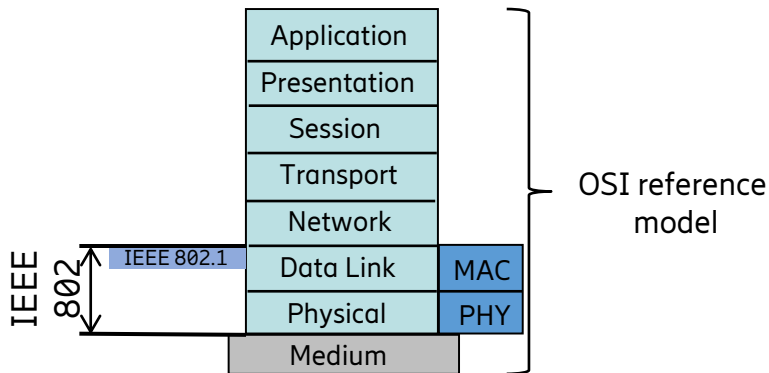


Discussion about 802 architecture

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- Architecture and Bridging
 - Traditionally, the Higher Layer Interface
- Part of the LAN / MAN Standards Committee
 - Along with 802.3, 802.11, 802.15, ...
 - Wired and wireless standards for data link and physical layers
 - In operation since March 1980



IEEE 802.1 Working Group

Chair: Glenn Parsons
Vice-chair: Jessy Rouyer

TSN Task Group
Chair: János Farkas

Security Task Group
Chair: Mick Seaman

Maintenance Task Group
Chair: Paul Congdon

YANGsters
Chair: Scott Mansfield

Nendiica
Chair: Roger Marks

IEEE Std 802 – abridged table of contents

- Family of IEEE 802 standards
- Reference models
- General requirements for an IEEE 802 network
- IEEE 802 network management
- MAC addresses
- Protocol identifiers
- Allocation of OID values
- Allocation of URN values

802 reference model

MSAP MAC service access point
LSAP link service access point

PSAP PHY service access point

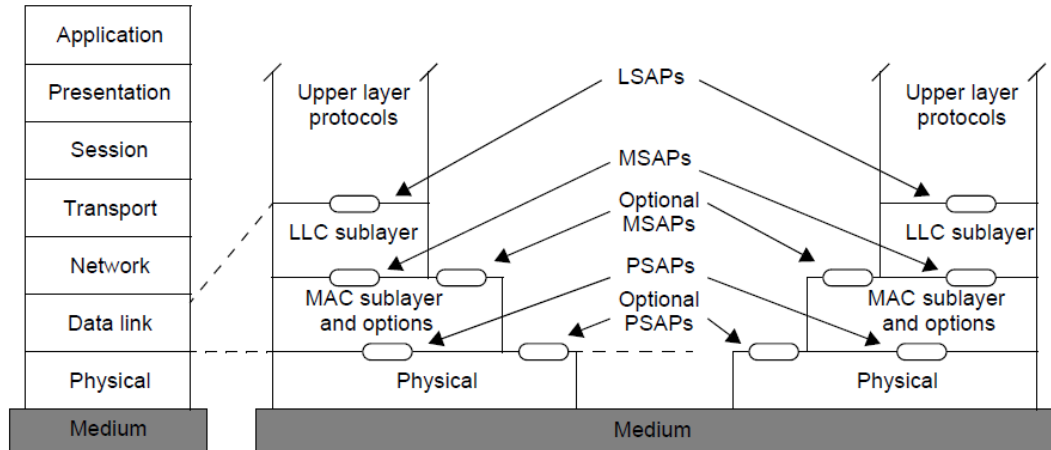


Figure 3 - IEEE Std 802

- Current IEEE 802 family of working groups
- 802.1 Bridging and Architecture
- 802.3 Ethernet
- 802.11 Wireless LAN (WLAN)
- 802.15 Wireless Personal Area Network (WPAN)
- 802.16 Broadband Wireless Access (BWA)
- 802.21 Media Independent Handover
- 802.22 Wireless Regional Area Networks (WRAN)

MAC address

- 48-bit or 64-bit number used to identify the source and destination MAC entities
- May also be used to identify a MAC SAP
- If the Individual/Group (I/G) bit is set to 1, the address is a group MAC address
- If the Universal/Local (U/L) bit is set to 1, the address is locally administered

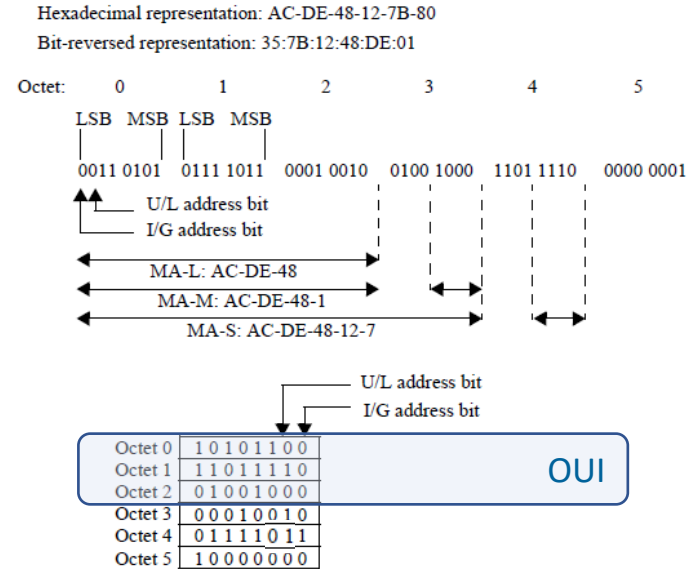


Figure 10 – IEEE Std 802

IEEE Std 802 and the RAC

- IEEE Std 802 is the primary standard for multiple IEEE Registration Authority administered registries
 - IEEE RA administered universally unique MAC address registries (MA-L, MA-M and MA-S)
 - Specifications for use of Organizationally Unique Identifier (OUI) contained in MA-L, and Company ID (CID)
 - EtherType protocol identifiers
 - Hierarchical registries (e.g., oid and urn)

octet identifier	MSB	0	1	2	3	4	5	LSB				
MA-L	24-bit OUI				24-bit extension							
MA-M	28-bit MA-M base					20-bit extension						
MA-S	36-bit OUI-36						12-bit extension					
example value (hex)	AC		DE		48		23		45		67	
example value (binary)	1010	1100	1101	1110	0100	1000	0010	0011	0100	0101	0110	0111

Table 6 – RAC Guide to EUI, OUI and CID

Why are we discussing 802 architecture?

- Highlight the revision project
- Level-set on the goals of IEEE Std 802 Overview and Architecture
- Level-set on the architectures of the 802 family of standards
- Input to EC workshop on “802 Architecture and Technical Coherence”