

# Overview

WebSphere Application Server - Express Beta

# Agenda

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- What it is WebSphere Express
- Platforms and Software Supported
- WebSphere Studio Site Developer
- WebSphere Application Server
- Installation and Administration
- Documentation

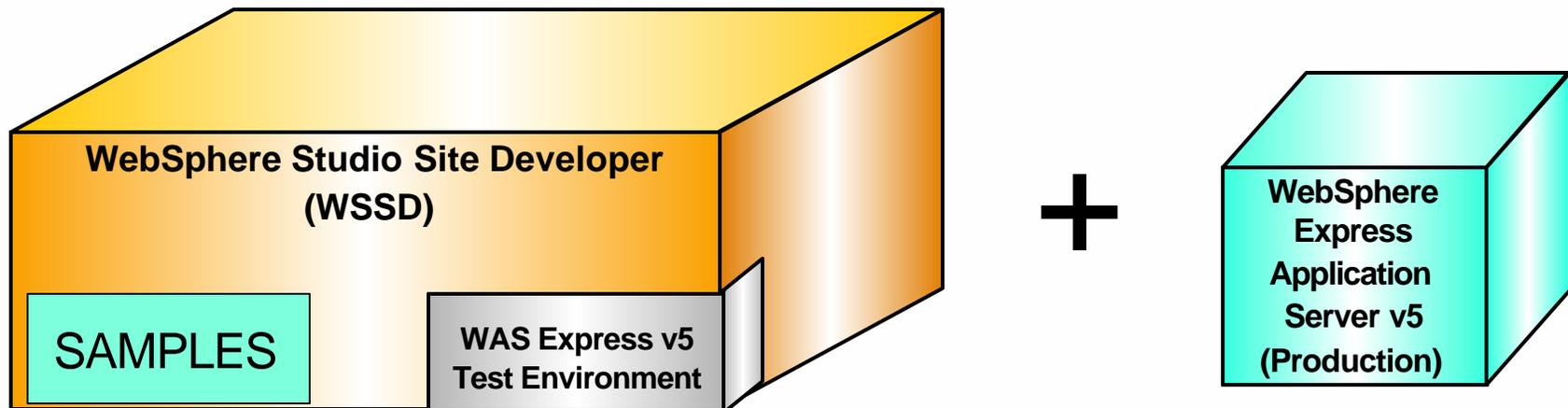
## Level Set...

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- Material is based on Beta driver: July 30, 2002
- Express Driver: we-beta.GM

# WebSphere Application Server - Express

- A product that is easy to use from beginning to end
  - ▶ Quick, wizard-driven installation
  - ▶ Simplified programming model leverages existing skills
  - ▶ Wizards and samples guide developers through the process of building a dynamic web site
  - ▶ One click application assembly and deployment
  - ▶ Near-zero administration that focuses maintenance efforts



Note: WebSphere Application Server Express v5 is a subset of the Full fledged WebSphere Application Server v5

# Supported Platforms

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## ■ Development (Tooling)

- ▶ Windows
  - NT 4 SP 6a
  - 2000 SP 2 (Professional, Server, Server Advanced)
  - XP (not in beta)
  - Linux - not in beta and maybe possible by GA

## ■ Deployment (App Server)

- ▶ Windows
  - NT 4 SP 6a
  - 2000 SP 2 (Professional, Server, Server Advanced)
- ▶ Linux (not in beta)
  - RedHat Linux 7.2
  - SuSE Linux 7.3
- ▶ iSeries - OS/400 V5R1, V5R2, V5R3 (not in beta)

# Supported Software

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## ■ Databases

- ▶ DB2 7.2 FP6
- ▶ Cloudscape 5.0.7
- ▶ Oracle v9i (thin client)
- ▶ MS SQL Server 2000

