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INTERNATIONAL STANDARD

ISO/IEC 10164-14

First edition
1996-12-15

Information technology — Open Systems Interconnection — Systems Management: Confidence and diagnostic test categories

Technologies de l'information — Interconnexion de systèmes ouverts (OSI) — Gestion-systèmes: Catégories de test de confiance et de diagnostic

Reference number
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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 10164-14 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 21, *Open Systems Interconnection, data management and open distributed processing*, in collaboration with ITU-T. The identical text is published as ITU-T Recommendation X.737.

ISO/IEC 10164 consists of the following parts, under the general title *Information technology — Open Systems Interconnection — Systems Management*:

— *Part 1: Object management function*
— *Part 2: State management function*
— *Part 3: Attributes for representing relationships*
— *Part 4: Alarm reporting function*
— *Part 5: Event report management function*
— *Part 6: Log control function*
— *Part 7: Security alarm reporting function*
— *Part 8: Security audit trail function*
— *Part 9: Objects and attributes for access control*
— *Part 10: Accounting metering function*
— *Part 11: Metric objects and attributes*
— *Part 12: Test management function*
— *Part 13: Summarization function*
— *Part 14: Confidence and diagnostic test categories*
— *Part 15: Scheduling function*
— *Part 16: Management knowledge management function*
— *Part 17: Change over function*

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— *Part 18: Software management function*

— *Part 19: Management domain and Management policy management function*

— *Part 21: Command Sequencer*

Annexes A to E form an integral part of this part of ISO/IEC 10164. Annexes F to I are for information only.

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ITU-T RECOMMENDATION

INFORMATION TECHNOLOGY – OPEN SYSTEMS INTERCONNECTION – SYSTEMS MANAGEMENT: CONFIDENCE AND DIAGNOSTIC TEST CATEGORIES

1 Scope

This Recommendation | International Standard defines a Systems Management Function that may be used by an application process in a centralised or decentralised management environment to interact for the purpose of systems management, as defined by CCITT Rec. X.700 | ISO/IEC 7498-4. This Recommendation | International Standard defines a function which consists of generic definitions, services and functional units. This function is positioned in the application layer of ITU-T Rec. X.200 | ISO/IEC 7498-1 and is defined according to the model provided by ITU-T Rec. X.207 | ISO/IEC 9545. The role of systems management functions is described by CCITT Rec. X.701 | ISO/IEC 10040.

This Recommendation | International Standard:

- establishes user requirements for this Recommendation | International Standard;
- specifies Confidence and diagnostic test categories that relate generic definitions provided by this Recommendation | International Standard to user requirements;
- defines managed objects, packages, attribute types, operation types, and parameters documented in accordance with CCITT Rec. X.722 | ISO/IEC 10165-4;
- specifies compliance requirements placed on other Recommendations | Standards that make use of the Generic Definitions of this Recommendation | International Standard.

This Recommendation | International Standard does not:

- define the nature of any implementation intended to provide Confidence and diagnostic tests;
- specify the manner in which management is accomplished by the user of Confidence and diagnostic tests;
- define the nature of any interactions which result in the use of Confidence and diagnostic tests;
- specify the services necessary for the establishment, normal and abnormal release of a management association.

2 Normative references

The following Recommendations and International Standards contain provisions which, through reference in this text, constitute provisions of this Recommendation | International Standard. At the time of publication, the editions indicated were valid. All Recommendations and Standards are subject to revision, and parties to agreements based on this Recommendation | International Standard are encouraged to investigate the possibility of applying the most recent edition of the Recommendations and Standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards. The Telecommunications Standardization Bureau of the ITU-T maintains a list of currently valid ITU-T Recommendations.

2.1 Identical Recommendations | International Standards

- ITU-T Recommendation X.200 (1994) | ISO/IEC 7498-1:1994, *Information technology – Open Systems Interconnection – Basic Reference Model: The Basic Model.*
- ITU-T Recommendation X.207 (1993) | ISO/IEC 9545:1994, *Information technology – Open Systems Interconnection – Application Layer structure.*

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- ITU-T Recommendation X.210 (1993) | ISO/IEC 10731:1994, *Information technology – Open Systems Interconnection – Basic Reference Model: Conventions for the definition of OSI services.*
- CCITT Recommendation X.701 (1992) | ISO/IEC 10040:1992, *Information technology – Open Systems Interconnection – Systems management overview.*
- CCITT Recommendation X.720 (1992) | ISO/IEC 10165-1:1993, *Information technology – Open Systems Interconnection – Structure of management information: Management Information Model.*
- CCITT Recommendation X.721 (1992) | ISO/IEC 10165-2:1992, *Information technology – Open Systems Interconnection – Structure of management information: Definition of management information.*
- CCITT Recommendation X.722 (1992) | ISO/IEC 10165-4:1992, *Information technology – Open Systems Interconnection – Structure of management information: Guidelines for the definition of managed objects.*
- ITU-T Recommendation X.724 (1993) | ISO/IEC 10165-6:1994, *Information technology – Open Systems Interconnection – Structure of management information: Requirements and guidelines for implementation conformance statement proformas associated with OSI management.*
- ITU-T Recommendation X.745 (1993) | ISO/IEC 10164-12:1994, *Information technology – Open Systems Interconnection – Systems management: Test management function.*

2.2 Paired Recommendation | International Standards equivalent in technical content

- CCITT Recommendation X.208 (1988), *Specification of Abstract Syntax Notation One (ASN.1).*

  ISO/IEC 8824:1990, *Information technology – Open Systems Interconnection – Specification of Abstract Syntax Notation One (ASN.1).*
- ITU-T Recommendation X.290 (1995), *OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications – General concepts.*

  ISO/IEC 9646-1:1994, *Information technology – Open Systems Interconnection – Conformance testing methodology and framework – Part 1: General concepts.*
- ITU-T Recommendation X.291 (1995), *OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications – Abstract test suite specification.*

  ISO/IEC 9646-2:1994, *Information technology – Open Systems Interconnection – Conformance testing methodology and framework – Part 2: Abstract Test Suite specification.*
- CCITT Recommendation X.700 (1992), *Management framework for Open Systems Interconnection (OSI) for CCITT applications.*

  ISO/IEC 7498-4: 1989, *Information processing systems – Open Systems Interconnection – Basic Reference Model – Part 4: Management framework.*
- CCITT Recommendation X.710 (1991), *Common management information service definition for CCITT applications.*

  ISO/IEC 9595:1991, *Information technology – Open Systems Interconnection – Common management information service definition.*

2.3 Additional references

- CCITT Recommendation O.151 (1992), *Error performance measuring equipment operating at the primary rate and above.*
- CCITT Recommendation O.152 (1992), *Error performance measuring equipment for bit rates of 64 kbit/s and N x 64 kbit/s.*
- ITU-T Recommendation V.32 (1993), *A family of 2-wire, duplex modems operating at data signalling rates of up to 9 600 bit/s for use on the general switched telephone network and on leased telephone type circuits.*