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Information technology — Cloud computing — Reference architecture

AS ISO/IEC 17789:2020

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Information technology — Cloud computing — Reference architecture

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Preface

This Standard was prepared by the Standards Australia Committee IT-038, Cloud Computing and Distributed Platforms.

The objective of this document is to specify the cloud computing reference architecture (CCRA). The reference architecture includes the cloud computing roles, cloud computing activities, and the cloud computing functional components and their relationships.

This document is identical with, and has been reproduced from, ISO/IEC 17789:2014, *Information technology — Cloud computing — Reference architecture*.

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Foreword

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

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

ISO/IEC 17789 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 38, *Distributed application platforms and services (DAPS)*, in collaboration with ITU-T. The identical text is published as ITU-T Rec. Y.3502 (08/2014).

NOTES

Australian Standard®

Information technology — Cloud computing — Reference architecture

1 Scope

This Recommendation | International Standard specifies the cloud computing reference architecture (CCRA). The reference architecture includes the **cloud computing roles**, **cloud computing activities**, and the **cloud computing functional components** and their relationships.

2 Normative references

The following Recommendations and International Standards contain provisions which, through reference in this text, constitute provisions of this Recommendation | International Standard. At the time of publication, the editions indicated were valid. All Recommendations and Standards are subject to revision, and parties to agreements based on this Recommendation | International Standard are encouraged to investigate the possibility of applying the most recent edition of the Recommendations and Standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards. The Telecommunication Standardization Bureau of the ITU maintains a list of currently valid ITU-T Recommendations.

2.1 Identical Recommendations | International Standards

Recommendation ITU-T Y.3500 (2014) | ISO/IEC 17788:2014, *Information technology — Cloud computing — Overview and vocabulary*

2.2 Additional references

ISO/IEC 29100:2011, *Information technology — Security techniques — Privacy framework*

3 Definitions

For the purposes of this Recommendation | International Standard, the terms and definitions in Rec. ITU-T Y.3500 | ISO/IEC 17788 and the following definitions apply.

3.1 Terms defined elsewhere

3.1.1
architecture
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: This term is defined in ISO/IEC/IEEE 42010]

3.1.2
personally identifiable information (PII)
any information that (a) can be used to identify the PII principal to whom such information relates, or (b) is or might be directly or indirectly linked to a PII principal

Note 1 to entry: To determine whether a PII principal is identifiable, account should be taken of all the means which can reasonably be used by the privacy stakeholder holding the data, or by any other **party**, to identify that natural person.

[SOURCE: This term is defined in ISO/IEC 29100]

3.2 Terms defined in this Recommendation | International Standard

This Recommendation | International Standard defines the following terms: