



Why does the Rest API returns result in json only ? What if I want xml ?

The REST API returns JSON by default because Spring Boot includes Jackson (a JSON serializer) in the default starters and automatically configures it to convert Java objects into JSON. JSON is the standard for REST APIs due to being lightweight and widely supported.

To support **XML**, you do not need to rewrite your code. You just need to add the XML serializer library, and Spring will handle the rest via **Content Negotiation**.

How to enable XML support (2 Steps)

1. Add the Dependency

Add the `jackson-dataformat-xml` dependency to your `pom.xml`. This tells Spring, "I can now speak XML too." ^[1] ^[2]

```
<dependency>
  <groupId>com.fasterxml.jackson.dataformat</groupId>
  <artifactId>jackson-dataformat-xml</artifactId>
</dependency>
```

2. Use Content Negotiation (The "Accept" Header)

Once the dependency is added, the client decides the format using the Accept HTTP header.

- **For JSON:** Accept: `application/json` (Default)
- **For XML:** Accept: `application/xml`

Spring's `DispatcherServlet` checks this header and automatically chooses the right converter (`MappingJackson2XmlHttpMessageConverter` VS. `MappingJackson2HttpMessageConverter`) to format the response. ^[2] ^[1]

Summary Answer for Interview

"Spring Boot returns JSON by default because the Jackson JSON library is on the classpath. To support XML, I simply add the `jackson-dataformat-xml` dependency. Then, the client can request XML by sending the Accept: `application/xml` header. Spring handles this content negotiation automatically."



1. <https://dev.to/ayshriv/spring-boot-rest-api-returning-response-in-json-format-4db0>

2. <https://dev.to/ayshriv/spring-boot-rest-api-returning-response-in-xml-format-2dkh>

3. <https://ppl-ai-file-upload.s3.amazonaws.com/web/direct-files/attachments/images/81815274/429036f4-3bc3-4a7a-8c6f-90246e73b9b9/image.jpg>
4. https://www.reddit.com/r/SpringBoot/comments/vaqlon/how_to_return_dynamic_json_response_in_spring_boot/
5. <https://www.youtube.com/watch?v=cl6VIGDLH5s>
6. <https://www.codejava.net/rest-api/how-to-prettyfy-json-output>
7. https://www.reddit.com/r/SpringBoot/comments/16tmszg/how_to_output_response_in_json_format_newbie/
8. <https://ppl-ai-file-upload.s3.amazonaws.com/web/direct-files/attachments/images/81815274/24f18c0a-b56e-4862-a619-e2959036a5c2/image.jpg>
9. <https://ppl-ai-file-upload.s3.amazonaws.com/web/direct-files/attachments/images/81815274/97e9ed86-ed11-4035-a18b-1eb05c1bab4e/image.jpg>
10. <https://ppl-ai-file-upload.s3.amazonaws.com/web/direct-files/attachments/images/81815274/87f62423-96f2-4071-9802-8f6699e0ecd8/image.jpg>
11. <https://www.geeksforgeeks.org/springboot/spring-rest-json-response/>
12. <https://stackoverflow.com/questions/40248640/change-spring-boots-default-json-error-response-structure>
13. <https://www.baeldung.com/spring-boot-json>
14. <https://blog.masteringbackend.com/spring-boot-rest-api-returning-response-in-json-format>