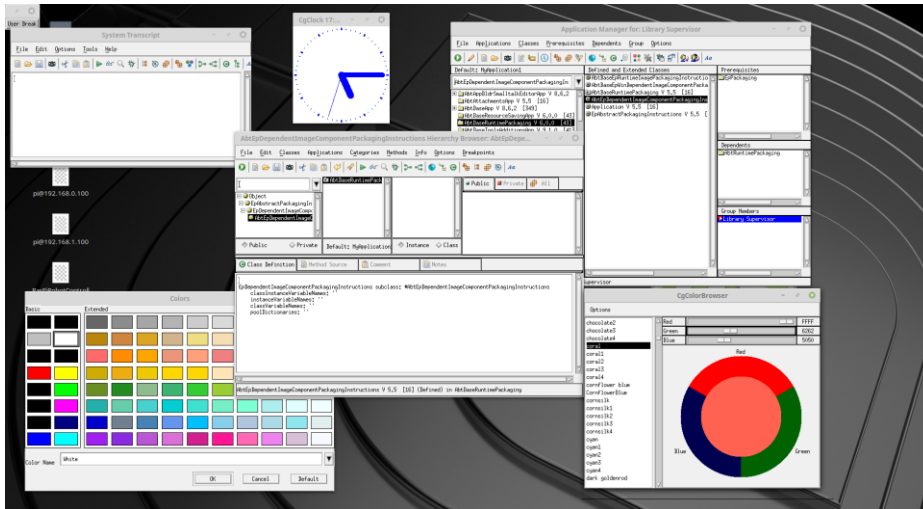
V9.1 available for Windows and Linux

New Platform

- › Linux 64-bit now available!
 - › New virtual machines
 - › Updated Smalltalk images

Unix UI Revisited

- › Native widgets updated to latest Motif/X11
 - › Improved user-experience
 - › 64-bit compatible



Unix UI Revisited

- › Development Environment Enhancements to:
 - › Theme
 - › Keyboard Shortcuts
 - › Scrolling
 - › Code Completion
 - › File Dialogs
 - › Menu Popups
 - › Async Queue Overflow Avoidance
 - › And more...

Security

- › OpenSSL 1.1.1 Compatible
 - › TLS 1.3
 - › SHA3
- › VA Smalltalk Binaries
 - › Address Space Layout Randomization (ASLR)
 - › Data Execution Prevention (DEP)

Internationalization

- › Unified Codepage Conversion Policies
 - › Windows API vs Iconv
- › User can control conversion policy
 - › System-Wide or Single invocation
- › Default policy: Transliterate / Skip UTF-8 BOM
- › Handles embedded nulls
- › Grease UTF-8 Codec now uses converter

Base Libraries

- › Regular Expressions
 - › *Special Thanks: Wouter van Zuilen*
- › JSON (NeoJSON)
 - › *Special Thanks: Sven Van Caekenberghe*
- › UUID (version 3 - 5)
- › Enhanced String>>match:
- › Enhanced High-Resolution Timers
- › Streams Auto-detect Line Endings

Compression

- › High-Performance Codec Streams
- › DEFLATE/GZip/LZ4 Compression Streams
- › All algorithms offer optimized non-streaming variants
- › ZStandard in VastGoodies

instantiations.com/resources/goodies.html

Compression

- › Zip Archive Stream
 - › In-Memory (no filesystem support needed)
 - › Zip64 Support
 - › Read/Write Zip Archives to memory/files/sockets

Communications

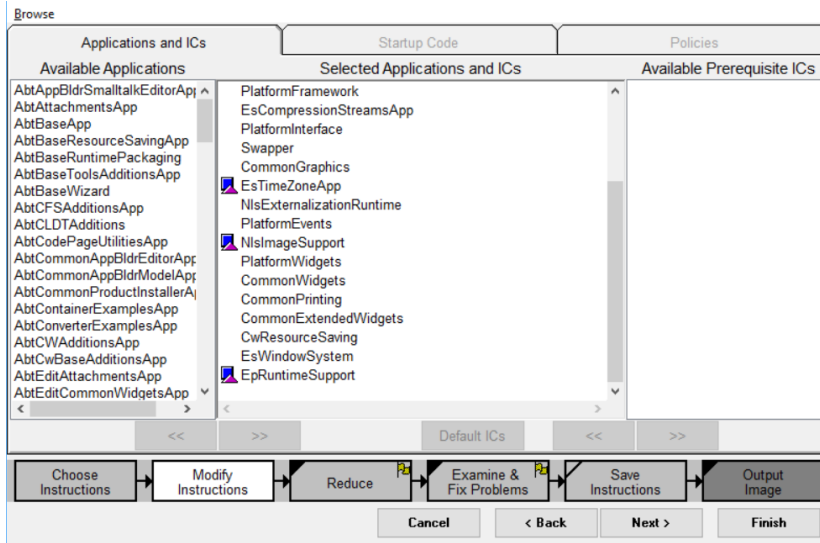
- › New LDAP Binding Framework
- › Unified OpenLDAP and Windows LDAP API

