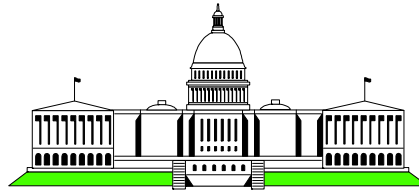


WebSphere Studio - an Overview



Washington System Center

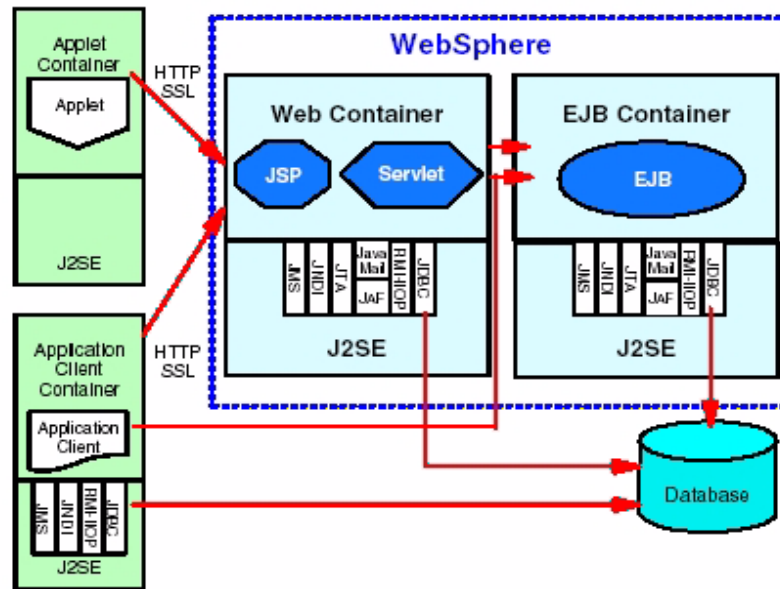
Agenda



- ▶ J2EE Overview
- ▶ Eclipse Overview
- ▶ WebSphere Studio Overview
- ▶ Application Server Toolkit (ASTK)

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J2EE Architecture



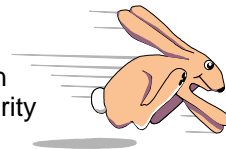
J2EE Architecture

WAR = Web Archive

- ▶ contain all the components of a web application
- ▶ usually consists of HTML, CSS, JSP, servlets, images

EAR = Enterprise Archive

- ▶ represents a J2EE application that can be deployed in a WebSphere Application Server.
 - Java archive files
 - deployment descriptor - describes the contents of the application and contains instructions for the entire application, such as security settings to be used in the run-time environment



JAR = Java Archive



- ▶ allows you to store multiple files into a single archive file
- ▶ typically contains the class files and additional resources associated with applets and applications
- ▶ EJB modules and utility modules are packaged as JAR files

What is Eclipse?



- ▶ open, portable, universal tooling platform that provides frameworks, services, and tools for building tools
- ▶ by design the platform does not provide a great deal of end user functionality
- ▶ the value is what it encourages: rapid development of integrated features based on a plug-in model



On Feb 2, 2004 the Eclipse Board of Stewards announced Eclipse's reorganization into a not-for-profit corporation.

What is WebSphere Studio Workbench?



WebSphere Studio Workbench

- ▶ base platform and foundation for the new WebSphere Studio family of offerings
- ▶ an open, portable universal tooling platform and integration technology
- ▶ provides a roles-based development model
- ▶ provides tight integration for development, test, debug, and deploy



Integrated Development Environment (IDE)

- ▶ set of software development tools such as source editors, compilers, and debugger, that are accessible from a single user interface

Workspaces

- ▶ a workspace is a private work area for the individual developer
- ▶ it holds the environment metadata and the loaded projects' data in regular files

Projects

- ▶ top level construct for organizing the different resources
- ▶ contains files as well as folders
- ▶ many different types
 - ▶ Java
 - ▶ EJB
 - ▶ enterprise application
 - ▶ web

