



# eclipse & iSeries New WebSphere Announcements!!

IBM Toronto Development Laboratory

**WebSphere** software

■ the fastest way to dynamic e-business ■



# Agenda

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- iSeries e-business Strategies
- WebSphere Application Server Options for iSeries Customers
- June 4th Announcements for iSeries Application Development
- Questions & Answers

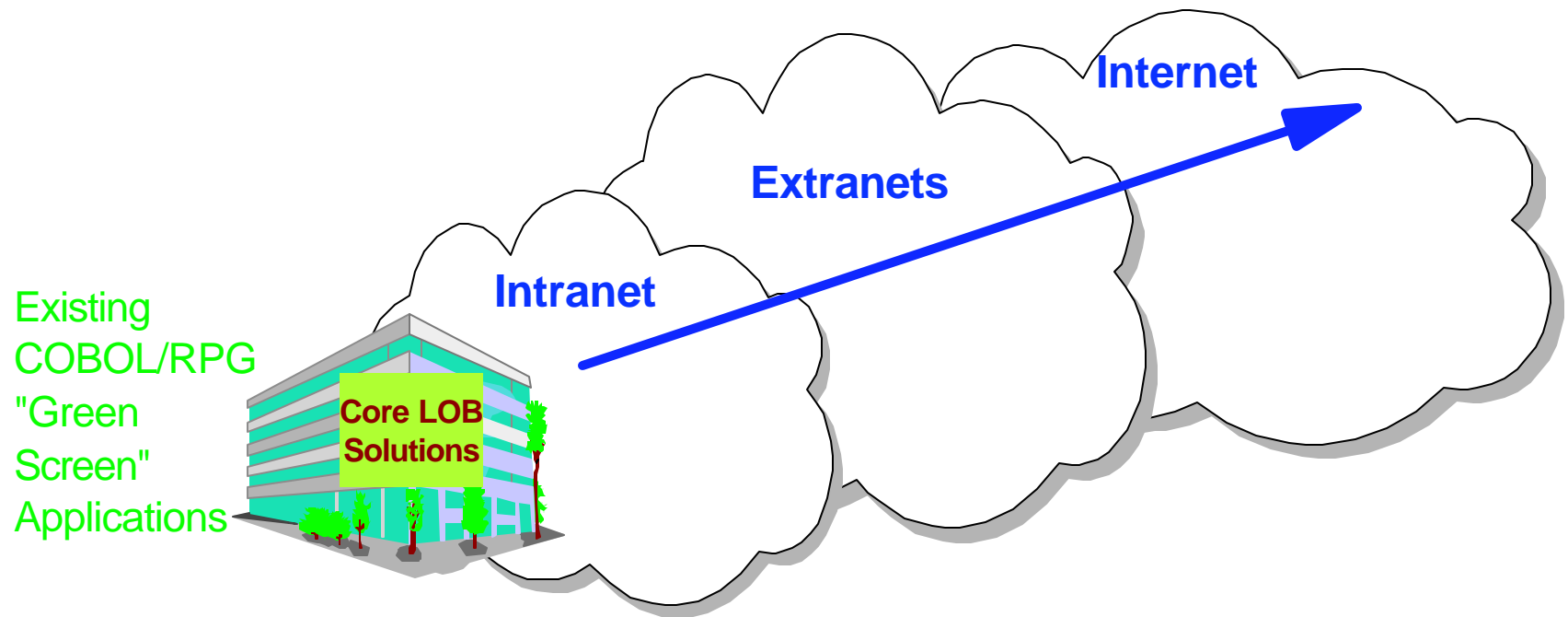


**IBM**

# *iSeries e-business Strategies*

## iSeries e-business Strategies

- #1 - Extend existing applications to the Web**
- #2 - Buy new e-business applications from ISV's**
- #3 - Build new e-business applications**
- #4 - Consolidate e-business workloads**



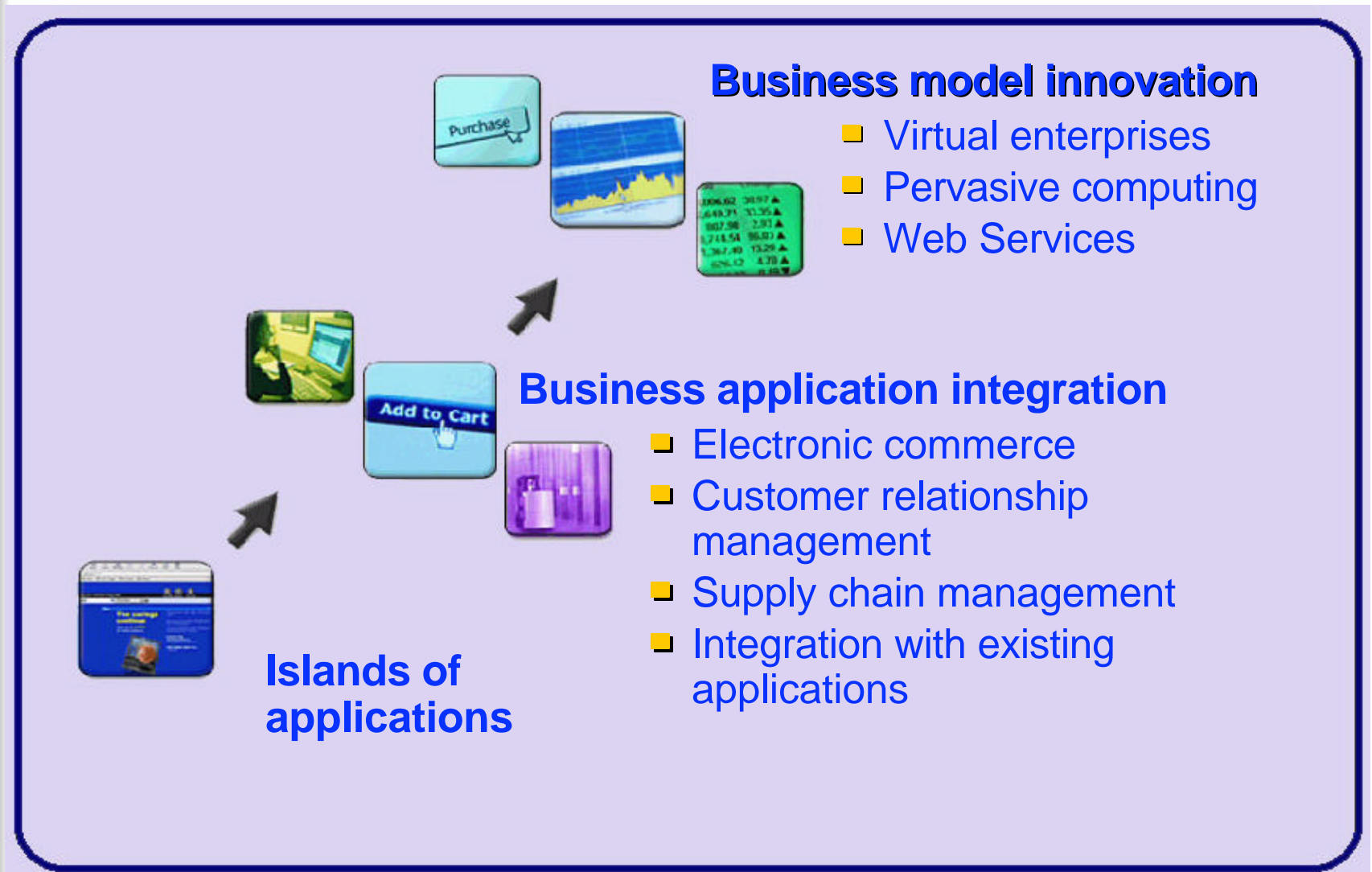
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# e-business Evolution (Stages of Adoption)





