

# JWT Embedded Tokens

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# Background

- ~~Tokens issued by one issuer~~
- Tokens issued by **multiple issuers**

# Goal

- Bind one or more tokens from other issuer(s) to a new token and show relationship.

# Purpose

- Audit trail
- Real-time display of information
- Evaluation & Authorization

# Multiple Issuers

- Access Token
  - E.g., STIR - Diverted Calls
- ID Token
  - E.g., Hellō - Linking identity claims from multiple parties.

# Token Exchange Request

POST /token

Host: as.example.com

Content-Type: application/x-www-form-urlencoded

grant\_type=urn:ietf:params:oauth:grant-type:token-exchange

&subject\_token=<subject\_token>

&subject\_token\_type=urn:ietf:params:oauth:token-type:access\_token

&embed

# Token Exchange Response

HTTP/1.1 200 OK

Content-Type: application/json

```
{  
  "access_token": <access token>,  
  "issued_token_type": "urn:iETF:params:oauth:  
token-type:access_token",  
  "token_type": "Bearer",  
  "expires_in": 60  
}
```

# Tokens Claim

```
{  
  "sub": "1234567890",  
  "name": "John Doe",  
  "iat": 1516239022,  
  
  "tokens": [  
    { "type": <token-type>,  
      "token": <token> }  
  ]  
}
```



# Questions?

- Comments?
- Thoughts?