ISO/IEC 10164-15:2002-12 (E)

Information technology - Open systems Interconnection - Systems management: Scheduling function

Contents

Page

Reference number INTERNATIONAL STANDARD 10164-15 Second edition 2002-12-15 Information technology -- Open Systems Interconnection -- Systems management: Scheduling function Technologies de l'information -- Interconnexion de systèmes ouverts (OSI) -- Gestion-systèmes: Fonction de programmation PDF disclaimer This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area. Adobe is a trademark of Adobe Systems Incorporated. Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below. electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester. ISO copyright office Case postale 56 · CH-1211 Geneva 20 Tel. + 41 22 749 01 11 Fax + 41 22 749 09 47 E-mail copyright@iso.org Web www.iso.org Published in Switzerland CONTENTS 1 Scope 1

2 Normative references 1
2.1 Identical Recommendations ..... International Standards| 1
2.2 Paired Recommendations ..... International Standards equivalent in technical content| 2
2.3 Additional references 2

3 Definitions 2
3.1 Basic reference model definitions 3
3.2 Abstract syntax notation one definitions 3
3.3 Management framework definitions 3
3.4 Common management information service definitions 3
3.5 Systems management overview definitions 3
3.6 Management information model definitions 3
3.7 Additional definitions 4

4 Abbreviations 4

5 Conventions 4

6 Requirements 4

7 Model 5
7.1 Internal scheduling mechanism 5
7.2 External scheduling mechanism 5
7.3 Types of scheduling 6
7.4 Relationships between SOs and SMOs 7

8 Generic definitions 8
8.1 Management information required for internal scheduling 8
8.2 Managed objects 8
8.3 Packages 13
8.4 Properties of SMOs 19

8.5 Compliance 21
8.6 Generic definitions from the object management function 21
8.7 Generic definitions from the state management function 21
8.8 Generic definitions from the event report management function 21
8.9 Generic definitions from the test management function 21
8.10 Generic definitions from the summarization function 21

9 Service definition 22

10 Functional units 22

11 Protocol and abstract syntax 22
11.1 Managed objects 22
11.2 Management attributes 23
11.3 Management actions 23
11.4 Management notifications 23

12 Relationships with other functions 23

13 Conformance 23
13.1 Static conformance 24
13.2 Dynamic conformance 24
13.3 Management implementation conformance statement requirements 24

Annex A - Definition of management information 24

A.1 Object class definitions 24
A.1.1 Scheduler object definition 24
A.1.2 Daily scheduler object definition 25
A.1.3 Weekly scheduler object definition 25
A.1.4 Monthly scheduler object definition 25
A.1.5 Periodic scheduler object definition 25
A.1.6 Daily operation scheduler object definition 25
A.1.7 Weekly operation scheduler object definition 25
A.1.8 Monthly operation scheduler object definition 25
A.1.9 Periodic operation scheduler object definition 26
A.1.10 Operation result record object definition 26
A.1.11 multischeduler object definition 26
A.1.12 typeOfDayController 27
A.2 Name bindings 27
A.2.1 Scheduler name binding 27
A.2.2 type of day controller name-binding 28
A.3 Packages 28
A.3.1 Multiple daily scheduling package 28
A.3.2 Multiple monthly scheduling package 28
A.3.3 Multiple weekly scheduling package 28
A.3.4 Periodic scheduling package 29
A.3.5 Resynchronize mode package 29
A.3.6 Scheduled managed objects package 29
A.3.7 Scheduler object package 29
A.3.8 Operations scheduling package 29
A.3.9 Operation notification package 29
A.4 Attributes 29
A.4.1 External scheduler name attribute 30
A.4.2 On duty attribute 30
A.4.3 Resynchronize mode attribute 30
A.4.4 Scheduled managed objects attribute 30
A.4.5 Scheduler ID attribute 31
A.4.6 scheduling data attribute 31
A.4.7 Sequence of days attribute 31
A.4.8 Sequence of months attribute 31
A.4.9 Sequence of weeks attribute 31

A.4.10 Time period attribute 31
A.4.11 Operation specifications attribute 31
A.4.12 Operation result attribute 32
A.4.13 type of day controller instance attribute 32
A.4.14 type of day controller id attribute 32
A.4.15 week day translation list attribute 32
A.4.16 Behaviour for current TypeOfDay initial value 32
A.5 Notifications 32
A.5.1 Operation result notification 32
A.6 ASN.1 definitions 32

Annex B - Exemple of scheduling Data values 36

B.1 Example 1: Shows several index values use 36
B.1.1 Interval solution 36
B.1.2 Trigger solution 36
B.2 Example 2: Shows typeOfDay use 37
B.2.1 Interval solution 37
B.2.2 Trigger solution 38
B.3 Example 3: Shows overlapping intervals, implicit repetition (months periodicity) and mixed scheduler types 38

Annex C - MCS proforma 40

Annex D - PICS proforma 40

Annex E - MOCS proforma 40

Annex F - MIDS proforma 40

Annex G - MRCS proforma 40