

ISO/IEC 9594-3:2014-03 (E)

Information technology - Open Systems Interconnection - The Directory - Part 3: Abstract service definition

Contents		Page
1	Scope	1
2	Normative references	1
2.1	Identical Recommendations International Standards	1
2.2	Other references	2
3	Definitions	2
3.1	Basic Directory definitions.....	2
3.2	Directory model definitions	2
3.3	Directory information base definitions.....	2
3.4	Directory entry definitions	2
3.5	Name definitions	3
3.6	Distributed operations definitions	3
3.7	Abstract service definitions.....	3
4	Abbreviations	4
5	Conventions.....	4
6	Overview of the Directory service.....	4
7	Information types and common procedures	5
7.1	Introduction.....	5
7.2	Information types defined elsewhere	5
7.3	Common arguments	6
7.4	Common results	9
7.5	Service controls.....	9
7.6	Entry information selection.....	12
7.7	Entry information	15
7.8	Filter.....	17
7.9	Paged results	20
7.10	Security parameters.....	21
7.11	Common elements of procedure for access control.....	23
7.12	Managing the DSA Information Tree	24
7.13	Procedures for families of entries.....	25
8	Bind, Unbind operations, Change Password and Administer Password operations	26
8.1	Directory Bind.....	26
8.2	Directory Unbind	29
9	Directory Read operations.....	29
9.1	Read	29
9.2	Compare.....	32
9.3	Abandon.....	35
10	Directory Search operations	35
10.1	List	35
10.2	Search.....	39

11	Directory Modify operations	50
11.1	Add Entry	50
11.2	Remove Entry	52
11.3	Modify Entry	54
11.4	Modify DN	58
11.5	Change Password	60
11.6	Administer Password	61
12	Operations for LDAP messages	62
12.1	LDAP Transport operation.....	62
12.2	Linked LDAP operation	64
13	Errors	65
13.1	Error precedence	65
13.2	Abandoned	65
13.3	Abandon Failed	66
13.4	Attribute Error	66
13.5	Name Error	67
13.6	Referral.....	68
13.7	Security Error	68
13.8	Service Error	69
13.9	Update Error.....	71
14	Analysis of search arguments.....	72
14.1	General check of search filter.....	73
14.2	Check of request-attribute-profiles.....	74
14.3	Check of controls and hierarchy selections	76
14.4	Check of matching use	76
	Annex A – Abstract Service in ASN.1	78
	Annex B – Operational semantics for Basic Access Control.....	94
	Annex C – Examples of searching families of entries	107
	C.1 Single family example.....	107
	C.2 Multiple families example.....	108
	Annex D – External ASN.1 module	111
	Annex E – Amendments and corrigenda	115