



# WebSphere Studio "How To" Resources

(Eclipse, WSStudio, WSSD, WSAD, WSAD-IE, WSED)  
(Updated 2003/09/02) (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 ([WSDD](#) and [IBM DeveloperWorks](#))**  
(updated daily...find the latest yourself...the source of most links in this document):  
[WebSphere Developer Domain \(WSDD\) 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 (Briefs and Presentations):**  
[WSStudio V5 Technical Brief](#), [V5 Web Page Overview](#), [V5 Technical Summary Overview Presentation](#),  
[V5 Technical Details Overview Presentation](#), [V4 Tech Overview WhitePaper](#)
- **Fundamentals (Books):**  
[WSStudio V5 Programming Guide Redbook](#)  
[WSStudio V5 EJB2.0 Programming Red Book](#)  
[Exploring WSAD-IE V5 Redbook](#)  
[iSeries \(AS/400\): WebSphere Development Studio Client for iSeries V5.0](#)  
[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](#)  
[Web Services: Best Practices Part 1of2](#)  
[Web Services: Best Practices Part 2of2](#)  
[Portlet Development Best Practices](#)  
[JSP Best Practices](#)
- **Portal (reading):**  
[Portal: Homepage: http://ibm.com/websphere/portal](#)  
[Portal: "Information Kit" a Whitepaper Collection with demo \(good high-level information\)](#)  
[Portlets: The Case for Portlets: What are they and when to use them](#)  
[Portal: WebSphere Portal Extend: Collaborative Components Redpaper](#)  
[Portal: WebSphere Portal V4.1 Installation Redbook](#)  
[WebSphere Portal Beginnings \(The "Go For It" Chronicles\)](#)
- **Portal/Portlet (hands-on):**  
[Portlet Plugin \(Portal Toolkit\) for V5 WebSphere Studio](#)  
[Portlet Plugin Creator, David Lection, Q&A Article on Portlet Development](#)  
[Portlet Development Best Practices](#)

[Portlet Development Guide 2nd Edition](#)

[Portlet Team Development with WSAD and the Portal Toolkit Plugin](#)

[The Making of MetroSphere: Building an online community with WebSphere Portal \(multi-part article\)](#)

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

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

[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 [\(Get sample code here\)](#) , [Portlet Development Guide 2nd Edition](#)
- **Grid Computing:**  
[Grid computing: Conceptual flyover for developers \(Article\)](#)
- **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 WSSstudio Part 1 of 4](#)  
[Portlet Team Development with WSSstudio 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 \(Lab Exercise\)](#)
- **Rational:**  
[Rational InfoCenter! Your one-stop-shop Source: http://www.rational.com/centers/index.jsp](#)  
[Use Cases, RequisitePro, Rose, XDE, RUP, AnalystStudio, and more...](#)
- **Debugging:**  
[Debugging: WSSstudio Debugging fundamentals \(Article PART 1\)](#)  
[Debugging: WSSstudio Debugging fundamentals \(Article PART 2\)](#)  
[Eclipse Debugging Overview Article](#)
- **Testing:**  
[Testing: JUnit testing with WebSphere Studio](#)  
[Testing: HttpUnit \(As JUnit is good for Java testing, HttpUnit is good for Web development\)](#)  
[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:** [WSStudio Tutorial Demo of the Struts Builder Tools](#), [Struts: Tutorial for WSStudio from ibm.com/developer DeveloperWorks](#) and [\(Get sample code here\)](#)
- **JSF (Java Server Faces):**  
[Java Server Faces - A first look Part 1 of 2 "...How to Implement JSF..."](#) (Article - JavaWorld)  
[Java Server Faces - A first look Part 2 of 2 "Explore JSF Components"](#) (Article - JavaWorld)
- **Taglibs and JSTL (JSP Standard Tag Library):**  
[Introduction to JSP Taglibs](#)  
[JSTL Primers: Part1: The Expression Language](#)  
[JSTL Primers: Part2: Getting down to the core](#)  
[JSTL Primers: Part3: Presentation is Everything](#)  
[JSTL Primers: Part4: Accessing XML and SQL Content](#)
- **JSPs:** [JSP Best Practices](#), [Introduction to JSP Taglibs](#)
- **Java Visual Editor (JVE) (Thick Clients):** [JVE: Building Apps with the WSStudio Java Visual Editor \(JVE\) Part 1: Creating your first Applet](#)
- **SQL:** [SQL: Query Development in WSStudio](#), [SQLJ: Plugin for WSStudio development of SQLJ](#)
- **Persistence related:**  
[Data Access Beans: Tutorial: "Look, Ma. No EJBs!"](#)  
[JDO: Go-ForIt quest continues, Part 6: Create persistent application data with Java Data Objects](#)
- **XML:** [The XML Files: Developing XML/XSL Applications Using WSStudio 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 WSStudio 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 \(From ibm.com/developer DeveloperWorks\)](#)  
[XML and Java technologies: Data binding, Part 1: Code generation approaches -- JAXB and more](#)  
[XML and Java technologies: Data binding, Part 2: Performance](#)
- **Web Apps:** [Web App development with WSStudio](#)
- **J2EE Apps:**  
[J2EE App development with WSStudio - Part I](#)  
[J2EE App deployment with WSStudio - Part II \(Deployment to WAS 4.0 AEs Single Server\)](#)  
[Deploying a J2EE App from WSStudio 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 WSStudio](#)  
[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 & Demos):**

