

Web-based IoT standardization activity including OMA GotAPI and DWAPI

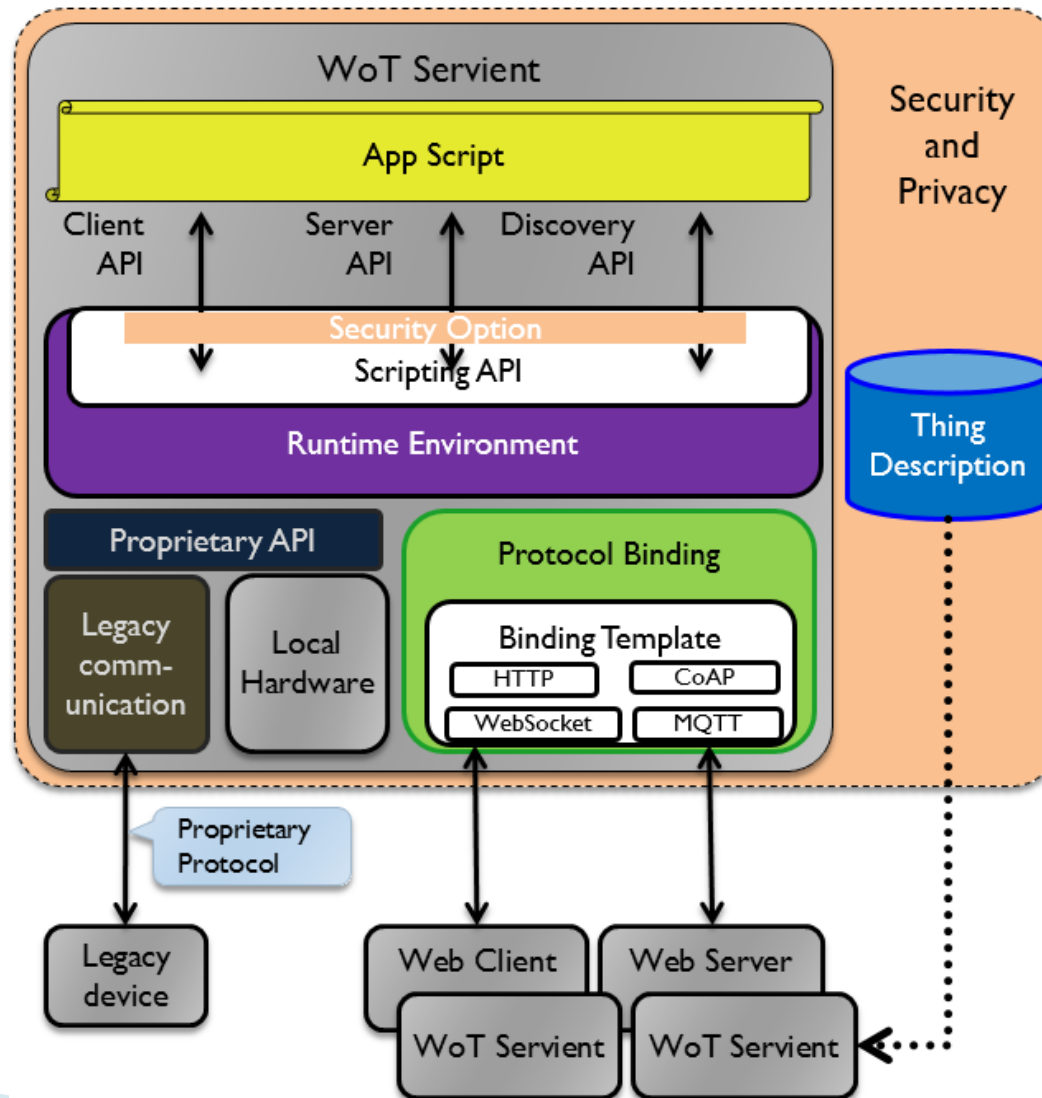
Prof. Han, Min-gyu
(andyhan@hansung.ac.kr)

