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ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - APE 7112B
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Foreword

This Group Specification (GS) has been produced by ETSI Industry Specification Group (ISG) cross-cutting Context Information Management (CIM).

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Modal verbs terminology

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Executive summary

The present document formally describes the Context Information Management API (NGSI-LD) Specification. The Context Information Management API allows users to provide, consume and subscribe to context information in multiple scenarios and involving multiple stakeholders. Context information is modeled as attributes (properties and relationships) of context entities, also referred to as "digital twins", representing real-world assets. It enables close to real-time access to information coming from many different sources (not only IoT data sources).

Introduction

The present document defines the NGSI-LD API Specification. This Context Information Management API allows users to provide, consume and subscribe to context information in multiple scenarios and involving multiple stakeholders. Context information is modeled as attributes of context entities, also referred to as "digital twins", representing real-world assets (e.g. a bus in a city or a luggage claim ticket). Because of that, the NGSI-LD API is often used to bring standardized access to digital twin data.

The ongoing status of the NGSI-LD API can be found in [i.17].

The ETSI ISG CIM has decided to give the name "NGSI-LD" to the Context Information Management API. The rationale is to reinforce the fact that the present document leverages on the former OMA NGSI 9 and 10 interfaces [i.3] and FIWARE® NGSIv2 [i.9] to incorporate the latest advances from Linked Data.

Most of the NGSI-LD API and the ETSI ISG CIM information model work referenced here was created with the support of the following European Union Horizon 2020 research projects: No. 732851 (FI-NEXT), No. 723156 (WISE-IoT), No. 732240 (SynchroniCity) and No. 731993 (AutoPilot), No. 814918 (Fed4IoT), No. 779852 (IoTcrawler), No. 731884 (IoF2020), including many contributions from members of the FIWARE® Community.

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