## ■ Team Servers

- ▶ CVS

## ■ Web Browsers

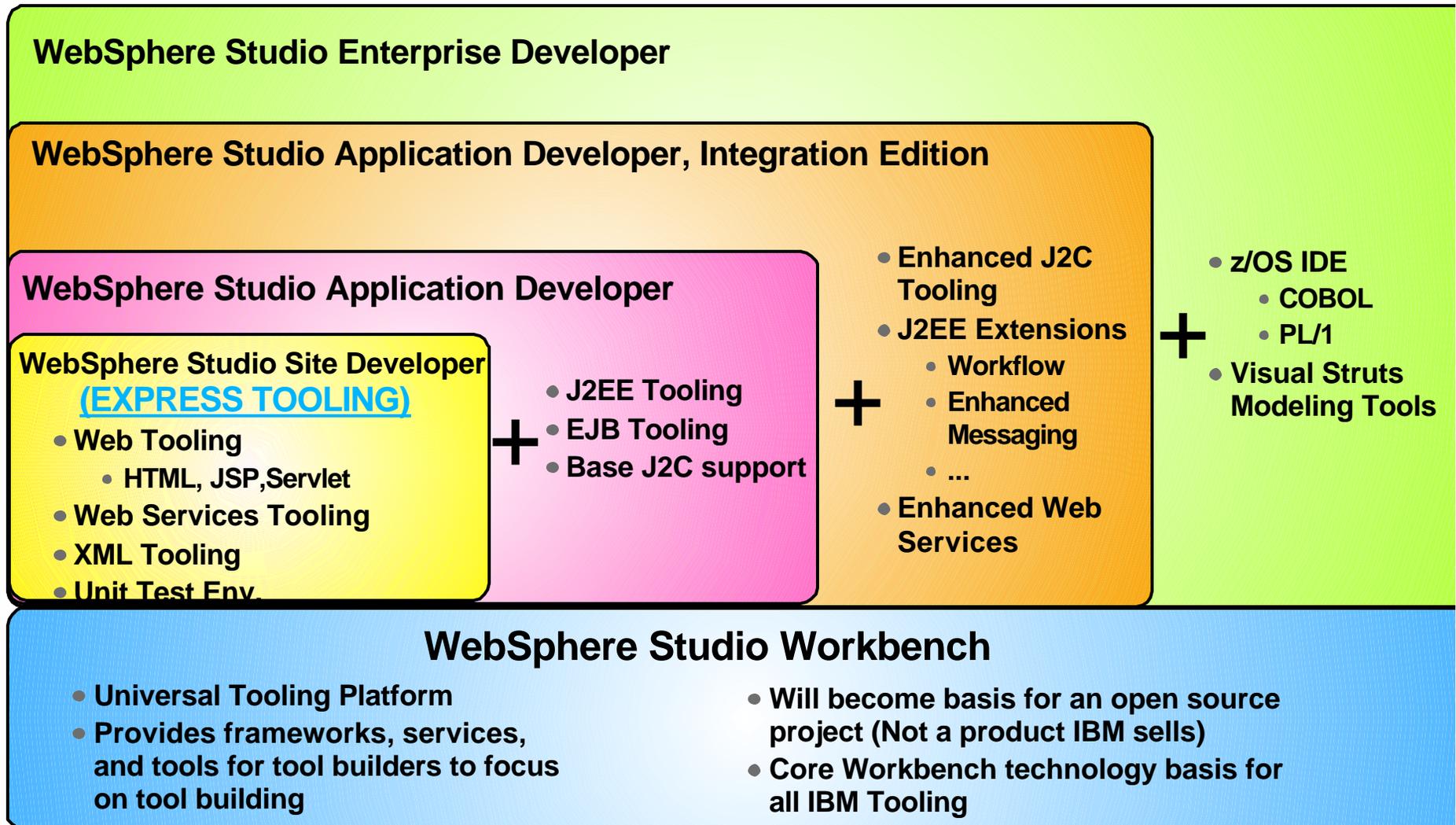
- ▶ Microsoft Internet Explorer 5.5 SP2, 6.0x
- ▶ Netscape 4.79

# Section

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## *Development Tooling and Deployment Tooling*

# WebSphere Studio Offering/Branding



# Details for WSSD Tools

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## ■ J2EE Tools

- ▶ Set of tools for creating and modifying Enterprise Applications

## ■ Web Component Tools

- ▶ Tools to create J2EE and/or Static Web projects and all its resources (HTML, Servlet, JSP, etc.)

