The Aspect Markup Language
and its Support of Aspect Plugins

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ISR Technical Report # UCI-ISR-04-8
October 2004

Abstract:

We describe the Aspect Markup Language (AML), an XML-based AOP language for programming aspects. AML separates the binding instructions, written in XML, from the executable aspect code, written in a regular programming language. This separation by itself has some advantages, namely for testing. But the main goal of AML is to provide a highly extensible AOP platform, with which programmers can easily define their own constructs using well-known plugin techniques. This novel feature enables the development of AOP toolkits that target domain-specific crosscutting concerns. To demonstrate the feasibility of our approach, we have implemented AML for Java, along with a corresponding aspect weaver, jamlc. Jamlc weaves aspects written in AML and Java components into target bytecode. We present examples and show how to write aspect plugins.