PD ISO/IEC TR 30164:2020

BSI Standards Publication

Internet of things (IoT) — Edge computing

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National foreword

This Published Document is the UK implementation of ISO/IEC TR 30164:2020.

The UK participation in its preparation was entrusted to Technical Committee IOT/1, Internet of Things.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Published by BSI Standards Limited 2020

ISBN 978 0 539 13672 2

ICS 35.020

Compliance with a British Standard cannot confer immunity from legal obligations.

This Published Document was published under the authority of the Standards Policy and Strategy Committee on 31 May 2020.

Amendments/corrigenda issued since publication

Date	Text affected

ISO/IEC TR 30164

Edition 1.0 2020-04

TECHNICAL REPORT

colour inside

Internet of things (IoT) – Edge computing

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 35.020

ISBN 978-2-8322-8087-4

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INTERNET OF THINGS (IoT) – EDGE COMPUTING

FOREWORD

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ISO/IEC TR 30164, which is a Technical Report, has been prepared by subcommittee 41: Internet of Things and related technologies, of ISO/IEC joint technical committee 1: Information technology.

The text of this Technical Report is based on the following documents:

Enquiry draft	Report on voting
JTC1-SC41/110/DTR	JTC1-SC41/120/RVDTR

Full information on the voting for the approval of this Technical Report 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) – EDGE COMPUTING

1 Scope

This document describes the common concepts, terminologies, characteristics, use cases and technologies (including data management, coordination, processing, network functionality, heterogeneous computing, security, hardware/software optimization) of edge computing for IoT systems applications. This document is also meant to assist in the identification of potential areas for standardization in edge computing for IoT.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 20924, *Internet of Things (IoT) – Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 20924 and the following apply.

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
edge
boundary between pertinent digital and physical entities, delineated by networked sensors and actuators

3.2
edge computing
distributed computing that takes place at or near the edge, where the nearness is defined by the system's requirements

3.3
software defined network
SDN
network designed, built and managed with separation of the control plane from the forwarding plane and abstraction of the underlying infrastructure, enabling efficient network management and utilization

3.4
personally identifiable information
PII
information that (a) can be used to establish a link between the information and the natural person to whom such information relates, or (b) is or can be directly or indirectly linked to a natural person