



Technical Overview

K2.net 2003

The K2.net 2003 solution is an enterprise human-to-human and human-to-system workflow platform built on the Microsoft® .NET Framework.

Solution Overview

The K2.net 2003 solution automates and manages an organization's human-to-human and human-to-system business processes, making it possible for information workers to focus on key business drivers, such as customer satisfaction and innovation, and spend less time on the micro-management of routine work tasks.



Well-defined business processes are at the core of an agile, innovative organization. A robust and flexible workflow environment in which to automate business processes provides companies with a strategic advantage so that they can outperform the competition and reduce costs. The K2.net 2003 solution empowers organizations to implement creative and collaborative ideas, and unlocks exceptional productivity levels from existing human and technology resources, resulting in a dramatic return on investment in a short period of time.

The K2.net 2003 solution includes five components:

- K2.net 2003 Studio—a powerful drag-and-drop workflow design environment
- K2.net 2003 Server—server software designed to handle large volumes of transactions for systems that require high availability and execute on the Microsoft Windows® platform
- K2.net 2003 Workspace—an environment for tracking and managing work
- K2.net 2003 Templates—user-friendly wizards for authoring workflow steps
- K2.net 2003 SmartForm Controls for ASP.NET—a set of Microsoft ASP.NET form and user interface controls for rapidly building workflow-enabled, Web-accessible forms.

Built on the Microsoft .NET Framework, the K2.net 2003 solution provides the underlying infrastructure to integrate and leverage an organization's IT investments, as well as optimize the creative spirit in an enterprise.

Technical Advantages

Built on the Microsoft .NET Framework, the Web-enabled technologies of the K2.net 2003 solution seamlessly integrate human and technology resources to provide workflow information to users via any device at any time. The K2.net automated process environment is scalable and extensible with the flexibility to interoperate across platforms and with disparate legacy systems.

- Integrates seamlessly .NET event code items and various user interfaces, such as Microsoft ASP.NET, Microsoft Windows Forms, Microsoft Office InfoPath™ 2003, and Microsoft Office System documents with a dynamic XML-based reporting framework to provide a comprehensive workflow and business process environment.
- Interoperates across platforms and with disparate legacy systems, connecting people, processes, and systems anytime from any appropriate device.

- Leverages existing IT investments by building on existing Microsoft software and infrastructure and legacy systems.
- Ensures—with its free-threading architecture and optimized load balancing—that workflow solutions built with K2.net 2003 components are scalable and extensible to meet increasing demands and changing market conditions.
- Executes on the Microsoft Windows server operating systems and is ideal for environments with high-transaction volume and high-availability demands.
- Automates the task of authoring common workflow steps without extensive programming and provides a set of ASP.NET form and user-interface controls for developers to rapidly build workflow-enabled forms to capture task information.
- Enables developers to create wizard-like reusable components to import best practice coded events, external users and roles, data from existing sources, and existing escalation rules.
- Easy to manage using a central control environment for distributed K2.net 2003 Servers via the corporate LAN, WAN, VPN or the Internet.
- Extracts business rules and workflow logic from your existing systems to create a workflow environment specific to your business.
- Uses the power and flexibility of the Microsoft .NET Framework, including flexible developer languages, interoperability, and scalability so that organizations can leverage existing technical skills without investing in proprietary technology.
- Delivers your solution on a Microsoft platform and according to your specific industry standards, drawing upon the technical skills, business expertise, and vertical market depth within SourceCode and its extensive partner network.

Solution Architecture

The K2.net 2003 solution consists of a number of components:

- K2.net 2003 Studio is a powerful drag and drop workflow design environment which links people to the business forms and documents they need to perform their work. It links people, applications, and information into seamless business processes, assisting information workers in making informed decisions.
- K2.net 2003 Server creates a reliable, secure and extensible platform where business processes can execute on the Microsoft Windows server operating systems. K2.net 2003 Server is designed to address the needs of large enterprises, where large volumes of transactions are executed daily and where high availability is critical. K2.net Server has been developed in C++ and C# programming languages, making extensive use of the Microsoft .NET Framework. The server component is a multi-threaded execution environment following an *n*-tier architecture. The K2.net 2003 Server consists of a number of Microsoft Windows Services, .NET-connected application program interfaces (API), Web Services Description Language (WSDL) Web Services, as well as support for enterprise management standards, such as Microsoft Windows Management Instrumentation (WMI).
- The K2.net 2003 Workspace combines a Microsoft ASP.NET-based user interface with a dynamic XML-based reporting framework to provide a comprehensive workflow task management experience to knowledge workers. This combination allows work and task items to be managed, sorted, prioritized and filtered. The customizable environment ensures that work items are delivered on time, every time, and provides users with a responsive view of their activities and the tasks in progress.

