

# WebSphere Application Development

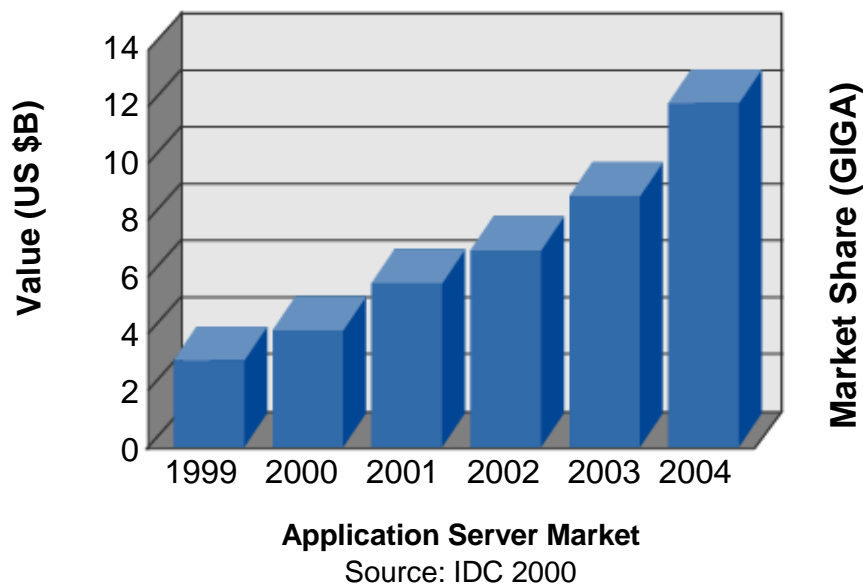
- ▶ WebSphere software platform
- ▶ WebSphere Partners
- ▶ Vision and Strategy
- ▶ Offering Details
  - ▶ Studio
  - ▶ VisualAge for Java
  - ▶ Studio Workbench



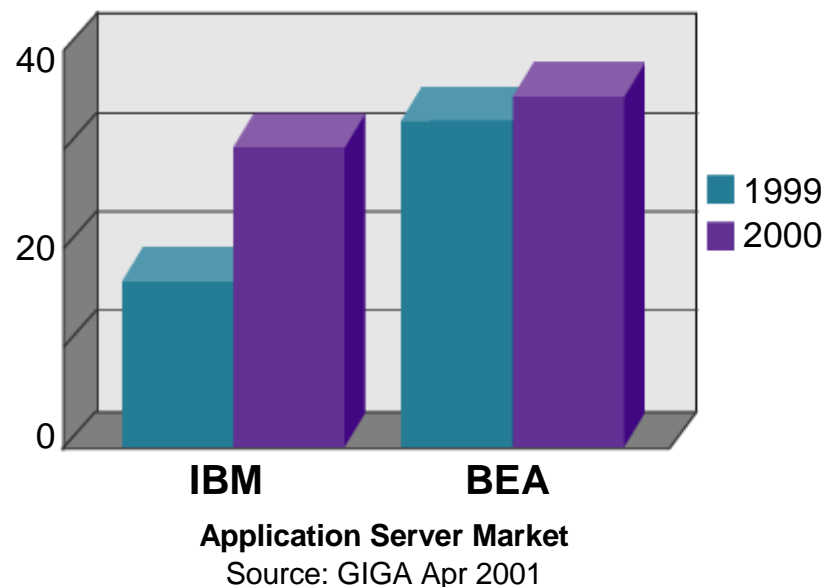
**Roger Rea**  
Market Manager,  
WebSphere Application Development  
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# WebSphere Market Success

