POI Utils

Overview

by Nicola Ken Barozzi, Andrew C. Oliver

1. Logging

Logging in POI is used only as a debugging mechanism, not a normal runtime logging system. Logging is ONLY for autopsie type debugging, and should NEVER be enabled on a production system. Enabling logging will reduce performance by at least a factor of 100. If you are not developing POI or trying to debug why POI isn't reading a file correctly, then DO NOT enable logging. You've been warned.

Hence, we need to be able to easily disable it entirely and make POI not dependent on any logging package.

Note:

POI is not dependent on commons-logging for running, but not for compiling.

1.1. Logging Overview

Every class uses a POILogger to log, and gets it using a static method of the POILogFactory.

The POILogFactory uses the NullLogger by default; it can be instructed to use any other POILogger implementation by setting the system property org.apache.poi.util.POILogger.

Note:

java -Dorg.apache.poi.util.POILogger=the.package.of.MyPoiLoggerImpl ProgramThatUsesPoi

FIXME (nicolaken):

Still needs testing.

1.2. POILogFactory

Each class in POI can get its POILogger by calling a static method of the POILogFactory.

1.3. POILogger

Each class in POI can log using a POILogger, which is an abstract class. We decided to make our own logging facade because:

- 1. we need to log many values and we put many methods in this class to facilitate the programmer, without having him write string concatenations;
- 2. we need to be able to use POI without any logger package present.

There are three implementations available, and you can roll out your own, just extend org.apache.poi.util.POILogger.

1.3.1. NullLogger

Discards every logging request.

1.3.2. SystemOutLogger

Sends every logging request to System.out.

1.3.3. CommonsLogger

Sends every logging request to the Commons Logging package. This can use JDK1.4 logging, log4i, logkit, and is an actively maintained Jakarta Project.