ISO/IEC 9594-1:2005-12 (E)

Information technology - Open Systems Interconnection - The Directory: Overview of concepts, models and services

Contents

Page

Reference number INTERNATIONAL STANDARD 9594-1 Fifth edition 2005-12-15 Information technology -- Open Systems Interconnection -- The Directory: Overview of concepts, models and services Technologies de l'information -- Interconnexion de systèmes ouverts (OSI) -- L'annuaire: Aperçu général des concepts, modèles et services 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 by ISO in 2006 Published in Switzerland CONTENTS 1 Scope 1

2 Normative references 1
2.1 Identical Recommendations ..... International Standards|1

3 Definitions 2
3.1 Communication Model definitions 2
3.2 Directory model definitions 2
3.3 Distributed Operation definitions 3
3.4 Replication definitions 3
3.5 Basic directory definitions 3

4 Abbreviations 3

5 Conventions 4

6 Overview of the Directory 4

7 The Directory Information Base (DIB) 5

8 The Directory service 7
8.1 Introduction 7
8.2 Service qualification 7
8.2.1 Service controls 7
8.2.2 Security parameters 7
8.2.3 Filters 8
8.3 Directory interrogation 8
8.3.1 Read 8
8.3.2 Compare 8
8.3.3 List 8
8.3.4 Search 8
8.3.5 Abandon 8
8.4 Directory modification 8

8.4.1 Add entry ... 8
8.4.2 Remove entry ... 8
8.4.3 Modify entry ... 8
8.4.4 Modify distinguished name ... 9
8.5 Other outcomes ... 9
8.5.1 Errors ... 9
8.5.2 Referrals ... 9

9 The distributed Directory ... 9
9.1 Functional model ... 9
9.2 Organizational model ... 10
9.3 Operation of the model ... 10

10 Access control in the Directory ... 14

11 Service administration ... 15

12 Replication in the Directory ... 15
12.1 Introduction ... 15
12.2 Forms of Directory replication ... 16
12.3 Replication and consistency of Directory information ... 17
12.4 Views of replication ... 17
12.4.1 Directory user view ... 17
12.4.2 Administrative user view ... 17
12.4.3 DSA view ... 18
12.5 Replication and Access Control ... 18

13 Directory protocols ... 18

14 Systems management of the Directory ... 18
14.1 Introduction ... 18
14.2 Management of the DIT domain ... 19
14.3 Management of Directory components ... 19

Annex A - Applying the Directory ... 20

A.1 The Directory environment ... 20
A.2 Directory service characteristics ... 20
A.3 Patterns of use of the Directory ... 20
A.3.1 Introduction ... 20
A.3.2 Look-up ... 20
A.3.3 User-friendly naming ... 21
A.3.4 Browsing ... 21
A.3.5 Yellow pages ... 21
A.3.6 Search restrictions and relaxation ... 21
A.3.7 Groups ... 22
A.3.8 Authentication ... 22
A.3.9 Attribute-based Location ... 22
A.4 Generic applications ... 22
A.4.1 Introduction ... 22
A.4.2 Inter-personal communications ... 22
A.4.3 Inter-system communications (for OSI) ... 23

Annex B - Amendments and corrigenda ... 24