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Perspectives

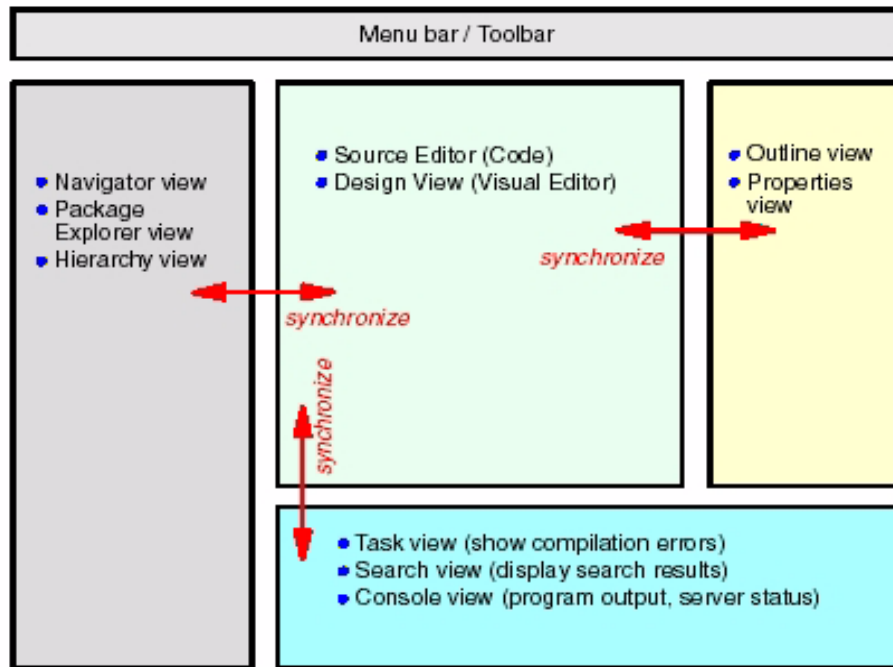
- ▶ each perspective is suited for a particular role
- ▶ provides the developer with the necessary tools to work on the tasks associated with that role
- ▶ combination of views and editors that show various aspects of the project resource
- ▶ organized by developer role or task
- ▶ customizable
- ▶ defines an initial set and layout of views and editors for performing a particular set of development activities

Views

- ▶ provide alternative presentations of resources or ways of navigating through the information in your Workbench

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Perspective



Perspective

Available perspectives in WebSphere Studio Family products

Resource	Server
Java	XML
Java Browsing	XSL debug
Java Type Hierarchy	Data
Web	Debug
J2EE	Install/Update

Sampling of views available in WebSphere Studio Family products

J2EE Navigator	Server configuration
Outline	Debug
Tasks	Breakpoints
Properties	Attributes
Status	Gallery
Editor pane	Styles
Page Designer	Servers

WebSphere Studio Family - Products



WebSphere Studio Site Developer (WSSD)

WebSphere Studio Application Developer (WSAD)

WebSphere Studio Application Developer - Integrated Edition (WSAD-IE)

WebSphere Studio Enterprise Developer (WSED)

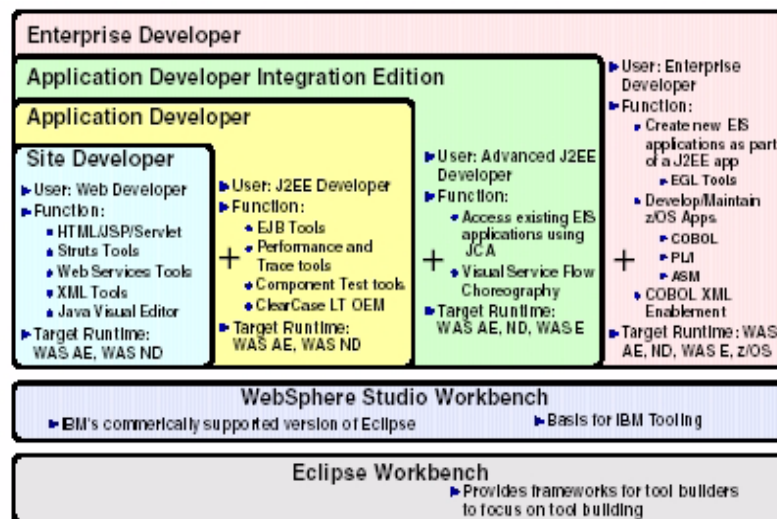


WSSD - Site Developer



WebSphere Studio Site Developer

- ▶ intended for Web developers who develop and manage complex web sites
- ▶ supports JSPs, servlets, HTML, JavaScript, and DHTML
- ▶ recommended resource requirements: 768 MB memory, 1.3 GB disk space

