

IBM Software Group

WebSphere Business Integration

Werner H. Raschhofer IBM WebSphere Business Development CEMA Summer 2004



@business on demand.

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A Challenging Business Environment

Insurance

Which Differs Industry By Industry

Continuous Change

Finance

Electronics

Healthcare

Wholesale

Unpredictable **Threats**

Government

Retail

Consumer Packaged Goods (CPG)

Automotive

Rigorous Competition

Banking

Unrelenting Financial Pressures





Changing Business Management Priorities

Automotive

Banking

CPG

Electronics

Finance

Government

Insurance

Retail

Wholesale

Market Challenges

Continuous Change

Rigorous Competition

Unrelenting Financial Pressures

Unpredictable Threats

From

Predictive

History as a guide Forecast-driven

Diffused

Siloed Limited partnering

Fixed

Inflexible structures Fixed assets

Vulnerable

Reactive Risk from unforeseen To



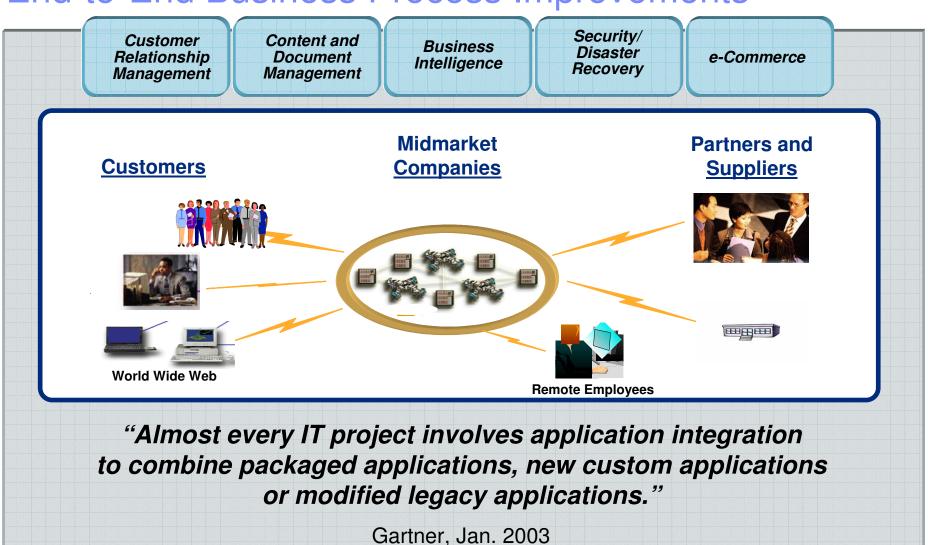








End-to-End Business Process Improvements

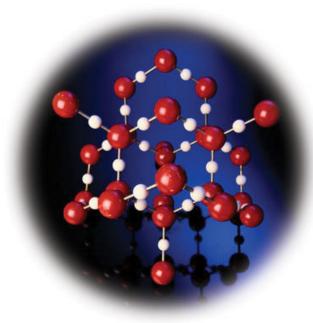


Application Integration: Gartner Covers a Ubiquitous Topic. 1/28/03 Roy Schulte



Moving Toward an On Demand Model

An on demand business is an enterprise whose business processes—integrated end-to-end across the company and with key partners, suppliers and customers—can respond with speed to any customer demand, market opportunity or external threat.



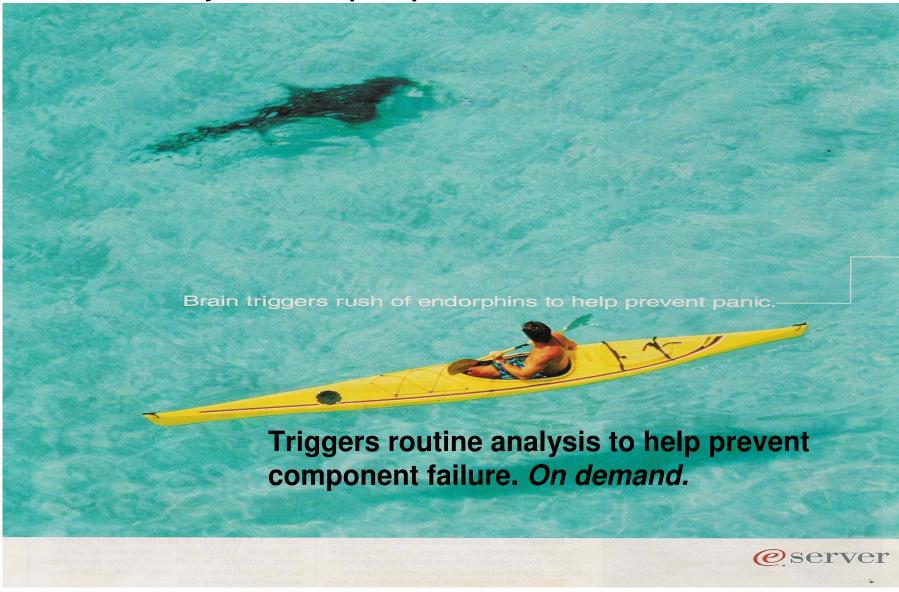
"We had a different shipping system, a different accounting system, a different manufacturing system... we needed something that was completely integrated."

