SLOVENSKI STANDARD
SIST EN ISP 10607-6:1997

01-december-1997

Information technology - International Standardized Profiles AFTnn - File Transfer, Access and Management - Part 6: AFT3 - File Management Service (ISO/IEC ISP 10607-6:1995)

Information technology - International Standardized Profiles AFTnn - File Transfer, Access and Management - Part 6: AFT3 - File Management Service (ISO/IEC ISP 10607 -6:1995)

iTeh STANDARD PREVIEW
Informationstechnik - Internationale Profilnormen AFTnn - Dateiübermittlung, Zugriff und Verwaltung - Teil 6: AFT3 - Management von Dateien (ISO/IEC ISP 10607-6:1995)
(standards.iteh.ai)

SIST EN ISP 10607-6:1997
Technologies de l'information - Profils normalisés internationaux AFTnn - Transfert, https://standards.iteh.ai/catalog/standards/sist/0fd579b7-9ea9-4cbc-9769-
acces et gestion de fichier - Partie 6: AFT3 - Service de gestion de fichier (ISO/IEC ISP bfe8f89ffefd/sist-en-isp-10607-6-1997
10607-6:1995)

Ta slovenski standard je istoveten z: EN ISP 10607-6:1996

ICS:

35.100.05	X^ •‖ b)^Á] [¦æà}ãz\^ ¦^zãç^	Multilayer applications

SIST EN ISP 10607-6:1997   en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

EUROPEAN STANDARD	**EN ISP 10607-6**
NORME EUROPÉENNE	
EUROPÄISCHE NORM	August 1996

ICS 35.100   Supersedes EN ISP 10607-6:1993

Descriptors: See ISO document

English version

Information technology - International Standardized Profiles AFTnn - File Transfer, Access and Management - Part 6: AFT3 - File Management Service (ISO/IEC ISP 10607-6:1995)

Technologies de l'information - Profils normalisés internationaux AFTnn - Transfert, accès et gestion de fichier - Partie 6: AFT3 - Service de gestion de fichier (ISO/IEC ISP 10607-6:1995)

Informationstechnik - Internationale Profilnormen AFTnn - Dateiübermittlung, Zugriff und Verwaltung - Teil 6: AFT3 - Management von Dateien (ISO/IEC ISP 10607-6:1995)

REPUBLIKA SLOVENIJA
MINISTRSTVO ZA ZNANOST IN TEHNOLOGIJO
Urad RS za standardizacijo in meroslovje
LJUBLJANA
SIST.... EN ISP 10607-6.
PREVZET PO METODI RAZGLASITVE   -12- 1997

This European Standard was approved by CEN on 1996-08-09. CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart,36 B-1050 Brussels

© 1996   Copyright reserved to CEN members

Ref. No. EN ISP 10607-6:1996 E

Foreword

The text of the International Standard from Technical Committee ISO/IEC/JTC 1 "Information Technologies" of the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) has been taken over as an European Standard by the Technical Board of CEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 1997, and conflicting national standards shall be withdrawn at the latest by month of February 1997.

This European Standard spersedes EN ISP 10607-6:1993.

For the time being this standard exists in the English version only.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

ENDORSEMENT NOTICE

The text of the International Standard ISO/IEC ISP 10607-6:1991 was approved by CEN as a European Standard without any modification.

INTERNATIONAL
STANDARDIZED
PROFILE

ISO/IEC
ISP
10607-6

Second edition
1995-12-15

Information technology — International Standardized Profiles AFTnn — File Transfer, Access and Management —

Part 6:
AFT3 — File Management Service

*Technologies de l'information — Profils normalisés internationaux AFTnn —
Transfert, accès et gestion de fichier —*

Partie 6: AFT3 — Service de gestion de fichier

ISO/IEC ISP 10607-6 : 1995 (E)

Contents

Annexes

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental or non-governmental, in liaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC1. In addition to developing International Standards, ISO/IEC JTC1 has created a Special Group on Functional Standardization for the elaboration of International Standardized Profiles.

An International Standardized Profile is an internationally agreed, harmonized document which identifies a standard or group of standards, together with options and parameters, necessary to accomplish a function or set of functions.

Draft International Standardized Profiles are circulated to national bodies for voting. Publication as an International Standardized Profile requires approval by at least 75 % of the national bodies casting a vote.

International Standardized Profile ISO/IEC ISP 10607-6 was prepared with the collaboration of

- Asia-Oceania Workshop (AOW);

- European Workshop for Open Systems (EWOS);

- Open Systems Environment Implementors' Workshop (OIW).

