

GNAP + SPC



Summary fynbos.

Omer has prepared an Internet Draft describing an extension to GNAP using SPC as an interaction mode

### https://www.ietf.org/archive/id/draft-ozdemir-gnap-spc-extension-00.html

- ID is being discussed within the GNAP WG and MAY be adopted as a work item or passed to another group.
- Will be refined as SPC API evolves.

# How does SPC work with GNAP?

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- 1. **Client** tests if SPC is possible (is end user using a browser which supports SPC?)
- 2. Client requests a grant to perform a payment from authorization server (AS)
  - a. Specifies SPC as a possible interaction mode.
  - b. Provides user identity hints and/or assertions.
- 3. **AS** determines SPC is preferred interaction AND user has enrolled credentials.
- 4. **AS** requests client perform SPC and provides challenge and candidate credentials.
- 5. Client invokes SPC with candidate credentials and challenge.
- 6. **Client** returns SPC response to AS to finish interaction and continue grant request
- 7. **AS** returns a grant, rejects request, or requests a different interaction

Prerequisites fynbos.

### Is SPC supported?

- Improvements to API have been proposed. Need to update Appendix of spec based on outcomes.

#### User hints and attestations?

- User identifiers and assertions can be passed in grant request

#### Device identification?

 Need to decide on the best way to pass a browser fingerprint in the grant request?

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AS applies policy based on:

- Grant requested
- Context provided (user identifiers, device context)
- Supported interaction modes

AS doesn't have to request interaction.

AS uses SRC as an interaction method if the identified user has enrolled credentials and the client has indicated support

AS evaluates SPC response and can require further interactions

Client fynbos.

Client is communicating with the AS over back-channel

- User is unaware so failure is silent, doesn't impact UX

Client needs a way to resolve AS URL from payment instrument or user identifier

- Payment Pointers (identifier is the URL)
- Directories that map identifiers to AS URLs
- Federated model (e.g. SRC)

Client is responsible for invoking SPC and returning the response

Next Steps fynbos.

## Evolve spec with SPC

- Grant request should map to SPC request
- Support for instrument details and/or selection

## **Implementations**

- Open Source: Rafiki project by the Interledger Foundation
- Commercial: Fynbos wallet