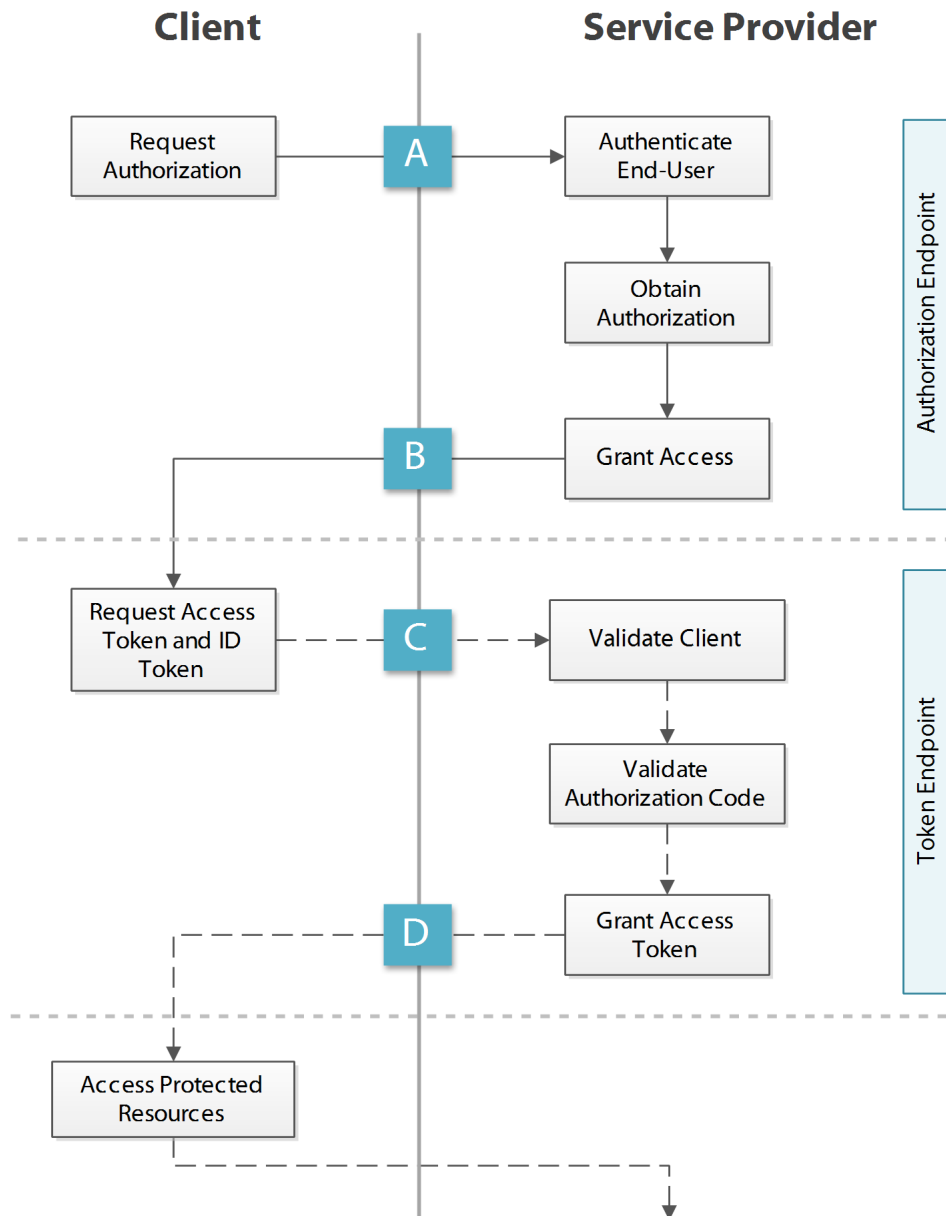


# OpenID Connect

## Authorization Code Flow



A

### Consumer Requests Authorization

**Request includes**

- response\_type: code
- scope: openid (MAY include additional scopes)
- client\_id
- redirect\_uri
- state (optional, recommended)
- nonce
- display (optional)
- prompt (optional)
- request (optional)
- request\_uri (optional)

B

### Service Provider Grants Authorization

**Response includes**

- code
- state (required IFF state was sent in the request; must be equal to what was received)

C

### Consumer Requests Access Token and ID Token

**Request includes**

- grant\_type:
- authorization\_code
- code
- redirect\_uri

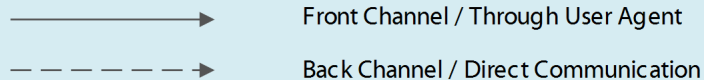
**If the client is confidential, it must authenticate with the Authorization Server in this request.**

D

### Service Provider Grants Access Token and ID Token

**Response includes**

- access\_token
- id\_token
- token\_type: Bearer
- expires\_in (optional)
- refresh\_token (optional)
- scope (optional; SHOULD be included if the scope granted differs from the scope requested)

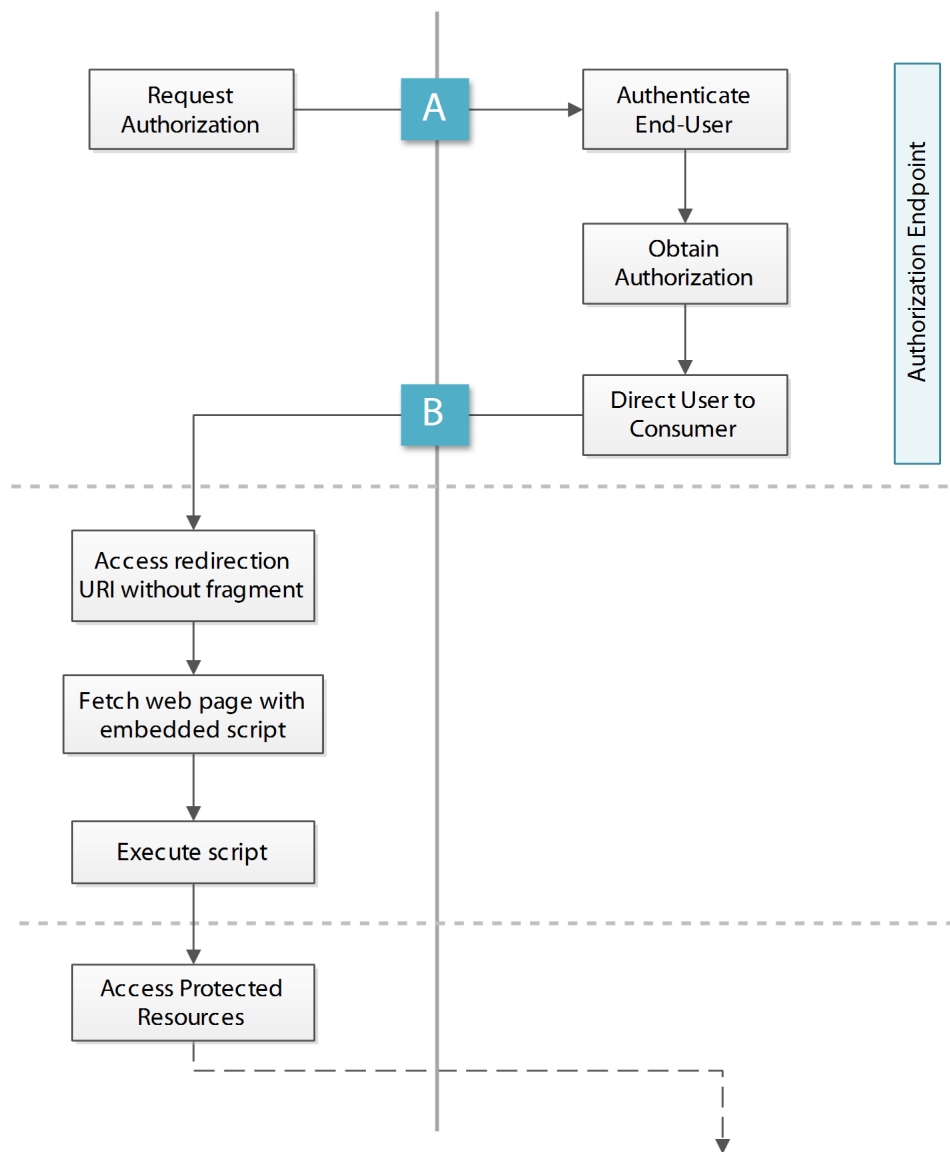


# OpenID Connect

## Implicit Flow

### Client

### Service Provider



A

#### Consumer Requests Authorization

##### Request includes

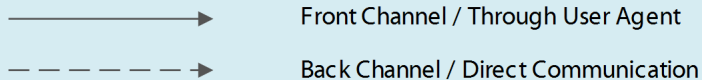
response\_type: id\_token token  
 scope: openid (MAY include additional scopes)  
 client\_id  
 redirect\_uri (required IFF the client has pre-configured more than one value with the service provider)  
 state (optional, recommended)  
 nonce  
 display (optional)  
 prompt (optional)  
 request (optional)  
 request\_uri (optional)

