Tools to build a powerful e-commerce site

IBM

IBM WebSphere Commerce Suite

Are you looking for a solution that provides reliable, secure, robust software for e-commerce Web sites while giving customers pleasant, safe purchasing experiences? IBM WebSphere™ Commerce Suite (formerly IBM Net.Commerce) is a comprehensive set of integrated software components that help you build, maintain and host stores and malls so you can sell your goods and services on the Web. It provides a total framework to conduct successful e-commerce that attracts customers and drives sales.

Highlights

Helps get e-commerce sites up and running quickly through a store creation wizard and team-based Web development tools

Provides an advanced personalization framework, supporting relationship marketing to help improve your site's profitability

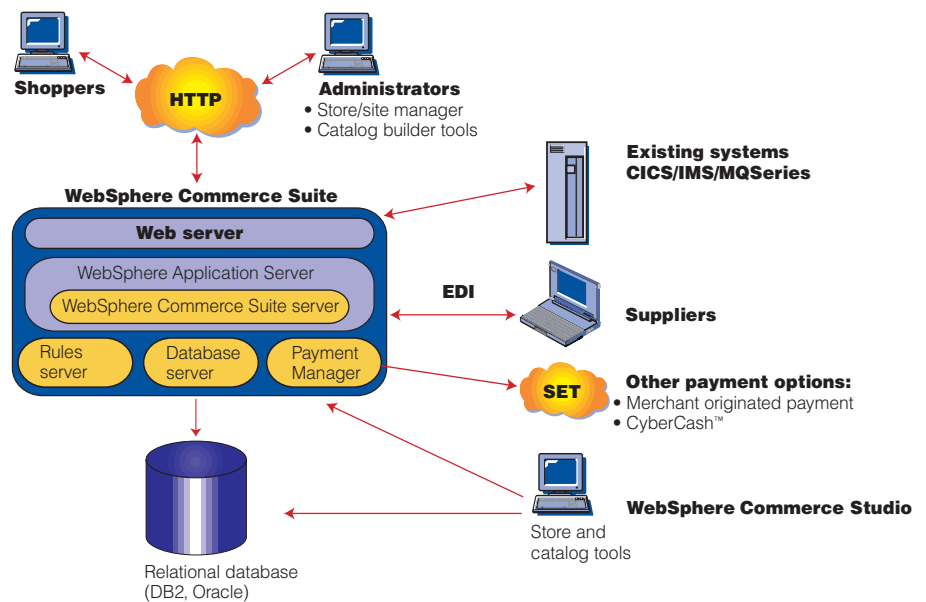**Increases productivity and data integrity with content management tools used for store and catalog data**

Incorporates leading payment methods for processing Internet payments securely

Provides a rich set of catalog tools to help you create and maintain information-rich electronic catalogs

Protects your investments by integrating with existing, critical back-end business systems and by using popular Internet standards, such as Java technology, JSP and XML

Adds excitement to your site with HotMedia multimedia technology and auctions

IBM WebSphere Commerce Suite provides a complete solution for your e-commerce needs.

e-business

Integrate Web sites with business-critical systems

Establish online stores with high-security, sophisticated catalogs
WebSphere Commerce Suite includes tools to create and manage e-commerce Web sites and complex catalog data; it also includes server software to host e-commerce sites and robust payment software to handle secure Internet payments.

WebSphere Commerce Suite is packaged with leading software, including: IBM DB2® Universal Database™, IBM WebSphere Application Server, IBM HTTP Server, IBM WebSphere Payment Manager and Netscape Communicator for Windows®(must be obtained separately for IBM AS/400®).

The open architecture of WebSphere Commerce Suite gives you optimal flexibility, allowing you to modify many of the base functions to suit your specific requirements. You can even plug in an alternate Web server, like Netscape Enterprise Server 3.63, or an alternate database, such as Oracle.

Pick the product that's right for you today
IBM WebSphere Commerce Suite, Start Edition for Windows NT® is designed for entry-level Web sites. Using WebSphere Commerce Suite, Start Edition you can create compelling e-commerce sites. Visitors to these sites can place items in shopping carts, set preferences, navigate to personal catalogs, check out, select payment and shipment methods, and pay by credit card.