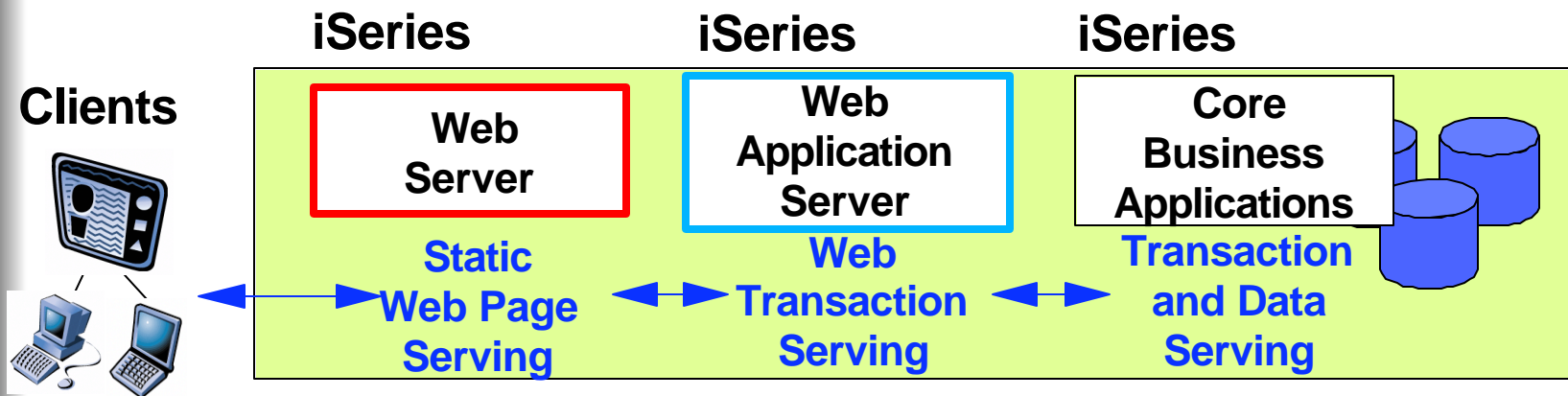
# iSeries, Web Serving & Web Application Serving

## iSeries Web Servers

- IBM HTTP Server for iSeries
- IBM HTTP Server (Powered by Apache)
- Domino HTTP server

## Web Application Servers (WAS) for iSeries

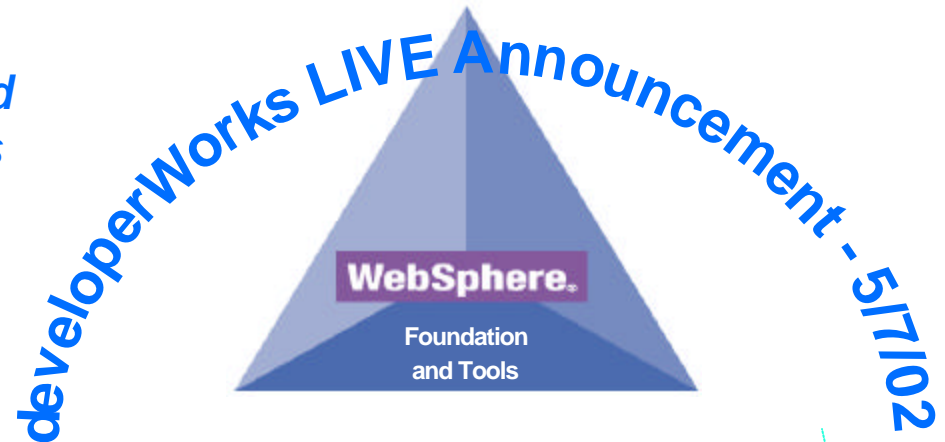
1. IBM WebSphere Application Server 3.5 (Older)
2. IBM WebSphere Application Server 4.0 (Current)
3. Apache Software Foundation's Jakarta Tomcat (Open Source)
4. *IBM WebSphere Application Server V5 (NEW)*





# WebSphere Application Server V5

*Expand business opportunities and productivity through a world class infrastructure ready for the next chapter in e-business*



WebSphere V5 Leadership	Customer Value Proposition	Open Standards Leadership
<b>Comprehensive Build-to-Integrate Platform</b>	Improve time-to-value by building new integration-ready applications which leverage existing software assets	J2EE Web Services Platform
<b>Agile Deployment and Administration</b>	Lower cost of ownership and minimize startup investment with highly productive and flexible administration, deployment and management services	UDDI, Security, Administration, etc.
<b>Intelligent End-to-End Application Optimization</b>	Create competitive advantage and optimize price/performance while meeting the changing demands of dynamic e-businesses with industry leading reliability, availability, scalability, performance and security	Edge, Grid and Service Management
<b>Highly Integrated Application Development</b>	Maximize ROI and lower labor costs with superior developer productivity	Eclipse & Open Source Communities

