

Eclipse: State of the Art IDE

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What Is Eclipse ?

Integrated Development
Environment

Open Source Project

ava IDE

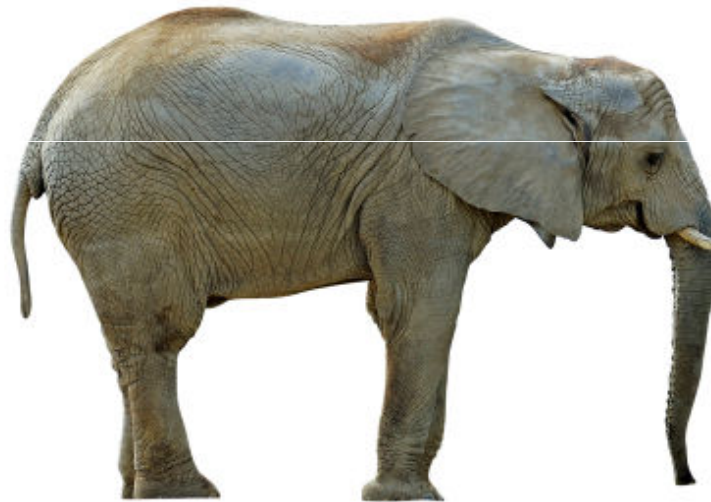
Software
EcoSystem

A Foundation

Plug-in
Environment

C/C++ IDE

An Application
Framework



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Importance of IDEs

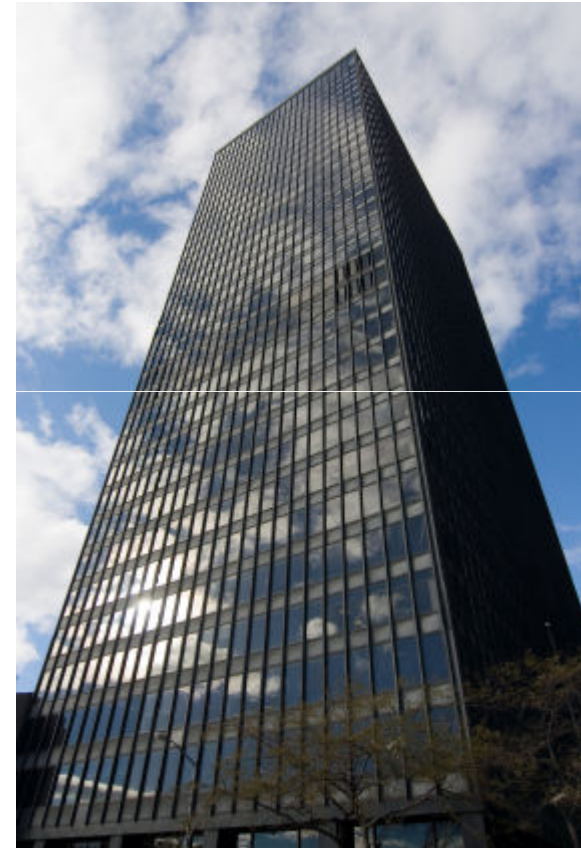
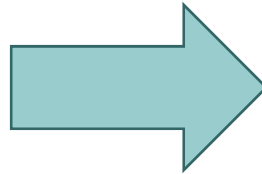
IDE Features: JDT Demo

The Story of Eclipse

More Cool IDE Features: CDT Demo

What The Future Holds

Industry Evolution



Software Evolution

As software systems evolves we need the right tools that:

- Enhance Productivity
- Integrate Technology
- Promote Innovation

Modern IDEs and Eclipse provide these and help drive the industry forward.

