WebSphere Studio Device Developer - The Right Tools

IBM has also used the eclipse platform's plug-in architecture (www.eclipse.org) to integrate the award winning functions contained in its VisualAge™ Micro Edition into WebSphere Studio Device Developer. This new product, built on IBM's WebSphere Studio Workbench, provides developers with a complete build, deploy and test environment for the creation of Java applications that target WebSphere Micro Environment.

WebSphere Studio Device Developer

	Feature	Benefit
WebSphere Studio Device Developer		
Editor		
	WebSphere Studio Integrated toolset	Can shorten coding cycle time, errors
	Code-assist / auto-completion	Simplifies coding / can reduce manual lookup time / ease of learning
	Compiles against selectable Class Libs (JCL's)	Allows switching from large to small libs, and gives immed. feedback
	OSGi Bundle creation support	Simplifies OSGi bundle definition & management
	Extensible / open plug-in architecture	Upgrades, 3rd-party & customer customization
	Provides integration points to server side tooling	Plugs into WebSphere Studio Application Developer for an device-to-server build, deploy, test solution
	Programmable editor	
	Refactoring Tool	Important when migrating applications to take advantage of new specifications. Useful for migrating PersonalJava applications to J2ME
Debugger		
	Integrated into IDE	Simpler, faster, greater functionality
	On-target cross-platform debugger	Remote debug to multiple targets allows developers to test code as it runs on the target device. Debug client runs on client avoiding load and space utilization on the target
	Debugger does not alter executable (no hooks in application)	Testing actual application speeds the development process and ensures developer that app will run on target devices
	Hot code replacement (local)	Do not need to restart debugging session - saves lots of time
	Hot code replacement (remote target)	(cont'd) also don't need to re-download updated code
	Plug in for PalmOS Emulator	Assist in local testing of application on developers workstation
	Integrated BREW emulator	Assists in testing of "TRUE BREW" applications – Available via Web Update late 2002
MicroAnalyzer		
	Integrated into IDE	Simpler, faster, greater functionality

	Memory space monitoring	Needed for debugging memory use issues, leaks, GC issues, etc.
	Logic trace-like display shows thread switches	Critical for debugging thread issues, deadlock, timing issues, etc.
	shows JNI calls	Required for testing native code calls
Repository - Team Streaming Technology		
	Differences Browser	Allows developers to compare and quickly merge code changes
	Supports popular Version Control (VC) products	Integrates with CVS (open version control system). Also plugs into WebSphere Studio Application Developer for access to more Source Code Management Systems (Rational, TogetherSoft, Merant,…).
	Supports multiple distributed servers easily (WAN)	Projects can be distributed, and one developer can work on several projects for several teams across network (employees / suppliers/ …)
	Replication between servers or desktop	Simplifies development when disconnected from network. Only file changes have to be transferred so slow links can be used.
	Versioning	Can immediately recall earlier versions applications for support or modification.
	Releasing	Used to share finished code with teammates
Build / Launch / Test Integration		
	Integrated with ANT build scripts for smoother workflow between edit, build and test phase	Rapid build capabilities can speed testing of applications. Tight integration with the version control systems allows new ideas to be tested, and versioned together.
	Integrates with PalmOS Emulator (POSE)	Assists developers in quickly building applications for deployment to PalmOS devices
	Architected Emulator Interface allowing other skins to be quickly added	Allows new emulator skins to be quickly added to the development environment
	Integrated BREW SDK and emulator	Assists developers in quickly building TRUE BREW applications
	MIDlet templates for creating MIDP applications	Assists developers in creating MIDlets for deployment to J2ME Java Powered Runtimes
	Support for Microsoft Active Sync	Assists developers in deploying applications to PocketPC devices.
Open		
	Eclipse.org "Plug in' architecture	Uses eclipse.org architecture to allow other tools vendors easily integrate.
	Integrates with C/C++ support	Stores C/C++ code in repository for VC of entire application
	BREW Development "Plug in'	Assists developers in creating TRUE BREW(TM) applications