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SERIES X: DATA NETWORKS AND OPEN SYSTEM COMMUNICATIONS

Message Handling Systems

Message Handling Systems – EDI-MS attributes PICS proforma

ITU-T Recommendation X.488

(Previously CCITT Recommendation)

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ITU-T RECOMMENDATION X.488

MESSAGE HANDLING SYSTEMS – EDI-MS ATTRIBUTES PICS PROFORMA

Summary

This Recommendation provides the PICS proforma for access to a message store (EDI-MS) in an EDI Messaging (EDIMG) environment using the P7 MS Access Protocol.

Source

ITU-T Recommendation X.488 was prepared by ITU-T Study Group 7 (1997-2000) and was approved under the WTSC Resolution No. 1 procedure on the 18th of June 1999. Reprinted April 2000 to realign the presentation of the X.480-series Recommendations.

FOREWORD

ITU (International Telecommunication Union) is the United Nations Specialized Agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the ITU. The ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation the term *recognized operating agency (ROA)* includes any individual, company, corporation or governmental organization that operates a public correspondence service. The terms *Administration, ROA* and *public correspondence* are defined in the *Constitution of the ITU (Geneva, 1992)*.

INTELLECTUAL PROPERTY RIGHTS

The ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. The ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

As of the date of approval of this Recommendation, the ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

CONTENTS

Introduction

This Recommendation is one in a set of Recommendations defining Message Handling in a distributed open system environment.

Message Handling provides for the exchange of messages between users on a store-and-forward basis. A message submitted by one user (the originator) is transferred through the Message Transfer System (MTS) and delivered to one or more users (the recipients). The MTS comprises a number of Message Transfer Agents (MTAs), which transfer messages and deliver them to their recipients.

To evaluate the capabilities of a particular implementation, it is necessary to have a statement of which capabilities and options have been implemented for a given OSI protocol. Such a statement is called a Protocol Implementation Conformance Statement (PICS).

Recommendation X.488

MESSAGE HANDLING SYSTEMS – EDI-MS ATTRIBUTES PICS PROFORMA[1]

1 Scope

This Recommendation provides the Protocol Implementation Conformance Statement (PICS) proforma for the EDI-MS attributes specified in ITU-T Rec. X.413 | ISO/IEC 10021-5 and ITU-T Rec. X.419 | ISO/IEC 10021-6. The PICS proforma presents in tabular form the mandatory and optional EDI-specific attributes.

This PICS proforma is based on the relevant guidance for PICS proformas given in ITU-T Rec. X.296 | ISO/IEC 9646-7.

2 Normative references

The following Recommendations and International Standards contain provisions which, through reference in this text, constitute provisions of this Recommendation. 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 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.402 (1999) | ISO/IEC 10021-2:1999, *Information technology – Message Handling Systems (MHS): Overall architecture*.

– ITU-T Recommendation X.413 (1999) | ISO/IEC 10021-5:1999, *Information technology – Message handling systems: Message store – Abstract service definition*.

– ITU-T Recommendation X.419 (1999) | ISO/IEC 10021-6:1999, *Information technology – Message Handling Systems (MHS): Protocol specifications*.

2.2 Paired Recommendations | International Standards equivalent in technical content

– 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.296 (1995), *OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications – Implementation conformance statements*.

ISO/IEC 9646-7:1995, *Information technology – Open Systems Interconnection – Conformance testing methodology and framework – Part 7: Implementation Conformance Statements*.

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[1] Annex A in this Recommendation is technically aligned with Annex A in ISO/IEC ISP 12063-5, Information technology – International Standardized Profiles AMH3n – Message Handling Systems – EDI Messaging – Part 5: AMH34 – EDIMG Requirements for Enhanced MS Access (P7).

3 Definitions

Terms used in this Recommendation are defined in the referenced Recommendations | International Standards.

4 Abbreviations

This Recommendation uses the following abbreviations:

EDI Electronic Data Interchange

ISP International Standardized Profile

MHS Message Handling Systems

MS Message Store

MTA Message Transfer Agent

OSI Open Systems Interconnection

PDU Protocol Data Unit

PICS Protocol Implementation Conformance Statement

UA User Agent

5 Conformance

A conforming PICS proforma shall be technically equivalent to the text of the PICS proforma in this Recommendation and shall preserve the numbering and ordering of items in the PICS proforma in this Recommendation.

A PICS which conforms to this Recommendation shall:

a) describe an implementation which conforms to ITU-T Rec. X.413 | ISO/IEC 10021-5 and ITU-T Rec. X.419 | ISO/IEC 10021-6;

b) be a conforming PICS proforma, which has been completed in accordance with the instructions for completion given in Annex A;

c) include the information necessary to uniquely identify both the supplier and the implementation.

