



WebSphere Studio V5 Tutorial Demos Handbook

Bill Hahn's Guided Tour of WSStudio

(Updated 2003/01/27) (Newest material at <http://www.WebSphereCentral.com>)

[\(Click here if you need a more recent version of this document\)](#)



How to use this Handbook:

1. Save this PDF document to your hard drive (important).
2. Use the **TABLE OF CONTENTS** to go directly to any demo description/download.
3. Use the “**Download Demo First**” link, found in the demo description, to start the download.
4. If you save each demo in the same folder as this PDF document, you can use the “**Run Demo**” links to run each demonstration. (That effectively makes this document both a Handbook and a Menu System)

How to get a free CD of demos #1-20 (a.k.a. V5AD#1 - V5AD#20):

- A) If you are a customer (starting in February 2003) you may order the “Tools for the Enterprise” CD set at the following link: <http://www.ibm.com/websphere/enterprisetools> (This includes other valuable material as well)
- B) If you are an IBM employee, go to: <http://w3.demopkg.ibm.com> or <http://w3.demopkg.ibm.com/LPage/DCLI>
- C) Anyone can get a ZIP file of the CD image [by clicking here](#). (unzipping and burning that on a new CD works.)

How the Tutorial Demos are organized:

- **Guided Tour** (Comprehensively highlights WSStudio V5)
- **End-2-End Scenario** (Builds an application from scratch that spans J2EE and Web Services building blocks)
- **CodePro Studio** (Extends WSStudio's core productivity)
- **WSStudio Collection** (Existing and under-construction Tutorial Demos)

TABLE OF CONTENTS

[\(Click to go to a demo\)](#)

Quick Comprehensive Tour.....	6
V5AD#1 The Essence of WebSphere Studio V5 (5 min play time).....	6
V5AD#2 Introduction and Tour of WebSphere Studio V5 (30 min play time).....	6
Guided Tour (9 Tutorial Demos).....	7
<i>The Workbench</i>	7
V5AD#3 Getting Started (5 min play time).....	7
V5AD#4 Perspectives and Views (15 min play time).....	7
V5AD#5 Keyboard Shortcuts (5 min play time).....	7
V5AD#6 Editors (16 min play time).....	7
V5AD#7 Multiple Workbench windows enhance navigation (4 min play time).....	7
<i>Dynamic Development (Incremental Build, Test, Smart-publish and Hot-Redeploy)</i>	8
V5AD#8 Dynamic Development (10 min play time).....	8
<i>On Demand Code Smarts</i>	8
V5AD#9 Java Development using On Demand Code Smarts (25 min play time).....	8
<i>Struts Builder Tools</i>	8
V5AD#10 Struts-config.xml editor, Visual Builder & Web Structure View (22 min).....	8
<i>Java Visual Editor (JVE) for Thick Clients</i>	8
V5AD#11 Java Visual Editor (JVE) *brief* Introduction (1 min play time).....	8

<i>Eclipse 2.0</i>	8
V5AD#12 Eclipse 2.0 Highlights by Rick Weaver (50 min play time)	8
End-2-End Scenario (8 Tutorial Demos).....	9
V5AD#13 Introduction to the End-2-End Scenario (1 min).....	9
V5AD#14 End-2-End: JSP Web Page and JavaBean (13 min).....	9
V5AD#15 End-2-End: JavaBeans in separate Java Project (Java Utility Jars) (8 min).....	9
V5AD#16 End-2-End: Session EJB (10 min).....	10
V5AD#17 End-2-End: Web Services (10 min).....	10
V5AD#18 End-2-End: EJB 2.0 Container Managed Persistence (CMP) (15 min).....	10
V5AD#19 End-2-End: EJB 2.0 Message Driven Bean (MDB) (3 min).....	10
V5AD#20 End-2-End: Transfer Funds (10 min).....	10
CodePro Studio from Instantiations.com (13 Tutorial Demos).....	11
V5CP#1 Code Audit (7 min) Click here → Run Demo or Download Demo First.....	12
V5CP#2 Code Metrics (4 min) Click here → Run Demo or Download Demo First	12
V5CP#3 Design Patterns (4 min) Click here → Run Demo or Download Demo First.....	12
V5CP#4 Javadoc Repair (3 min) Click here → Run Demo or Download Demo First	12
V5CP#5 Method & Field Wizards (4 min) Click here → Run Demo or Download Demo First	12
V5CP#6 Task Scheduler (3 min) Click here → Run Demo or Download Demo First	12
V5CP#7 VA Java Perspective (3 min) Click here → Run Demo or Download Demo First	12
V5CP#8 Enhanced Navigation (5 min) Click here → Run Demo or Download Demo First.....	12
V5CP#9 Task View Enhancements (3 min) Click here → Run Demo or Download Demo First	12
V5CP#10 Build Automation (4 min) Click here → Run Demo or Download Demo First.....	12
V5CP#11 CVS Enhancements (5 min) Click here → Run Demo or Download Demo First.....	12
V5CP#12 Transition Tools (6 min) Click here → Run Demo or Download Demo First	12
V5CP#13 VCE Bridge (3 min) Click here → Run Demo or Download Demo First	12
WebSphere Studio Collection	13
<i>Available</i>	13
V5AD#21 Portal Toolkit Plugin for Portlet Development (9 min)	13
<i>Under Construction</i>	13
<i>WSAD</i>	13
<i>WSAD-IE</i>	13
<i>WSED</i>	13
<i>Other Plugins from IBM, ISVs and the Open Source Community</i>	13

Guided Tour of WebSphere Studio

■ The Workbench

- Perspectives, Views, Editors and multiple Windows
- Switch between roles and tooling easily
- Customizable and minimizes learning curves
- **Bottom Line** → **The Workbench adjusts to fit you ...not the other way around!**

■ Dynamic Development

- Automatic, Incremental Build across all artifacts
- Automatic J2EE hot-redeployment (~~server re-starts~~)
- **Bottom Line**
→ **Super-Fast Build/Change/Test Cycles!**

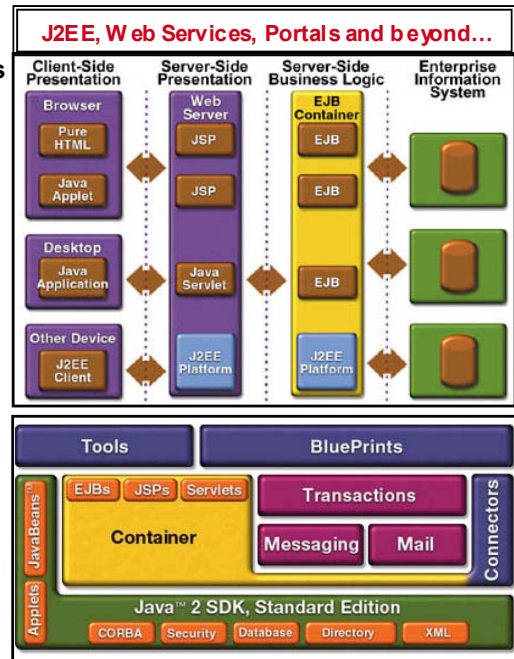
■ On Demand Code Smarts

- Contextual code assist & smart editors speed coding
- Wizards, builders facilitate open stds & best practices
- **Bottom Line**
→ **Faster Low/High-Level coding & maintenance!**