IBM WebSphere Commerce Suite, Pro Edition—available for IBM AIX®, AS/400, IBM S/390®, Microsoft® Windows NT and Sun Solaris™ operating environments—is designed for businesses that require a robust, scalable e-commerce solution. With WebSphere Commerce Suite, Pro Edition, you get all the features of WebSphere Commerce Suite, Start Edition, as well as advanced tools to create and manage information-rich catalogs, personalize shopping trips for your customers, create and manage auctions and integrate with your existing systems.

The wide platform availability of this flexible solution makes it especially versatile for use by businesses of all types and sizes.

WebSphere Commerce Studio: powerful Web development tools
A companion product—IBM WebSphere Commerce Studio, Developer Edition—is a complete development environment that allows you to quickly create stores using a store creator wizard and maintain them using IBM WebSphere Studio. Using JavaServer Pages™ (JSP™), you can quickly create dynamic Web pages to display your catalog data. When you are finished, simply publish the store to the WebSphere Commerce Suite staging/production server to get your store up and running.

For enhanced functionality, IBM WebSphere Commerce Studio, Professional Developer Edition provides IBM WebSphere Catalog Architect to manage your catalog data and technology from Blaze Software to develop and manage business rules.

Database gives full transaction management capability
Included in WebSphere Commerce Suite is DB2 Universal Database relational database software, the power behind the world's most demanding e-business applications. It contains all the information used by the WebSphere Commerce Suite system, from basic information required to run the server to detailed information pertaining to individual shoppers, product items and prices. The database also includes pointers to images, macros, overridable functions and HTML files. WebSphere Commerce Suite uses the Open Database Connectivity (ODBC) and Java Database Connectivity (JDBC) standards to communicate with DB2® and Oracle databases.

WebSphere Commerce Suite includes DB2 Text Extender, which gives WebSphere Commerce Suite sites high-speed search capabilities.[1] Text Extender provides extensions to Structured Query Language (SQL) and retrieves unstructured text stored in DB2 databases—so buyers can search for synonyms, inexact matches and words in close proximity. Boolean and wildcard searches can also be used.

Server provides open architecture, rich functionality

The rich functionality of WebSphere Commerce Suite stems from its server. The server controls the flow of information to and from buyers, as well as the flow of information to merchants performing administrative functions. The WebSphere Commerce Suite server is built with an open architecture, so you can create customized stores with unique pages and shopping processes. The open architecture is enhanced by JSP, used to create catalog pages, and Extensible Markup Language (XML), used for mass imports.

Relationship marketing helps to increase sales

The key to increasing e-commerce sales is to leverage the same proven merch-andising techniques used in traditional commerce ventures. WebSphere Commerce Suite uses an advanced relationship marketing framework to provide unique customer shopping experiences and to create marketing campaigns that can increase site traffic and sales. With WebSphere Commerce Suite, you can create your own marketing campaigns or use packaged campaigns, such as:

- Merchandising: Highlights related items based on cross-sell, up-sell, accessory or substitution strategies
- Inventory reduction: Offers recommendations and discounts for excess inventory
- Legal policy: Tailors your sales based on country-specific legal policies
- Time-based: Provides promotions based on season, special events or holidays

Auctions add excitement to your site

Many e-commerce sites add the excitement of auctions to attract users, encourage repeat visits, capture customer data, increase sales and move excess inventory. WebSphere Commerce Suite provides an interface that makes setting up and running an auction easy. Several auction bidding techniques are available, including open-cry, sealed-bid and Dutch.

Performance and scalability

WebSphere Commerce Suite uses proven techniques to achieve peak performance and to drive some of the busiest sites in the world. Highly scalable, WebSphere Commerce Suite is often set up with a three-tier configuration using multiple WebSphere Commerce Suite servers and a single remote database. A dispatcher product, such as IBM Network Dispatcher, is used to distribute the workload to the WebSphere Commerce Suite servers. Advantages of using a three-tier configuration include:

- Workload distribution
- Backup availability
- Additional database protection, if the database is placed behind a firewall
- System expandability
- Database failure support

Payment Manager provides security for buyers and sellers

WebSphere Commerce Suite includes WebSphere Payment Manager, a leading Web payment solution for merchants and hosting service providers. Payment Manager serves as an enhanced electronic cash register on the Internet, securely managing Internet payments for merchants by:

