

IETF HTTP WG 2021-06 Interim - SEARCH Method

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Slides below are mostly from IETF 93 (Prague, 2015).

Draft was adopted late 2010; initial 00 draft March, minor edits in 01 just now. Draft name ("safe-method-w-body") leaves method name open; contents currently specifies SEARCH though.

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 knowing 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.
- Alternative would be to mint a new method name. Bikeshed ahaid.

Specifically...:

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

Further reading:

- [draft-ietf-httpbis-safe-method-w-body-01](#)
- [RFC 5323: Web Distributed Authoring and Versioning \(WebDAV\) SEARCH](#)
- [Latest discussion thread on WG mailing list](#)