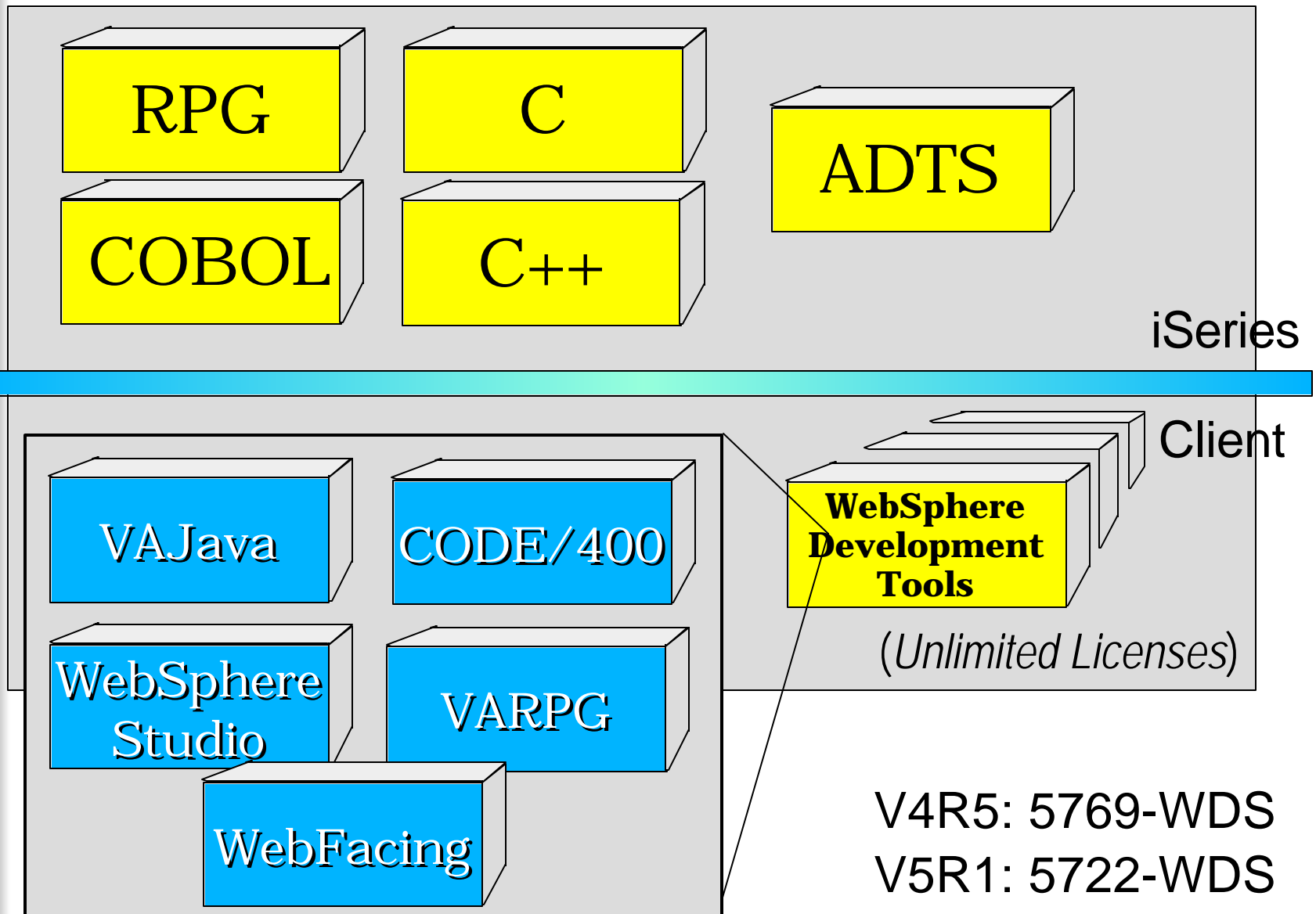


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# WebSphere Development Studio for iSeries





## Benefits

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- Benefits to Developers
  - All tools packaged together
    - support all application models from traditional to web to java
  - price point was attractive
  - no decisions - one package to order
- Benefits to IBM and Partners
  - all customers have same suite of tools





## Customer Response

### *WebSphere Development Studio for iSeries is a HIT !*

Most successful launch of development tools in the history of the midrange marketplace !

Shipped over 50,000 copies of WDS since May 23, 2001

*"The most significant change in AS/400 application development EVER!"*

Al Barsa, Barsa Consulting

*"On WebFacing "5250 to Web GUI - No Sweat!"*

Garry Reinhard, CEO/Appcon

*"The new IBM Tool strategy for AS/400 rocks!"*

Carson Soule

*"IBM has definitely got it right this time!"*

Charlie Massoglia, COMMON President

*"WDS was great in V5R1 BUT it gets even better in V5R2!"*

Jim Mason, beta customer

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# New WebSphere Development Direction Announced



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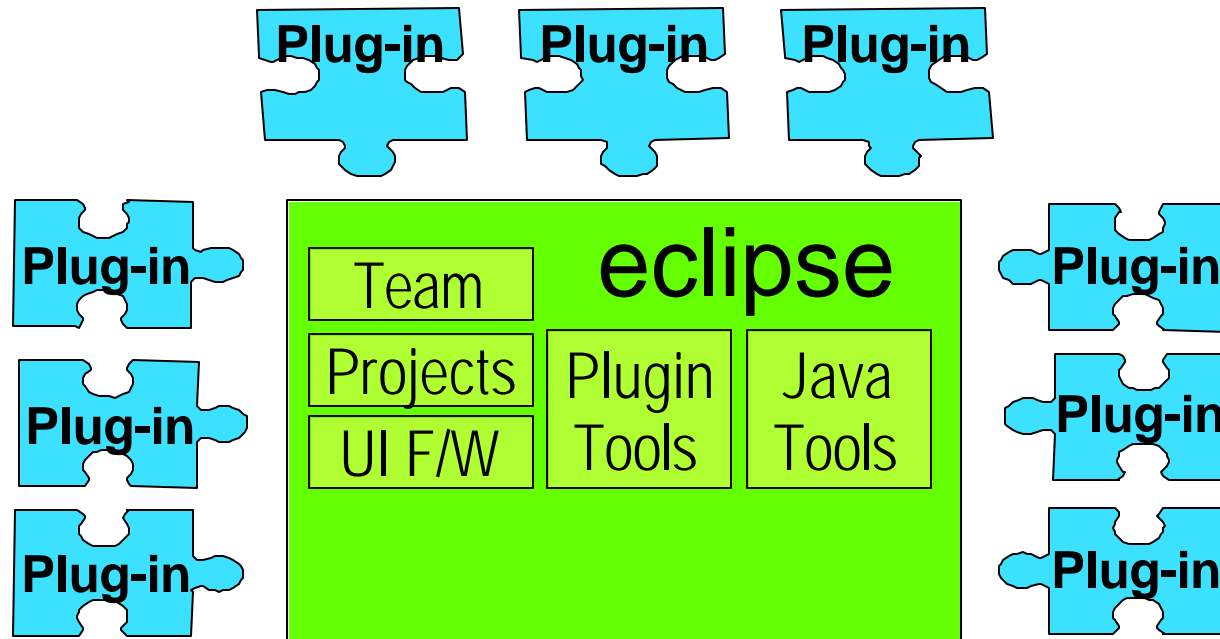
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# eclipse

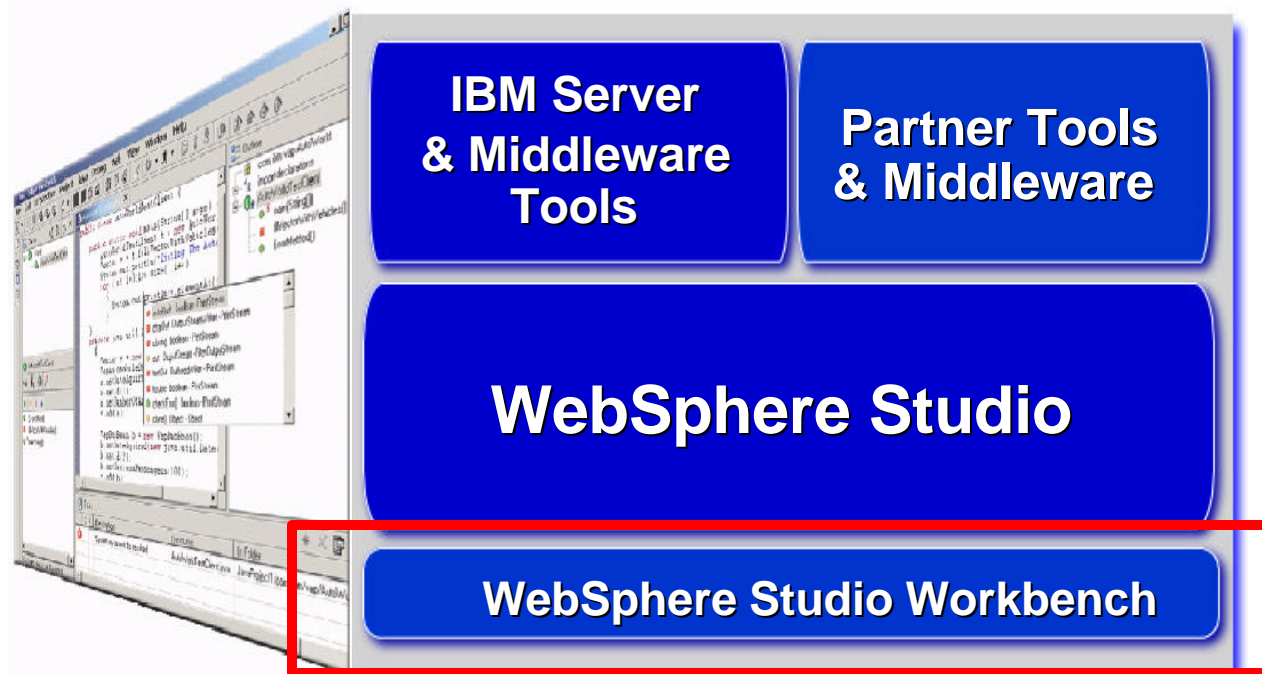
- eclipse is IBM's new IDE technology engine
  - fully open-source @ [www.eclipse.org](http://www.eclipse.org)
  - huge interest: > 500,000 downloads
  - written in Java
  - easily extended by plugins
- Great industry feedback
  - buy in from many industry tool vendors