Ron Wise, President Wise Industries





The human body can anticipate problems on demand.







Business Integration Capabilities from IBM





Model business functions and processes

Transform applications, processes and data

Integrate islands of applications,

processes and information

Interact with resources anytime

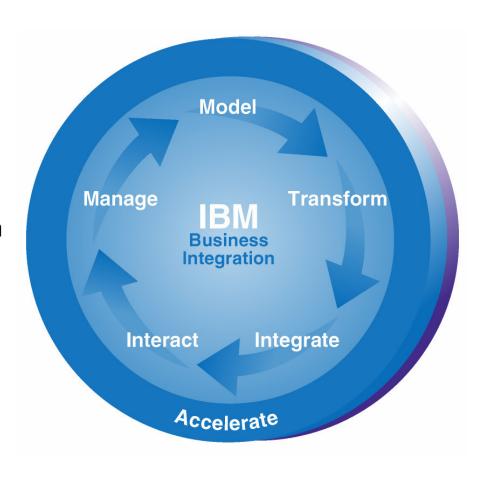
and anywhere

Manage performance against

business objectives

Accelerate implementation of

intelligent processes







Key products supporting Integration Capabilities

Model business functions and processes

WebSphere Business Integration Modeler

Transform applications, processes and data

- WebSphere Studio
- WebSphere Enterprise Modernization
- WebSphere Business Integration Tools

Integrate islands of applications, processes and information

- WebSphere Business Integration
- DB2 Information Integrator

Interact with resources anytime, anywhere with any device

- WebSphere Portal
- WebSphere Everyplace
- WebSphere Voice
- Lotus Workplace

Manage performance against business objectives

- WebSphere Business Integration Monitor
- Tivoli Business Services Management
- DB2 UDB and Content Manager

Accelerate the implementation of intelligent processes

- Pre-Built Portlets
- Adapters
- Process Templates
- WebSphere Commerce

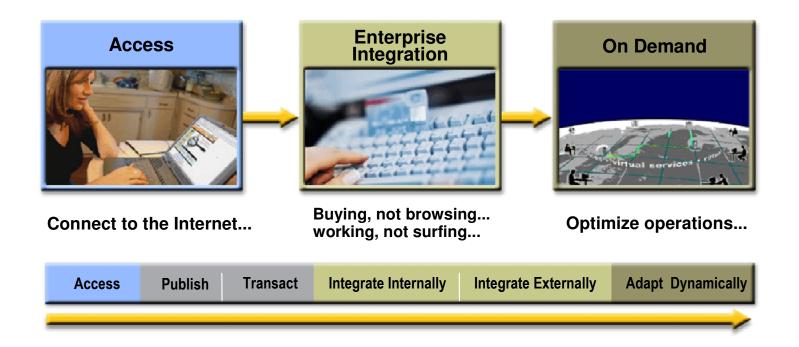
Service Oriented Infrastructure leveraging a common runtime environment

- WebSphere Application Server
- WebSphere MQ
- WebSphere Studio



Advancing Toward On Demand Business

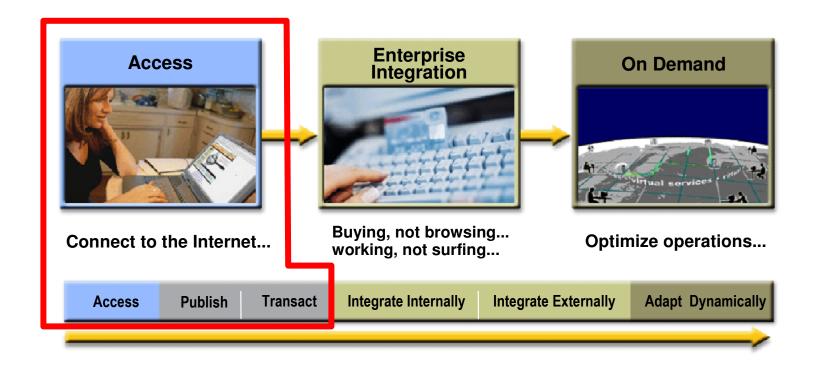
WebSphere provides value throughout <u>all</u> stages of e-business adoption





