

Getting Started

The purpose of this page is to assist developers in setting up an environment suitable to build HiveMind from source and run the examples provided. These details apply to HiveMind 1.1.

While the specific details were produced on a Windows platform, the steps should apply equally to any operating system.

Documented Environment:

- Windows XP
- JDK 1.5
- Ant 1.6.2

Assumptions:

- Ant is installed and in the PATH. And environment variable ANT_HOME is set and points to the Ant installation directory.
- Java is installed properly and in the PATH.
- You have checked out the HiveMind source to your local disk.

Ant setup:

- xalan.jar, xercesImpl.jar, and xml-apis.jar are in the lib directory under \$ANT_HOME. The version used in this configuration was [xalan-j 2.6.0](#)
- It is recommended that you have junit-3.8.1.jar installed in the lib directory under \$ANT_HOME prior to starting a build. If you don't, the build will install it, fail, and require a rebuild.

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Ant

By far the easiest environment to setup.

Assuming you have met the assumptions, build the first time with:

```
C:\>cd HiveMind
C:\HiveMind>ant
```

Note: After the DOWNLOAD WARNING, you will be required to enter `continue` before the build will proceed. The following output will be displayed:

```
C:\HiveMind>ant
Buildfile: build.xml

install:

compile:
[mkdir] Created dir: C:\HiveMind\ext-package\lib

-display-download-warning:
[echo]
[echo] *****
[echo] *
[echo] *                               D O W N L O A D   W A R N I N G                               *
[echo] *
[echo] * Dependent libraries will be downloaded. These are NOT necessarily downloaded from apache.org, *
[echo] * and may use other licences besides the Apache Software License. Dependencies will use an *
[echo] * open-source license compatible with the ASL, such as Berkeley Software Distribution (BSD) or *
[echo] * Mozilla Public License (MPL). *
[echo] *
[echo] *****
[input] Enter 'continue' to continue with the build:(continue)
continue
```

```
[grabber] Downloading http://www.ibiblio.org/maven/commons-logging/jars/commons-logging-1.0.3.jar to C:\HiveMind\ext-package\lib\commons-logging-1.0.3.jar
[mkdir] Created dir: C:\HiveMind\framework\target\module-lib\compile\commons-logging
[copy] Copying 1 file to C:\HiveMind\framework\target\module-lib\compile\commons-logging
[copy] Copying C:\HiveMind\ext-package\lib\commons-logging-1.0.3.jar to C:\HiveMind\framework\target\module-lib\compile\commons-logging\commons-logging-1.0.3.jar

-display-download-warning:
[grabber] Downloading http://www.ibiblio.org/maven/javassist/jars/javassist-3.0-rc-1.jar to C:\HiveMind\ext-package\lib\javassist-3.0-rc-1.jar
[mkdir] Created dir: C:\HiveMind\framework\target\module-lib\compile\javassist
[copy] Copying 1 file to C:\HiveMind\framework\target\module-lib\compile\javassist
[copy] Copying C:\HiveMind\ext-package\lib\javassist-3.0-rc-1.jar to C:\HiveMind\framework\target\module-lib\compile\javassist\javassist-3.0-rc-1.jar

-display-download-warning:
[grabber] Downloading http://www.ibiblio.org/maven/servletapi/jars/servletapi-2.3.jar to C:\HiveMind\ext-package\lib\servletapi-2.3.jar
[mkdir] Created dir: C:\HiveMind\framework\target\module-lib\compile\servletapi
[copy] Copying 1 file to C:\HiveMind\framework\target\module-lib\compile\servletapi
[copy] Copying C:\HiveMind\ext-package\lib\servletapi-2.3.jar to C:\HiveMind\framework\target\module-lib\compile\servletapi\servletapi-2.3.jar

-display-download-warning:
[grabber] Downloading http://www.ibiblio.org/maven/oro/jars/oro-2.0.6.jar to C:\HiveMind\ext-package\lib\oro-2.0.6.jar
[mkdir] Created dir: C:\HiveMind\framework\target\module-lib\compile\oro
[copy] Copying 1 file to C:\HiveMind\framework\target\module-lib\compile\oro
[copy] Copying C:\HiveMind\ext-package\lib\oro-2.0.6.jar to C:\HiveMind\framework\target\module-lib\compile\oro\oro-2.0.6.jar

-display-download-warning:
[grabber] Downloading http://www.ibiblio.org/maven/log4j/jars/log4j-1.2.7.jar to C:\HiveMind\ext-package\lib\log4j-1.2.7.jar
[mkdir] Created dir: C:\HiveMind\framework\target\module-lib\compile\log4j
[copy] Copying 1 file to C:\HiveMind\framework\target\module-lib\compile\log4j
[copy] Copying C:\HiveMind\ext-package\lib\log4j-1.2.7.jar to C:\HiveMind\framework\target\module-lib\compile\log4j\log4j-1.2.7.jar

-display-download-warning:
[grabber] Downloading http://www.ibiblio.org/maven/easymock/jars/easymock-1.1.jar to C:\HiveMind\ext-package\lib\easymock-1.1.jar
[mkdir] Created dir: C:\HiveMind\framework\target\module-lib\compile\easymock
[copy] Copying 1 file to C:\HiveMind\framework\target\module-lib\compile\easymock
[copy] Copying C:\HiveMind\ext-package\lib\easymock-1.1.jar to C:\HiveMind\framework\target\module-lib\compile\easymock\easymock-1.1.jar

-display-download-warning:
[grabber] Downloading http://www.ibiblio.org/maven/easymock/jars/easymockclassexension-1.1.jar to C:\HiveMind\ext-package\lib\easymockclassexension-1.1.jar
[mkdir] Created dir: C:\HiveMind\framework\target\module-lib\compile\easymockclassexension
[copy] Copying 1 file to C:\HiveMind\framework\target\module-lib\compile\easymockclassexension
[copy] Copying C:\HiveMind\ext-package\lib\easymockclassexension-1.1.jar to C:\HiveMind\framework\target\module-lib\compile\easymockclassexension\easymockclassexension-1.1.jar

-display-download-warning:
[grabber] Downloading http://www.ibiblio.org/maven/cglib/jars/cglib-full-2.0.1.jar to C:\HiveMind\ext-package\lib\cglib-full-2.0.1.jar
[mkdir] Created dir: C:\HiveMind\framework\target\module-lib\compile\cglib-full
[copy] Copying 1 file to C:\HiveMind\framework\target\module-lib\compile\cglib-full
[copy] Copying C:\HiveMind\ext-package\lib\cglib-full-2.0.1.jar to C:\HiveMind\framework\target\module-lib\compile\cglib-full\cglib-full-2.0.1.jar

-display-download-warning:
[grabber] Downloading http://www.ibiblio.org/maven/junit/jars/junit-3.8.1.jar to C:\HiveMind\ext-package\lib\junit-3.8.1.jar
[mkdir] Created dir: C:\HiveMind\framework\target\module-lib\compile\junit
[copy] Copying 1 file to C:\HiveMind\framework\target\module-lib\compile\junit
[copy] Copying C:\HiveMind\ext-package\lib\junit-3.8.1.jar to C:\HiveMind\framework\target\module-lib\compile\junit\junit-3.8.1.jar
```

```
-compile-init:
[mkdir] Created dir: C:\HiveMind\framework\target\generated-java
[mkdir] Created dir: C:\HiveMind\framework\target\classes
[echo]
[echo]
[echo] *** Compiling Java sources to target/classes ...

[echo]
[javac] Compiling 263 source files to C:\HiveMind\framework\target\classes
[javac] C:\HiveMind\framework\src\java\org\apache\hivemind\ant\ManifestClassPath.java:43: warning:
[deprecation] project in org.apache.tools.ant.ProjectComponent has been deprecated
[javac]         _classpath = new Path(project);
[javac]         ^
[javac] C:\HiveMind\framework\src\java\org\apache\hivemind\ant\ManifestClassPath.java:119: warning:
[deprecation] project in org.apache.tools.ant.ProjectComponent has been deprecated
[javac]         project.setProperty(_property, buffer.toString());
[javac]         ^
[javac] 2 warnings
[echo]
[echo]
[echo] *** Copying resources to target/classes ...

[echo]
[copy] Copying 13 files to C:\HiveMind\framework\target\classes

compile-tests:

-display-download-warning:
[mkdir] Created dir: C:\HiveMind\framework\target\test-classes
[echo]
[echo]
[echo] *** Compiling tests to target/test-classes ...

[echo]
[javac] Compiling 186 source files to C:\HiveMind\framework\target\test-classes

run-tests:

-install-junit:
[mkdir] Created dir: C:\HiveMind\framework\target\junit-temp
[mkdir] Created dir: C:\HiveMind\framework\target\junit-reports
[echo]
[echo]
[echo] *** Running unit tests ...
[echo]
[junit] Testsuite: hivemind.test.TestContains
[junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 2.504 sec

[junit] Testsuite: hivemind.test.TestDependency
[junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0.56 sec

[junit] Testsuite: hivemind.test.TestHiveMindFindLocation
[junit] Tests run: 7, Failures: 0, Errors: 0, Time elapsed: 0.021 sec

[junit] Testsuite: hivemind.test.TestLocation
[junit] Tests run: 11, Failures: 0, Errors: 0, Time elapsed: 0.02 sec

[junit] Testsuite: hivemind.test.TestMessagesImpl
[junit] Tests run: 10, Failures: 0, Errors: 0, Time elapsed: 0.04 sec

[junit] Testsuite: hivemind.test.TestMisc
[junit] Tests run: 8, Failures: 0, Errors: 0, Time elapsed: 0.14 sec

[junit] Testsuite: hivemind.test.TestRegistryBuilder
[junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0.681 sec

[junit] Testsuite: hivemind.test.TestServicesByInterface
[junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0.671 sec

[junit] Testsuite: hivemind.test.TestSubModule
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.421 sec
```

```
[junit] Testsuite: hivemind.test.ant.TestConstructRegistry
[junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.39 sec

[junit] Testsuite: hivemind.test.ant.TestManifestClassPath
[junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: hivemind.test.config.TestConfigurationPoint
[junit] Tests run: 22, Failures: 0, Errors: 0, Time elapsed: 3.405 sec

[junit] Testsuite: hivemind.test.config.TestConversion
[junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.972 sec

[junit] Testsuite: hivemind.test.config.TestUniqueElementAttribute
[junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0.45 sec

[junit] Testsuite: hivemind.test.impl.TestRegistryAssemblyImpl