**Accelerating e-business Platform Market**



**WebSphere: Fastest Growing Platform**

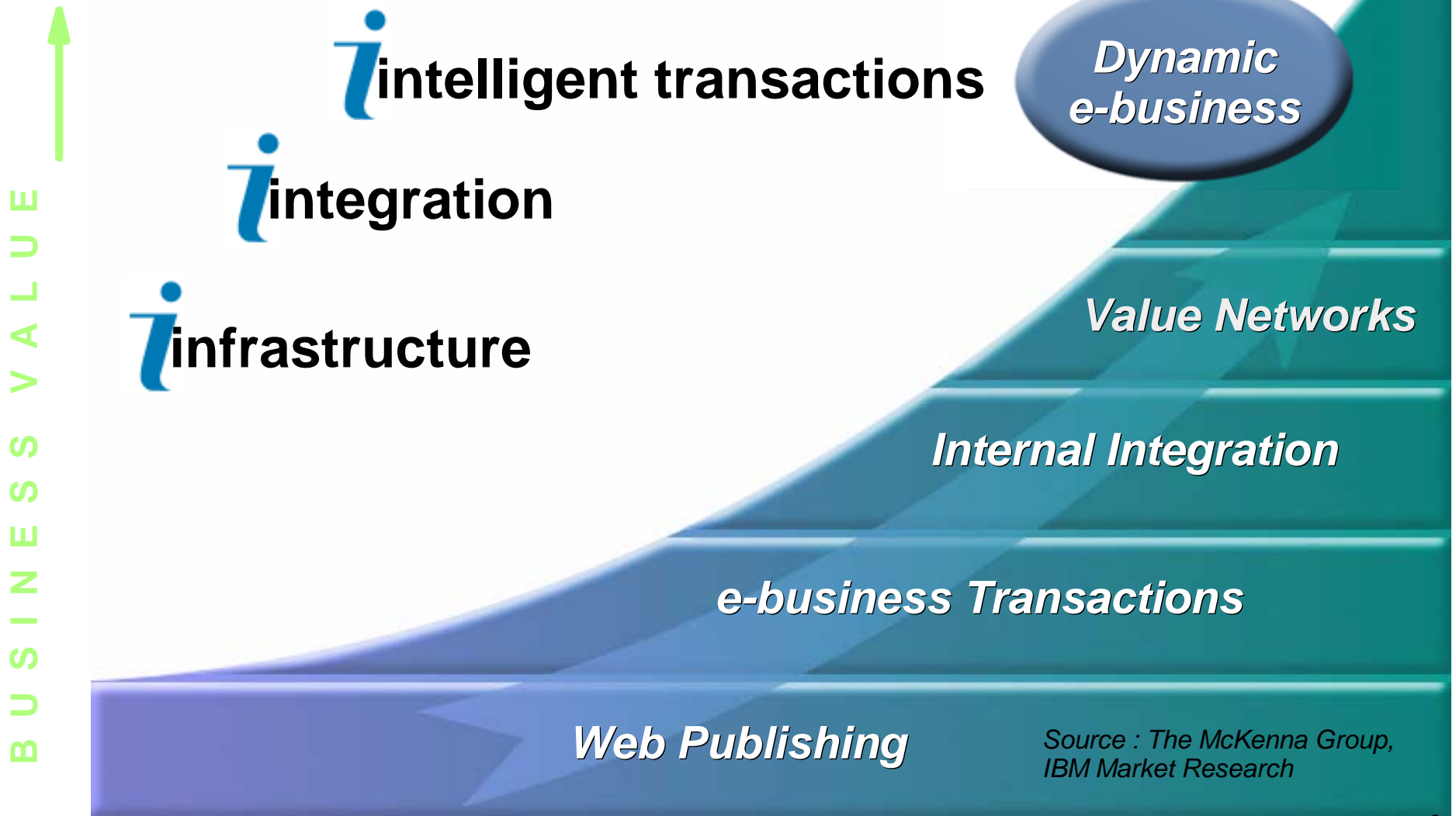


*35,000 customers worldwide*

*9,000+ ISV applications*

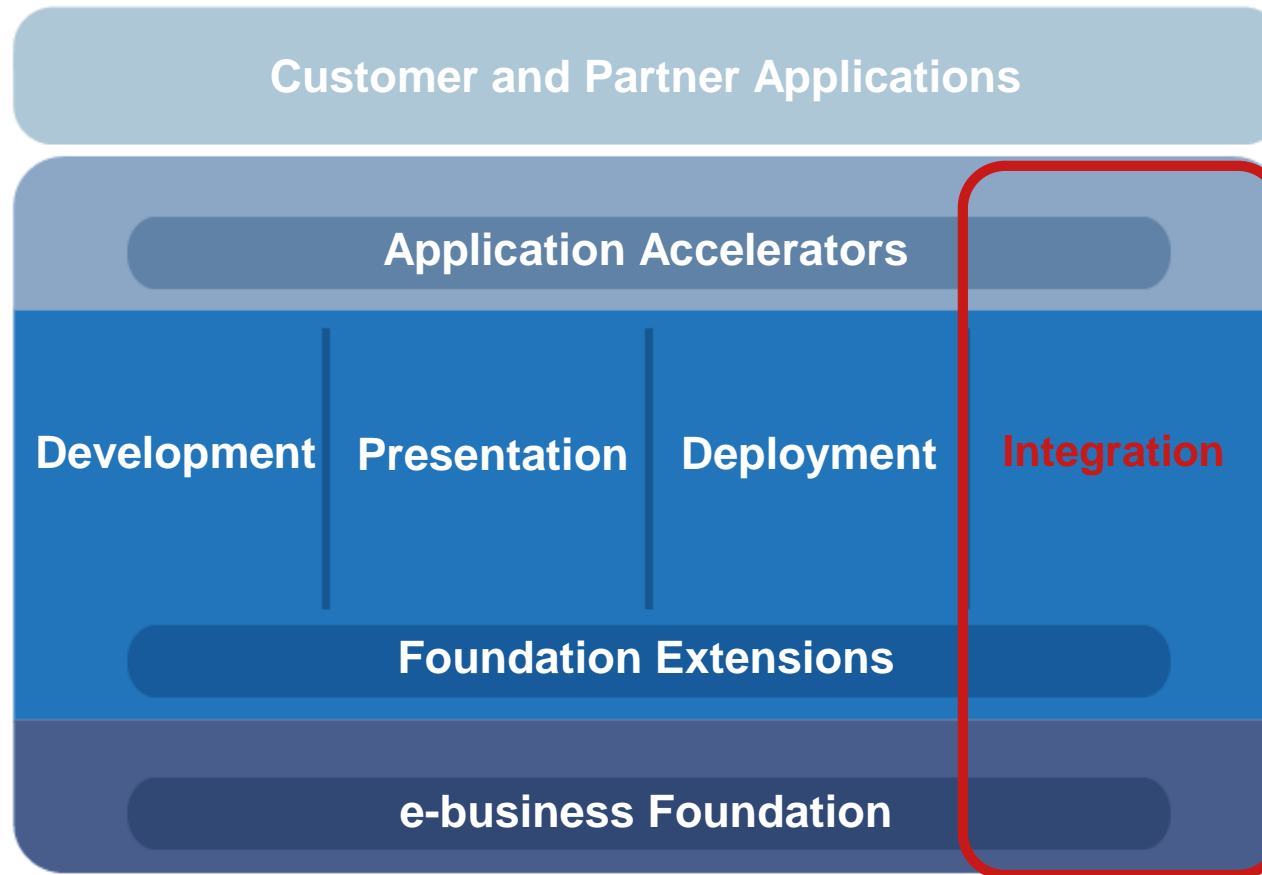
*7,000 certified professionals*

# Dynamic e-business



Source : The McKenna Group,  
IBM Market Research

# Platform for Dynamic e-business



- Incorporating integration and BPM in a transactional context
- Enhancing foundation with version 4.0
- Delivering prepackaged business infrastructure
- Widest support for open standards -- leader in web services

# WebSphere Platform

## Realize greatest business value versus competition

- ▶ Over twice the performance throughput per \$ invested

## Deliver the technology required for dynamic e-business

- ▶ First with Web services technologies - SOAP, WSDL, UDDI
- ▶ First with J2EE added value optimized for dynamic web transactions

## Easily start with an e-business platform adaptive to change via superior configuration flexibility, extensibility and scalability

## Leverage your existing assets to build robust e-business infrastructures

- ▶ Broadest range of complementary, integrated middleware
- ▶ Over 9,000 ISV applications available (500% YTY growth)

## Establish the most productive developer environment through a full range of integrated and extensible AD tools

- ▶ Greatest number of certified developers
- ▶ 7,000 professionals worldwide across industries, disciplines

# Delivering Dynamic e-business

BUSINESS VALUE ↑

## *Ability to Execute with the WebSphere Software Platform*

- 7,000 certified professionals
- Reduced cycle time 30 - 40%
- Reduced development cost 50%
- Financial benefit of \$10.3M
- Application running in 90 days
- 50% Code reuse

*Ability to Execute with point product technology*

## Software Value for PartnerWorld

- **Each 1\$ of IBM software, customers spend:**
  - ▶ **\$19.70 on services, hardware and other software**
- **PartnerWorld for Software benefits**
  - ▶ **Run your business includes:**
    - WebSphere Studio
    - VisualAge for Java
  - ▶ **Solution/Product Information Web Site updates:**
    - WebSphere Studio Homepage Builder V6
    - WebSphere Studio Professional Edition V4
    - WebSphere Studio Advanced Edition V4
    - VisualAge for Java V4
    - WebSphere Studio Workbench

# WebSphere Deal Anatomy

## ■ Small

- ▶ Application examples: Web enabling applications; B2C or basic B2B; Simple employee intranet: B2E
- ▶ SW Revenue: \$20K - \$60K
- ▶ Services Revenue: \$40K - \$120K @ 2:1

## ■ Medium

- ▶ Application examples: Simple e-commerce site: B2C, B2B; Simple business process automation; Employee benefit self-service B2E
- ▶ SW Revenue: \$60K - \$140K
- ▶ Services Revenue: \$240K - \$560K @ 4:1

## ■ Large

- ▶ Application examples: Enterprise-wide business processes; Large-scale B2B or B2C applications
- ▶ SW Revenue: \$1.1M
- ▶ Services Revenue: \$11M @ 10:1



# IBM WebSphere Software Platform Typical Partner Profile

- **Java** skills
- **Certifications** for WebSphere
- **Vertical application** (Optional)
- **IBM HW** Platform knowledge (if Channel appropriate)
- **Non IBM HW** Platform knowledge (if Channel appropriate)
  - ▶ SUN Solaris, HP, and/or Compaq
- Complementary **Database** Software
  - ▶ **IBM DB2** (Lead with)
  - ▶ Other "Best of Breed" Non IBM Database offerings (customer preference)

# Application Development Vision

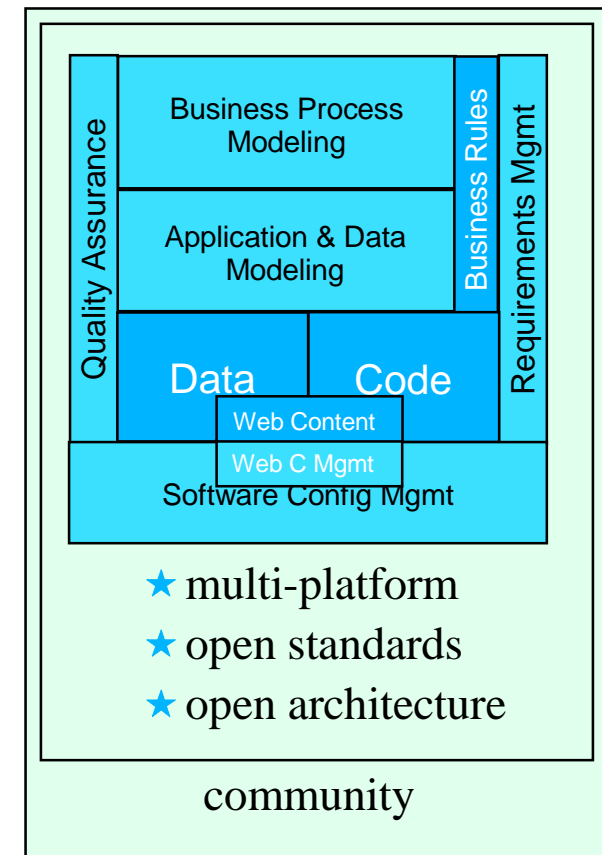
- **Deliver, grow, and differentiate e-business**
- **Help teams design, develop, and deploy dynamic e-business applications**
- **Provide the ultimate workbench to "manage" the work**

# WebSphere

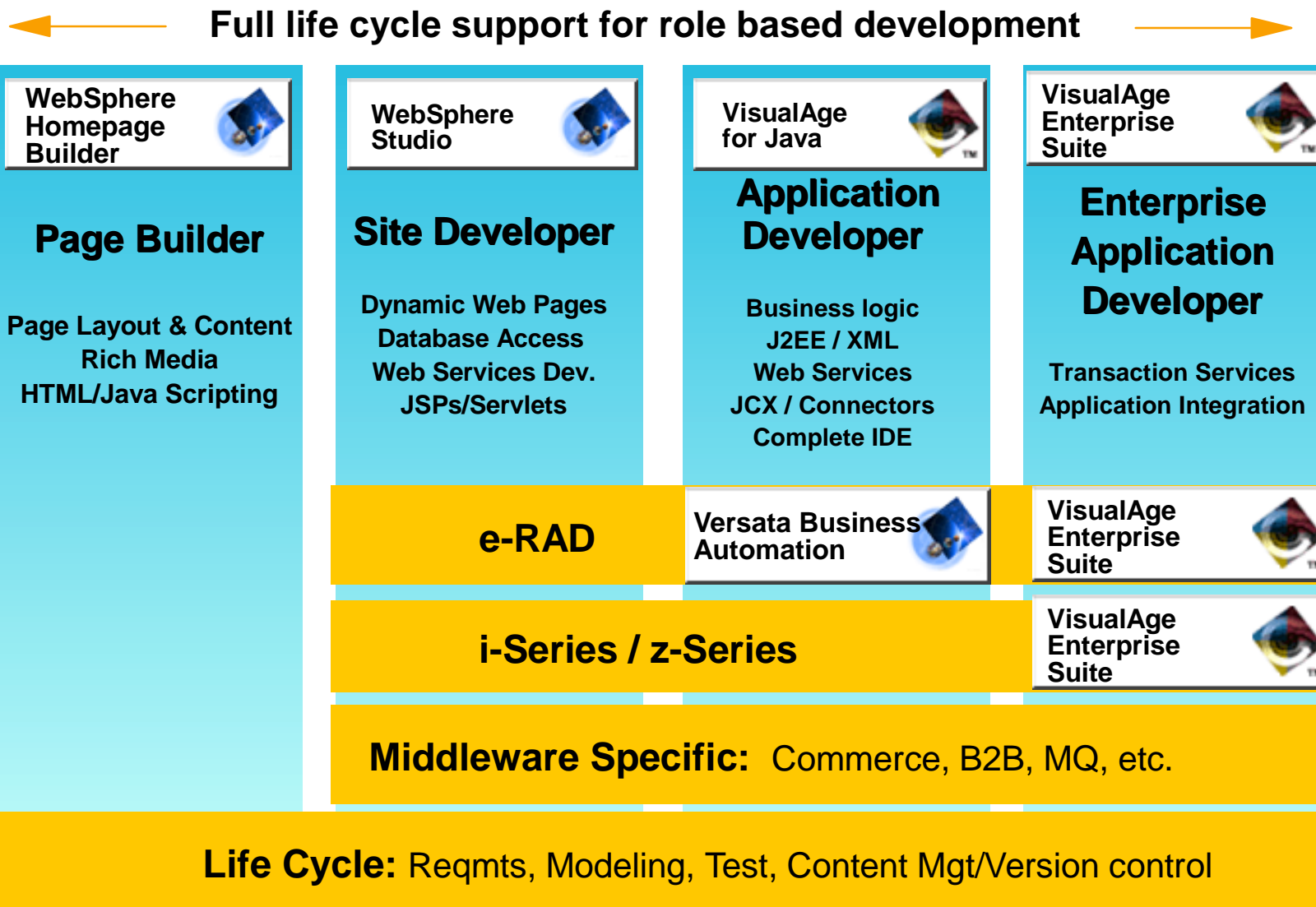
■ The Fastest Way to e-business ■

# Application Development Strategy

- A comprehensive development environment
- A programming model
- A developer community