Advancing Toward On Demand Business

WebSphere provides value throughout all stages of e-business adoption





Access Stage: Information Publishing & Access



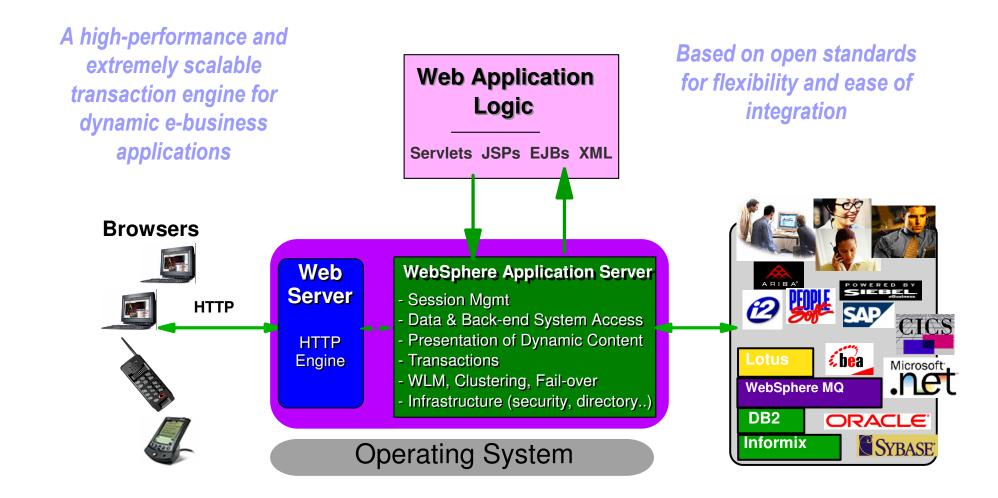
Business challenges

- Web pages are static, and updating them is labor-intensive so they are usually out-of-date
- Want to leverage the Web to attract customers, but current site does not provide compelling, dynamic content to encourage repeat visits
- Customers and partners need up-to-date information from in-house system(s) or database(s) (e.g., order status)
- IT department small and overworked, with limited budget, so
 Web strategy cannot require frequent IT involvement



WebSphere Application Server

IBM's J2EE & Web Services Server





Good Questions to Ask

What is an Application Server?

- "Operating System for applications" between actual OpSys & applications running on it;
- Runtime paired with modern Application Development Tools.
- Used for both Internet and Intranet solutions.

What does it do?

- Provides common services that modern applications require, e.g. security, resource access integration, transactional control, etc.
- Centralizes these services for reuse by all applications.
- Separates application logic from presentation & data.

Why not build that myself?

- Very complex code, very long to deploy, very expensive to maintain.
- Distracts from focus on business domain knowledge



WebSphere Application Server - Express

Affordable "on-ramp" to the WebSphere platform

- Ready to go out-of-the-box solution
 - Single, tightly integrated package
 - Simplified application server, development tools and cross-industry samples
- End-to-end ease of use
 - Easy, wizard-driven installation
 - Quickly develop and deploy applications using wizards, templates, and samples
 - Simplified programming model
 - Near-zero administration
 - Low-cost entry, with investment protection
- Supported platforms: Windows, Linux, OS/400, AIX, HP-UX, Solaris





Transform applications, processes and data

Requirements

- Create new business value from existing IT systems
- Maximize predictability, efficiency and quality of development, integration and operations

Benefits

Customer:

- Increase investment in creating strategic advantage
- Enable rapid change to meet new market opportunities
- Reduce cost by simplifying business processes
- Minimize risk of disrupting critical processes

Transform applications, processes and data

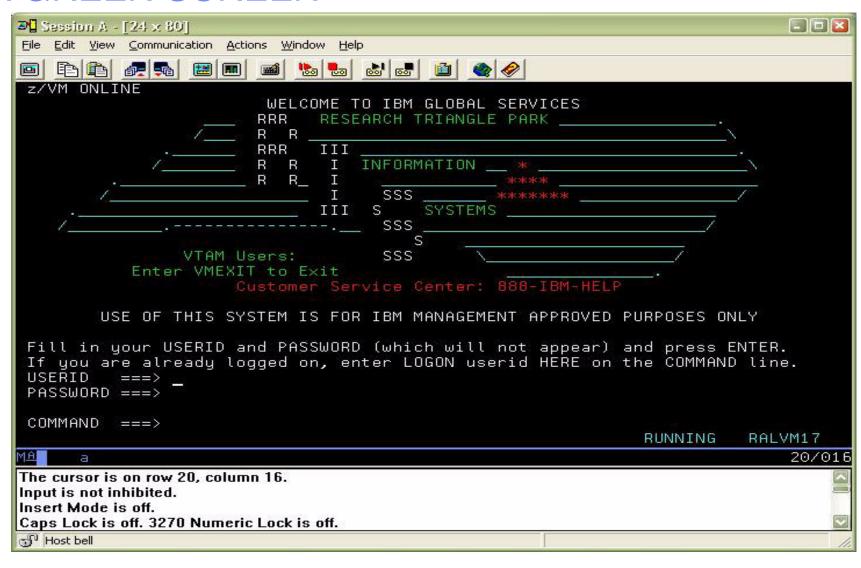
Partner:

- Huge iSeries and zSeries customer base with common pains
- Leverage existing skills
- IBM needs skilled partners in this area
- Build sustainable customer relationships
 - WebSphere Studio
 - WebSphere Enterprise Modernization
 - WebSphere Business Integration Tools





A GREEN SCREEN





WebSphere Host Access Transformation Services (HATS)

Easily extend existing applications to the widest possible audience



- A Web-to-host HTML emulator...
- with a rules-based transformation engine, that...
- converts green screens to graphical user interfaces, Web services, and portals and...
- improves the navigation and ease-of-use of host applications.