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0 sec

[junit] Testsuite: hivemind.test.parse.TestDescriptorParser
[junit] Tests run: 29, Failures: 0, Errors: 0, Time elapsed: 0.19 sec

[junit] Testsuite: hivemind.test.parse.TestModuleDescriptor
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.011 sec

[junit] Testsuite: hivemind.test.parse.TestToString
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.02 sec

[junit] Testsuite: hivemind.test.rules.TestBooleanTranslator
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: hivemind.test.rules.TestConfigurationTranslator
[junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0.49 sec

[junit] Testsuite: hivemind.test.rules.TestConvertInitializer
[junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: hivemind.test.rules.TestEnumerationTranslator
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: hivemind.test.rules.TestInvokeParentRule
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.191 sec

[junit] Testsuite: hivemind.test.rules.TestObjectTranslator
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.13 sec

[junit] Testsuite: hivemind.test.rules.TestPushAttributeRule
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.02 sec

[junit] Testsuite: hivemind.test.rules.TestServicePointTranslator
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: hivemind.test.rules.TestSetModule
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: hivemind.test.rules.TestSetPropertyRule
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.21 sec

[junit] Testsuite: hivemind.test.rules.TestSmartTranslator
[junit] Tests run: 9, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: hivemind.test.services.TestBuilderFactory
[junit] Tests run: 17, Failures: 0, Errors: 0, Time elapsed: 1.442 sec

[junit] Testsuite: hivemind.test.services.TestEagerLoader
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.641 sec

[junit] Testsuite: hivemind.test.services.TestEventLinker
[junit] Tests run: 7, Failures: 0, Errors: 0, Time elapsed: 0.261 sec

[junit] Testsuite: hivemind.test.services.TestMethodSignature
```

```
[junit] Tests run: 14, Failures: 0, Errors: 0, Time elapsed: 0.02 sec

[junit] Testsuite: hivemind.test.services.TestPooledServiceModel
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.4 sec

[junit] Testsuite: hivemind.test.services.TestServices
[junit] Tests run: 13, Failures: 0, Errors: 0, Time elapsed: 2.354 sec

[junit] Testsuite: hivemind.test.services.TestShutdown
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.801 sec

[junit] Testsuite: hivemind.test.services.TestStartup
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.13 sec

[junit] Testsuite: hivemind.test.services.TestThreadEventNotifier
[junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0 sec

[junit] Testsuite: hivemind.test.services.TestThreadLocalStorage
[junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: hivemind.test.services.TestThreadedModel
[junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0.721 sec

[junit] Testsuite: org.apache.hivemind.TestApplicationRuntimeException
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0 sec

[junit] Testsuite: org.apache.hivemind.TestDefense
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.TestOccurrences
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.conditional.TestEvaluationContext
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0 sec

[junit] Testsuite: org.apache.hivemind.conditional.TestEvaluators
[junit] Tests run: 9, Failures: 0, Errors: 0, Time elapsed: 0.02 sec

[junit] Testsuite: org.apache.hivemind.conditional.TestLexer
[junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0.02 sec

[junit] Testsuite: org.apache.hivemind.conditional.TestNode
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0 sec

[junit] Testsuite: org.apache.hivemind.conditional.TestParser
[junit] Tests run: 9, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.conditional.TestToken
[junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0 sec

[junit] Testsuite: org.apache.hivemind.impl.TestErrorHandler
[junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.impl.TestInvokeFactoryServiceConstructor
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0 sec

[junit] Testsuite: org.apache.hivemind.impl.TestJavaTypeUtils
[junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.impl.TestMethodIterator
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.impl.TestModule
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.02 sec

[junit] Testsuite: org.apache.hivemind.impl.TestRegistryInfrastructure
[junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.impl.TestRegistryInfrastructureConstructor
[junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
```

```
[junit] Testsuite: org.apache.hivemind.impl.TestSchemaProcessor
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.03 sec

[junit] Testsuite: org.apache.hivemind.impl.TestServiceModelThreading
[junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0.831 sec

[junit] Testsuite: org.apache.hivemind.impl.TestServicePoint
[junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.impl.TestSymbolExpander
[junit] Tests run: 10, Failures: 0, Errors: 0, Time elapsed: 0.13 sec

[junit] Testsuite: org.apache.hivemind.impl.TestTranslatorManager
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0 sec

[junit] Testsuite: org.apache.hivemind.impl.TestVisibility
[junit] Tests run: 9, Failures: 0, Errors: 0, Time elapsed: 0.02 sec

[junit] Testsuite: org.apache.hivemind.internal.ser.TestServiceSerializationHelper
[junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.17 sec

[junit] Testsuite: org.apache.hivemind.methodmatch.TestMethodFilters
[junit] Tests run: 11, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.methodmatch.TestMethodMatcher
[junit] Tests run: 7, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.methodmatch.TestMethodPatternParser
[junit] Tests run: 12, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.order.TestOrderer
[junit] Tests run: 14, Failures: 0, Errors: 0, Time elapsed: 0.02 sec

[junit] Testsuite: org.apache.hivemind.schema.rules.TestIdTranslators
[junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0 sec

[junit] Testsuite: org.apache.hivemind.schema.rules.TestNumericTranslators
[junit] Tests run: 18, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.service.impl.TestBuilderFactory
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.service.impl.TestClassFab
[junit] Tests run: 18, Failures: 0, Errors: 0, Time elapsed: 0.07 sec

[junit] Testsuite: org.apache.hivemind.service.impl.TestClassFabUtils
[junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0.02 sec

[junit] Testsuite: org.apache.hivemind.service.impl.TestLoggingInterceptorFactory
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.03 sec

[junit] Testsuite: org.apache.hivemind.service.impl.TestObjectProviders
[junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.02 sec

[junit] Testsuite: org.apache.hivemind.service.impl.TestObjectTranslator
[junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0 sec

[junit] Testsuite: org.apache.hivemind.servlet.TestHiveMindFilter
[junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.711 sec

[junit] Testsuite: org.apache.hivemind.test.TestAggregateArgumentsMatcher
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0 sec

[junit] Testsuite: org.apache.hivemind.test.TestArrayMatcher
[junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.test.TestMockClass
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.32 sec

[junit] Testsuite: org.apache.hivemind.test.TestRegexpMatcher
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
```

```
[junit] Testsuite: org.apache.hivemind.util.TestBodyBuilder
[junit] Tests run: 11, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.util.TestClasspathResource
[junit] Tests run: 12, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.util.TestConstructorUtils
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.util.TestContextResource
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.util.TestEventListenerList
[junit] Tests run: 7, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.util.TestFileResource
[junit] Tests run: 8, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.util.TestIdUtils
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0 sec

[junit] Testsuite: org.apache.hivemind.util.TestLocalizedContextResourceFinder
[junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0 sec

[junit] Testsuite: org.apache.hivemind.util.TestLocalizedNameGenerator
[junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.util.TestPropertyUtils
[junit] Tests run: 15, Failures: 0, Errors: 0, Time elapsed: 0.06 sec

[junit] Testsuite: org.apache.hivemind.util.TestShutdownCoordinator
[junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0.161 sec

[junit] Testsuite: org.apache.hivemind.util.TestStringUtils
[junit] Tests run: 11, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: org.apache.hivemind.util.TestToStringBuilder
[junit] Tests run: 13, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
```

jar:

```
[mkdir] Created dir: C:\HiveMind\target
[echo]
[echo]
[echo] *** Packaging as ../target/hivemind-1.1-alpha-2-snapshot.jar ...

[echo]
[jar] Building jar: C:\HiveMind\target\hivemind-1.1-alpha-2-snapshot.jar
[copy] Copying 1 file to C:\HiveMind\ext-package\lib
```

install:

compile:

