



Spring Boot Microservices

Beginner to Guru

Overview of Using Jackson



Common Jackson Annotations

- **@JsonProperty** - Allows you to set the property name
- **@JsonFormat** - Gives you control over how property is serialized. (Helpful for dates)
- **@JsonUnwrapped** - Allows you to flatten a property
- **@JsonView** - Allows you to configure virtual 'views' of objects
- **@JsonManagedReference, @JsonBackReference** - for mapping embedded items
- **@JsonIdentityInfo** - Allows you to specify a property to determine object identity
- **@JsonFilter** - Used to specify a programatic property filter



Jackson Serialization Annotations

- **@JsonAnyGetter** - Takes a Map property and serializes the key to property names, values to values
- **@JsonGetter** - Allows you to identify a method as a 'getter', which will be serialized into a property
- **@JsonPropertyOrder** - Allows you to set the order of properties in the serialized JSON output
- **@JsonRawValue** - Will serialize the string value of the property as is. **Warning** - Can lead to invalid JSON.



Jackson Serialization Annotations

- **@JsonValue** - Used to mark a method for the Serialization output. Will throw exception if more than one method is annotated. Warning: May produce invalid JSON.
- **@JsonRootName** - Creates a root element for the object.
- **@JsonSerialize** - Allows you to specify a custom serializer



Jackson Deserialization Annotations

- **@JsonCreator** - Use identify the object constructor to use, and property binding
- **@JacksonInject** - Allows you to inject values into properties using deserialization
- **@JsonAnySetter** - Converts JSON object into a Java Map object, where property names are keys of the map.
- **@JsonSetter** - Identifies a Java method to use as a setter for the identified JSON property.
- **@JsonDeserialize** - Allows you to specify a custom deserializer



Other Jackson Annotations

- **@JsonIgnoreProperties** - Class level annotation used to tell Jackson to ignore one or more property
- **@JsonIgnore** - Field level annotation use to tell Jackson to ignore a property
- **@JsonIgnoreType** - Class level annotation used to ignore class - typically used to ignore class, where the class is a property in other classes.
- **@JsonInclude** - Class level annotation used to control how null values are presented in serialization



Other Jackson Annotations

- **@JsonAutoDetect** - Jackson will use reflection in serialization. This annotation allows you to tune which properties / methods are detected.



Jackson and Spring Boot

- Spring Boot will like most things, auto configure Jackson with 'sensible' defaults
- The Jackson object mapper accepts a large variety of properties which can be used to customize its behavior
- The majority of configuration values can be adjusted via configuration properties in `application.properties`.
- If needed, you can override Spring Boot and provide a custom definition of the Jackson Object mapper via a Spring Bean.