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Importance of IDEs

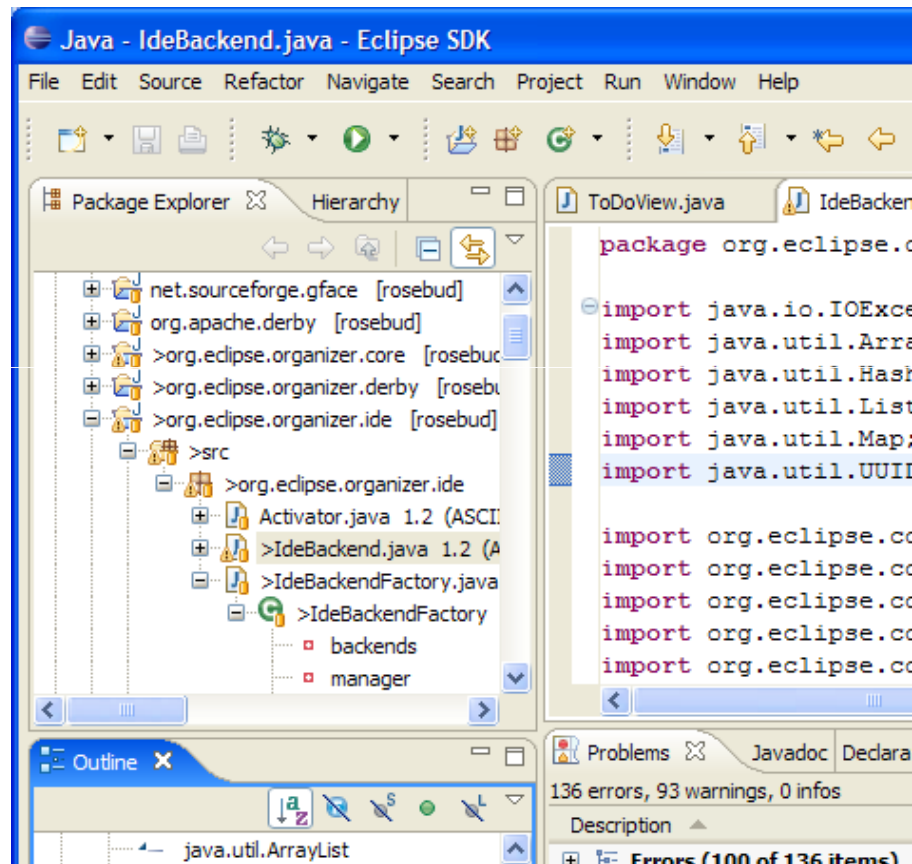
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What The Future Holds

Eclipse: A JAVA IDE



Java Development Tools (JDT)

