

# draft-lodderstedt-oauth-jwt-introspection- response-00

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# What is it?

- Proposes an additional JWT based response type for Token Introspection (RFC 7662)

HTTP/1.1 200 OK

Content-Type: application/json

```
{
  "sub": "Z5O3upPC88QrAjx00dis",
  "aud": "https://protected.example.net/resource",
  "extension_field": "twenty-seven",
  "scope": "read write dolphin",
  "iss": "https://server.example.com/",
  "active": true,
  "exp": 1419356238,
  "iat": 1419350238,
  "client_id": "l238j323ds-23ij4",
  "username": "jdoe"
}
```

HTTP/1.1 200 OK

Content-Type: application/jwt

```
eyJraWQiOiIiYXNjaWwXnljoiUIMyNTYifQ.eyJzdWliOiJaNU8zdXBQQzg4UXJBa
ngwMGRpcylslmF1ZCI6Imh0dHBzOlwvXC9wcm90ZWNOZWQuZXhhbXBsZS5u
ZXRlc3Jlc291cmNliwiZXh0ZW5zaW9uX2ZpZWxkljoidHdlbnR5LXNldmVuliwic2
NvcGUiOiJyZWFKIHdyXRlIGRvbHBoaW4iLCJpc3MiOiJodHRwczpcL1wvc2Vyd
mVyLmV4YW1wbGUuY29tXC8iLCJhY3RpdmUiOnRydWUsImV4cCI6MTQxOTM
1NjlzOCwiaWF0IjoxNDE5MzUwMjM4LCJjbGllbnRfaWQiOiJzMjM4ajMyM2RzLT
zaWo0liwidXNlcm5hbWUiOiJqZG9lIn0.HEQHf05vqVvWVnWuEjbzUnPz6JDQVR
69QkxgzBNq5kk-sK54ieg1STazXGsdFAT8nUhiiV1f_Z4HOKNnBs8TLKaFXokhA
0MqNBOYI--2unVHDqI_RPmC3p0NmP02Xmv4hzxFmTmPgjSy3vpKQDihOjhwn
Bh7G81JNaJqjJQTRv_1dHUPJotQjMK3k8_5FyiO2p64Y2VxyqN1VWVlgOHlJw
hj6BaGHk4Qf5F8DHQZ1WCPg2p_-hwwfInfxh1_buSjxyDRF4oe9pKy6ZB3ejh9qI
Mm-WrwltuU1uWMXxN6eS6tUtpKo8UCHBwLWCHmJN7KU6ZojmaISspS23IEL
Alyw
```

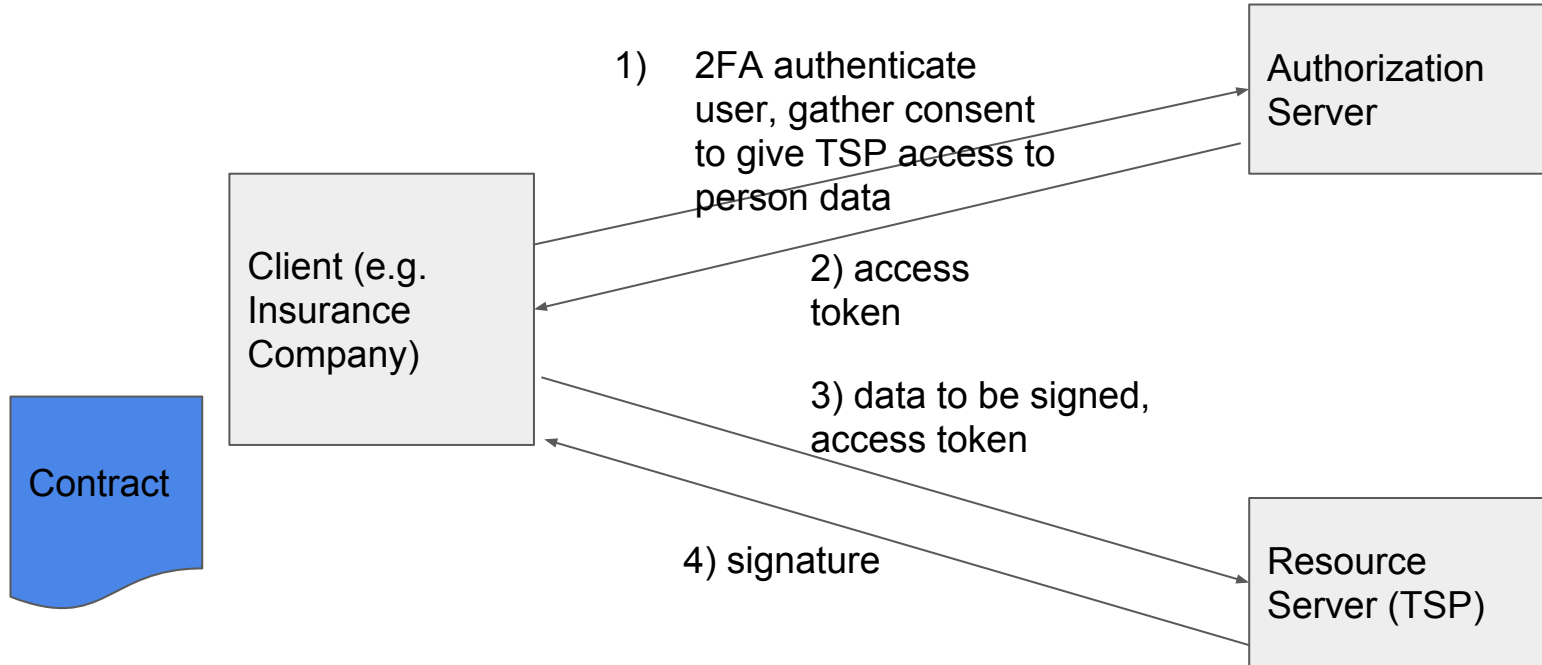
# What is it good for?