- Processing customer transactions originated from browsers and wallets
- Managing payments for multiple concurrent merchants, languages and currencies
- Communicating with bank payment gateways using SSL and SET™ for credit and debit card transactions
- Dynamically notifying the commerce server and order fulfillment applications of payment approval
- Storing information in the database for future bank account reconciliation and exception management

Based on open, standards-based technology, WebSphere Payment Manager supports multiple payment protocols, including: SET Secure Electronic Transaction™ Protocol, an industry-standard transport and messaging protocol that uses encrypted certificates for more secure payment processing; and Merchant Initiated SET (MIS), a SET extension that can be used by merchants to accept credit card information from consumers using any method other than SET.

Powerful tools for evolving business needs

With Payment Manager, transactions are sent through your system privately, and then to the bank for approval. Using transaction tables in the WebSphere Commerce Suite database, Payment Manager maintains information about the status of transactions, authorization requests and capture requests — facilitating event notification and transaction reconciliation. And because it can confirm customer identities using SET, customer fraud is minimized. If you're a hosting service provider, Payment Manager offers unique market opportunities to extend payment capabilities within your existing business, as well as to retain and grow your merchant base.

Web site administrators can easily manage a store

Specialized administrator tools, accessed from a Web browser, make the day-to-day tasks of running a site or store easy. Using the administration interface, you can control security through user ID and password protection or X.509 certificate-based authentication; you can also monitor buyer behavior to help plan future enhancements to your site. Administration capability is available through two interfaces — site manager and store manager.

Site manager
Web site administrators can use the site manager — a collection of tools and easy-to-use online forms — to define and manage functions related to Internet malls. With these tools, you can assign headers, footers and home pages; define

categories for stores within a mall; open or close stores; and define which shopping processes should be the same for all stores. The site manager can also be used to assign macros or overridable functions to customize shopping processes.

Store manager
The store manager contains online forms used to set up interactive catalogs for stores. You can use the store manager to create and manage product categories; create buyer groups and assign buyers to groups; and customize pages so that displays are tailored to different groups.

Powerful catalog tools can boost productivity

IBM WebSphere Catalog Architect helps streamline import or creation — and management — of product information. Catalog Architect enables you to build rich product information with detailed attributes and relationship information for catalogs. Using product modeling and data validation features, you can prepare complete, correct, current and consistent product information. Catalog Architect is designed to understand the inherent relationships between different catalog elements, including:

- Products
- Categories
- Product sets or kits
- SKUs or cross-sell items

Its object-centered constraint model architecture provides the foundation for the catalog information knowledge base. By eliminating redundant product information and allowing a single point of entry for managing both database and file assets for all products and SKUs, Catalog Architect can help boost productivity during catalog design, construction and maintenance.

Both Catalog Architect and WebSphere Commerce Suite provide mass import utilities to quickly populate or update a database with product data. The mass import utility can input data tagged in an XML format, making it flexible and easy to use.

WebSphere Catalog Architect is packaged with WebSphere Commerce Studio, Professional Developer Edition. It can also be purchased separately for use with WebSphere Commerce Suite, Start or Pro Editions.

Product advisor enables intelligent catalog searches

WebSphere Commerce Suite product advisor — a feature of WebSphere Commerce Suite, Pro Edition — provides a set of tools you can use to create multiple ways for your buyers to browse and find the products they want. Product advisor includes shopping metaphors for product exploration, product comparison and sales assistance.

Connecting your site to your core business processes

To deliver a fully comprehensive e-commerce site, your Web site should integrate with your existing systems quickly — without causing you to develop a custom-programmed solution each time an application changes. Interfaces are provided with WebSphere Commerce Suite, Pro Edition to facilitate its integration with in-house-developed systems and middleware, including Electronic Data Interchange (EDI), IBM CICS®, IBM MQSeries®, IBM IMS® products and SAP Release 3.

To enhance back-end integration for WebSphere Commerce Suite, Start and Pro Editions, you can use IBM Commerce Integrator. Commerce Integrator is an open technology product that simplifies integration of Enterprise Resource Planning (ERP) and business-application systems with the WebSphere Commerce Suite server; it also extends business processes to customers and suppliers securely over the Web. Based on MQSeries secure messaging middleware, Commerce Integrator offers intelligent, rules-based message routing, transformation and formatting.