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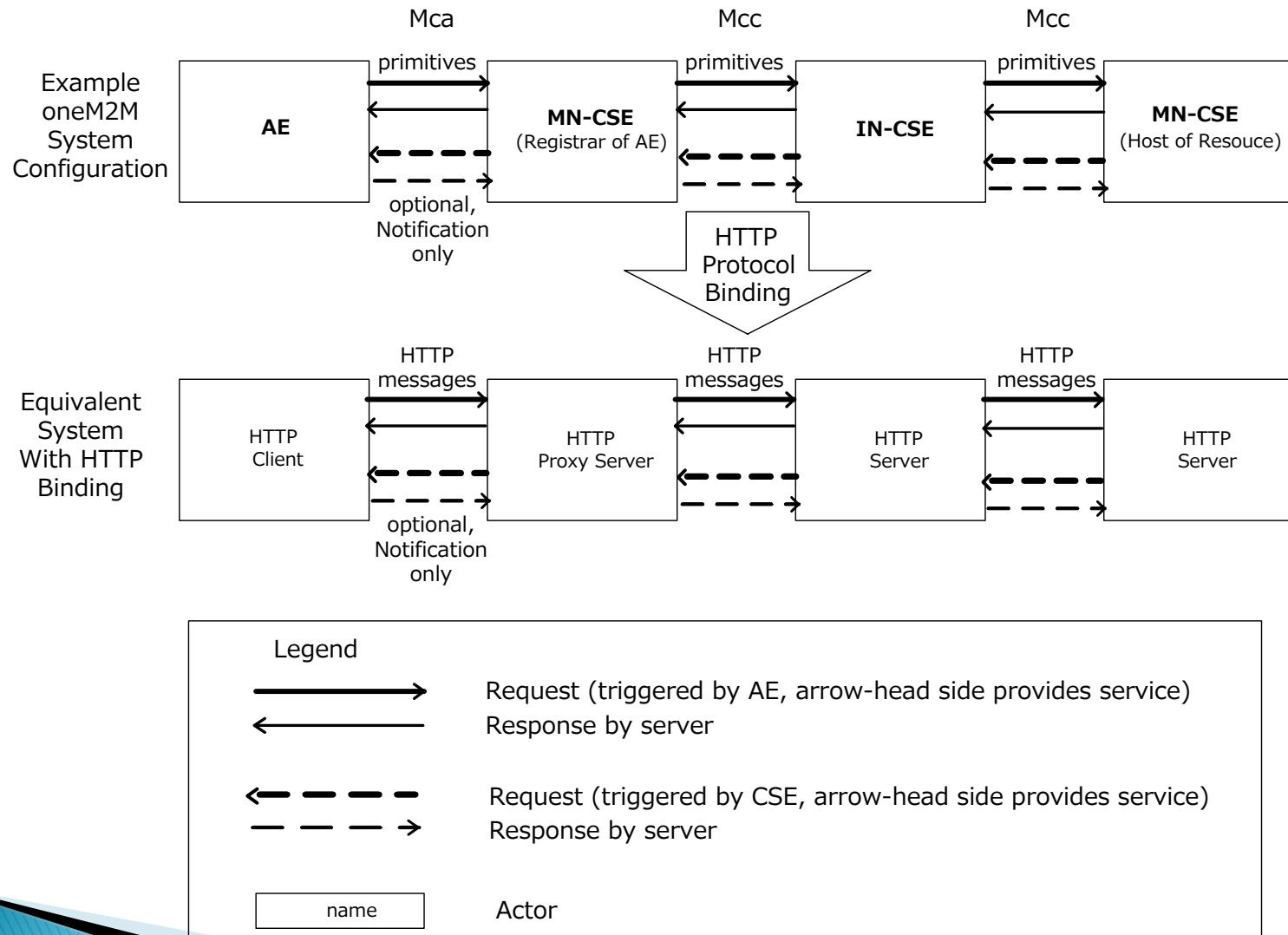
Web-based IoT Standardization

- ▶ W3C Web of Things WG
 - WoT Architecture
 - WoT Thing Description
 - WoT Scripting API
 - WoT Binding Templates
- ▶ oneM2M WG3(PRO)
 - TS-0008 CoAP Protocol Binding
 - TS-0009 HTTP Protocol Binding
- ▶ OMA Contents Delivery(CD)
 - Generic Open Terminal API(GotAPI)
 - Device Web API(DWAPI)
 - Social Network Web-Social Web of Things(SWoT)