■ Struts Builder (Thin clients)

- Struts-aware app builder, config editor, component wizards and project navigators
- Visual builder constructs new apps and speeds maintenance
- **Bottom Line** → **Faster for Struts Pros, Easier for Struts Beginners!**

■ Java Visual Editor (Thick clients)



End-2-End Scenario

Web Page Design View

Today's Date and Time:

JavaScript Greeting:

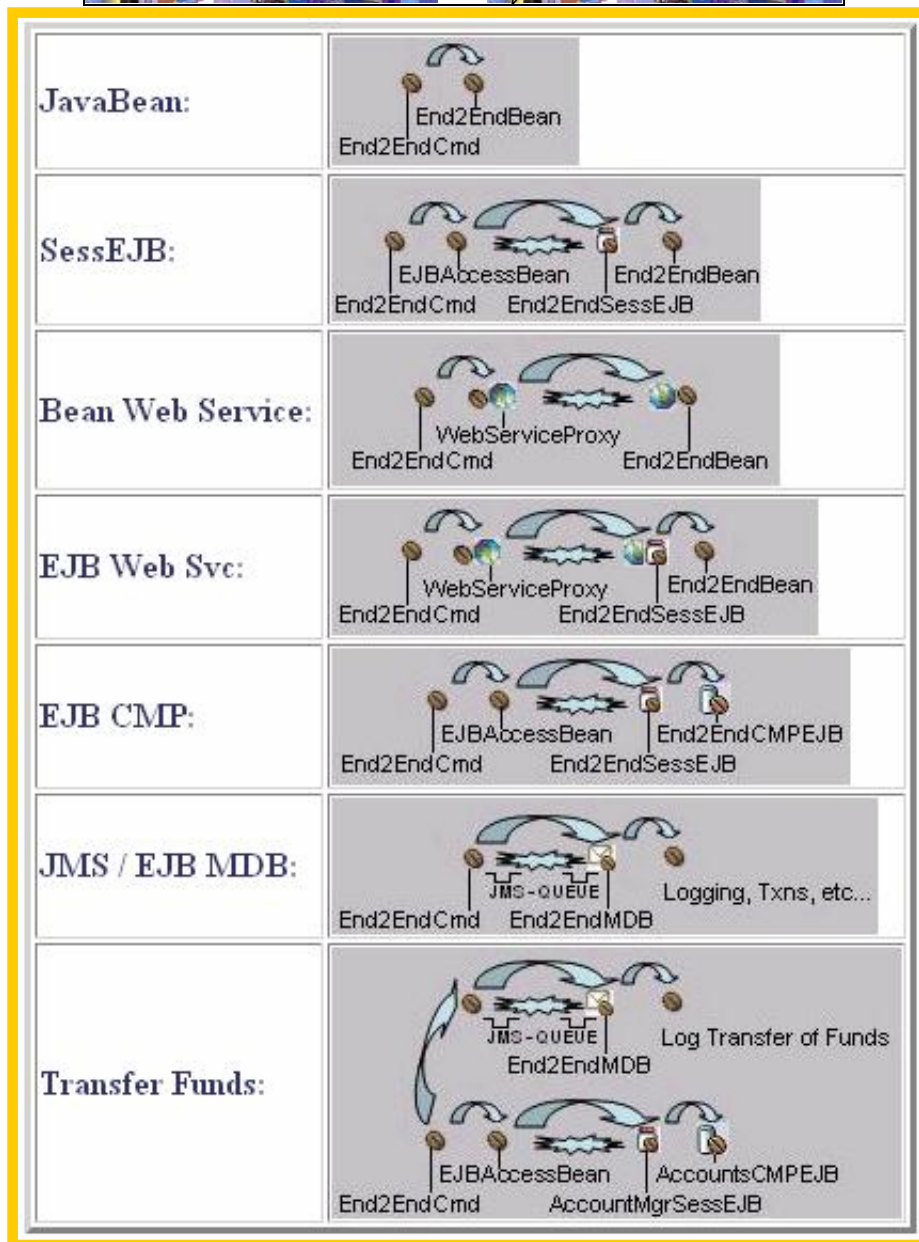
JavaBean HitCount: =

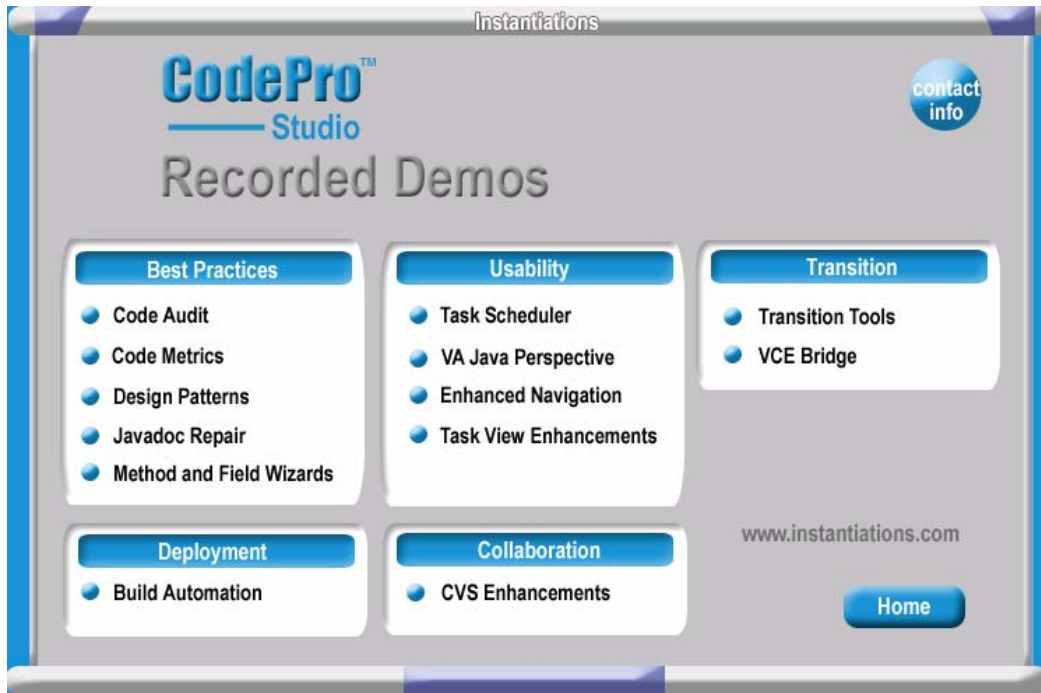
e2eCmds

JavaBean:	<input type="text" value="e2eCmds.ca.."/>
SessEJB:	<input type="text" value="e2eCmds.ca.."/>
Bean Web Service:	<input type="text" value="e2eCmds.ca.."/>
EJB Web Service:	<input type="text" value="e2eCmds.ca.."/>
EJB CMP:	EJB Hitcount = <input type="text" value="e2eCmds.ca.."/>
JMS / EJB MDB:	(Check Console for Msg!) <input checked="" type="radio"/> e2eCmds.ca..
Transfer Funds:	<input type="text" value="e2eCmds.tr.."/>

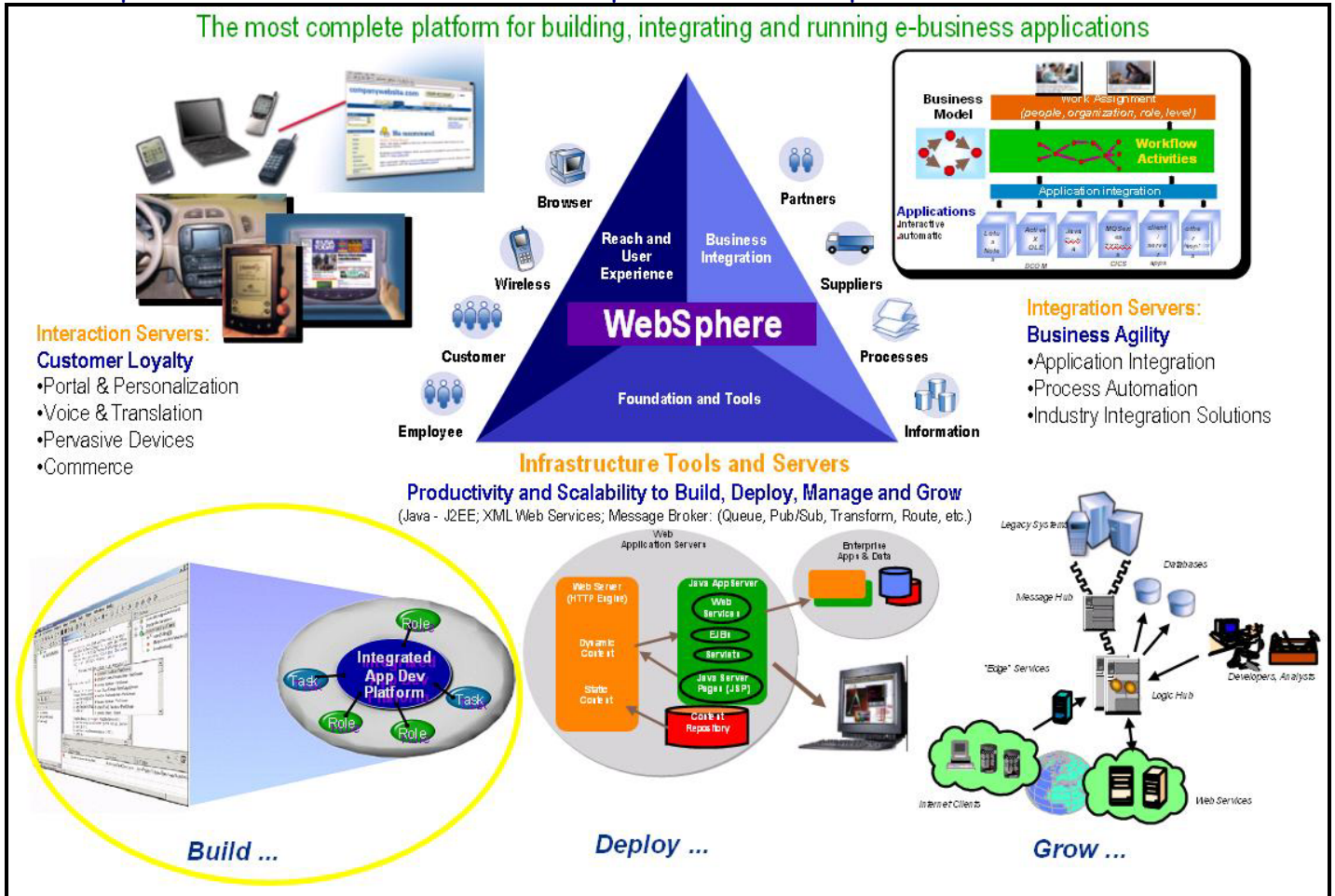
JavaBean:	
SessEJB:	
Bean Web Service:	
EJB Web Svc:	
EJB CMP:	
JMS / EJB MDB:	
Transfer Funds:	

Page 33





The "Evolving Collection" of Tutorial Demos spans editions of WSStudio, the WebSphere Platform, ISVs and open source plug-in innovations (>100 in 2002). To site one important part of that picture, here is the breadth and depth of the WebSphere Software Platform:



Quick Comprehensive Tour

How to navigate around the Tutorial Demos:

The playback controls make it easy to navigate throughout the demos:

[Spacebar]	Pause / Resume
While Paused: [PgDn] / [PgUp]	Fast Forward / Reverse
[Esc]	Fast slider bar mouse control
[Alt] + [Enter]	Fullscreen mode

V5AD#1 **The Essence of WebSphere Studio V5** (5 min play time)

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

This 5 minute presentation introduces you to the building blocks of WebSphere Studio. The breadth and depth of WebSphere Studio extends across Java, J2EE, Web Services, Workflow, Business Integration, the Mainframe and beyond.

V5AD#2 **Introduction and Tour of WebSphere Studio V5** (30 min play time)

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

This comprehensive tour includes highlights of WSStudio Application Developer (WSAD). This introductory demonstration is for everyone. While it is designed for developers, it has enough wide-reaching coverage that even non-programmers should find it illuminating. This demonstration will give you an idea of the power, flexibility, breadth and depth of WebSphere Studio. Here are some of the highlights:

1. **The Workbench**

- Java/J2EE, Web Services, XML/XSL, JSP/HTML, Database, Testing and Performance Profile tools are in the *same* IDE. This enables extremely quick development/test cycles without manually publishing, repeatedly deploying or constantly re-starting application servers.
- “Perspectives”, “Views” and smart editors facilitate roles-based development and leverage a variety of tools. Learning curves are minimized using cleanly organizing activities in a highly customizable IDE. The bottom line: The workbench adjusts to fit you, not the other way around. (i.e. Java, Web, J2EE, HTML/JSP, EJB, XML, Web Services, Profiling, Testing, etc.).
- Developer preferences for workbench and UI are extremely customizable and re-usable across teams.
- The J2EE fabric of WebSphere Studio automatically and incrementally packages your application for quick testing, debugging and deployment. EAR files, JAR files, WAR files and associated deployment descriptors are automatically generated and optionally easily modified.

2. **Dynamic Development**

- Hot-redeployment to local/remote application servers makes multi-tier testing quick, easy and consistent.
- Dynamic round-trip testing leverages Hot-redeploy, incremental compilation/parsing/validation, integrated J2EE test servers, auto-incremental “Smart-Publishing” and code-assist.

