HTTP/2 Local Activities Report in Japan

November 2014, IETF91

httpbis

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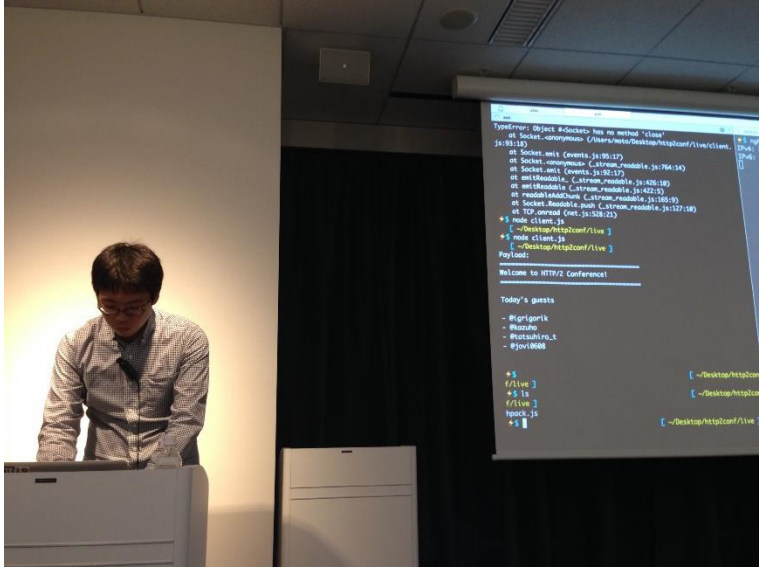
HTTP 2
JP

HTTP/2 Conference Tokyo 2014

- Nov. 3, 2014 Tokyo
- ~100 attendees
- Guest Speaker: Ilya Grigorik (author of HPBN)

Talks and slides



- jxck: HTTP2Study chronicle
- igrigorik: HTTP/2 all the things!
- summerwind: Live coding
  - Implementing HTTP/2 client in 60 minutes
- tatsuhiro-t: nghttp2
- kazuho: h2o the optimized HTTP server
- shigeki: Technical Overview of QUIC
- Panel discussion: jxck, igirigorik, tatsuhiro-t, kazuho

Excerpts from HTTP/2 Conf.

- New HTTP/2 server implementation h2o by kazuho
  - To realize http everywhere
  - Starting performance competition now benefits everyone
    - Fast HTTP/1.1 header parser, pre-compiled sprintf
- Priority
  - Only nghttp2 and iij-http2 implement dependency tree
  - Implementers are motivated to implement priority
- Implementation hurdles
  - Asynchronous I/O
  - HPACK is simplified now. hpack-test-case helps

Implementations updated to -14

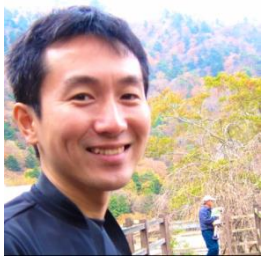
nghttp2
C
tatsuhiro-t

sasazka New
node.js
summerwind

iij-http2
node.js
shigeki

haskell-http2
Haskell
kazu-yamamoto

http2-go
Go
jxck



h2o New
C
kazuho

http-2
Ruby
igrigorik + mad-p

Meetup - #http2study

- #1 2013/08/14
- #2 2013/10/17
- #3 2014/01/28
- #4 2014/03/20
- #5 2014/07/30

- IETF briefing session
- spec discuttion
- implementation tips
- project sharing
- etc

http://connpass.com/series/457/

Hackathon

- #1 2014/02/23
- #2 2014/05/24
- #3 2014/09/06

- issuethon 2014/04/12
  - discuttion on http2 issues on ML & github

HPACK Test Case

- encode same headers into wire
- interop with other impls

```
{
 "cases": [
   {
     "seqno": 0,
     "headers": [
       { ":method": "GET" },
       { ":scheme": "http" },
       { ":authority": "yahoo.co.jp" },
       {  ":path": "/"  }
     ]
   },
...
```

