

IOT BZH

Vehicle 2 Cloud AGL Open Identity Agent



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Use Cases

- Car to Cloud
- Cloud to Car
- Mobile to Car
- Fleet Management to Car
- Multi SoC
- Untrusted Application Authentication

Car → cloud

- Telematics
 - CAN/Signal acquisition
 - Local processing in Car
 - Push useful data to the cloud

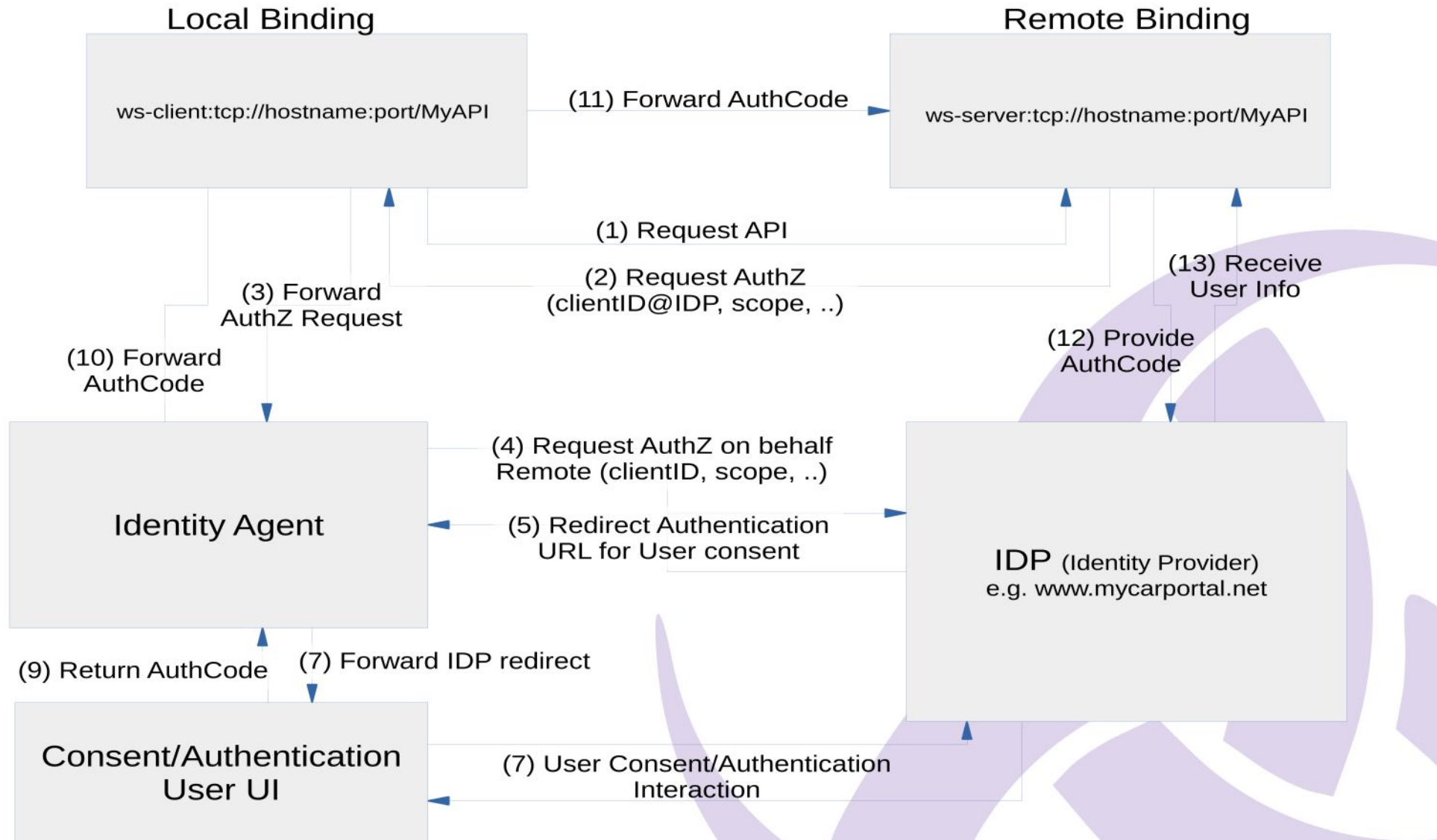
Cloud → Vehicle

- Retrieve user preferences
 - UI Skin
 - Music Playlist
 - Etc...
- Streaming services
 - e.g. Spotify
- Provisioning
 - Rental car push user preferences (e.g. language, navigation)
 - Car sharing (provision of keys)
 - Etc.

