



黑客派

# SpringMVC@RequestBody 415 错误处理

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原文链接: <https://hacpai.com/article/1482498816511>

来源网站: [黑客派](#)

许可协议: [署名-相同方式共享 4.0 国际 \(CC BY-SA 4.0\)](#)

```

<p>[TOCM]</p>
<script async src="https://pagead2.googlesyndication.com/pagead/js/adsbygoogle.js"></scr
pt>
<!-- 黑客派PC帖子内嵌-展示 -->
<ins class="adsbygoogle" style="display:block" data-ad-client="ca-pub-5357405790190342"
data-ad-slot="8316640078" data-ad-format="auto" data-full-width-responsive="true"></in
>
<script>
  (adsbygoogle = window.adsbygoogle || []).push({});
</script>
<h2 id="SpringMVC-RequestBody--415错误处理"><a href="https://link.hacpai.com/forward?
oto=mailto%3ASpringMVC%40RequestBody" target="_blank" rel="nofollow ugc">SpringMV
@RequestBody</a> 415 错误处理</h2>
<h2 id="问题描述">问题描述</h2>
<p>在 SpringMVC 中使用 <code>@RequestBody</code> 主要是为了从 Request 流中获取 JS
N 字符串并且自动转为 JavaBean, 结果就出现了 HTTP 错误码 415 Unsupported media type. <b
> </p>
<h2 id="分析问题">分析问题</h2>
<p>对于当前请求的方法和所请求的资源, 请求中提交的实体并不是服务器中所支持的格式, 因此请
被拒绝。但是我们在控制台日志上能够看到明显的错误描述, 所以这个时候需要将日志级别调至
ebug, 然后在控制台可以看到如下信息。</p>
<pre><code class="language-java highlight-chroma"><span class="highlight-n">20160106
25258</span> <span class="highlight-n">4736706</span> <span class="highlight-o">[</s
an> <span class="highlight-n">http</span> <span class="highlight-o">-</span> <span clas
="highlight-n">apr</span> <span class="highlight-o">-</span> <span class="highlight-n">
080</span> <span class="highlight-o">-</span> <span class="highlight-n">exec</span> <s
an class="highlight-o">-</span> <span class="highlight-n">3</span> <span class="highligh
-o">]</span> <span class="highlight-n">DEBUG</span> <span class="highlight-n">org</s
an> <span class="highlight-o">.</span> <span class="highlight-na">springframework</spa
> <span class="highlight-o">.</span> <span class="highlight-na">web</span> <span class=
highlight-o">.</span> <span class="highlight-na">servlet</span> <span class="highlight-o"
.</span> <span class="highlight-na">mvc</span> <span class="highlight-o">.</span> <span
class="highlight-na">method</span> <span class="highlight-o">.</span> <span class="high
ight-na">annotation</span> <span class="highlight-o">.</span> <span class="highlight-na
">ExceptionHandlerExceptionResolver</span> <span class="highlight-o">-</span> <span c
ass="highlight-n">Resolving</span> <span class="highlight-n">exception</span> <span cl
ss="highlight-n">from</span> <span class="highlight-n">handler</span> <span class="hi
hlight-o">[</span> <span class="highlight-kc">null</span> <span class="highlight-o">]:</s
an> <span class="highlight-n">org</span> <span class="highlight-o">.</span> <span class
"highlight-na">springframework</span> <span class="highlight-o">.</span> <span class="h
ghlight-na">web</span> <span class="highlight-o">.</span> <span class="highlight-na">Ht
pMediaTypeNotSupportedException</span> <span class="highlight-o">:</span> <span clas
="highlight-n">Content</span> <span class="highlight-n">type</span> <span class="highl
ght-err">'</span> <span class="highlight-n">text</span> <span class="highlight-o">/</spa
> <span class="highlight-n">plain</span> <span class="highlight-o">;</span> <span class=
highlight-n">charset</span> <span class="highlight-o">=</span> <span class="highlight-n
">UTF</span> <span class="highlight-o">-</span> <span class="highlight-n">8</span> <sp
n class="highlight-err">'</span> <span class="highlight-n">not</span> <span class="highl
ght-n">supported</span>
<span class="highlight-n">20160106125258</span> <span class="highlight-n">4736707</
pan> <span class="highlight-o">[</span> <span class="highlight-n">http</span> <span cla
s="highlight-o">-</span> <span class="highlight-n">apr</span> <span class="highlight-o"
-</span> <span class="highlight-n">8080</span> <span class="highlight-o">-</span> <spa

