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Focus

WDSc and Eclipse: Big Benefits for Developers and Tool Vendors

You did a great job, IBM!

by Philippe Magne
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IBM's development environment, WebSphere Development Studio Client (WDSc) for System i, is dramatically changing development on the platform.

It all began in 2001 when IBM put $50 million into the Eclipse development environment and then made it available to the open-source community. The Eclipse consortium was created to promote the tool among developers and create a community of vendors focused on this new standard. The Eclipse environment was designed with an open, modular architecture that allows technical tool vendors to develop modules as plug-ins in order to have total integration in the new environment.

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Today, the Eclipse environment has been adopted by a large majority of the open-source community, and IBM has spun off commercial versions of this tool. This led to the creation of the Rational Application Developer (RAD), the official replacement of VisualAge for Java. RAD is also a complete development environment for Java applications, including EJB and WDSc for System i, the latter allowing the creation of both Web sites and native System i code when the Remote System Explorer (RSE) plug-in is utilized.

We often hear "Just because IBM develops excellent products, it doesn't mean that the product will necessarily be a success with the IT community." After all, look at CODE/400, IBM's first foray into creating a graphical development environment that accommodated RPG and COBOL. But with WDSc, the efforts that began in 2001 have at last come of age. WDSc is an unequivocal success.

Increased Productivity—An Unstoppable Evolution

What do developers say? The acceptance of a new development environment depends on a huge number of carefully thought out details that will visibly save developers valuable time. In WDSc, these details are varied: source indentation and coloring, direct access to code-writing fields, inclusion of compilation results directly into the source, the ability to simultaneously debug Java and native code, environment customization options, etc. The list is long. Furthermore, all the enhancements have been made in such a way that if developers prefer, they can retain their familiar techniques from previous development environments. For example, a user can type "C" to copy a line of code, while colleagues can use the mouse for the same action. This is an environment that respects each user's personal style, which developers appreciate.

Although the transition will take time, good old SEU, SDA, RLU, and other PDMs have definitely been relegated to the past. Young developers working on the System i will push for the transition. This will occur as IT services find more flexibility in their investment budgets and are able to recruit young developers.

An Eye on Performance

All too often, we hear people say, "WDSc? I tried it on my machine. It was too slow, so I dropped it." If that was your experience, you are urged to reconsider! Here's why: WDSc is written in Java, and everyone knows Java needs larger amounts of RAM to work comfortably. Try it on a machine with at least 1 GB of RAM. I know that you can picture the IT director fretting about needing to replace all the PCs. But wouldn't it be motivating for your teams to work on high-

performance machines in an up-to-date environment?

And, if you don't want to change your PC, IBM has now developed a WDSc Lite, available with V5R4, that requires only 256 MB.

With a little training, it is easy to get familiarized with this environment. Count on about three weeks of practice, and you'll be in good shape. This is a very rich environment, which undoubtedly accounts for its success. A certain minimum amount of assistance is required to take full advantage of this richness; therefore, a modest investment in training will ensure a rapid and smooth integration.

A Revolution for Vendors

With WDSc, IBM has provided technical tool producers with nothing less than a standard graphical interface for the entire product range. All questions about the ergonomics of tools have been answered in one go. All natively developed online help can be found in the graphical interface, and many entry points appear as commands. Since IBM immediately developed a converter, third-party tools developers were spared major re-developments in the new interface.

It is important to emphasize that no development management rules had to be rewritten. The plug-ins belonging to some third-party vendors are just a layer overlying functions that are piloted with native code. Products exist that have interfaces corresponding to each of the developer profiles found in an AS/400 service: There's a native interface for developers who can't or won't migrate to WDSc, a "rich client" interface for PC developers on client/server developments, and a Java interface for WDSc, RAD, and Eclipse users.

In this period of migration to WDSc, the need for organizations to review their change management processes is becoming critical. Toward this end, WDSc has genuinely changed the developer's approach to compatible third-party development tools. For instance, some versioning tools that have been perceived by developers as control tools are now becoming true WDSc productivity tools, which are intuitive and naturally easy to learn.

R&D plug-in development teams cannot stop singing the praises of this new environment. Every day, they discover new features, which they assemble and incorporate in their tools. One example is the source-compare tool that comes by default with Eclipse. It is now being used at an entirely different level in the management of source archives.

Another welcome feature offered by the Eclipse environment is automatic release upgrades. To

automatically receive the latest updates of plug-ins by third-party vendors, developers can simply subscribe to the patch server.

A Point of Convergence

Any development project requires team coherence. Everything must be done to facilitate sharing and mutual understanding. Probably the greatest advantage of this new development environment is that it serves as a meeting point for development teams that work in both native and newer development languages. It is generally accepted that native developers must continue to use RPG or COBOL and that only the interface is dedicated to new technology, but with Eclipse and WDSc, this is not the case. Now these dissimilar teams truly have a common development environment.

Migrating to WDSc means preparing for the long-term. It shows what can be done in RPG with modern tools. The impact is impressive. In time, this will help ease tensions between old school and forward thinkers and improve the image of the powerful, adaptable System i platform, which is too quickly labeled as a "dinosaur" by those who don't understand it.

Philippe Magne is CEO and Chairman of ARCAD Software, the leading European provider of application change-management solutions for IBM System i. ARCAD Software's solutions provide an integrated and modular response to development issues such as version control, multi-platform software configuration and change management, application mining and retro-documentation, deployment automation and security, regression test automation, and Help Desk. Headquartered in Annecy, France, ARCAD Software operates directly in North America and Canada from its subsidiary in Cambridge, Massachusetts. For more information, visit the company's Web site. To contact the author, send an email to pmagne@arcadsoftware.com.