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Informationsteknologi – Referencearkitektur for big data – Del 1: Rammer og applikationsproces

Information technology – Big data reference architecture – Part 1: Framework and application process



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Information technology — Big data reference architecture —

Part 1: Framework and application process

*Technologies de l'information — Architecture de référence des
mégadonnées —*

Partie 1: Cadre méthodologique et processus d'application



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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 42, *Artificial intelligence*.

A list of all parts in the [ISO/IEC 20547](http://www.iso.org/iso/20547) series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

The big data paradigm is a rapidly changing field with rapidly changing technologies. This dynamic situation creates two significant issues for potential implementers of the technology. First, there is a lack of standard definitions for terms including the core concept of big data. The second issue is that there is no consistent approach to describe a big data architecture and implementation. The first issue is addressed by [ISO/IEC 20546](#). The [ISO/IEC 20547 series](#) is targeted to the second issue and provides a framework and reference architecture which organizations can apply to their problem domain to effectively and consistently describe their architecture and its implementations with respect to the roles/actors and their concerns as well as the underlying technology. This document describes the reference architecture framework and provides a process for mapping a specific problem set/use case to the architecture and evaluating that mapping.

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Information technology — Big data reference architecture —

Part 1: Framework and application process

1 Scope

This document describes the framework of the big data reference architecture and the process for how a user of the document can apply it to their particular problem domain.

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/IEEE 42010](#), *Systems and software engineering — Architecture description*.