



WebSphere Studio "How To" Resources

(Eclipse, WSStudio, WSSD, WSAD, WSAD-IE, WSED)
(Updated 2003/01/15) (Newest material at <http://WebSphereCentral.com>)
([Click here if you need a more recent version of this document](#))



Tutorials and Hands-on exercises

- **IBM Developer Websites:**

(updated daily...find the latest yourself...the source of most links in this document):

[WebSphere Developer Domain \(WSSD\) Library, sorted by topics and products](#)

[Latest WSStudio Technical Articles on WebSphere Developer Domain \(ibm.com/websphere/developer\)](#)

[Latest Java Technology "How To" resources from IBM DeveloperWorks \(ibm.com/developer\)](#)

- **Fundamentals and Advanced Topics (Tutorial Demos):**

[WSStudio technical demos \(tutorials w/ sound\)](#)

- **Fundamentals (reading):**

[WSStudio V5 Technical Brief](#), [V5 Web Page Overview](#), [V5 Technical Summary Overview Presentation](#),

[V5 Technical Details Overview Presentation](#), [V4 Tech Overview WhitePaper](#), [V4 Tech RedBook](#)

- **Fundamentals (hands-on):**

[WSAD V5 Fundamentals/Advanced Presentations and Lab Exercises](#)

[WSAD V4 Fundamentals Collection of Hands-On Labs and Presentations](#)

[WSAD V4 Fundamentals Hand-On Exercises & WSAD V4 Fundamentals Hands-On Presentations](#)

[WSAD V4 Advanced Hands-On Exercises and Presentations](#)

- **Fundamentals (hints & tips):** [Collection of Newsgroup usage tips](#), [WSAD V5 Keyboard Shortcuts \(PDF version of online help information\)](#)

- **Best Practices:**

[CodePro Studio Plugin for WSStudio from Instantiations Inc.](#)

[WebSphere Developers Domain \(WSDD\) Best Practices ZONE](#)

- **Portal (reading):**

[Portal: Homepage: http://ibm.com/websphere/portal](#), [Portal: "Information Kit" a Whitepaper Collection with demo \(no hands-on but good high-level information\)](#),

[Portal: WebSphere Portal Extend: Collaborative Components Redpaper](#),

[Portal: WebSphere Portal V4.1 Installation Redbook](#)

- **Portal/Portlet (hands-on):**

[Developing and Debugging Portlets using WSStudio and WebSphere Portal Server](#)

[Portlet Plugin Hands-On Lab using the for WSStudio](#), ([Get the WSAD V4.x Portlet Plugin here](#))

[Portlet Plugin for V5 coming soon \(It will be Struts based!\) \(It will be linked here once released\)...](#)

[Advanced Portlet Development and a Portlet Application Template](#)

[How to turn your existing web application \(Servlet/JSP\) into a Portlet](#)

[Portal: Complete Dev/Deploy Hands-On Labs: Install, Admin, Use, Dev/Deploy WSPortal V4.1.2 \(150MB\)](#)

[Subset: Only the Installation Labs \(2MB\)](#), [Subset: Only the Technical Presentations \(16MB\)](#), [Subset: Only the Admin, Usage and Development Labs \(130MB\)](#)

- **Portlet (API):** [Portal: Portlet Programming Part 1 - Aug 2002](#), [Portal: Portlet Programming Part 2 - Aug 2002](#), [Portal: V4.1.2 Portlet Development Guide](#) and ([Get sample code here](#))

- **HATS:** [Quick Reference: Host Access Transformation Server \(Rules-based engine converts 3270/5250 into JSPs/HTML.\)](#)
[Building a web-to-host application article](#)

- **Team Development:**

[Quick Reference about your options \(CVS, ClearCase, PVCS, and more\)](#)

[Team Development in WSStudio Part 1 of 4](#)

[Portlet Team Development with WSStudio and the Portal Toolkit Plug-in](#)