Productivity

- Refactoring
- Code Navigation

Integration

- Debugging
- Testing, Source Control

Innovation

- Fast incremental compilation and build

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Importance of IDEs

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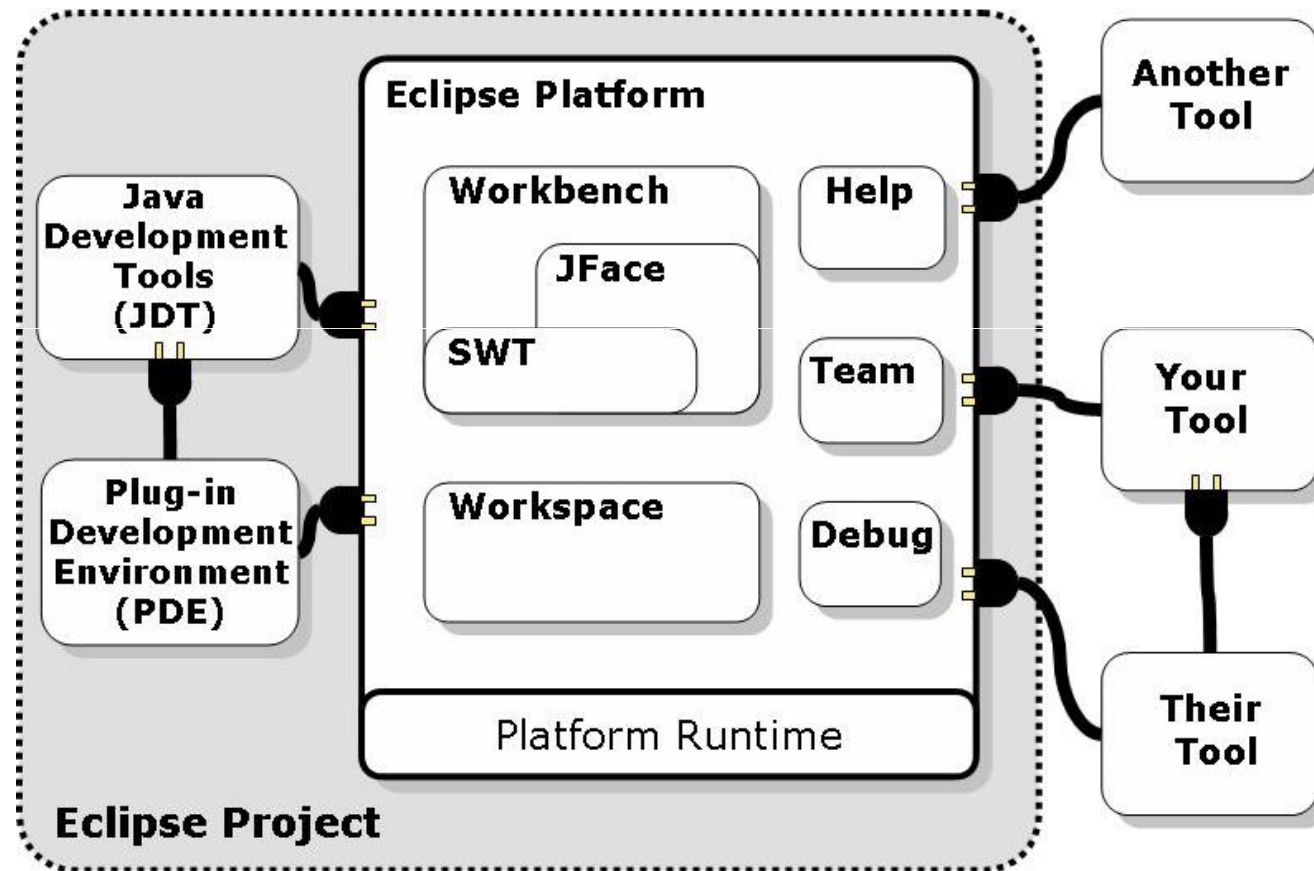
What The Future Holds

The Story of Eclipse



- Late '90s Tool Landscape
 - Microsoft vs Java
- IBM /Object Technology International (OTI)
 - Release an open source Eclipse in 2001
- Eclipse Foundation created
 - EclipseCon 2004, eclipse community developed
- Today
 - 8 Strategic members, >100 other members

Eclipse Plug-in Architecture



Why Eclipse Stood Out

- Free & Open Source
- Plug-in Architecture and Tooling Support
- Commercially Acceptable Licence
- Swing vs SWT

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Importance of IDEs

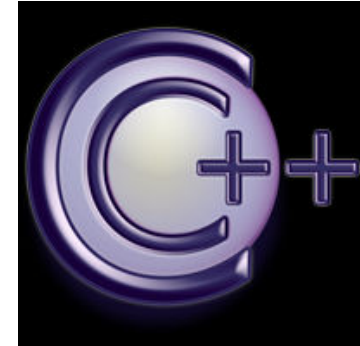
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What The Future Holds

