

CoRE: Problem Details

May 10th (Wednesday), 14:00–15:30 UTC

Problem Details:

Concise equivalent of RFC 7807(bis)

example (RFC 7807)

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

status

Concise version in progress until July 2020
Waiting for completion of CoRAL

Problem: 3GPP needs this **now** (June)
→ draft-ietf-core-problem-details-03 (2022-05-06)

"unbundled" approach (Thomas Fossati)

Do not mirror 7807's "type"

Add a global registry for custom problem details entries
(works best if these are maps as well)

A bit like CWT

Combining multiple custom problem details entries:
~ Multiple inheritance

example (unbundled)

```
{ / no problem type given /  
  -1 /title/: "You do not have enough credit.",  
  -2 /detail/: "Your current balance is 30, but that costs 50.",  
  -3 /instance/: "/account/12345/msgs/abc",  
  4711 /example.com out-of-credit custom problem detail key/ : {  
    0 /out-of-credit-balance/: 30,  
    1 /available-accounts/: ["/account/12345",  
                             "/account/67890"]  
    / 0 and 1 are internal to example.com's 4711;  
      they don't need registering /  
  }  
} / nesting another map /
```

```

{ / no problem type given /
  -1 /title/: "You do not have enough credit.",
  -2 /detail/: "Your current balance is 30, but that costs 50.",
  -3 /instance/: "/account/12345/msgs/abc",
  "tag:example.com,2022:out-of-credit" : {
    0 /out-of-credit-balance/: 30,
    1 /available-accounts/: ["/account/12345",
                             "/account/67890"]
    / 0 and 1 are internal to example.com's 2022:out-of-credit;
      they don't need registering /
  }
} / look, ma, no registering /

```

```
{ / no problem type given /
  -1 /title/: "You do not have enough credit.",
  -2 /detail/: "Your current balance is 30, but that costs 50.",
  -3 /instance/: "/account/12345/messages/abc",
  "http://example.com/account/pd": {
    0 /out-of-credit-balance/: 30,
    1 /available-accounts/: ["/account/12345",
                             "/account/67890"]
  },
  "http://example.com/common/pd": {
    0 /pid/: 24153,
    1 /process name/: "acctd",
  }
} / composition example /
```

tunneling

Register CPD 7807 as:



```
tunnel-7807 = {  
  ? &(type: 0) => ~uri  
  ? &(status: 1) => 0..999  
  * text => any  
}
```

```
{ / no problem type given /  
-1 /title/: "not enough credit",  
-2 /detail/: "Balance is 30, cost is 50.",  
-3 /instance/: "/account/12345/msgs/abc",  
  7807: {  
    0: "https://example.com/probs/o-o-cred",  
    "balance": 30,  
    "accounts": ["/account/12345",  
                 "/account/67890"]  
  }  
}
```

(inverse direction waiting
for 7807bis, probably with
some base64-encoded
CBOR)

Tag 38

Tag 38: registered to do:

```
38(["en", "Hello"])
```

Missing out on base-direction (ltr/rtl)!

```
38(["he", "שלום", true])
```

<https://www.w3.org/International/questions/qa-direction-from-language.html>

https://www.w3.org/TR/international-specs/#text_direction

Tag 38 update proposal:

- (1) define new tag for direction
- (2a) define new tag "N38" like below, similar to 264 vs 4
- (2b) fix up 38 to be like below

```
tag38 = #6.38([tag38-ltag, text, ?tag38-direction])
tag38-ltag = text .abnf ("Language-Tag" .det RFC5646)
tag38-direction = &(ltr: false, rtl: true)
```

```
RFC5646 = '  
  Language-Tag = langtag           ; normal language tags  
                / privateuse      ; private use tag  
  ...          / legacy            ; legacy tags
```