

Overview

WebSphere Application Server - Express Beta

Agenda

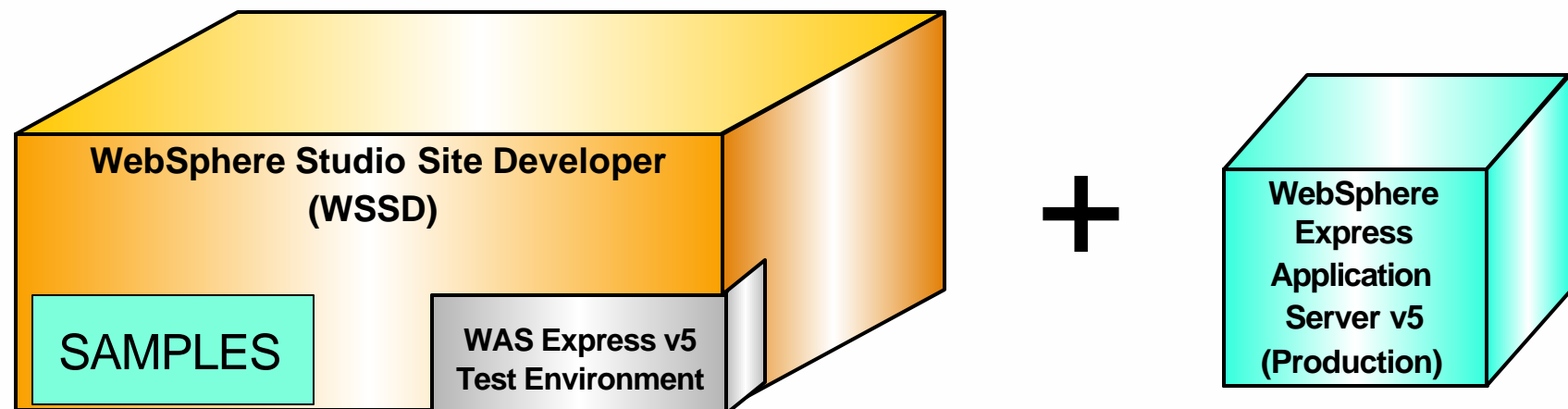
- What it is WebSphere Express
- Platforms and Software Supported
- WebSphere Studio Site Developer
- WebSphere Application Server
- Installation and Administration
- Documentation

Level Set...