3. **On Demand Code Assist**

- Code assist now completes your coding statements for Java, HTML, JSP, TagLibs, XML, XSL, SQL, etc.
- Context sensitive smart editors and builders promote high/low-level coding and best practices

4. **Struts Builder Tools**

5. **Java Visual Editor (JVE) for Thick Clients**

Guided Tour (9 Tutorial Demos)

How to navigate around the Tutorial Demos:

The playback controls make it easy to navigate throughout the demos:

[Spacebar]	Pause / Resume
While Paused: [PgDn] / [PgUp]	Fast Forward / Reverse
[Esc]	Fast slider bar mouse control
[Alt] + [Enter]	Fullscreen mode

The Workbench

V5AD#3 **Getting Started** (5 min play time)

Drag and drop documents and programming artifacts into WSSstudio. WSSstudio incrementally builds/compiles/parses/validates artifacts imported and/or drag-dropped into WSSstudio. Windows applications, like Word and PowerPoint, run inside WSSstudio. This Tutorial Demo begins to acclimate you to how the workbench works and also shows you how you might bring your existing code into WSSstudio.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

V5AD#4 **Perspectives and Views** (15 min play time)

WebSphere Studio uses a wide variety of dynamic Views to facilitate roles-based development. These Views are customizable and can be combined into customized Perspectives, which are collections of Views. WSSstudio comes equipped with a variety of default perspectives. Some popular Perspectives are covered in this demo while others are covered in the “Introduction and Tour” demo (V5AD#2). This demonstration will prepare you to work with the default Perspectives as well as customize and share ones that you can tailor to meet your specific needs.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

V5AD#5 **Keyboard Shortcuts** (5 min play time)

Mouse aerobics are desirable in some cases while keyboard shortcuts are otherwise preferred. WSSstudio V5 has added many flexibilities to cruise around using the keyboard, as well as a nice summary of those shortcuts in the help system.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

V5AD#6 **Editors** (16 min play time)

There are many different “smart” editors in WSSstudio. You can use your own favorite editor against any file, seamlessly leveraging the smart-publish and hot-redeploy features of WSSstudio that result in dramatically faster test cycles. In addition, the built-in editors adapt to the type of artifacts you are editing by using code-assist, incremental build, colors, highlights, tree views, graphics and many other tactics. This tutorial will familiarize you with the possibilities and teach you the fundamentals of many of the key editors.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

V5AD#7 **Multiple Workbench windows enhance navigation** (4 min play time)

V5 introduces the ability to run multiple instances of the Workbench window (Window > New Window). This results in an excellent usage-pattern for cleanly organizing your desktop, without running multiple

copies of an IDE and without having too many files crowding your vision. This tutorial will familiarize you with when and how to leverage the multiple workbench window capability of WSStudio V5. (Special note: If you are familiar with WSStudio V4, this is a MUST SEE Tutorial Demo)

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

Dynamic Development (Incremental Build, Test, Smart-publish and Hot-Redeploy)

V5AD#8 **Dynamic Development** (10 min play time)

Automatic, incremental Build/Compile/Parse/Validate/Publish/Hot-redeploy DRAMATICALLY quickens your development cycle. This tutorial takes that to the extreme and covers the majority of the day-in-the-life-of-a-developer scenarios where this feature saves you a ton of time! (informal customer estimates range from 2-4hrs per day in time savings)

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

On Demand Code Smarts

V5AD#9 **Java Development using On Demand Code Smarts** (25 min play time)

Code-assist, Code-fix Proposals, incremental Build/Compilation/Parsing, source code wizards, refactoring, templates and the get-me-out-of-a-jam Local History combine to make this coding exercise truly enriched. This tutorial will familiarize you with some of the code productivity features in WSStudio V5 that will save both the low-level and high-level developer a ton of time.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

Struts Builder Tools

V5AD#10 **Struts-config.xml editor, Visual Builder and Web Structure View** (22 min play time)

The Struts tooling in V5 is a BIG addition. Both Struts pros and Struts beginners will be able build new Struts apps and maintain existing Struts apps quicker and easier. This tutorial familiarizes you with the WSStudio “Triad” of Struts Tools and takes a very common path through the tools while developing a new Struts application.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

Java Visual Editor (JVE) for Thick Clients

V5AD#11 **Java Visual Editor (JVE) *brief* Introduction** (1 min play time)

The JVE is a new addition to V5, it has a critical mass of capability and there are many enhancements slated for this key component. This tutorial will scratch the surface by showing you the primary layout of the JVE editor and it’s hallmark two-way editing capability.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

Eclipse 2.0 by Rick Weaver (Core IDE enhancements found in WSStudio V5.0)

V5AD#12 **Eclipse 2.0 Highlights by Rick Weaver** (50 min play time)

Rick Weaver, IBM Sr. Consulting WW Tools Specialist, details the most compelling enhancements.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

End-2-End Scenario (8 Tutorial Demos)

Silent – NO sound! Smaller files, shorter downloads and quicker coverage.
Narrated versions added soon.

How to navigate around the Tutorial Demos:

The playback controls make it easy to navigate throughout the demos:

[Spacebar]	Pause / Resume
While Paused: [PgDn] / [PgUp]	Fast Forward / Reverse
[Esc]	Fast slider bar mouse control
[Alt] + [Enter]	Fullscreen mode

How the End-2-End Scenario is organized:

- This application is built from scratch.
- Please review the diagram towards the beginning of this document, which uses pictures to describe the breadth and depth of the “End-2-End Scenario”.
- A single JSP is used to invoke multiple methods on a single End2EndCmds.java bean.
- Each method on the End2EndCmds bean calls a different J2EE or Web Services technology. In this fashion, we cover most scenarios with one example.
- The following tutorial demos cover each interaction separately.

V5AD#13 Introduction to the End-2-End Scenario (1 min)

This Tutorial Demo Series is initially offered as a silent (NO sound) edition, resulting in faster downloads and a quicker, more streamlined tour. If you view the “Guided Tour” series first, your familiarity with WSStudio V5 will allow you to follow these tutorials closely and easily. In addition, don’t forget about the playback controls shown in the table above. The playback controls will prove especially useful for your viewing efficiency.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

V5AD#14 End-2-End: JSP Web Page and JavaBean (13 min)

Create a Web Project, web page (JSP) and JavaBean from scratch. Drag-drop the JavaBean onto the web page and call it directly. Perform some dynamic Hot-redeploy testing. This is the user interface and controller for the End-2-End reference application.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

V5AD#15 End-2-End: JavaBeans in separate Java Project (Java Utility Jars) (8 min)

It is very common to structure application code across different J2EE building blocks. Specifically, this tutorial demo covers the case where Java classes are in a separate Jar, which is easily developed and integrated in WSStudio using Java Projects. Special Note: For WSStudio V4 enthusiasts, V5 has a new integrated alternative to the V4 vintage “zipcreation” plugin. The “zipcreation” plugin still works with V5 and is a fine alternative if that’s what you are more comfortable using. In addition, the “zipcreation” plugin is more appropriate and necessary in V5 if you are planning to use a non-IBM application server for WSStudio integrated testing (i.e. www.genuitech.com WebLogic plugin).

