

... get your e-business up to speed



#### **Business Partners are Important to IBM's Success**



#### 130,000

■ SMB: In 1998 130,000 SMB business leads were given to partners.

#### \$700,000,000

Large customers: In 1998, IBM subcontracted over \$700 million to our top business partners to develop complete end-user solutions.

#### 40

■ Services: In 1998, sales of IBM services through business partners grew over 40% year-to-year.

#### \$1.1 Billion

■ Increased revenue: In 1998, business partners' IBM revenue grew by 40% to more than \$1.1 billion.



#### e-business

## **Analyst Highlights**

#### Forrester

... lists 3 winners (IBM, Microsoft and Oracle) and 3 challengers (BEA, Sun and Netscape) in the applications server space and asserts that <u>"IBM wins with</u> <u>WebSphere and Workbench."</u>

Joshua Walker, Ted Schadler, Eric Grown, Christine Overby

#### Aberdeen

- ▶ "If your company is investigating deployment platforms, WebSphere must be considered. It represents the most mature and capable open-standards, Java-based, application development and deployment platform Aberdeen has evaluated." Tim Sloane
- ▶ "Through this distribution agreement with Novell, combined with IBM's own distribution across the IBM platforms, WebSphere now commands a huge market lead. As Java Web Developers and ISV's decide which platform to utilize for initial application deployment, this market leadership will make WebSphere an obvious choice." Tim Sloane

#### = IDC

■ "The division between the tools used to develop applications, and the deployment environments in which they will run, is becoming increasingly blurred", said Steve Garone, Program Director for Application Development and Deployment atInternational Data Corporation. "This phenomenon is driven in great part by the desire of users to focus on running their businesses, without having to worry about the technology that underlies the applications that help them do it. IBMhas recognized this, and has demonstrated this by closely integrating its development and deployment products. In addition, its use of standards based technologies such as Enterprise JavaBeans and XML has served to minimize compatibility and scalability issues and helps its customers maximize their ebusiness investments." Steve Garone, IDC





## The Server World is not just NT...

		1997	1997	1996-1997	1998	1998	1997-1998
N		Shipments (000)	Share (%)	Growth (%)	Shipments (000)	Share (%)	Growth (%)
K	Windows NT Server	1,226	36.0	73.2	1,560	35.8	27.2
	NetWare 3.x and 4.x	927	26.4	-6.6	1,053	24.2	13.6
	Combined Unix Server	728	20.7	17.4	758	17.4	4.1
	Linux	240	6.8	20.0	750	17.2	212.5
	OS/2	220	6.3	-36.2	131	3.0	-40.5
	Other NOS	135	3.8	-16.7	101	2.3	-25.2
	Total SOE Servers	3,476	100.0	15.3	4,353	100.0	25.2

Source: IDC (Shipment figures refer to new software licenses, including upgrades)





### **Business Relationship Value**

#### Web Opportunity

1998		2000	
eBusiness market	\$200B	eBusiness	\$380B
App Servers	\$338M	App Servers	\$439M
Internet Tools	\$1.4B	Internet Tools	\$1.9B
Java Tools	\$283M	Java Tools	\$800M

#### Press and Analyst View

Web El Nino Turned Back by New Generation of Load-Balancing Technolog

Zona Research, Inc. June 1998

**IBM Shakes the Sphere** 

International Data Corporation June 1998

#### **Demand Generation**

Web Enabled Self Service, e-Commerce, Business Integration campaigns

Trade Press, Trade Show, DRM

PR/Consultant activities, Electronic

e-business Now campaign

★ Leads passed to qualified partners





## Integrated IBM WebSphere Family and VisualAge for Java Version 3 Launch



- ➤ Completes and complements activity started with WebSphere Application Server V3.0, Enterprise Edition Announce in July 1999
- Product update announcements
  - WebSphere Application Server V3.0, Standard Edition
  - WebSphere Application Server V3.0, Advanced Editi
  - WebSphere Performance Pack V3.
  - -WebSphere Studio V3.0
  - VisualAge for Java V3.

#### Business Partner Participation

- ► Razorfish (www.razorfish.Com)
- Cambridge Interactive (www.psteering.com)
- ► InterWoven (www.interwoven.com)







# WebSphere and Razorfish Digital Change Management

Leonardo Malve Razorfish, Inc.





## Razorfish - Digital Change Management

- •Razorfish is a leading-edge international digital communications solutions provider.
- •Through our proprietary D igital Change
  M anagem ent(SM) process, we help clients
  increase sales, im prove communications and
  create and enhance brand identities.
- •This process delivers optim aluser experience to our clients and their custom ers

Surprising, delightful and U ser-centered experiences delivered with innovative, cutting-edge technology



#### Razorfish and IBM WebSphere

Used on several engagem ents; currently using it on several more

#### Pros:

- Strong standards support EJB , JSP , servlets
- high perform ance JD K
- solid connection pooling support

#### Cons:

- Finicky setup and configuration
- load-balancing issues and scalability
- som e tools not fully integrated



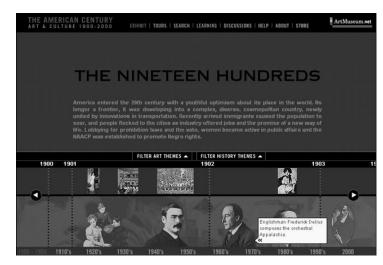


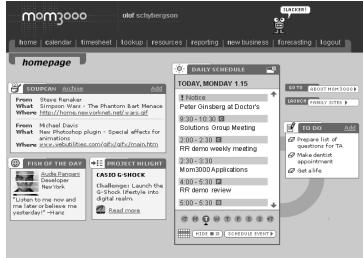
#### Example IBM WebSphere Solutions



The Am erican Century

Ourglobal intranet







#### Coolthingsabout IBM WebSphere 3.0...

- Increased A PI support [servlets 21, JSP 1.0, X SL /X M L services]
- Increased distributed support [class reloading, virtual hosting, servlet chaining, distributed transactions, RM I/IIOP]
- Increased perform ance [multi-JVMs, load-balancing, optimized EJB access]
- Better system adm in [security, LDAP support, perform ance monitoring]

