

Edition 1.0 2020-04

TECHNICAL REPORT



Internet of things (IoT) - Edge computing



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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