- 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

■ 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

■ Databases

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

■ Team Servers

- ▶ CVS

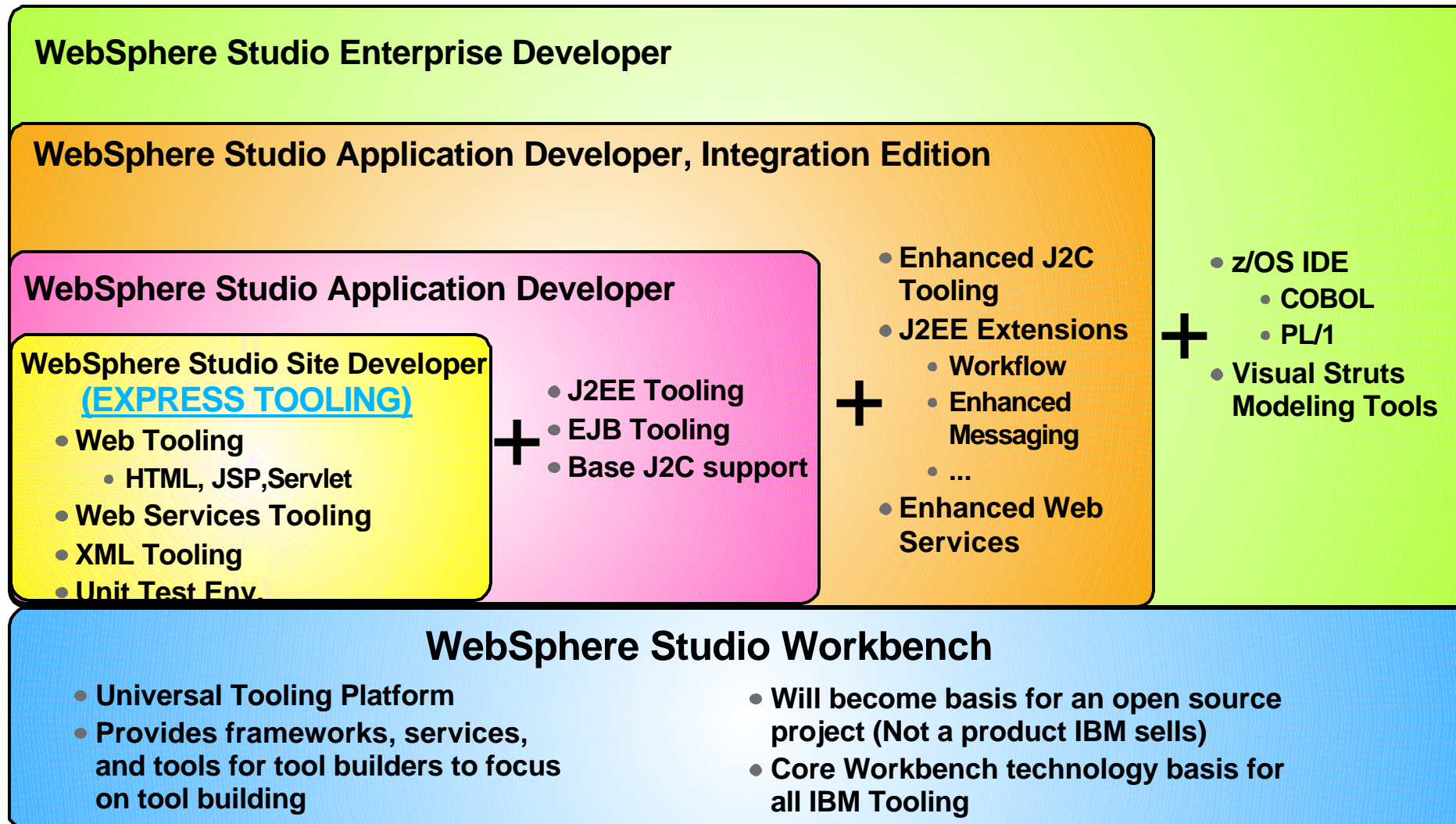
■ Web Browsers

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

Section

Development Tooling and Deployment Tooling

WebSphere Studio Offering/Branding



Details for WSSD Tools

■ 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)

■ 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)

■ 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

- 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 ...

- 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 ...

- 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

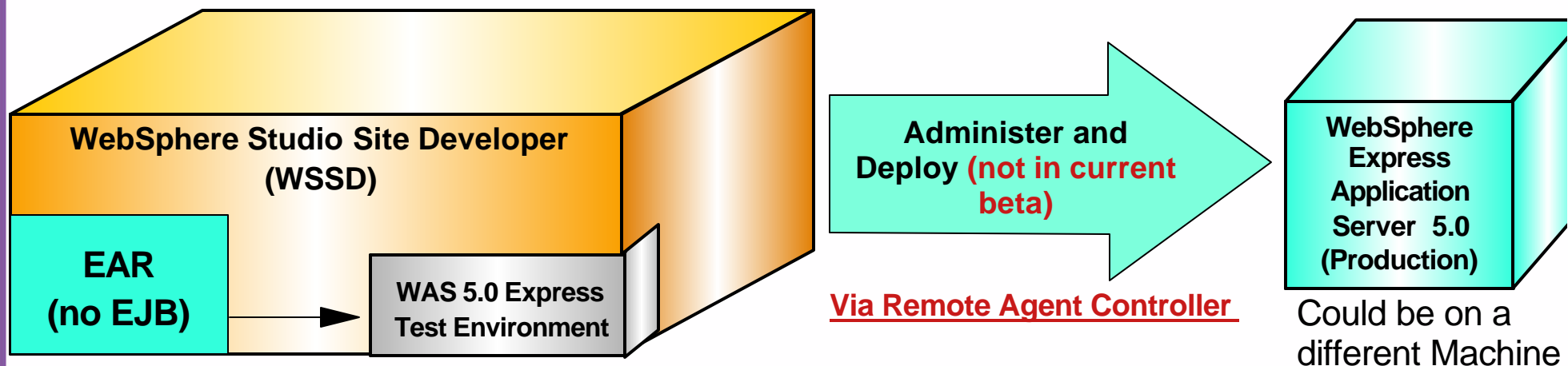
What's not in WAS Express Application Server

- 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 ...

- 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

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

Installation, Documentation and Help

Installation and Administration

■ 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

- 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

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