Systems management keeps your e-business running

WebSphere Commerce Suite is Tivoli Ready™, which means you can use Tivoli® solutions to manage your e-commerce systems. Tivoli's e-business management products enable you to speed deployment, ensure security, maintain availability and optimize performance of your business systems.

IBM SecureWay® Directory server can be used with WebSphere Commerce Suite for Lightweight Directory Access Protocol (LDAP) standards-based directory services. This server centrally updates information that can be used by multiple applications, networks and systems across a variety of platforms — significantly reducing the time-consuming process of updating individual application side files and directories.

Service provider solution supports quick time to market

Service providers who want to extend their existing services to the Internet can benefit from our service provider solution, enabling quick time to market. Our service provider solution builds on the scalable, multimerchant platform of WebSphere Commerce Suite to help establish and operate full-service, low-maintenance e-commerce sites, 24 hours a day, 7 days a week.

IBM WebSphere Commerce Community

As a member of the community, you'll have access to reference applications that can enhance your e-commerce implementation. This includes sample code, e-commerce business processes, links to news, analyst reports, interviews with IBM e-commerce gurus and discussion forums with fellow community members.

To help you take advantage of e-commerce opportunities, IBM has developed relationships with more than 100 software developers to create complementary solutions and services, including customer relationship management, merchandising, personalization, advertising, content management and fulfillment.

WebSphere software platform: building on a firm foundation

WebSphere Commerce Suite is part of the IBM WebSphere software platform — a comprehensive set of integrated, award-winning e-business solutions. No matter where you are in the e-business cycle, the WebSphere software platform delivers the flexibility you need to grow — at the speed the market demands. Building on this robust platform, you can connect diverse IT environments to maximize your current investments and leverage existing skills. Deliver your core business applications to the Web using industry standards like Java technology and XML. And create next-generation applications that differentiate you from the competition. Advance to a powerful platform for integrated e-business — the WebSphere software platform.

IBM WebSphere Commerce Suite at a glance

WebSphere Commerce Suite, Start Edition is available only for the Microsoft Windows NT platform. WebSphere Commerce Suite, Pro Edition is available for IBM AIX, Windows NT and Sun Solaris operating environments.

	Hardware requirements[2]	Software requirements	Packaged software
IBM AIX	• IBM RS/6000® processor capable of running AIX • A minimum of 256MB of RAM • 900MB of available disk space for program files • CD-ROM drive	• IBM AIX, Version 4.3.2 or Version 4.3.3 • For Oracle Open Database Connectivity (ODBC) support, Oracle 8.0.5 or 8.1.5 is required[3]	• IBM DB2 Universal Database, Version 6.1 and DB2 Text Extender • IBM Net.Data® 6.1 • IBM HTTP Server, Version 1.3.6.2 • IBM WebSphere Payment Manager, Version 2.1 • IBM SecureWay Directory, Version 3.1.1.2 • IBM WebSphere Application Server 3.02 with Java Development Kit™ (JDK™) 1.1.6 • Netscape Communicator 4.61 for Windows • Blaze Advisor Solutions Suite™ (Pro Edition only)
Windows NT	• A dedicated Pentium® 166MHz (or higher), IBM-compatible personal computer • A minimum of 256MB RAM • 500MB free disk space for program files • CD-ROM drive	• Microsoft Windows NT Server, Version 4.0 SP4 • For Oracle Open Database Connectivity (ODBC) support, Oracle 8.0.5 or 8.1.5 is required[3]	• IBM DB2 Universal Database, Version 6.1 and DB2 Text Extender • IBM Net.Data 6.1 • IBM HTTP Server, Version 1.3.6.2 • IBM WebSphere Payment Manager, Version 2.1 • IBM SecureWay Directory, Version 3.1.1.2 • IBM WebSphere Application Server 3.02 with JDK 1.1.7 • Netscape Communicator 4.61 for Windows • Blaze Advisor Solutions Suite (Pro Edition only)
Sun Solaris	• Sun SPARCstation capable of running Sun Solaris operating environment • 256MB RAM with 320MB swap space • 400MB free disk space for program files • CD-ROM drive	• Sun Solaris operating environment, Version 2.6 or 2.7 • For Oracle Open Database Connectivity (ODBC) support, Oracle 8.0.5 or 8.1.5 is required[3]	• IBM DB2 Universal Database, Version 6.1 and DB2 Text Extender • IBM Net.Data 6.1 • IBM HTTP Server, Version 1.3.6.2 • IBM WebSphere Payment Manager, Version 2.1 • IBM SecureWay Directory, Version 3.1.1.2 • IBM WebSphere Application Server 3.02 with JDK 1.1.7 • Netscape Communicator 4.61 for Windows • Blaze Advisor Solutions Suite (Pro Edition only)