#### ...and W ebSphere Studio 3.0

- Integration with SourceSafe
- Integrated editing and debugging of JSPs using IBM Distributed Debugger
- Fast visual and JSP prototyping with round-trip editing and VA Java integration







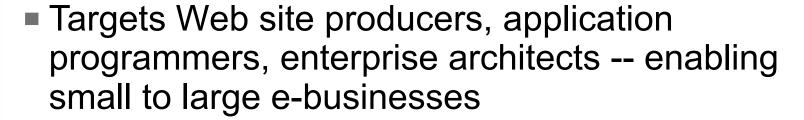
## Razorfish/IBM Web Integrator Partnership

#### Finally, a real partnership relation!

- Dedicated [clue-ful and fabulous!] relationship m anager
- Early access to IBM e-business solutions and innovations
- High-quality professional education
- High-powered technical assistance
- Leveraging the attention and experience of a w orld-w ide system s innovator



## WebSphere Application Server Family ---Key Usage Concepts



- Enables a range of e-business solutions from simple Web sites to the most sophisticated Web-based e-commerce activit
  - ► Runs, builds, manages e-business applications
- Supports all emerging e-business applications
  - ▶ Web self-service
  - Customer relationship management
  - Supply chain management
  - ► e-commerce, subscription services
  - ► Business to business communications





## WebSphere Family -- Broad Function, Selectable Qualities of Service ...

#### Family of Complementary, Integrated Products



## Business Application Components Commerce

### WebSphere Studio

- Workbench
- Wizards
- Content Authoring
- Site Development
- ContentManagement

#### **VisualAge**

- Application Programming
- Component Development
- TeamDevelopment

## Standard Edition

For WEB SITE PRODUCERS to produce dynamic PRESENTATION logic and content

### Advanced Edition

For APPLICATION PROGRAMMERS to build business logic for new APPLICATIONS

### Enterprise Edition

For ENTERPRISE
ARCHITECTS to
INTEGRATE new
and existing business
logic in heterogeneous systems

#### **SecureWay**

- Locate
- Connect
- Secure

#### **WebSphere Performance Pack**

- Caching
- Load Balancing

- Filteri
- Distributed Files

#### **HTTP Server**

AIX HP-UX Linux OS/390 OS/400 NetWare NT OS/2 Solaris

#### **Tivoli**

- Manage
- Deploy
- Maintain

Build Run Manage





## With Version 3, WebSphere Further ...

- Enables e-business development
  - ► Turning Web site visitors into customers
    - Improving customer satisfaction
    - Creating competitive advantage
  - ► Reducing operational costs, increase revenue
  - Shortening sales cycle
- Emphasizes completeness of solution
  - ► WebSphere App Server for every e-business need
  - ► Framework to build, run, manage and grow
  - ► Enter where your business is today and adjust it as your business changes
- Invites, rewards partner participation
  - ▶ 100+ ISVs, SIs and Global SIs using WebSphere
- Eases app development thru tools integration



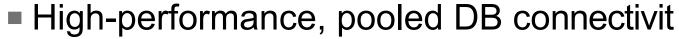
## WebSphere Application Server, Standard Edition -- Key Usage Concepts



- Targets Web site producers -- enabling them to produce dynamic presentation content / logic
- Transforms static Web sites to dynamic ones
  - Supports development, runtime for dynamic Web page content deliver
    - Java servlet run-time/services, Java Server Page (JSP) support,
       XML document structure services, high-performance database connection manager
  - ► Runs on a broad range of HTTP servers
- Connects Internet users to businesses
  - Manages access and interactions
  - Supports presentation logic for dynamic Webpages
  - Enables Web self-service application requiring database connectivit



## WebSphere Application Server, Standard Edition -- New in Version 3



Session and state management across multiple servers

XML server tools

XSL Processor, XML Parser twice as fast

Java Server Page support

Extended with new query, connection tags

Site analysis

- Analyze Web logs from multiple platforms
- Database to provide scalability, customizable reporti

Auto-translation of Website content on the fl

Management

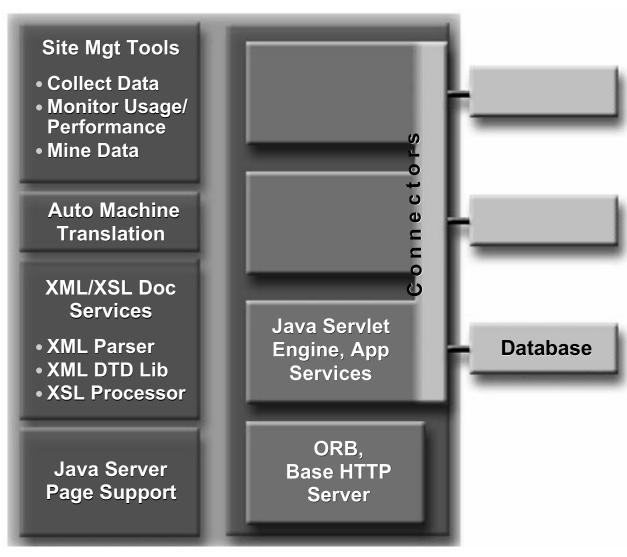
Security (LDAP, SSL improvements), SNMP instrumentati





## **WebSphere Application Server, Standard Edition -- Version 3 Product Architecture**









## WebSphere Application Server, Advanced Edition -- Key Usage Concepts

- Targets application programmers -- enabling them to build business logic for new e-business applications using EJB components
- Provides standards-based programming model
  - Supports all major EJB constructs
    - Session and Entity Beans, RMI/IIOP communications, container
  - Supplies Enterprise Java Server services
    - JNDI, JDBC, JTS, ...
  - Manages workload across applications servers
  - Supports Web connectivity to leading transactional, DB systems
- Enables medium and large e-businesses and business-to-business communication
  - e-commerce, business integration applications