# WebSphere Studio Workbench

- IBM's commercially supported implementation of the Eclipse open source technology
- the foundation for the new Websphere Studio family and future IBM middleware tools
- Enables partners or customers to develop, customize or integrate tools with the Websphere Software Platform
- Support by a new business partner program



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## *Benefits to Using eclipse*

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- Benefits to Users
  - Increased productivity through integration of tools and the development team
  - Flexibility through choice of tool plug-ins
  - Reduced training cost through single extensible IDE
- IBM Benefits
  - Increased speed to meet developers needs
    - Packaging flexibility
    - Rapid integration of best-of-breed partner tools
    - Greater focus on tools vs. tool infrastructure



# Offerings

- **WebSphere Studio is IBM's next generation development environment**



- **Planned configurations:**

- **WebSphere Studio Homepage Builder**

- Fast, Easy, Powerful Web site development
- Includes WebVideo Studio

- **WebSphere Studio Site Developer - Advanced**

- Development of dynamic Web sites (Web services, JSPs, Servlets, XML, Rich Media)
- WebSphere Studio Professional and Advanced Editions Version 4.0 will contain the Beta version of this product

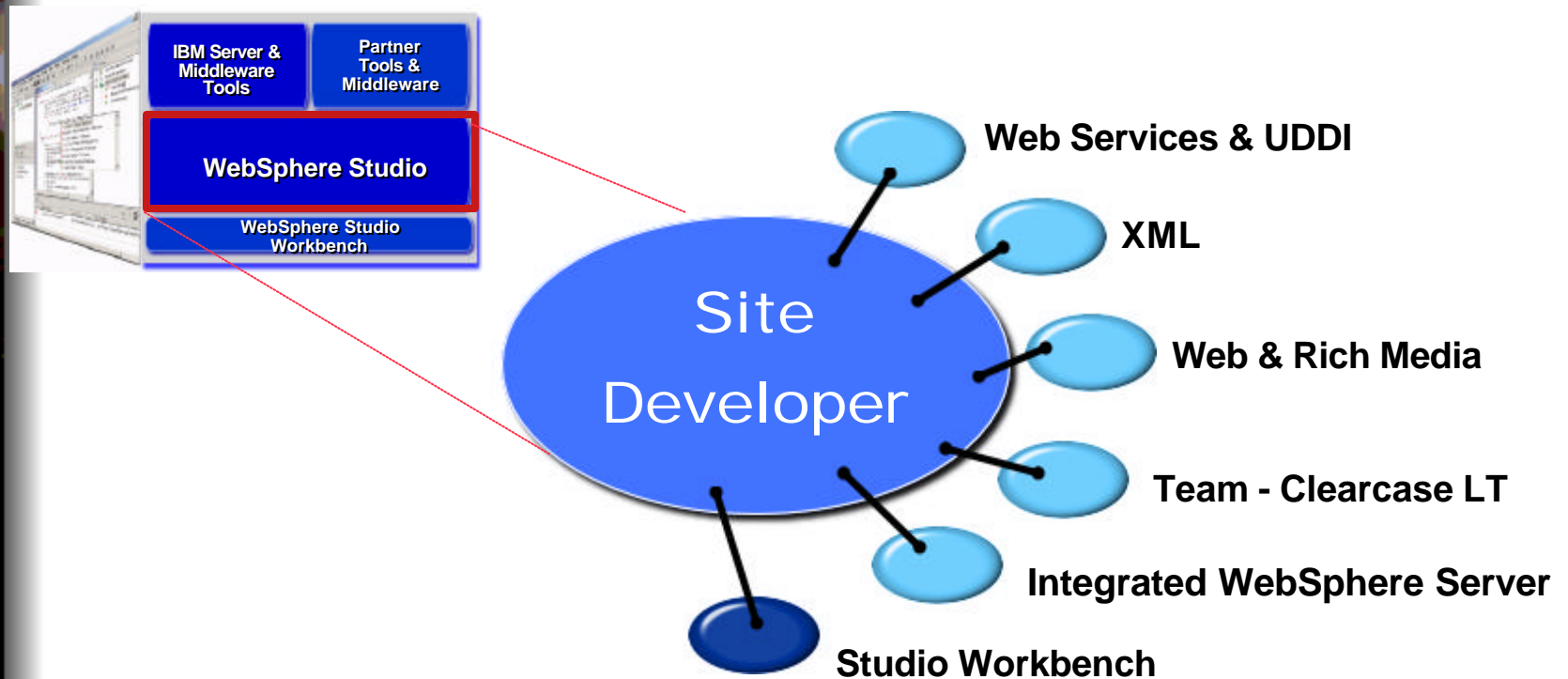
- **WebSphere Studio Application Developer**

- Development of J2EE and database applications in a team environment
- It has **all the functions** of WebSphere Studio Site Developer
- VisualAge for Java Enterprise Edition Version 4.0 will contain the Beta version of this product



# WebSphere Studio Site Developer - Advanced

- ★ For professional developers of dynamic Web applications & sites
- ★ Delivers integrated support for open Web standards, including Java, JSP, XML, Rich Media & Web services tools
- ★ Includes Rational ClearCase LT as a team development option

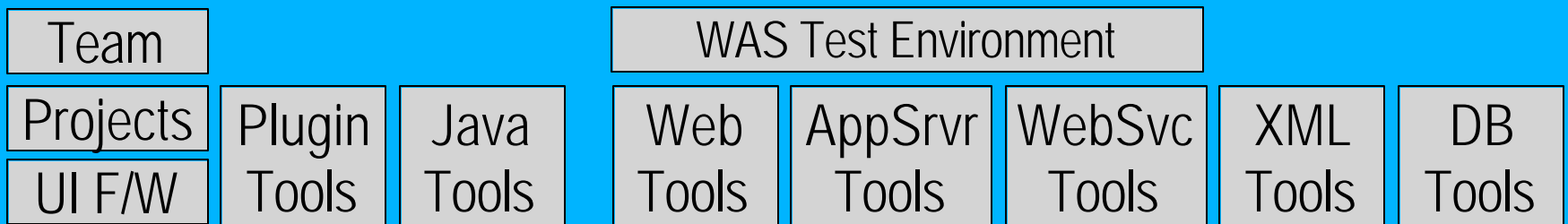




# WSSDa 4.03

- Includes (roughly):
  - classic VJava Pro + enhancements
  - classic WebSphere Studio Standard + enhancements
  - new WAS 4.0 Test Environment
  - new tools for Servers, XML, Web Services and Database design