CDT: A mini revolution



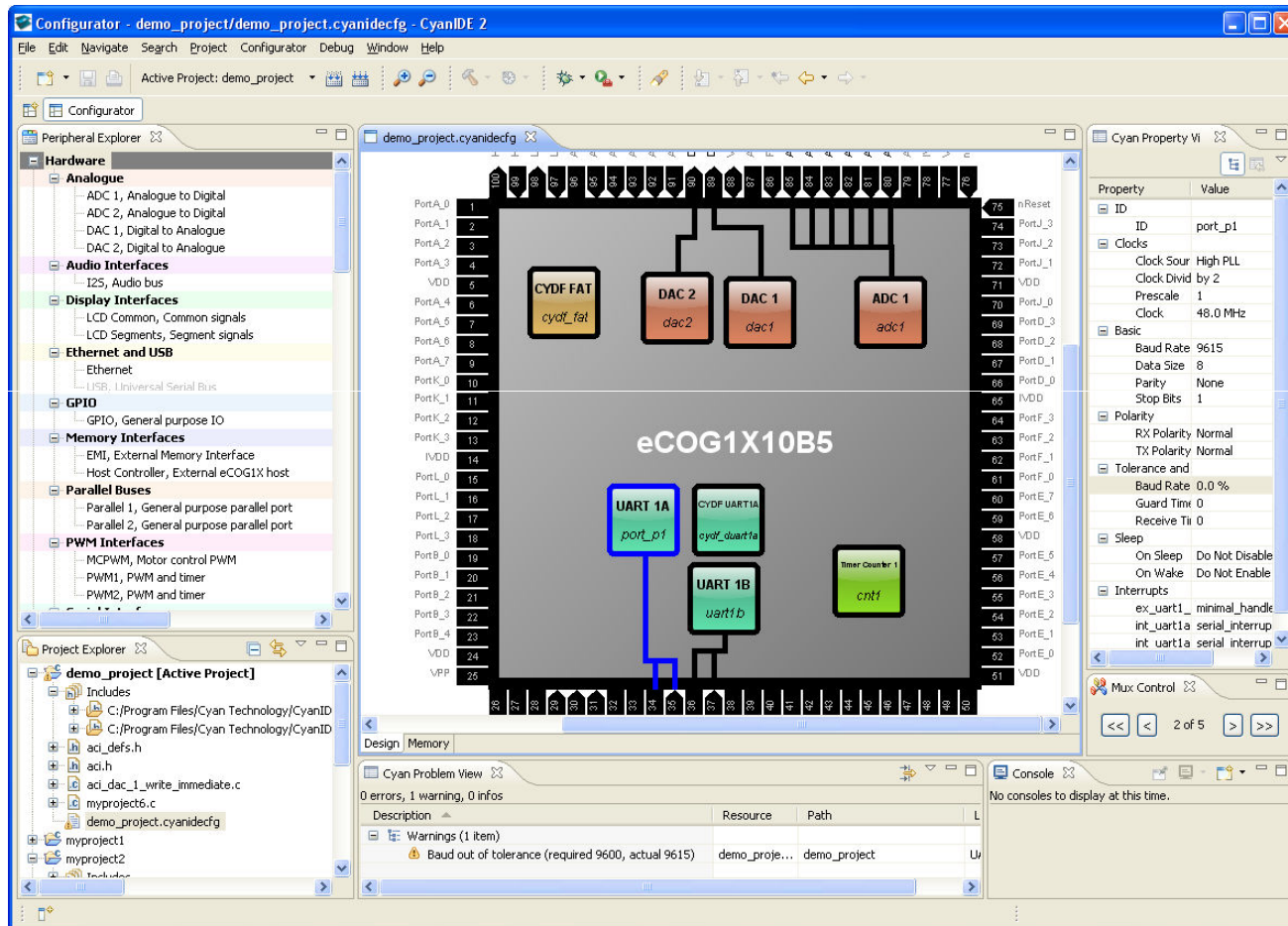
C/C++ dev + Eclipse = CDT

Industrial Strength IDE