# WebSphere Application Development - Role Based



# WebSphere Application Development V4.0 Packaging

## Configuration Options

- ✓ *VisualAge for Java Professional Edition*
- ✓ *VisualAge for Java Enterprise Edition*
- ✓ *WebSphere Studio Homepage Builder*
- ✓ *WebSphere Studio Professional Edition*
  - includes *VisualAge for Java PE*
- ✓ *WebSphere Studio Advanced Edition*
  - includes *VisualAge for Java PE*

## Platforms

- ✓ Development:
  - Studio Windows 98, Me, NT, 2000
  - VA Java Windows 98, NT, 2000
- ✓ Deployment:
  - All WebSphere Server Platforms

## Dates

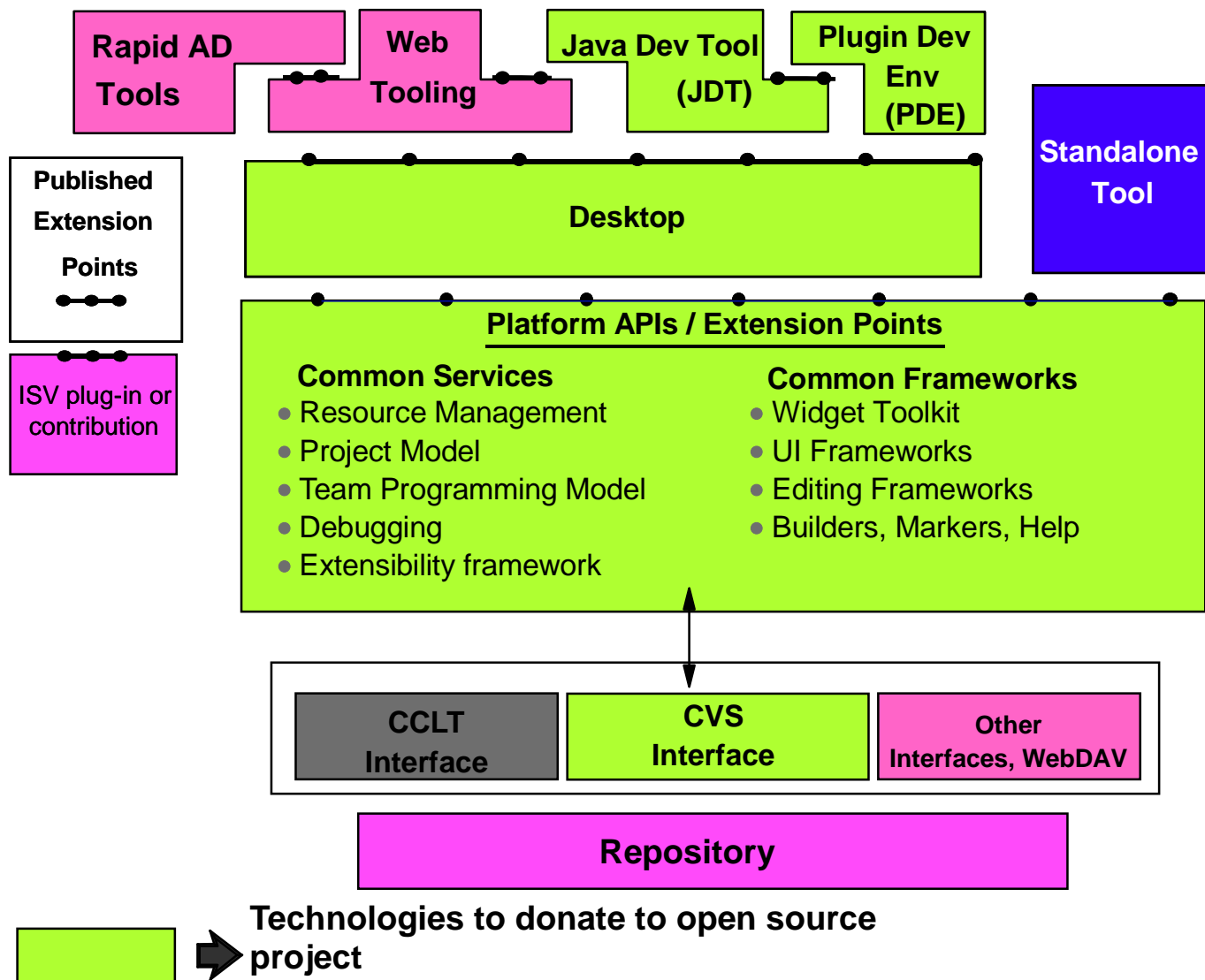
- ✓ eGA : 7/13/01
- ✓ GA : 8/3/01
- ✓ Homepage Builder 6/29/01

## Pricing

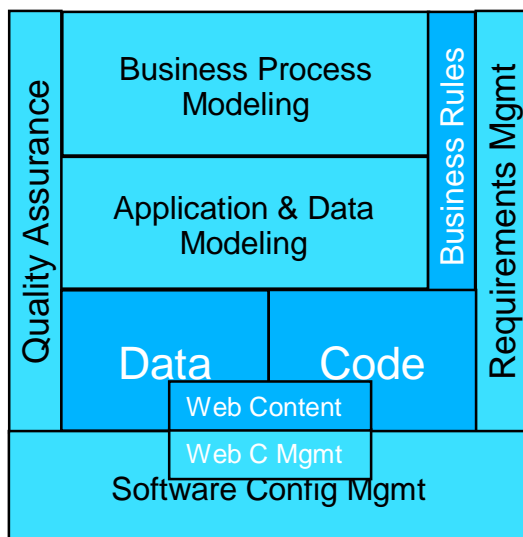
- |                                     |         |
|-------------------------------------|---------|
| ✓ VisualAge for Java Pro            | \$ 149  |
| ✓ VisualAge for Java Enterprise:    | \$ 2999 |
| ✓ WebSphere Studio Homepage Builder | \$ 99   |
| ✓ WebSphere Studio Pro:             | \$ 599  |
| ✓ WebSphere Studio Advanced:        | \$ 1999 |