## WebSphere Studio Site Developer Advanced





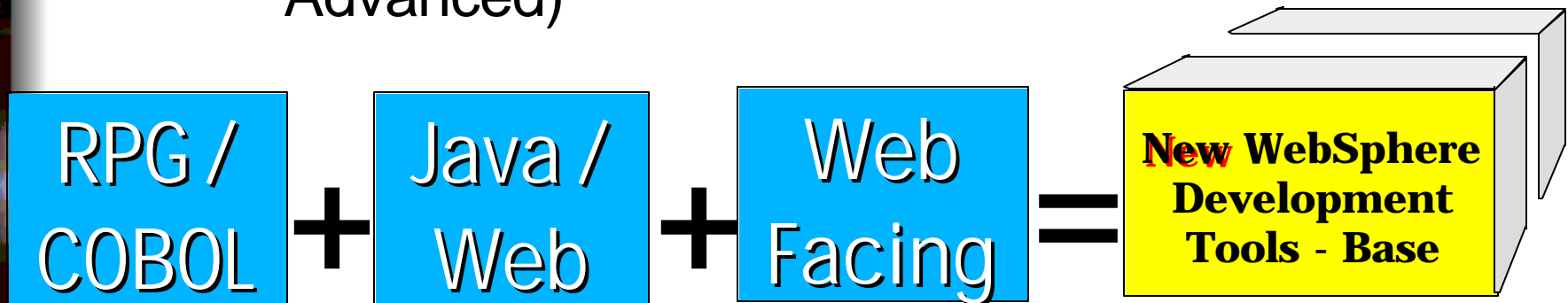


# What We're Announcing TODAY!

## New Technology

### 1. Integrated Development Environment

(based on WebSphere Studio Site Developer Advanced)



## New Tools

### 2. New Tools for New Technology



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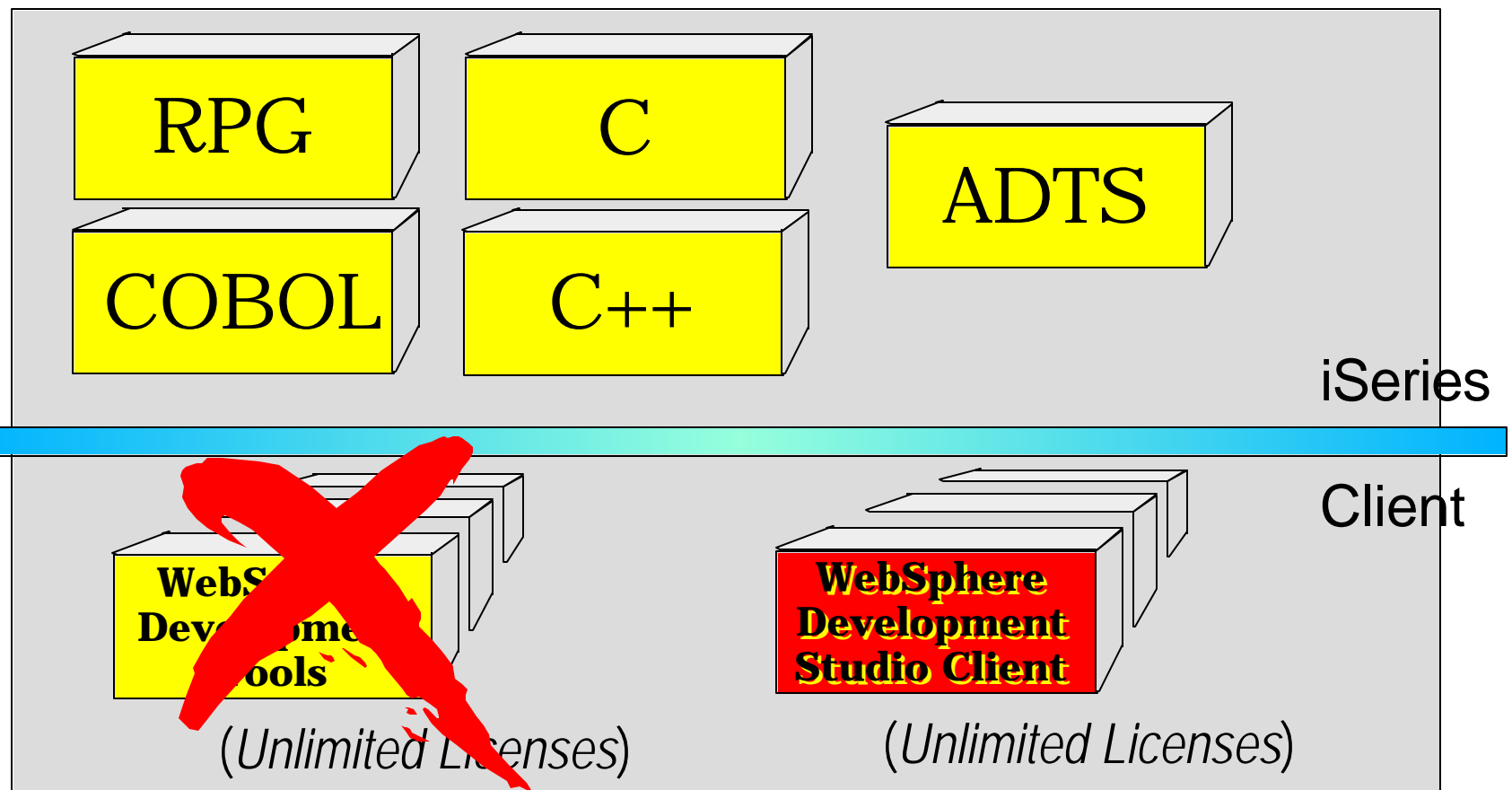
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# What We're Announcing TODAY!