W3C WoT Servient

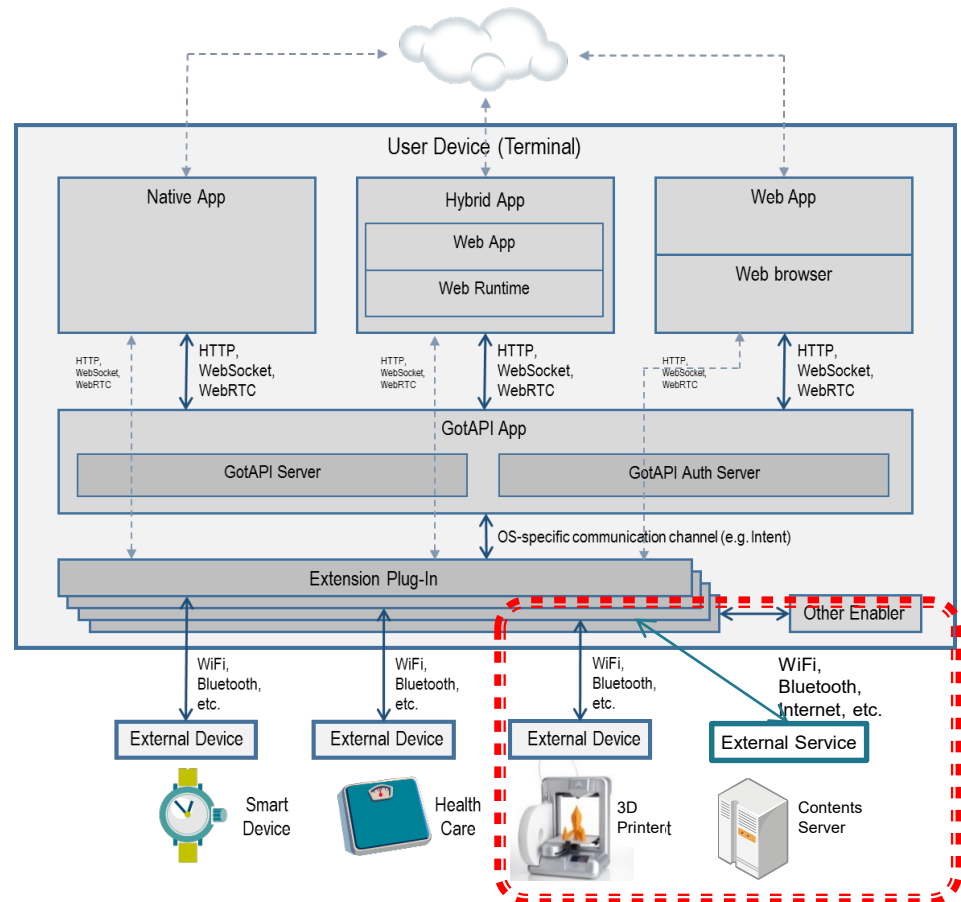


oneM2M entities and HTTP Client/Server

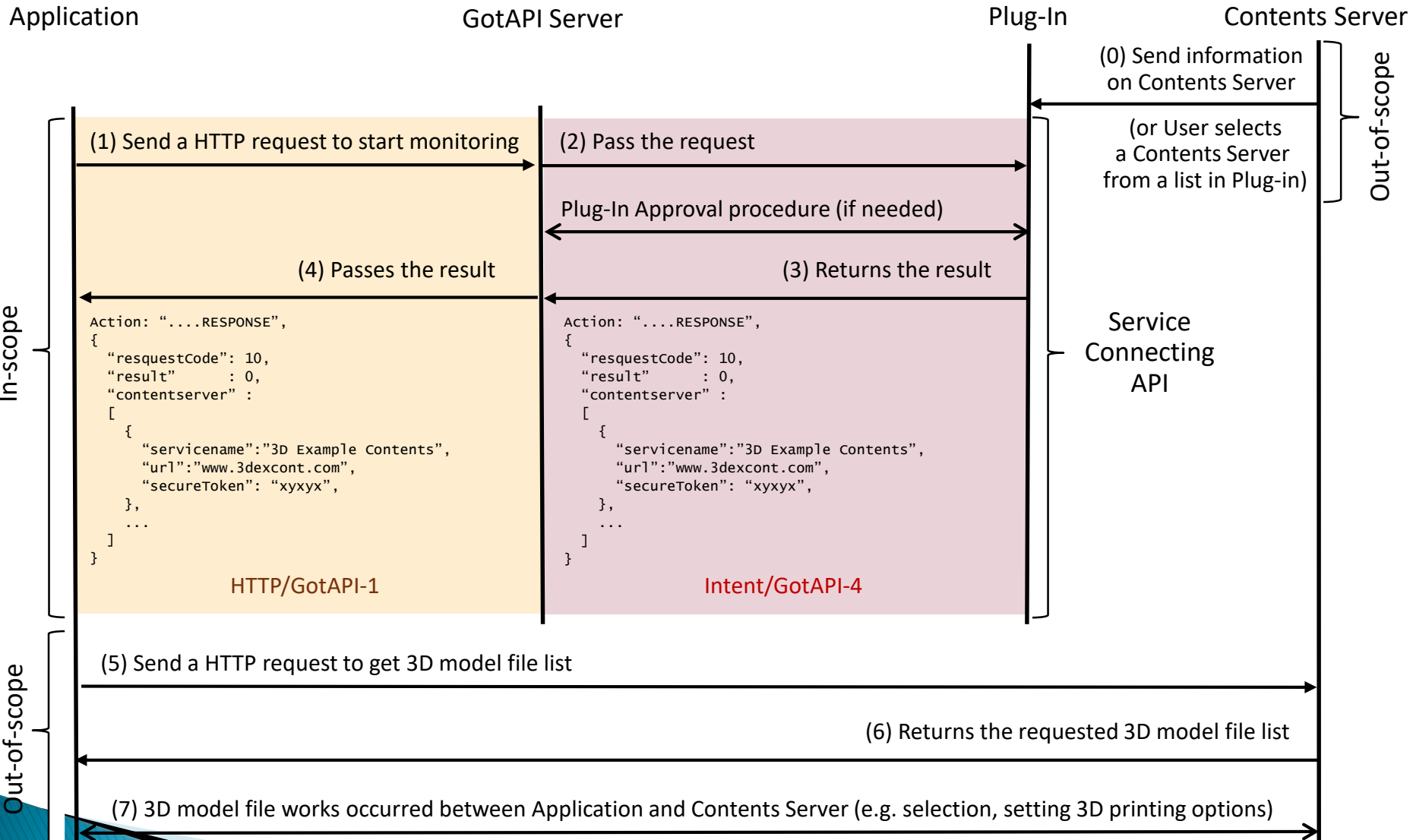


OMA GotAPI & DWAPI

- ▶ Supports PCH and 3DP
- ▶ DWAPI Common API
 - Service Discovery
 - One-shot Messaging
 - Asynchronous Messaging
- ▶ DWAPI-3DP Specific API
 - Service Connecting
 - Authentication
 - 3D Printing Command



Getting 3D model file of DWAPI-3DP

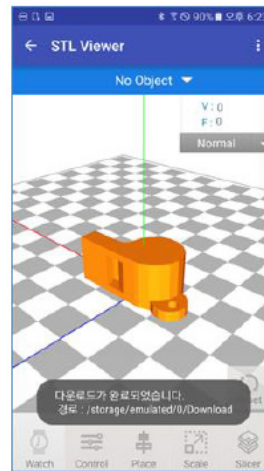


OMA DWAPI Status

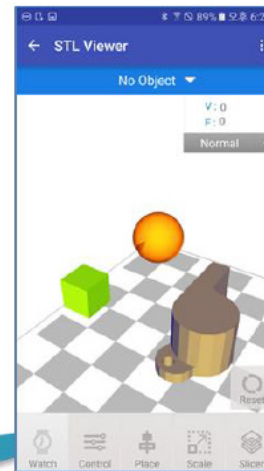
- ▶ Updated ER and additional TS
 - Will be released within this year
 - Modified architecture and additional features
- ▶ Additional Features
 - Supports Remote Operation
