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Information technology — Open Systems Interconnection — Systems Management: Management knowledge management function

AMENDMENT 1: Extension for General Relationship Model

*Technologies de l'information — Interconnexion de systèmes ouverts
(OSI) — Gestion-systèmes: Fonction de gestion de connaissance de
gestion*

AMENDEMENT 1: Extension pour modèle général de relation



Foreword

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INTERNATIONAL STANDARD

ITU-T RECOMMENDATION

INFORMATION TECHNOLOGY – OPEN SYSTEMS INTERCONNECTION –
SYSTEMS MANAGEMENT: MANAGEMENT KNOWLEDGE
MANAGEMENT FUNCTION

AMENDMENT 1

Extension for General Relationship Model

1) **Subclause 3.6**

Add references to these SMO-defined terms inserted among existing terms in alphabetical order:

- e) managed object class

and renumber the list as from the existing e) which becomes f), to the end.

2) **Subclause 3.11**

Add references to these GRM-defined terms inserted before and after existing term in alphabetical order:

- binding;
- binding support;
- managed relationship class;
- relationship cardinality;
- relationship management notification;
- relationship management operation;
- role cardinality;
- relationship mapping specification;
- relationship class specification;
- role;
- unbinding;
- unbinding support.

3) **Clause 4**

Insert the following abbreviation by alphabetical order:

- GRM General relationship model

4) Clause 6

In this clause change:

- *Definition knowledge:* Information on the formal specification of managed object classes, name bindings, etc., e.g. templates for classes, name bindings.

to:

- *Definition knowledge:* Information on the formal specification of managed object classes and managed relationship classes and related specifications, e.g. templates for classes, attributes, name bindings.

Add an X in the Table 1 cell in the Definition knowledge column in the Relationship knowledge row.

5) Subclause 6.3

In the 2nd item:

relationship role bindings

to:

relationship mapping specifications

6) Subclauses 6.3, 6.5, 7.1.1.1, 8.1.1.2, Table 8, A.2.1 and A.2.3

In subclauses 6.3, 6.5, 7.1.1.1, 8.1.1.2, Table 8, and in behaviour text in A.2.1 and A.2.3, replace each occurrence of the term relationship class that is not preceded by managed with the term defined in GRM managed relationship class but do not change the label supportedRelationshipClassList.

7) Subclause 7.1.2

In this subclause change GDMO and ASN.1 specifications to GDMO, GRM and ASN.1 specifications.

8) Subclauses 7.1.2, 8.1.2.12, 8.6.2 and A.3.3

In subclauses 7.1.2, 8.1.2.12, 8.6.2 and A.3.3, change all occurrences of GDMO template(s) to template(s).

9) Subclause 7.3

Add an X in the four Table 2 cells that are in either the Definition managed objects or Definition Directory objects columns and that are in either the Managed object class knowledge or Relationship knowledge rows. Change both occurrences of X (Note 7) to X and eliminate Note 7.

10) New subclauses 8.1.2.12 and 8.1.2.13

Renumber subclause 8.1.2.12 as 8.1.2.14 and insert two new subclauses before it:

8.1.2.12 Relationship class template managed object

The relationship class template managed object represents a GRM relationship class specification.

The relationship class template managed object class is defined as a subclass of the template managed object class. Its mandatory, read-only attributes are:

- a) derived from;
- b) behaviour.

Its optional, read-only attributes are:

- a) supports;
- b) qualified by;
- c) role specifier.

8.1.2.13 Relationship mapping template managed object

The relationship mapping template managed object represents a GRM relationship mapping specification.

The relationship mapping template managed object class is defined as a subclass of the template managed object class. Its mandatory, read-only attributes are:

- a) mapped relationship class;
- b) behaviour;
- c) role mapping specification;
- d) registered as.

Its optional, read-only attributes are:

- a) relationship object;
- b) operations mapping.

11) Subclause 8.6.2

In this subclause, change the two occurrences of GDMO specifications to GDMO, GRM or ASN.1 specifications.

Append to this subclause the following paragraphs:

The Directory auxiliary class relationship class template is defined for inclusion in Directory entries of Directory structural class Registered information and represents a GRM relationship class specification. It must contain the attributes Derived from and Behaviour. It may contain the attributes Supports, Qualified by, and Role specifier.

The Derived from attribute identifies the immediate superclasses of a managed relationship class. The Behaviour attribute specifies the behaviour associated with the managed relationship class. The Supports attribute defines the relationship management operations and notifications that a managed relationship supports. The Qualified by attribute specifies the attributes that are associated with the managed relationship as a whole. The Role specifier attribute identifies the roles associated with the managed relationship class.

The Directory auxiliary class Relationship mapping template is defined for inclusion in Directory entries of Directory structural class Registered information and represents a GRM relationship mapping specification. It must contain the attributes Behaviour, Mapped relationship class, Role mapping specification set, and Registered as. It may contain the attributes Relationship object and Operations mapping.

The Behaviour attribute defines the behaviour associated with the relationship mapping. The Mapped relationship class attribute specifies the managed relationship class to which the represented relationship mapping is related. The Role mapping specification set attribute identifies candidate managed object classes that may fulfil a given role. The Registered as attribute contains the object identifier of the represented relation mapping. The Relationship object attribute indicates the class of a relationship object that shall represent the managed relationship. The Operations mapping attribute specifies the mapping of a relationship management operation to one or more systems management operations.

12) Subclause 11.1.1.2

Add entries to Table 6 for relationship class template and relationship mapping template (inserting before the entry for the template class).

13) Subclause 11.1.5.1

Add entries to Table 9 for the new attributes mentioned in the new subclauses 8.1.2.12 and 8.1.2.13.

14) Subclause 11.1.5.2

Insert in Table 14 the following entries before the entry for the template class:

Relationship class template	managementRelationshipClass
Relationship mapping template	managementRelationshipMapping

15) Subclause 11.1.6.1

Insert in Table 15 the following entries before the entry for the template class:

relationshipClassTemplate	managementRelationshipClass
relationshipMappingTemplate	managementRelationshipMapping

16) Subclause 11.2.1.2

Add to Table 17 the following entries (inserting in alphabetical order):

Mapped relationship class	mappedRelationshipClass
Operations mapping	operationsMapping
Qualified by	qualifiedBy
Relationship object	relationshipObject
Role mapping specification set	roleMappingSpecificationSet
Role specifier	roleSpecifier
Supports	supports

17) Subclause A.1

In this subclause change:

--%PRAGMA version BIT STRING {v1990(0), v1994(1)} ::= {v1990, v1994}

to:

--<ASN1.Version 1990, 1994 MKMD >--

18) Subclause A.2.4

In this subclause change:

--%PRAGMA version BIT STRING {v1990(0), v1994(1)} ::= v1990

to:

--<ASN1.Version 1990 RepertoireASN1Module >--

Also in this subclause change:

FROM Attribute-ASN1Module {joint-iso-ccitt(2) ms(9) smi(3) part2(2) asn1Module(2)}

to:

FROM Attribute-ASN1Module {joint-iso-itu-t(2) ms(9) smi(3) part2(2) asn1Module(2) 1}