

Spring Boot Actuator

Spring Boot Actuator is a subproject of the Spring Boot framework that provides **production-ready features** to help you monitor and manage your application.

What does it do?

Actuator adds a set of **REST endpoints** to your application that let you:

- Monitor **health** and **metrics**
 - View **application configuration** and **environment**
 - Inspect **bean definitions, mappings, loggers**, and more
 - Perform **diagnostics** (e.g., thread dumps, heap dumps)
 - Dynamically change **log levels**
 - Check **scheduling tasks, caches**, and **custom endpoints**
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Common Use Cases

- **Health checks** for load balancers or Kubernetes (/actuator/health)
- **Metrics reporting** (e.g., to Prometheus or Grafana)
- **Debugging** startup issues with auto-configuration
- **Viewing application structure** (e.g., routes, beans, config properties)
- **Tuning logging levels** without restarting the app

<http://localhost:2024/actuator>

This JSON represents the available **Spring Boot Actuator endpoints** exposed by a running Spring Boot application on <http://localhost:2024>. The "_links" structure follows the [HATEOAS \(Hypermedia as the Engine of Application State\)](#) principle, which is used in Spring Boot's Actuator to describe the navigable API endpoints.

Breakdown of the JSON Structure

- Each key under "_links" is an **Actuator endpoint**.
- Each has a href, which is the URL you can call to access that specific actuator functionality.

- If "templated": true, the URL requires a parameter (e.g., {cache}, {name}).

Common Endpoints

Endpoint Key	Description
self	Base actuator endpoint.
health	Checks the overall health of the application.
info	Exposes arbitrary application info (like app version, etc.).
beans	Lists all Spring beans in the application context.
env	Shows environment properties.
env/{toMatch}	Queries a specific environment property by key.
loggers	Allows viewing and configuring log levels.
loggers/{name}	Configure a specific logger.
metrics	Lists available metrics.
metrics/{requiredMetricName}	Returns details about a specific metric.
threaddump	Returns a thread dump.
heapdump	Returns a heap dump.
scheduledtasks	Shows scheduled tasks in the app.
mappings	Shows all URL mappings (e.g., which controllers handle which routes).
caches	Info about caches used by the app.
conditions	Shows auto-configuration conditions and whether they matched.
configprops	Shows all @ConfigurationProperties beans.
sbom	Shows Software Bill of Materials (dependency info).
custom	A custom actuator endpoint defined by the application.

Would you like to know how to enable, disable, or secure any of these endpoints?