

# XDoclet

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# What Is It?

- Open source code (file) generator (FREE)
- Enables Attribute-Oriented Programming
  - Add meta data (attributes) to classes and methods
- Creates files based on JavaDoc @ tags and template files (*.xdt*)
  - Java source files
  - XML files
  - Any type of text file (perhaps a simple report)
- Completely Extensible

# Where Do I Get It?

- Downloadable from:
  - <http://xdoclet.sourceforge.net>
- Current Version
  - *1.2 beta 2*

**XDoclet 1.2 Beta 2**

Released end of 2002.

**XDoclet 1.2 Beta 3**

Should be released in the beginning of February 2003.

**XDoclet 1.2 Final**

Should be released at the end of February 2003.

# Continuous Integration

- Works directly with Ant buildfiles
- Never have to worry about outdated files
  - Build process automatically regenerates out-of-date files
- Setup once, Run all the time ———↑
- Support for application servers
  - JBoss (2.4/ 3.0), WebLogic (6/7), Orion, etc.

Graphical wizards == manual process

# Typical Build Process

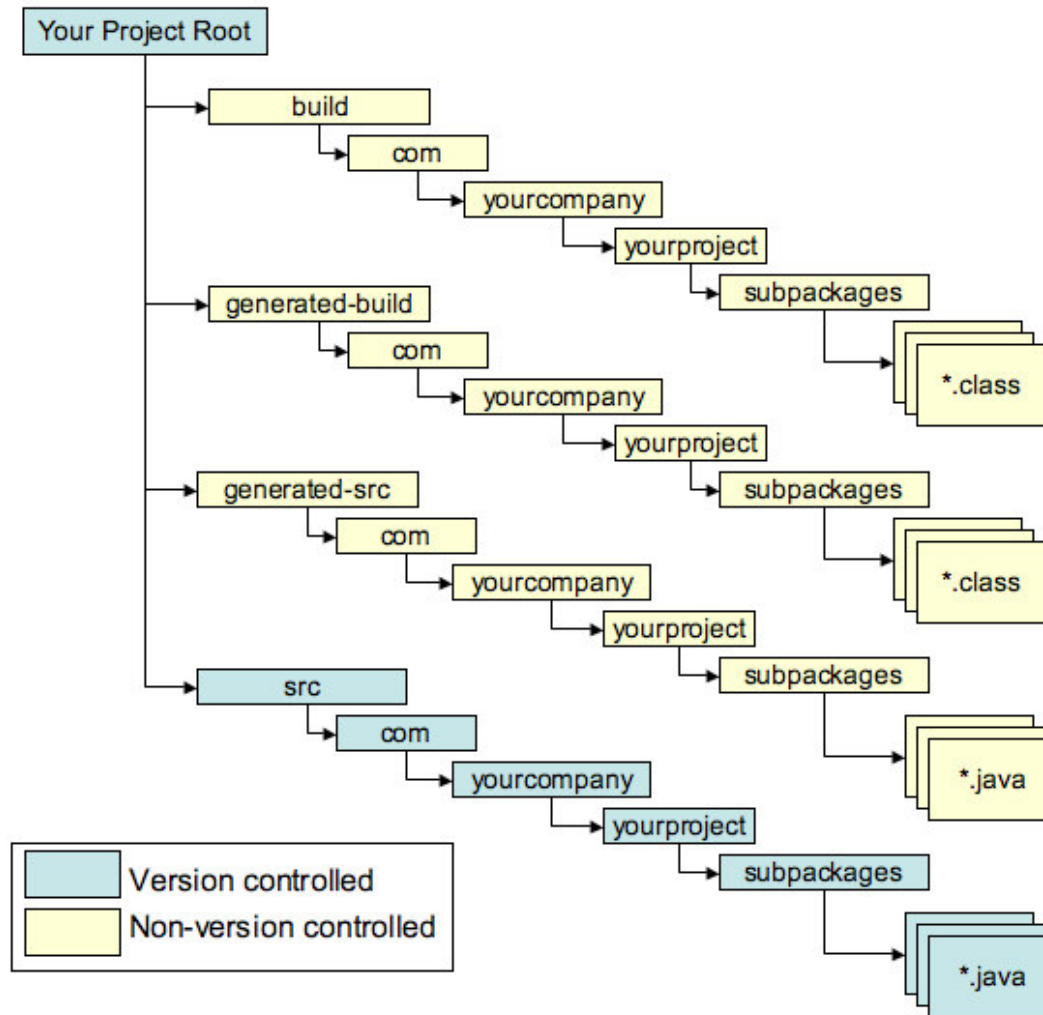
- Prepare the development environment
- Compile out-of-date code
- Package into a deployable unit
- Execute JUnit tests
- Deploy to a server

