
**Information technology — Framework and
taxonomy of International Standardized
Profiles —**

Part 2:
Principles and Taxonomy for OSI Profiles

*Technologies de l'information — Cadre et taxinomie des profils normalisés
internationaux —*

Partie 2: Principes et taxinomie pour profils OSI



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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.

The main task of technical committees is to prepare International Standards, but in exceptional circumstances a technical committee may propose the publication of a Technical Report of one of the following types:

- type 1, when the required support cannot be obtained for the publication of an International Standard, despite repeated efforts;
- type 2, when the subject is still under technical development or where for any other reason there is the future but not immediate possibility of an agreement on an International Standard;
- type 3, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example).

Technical Reports of types 1 and 2 are subject to review within three years of publication, to decide whether they can be transformed into International Standards. Technical Reports of type 3 do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

ISO/IEC TR 10000-2, which is a Technical Report of type 3, was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*.

This fifth edition cancels and replaces the fourth edition (ISO/IEC TR 10000-2:1995), which has been technically revised.

ISO/IEC TR 10000 consists of the following parts, under the general title *Information technology Framework and taxonomy of International Standardized Profiles*:

- *Part 1: General principles and documentation framework*
- *Part 2: Principles and Taxonomy for OSI Profiles*
- *Part 3: Principles and Taxonomy for Open System Environment Profiles*

Other parts to be defined as necessary.

Introduction

The context of Functional Standardization is one part of the overall field of Information Technology standardization activities covering

- Base standards, which define fundamentals and generalized procedures. They provide an infrastructure that can be used by a variety of applications, each of which can make its own selection from the options offered by them.
- Profiles, which define conforming subsets or combinations of base standards used to provide specific functions. Profiles identify the use of particular options available in the base standards, and provide a basis for the development of uniform, internationally recognized, conformance tests.

Registration mechanisms, which provide the means to specify detailed parameterization within the framework of the base standards or profiles.

Within ISO/IEC JTC 1, the process of Functional Standardization is concerned with the methodology of defining profiles, and their publication in documents called "International Standardized Profiles" (ISPs) in accordance with procedures contained in the Directives of JTC 1. The scope of Information Technology standardization to which this process is being applied is that which corresponds to the generally understood, but loosely defined, concept of "Open Systems". The objective is to facilitate the specification of IT systems characterized by a high degree of interoperability and portability of their components.

In addition to ISO/IEC TR 10000, the secretariat of the Special Group on Functional Standardization maintains a standing document (SD-4) entitled "Directory of ISPs and Profiles contained therein". This is a factual record of which ISPs exist, or are in preparation, together with an executive summary of each profile. It is subject to regular updating by the Secretariat of ISO/IEC JTC 1/SGFS.

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Information technology — Framework and taxonomy of International Standardized Profiles —

Part 2: Principles and Taxonomy for OSI Profiles

1 Scope

The purpose of this part of ISO/IEC TR 10000 is to provide principles and a classification scheme for OSI profiles which may be or have been submitted for ratification as International Standardized Profiles (ISPs).¹

ISO/IEC TR 10000-1 defines the concept of profiles which are documented in ISPs. OSI profiles are a subset of OSE profiles. ISO/IEC TR 10000-3 defines the concept of OSP profiles and, along with ISO/IEC TR 10000-1, gives guidance to organizations making proposals for Draft ISPs, on the nature and content of the documents they are producing.

The existence of a profile classification in this part of ISO/IEC TR 10000 does not reflect a judgment by ISO/IEC JTC 1/SGFS that a profile is required for such capability. It merely provides a capability to identify uniquely such a function and to enable evaluation of PDISPs.

Since profiles will be proposed according to needs identified to SGFS and according to the progress of international base standardization, the Taxonomy will be periodically updated or have new parts added in order to reflect the progress reached. It is also recognized that there will be proposals for the extension of the Taxonomy to cover functions which were not identified during preparation of this edition of ISO/IEC TR 10000. These extensions may be identified by a variety of proposers and involve simple extensions to the existing Taxonomy or the addition of new functional areas not currently covered by ISO/IEC TR 10000. The inclusion of such extensions is administered following the procedures elaborated by SGFS.

A distinction has been made between a profile and an ISP documenting one or more profiles. The Taxonomy is only concerned with profiles, but further information is given in the "Directory of ISPs and Profiles contained therein" as to which ISP contains the documentation of a profile.

This *Directory* is maintained as an SGFS standing document SD-4 (see Annex A). For each draft profile submitted to SGFS, it will

also provide additional information, including the status of the identified profiles.

2 References

ISO/IEC 9646-6:1994, *Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 6: Protocol profile test specification*. {ITU-T Rec. X.295 (1995)}

ISO/IEC 9646-7:1995, *Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements*. {ITU-T Rec. X.296 (1995)}

ISO/IEC TR 10000-1:1998, *Information technology - Framework and taxonomy of International Standardized Profiles - Part 1: General principles and documentation framework*.

ISO/IEC TR 10000-3:1998, *Information technology - Framework and taxonomy of International Standardized Profiles - Part 3: Principles and Taxonomy for Open System Environment Profiles*.

A number of other ISO, IEC, and ISO/IEC JTC 1 Standards and ITU-T Recommendations are quoted in examples which do not constitute provisions of this part of ISO/IEC TR 10000.

3 Definition

For the purposes of this part of ISO/IEC TR 10000, the following definition applies.

3.1 Group: A set of OSI profiles that are compatible, in the sense that an IT implementing one profile from a Group can interwork, according to OSI, with another IT system implementing a different profile from the same Group, in terms of the operation of the protocols specified within these profiles.

¹ This part of ISO/IEC TR 10000 defines only a taxonomy for OSI based communication profiles; the issue of the placement of other communication profiles is not addressed.