

# Home

We're the [Commons](#) community, dedicated to creating reusable library components in Java. Apache Commons mainly uses [Git](#) as the version control system, and Commons components are available as read-only mirrors on [Github](#).

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## Components

Components are subprojects of Commons. Every component provides, and maintains one or more jar files, building a library. We distinguish components by maturity status: **Proper** (Mature, Releases available), **Sandbox** (Immature, never released), and **Dormant** (No longer active, unmaintained).

Name	Status	Description
<a href="#">BeanUtils</a>	Proper	Utilities for manipulating java beans, including copying properties, cloning, invoking methods and type conversion.
<a href="#">Betwixt</a>	Dormant	Services for mapping JavaBeans to XML documents, and vice versa.
<a href="#">Chain</a>	Proper	A "Chain of Responsibility" pattern implementation for organizing complex processing flows.
<a href="#">CLI</a>	Proper	Command Line Interface library for processing command-line options and arguments.
<a href="#">Codec</a>	Proper	General encoding/decoding algorithms. Includes some phonetic encoders, Hex, Base64, and a URL encoder.
<a href="#">Collections</a>	Proper	Builds upon the Java Collections Framework of List, Set and Map to provide many more implementations, new collections and abstract base classes.
<a href="#">Configuration</a>	Proper	Tools to assist in the reading of configuration/preferences files in various formats
<a href="#">Compress</a>	Proper	Defines an API for working with archives and compression formats including but not limited to: tar,gz, ar, cpio, zip and bzip2 files
<a href="#">Daemon</a>	Proper	Run (java) applications as windows service or UNIX daemon.
<a href="#">DBCP</a>	Proper	Database connection pooling services.
<a href="#">Digester</a>	Proper	XML-to-Java-object mapping utility.
<a href="#">Email</a>	Proper	Simplify email sending with Java. Built on top of the Java Mail API.
<a href="#">Exec</a>	Proper	A Java library to execute external processes from within a Java application.
<a href="#">FileUpload</a>	Proper	Makes it easy to add robust, high-performance, file upload capability to your servlets and web applications
<a href="#">Functor</a>	Proper	A functor is a function that can be manipulated as an object, or an object representing a single, generic function.
<a href="#">IO</a>	Proper	Utility classes, stream implementations, file filters and endian classes to assist in input/output operations.
<a href="#">JCI</a>	Proper	Java Compiler Interface
<a href="#">JCS</a>	Proper	Java Caching System
<a href="#">JEXL</a>	Proper	A velocity-esque expression interpreter
<a href="#">Jelly</a>	Proper	An XML-based scripting language.
<a href="#">XPath</a>	Proper	Facilities for applying xpath expressions to graphs of objects of all kinds: Java beans, Maps, Servlet contexts, DOM etc.

<a href="#">Lang</a>	Proper	Common utilities that should be provided by the JDK, including String handling, Object and Date helpers, nested exceptions and enumerated types.
<a href="#">Launcher</a>	Dormant	A cross platform Java application launcher which eliminates the need for a batch or shell script to launch a Java class.
<a href="#">Logging</a>	Proper	A thin, modular bridging API with out-of-the-box support for the most well known logging systems.
<a href="#">Math</a>	Proper	Lightweight, self-contained mathematics and statistics components.
<a href="#">Modeler</a>	Dormant	Mechanisms to create Model MBeans compatible with JMX specification.
<a href="#">Net</a>	Proper	A collection of classes implementing various network protocols such as FTP, NNTP, SMTP, Telnet.
<a href="#">Pool</a>	Proper	A generic object pooling interface, a toolkit for creating modular object pools and several general purpose pool implementations.
<a href="#">Proxy</a>	Proper	A Java library for dynamic proxying
<a href="#">SCXML</a>	Proper	A Java implementation of State Chart XML (SCXML), currently a W3C Working Draft.
<a href="#">Transaction</a>	Dormant	Utility classes commonly used in transactional programming
<a href="#">Validator</a>	Proper	Components for user input validation
<a href="#">VFS</a>	Proper	Extensible framework to acces various filesystems through an unified api with implementations for e.g. sftp, smb, http, zip, ...

## Elsewhere at Apache ...

The following components were part of Apache Commons but have moved elsewhere:

[Cactus](#): Cactus is a simple test framework for unit testing server-side java code (Servlets, EJBs, Tag Libs, Filters, ...). The intent of Cactus is to lower the cost of writing tests for server-side code.

[Hivemind](#): HiveMind is a services and configuration microkernel. HiveMind allows you to create your application using a service oriented architecture.

[HttpClient 3.x](#): Framework for working with the client-side of the HTTP protocol.

[Naming](#): The Naming subproject will contain common JNDI code along with various JNDI providers.