Highlights

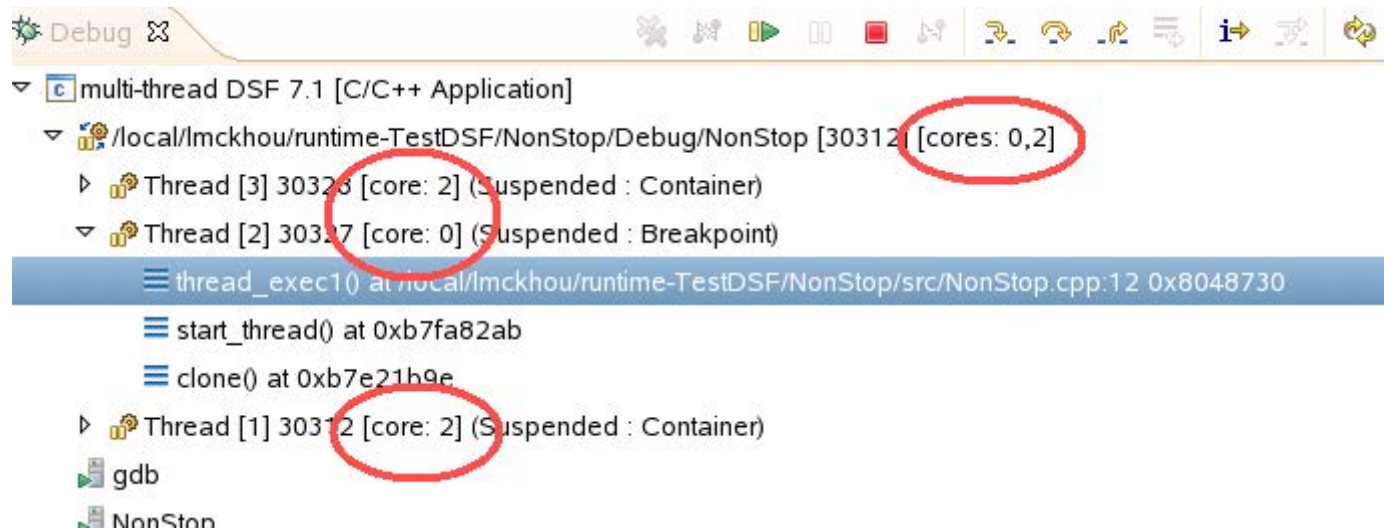
- Code navigation
- Macro expansion
- Multicore debug

