

Obfuscate4e

Integration of obfuscation into the PDE build mechanism

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PartMaster

- ❖ Product and service provider around product lifecycle management
- ❖ Committed to open standards and technologies
- ❖ Eclipse RCP users from the beginning
- ❖ Consulting and implementation services around Eclipse RCP
- ❖ www.partmaster.de

Obfuscate4e: project history

- ❖ Developed in 2006 as internal tool to stabilize product obfuscation process
- ❖ Integrated obfuscators: Zelix KlassMaster and ProGuard
- ❖ Since November 2007: openSource project hosted at sourceforge.net (with ProGuard integration)





Obfuscation

Citation from the ProGuard homepage

(<http://proguard.sourceforge.net>)

- ❖ Creating more compact code, for smaller code archives, faster transfer across networks, faster loading, and smaller memory footprints
- ❖ Making programs and libraries harder to reverse-engineer
- ❖ Listing dead code, so it can be removed from the source code
- ❖ Retargeting and preverifying existing class files for Java6, to take full advantage of Java6's faster class loading



PDE build mechanism

- ❖ ant based
- ❖ scripts are generated at build time
- ❖ extensible through custom build callbacks (since Eclipse 3.2)



Obfuscate4e and PDE build

- ❖ provide Proguard ant task
- ❖ generate customBuildCallbacks.xml
- ❖ read exported packages from MANIFEST.MF
- ❖ put obfuscator specific logic into post.@dot task
- ❖ change build.properties to enable custom build callbacks mechanism





Demo

- ❖ Hello World plugin
- ❖ eidle screensaver framework
(<http://code.google.com/p/eidle>)



Ideas for Improvement

- ❖ exclude all standard (eclipse) extension by default
- ❖ analyze plugin.xml to find application entry points (extensions)
- ❖ handle obfuscator configuration in separate file
- ❖ provide editor for obfuscator configuration file
- ❖ ...