HATS is being used by a number of business partners in SMB accounts because it is very easy to use and skills can be developed to support multiple customers

•Default rules and on-the-fly screen transformation allow 3270 and 5250 applications to be deployed to the Web within hours of loading the software





Alabama Gas Corporation



- Largest natural gas distributor in Alabama
 - 463,000 customers
 - Over 1000 employees
 - Heavy focus on customer service
- Existing customer service application failing to meet Alagasco's needs
 - Over 500 green screens
 - 3 month learning curve
 - Rapid growth of customer base increasing need for new CSR's
- Began search for new CRM application
 - Business Partner recognized opportunity to transform existing application
 - Demonstrated ability to convert existing application to web interface using HATS
- Web interface for CRM application deployed in 2 months
 - Customer service application learning curve reduced to weeks
 - Planning expansion to other Alagasco applications



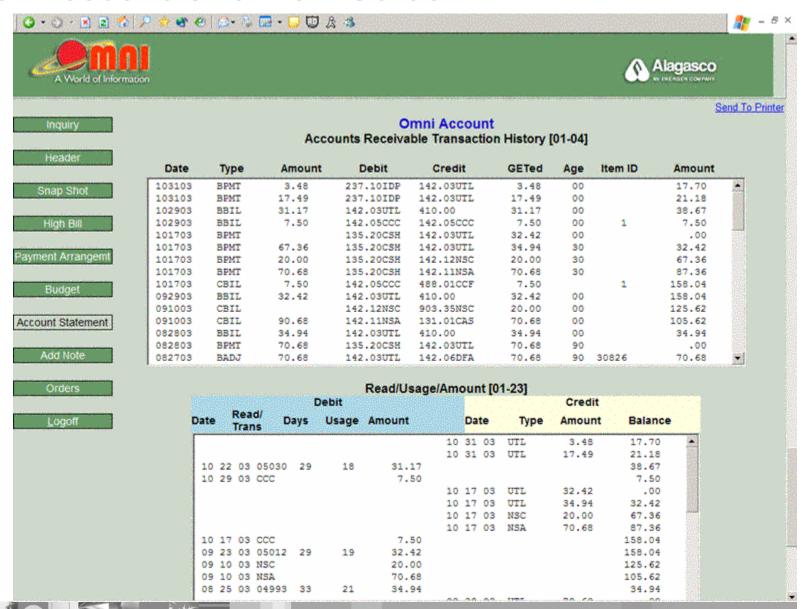




Customer Account Overview Screen

Customer data consolidated from 14 individual screens

Demo available at www.piner.com





Access Stage: Publish, Transact



Business challenges

- •Improve employee productivity by reducing time spent searching for information
- Simplify and improve collaboration with partners and customers
- ■Increase decision-making speed by giving employees access to information, people, and processes from a single interface
- •Allow users to tailor the interface without IT involvement



Interact with resources anytime, anywhere, with any device

Requirements

- Provide secure, single point of interaction to people, data, applications and processes accessed by any device, anywhere, anytime
- Customizable and flexible web portals based on business priorities
- Integrated collaboration and human interaction capabilities, easily managed and extended beyond organizational boundaries

Benefits

Customer:

- Improved employee efficiency
- Improved business decision making and customer service
- Real-time multi-modal communication outside and across the enterprise
- Real-time collaboration across the enterprise reducing expenses
- Empower mobility and access to global teams
- Tailor new breeds of devices to optimize business processes

Partner:

- One-stop shop for pervasive device support
- Creates opportunities for business consulting
- Improve developer productivity
- Faster deployment of new applications
 greater competitive edge

Interact with resources anytime, anywhere with any device

- WebSphere Portal/ Express
- WebSphere Voice
- WebSphere Everyplace
- Lotus Workplace



WebSphere Portal – Express

Access

Affordable, out-of-the-box portal solution that will unify information and applications into a single customized environment.

- Find business critical applications and information in one location
 - No need to visit a lot of different sites.
- Display the applications and information that are relevant to each portal user
 - Spend less time searching for what is needed
- Organize the portal the way each user prefers
 - For example, place email and calendar in column one on page one if preferred
- Sign on once to get access to what is needed
 - No need to log in with a different ID and password for each application
- Supported platforms: Windows, Linux, OS/400

<u>WebSphere Portal – Express Plus</u>

Adds:

Integrated Instant Messaging Virtual Teamrooms



Plastic Surgery Center Chooses WebSphere Express

Challenge

Facing declining revenues due to its outmoded business processes & poor productivity – in danger of losing patient base

"We were in danger of losing our patient base to competing clinics because of inferior service. We wanted the ability to instantly call up a patient's status at any point during his or her visit."

- Patty Stibbs, Administrator, Plastic Surgery Center

Solution

A new patient management system that streamlines business processes and captures patient information for immediate use by doctors and employees. Based on WebSphere Portal Express Plus, WebSphere Application Server and Lotus Instant Messaging.



