

# Technical Report

ISO/IEC TR 19583-21

Information technology — Concepts and usage of metadata —

Part 21:

11179-3, -31, -32 Data model in SQL

Technologies de l'information — Concepts et utilisation des métadonnées —

Partie 21: Modèle de données en SQL 11179-3, -31, -32

Second edition 2025-03



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#### Foreword

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 32, *Data management and interchange*.

This second edition cancels and replaces the first edition (ISO/IEC 19583-21:2022), which has been technically revised.

The main changes are as follows:

 examples have been added to instatiate the metamodel of the latest version of the ISO/IEC 11179 series (Annexes B and C have been added).

A list of all parts in the ISO/IEC 19583 series can be found on the ISO and IEC websites.

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 <a href="https://www.iso.org/members.html">www.iso.org/members.html</a> and <a href="https://www.iso.org/members.html">www.iso.org/members.html</a> and <a href="https://www.iso.org/members.html">www.iso.org/members.html</a> and

#### Introduction

The ISO/IEC 11179 series provides a specification for a registry in which information about metadata can be recorded and maintained.

The metamodel to instantiate such a registry is expressed in text as a conceptual model. This conceptual model is illustrated with a series of diagrams which use the class diagram notation from the Unified Modeling Language (UML).[2][3]

Implementers and users of the registries described in ISO/IEC 11179 require further guidance to turn the conceptual models into concrete instantiations. This document provides a possible instantiation of the registry metamodel specified in ISO/IEC 11179-3[ $\frac{1}{2}$ ], ISO/IEC 11179-31[ $\frac{5}{2}$ ] and ISO/IEC 11179-32[ $\frac{6}{2}$ ] using the SQL database language as specified in the ISO/IEC 9075 series.[ $\frac{7}{2}$ ]

This specimen instantiation is provided to increase the understanding of ISO/IEC 11179-3, ISO/IEC 11179-31 and ISO/IEC 11179-32, and hence, to promote its adoption.

This document is not intended to replace the UML version but rather serves as a complement, providing SQL statements that describe the ISO/IEC 11179 metamodel. It aims to facilitate the application of ISO/IEC 11179 in a database or related environment.

## Information technology — Concepts and usage of metadata —

### Part 21:

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#### 1 Scope

This document provides a possible instantiation of the registry metamodel specified in ISO/IEC 11179-3, ISO/IEC 11179-31, ISO/IEC 11179-32 using the SQL database language as specified in ISO/IEC 9075-2.

#### 2 Normative references

There are no normative references in this document.