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SERIES H: AUDIOVISUAL AND MULTIMEDIA SYSTEMS

ITU-T H.248.x sub-series packages guide – Release 16

ITU-T H-series Recommendations – Supplement 2

ITU-T

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Supplement 2 to ITU-T H-series Recommendations

ITU-T H.248.x sub-series packages guide – Release 16

Summary

Supplement 2 to ITU-T H-series Recommendations summarizes packages that have been standardized in the time-frame from June 2000 to October 2015. It identifies packages that meet ITU-T H.248.x sub-series requirements for package definition and are for general use by the wider standards community.

ITU-T H.248.x sub-series packages guide – Release 16 provides for the:

- identification of packages that are considered technically consistent with ITU-T H.248.x sub-series principles and packages definition rules in clause 12 of Recommendation ITU-T H.248.1;
- identification of packages that are currently being worked upon;
- identification of packages that have been worked upon over a certain period of time;
- identification of packages with overlapping functionality.

Implementers are encouraged to review the packages in this supplement before proposing new packages.

Release 16 contains:

- New packages defined in Recommendations ITU-T H.248.39, ITU-T H.248.50 and ITU-T H.248.78.
- Revised packages in Recommendations ITU-T H.248.16, ITU-T H.248.29 and ITU-T H.248.41.
- References to new work items: Recommendations ITU-T H.248.86, ITU-T H.248.88, ITU-T H.248.89, ITU-T H.248.91, ITU-T H.248.92, ITU-T H.248.94 (ex.H.248.WEBRTC), ITU-T H.248.96 (ex.H.248.STGROUP), ITU-T H.248.97 (ex.H.248.SCTP) and H.248.98 (ex.H.248.PAURES).

History

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14.0	ITU-T H Suppl. 2	2010-07-30	16	11.1002/1000/11000
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FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, information and communication technologies (ICTs). 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 publication, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

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Supplement 2 to ITU-T H-series Recommendations

ITU-T H.248.x sub-series packages guide – Release 16

1 Scope

This Supplement summarizes packages that have been standardized in the time-frame from June 2000 to October 2015. It identifies packages that meet ITU-T H.248.x sub-series requirements for package definition and are for general use by the wider standards community.

ITU-T H.248.x sub-series packages guide – Release 16 provides for the:

- identification of packages that are considered technically consistent with ITU-T H.248.x sub-series principles and packages definition rules in clause 12 of [ITU-T H.248.1];
- identification of packages that are currently being worked upon;
- identification of packages that have been worked upon over a certain period of time;
- identification of packages with overlapping functionality.

According to ITU-T H.248 package registration procedures defined by [IETF RFC 5615] and clause 14 of [ITU-T H.248.1], ITU-T Study Group 16 (SG16) invites package authors/editors to share their current and future work on packages in the form of contribution, liaison or communication to ITU-T SG16. This will assist ITU-T SG16 in producing future releases of this supplement. ITU-T SG16 will then endeavour to provide constructive comments to assist them in their packages work. If ITU-T SG16 determines that their packages are consistent with ITU-T H.248 and, particularly, clause 12 of [ITU-T H.248.1], it will include these in the "Externally defined packages that meet requirements" clause of the ITU-T H.248.x sub-series packages guide.

2 References

- [ITU-T H.248.1] Recommendation ITU-T H.248.1 v3 (2015), *Gateway control protocol: Version 3*.
- [ITU-T Q.1950] Recommendation ITU-T Q.1950 (2002), *Bearer independent call bearer control protocol*.
- [IETF RFC 5615] IETF RFC 5615 (2009), *H.248/MEGACO Registration Procedures*.

See clauses below for individual references.

3 Definitions

None.

4 Abbreviations and acronyms

None.

5 ITU-T Study Group 16 packages

Package name and description	Identity		Version	Reference	Status
	Text	Binary			
Annex E ITU-T H.248.1 Basic packages The packages contained in this annex are: • generic package; • base root package; • tone generator package; • tone detection package; • basic DTMF generator package; • DTMF detection package; • call progress tones generator package; • call progress tones detection package; • analog line supervision package; • basic continuity package; • network package; • RTP package; • TDM circuit package; • segmentation package; • notification behaviour package. Amendment 2 contains enhancements to the DTMF detection and RTP packages.	g root tonegen tonedet dg dd cg cd al ct nt rtp tdmc seg nb	0x0001 0x0002 0x0003 0x0004 0x0005 0x0006 0x0007 0x0008 0x0009 0x000a 0x000b 0x000c 0x000d 0x00a3 0x009a	2 2 2 1 2 2 2 1 1 1 1 2 1 1 1	Annex E ITU-T H.248.1 v3 (2005) Amendment 2 (12/2009)	
ITU-T H.248.2 Facsimile, text conversation and call discrimination packages This Recommendation describes packages for fax, text telephone, call type discrimination, and data call detection. The packages contained in this Recommendation are: <i>The call type discrimination package</i> defines control and monitoring of a PSTN line for the signalling protocols used in the beginning of a session of data transmission for fax, text telephony or data. <i>The text telephone package</i> defines control of a PSTN text telephone session in any of the modes supported by the automoding text telephone Rec. ITU-T V.18. <i>The fax package</i> defines control of a PSTN fax transmission.	ctyp txp fax	0x0011 0x0010 0x0012	3 1 1	ITU-T H.248.2 (2005) Amendment 1 (01/2007) Revision (2013)	Version 1 done ftmd & ctyp version 2 done

