

INTERNATIONAL STANDARDIZED PROFILE

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Part 12: ADY53 — Shadowing subsets

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Partie 12: ADY53 — Sous-ensembles de suivi



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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. In addition to developing International Standards, ISO/IEC JTC 1 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 a 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 15125-12 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 15125 consists of the following parts, under the general title *Information technology — International Standardized Profiles ADYnn — OSI Directory*.

- Part 1 : ADY11 — DUA Support of the Directory Access Protocol
- Part 2 : ADY12 — DUA Support of Distributed Operations
- Part 3 : ADY21 — DSA Support of Directory Access
- Part 4 : ADY22 — DSA Support of Distributed Operations
- Part 5 : ADY41 — DUA Authentication as DAP Initiator
- Part 6 : ADY42 — DSA Authentication as DAP Responder
- Part 7 : ADY43 — DSA to DSA Authentication
- Part 8 : ADY44 — DSA Simple Access Control
- Part 9 : ADY45 — DSA Basic Access Control
- Part 10 : ADY51 — Shadowing using ROSE
- Part 11 : ADY52 — Shadowing using RTSE
- Part 12 : ADY53 — Shadowing subsets
- Part 13 : ADY61 — Administrative Areas
- Part 14 : ADY62 — Establishment and Utilisation of Shadowing Agreements
- Part 15 : ADY63 — Schema Administration and Publication
- Part 16 : ADY71 — Shadowing Operational Binding
- Part 17 : ADY72 — Hierarchical Operational Binding
- Part 18 : ADY73 — Non-specific Hierarchical Operational Binding

Annexes A and B form a normative part of this part of ISO/IEC ISP 15125.

Introduction

The concept and structure of International Standardized Profiles for Information Systems are laid down in the Technical Report ISO/IEC TR 10000. The purpose of an International Standardized Profile is to recommend when and how certain information technology standards shall be used.

The International Standardized Profile, ISO/IEC ISP 15125, consists of a set of International Standardized Profile parts relating to the Directory as defined in the Technical Report ISO/IEC TR 10000-2.

This part of ISO/IEC ISP 15125 specifies application profile ADY53 (see TR 10000-2) which defines six functional subsets that may be supported by Directory System Agent (DSA) implementations when shadowing Directory information in accordance with ISO/IEC 9594-9:1995 | ITU-T Recommendation X.525:1993.

Information technology — International Standardized Profiles

ADYnn — OSI Directory —

Part 12:

ADY53 — Shadowing subsets

1 Scope

1.1 General

The Directory standards specify a directory information shadowing service which DSAs may support in order to replicate Directory information. This shadowing service provides a standardized mechanism whereby shadowed information can be set up and maintained between co-operating DSAs. The information to be shadowed is specified in terms of a unit of replication.

This part of ISO/IEC ISP 15125 defines a number of functional shadowing subsets to which a DSA implementation may conform. Each functional subset requires a DSA to be capable of performing shadowing to a particular level, this level being based upon the degree of refinement permitted within the specification of a unit of replication. The functional subsets can be related to either a DSA implementation operating as a supplier of shadowed information or a DSA implementation acting as a consumer of shadowed information.

This part of ISO/IEC ISP 15125 identifies the capability to handle overlapping replicated areas specified within different units of replication as a separate, optional capability which a DSA implementation may combine with support for any of the functional shadowing subsets defined.

This part of ISO/IEC ISP 15125 does not specify any requirements related to the administration, management or protocol aspects of shadowing Directory information. However, this part of ISO/IEC ISP 15125 does mandate conformance to those parts of ISO/IEC ISP 15125 which do specify such requirements, specifically, ISO/IEC ISP 15125-14 (ADY62 - Establishment and Utilisation of Shadowing Agreements) and either part 10 (ADY51 - Shadowing using ROSE) or ISO/IEC ISP 15125-11 (ADY52 - Shadowing using RTSE).

1.2 Position within the taxonomy

This part of ISO/IEC ISP 15125 is identified in ISO/IEC TR 10000-2 as ADY53 "The Directory - Shadowing Capabilities - Shadowing Subsets".

1.3 Scenario

In the Directory, replication of information between DSAs can be achieved by use of the standardized shadowing mechanism defined in ISO/IEC 9594-9: 1995 | ITU-T X.525: 1993. A subtree of the DIT which is to be replicated is the subject of a shadowing agreement between DSAs and

specified in terms of a unit of replication. A DSA which provides a unit of replication is termed a 'shadow supplier'; a DSA which receives a unit of replication is termed a 'shadow consumer' (see Figure 1).

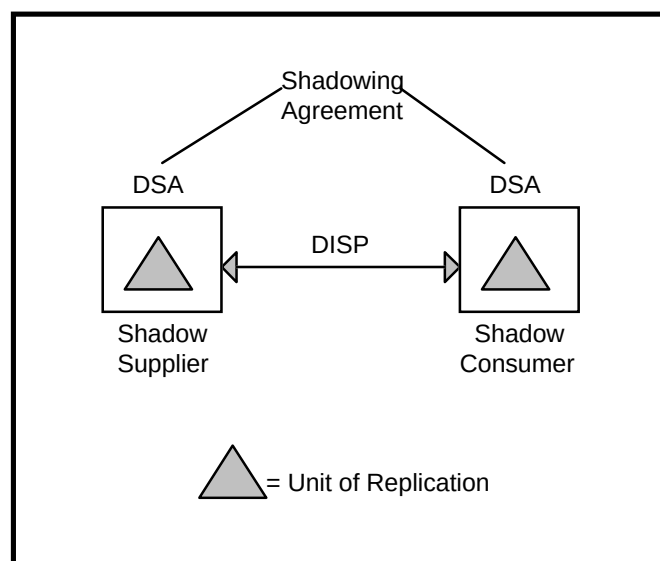


Figure 1 - Directory Shadowing

2 Normative references

The following documents contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC ISP 15125. 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 15125 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.

ISO/IEC TR 10000-1:1995, *Information technology - Framework and taxonomy of International Standardized Profiles - Part 1: General principles and documentation framework*.

ISO/IEC TR 10000-2:1995, *Information technology - Framework and taxonomy of International Standardized Profiles - Part 2: Principles and taxonomy for OSI profiles*.