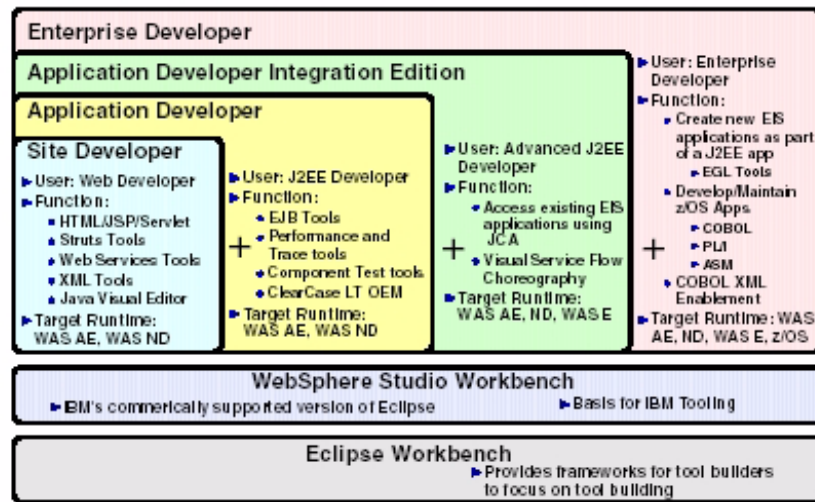


WSAD - Application Developer



WebSphere Studio Application Developer

- ▶ designed for professional developers of Java and J2EE applications, who require integrated Java, Web, XML, and web services support
- ▶ performance profiling and logging tools for both local and remote execution
- ▶ recommended resource requirements: 768 MB memory, 1.3 GB disk space

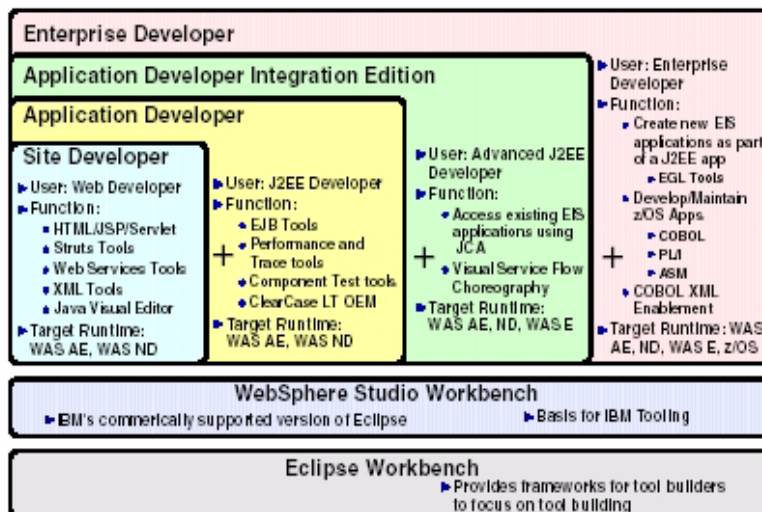


WSAD IE - Application Developer Integration Edition



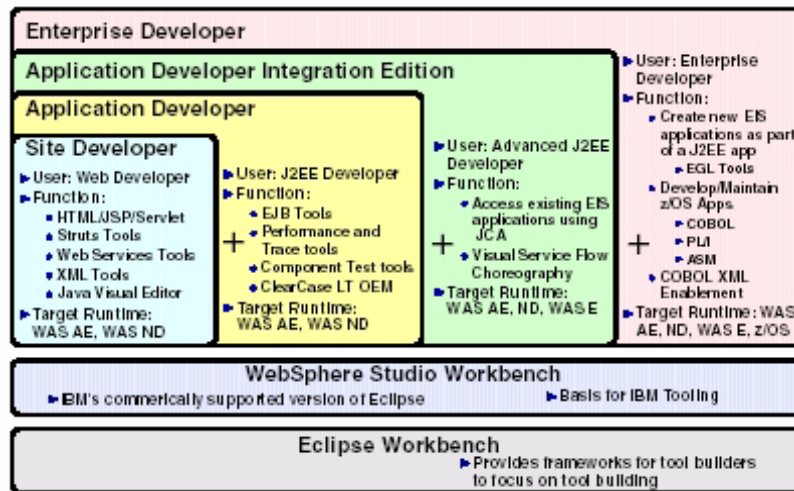
WebSphere Studio Application Developer - Integration Edition

- ▶ custom application adapters to integrate your J2EE application with your back-end systems
- ▶ support for the full set of Enterprise services
- ▶ recommended resource requirements: 768 MB memory, 4 GB disk space



WebSphere Studio Enterprise Developer

- ▶ integrating transactional environments such as CICS and IMS
- ▶ developing and maintaining zOS applications
- ▶ supporting Java, COBOL, PL/I development
- ▶ recommended resource requirements: 768 MB memory, 800 MB disk space



Why?