- [Web Services: Make any JavaBean into a Web Service using WSStudio \(Tutorial Demo\)](#)
  - [Web Services: Collection of IBM DeveloperWorks Articles on Web Services](#)
  - [Web Services: Best Practices Part 1of2](#)
  - [Web Services: Best Practices Part 2of2](#)
  - [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 (Interoperability and .NET):**

- [Web Services: WSStudio and MS .NET: Part 1 - Invoking a .NET Web Service from a WSStudio Client](#)
  - [Web Services: WSStudio & MS .NET: Part 2 - Invoking a WSStudio Web Service from a .NET Client](#)
  - [Web Services: Interoperability: Example: \(.NET, WebSphere and others\) using Axis, JSR109 and WS-I](#)
  - [Web Services: Portability and Interoperability \(Article\)](#)
  - [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](#)

- **Process Choreography**

- WSAD-IE and WAS-Enterprise**

- [WSAD-IE Presentation](#)
    - [WAS-E \(Enterprise\) Presentation with extensive speaker notes](#)
    - [Process Choreography White Paper](#)
    - [WSAD-IE Process Choreography DEMO](#)
    - [WAS-E and WSAD-IE Interactive Presentation/DEMO](#)

- **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:**

- [MDB: Creating and Testing Message Driven Beans using WSAD V5 \(Article\)](#)
  - [MDB: Develop and Test Message Driven Beans with WSAD V5 \(Article\)](#)
  - [MDB: Developing a Publish-Subscribe Message-Driven Bean \(Article\) \(Wilkinson 3of3\)](#)
  - [JMS: WAS: WSStudio: Embedded Messaging and MQ Java for Developers \(MQJD\) \(Clarifications\)](#)
  - [JMS: Developing a JMS Point-to-Point Application using WSAD V5 \(Article\) \(Wilkinson 1of3\)](#)
  - [JMS: Developing a JMS Publish-Subscribe Application using WSAD V5 \(Article\) \(Wilkinson 2of3\)](#)
  - [JMS: WAS Enterprise: Extended Messaging](#)
  - [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 \(Search Current List\)](#)

