INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

X.518
Corrigendum 1
(03/2000)

SERIES X: DATA NETWORKS AND OPEN SYSTEM COMMUNICATIONS

Directory

Information technology – Open Systems Interconnection – The Directory: Procedures for distributed operation

Technical Corrigendum 1

ITU-T Recommendation X.518 – Corrigendum 1

ITU-T X-SERIES RECOMMENDATIONS
DATA NETWORKS AND OPEN SYSTEM COMMUNICATIONS

PUBLIC DATA NETWORKS	
Services and facilities	X.1–X.19
Interfaces	X.20–X.49
Transmission, signalling and switching	X.50–X.89
Network aspects	X.90–X.149
Maintenance	X.150–X.179
Administrative arrangements	X.180–X.199
OPEN SYSTEMS INTERCONNECTION	
Model and notation	X.200–X.209
Service definitions	X.210–X.219
Connection-mode protocol specifications	X.220–X.229
Connectionless-mode protocol specifications	X.230–X.239
PICS proformas	X.240–X.259
Protocol Identification	X.260–X.269
Security Protocols	X.270–X.279
Layer Managed Objects	X.280–X.289
Conformance testing	X.290–X.299
INTERWORKING BETWEEN NETWORKS	
General	X.300–X.349
Satellite data transmission systems	X.350–X.369
IP-based networks	X.370–X.399
MESSAGE HANDLING SYSTEMS	X.400–X.499
DIRECTORY	**X.500–X.599**
OSI NETWORKING AND SYSTEM ASPECTS	
Networking	X.600–X.629
Efficiency	X.630–X.639
Quality of service	X.640–X.649
Naming, Addressing and Registration	X.650–X.679
Abstract Syntax Notation One (ASN.1)	X.680–X.699
OSI MANAGEMENT	
Systems Management framework and architecture	X.700–X.709
Management Communication Service and Protocol	X.710–X.719
Structure of Management Information	X.720–X.729
Management functions and ODMA functions	X.730–X.799
SECURITY	X.800–X.849
OSI APPLICATIONS	
Commitment, Concurrency and Recovery	X.850–X.859
Transaction processing	X.860–X.879
Remote operations	X.880–X.899
OPEN DISTRIBUTED PROCESSING	X.900–X.999

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

INTERNATIONAL STANDARD ISO/IEC 9594-4

ITU-T RECOMMENDATION X.518

INFORMATION TECHNOLOGY – OPEN SYSTEMS INTERCONNECTION – THE DIRECTORY: PROCEDURES FOR DISTRIBUTED OPERATION

TECHNICAL CORRIGENDUM 1

Source

Corrigendum 1 to ITU-T Recommendation X.518 was prepared by ITU-T Study Group 7 (1997-2000) and approved on 31 March 2000. An identical text is also published as Technical Corrigendum 1 to ISO/IEC 9594-4.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSC Resolution 1.

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.

NOTE

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

INTELLECTUAL PROPERTY RIGHTS

ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

As of the date of approval of this Recommendation, ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

CONTENTS

INTERNATIONAL STANDARD

ITU-T RECOMMENDATION

INFORMATION TECHNOLOGY – OPEN SYSTEMS INTERCONNECTION – THE DIRECTORY: PROCEDURES FOR DISTRIBUTED OPERATION

TECHNICAL CORRIGENDUM 1

1) Resolution to defect report 9594/157

Subclause 19.1.4 Modify DN operation

After the first paragraph of bullet 9), add the following new paragraph:

If the entry, alias entry or subentry was within the **UnitOfReplication** of one or more shadowing agreements held by the DSA, and the superior of the renamed entry, alias entry or subentry is not within this **UnitOfReplication**, the shadow consumers shall be updated using the procedures of the Directory shadow service specified in ITU-T Rec. X.525 | ISO/IEC 9594-9; in this case the shadowed entry and all its subordinates shall be removed.

If the entry, alias entry or subentry was not within the **UnitOfReplication** of one or more shadowing agreements held by the DSA, and the renamed entry, alias entry or subentry is now within this **UnitOfReplication**, the shadow consumers shall be updated using the procedures of the Directory shadow service specified in ITU-T Rec. X.525 | ISO/IEC 9594-9; in this case the shadowed entry and all its subordinates shall be shadowed.

2) Resolution to defect report 9594/159

Subclause 19.3.2.2.1 Search procedure (I)

Replace the whole text of the subclause 19.3.2.2.1 1) b) i) with the following text:

    i)   If **e** is unsuitable, make a **continuationReference** as follows and add it to **SRContinuationList**:

       –   **targetObject** set to the DN of DSE **e**;

       –   **operationProgress** with **nameResolutionPhase** set to **proceeding** and **nextRDNtoBeResolved** set to the number of RDNs in **e**;

       –   all other components of **continuationReference** are unchanged.

            Then return.

In the Note following subclause 19.3.2.2.1.1) b) i), remove the brackets with their content.

Subclause 18.3.1 Find DSE procedure

Delete in step 9) the first paragraph and NOTE 5.

