

# **IETF 93 - SEARCH method**

Julian Reschke, greenbytes

### Why?

One of the most FAQs on StackOverflow is: can I send a GET request with a payload?

We should have material that explains why GET with body doesn't work, and what the alternatives are.

#### **Proposal:**

Explain the situation:

- Bookmarkability/Cacheability
- Drawbacks of using GET: URIs might leak more frequently than payloads (log files, Referer), some components might fail for long URIs
- Drawbacks of using POST: not safe, thus not repeatable without knowig the semantics of the request
- Explore Content-Location, making the GET-table resource discoverable
- Can URI templates help?

#### **Alternatives to GET and POST**

- Use an HTTP method that is defined to support a request payload **and** is safe.
- The method registry already contains three candidates: PROPFIND, REPORT, and SEARCH; all of which defined for WebDAV.
- There is existing code out there which knows about them being safe, so it makes sense to use one of these. It also avoids using yet another method name.
- The most generic of these is SEARCH; we could un-tangle it from WebDAV (without breaking existing uses) by allowing any media type as payload (as in PATCH), and open up the response format as well.

## Specifically...:

- Make it as simple as possible.
- Format discovery using Accept-Search response header field (mirrors PATCH).
- Discuss concrete formats in separate specs.
- Explore ways to make the response to SEARCH GET-table and to leverage URI templates so clients can directly construct GET requests once they know about the URI format.

## **Further reading:**

- <u>draft-snell-search-method</u>
- <u>draft-hunt-scim-search</u>
- <u>RFC 5323: Web Distributed Authoring and Versioning (WebDAV) SEARCH</u>