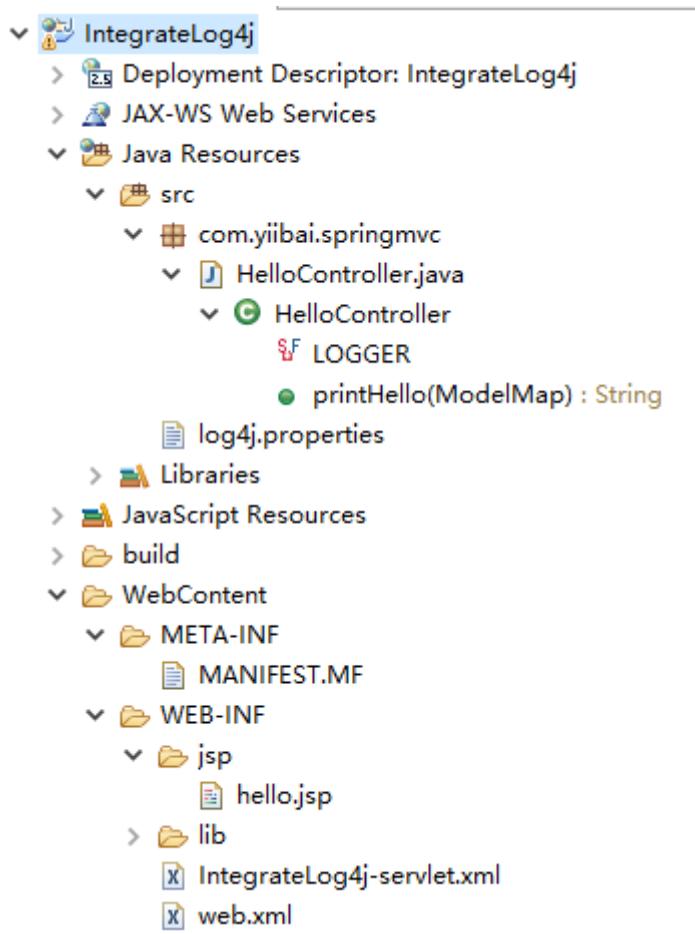


# Spring MVC 集成 Log4j

以下示例显示如何使用 Spring Web MVC 框架集成 [LOG4J](#)。首先使用 Eclipse IDE，并按照以下步骤使用 Spring Web Framework 开发基于动态表单的 Web 应用程序：

1. 创建一个名称为 IntegrateLog4j 的动态 WEB 项目。
2. 在 com.yiibai.springmvc 包下创建一个 Java 类：HelloController。
3. 从 [maven](#) 存储库页面下载 Log4j 库： [log4j](#)。把它放在 CLASSPATH 中。
4. 在 src 文件夹下创建一个 log4j.properties 文件。
5. 最后一步是创建所有源和配置文件的内容并运行应用程序，详细如下所述。

完整的项目文件目录结构如下所示 –



HelloController.java 的代码如下所示 –

```
package com.yiibai.springmvc;
import org.apache.log4j.Logger;
import org.springframework.stereotype.Controller;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestMethod;
```

```

import org.springframework.ui.ModelMap;

@Controller
@RequestMapping("/hello")
public class HelloController{
    private static final Logger LOGGER = Logger.getLogger(HelloController.class);
    @RequestMapping(method = RequestMethod.GET)
    public String printHello(ModelMap model) {
        LOGGER.info("printHello started.");
        //logs debug message
        if(LOGGER.isDebugEnabled()){
            LOGGER.debug("Inside: printHello");
        }
        //logs exception
        LOGGER.error("Logging a sample exception", new Exception("Testing"));

        model.addAttribute("message", "Hello Spring MVC Framework!");
        LOGGER.info("printHello ended.");
        return "hello";
    }
}
Java

```

**log4j.properties** 的代码如下所示 -

```

# Root logger option
log4j.rootLogger=DEBUG, stdout, file

# Redirect log messages to console
log4j.appender.stdout=org.apache.log4j.ConsoleAppender
log4j.appender.stdout.Target=System.out
log4j.appender.stdout.layout=org.apache.log4j.PatternLayout
log4j.appender.stdout.layout.ConversionPattern=%d{yyyy-MM-dd HH:mm:ss} %-5p %c{1}:%L - %m%n

# Redirect log messages to a log file
log4j.appender.file=org.apache.log4j.RollingFileAppender
#outputs to Tomcat home
log4j.appender.file.File=${catalina.home}/logs/myapp.log
log4j.appender.file.MaxFileSize=5MB
log4j.appender.file.MaxBackupIndex=10
log4j.appender.file.layout=org.apache.log4j.PatternLayout
log4j.appender.file.layout.ConversionPattern=%d{yyyy-MM-dd HH:mm:ss} %-5p %c{1}:%L - %m%n