-display-download-warning:

```
[grabber] Downloading http://www.ibiblio.org/maven/jboss/jars/jboss-j2ee-3.2.1.jar to C:\HiveMind\ext-
package\lib\jboss-j2ee-3.2.1.jar
[mkdir] Created dir: C:\HiveMind\library\target\module-lib\compile\jboss-j2ee
[copy] Copying 1 file to C:\HiveMind\library\target\module-lib\compile\jboss-j2ee
[copy] Copying C:\HiveMind\ext-package\lib\jboss-j2ee-3.2.1.jar to C:\HiveMind\library\target\module-
lib\compile\jboss-j2ee\jboss-j2ee-3.2.1.jar
```

-display-download-warning:

```
[grabber] Downloading http://www.ibiblio.org/maven/springframework/jars/spring-full-1.0.1.jar to C:
\HiveMind\ext-package\lib\spring-full-1.0.1.jar
[mkdir] Created dir: C:\HiveMind\library\target\module-lib\compile\spring-full
[copy] Copying 1 file to C:\HiveMind\library\target\module-lib\compile\spring-full
[copy] Copying C:\HiveMind\ext-package\lib\spring-full-1.0.1.jar to C:\HiveMind\library\target\module-
lib\compile\spring-full\spring-full-1.0.1.jar
```

```

-display-download-warning:
  [mkdir] Created dir: C:\HiveMind\library\target\module-lib\compile\commons-logging
  [copy] Copying 1 file to C:\HiveMind\library\target\module-lib\compile\commons-logging
  [copy] Copying C:\HiveMind\ext-package\lib\commons-logging-1.0.3.jar to C:\HiveMind\library\target\module-lib\compile\commons-logging\commons-logging-1.0.3.jar

-display-download-warning:
  [grabber] Downloading http://www.ibiblio.org/maven/groovy/jars/groovy-all-1.0-beta-7.jar to C:\HiveMind\ext-package\lib\groovy-all-1.0-beta-7.jar
  [mkdir] Created dir: C:\HiveMind\library\target\module-lib\compile\groovy-all
  [copy] Copying 1 file to C:\HiveMind\library\target\module-lib\compile\groovy-all
  [copy] Copying C:\HiveMind\ext-package\lib\groovy-all-1.0-beta-7.jar to C:\HiveMind\library\target\module-lib\compile\groovy-all\groovy-all-1.0-beta-7.jar

-display-download-warning:
  [mkdir] Created dir: C:\HiveMind\library\target\module-lib\test\log4j
  [copy] Copying 1 file to C:\HiveMind\library\target\module-lib\test\log4j
  [copy] Copying C:\HiveMind\ext-package\lib\log4j-1.2.7.jar to C:\HiveMind\library\target\module-lib\test\log4j\log4j-1.2.7.jar

-display-download-warning:
  [mkdir] Created dir: C:\HiveMind\library\target\module-lib\test\javassist
  [copy] Copying 1 file to C:\HiveMind\library\target\module-lib\test\javassist
  [copy] Copying C:\HiveMind\ext-package\lib\javassist-3.0-rc-1.jar to C:\HiveMind\library\target\module-lib\test\javassist\javassist-3.0-rc-1.jar

-display-download-warning:
  [mkdir] Created dir: C:\HiveMind\library\target\module-lib\test\servletapi
  [copy] Copying 1 file to C:\HiveMind\library\target\module-lib\test\servletapi
  [copy] Copying C:\HiveMind\ext-package\lib\servletapi-2.3.jar to C:\HiveMind\library\target\module-lib\test\servletapi\servletapi-2.3.jar

-display-download-warning:
  [mkdir] Created dir: C:\HiveMind\library\target\module-lib\test\oro
  [copy] Copying 1 file to C:\HiveMind\library\target\module-lib\test\oro
  [copy] Copying C:\HiveMind\ext-package\lib\oro-2.0.6.jar to C:\HiveMind\library\target\module-lib\test\oro\oro-2.0.6.jar

-display-download-warning:
  [mkdir] Created dir: C:\HiveMind\library\target\module-lib\test\easymock
  [copy] Copying 1 file to C:\HiveMind\library\target\module-lib\test\easymock
  [copy] Copying C:\HiveMind\ext-package\lib\easymock-1.1.jar to C:\HiveMind\library\target\module-lib\test\easymock\easymock-1.1.jar
  [mkdir] Created dir: C:\HiveMind\library\target\module-lib\compile\hivemind
  [copy] Copying 1 file to C:\HiveMind\library\target\module-lib\compile\hivemind
  [copy] Copying C:\HiveMind\target\hivemind-1.1-alpha-2-snapshot.jar to C:\HiveMind\library\target\module-lib\compile\hivemind\hivemind-1.1-alpha-2-snapshot.jar

-compile-init:
  [mkdir] Created dir: C:\HiveMind\library\target\generated-java
  [mkdir] Created dir: C:\HiveMind\library\target\classes
  [echo]
  [echo]
  [echo] *** Compiling Java sources to target/classes ...

  [echo]
  [javac] Compiling 52 source files to C:\HiveMind\library\target\classes
  [echo]
  [echo]
  [echo] *** Copying resources to target/classes ...

  [echo]
  [copy] Copying 5 files to C:\HiveMind\library\target\classes

compile-tests:

-display-download-warning:
  [mkdir] Created dir: C:\HiveMind\library\target\module-lib\test\junit
  [copy] Copying 1 file to C:\HiveMind\library\target\module-lib\test\junit
  [copy] Copying C:\HiveMind\ext-package\lib\junit-3.8.1.jar to C:\HiveMind\library\target\module-lib\test\junit\junit-3.8.1.jar

```



```
[mkdir] Created dir: C:\HiveMind\library\target\test-classes
[echo]
[echo]
[echo] *** Compiling tests to target/test-classes ...

[echo]
[javac] Compiling 46 source files to C:\HiveMind\library\target\test-classes
```

run-tests:

-install-junit:

```
[mkdir] Created dir: C:\HiveMind\library\target\junit-temp
[mkdir] Created dir: C:\HiveMind\library\target\junit-reports
[echo]
[echo]
[echo] *** Running unit tests ...
[echo]
[junit] Testsuite: hivemind.test.lib.TestDefaultImplementationBuilder
[junit] Tests run: 8, Failures: 0, Errors: 0, Time elapsed: 2.093 sec

[junit] Testsuite: hivemind.test.lib.TestEJBProxyFactory
[junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 1.332 sec

[junit] Testsuite: hivemind.test.lib.TestRemoteExceptionCoordinator
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.01 sec

[junit] Testsuite: hivemind.test.lib.TestSpringLookupFactory
[junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0.641 sec

[junit] Testsuite: hivemind.test.lib.TestSpringObjectProvider
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.551 sec

[junit] Testsuite: org.apache.hivemind.lib.adapter.TestAdapterRegistryFactory
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.37 sec

[junit] Testsuite: org.apache.hivemind.lib.chain.TestChainBuilder
[junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 1.302 sec

[junit] Testsuite: org.apache.hivemind.lib.factory.TestBeanFactoryImpl
[junit] Tests run: 12, Failures: 0, Errors: 0, Time elapsed: 0.561 sec

[junit] Testsuite: org.apache.hivemind.lib.factory.TestBeanFactoryObjectProvider
[junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0.08 sec

[junit] Testsuite: org.apache.hivemind.lib.groovy.TestGroovyModuleDescriptorProvider
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 2.253 sec

[junit] Testsuite: org.apache.hivemind.lib.groovy.TestHiveMindBuilder
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.131 sec

[junit] Testsuite: org.apache.hivemind.lib.impl.TestServicePropertyFactory
[junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.791 sec

[junit] Testsuite: org.apache.hivemind.lib.pipeline.TestBridgeBuilder
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.05 sec

[junit] Testsuite: org.apache.hivemind.lib.pipeline.TestFilterMethodAnalyzer
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.02 sec

[junit] Testsuite: org.apache.hivemind.lib.pipeline.TestPipelineAssembler
[junit] Tests run: 9, Failures: 0, Errors: 0, Time elapsed: 0.671 sec

[junit] Testsuite: org.apache.hivemind.lib.util.TestAdaptorRegistry
[junit] Tests run: 14, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
```

