AS ISO/IEC 20924:2021
ISO/IEC 20924:2018

Australian STANDARD®

STANDARDS Australia

Internet of Things (IoT) — Vocabulary

AS ISO/IEC 20924:2021

This Australian Standard® was prepared by IT-042, Internet of Things and Related Technologies. It was approved on behalf of the Council of Standards Australia on 4 January 2021.

This Standard was published on 19 February 2021.

The following are represented on Committee IT-042:

Australian Academy of Technological Sciences and Engineering
Australian Communications and Media Authority
Australian Communications Consumer Action Network
Australian Industry Group
Australian Information Industry Association
Australian Smart Communities Association
Communications Alliance
Consumers Federation of Australia
CSIRO Data61
Engineers Australia
IoT Alliance Australia
NSW Data Analytics Centre
University of Technology Sydney
Water Services Association of Australia

This Standard was issued in draft form for comment as DR AS ISO/IEC 20924:2020.

Keeping Standards up-to-date

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:
www.standards.org.au

ISBN 978 1 76113 202 5

Internet of Things (IoT) — Vocabulary

First published as AS ISO/IEC 20924:2021.

Preface

This Standard was prepared by the Standards Australia Committee IT-042, Internet of Things and Related Technologies.

The objective of this document is to provide 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.

This document is identical with, and has been reproduced from, ISO/IEC 20924:2018, *Internet of things (IoT) — Vocabulary*.

As this document has been reproduced from an International Standard, a full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms "normative" and "informative" are used in Standards to define the application of the appendices or annexes to which they apply. A "normative" appendix or annex is an integral part of a Standard, whereas an "informative" appendix or annex is only for information and guidance.

Contents

FOREWORD

1) ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

2) The formal decisions or agreements of IEC and ISO on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees and ISO member bodies.

3) IEC, ISO and ISO/IEC publications have the form of recommendations for international use and are accepted by IEC National Committees and ISO member bodies in that sense. While all reasonable efforts are made to ensure that the technical content of IEC, ISO and ISO/IEC publications is accurate, IEC or ISO cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.

4) In order to promote international uniformity, IEC National Committees and ISO member bodies undertake to apply IEC, ISO and ISO/IEC publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any ISO, IEC or ISO/IEC publication and the corresponding national or regional publication should be clearly indicated in the latter.

5) ISO and IEC do not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. ISO or IEC are not responsible for any services carried out by independent certification bodies.

6) All users should ensure that they have the latest edition of this publication.

7) No liability shall attach to IEC or ISO or its directors, employees, servants or agents including individual experts and members of their technical committees and IEC National Committees or ISO member bodies for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication of, use of, or reliance upon, this ISO/IEC publication or any other IEC, ISO or ISO/IEC publications.

8) Attention is drawn to the normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.

9) Attention is drawn to the possibility that some of the elements of this ISO/IEC publication may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

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 International Standard has been approved by vote of the member bodies, and the voting results may be obtained from the address given on the second title page.

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

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

— reconfirmed,

— withdrawn,

— replaced by a revised edition, or

— amended.

NOTES

Australian Standard®

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.]

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]