

Eclipse in the QuickSilver Technology Enterprise

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Who is QuickSilver Technology?

“QuickSilver Technology is a developer of enabling technologies for mobile and wireless computing platforms. QuickSilver's first initiative is the design, development, and production of the Adaptive Computing Machine™ (ACM), a new, software-programmable IC that offers custom-silicon capabilities and performance.”

- We deliver an Adapt2000 ACM System Platform that includes the Adapt2400 ACM Architecture and InSpire™ SDK Tools Set.

Adoption of Eclipse at QuickSilver: Summary

- Initial adoption of Eclipse at QuickSilver was driven entirely by its applicability as an IDE framework, not as an enterprise tool
- Between Q1/2002 and Q2/2003, Eclipse evolved from being “too unstable”, “too difficult”, and “too risky” to being “too useful to pass up”
- Now that technical barriers to adoption have been overcome, we are beginning to embrace Eclipse more fully in our organization



Adoption of Eclipse at QuickSilver: Q1/2002

Q1/2002

- First investigation into Eclipse involved automation of command-line tools within an IDE
- Lack of Eclipse documentation and samples
- Stability issues
- No clear path to an integrated tools environment: “If only there was a plug-in for debugging Windows C++ applications.”

Bottom line: Not enough value for too much risk



Adoption of Eclipse at QuickSilver: Q1/2003

Q1/2003

- Eclipse has a C++ plug-in!
- C++ Debugger not yet available on Windows
- Eclipse documentation and samples are much better
- This thing is for real
- We could build an IDE using this

Bottom line: No sense proceeding without a C++ Debugger



Adoption of Eclipse at QuickSilver: Q2/2003

Q2/2003

- Eclipse C++ Debugger is working on Windows. Eclipse seems to have all the pieces we need
- Technical hurdle #1: bridging a Java IDE to our C++ back end
- Technical hurdle #2: integrating our debug services with CDT

Bottom line: Proceed with development of a proof of concept



Adoption of Eclipse at QuickSilver: Q3/2003

Q3/2003

- IDE Debugger prototype successfully implemented using Eclipse - Technical hurdle #1 overcome using CORBA
- C++ Debugging is not yet implemented, but seems feasible
- Time to proceed to technical hurdle #2 and figure out how to integrate with the CDT

At this point, Eclipse has been adopted into the QuickSilver organization as an IDE platform and a Java development tool.



Adoption of Eclipse at QuickSilver: Q4/2003

Q4/2003

- Utilizing CDT requires porting some code from VS.net to GCC
- VS.net strongly preferred over Eclipse for C++ development
- Integration with CDT is working, but it is difficult
- CDT is not as robust, mature, and well documented as we would like

Eclipse is now taking on a bigger role. Usability issues, lack of key features, and lack of stability hinder greater CDT adoption.



Adoption of Eclipse at QuickSilver: Q1/2004

Q1/2004

- QuickSilver will release v1.0 of its InSpire™ SDK Tool Set, including an Eclipse-based IDE
- Looking ahead to Eclipse 3.0 and CDT 2.0

Eclipse has matured at a remarkable rate over the past 24 months. As the CDT matures, and as new Eclipse capabilities are added, the role of Eclipse at QuickSilver will continue to expand.



Reactions to Eclipse at QuickSilver

- Workbench / JDT
 - “Looks slick. When can I use it?”
 - “I like Eclipse, I just wish there was a lot less of it.”
 - “Where’s File Open?”
 - “This rocks for Java development.”

- CDT
 - “Error parsing doesn’t work!”
 - “Why can’t I suspend the thread I’m debugging?”
 - “I’m switching back to Visual Studio.”

- Platform
 - “Hey, check out the cool plug-in I just downloaded.”

The Future of Eclipse at QuickSilver

- A large VS.net C++ code base combined with CDT usability issues means we won't be using Eclipse as our sole means for C++ development any time soon
- Use of Eclipse / Java / CORBA / GCC opens up cross-platform possibilities
- Pluggable architecture will be critical in supporting QuickSilver's Cooperative License Model

We're going to be seeing a lot more of Eclipse at QuickSilver...

