INTERNATIONAL TELECOMMUNICATION UNION

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OF ITU

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SERIES H: AUDIOVISUAL AND MULTIMEDIA SYSTEMS

Supplementary services for multimedia

H.225.0 transport of multiple Q.931 information elements of the same type

ITU-T Recommendation H.460.5

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ITU-T Recommendation H.460.5

H.225.0 transport of multiple Q.931 information elements of the same type

Summary

This Recommendation specifies the method of transferring duplicate Q.931 information elements in the H.225.0 messages. Such a method is required to overcome limitations imposed by ITU-T Rec. H.225.0. ITU-T Rec. H.225.0 allows for the inclusion of only a single Q.931 information element of a particular type in the single H.225.0 message.

Source

ITU-T Recommendation H.460.5 was prepared by ITU-T Study Group 16 (2001-2004) and approved under the WTSA Resolution 1 procedure on 29 November 2002.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. 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 Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 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 expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

INTELLECTUAL PROPERTY RIGHTS

ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. 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, 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

ITU-T Recommendation H.460.5

H.225.0 transport of multiple Q.931 information elements of the same type

1 Scope

ITU-T Rec. H.225.0 forbids including multiple Q.931 information elements (IEs) of the same type in the same message.

This Recommendation specifies the method of transferring duplicate Q.931 IEs in H.225.0.

2 References

The following ITU-T Recommendations and other references 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 other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation.

– ITU-T Recommendation H.225.0 (2000), *Call signalling protocols and media stream packetization for packet-based multimedia communications systems*.

– ITU-T Recommendation H.323 (2000), *Packet-based multimedia communications systems*.

– ITU-T Recommendation Q.931 (1998), *ISDN user-network interface layer 3 specification for basic call control*.

3 Terms and definitions

For the purposes of this Recommendation the definitions given in clause 3 of ITU-T Recs H.323, H.225.0 and H.245 apply.

4 The conversion procedure

To transfer a Q.931 message containing multiple IEs of the same type over the H.225.0 protocol, the conversion specified in this clause shall be performed.

The conversion applies to all IEs except for the IEs that have the first appearance of the particular IE identifier. The binary representations (that includes IE identifier, length and content) of all such IEs shall be assembled into a single octet string. The resulting octet string shall be used as the value of the GEF parameter, as defined in clause 5, "Generic Data Parameter specification". In accordance with ITU-T Rec. H.225.0, IEs shall not be duplicated in the Q.931 part of the H.225.0 message.

5 Generic Data Parameter specification

This clause defines the DuplicateIEs feature and parameter

Feature name:	DuplicateIEs
Feature Description:	The duplicate Q.931 IE support.
Feature identifier type:	Standard
Feature identifier value:	5

Parameter name:	IEsString
Parameter description:	The binary representation of the 2 to last IEs of particular type.
Parameter identifier type:	Standard
Parameter identifier value:	1
Parameter type:	raw
Parameter cardinality:	1

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