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

V5AD#16 End-2-End: Session EJB (10 min) >>>Updated 2003/01/20<<<

It is quick and easy to create EJBs of all types in WSStudio. This tutorial focuses on Session EJBs. To make it more interesting, we inherit from an existing plain-old Java class and create a handy EJB Access bean to make it easier to code to the remote EJB. In summary, this is a good example of typical EJB Session EJB creation and coding. Note: The EJB Test Client is very powerful and not used in this Tutorial Demo. Existing V4 Tutorial Demos provide examples of this and new V5 Tutorial Demos will revisit this in the future.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

V5AD#17 End-2-End: Web Services (10 min)

Web Services development is covered in a first class fashion with WSStudio. WSStudio creates and consumes Web Services, including a newly integrated UDDI “yellow pages” directory and a flexible UDDI browser. Without writing any code, WSStudio can make JavaBeans, EJBs, DB queries and URLs into Web Services. Your Web Service is automatically packaged and hot-deployed for immediate testing. All the necessary artifacts are created and packaged including the WSDL, deployment descriptor, Java Proxy and a sample application for convenient unit testing. Finally, UDDI is integrated inside and outside WSStudio. In this tutorial demo, an EJB is Web Service enabled. Other Web Services scenarios will be covered in the future, especially as additional AXIS support is introduced to compliment WSStudio’s currently AXIS-ready environment.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

V5AD#18 End-2-End: EJB 2.0 Container Managed Persistence (CMP) (15 min)

WSStudio has first-class object/relational (O/R) mapping. CMP EJBs can be created bottom-up, top-down and meet-in-the-middle. Foreign key relationships in the database(s) are generated into EJB associations for complete persistent navigation. Quick development and full-cycle testing is completed in this tutorial demo. Templates are used to speed the coding effort and a Session EJB acts as a façade to the CMP.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

V5AD#19 End-2-End: EJB 2.0 Message Driven Bean (MDB) (3 min)

MDB development is complete and quick in WSStudio. The integrated WebSphere Application Servers (WAS) in WSStudio are pre-configured, out-of-the-box, with an “MQ for Java Developer” (MQJD) runtime. Therefore, no additional messaging runtime installation is needed to facilitate JMS activities. In addition, configuring JMS providers, Queues/Topic information, listener ports, etc. is easy inside WSStudio. This tutorial demo goes through the steps necessary to create an MDB and then references a comprehensive article that describes a complete exercise, including the JMS/Queue related one-time configuration that is necessary for MDB development/testing. This excellent article is found on WebSphere Developers Domain (WSDD), in the “How-To Resources” on WebSphereCentral.com and a direct link is included ([Click Here](#)).

(Please note: While this article introduces the ability to use the administrative console against the WAS test servers in WSStudio, this is an optional step and is only included for academic reasons. All configuration for JMS setup can be done easily within WSStudio)

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

V5AD#20 End-2-End: Transfer Funds (10 min)

This exercise re-uses the EJB Project/Jar from the WSStudio V4 Tutorial Demo “Banking Scenario”. Therefore, this demonstrates a J2EE 1.3 Web Application calling a J2EE 1.2 EJB 1.1 Session/CMP EJB Module, all of which is running as an EAR (application) inside a WAS V5 server. If you would like additional details on how the transfer funds Accounts CMP EJB and AccountMgr Sess EJBs were built, please review the WSStudio V4 “Banking Scenario”. In the future, we will be replicating that scenario in this V5 Tutorial Demo Series.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

[CodePro Studio from Instantiations.com \(13 Tutorial Demos\)](#)

(Silent, no sound and nicely annotated)

How to navigate around the Tutorial Demos:

The playback controls make it easy to navigate throughout the demos:

[Spacebar]	Pause / Resume
While Paused: [PgDn] / [PgUp]	Fast Forward / Reverse
[Esc]	Fast slider bar mouse control
[Alt] + [Enter]	Fullscreen mode

How the CodePro Studio Instantiations.com Tutorial Demos are organized:

- The CodePro demos were created by <http://www.instantiations.com>
- Viewlet builder, an excellent demo authoring tool, was used to create these demos
- I have recorded the Viewlet demos using Camtasia to leverage the flexible playback controls of the Camtasia Player (camplay.exe), which is transparent to you, as a part of the packaged EXE downloads.
- Download and play these just like the rest of the Tutorial Demos. No additional software is needed.
- **Remember** that **[Alt] + [Enter]** puts demo into fullscreen mode and **[Esc]** displays more controls.



- V5CP#1 **Code Audit** (7 min) *Click here* → [Run Demo](#) or [Download Demo First](#)
- V5CP#2 **Code Metrics** (4 min) *Click here* → [Run Demo](#) or [Download Demo First](#)
- V5CP#3 **Design Patterns** (4 min) *Click here* → [Run Demo](#) or [Download Demo First](#)
- V5CP#4 **Javadoc Repair** (3 min) *Click here* → [Run Demo](#) or [Download Demo First](#)
- V5CP#5 **Method and Field Wizards** (4 min) *Click here* → [Run Demo](#) or [Download Demo First](#)
- V5CP#6 **Task Scheduler** (3 min) *Click here* → [Run Demo](#) or [Download Demo First](#)
- V5CP#7 **VA Java Perspective** (3 min) *Click here* → [Run Demo](#) or [Download Demo First](#)
- V5CP#8 **Enhanced Navigation** (5 min) *Click here* → [Run Demo](#) or [Download Demo First](#)
- V5CP#9 **Task View Enhancements** (3 min) *Click here* → [Run Demo](#) or [Download Demo First](#)
- V5CP#10 **Build Automation** (4 min) *Click here* → [Run Demo](#) or [Download Demo First](#)
- V5CP#11 **CVS Enhancements** (5 min) *Click here* → [Run Demo](#) or [Download Demo First](#)
- V5CP#12 **Transition Tools** (6 min) *Click here* → [Run Demo](#) or [Download Demo First](#)
- V5CP#13 **VCE Bridge** (3 min) *Click here* → [Run Demo](#) or [Download Demo First](#)

WebSphere Studio Collection

Available

V5AD#21 Portal Toolkit Plugin for Portlet Development (9 min)

Develop, test, deploy, configure and debug Portlets using the Portal Toolkit plugin for WSSstudio. By Doug Northup, IBM Portal Technical Lead World Wide Team.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

Under Construction

WSAD

- CVS Teaming
- Rational ClearCase Teaming
- Rational XDE Modeling
- Performance Profiling
- Component Testing
- Debugging Scenarios

WSAD-IE

- CICS, IMS, SAP JCA builder scenarios
- Workflow scenarios
- WAS EE tooling scenarios

WSED

- Mainframe development for Cobol, PL/I, CICS, IMS and mainframe resources navigation

Other Plugins from IBM, ISVs and the Open Source Community

- iSeries AS/400 development
- TogetherSoft Modeling
- Please email billhahn@mail.com with feedback, comments and ideas

WebSphere Studio V4 Tutorial Demos Handbook



Bill Hahn's Guided Tour of WSStudio

(Includes WSStudio IE and AD demos from Jim Palistrant and Rick Weaver)

(Updated 2002/05/01) (Newest material at <http://www.WebSphereCentral.com>)

([Click here if you need a more recent version of this document](#))



How to use this Handbook:

- If you are using this with a CD, just click on the “**Run Demo**” links that appear in each demo description.
- If you are viewing this on the web or you received this document alone, save this PDF document to your hard drive. Then use the “**Download Demo First**” links to download and save each demo to the same location/directory as this PDF document. Then you may use the “**Run Demo**” links to run the demonstrations.

