Cincom® VisualWorks®

The Premiere Object-Oriented Environment

Cincom Smalltalk™

The Cincom Smalltalk product suite consists of the Cincom VisualWorks and Cincom® ObjectStudio® development platforms. VisualWorks is an enterprise-class, cross-platform, application development and delivery platform that's used by world-class companies in areas such as semiconductor manufacturing, shipping, financial risk management, insurance, banking, government, education and healthcare.

VisualWorks

VisualWorks includes components for any type of work that your team might contemplate—Client, Server, Client-Server, Distributed, Grid or Web—and allows you to build them with superior development tools.

VisualWorks can work or integrate with most standard technologies such as internet protocols (HTTP, HTTPS, FTP, POP3, etc.), secure protocols (TLS, SSL, HTTPS), most relational databases (RDBs), sockets, COM, Web services (WS*), Web standards (HTML5, JavaScript, Ajax, JSON, WebSockets), MQSeries and more. This allows VisualWorks to seamlessly plug into an enterprise infrastructure—an important feature for IS shops that need to integrate multiple applications from multiple sources.

— WHAT'S NEW —

Text2

The underlying text handling of the entire foundation has been re-written from the ground up and integrated in order to handle modern and future needs. A few areas of new capability in text handling include:

- Annotations
- Adornments
- Alignments
- Actions
- Cursors
- Fonts
- Bidirectional content
- Embedded images
- Unicode
- Sparklines
- Lists

Advanced Source Code Editor

Including:
- Full theming system
  (code highlighting and much more)
  – 27 themes provided
  – User customizable
- Code critic feedback
- DSL support
- Annotated feedback
- Fully leverages Text2

Advanced Auto-Complete

Including:
- Auto-complete API for customization

Platform High Fidelity Look and Feel (UI Skinning)

- Native rendering combined with customizable widgets
- Native rendering on Windows® and OSX
- Allows custom looks to be created by developer

Cincom Smalltalk is a pure, object-oriented application development suite for software developers who need to build applications quickly and efficiently.

Cincom VisualWorks Environment

The VisualWorks suite is the premiere Smalltalk environment and has an unrivaled live development environment that is highly effective and productive.

VisualWorks is instantly portable across a wide range of platforms including:
- Windows (7, 8, 10)
- Windows Server (2008, 2012)
- Mac OSX (10.8.x – 10.11.x)
- Linux (x86/SPARC/PPC)
- AIX (6, 7)
- Solaris (SPARC)

VisualWorks has 64-bit engines and images available on:
- Windows (7, 8, 10) 64-bit
- Windows Server (2008, 2012R2) 64-bit
- Linux (x86-64)
- Solaris (SPARC)

Highlights

- New! Revamped code editor
- New! Editor theme system
- New! Greatly improved text
- New! UI Skinning
- MatriX multi-core support
- Internationalization
- SiouX Web server
- AppeX Web development
- Seaside Web framework
- Web services
- COM ActiveX
- Security protocols
- Distributed protocols
- OpenTalk
- Xtreams next generation streaming

Web Services

VisualWorks has full support for SOAP and WSDL. This allows for full interoperability with .NET-based services and J2EE Web services. Wizards make it easy to either expose existing interfaces as a Web service or to create client Smalltalk interfaces to existing services.

64-Bit

VisualWorks provides 64-bit VMs on most of our platforms including Windows 64-bit. 64-bit solutions have a much larger addressable memory, allowing a much larger object space, very large collections and other optimizations for 64-bit.

Source Code Management

VisualWorks offers a sophisticated source management system optimized for Smalltalk and built on industry-standard relational databases. This optimizes managing development for both the individual and the team.

MatriX Multi-Core

VisualWorks lets you leverage multi-core processors with the MatriX framework. Using this can dramatically increase throughput for some applications.

Web Solutions

Cincom supports several choices for developing simple to sophisticated Web-based solutions using our SiouX and AppeX frameworks to supporting industry solutions like Seaside and Amber.

SiouX

SiouX is our unified, flexible, scalable, high-performance HTTP server. It can support many Web solutions with one capable server, even simultaneously.

AppeX

AppeX is our lightweight, flexible, next-generation Web app framework supporting:

- HTML5
- JavaScript
- Ajax
- JSON
- XHR
- WebSockets

Seaside

The Seaside Web framework is a highly regarded mature and capable solution for Web-based solutions.

VisualWorks Project Manager

The Project Manager allows easy location and launching of projects as well as new project creation.

Refactoring Browser

The refactoring browser has been getting incremental visual and functional improvements every cycle, and is often where new improvements are first integrated and proven.

GUI Tools

The Cairo graphics package is an option with available libraries, allowing powerful graphic techniques for attractive applications. The user interface operates with multiple processes instead of a single "distinguished" process, enabling more responsive applications. Shortcut keys are industry standard where applicable.

Internationalization

VisualWorks includes an extensive locale system based upon CLDR (Unicode Consortium's Common Locale Data Repository) locales.

VisualWorks now supports bi-directional content for sophisticated internationalization solutions.

Database

VisualWorks supports connectivity to all major relational databases including Oracle, Sybase, SQL Server, PostgreSQL, MySQL, DB/2 and SQLite. VisualWorks also connects easily with OODBMS systems like GemTalk's GemStone/S solution.

Network Connectivity

VisualWorks has an extensive library of internet connectivity tools. We support a variety of protocols including FTP, HTTP, SMTP, IMAP and POP3, supported by a robust MIME framework.

Web Applications

VisualWorks has the new SiouX Web server with goals of performance and scalability, and the AppeX Web framework to build and maintain state-of-the-art Web applications for browsers and mobile devices.

Security/TLS/SSL/HTTPS

VisualWorks includes an extensive security library including TLS/SSL/HTTPS and mutual authentication.

Community

VisualWorks has an active community that shares solutions. See the public repository and contributed page for available solutions. See www.cincomsmalltalk.com/main/community/.

Cryptography

An extensive security library includes implementation of a number of cryptographic algorithms (MD5, SHA, DES, AES, RSA, DSA, DH, etc.) as well as higher-level mechanisms like password-based cryptography (PKCS#5), standard secure private key storage (PKCS#8) or public key certificates (X.509). Many of these standards are supported by a flexible ASN.1 marshaling framework. A complete implementation of SSL protocol is used to secure other protocols like HTTP (HTTPS) or various mail protocols.

The Added Value of ObjectStudio

With ObjectStudio now based on the Cincom Smalltalk Foundation, this powerful combination allows users to leverage the range of VisualWorks capabilities and the state-of-the-art ObjectStudio features. VisualWorks users now have access to ObjectStudio tools such as the modeling tool for architecting applications and the mapping tool for advanced object-relational mapping. Additionally, VisualWorks users can use ObjectStudio for its native Windows GUI.

Grab it. Try it. Fall in love with it.

You simply can't go wrong by choosing Cincom Smalltalk. To try it for yourself, simply visit try.cincomsmalltalk.com.