TECHNICAL REPORT

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Information technology — Message Handling Systems (MHS): MHS Routing — Guide for messaging systems managers

Technologies de l'information — Systèmes de messagerie (MHS): Routage MHS — Guide pour résponsables de systèmes de messagerie

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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.ch
Web www.iso.ch

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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.

In exceptional circumstances, 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), it may decide by a simple majority vote of its participating members to publish a Technical Report. A Technical Report is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.

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Attention is drawn to the possibility that some of the elements of this part of ISO/IEC TR 10021 may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC TR 10021-11 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 6, *Telecommunications and information exchange between systems*, in collaboration with ITU-T. The identical text is published as ITU-T Recommendation X.404.

ISO/IEC TR 10021 consists of the following parts, under the general title *Information technology — Message Handling Systems (MHS)*:

— *Part 1: System and Service Overview*

— *Part 2: Overall architecture*

— *Part 3: Abstract Service Definition Conventions*

— *Part 4: Message transfer system: Abstract service definition and procedures*

— *Part 5: Message store: Abstract service definition*

— *Part 6: Protocol specifications*

— *Part 7: Interpersonal messaging system*

— *Part 8: Electronic Data Interchange Messaging Service*

— *Part 9: Electronic Data Interchange Messaging System*

— *Part 10: MHS routing*

— *Part 11: MHS Routing — Guide for messaging systems managers*

Annexes A and B of this part of ISO/IEC 10021 are for information only.

Introduction

This Recommendation | Technical Report is one of a set of Recommendations | number of parts of ISO/IEC 10021 defining Message Handling in a distributed open systems environment.

ITU-T Rec. X.412 | ISO/IEC 10021-10 defines a method for routing messages through the Message Handling System (MHS). This Recommendation | Technical Report provides guidance for Configuring MTS Routing using the Directory, and suggests the characteristics of a Directory User Agent for managing that process. It allows OR-address plans, MTA interconnection topology and the management structures applied to MHS to be dealt with independently of each other whilst remaining within a co-ordinated framework.

TECHNICAL REPORT

ITU-T RECOMMENDATION

INFORMATION TECHNOLOGY – MESSAGE HANDLING SYSTEMS (MHS): MHS ROUTING – GUIDE FOR MESSAGING SYSTEM MANAGERS

1 Scope

This Recommendation | Technical Report specifies the means by which the administrator of various aspects of an MHS system may configure information into the directory for MTAs to use to determine the routing of messages.

ITU-T Rec. X.412 | ISO/IEC 10021-10 provides a set of directory structures that may be configured in many different ways to support a particular MHS routing strategy. In order to illustrate the use of these directory structures, this document contains advice on how an MHS Administrator might organize the configuration of directory trees and entries in the directory. In particular, it contains suggestions on the following:

- The types, construction and location of different OR-address subtrees that may be needed;
- The location of routing collective and MTA entries in the directory.

Other ways of using the routing capabilities specified in ITU-T Rec. X.412 | ISO/IEC 10021-10 are also valid.

Other Recommendations | International Standards define other aspects of the MHS. ITU-T Rec. F.400/X.400 | ISO/IEC 10021-1 defines the user-oriented services provided by the MHS. ITU-T Rec. X.402 | ISO/IEC 10021-2 provides an architectural overview of the MHS. ITU-T Rec. X.411 | ISO/IEC 10021-4 defines the abstract-service of the Message Transfer System. ITU-T Rec. X.412 | ISO/IEC 10021-10 defines MHS Routing using the directory.

2 Normative References

The following Recommendations and International Standards contain provisions which, through reference in this text, constitute provisions of this Recommendation | Technical Report. 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 | Technical Report are encouraged to investigate the possibility of applying the most recent edition of the Recommendations and Standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards. The Telecommunication Standardization Bureau of the ITU maintains a list of currently valid ITU-T Recommendations.

2.1 Identical Recommendations | International Standards

- ITU-T Recommendation X.216 (1994) | ISO/IEC 8822:1994, *Information technology – Open Systems Interconnection – Presentation service definition.*
- ITU-T Recommendation X.402 (1995) | ISO/IEC 10021-2:1996, *Information technology – Message Handling Systems (MHS): Overall architecture.*
- ITU-T Recommendation X.412 (1999) | ISO/IEC 10021-10:1998, *Information technology – Message Handling Systems (MHS): MHS routing.*
- ITU-T Recommendation X.500 (1997) | ISO/IEC 9594-1:1998, *Information technology – Open Systems Interconnection – The Directory: Overview of concepts, models and services.*

2.2 Paired Recommendations | International Standards equivalent in technical content

- CCITT Recommendation X.208 (1998), *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 F.400/X.400 (1999), *Message handling services: Message handling system and service overview*.

ISO/IEC 10021-1:1990, *Information technology – Text Communication – Message Oriented Text Interchange Systems (MOTIS) – Part 1: System and service overview*.