Main goals for ALS 2017

Integration with Systemd

Automatic connection to service and API

Identity agent

OpenId connect service

Bugs!
Recent work
Integration with systemd

• Brings systemd functionalities:
  – Socket-based Services Activation
  – CGroups / Namespaces for apps
  – … and any upcoming enhancement in systemd

• Automatic start of services / apps

• Automatic connection of clients to services

• Composition of services coming from different packages
Integration with systemd

- config.xml
- /etc/afm/afm-unit.conf
- json
- *service
- *socket
- temporary data
- Mustache engine
- Units description
- Unit installer

If permission validated

*appli content*
Definition of permissions

\texttt{urn:AGL:permission:<api>:<level>:<hierarchical-name>}

- The API providing (requiring) the permission.
- One of the values: system, platform, partner, \textit{publisher}, owner, public
- Colon separated names possibly defining hierarchies of permissions

Advantage: self declaration of api, level and scoping.

Note that other schemes can be defined for being used together with this one.

Examples:
- \texttt{urn:AGL:permission::platform:no-oom}
- \texttt{urn:AGL:permission:lowcan:system:read,write}
Ongoing work
History of the security model

- Meego (2014)
- Tizen 2 (June 2014)
- Tizen IVI
- Tizen 3 (Dec. 2014)
- Ostro (March 2015)
- AGL

Security model changes from Tizen 2 to Tizen 3
First meta-intel-iot-security release
AGL spec 1.0 May 28th
First Tizen 3 security release
Start of refitting framework
Integration to AGL

Synchronization
Security Topics

- Ensure cynara enforcement
- Test cynara tools
- Maintenance of meta-agl-security layer
- OpenID Connect – protect remote APIs
Binder / Bindings
Binder Enhancements

- Automatic transparent APIs to services
  - using D-Bus
  - using websocket locally
  - using in memory linkage
  - using websocket to access an OpenId connect protected
- Realign on upstream libmicrohttpd 50
- Native binder
API Transparency

Security Context

UI

Binder

CAN API

XXXXX API

Transport Layer

Cynara Security Check

Security Context

Binder

CAN High Level Binding(s)

CAN Low Level Binding(s)