Eclipse: State of the Art IDE

TRACY MIRANDA

9th December 2010
What Is Eclipse?

- Integrated Development Environment
- Open Source Project
- Software EcoSystem
- ava IDE
- A Foundation
- Plug-in Environment
- C/C++ IDE
- An Application Framework
- Java IDE
- An Application Framework
- A Foundation
- C/C++ IDE
AGENDA

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.
AGENDA

Importance of IDEs
IDE Features: JDT Demo
The Story of Eclipse
More Cool IDE Features: CDT Demo
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
AGENDA

Importance of IDEs

IDE Features: JDT Demo

The Story of Eclipse

More Cool IDE Features: CDT Demo

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
AGENDA

Importance of IDEs
IDE Features: JDT Demo
The Story of Eclipse
More Cool IDE Features: CDT Demo
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

New buttons to control reverse execution

To toggle reverse debugging and display new control buttons
AGENDA

Importance of IDEs

IDE Features: JDT Demo

The Story of Eclipse

More Cool IDE Features: CDT Demo

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....
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....