## ■ Web Services

- ▶ Wizards for publishing and consuming Web Services better integrated with production environment
  - Lower time to place Web Services into production
- ▶ UDDI Test Registry

## ■ Server Test Tools

- ▶ Integrated WebSphere Application Server Express v5 (exact copy of the production Express Application Server) for unit test of your Enterprise applications

## ■ Java Development Tools

- ▶ Full Java Development tools needed for Servlet development

## Details for WSSD Tools (continued)

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### ■ XML

- ▶ Set of tools for XML resources
  - XML, XSL, XSD, DTD, etc.
- ▶ XML Signatures support

### ■ Data Tools

- ▶ Used by database administrator for creating, modifying databases
- ▶ Stored Procedures and User-Defined Function support

### ■ Profiling and Debugging

- ▶ Profiling is similar to JProbe, or J-Insight - lets you profile your application at the class, method level
- ▶ Debugging of applications running in Unit test as well as remote Application Servers

### ■ Team Programming

- ▶ Integration for CVS - Support for other SCMs like Rational ClearCase

## Details for WSSD Tools (continued)

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- Java Visual Editor
  - ▶ View and Edit graphical components
  - ▶ Supports AWT and Swing components
    - AWT Components
    - Swing Converters
    - Swing Components
    - Swing Menus
  
- WebSphere Application Server Support Tools
  - ▶ Import and analyze WebSphere Logs (Log Analyzer)
  - ▶ Create and update Symptom Database files

# WebSphere Application Server 5.0 - Packaging

## IBM WebSphere Application Server

- Application Server, IBM HTTP Server
- Application Client
- Application Server Toolkit
- DataDirect Technologies JDBC Drivers for WAS

## IBM WebSphere Application Server Network Deployment

- Application Server, IBM HTTP Server
- **Deployment Manager**
- **Edge Components**
- Application Client
- Application Server Toolkit
- DataDirect Technologies JDBC Drivers for WAS
- **DB2 Universal Database Enterprise Edition v7.2**
- **IBM Directory v4.1**

## IBM WebSphere Application Server Extended Deployment

- Application Server, IBM HTTP Server
- **Extended Deployment Manager**
- **Advanced Edge Components**
- Application Client
- Application Server Toolkit
- DataDirect Technologies JDBC Drivers for WAS
- DB2 Universal Database Enterprise Edition v7.2
- IBM Directory v4.1

## IBM WebSphere Application Server Enterprise

- Application Server, IBM HTTP Server
- Extended Deployment Manager
- Advanced Edge Components
- **Enterprise Extension**
- Application Client
- Application Server Toolkit
- DataDirect Technologies JDBC Drivers for WAS
- DB2 Universal Database Enterprise Edition v7.2
- IBM Directory v4.1
- **WebSphere MQ v5.3**

## IBM WebSphere Application Server Express

- Lightweight version of Application Server
- WebSphere Studio Site Developer

# WAS Express 5.0 - Application Server Content

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- Web container - ability to serve static (HTML) and dynamic (Servlet, JSP) content
- JSP processor
- Server-side JavaScript support
- Bean Scripting Framework
- `<jsp:include>` .js file (pure JavaScript)
- Function call support -- ability to have a JSP tag that allows you to call a function in a JavaScript library for something like a utility function
- XML parser and XSL processor
- Web Services support
- Security runtime
  - ▶ Simple WebSphere Authentication Module (SWAM) for Local OS authentication
    - No LDAP or custom registry support

## WAS Express 5.0 - Application Server Content ...

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- HTTP transport engine
  - ▶ HTTP session support -- in-memory session support
- J2EE API libraries
- Simplified default server config
- Connection Manager for JDBC access
- Support for migrating to higher-value WAS servers

# WAS Express 5.0 - Application Server Content ...

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- For Windows / Linux platform
  - ▶ Cloudscape database
    - Not licensed for production use -- for use by the Sample apps
  - ▶ JVM 1.3.1
  - ▶ Windows service (for Windows platform only)
    - Monitors the health of the application server
  
- For iSeries platform only
  - ▶ Web server plug-ins for
    - IBM HTTP for iSeries server
    - Domino for iSeries server
  - ▶ HTTP web Admin console extensions