- **ANT:**  
[Using the "Ant" build/deploy tooling with WSSstudio \(3 part article\)](#)
- **Security:**  
[Testing J2EE security applications using the file-based registry in WebSphere Studio V5](#)
- **Class Loaders:**  
[J2EE Class Loading Demystified - managing your classpath for your EAR, WAR, JAR and AppServer, Java Java Utility Jars/Projects in WSSstudio \(Article and zipCreation plugin\)](#)  
(Note: WSSstudio V5 has an integrated alternative to plugin. It still works in V5, but it is largely redundant.)
- **Plugin Development:**  
[Plugin development: Extend Eclipse's Java Dev Tools - What is possible, where to start, and how to proceed](#)  
[Plugin development: Plug a Swing based development tool into Eclipse](#)
- **WAS (WebSphere Application Server):**  
[WebSphere V5.0 Performance, Scalability, and High Availability: WebSphere Handbook Series](#)  
[WebSphere App Server V5 Handbook SG24-6891](#)  
[WebSphere App Server V5 Web Services Handbook SG24-6195](#)  
[WebSphere App Server V5 Security Handbook WebSphere Handbook series SG24-6573](#)  
[WebSphere App Server V5 Migration Guide SG24-6910](#)  
[WebSphere App Server V5 Express Handbook SG24-6555](#)  
[WebSphere App Server V5 Load Balancing and Failover \(Article with example\)](#)  
[WebSphere App Server V4.0 Handbook](#)  
[WebSphere App Server V4.0 Scalability](#)  
[WebSphere App Server V4.0 Security](#)  
[WebSphere App Server V3.5 Handbook](#)  
[System Administration for WAS V5 - Part 1: Overview](#)  
[System Administration for WAS V5 - Part 2: Writing Your Own Admin Scripts/Programs](#)  
[System Administration for WAS V5 - Part 3: Event Notifications](#)  
[System Administration for WAS V5 - Part 4: Extending WAS Mgmt System \(Writing your own MBeans\)](#)  
[Useful Commands for WAS Admin - Part1: App Server Admin Tasks](#)  
[Useful Commands for WAS Admin - Part2: System Admin Tasks](#)
- **WebLogic:**  
[WebLogic: Genuitec: Plugins for WSSstudio for WebLogic V5, V6 and V7](#)  
[WebLogic: ObjectEdge: Plugins for WSSstudio 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 WSSstudio 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](#)  
[Downloadable courses, tutorials and other education for WebSphere Dev Studio \(WDS\) for iSeries](#)
- **WebSphere EE V4 (APIs):** [WebSphere Enterprise Edition \(EE\) V4 Programmers Guide,](#)
- **Migration: (JBuilder→WSSstudio):**  
[JBuilder to WSSstudio Migration Article \(Elaine Lau\)](#)
- **Migration: (VAJava→WSSstudio):**  
[IBM Migration/Coexistence homepage: http://ibm.com/websphere/developer/zones/studio/transition.html](#)  
[CodePro Studio Migration Edition Plugin \(Instantiations\) for VAJava/WSSstudio coexistence and migration](#)
- **Migration: (WebSphere Application Server V3.5→V4.0+ Migration Tools/Articles)**  
[Migrating to WebSphere Application Server Version 5.0 -- An End-to-End Migration Guide](#)  
[Migration to WAS V5 - Quick Guide from Developerworks](#)