## WebSphere Application Server **Advanced Edition -- New in Version 3**



- EJB server
  - Scalability features for EJBs, servlets and JSPs
    - EJB, servlet, JSP code all executes in the same runtime
    - Application-level load balanci
    - Application-level partitioni
    - Workload management for applications
  - ► Persistence supported through DB2 and Oracle
  - Improved security controls and management
    - User, group-level set
    - Method-level policy and control
- Support for workload management and failover across multiple nodes

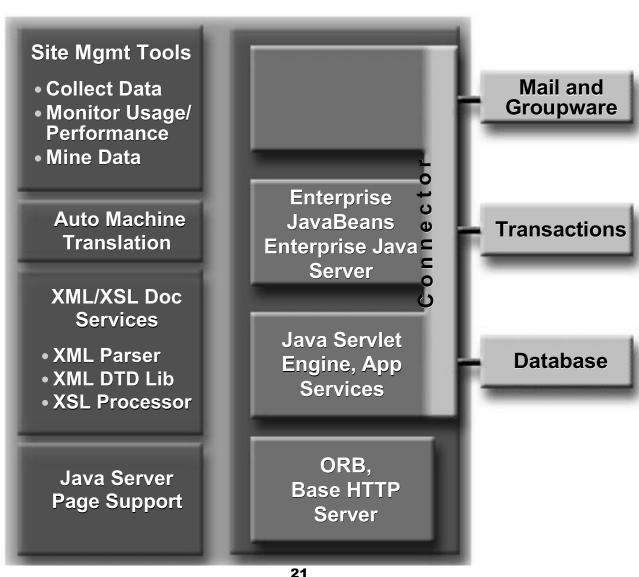
Build with VisualAge and WebSphere Studio





### WebSphere Application Server, Advanced **Edition -- Version 3 Product Architecture**









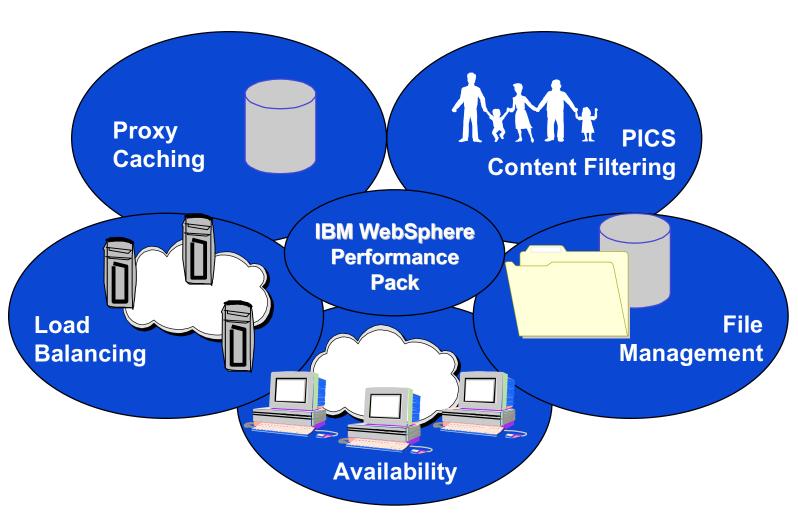
#### What Are The Key Features of Site Analyzer

- Content analyzer to help manage site deployment and site qualit
  - ▶ Provides for site visualization
  - ► Structural Analysis broken links, missing image files, ALT tags
- Usage Analyzer to understand web site traffic volumes as well as visitor behaviour
  - ► Ability to identify specific dynamic applications and parameters for analysis
  - ► Categorization to logically subset data into user-defined analysis groups
- Comprehensive analysis and reporting including charting
  - ▶ Utilizes e-suites to provide Lotus 1-2-3 like charting capabilities
  - Produces static HTML and dynamic XML reports utilizing a modular
  - reporting structure
- Utilizes an embedded DB2 database
  - ► Ability to produce trend reports for site activity and visitor behavior
  - Allows for greater scalability and creation of additional aggregates for reporting



## WebSphere Performance Pack -- Bringing Enterprise Access Volumes to the Web







## WebSphere Performance Pack -- Key Usage Concepts



- Improves Web server general performance with leading-edge component technolog
  - Caching
  - ► File management
  - Load balancing
- Enables Web sites to scale quickly to meet spikes in customer demand of Web site products or services







### **WebSphere Performance Pack -- New in** Version 3

- Enhanced security with AFS 3.5 Web Security Pack
  - Enables Web server to authenticate clients to AFS using AFS protection and credentials
- WTE SSL support
  - Allows information between the clients and the Web site to be encrypted.
- Expanded platform support
  - ►WTE and AFS on Linux
  - Windows 95, 98 (perform AFS functions w/AFS Light)
- Additional user control
  - ► WTE will delete expired pages at user-specified times
  - Garbage collection multi-threaded to improve speed
- Multi-homed Database Server Support
  - ► AFS DB servers to reside on multi-homed hosts, enhancing Performance Pack co-location options