Rebranding CDT

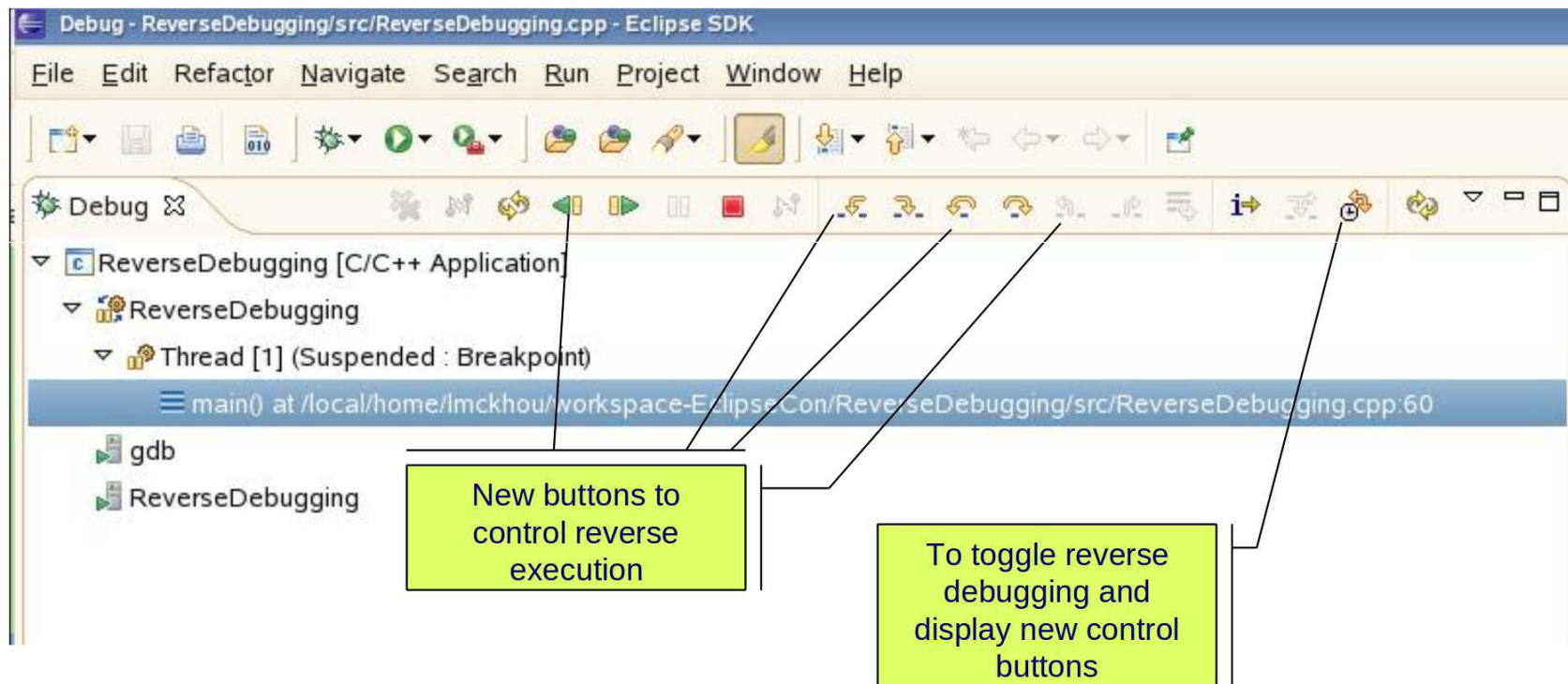


CDT – Multicore Debug

- Core awareness, threads are running on which cores



CDT – Reverse Debugging



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Importance of IDEs

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What The Future Holds

Eclipse Evolution

- 2001

- “An IDE for everything and nothing in particular”

- 2005

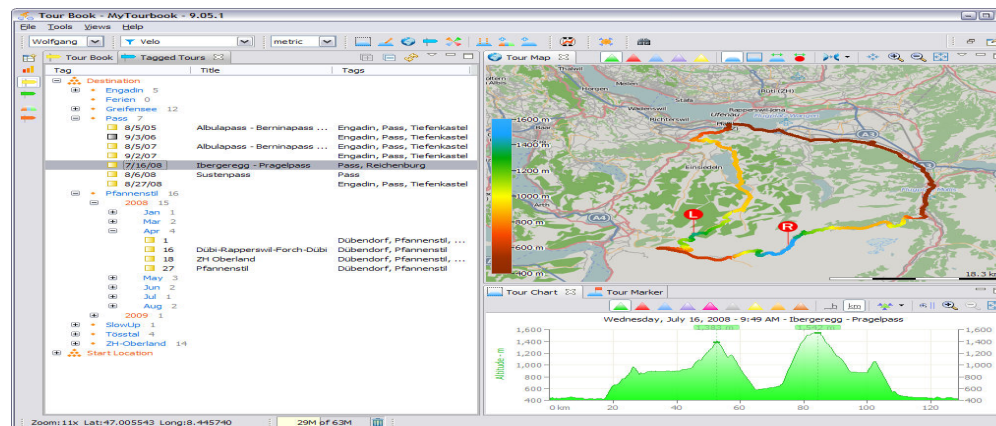
- “A framework for everything and nothing in particular”

