

ISO/IEC 19763-3:2010-08 (E)

Information technology - Metamodel framework for interoperability (MFI) - Part 3: Metamodel for ontology registration

Contents

Page

Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	2
3 Terms, definitions and abbreviated terms	2
3.1 Terms and definitions	2
3.1.1 Terms on ontology	2
3.1.2 Other terms	3
3.2 Abbreviated terms	3
4 Conformance	4
4.1 General	4
4.2 Levels of conformance	4
4.2.1 General	4
4.2.2 Conformance level 1	4
4.2.3 Conformance level 2	4
4.3 Degree of conformance	4
4.3.1 General	4
4.3.2 Strictly conforming implementation	4
4.3.3 Conforming implementation	4
4.4 Implementation Conformance Statement (ICS)	5
5 Structure of MFI Ontology registration	5
5.1 Overview of MFI Ontology registration	5
5.2 Overview of Basic_Model package	5
5.3 Overview of Evolution_Model package	7
5.4 Basic_Model package	8
5.4.1 Authoritative_Extent	8
5.4.2 Local_Item	8
5.4.3 Ontology_Language	9
5.4.4 Ontology_Whole	9
5.4.5 Registered_Ontology_Whole	9
5.4.6 Unregistered_Ontology_Whole	10
5.4.7 Reference_Registered_Ontology_Whole	10
5.4.8 Local_Registered_Ontology_Whole	10
5.4.9 Ontology_Component	11
5.4.10 Registered_Ontology_Component	11
5.4.11 Reference_Registered_Ontology_Component	12
5.4.12 Local_Registered_Ontology_Component	12
5.4.13 Ontology_Atomic_Construct	13
5.4.14 Registered_Ontology_Atomic_Construct	13
5.4.15 Unregistered_Ontology_Atomic_Construct	14
5.4.16 Reference_Registered_Ontology_Atomic_Construct	14
5.4.17 Local_Registered_Ontology_Atomic_Construct	14
5.5 Evolution_Model package	15
5.5.1 Item_Evolution	15
5.5.2 Registered_Ontology_Whole_Evolution	15

5.5.3	Registered_Ontology_Component_Evolution	15
5.5.4	Registered_Ontology_Atomic_Construct_Evolution	16
Annex A (informative)	List of Ontology_Languages	17
Annex B (informative)	Example of Basic_Model	18
Annex C (informative)	Example of Evolution_Model	26
Bibliography		34
Figures	Figure 1 -- Scope of MFI Ontology registration	1
	Figure 2 -- Package structure of MFI Ontology registration	5
	Figure 3 -- Metamodel in Basic_Model package	6
	Figure 4 -- Metamodel in Evolution_Model package	8
	Figure B.1 -- Three examples of the sentences in RO1	18
	Figure B.2 -- Registration of RO1	19
	Figure B.3 -- Two examples of the sentences in RO2	20
	Figure B.4 -- Registration of RO2	21
	Figure B.5 -- Three examples of the sentences in LO1	22
	Figure B.6 -- Registration of LO1	23
	Figure B.7 -- An example of the sentences in LO2	24
	Figure B.8 -- Registration of LO2	24
	Figure C.1 -- Three examples of the sentences in LO3	26
	Figure C.2 -- Registration of LO3	27
	Figure C.3 -- Registration of items evolution from LO1 to LO3	28
Tables	Table A.1 -- List of Ontology_Languages	17
	Table D.1 -- Mapping the metaclasses	29