Business Benefits:

- Full payback in just 3 weeks
- \$250K / yr. in additional revenue through improved productivity
- Strengthened patient relationships through faster, better customer service

Technology Benefits:

- Standards-based environment supports business growth
- Easily integrates with existing PC Local Area Network and most patient administration systems



Access

Access Stage: Transactions

Business challenges

- Extend business reach by using the Web as a sales channel
- Offer consumers a convenient online shopping experience
- Give business customers an easy way to place and track orders online
- Modify store capabilities, content, and appearance without
 IT involvement



Accelerate the implementation of intelligent processes

Munique IDM Transform Indiana Indiana

Requirements

- Differentiate quickly and easily for competitive advantage
- Engage with complete customer context
- Respond and adapt to changing customer needs and demands
- Deploy pre-built intelligent and extendable business processes

Benefits

Customer:

- Accelerated implementation for rapid ROI
- Flexibility to meet unique and specific business needs
- Agility to respond to new needs and opportunities—more quickly and cost-effectively
- Extensibility for competitive differentiation

Partner:

- Reduced deployment time, effort and costs
- Improved and accelerated ability to meet new LOB requirements – sustain and grow engagements
- Lower Cost

Accelerate the implementation of intelligent processes

- Pre-Built Portlets
- Process Templates
- Adapters
- WebSphere Commerce/Express



WebSphere Commerce – Express



- Affordable, but Complete "all-in-one" licensing to meet your production, staging, development needs
- Quickly and Easily Installed begin creating and customizing your site in <u>as little as one hour</u> -resulting in lower service costs
- Easy to Implement "Express" store model and fast-path guide gets you to your production site fast
- Ready Now, but built for the future with advanced features you can grow into
- Easy to Administer and Manage with wizard-based tools for site management
- Reliable and Robust built on WebSphere, a rock-solid e-business infrastructure that can level the playing field with larger companies
- Built on Open Standards frees your company from proprietary platform restrictions
- Supported platforms: Windows, Linux/Intel, OS/400





Chevrolet Dealer Drives Revenues With WebSphere

Challenge

- Offer customers the ability to buy GM accessories online.
- Improve the design of existing Web site and enhance the presentation of the GM brand to potential customers.

Solution

 IBM Business Partner Information Design Incorporated (IDI) created Web portal solution based on IBM WebSphere Commerce – Express and WebSphere Application Server. IBM DB2 Universal Database Express Edition is the repository for customer order information.

"There are just so many things I like about WebSphere Commerce - Express. I haven't been able to find anything that hasn't worked just the way it should."

--Robert Ernst, Manager of IT, Mike Castrucci Chevrolet

Mike Castrucci Chevrolet THE GM MALL

Business Benefits:

- Incremental revenue from accessory sales
- Enhanced brand image for dealership
- Growing catalog of accessories easy to manage

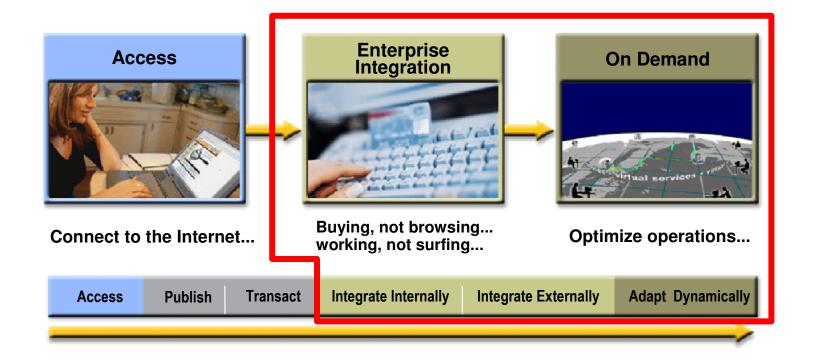
Technology Benefits:

Implementation of site took just 5 weeks



Advancing Toward On Demand Business

WebSphere provides value throughout <u>all</u> stages of e-business adoption





Integration, On Demand Stages: Integrate Internally & Externally, Adapt Dynamically





Business challenges

- Provide customized and consistent business information to improve customer service
- Automate, integrate and coordinate operations end-to-end to reduce costs and improve responsiveness
- Integrate and optimize the use of people and their tools in processes to enhance productivity
- Reduce the cost and time of building and integrating new and existing applications to extend application value
- Streamline application upgrades to minimize cycle time and costs
- Transform IT from inhibitor to enabler and focus on core competencies



Model and simulate business processes

Monage ISM Transform Custiness Integration Interact Integrate

Requirements

- Graphically design processes and quickly redesign across people, partners and applications
- "What-if" simulation of operations to optimize and project business benefits
- Fast start to deployment—generates code from model

Benefits

Customer:

- Control of the business
- High-speed change implementation
- Business level specs leading to IT deployment
- Simplify the processes
- Provide projections of business benefits

Partner:

- Sponsor requirements are clearly defined, simulated, and documented
- Increase competitive edge with advanced business modeling capability
- Improve customer satisfaction