Table of Contents (click to go to a demo):

AD1	Your first "Tutorial Demo". Please start here! (1 min play time).....	15
AD2	WebSphere Studio Introduction and Tour (20 min play time).....	15
	Hello World Tutorial Demo Scenario (8 parts).....	15
AD3	(1of8) JavaBean Development - HelloWorld.SimpleJavaBean (10 min play time).....	15
AD5	(3of8) EJB Development - Makes HelloWorld.SimpleJavaBean into an EJB (14 min play time).....	15
AD6	(4of8) Web Services Development - Makes HelloWorldEJB a Web Service (10 min play time).....	15
AD7	(5of8) Web App Development - WSStudio generates a complete web app (6 min play time).....	16
AD8	(6of8) Deploying the HelloWorld J2EE application to WebSphere App Server (6 min play time).....	16
AD9	(7of8) Debugging JavaBeans, JSPs, Servlets, TagLibs and EJBs (8 min play time).....	16
AD10	(8of8) Hot-redeployment of EJBs using the UTC to quicken the development cycle (6 min).....	16
	Bank Application Tutorial Demo Scenario (9 parts).....	16
AD11	(1of9) Generate Accounts Entity EJB - "Bottom up" code gen based on a DB table (10 min).....	16
AD12	(2of9) Create AccountMgr Session EJB (credit, debit, transfer using Accounts EJB) (11 min).....	16
AD13	(3of9) WebSphere Studio generates complete web app for the AccountMgr EJB (9 min).....	17
AD14	(4of9) Create a Web Service for AccountMgr EJB and a Web Application that calls it (14 min).....	17
AD15	(5of9) Deploy the Bank App J2EE application to WebSphere Application Server (5 min).....	17
AD16	(6of9) Debug the Bank App (8 min play time).....	17
AD17	(7of9) Alternative Entity EJB Approach: Create a "Meet in the middle" O/R mapping (10 min).....	17
AD18	(8of9) Web Bank Online (WBOOnline) - EJB Relationships and DB Foreign keys (8 min).....	18
AD19	(9of9) WBOOnline based Introduction to WSStudio (produced by Rick Weaver) (40 min).....	18
	Miscellaneous Key Tutorial Demos.....	18
AD20	Web Services Development - Make a Simple JavaBean into a Web Service (10 min play time).....	18
AD21	Database Web Apps: Database & Web Perspectives, SQL-Web Wizards (12 min).....	18
AD22	Dreamweaver UltraDev integration with WebSphere Studio (4 min play time).....	18
AD23	Customizing Perspectives (7 min play time).....	18
AD24	TagLib Development (6 min play time).....	19
AD25	Java Utility Jars - Using the zipcreation Plugin (2 min play time).....	19
	Unique WebSphere Studio Capabilities.....	19
AD26	Incremental compiler, parsing validation, Task sheet, and Testing with compile errors (8 min).....	19
AD27	Code assist (5 min play time).....	19
AD28	Local History (4 min play time).....	19
AD29	Java/text search (3 min play time).....	19
AD30	"Go To..." Resource, type, package browsers (1 min play time).....	19
AD31	MSOffice integration (2 min play time).....	20
AD32	Hierarchy View (1 min play time).....	20
AD33	"Links View" for web apps (1 min play time).....	20
AD34	XSL Trace (1 min play time).....	20
	Get the code and database I used for most of these demos.....	20
	WebSphere Studio Application Developer Integration Edition (Produced by Jim palistrant).....	20
IE1	WSStudio Integration Edition (IE) - Java Bean demo.....	20
IE2	WSStudio Integration Edition (IE) - EJB demo.....	20
IE3	WSStudio Integration Edition (IE) - CICS demo.....	20
IE4	WSStudio Integration Edition (IE) - Services Flow demo.....	20
IE5	WSStudio Integration Edition (IE) - Deployment demo.....	20

AD1 Your first "Tutorial Demo". Please start here! (1 min play time)

This 1 minute tutorial demo shows you how to control the Camtasia Player. Some very nice non-obvious features are covered. So, please take 1 minute to watch this demo.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD2 WebSphere Studio Introduction and Tour (20 min play time)

See why WSStudio won "Best Java IDE" and "Best Java Product" at the 2002 JavaOne conference. Developers from all backgrounds are excited about WSStudio. This introductory demonstration is for everyone. While it is designed for developers, it has enough wide-reaching coverage that even non-programmers should find it illuminating. This demonstration will give you an idea of the power, flexibility, breadth and depth of WebSphere Studio (WSStudio). Here are some highlights:

- J2EE, Java, Web, XML and Web Services tooling are in the *same* IDE for the first time. This enables previewing/testing web applications without manually publishing or repeatedly deploying applications.
- The integrated application server makes multi-tier testing quick and easy.
- The J2EE fabric of WebSphere Studio automatically packages your application for quick deployment, creating EAR, JAR and WAR files and their associate deployment descriptors for you.
- See how WebSphere Studio uses "Perspectives" to enable developers to play different roles and use different types of tooling, cleanly organized and fully customizable (i.e. Java, HTML, JSPs, EJBs, XML, Web Services, etc.).
- WebSphere Studio can be highly customized to each developer's preferences using new and existing Perspectives.
- Dynamic round-trip testing leverages the incremental compilers, parsers, validators, integrated J2EE test servers, auto-incremental "Smart-Publishing" and code-assist.
- Code assist now completes your coding statements for Java, HTML, JSP, TagLibs, XML, SQL and other artifacts.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

Hello World Tutorial Demo Scenario (8 parts)

AD3 (1of8) JavaBean Development - HelloWorld.SimpleJavaBean (10 min play time)

We'll write a JavaBean class from scratch. Use code assist, the incremental compiler and the task sheet to write a test case. Use the "Scrapbook" unit testing environment to innovatively test code "snippets".