**Web Services Enabled**

## WebSphere Studio Workbench - an open tool development kit



# Workbench Key ISV Partners



## Rules based development

- ▶ Versata

## Connectors

- ▶ Extricity

## Development tools

- ▶ Instantiations
- ▶ Macromedia

## Business Process Modeling

- ▶ Holosofx

## Requirement Management

- ▶ RationalSuite Analyst Studio

## Application and Data Modeling

- ▶ RationalSuite Developer Studio

## Web Content Management

- ▶ Interwoven

## Software Configuration Management

- ▶ Rational ClearCase / ClearQuest
- ▶ Serena ChangeMan
- ▶ Merant PVCS

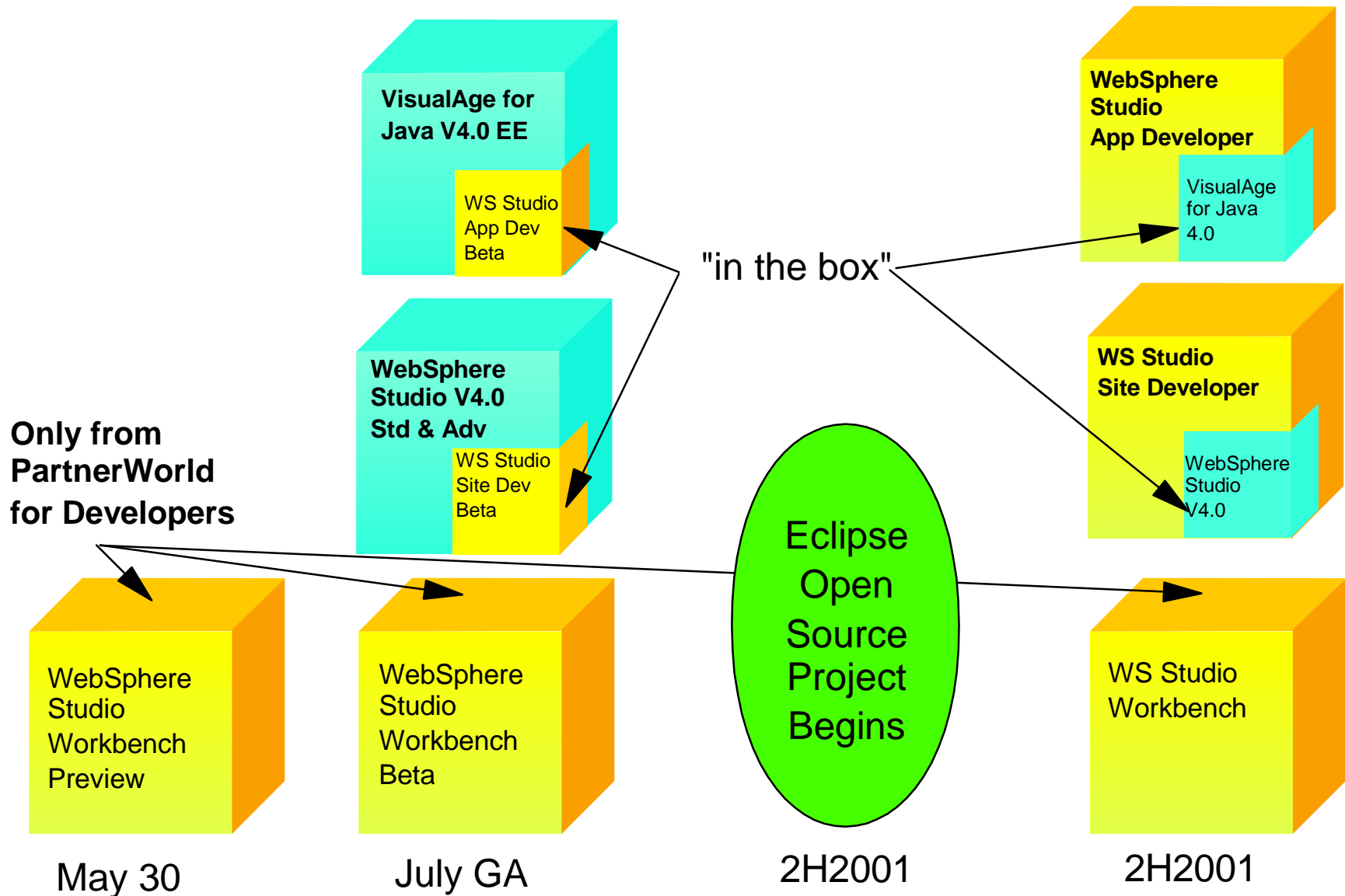
## Quality Assurance / Performance

- ▶ RationalSuite Test Studio
- ▶ Sitraka

## Business Process Integration

- ▶ CommerceQuest

## WebSphere Application Development





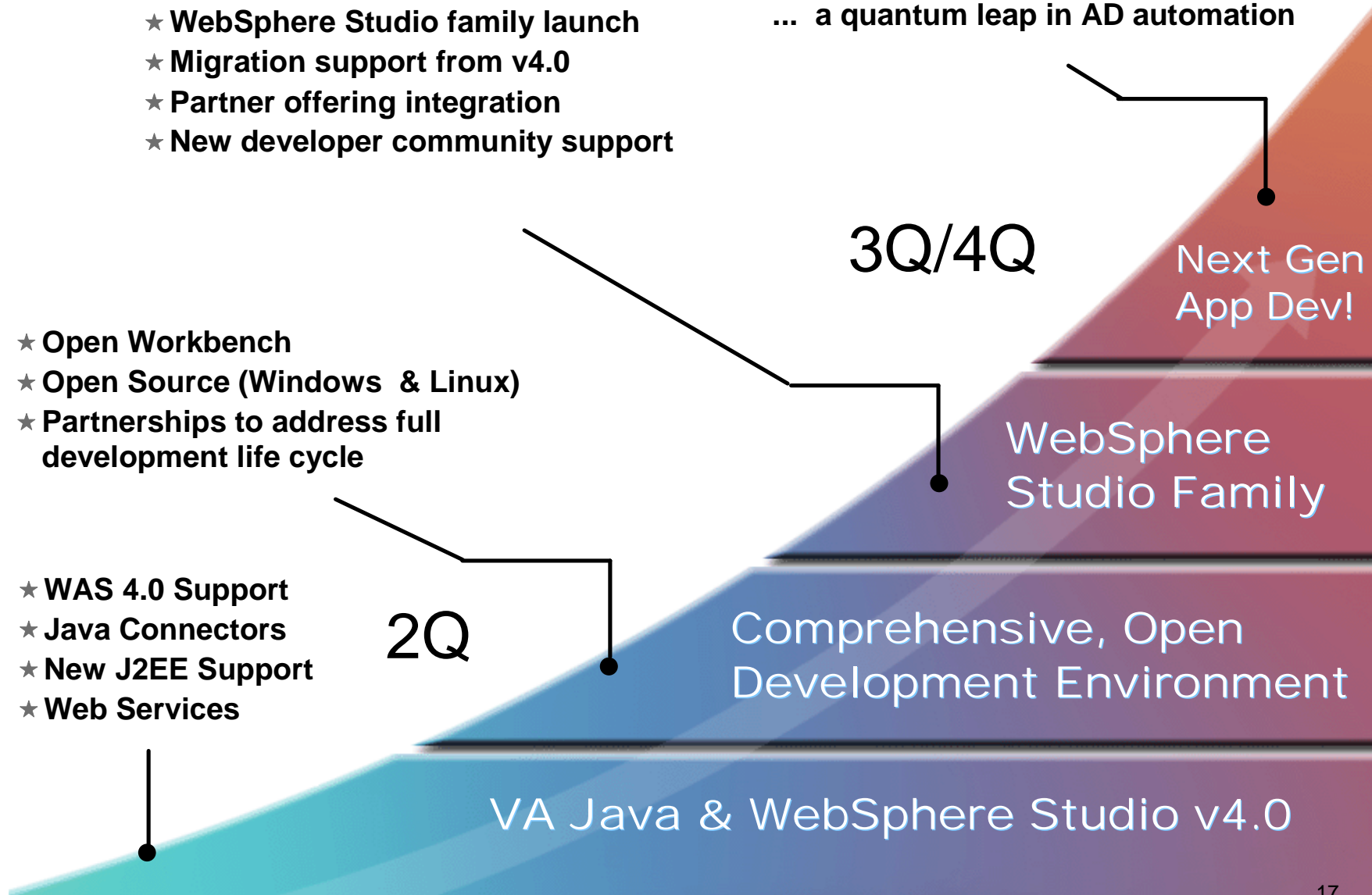
# WebSphere Application Development Roadmap

- ★ WebSphere Studio family launch
- ★ Migration support from v4.0
- ★ Partner offering integration
- ★ New developer community support

★ Next Generation AD Vision  
... a quantum leap in AD automation

- ★ Open Workbench
- ★ Open Source (Windows & Linux)
- ★ Partnerships to address full development life cycle

- ★ WAS 4.0 Support
- ★ Java Connectors
- ★ New J2EE Support
- ★ Web Services



## Market Differentiators

- **Only IBM** offers a comprehensive software platform with our award winning application development tools (VisualAge, WebSphere Studio)
- **Only IBM** uniquely enables customers and partners to efficiently *develop, deploy, maintain, and manage* J2EE based e-business applications
- **Only IBM** has effectively created and maintained a developer community focused on J2EE and Web Services using alphaWorks and developerWorks



# WebSphere Studio

For Building Today's Dynamic  
e-Business

# WebSphere

! The Fastest Way to e-business !

## WebSphere Studio

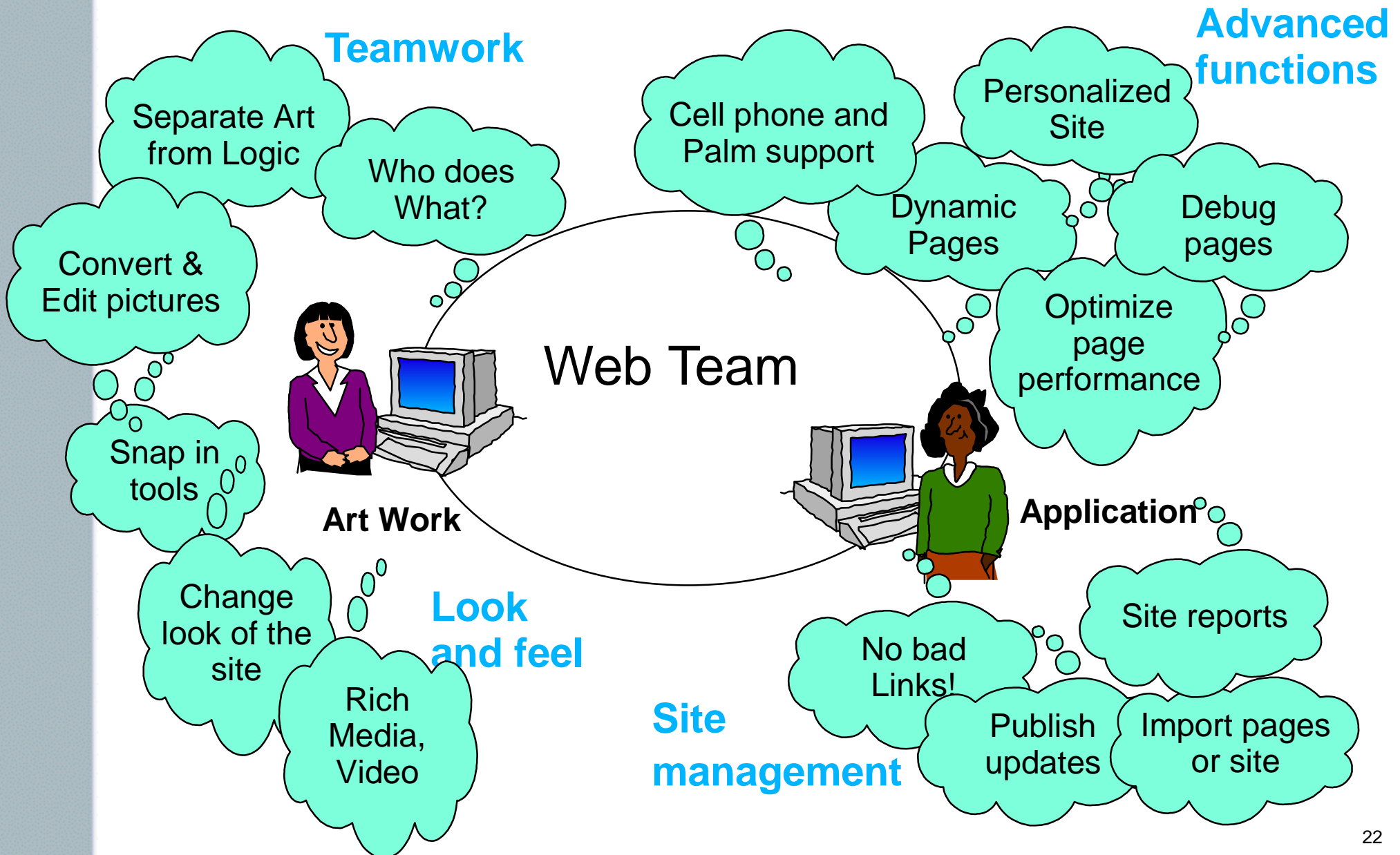
- **What is WebSphere Studio?**
- **Understanding Key Features**
- **WebSphere Studio V4.0-What's new**

# What is WebSphere Studio?

## From simple to advanced Web Development

- ▶ **Complete and easy-to-use**
- ▶ **Visual Page and Site Design**
- ▶ **Advanced tools for web developers**
- ▶ **Improves developer productivity**
- ▶ **Integrates with IBM and third party tools**
- ▶ **Improves testing, deployment and management of web applications**
- ▶ **Comes in three editions:**
  - **Homepage Builder - Single user, HTML, Clients-side applications**
  - **Professional Edition - Small teams, JSP, Server-side applications**
  - **Advanced Edition - Large teams, JSP, Personalization**

# Studio Eliminates Common Web Development Constraints



# Homepage Builder V6.0: Entry web authoring tool

- 2000 Templates
- 5000 Samples
- Video editor
- Logos, Buttons, Photo frames, Line drawings
- Animation
- Image tools
- Cascading Style Sheets
- Dynamic HTML
- Site Management
  - ▶ Accessibility



## WebVideo Studio for videos

- Easy video editing by timeline
- Capture from digital video and digital camera
- Clip video frame or compose from many videos
- Add of text logos, images, photos, and sounds
- Transition effects
- Simple insertion into page
- Multiple formats



WebVideo Studio



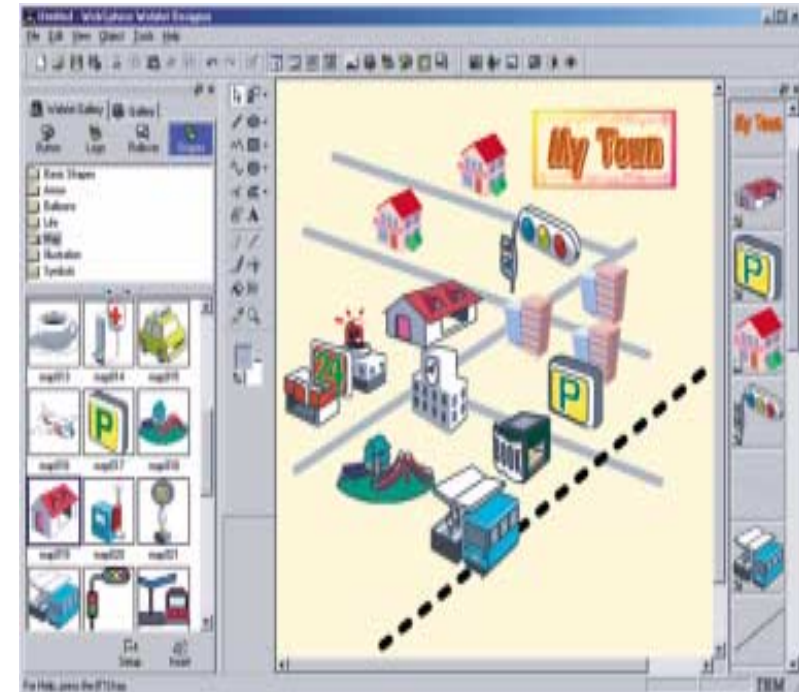
## Image tools for advanced pages

- Use **WebArt Designer, AnimatedGif Designer** to create:

- ▶ logos, buttons, and vector graphics
- ▶ Edit images
  - Crop, Rotate, Flip
  - Brightness, Contrast
  - Color tone
- ▶ Animations, Rollovers

- Use **HotMedia** to create:

- ▶ Panoramic views
- ▶ Synchronized audio, video
- ▶ *Without using plugins!*



Web Art Designer

## Pages for cell phones

- **Generate HTML tags for specific browsers**
  - ▶ TV mode (640x480), Mobile mode (160x160), 1/4 VGA, VGA
- **i-mode support**
  - ▶ Cell phone format for Japan, spreading to Europe and US
  - ▶ **i-Photo Builder**
    - converts photos and images to i-mode color or black/white formats

