

Apache Ant 1.6.2

Singleton

1(BL)

Singleton: org.apache.tools.ant.types.selectors.SelectorUtils
uniqueInstance: static SelectorUtils instance

Template Method

1(BL)

AbstractClass :org.apache.tools.ant.taskdefs.optional.depend.constantpool.ConstantPoolEntry
TemplateMethod :read(), readEntry()

2(BL)

AbstractClass :org.apache.tools.ant.taskdefs.optional.dotnet.DotnetCompile
TemplateMethod :execute()

3(BL)

AbstractClass :org.apache.tools.ant.taskdefs.optional.ide.VAJToolsServlet
TemplateMethod :execute(), Request()

4(BL)

AbstractClass :org.apache.tools.ant.taskdefs.optional.j2ee.AbstractHotDeploymentTool
TemplateMethod :deploy (), validateAttributes ()

5(BL)

AbstractClass :org.apache.tools.ant.taskdefs.optional.junit.XalanExecutor
TemplateMethod :execute()

6(BL)

AbstractClass :org.apache.tools.ant.taskdefs.optional.metamata.AbstractMetamataTask
TemplateMethod :execute()

7(BL)

AbstractClass :org.apache.tools.ant.taskdefs.optional.sos.SOS
TemplateMethod :buildCmdLine(), execute()

8(BL)

AbstractClass :org.apache.tools.ant.taskdefs.optional.starteam.StarTeamTask
TemplateMethod :createSnapshotView()

9(BL)

AbstractClass :org.apache.tools.ant.taskdefs.optional.vss.MSVSS
TemplateMethod :buildCmdLine(), execute()

10(BL)

AbstractClass :org.apache.tools.ant.taskdefs.Pack
TemplateMethod :pack(), execute()

11(BL)

AbstractClass :org.apache.tools.ant.taskdefs.Unpack
TemplateMethod :extract()

12(BL)

AbstractClass :org.apache.tools.ant.types.selectors.MappingSelector
TemplateMethod :selectionTest(), isSelected()

13(BL)

AbstractClass :org.apache.tools.ant.types.Assertions
TemplateMethod :getCommandPrefix(), toCommand()

14(BL)

AbstractClass :org.apache.tools.ant.types.EnumeratedAttribute
TemplateMethod :getValues(), indexOfValue()

15(BL)

AbstractClass :org.apache.tools.ant.util.depend.AbstractAnalyzer
TemplateMethod :determineDependencies(), getClassDependencies()

Decorator

1(BL)

Decorator: org.apache.tools.Externalfiles.FilterInputStream
Component: org.apache.tools.Externalfiles.InputStream

2(BL)

Decorator :org.apache.tools.Externalfiles.FilterOutputStream.java
Component :org.apache.tools.Externalfiles.OutputStream.java

Visitor

1(NBL)

Visitor: org.apache.tools.ant.taskdefs.optional.jsp.compilers.JspCompilerAdapter.java
Concretevisitor: org.apache.tools.ant.taskdefs.optional.jsp.JspC.java|.....

2(NBL)

Visitor: org.apache.tools.ant.taskdefs.optional.jsp.compilers.JspCompilerAdapter.java
Concretevisitor: org.apache.tools.ant.taskdefs.Rmic.java

Factory method

12(NBL)

Creator: org.apache.tools.Externalfiles.ClassLoader.java
Factormethod: getResourceAsStream
Concretecreator: org.apache.tools.ant.AntClassLoader.java

Composite

1(NBL)

Component: org.apache.tools.ant.Task.java
Composite: org.apache.tools.ant.taskdefs.Parallel.java
Add(Component): addTask

2(NBL)

Component: org.apache.tools.ant.types.FileSet.java

Composite: org.apache.tools.ant.types.optional.depend.ClassfileSet.java

Add(Component): addRootFileset

3(NBL)

Component: org.apache.tools.ant.Task.java

Composite: org.apache.tools.ant.taskdefs.Sequential.java

Add(Component): addTask

Prototype

1(NBL)

Prototype: org.apache.tools.ant.types.FileSet.java

Concreteprototype: org.apache.tools.ant.types.optional.depend.ClassfileSet.java

2(NBL)

Prototype: org.apache.tools.ant.types.FileSet.java

Concreteprototype: org.apache.tools.ant.types.ZipFileSet.java

3(NBL)

Prototype: org.apache.tools.ant.types.selectors.modifiedselector.Cache.java

Concreteprototype: org.apache.tools.ant.types.selectors.modifiedselector.PropertiesfileCache.java

Chain of Responsibility

1(NBL)

Handler: org.apache.tools.Externalfiles.InputStream.java

ConcreteHandler: org.apache.tools.Externalfiles.FilterInputStream.java

2(NBL)

Handler: org.apache.tools.Externalfiles.OutputStream.java

ConcreteHandler: org.apache.tools.Externalfiles.FilterOutputStream.java

3(NBL)

Handler: org.apache.tools.Externalfiles.Reader.java

ConcreteHandler: org.apache.tools.Externalfiles.FilterReader.java

Command

1(NBL)

Command: org.apache.tools.ant.Task.java

ConcreteCommand: org.apache.tools.ant.taskdefs.email.EmailTask.java|....

2(NBL)

Command: org.apache.tools.Externalfiles Runnable.java

ConcreteCommand: org.apache.tools.ant.taskdefs.ExecuteJava.java

3(NBL)

Command: org.apache.tools.Externalfiles.InputStream.java

ConcreteCommand: org.apache.tools.ant.DemuxInputStream.java

Bridge

1(NBL)

Abstraction: org.apache.tools.ant.filters.TokenFilter.java

Implementor: org.apache.tools.ant.util.regexp.Regexp.java

2(NBL)

Abstraction: org.apache.tools.ant.filters.TokenFilter.java

Implementor: org.apache.tools.ant.util.Tokenizer.java

3(NBL)

Abstraction: org.apache.tools.ant.taskdefs.optional.ide.VAJToolsServlet.java

Implementor: org.apache.tools.ant.taskdefs.optional.ide.VAJUtil.java

4(NBL)

Abstraction: org.apache.tools.ant.taskdefs.Execute.java

Implementor: org.apache.tools.ant.taskdefs.ExecuteStreamHandler.java

5(NBL)

Abstraction: org.apache.tools.ant.taskdefs.ExecuteOn.java

Implementor: org.apache.tools.ant.util.FileNameMapper.java

BL: Baseline as indicated in our paper

NBL: Non-trusted baseline. For this baseline, we did not manually analyzed results of prototyping tool.