B

#### Service Provider Grants Authorization

##### Redirection URI (302 Found) includes (url-encoded in fragment)

access\_token  
 id\_token  
 token\_type: Bearer  
 expires\_in (optional)  
 refresh\_token (optional)  
 scope (optional; SHOULD be included if the scope granted differs from the scope requested)  
 state (required IFF state was sent in the request; must be equal to what was received)

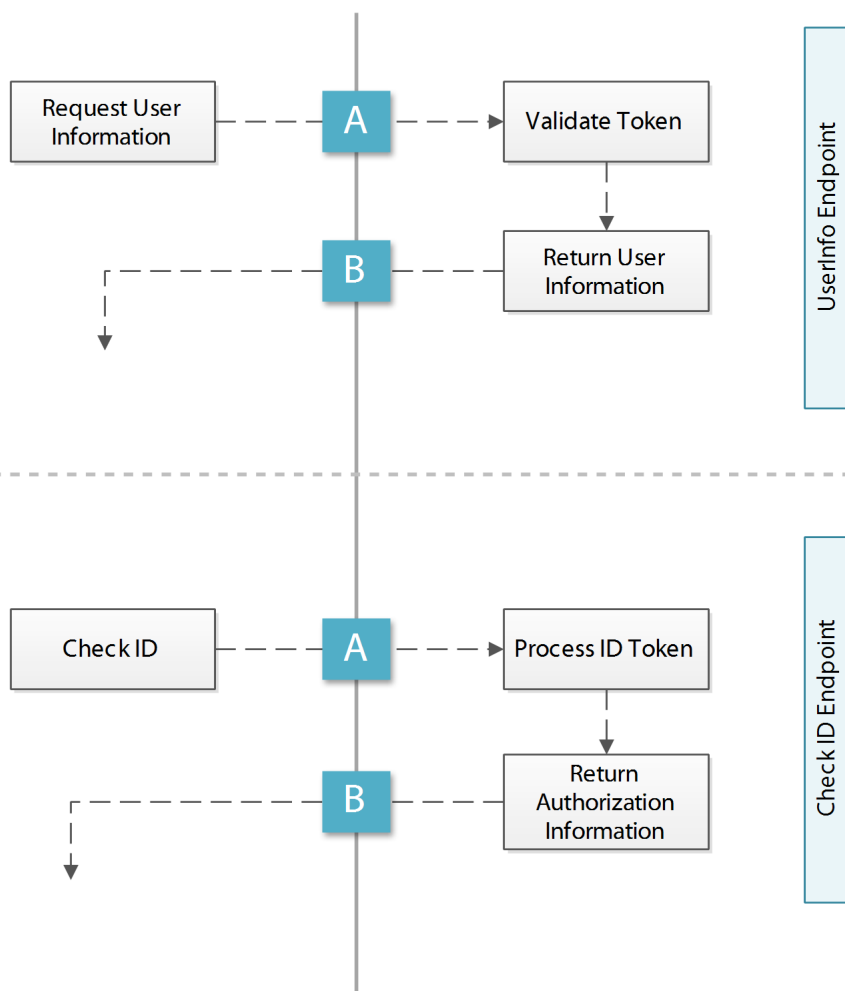


# OpenID Connect

## Optional Steps

### Client

### Service Provider



**A** Consumer Sends **User Info** Request

**Request includes**  
access\_token  
schema: openid

**B** Service Provider Returns **User Info** Response

**JSON response includes**  
user\_id

Optionally: name, given\_name,  
family\_name, middle\_name,  
nickname, profile, picture,  
website, email, verified, gender,  
birthday, zoneinfo, locale,  
phone\_number, address,  
updated\_time

**A** Consumer Sends **Check ID** Request

**Request includes**  
id\_token

**B** Service Provider Returns **Check ID** Response

**JSON response includes**  
iss  
user\_id  
aud  
exp  
iso29115 (optional)  
nonce  
auth\_time (optional)

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