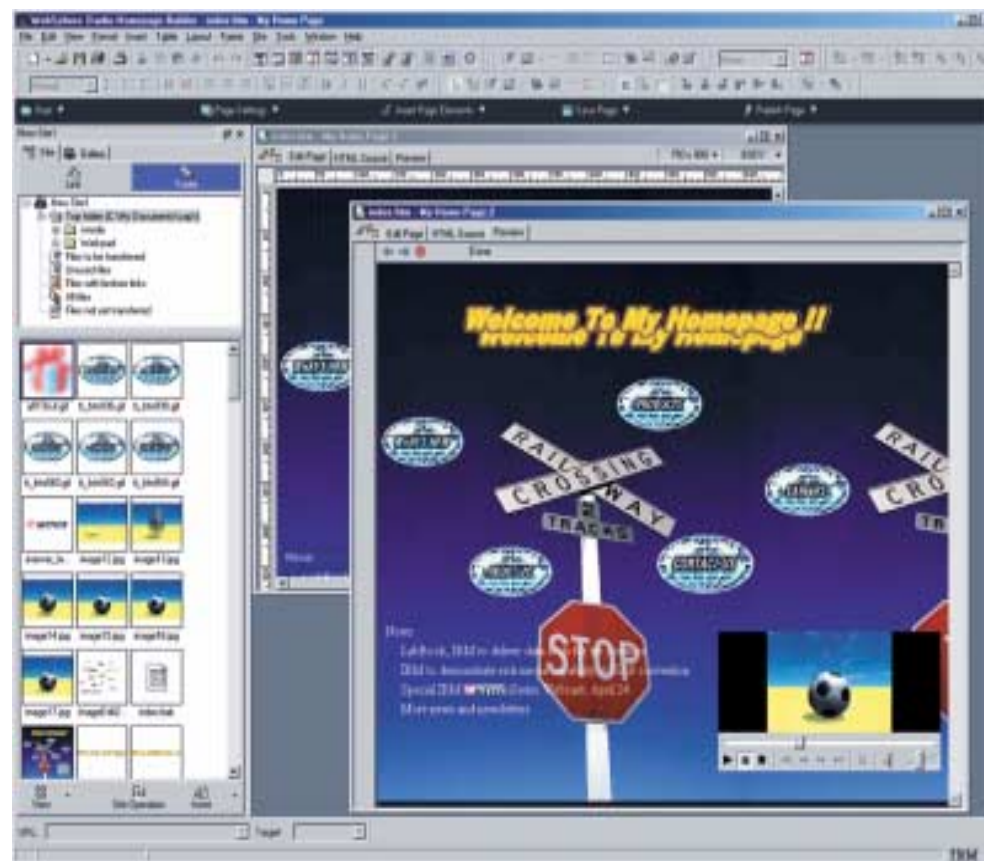


*Create pages for i-mode*

## Start with simple pages.....

- Easy to get started
- Instantly update sites
- Advanced tools

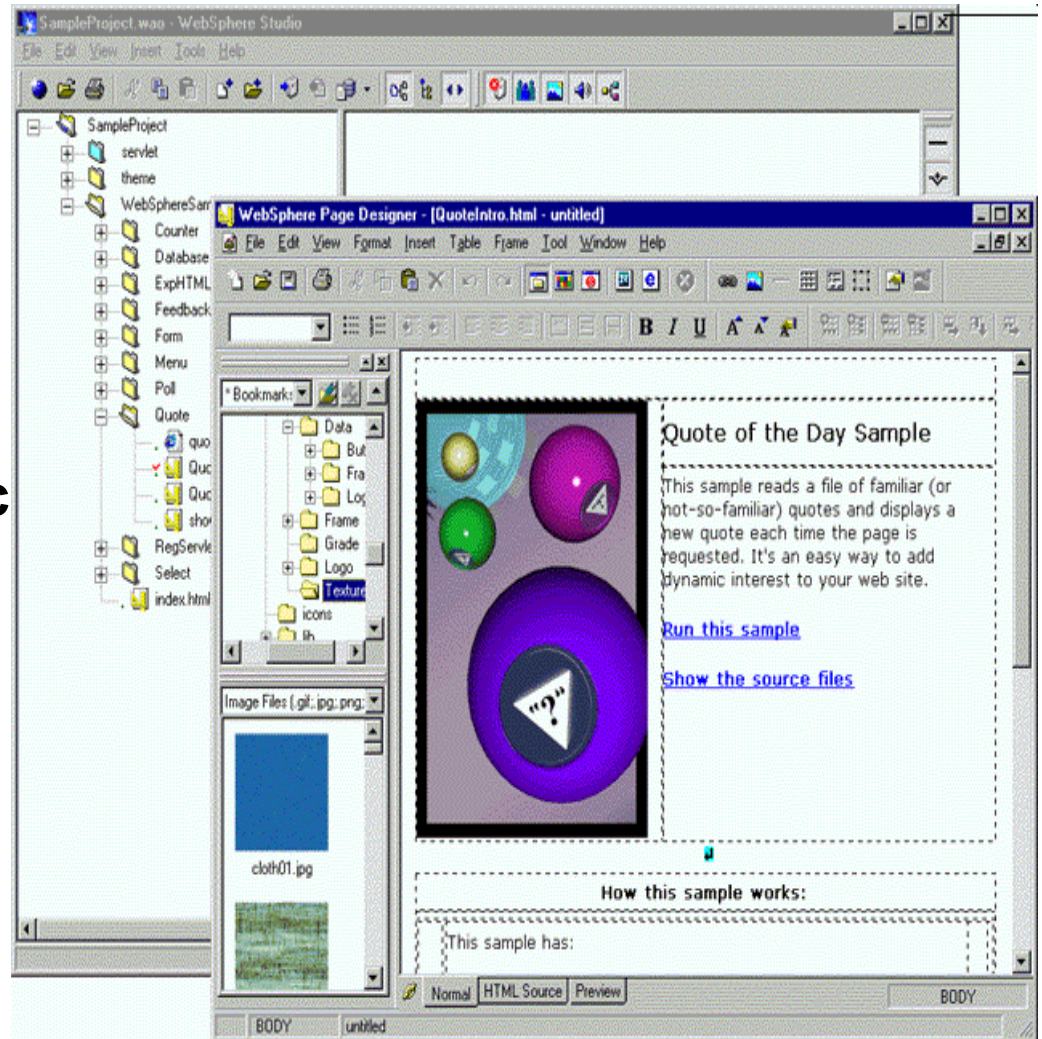
Departmental  
publishing



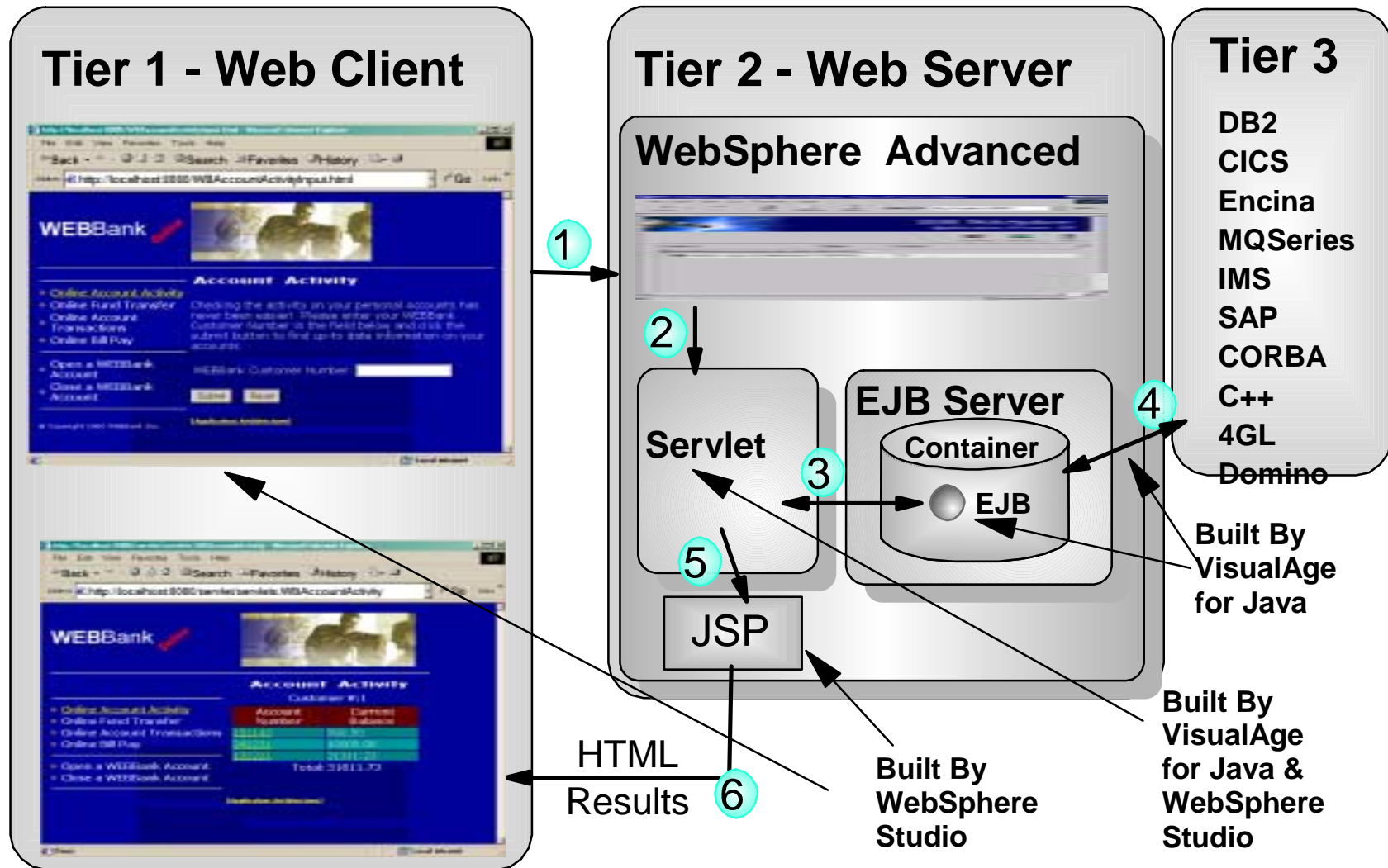
.....grow to dynamic applications

- **WebSphere Studio**
- **JavaScript**
  - **Client-side dynamic**
    - All Studio editions
- **Java**
  - **Server-side dynamic**
    - Professional Edition
    - Advanced Edition

**Corporate Applications**



## ...grow with WebSphere Studio



## Server-side Dynamic Applications

# Homepage Builder Benefits

- **Save time**
  - ▶ Small learning curve - no HTML or programming skills
    - Tutorial and help screens enable rapid competence
  - ▶ Create sites in minutes with templates
  - ▶ Everything needed to build and publish your site
- **Communicate more effectively**
  - ▶ Animation helps highlight important information
  - ▶ Videos to show the complete event
  - ▶ Easy site management allows frequent updates
- **Simple growth to WebSphere dynamic applications**
- **Appropriate for beginners to experts**

# Homepage Builder Comparison

Feature	WebSphere Homepage Builder	Microsoft FrontPage	Macromedia Dreamweaver
Page Authoring	X	X	X
Tutorial and Help	X	No tutorial	No tutorial
Site/Page Template	X	X	X
WebArt Designer	X		
Web Animation	X		
Site Management	X	X	X
Site Check	X	No accessibility	No accessibility
Templates/Samples	2000/3000	60 themes	
Linux Support	X		
WebSphere Platform	X		

The press agree:

- **ZDNet 5 Star Award:** "enough advanced functions to impress experienced Webmasters, but plenty of multimedia tutorials and a detailed user's guide to get newbies up and running, this Website authoring suite aims to please -- and scores a bulls-eye."
- **32bitsonline.com** "a great value for its US\$69 sticker price. Especially for beginners, you get a product that will allow you do just about everything you could want to do."



## Studio Professional and Advanced

- **Visual Page Designer adds JSP support**
  - ▶ Technology from Homepage Builder V5
- **Rich multistage deployment**
- **Workbench to edit & manage web content**
  - ▶ Import/export from VisualAge for Java
  - ▶ Register your favorite tools
  - ▶ Import and Archive sites
- **Wizards for non-programmers to quickly build new WebSphere applications**
  - ▶ Including Wireless, Voice XML and now Web services

Everything in one box!

# Simplify dynamic page development

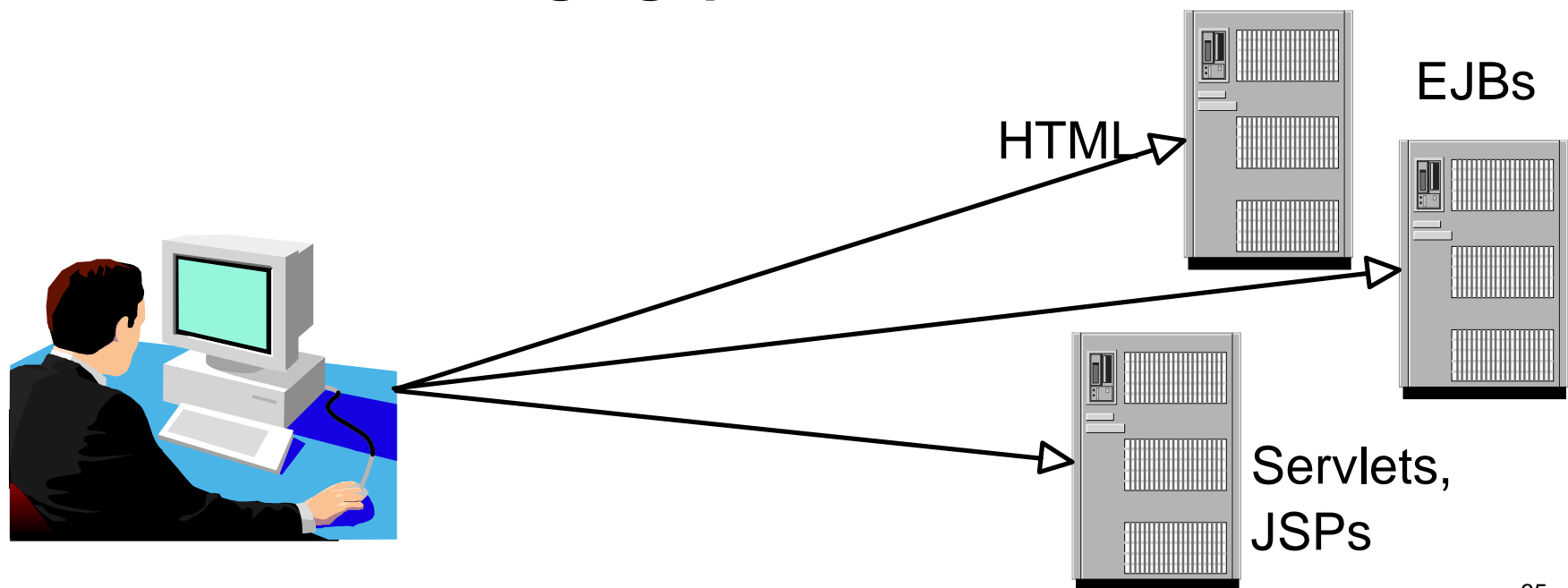
- **Script editor to quickly add simple scripts**
  - ▶ JSP (Java) for server side
  - ▶ JavaScript (+ others) for client side
- **Drag/Drop server-side logic on a JSP page**
  - ▶ Separation of logic (JavaBeans) and look (mark up)
- **Servlet Wizard**
  - ▶ Simplifies complex interactions, like personalizing pages
  - ▶ Creates a "control" Servlet
  - ▶ Multiple pages based on servlet results
    - For example, personalized pages or error pages
  - ▶ Supports pervasive devices like phones and PDAs



