An overview of the current status
How is oneM2M composed?
Partner Type 1
How is oneM2M composed?
Partner Type 2 and Associate Members

Partner Type 2
- Continua Health Alliance
- HGi
- OMA

Associate Members
- NIST National Institute of Standards and Technology
- U.S. Department of Commerce
- Ministry of Science, ICT and Future Planning
- Department of Transportation
  United States of America
How is oneM2M composed?
Technical Plenary and Working Groups

Steering Committee

Technical Plenary

Secretariat

WG1
Use Cases and Requirements

WG2
Architecture

WG3
Protocols

WG4
Security

WG5
Management, Semantics, Abstraction
oneM2M status
What’s been accomplished so far?

WG1:
- Use Case Technical Report complete
- Requirements Technical Specification complete

WG2:
- Architecture Analysis Part 1 Technical Report complete
- Architecture Analysis Part 2 Technical Report complete
oneM2M status
What still needs to be done?

WG2:
• Functional Architecture Technical Specification

WG3:
• Protocol Analysis Technical Report
• Protocol Technical Specification

WG4:
• Security Solutions Technical Report
• Security Solutions Technical Specification

WG5:
• Study of Management Capability Enablement Technical Report
• Study on Abstraction and Semantics Enablement Technical Report
oneM2M status
What’s in scope?

Layer

Applications

oneM2M Service Layer

Underlying Networks

Automotive

Agricultural

Telematics

Point of Sale

Utilities

3GPP; 3GPP2; 802.11; DOCSIS; etc.
**oneM2M status**

**Architectural view**

Nodes consist of:
- **AE** – Application Entities
- **CSE** – Common Services Entities

Reference points are:
- **Mcc** – between CSE’s
- **Mca** – between an AE and a CSE
- **Mcn** – between a CSE and an Underlying Network

In oneM2M scope
CSE is composed of Common Service Functions (CSF):

- **AID** – Addressing and Identification
- **SEC** – Security
- **SMG** – Session Management
- **SCA** – Service Charging and Accounting
- **DMR** – Data Management Repository
- **CMDH** – Communication Management/Delivery Handling
- **DIS** – Discovery
- **LOC** – Location
- **REG** – Registration
- **SUB** – Subscription Notification
- **NSE** – Network Service Exposure
- **GMG** – Group Management

CSFs will be expressed in terms of services/functions exposed on reference points.
oneM2M status
Architectural view

Application Dedicated Node

Application Service Node

Middle Node

Infrastructure Node
oneM2M status

Protocol View

• Very early stages of protocol work underway

• Undertaking a review of existing protocols with a view towards their applicability in oneM2M
  • MQTT
  • CoAP
  • XMPP
  • HTTP
  • Websockets
  • Others in the queue…

• What protocols should be used over which protocol segments

• Protocol work specific to oneM2M will begin once WG2 completes the architecture work, which is scheduled for February 2014
• Work well underway for the Technical Report, which examines:
  • Threats and vulnerabilities
  • Countermeasures and solutions
  • Security requirements

• The Technical Specification will provide security solutions based upon the analysis provided in the TR.
Current work is focused on selection of an appropriate device management protocol for the first release, examining multiple options:

- OMA-DM 1.3
- OMA-DM LWM2M
- OMA-DM 2.0
- TR-069

Also considering information models with which to begin construction of an abstraction layer for interworking with other M2M protocols.