

ISO/IEC TR 19583-21:2025-03 (E)

Information technology - Concepts and usage of metadata - Part 21: 11179-3, -31, -32 Data model in SQL

Contents

Page

Foreword.....	iv
Introduction.....	v
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 The relationship among ISO/IEC 11179-3, ISO/IEC 11179-31 and ISO/IEC 11179-32.....	1
4.1 Overview.....	1
4.2 ISO/IEC 11179-3 — Metamodel for registry common facilities.....	1
4.3 ISO/IEC 11179-30 — Basic attributes of metadata.....	2
4.4 ISO/IEC 11179-31 — Metamodel for data specification registration.....	2
4.5 ISO/IEC 11179-32 — Metamodel for concept system registration.....	2
5 Overview of the relationship between UML Class Diagrams and SQL.....	2
6 Generating the SQL for the metamodel.....	3
6.1 Overview.....	3
6.2 General principles for the translation of a UML Class diagram into SQL statements.....	3
6.3 Specific approaches taken for the translation of the metadata registry metamodel.....	4
6.3.1 Overview.....	4
6.3.2 Obligations.....	4
6.3.3 Translation of datatypes.....	5
6.3.4 Translation of the basic classes.....	6
6.3.5 Translation of the remaining classes.....	6
6.3.6 Translation of specialization hierarchies.....	6
6.3.7 Translation of the association classes.....	6
6.3.8 Translation of the attributes of the classes.....	6
6.3.9 Translation of the associations.....	7
6.3.10 Cross-table constraints.....	7
7 Example SQL for instantiation of the metamodel.....	7
Annex A (informative) Example SQL to instantiate the ISO/IEC 11179-3 metamodel.....	8
Annex B (informative) Example SQL to instantiate the ISO/IEC 11179-32 metamodel.....	23
Annex C (informative) Example SQL to instantiate the ISO/IEC 11179-31 metamodel.....	28
Bibliography.....	44