

# Componentization

## Class library componentization

The class library API can be split-up into groups of packages that form 'functional units'. Each of these functional units (components) has predominantly public API dependencies between them. Of course, there will be a number of implementation packages required too to support the public APIs. There is a 'special' set of KERNEL classes that are VM-specific. The others are common across VM implementation by using Java, JNI, and native OS calls directly.

### APPLET

- `java.applet`

### AUTH

- `javax.security.auth`
- `javax.security.auth.callback`
- `javax.security.auth.kerberos`
- `javax.security.auth.login`
- `javax.security.auth.spi`
- `javax.security.auth.x500`
- `javax.security.sasl`
- `org.ietf.jgss`

### AWT

- `java.awt`
- `java.awt.color`
- `java.awt.datatransfer`
- `java.awt.dnd`
- `java.awt.event`
- `java.awt.font`
- `java.awt.geom`
- `java.awt.im`
- `java.awt.im.spi`
- `java.awt.image`
- `java.awt.image.renderable`
- `java.awt.print`

### BEANS

- `java.beans`
- `java.beans.beancontext`

### LUNI

- `java.io`
- `java.lang` (some classes in KERNEL)
- `java.lang.ref` (some classes in KERNEL)
- `java.lang.reflect` (some classes in KERNEL)
- `java.net`
- `java.util`

### ANNOTATION

- `java.lang.annotation`

### INSTRUMENT

- `java.lang.instrument`

### LANG-MANAGEMENT

- `java.lang.management`

### MATH

- `java.math`

## NIO-CHANNELS

- `java.nio`
- `java.nio.channels`
- `java.nio.channels.spi`

## NIO-CHARSET

- `java.nio.charset`
- `java.nio.charset.spi`

## RMI

- `java.rmi`
- `java.rmi.activation`
- `java.rmi.dgc`
- `java.rmi.registry`
- `java.rmi.server`

## SECURITY

- `java.security` (some classes in KERNEL)
- `java.security.acl`
- `java.security.cert`
- `java.security.interfaces`
- `java.security.spec`
- `javax.security.cert`

## SQL

- `java.sql`
- `javax.sql`
- `javax.sql.rowset`
- `javax.sql.rowset.serial`
- `javax.sql.rowset.spi`

## TEXT

- `java.text`

## CONCURRENT

- `java.util.concurrent` (some classes in KERNEL)
- `java.util.concurrent.atomic` (some classes in KERNEL)
- `java.util.concurrent.locks` (some classes in KERNEL)

## ARCHIVE

- `java.util.jar`
- `java.util.zip`

## LOGGING

- `java.util.logging`

## PREFS

- `java.util.prefs`

## REGEX

- `java.util.regex`

## ACCESSIBILITY

- javax.accessibility

## CRYPTO

- javax.crypto
- javax.crypto.interfaces
- javax.crypto.spec

## IMAGEIO

- javax.imageio
- javax.imageio.event
- javax.imageio.metadata
- javax.imageio.plugins.bmp
- javax.imageio.plugins.jpeg
- javax.imageio.spi
- javax.imageio.stream

## JMX

- javax.management
- javax.management.loading
- javax.management.modelmbean
- javax.management.monitor
- javax.management.openmbean
- javax.management.relation
- javax.management.remote
- javax.management.remote.rmi
- javax.management.timer

## JNDI

- javax.naming
- javax.naming.directory
- javax.naming.event
- javax.naming.ldap
- javax.naming.spi

## X-NET

- javax.net
- javax.net.ssl

## PRINT

- javax.print
- javax.print.attribute
- javax.print.attribute.standard
- javax.print.event

## SOUND

- javax.sound.midi
- javax.sound.midi.spi
- javax.sound.sampled
- javax.sound.sampled.spi

## SWING

- javax.swing
- javax.swing.border
- javax.swing.colorchooser
- javax.swing.event
- javax.swing.filechooser
- javax.swing.plaf
- javax.swing.plaf.basic
- javax.swing.plaf.metal

- javax.swing.plaf.multi
- javax.swing.plaf.synth
- javax.swing.table
- javax.swing.text
- javax.swing.text.html
- javax.swing.text.html.parser
- javax.swing.text.rtf
- javax.swing.tree
- javax.swing.undo

## XML

- javax.xml
- javax.xml.datatype
- javax.xml.namespace
- javax.xml.parsers
- javax.xml.transform
- javax.xml.transform.dom
- javax.xml.transform.sax
- javax.xml.transform.stream
- javax.xml.validation
- javax.xml.xpath
- org.w3c.dom
- org.w3c.dom.bootstrap
- org.w3c.dom.events
- org.w3c.dom.ls
- org.xml.sax
- org.xml.sax.ext
- org.xml.sax.helpers

## ORB

- javax.activity
- javax.rmi
- javax.rmi.CORBA
- javax.rmi.ssl
- javax.transaction
- javax.transaction.xa
- org.omg.CORBA
- org.omg.CORBA\_2\_3
- org.omg.CORBA\_2\_3.portable
- org.omg.CORBA.DynAnyPackage
- org.omg.CORBA.ORBPackage
- org.omg.CORBA.portable
- org.omg.CORBA.TypeCodePackage
- org.omg.CosNaming
- org.omg.CosNaming.NamingContextExtPackage
- org.omg.CosNaming.NamingContextPackage
- org.omg.Dynamic
- org.omg.DynamicAny
- org.omg.DynamicAny.DynAnyFactoryPackage
- org.omg.DynamicAny.DynAnyPackage
- org.omg.IOP
- org.omg.IOP.CodecFactoryPackage
- org.omg.IOP.CodecPackage
- org.omg.Messaging
- org.omg.PortableInterceptor
- org.omg.PortableInterceptor.ORBInitInfoPackage
- org.omg.PortableServer
- org.omg.PortableServer.CurrentPackage
- org.omg.PortableServer.POAManagerPackage
- org.omg.PortableServer.POAPackage
- org.omg.PortableServer.portable
- org.omg.PortableServer.ServantLocatorPackage
- org.omg.SendingContext
- org.omg.stub.java.rmi