

### Cincom Smalltalk™

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

### VisualWorks Environment

The VisualWorks suite is the premier Smalltalk platform for building instantly portable server, web-based and client/server applications. VisualWorks is portable across a wide range of platforms:

- Windows (XP/200x/Vista/7/8)
- Mac OSX
- Linux (x86/SPARC/PPC)
- AIX
- Solaris (SPARC/x86)

VisualWorks has 64-bit engines and images available on:

- Windows (Vista/7/8 64-bit)
- Linux (x86-64)
- Solaris (SPARC/x86-64)

### Highlights

- 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

# Cincom® VisualWorks® Environment

## Cincom Smalltalk

The Cincom Smalltalk product suite consists of the VisualWorks and Cincom® ObjectStudio® development platforms. VisualWorks is an enterprise-class application development and delivery platform 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 your team might contemplate—Client, Server, Client-Server, Distributed, Grid, Web Applications, WS\* (Web Services)—and allows you to build them with superior development tools. VisualWorks includes best-of-breed tools like the Refactoring Browser and the Professional Debugger Package, which are fully integrated with the product. VisualWorks is ready for integration with other leading applications and services with support for Web Services and common internet protocols (such as HTTP, HTTPS, FTP, POP3, etc.).

VisualWorks supports interoperability standards such as CORBA, COM, Dot-NET and MQSeries, allowing Smalltalk applications to seamlessly plug into an enterprise infrastructure—an important feature for IS shops that need to integrate multiple applications from multiple sources.

With CORBA support for J2EE, Web Services support for .NET and COM support for legacy applications, VisualWorks is also an excellent choice as an integration platform.

## Store Source Code Management

VisualWorks offers source code flexibility with many ways to manage your code and organize projects and systems. Source files, parcels and the sophisticated Store RDBMS-based system can handle projects of any size.

## 64-bit Platforms

VisualWorks offers several 64-bit environments, now including Windows 64-bit platforms, which have more addressable memory, allowing a much larger object space, very large collections and other optimizations.

## MatriX Multi-Core

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

## Seaside

The Seaside Web Framework is a leading-edge web framework for developing rich internet applications using standards and technology such as common internet protocols, AJAX, Comet and CSS. Many traditionally difficult problems in web programming like flow control, state management and handling the back button are simple and easy with Seaside.

## Web Services

Web Services offers a clean way to interoperate transparently with remote services, or to transparently make Smalltalk services available to others.

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.

## Product Tools

### 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 that allow 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.

## Database

VisualWorks supports connectivity via ODBC and native connections to Oracle, Sybase, SQL Server, PostgreSQL, MySQL, DB/2 and SQLite. There are a number of contributed database connects to other RDBMS systems. Of course, VisualWorks connects easily with OODBMS systems like GemStone, which allows for much more natural object persistence.

## 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 and SSL

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.

Unparalleled productivity, the best tools for supporting methodologies like extreme programming (XP) and worldwide support from Cincom. You simply can't go wrong by choosing Cincom Smalltalk. To try it for yourself, simply visit [try.cincomsmalltalk.com](http://try.cincomsmalltalk.com).

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