- **CVS:**
 - [Team Development in WSSstudio Part 1 of 4](#)
 - [Team Development in WSSstudio: Using CVS Part 2 of 4](#)
 - [Team Development in WSSstudio: Installing CVS on Linux Server Part 3 of 4](#)
 - [Team Development in WSSstudio: Concurrent development with CVS Part 4 of 4](#)
 - [CVS: www.cvshome.org Documentation \(Introductory and Usage related\)](#)
 - [CVS: Team Development in WSSstudio \(Good WSSstudio coverage plus includes VAJava comparison\)](#)
 - [CVS: Teaming lab exercise - installation & usage with WSSstudio](#)
- **ClearCase:**
 - [ClearCase: Integration with WSSstudio \(How To Article\)](#)
 - [ClearCase: Integration with WSSstudio \(Whitepaper\)](#)
 - [ClearCase: Hands on development with multiple developers \(Tutorial\)](#)
 - [ClearCase: Teaming with WSSstudio \(Lab Exercise\)](#)
- **Debugging:**
 - [Debugging: WSSstudio Debugging fundamentals \(Article PART 1\)](#)
 - [Debugging: WSSstudio Debugging fundamentals \(Article PART 2\)](#)
- **Testing:** [Testing: WSSstudio V5 Testing Tools Lab \(Screenshots and info\)](#), [Testing: WebSphere App Server Test Environment Guide](#)
- **Profiling:** [Profiling: WSSstudio V5 Profiling/Performance Tools Lab \(Screenshots and info\)](#), [Profiling, Monitoring, Tracing and Performance: WSSstudio Application Monitor for WebSphere on zOS/390](#)
- **Struts:** [Struts: Tutorial for WSSstudio from ibm.com/developer DeveloperWorks](#) and [\(Get sample code here\)](#), [Struts: development with WSSstudio](#)
- **Java Visual Editor (JVE) (Thick Clients):** [JVE: Building Apps with the WSSstudio Java Visual Editor \(JVE\) Part 1: Creating your first Applet](#)
- **SQL:** [SQL: Query Development in WSSstudio](#), [SQLJ: Plugin for WSSstudio development of SQLJ](#)
- **XML:** [The XML Files: Developing XML/XSL Applications Using WSSstudio V5](#)
- **XML (7 part article):** [1-XML Schemas](#), [2-SQL Query](#), [3-SQL & XML together](#), [4-XML Editor tips](#), [5-RDB to XML Mappings](#), [6-Namespaces Demystified](#), [7-XSL Stylesheets](#) (NOTE: JavaBean proxy generation for Java-XML mappings, AXIS and many other XML features in WSSstudio are NOT yet covered in this excellent series. Please compliment these great articles by reading "The XML Files..." above.)
- **XML (APIs):** <http://java.sun.com/xml/>, <http://java.sun.com/xml/jaxb>, <http://java.sun.com/xml/jaxm>, <http://java.sun.com/xml/jaxp>, <http://java.sun.com/xml/jaxr>, <http://java.sun.com/xml/jaxrpc>
- **XML JAXB:** [XML: JAXB: Tutorial: JAXB maps JavaBeans To/From XML \(From ibm.com/developer DeveloperWorks\)](#)
- **Web Apps:** [Web App development with WSSstudio](#)
- **J2EE Apps:**
 - [J2EE App development with WSSstudio - Part I](#)
 - [J2EE App deployment with WSSstudio - Part II \(Deployment to WAS 4.0 AEs Single Server\)](#)
 - [Deploying a J2EE App from WSSstudio to WAS V4.0 AE full](#)
- **EJBs (Session and Entity):**
 - [EJB: Make any JavaBean into an EJB Session Bean \(Tutorial Demo\)](#)
 - [EJB: Online-html \(downloadable PDF\) tutorial for simple EJB development in WSSstudio](#)
 - [EJB: Generate EJB Entity Beans "bottom-up" from simple database tables \(Tutorial Demo\)](#)
 - [EJB: Create a Session facade for an Entity CMP, using EJB Access beans \(Tutorial Demo\)](#)
 - [EJB: Generate EJB CMP Entity Beans "bottom-up" from multiple tables with foreign keys \(Tutorial Demo\)](#)
 - [EJB: "Meet-in-the-middle" mapping of existing EJB CMP Entity Beans to DB tables \(Tutorial Demo\)](#)
 - [EJB: Maintaining and Updating EJBs "consistently" \(Article\)](#)
 - [EJB: Data Type Conversion between EJB/Java types and DB SQL data types \(Article\)](#)

[EJB: Building EJB CMP Entity Beans that Span Federated Data \(Views and DB2 NickNames\) \(Uses WSAD-IE but WSAD will work as well\)](#)

[EJB: Make any JavaBean into an EJB Session Bean \(Tutorial Demo\)](#)

- **EJBs (MDB):**

[EJB/MDB: Creating and Testing Message Driven Beans using WSAD V5 \(Article\)](#)

[EJB/MDB: Develop and Test Message Driven Beans with WSAD V5 \(Article\)](#)