Car to Infrastructure

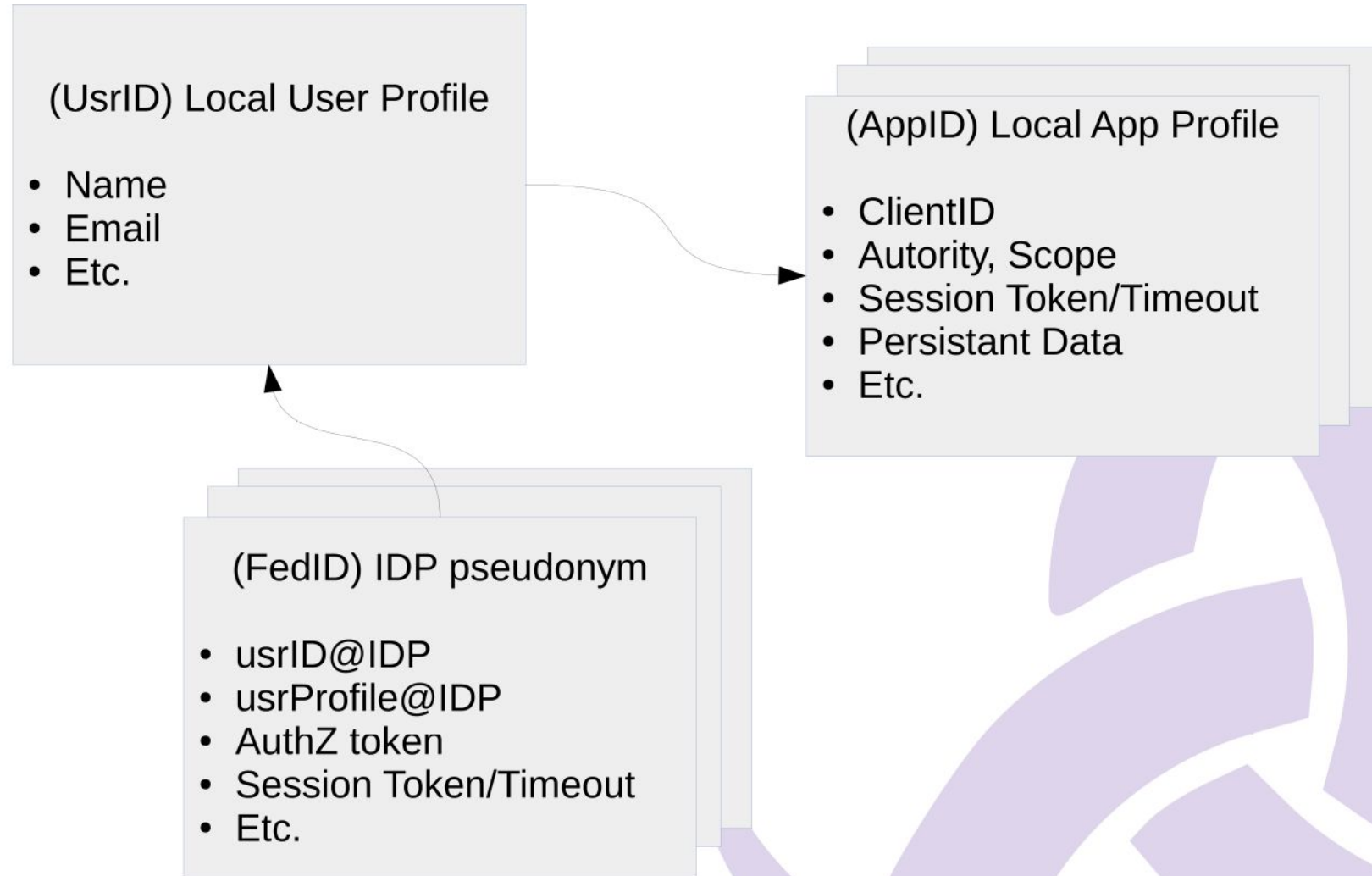
- Payment
 - Toll Road
 - Parking
 - Etc.
- Car to City
 - Retrieving local traffic
 - Retrieving tourist information
- Car to Home
 - Automatic synchronization music
 - Opening garage doors

Global Architecture



Data Model

Identity Agent Data Structure



Work To Be Done

- AGL Binding Protocol Extension
 - Native integration of OpenID Connect
 - Support for user interaction (consent, authentication)
- Access Controls
 - LOA
 - Hook for roles/group
 - Link with existing privilege model
- Authentication
 - Webview for Authentication/Consent
 - Map authentication devices (NFC, FiDO)
 - Define API for custom API

Further Information

- Specifications: <http://openid.net/connect>
- Introduction <http://openid.net/connect/faq>
- Deep dive in protocols: *[Following videos are pretty technical, while they relates to one of previous live project they may help to understand OpenID protocols. Please ignore 1st videos which are related to the installation of the project, last ones demonstrate protocols through a live debug session]*
 - French <http://breizhme.net/fr/video-technique> (2nd & 3rd videos)
 - English <http://breizhme.net/en/> (last video)

Warning: When searching for information you should be aware that OpenID-connect has 100% different from OpenID-v1/v2.