ISO/IEC ISP 10607 consists of the following parts, under the general title *Information technology - International Standardized Profiles AFTnn - File Transfer, Access and Management:*

> - *Part 1: Specification of ACSE, Presentation and Session protocols for the use by FTAM*
>
> - *Part 2 : Definition of document types, constraint sets and syntaxes*
>
> - *Part 3 : AFT11 - Simple File Transfer Service (unstructured)*
>
> - *Part 4 : AFT12 - Positional File Transfer Service (flat)*
>
> - *Part 5 : AFT22 - Positional File Access Service (flat)*
>
> - *Part 6 : AFT3 - File Management Service*

This second edition cancels and replaces the first edition (ISO/IEC ISP 10607-6 : 1991), which has been technically revised.

Annexes A and B form an integral part of this part of ISO/IEC ISP 10607. Annexes C and D are for information only.

Introduction

This part of ISO/IEC ISP 10607 is defined within the context of Functional Standardization, in accordance with the principles specified by ISO/IEC TR 10000, "Framework and Taxonomy of International Standardized Profiles". The context of Functional Standardization is one part of the overall field of Information Technology (IT) standardization activities, covering base standards, profiles, and registration mechanisms. A profile defines a combination of base standards that collectively perform a specific well-defined IT function. Profiles standardize the use of options and other variations in the base standards, and provide a basis for the development of uniform, internationally recognized system tests.

One of the most important roles for an ISP is to serve as the basis for the development (by organizations other than ISO and IEC) of internationally recognized tests and test centres. ISPs are produced not simply to legitimize a particular choice of base standards and options, but to promote real system interoperability. The development and widespread acceptance of tests based on this and other ISPs is crucial to the successful realization of this goal.

The text for this part of ISO/IEC ISP 10607 was developed in close co-operation among the FTAM Expert Groups of the three International OSI/OSE Workshops : OSE Implementors' Workshop (OIW), the European Workshop for Open Systems (EWOS) and the Asia-Oceania Workshop (AOW). This part of ISO/IEC ISP 10607 is harmonized among these three Workshops and it was finally ratified by the Workshops' plenary assemblies.

INTERNATIONAL STANDARDIZED PROFILE © ISO/IEC ISO/IEC ISP 10607-6:1995(E)

Information technology — International Standardized Profiles AFTnn — File Transfer, Access and Management —

Part 6:
AFT3 —File Management Service

1 Scope

1.1 General

This part of ISO/IEC ISP 10607 (AFT3) covers management of files between the filestores of two end systems, using the OSI connection-mode transport service to provide the interconnection. One end system acts in the initiator role and initiates the file management, the other end system acts in the responder role and provides management of the file in the virtual filestore.

These role combinations and the interoperability are shown in table 1.

Table 1 - Interoperable configurations

		Initiator		Responder	
		Sender	Receiver	Sender	Receiver
Initiator	Sender				x
	Receiver			x	
Responder	Sender		x		
	Receiver	x			

This part of ISO/IEC ISP 10607 specifies implementations that support file management, i.e. the ability to

    a) create and delete a file, and

    b) read and change the attributes of a file.

This part of ISO/IEC ISP 10607 shall be implemented with one or more of ISO/IEC ISP 10607-3, ISO/IEC ISP 10607-4, ISO/IEC ISP 10607-5. Therefore, this part of ISO/IEC ISP 10607 specifies only that functionality which is additional to the functionality of the related parts.

This part of ISO/IEC ISP 10607 specifies how the OSI FTAM application standard shall be used to provide the functions defined above. It does not specify total system capability. In particular, a system may operate this profile and at the same time engage in other communications. The requirements placed on an implementation in this part of ISO/IEC ISP 10607 are solely those necessary for operation of the protocol specified.

This part of ISO/IEC ISP 10607 describes the actions and attributes of the virtual filestore, and the service provided by the file service provider to file service users, together with the necessary communications between the initiator and the responder.

1.2 Position within the taxonomy

This part of ISO/IEC ISP 10607 is identified in ISO/IEC TR 10000-2 as "AFT3 - File Management Service".

It may be combined with any T-Profiles (see ISO/IEC TR 10000) specifying the OSI connection-mode transport service.

1.3 Scenario

The model used is one of two end systems establishing an association and managing files in the responder's virtual filestore as shown in figure 1.
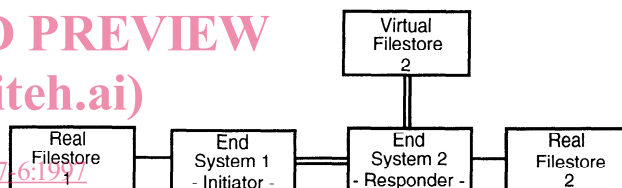

Figure 1 - File management between two end systems

Specifications of this part of ISO/IEC ISP 10607 apply on the double lines of figure 1. The mapping between the virtual filestore and the real filestore together with the local data management system is not defined in this part of ISO/IEC ISP 10607.