If running server side tests you have to deploy before executing tests.

# Build Process With XDoclet

- Prepare the development environment
- **Run XDoclet to regenerate out-of-date generated source files**
- Compile out-of-date code
- Package into a deployable unit
- Execute JUnit tests
- Deploy to a server

# Where To Put Generated Files?



# Marking Up A Bean

```
/**
 * @ejb.bean
 *     type="Stateless"
 *     name="PaymentProcessingBean"
 *     jndi-name="ejb/PaymentProcessingBean"
 *     view-type="remote"
 * @ejb.transaction
 *     type="Required"
 * @ejb.transaction-type
 *     type="Container"
 *
 * @author Brian M. Coyner
 */
public abstract class PaymentProcessingBean implements SessionBean {

    /**
     * @ejb.interface-method view-type="remote"
     */
    public boolean makePayment(String accountNumber, double payment) {
        return true;
    }
}
```

All XDoclet tags have a namespace,  
followed by zero or more attributes  
(name/ value pairs).



# Setting Up The ejbdoclet Task

```
<taskdef name="ejbdoclet" classname="xdoclet.modules.ejb.EjbDocletTask">  
  <classpath>  
    <pathelement path="${env.JBOSS_DIST}/client/jboss-j2ee.jar"/>  
    <pathelement path="${env.XDOCLET_HOME}/lib/xdoclet.jar"/>  
    <pathelement path="${env.XDOCLET_HOME}/lib/xjavadoc.jar"/>  
    <pathelement path="${env.XDOCLET_HOME}/lib/xdoclet-ejb-module.jar"/>  
    <pathelement location="${dir.lib}/commons-logging-1.0.jar"/>  
  </classpath>  
</taskdef>
```

1.2 beta 1 does not ship with commons-logging-1.0.jar.  
You may download from <http://jakarta.apache.org>

Need javax.ejb.\* classes.

# Invoking The ejbdoclet Task

```
<ejbdoclet  
  ejbspec="2.0"  
  destdir="${dir.generated.src}"  
  excludedtags="@version,@author,@see">
```

```
  <fileset dir="${dir.src}">  
    <include name="**/ejb/*Bean.java"/>  
  </fileset>
```

```
  <homeinterface/>  
  <remoteinterface/>  
  <session/>
```

```
  <deploymentdescriptor destdir="${dir.ejb.metainf}" validatexml="true"/>
```

```
</ejbdoclet>
```

Consistent naming conventions serve two purposes:

- 1.) They make your code more maintainable
- 2.) Consistency facilitates automation

XDoclet Subtasks

Subtasks apply templates (*.xdt* files) to the files described in the `fileset` task.

The generated content, if any, is placed in the directory specified by the `destdir`.

# Other Resources

- XDoclet's Home
  - <http://xdoclet.sourceforge.net/>
  - <http://www.jguru.com/forums/XDoclet>
- *Java Extreme Programming Cookbook*
  - O'Reilly
  - Eric Burke and Brian Coyner (me)
  - Hits the shelves March 2003
  - Covers numerous open source tools
    - XDoclet, JUnit, HttpUnit, Cactus, etc.