# ParcPlace-Digitalk User Conference Review

## **Ron Charron**

The following is a review of ParcPlace-Digitalk's Third Annual International User Conference, held at the Disneyland Hotel in Anaheim from September 9-11.

Jigsaw was to be the name for the new "merged" image. Somehow, PP-D was determined to pull off the formidable feat of combining Digitalk's VisualSmalltalk image with that of ParcPlace's VisualWorks. The very reason I described this as formidable was because of the resounding differences that separate the two implementations. Beyond the commonality provided by the very similar Collection and Magnitude Classes, and assorted blue-book classes, there lay the tremendous differences in the widget model.

Traditionally, Digitalk's strengths have been in strong platform ties, using native widgets. VisualWorks' customers have commonly sacrificed native widgets for emulated ones. It's not that they favor emulated widgets, but it's both the large range of platforms offered to them and the low-hassle interoperability that have closed many a sale. But many, including me, have longed for the day when native widgets would become available for VisualWorks. So, it was with the hope of hearing this good news that I packed my bag and hitched a ride to the land of Mickey Mouse.

### WELCOME TO THE CLIENT/SERVER/WEB COMPANY

Of late, I wake up wondering if I'll have to type in an URL to get my car going in the morning. I've quit subscribing to the newspaper because I surf the airlines about as often as I do the Web. . . and that's a lot. I can now read my favorite newspaper and listen to my favorite radio stations by "jacking-in." Things will never be the same in the Smalltalk world, now that it's caught up in the all-knowing, all-seeing Web.

PP-D has definitely caught Web fever. It takes no more than a quick jump to its homepage to convince you that it looks like it's got more than a 24-hour flu.

And so, in opening the conference, Bill Lyons, presi-

dent and CEO of PP-D, announced that his company was on the path to becoming a major player in the client/server/Web business, and moving away from being a client-centric solutions provider. Indeed, the firm would place more emphasis on server-based solutions. The high profile given to VisualWave during the conference made this fairly clear. Also, Distributed Smalltalk, which is usually a backstage item, was demonstrated in numerous lectures. Let's not forget the high profile given to Parts for Java, available at a computer store near you!

"We're not in Kansas anymore" was a feeling I shared with many an old-hat Smalltalker throughout the conference. This was made obvious in PC Week columnist Peter Coffee's keynote address titled: "Smalltalk: Surviving Its Success." He maintained that while OO had become mainstream, management now had to be convinced to go to OO in order to catch up with the competiton, rather than as a means to increase the return on investment. His recollection of all the products that had gone OO in the last few years reminded me of a joke about Orville Reddenbacker coming out with "Object-Oriented Popcorn" (P++). And with Java, it was all going to start over with a fury unparalleled. The Java volcano had erupted and no IT shop on earth would ever be safe from its strange seduction. Of course, Coffee reflected as we all did-that Java was not yet mature, and you really had to be a masochist to want to move away from Smalltalk and into Java. But still, Java is a force to be reckoned with and any tools salesperson who had not smelled the "Coffee" on this one was taking the risk of interacting with Job-Search Beans in line at the welfare

Coffee also presented little dark secrets, surprising no one, about how by requesting for <UnRememberedPrefix Here...>date(96,8,9,0,0,128) gave an entirely different answer in Sun's Library than it did in Microsoft's Library. (Not even the same day!) So, if you're feeling apprehensive about the year 2000, you're in for a lot more fun if you'll be delivering in Java in the year 2048!

So what's ahead for Smalltalk? In response to the Java

issue, many suggested that a Smalltalk plug-in for Netscape could help fend off the Java tide. During one of the Parts for Java demos, I felt that the coding process that was required, beyond wiring up Java widgets, would bring us to something I hadn't experienced since I started using Methods (introduced by Digitalk in 1985). Although Methods was text-only, you were still coding in an environment that was as interactive as that of modern-day Smalltalks. It is hard for me today to go back to an environment that doesn't have the type of tight integration of the editor, compiler, debugger, and code browser tools that Methods has for PC platforms. Of course, Lisp environments did, but that's another story. So, until Java development environments become as friendly as Methods USED TO BE, most Smalltalkers will feel that coding a nontrivial Java app will feel like taking steps backwards.

