oneM2M IoT SL Architecture

oneM2M Layered Architecure Model

oneM2M Layered Model comprises three (3) layers:

- the Application Layer,
- the Common Services Layer
- the underlying Network Services Layer.

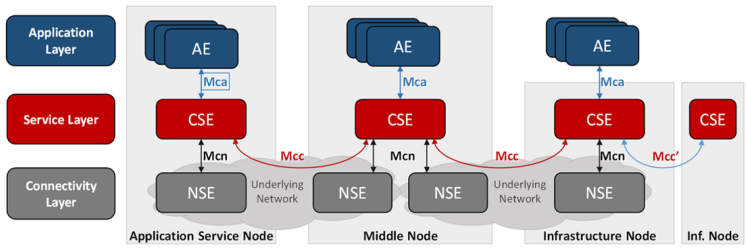

Figure 5.1.2-1: oneM2M Layered Model

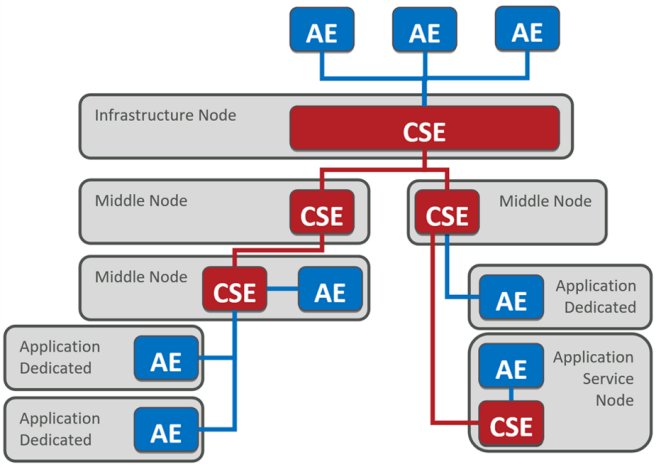

Figure 5.1.2-3: oneM2M node topology

Application Entity (AE): The Application Entity is an Entity in the Application Layer that implements an M2M Application Service Logic. Each Application Service Logic can be resident in a number of M2M Nodes and/or more than once on a Single M2M Node. Each execution instance of an Application Service Logic is termed an "Application Entity" (AE) and is identified with a unique AE-ID.

Examples of the AEs include an instance of a fleet tracking application, a remote blood sugar measuring application, a power metering application or a pump controlling application.

Common Services Entity (CSE): A Common Services Entity represents an Instantiation of a Set of "Common Service Functions" of the oneM2M Service Layer. A CSE is actually the Entity that contains the collection of oneM2M-specified Common Service Functions that AEs are able to use. Such Service Functions are exposed to other Entities through the **Mca** (exposure to AEs) and **Mcc** (exposure to other CSEs) Reference Points.

Reference Point **Mcn** is used for accessing services provided by the underlying Network Service Entities (**NSE**) such as waking up a sleeping device. Each **CSE** is identified with a unique CSE-ID.

Examples of service functions offered by the CSE include: data storage & sharing with access control and authorization, event detection and notification, group communication, scheduling of data exchanges, device management, and location services.

Network Services Entity (NSE): A Network Services Entity provides Services from the underlying Network to the CSEs.