

GNAP Interim Meeting

draft-ietf-gnap-core-protocol-03

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Justin Richer • Aaron Parecki • Fabien Imbault

Agenda

- Updates on Latest Draft (-03)
 - Terminology
 - Functional changes
 - Editorial changes
- Issues
 - #40 access token request/response format
 - #122 interaction request/response format

Terminology

- Goal: enable future technical work with more clarity
- Takes into account discussions/feedbacks on the mailing list
- ISO style (definition, note, example)
- Provide self-contained definitions (no embedded requirement, no circular def)
- Don't change what works / what people know (AS, RS, client), but be precise
- Issue [#29](#) / PR [#155](#) (pending merge) / [wiki](#)

Future steps:

- Identify if we need additional terms (ex: interaction server, key proof, etc.) - would be managed through dedicated issues

Terminology : list of terms

- roles:
 - AS / client / RS / RO / end-user
- elements:
 - attribute / access token / grant / privilege / protected resource / right / subject / subject information
- changed: RQ -> end-user
- included (sub-definitions):
 - privilege / attribute / right / subject (cf <https://tools.ietf.org/html/draft-ietf-secevent-subject-identifiers-06>)
- removed:
 - cryptographic key (nothing specific to the spec)

Functional Changes

- Dropped redirect to a short URL ([#139](#), [#121](#), [#53](#))
- Dropped OpenID Connect “claims” parameter ([#140](#))
- Made access tokens mandatory for continuation request ([#129](#), [#67](#))

Editorial Changes

- Removed closed issues from draft text ([#150](#))
- Fixed a bug about sub_ids ([#153](#))
- Rephrased to “GNAP” instead of “GNAP protocol” ([#125](#))
- Minor typo fixes ([#126](#))
- Updated acknowledgements

Discussion Items

#40 Access Token Request/Response Format

<https://github.com/ietf-wg-gnap/gnap-core-protocol/issues/40>

Current Syntax: Request

```
{  
  "client": ...  
  "resources": [  
    {  
      "type": "photo-api",  
      "actions": [ "read", "write", "dolphin" ],  
      "locations": [  
        "https://server.example.net/",  
        "https://resource.local/other"  
      ],  
      "datatypes": [ "metadata", "images" ]  
    },  
    "read",  
    "bind_token",  
    "multi_token"  
  ]  
}
```

Access Token

Rich Object

Reference

Flags

Proposed Syntax: Request

```
{
  "client": ...
  "access_token": {
    "access": [
      {
        "type": "photo-api",
        "actions": [ "read", "write", "dolphin" ],
        "locations": [
          "https://server.example.net/",
          "https://resource.local/other"
        ],
        "datatypes": [ "metadata", "images" ]
      },
      "read"
    ]
    "key": true,
    "multi token": true,
    "label": "token-1"
  }
}
```

Access Token

Rich Object

Reference

Flags

Current Syntax: Response

```
{
  "continue": ...
  "access_token": {
    "value": "GrFWA7zOkP0PpUPEiqhuKP",
    "resources": [
      {
        "type": "photo-api",
        "actions": [ "read", "write", "dolphin" ],
        "locations": [
          "https://server.example.net/",
          "https://resource.local/other"
        ],
        "datatypes": [ "metadata", "images" ]
      },
      "read"
    ]
  }
  "key": true
}
```

Access Token

Value

Rich Object

Reference

Binding

Proposed Syntax: Response

```
{
  "continue": ...
  "access_token": {
    "value": "GrFWA7zOkP0PpUPEiqhuKP",
    "access": [
      {
        "type": "photo-api",
        "actions": [ "read", "write", "dolphin" ],
        "locations": [
          "https://server.example.net/",
          "https://resource.local/other"
        ],
        "datatypes": [ "metadata", "images" ]
      },
      "read"
    ]
  },
  "key": true,
  "multi token": true,
  "label": "token-1"
}
```

Access Token

Value

Rich Object

Reference

Binding

Flags

Current Syntax: Multi Request

```
{  
  "client": ...  
  "resources": {  
    "token1": [ "write", "bind_token" ],  
    "token2": [ "read" ]  
  }  
}
```

First, bound

Second, bearer

Proposed Syntax: Multi Request

```
{
  "client": ...
  "access_token": [
    {
      "label": "token1",
      "access": [ "write" ],
      "key": true
    },
    {
      "label": "token2",
      "access": [ "read" ],
      "key": false
    }
  ]
}
```

First, bound

Second, bearer

Current Syntax: Multi Response

```
{
  "continue": ...
  "multiple access tokens": {
    "token1": {
      "value": "GrFWA7zOkP0PpUPEiqhuKP",
      "resources": [ "write" ],
      "key": true
    },
    "token2": {
      "value": "PNEKgODQk/7vRW59sAdenl",
      "resources": [ "read" ],
      "key": false
    }
  }
}
```

First, bound

Label in structure

Second, bearer

Proposed Syntax: Multi Response

```
{
  "continue": ...
  "access token": [
    {
      "label": "token1",
      "value": "GrFWA7zOkP0PpUPEiqhuKP",
      "access": [ "write" ],
      "key": true
    },
    {
      "label": "token2",
      "value": "PNEKgODQk/7vRW59sAdenl",
      "access": [ "read" ],
      "key": false
    }
  ]
}
```

First, bound

Label internal

Second, bearer

Why change?

- Parallelism between request and response
- Easier to talk about attributes other than “resources”
 - Including better defaults (ie, default to “bound” token)
- Paves the way for directed tokens
 - “Label” is just a start
- Consistent syntax for single/multi token requests

Downsides?

- More complex structure
- Requires separate “label” to differentiate multiple tokens

Interaction Request/Response Format

<https://github.com/ietf-wg-gnap/gnap-core-protocol/issues/122>

Current Syntax

```
"interact": {
```

```
  "redirect": true,  
  "app": true,  
  "user_code": true,
```

How the client can interact with the user

```
  "callback": {  
    "method": "redirect",  
    "uri": "https://client.example.net/return/123455",  
    "nonce": "LKLTi25DK82FX4T4QFZC"  
  },
```

How the client can
receive a response from the AS

```
  "ui_locales": ["en-US", "fr-CA"]
```

Hints to the AS

```
}
```

Proposed Syntax

```
"interact": {  
  "start": ["redirect", "app", "user_code"],  
  "finish": {  
    "callback": {  
      "method": "redirect",  
      "uri": "https://client.example.net/return/123455",  
      "nonce": "LKLTi25DK82FX4T4QFZC"  
    }  
  },  
  "hints": {  
    "ui_locales": ["en-US", "fr-CA"]  
  }  
}
```

Why change?

- Clearer to understand what the values mean when separating the start/finish parts of the flow
- Avoids boolean values when the only meaningful value is “true” anyway
- Future development and extensions don’t risk conflicts

```
"interact": {  
  "start": ["redirect", "app", "user_code"],  
  "finish": {  
    "callback": {  
      "method": "redirect",  
      "uri": "https://client.example.net/return/123455",  
      "nonce": "LKLTI25DK82FX4T4QFZC"  
    }  
  },  
  "hints": {  
    "ui_locales": ["en-US", "fr-CA"]  
  }  
}
```