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