

SLF4J

The Simple Logging Facade for Java (SLF4J) serves as a simple facade or abstraction for various logging frameworks (e.g. java.util.logging, logback, log4j) allowing the end user to plug in the desired logging framework at *deployment* time.

SLF4J-Log4J

pom.xml

```
<properties>
    <maven.compiler.source>1.8</maven.compiler.source>
    <maven.compiler.target>1.8</maven.compiler.target>
</properties>
<dependencies>
    <dependency>
        <groupId>org.slf4j</groupId>
        <artifactId>slf4j-api</artifactId>
        <version>1.7.32</version>
    </dependency>
    <dependency>
        <groupId>org.slf4j</groupId>
        <artifactId>slf4j-log4j12</artifactId>
        <version>1.7.32</version>
    </dependency>
</dependencies>
```

log4j.properties

```
# rootLogger=PriorityMethod, app names
log4j.rootLogger=TRACE, abc, xyz

# appender
log4j.appender.abc=org.apache.log4j.ConsoleAppender
log4j.appender.abc.Target=System.out
# layout
log4j.appender.abc.layout=org.apache.log4j.PatternLayout
log4j.appender.abc.layout.ConversionPattern=%d{dd/MM/yy} %C [%M] - %p : %m %n

# File Appender
log4j.appender.xyz=org.apache.log4j.FileAppender
log4j.appender.xyz.File=d:/mylogs/myapp.log
log4j.appender.xyz.layout=org.apache.log4j.PatternLayout
log4j.appender.xyz.layout.ConversionPattern=%d{dd/MM/yy} %C [%M] - %p : %m %n
```

Test.java

```
package in.nit;

import java.io.IOException;

import org.slf4j.Logger;
import org.slf4j.LoggerFactory;

public class Test {

    private static final Logger Log = LoggerFactory.getLogger(Test.class);

    public static void main(String[] args) throws IOException {
        Log.trace("FROM TRACE");
        Log.debug("FROM DEBUG");
        Log.info("FROM info");
        Log.warn("FROM warn");
        Log.error("FROM error");
    }
}
```

SLF4J-Logback

pom.xml

```
<properties>
    <maven.compiler.source>1.8</maven.compiler.source>
    <maven.compiler.target>1.8</maven.compiler.target>
</properties>
<dependencies>
    <dependency>
        <groupId>org.slf4j</groupId>
        <artifactId>slf4j-api</artifactId>
        <version>1.7.32</version>
    </dependency>
    <dependency>
        <groupId>ch.qos.logback</groupId>
        <artifactId>logback-classic</artifactId>
        <version>1.2.6</version>
    </dependency>
</dependencies>
```

logback.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<configuration>
```

```
<appender name="stdout" class="ch.qos.logback.core.ConsoleAppender">
  <encoder>
    <pattern>%d{yyyy-MM-dd HH:mm:ss:SSS} %5p %t %c{2}:%L - %m%n</pattern>
  </encoder>
</appender>
<root level="TRACE">
  <appender-ref ref="stdout"/>
</root>

<appender name="FILE" class="ch.qos.logback.core.FileAppender">
  <file>testFile.log</file>
  <append>true</append>
  <immediateFlush>true</immediateFlush>
  <encoder>
    <pattern>%d{yyyy-MM-dd HH:mm:ss:SSS} %5p %t %c{2}:%L -
    %m%n</pattern>
  </encoder>
</appender>

<root level="TRACE">
  <appender-ref ref="FILE" />
</root>
</configuration>
```

Test.java

```
package in.nit;

import java.io.IOException;

import org.slf4j.Logger;
import org.slf4j.LoggerFactory;

public class Test {

    private static final Logger Log = LoggerFactory.getLogger(Test.class);

    public static void main(String[] args) throws IOException {
        Log.trace("FROM TRACE");
        Log.debug("FROM DEBUG");
        Log.info("FROM info");
        Log.warn("FROM warn");
        Log.error("FROM error");
    }
}
```