



SmartM2M; Demonstration of Performance Evaluation and Analysis for oneM2M Planning and Deployment

Thierry Monteil, Samir Medjiah, Marie-Agnès Peraldi-Frati, Luigi Liquori,
Bob Flynn

► To cite this version:

Thierry Monteil, Samir Medjiah, Marie-Agnès Peraldi-Frati, Luigi Liquori, Bob Flynn. SmartM2M; Demonstration of Performance Evaluation and Analysis for oneM2M Planning and Deployment. ETSI Technical Report, 2024, pp.34. hal-04753228

HAL Id: hal-04753228

<https://inria.hal.science/hal-04753228v1>

Submitted on 25 Oct 2024

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

Copyright

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

ETSI TC SmartM2M; SmartM2M; Demonstration of Performance Evaluation and Analysis for oneM2M Planning and Deployment

Thierry Monteil (7, 8), Samir Medjiah (4, 5, 6), Marie-Agnès Peraldi-Frati (3, 2), Luigi Liquori (1, 2, 3), Bob Flynn

1 CRISAM - Inria Sophia Antipolis - Méditerranée

2 KAIROS - Logical Time for Formal Embedded System Design

3 UCA - Université Côte d'Azur

4 UT - Université de Toulouse

5 UT3 - Université Toulouse III - Paul Sabatier

6 LAAS-SARA - Équipe Services et Architectures pour Réseaux Avancés

7 IRIT-SEPIA - Système d'exploitation, systèmes répartis, de l'intergiciel à l'architecture

8 INSA Toulouse - Institut National des Sciences Appliquées – Toulouse

Executive summary

The present document describes and present different demonstrators build on top of the simulation tool and the profiler tool developed in ETSI TR 103 841. More precisely, the simulation tool is a OMNeT++ library implementing either the deployment model and the case studies. The profiler is a standalone software to be run together with a real open source oneM2M implementation to measure and record the impact on computer resources like memory or processor. Those real measures are used as input for the simulator. The present document provides the configuration elements of three demonstrators, highlights classical behaviors in IoT system deployment and illustrates features of the simulation tools in terms of KPI analysis.

Protected by ETSI IPR. Please refer this document as

T. Monteil, S. Medjiah, M.A. Peraldi-Frati, L. Liquori, B. Flynn. ETSI Technical Report TR 103842. SmartM2M; Scenarios for evaluation of oneM2M deployments, 34 pages, 2023.

The full document will appear on

<https://www.etsi.org/standards-search>