- Rich Client Platform

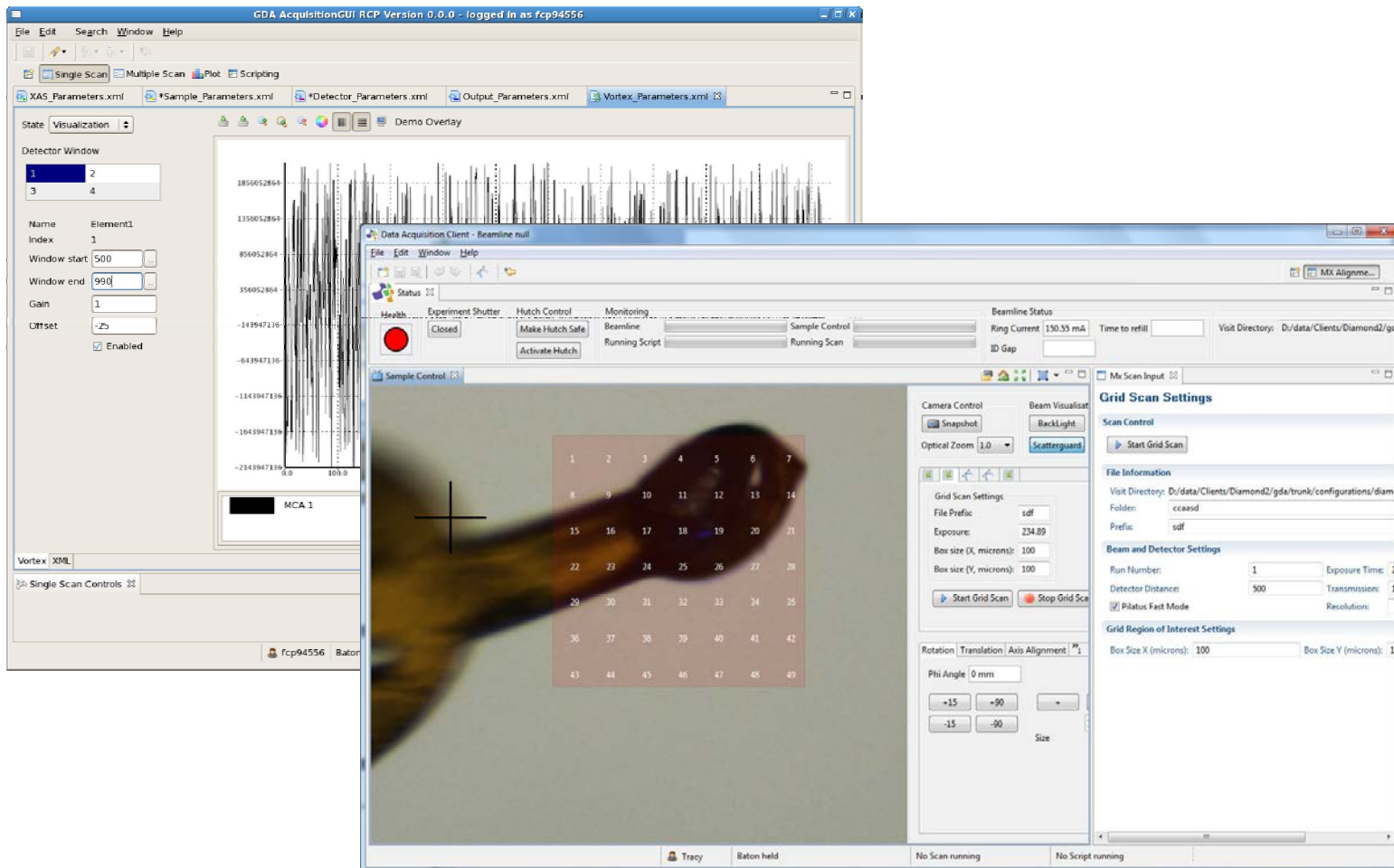
Rich Client Platform

- Rich user experience
- A client for some backend service
- Platform independent

Runs with little or no modification on multiple platforms and devices



Diamond Light Source



Future of Eclipse

- Eight Eclipse domains
IDE, Mobile, Enterprise, Modelling...
- E4 – next generation of Eclipse
Cloud computing, Rich Internet Applications
- Competition
Netbeans ?

Future as an IDE

- Industry Standard IDE for major languages
- The IDE for your domain specific language....

Xtext



Eclipse Is...

- An IDE framework: JDT, CDT
- A tools/application framework
- Open source project
- An eco-system
- A foundation

...helping build tomorrow's software skyscrapers....