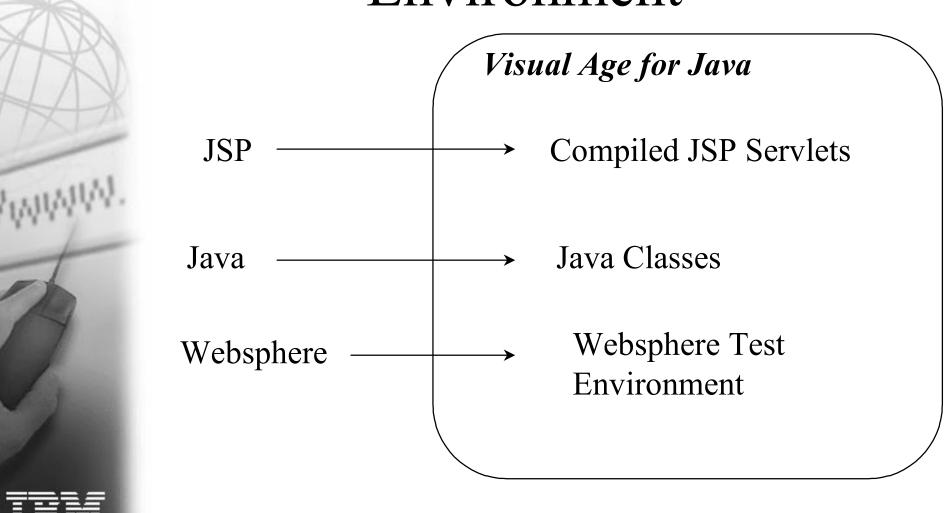
## Competing on Internet Time

Rapid application development with Websphere and Power Steering

By Andy Singleton
CTO, Cambridge Interactive



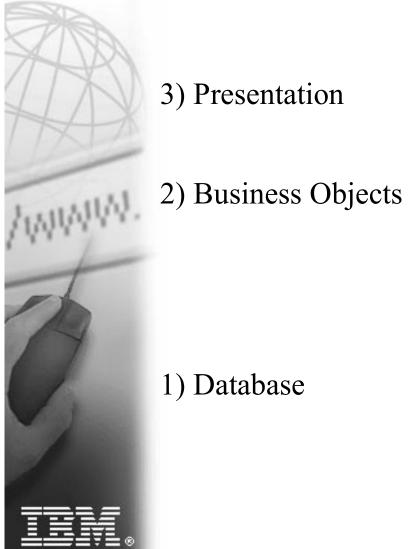
## Integrated Development Environment







## Three-tier Web architecture



Websphere

3) Presentation

**JSP** 

Java Objects

1) Database

Relational Database







- Write-through caching in the business object layer makes it fast.
- Java is a very productive language.
- The presentation layer is easy to design and change.
- We can change the branding to create private label versions for customers.



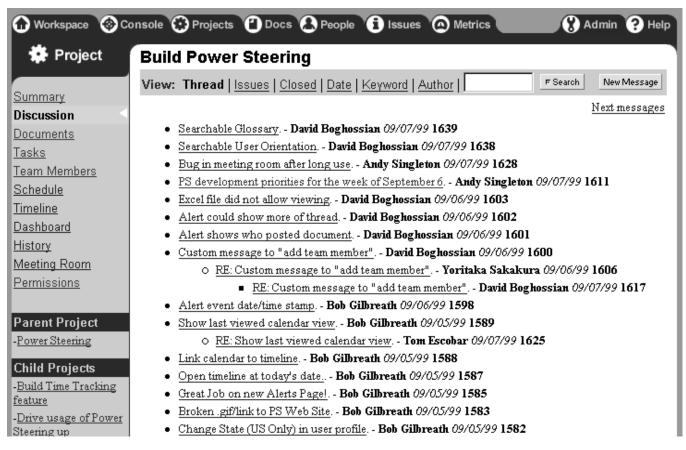


## Power Steering Cycles

- Daily builds
- Feature releases EVERY WEEK
- Six week major feature cycle
- One year architecture cycle

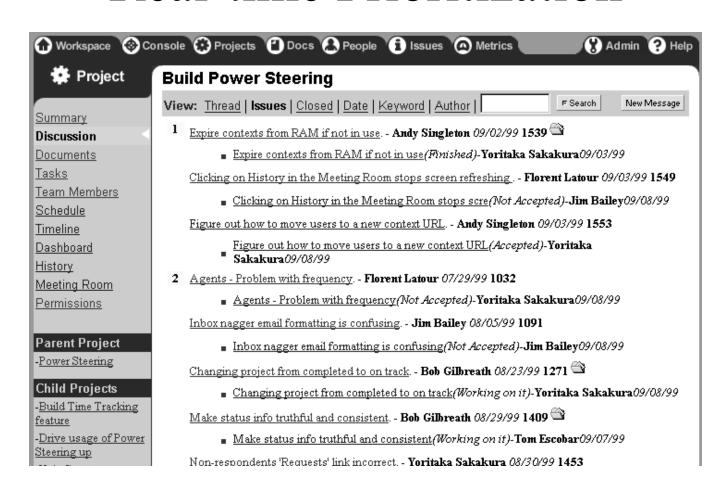


# Discuss Problems and Opportunities





#### Real-time Prioritization







# Application Services The speed advantage

- Application hosting allows us to roll out new features to all customers every week.
- We can measure usage and invest in the most important features.
- Email-driven invitation process gives us rapid rollouts and expanding desktop share.
- Aiming for a 5:1 cost advantage.





# Application Services and Websphere

- We use it in our datacenter to run hundreds of separate customer trials from a single NT server.
- Because it runs on so many platforms, customers can also use it for on-site installation in almost any datacenter environment. This is important.
- Some scalability problems. Problems with memory management.







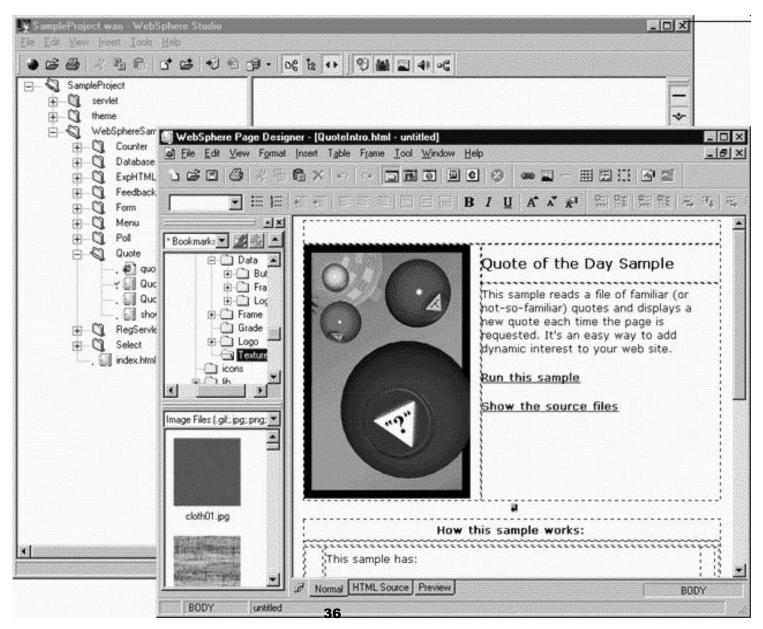
- Use for managing continuous development
- Customize the JSP presentation layer with your own branding.
- Full source code availability
- Participate in the development for cash and/or royalties.