- The K2.net 2003 SmartForm controls allow ASP.NET developers and business process designers to create workflow forms rapidly to connect people and business applications to processes, without extensive programming. The K2.net 2003 SmartForm controls have been aimed at both business users and ASP.NET developers. This empowers businesses to create easily rich ASP.NET user interfaces, which can be extended to meet complex technical requirements.
- The K2.net 2003 solution takes advantage of a number of Microsoft .NET Framework benefits, including XML Web Services throughout, making it possible for workflow participants to gain easy access to workflow tasks through multiple platforms, including:
 - Microsoft ASP.NET using the K2.net 2003 SmartForm controls
 - Microsoft Office System smart documents, including Office InfoPath 2003 forms
 - Mobile devices, including Pocket PC and Tablet PC
 - Microsoft Exchange 2003
 - Microsoft MSN® Messenger
 - SMTP(Simple Mail Transfer Protocol) mail notifications and messages
 - Microsoft Office SharePoint™ Portal Server 2003

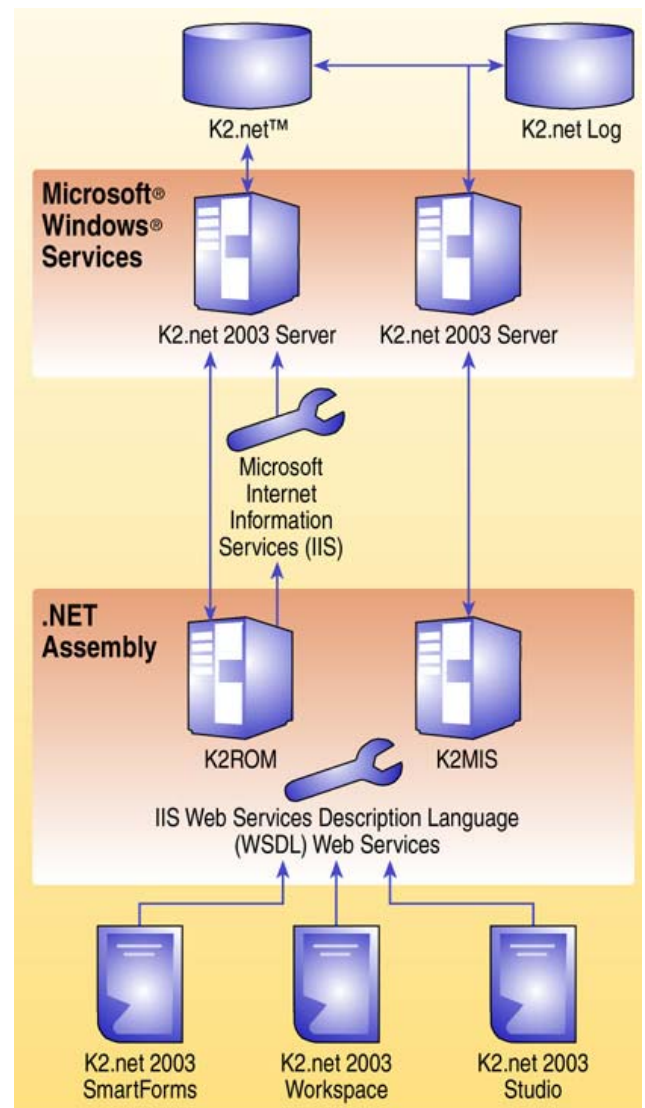
K2.net 2003 and the Microsoft Office System

The K2.net 2003 solution depends on Microsoft Office System applications, Microsoft Exchange Server 2003, and SharePoint Portal Server 2003 for its base business process and collaborative functionality. InfoPath 2003 is one of the primary forms technologies, enabling users to provide an efficient way to gather required business information as part of the workflow, and then repurpose that information across the enterprise.

