Link relationship types for authentication

HTTPAPI-WG @ IETF-116 Evert Pot (https://evertpot.com/)

Why?

- Developers of hypermedia-style applications and APIs use the IANA Link Relations registry as a vocabulary for standard relationships.
- Several user and authentication-related link relations are very commonly needed, and could be useful as an addition.

4 proposed link relationship types ("rels")

- rel="authenticate" Follow this link to enter an authentication flow.
- rel="authenticated-as" The resource at the target is a representation of the currently authenticated user.
- rel="logout" Follow this link to enter the logout process.
- rel="register-user" Follow this link to enter a user registration flow.

rel="authenticate" example use-cases

- Might contain a OAuth2 or OpenID authorization endpoint for the "authorization_code" flow.
- In this case a client does not need to know it's using OAuth2, it's equivalent to a 'Login' button in a HTML page.
- Generic clients can automatically detect 'login' functionality and adjust the UI accordingly to the presence of this feature.

rel="authenticated-as" example use-cases

- Answers the question "Who am I?"
- Useful for hypermedia applications to discover additional features associated with the current user.
- Global identifier for the current user (acct: schemes)

rel="logout" example use-cases

- Makes generic clients aware of the 'logout' affordance.
- Could potentially let browsers adjust the UI to render a 'logout' button in the actual browser chrome in a predictable place.

History & current implementations

- Original draft from May 2019.
- Variety of people let me know they've integrated it and asked if these ever became an RFC.
- I'm at least aware of support in our own systems (a12n-server) and Drupal 10.
- Some positive feedback on the httpapi list!

Similar work

- "Interactive Authentication of Non-Interactive HTTP Requests" Ben Schwartz.
- Subject Identifier ("sub") in <u>OpenID Connect ID Token</u>.
- OpenID Connect RP-Initiated Logout
- A Well-Known URL for Changing Passwords (/.well-known/change-password)

Open questions?

- 1. "register-user" link has no support that I'm aware of, and should probably be removed unless there's users.
- Concern on the list about naming. Should "logout" be "logout-page" or "logout-resource" to better reflect its nature?

Next steps?

Help me I'm lost!

Thanks!
Evert Pot
https://evertpot.com/
me@evertpot.com/