```

```
class="highlight-n">exec</span><span class="highlight-o">-</span><span class="highlig
t-n">3</span><span class="highlight-o">]</span><span class="highlight-n">DEBUG</sp
n><span class="highlight-n">org</span><span class="highlight-o">.</span><span class=
highlight-na">springframework</span><span class="highlight-o">.</span><span class="hi
hlight-na">web</span><span class="highlight-o">.</span><span class="highlight-na">ser
let</span><span class="highlight-o">.</span><span class="highlight-na">mvc</span><s
an class="highlight-o">.</span><span class="highlight-na">annotation</span><span class
"highlight-o">.</span><span class="highlight-na">ResponseStatusExceptionHandlerResolver</spa
><span class="highlight-o">-</span><span class="highlight-n">Resolving</span><span clas
s="highlight-n">exception</span><span class="highlight-n">from</span><span clas
s="highlight-n">handler</span><span class="highlight-o">[</span><span class="highlight
kc">null</span><span class="highlight-o">]:</span><span class="highlight-n">org</spa
><span class="highlight-o">.</span><span class="highlight-na">springframework</span>
span class="highlight-o">.</span><span class="highlight-na">web</span><span class="hi
hlight-o">.</span><span class="highlight-na">HttpMediaTypeNotSupportedException</sp
n><span class="highlight-o">:</span><span class="highlight-n">Content</span><span c
ass="highlight-n">type</span><span class="highlight-err">'</span><span class="highligh
-n">text</span><span class="highlight-o">/</span><span class="highlight-n">plain</spa
><span class="highlight-o">;</span><span class="highlight-n">charset</span><span class="highli
ght-o">=</span><span class="highlight-n">UTF</span><span class="highlight-o">-</span>
<span class="highlight-n">8</span><span class="highlight-err">'</span><span class="span
lass="highlight-n">not</span><span class="highlight-n">supported</span>
<span class="highlight-n">20160106125258</span><span class="highlight-n">4736707</
pan><span class="highlight-o">[</span><span class="highlight-n">http</span><span cla
s="highlight-o">-</span><span class="highlight-n">apr</span><span class="highlight-o"
-</span><span class="highlight-n">8080</span><span class="highlight-o">-</span><spa
class="highlight-n">exec</span><span class="highlight-o">-</span><span class="highlig
t-n">3</span><span class="highlight-o">]</span><span class="highlight-n">DEBUG</sp
n><span class="highlight-n">org</span><span class="highlight-o">.</span><span class=
highlight-na">springframework</span><span class="highlight-o">.</span><span class="hi
hlight-na">web</span><span class="highlight-o">.</span><span class="highlight-na">ser
let</span><span class="highlight-o">.</span><span class="highlight-na">mvc</span><s
an class="highlight-o">.</span><span class="highlight-na">support</span><span class="h
ghlight-o">.</span><span class="highlight-na">DefaultHandlerExceptionHandlerResolver</span>
span class="highlight-o">-</span><span class="highlight-n">Resolving</span><span clas
s="highlight-n">exception</span><span class="highlight-n">from</span><span class="hi
hlight-n">handler</span><span class="highlight-o">[</span><span class="highlight-kc">
ull</span><span class="highlight-o">]:</span><span class="highlight-n">org</span><sp
n class="highlight-o">.</span><span class="highlight-na">springframework</span><span lass=
"highlight-o">.</span><span class="highlight-na">web</span><span class="highlight
o">.</span><span class="highlight-na">HttpMediaTypeNotSupportedException</span><s
an class="highlight-o">:</span><span class="highlight-n">Content</span><span class="h
ghlight-n">type</span><span class="highlight-err">'</span><span class="highlight-n">te
t</span><span class="highlight-o">/</span><span class="highlight-n">plain</span><spa
class="highlight-o">;</span><span class="highlight-n">charset</span><span class="highli
ght-o">=</span><span class="highlight-n">UTF</span><span class="highlight-o">-</spa
><span class="highlight-n">8</span><span class="highlight-err">'</span><span class="h
ghlight-n">not</span><span class="highlight-n">supported</span>
```

