Resumable Uploads For HTTP

IETF Hackathon

IETF 118
4–5 November 2023
Prague, Czech Republic



Context

- Resumable uploads:
 - Recover from interruptions during file transfer
 - Makes uploads pausable and resilient
 - draft-ietf-httpbis-resumable-upload

Hackathon Plan

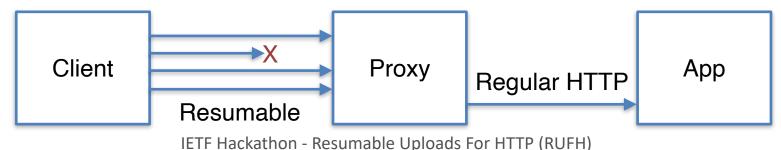
- Plugins for popular HTTP proxies for handling resumable uploads
- CLI program to test if a server conforms to the spec
- JavaScript runtime compatibility (Node.js, Deno, Bun, Cloudfare Workers, AWS Lambda etc)
- Resumability polyfill for the Fetch API in browsers

What got done

- Tool for testing servers' conformity to specification
 - Improve interoperability between existing implementations
 - github.com/tus/ietf-hackathon/tests

What got done

- Integrate resumable uploads into proxies through plugins
 - Transform resumable uploads into regular requests
 - Easily add resumable uploads to existing application without backend modifications
 - Nginx: github.com/tus/ietf-hackathon/nginx-rufh
 - Caddy: github.com/Murderlon/caddy-rufh



What we learned

- Proof of concept for resumable uploads in proxies
 - Sending informational responses 1XX is possible
- Automatic conformity check for specification is helpful
 - Some bugs were discovered and fixed

Wrap Up

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Draft: <u>draft-ietf-httpbis-resumable-upload</u>

Discussion on Friday at 13:00 in httpbis session