INTERNATIONAL STANDARD

ISO/IEC 10026-2

Third edition
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Information technology — Open Systems Interconnection — Distributed Transaction Processing —

Part 2:
OSI TP Service

Technologies de l'information — Interconnexion de systèmes ouverts (OSI) — Traitement transactionnel réparti —

Partie 2: Service OSI TP

Reference number
ISO/IEC 10026-2:1998(E)

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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 and 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 JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

International Standard ISO/IEC 10026-2 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 21, *Open systems interconnection*, *data management and open distributed processing.*

This third edition cancels and replaces the second edition (ISO/IEC 10026-2:1996), which has been technically revised.

This part of ISO/IEC 10026 is technically aligned with ITU-T Recommendation X.861, but is not published as identical text.

ISO/IEC 10026 consists of the following parts, under the general title *Information technology — Open Systems Interconnection — Distributed Transaction Processing*:

— *Part 1: OSI TP Model*

— *Part 2: OSI TP Service*

— *Part 3: Protocol specification*

— *Part 4: Protocol Implementation Conformance Statement (PICS) proforma*

— *Part 5: Application context proforma and guidelines when using OSI TP*

— *Part 6: Unstructured Data Transfer*

Annex A forms an integral part of this part of ISO/IEC 10026. Annex B is for information only.

Introduction

ISO/IEC 10026 is one of a set of 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/IEC 7498-1). 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 management;

c) of different levels of complexity; and

d) of different technologies.

ISO/IEC 10026 defines an OSI TP Model, an OSI TP Service and specifies an OSI TP Protocol available within the Application Layer of the OSI Reference Model.

The OSI TP Service is an Application Layer service. It is concerned with information which can be related as distributed transactions, which involve two or more open systems.

This part of ISO/IEC 10026 defines a basic OSI TP Service. It provides sufficient facilities to support transaction processing, and establishes a framework for coordination across multiple TP resources in separate open systems.

ISO/IEC 10026 does not specify the interface to local resources or access facilities that are provided within the local system. However, future enhancement of the standard may deal with these issues.

Information technology — Open Systems Interconnection — Distributed Transaction Processing —

Part 2:

OSI TP Service

1 Scope

This part of ISO/IEC 10026 defines in an abstract way the Distributed Transaction Processing Service within the Application Layer in terms of:

a) the actions and events of the service primitives;

b) the parameter data associated with each service primitive's action and event; and

c) the relationship between, and the valid sequences of these actions and events.

It does not specify individual implementations or products, nor does it constrain the implementation of entities or interfaces within a computer system.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 10026. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO/IEC 10026 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO/IEC 7498-1:1994, *Information technology - Open Systems Interconnection - Basic Reference Model: The Basic Model.*

ISO/IEC 7498-3:1997, *Information technology - Open Systems Interconnection - Basic Reference Model: Naming and addressing.*

ISO/IEC 8649:1996, *Information technology - Open Systems Interconnection - Service definition for the Association Control Service Element.*

ISO/IEC 10026-1:1998, *Information technology - Open Systems Interconnection - Distributed Transaction Processing - Part 1: OSI TP Model*.

ISO/IEC 10026-3:1998, *Information technology - Open Systems Interconnection - Distributed Transaction Processing - Part 3: Protocol specification*.

ISO/IEC 10731:1994, *Information technology - Open Systems Interconnection - Basic Reference Model - Conventions for the definition of OSI services.*