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD4 (2of8) JSP Development - HelloWorld.jsp (22 min play time)

Write a JSP from scratch, call an existing JavaBean from within the JSP and test the JSP using the integrated J2EE test server Perspective. Then make repeated changes to the JSP that are immediately and incrementally compiled, parsed, published and tested.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD5 (3of8) EJB Development - Makes HelloWorld.SimpleJavaBean into an EJB (14 min play time)

Make any JavaBean into an EJB without writing any code. Use the EJB Universal Test Client (UTC) to unit test the EJB. Use hot-redeploy to iteratively test code changes in the EJB.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD6 (4of8) Web Services Development - Makes HelloWorldEJB a Web Service (10 min play time)

Turn any JavaBean, EJB, URL or database query into a Web Service, without writing any code. In this example, the WSDL, JavaBean proxy code and a sample application are all generated. You can create Web Services and build applications that consume Web Services, using fully automated tooling. You can also import wsdl directly from UDDI Web Services Registries and publish Web Services (wsdl) directly to UDDI Registries, all from inside WSStudio.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

- AD7 (5of8) Web App Development - WStudio generates a complete web app** (6 min play time)
Create an entire web application (HTML page, Servlet controller, JSP results, view bean, EJB access bean, Web Service proxy bean) based on an existing business component or JavaBean. In this example, we'll take an EJB and generate a web application around it, so that users can enter the appropriate data into an HTML form. Then a Servlet /JSP combination calls the EJB and a JSP displays the results. You don't have to write any code for any of those components. Complete web app creation made simple. Finally, we'll modify the generated web application to demonstrate how to jumpstart and customize your web application development efforts. There are no limits, only endless possibilities, using the complete web generation and from-the-ground-up web app development tooling in WStudio.
[Click here](#) → [Run Demo](#) or [Download Demo First](#)
- AD8 (6of8) Deploying the HelloWorld J2EE application to WebSphere App Server** (6 min play time)
Deploying is a snap using WStudio, thanks to the incremental and automatic generation of EAR, WAR, JAR and deployment descriptor files. In addition, you can use friendly editors and/or the source code of the deployment descriptors to customize application deployment. Taking the comprehensive defaults, you can completely deploy your application in seconds, using the well organized and automatic EAR file generation of WStudio. See how to deploy into WebSphere Application Server using the Administrative console of WebSphere Advanced Edition as well as the command line approach using WSCP.
[Click here](#) → [Run Demo](#) or [Download Demo First](#)
- AD9 (7of8) Debugging JavaBeans, JSPs, Servlets, TagLibs and EJBs** (8 min play time)
Use WStudio's debugger to block-and-tackle Java, JSPs, TagLibs, Servlets, EJBs, Web Services and more. You can set breakpoints, step through/into code, examine and change variables, walk forwards/backwards through the call-stack and see Java/JSP/EJB source while debugging. You can use the same debugger for local and remote debugging. This debugger is a consistent enhancement to the award winning debugger of VisualAge for Java. It provides the fundamentals every developer will need and some luxuries of a top notch debugging environment.
[Click here](#) → [Run Demo](#) or [Download Demo First](#)
- AD10 (8of8) Hot-redeployment of EJBs using the UTC to quicken the development cycle** (6 min)
Use the EJB Universal Test Client (UTC) to unit test the EJB. Then Use hot-redeploy to iteratively test code changes in the EJB while quickly refreshing the EJB code, on the server, in seconds.
[Click here](#) → [Run Demo](#) or [Download Demo First](#)

Bank Application Tutorial Demo Scenario (9 parts)

- AD11 (1of9) Generate Accounts Entity EJB - "Bottom up" code gen based on a DB table** (10 min)
We'll generate an EJB Entity with Container Managed Persistence (CMP) based on an existing database table. The EJB code and O/R mappings are generated for us. Then we'll use the EJB Universal Test Client to test the EJB.
[Click here](#) → [Run Demo](#) or [Download Demo First](#)
- AD12 (2of9) Create AccountMgr Session EJB (credit, debit, transfer using Accounts EJB)** (11 min)
Create a new AccountMgr session EJB, letting WStudio generate the infrastructure code. Generate an EJB Access Bean for the Accounts EJB. Add custom code in the AccountMgr EJB to easily call the Accounts EJB, to credit, debit and transfer funds. We'll use the EJB wizards, J2EE perspective and the Universal Test Client to develop this EJB based business logic.
[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD13 (3of9) WebSphere Studio generates complete web app for the AccountMgr EJB (9 min)

Create an entire web application (HTML page, Servlet controller, JSP results, view bean, EJB access bean, Web Service proxy bean) based on an existing business component or JavaBean. In this example, we'll take an EJB and generate a web application around it, so that users can enter the appropriate data into an HTML form. Then a Servlet /JSP combination calls the EJB and a JSP displays the results. You don't have to write any code for any of those components. Complete web app creation made simple. Finally, we'll modify the generated web application to demonstrate how to jumpstart and customize your web application development efforts. There are no limits, only endless possibilities, using the complete web generation and from-the-ground-up web app development tooling in WSStudio.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD14 (4of9) Create a Web Service for AccountMgr EJB and a Web Application that calls it (14 min)

Turn any JavaBean, EJB, URL or database query into a Web Service, without writing any code. In this example the WSDL, JavaBean proxy code and a sample application are all created for you. Therefore, you can create and consume Web Services, using fully automated tooling. You can even import from and publish directly to a UDDI Web Services Registry, all from inside WSStudio. In this demonstration we'll generate a complete web application to serve up the Web Service and then customize it on-the-fly.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD15 (5of9) Deploy the Bank App J2EE application to WebSphere Application Server (5 min)

Deploying is a snap using WSStudio, thanks to the incremental and automatic generation of EAR, WAR, JAR and deployment descriptor files. In addition, you can use friendly editors and/or the source code of the deployment descriptors to customize application deployment. Taking the comprehensive defaults, you can completely deploy your application in seconds, using the well organized and automated EAR file generation of WSStudio. See how to deploy into WebSphere Application Server using the administrative console of WebSphere Advanced Edition as well as the command line approach using WSCP.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD16 (6of9) Debug the Bank App (8 min play time)

Use WSStudio's debugger to block-and-tackle Java, JSPs, TagLibs, Servlets, EJBs, Web Services and more. You can set breakpoints, step through/into code, examine and change variables, walk forwards/backwards through the call-stack and see Java/JSP/EJB source while debugging. You can use the same debugger for local and remote debugging. This debugger is a consistent enhancement to the award winning debugger of VisualAge for Java. It provides the fundamentals every developer will need and some luxuries of a top notch debugging environment.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD17 (7of9) Alternative Entity EJB Approach: Create a "Meet in the middle" O/R mapping (10 min)

The Premise: The business logic exists in a JavaBean Class and the business data exists in a database table. Therefore, how can I turn the existing JavaBean into an EJB and map it's fields/properties to an existing table's columns? That is where "meet-in-the-middle" comes in handy. WSStudio automates this process, including: EJB inheritance, JavaBean inheritance, simple and compound SQL/Java data-type conversion and aggregate data type composition. In this demonstration we will EJB-enable our JavaBean class, create an object↔relational mapping and persist/hydrate our JavaBean class with database table data.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD18 (8of9) Web Bank Online (WBOOnline) - EJB Relationships and DB Foreign Keys (8 min)