2 Normative references

The following documents contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC ISP 10607. At the time of publication, the editions indicated were valid. All documents are subject to revision, and parties to agreements based on this part of ISO/IEC ISP 10607 are warned against automatically applying any more recent editions of the documents listed below, since the nature of references made by ISPs to such documents is that they may be specific to a particular edition. Members of IEC and ISO maintain registers of currently valid International Standards and ISPs, and ITU-T maintains published editions of its current Recommendations.

Corrigenda to the base standards referenced : See annex C for a complete list of these documents which are identified in this part of ISO/IEC ISP 10607.

ISO 8571-1:1988, *Information processing systems - Open Systems Interconnection - File Transfer, Access and Management - Part 1 : General introduction.*

1

ISO/IEC ISP 10607-6 : 1995 (E)   © ISO/IEC

ISO 8571-2:1988, *Information processing systems - Open Systems Interconnection - File Transfer, Access and Management - Part 2 : Virtual Filestore Definition.*

ISO 8571-3:1988, *Information processing systems - Open Systems Interconnection - File Transfer, Access and Management - Part 3 : File Service Definition.*

ISO 8571-4:1988, *Information processing systems - Open Systems Interconnection - File Transfer, Access and Management - Part 4 : File Protocol Specification.*

ISO 8571-4:1988/Amd.4:1992, *Information processing systems - Open Systems Interconnection - File Transfer, Access and Management - Part 4 : File Protocol Specification - Amendment 4 .*

ISO/IEC 8571-5:1990, *Information processing systems - Open Systems Interconnection - File Transfer, Access and Management - Part 5 : Protocol Implementation Conformance Statement Proforma.*

ISO/IEC TR 10000-1:1992[1], *Information technology - Framework and taxonomy of International Standardized Profiles - Part 1 : Framework.*

ISO/IEC TR 10000-2:1994[1], *Information technology - Framework and taxonomy of International Standardized Profiles - Part 2 : Principles and Taxonomy for OSI Profiles.*

ISO/IEC ISP 10607-1:1995, *Information technology - International Standardized Profiles AFTnn - File Transfer, Access and Management - Part 1 : Specification of ACSE, Presentation and Session protocols for the use by FTAM.*

ISO/IEC ISP 10607-2:1995, *Information technology - International Standardized Profiles AFTnn - File Transfer, Access and Management - Part 2 : Definition of document types, constraint sets and syntaxes.*

ISO/IEC ISP 10607-3:1995, *Information technology - International Standardized Profiles AFTnn - File Transfer, Access and Management - Part 3 : AFT11 - Simple File Transfer Service (unstructured).*

ISO/IEC ISP 10607-4:1995, *Information technology - International Standardized Profiles AFTnn - File Transfer, Access and Management - Part 4 : AFT12 - Positional File Transfer Service (flat).*

ISO/IEC ISP 10607-5:1995, *Information technology - International Standardized Profiles AFTnn - File Transfer, Access and Management - Part 5 : AFT22 - Positional File Access Service (flat).*

3 Definitions

For the purposes of this part of ISO/IEC ISP 10607, the following definitions apply.

The terms used in this part of ISO/IEC ISP 10607 are defined in the referenced base standards.

In addition, the following terms are defined.

_____

[1] Currently under revision.

3.1 General

3.1.1 interwork : to be able to communicate to satisfy the intent of the initiator.

3.2 Support level

To specify the support level of protocol features for this part of ISO/IEC ISP 10607, the following terminology is defined.

3.2.1 supported; m : Any feature denoted by "m" is mandatory or optional in the base standard. That feature shall be supported, i.e. its syntax and procedures shall be implemented as specified in the base standard or in this part of ISO/IEC ISP 10607 by all implementations claiming conformance to this part of ISO/IEC ISP 10607.

However, it is not a requirement that the feature shall be used in all instances of communication, unless mandated by the base standard or stated otherwise in this part of ISO/IEC ISP 10607.

For fully supported attributes, this implies that at least the minimum range of attribute values, as defined in ISO 8571-2, shall be supported unless stated otherwise in this part of ISO/IEC ISP 10607.

NOTES

1 For features which are optional in the base standard, conformant implementations shall be able to interwork with other implementations not supporting this feature.

2 The support of a feature can be conditional, depending on the support of a class of features to which it belongs, e.g. an attribute in an attribute group, a parameter in a PDU, a PDU in a functional unit.

3.2.2 optionally supported; o : Any feature denoted by "o" is left to the implementation as to whether that feature is implemented or not.

If an attribute group with a support level of "o" is chosen to be implemented, then all the attributes in this group that are classified as "m" shall be supported.