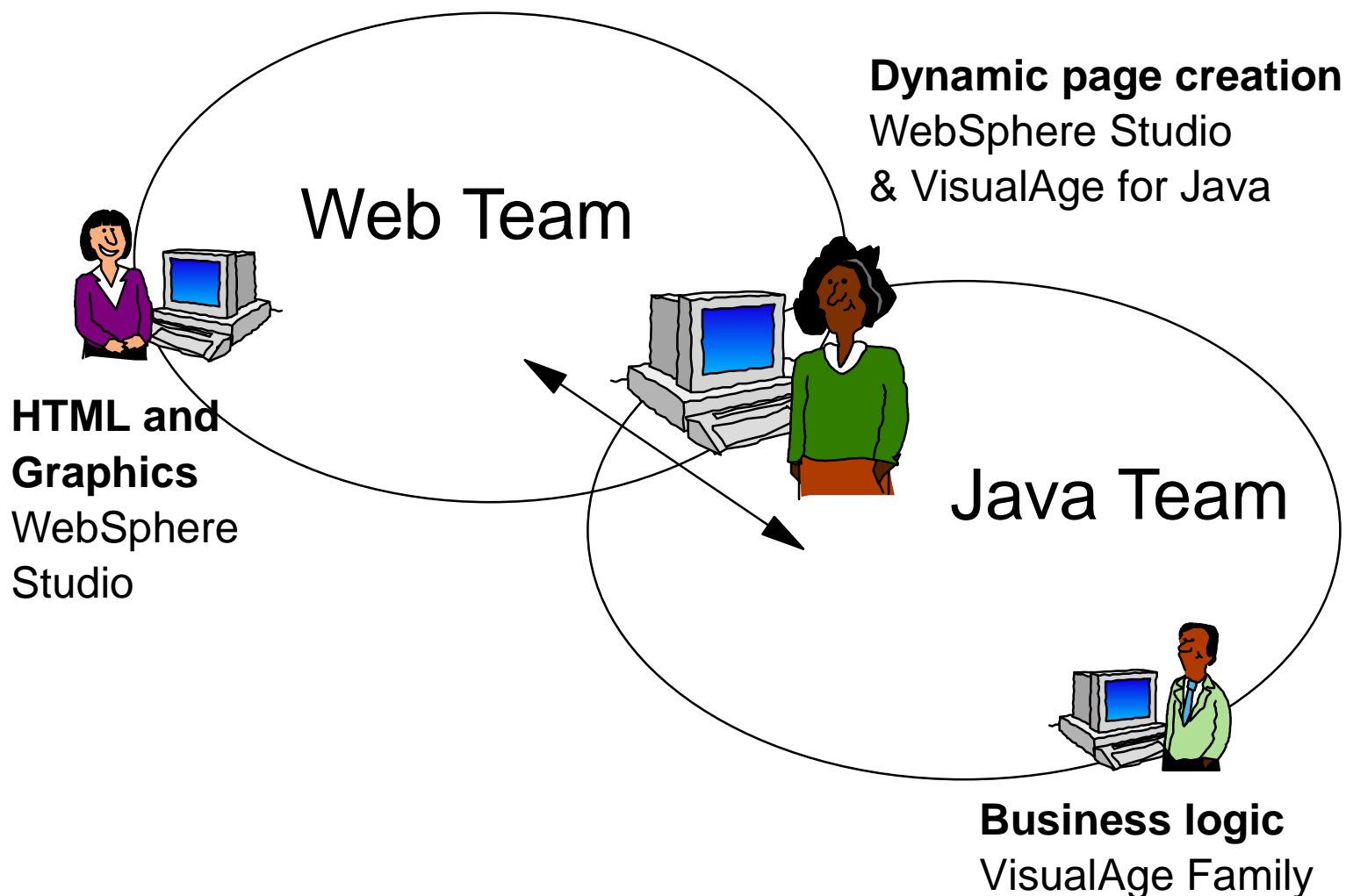
*Industry  
First!*

# Publishing Improves Productivity

- **Links are managed by Studio**
  - ▶ Mappings done at publish time
  - ▶ To reflect host names, physical paths
- **Enables multi-host, multi-stage publishing**
  - ▶ Allows test, staging, production, or customized



# Extend the Web team to Java programmers



# Define dynamic pages once!

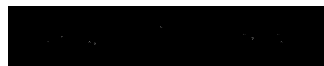
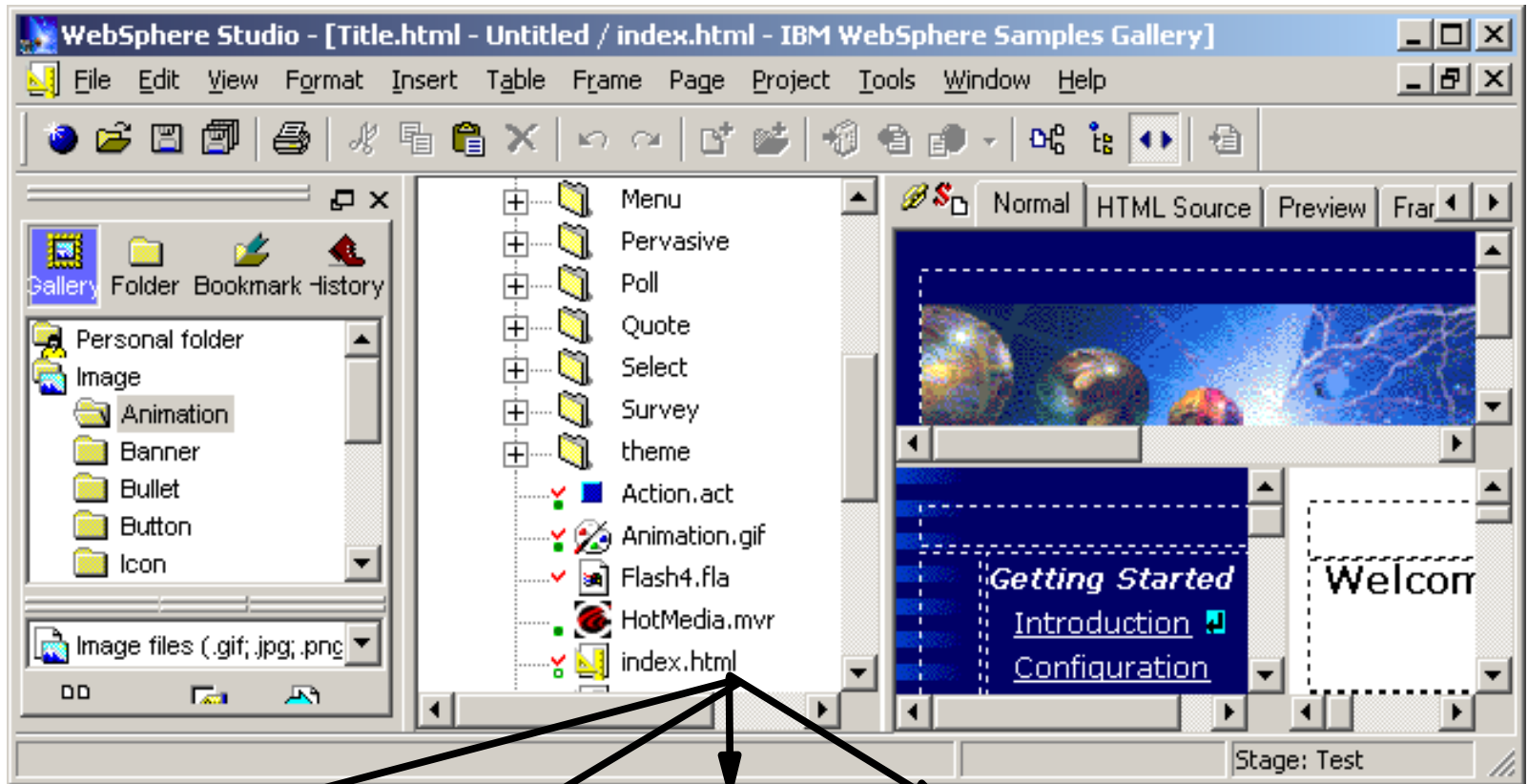
- Multiple pages created with different markup
- Page Designer extended to support Compact HTML
- Database Wizard supports:
  - ▶ HTML - Web Browsers
  - ▶ WML - Cell phones and PDAs
  - ▶ Compact HTML - Cell phones and PDAs
  - ▶ Voice XML - emerging standard for Voice