- **Web Services (articles):**

[Web Services: Make any JavaBean into a Web Service using WSStudio \(Tutorial Demo\)](#)

[Web Services: Development and Deployment with WSStudio and WAS 4.0 \(4 Part Article\)](#)

[Web Services: Developing XML Web Services with WSAD \(Systems Journal\)](#)

[Web Services: Using WSStudio and UDDI to discover and call an internet Web Service \(Article\)](#)

[Web Services: Building a J2EE app that calls the Google Internet Web Service \(Article - Part I\)](#)

[Web Services: Building a J2EE app that calls the Google Internet Web Service \(Article - Part II\)](#)

[Web Services: Using WSStudio to develop and deploy a Web Service \(Tutorial - Part I\)](#)

[Web Services: Using WSStudio to develop and deploy a Web Service \(Tutorial - Part II\)](#)

[Web Services: Making a DB2 query into a Web Service](#)

- **Web Services (books):**

[Web Services: Redbook: Web Services Wizardry with WebSphere Studio](#)

[Web Services: Redbook: Self-Study Guide: WSStudio and Web Services](#)

- **Web Services (and .NET):** [Developing a .NET client for a WSStudio EJB Web Service \(Article\)](#)

- **WSIF:** [WSIF - Web Services Invocation Framework - A SOAP independent multi-protocol approach](#),
[WSIF - Part 2 - The Architecture](#), [WSIF - What the creators had in mind](#)

- **JCA (J2EE/CA, J2C):**

[JCA-J2C: WSAD-IE development and migration from VAJava](#)

[JCA-J2C: WSAD development using VAJava's EABs](#)

[JCA-J2C: WSAD-IE training package \(Presentation and Lab\)](#)

[JCA-J2C: WSAD-IE CICS ECI access using WSStudio-IE \(Recorded Tutorial Demo with sound\)](#)

[JCA-J2C: Java Connectors for CICS: Featuring the J2EE Connector Architecture](#)

[JCA-J2C: Enabling a J2EE Resource Adapter using the JCA Tool Plugin -- Part 1](#)

- **JMS:**

[JMS: Using JMS with WSStudio \(Part 1\)](#), [JMS: Using JMS with WSStudio \(Part 2\)](#)

[JMS: Architecture: Integrating WebSphere Application Server and the WebSphere MQ Family](#)

[JMS: All Articles On DevDomain ibm.com/developer \(Search Current List\)](#)

[EJB/MDB: Creating and Testing Message Driven Beans using WSAD V5 \(Article\)](#)

[EJB/MDB: Develop and Test Message Driven Beans with WSAD V5 \(Article\)](#)

- **ANT:**

[Using the "Ant" build/deploy tooling with WSStudio \(3 part article\)](#)

- **Class Loaders:**

[J2EE Class Loading Demystified - managing your classpath for your EAR, WAR, JAR and AppServer, Java
Java Utility Jars/Projects in WSStudio \(Article and zipCreation plugin\)](#)

(Note: WSStudio V5 has an integrated alternative to plugin. It still works in V5, but it is largely redundant.)

- **Plugin Development:** [Plugin Development: Plug a Swing based development tool into Eclipse](#)

- **WebLogic:**

[WebLogic: Genuitec: Plugins for WSStudio for WebLogic V5, V6 and V7](#)

[WebLogic: ObjectEdge: Plugins for WSStudio for WebLogic V5, V6 and V7](#)

[WebLogic ==> WAS V4: Migrating WebLogic Applications to WebSphere Advanced V4](#)

[WebLogic ==> WAS V5: Migrating WebLogic Applications to WebSphere Adv V5 \(Use with V4 book\)](#)

- **Microsoft .NET and WSStudio Comparisons:**

[Part I: Conceptual Differences](#), [Part II: Implementation Differences](#), [Part III: Interoperability](#)

- **iSeries (AS/400):** [WebSphere Dev Studio \(WDS\): Bring a New Life to Your 5250 Applications](#)
- **WebSphere EE V4 (APIs):** [WebSphere Enterprise Edition \(EE\) V4 Programmers Guide,](#)
- **Migration: (JBuilder→WSStudio):**
[JBuilder to WSStudio Migration Article \(Elaine Lau\)](#)
- **Migration: (VAJava→WSStudio):**
[IBM Migration/Coexistence homepage: http://ibm.com/websphere/developer/zones/studio/transition.html](#)
[CodePro Studio Migration Edition Plugin \(Instantiations\) for VAJava/WSStudio coexistence and migration](#)
- **Migration: (WebSphere Application Server V3.5→V4.0+ Migration Tools/Articles)**
[Tool&Article: Migrating Servlet/EJB apps from WAS V3.5 to V4.0+](#)
[Tool: Servlet/JSP PRE-WAS3.5 Migration Tool \(i.e. JSP .91/1.0 to 1.1 and Servlet 2.1 to 2.2\)](#)
- Instantiations Inc. award winning tooling and plugin for WSStudio (Best Practices and/or VAJava migration): <http://www.instantiations.com/wsad>