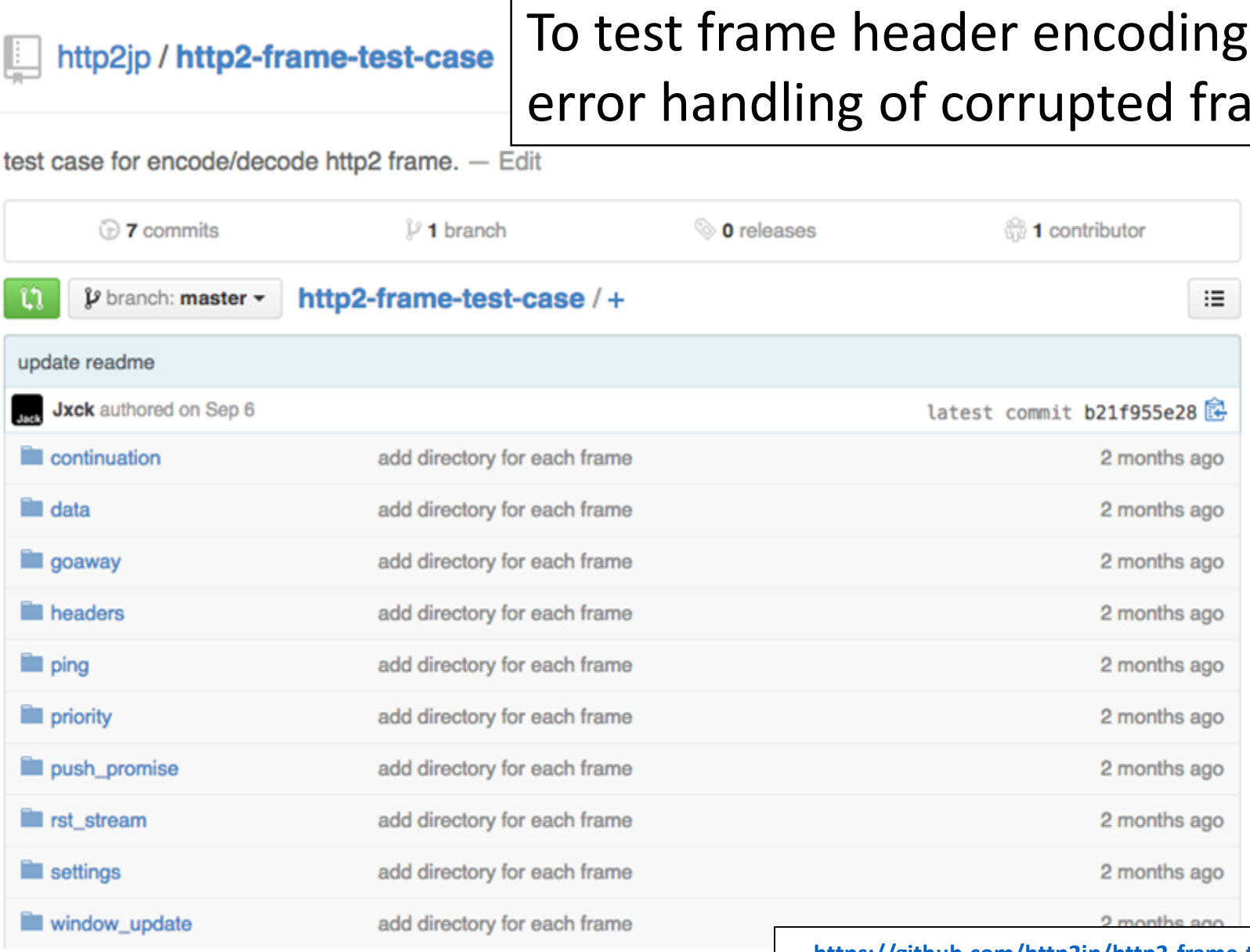
implementations result

1. “8286418cf1e3c2fe8739ceb90ebf4aff84”
2. “0283c5837f06839d29af0188f439ce75c875fa57048163”
3. “82864188f439ce75c875fa5784”
4. “0085b9495339e483c5837f0085b8824e5a4b839d29af0088b83b5339ec327d7f88f439ce75

https://github.com/http2jp/hpack-test-case

Test Frame Case (WIP)

To test frame header encoding, error handling of corrupted frames



http2jp / http2-frame-test-case

test case for encode/decode http2 frame. — Edit

7 commits | 1 branch | 0 releases | 1 contributor

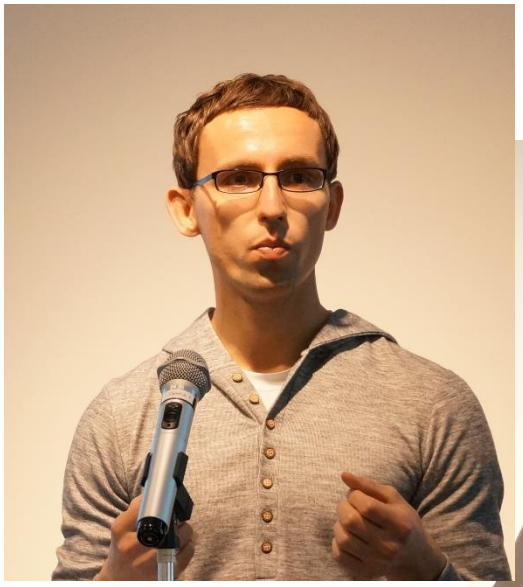
branch: master ▾ http2-frame-test-case / +

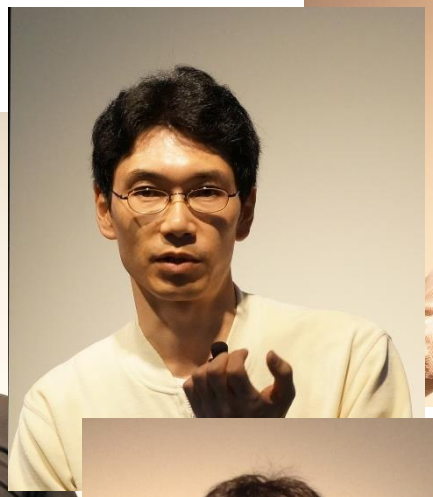
update readme

Jxck authored on Sep 6 latest commit b21f955e28

continuation	add directory for each frame	2 months ago
data	add directory for each frame	2 months ago
goaway	add directory for each frame	2 months ago
headers	add directory for each frame	2 months ago
ping	add directory for each frame	2 months ago
priority	add directory for each frame	2 months ago
push_promise	add directory for each frame	2 months ago
rst_stream	add directory for each frame	2 months ago
settings	add directory for each frame	2 months ago
window_update	add directory for each frame	2 months ago

https://github.com/http2jp/http2-frame-test-case





Thank you