Tasks are integrated with the SharePoint 2003 tasklist system, providing a single environment for resource management and work optimization. The K2.net 2003 solution also leverages the SharePoint 2003 workspace architecture for workflow-enabled document collaboration.

K2.net 2003 and InfoPath 2003

Microsoft Office InfoPath 2003, built on industry-standard Extensible Markup Language (XML), is



an information-gathering program for information workers in any industry. InfoPath 2003 makes it easy to design and implement rich, dynamic forms that directly connect people to line-of-business applications and business processes. Following an efficient and flexible information gathering process, workers can more effectively share, reuse, and repurpose data and information throughout their team or organization, improving collaboration and decision-making.

Featuring a flexible object model, a drag-and-drop design environment and rich editing controls, InfoPath 2003 enables developers to create solutions quickly and easily without having to perform any custom coding. It also provides a script editor and other tools for those who want to create more complex solutions. This flexibility enables developers to create, implement, and deploy solutions incorporating InfoPath quickly and easily. They can integrate the solutions with a variety of servers and Web services.

K2.net 2003 automates business processes by providing workflow automation for InfoPath 2003 forms. Based on the contents of the InfoPath 2003 form, business rules determine its behavior in the workflow— gathering the necessary data, saving it as native XML, and processing it as required. With K2.net 2003 and InfoPath 2003, businesses can implement complex forms-based workflow solutions in their organizations.

Extensibility

Extensibility is one of the key differentiators for the K2.net 2003 solution. Because of the flexible architecture, partners and customers can leverage the automation models and APIs of K2.net to customize and extend the product to fit their specific needs.

K2.net Studio, the graphical workflow design environment, has a built-in automation model, allowing partners to extend the drag-and-drop workflow development environment of K2.net.

The K2.net 2003 Templates are user-friendly wizards that automate the task of authoring common workflow steps. These wizards enable users to create workflow components without extensive programming. The K2.net 2003 Templates include wizards for Microsoft Exchange Server, Microsoft Office System, InfoPath 2003 documents, SharePoint Portal Server 2003, Microsoft Content Management Server, Microsoft Commerce Server and Microsoft BizTalk® Server.

K2.net has a full Solution Development Kit (SDK), which helps partners to create additional, custom K2.net 2003 Templates.

Solution Components

K2.net 2003 uses the following Microsoft tools and applications:

Microsoft Office System Programs:

- Microsoft Office Word 2003
- Microsoft Office Excel 2003
- Microsoft Office PowerPoint® 2003
- Microsoft Office Access 2003
- Microsoft Office Outlook® 2003
- Microsoft Office InfoPath 2003/ Microsoft Office OneNote™
- Microsoft Office Project 2003

Microsoft Office System Servers:

- Microsoft Office SharePoint Portal Server 2003
- Microsoft Exchange Server 2003

Other Microsoft Office System Technologies:

- Smart Tags
- Smart Documents
- Web parts and Office Web Components
- Collaboration features
- Workflow

Other Microsoft Products and Technologies:

- Microsoft BizTalk Server 2002 and BizTalk Server 2004—for enterprise application integration
- Microsoft Content Management Server 2002—for the ability to build, deploy, and maintain content-rich Web sites

About SourceCode

SourceCode Technology Holdings (SourceCode) develops and distributes K2.net products—leading-edge software and solutions that significantly increase business productivity by automating business processes and creating an integrated workflow environment. Built on the Microsoft .NET Framework, K2.net enables organizations to design, execute, manage, and control true enterprise-level, human-to-human and human-to-system workflow solutions that integrate seamlessly across multiple geographies and devices.

From its global offices in California, New York, London, Singapore, and South Africa, SourceCode has developed a reputation for technical innovation with Microsoft-based software and was selected by Microsoft as its Independent Software Vendor of the Year 2002 in Southern Africa. By delivering top value and world-class services to its customers and business partners, SourceCode has attracted some of the world's largest enterprise customers. K2.net products are available in Asia, Australasia, Europe, the United Kingdom, Africa, the Middle East and the United States.