Model and simulate business processes

WebSphere Business Integration Modeler



WebSphere Business Integration Workbench Entry Edition

A modeling tool for capturing and simulating business processes

- Business/IT Friendly: Provides a shared-workspace for Business and IT
- Easy to Use & Intuitive: Rapidly begin modeling processes
- Animated Simulations: Identify bottlenecks and watch what-if scenarios
- Capabilities
 - Enterprise Modeling
 - Process Modeling
 - Performance Simulation
- Platform supported: Windows



Integrate islands of applications and information

Model Maninge Biginesia Interact Integrate Accelerate

Requirements

- Choreograph standalone applications into a composite business process
- Extend business processes to trading partners.
- Broker and optimize high speed communications between applications
- Provide a common view of diverse and distributed information

Benefits

Customer:

- Improve customer service and business agility
- Access real time business information accurately and rapidly
- Accelerate mergers and acquisitions
- Eliminate manual process errors
- Improve and automate value-chain management

Integrate islands of applications and information

Partner:

- Express combats Microsoft's "easy answer"
- Entry discussions often lead to more advanced editions and engagements
- Build set of reusable Web Services assets
- Build sustainable, long term customer relationships
 - WebSphere Business Integration
 - DB2 Information Integrator



WebSphere MQ Express

A fast and proven on-ramp for simple application-to-application connectivity, reducing the need for complex communications programming

- Proven WebSphere MQ technology
 - Assured delivery of messages & Asynchronous communications to improve system availability and throughput
 - Security through the Secure Sockets Layer (SSL) protocol & Tools for managing clusters of systems
- Ease of Use File Transfer Program provides immediate productivity
- Ease of Installation (3 steps, 10 minutes)
- Ease of Learning including animated Quick Tour
- Ease of Application Development including "file-like" interface and standards support
- Supports up to 5 concurrent server connections and up to 10 concurrent client connections on a single processor
- Supported Platforms: Windows, Linux





The IBM solution is making a dramatic change in our IT environment, which will eventually result in better support for our business drivers and objectives. We are in a much better position now from both a technology and integration perspective to approach major integration initiatives in the future.

—Laurentiu Mandu. MobiFon IT Director

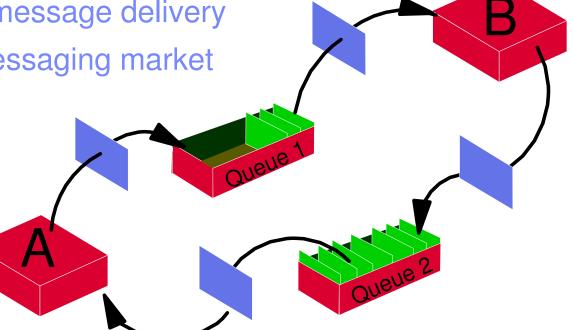


WebSphere MQ Concepts

- Links "nearly everything to almost anything..."
- Easy-to-use, multi-platform API (MQI and JMS)
- Loosely-coupled flexibility via queuing
- Faster and safer application development



■80+% of commercial messaging market





WebSphere MQ



- ✓ WebSphere MQ
- ✓ World Class Messaging
- ✓ Industrial Strength Middleware
- ✓ Marketplace Success

Customer Acceptance

Customer Base – used by over .

. .

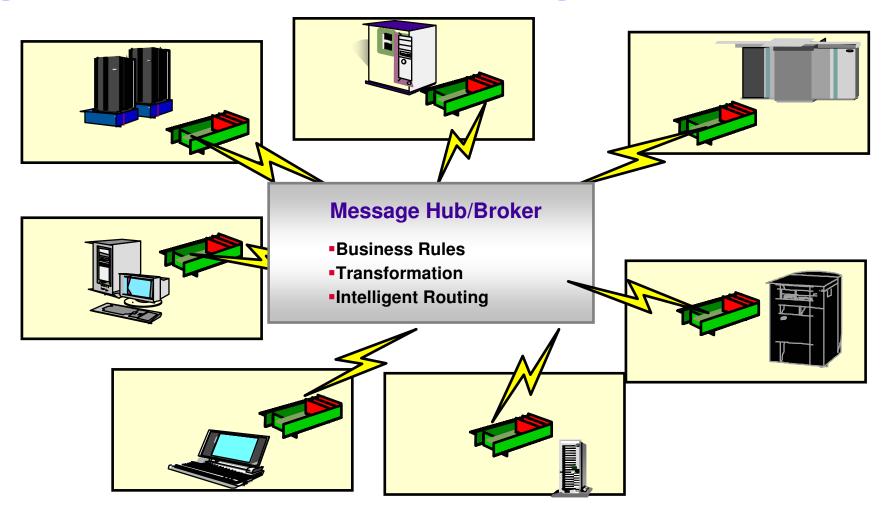
- 10,000 customer sites
- 2/3s of top 100 North American and European Banks
- 550 independent vendors offer WMQ based services and products
- Product Certifications
- Over 3,000 people
- across 1,000 companies

Industry Recognition

- Intelligent Enterprise Readers' Choice Award
- Best in Enterprise Integration 2002
- Java Pro Magazine 2002
 Readers' Choice Awards
- Best Java Messaging Middleware
- ASPire
- Best in Integration Award
- Java Developers Journal Readers' Choice Award
- Best Java Messaging Tool . .