3) Resolution to defect report 9594/162

Subclause 20.4.5 APInfo procedure

Replace the text of the second to last dash of 5) c), "**ChainingArguments.exclusions** absent" *with the following:*

       –   "**chainingArguments.exclusions** is set to either the relevant exclusions for the current target object if called by the Search Continuation Reference procedure, or absent if the APInfo procedure was called by the Name Resolution or the List Continuation procedures."

4)   Resolution to defect report 9594/180

Subclause 10.3 Chaining Arguments

Delete bullet g) (which is a duplicate of o)) and renumber the following items. Modify the order of m) n) and o) to o), n) m) which, with the renumbering will become:

l)   The **entryOnly** ...

m)   **uniqueIdentifier** ...

n)   **authenticationLevel** ...

5)   Resolution to defect report 9594/190

Subclause 19.3.1.2.2 List procedure (II)

In bullet 1) add a new step before a) and renumber the subsequent steps accordingly:

a)   If **e**' is not an entry or alias, continue with the next immediate subordinate.

b)   Check ACI ...

6)   Resolution to defect report 9594/198

Subclause 17.3.3.1 DUA request

Insert two new bullets e) and f) into 17.3.3.1 after bullet d) and renumber the existing e), f), g) as g), h), i) to read as follows:

d)   **ChainingArguments.AuthenticationLevel** and **ChainginArgument.UniqueID** are set according to the local security policy.

e)   **ChainingArguments.nameResolveOnMaster** is copied from **CommonArguments.nameResolveOnMaster**.

f)   **ChainingArguments.exclusions, ChainingArguments.entryOnly** and **ChainingArguments.referenceType** are copied from **CommonArguments.exclusions, CommonArguments.entryOnly** and **CommonArguments.referenceType** if they are present, otherwise they are omitted.

g)   If the **manageDSAIT** option is set …

7)   Resolution to defect report 9594/206

Clause 21 Results Merging procedure

Add the following Note after bullet 6):

"NOTE – In case a DSA receives search or list results from other DSAs, and such results have parameters unknown to the DSA, the uncorrelated results shall be returned. Otherwise, the DSA shall perform merging, if the search results are not signed.

A DSA which received unsigned, uncorrelated results from a DSA not able to perform consolidation, shall perform merging, if it has the proper knowledge of all parameters of the uncorrelated results."

8)   Resolution to defect report 9594/209

Subclause 12.1 Chained operations and Annex A

*Modify the ASN.1 of **ERRORS** as follows:*

    ERRORS   {operation.&Errors Except referral| dsaReferral}

9) Resolution to defect report 9594/211

Subclause 10.3

Change **timeLimit** *in* **ChainingArguments** *to:*

> timeLimit   [9]   Time OPTIONAL,

Insert the following after the ASN.1 definition of **ChainingArguments**:

> **Time ::= CHOICE {**
>   utcTime   UTCTime,
>   generalizedTime   GeneralizedTime **}**

Add the following to k):

> Before a value of **Time** is used in any comparison operation, and if the syntax of **Time** has been chosen as the **UTCTime** type, the value of the two-digit year field shall be rationalized into a four-digit year value as follows:
>
> –   If the 2-digit value is 00 through 49 inclusive, the value shall have 2000 added to it.
>
> –   If the 2-digit value is 50 through 99 inclusive, the value shall have 1900 added to it.

NOTE – The use of **GeneralizedTime** may prevent interworking with implementations unaware of the possibility of choosing either **UTCTime** or **GeneralizedTime**. It is the responsibility of those specifying the domains in which this Directory Specification will be used, e.g. profiling groups, as to when the **GeneralizedTime** may be used. In no case shall **UTCTime** be used for representing dates beyond 2049.

Also make the ASN.1 changes to Annex A.

SERIES OF ITU-T RECOMMENDATIONS

Series A	Organization of the work of ITU-T
Series B	Means of expression: definitions, symbols, classification
Series C	General telecommunication statistics
Series D	General tariff principles
Series E	Overall network operation, telephone service, service operation and human factors
Series F	Non-telephone telecommunication services
Series G	Transmission systems and media, digital systems and networks
Series H	Audiovisual and multimedia systems
Series I	Integrated services digital network
Series J	Transmission of television, sound programme and other multimedia signals
Series K	Protection against interference
Series L	Construction, installation and protection of cables and other elements of outside plant
Series M	TMN and network maintenance: international transmission systems, telephone circuits, telegraphy, facsimile and leased circuits
Series N	Maintenance: international sound programme and television transmission circuits
Series O	Specifications of measuring equipment
Series P	Telephone transmission quality, telephone installations, local line networks
Series Q	Switching and signalling
Series R	Telegraph transmission
Series S	Telegraph services terminal equipment
Series T	Terminals for telematic services
Series U	Telegraph switching
Series V	Data communication over the telephone network
Series X	**Data networks and open system communications**
Series Y	Global information infrastructure and Internet protocol aspects
Series Z	Languages and general software aspects for telecommunication systems