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Information processing systems — Open Systems Interconnection — File Transfer, Access and Management —

Part 2 : Virtual Filestore Definition

*Systemes de traitement de l'information — Interconnexion de systemes ouverts — Gestion,
accès et transfert de fichier —*

Partie 2 : Fichier virtuel

Reference number
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 8571-2 was prepared by Technical Committee ISO/TC 97, *Information processing systems*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

ISO 8571 consists of the following parts, under the general title *Information processing systems — Open Systems Interconnection — File Transfer, Access and Management*

- *Part 1 : General introduction*
- *Part 2 : Virtual Filestore Definition*
- *Part 3 : File Service Definition*
- *Part 4 : File Protocol Specification*

Annexes A and B form an integral part of this International Standard. Annexes C, D and E are for information only.

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Information processing systems — Open Systems Interconnection — File Transfer, Access and Management —

Part 2 : Virtual Filestore Definition

0 Introduction

ISO 8571 is one of a set of International Standards produced to facilitate the interconnection of computer systems. It is related to other International Standards in the set as defined by the Reference Model for Open Systems Interconnection (ISO 7498). The Reference Model subdivides the area of standardization for interconnection into a series of layers of specification, each of manageable size.

The aim of Open Systems Interconnection is to allow, with a minimum of technical agreement outside the interconnection standards, the interconnection of computer systems

- a) from different manufacturers,
- b) under different managements,
- c) of different levels of complexity,
- d) of different ages.

ISO 8571 defines a File Service and specifies a File Protocol available within the application layer of the Reference Model. The service defined is of the category Application Service Element (ASE). It is concerned with identifiable bodies of information which can be treated as files, and may be stored within open systems or passed between application processes.

ISO 8571 defines a basic file service. It provides basic facilities to support file transfer, and establishes a framework for file access and file management. ISO 8571 does not specify the interfaces to a file transfer or access facility within the local system.

ISO 8571 consists of the following four parts:

- Part 1: General introduction
- Part 2: Virtual Filestore definition
- Part 3: File Service definition
- Part 4: File Protocol specification

The definition in this part of ISO 8571 is used in the subsequent parts of ISO 8571 which specify services and protocols. They reference the filestore definition in order to assign meaning to the various descriptive data items which they manipulate. This definition will also be used by protocol implementors when choosing a mapping from the protocol items onto their real storage mechanism.

This part of ISO 8571 contains the following annexes which form part of the standard:

- Annex A - File access structure constraint sets;
- Annex B - Document types;

and the following annexes which do not form part of the standard:

- Annex C - Reading of structured files;
- Annex D - Insertion in a structured file;
- Annex E - ASN.1 cross reference.

1 Scope and field of application

This part of ISO 8571

- a) defines an abstract model of the virtual filestore for describing files and filestores (see section one);
- b) defines the set of actions available to manipulate the elements of the model (see section two);
- c) defines the properties of individual files and associations in terms of attributes (see section three);
- d) defines the form of representations of files with hierarchical structures (see clause 7 in section one).

This part of ISO 8571 does not specify

- e) requirements relating to the mapping from real to virtual filestores;
- f) requirements for implementations of the real filestore.

The Virtual Filestore definition is provided for reference by the other parts of ISO 8571 defining the file service (ISO 8571-3) and specifying the file protocol (ISO 8571-4).

2 References

ISO 6429, *Information processing - ISO 7-bit and 8-bit coded character sets - Additional control functions for character imaging devices.*

ISO 7498, *Information Processing Systems - Open Systems Interconnection - Basic Reference Model.*

ISO 8571, *Information Processing Systems - Open systems Interconnection - File transfer, access and management.*

- Part 1: General introduction.
- Part 3: File Service definition.
- Part 4: File Protocol specification.

ISO 8601, *Data elements and interchange formats - Information interchange - Representation of dates and times.*

ISO 8650, *Information Processing Systems - Open Systems Interconnection - Protocol specification for the Association Control Service Element.*

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ISO 8822, *Information Processing Systems - Open Systems Interconnection - Connection-oriented presentation service definition.*

ISO 8824, *Information Processing Systems - Open Systems Interconnection - Specification of Abstract Syntax Notation One (ASN.1).*

ISO 8825, *Information Processing Systems - Open Systems Interconnection - Specification of Basic encoding rules for Abstract Syntax Notation One (ASN.1).*

ISO 8832, *Information Processing Systems - Open Systems Interconnection - Specification of the basic class protocol for Job Transfer and Manipulation.*¹⁾

ISO 9804, *Information Processing Systems - Open Systems Interconnection - Definition of Application Service Elements - Commitment, Concurrency and Recovery.*¹⁾

ISO 9834-2, *Information Processing Systems - Procedures for specific OSI registration authorities - Part 2: Registration of Document Types.*¹⁾

¹⁾ At present at the stage of draft; publication anticipated in due course.