



# VAST Platform 2021

## 10.0.2

## Design it. Build it. Deploy it.

Create object-oriented software that's stable, easy to maintain, and deploys smoothly — all from the same comprehensive development environment.

The VAST Platform is a comprehensive integrated development environment (IDE) that works with a Smalltalk language runtime. Because it's Smalltalk-based, the IDE and the runtime are essentially a development 'image' that's executed by a virtual machine (VM).

First released as IBM® VisualAge® Smalltalk in 1993, the VAST Platform has built upon this original foundation starting in 2005 and has continued to grow in power and flexibility through ongoing research and development.

VAST has evolved beyond what the original VisualAge developers could have foreseen, and allows developers to quickly iterate new ideas with proven Smalltalk-based live programming methodologies and deploy to a variety of desktop, cloud, Internet of Things (IoT), and on-premise server hardware.



## What's New in VAST 2021



### Platform

- Migration to LLVM 10 compiler toolchain
- Asynchronous call-ins
- SELinux Support (As of 10.0.1)



### Core Libraries

- Cross-platform OsProcess framework
- Futures/promises asynchronous framework
- High-resolution timer
- Secure RNG stream
- Swapper performance increase
- Enhanced walkback generator



### Communications

- IBM MQ Series SSL/TLS support and 64-bit updates
- Improved SMTP handling
- Socket fixes and enhancements



### Version Control

- Git/Tonel tooling



### Development Tools

- Brace array syntax
- Method type annotations



### Look and Feel

- Hi-DPI fixes and enhancements
- Product branding and other visual updates



### Documentation

- Lightweight/mobile-friendly documentation

# VA Top Features

## Type Analysis & Enhanced Code Completion

Real-time and lag free. The VAST IDE's tools speed up your workflow and reduce the likelihood of bugs making it to production.

## Multi-CPU Capable with FFI & OsProcess

Whether using native threads, or OS processes, take advantage of multiple processors by using VAST's multi-threaded foreign function interface (FFI) or our OsProcess framework.

## Asynchronous Programming

Creating complex asynchronous behaviors is now easier with VAST's best-in-class futures/promises framework inspired by similar functionality from the Dart programming language.



## Platform

- LLVM Compiler
- IBM® VisualAge® Smalltalk compatible
- Native interface support
- Asynchronous calls



## Core Libraries

- Integrated compression (Zip, Zip64, Brotli, Lz4, Zstd, Gzip)
- Built-in cryptography
- Object-oriented systems programming (OsProcess)
- Logging framework



## Communications

- Database Support (Oracle, DB2, PostgreSQL, SQLite, ODBC, RDBMS, ORM - GLORP)
- Server Smalltalk (SST)
- Integrated Web Technology (Seaside, REST, HTTPS, jQuery, AJAX)
- Web Services Tools
- Network Protocol Support (HTTP, IMAP, SMTP, LDAP, IBM MQ series)
- External Interface Support (JSON, XML, CSV, COM (OLE, ActiveX), STON)



## Version Control

- ENVY Version Control
- Git Friendly



## Development Tools

- Cross Platform Development
- IDE Tools (Best-in-class debuggers, code browsers, inspectors, a performance monitor, code reporting tools, code coverage analysis for tests, and linters.)
- WYSIWYG GUI Builders
- Advanced Code Editor (supporting code highlighting in 25+ languages with fully customizable color theming and linting.)
- Packager
- Dependency Analysis Tools



## Look and Feel

- Hi DPI (for Windows) and Native Widgets
- Emulated Widgets

## Services

- There's no outsourced support at Instantiations. You speak directly to the engineers developing and maintaining VAST.
- Custom development, consulting, Internet of Things (IoT), and training services are available.

## VAST Add-Ons

- WindowBuilder Pro™
- WidgetKit/Business Graphics™ (32-bit only)
- WidgetKit/Professional™ (32-bit only)
- WindowBuilder Pro™ Translation Toolkit

## VAST 10.0.2 Supported Configurations

### Operating System

Microsoft® Windows® 10, 8.1, 8, 7, Server 2019, Server 2016, Server 2012 R2, Server 2008 R2

Red Hat® Enterprise 8, OpenSUSE 10-15.2, Ubuntu® 7-20, Fedora® Core 14-33

### Hardware Platform

Intel® (except Itanium®), and AMD PCs

## VAST 8.6.3 Also Supports

Sun® Solaris® 8, 9, and 10

SPARC® workstation or server

AIX® 5L v5.3 and AIX v6.1

RS/6000, POWERStation or POWERServer



**Instantiations, Inc.**  
4917 Waters Edge Drive, Suite 268  
Raleigh, NC 27606, United States

[instantiations.com](http://instantiations.com)

[sales@instantiations.com](mailto:sales@instantiations.com)

International: +1 503 263 0058

North America, Toll Free: 855 476 2558