## WebSphere Studio - Visual Layout for Dynamic JSPs/HTML







# WebSphere Studio -- New in Version 3



- Studio Workbench Greatly enhanced
  - ► Manages Web projects, files, and link relationships
  - ► Team enabled common view, check-in/out,
- Integrated Page Designer New, industry first
  - ► Visual layout for dynamic JavaServer Pages (JSP)
  - Creates dynamic JSPs with the same ease of creating HTML
- Integrated Servlet Wizards Enhanced
- Integrated Remote Debug New, industry first
  - ► Remote JSP/Java debugger integrated into Studio
- VisualAge Java Pro integration New



# WebSphere Studio -- Additional Version 3 Support



## Companion tools

- ► Applet Designer
  - Visual authoring tool that makes it easy to build new Java applets
- WebArt Designer
  - Handy tool for creating masthead images, buttons, and other Web page graphics
- AnimatedGif Designer
  - Tool for assembling GIF animations

# Complementary Products

- ► HotMedia (on the Studio CD)
  - For quick graphic design
- ▶ PerfectPhoto
  - For advanced image editing
- ► NetObjects Fusion
  - For a visual way to prototype Web sites





### e-business



# VisualAge for Java -- Usage Concepts

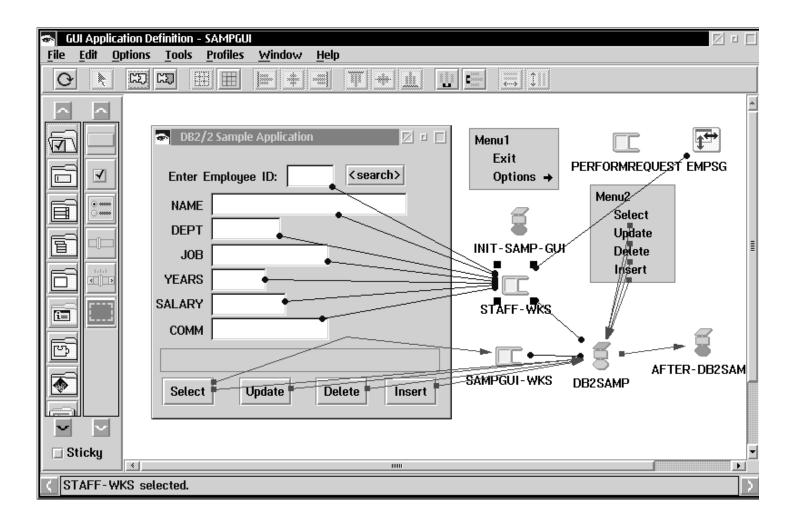
- Aimed At Java Developers
  - ► Applets, Swing, JSPs, Servlets, Applications, JavaBeans, EJBs
  - ► Focus is on the business logic
- Scalable data-centric e-business solutions
  - Data Access Beans and new Quickforms
    - Quickly create data centric e-business solutions for deployment to WebSpher
  - Stored Procedure builder & SQLJ support
    - Scale your Web solution and add security through an easy-to-use Stored Procedure Builder
- Easily Extend Existing Applications to e-business
  - Access Builders generate the connection code
    - Notes, CICS TS, Encina, SAP R/3, IMS, Encina, C++, Java (RMI), Host-on-Demand
- Build for the future
  - ► Best of breed Enterprise JavaBean development and deployment
  - Rapid Application Deployment through integration with WAS/WSS



# VisualAge for Java -- Visual Construction

### e-business









# VisualAge for Java -- New in Version 3

- Ease-of-use improvements
  - ► Learn Java with an updated tutorial from MindQ
  - Quickforms for rapid prototype of user interface
  - Simplified Enterprise Access Builders
  - Enhanced data access beans
  - Enterprise JavaBean Development made even faster
- Java 2 Platform Support
  - ▶ Build for deployment to the Java 2 Platform
- Tighter integration with Rational Suites
  - Round-tripping between Rational Rose and VisualAge for Java via an XMI bridge
- Enhanced support for building scalable data solutions
  - Quickforms prototype User Interfaces from existing data
  - ► New Stored Procedure builder (Wizard)
    - Access to data via called program, enhances security and throughput
  - Support for SQLJ in environment
  - Framework for mapping data schemas to EJBs



### e-business



# VisualAge for Java - New in Version 3.0

- Opens up development / deployment options
  - ► More platforms development
    - Windows 95, Windows 98, Windows NT, OS/2, AIX, Linux Pro Beta (NEW)
  - ► More platforms deployment
    - Windows, OS/2, AIX, AS/400, OS/390
    - -Linux and Solaris (NEW)
    - Java 2 Platform, Standard Edition (NEW)
- Eases EJB development
  - ► Automates 'hard work' in coding EJBs
    - Developer codes Java business logic / tool generates infrastructure
  - ► "Access Bean" generation allows bean developers to exploit EJBs
  - ► Generates a test client so EJB developers can quickly test
  - ► Treats EJBs as first class objects
    - Edit, compile, debug, browse, version control
  - Enables testing inside the IDE speeds testing
    - Local debug of Servlets, JSPs and EJBs prior to deployment
- Rapid Application Deployment
  - ► Wizards ensure fast deployment to WebSphere