 - Provides Secured Domain between external device (e.g.3DP) and external server (e.g. 3D contents service)
- ▶ External Liaison
 - oneM2M WG5(MAS) device profile

DEMO

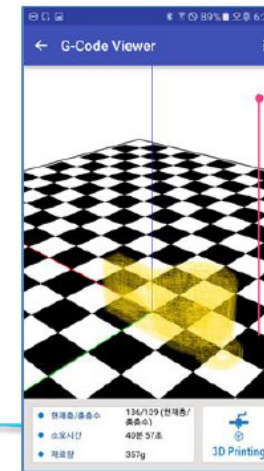
- ▶ EDIX 2017 (Educational IT Solutions Expo) Tokyo
- ▶ May 17th-19th, 2017 (Tokyo Big Sight)
- ▶ <http://www.edix-expo.jp/en/>



Download
3D model



Place (auto/manual)
3D models on
printer volume



Preview
printing Information

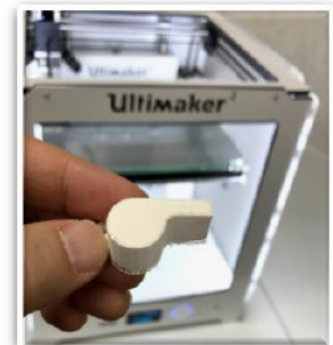


Printing control &
status monitoring



<Mobile 3D Printing Process>

Add-on board
(Raspberry Pi)



Спасибо! 谢谢! 감사합니다.

Pěkně děkuji. Danke schön! Thank you!

Merci beaucoup. Muchas gracias.

ありがとうございます。

ขอบคุณครับ. Terima kasih.

Талархлаа. Cảm ơn chị.

अतिकृतज्ञ होना Hálás vagyok.