IBM WebSphere Commerce Suite at a glance — continued

	Hardware requirements[2]	Software requirements	Packaged software
AS/400	• An AS/400* server with a CPW rating of 220 or more, running IBM OS/400, Version 4, Release 4 with: – CD-ROM drive – Minimum of 512MB of RAM – 175MB of available disk space for program files, plus 30MB for each additional language	• IBM OS/400, Version 4, Release 4, or higher, which includes: – DB2 for AS/400, Version 4 Release 4 – IBM HTTP Server for AS/400 (5769DG1) – Net.Data for AS/400 – Digital Certificate Manager (5769SS1 Option 34) – QShell Interpreter (5769SS1 Option 30) – Java Development Kit 1.1.7 (JDK) (5769 JV1) – AS/400 Toolbox for Java – TCP/IP Connectivity Utilities for AS/400, Version 4 Release 4 (5769-TC1) – Crypto Access Provider for AS/400. One of the following is required and can be acquired at no additional charge, but is not included with OS/400: 5769AC1 [40-bit], 5769AC2 [56-bit] or 5769AC3 [128-bit]) • Other requirements: Netscape Communicator 4.61 for Windows	• IBM WebSphere Application Server, Version 3.02 • IBM WebSphere Payment Manager, Version 2.1 • Blaze Advisor Solutions Suite (Pro Edition only)
S/390	• IBM S/390 system capable of running OS/390, Version 2.7, or higher, with the UNIX® system services environment enabled. • A minimum of 500MB of memory 664 cylinders of available disk space for program files	• IBM OS/390, Version 2.7, or higher, including the following components: – IBM HTTP Server, Version 5.1, or higher – JDK 1.1.8 – IBM WebSphere Application Server, Version 3.0.2 – IBM DB2 Universal Database, Version 6.1 – Netscape Communicator, Version 4.6.1 for Windows	• IBM Net.Data, Version 2.2 • IBM WebSphere Payment Manager, Version 2.1 • Blaze Advisor Solutions Suite (Pro Edition only)

*Note: For CPU, memory and DASD requirements based on workload estimates, use the IBM Workload Estimator for AS/400 provided at:
http://as400service.ibm.com/estimator/index.html

IBM WebSphere Commerce Studio, Developer Edition and Professional Developer Edition at a glance

IBM®

Hardware requirements	• A dedicated Pentium® 166MHz, or higher, IBM-compatible personal computer • A minimum of 64MB of RAM • 300MB of available disk space • CD-ROM drive

Software requirements	• Microsoft Windows NT server or workstation
	• Microsoft Internet Explorer 4, or higher
	• IBM WebSphere Commerce Suite
	  – WebSphere Commerce Suite, Start Edition, for use with Commerce Studio, Developer Edition
	  – WebSphere Commerce Suite, Pro Edition, for use with Commerce Studio, Professional Developer Edition

Packaged software	• IBM WebSphere Studio, Version 3.0
	  – Applet designer
	  – Perfect Photo
	  – IBM HotMedia™
	  – IBM VisualAge® for Java Pro, Version 3.0
	  – Page designer
	• Store creator
	• Blaze Advisor Solutions Suite (Professional Developer Edition only)
	• IBM WebSphere Catalog Architect (Professional Developer Edition only)

For more information

To learn more about IBM WebSphere Commerce Suite and related offerings and services, contact your IBM marketing representative, IBM Business Partner or visit:
ibm.com/software/websphere/commerce

To learn more about the WebSphere Commerce Community, visit:
ibm.com/software/websphere/commerce/community

G325-3952-01