Cincom Smalltalk™
The benchmark tools for productivity

Cincom® ObjectStudio®
The Windows'-centric, Business Analyst's Thinking Tool

Cincom® VisualWorks®
The Cross-Platform, Multilingual, Do-Anything Tool

We are proud to introduce to you, Cincom Smalltalk Version 9.0. Version 9.0 continues our path to move the products closer together, to better utilize extraordinary skills we have within our Cincom Smalltalk engineering team and to expand the Cincom Smalltalk foundation with the intent to offer the best of both products to our customers. This would allow, for example, Cincom® VisualWorks® users to use the native windows widgets and the modeling and mapping tools of Cincom® ObjectStudio® and would give ObjectStudio users the potential to move applications cross-platform. Version 9.0 continues to improve and enhance infrastructure, such as in GUI and TLS/Security areas, to allow continued future improvements while keeping API capability.

WHAT'S NEW IN THE FOUNDATION!

New TLS Plugin
- Provides advanced encryption suite support
- OpenSSL 1.1 and 1.1.1 support

HTTP/2
- Support for the next generation of HTTP protocol: HTTP/2
- Create an HTTP/2 server

New Help
- DITA-XML standards-based help system for the IDE
- Can be used to create a help system for user-developed applications

Advanced Source Code Editor
- Advanced auto-complete
- Theming support
- Code critic feedback
- Annotated warnings
- DSL support
- Contextual coloring

PostgreSQL3 Driver Updates

Highlights
- New! Advanced Encryption Suite support
- New! AppeX ES6 JavaScript support
- New! HTTP/2 support
- New! Help system
- New! Source Code Editor
- New! Editor theme system
- New! Auto-complete
- MatriX multi-core support
- SiouX Web server
- AppeX Web development
- COM ActiveX
- Security protocols
- Distributed protocols

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.

Database

Cincom Smalltalk 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.

Network Connectivity

Cincom Smalltalk has an extensive library of internet connectivity tools. We support a variety of protocols including FTP, HTTP 1.1/2, SMTP, IMAP and POP3, supported by a robust MIME framework. All protocols can run over a secure connection.

MatriX Multi-Core

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

Store Source Code Management

Cincom Smalltalk 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. Source files, parcels and the sophisticated Store RDBMS-based system can handle any size project.

Web Applications and Solutions

Users have access to 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.

Cincom supports several choices for developing simple to sophisticated Web-based solutions using our SiouX and AppeX solutions to support 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
- JSON
- JavaScript
- XHR
- Ajax
- WebSockets

Seaside

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

Web Services

Web Services enable applications to communicate across networks or the internet in a platform-independent way. Cincom Smalltalk 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.

Opentalk

Opentalk is the distribution framework that allows rapid implementation of distributed protocols such as Smalltalk-to-Smalltalk. Opentalk serves as the basis of Web Services and Web Toolkit implementations.

Security*

The Cincom Smalltalk Security Library offers users a wide range of cryptography and related security components implemented within the environment. This enables developers to quickly and easily incorporate a variety of security capabilities into their applications.

Components include secret key encryption, public key encryption, hash algorithms, digital signatures, password-based cryptography and support for TLS protocol and HTTPS.

Security/TLS/HTTPS*

Cincom Smalltalk includes an extensive security library including TLS/ HTTPS and mutual authentication.

*NOTE: These features are only available to Cincom Smalltalk customers.

Cincom ObjectStudio

For developers of scalable internet, intranet and client/server applications, ObjectStudio programming tools provide increased productivity to help you meet the rapid time-to-market requirements of today's market.

For customers needing to build applications that cleanly fold into a Microsoft®-centric infrastructure, ObjectStudio is an excellent choice. It's known as the "business person's thinking tool." Based on the powerful Smalltalk language, ObjectStudio provides a robust development environment, which is necessary to create innovative applications that capture complex business models and processes.

Key ObjectStudio Features!

Next Generation User Interface

- Latest features of Windows native widgets
- No primitives
- All Smalltalk using FFI (DLLCC) -> Windows API
- Support for jpg, png, gif and tif
- Access to GDI+ features including gradient brushes and alpha blending

Next Generation Launcher

- Uses Next Generation User Interface
- Central, convenient access to frequently used items like favorite packages and bundles, loaded controllers, open windows and breakpoints

Powerful Object Modeling

The ObjectStudio modeling tool integrates the design of complex business objects generation, presenting a high-level, business-like interface that delivers user-friendly tools for working with objects. The object modeling tool supports case analysis, event diagramming, CRC cards and notations, including industry-standard UML.

Automated Code Generation

Using ObjectStudio, an application moves from the design stage to completion much faster than with traditional tools. The ObjectStudio modeling tool can modify and maintain applications more quickly and easily because class hierarchies and object relationships can be arranged graphically, without coding. Simply make changes to the model and then let the modeling tool generate the code automatically.

Round-Trip Engineering

Even after an application is rolled out, your job is not done. Ever-changing requirements mean ever-changing code. With ObjectStudio, any changes to the business object model are automatically reflected in the code and vice versa. This means that you always have access to a current business model of the application. Using a current visual and easy-to-understand model, your business analysts, training and support team and IT staff can better understand your complex enterprise applications and be productive in less time.

Robust Object Mapping

The ObjectStudio mapping tool provides visual, drag-and-drop tools for linking objects to databases. The Object Relational Mapper uses the resulting object mapping definitions to make application connections to your database, without requiring any SQL code to be written into the application. This allows the developer to concentrate on objects without worrying about the details of the database implementation. This is done automatically.

Environments:

Microsoft Windows® 10 and Windows Server 2016/2019

Supported standards:

- ActiveX and OCX
- TCP/IP
- APPC
- OLE
- DLL
- COM/DCOM
- EHLLAPI
- DDE

Supported databases:

- ODBC
- Sybase
- Oracle
- DB2

Highlights:

- Windows native user interface
- New! Next generation user interface
- New! Next generation launcher
- Powerful object modeling
- Automated code generation
- Round-trip engineering
- Robust object mapping
- Strong database and legacy applications integration
- SpyTool

Cincom VisualWorks

VisualWorks is an enterprise-class, multilingual, 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.

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

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, HTTP/2, FTP, POP3, etc.), secure protocols (TLS, 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.

Key VisualWorks Features

High-Fidelity Skins (UI Skinning)
- Native rendering combined with customizable widgets
- Native rendering on Windows and MacOS
- Allows custom looks to be created by developer

Cross-Platform
- Windows, Mac, Linux, Unix
- See the available platforms listed

Enhanced Text
A few areas of new capability in text handling include:
- Annotations
- Adornments
- Sparklines
- Lists

64-Bit

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

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.

VisualWorks Project Manager

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

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.

Community

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

VisualWorks is instantly portable across a wide range of platforms 32 & 64 bit including:
- Windows (10)
- Windows Server® (2016/2019)
- MacOS (10.13.x – 10.15.x)
- Linux (x86) (RHEL 6.0+)
- AIX 7.x

Highlights:
- Appex Ecmascript ES6 support
- UI Skinning on Windows/MacOS
- New text
- Internationalization
- Seaside Web framework
- Web services

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