## WebSphere Development Studio Client

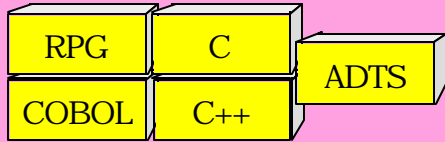
- New version of client tools for iSeries Development
- Based on eclipse technology



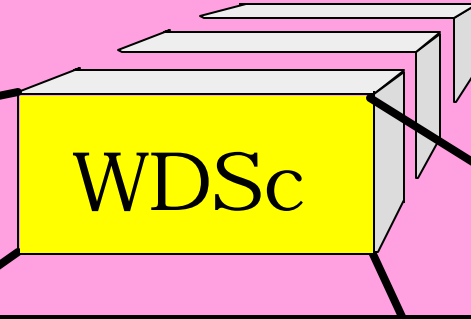
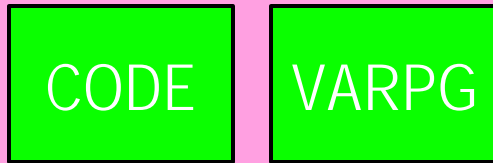


# WDS and WDS Sc 4.0!

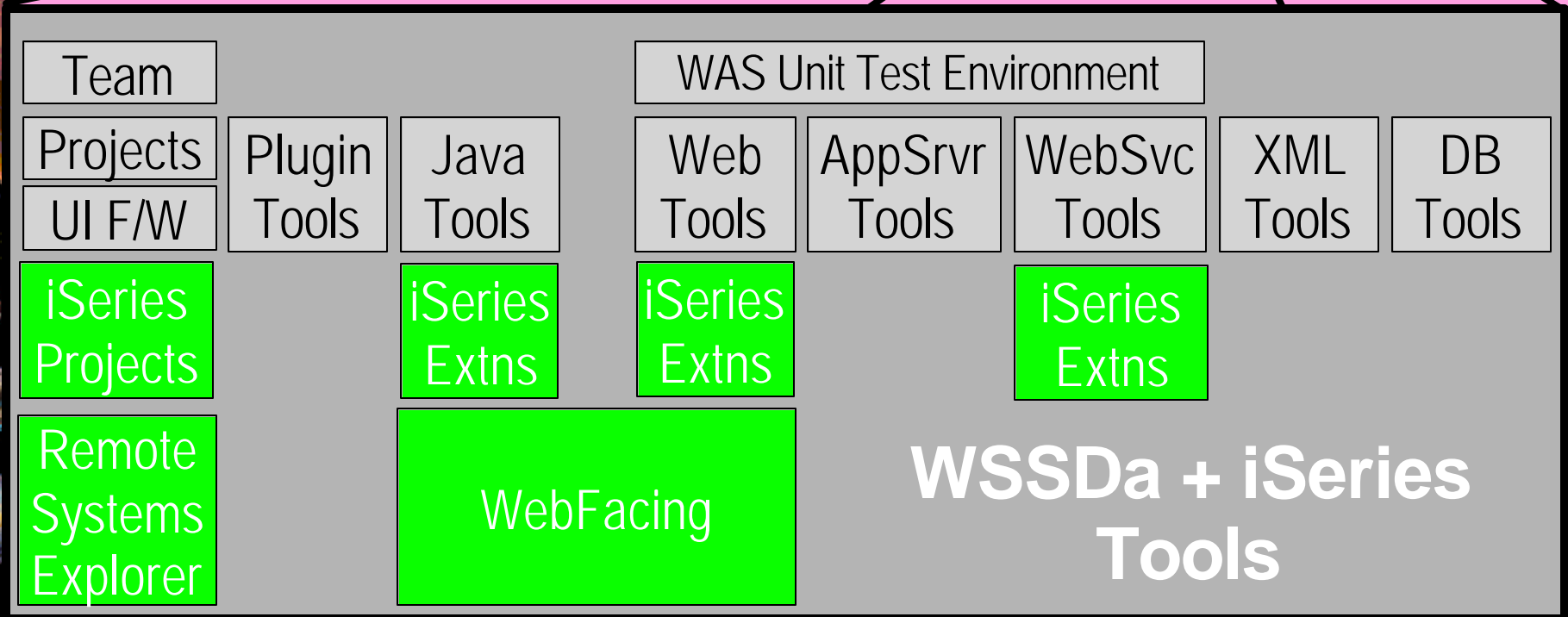
WebSphere Development Studio



iSeries



Client



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NOTE: Rational ClearCase LT not included



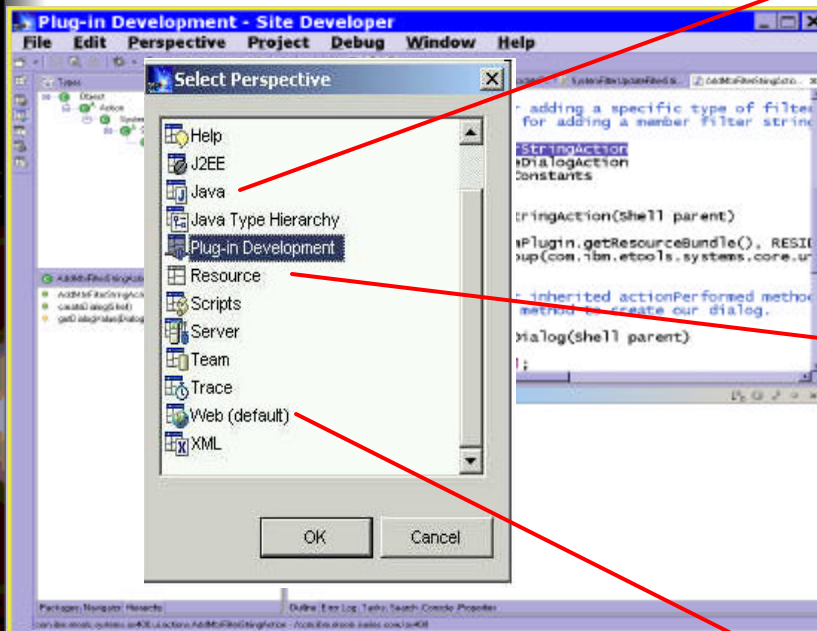
# Why WDS*c*?

## WDS*c* Benefits

1. One Integrated Development Environment (IDE)
  - increased productivity for programmers
  - skills transfer from one perspective to the next
  - simplified testing
    - ✓ traditional applications
    - ✓ web applications
2. IBM can add additional functions through plug-ins without having to re-write an entire tool
3. Faster response to industry changes
  - plug-ins
  - integration of non-IBM tools
4. Inclusion of latest industry trends
  - XML
  - Web Services



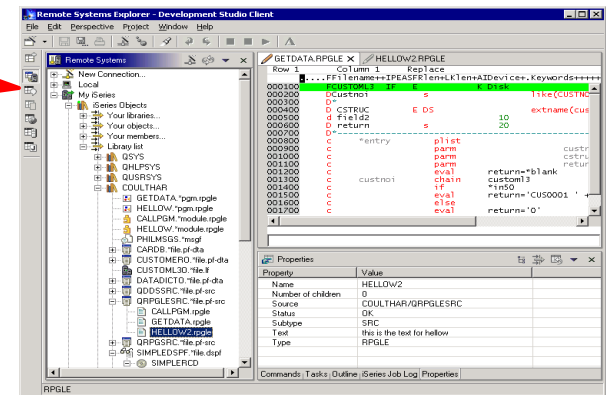
# One Development Environment



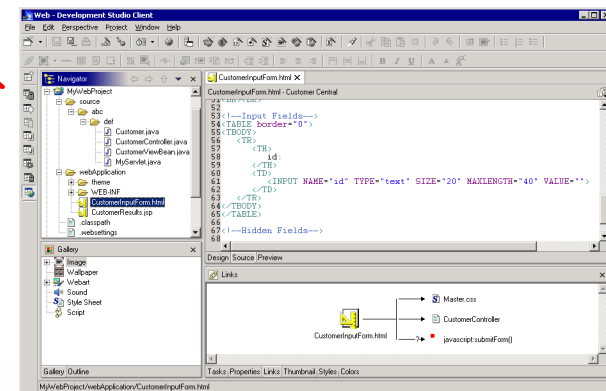
Java



Remote System Explorer



Web



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## What? When?