jar:

```
[echo]
[echo]
[echo] *** Packaging as ../target/hivemind-lib-1.1-alpha-2-snapshot.jar ...
```

```

[echo]
[jar] Building jar: C:\HiveMind\target\hivemind-lib-1.1-alpha-2-snapshot.jar
[copy] Copying 1 file to C:\HiveMind\ext-package\lib

install:
Trying to override old definition of task hivedoc-report

compile:

-display-download-warning:
[grabber] Downloading http://www.ibiblio.org/maven/geronimo-spec/jars/geronimo-spec-ejb-1.0-M1.jar to C:\HiveMind\ext-package\lib\geronimo-spec-ejb-1.0-M1.jar
[mkdir] Created dir: C:\HiveMind\examples\target\module-lib\compile\geronimo-spec-ejb
[copy] Copying 1 file to C:\HiveMind\examples\target\module-lib\compile\geronimo-spec-ejb
[copy] Copying C:\HiveMind\ext-package\lib\geronimo-spec-ejb-1.0-M1.jar to C:\HiveMind\examples\target\module-lib\compile\geronimo-spec-ejb\geronimo-spec-ejb-1.0-M1.jar

-display-download-warning:
[mkdir] Created dir: C:\HiveMind\examples\target\module-lib\compile\spring-full
[copy] Copying 1 file to C:\HiveMind\examples\target\module-lib\compile\spring-full
[copy] Copying C:\HiveMind\ext-package\lib\spring-full-1.0.1.jar to C:\HiveMind\examples\target\module-lib\compile\spring-full\spring-full-1.0.1.jar

-display-download-warning:
[mkdir] Created dir: C:\HiveMind\examples\target\module-lib\compile\commons-logging
[copy] Copying 1 file to C:\HiveMind\examples\target\module-lib\compile\commons-logging
[copy] Copying C:\HiveMind\ext-package\lib\commons-logging-1.0.3.jar to C:\HiveMind\examples\target\module-lib\compile\commons-logging\commons-logging-1.0.3.jar

-display-download-warning:
[mkdir] Created dir: C:\HiveMind\examples\target\module-lib\run\log4j
[copy] Copying 1 file to C:\HiveMind\examples\target\module-lib\run\log4j
[copy] Copying C:\HiveMind\ext-package\lib\log4j-1.2.7.jar to C:\HiveMind\examples\target\module-lib\run\log4j\log4j-1.2.7.jar

-display-download-warning:
[mkdir] Created dir: C:\HiveMind\examples\target\module-lib\run\javassist
[copy] Copying 1 file to C:\HiveMind\examples\target\module-lib\run\javassist
[copy] Copying C:\HiveMind\ext-package\lib\javassist-3.0-rc-1.jar to C:\HiveMind\examples\target\module-lib\run\javassist\javassist-3.0-rc-1.jar

-display-download-warning:
[mkdir] Created dir: C:\HiveMind\examples\target\module-lib\run\oro
[copy] Copying 1 file to C:\HiveMind\examples\target\module-lib\run\oro
[copy] Copying C:\HiveMind\ext-package\lib\oro-2.0.6.jar to C:\HiveMind\examples\target\module-lib\run\oro\oro-2.0.6.jar

-display-download-warning:
[mkdir] Created dir: C:\HiveMind\examples\target\module-lib\test\easyMock
[copy] Copying 1 file to C:\HiveMind\examples\target\module-lib\test\easyMock
[copy] Copying C:\HiveMind\ext-package\lib\easyMock-1.1.jar to C:\HiveMind\examples\target\module-lib\test\easyMock\easyMock-1.1.jar
[mkdir] Created dir: C:\HiveMind\examples\target\module-lib\compile\hivemind
[copy] Copying 1 file to C:\HiveMind\examples\target\module-lib\compile\hivemind
[copy] Copying C:\HiveMind\target\hivemind-1.1-alpha-2-snapshot.jar to C:\HiveMind\examples\target\module-lib\compile\hivemind\hivemind-1.1-alpha-2-snapshot.jar

-compile-init:
[mkdir] Created dir: C:\HiveMind\examples\target\generated-java
[mkdir] Created dir: C:\HiveMind\examples\target\classes
[echo]
[echo]
[echo] *** Compiling Java sources to target/classes ...

[echo]
[javac] Compiling 24 source files to C:\HiveMind\examples\target\classes
[echo]
[echo]
[echo] *** Copying resources to target/classes ...

```

```

[echo]

compile-tests:

-display-download-warning:
[mkdir] Created dir: C:\HiveMind\examples\target\module-lib\test\junit
[copy] Copying 1 file to C:\HiveMind\examples\target\module-lib\test\junit
[copy] Copying C:\HiveMind\ext-package\lib\junit-3.8.1.jar to C:\HiveMind\examples\target\module-
lib\test\junit\junit-3.8.1.jar
[mkdir] Created dir: C:\HiveMind\examples\target\test-classes
[echo]
[echo]
[echo] *** Compiling tests to target/test-classes ...

[echo]
[javac] Compiling 3 source files to C:\HiveMind\examples\target\test-classes

run-tests:

-install-junit:
[mkdir] Created dir: C:\HiveMind\examples\target\junit-temp
[mkdir] Created dir: C:\HiveMind\examples\target\junit-reports
[echo]
[echo]
[echo] *** Running unit tests ...
[echo]
[junit] Testsuite: com.panorama.startup.impl.TestExecuteStatic
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.49 sec

[junit] Testsuite: com.panorama.startup.impl.TestTaskExecutor
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.32 sec

jar:
[echo]
[echo]
[echo] *** Packaging as target/hivemind-examples-1.1-alpha-2-snapshot.jar .
..
[echo]
[jar] Building jar: C:\HiveMind\examples\target\hivemind-examples-1.1-alpha-2-snapshot.jar
[copy] Copying 1 file to C:\HiveMind\ext-package\lib

install:

BUILD SUCCESSFUL
Total time: 2 minutes 58 seconds

```

HiveMind is now built and you are ready to try out the Examples

IDE Configurations

Each IDE may require different modifications in order to build HiveMind from source.

Eclipse

The following steps were performed using Eclipse 3.1M4.

The main configuration change required to build HiveMind in Eclipse is to change the ANT_HOME variable in the Ant Runtime configuration. There are two ways to do this: Globally, and Individually. If you make the change Globally, it will apply to all Ant scripts run inside Eclipse. If done Individually, the same change will have to be made for every Ant script run in the HiveMind project.

To make the change Globally:

1. Click on Window -> Preferences -> Ant -> Runtime 2. Click on "Ant Home..." and select your Ant installation directory

To make the change on a single build file:

1. Right click on the top-level build.xml file and choose Run As -> Ant Build... 2. Select the "Classpath" tab 3. Click the "Ant Home..." button and change ANT_HOME to point to your installation of Ant (the default is Eclipse's Ant plugin)

There are two ways to build HiveMind:

1. Select the build.xml file in the root directory of the project. Right click and choose Run As -> Ant Build 2. Go to Window -> Show View -> Ant. Double click on the "install" target (default target indicated by blue text)

Note: After starting the build, you will be presented with a "Continue" prompt. You must type `continue` in this box before the build will proceed.

