

INTERNATIONAL TELECOMMUNICATION UNION





SERIES X: DATA NETWORKS AND OPEN SYSTEM COMMUNICATION

OSI management

Information technology - Open Systems Interconnection - Structure of management information: Guidelines for the definition of managed objects

Technical Corrigendum 1

ITU-T Recommendation X.722 - Corrigendum 1

(Previously "CCITT Recommendation")

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For further details, please refer to ITU-T List of Recommendations.

FOREWORD

ITU (International Telecommunication Union) is the United Nations Specialized Agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the ITU. Some 179 member countries, 84 telecom operating entities, 145 scientific and industrial organizations and 38 international organizations participate in ITU-T which is the body which sets world telecommunications standards (Recommendations).

The approval of Recommendations by the Members of ITU-T is covered by the procedure laid down in WTSC Resolution No. 1 (Helsinki, 1993). In addition, the World Telecommunication Standardization Conference (WTSC), which meets every four years, approves Recommendations submitted to it and establishes the study programme for the following period.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC. The text of ITU-T Recommendation X.722, Corrigendum 1 was approved on 5th of October 1996. The identical text is also published as ISO/IEC International Standard 10165-4.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

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Summary

This technical corrigendum corrects an ambiguity that can cause an operations systems (OS) implementor to develop software that will not work correctly with another vendor's OS product.

INTERNATIONAL STANDARD

ITU-T RECOMMENDATION

INFORMATION TECHNOLOGY – OPEN SYSTEMS INTERCONNECTION – STRUCTURE OF MANAGEMENT INFORMATION: GUIDELINES FOR THE DEFINITION OF MANAGED OBJECTS

TECHNICAL CORRIGENDUM 1

1) Subclause 6.4.5

Add the following at the end of the current paragraph:

"A managed object identifies its actual class (see 7.4.3) by the value of its managed object class attribute."

2) Subclause 7.4

Add the following immediately after 7.4.2 as a new subclause:

"7.4.3 Actual class

A managed object class definition consists of the MANAGED OBJECT CLASS template (see 8.3) registered with the object identifier value for that class together with the set of templates referenced by that template and all templates referenced by templates in the set.

A managed object identifies its actual class by the value of its managed object class attribute which is the object identifier value used to register its MANAGED OBJECT CLASS template. Each managed object:

- supports all of the characteristics defined in its actual class definition in accord with the packages that are
 present;
- supports only operations that are defined in its actual class definition for packages that are present; and
- emits only notifications when a behaviour defined to trigger that notification in the actual class definition applies for packages that are present.

The absence of a GDMO construct for a characteristic in a managed object class definition specifically excludes that characteristic from that class definition. A subclass may add an excluded construct by explicit definition. Each subclass has its own registered object identifier value. For example, if REPLACE is not specified for a single-valued attribute, that attribute in instances of that class shall be regarded as read only; a subclass definition may extend this by adding the REPLACE construct to specify that the attribute can be replaced for instances of the subclass and instances that are compatible with the subclass."

3) Subclause 8.3.3.1

Add the following to 8.3.3.1 a) before "NOTE 2":

"When behaviour is extended the stated or implied pre-conditions may only be weakened (the required pre-conditions shall remain the same or become fewer), the stated or implied post-conditions may only be strengthened (the same post-conditions shall be satisfied and additional post-conditions may be satisfied), and the stated or implied invariants remain unchanged but more invariants may be added. (Refer to 5.2.2.6 of CCITT Rec. X.720 | ISO/IEC 10165-1 of the Management Information Model.)"

ISO/IEC 10165-4 : 1992/Cor.1 : 1996 (E)

4) Subclause 8.3.3.3

Add the following to the end of this subclause, as a new paragraph:

"Where there are specific conditions that preclude instantiation of a conditional package, these should be specified in a BEHAVIOUR template. The BEHAVIOUR template used for this may be in the conditional package itself or in a mandatory package of the class. If such specifications are present in textual behaviour definitions, it is recommended that the paragraph containing the specification be introduced with "package-label> PRESENT ONLY IF:" as a textual convention."

5) Subclause 8.5.1.1.1

In 8.5.1.1.1 replace "9.5.3" with "8.5.3.1".

6) Index

Change these index entries:

"BEHAVIOUR 25-26, 30-32, 34-35, 37-40

REPLACE 14, 26-27"

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