### WebSphere Development Studio Client (WDSc)

- eclipse based tools
- It is the "new" WebSphere Development Tools
  - Will ship with V5R2 version of Websphere Development Studio for iSeries
- No additional charge upgrade for existing V5R1 licenses
  - Must specifically order the upgrade - no auto-ship
  - 5722-WDS Refresh feature code 2655
  - Available on July 14

More details:

[www.ibm.com/software/ad/wdt400](http://www.ibm.com/software/ad/wdt400)



# What? When?

## Components

- WDS*c*
  - Java Tools
  - Web Tools
  - WebFacing
  - XML Tools
  - Web Services Tools
  - Remote System Explorer (RPG and COBOL Development)

More details:  
[www.ibm.com/software/ad/wdt400](http://www.ibm.com/software/ad/wdt400)



# Remote System Explorer Perspective (Native)

The screenshot shows the 'Remote Systems Explorer - Development Studio Client' interface. On the left, a tree view shows a hierarchy of remote systems under 'My iSeries', including libraries like QSYS, QHLPYSYS, QUSRSYS, and COULTHAR. The 'HELLOW2.rpgle' file is selected. The main editor displays the source code of 'HELLOW2.RPGLE', which includes a table definition for 'CUSTOML3' and a program body with conditional logic. The 'Properties' window at the bottom right shows details for the selected file, such as its name, source, and type.

Property	Value
Name	HELLOW2
Number of children	0
Source	COULTHAR/QRPGLESRC
Status	OK
Subtype	SRC
Text	this is the text for hellow
Type	RPGLE

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# Java Perspective

The screenshot displays the Eclipse IDE in the Java Perspective. The main editor shows the source code for the `AddMbrFilterStringAction` class. The code is as follows:

```
/**
 * This is the action for adding a specific type of filter
 * Specifically, this is for adding a member filter string
 */
public class AddMbrFilterStringAction
    extends SystemBaseDialogAction
    implements IAS400Constants
{
    public AddMbrFilterStringAction(Shell parent)
    {
        super(AS400SystemPlugin.getResourceBundle(), RESID
            setContextMenuGroup(com.ibm.etools.systems.core.u
    }
    /**
     * We use the default inherited actionPerformed method
     * which calls this method to create our dialog.
     */
    public Dialog createDialog(Shell parent)
    {
        Dialog dlg = null;
    }
}
```

The IDE interface includes a Package Explorer on the left showing the class hierarchy: `Object` → `Action` → `SystemBaseAction` → `SystemBaseDialogAction` → `AddMbrFilterStringAction`. Below the Package Explorer, the Properties view shows the methods: `AddMbrFilterStringAction(Shell)`, `createDialog(Shell)`, and `getDialogValue(Dialog)`. The Outline view at the bottom shows the class structure with the same methods listed. The status bar at the bottom indicates the current file is `com.ibm.etools.systems.as400.ui.actions.AddMbrFilterStringAction`.

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# Web Perspective

The screenshot displays the Eclipse Web Development Studio Client interface. The main window is titled "Web - Development Studio Client" and features a menu bar (File, Edit, Perspective, Project, Window, Help) and a toolbar. The interface is divided into several panes:

- Navigator:** Shows a project tree for "MyWebProject". The structure includes a "source" folder with sub-folders "abc" and "def". The "def" folder contains "Customer.java", "CustomerController.java", "CustomerViewBean.java", and "MyServlet.java". A "webApplication" folder contains "theme", "WEB-INF" (with "CustomerInputForm.html" selected), and "CustomerResults.jsp". Other files include ".classpath" and ".websettings".
- Code Editor:** Displays the content of "CustomerInputForm.html". The code includes HTML comments for "Input Fields" and "Hidden Fields", and an HTML table with a text input field. The code is as follows:

```
51 <!--Input Fields-->
52
53 <!--Input Fields-->
54 <TABLE border="0">
55 <TBODY>
56 <TR>
57 <TH>
58 <TH id:
59 </TH>
60 <TD>
61 <INPUT NAME="id" TYPE="text" SIZE="20" MAXLENGTH="40" VALUE="">
62 </TD>
63 </TR>
64 </TBODY>
65 </TABLE>
66
67 <!--Hidden Fields-->
68
```
- Gallery:** Shows a list of resources: Image, Wallpaper, Webart, Sound, Style Sheet, and Script.
- Links:** A diagram showing "CustomerInputForm.html" linked to "Master.css", "CustomerController", and "javascript:submitForm()".

At the bottom of the window, the status bar shows the current file path: "MyWebProject/webApplication/CustomerInputForm.html".



# WebFacing Perspective

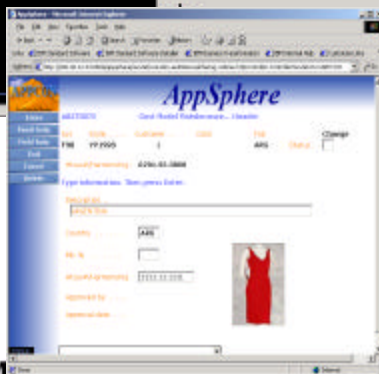
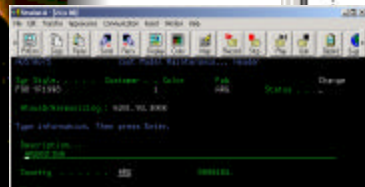
The screenshot displays the IBM WebFacing Tool (First Edition) interface. The main window is titled "IBM WebFacing Tool (First Edition)" and features a menu bar with "File", "Edit", "Workbench", "Perspective", "Window", and "Help". Below the menu bar is a toolbar with icons for file operations and a "Workspace" tab. The "WebFacing Projects" pane on the left shows a project tree for "Appcon1" with subfolders "CL Commands" and "DDS". Under "DDS", there is a folder "<TORAS14M>APPIBM/QDDSSR" containing a folder "Z0000001" with files "Z0000001Data.java", "Z0000001Feedback.java", "Z0000001View.java", and "Z0000001.jsp". Other folders include "Z000SFH1", "Z000SFD1", and "Z000SFC1". The "Properties" window at the bottom shows the following values:

Property	Value
TORAS14M	TORAS14M
web	web
6840A3295783B73E4A	6840A3295783B73E4A
admin@ibm.com	admin@ibm.com
3	3

The "Z0000001.jsp" code editor shows the following JSP code:

```
<% /* %><HTML>
<HEAD>
<META name="GENERATOR" content="AS/400
</HEAD>
<BODY><% /* %>
<% System.out.println("Processing Reco
<%@ page import="com.ibm.as400ad.webfa
<jsp:useBean id='Z0000001' scope='sess
<% final int QUOTED_TRANSFORM = HTMLSt
<% final int UNQUOTED_TRANSFORM = HTML
<% final int zOrder = Z0000001.getZOrd
<% int lastCol; %>
<% /* %><TABLE><TBODY><% /* %>

<TR>
<% lastCol = 0; %>
<TD id="l<%=zOrder%>r1c1" colspan=1>&n
<TD id="l<%=zOrder%>r1c2" NOWRAP colsp
<span id="Z0000001$CURREC" <{%Display
</TD>
<% lastCol = 9; %>
<TD id="l<%=zOrder%>r1c10" colspan=25>
<TD id="l<%=zOrder%>r1c35" NOWRAP cols
<span id='const0' <{%DisplayAttribute
</TD>
```



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## Market Feedback

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### **ASC Inc**

#### **Chris Wilson, Director, Programming/Operation Tools**

"Eclipse is perhaps the single best idea we've seen out of IBM in years. By leveraging its experience with Java, IBM has created a plugin shell that has a real chance of replacing Microsoft's Visual Studio as the standard IDE in the industry. Despite its youth, Eclipse is the most powerful Java IDE we have ever encountered."