Annex A[2]

PICS Proforma for EDI-MS attributes

(This annex forms an integral part of this Recommendation)

Contents of the PICS proforma

NOTE – The numbering of subclauses and items in this annex is identical to that in ISO/IEC ISP 12063-5, Information technology – International Standardized Profiles AMH3n – Message Handling Systems – EDI Messaging – Part 5: AMH34 – EDIMG Requirements for Enhanced Access (P7).

A.0 Instructions and identification

A.0.1 Instructions

A.0.1.1 Purpose of the proforma

The purpose of the PICS proforma is to provide suppliers of implementations of the P7 protocol with a consistent means of stating which proforma has been implemented.

The proforma is in the form of a questionnaire and consists of a set of items. An item is provided for each capability for which an implementation choice is allowed. Items are also provided for mandatory capabilities for which no implementation choice is allowed. Each item includes an item number, an item description, a status value specifying the support requirement, and room for a support answer to be provided by the supplier.

A.0.1.2 Item numbering

Each line in the PICS proforma which requires implementation detail to be entered is given a number in the first column. The item number column provides a means of uniquely referencing each possible answer within the PICS proforma.

A.0.1.3 Base column

In each table, the "Base" column reflects the level of support required for conformance to the base standard.

The following classifications are used in this PICS to specify static conformance requirements – i.e. capability.

NOTE – The Profile column is used for functional profiles and uses the same classification.

In the case of protocol elements, the classification is relative to that of the containing element, if any. Where the constituent elements of a non-primitive element are not individually specified, then each shall be considered to have the classification of that element. Where the range of values to be supported for an element is not specified, then all values defined in the MHS base standards shall be supported.

mandatory support (**m**): The element or feature shall be fully supported. An implementation shall be able to generate the element, and/or receive the element and perform all associated procedures (i.e. implying the ability to handle both the syntax and the semantics of the element) as relevant, as specified in the MHS base standards. Where support for origination (generation) and reception are not distinguished, then both capabilities shall be assumed. Mandatory support of an MS attribute for the MS requires that it is supported in the context of all applicable supported operation arguments and results. Mandatory support of an MS attribute by the MS-user requires that it is supported in the context of at least one supported operation argument and result. The way in which attribute values are stored by an MS implementation, or used by a UA implementation, is otherwise a local matter.

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[2] **Copyright release for PICS proformas**

Users of this Recommendation may freely reproduce the PICS proforma in this annex so that it can be used for its intended purpose and may further publish the completed PICS.

optional support (**o**): An implementation is not required to support the element or feature. If support is claimed, the element shall be treated as if it were specified as mandatory support. If support is not claimed, and the element is an argument, then an implementation shall generate an appropriate error indication if the element is received. If support is not claimed, and the element is a result, then an implementation may ignore the element if it is received. If support of an operation as a responder is not claimed, then an appropriate error indication shall be generated (as a minimum, a ROSE reject shall be generated).

conditional support (**c**): The element shall be supported under the conditions specified in this Recommendation. If these conditions are met, the element shall be treated as if it were specified as mandatory support. If these conditions are not met, the element shall be treated as if it were specified as optional support (unless otherwise stated).

out of scope (**i**): The element is outside the scope of this Recommendation – i.e. it will not be the subject of a conformance test.

not applicable (**–**): The element is not applicable in the particular context in which this classification is used.

A.0.1.4 Support column

The "Support" column is provided for completion by the supplier of the implementation as follows:

Y — The element or feature is fully supported (i.e. satisfying the requirements of the m profile support classification).

N — The element or feature is not supported, further qualified to indicate the action taken on receipt of such an element as follows:

ND – the element is discarded/ignored;

NR – the PDU is rejected (with an appropriate error indication where applicable).

– or blank — The element or feature is not applicable (i.e. a major feature or composite protocol element which includes this element or feature is not supported or is minimally supported).

A.0.1.5 References column

The "References" column is provided for cross-referencing purposes. The notation employed for references also indicates composite elements which contain sub-elements (a sub-element reference is prefixed by the reference of the composite element).

A reference to a specific item is specified by the following sequence:

a) if the reference is to an item in another document, then the reference starts with unambiguous identifier for that document;

b) the number of the subclause enclosing the table, or the number of the table if they are numbered;

c) a solidus character "/ ";

d) the item number, to identify the row in which the answer appears.

A.0.2 Identification of PICS proforma corrigenda

The supplier of the PICS proforma shall identify any corrigenda that have been applied (i.e. Technical Corrigendum or equivalent) to the published proforma. Suppliers of the proforma should modify the proforma, or attach relevant additional pages in order to apply the corrigenda and then record the application of the corrigenda in the table below.