Find the Latest Yourself

- News Groups, Feature Requests, Events, Meet the experts: <http://ibm.com/websphere/developer/community>
- WSStudio Zone at WebSphere Developer Domain: <http://www7b.software.ibm.com/wsdd/zones/studio/>
- WebSphere Developer Domain: <http://www.ibm.com/websphere/developer>
- IBM DeveloperWorks: <http://www.ibm.com/developer>
- IBM Redbooks: <http://www.redbooks.ibm.com>

Technical Presentations

- My latest presentations:
<ftp://ibm4me:was35vaj@service2.boulder.ibm.com/Miscellaneous/GettingStarted/WebSpherePresentations.pdf>
- Mark Colan, lead IBM evangelist for e-business and Web Services, has many presentations (mostly Web Services):
<http://www-106.ibm.com/developerworks/speakers/colan/>

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Date	Comments
2003/01/15	Added: EJB/MDB: Develop and Test Message Driven Beans with WSAD V5 (Article)
2003/01/15	Added: Portlet Team Development with WSStudio and the Portal Toolkit Plug-in
2002/12/20	Added: JBuilder to WSStudio Migration Article (Elaine Lau)
2002/12/17	Added: Several articles on Team Development, ClearCase and CVS development (total added 5)
2002/12/11	Added: JVE: Building Apps with the WSStudio Java Visual Editor (JVE) Part 1: Creating your first Applet
2002/12/04	Added: How to turn your existing web application (Servlet/JSP) into a Portlet
2002/12/04	Added: Portlet Plugin for V5 coming soon (It will be Struts based!) (It will be linked in doc, once released)
2002/12/01	Added: Advanced Portlet Development and a Portlet Application Templates
2002/11/22	Added: Debugging: WSStudio Debugging Fundamentals (Articles) (Part 1 & 2)
2002/11/22	Added: EJB: Online-html (downloadable PDF) tutorial for simple EJB development in WSStudio
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2002/11/22	Added: EJB: Maintaining and Updating EJBs "consistently" (Article)
2002/11/22	Added: EJB Java to DB/SQL data type conversion article AND existing tutorial demos
2002/11/18	Added: WebSphere Developers Domain (WSDD) Best Practices ZONE
2002/11/16	Reformatted for readability
2002/11/15	Added: XML: The XML Files: Developing XML/XSL Applications Using WSStudio V5

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2002/11/06	Added: SQLJ: Plugin for WSStudio development of SQLJ
2002/11/01	Added: Profiling: WSStudio V5 Profiling/Performance Tools Lab (Screenshots and info)
2002/11/01	Added: Testing: WSStudio V5 Testing Tools Lab (Screenshots and info)
2002/10/30	Added: Profiling, Monitoring, Tracing and Performance: WSStudio App Mon for WebSphere on zOS/390
2002/10/30	Added: WebLogic ==> WAS V5: Migrating WebLogic Apps to WebSphere Adv V5 (Use with V4 book)
2002/10/29	Added: Portal Development: Developing and Debugging Portlets with WSStudio and WebSphere Portal
2002/10/24	Added: 1 link: XML in WSStudio: Part 7 XSL Stylesheets (V5 features included)
2002/10/24	Fixed: 1 link: Latest Java Technology "How-To" Resources (DeveloperWorks ibm.com/developer)
2002/10/24	Added: 1 link: WebSphere Developers Domain Library link added to second line from the top of this doc
2002/10/23	Added: 2 links: Host Access Transformation Server (HATS): Quick Reference and Article
2002/10/20	Added: 1 link: JCA-J2C: Enabling a J2EE Resource Adapter using the JCA Tool Plugin -- Part 1
2002/10/15	Added: 1 link: WebSphere Portal Extend: Collaborative Components Redpaper
2002/10/15	Added: 1 link: WebSphere Portal Installation Redbook
2002/09/27	Added: 2 links: JMS-WSAD articles; 1) JMS-Architecture article; 2) JMS automated search.