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H.248

Annex M4

(07/2001)

SERIES H: AUDIOVISUAL AND MULTIMEDIA SYSTEMS

Infrastructure of audiovisual services – Communication procedures

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Gateway control protocol

Annex M4: H.248 packages for H.323 and H.324 interworking

ITU-T Recommendation H.248 – Annex M4

(Formerly CCITT Recommendation)

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ITU-T Recommendation H.248

Gateway control protocol

ANNEX M4

H.248 packages for H.323 and H.324 interworking

Summary

This annex defines several H.248 packages that are intended for Media Gateways designed to support interworking between H.323 terminals and H.324 terminals. More specifically, this Annex contains: package "h324" for creating terminations supporting H.324, package "h245" for creating terminations supporting H.245 channels for H.324 calls, package "h323bc" for creating terminations supporting H.245 channels for H.323 calls, package "h245com" for the communication of H.245 commands between a MGC and MG, and package "h245ind" for the communication of H.245 indications.

Source

Annex M4 to ITU-T Recommendation H.248 was prepared by ITU-T Study Group 16 (2001-2004) and approved under the WTSA Resolution 1 procedure on 29 July 2001.

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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.

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As of the date of approval of this Recommendation, ITU had 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.

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ITU-T Recommendation H.248

Gateway control protocol

ANNEX M4

H.248 packages for H.323 and H.324 interworking

M4.1 Introduction

This annex gathers packages for H.245, H.245 parameters specific to H-series audiovisual terminals, and Annex C/H.324 terminals for use with the H.248 gateway control protocol. The packages in this annex are in conformance with clause 12/H.248 package definition guidelines.

M4.2 Scope

This annex describes packages for the H.248 gateway control protocol related to interworking of H.323 and H.324 terminals, as follows:

- Package "h324" for termination of H.324 bitstream on MGs.
- Package "h245" for termination of H.245 messages on MGs.
- Package "h323bc" for H.245 parameters specific to H.323.
- Package "h245com" for providing properties that allow the MGC to indicate to the MG that the MGC has sent or received an H.245 command.
- Package "h245ind" for providing properties that allow the MGC to indicate to the MG that the MGC has sent or received an H.245 indication.

With the terminations implementing "h324", "h245com" and "h245ind" packages, the de-composed gateway may support H.324 communication with the H.245 control function in the MGC. In the H.324 and H.323 interworking scenario with this de-composed gateway, H.245 control messages are terminated in the MGC (a backhaul is used between the MG and the MGC to transport H.245 messages between the MG and the MGC, on the H.324 side). The terminations for media on both H.324 and H.323 sides are managed by the MGC.

With the terminations implementing "h324" and "h245" packages, the de-composed gateway may support H.324 communication with H.245 control in the MG. In the H.324 and H.323 interworking scenario with this de-composed gateway, H.245 control messages from the H.324 side and the H.323 side are terminated in the "h245" termination and in the "h323bc" termination respectively, and are processed in the MG. The MG manages the logical channels for media.

M4.3 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.

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M4.3.1 Normative references

- ITU-T H.223 (2001), *Multiplexing protocol for low bit rate multimedia communication.*
- ITU-T H.245 (2001), *Control protocol for multimedia communication.*
- ITU-T H.323 (2000), *Packet-based multimedia communications systems.*
- ITU-T H.324 (1998), *Terminal for low bit-rate multimedia communication.*
- ITU-T V.8 (2000), *Procedures for starting sessions of data transmission over the public switched telephone network.*
- ITU-T V.8 *bis* (2000), *Procedures for the identification and selection of common modes of operation between data circuit-terminating equipments (DCEs) and between data terminal equipments (DTEs) over the public switched telephone network and on leased point-to-point telephone-type circuits.*
- ITU-T V.34 (1998), *A modem operating at data signalling rates of up to 33 600 bit/s for use on the general switched telephone network and on leased point-to-point 2-wire telephone-type circuits.*
- ITU-T V.42 (1996), *Error-correcting procedures for DCEs using asynchronous-to-synchronous conversion.*
- ITU-T V.42 *bis* (1990), *Data compression procedures for data circuit-terminating equipment (DCE) using error correction procedures.*
- ITU-T V.140 (1998), *Procedures for establishing communication between two multiprotocol audiovisual terminals using digital channels at a multiple of 64 or 56 kbit/s.*
- ITU-T X.691 (1997), *Information technology – ASN.1 encoding rules: Specification of Packed Encoding Rules (PER).*

M4.3.2 Informative reference

- RFC 2960 (2000), *Stream Control Transmission Protocol.*

M4.4 H324 Package

Package Name: H.324

PackageID: h324, (0x002c)

Version: 1

Extends: None

Description:

This package is defined to support terminations for calls using ITU-T H.324. The transport mechanism or bearer channel will be different for each environment where the package is used.

Figure M4-1 shows the functional view of a H.324 multimedia call and the MGC control points defined in the H.324 package. In ITU-T H.324, there are three communication modes defined according to the underlying network: a PSTN mode defined in ITU-T H.324 main body (H.324P), a mobile network mode defined in Annex C/H.324 (H.324M), and an ISDN mode defined in Annex D/H.324 (H.324I). One of these communication modes shall be selected when the termination implementing the H.324 package is invoked by the MGC.

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