**Apache Commons Exec**

**Rationale**

Executing external processes from Java is a well-known problem area. It is inheriently platform dependent and requires the developer to know and test for platform specific behaviors, for example using cmd.exe on Windows or limited buffer sizes causing deadlocks. The JRE support for this is very limited, albeit better with the Java SE 1.5 ProcessBuilder class.

Reliably executing external processes can also require knowledge of the environment variables before or after the command is executed. In J2SE 1.1-1.4 there is not support for this, since the method, System.getenv(), for retrieving environment variables is deprecated.

There are currently several different libraries that for their own purposes have implemented frameworks around Runtime.exec() to handle the various issues outlined above. The proposed project should aim at coordinating and learning from these initiatives to create and maintain a simple, reusable and well-tested package. Since some of the more problematic platforms are not readily available, it is our hope that the broad Apache community can be a great help.

# Version:

1.2

When a executor is execute, a int value exist value will be returned, that we can get it by DefaultExecuteResultHandler.

Interface

Executor

ExecuteResultHandler

DefaultExecuteResultHandler

ExecuteStreamHandler

ProcessDestroyer

TimeObserver

ExecuteWatchdog

Class

DefaultExecutor

CommandLine

Watchdog

ExecuteWatchdog

EvironmentUtils

MapUtils

StringUtils

DebugUtils

OS

The os helper class.