"WDSVC combines an outstanding industry standard version control in CVS with tools like our ABSTRACT impact analysis to finally create a true graphical development environment for the iSeries platform."

### **LANSA Inc**

#### **Bill Benjamin, Vice President, Business Development**

"The goal of Eclipse to provide a seamless interface where developers can leverage tools from multiple vendors is a great idea and is something that will add value to our customers. Eclipse is a great way to make it easy for iSeries customers to integrate WebSphere and leading development tools like LANSA".

### **SoftLanding Systems**

#### **Mark Phippard, Director of Development**

"Finally, an IDE done right! SoftLanding is very excited about the new Eclipse-family of IDE's, including WDSVC. We believe that these IDE's represent a major step forward for our customers and all iSeries customers and business partners. We are excited about the technology and are firmly committed to contributing plug-ins for our TurnOver change management product and to provide the best possible support for all Eclipse-based development."

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## Market Feedback

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### **Republic Indemnity of America**

**Bob Cancilla, IT Director. Also runs [www.ignite400.org](http://www.ignite400.org)**

"I have never been so impressed with a product as I am with what I am seeing in here. This is one of the most totally incredible products I have ever seen in 30 years in the business."

### **Mid-Comp International**

**Robert A. Hare, WebSphere Team Development Manager**

"It is very important in the development of our web enablement projects to have all developers working from a common work bench. Using the WDS<sub>c</sub> allows all areas of development to come together from RPG maintenance and modifications to java code generation. The WebFacing tools and wizards that generate Java allow legacy programmers to be far more efficient helping bring the WebApplication to the client faster."

### **Aldon Computer Group**

**Dan Magid, Vice President**

"Aldon Computer Group is pleased to be working in partnership with IBM to integrate Aldon Affiniti with the Eclipse open source workbench. Aldon Affiniti's integration with Eclipse provides an easy way for developers to combine the powerful, unified multi-platform change management system of Aldon Affiniti with the wide range of developer tools available through Eclipse."



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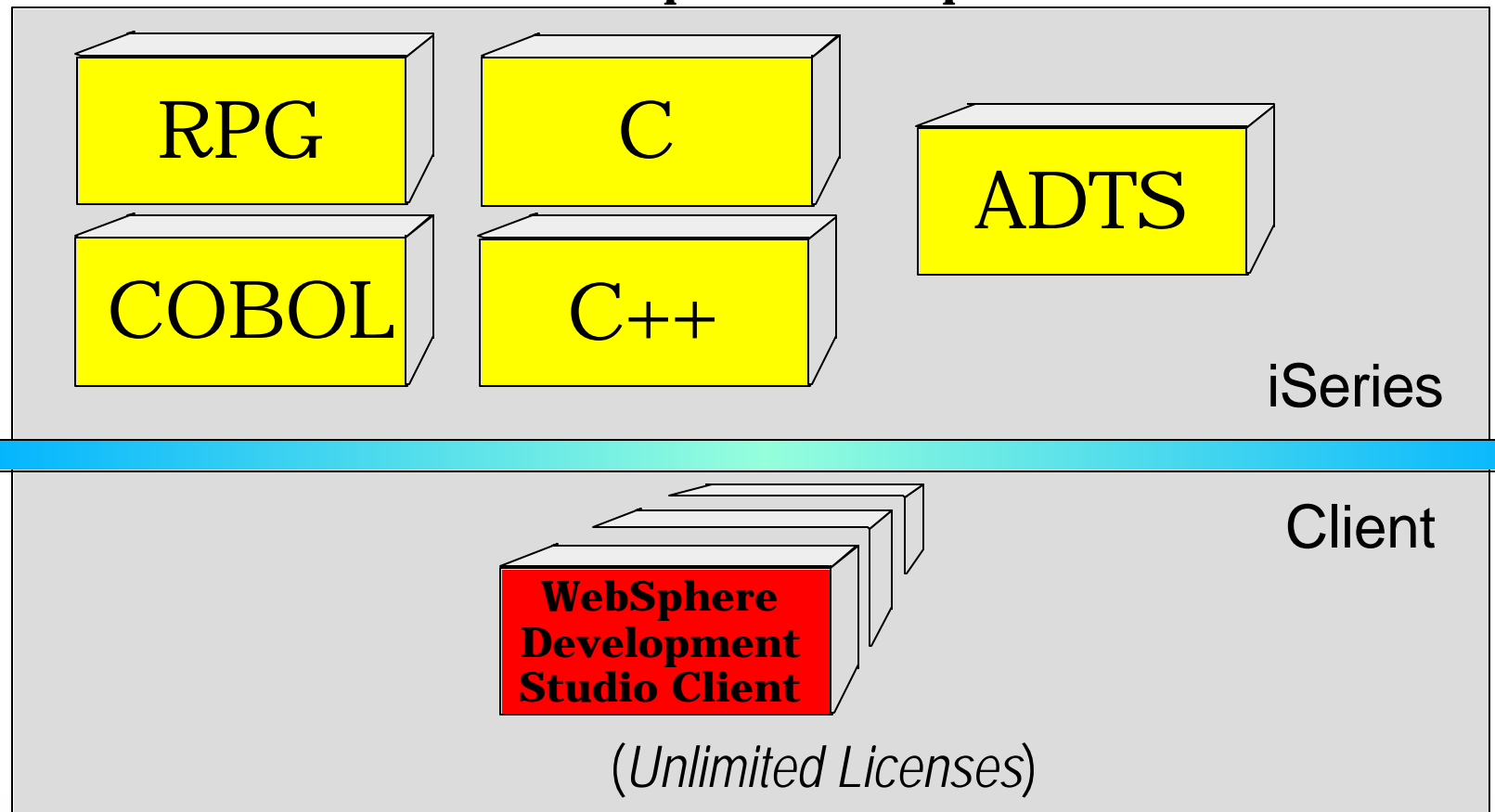
# Summary

## The Best Gets Better!!!

WebSphere Development Studio Client delivers:

- Comprehensive suite of integrated tools
- More than ever "there are no excuses"

### WebSphere Development Studio for iSeries





## More Information

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[www.ibm.com/software/ad/wds400](http://www.ibm.com/software/ad/wds400)

- As of June 4th

[www.eclipse.org](http://www.eclipse.org)

- Eclipse and information about eclipse

[www.ignite400.org](http://www.ignite400.org)

- Introduction to eclipse article  
*eServer iSeries magazine, July issue*

- 3 articles on WDS

[www.ibm.com/websphere/developer](http://www.ibm.com/websphere/developer)

- WebSphere Developer Domain
- Many articles on eclipse and WSWB and WebSphere Studio configurations

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

- Web Services



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