Functions performed using WSAD

- ▶ defining security roles (declarative security)
- ▶ security role mapping (declarative security)
- ▶ defining security constraints
- ▶ security role references
- ▶ form login configuration

Other tools



Application Server Toolkit (ASTK)

- ▶ Eclipse Workbench
- ▶ Assembly Toolkit
- ▶ Debug component
- ▶ Distributed Profiling component
- ▶ Logging tools

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Assembly Toolkit



Assembly Toolkit

- ▶ packages components into modules that comply with the J2EE spec
- ▶ replaces the Application Assembly Toolkit
- ▶ consists of the J2EE perspective of WSAD
- ▶ allows you to create and modify J2EE applications and modules, edit deployment descriptors and map DBs
- ▶ one of the tools provided by the Application Server Toolkit (ASTK)

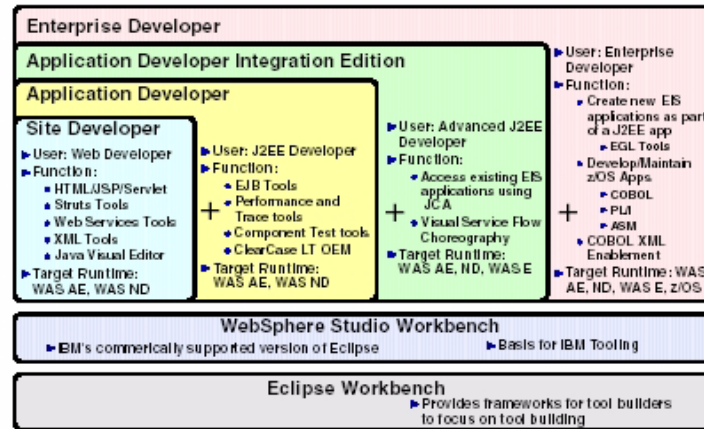
Assembly Process

- ▶ select all of the files to include in the module
- ▶ create a deployment descriptor containing instructions for module deployment on the application server. As you configure properties using the assembly toolkit, the tool generates the deployment descriptor for you
- ▶ package modules into an .EAR file which may contain - .JAR, .RAR, .WAR files

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Summary

- ▶ J2EE background info
- ▶ WebSphere Studio Family
- ▶ Application Server Toolkit



WebSphere software

Reference

Product Documentation
Installation Guide
Getting Started Guide

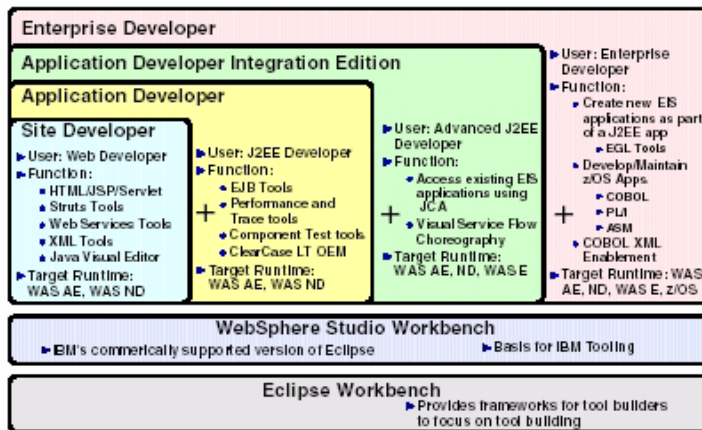
Redbooks - www.redbooks.ibm.com

WebSphere Studio Application Developer V5 Programming Guide
SG24-6957

WebSphere Application Server V5.1 System Management and
Configuration (WebSphere Handbook Series) SG24-6195

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What is WebSphere Studio?



WebSphere Studio Site Developer (WSSD)

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WebSphere Studio Application Developer - Integrated Edition (WSAD-IE)

WebSphere Studio Enterprise Developer (WSED)