</code></pre>

<p>从上面的日志可以得知 SpringMVC 有一个异常类的打印 <code>HttpMediaTypeNotSupport dException</code>, 并且可以看到后面的描述。 </p>

<h2 id="解决方案">解决方案</h2>

<p>根据上面的日志信息，可以想到一些解决源头，要么修改请求方，要么修改处理方。下面都介绍下。 </p>

<ol>

<li>可以将 AJAX 的发送 POST 请求的 <code>content-type</code> 值设为 <code>application json</code>;</li>

<li>可以配置 <code>MappingJacksonHttpMessageConverter</code> 消息处理器，Spring 不同版本其配置不一样，主要区别于 3.1 之前和之后。 <br> 3.1 之前的配置</li>

</ol>

```
<script async src="https://pagead2.googlesyndication.com/pagead/js/adsbygoogle.js"></script>
```

```
<!-- 黑客派PC帖子内嵌-展示 -->
```

```
<ins class="adsbygoogle" style="display:block" data-ad-client="ca-pub-5357405790190342" data-ad-slot="8316640078" data-ad-format="auto" data-full-width-responsive="true"></ins>
```

```
<script>
```

```
  (adsbygoogle = window.adsbygoogle || []).push({});
```

```
</script>
```

```
<pre><code class="language-xml highlight-chroma"><span class="highlight-nt">&lt;bean</span> <span class="highlight-na">class=</span> <span class="highlight-s">"org.springframework.http.converter.json.MappingJacksonHttpMessageConverter"</span> <span class="highlight-nt">&gt;</span>
```

```
  <span class="highlight-nt">&lt;property</span> <span class="highlight-na">name</span> <span class="highlight-s">"supportedMediaTypes"</span> <span class="highlight-nt">&gt;</span>
```

```
    <span class="highlight-nt">&lt;list</span>&gt;</span>
```

```
      <span class="highlight-nt">&lt;value</span>&gt;</span>text/plain;charset=UTF-8<span class="highlight-nt">&lt;/value</span>&gt;</span> <span class="highlight-c">&lt;!-- 增加这个配置 -&gt;</span>
```

```
    <span class="highlight-nt">&lt;value</span>&gt;</span>application/json;charset=UTF-8<span class="highlight-nt">&lt;/value</span>&gt;</span>
```

```
      <span class="highlight-nt">&lt;/list</span>&gt;</span>
```

```
    <span class="highlight-nt">&lt;/property</span>&gt;</span>
```

```
  <span class="highlight-nt">&lt;/bean</span>&gt;</span>
```

```
</code></pre>
```

