

BRUNEL: Welcome to another episode of Getting the Most Out of IBM U2. This is Kenny Brunel, and I'll be your host for today's topic, which focuses on the Eclipse Software Development Kit.

First of all, we should learn just what Eclipse is. With me today is my guest John Zagnoli. John is the development manager for the U2 tools. John, welcome. Can you give our listeners a brief overview of Eclipse?

ZAGNOLI: Thank you, Kenny. I'd love to. The Eclipse platform is a universal tool platform: an open, extensible integrated development environment for anything and nothing in particular.

That quote comes directly from the eclipse.org website. Some people also like to think of Eclipse as an alternative to Visual Studio. Eclipse is an open source project governed by the EPL, Enhanced Program License.

What is the Enhanced Program License? As many people know, IBM created the initial Eclipse effort and then basically turned it over to the open source community. The reason for that is to encourage collaboration. And by collaborating, everyone can achieve goals that any single organization could not do on their own.

License allows people to contribute and also use the Eclipse platform in their own products and license their own products and charge for them.

So it's a very flexible license, but it also encourages this incredible collaboration we've seen with the product.

Eclipse has many components. The main part is the Eclipse platform itself. This is the framework to providing the development and runtime services.

The Eclipse platform, without any plug-ins provides a very useful functionality and development environment. However, what truly makes it interesting is the plug-ins and tools that have been developed on top of it. These tools come from the vast open source community.

Some of the tools include editors for user interfaces, development environments for Java, C++, PHP, AJAX, UML modeling, just to name a few.

BRUNEL: Okay. Thanks, John. I'm wondering why Eclipse would matter to our U2 partners and end users. So I have another guest with me today, Randy Pruett. Randy has been developing in the....part of the U2 community for over 15 years, and he happens to be our local Eclipse guru. Randy, can you tell us why Eclipse?

PRUETT: I hope so, Kenny. Eclipse is open source in nature -- it means customers can acquire it and experiment with it without a large software investment. This leads to lots of innovative ideas and new projects.

The other aspect of it that's really useful is it's Java-based, which means there's plenty of engineers already proficient with the semantics and concepts used within the Eclipse environment.

Eclipse also provides a Rich Client Platform allowing users to develop and create their own look and feel for their applications. So we've done that a lot with the U2 projects where we take the base Eclipse platform and mold it into what we want it to look like so that all of our U2 tools have a standard look and feel in the Rich Client environment.

Also, developers can retain most of Eclipse's rich functionality like table viewers, tree viewers, menus, keyboard shortcuts and perspectives which are built into the framework. That just means they don't have to redevelop or create on their own all the things that are standard in most software applications.

ZAGNOLI: We call that reinventing the wheel.

PRUETT: Or not reinventing the wheel.

ZAGNOLI: Or not reinventing the wheel, yes.

PRUETT: The Eclipse platform is independent, which means...or platform-independent, which means it can run on things other than just Windows. For instance, Mac OSX and Linux. And in those different environments it can have native windowing support.

An application or plug-in can choose to have native look and feel, so it doesn't look just like an Eclipse application running on Windows or Java or Mac OSX or Linux, it looks like a native application for Windows or native Mac OSX application or native X Windows application.

BRUNEL: Okay, It sounds like Eclipse is a great tool for Java developers. Would a developer using other languages like, say, C++ or PHP, for example, be able to make use of Eclipse?

PRUETT: Indeed, Kenny. Eclipse IDE supports plug-ins as we mentioned earlier, full development environments for C++ and PHP and other languages and each of these provides syntax editors, build environments, debuggers, and even source code control hooks.

BRUNEL: My next question goes back to John. John, I think our listeners would like to know what Eclipse is being

used for within the U2 development team. Can you give us an idea of what products are leveraging the Eclipse platform?

ZAGNOLI: Yes, Ken. Eclipse has become an integral part of the U2 product suite. We've released several Java-based products using the Rich Client Platform app built upon Eclipse. The U2 Web development environment is a very good example.

It was formerly a Visual Basic app. It was reborn with the modern look and feel and integrated with .NET and ASPX. We took several components and integrated them together using that Rich Client Platform. The Web service developer is another application we developed using Eclipse.

We're working on several new projects as well. To name a few other existing ones, the U2 XML DB tool, EDA schema mapping and the SSL config tool.

BRUNEL: So it sounds to me like Eclipse is here to stay for a while, would you agree?

ZAGNOLI: Absolutely. A case in point is our new basic IDE, which is going to give users an advanced view and syntax checking and in the U2 environment which is something that's been sorely needed.

BRUNEL: Excellent. Okay. Randy, back to you. It's great that U2 is leveraging Eclipse's technology, but why would our customers be interested in it? Give us some examples of what our customers would do with Eclipse.

PRUETT: There's a lot they can do with Eclipse. The existing tools as mentioned earlier can be used now to develop applications, Web sites, Web services and more.

For those willing to invest a little effort, such as creating a Web service to retrieve the data from U2, the Eclipse Business and Intelligent Reporting Tool also known as BIRT provides tons of reporting and graphical tools stored in databases and with those tools you can create pie charts, and bar charts, and 3-D bar charts, and just all kinds of really nice looking reports that can either be Web based or rich client based.

Even those simply wanting just an IDE, or a Java C++ or, say, even PHP, as we talked about earlier, development environment, can use the Eclipse IDE with the appropriate language-specific IDE plug-ins.

The integrated build debug and source code provide excellent functionality as is. They can be customized as needed often with simple preference changes, but to any extent required because all the source code for Eclipse is available to any

developer that chooses to download it.

BRUNEL: Okay. Thanks, Randy. So now that we've given our listeners a good overview of Eclipse, John, would you mind telling us how can we get the most out of Eclipse?

ZAGNOLI: Sure, Kenny. First of all, use the Web. Go to the Eclipse www.eclipse.org Web site. There are many sites within this Web site offering code samples and ideas for using Eclipse.

IBM developerWorks. Since IBM has put a great emphasis on the use of Eclipse, developerWorks has many resources and examples using the Eclipse-based products such as the Rational Tool Suite.

And, search the Web. There are so many people out there using this tool that I'm sure you'll find thousands of examples of useful tools built on it.

PRUETT: Not only useful tools but ideas for tools you might want to do that no one's built yet.

ZAGNOLI: That's interesting. So people propose ideas out there on the blogs and say, wouldn't it be great if somebody developed this.

BRUNEL: Randy, John, thanks for joining me today. I'd also like to thank our listeners for tuning in. And we hope that you found today's podcast useful. Please send us e-mail with your feedback, any comments or suggestions you have for future episodes. The best place to contact us is via e-mail at U2askus@us.ibm.com.

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