The Lean WebSphere Environment for Developers

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Frequency of Development Tasks

• Common development tasks include:
  • Modify file within an application
  • Debug a problem in an application
  • Restart/redeploy application
  • Restart server
  • Share code with team
  • Change app structure (add/remove a module/bundle)
  • Make config change
  • Share config change with team
  • Reproduce problem from another environment
  • Upgrade to new service release
  • Create application
  • Install server

• All tasks should be as painless as possible, with special emphasis on the more frequent ones. If the time taken to accomplish these tasks is an impediment to the development, the cost of the fidelity of the test server runtime is challenged.
What Do Developers Want?

• Developers are looking for more (or less) from the test server runtime in the tools.
  – Greater test simplicity
    • Config model (hard to edit, backup, share)
    • Admin console is for operational mgmt rather than development
    • Problem determination (including within customer apps)
  – Responsiveness
    • Incremental publishing, app install, server startup time
  – Footprint
    • WAS server types defined to RAD have a WAS production server footprint and memory use.
      – For all types of application
    • Tools available only as part of RAD distributions
When Do They Want It?

Now
What Next for WebSphere Dev/Test Tools and Runtime?

WAS V8.5 Alpha introduces:
- A new dynamic profile of WAS which is focused FIRST on the development experience
  - Small footprint test server runtime
  - Simplified, shareable config
  - Fastest possible server start-up
- Fidelity with full-profile WAS
  - Same containers, QoS as full-profile WAS
  - But radically refactored to focus on the development experience
  - Extreme dynamicity to start what the app requires and no more
- Initially focused on dev/test of web, mobile and OSGi apps.

Visit and participate in the new WAS Developer Community

wasdev.net
WAS V8.5 Alpha: Introducing WAS “Liberty” Profile

• Not a single static profile: rather a dynamic, flexible profile of the runtime to load only what the application needs
  – Memory footprint (web feature): < 50 MB
  – Profile is dynamic – switch parts of the server on and off without restart.
• Extremely lightweight
  – Incredibly fast (re)start times: <5 seconds
• Simplified configuration for quick time to productivity; one single config file or modular config (as desired).
  – Easy to share / diff / manage in version control
  – Easy to componentize configuration across larger development teams
• Tools available as Eclipse features as well as in RAD...
# WebSphere Developer Tools (WDT) & RAD

## RAD

**Install:** IM

### WebSphere Integration
- Support for WAS v6.0, v6.1
- Test Environments for WAS v6.1, 7.0, v8.0
- Portal Tools & Portal Server support
- Profile applications on WAS
- Cloud: Deploy to IWD, or WebSphere/Portal instances on SCE

### Problem Determination
- Code visualization - class, sequence and topic diagrams
- Static analysis (code review)
- Code coverage: optimize unit testing
- Profiling

### Team Productivity
- RTC integration
- Collaborative debug
- Collaborative code analysis

### Programming Model Support
- Basic creation, editing, and validation support for JEE applications:
  - Web, XML, JPA, EJB, EAR
  - Database tools

### Extended Programming Model Support
- Advanced support for J2EE 1.4 and earlier:
  - EJB & Web Services deploy
  - DD editors
  - JAX-RPC
- Web:
  - Page & site designer
  - Web diagram Editor
  - Struts, JSF support
  - iWidget support

## WDT

**Install:** Eclipse update site or IM

### WebSphere Integration
- Support for WAS v7.0, v8.0
- Publish, start/stop the server
- Debug Jython/wsadmin scripts

### WAS Extensions Support
- Binding and extension editors
- Support for non-spec extensions

### Liberty Profile Integration
- Publish, start/stop the server
- Edit & manage server configuration

### Eclipse (WTP, DTP)

### Programming Model Support
- Basic creation, editing, and validation support for JEE applications:
  - Web, XML, JPA, EJB, EAR
  - Database tools

WDT adds support for Mac for dev/test with WAS Liberty Profile
Demo
Get the WebSphere Dev Tools Easily

- Free & frictionless download of developer tools
- Extends Eclipse JEE Helios (3.6) and Indigo (3.7)
- No time limit. Available from:
  - New WASdev community site: http://wasdev.net
  - Within Eclipse (Help→MarketPlace)
  - Eclipse update repository
Get the WAS Runtime Easily

- Free & frictionless download of the **WAS runtime** for development & test
- No time limit.
- Full profile “WAS for Developers” has been available since WAS V7.
- New lightweight “WAS Liberty profile” is now available through the WAS V8.5 Open Alpha program.
- A zip download for web application development: **25 MB**. Available from:
  - New WASdev community site: [http://wasdev.net](http://wasdev.net)
  - Within the WebSphere Development Eclipse
- Develop, debug and test web applications using lightweight tools and runtime – deploy with complete fidelity to full-profile WAS server.

[Image of WAS runtime download](image)
Summary

- WAS V8.5 Alpha includes a lightweight, composable “Liberty” profile of WAS.
  - With high fidelity to WAS V8 production environment
  - Focusing on the needs of the developer
    - Reduce overhead of common development tasks
    - Suitable for modest development hardware
- WebSphere Developer Tools for Eclipse deliver tools for the most popular WAS programming models as Eclipse features.
- Free with no time limit for development use
  - Accelerates development time to productivity.
Questions?
How is Fidelity Achieved?

- By testing on a server type that most closely resembles the production WAS server runtime.