[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/>

### This Document's Update History (started on 2002/09/27)

Date	Comments
2003/08/29	Added: WebServices: WSStudio & MS.NET: Part 2 - Invoking WSStudio Web Service from a .NET Client
2003/08/29	Added: Web Services: WSStudio & MS.NET: Part 1 - Invoking a .NET Web Service from WSStudio Client
2003/08/12	Added: MDB: Developing a Publish Subscribe Message Driven Bean
2003/08/12	Added: Process Choreography section: WAS-E, WSAD-IE, Presentations/Demos/WhitePapers, etc.
2003/08/05	Added: JDO: Go-ForIt quest continues, Part 6: Create persistent application data with Java Data Objects
2003/08/05	Added: Plugin dev: Extend Eclipse's Java Dev Tools – What's possible, where to start, how to proceed
2003/08/05	Added: JMS: Developing a JMS Publish-Subscribe Application using WSAD V5 (Article)
2003/08/05	Added: JMS: Developing a JMS Point-to-Point Application using WSAD V5 (Article)
2003/08/05	Added: JSP Taglibs: Introduction to Taglibs
2003/07/31	Added: JSF (Java Server Faces) JavaWorld First Look Parts 1 & 2
2003/07/29	Added: Portlet Team Development with WSAD and the Portal Toolkit Plugin
2003/07/28	Added: Exploring WSAD-IE V5 Redbook
2003/07/28	Added: WebSphere App Server V5 Load Balancing and Failover (Article with example)
2003/07/07	Added: iSeries (AS/400): WebSphere Development Studio Client for iSeries V5.0
2003/06/15	Added: WAS Handbooks (Redbooks)
2003/06/15	Changed: WebSphere (WAS) Administration Section to WAS (WebSphere Application Server)
2003/05/29	Added: WebSphere (WAS) Administration Section, including 6 articles
2003/05/28	Added: Rational Section, InfoCenter and more!
2003/05/28	Added: Migration to WAS V5 Quick Guide from DeveloperWorks
2003/05/28	Added: JSTL 4 part article (JSP Standard Tag Libraries)
2003/05/28	Added: WSStudio Struts Builder Tutorial Demo link
2003/05/19	Added: JSP Best Practices
2003/05/19	Added: Portlet Development Guide 2nd Edition
2003/05/19	Added: Portlet Development Best Practices
2003/05/19	Added: Portlet Plugin Creator, David Lection, Q&A Article on Portlet Development
2003/05/19	Added: Portlet Plugin (Portal Toolkit) for V5 WebSphere Studio
2003/05/12	Added: Grid computing: Conceptual flyover for developers (Article)
2003/05/01	Added: The Making of MetroSphere: Building and online community with WebSphere Portal (mult articles)
2003/04/28	Added: Fundamentals (Books): V5 Programming Guide Red Book (Redpiece Draft)

2003/04/28	Added: Fundamentals (Books): EJB 2.0 Programming Red Book
2003/04/01	Added: JMS: WAS Enterprise: Extended Messaging
2003/04/01	Added: Testing J2EE security applications using the file-based registry in WebSphere Studio V5
2003/04/01	Added: Testing: JUnit testing with WebSphere Studio
2003/03/31	Added: Testing: HttpUnit (As JUnit is good for Java testing, HttpUnit is good for Web development)
2003/03/29	Added: Data Access Beans: Data Access Beans Tutorial: "Look, Ma. No EJBs!"
2003/03/20	Added: Web Services: Portability and Interoperability (Article)
2003/03/20	Added: Web Services: Collection of IBM DeveloperWorks Articles on Web Services
2003/03/20	Added: Web Services: Best Practices Part 1of2 and Part 2of2
2003/03/20	Added: Web Services: Interoperability (.NET, WebSphere and others) using Axis, JSR109 and WS-I
2003/02/10	Added: Migrating to WebSphere Application Server Version 5.0 -- An End-to-End Migration Guide
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
2002/11/22	Added: EJB: Building EJB CMP Entity Beans that Span Federated Data (Views and DB2 NickNames) (Uses WSAD-IE but WSAD will work as well)
2002/11/22	Added: EJB/MDB: "Creating and testing Message Driven Beans using WSAD V5 (Article)"
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
2002/11/08	Added: JCA-J2C: WSAD-IE development and migration from VAJava
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.
2002/09/27	Began tracking changes to this document
2001/09/01	Created first version of this document based on WebSphere Studio V4 (replacement for WSStudio Classic and VAJava)
1997/07/01	Created first version of the VisualAge for Java Quick Reference