# **Application Development Tool Support** Summary for WebSphere Version 3

The Component

**IBM SanFrancisco** 

**OO** Integration **Architects** 

VisualAge Component Development for WAS EE

00 **Application Programmers** 

VisualAge for Java, EE

VisualAge for Java, EE

**Traditional Application Programmers**  **VisualAge** Generator

**VisualAge** Generator

Web Site **Producers**  **WebSphere Studio** 

Presentation

**WebSphere Studio** 

**Advanced** 

WebSphere **Studio** 

**Application** Complexity

WebSphere **Edition** 

**Standard** 

**Applicati** 

**Enterprise Edition** 

Integration

**Application** Server

**Edition** 







# WebSphere and WebSphere Studio with Interwoven Content Management

Jeffery Englemann Vice President





# Interwoven Backgroun

- Company
  - Founded 1995
  - Sunnyvale, California
  - 160 employees
  - Global operations
  - **Products** 
    - TeamSite and OpenDeploy
    - Fourth-generatio
  - **Customers and Partners** 
    - 100+ customers
    - Partnered e-commerce technology leaders

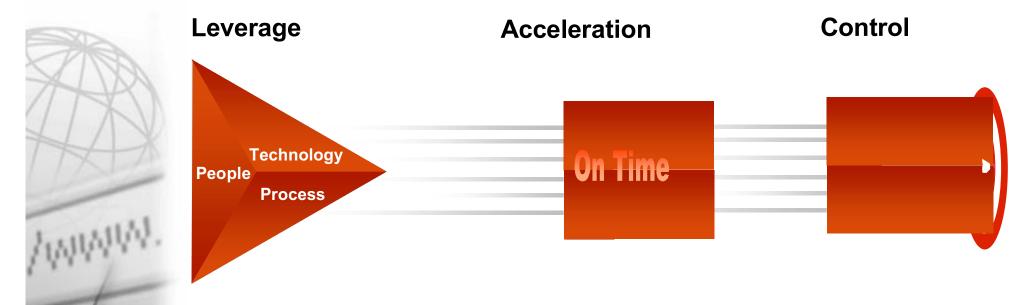


www.interwoven.com





# Moving Business to the web



### **Subject Matter Experts**

Intuitive browser based GUI and templating interface

### **Technology Innovation**

Open architecture supports any and all technologies, (e.g. XML)

### **Business Process**

All assets, all content



### **Multiple teams**

Project branching technology promotes multiple teams

### **Installed Base Tools**

Out-of-box support for existing tools and content delivery systems

### **Rapid Implementation**

Quick start methodology delivers results in 30 days

### **Brand Contr**

Templating and workflow ensure brand compliance

### Individual accountability

In context QA and virtualization gives everybody a copy of the website

### **Manage Workflow**

Workflow ensures compliance with regulations. Rollback provides insurance



# Making it easier

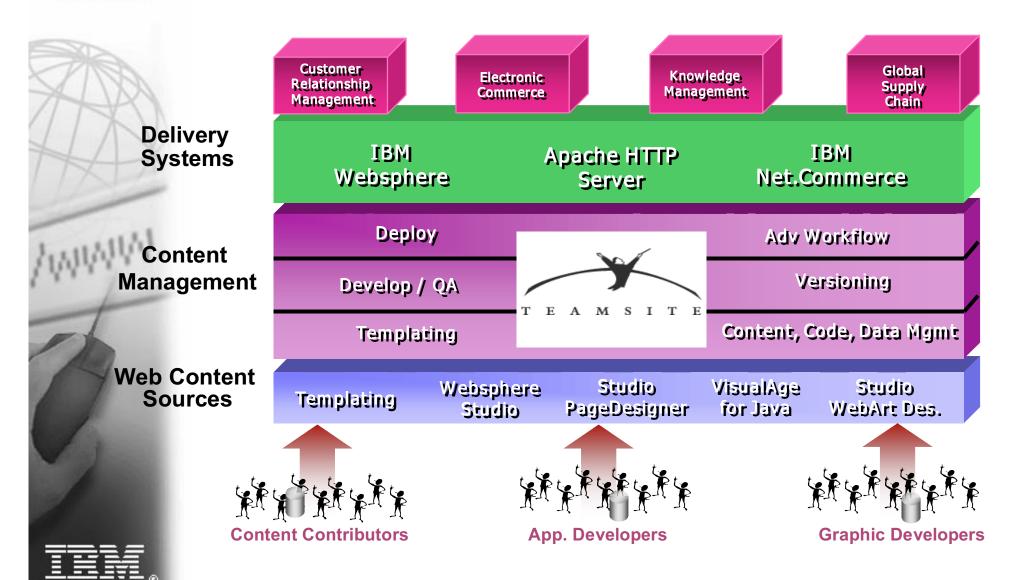


Content Management ---

- Multi-Contibutor
  - Non-Technical and Technical content contributors
- File, data, and code management and versionin
- Advanced workflow
- Test and QA
- Web content replication