<p>3.1 之后的配置</p>

```
<pre><code class="language-xml highlight-chroma"><span class="highlight-nt">&lt;mvc:annotation-driven</span>&gt;</span>
```

```
  <span class="highlight-nt">&lt;mvc:message-converters</span> <span class="highlight-na">register-defaults=</span> <span class="highlight-s">"true"</span> <span class="highlight-nt">&gt;</span>
```

```
  <span class="highlight-nt">&lt;bean</span> <span class="highlight-na">class=</span> <span class="highlight-s">"org.springframework.http.converter.json.MappingJacksonHttpMessageConverter"</span> <span class="highlight-nt">&gt;</span>
```

```
    <span class="highlight-nt">&lt;property</span> <span class="highlight-na">name=</span> <span class="highlight-s">"supportedMediaTypes"</span> <span class="highlight-nt">&gt;</span>
```

```
      <span class="highlight-nt">&lt;list</span>&gt;</span>
```

```
        <span class="highlight-nt">&lt;value</span>&gt;</span>text/plain;charset=UTF-8<span class="highlight-nt">&lt;/value</span>&gt;</span> <span class="highlight-c">&lt;!-- 增加这个配置 --&gt;</span>
```

```
      <span class="highlight-nt">&lt;value</span>&gt;</span>application/json;charset=UTF-8<span class="highlight-nt">&lt;/value</span>&gt;</span>
```

```
        <span class="highlight-nt">&lt;/list</span>&gt;</span>
```

```
    <span class="highlight-nt">&lt;/property</span>&gt;</span>
```

```

    <span class="highlight-nt">&lt;/bean&gt;</span>
    <span class="highlight-nt">&lt;/mvc:message-converters&gt;</span>
    <span class="highlight-nt">&lt;/mvc:annotation-driven&gt;</span>
</code></pre>
<h2 id="关于HttpMessageConverter请求信息转换器简介">关于 HttpMessageConverter 请求信息转换器简介</h2>
<p>HttpMessageConverter 接口指定了一个可以把 Http request 信息和 Http response 信息进行格式转换的转换器。通常实现 HttpMessageConverter 接口的转换器有以下几种：</p>
<ol>
<li>ByteArrayHttpMessageConverter: 负责读取二进制格式的数据和写出二进制格式的数据；</li>
<li>StringHttpMessageConverter: 负责读取字符串格式的数据和写出二进制格式的数据；</li>
<li>ResourceHttpMessageConverter: 负责读取资源文件和写出资源文件数据；</li>
<li>FormHttpMessageConverter: 负责读取 form 提交的数据（能读取的数据格式为 application/x-www-form-urlencoded，不能读取 multipart/form-data 格式数据）；负责写入 application/x-www-form-urlencoded 和 multipart/form-data 格式的数据；</li>
<li>MappingJacksonHttpMessageConverter: 负责读取和写入 JSON 格式的数据，<strong>这使用的 Jackson 版本 1.x 的，该版本系列已经不再维护了</strong>;</li>
<li>MappingJackson2HttpMessageConverter: 负责读取和写入 JSON 格式的数据，<strong>这使用的 Jackson 版本 2.x 的</strong>;</li>
<li>SourceHttpMessageConverter: 负责读取和写入 XML 中 javax.xml.transform.Source 定义数据；</li>
<li>Jaxb2RootElementHttpMessageConverter: 负责读取和写入 XML 标签格式的数据；</li>
<li>AtomFeedHttpMessageConverter: 负责读取和写入 Atom 格式的数据；</li>
<li>RssChannelHttpMessageConverter: 负责读取和写入 RSS 格式的数据；</li>
<li>...还有更多消息转换器，更多关于 HttpMessageConverter 的信息请看：<a href="https://link.hacpai.com/forward?goto=http%3A%2F%2Fdocs.spring.io%2Fspring%2Fdocs%2F3.0.x%2Fapi%2Forg%2Fspringframework%2Fhttp%2Fconverter%2FHttpMessageConverter.html" target="blank" rel="nofollow ugc">http://docs.spring.io/spring/docs/3.0.x/api/org/springframework/tp/converter/HttpMessageConverter.html</a></li>
</ol>
<script async src="https://pagead2.googlesyndication.com/pagead/js/adsbygoogle.js"></script>
<!-- 黑客派PC帖子内嵌-展示 -->
<ins class="adsbygoogle" style="display:block" data-ad-client="ca-pub-5357405790190342" data-ad-slot="8316640078" data-ad-format="auto" data-full-width-responsive="true"></ins>
</script>
(adsbygoogle = window.adsbygoogle || []).push({});
</script>
<h2 id="HttpMessageConverter请求信息转换器执行流程-">HttpMessageConverter 请求信息转换器执行流程：</h2>
<p>当用户发送请求后，@Requestbody 注解会读取请求 body 中的数据，默认的请求转换器 HttpMessageConverter 通过获取请求头 Header 中的 Content-Type 来确认请求头的数据格式，从而来请求数据适配合适的转换器。例如 contentType:applicatin/json，那么转换器会适配 MappingJacksonHttpMessageConverter。响应时候的时候同理，@ResponseBody 注解会启用 HttpMessageConverter，通过检测 Header 中 Accept 属性来适配的响应的转换器。</p>
<h2 id="其他问题说明">其他问题说明</h2>
<p>需要注意的是：使用 Spring 版本好 Spring 配置文件中声明 DTD 版本要一致，否则出现问题很排查。</p>

```