

slf4j注意事项

slf4j可以对接其他日志实现，坐标如下：

```
<!--slf转其他日志-->
<!--slf - jcl-->
<dependency>
  <groupId>org.slf4j</groupId>
  <artifactId>slf4j-jcl</artifactId>
  <version>1.7.30</version>
  <exclusions>
    <exclusion>
      <groupId>*</groupId>
      <artifactId>*</artifactId>
    </exclusion>
  </exclusions>
</dependency>

<!-- slf - log4j -->
<dependency>
  <groupId>org.slf4j</groupId>
  <artifactId>slf4j-log4j12</artifactId>
  <version>1.7.30</version>
  <exclusions>
    <exclusion>
      <groupId>*</groupId>
      <artifactId>*</artifactId>
    </exclusion>
  </exclusions>
</dependency>

<!-- slf4j - log4j2 -->
<dependency>
  <groupId>org.apache.logging.log4j</groupId>
  <artifactId>log4j-slf4j-impl</artifactId>
  <version>2.13.0</version>
```

```
<scope>runtime</scope>
<optional>true</optional>
<exclusions>
  <exclusion>
    <groupId>*</groupId>
    <artifactId>*</artifactId>
  </exclusion>
</exclusions>
</dependency>

<!--slf - jul-->
<dependency>
  <groupId>org.slf4j</groupId>
  <artifactId>slf4j-jdk14</artifactId>
  <version>1.7.30</version>
</dependency>

<!--slf - simplelog-->
<dependency>
  <groupId>org.slf4j</groupId>
  <artifactId>slf4j-simple</artifactId>
  <version>1.7.30</version>
</dependency>

<!--slf - logback-->
<dependency>
  <groupId>ch.qos.logback</groupId>
  <artifactId>logback-core</artifactId>
  <version>1.2.3</version>
</dependency>
<dependency>
  <groupId>ch.qos.logback</groupId>
  <artifactId>logback-classic</artifactId>
  <version>1.2.3</version>
</dependency>
```

问题：多个桥接器的话，slf4j怎么处理呢？

使用在class path中较早出现的那个，如在maven中，会使用在pom.xml中定义较靠前的桥接器

同样，其他日志也可以转给slf：

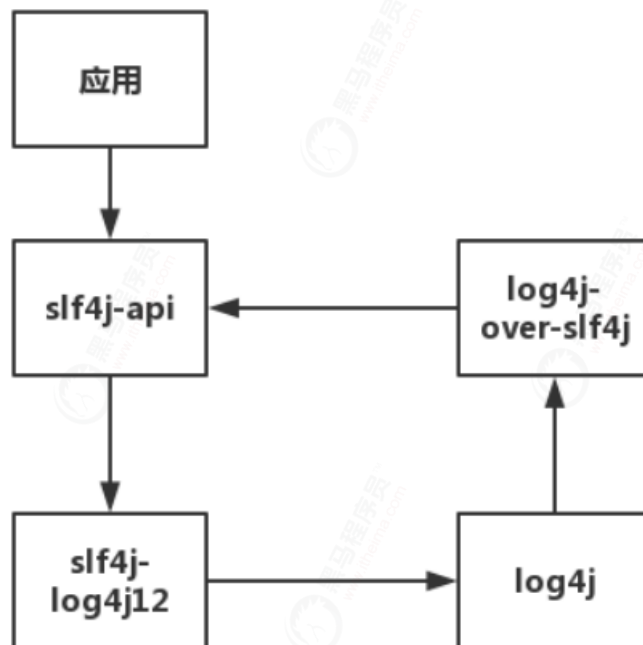
```
<!--其他日志转slf-->
<!--jul - slf-->
<dependency>
  <groupId>org.slf4j</groupId>
  <artifactId>jul-to-slf4j</artifactId>
  <version>1.7.30</version>
</dependency>

<!--jcl - slf-->
<dependency>
  <groupId>org.slf4j</groupId>
  <artifactId>jcl-over-slf4j</artifactId>
  <version>1.7.30</version>
</dependency>

<!--log4j - slf-->
<dependency>
  <groupId>org.slf4j</groupId>
  <artifactId>log4j-over-slf4j</artifactId>
  <version>1.7.30</version>
</dependency>

<!--log4j2 - slf-->
<dependency>
  <groupId>org.apache.logging.log4j</groupId>
  <artifactId>log4j-to-slf4j</artifactId>
  <version>2.13.0</version>
</dependency>
```

这就有问题了，如果互相转，就会形成slf4j日志环，来回踢皮球



一个典型的案例，详细参考“日志环路代码.zip”

如果你的项目里恰好用到了下面这些jar坐标：

```
<!-- 演示实例: slf4j - log4j - slf4j -->
<!--log4j-->
<dependency>
  <groupId>log4j</groupId>
  <artifactId>log4j</artifactId>
  <version>1.2.17</version>
</dependency>
<dependency>
  <groupId>log4j</groupId>
  <artifactId>apache-log4j-extras</artifactId>
  <version>1.2.17</version>
</dependency>

<!--slf4j-->
<dependency>
  <groupId>org.slf4j</groupId>
  <artifactId>slf4j-api</artifactId>
  <version>1.7.30</version>
</dependency>

<!--log4j 的日志转给 slf-->
<dependency>
```

```

    <groupId>org.slf4j</groupId>
    <artifactId>log4j-over-slf4j</artifactId>
    <version>1.7.30</version>
  </dependency>

  <!-- slf 再转给 log4j -->
  <dependency>
    <groupId>org.slf4j</groupId>
    <artifactId>slf4j-log4j12</artifactId>
    <version>1.7.30</version>
    <exclusions>
      <exclusion>
        <groupId>*</groupId>
        <artifactId>*</artifactId>
      </exclusion>
    </exclusions>
  </dependency>

```

报错结果：

```

SLF4J: Detected both log4j-over-slf4j.jar AND bound slf4j-
log4j12.jar on the class path, preempting
StackOverflowError.
SLF4J: See also
http://www.slf4j.org/codes.html#log4jDelegationLoop for
more details.
java.lang.ExceptionInInitializerError
    at org.slf4j.impl.StaticLoggerBinder.<init>
(StaticLoggerBinder.java:72)
    at org.slf4j.impl.StaticLoggerBinder.<clinit>
(StaticLoggerBinder.java:45)
    at
org.slf4j.LoggerFactory.bind(LoggerFactory.java:150)
    at
org.slf4j.LoggerFactory.performInitialization(LoggerFactor
y.java:124)
    at
org.slf4j.LoggerFactory.getILoggerFactory(LoggerFactory.ja
va:417)

```

```
at
org.slf4j.LoggerFactory.getLogger(LoggerFactory.java:362)
at
org.slf4j.LoggerFactory.getLogger(LoggerFactory.java:388)
at com.itheima.slf4j.Demo.<clinit>(Demo.java:8)
Caused by: java.lang.IllegalStateException: Detected both
log4j-over-slf4j.jar AND bound slf4j-log4j12.jar on the
class path, preempting StackOverflowError. See also
http://www.slf4j.org/codes.html#log4jDelegationLoop for
more details.
at org.slf4j.impl.Log4jLoggerFactory.<clinit>
(Log4jLoggerFactory.java:54)
... 8 more
Exception in thread "main"
Process finished with exit code 1
```

结论：使用slf桥接和绑定的时候要留心，不要自相矛盾形成环！！！！