#### THE CASCADE APP-DEVELOPMENT ENVIRONMENT

Cascade was the code name given to the applicationdevelopment environment to be used in the new Jigsaw images. This new environment for Jigsaw will be able to add constants (or "read-only" objects). There is also a space for entering a string describing variables. So, VisualWorks 4.0 customers will now have a PP-D-supplied version-control and source-management system. The first jigsawed image will be called VisualWorks 4.0. PP-D has indicated that the base runtime image will be small and headless, with just the necessary code to bind with SLLs. Descriptions of system enhancements that support packaging left me believing that VisualWorks customers may have a workable alternative to ENVY/Developer. On that subject, PP-D engineers promised to work with OTI to facilitate support of ENVY products on the new image. OTI says it will be receiving the beta, and will then evaluate the effort involved in doing the port. The presentation on the Cascade architecture led me to believe that this may not be a trivial task. However, OTI is not known for building trivial products, and if we're lucky, we may even see more improvements in ENVY/Manager as it is rewritten for the Cascade environment.

#### VISUALWORKS 4.0 OR JIGSAW?

On one side we had Bill Lyons saying that Jigsaw was to become "a family of products," and on the other we had just about every engineer describing it as a new image. It is apparent to me there have been some shifts in the way PP-D wants to present its future to the world. The way I pictured it from bits and pieces of lectures and conversations was: Common technology will gradually be integrated into both VisualWorks and VisualSmalltalk images. Eventually, there may be no large, discernible differences between images, so are we looking at "merge by attrition?"

It does make some sense to me, and I think it will make some sense to the customer if PP-D can manage the cost of maintaining the two product lines for a while. Gone is the scare that clients will have to do massive rewrites to get their code to run in the new, merged image. There are some caveats, however. Wrappers and controllers are going away; a new event model is coming in. If you have invested in custom wrappers and controllers, you will need to re-examine your work and start planning for an event model. Make sure you get on the beta program as soon as possible to plan your migration strategy carefully. The feeling is that market pressures may lead PP-D to release a beta that may indeed be a bit "Alpha-ish." If that is the case, expect possible important changes between beta and general acceptance.

On the negative side of things, that means frequent adjustments to your port strategy. On the positive side, it means that if you are vocal and describe your needs in a precise fashion, you may get a chance to influence the development of the new product. If you have a massive investment in VisualWorks technology, you could protect your investment by making sure that you have some good talent assigned to assessing the beta and the port implications as soon as possible.

So, by talking with PP-D engineers, the first incarnation of Jigsaw will be the VisualWorks 4.0 image shipped with the Cascade environment and with native widgets. Native widgets will include Win32, and Win 95 common controls, with other platforms retaining emulated widgets. Datasets and the like may remain emulated, for lack of an adequate native.

Also, answering my question during the Jigsaw tools session, PP-D had not yet started work on native fonts and color models. Prior to VW4.0, expect releases of VSE 3.12 and VW2.52 in 'Q4.

#### WE'RE THE OO SERVER PEOPLE

With the acquisition of Distributed Smalltalk from Hewlett-Packard, and with its own VisualWave environment, PP-D wants to position itself as an important player in the OO application-server business. This squarely places them face-to-face with GemStone, which has been gaining more market acceptance since it made this kind of shift in the last few years. One major difference in Gemstone's favor is that it has a solid OODBM to back it up.

So what can make PP-D a player in the OO application-server market? The VisualWave demonstrations succeeded in convincing me that it had a viable tool for the development of Web server apps serving mostly HTML, with some support for Java-Script. However, the audience vocalized that more Java support will have to come quickly. Although Parts for Java offered some interesting technology for the Jigsaw line of products, PP-D technical management will have a formidable challenge ahead in making all the parts fit together. If it can put Parts for Java's quality-code development together with the quality server infrastructure of VisualWave, and offer better database support, PP-D may indeed have a winner. However, in the meantime, we will still have to look at "some assembly required" for many corporate applications.

