

# json-home & http-problem

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# HTTP Problem Details

- “HTTP APIs” often need an error reporting format
- Status code doesn’t contain enough detail
- Current solution is “roll-your-own”
- Lots of pitfalls

# HTTP Problem Details

HTTP/1.1 403 Forbidden

Content-Type: application/problem+json

Content-Language: en

```
{
  "type": "http://example.com/probs/out-of-credit",
  "title": "You do not have enough credit.",
  "detail": "Your current balance is 30, but that costs 50.",
  "instance": "http://example.net/account/12345/messages/abc",
  "balance": 30,
  "accounts": ["http://example.net/account/12345",
               "http://example.net/account/67890"]
}
```

# HTTP Problem Details

- -00: July 2012
- -06: February 2014
- Used by frameworks (e.g. HAPI) and individual APIs
- Lots of people seem to be waiting for it to finalise

# Home Documents for HTTP APIs

- “Home Page” for HTTP APIs
- JSON-based format (translation to XML)
- Builds on:
  - Web Linking (RFC5988)
  - URI Templates (RFC6570)

```
HTTP/1.1 200 OK
Content-Type: application/json-home
Cache-Control: max-age=3600
Connection: close
```

```
{
  "resources": {
    "http://example.org/rel/widgets": {
      "href": "/widgets/"
    },
    "http://example.org/rel/widget": {
      "href-template": "/widgets/{widget_id}",
      "href-vars": {
        "widget_id": "http://example.org/param/widget"
      },
      "hints": {
        "allow": ["GET", "PUT", "DELETE", "PATCH"],
        "formats": {
          "application/json": {}
        },
        "accept-patch": ["application/json-patch"],
        "accept-post": ["application/xml"],
        "accept-ranges": ["bytes"]
      }
    }
  }
}
```

# Home Documents for HTTP APIs

- Better alignment with Web, hypermedia
- Allows mixing more than one API together
- Versioning and extensibility
- Role-based access control
- Better solution to “Get Off My Lawn” problem