Actuator

Actuator is a library that provides production-ready features for monitoring and managing Spring Boot applications. Each link in the response corresponds to a specific management or monitoring function of the application.

Here's a breakdown of the links and their purpose:

1. **self**: The URL for the base Actuator endpoint (in this case, **http://localhost:2024/actuator**).
2. **custom**: A custom endpoint for the application, typically used for user-defined metrics or functionality, located at **http://localhost:2024/actuator/custom.**
3. **beans**: Provides information about the beans in the Spring context (i.e., the Spring-managed objects). The URL is **http://localhost:2024/actuator/beans.**
4. **caches**: Links to information about application-level caching. There is also a specific endpoint for a cache (caches-cache), where {cache} is a placeholder for a specific cache name.
5. **health**: Provides health check information for the application, which can include status indicators such as "UP" or "DOWN", showing the health of various components of the system. The URL is **http://localhost:2024/actuator/health.**
6. **health-path**: A variant of the health endpoint that allows checking health at a more specific path (the {*path} is a placeholder).
7. **info**: Displays general application information such as version, build, or any custom details. The URL is **http://localhost:2024/actuator/info**.
8. **conditions**: Provides information about Spring @Condition annotations that are used in configuration, typically for conditional bean creation. The URL is **http://localhost:2024/actuator/conditions.**
9. **configprops**: Lists the configuration properties for the application. This helps to view the properties configured in the Spring environment. The URL is **http://localhost:2024/actuator/configprops.**

10. **configprops-prefix**: Similar to configprops, but allows filtering based on a specific prefix in the property names.
11. **env**: Shows the current environment variables and properties. The URL is **http://localhost:2024/actuator/env.**
12. **env-toMatch**: Filters environment variables based on a match string ({toMatch}), allowing more targeted querying of properties.
13. **loggers**: Provides access to application loggers, including their levels (e.g., INFO, DEBUG, ERROR). The URL is **http://localhost:2024/actuator/loggers**.
14. **loggers-name**: Allows viewing or changing the logging level of a specific logger by name (e.g., loggers/{name}).
15. **heapdump**: Provides a heap dump of the application's memory, which is useful for debugging memory-related issues. The URL is **http://localhost:2024/actuator/heapdump**.
16. **threaddump**: Provides a thread dump, useful for debugging thread contention or other thread-related issues. The URL is **http://localhost:2024/actuator/threaddump.**
17. **metrics**: Exposes various application metrics (like system health, performance, etc.). The URL is **http://localhost:2024/actuator/metrics.**
18. **metrics-requiredMetricName**: Allows you to query a specific metric by name, where {requiredMetricName} is a placeholder for the metric you want to retrieve.
19. **sbom**: Provides the Software Bill of Materials (SBOM), which is a list of the components used in the application, including libraries and dependencies. The URL is **http://localhost:2024/actuator/sbom**.
20. **sbom-id**: Retrieves the SBOM by a specific ID (sbom/{id}).
21. **scheduledtasks**: Provides information about scheduled tasks that are running in the application, showing the status and details about scheduled tasks. The URL is **http://localhost:2024/actuator/scheduledtasks.**
22. **mappings**: Displays the list of HTTP request mappings, which shows how incoming requests are mapped to specific controllers or endpoints. The URL is **http://localhost:2024/actuator/mappings.**

Each of these endpoints provides valuable insights into the state and operation of the application, and they are typically used for monitoring, troubleshooting, and managing the Spring Boot application in a production environment.