- Allows the AS to sign and encrypt the Token Introspection response
- Signing gives RS a cryptographic proof
  - that a particular AS has issued the access token and
  - what data the AS asserted in the access token
- Encryption may allow intermediaries to fetch the access token without getting access to the access token's payload
- Signing may be used to ensure the access token's integrity and authenticity in such cases

# Use Case Qualified Electronic Signature

- RS is Trusted Service Provider according to eIDAS (EU directive on **e**lectronic **I**dentification, **A**uthentication and trust **S**ervices)
- Offers remotely activated electronic signatures
- Can be used with an access token issued by an AS complying with eIDAS level of assurance substantial (identity proofing and authentication)

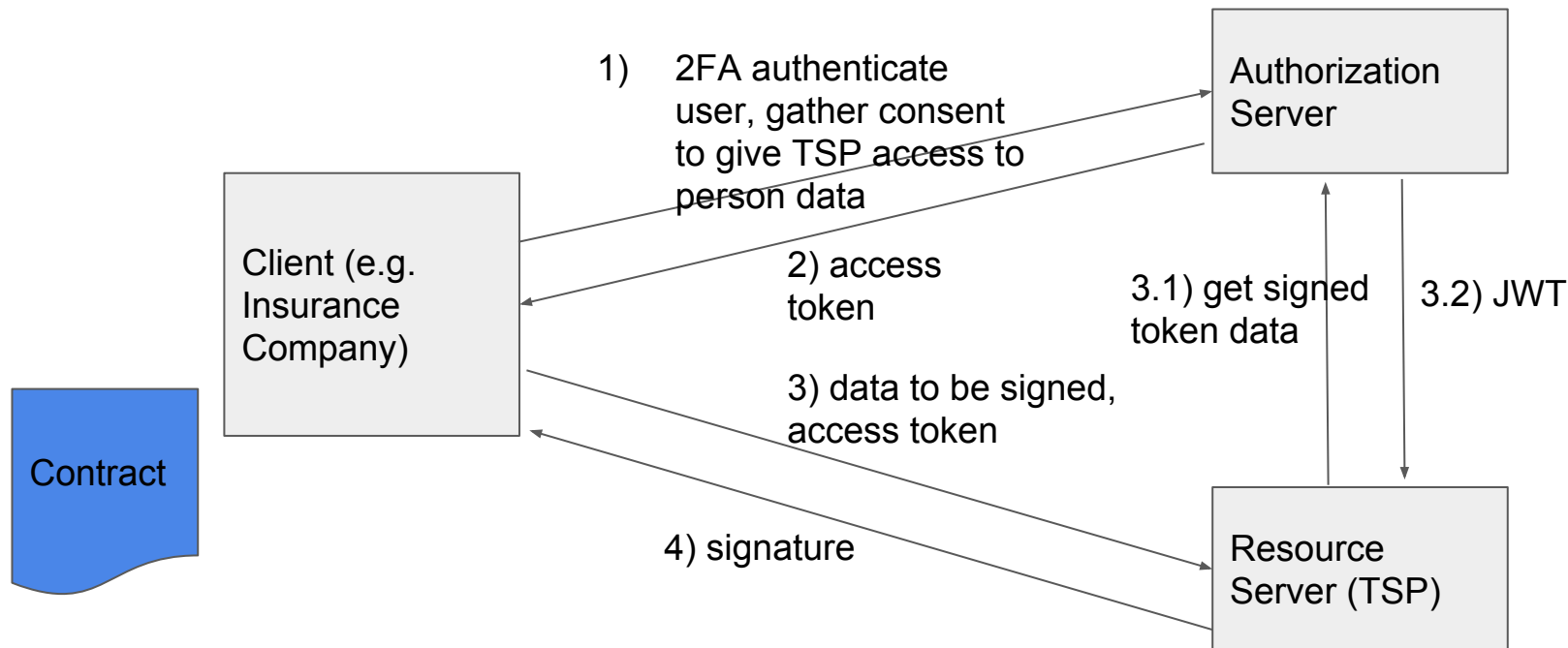
# Use Case Qualified Electronic Signature (2)



## Use Case Qualified Electronic Signature (3)

- The RS (TSP) is obliged to keep an audit trail of the whole process, including **what entity performed the identity verification and authentication**
- Signed Access Tokens help the RS to securely link the transaction back to the respective AS
- Structured access tokens? Not the easiest choice if the clients wants to access multiple RSs based on the same authorization grant
- **Token Introspection is easier to use from a client perspective but currently lacks digitally signed tokens.**

# Use Case Qualified Electronic Signature (4)



# Status

- Published revision -00
- Describes JWT response format
- Describes use of meta data to determine response type