## Advanced Edition for large teams

- **Advanced Edition adds 4 key functions**
  - ▶ **Works with version control systems**
  - ▶ **Personalization tools**
  - ▶ **Page Detailer for page performance analysis**
  - ▶ **Distributed Debugger for debugging JSP pages**

## SCM API's to add version control



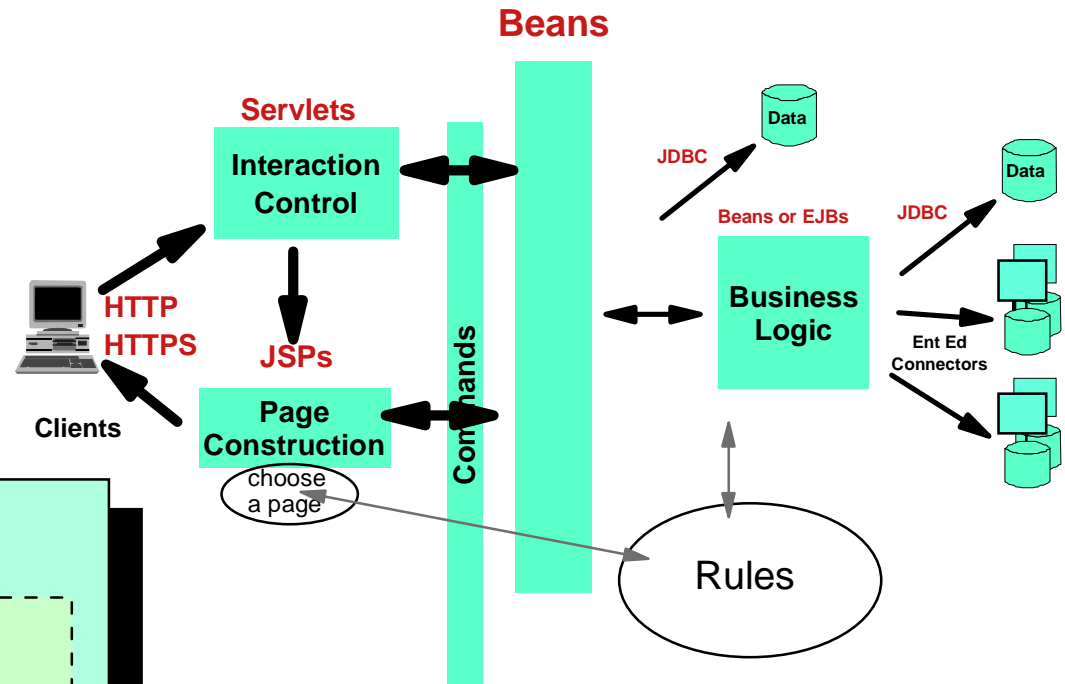
ClearCase



Others...

# WebSphere HTTP Application Profile

- ✓ WebSphere HTTP Application Profile isolates business logic and presentation.
- ✓ JSPs assemble the page for display.



## Personalized Page

**Links to things of interest to you:**

- New financing options announced
- 
- 

**Applications I am authorized to use:**

- Enter orders
- Credit status
- 

**Company policy manuals relating to my job:**

- Vacation
- Health plan
-

Your favorite links

- ✓ JSPs continue to assemble the page, but will be able to make use of WebSphere's enhanced user profile, new content model and Rules to customize the results.
- ✓ In addition, business rules can be shared beyond just personalization.

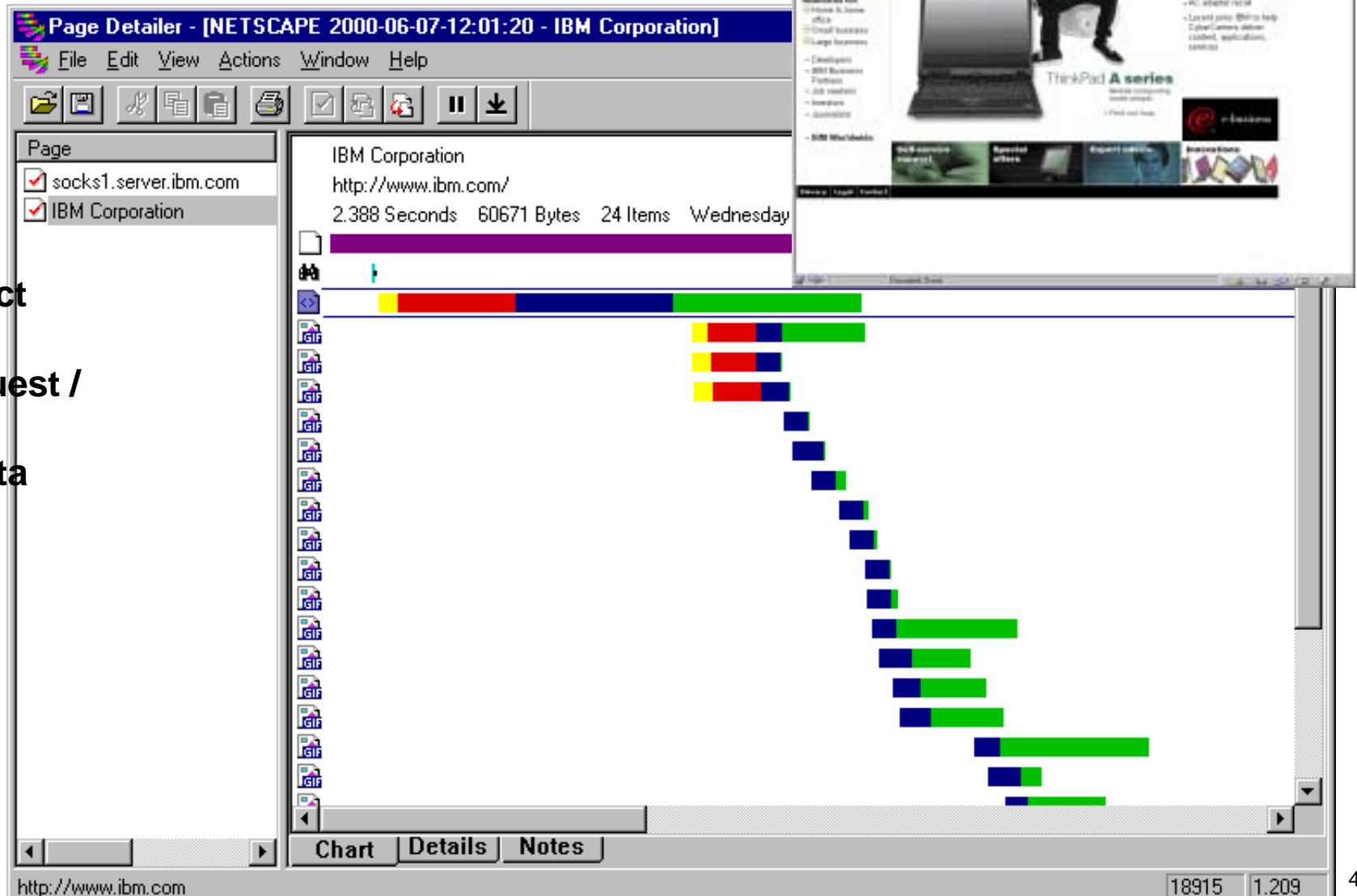


# Optimize pages

- **Page Detailer** Reports Web Page Performance so Page Designers and Web Site Management Can Optimize Customer Browsing Experience
  - ▶ End-User Response Time Experience
  - ▶ Understand Component Retrieval Schedule
  - ▶ Review Component Affects on Response Time
  - ▶ Compare Different Browser Performance
  - ▶ Investigate Bottlenecks in Content Delivery

## www.ibm.com

2.388 seconds  
60671 bytes  
24 items



# Team recognition

- **Unmatched team support; see what the press say:**
  - ▶ **"Developers will find the combination of WebSphere Studio and WebSphere Advanced Edition to be compelling," Java Developers Journal**
  - ▶ **"A very powerful development environment," InternetWeek**
  - ▶ **"Deploying code from within the Studio environment is surprisingly easy," Web Techniques**
  - ▶ **"IBM has a winner," News/400**
  - ▶ **Productivity award, Design and Management Tools Category, Software Development Magazine**

# Studio V4.0 Enhancements

- New **Web Services Wizards**
  - allows developers to easily develop, describe and publish web services.
- Support for Java Server Pages (JSP) 1.1 and Servlet 2.2
- Includes **WebSphere Everyplace Suite** Software Development Kit
  - Location Based Service Beans (LBS), Push API, WAP emulator
- Studio V4.0 supports **Portal Server 3.5**
  - create personalized web experiences by adding JSP and HyperText Markup Language (HTML) fragments to your projects through Studio's Page Designer

# WebSphere Studio V4.0 Summary

Feature	WebSphere Studio V3.5	Microsoft Visual Interdev	CF Studio V4.5	Macromedia UltraDev V1.0
Dynamic Page Authoring	X	X	X	X
Script Editor	X	X	X	X
Import & Archive Site	X			
Servlet Wizard	X			
Database Wizard	X	X		X
Pervasive Support	X			
Personalization	X	X		
Page Detailer	X			
Integrate other tools	X	X		X
VA Java integration	X			
Publishing	X	X	X	X

# WebSphere Studio Benefits

- **Reduces effort/cost to deliver and grow dynamic web applications for the WebSphere Platform**
- **Reduces effort to deploy a complete tools solution for dynamic web application development**
- **Investments in tools and skills is maintained through integration of existing tools with WebSphere Studio**
- **Expansion of capability through WebSphere and VisualAge family to grow and differentiate**



[www.ibm.com/software/ad](http://www.ibm.com/software/ad)

# WebSphere

! The Fastest Way to e-business !