

# HelloWorld

Here is a two-file application called HelloWorld - with an Aspect which prints "Tracing" to show that the aspect has been applied. Load into Eclipse with the AJDT and you can see the aspect getting applied. For this example the AjLib jar is extracted into the project also. The src to the example is attached - see the attachments tab.

HelloWorld.java:

```
package com.AjlibTest;
public class HelloWorld
{
    public static void main(String[] args)
    {
        DummyObject dummyObject = new DummyObject();
        dummyObject.someMethod(5);
    }
}
```

DummyObject.java:

```
package com.AjlibTest;
public class DummyObject
{
    public int someMethod(int i)
    {
        return 7;
    }
}
```

TestTraceAspect.aj:

```
package com.AjlibTest;
import org.codehaus.ajlib.util.tracing.ExecutionTracing;
public aspect TestTraceAspect extends ExecutionTracing
{
    public pointcut scope() :within(DummyObject);
    before(): scope()
```

```
Unknown macro: { System.out.println("Tracing"); }
```

```
}
```

With AjLib extracted along with the src into a single eclipse project for the purposes of this example, the resulting directory structure looks like this:

```
org\codehaus\ajlib\util\tracing\AbstractTracing.aj
org\codehaus\ajlib\util\tracing\BasicTraceFormatter.aj
org\codehaus\ajlib\util\tracing\CustomTraceable.aj
org\codehaus\ajlib\util\tracing\ExecutionTracing.aj
org\codehaus\ajlib\util\tracing\ExtensibleTracing.aj
org\codehaus\ajlib\util\tracing\GuardTracing.aj
org\codehaus\ajlib\util\tracing\Log4jExecutionTracing.aj
org\codehaus\ajlib\util\tracing\Log4jTracer.aj
org\codehaus\ajlib\util\tracing\NotTraced.aj
org\codehaus\ajlib\util\tracing\PerThreadTracer.aj
org\codehaus\ajlib\util\tracing\PrintStreamTracer.aj
org\codehaus\ajlib\util\tracing\StandardPointcuts.aj
org\codehaus\ajlib\util\tracing\TraceFormatter.aj
org\codehaus\ajlib\util\tracing\Tracer.aj
org\codehaus\ajlib\util\tracing\XMLTraceFormatter.aj
com\AjlibTest\TestTraceAspect.aj
com\AjlibTest\DummyObject.java
com\AjlibTest\HelloWorld.java
```

This is the output produced to the console from running this example:

```
Tracing
Tracing
Tracing
Tracing
```

```
trace enter: com.AjlibTest.DummyObject() , this: com.AjlibTest.DummyObject@7a84e4
```

```
trace exit: com.AjlibTest.DummyObject()
```

```
Tracing
```

```
trace enter: int com.AjlibTest.DummyObject.someMethod(int) , this: com.AjlibTest.DummyObject@7a84e4, args: arg 0 = 5
```

```
trace exit: int com.AjlibTest.DummyObject.someMethod(int), return = 7
```