Web Bank Online (WBOOnline) represents a more complex "real world" version of our Banking Application Tutorial Demo Scenario. WBOOnline's operational database has 5 tables with foreign key relationships and Customers have a one-to-many relationship to accounts. WSSStudio generates the WBOOnline EJBs based on 5 tables, including foreign keys. We'll examine the generated mappings, making special note of the relationships (which are based on the foreign keys). We'll use the EJB Universal Test Client (UTC) to test the Customer EJB, ask for a specific customer number and retrieve all accounts for that customer in ONE operation, thanks to the generated EJB relationships. CMP EJB Entity beans that represent foreign key relationships using EJB relationships can be very powerful and convenient when building "real-world" applications.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

If from CD...[Click here](#) → [Run Demo](#) (different, shorter name)

AD19 (9of9) WBOOnline based Introduction to WSSStudio (produced by Rick Weaver) (40 min)

Web Bank Online (WBOOnline) represents a more complex "real world" version of our Banking Application Tutorial Demo Scenario. Rick uses this as a backdrop for a day in the life of a developer. Similar to tutorial demo AD2, Rick gives us a tour of many of the award winning features of WebSphere Studio.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD20 Web Services Development - Make a Simple JavaBean into a Web Service (10 min play time)

Turn any JavaBean, EJB, URL or database query into a Web Service, without writing any code. In this example, the WSDL, JavaBean proxy code and a sample application are all generated. You can create Web Services and build applications that consume Web Services, using fully automated tooling. You can also import wsdl directly from UDDI Web Services Registries and publish Web Services (wsdl) directly to UDDI Registries, all from inside WSSStudio.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD21 Database Web Apps: Database & Web Perspectives, SQL-Web Wizards (12 min)

Create SQL queries with an easy to use wizard and the "Data Perspective" of WebSphere Studio. Then generate a complete web application based on that SQL query. Finally, test the application and enhance the user interface web pages in the generated web application.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD22 Dreamweaver UltraDev integration with WebSphere Studio (4 min play time)

While WebSphere Studio offers complete web page development and second-to-none JSP development, some web page designers have existing skills with Dreamweaver UltraDev. Experienced Dreamweaver developers can get the "best of both worlds", while developing/testing web pages, by having WebSphere Studio manage the artifacts. Because WebSphere Studio manages the lifecycle of the artifacts, you automatically take advantage of "Smart-Publishing", version control, round-trip server-side development, faster testing and comprehensive debugging.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD23 Customizing Perspectives (7 min play time)

WebSphere Studio comes pre-configured with default perspectives for Java, J2EE, EJB, Web, XML, Database, Scripting, Servers, Teaming, Debugging and other types of development. Each Perspective is a collection of high-function "views". This tutorial demo illustrates how we can create a "Super Perspective" that contains many different views, save that perspective and share it with others.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD24 **TagLib Development** (6 min play time)

Tag libraries can be very useful for programming productivity, re-use, layered application best practices and JSP coding style.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD25 **Java Utility Jars - Using the zipcreation Plugin** (2 min play time)

Use the Plugin in this demo to more quickly and more easily develop common Java Jars as a part of your overall EAR application. Also use the article that is referenced in this demo to learn more about where to put Java Utility Jars.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD26 **Incremental compiler, parsing validation, Task sheet, and Testing with compile errors** (8 min)

WebSphere Studio uses some very innovative technology to allow for incremental compiling and parsing of application artifacts (i.e. Java classes, EJBs, JSPs, HTML, XML, deployment descriptors, WSDL, etc.). With this approach, you never have to manually batch-build your applications. Because the incremental compiling/parsing happens quickly each time you save your files, you get immediate well organized feedback about your progress. In addition, the unique incremental compiler allows for more flexible compile error resolution using a “Task Sheet” that cumulatively collects compiler/parsing errors over time. The incremental compiler even enables you to run components that are unfinished and/or have compile errors, allowing for more granular and incremental development.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD27 **Code assist** (5 min play time)

Code assist completes your coding statements for Java, HTML, JSP, TagLibs, XML, SQL and other artifacts.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD28 **Local History** (4 min play time)

Ever make a mistake while coding? Have you ever spent minutes or hours trying to recover from some supposedly “bright idea”? If so, Local History is definitely for you! WebSphere Studio maintains a history of your coding activities for as many days as you choose, saving the deltas in coding changes locally, regardless of whether or not you’re using an SCM or ever check-in/check-out. This is quite a risk reduction feature and makes experimentation more fun and carefree. Enjoy your newfound freedom to hack away!

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD29 **Java/text search** (3 min play time)

“Search” is an understatement. This engine lets you be as broad or as specific as you want. You can search for: text, text in specific types of files, Java types, methods, fields, etc. You can even refine your search to only include declarations, references and/or implementers. This is a very flexible, very powerful and very fast search engine...thousands of hits in just seconds.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD30 **"Go To..." Resource, type, package browsers** (1 min play time)

This approach is more immediate and even quicker than the powerful search engine. In less than a second, you can jump to packages, classes or ANY artifact/file with a name that partially matches what you type. This feature redefines “navigating” an IDE. This is an easy to miss feature and hard to live without.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD31 MSOffice integration (2 min play time)

Just about everyone uses Microsoft Office for documents, spreadsheets, diagrams etc. You probably have some project-related documentation that you would like to keep handy and/or a part of your project. Well, now you can. You can even drive those applications as embedded windows with active toolbars, inside of WebSphere Studio. While this example is only the “tip of the iceberg” when it comes to WebSphere Studio’s plugin architecture, it is none-the-less a modest and compelling example of how Studio’s pluggability facilitates 3rd party tooling integration.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD32 Hierarchy View (1 min play time)

Sometimes it is important to see what you are inheriting. This view makes that possible. I provide a suggestion on where to place this view for most efficient use.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD33 "Links View" for web apps (1 min play time)

The Links View is a web designer’s friend. It shows upstream and downstream links between web pages and their artifacts. It’s easy to miss and it can come in handy, so get to know this view.

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

AD34 XSL Trace (1 min play time)

If you deal with XSL transformations, you’ll want to have this in your bag of tricks. See how you can step through an XSL transformation using this 3-pane view of the source XML, source XSL and resulting XML or HTML. (The target document is XML in this example, but could just as easily have been HTML)

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

Get the code and database I used for most of these demos

ZIP containing EAR file, DDL and BAT file: [Download Code and Database DDL](#)

WebSphere Studio Application Developer Integration Edition (Produced by Jim palistrant)

IE1 WSStudio Integration Edition (IE) - Java Bean demo

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

IE2 WSStudio Integration Edition (IE) - EJB demo

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

IE3 WSStudio Integration Edition (IE) - CICS demo

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

IE4 WSStudio Integration Edition (IE) - Services Flow demo

[Click here](#) → [Run Demo](#) or [Download Demo First](#)

IE5 WSStudio Integration Edition (IE) - Deployment demo

[Click here](#) → [Run Demo](#) or [Download Demo First](#)