

ABSTRACT

Machine to Machine (M2M) refers a technology that allow both wireless and wired systems to communicate with other devices of the same type. M2M is a broad term as it does not pinpoint specific wireless or wired networking, information and communications technology. This broad term is particularly used by business executives. M2M is considered as an integral part of the Internet of Things (IoT) and brings several benefits to industry and business in general as it has a wide range of applications such as industrial automation, logistics, Smart Grid, Smart Cities, health, defense etc. mostly for monitoring but also for control purposes.

In order to support the rapid new development and the worldwide adoption of the Internet of Things as well as the continued growth of M2M technology and its large scale applications in the future, a global adoption and deployment of the Internet Protocol Version 6 (IPv6) are required because all of the sensors and machine-readable identifiers needed to make the Internet of Things a reality will need an extremely large address space. Even if the current supply of IPv4 addresses were not to be exhausted soon, the size of IPv4 itself is not large enough to support the future requirement of IoT.

Consequently, the future success of M2M, as an integral part of the IoT, will largely be determined by the successful global adoption of IPv6.

M2M can include the case of industrial instrumentation - comprising a device (such as a sensor or meter) to capture an event (such as temperature, inventory level, etc.) that is relayed through a network (wireless, wired or hybrid) to an application (software program) that translates the captured event into meaningful information (for example, items need to be restocked). Such communication was originally accomplished by having a remote network of machines relay information back to a central hub for analysis, which would then be rerouted into a system like a personal computer