

Local Activity Report in Japan

March 2014

IETF 89

httpbis

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HTTP/2

JP

Member



Jack



Orz



and more and more
maybe upto 30~40

Implementations

HTTP2



nghttp2
C
Draft-10



iij-http2
node.js
Draft-10



http2-go
Go
Draft-10

HPACK



node-http2-hpack
node.js
Draft-6



haskell-http2
haskell
Draft-6

Local Activity in Japan

- **meetup**
 - #1 2013/Aug, 34 atnds
 - #2 2013/Oct, 43 atnds
 - #3 2014/Jan, 60 atnds
- **hackathon**
 - #1 2013/Oct, 6 atnds
 - #2 2013/Dec, 9 atnds
 - #3 2014/Feb, 23 atnds
- **interop**
 - `hpack-test-case`
- **resources**
 - <http://http2.info>

Meetup - #http2study

- Speaker

- tatsuhiro_t (about nghttp2)
- shigeki (about interim)
- fujiwara (about hpack history)
- kazu (about hpack bench)
- etc



Hackathon





HPACK Test Case — Edit

119 commits

1 branch

0 releases

6 contributors



branch: master ▾

hpack-test-case / +

Delete not interesting test cases to reduce maintenance cost



tatsuhiro-t authored 18 hours ago

latest commit 1437181c96

go-hpack

remove context from go-hapck

2 days ago

haskell-http2-diff-huffman

revert directory

3 days ago

haskell-http2-diff

revert directory

3 days ago

haskell-http2-linear-huffman

revert directory

3 days ago

haskell-http2-linear

revert directory

3 days ago

haskell-http2-naive-huffman

revert directory

3 days ago

haskell-http2-naive

revert directory

3 days ago

haskell-http2-static-huffman

revert directory

3 days ago

haskell-http2-static

revert directory

3 days ago

ngnhttp2-16384-4096

Update ngnhttp2 output to HPACK-06

18 hours ago

ngnhttp2

Update ngnhttp2 output to HPACK-06

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

HPACK Test Case

- encode same headers into wire
- interop with other impls

```
{  
  "draft": 6,  
  "cases": {  
    "header_table_size": 4096,  
    "headers": [  
      { ":method": "GET" },  
      { ":scheme": "http" },  
      { ":authority": "yahoo.co.jp" },  
      { ":path": "/" }  
    ],  
    "wire":  
      "82870388f4466d6912d2717787"  
  }  
}
```

```
{  
  "draft": 6,  
  "cases": {  
    "header_table_size": 4096,  
    "headers": [  
      { ":method": "GET" },  
      { ":scheme": "http" },  
      { ":authority": "yahoo.co.jp" },  
      { ":path": "/" }  
    ],  
    "wire":  
      "80808287030b7961686f6f2e636f2e6a7087"  
  }  
}
```

HPACK Test Case

- compare compression ratio

Compression Ratio

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The each cell has X (Y/Z) format:

X: Y / Z

Y: Number of bytes after compression

Z: Number of bytes before compression

story	go-hpack	haskell-http2-diff	haskell-http2-diff-huffman	haskell-http2-linear	haskell-http2-linear-huffman	haskell-naiv
story_00.json	1.01 (185/183)	0.48 (87/183)	0.36 (65/183)	0.52 (95/183)	0.40 (73/183)	1.23 (225/1
story_01.json	1.03 (184/178)	0.37 (65/178)	0.31 (56/178)	0.40 (72/178)	0.35 (63/178)	1.24 (221/1
story_02.json	0.83 (2865/3456)	0.26 (897/3456)	0.19 (653/3456)	0.28 (978/3456)	0.21 (734/3456)	1.09 (3770
story_03.json	0.85 (2648/3113)	0.19 (590/3113)	0.14 (446/3113)	0.22 (670/3113)	0.17 (526/3113)	1.10 (3430
story_04.json	0.85 (2648/3113)	0.19 (590/3113)	0.14 (446/3113)	0.22 (670/3113)	0.17 (526/3113)	1.10 (3430
story_05.json	0.85 (2924/3455)	0.19 (667/3455)	0.15 (507/3455)	0.22 (748/3455)	0.17 (588/3455)	1.10 (3796
story_06.json	0.85 (2958/3489)	0.29 (1013/3489)	0.23 (797/3489)	0.31 (1099/3489)	0.25 (883/3489)	1.09 (3808
story_07.json	0.84 (2697/3192)	0.23 (733/3192)	0.18 (559/3192)	0.25 (812/3192)	0.20 (638/3192)	1.10 (3512
story_08.json	0.84 (3376/4006)	0.30 (1202/4006)	0.24 (942/4006)	0.32 (1272/4006)	0.25 (1012/4006)	1.09 (4349
story_09.json	0.84 (2781/3309)	0.25 (817/3309)	0.19 (628/3309)	0.27 (894/3309)	0.21 (705/3309)	1.10 (3630

HTTP/2

JAPAN LOCAL ACTIVITY

Materials

- [HTTP/2 draft-09 \(Japanese translation\)](#)
- [HPACK Test Case](#)

Meetup

- [HTTP/2 Study #3](#) (2014/1/28)
- [HTTP/2 Study #2](#) (2013/10/17)
- [HTTP/2 Study #1](#) (2013/08/14)

Hackathon

- [HTTP/2 Hackathon #1](#) (2014/2/23)
- [HTTP/2 Mini Hackathon #2](#) (2013/12/15)
- [HTTP/2 Mini Hackathon #1](#) (2013/10/12)

Presentations

- [HTTP2 最速実装～入門編～](#)
- [httpbis interim@チューリッヒ レポート](#)

Writing I-D

- about HTTP/2 and HPACK
 - Survey of Current Implementations
 - Result of Interop test
 - Knowledge of implementation
- Publish
 - as Informational Draft
 - on April



thanks :)

Local Activity in Japan