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| Input Contribution | |
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| Title:\* | TR-0043-Modbus-interworking-scenario |
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# Introduction

This contribution proposes to add a new section for Modbus Interworking Use Case.

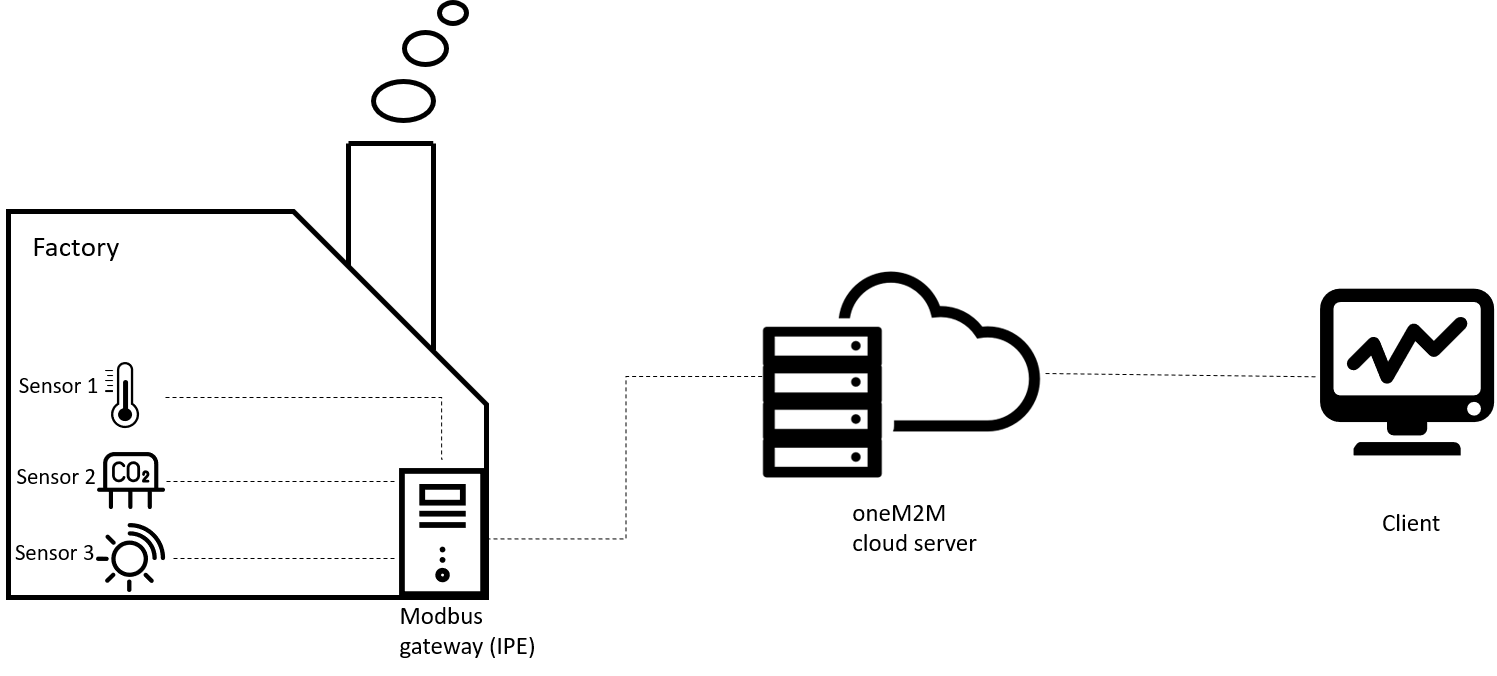
### -----------------------Start of change 1-------------------------------------------

# 6 Scenarios for oneM2M and Modbus Interworking

*This clause studies the* *scenarios for oneM2M and Modbus Interworking, such as Modbus-based device can connect to IN directly or via MN/ASN, and Modbus-based devices can connect to each other via IN/MN/ASN.*

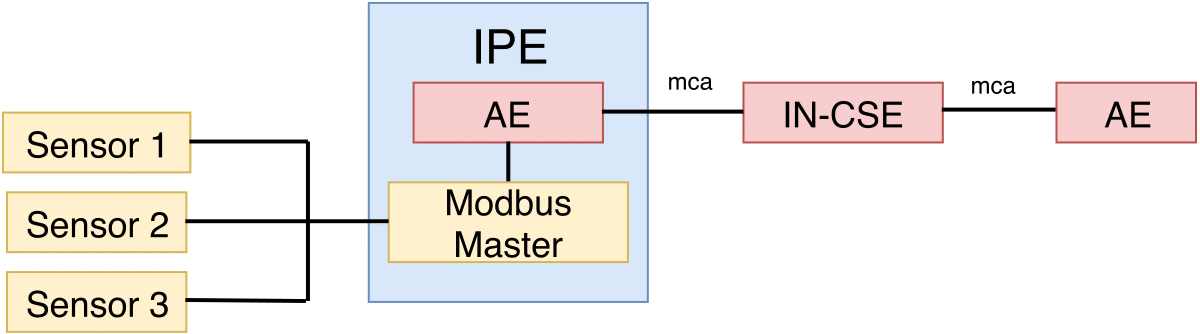
## 6.1 Use case

As the Modbus protocol is mainly used for industial purposes, let’s see a use case where a group of sensors working over Modbus are remotely monitored by client application. The figure 6.1 below shows a possible use case of interworking between Modbus devices and oneM2M services. A factory has 3 sensors which are connected to local Modbus gateway (IPE) with an embedded application to store sensors data in oneM2M cloud server. The client can monitor sensors readings by accessing oneM2M cloud server.



**Figure 6.1 Use case architecture overview.**

Figure 6.2 shows how the architecture presented in previous section can be presented in the form of Modbus and oneM2M entites. Sensors 1, 2, 3 are Modbus slaves connected to Modbus Master. Modbus Master is integrated with oneM2M AE entity to use services provided by IN-CSE. Modbus Master coupled with oneM2M AE entity make up IPE. It is a key unit to provide interworking between Modbus devices and oneM2M based platform. Client application is represented as an AE.



**Figure 6.2 Use case entity representation**

### -----------------------End of change 1 -------------------------------------------