# **IBM Websphere and Interwoven**





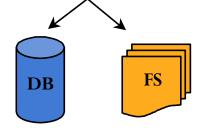
# Interwoven Hybrid Architecture



### **Content Management**

- Content
- Code
- Data

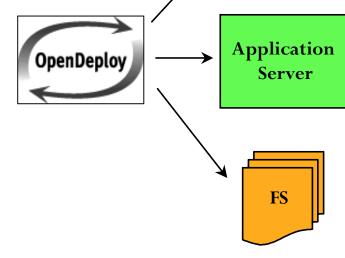
# **TeamSite**



**Development** 

### **Replication**

- DataDeploy
- FileDeploy
- Deploy & Run

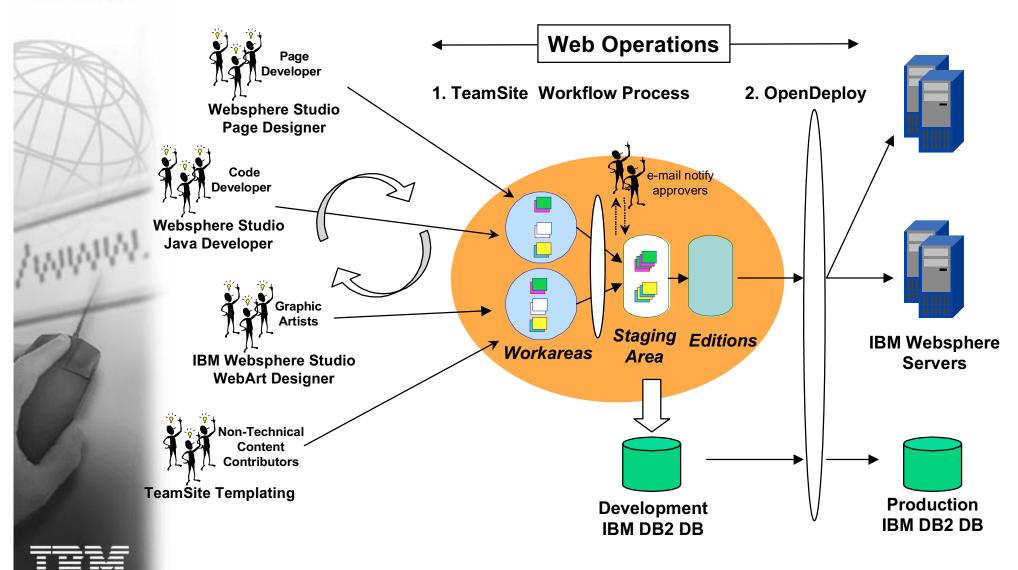


DB

**Production Site** 

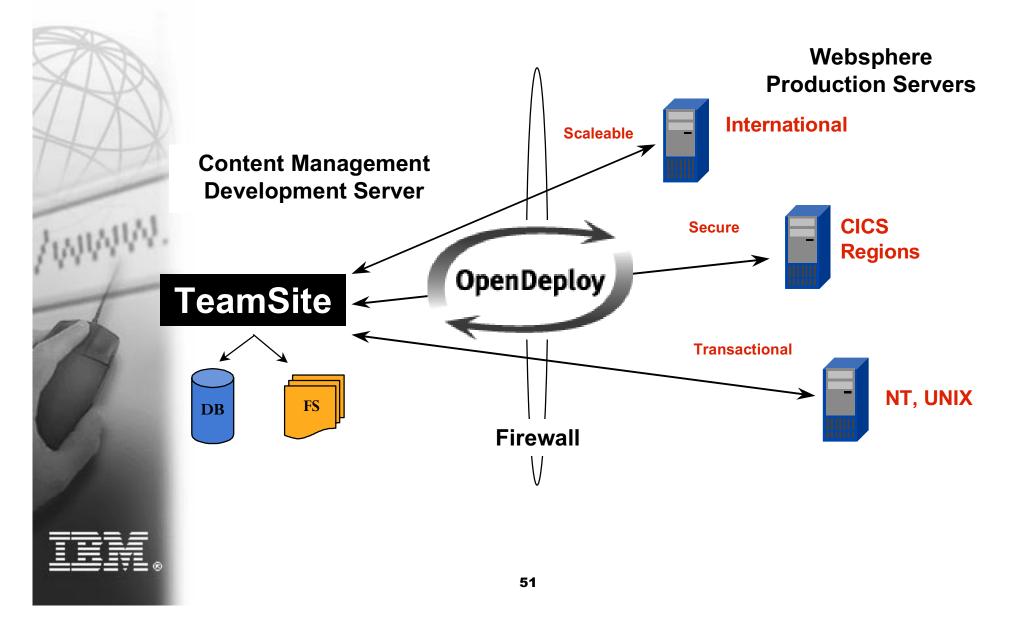


# **Content Management Workflow**





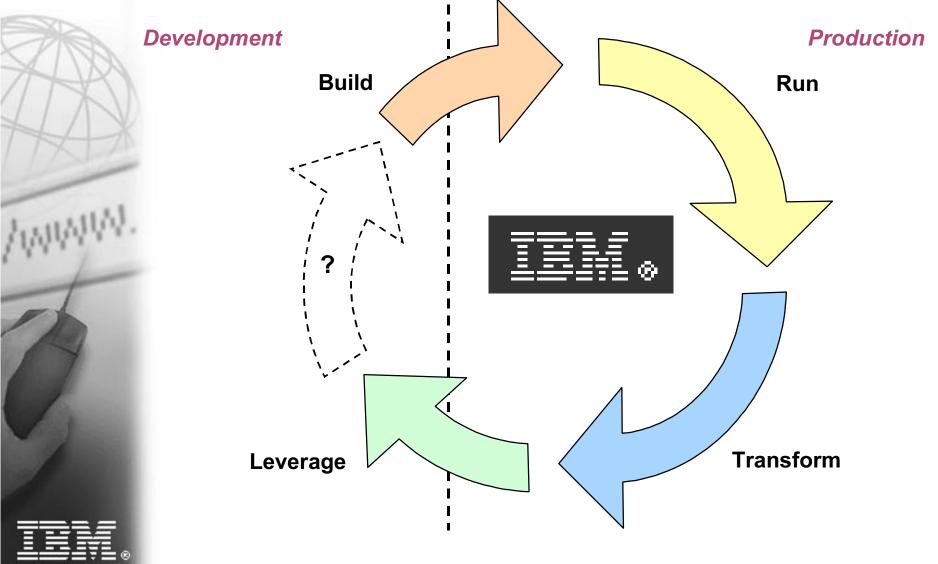
# **Content and Data Replication**





# **E-Business Lifecycle**

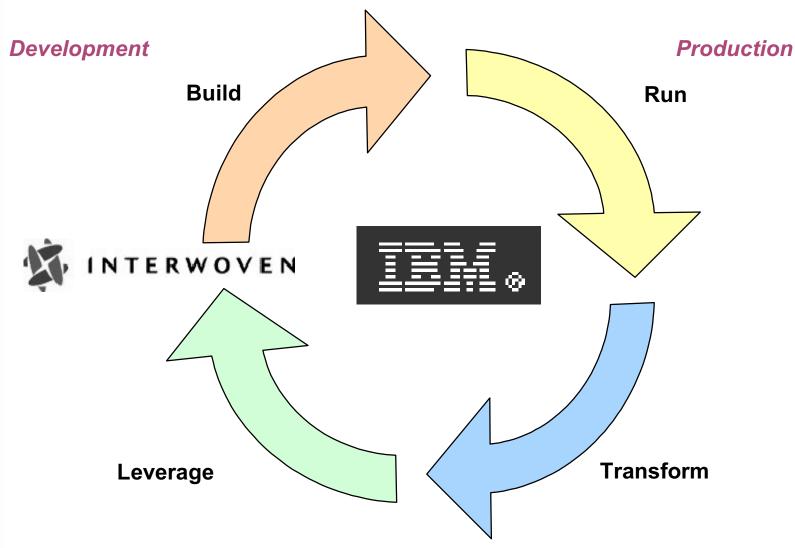
e-business





# **E-Business Lifecycle w/ Content Mgnt**







# **Summary of Benefits**

- - Interwoven provides robust content management for Websphere
  - Content management has become a requirement for large sites
  - Interwoven supports the entire web team
    - Non-Technical and Technical contributors
    - Complements Websphere Studio
    - Open, Internet-standards architecture
  - Hybrid architecture supports both files and data
    - File-system view of managed content enables compiling, running and testing of application code (Java, EJBs, JS, etc.)
  - Advanced workflow facilitates design and maintenance



# Prices and Availability Summar

- WebSphere Application Server Version 3.0, Standard Edition
  - ► \$795 per server (Available Sep 30 99)
- WebSphere Application Server Version 3.0, Advanced Edition
  - ► \$7,500 per processor (Available Sep 30 99)
- WebSphere Performance Pack Version 3.0
  - ► \$7,999 per copy (Available Sep 30 99)
- WebSphere Studio Version 3.0
  - ► \$495 per copy (Available Sep 30 99)
- VisualAge for Java Enterprise Version 3.0
  - ► \$2,999 per copy (Available Oct 99)
- WebSphere Application Server Version 3.0,Enterprise Edition
  - ► \$35,000 per processor (available now)
- Prices in US \$'s





# **IBM Business Partner Charter**

- Business Partners will be our primary way to deliver solutions to small and medium-size enterprises
- Business Partners will also help us efficiently fulfill the IT needs of our large customers
- We will team with you to jointly develop, sell and deliver services
- We will help you increase your IBM software revenue
- We will help you develop, market and sell applications and capitalize on e-business
- Our business units will work together to make it easier for Business Partners to profit selling IBM Solutions





# IBM Partnerworld Business Partner Programs:





Awareness Interest Enablement Engagement Reward

Investing in our Partners' Success...



# IBM Business Partner-Software Progra



### Mission

Grow software and services opportunity for Business Partner communit

## Strategy

- Recruit A team of "Best-of-Breed" IBM Business Partners
- Enable Train and educate IBM Business Partners to create a critical mass of skilled providers