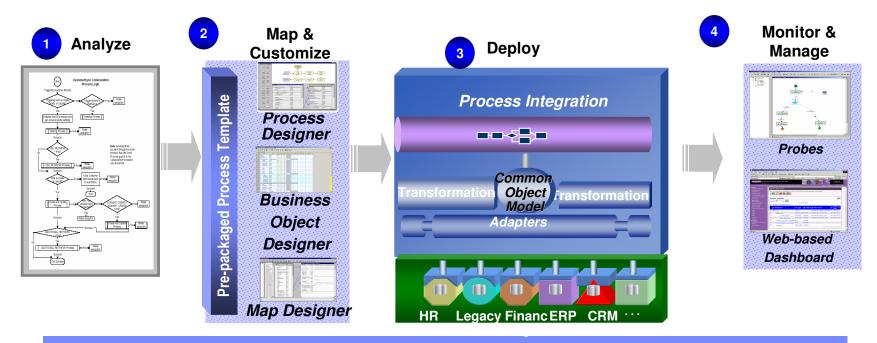


Concept Of A Message Broker - Making Application Integration Easier with WBI Message Broker





Announcing WebSphere Business Integration Server Express: your on-ramp integration solution



- ➤ Analyze: Easy-to-use Tools Driven Integration integrating internal systems, customers & partners
- Map and Customize: Map Business Process to underlying IT implementations.
- ➤ Easily Deploy: Support for open standards including Web services and BPEL
- ➤ Monitor and Manage: improve your processes over time



WebSphere Business Integration Server Express: Benefits for your customers

Non-invasive infrastructure

- Leverages existing infrastructure. Averse to "Rip & Replace"
- Integrate medium business applications with internal systems and data stores

Time to market

- Quickly deploy medium business solutions that require back-end integration
- Easy-to-use with little skill set.

Business processes driving integration

Top-down integration approach. LOB processes driving IT integration, not the other way around

Business Process Automation

Automates business processes that are manual and inefficient

Completeness of the solution

• Need a comprehensive package that addresses the various medium business integration drivers

Business Process Flexibility & Agility

Change business rules on-demand to meet market needs

Scalable Solution

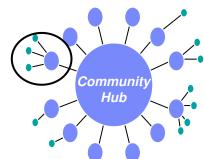
Support for relevant Platforms and Open Standards



WebSphere Business Integration Connect - Express

A low cost solution to enable trading partners to interact efficiently with each other and community hub using industry standard date formats and protocols

- Enables customers to join sophisticated trading communities quickly and easily (up to 5 trading partners)
- Reduces the risks and costs associated with traditional B2B environments
- Helps customers quickly conform to industry mandates like AS2 (Certified by Drummond Group)
- Supports a wide range of data-formats for communication
- Leverages widely used internet protocols
 E.g., HTTP for Data Exchange
- Easy-to-use package that requires little skill
- Supported Platforms: Windows, Linux





Companies that linked business processes with trading partners show 70% higher profitability than those that do not

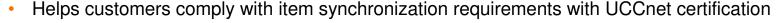
-Business Advisor Zone, 12/2/2002



WebSphere Business Integration Express for Item Synchronization

UCCnet solution that gives mid-size businesses full-featured item synchronization function to share information stored in their internal systems with customers and prospective customers.

WebSphere Business Integration Express for Item Synchronization:





- Enhances Supply Chain Management (SCM) and merchandising applications
 Easy to use facilitate faster implementation
- Tools driven Little on no programming involved
- Faster return on investments
- Low total cost of ownership
- Supported Platforms: Windows, Linux, OS/400

WebSphere Business Integration Express Plus for Item Synchronization

Adds In:

- Tooling to customize and modify business processes
- Includes the SAP adapter

Retail industry could save \$40B/year by eliminating supply chain information errors.

—A.T. Kearny, The eRed Zone, Oct 2002



Scripto Fires Up UCCnet Integration

Challenge

- Meet the demands of Home Depot and Wal-Mart by automating item synchronization and integrating with UCCnet
- Existing manual process prone to data entry errors and significant chargeback fees

Solution

 IBM Business Partner Netcom Systems integrated Scripto-Tokai's J.D. Edwards ERP system using IBM WebSphere Business Integration Express for Item Synchronization



Business Benefits:

- Expected savings of \$60-\$80 per item per year over previous manual process
- Employees focused on core competencies, not data entry
- Extended global reach through UCCnet posting

Technology Benefits:

Solution implemented and deployed within 3 months



Scenarios

- Create On Demand Vision with Integration focus
- Where are they on the On Demand Roadmap?
- Define their business problems
- Map business problems to BI Capabilities
- Map Capabilities to Products
- Present Capability and Product
- Use Modeler to create ROI

Take the order

Expand customer vision



Why IBM WebSphere?



