Additional HTTP Status Codes

draft-nottingham-http-new-status
Background

• HTTPbis is prohibited from creating new protocol elements by charter*

• Status code registrations require Standards Track

• Over time, we’ve identified gaps
428 Precondition Required

- Solution to “lost update” problem requires client to make a conditional request
  PUT /foo HTTP/1.1
  Host: www.example.com
  If-Match: “abcdef”

- Currently no way for a server to express that this is required
429 Too Many Requests

- “Rate Limiting” is becoming common on the Web
  - e.g., api.*.com
- Various status codes currently in use
  - 503, 500, 403, 400...
- Could be a 5xx or 4xx
  - leaning towards 4xx (hence “too many reqs”)
  - important thing is to converge on one
431 Request Headers Too Large

- Many implementations limit headers
- We already have
  - 413 Request Representation Too Large
  - 414 URI Too Long
- Not clear if 413 is appropriate when the headers are too large (httpbis #299)
511 Network Auth Required

- The “captive portal” use case
- Previously draft-nottingham-http-portal
- Driver is helping non-browser clients avoid getting confused
- NOT a complete solution; HTTP only
Moving Forward

- APPSAWG?
- Need to coordinate with HTTPbis (where weight of expertise / implementers is)
- HIGH BAR for adding additional codes
- Don’t want this to be the kitchen sink
- Suggested criteria: real-world examples / demonstrable hole in the spec