# What's not in WAS Express Application Server

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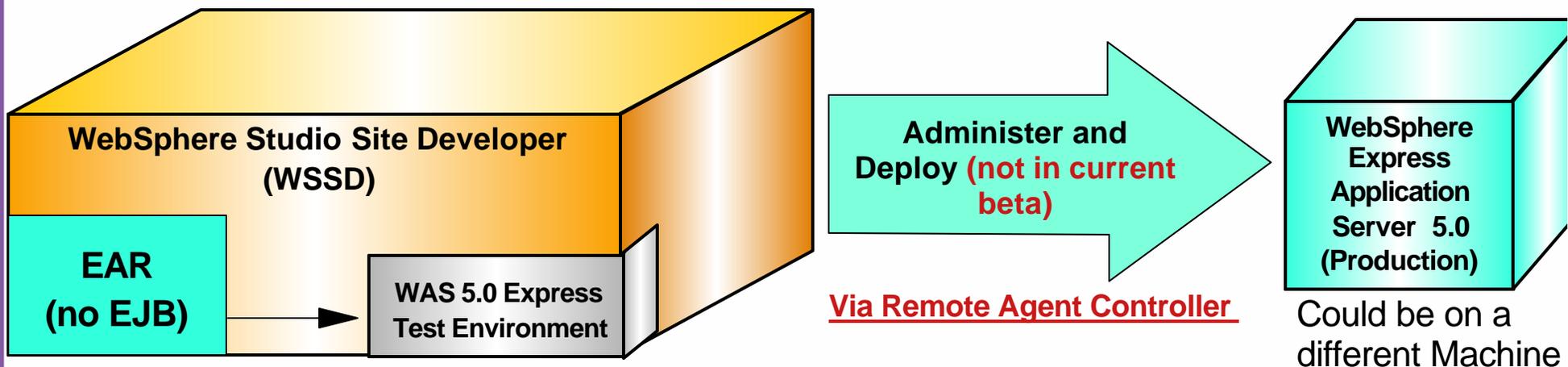
- EJB container
- ★ Browser-based Admin console
- Analysis logger support (from Site Analyzer)
- ★ Application Assembly Tool - don't need it since you have full development tool
- ★ Deploy Tool
- Tivoli Performance Viewer (used to be called Resource Analyzer)
- ★ Log Analyzer
- Work Load Management (WLM)
- Performance monitoring infrastructure (PMI)
- Localizable text
- Dynacache
- ★ Object Level Trace (OLT)

# What's not in WAS Express Application Server ...

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- J2EE Application Client
- WAS runtime samples
- Migration tools for migrating from WAS 3.5.x and 4.x
- Client Container Resource Config Tool (CCRCT)
- J2EE transaction support
- Resources
  - ▶ Java messaging support / JMS providers
  - ▶ J2C resource adapters
  - ▶ Custom Mail providers
  - ▶ URL providers
  - ▶ Resource Environment provider

# Development and Deployment Process with Express



## Notes:

- Support for accessing Remote Application Server is not supported in Beta - Will be there in beta refresh
- Use of WSSD and built-in WAS Test Environment will give you very decent experience of how the GA code will work

# WebSphere Application Server - Express Samples

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Can use the samples as a starting point, as a code repository or simply as a reference tool and educational guide.

- Electronic catalog
- Customer Service (customer log-on for account update, FAQs, feedback form)
- Document Distribution/Human Resources
- Web Services consumption
- Conference room registration
- Dynamic web publishing
- Survey
- Mini-applications provided by Business Partners as "Express Solutions"
  - ▶ A web page containing downloadable mini-applications from IBM Business Partners for use with WAS - Express is in plans

# Section

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## *Installation, Documentation and Help*

# Installation and Administration

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- Hardware Requirements (Development)
  - ▶ Intel Pentium Processor @ 500 MHz or greater
  - ▶ 512 MB RAM (Intel) 768MB Recommended
  - ▶ 2 GB DASD
  - ▶ CD-ROM drive
  
- Install Options
  - ▶ Silent Install (not in beta)
    - Based on input response file (sample response file included)
  - ▶ Install of WSSD Tooling or Application Server or both
    - WSSD Tooling contains the runtime App. server environment for Unit test
  
- All Administration of the major activities in the development/deployment life cycle is done via WSSD tool
  - ▶ Development, Assembly, Deployment, Execution, Maintenance

# Documentation

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- README
- Install Guide
- Getting started (product overview, key features, main views and tasks)
- Tutorials (Workbench: navigating the workbench)
- Integrated samples
- Samples description (how to use the samples "as is", self-directed demo)
- How to modify the samples (describes sample implementation, key features, code techniques)
- Building a Web Application with WebSphere Application Server - Express.  
Building a simple application using Wizards and samples as building blocks
- Exhaustive Online Help and Contextual help (F1 for Infopops)

## Notes:

- Current Beta documentation has references to EJBs and samples that do not apply to WebSphere Express
- This will be cleaned up by GA.

# Summary

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- WebSphere Express is a simple to use tool for Web Applications, providing you, both the development and the deployment environments