If a parameter is optionally supported, then the syntax shall be supported, but it is left to each implementation whether the procedures are implemented or not.

When receiving an optional parameter which is not subject of negotiation and is not supported by the receiver, the receiver shall at least inform the sender by informative diagnostic and interworking shall not be disrupted.

3.2.3 conditionally supported; c : Any feature denoted by "c" shall be supported under the conditions specified in this part of ISO/IEC ISP 10607. If these conditions are not met, the feature is outside the scope of this part of ISO/IEC ISP 10607.

3.2.4 excluded; x : Any feature denoted by "x" is excluded in this part of ISO/IEC ISP 10607, i.e. it shall not be implemented.

3.2.5 outside the scope; i : Any feature denoted by "i" is outside the scope of this part of ISO/IEC ISP 10607, i.e. it may be ignored, and will therefore not be subject of an ISP conformance test. However the syntax of all parameters of supported PDUs shall be implemented,

2

even if the procedures are not (i.e. the receiver shall be able to decode the PDU).

3.2.6 not applicable; - : Any feature denoted by "-" is not defined in the context where it is mentioned, e.g. a parameter which is not part of the respective PDU. The occurrence of not applicable features is mainly due to the format of the tables in the Profile Requirements List.

4 Abbreviations

ACSE	Association Control Service Element
AFT	Profile sub-class : File Transfer, Access and Management
FTAM	File Transfer, Access and Management
ISP	International Standardized Profile
OSI	Open Systems Interconnection
PICS	Protocol Implementation Conformance Statement

Definitions and abbreviations used in ISO/IEC ISP 10607-6, annex A are defined in ISO 8571.

Support level for protocol features

m	supported
o	optionally supported
c	conditionally supported
x	excluded
i	outside the scope
-	not applicable

5 Conformance

This part of ISO/IEC ISP 10607 states requirements upon implementations to achieve interworking. A claim of conformance to this part of ISO/IEC ISP 10607 is a claim that all requirements in the relevant base standards are satisfied, and that all requirements in the following clauses and in annex A are satisfied. Annex A states the relationship between these requirements and those of the base standards.

5.1 Conformance statement

For each implementation claiming conformance to this part of ISO/IEC ISP 10607 a PICS shall be made available stating support or non-support of each option identified in this part of ISO/IEC ISP 10607.

5.2 FTAM conformance

This part of ISO/IEC ISP 10607 specifies implementation options or selections such that conformant implementations will satisfy the conformance requirements of ISO 8571.

Implementations conforming to this part of ISO/IEC ISP 10607 shall implement all the supported (m) features (identified in annex A), unless they are part of an unimplemented optional feature. They shall state which optionally supported (o) features are implemented.

6 Virtual filestore

The support for file and filestore characteristics, file actions, attribute groups and attributes is as specified in

the related part(s) of ISO/IEC ISP 10607, clause 6 and annex A.

7 File protocol

Annex A summarizes the characteristics of the file protocol regarding only that functionality which is specified in addition to that of the related part(s) of ISO/IEC ISP 10607.

7.1 Service classes, functional units

The functions as described in this part of ISO/IEC ISP 10607 shall always be implemented in conjunction with one or more of ISO/IEC ISP 10607-3, ISO/IEC ISP 10607-4, ISO/IEC ISP 10607-5. The service classes and functional units that shall be implemented are specified in A.12.4 and A.12.5.

For an implementation supporting this part of ISO/IEC ISP 10607 in conjunction with ISO/IEC ISP 10607-3 or ISO/IEC ISP 10607-4, any of the service classes T, M or (T, M, TM) may be requested and any of the classes T, M or TM may be responded on F-INITIALIZE.

For an implementation supporting this part of ISO/IEC ISP 10607 in conjunction with ISO/IEC ISP 10607-5, either of the service classes A or M may be requested and responded on F-INITIALIZE.

7.2 Recommendations

7.2.1 As an additional value for the implementation information parameter the value "AFT3" may be used.

7.2.2 If the concurrency control parameter is not supported, the following file locks should apply:

a) If the requested access parameter includes only the read or read attribute action, then:

| requested action | - shared/exclusive (local choice) |

| not requested read attribute action | - not required |

| all other write actions | - no access |

b) If the requested access parameter includes at least one of the replace, extend or delete file actions, then:

| requested actions | - exclusive |

| all other actions | - no access |

If the concurrency control parameter is supported but not present, then the file locks specified above should also be applied by default.

7.3 Diagnostic parameter

A value for the diagnostic parameter in a response FPDU shall be sent when the action result or state result parameters are not success.

For the diagnostic parameter of F-INITIALIZE, F-P-ABORT and F-RECOVER PDUs, the term suggested delay shall be supported if the recovery functional unit is implemented.