Communications

- › HTTP Client Enhancements
- › Improved Proxy Support

Deployment

- › Linux 64-bit Packaging Support
- › 64-bit Cross-Development (XD)



Installation

- › Linux 64-bit Installers
- › Linux Package-Manager Integration
 - › Auto-Install of Dependencies

Development Tooling

New Editor Themes

Dark

```
1 scSampleMethod: arg1 with: arg2
2 "This is a multi-line comment
3   This is a multi-line comment"
4
5
6 | temp1 temp3 |
7 <primitive: ThisIsAPrimitive>
8 temp1 := Array with: arg1 with: instVar with: #aSymbol.
9 "Another comment"
10 self activeBreakpoint.
11 self inactiveBreakpoint.
12 self mixed: [self activeBreakpoint] with: [self inactiveBreakpoint].
13 self disabledBreakpoint.
14 1 to: temp1 size do: [:blockArg | | temp2 unusedTemp1 |
15   (temp3 := temp2 := temp1 at: blockArg)
16   setSensitive: true;
17   setLabel: CwConstants::XmOK;
18   backgroundColor: ( (Smalltalk at: #Color) blue: 65535 // 2 + 1);
19   smartHighlight;
20   smartHighlight;
21   addAll: #(A #B 3);
22   propertyAt: ClassVar put: #[1 2 3 4].
23   self callCallbacks: temp2 callData: classInstVar].
24 self
25   propertyAt: $A;
26   propertyAt: 'aString' put: nil.
27 temp1 recomputeSize.
28 ^super sampleMethod: arg1 with: temp1))))))]]
```

Solarized

```
1 scSampleMethod: arg1 with: arg2
2 "This is a multi-line comment
3   This is a multi-line comment"
4
5
6 | temp1 temp3 |
7 <primitive: ThisIsAPrimitive>
8 temp1 := Array with: arg1 with: instVar with: #aSymbol.
9 "Another comment"
10 self activeBreakpoint.
11 self inactiveBreakpoint.
12 self mixed: [self activeBreakpoint] with: [self inactiveBreakpoint].
13 self disabledBreakpoint.
14 1 to: temp1 size do: [:blockArg | | temp2 unusedTemp1 |
15   (temp3 := temp2 := temp1 at: blockArg)
16   setSensitive: true;
17   setLabel: CwConstants::XmOK;
18   backgroundColor: ( (Smalltalk at: #Color) blue: 65535 // 2 + 1);
19   smartHighlight;
20   smartHighlight;
21   addAll: #(A #B 3);
22   propertyAt: ClassVar put: #[1 2 3 4].
23   self callCallbacks: temp2 callData: classInstVar].
24 self
25   propertyAt: $A;
26   propertyAt: 'aString' put: nil.
27 temp1 recomputeSize.
28 ^super sampleMethod: arg1 with: temp1))))))]]
```

Next Release

- › Unicode Support
- › Packager Simplification
- › WAN development solution
- › Windows High-DPI Support
- › Server Smalltalk (SST) Enhancements
- › Unified Native Process API
- › Enhanced Filesystem API
- › New AIX and Solaris Virtual Machines

How to Get VA Smalltalk

Download evaluation copy

instantiations.com/products/vasmalltalk/download.html

Buy development licenses

instantiations.com/products/purchase.html

Be a committer on an Open Source project

instantiations.com/company/open-source.html

Work for an educational institution

instantiations.com/products/academic-licenseprogram.html

Contact

General Information

info@instantiations.com

Sales

sales@instantiations.com

Support

support@instantiations.com

Me

sberman@instantiations.com

Thank you for your Attention

Questions?