- Engage Link IBM Business Partners to sales opportunities/IBM Software Marketing Programs to generate strong business growth



e-business

# **Solution Focus**

Moving from volume to value

Focusing on competency beyond product knowledge

 Providing choice/benefits based on business partner segments/model

### **Theme**

Leveraging the IBM Brand Investment

e-commerce
Web Self Service
Business Intelligence
Business Integration
Collaboration/Messaging
SecureWay Host Integration

(e)

ERP or Cons

Server Consolidation Customer Relationship Mgt Supply Chain Mgt Sales Force Automation

Plus: ISU/ISV Applications

Net.Commerce VisualAge for Java Visual Warehouse MQSeries DB2 Universal Database SecureWay Firewall IBM WebSphere
Lotus Notes & Domino
Tivoli TME 10, ADSM V3
IBM Software Suites
SecureWay Host on

Demand

e-Products

Driving skills development in key IBM SW products

Lotus





e-Solution

Marketing value along with product

**Branded Business Partner Programs** 





# How can you get started?

### **Get Educated**

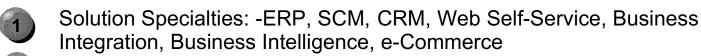
- Web Based Traini
  - Technical Training
  - Sales Training
- Classroom traini
  - ► IBM WebSphere Application Server
  - ► IBM WebSphere Studio
  - ► IBM WebSphere Performance Pack
  - Solution Selling with Web Self-Service
  - VisualAge for Java



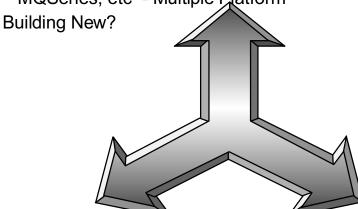


# **Marketing Activities**

### **Solution Focus Areas**



GA Solutions: Customer References with WebSphere, VisualAge Java, Domino, MQSeries, etc. - Multiple Platform





- → Identify your Interest
- → Create Bookmark

DeveloperWorks -

www.IBM.com/Developers/

PartnerWorld for Developers www.Developer.IBM.com

- → Become a Member
   PartnerWorld for Developers
- → Get Registered

Global Software Solutions Guide www.software.ibm.com/solutions 61

### Marketing Services Available

- → PartnerWorld Communications to / from IBM
- → PartnerEducation -Education and Certification
- → PartnerSupport -Technical Support
- → PartnerMarketing Fact Sheet, Web Quotes, Partner Slides, Application Briefs, Events, Speaker Opportunities
- PartnerCommerce Online Ordering
- *→ PartnerLine* -Telephone Support







# Remember the following Web sites:

- Download and 'test drive' WebSphere products
  - ► www.ibm.com/websphere
- Learn about partnering with IBM
  - ► www.ibm.com/partners
  - ► www.software.ibm.com/webintegrators
  - ▶ www.developer.ibm.com
- Check out the robust resources IBM provides its business partners
  - ► www.ibm.com/partnerinfo
  - www.ibm.com/developer
- Get enabled and certified
  - ► www.ibm.com/certif



# Keep your eyes open for ......



# PartnerWorld 2000 January 23 - 26, 2000 San Diego, CA

The premier event for IBM Business Partners.

More details will be coming soon!







... we invite your questions...