The following output will be displayed in the console:

```
Buildfile: C:\HiveMind\build.xml
install:
compile:
  [mkdir] Created dir: C:\HiveMind\ext-package\lib
-display-download-warning:
  [echo] *****
  [echo] *
  [echo] *                               D O W N L O A D   W A R N I N G
  [echo] *
  [echo] * Dependent libraries will be downloaded. These are NOT necessarily downloaded from apache.org, *
  [echo] * and may use other licences besides the Apache Software License. Dependencies will use an *
  [echo] * open-source license compatible with the ASL, such as Berkeley Software Distribution (BSD) or *
  [echo] * Mozilla Public License (MPL).
  [echo] *
  [echo] *****
  [mkdir] Created dir: C:\HiveMind\hivebuild\target\classes
  [javac] Compiling 1 source file to C:\HiveMind\hivebuild\target\classes
  [grabber] Downloading http://www.ibiblio.org/maven/commons-logging/jars/commons-logging-1.0.3.jar to C:
\HiveMind\ext-package\lib\commons-logging-1.0.3.jar
  [mkdir] Created dir: C:\HiveMind\framework\target\module-lib\compile\commons-logging
  [copy] Copying 1 file to C:\HiveMind\framework\target\module-lib\compile\commons-logging
  [copy] Copying C:\HiveMind\ext-package\lib\commons-logging-1.0.3.jar to C:
\HiveMind\framework\target\module-lib\compile\commons-logging\commons-logging-1.0.3.jar
-display-download-warning:
  [grabber] Downloading http://www.ibiblio.org/maven/javassist/jars/javassist-3.0-rc-1.jar to C:\HiveMind\ext-
package\lib\javassist-3.0-rc-1.jar
  [mkdir] Created dir: C:\HiveMind\framework\target\module-lib\compile\javassist
  [copy] Copying 1 file to C:\HiveMind\framework\target\module-lib\compile\javassist
  [copy] Copying C:\HiveMind\ext-package\lib\javassist-3.0-rc-1.jar to C:\HiveMind\framework\target\module-
lib\compile\javassist\javassist-3.0-rc-1.jar
-display-download-warning:
  [grabber] Downloading http://www.ibiblio.org/maven/servletapi/jars/servletapi-2.3.jar to C:\HiveMind\ext-
package\lib\servletapi-2.3.jar
  [mkdir] Created dir: C:\HiveMind\framework\target\module-lib\compile\servletapi
  [copy] Copying 1 file to C:\HiveMind\framework\target\module-lib\compile\servletapi
  [copy] Copying C:\HiveMind\ext-package\lib\servletapi-2.3.jar to C:\HiveMind\framework\target\module-
lib\compile\servletapi\servletapi-2.3.jar
-display-download-warning:
  [grabber] Downloading http://www.ibiblio.org/maven/oro/jars/oro-2.0.6.jar to C:\HiveMind\ext-package\lib\oro-
2.0.6.jar
  [mkdir] Created dir: C:\HiveMind\framework\target\module-lib\compile\oro
  [copy] Copying 1 file to C:\HiveMind\framework\target\module-lib\compile\oro
  [copy] Copying C:\HiveMind\ext-package\lib\oro-2.0.6.jar to C:\HiveMind\framework\target\module-
lib\compile\oro\oro-2.0.6.jar
-display-download-warning:
  [grabber] Downloading http://www.ibiblio.org/maven/log4j/jars/log4j-1.2.7.jar to C:\HiveMind\ext-
package\lib\log4j-1.2.7.jar
  [mkdir] Created dir: C:\HiveMind\framework\target\module-lib\compile\log4j
  [copy] Copying 1 file to C:\HiveMind\framework\target\module-lib\compile\log4j
  [copy] Copying C:\HiveMind\ext-package\lib\log4j-1.2.7.jar to C:\HiveMind\framework\target\module-
lib\compile\log4j\log4j-1.2.7.jar
-display-download-warning:
  [grabber] Downloading http://www.ibiblio.org/maven/easymock/jars/easymock-1.1.jar to C:\HiveMind\ext-
package\lib\easymock-1.1.jar
  [mkdir] Created dir: C:\HiveMind\framework\target\module-lib\compile\easymock
  [copy] Copying 1 file to C:\HiveMind\framework\target\module-lib\compile\easymock
  [copy] Copying C:\HiveMind\ext-package\lib\easymock-1.1.jar to C:\HiveMind\framework\target\module-
lib\compile\easymock\easymock-1.1.jar
-display-download-warning:
  [grabber] Downloading http://www.ibiblio.org/maven/easymock/jars/easymockclassexension-1.1.jar to C:
\HiveMind\ext-package\lib\easymockclassexension-1.1.jar
  [mkdir] Created dir: C:\HiveMind\framework\target\module-lib\compile\easymockclassexension
```

```

    [copy] Copying 1 file to C:\HiveMind\framework\target\module-lib\compile\easyMockClassExtension
    [copy] Copying C:\HiveMind\ext-package\lib\easyMockClassExtension-1.1.jar to C:
\HiveMind\framework\target\module-lib\compile\easyMockClassExtension\easyMockClassExtension-1.1.jar
-display-download-warning:
    [grabber] Downloading http://www.ibiblio.org/maven/cglib/jars/cglib-full-2.0.1.jar to C:\HiveMind\ext-
package\lib\cglib-full-2.0.1.jar
    [mkdir] Created dir: C:\HiveMind\framework\target\module-lib\compile\cglib-full
    [copy] Copying 1 file to C:\HiveMind\framework\target\module-lib\compile\cglib-full
    [copy] Copying C:\HiveMind\ext-package\lib\cglib-full-2.0.1.jar to C:\HiveMind\framework\target\module-
lib\compile\cglib-full\cglib-full-2.0.1.jar
-display-download-warning:
    [grabber] Downloading http://www.ibiblio.org/maven/junit/jars/junit-3.8.1.jar to C:\HiveMind\ext-
package\lib\junit-3.8.1.jar
    [mkdir] Created dir: C:\HiveMind\framework\target\module-lib\compile\junit
    [copy] Copying 1 file to C:\HiveMind\framework\target\module-lib\compile\junit
    [copy] Copying C:\HiveMind\ext-package\lib\junit-3.8.1.jar to C:\HiveMind\framework\target\module-
lib\compile\junit\junit-3.8.1.jar
-compile-init:
    [mkdir] Created dir: C:\HiveMind\framework\target\generated-java
    [mkdir] Created dir: C:\HiveMind\framework\target\classes
    [echo] *** Compiling Java sources to target/classes ...
    [javac] Compiling 263 source files to C:\HiveMind\framework\target\classes
    [javac] C:\HiveMind\framework\src\java\org\apache\hivemind\ant\ManifestClassPath.java:43: warning:
[deprecation] project in org.apache.tools.ant.ProjectComponent has been deprecated
    [javac] _classpath = new Path(project);
    [javac] ^
    [javac] C:\HiveMind\framework\src\java\org\apache\hivemind\ant\ManifestClassPath.java:119: warning:
[deprecation] project in org.apache.tools.ant.ProjectComponent has been deprecated
    [javac] project.setProperty(_property, buffer.toString());
    [javac] ^
    [javac] 2 warnings
    [echo] *** Copying resources to target/classes ...
    [copy] Copying 13 files to C:\HiveMind\framework\target\classes
compile-tests:
-display-download-warning:
    [mkdir] Created dir: C:\HiveMind\framework\target\test-classes
    [echo] *** Compiling tests to target/test-classes ...
    [javac] Compiling 186 source files to C:\HiveMind\framework\target\test-classes
run-tests:
-install-junit:
    [mkdir] Created dir: C:\HiveMind\framework\target\junit-temp
    [mkdir] Created dir: C:\HiveMind\framework\target\junit-reports
    [echo] *** Running unit tests ...
    [junit] Testsuite: hivemind.test.TestContains
    [junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 2.363 sec
    [junit] Testsuite: hivemind.test.TestDependency
    [junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0.681 sec
    [junit] Testsuite: hivemind.test.TestHiveMindFindLocation
    [junit] Tests run: 7, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
    [junit] Testsuite: hivemind.test.TestLocation
    [junit] Tests run: 11, Failures: 0, Errors: 0, Time elapsed: 0.02 sec
    [junit] Testsuite: hivemind.test.TestMessagesImpl
    [junit] Tests run: 10, Failures: 0, Errors: 0, Time elapsed: 0.04 sec
    [junit] Testsuite: hivemind.test.TestMisc
    [junit] Tests run: 8, Failures: 0, Errors: 0, Time elapsed: 0.06 sec
    [junit] Testsuite: hivemind.test.TestRegistryBuilder
    [junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0.711 sec
    [junit] Testsuite: hivemind.test.TestServicesByInterface
    [junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0.611 sec
    [junit] Testsuite: hivemind.test.TestSubModule
    [junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.421 sec
    [junit] Testsuite: hivemind.test.ant.TestConstructRegistry
    [junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.411 sec
    [junit] Testsuite: hivemind.test.ant.TestManifestClassPath
    [junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
    [junit] Testsuite: hivemind.test.config.TestConfigurationPoint
    [junit] Tests run: 22, Failures: 0, Errors: 0, Time elapsed: 3.214 sec
    [junit] Testsuite: hivemind.test.config.TestConversion
    [junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.982 sec
    [junit] Testsuite: hivemind.test.config.TestUniqueElementAttribute
    [junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0.47 sec

```

```
[junit] Testsuite: hivemind.test.impl.TestRegistryAssemblyImpl
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0 sec
[junit] Testsuite: hivemind.test.parse.TestDescriptorParser
[junit] Tests run: 29, Failures: 0, Errors: 0, Time elapsed: 0.221 sec
[junit] Testsuite: hivemind.test.parse.TestModuleDescriptor
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: hivemind.test.parse.TestToString
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.13 sec
[junit] Testsuite: hivemind.test.rules.TestBooleanTranslator
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: hivemind.test.rules.TestConfigurationTranslator
[junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0.481 sec
[junit] Testsuite: hivemind.test.rules.TestConvertInitializer
[junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0 sec
[junit] Testsuite: hivemind.test.rules.TestEnumerationTranslator
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: hivemind.test.rules.TestInvokeParentRule
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.18 sec
[junit] Testsuite: hivemind.test.rules.TestObjectTranslator
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.23 sec
[junit] Testsuite: hivemind.test.rules.TestPushAttributeRule
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.02 sec
[junit] Testsuite: hivemind.test.rules.TestServicePointTranslator
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0 sec
[junit] Testsuite: hivemind.test.rules.TestSetModule
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: hivemind.test.rules.TestSetPropertyRule
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.16 sec
[junit] Testsuite: hivemind.test.rules.TestSmartTranslator
[junit] Tests run: 9, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: hivemind.test.services.TestBuilderFactory
[junit] Tests run: 17, Failures: 0, Errors: 0, Time elapsed: 1.372 sec
[junit] Testsuite: hivemind.test.services.TestEagerLoader
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.711 sec
[junit] Testsuite: hivemind.test.services.TestEventLinker
[junit] Tests run: 7, Failures: 0, Errors: 0, Time elapsed: 0.21 sec
[junit] Testsuite: hivemind.test.services.TestMethodSignature
[junit] Tests run: 14, Failures: 0, Errors: 0, Time elapsed: 0.02 sec
[junit] Testsuite: hivemind.test.services.TestPooledServiceModel
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.35 sec
[junit] Testsuite: hivemind.test.services.TestServices
[junit] Tests run: 13, Failures: 0, Errors: 0, Time elapsed: 2.263 sec
[junit] Testsuite: hivemind.test.services.TestShutdown
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.792 sec
[junit] Testsuite: hivemind.test.services.TestStartup
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.16 sec
[junit] Testsuite: hivemind.test.services.TestThreadEventNotifier
[junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: hivemind.test.services.TestThreadLocalStorage
[junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: hivemind.test.services.TestThreadedModel
[junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0.741 sec
[junit] Testsuite: org.apache.hivemind.TestApplicationRuntimeException
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.TestDefense
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0 sec
[junit] Testsuite: org.apache.hivemind.TestOccurrences
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0 sec
[junit] Testsuite: org.apache.hivemind.conditional.TestEvaluationContext
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.11 sec
[junit] Testsuite: org.apache.hivemind.conditional.TestEvaluators
[junit] Tests run: 9, Failures: 0, Errors: 0, Time elapsed: 0.02 sec
[junit] Testsuite: org.apache.hivemind.conditional.TestLexer
[junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.conditional.TestNode
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0 sec
[junit] Testsuite: org.apache.hivemind.conditional.TestParser
[junit] Tests run: 9, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.conditional.TestToken
[junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.impl.TestErrorHandler
```

[junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0 sec
[junit] Testsuite: org.apache.hivemind.impl.TestInvokeFactoryServiceConstructor
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.impl.TestJavaTypeUtils
[junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.impl.TestMethodIterator
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.impl.TestModule
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.impl.TestRegistryInfrastructure
[junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.impl.TestRegistryInfrastructureConstructor
[junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.impl.TestSchemaProcessor
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.26 sec
[junit] Testsuite: org.apache.hivemind.impl.TestServiceModelThreading
[junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0.832 sec
[junit] Testsuite: org.apache.hivemind.impl.TestServicePoint
[junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.impl.TestSymbolExpander
[junit] Tests run: 10, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.impl.TestTranslatorManager
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.impl.TestVisibility
[junit] Tests run: 9, Failures: 0, Errors: 0, Time elapsed: 0.14 sec
[junit] Testsuite: org.apache.hivemind.internal.ser.TestServiceSerializationHelper
[junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.19 sec
[junit] Testsuite: org.apache.hivemind.methodmatch.TestMethodFilters
[junit] Tests run: 11, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.methodmatch.TestMethodMatcher
[junit] Tests run: 7, Failures: 0, Errors: 0, Time elapsed: 0.02 sec
[junit] Testsuite: org.apache.hivemind.methodmatch.TestMethodPatternParser
[junit] Tests run: 12, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.order.TestOrderer
[junit] Tests run: 14, Failures: 0, Errors: 0, Time elapsed: 0.02 sec
[junit] Testsuite: org.apache.hivemind.schema.rules.TestIdTranslators
[junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.schema.rules.TestNumericTranslators
[junit] Tests run: 18, Failures: 0, Errors: 0, Time elapsed: 0.08 sec
[junit] Testsuite: org.apache.hivemind.service.impl.TestBuilderFactory
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.service.impl.TestClassFab
[junit] Tests run: 18, Failures: 0, Errors: 0, Time elapsed: 0.08 sec
[junit] Testsuite: org.apache.hivemind.service.impl.TestClassFabUtils
[junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.service.impl.TestLoggingInterceptorFactory
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.02 sec
[junit] Testsuite: org.apache.hivemind.service.impl.TestObjectProviders
[junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.service.impl.TestObjectTranslator
[junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.servlet.TestHiveMindFilter
[junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.701 sec
[junit] Testsuite: org.apache.hivemind.test.TestAggregateArgumentsMatcher
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.test.TestArrayMatcher
[junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0 sec
[junit] Testsuite: org.apache.hivemind.test.TestMockClass
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.36 sec
[junit] Testsuite: org.apache.hivemind.test.TestRegexpMatcher
[junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.util.TestBodyBuilder
[junit] Tests run: 11, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.util.TestClasspathResource
[junit] Tests run: 12, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.util.TestConstructorUtils
[junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.util.TestContextResource
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.util.TestEventListenerList
[junit] Tests run: 7, Failures: 0, Errors: 0, Time elapsed: 0 sec

```

[junit] Testsuite: org.apache.hivemind.util.TestFileResource
[junit] Tests run: 8, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.util.TestIdUtils
[junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.util.TestLocalizedContextResourceFinder
[junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0 sec
[junit] Testsuite: org.apache.hivemind.util.TestLocalizedNameGenerator
[junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.16 sec
[junit] Testsuite: org.apache.hivemind.util.TestPropertyUtils
[junit] Tests run: 15, Failures: 0, Errors: 0, Time elapsed: 0.07 sec
[junit] Testsuite: org.apache.hivemind.util.TestShutdownCoordinator
[junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0.251 sec
[junit] Testsuite: org.apache.hivemind.util.TestStringUtils
[junit] Tests run: 11, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
[junit] Testsuite: org.apache.hivemind.util.TestToStringBuilder
[junit] Tests run: 13, Failures: 0, Errors: 0, Time elapsed: 0 sec
jar:
[mkdir] Created dir: C:\HiveMind\target
[echo] *** Packaging as ../target/hivemind-1.1-alpha-2-snapshot.jar ...
[jar] Building jar: C:\HiveMind\target\hivemind-1.1-alpha-2-snapshot.jar
[copy] Copying 1 file to C:\HiveMind\ext-package\lib
install:
compile:
-display-download-warning:
[grabber] Downloading http://www.ibiblio.org/maven/jboss/jars/jboss-j2ee-3.2.1.jar to C:\HiveMind\ext-
package\lib\jboss-j2ee-3.2.1.jar
[mkdir] Created dir: C:\HiveMind\library\target\module-lib\compile\jboss-j2ee
[copy] Copying 1 file to C:\HiveMind\library\target\module-lib\compile\jboss-j2ee
[copy] Copying C:\HiveMind\ext-package\lib\jboss-j2ee-3.2.1.jar to C:\HiveMind\library\target\module-
lib\compile\jboss-j2ee\jboss-j2ee-3.2.1.jar
-display-download-warning:
[grabber] Downloading http://www.ibiblio.org/maven/springframework/jars/spring-full-1.0.1.jar to C:
\HiveMind\ext-package\lib\spring-full-1.0.1.jar
[mkdir] Created dir: C:\HiveMind\library\target\module-lib\compile\spring-full
[copy] Copying 1 file to C:\HiveMind\library\target\module-lib\compile\spring-full
[copy] Copying C:\HiveMind\ext-package\lib\spring-full-1.0.1.jar to C:\HiveMind\library\target\module-
lib\compile\spring-full\spring-full-1.0.1.jar
-display-download-warning:
[mkdir] Created dir: C:\HiveMind\library\target\module-lib\compile\commons-logging
[copy] Copying 1 file to C:\HiveMind\library\target\module-lib\compile\commons-logging
[copy] Copying C:\HiveMind\ext-package\lib\commons-logging-1.0.3.jar to C:\HiveMind\library\target\module-
lib\compile\commons-logging\commons-logging-1.0.3.jar
-display-download-warning:
[grabber] Downloading http://www.ibiblio.org/maven/groovy/jars/groovy-all-1.0-beta-9.jar to C:\HiveMind\ext-
package\lib\groovy-all-1.0-beta-9.jar
[mkdir] Created dir: C:\HiveMind\library\target\module-lib\compile\groovy-all
[copy] Copying 1 file to C:\HiveMind\library\target\module-lib\compile\groovy-all
[copy] Copying C:\HiveMind\ext-package\lib\groovy-all-1.0-beta-9.jar to C:\HiveMind\library\target\module-
lib\compile\groovy-all\groovy-all-1.0-beta-9.jar
-display-download-warning:
[mkdir] Created dir: C:\HiveMind\library\target\module-lib\test\log4j
[copy] Copying 1 file to C:\HiveMind\library\target\module-lib\test\log4j
[copy] Copying C:\HiveMind\ext-package\lib\log4j-1.2.7.jar to C:\HiveMind\library\target\module-
lib\test\log4j\log4j-1.2.7.jar
-display-download-warning:
[mkdir] Created dir: C:\HiveMind\library\target\module-lib\test\javassist
[copy] Copying 1 file to C:\HiveMind\library\target\module-lib\test\javassist
[copy] Copying C:\HiveMind\ext-package\lib\javassist-3.0-rc-1.jar to C:\HiveMind\library\target\module-
lib\test\javassist\javassist-3.0-rc-1.jar
-display-download-warning:
[mkdir] Created dir: C:\HiveMind\library\target\module-lib\test\servletapi
[copy] Copying 1 file to C:\HiveMind\library\target\module-lib\test\servletapi
[copy] Copying C:\HiveMind\ext-package\lib\servletapi-2.3.jar to C:\HiveMind\library\target\module-
lib\test\servletapi\servletapi-2.3.jar
-display-download-warning:
[mkdir] Created dir: C:\HiveMind\library\target\module-lib\test\oro
[copy] Copying 1 file to C:\HiveMind\library\target\module-lib\test\oro
[copy] Copying C:\HiveMind\ext-package\lib\oro-2.0.6.jar to C:\HiveMind\library\target\module-
lib\test\oro\oro-2.0.6.jar
-display-download-warning:
[mkdir] Created dir: C:\HiveMind\library\target\module-lib\test\easymock