```

Shell

**IntegrateLog4j-servlet.xml** 配置如下所示 -

```
<beans xmlns="http://www.springframework.org/schema/beans"
    xmlns:context="http://www.springframework.org/schema/context"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:mvc="http://www.springframework.org/schema/mvc"
    xsi:schemaLocation="
        http://www.springframework.org/schema/beans
        http://www.springframework.org/schema/beans/spring-beans-3.0.xsd
        http://www.springframework.org/schema/context
        http://www.springframework.org/schema/context/spring-context-3.0.xsd
        http://www.springframework.org/schema/mvc
        http://www.springframework.org/schema/mvc/spring-mvc-3.0.xsd">
    <context:component-scan base-package="com.yiibai.springmvc" />

    <bean
        class="org.springframework.web.servlet.view.InternalResourceViewResolver">
        <property name="prefix" value="/WEB-INF/jsp/" />
        <property name="suffix" value=".jsp" />
    </bean>
</beans>
XML
```

**hello.jsp** 文件中的配置如下所示 -

```
<%@ page contentType="text/html; charset=UTF-8" %>
<html>
<head>
<title>Hello World</title>
</head>
<body>
    <h2>${message}</h2>
</body>
</html>
Jsp
```

在上面的代码中，已经在 tomcat 控制台中配置了 log4j，用它来记录日志详细信息，并且在 tomcat 目录下将日志文件保存为： myapp.log。

完成创建源和配置文件后，发布应用程序到 Tomcat 服务器。

现在启动 Tomcat 服务器，当访问 URL =>

<http://localhost:8080/IntegrateLog4j/hello>，如果 Spring Web 应用程序没有问题，应该看到以下结果：

The screenshot shows the Eclipse IDE interface. In the top left, there's a browser window titled "Hello World" displaying the URL "http://localhost:8080/IntegrateLog4j/hello" and the page content "Hello Spring MVC Framework!". In the bottom left, there's a "Console" tab showing Tomcat v7.0 Server logs. A red arrow points from the browser URL to the log entry "2017-01-21 18:13:11 DEBUG HelloController:14 - Inside: printHello". Another red arrow points from the log entry to the stack trace starting with "java.lang.Exception: Testing".

```

Tomcat v7.0 Server at localhost [Apache Tomcat] D:\Program Files\Java\jre8.0_65\bin\javaw.exe (2017年1月21日 下午6:12:40)
信息: Starting ProtocolHandler ["http-bio-8080"]
一月 21, 2017 6:12:46 下午 org.apache.coyote.AbstractProtocol start
信息: Starting ProtocolHandler ["ajp-bio-8009"]
一月 21, 2017 6:12:46 下午 org.apache.catalina.startup.Catalina start
信息: Server startup in 4349 ms
2017-01-21 18:12:47 DEBUG DispatcherServlet:865 - DispatcherServlet with name 'IntegrateLog4j' processing GET request for [/Integr
2017-01-21 18:12:47 WARN  PageNotFound:1147 - No mapping found for HTTP request with URI [/IntegrateLog4j/] in DispatcherServlet w
2017-01-21 18:12:47 DEBUG DispatcherServlet:1000 - Successfully completed request
2017-01-21 18:13:11 DEBUG DispatcherServlet:865 - DispatcherServlet with name 'IntegrateLog4j' processing GET request for [/Integr
2017-01-21 18:13:11 DEBUG DefaultAnnotationHandlerMapping:140 - Mapping [/hello] to HandlerExecutionChain with handler [com.yiibai
2017-01-21 18:13:11 DEBUG DispatcherServlet:951 - Last-Modified value for [/IntegrateLog4j/hello] is: -1
2017-01-21 18:13:11 DEBUG HandlerMethodInvoker:177 - Invoking request handler method: public java.lang.String com.yiibai.springmvc
2017-01-21 18:13:11 INFO  HelloController:14 - printHello started.
2017-01-21 18:13:11 DEBUG HelloController:17 - Inside: printHello
2017-01-21 18:13:11 ERROR HelloController:20 - Logging a sample exception
java.lang.Exception: Testing
    at com.yiibai.springmvc.HelloController.printHello(HelloController.java:20)
    at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
    at sun.reflect.NativeMethodAccessorImpl.invoke(Unknown Source)
    at sun.reflect.DelegatingMethodAccessorImpl.invoke(Unknown Source)
    at java.lang.reflect.Method.invoke(Unknown Source)
    at org.springframework.web.bind.annotation.support.HandlerMethodInvoker.invokeHandlerMethod(HandlerMethodInvoker.java:180)

```