Infrastructure That Lowers Total Cost of Ownership

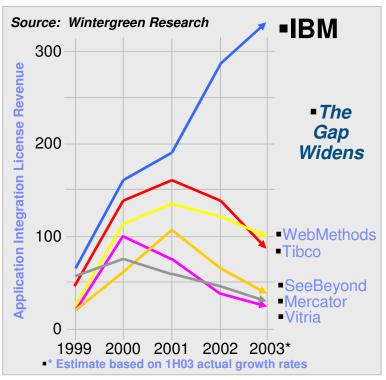
- A Clear and Stable Architecture for Today and Tomorrow
- Proven, Consistent Integration
 Environment and Security You Can
 Trust
- Breadth and Depth of Midmarket Optimized Portfolio
- Straightforward upgrade path to enterprise-level products





Market Leadership

Leading industry analysts recognize IBM's market share leadership across the core integration infrastructure components



•IBM "continued its long time lead of this market," *IDC says (June 2003)*

Application Deployment Platform Software Market

	2002 Share*	2001-02 Growth%	
IBM	23.3%	17.5%	
BEA Systems	17.3%	9.6%	
Oracle Corp.	9.5%	8.0%	
Tibco Inc.	4.9%	-19.4%	
webMethods	4.3%	6.3%	

^{*} Based on license revenue and license-related service fees

■ "IBM Has Top Share in All Application Integration Middleware Markets" *Gartner Dataquest, May 2003*

Worldwide IBM Market Share Position Based on New License Revenue

	Application Servers
	Integration Broker Suites
	Portals
	Message-Oriented Middleware
Application F	Platform Suites Composite Market
	Transaction Processing Monitors
	Total Market

2000	2001	2002
2	2	1
1	1	1
N/A	3	1
1	1	1
2	2	1
1	1	1
1	1	1

Sources:

[•] IDC, "Application Deployment Platform Software Market, 2000-2002, with Leading Suppliers" June 2003, Dennis Byron, Vice President, Business Process and Deployment Software Research





IBM Commitment to WebSphere

Nobody invests more

- \$1 billion annual investment in Engineering
- \$5 billion investment in technology acquisition
 - Modeling
 - Process Integration
 - Software Development
- Over 5,000 developers (as of 2Q2003)

Continued success

- 62,000 WebSphere Application Server customers
- 10,000 customer sites rely on WebSphere MQ
- 2,000 customers rely on WebSphere Business Integration
- 2,000+ customers rely on WebSphere Portal since year 2000 introduction
- WebSphere Commerce powers 48 of top 200 manufacturers

Award-winning Business Integration Environment



Best Application Server, 2003: IBM WebSphere Application Server
—InfoWorld Technology of the Year Awards



Vendor of the Year, 2003: IBM —Business Integration Journal



Best Java Messaging Tool, 2003: IBM WebSphere MQ Best Enterprise Application Integration Technology, 2003: IBM WebSphere Application Developer, Integration Edition

—JavaPro Readers Choice Awards



Business Partners Who Understand Your Business

- Over 120 currently active Top ISV partnerships with WebSphere
- Over 2950 active ISV solutions that run on WebSphere software
 -ISV Partner Metrics through Feb 2004
- 583 Business Partner applications that run on WebSphere Express software
- 2700 Business Partners in the Virtual Innovation Center program
- Business Partner skills certifications growth up 43% YTY 2Q03; over
 1300 business partners with certified WebSphere skills



Resources

- Your IBM Software Sales Rep Know your BPR!
- VIC Virtual Innovation Center
 - On-line technical enablement for all WebSphere products
 - http://www.expressenablement.com
 - Certifications
- SWIT IBM presales technical support
 - Will provide you technical presales sills
 - Available only through your BPR











Manage performance against business objectives

Requirements

- Measure business performance against key objectives; Provide framework for improvement
- Dynamically change business processes to meet shifting business conditions and meet objectives
- Optimize resource reallocation

Benefits

Customer:

- Business-tailored dashboards
- Closed-loop Business Process Management
- Continuous improvement
- Trends and comparative analyses
- Provides highest ROI

Manage performance against business objectives

Partner:

- Streamline ongoing SLA and/or contract terms discussions – lowers ongoing costs
- Provides justification of investments to customer
- Focus ongoing efforts on infusing value
 - WebSphere Business Integration Monitor
 - Tivoli Business Services Management
 - DB2 UDB and Content Manager



Service Oriented Infrastructure

Requirements

- Build new applications around business processes
- Respond quickly to changing business needs and demands
- Ability to integrate into existing and future IT systems and processes

Benefits

Customer:

- Flexibility Reduced interdependency between software assets
- Lower costs Allows individual software assets to become building blocks that can be reused
- Federated and policy based security, management and deployment
- Vendor independence Leverages open standards

Partner:

- Low cost entry point with Express
- Sets the foundation for more advanced Business Integration engagements
- Open standards optimize developer utilization
- Increase competitive edge with extensible solutions

Service Oriented Infrastructure

leveraging a common runtime environment

- WebSphere Application Server/Express
- WebSphere MQ/Express
- WebSphere Studio