```



```

    [copy] Copying 1 file to C:\HiveMind\library\target\module-lib\test\easymock
    [copy] Copying C:\HiveMind\ext-package\lib\easymock-1.1.jar to C:\HiveMind\library\target\module-
lib\test\easymock\easymock-1.1.jar
    [mkdir] Created dir: C:\HiveMind\library\target\module-lib\compile\hivemind
    [copy] Copying 1 file to C:\HiveMind\library\target\module-lib\compile\hivemind
    [copy] Copying C:\HiveMind\target\hivemind-1.1-alpha-2-snapshot.jar to C:\HiveMind\library\target\module-
lib\compile\hivemind\hivemind-1.1-alpha-2-snapshot.jar
-compile-init:
    [mkdir] Created dir: C:\HiveMind\library\target\generated-java
    [mkdir] Created dir: C:\HiveMind\library\target\classes
    [echo] *** Compiling Java sources to target/classes ...
    [javac] Compiling 52 source files to C:\HiveMind\library\target\classes
    [echo] *** Copying resources to target/classes ...
    [copy] Copying 5 files to C:\HiveMind\library\target\classes
compile-tests:
-display-download-warning:
    [mkdir] Created dir: C:\HiveMind\library\target\module-lib\test\junit
    [copy] Copying 1 file to C:\HiveMind\library\target\module-lib\test\junit
    [copy] Copying C:\HiveMind\ext-package\lib\junit-3.8.1.jar to C:\HiveMind\library\target\module-
lib\test\junit\junit-3.8.1.jar
    [mkdir] Created dir: C:\HiveMind\library\target\test-classes
    [echo] *** Compiling tests to target/test-classes ...
    [javac] Compiling 46 source files to C:\HiveMind\library\target\test-classes
run-tests:
-install-junit:
    [mkdir] Created dir: C:\HiveMind\library\target\junit-temp
    [mkdir] Created dir: C:\HiveMind\library\target\junit-reports
    [echo] *** Running unit tests ...
    [junit] Testsuite: hivemind.test.lib.TestDefaultImplementationBuilder
    [junit] Tests run: 8, Failures: 0, Errors: 0, Time elapsed: 2.043 sec
    [junit] Testsuite: hivemind.test.lib.TestEJBProxyFactory
    [junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 1.332 sec
    [junit] Testsuite: hivemind.test.lib.TestRemoteExceptionCoordinator
    [junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.07 sec
    [junit] Testsuite: hivemind.test.lib.TestSpringLookupFactory
    [junit] Tests run: 3, Failures: 0, Errors: 0, Time elapsed: 0.551 sec
    [junit] Testsuite: hivemind.test.lib.TestSpringObjectProvider
    [junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.54 sec
    [junit] Testsuite: org.apache.hivemind.lib.adapter.TestAdapterRegistryFactory
    [junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.361 sec
    [junit] Testsuite: org.apache.hivemind.lib.chain.TestChainBuilder
    [junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.961 sec
    [junit] Testsuite: org.apache.hivemind.lib.factory.TestBeanFactoryImpl
    [junit] Tests run: 12, Failures: 0, Errors: 0, Time elapsed: 0.321 sec
    [junit] Testsuite: org.apache.hivemind.lib.factory.TestBeanFactoryObjectProvider
    [junit] Tests run: 4, Failures: 0, Errors: 0, Time elapsed: 0.02 sec
    [junit] Testsuite: org.apache.hivemind.lib.groovy.TestGroovyModuleDescriptorProvider
    [junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 1.692 sec
    [junit] Testsuite: org.apache.hivemind.lib.groovy.TestHiveMindBuilder
    [junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.061 sec
    [junit] Testsuite: org.apache.hivemind.lib.impl.TestServicePropertyFactory
    [junit] Tests run: 6, Failures: 0, Errors: 0, Time elapsed: 0.781 sec
    [junit] Testsuite: org.apache.hivemind.lib.pipeline.TestBridgeBuilder
    [junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0.05 sec
    [junit] Testsuite: org.apache.hivemind.lib.pipeline.TestFilterMethodAnalyzer
    [junit] Tests run: 5, Failures: 0, Errors: 0, Time elapsed: 0 sec
    [junit] Testsuite: org.apache.hivemind.lib.pipeline.TestPipelineAssembler
    [junit] Tests run: 9, Failures: 0, Errors: 0, Time elapsed: 0.691 sec
    [junit] Testsuite: org.apache.hivemind.lib.util.TestAdaptorRegistry
    [junit] Tests run: 14, Failures: 0, Errors: 0, Time elapsed: 0.01 sec
jar:
    [echo] *** Packaging as ../target/hivemind-lib-1.1-alpha-2-snapshot.jar ...
    [jar] Building jar: C:\HiveMind\target\hivemind-lib-1.1-alpha-2-snapshot.jar
    [copy] Copying 1 file to C:\HiveMind\ext-package\lib
install:
Trying to override old definition of task hivedoc-report
compile:
-display-download-warning:
    [grabber] Downloading http://www.ibiblio.org/maven/geronimo-spec/jars/geronimo-spec-ejb-1.0-M1.jar to C:
\HiveMind\ext-package\lib\geronimo-spec-ejb-1.0-M1.jar
    [mkdir] Created dir: C:\HiveMind\examples\target\module-lib\compile\geronimo-spec-ejb

```

```

    [copy] Copying 1 file to C:\HiveMind\examples\target\module-lib\compile\geronimo-spec-ejb
    [copy] Copying C:\HiveMind\ext-package\lib\geronimo-spec-ejb-1.0-M1.jar to C:
\HiveMind\examples\target\module-lib\compile\geronimo-spec-ejb\geronimo-spec-ejb-1.0-M1.jar
-display-download-warning:
    [mkdir] Created dir: C:\HiveMind\examples\target\module-lib\compile\spring-full
    [copy] Copying 1 file to C:\HiveMind\examples\target\module-lib\compile\spring-full
    [copy] Copying C:\HiveMind\ext-package\lib\spring-full-1.0.1.jar to C:\HiveMind\examples\target\module-
lib\compile\spring-full\spring-full-1.0.1.jar
-display-download-warning:
    [mkdir] Created dir: C:\HiveMind\examples\target\module-lib\compile\commons-logging
    [copy] Copying 1 file to C:\HiveMind\examples\target\module-lib\compile\commons-logging
    [copy] Copying C:\HiveMind\ext-package\lib\commons-logging-1.0.3.jar to C:\HiveMind\examples\target\module-
lib\compile\commons-logging\commons-logging-1.0.3.jar
-display-download-warning:
    [mkdir] Created dir: C:\HiveMind\examples\target\module-lib\run\log4j
    [copy] Copying 1 file to C:\HiveMind\examples\target\module-lib\run\log4j
    [copy] Copying C:\HiveMind\ext-package\lib\log4j-1.2.7.jar to C:\HiveMind\examples\target\module-
lib\run\log4j\log4j-1.2.7.jar
-display-download-warning:
    [mkdir] Created dir: C:\HiveMind\examples\target\module-lib\run\javassist
    [copy] Copying 1 file to C:\HiveMind\examples\target\module-lib\run\javassist
    [copy] Copying C:\HiveMind\ext-package\lib\javassist-3.0-rc-1.jar to C:\HiveMind\examples\target\module-
lib\run\javassist\javassist-3.0-rc-1.jar
-display-download-warning:
    [mkdir] Created dir: C:\HiveMind\examples\target\module-lib\run\oro
    [copy] Copying 1 file to C:\HiveMind\examples\target\module-lib\run\oro
    [copy] Copying C:\HiveMind\ext-package\lib\oro-2.0.6.jar to C:\HiveMind\examples\target\module-
lib\run\oro\oro-2.0.6.jar
-display-download-warning:
    [mkdir] Created dir: C:\HiveMind\examples\target\module-lib\test\easymock
    [copy] Copying 1 file to C:\HiveMind\examples\target\module-lib\test\easymock
    [copy] Copying C:\HiveMind\ext-package\lib\easymock-1.1.jar to C:\HiveMind\examples\target\module-
lib\test\easymock\easymock-1.1.jar
    [mkdir] Created dir: C:\HiveMind\examples\target\module-lib\compile\hivemind
    [copy] Copying 1 file to C:\HiveMind\examples\target\module-lib\compile\hivemind
    [copy] Copying C:\HiveMind\target\hivemind-1.1-alpha-2-snapshot.jar to C:\HiveMind\examples\target\module-
lib\compile\hivemind\hivemind-1.1-alpha-2-snapshot.jar
-compile-init:
    [mkdir] Created dir: C:\HiveMind\examples\target\generated-java
    [mkdir] Created dir: C:\HiveMind\examples\target\classes
    [echo] *** Compiling Java sources to target/classes ...
    [javac] Compiling 24 source files to C:\HiveMind\examples\target\classes
    [echo] *** Copying resources to target/classes ...
compile-tests:
-display-download-warning:
    [mkdir] Created dir: C:\HiveMind\examples\target\module-lib\test\junit
    [copy] Copying 1 file to C:\HiveMind\examples\target\module-lib\test\junit
    [copy] Copying C:\HiveMind\ext-package\lib\junit-3.8.1.jar to C:\HiveMind\examples\target\module-
lib\test\junit\junit-3.8.1.jar
    [mkdir] Created dir: C:\HiveMind\examples\target\test-classes
    [echo] *** Compiling tests to target/test-classes ...
    [javac] Compiling 3 source files to C:\HiveMind\examples\target\test-classes
run-tests:
-install-junit:
    [mkdir] Created dir: C:\HiveMind\examples\target\junit-temp
    [mkdir] Created dir: C:\HiveMind\examples\target\junit-reports
    [echo] *** Running unit tests ...
    [junit] Testsuite: com.panorama.startup.impl.TestExecuteStatic
    [junit] Tests run: 1, Failures: 0, Errors: 0, Time elapsed: 0.461 sec
    [junit] Testsuite: com.panorama.startup.impl.TestTaskExecutor
    [junit] Tests run: 2, Failures: 0, Errors: 0, Time elapsed: 0.241 sec
jar:
    [echo] *** Packaging as target/hivemind-examples-1.1-alpha-2-snapshot.jar ...
    [jar] Building jar: C:\HiveMind\examples\target\hivemind-examples-1.1-alpha-2-snapshot.jar
    [copy] Copying 1 file to C:\HiveMind\ext-package\lib
install:
BUILD SUCCESSFUL
Total time: 3 minutes 39 seconds

```

Examples

The examples that come bundled with the HiveMind source are in the examples subdirectory and may be run via Ant.

