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Internet of things (IoT) – Vocabulary

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INTERNET OF THINGS (IoT) – VOCABULARY

FOREWORD

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International Standard ISO/IEC 20924 has been prepared by subcommittee 41: Internet of Things and related technologies, of ISO/IEC joint technical committee 1: Information technology.

This second edition cancels and replaces the first edition published in 2018. This edition constitutes a technical revision.

This edition includes the following technical changes with respect to the previous edition:

a) addition of new terms (safety, wearable device, data acquisition functional system, transport interoperability, etc) which are used in other ISO/IEC IoT related standards;
b) update of some definitions (data, data store, discovery service, etc.) to align with current usage in other IoT standards.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
JTC1-SC41/195/FDIS	JTC1-SC41/209/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

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INTERNET OF THINGS (IoT) – VOCABULARY

1 Scope

This document provides a definition of Internet of Things along with a set of terms and definitions. This document is a terminology foundation for the Internet of Things.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1 General terms

3.1.1
address
<*endpoint*> value that can be used to identify an *endpoint*, which can designate the originating source or destination of *data* being transmitted

3.1.2
application
software designed to fulfil a particular purpose

[SOURCE: ISO/IEC 24713-2:2008, 4.1, modified – "program or piece of" has been removed from the beginning of the definition.]

3.1.3
architecture
<system> set of fundamental concepts or properties of a system in its environment embodied in its elements, relationships, and in the principles of its design and evolution

[SOURCE: ISO/IEC/IEEE 42010:2011, 3.2, modified – "set of" has been added to the beginning of the definition.]

3.1.4
asset
~~physical entity or digital *entity* that has value to an individual, an organization or a government~~

~~[SOURCE: ISO/IEC 27032:2012, 4.6, modified – "anything" has been replaced by "physical entity or digital entity" at the beginning of the definition.]~~

entity that has value and is either owned by or under the custody of an individual, an organization, a government, or other groups

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3.1.5
availability
property of being accessible and usable upon demand by an authorized *entity*

Note 1 to entry: *IoT systems* can include both *human users* and service components as "authorized entities".

[SOURCE: ISO/IEC 27000:2018, 3.7]

3.1.6
characteristic
abstraction of a property of an *entity* or of a set of entities

[SOURCE: ISO 18104:2014, 3.1.4]

3.1.7
cloud computing
paradigm for enabling *network* access to a scalable and elastic pool of shareable physical or virtual resources with self-service provisioning and administration on-demand

[SOURCE: ISO/IEC 17788:2014, 3.2.5]

3.1.8
cloud service
one or more capabilities offered via *cloud computing* invoked using a defined *interface*

[SOURCE: ISO/IEC 17788:2014, 3.2.8]

3.1.9
cloud service provider
party which makes *cloud services* available

[SOURCE: ISO/IEC 17788:2014, 3.2.15]

3.1.10
compliance
~~characteristic of~~ conformance to rules, such as those defined by a law, a regulation, a standard, or a policy

3.1.11
component
modular, deployable, and replaceable part of a system ~~that encapsulates implementation and exposes a set of interfaces~~

[SOURCE: ISO 14813-5:2010, B.1.31, modified – "that encapsulates implementation and exposes a set of interfaces" has been deleted from the end of the definition.]

3.1.12
confidentiality
property that information is not made available or disclosed to unauthorized individuals, entities, or processes

[SOURCE: ISO/IEC 27000:2018, 3.10]

3.1.13
data
symbol or symbols represented in a digital and formalized manner suitable for communication, storage, interpretation or processing

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