Corrigenda to ITU-T Recommendation X.488

Cor:
Cor:
Cor:
Cor:
Implementors' Guide version:

A.0.3 Identification of the implementation

A.0.3.1 Date of statement

Ref.	Question	Response
1	Date of statement (YYYY-MM-DD)	

A.0.3.2 Identification of IUT

Ref.	Question	Response
1	Implementation name	
2	Implementation version	
3	Hardware name	
4	Hardware version	
5	Operating system name	
6	Operating system version	
7	Special configuration	
8	Other information	

A.0.3.3 Identification of supplier

Ref.	Question	Response
1	Organization name	
2	Contact name(s)	
3	Address	
4	Telephone number	
5	Telex number	
6	Fax number	
7	E-mail address	
8	Other information	

A.0.3.4 Identification of protocol

Ref.	Question	Response
1	Title, reference number and date of publication of the protocol standard	
2	Protocol version(s)	
3	Addenda/amendments/corrigenda implemented	
4	MHS Implementors' Guide version implemented	

A.0.3.5 Type of implementation

Ref.	Implementation Type	Response
1	MS-user (UA)	
2	MS (co-located with MTA)	
3	MS (P3 interface to MTA)	

NOTE – A separate PICS shall be completed for each implementation type for which conformance is claimed.

A.0.3.6 Global statement of conformance

Ref.	Question	Response
1	Are all mandatory base standards requirements implemented?	

A.1 Basic requirements

A.1.12 EDI-specific attributes

Ref.	Element	UA		MS		Support	Notes/ References
		Base	Profile	Base	Profile		
1	acknowledgement-request-for-this-recipient	o		o			
2	action-request-for-this-recipient	o		o			
3	application-reference	o		o			
4	authorization-information-for-this-recipient	o		o			
5	body	m		m			
6	communications-agreement-id-for-this-recipient	o		o			
7	cross-referencing-information	o		o			
8	date-and-time-of-preparation	m		m			
9	edi-application-security-elements	o		o			
10	edi-application-security-extensions	o		o			
11	edi-body-part	m		m			
12	edi-bodypart-type	m		m			
13	edi-message-type	m		m			
14	edi-notification-indicator	o		o			
15	edi-notification-requests-for-this-recipient	o		o			
16	edi-notification-security-for-this-recipient	o		o			
17	edi-reception-security-for-this-recipient	o		o			
18	edim-body-part	o		o			
19	edim-synopsis	o		o			
20	edims-entry-type	m		m			
21	edin-initiator	o		o			
22	edin-originator	o		o			
23	edin-receiver	o		o			
24	expiry-time	o		o			

Ref.	Element	UA		MS		Support	Notes/ References
		Base	Profile	Base	Profile		
25	externally-defined-body-part-types	o		o			
26	first-recipient	o		o			
27	fn-extensions	o		o			
28	fn-reason-code	o		o			
29	fn-supplementary-information	o		o			
30	forwarded-to	o		o			
31	heading	m		m			
32	heading-extensions	o		o			
33	incomplete-copy	o		o			
34	interchange-control-reference-for-this-recipient	m		m			
35	interchange-length	o		o			
36	interchange-recipient-for-this-recipient	m		m			
37	interchange-sender	m		m			
38	message-data	o		o			
39	message-parameters	o		o			
40	nn-extensions	o		o			
41	nn-reason-code	o		o			
42	nn-supplementary-information	o		o			
43	notification-security-elements	o		o			
44	notification-time	o		o			
45	notification-extensions	o		o			
46	obsoleted-edims	o		o			
47	originator	o		o			
48	pn-extensions	o		o			
49	pn-supplementary-information	o		o			
50	processing-priority-code-for-this-recipient	o		o			
51	recipient-extensions-for-this-recipient	o		o			
52	recipient-reference-for-this-recipient	o		o			
53	related-messages	o		o			
54	responsibility-forwarded	o		o			
55	responsibility-passing-allowed-for-this-recipient	o		o			
56	service-string-advice	o		o			
57	subject-edim	m		m			
58	syntax-identifier	m		m			
59	test-indicator-for-this-recipient	o		o			
60	this-edim	m		m			
61	this-recipient	o		o			

Annex B

Amendments and corrigenda

(This annex forms an integral part of this Recommendation)

Recommendations and International Standards are subject to constant review and revision by ITU-T and ISO/IEC. The following amendments and corrigenda are approved by ITU-T and ISO/IEC and are considered as normative references in this Recommendation.

None.

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