Calculator

Run the run-calculator target

The following output will be displayed:

```
Buildfile: C:\HiveMind\examples\build.xml
run-calculator:
  [java] Calculator [DEBUG] Creating SingletonProxy for service examples.Calculator
  [java] Inputs:    28.0 and 4.75
  [java] Calculator [DEBUG] Constructing core service implementation for service examples.Calculator
  [java] Subtractor [DEBUG] Creating SingletonProxy for service examples.Subtractor
  [java] Calculator [DEBUG] Autowired service property subtracter to <SingletonProxy for examples.Subtractor
(org.apache.hivemind.examples.Subtractor)>
  [java] Divider [DEBUG] Creating SingletonProxy for service examples.Divider
  [java] Calculator [DEBUG] Autowired service property divider to <SingletonProxy for examples.Divider(org.
apache.hivemind.examples.Divider)>
  [java] Multiplier [DEBUG] Creating SingletonProxy for service examples.Multiplier
  [java] Calculator [DEBUG] Autowired service property multiplier to <SingletonProxy for examples.Multiplier
(org.apache.hivemind.examples.Multiplier)>
  [java] Adder [DEBUG] Creating SingletonProxy for service examples.Adder
  [java] Calculator [DEBUG] Autowired service property adder to <SingletonProxy for examples.Adder(org.
apache.hivemind.examples.Adder)>
  [java] Calculator [DEBUG] Applying interceptor factory hivemind.LoggingInterceptor
  [java] Calculator [DEBUG] BEGIN add(28.0, 4.75)
  [java] Adder [DEBUG] Constructing core service implementation for service examples.Adder
  [java] Adder [DEBUG] Applying interceptor factory hivemind.LoggingInterceptor
  [java] Adder [DEBUG] BEGIN add(28.0, 4.75)
  [java] Adder [DEBUG] END add() [32.75]
  [java] Calculator [DEBUG] END add() [32.75]
  [java] Add:      32.75
  [java] Calculator [DEBUG] BEGIN subtract(28.0, 4.75)
  [java] Subtractor [DEBUG] Constructing core service implementation for service examples.Subtractor
  [java] Subtractor [DEBUG] Applying interceptor factory hivemind.LoggingInterceptor
  [java] Subtractor [DEBUG] BEGIN subtract(28.0, 4.75)
  [java] Subtractor [DEBUG] END subtract() [23.25]
  [java] Calculator [DEBUG] END subtract() [23.25]
  [java] Subtract: 23.25
  [java] Calculator [DEBUG] BEGIN multiply(28.0, 4.75)
  [java] Multiplier [DEBUG] Constructing core service implementation for service examples.Multiplier
  [java] Multiplier [DEBUG] Applying interceptor factory hivemind.LoggingInterceptor
  [java] Multiplier [DEBUG] BEGIN multiply(28.0, 4.75)
  [java] Multiplier [DEBUG] END multiply() [133.0]
  [java] Calculator [DEBUG] END multiply() [133.0]
  [java] Multiply: 133.0
  [java] Calculator [DEBUG] BEGIN divide(28.0, 4.75)
  [java] Divider [DEBUG] Constructing core service implementation for service examples.Divider
  [java] Divider [DEBUG] Applying interceptor factory hivemind.LoggingInterceptor
  [java] Divider [DEBUG] BEGIN divide(28.0, 4.75)
  [java] Divider [DEBUG] END divide() [5.894736842105263]
  [java] Calculator [DEBUG] END divide() [5.894736842105263]
  [java] Divide:   5.894736842105263
BUILD SUCCESSFUL
Total time: 4 seconds
```

Logging

Run the run-logging target

Note: This is the logging example and as such has an example of logging an exception. The exception reported in the exceptionThrower() represents a GOOD run.

The following output will be displayed:

```

Buildfile: C:\HiveMind\examples\build.xml
run-logging:
  [java] Target [DEBUG] Creating SingletonProxy for service examples.Target
  [java] *** Void method (no return value):
  [java] Target [DEBUG] Constructing core service implementation for service examples.Target
  [java] Target [DEBUG] Applying interceptor factory examples.ProxyLoggingInterceptor
  [java] ProxyLoggingInterceptor [DEBUG] Creating SingletonProxy for service examples.ProxyLoggingInterceptor
  [java] ProxyLoggingInterceptor [DEBUG] Constructing core service implementation for service examples.
ProxyLoggingInterceptor
  [java] Target [DEBUG] BEGIN voidMethod(Hello)
  [java] Target [DEBUG] END voidMethod()
  [java] *** Ordinary method (returns a List):
  [java] Target [DEBUG] BEGIN buildList(HiveMind, 4)
  [java] Target [DEBUG] END buildList() [[HiveMind, HiveMind, HiveMind, HiveMind]]
  [java] *** Exception method (throws an exception):
  [java] Target [DEBUG] BEGIN exceptionThrower()
  [java] Target [DEBUG] EXCEPTION exceptionThrower() -- org.apache.hivemind.ApplicationRuntimeException
  [java] org.apache.hivemind.ApplicationRuntimeException: Some application exception.
  [java] at org.apache.hivemind.examples.impl.TargetServiceImpl.exceptionThrower(TargetServiceImpl.java:49)
  [java] at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
  [java] at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:39)
  [java] at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:25)
  [java] at java.lang.reflect.Method.invoke(Method.java:585)
  [java] at org.apache.hivemind.examples.impl.ProxyLoggingInvocationHandler.invoke
(PProxyLoggingInvocationHandler.java:52)
  [java] at $Proxy0.exceptionThrower(Unknown Source)
  [java] at $TargetService_101d08a6f55.exceptionThrower($TargetService_101d08a6f55.java)
  [java] at org.apache.hivemind.examples.LoggingMain.main(LoggingMain.java:41)
  [java] at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
  [java] at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:39)
  [java] at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:25)
  [java] at java.lang.reflect.Method.invoke(Method.java:585)
  [java] at org.apache.tools.ant.taskdefs.ExecuteJava.run(ExecuteJava.java:193)
  [java] at org.apache.tools.ant.taskdefs.ExecuteJava.execute(ExecuteJava.java:130)
  [java] at org.apache.tools.ant.taskdefs.Java.run(Java.java:705)
  [java] at org.apache.tools.ant.taskdefs.Java.executeJava(Java.java:177)
  [java] at org.apache.tools.ant.taskdefs.Java.execute(Java.java:83)
  [java] at org.apache.tools.ant.UnknownElement.execute(UnknownElement.java:275)
  [java] at org.apache.tools.ant.Task.perform(Task.java:364)
  [java] at org.apache.tools.ant.Target.execute(Target.java:341)
  [java] at org.apache.tools.ant.Target.performTasks(Target.java:369)
  [java] at org.apache.tools.ant.Project.executeTarget(Project.java:1214)
  [java] at org.apache.tools.ant.Project.executeTargets(Project.java:1062)
  [java] at org.eclipse.ant.internal.ui.antsupport.InternalAntRunner.run(InternalAntRunner.java:387)
  [java] at org.eclipse.ant.internal.ui.antsupport.InternalAntRunner.main(InternalAntRunner.java:136)
BUILD SUCCESSFUL
Total time: 3 seconds

```

Panorama

Run the run-panorama target

The following output will be displayed:

Buildfile: C:\HiveMind\examples\build.xml

run-panorama:

```
[java] Startup [DEBUG] Creating SingletonProxy for service panorama.startup.Startup
[java] Startup [DEBUG] Constructing core service implementation for service panorama.startup.Startup
[java] Startup [DEBUG] Autowired property messages to org.apache.hivemind.impl.MessagesImpl@1682598
[java] Startup [DEBUG] Autowired property log to org.apache.commons.logging.impl.Log4JLogger@7c3885
[java] Startup [DEBUG] Autowired property errorLog to org.apache.hivemind.impl.ErrorLogImpl@162e295
[java] Startup [DEBUG] Set property tasks to <Element List Proxy for panorama.startup.Startup>
[java] MailStartup [DEBUG] Creating SingletonProxy for service panorama.mail.MailStartup
[java] Startup [INFO] Executing task Mail.
[java] MailStartup [DEBUG] Constructing core service implementation for service panorama.mail.MailStartup
[java] MailStartup invoked.
[java] Startup [INFO] Executing task Discussions.
[java] DiscussionsStartup invoked.
[java] Startup [INFO] Executed 2 tasks (in 2 milliseconds).
```

BUILD SUCCESSFUL

Total time: 3 seconds