Distributed Smalltalk lectures attempted to dispel the

myth that Smalltalk cannot perform as a server. Exhaustive demos on load-balancing were given. Unfortunately, despite emphasizing that 50 or 100 transactions were running, the engineers failed to explain adequately what these transactions were. Whatever they were, the engineers appeared happy. But people didn't appear too happy with the statement that "two tiers won't do it. . .three tiers won't do it. . . You need a fully distributed system." That may be true someday, but I don't see the masses rushing into implementing distributed systems until they get a better handle on building two- and three-tier OO-based apps. "Thread safety" was an important concern here, so when the subject of database access came forward, the statement that "few database services were thread-safe" did not give me the "warm fuzzies." IIOP was mentioned several times as the preferred communications protocol for the servers. This is interesting, because this is also in line with Netscape's plans.

#### BYE BYE OSI, HELLO PPD/OSI

If you've made WindowBuilder-Pro your home over the last few years, you'll probably be pleased to know that WindowBuilder Pro for VisualWorks is being rumored. Now that the barriers that once made it impractical are disappearing, along with native widgets and the event model, there is a good probability that the people who brought us WindowBuilder Pro will help bring the new VW Canvas Editor to life. No, it doesn't look like PP-D plans to port Parts to VW anytime soon. Many PP-D engineers have mentioned that the Canvas Editor tools really needed reworking, and that the ObjectShare Inc. acquisition presented PP-D with new "opportunities." I love to see a good virus infect a deserving host.

Since Smalltalk went corporate, programming enthusiasts have been deploring the lack of a low-cost Smalltalk for learning purposes. Now, thanks to ParcPlace-Digitalk and OSI, people wanting to learn Smalltalk will have a decent environment to learn in, and they won't need to take out a second mortgage on their house either. Smalltalk Express is the name of a (FREE) Smalltalk development tool that includes Smalltalk/ $V^{\text{TM}}$ , Win16, and WindowBuilder Pro/V. Surfing the Web all the way down to www.objectshare.com, will give you more details. At the comp.lang.smalltalk newsgroup, you will learn that SE: (Smalltalk Express) has been proposed as the first

three characters of the subject. CompuServe members will find Section 23 of the ParcPlace-Digitalk forum (CIS:PPDFORUM) devoted to Smalltalk Express.

#### ALL AHEAD WARP FACTOR NINE

Robi's Dream was entertaining as Robi (Michael Robicheaux), one of PP-D's top gurus and originator of the Canvas Editor Tools, used his VRML RoboBabe as the starting menu for his visions. He began poking and stroking parts of the 'Babe to fire up such phantasms as VRML Class Hierarchy Browsers, Performance Profilers, and Business Bar Charts. PP-D will now follow IBM's lead and have a Developer Certification Program.

What held my attention was OTI's presentation of ENVY/QA, which promises to give you professional code reviews without the hassle of a mentor breathing down your neck. Close to 40 metrics, code coverage, and code publishing tools will no doubt make many large-scale project managers happy. If you aren't excited, then you should be. All of the above are grossly under-addressed problems that were begging for relief. It's nice to see a package addressing all of these issues coming from a major player such as OTI.

#### CONCLUSION

PP-D appears to have some very good engineers here, and I hope they manage to bring all of this marvelous technology together. If they can pull it off, they are likely to become a major vendor in the new OO CSW arena.

For those who are more interested in what will happen to their investments in VisualSmalltalk or VisualWorks, you no longer have to head for the hills in panic. Neither VSE nor VW are going to be dropped. It may take some time for it to happen, but the goal of a unified image seems likely, maybe for 1998? In the meantime, thanks to Cascade, new goodies should run on both platforms.

Oh, for those who said that they went on the Indiana Jones ride ten times Tuesday night, I don't believe you. . . And, by the way, Disney—five bucks for a beer?. . . Come on!

Ron Charron is director of corporate services at The Object People. He has assisted major corporations in using Smalltalk in 11 countries... and counting!