Package name and description	Identity		Version	Reference	Status
	Text	Binary			
<i>The fax/textphone/modem tones detection package</i> defines control over a termination for detection of any signals from a fax, text telephone or data modem during a connection in voice mode. <i>The text conversation package</i> defines control over a real-time interactive text conversation session using a universal presentation format and transferred with a transport method from a multimedia protocol in any network environment. <i>The IP fax package</i> defines control over facsimile transmission in a packet network.	ftmd	0x000e	2		
	txc	0x000f	1		
	ipfax	0x0013	2		
ITU-T H.248.3 User interface elements and actions packages	dis	0x0014	1	ITU-T H.248.3 (2000) Cor.1 (2004) Revision (2013)	Done
	key	0x0015	1		
	kp	0x0016	1		
	labelkey	0x0017	1		
	kf	0x0018	1		
	ind	0x0019	1		
	ks	0x001a	1		
	anci	0x001b	1		
ITU-T H.248.6 Dynamic tone definition package This package defines a mechanism to redefine existing tones and create new tones for playback. The existing tones are the ones described in supported packages that extend the tonegen generic package.	dtd	0x001c	1	ITU-T H.248.6 (2000)	Done
ITU-T H.248.7 Generic announcement package This package supports announcement functionality at a Media Gateway. This announcement could be realized by the Media Gateway as different sorts of messaging. For example, it could be an audio announcement, a text message or a composition of text messages.	an	0x001d	1	ITU-T H.248.7 (2004)	Done

Package name and description	Identity		Version	Reference	Status
	Text	Binary			
ITU-T H.248.9 Advanced media server packages The basic audio package provides support for the standard IVR operations of PlayAnnouncement, PlayCollect, and PlayRecord. It supports direct references to simple audio as well as indirect references to simple and complex audio. It provides audio variables, control of audio interruptibility, digit buffer control, special key sequences, and support for reprompting during data collection. The advanced audio package extends the base package by providing an arbitrary number of user-defined qualifiers to be used in resolving complex audio structures. For example, the user could define qualifiers for any or all of the following: language, accent, audio file format, gender, speaker, or customer. Revision (2005) included: - new variable type "tone" for dynamic audio segment specification; - set extension of basic syntax: introduction of a new selector for text attributes; - variable type "Phrase": introduction of subtypes; - signal PlayCollect: enhanced functionality, new parameters. Amendment 1 includes: - enhancements to aasb and aasrec; - automatic speech recognition; - advanced audio server base package for TTS enhancement; - multimedia play package; - multimedia recording package. Revision (2009) includes: - enhancement to aasb, aasdc, aasrec, mpp and mrp.	aasb aasdc aasrec aassm bannsyx vvsyx setsyx phrsyx asr aasts mpp mrp edtmf	0x0033 0x0034 0x0035 0x0036 0x0047 0x0048 0x0049 0x004a 0x00a6 0x00a8 0x00a9 0x00b3 0x0100	3 3 3 1 1 2 3 2 1 2 2 2 1	ITU-T H.248.9 (2005) Amd.1 (2007) Revision (2009)	Done
ITU-T H.248.10 Media gateway resource congestion handling package This package makes it possible for the MG to control its load.	chp	0x0029	1	ITU-T H.248.10 (2001)	Done
ITU-T H.248.11 Media gateway overload control package This is a more in-depth proposal than ITU-T H.248.10.	ocp	0x0051	1	ITU-T H.248.11 (2002) Revision (2013)	Done

Package name and description	Identity		Version	Reference	Status
	Text	Binary			
ITU-T H.248.12 H.248.1 packages for H.323 and H.324 interworking This Recommendation gathers together packages for ITU-T H.245, ITU-T H.245 parameters specific to H-series audiovisual terminal and Annex C of ITU-T H.324 for use with the ITU-T H.248.1 gateway control protocol. The Recommendation contains extensions that allow the MGC to control the interworking between ITU-T H.324 and ITU-T H.323. It also has a package to allow tunnelling of ITU-T H.245 messages between a MGC and MG. Revision (2011) allows the MGC to request the MG to report when the h223Skewindication parameter exceeds a certain amount.	h245 h323bc h324 h245com h245ind h324ext h245com ext h245inde xt h245tp	0x002a 0x002b 0x002c 0x002d 0x002e 0x0063 0x0064 0x0065 0x00b4	1 1 1 1 1 1 1 2 1	ITU-T H.248.12 (2001) Amd.1 (2002) Amd.2 (2007) Revision (2012)	Done
ITU-T H.248.13 Quality alert ceasing package This package enables the MG to indicate when a line has returned to normal quality.	qac	0x0037	1	ITU-T H.248.13 (2002)	Done
ITU-T H.248.14 Inactivity timer package This is used by MG to poll whether or not the MGC is still alive. Revision (2009) only contains procedural updates.	it	0x0045	1	ITU-T H.248.14 (2002) Revision (2009)	Done
ITU-T H.248.15 SDP H.248 package attribute This Recommendation describes SDP attributes to allow the text local and remote descriptor to contain properties.	NA	NA	NA	ITU-T H.248.15 (2002) Revision (2013)	Done
ITU-T H.248.16 Enhanced digit collection packages and procedures	xdd edd	0x0052 0x0066	2 2	ITU-T H.248.16 (2002), plus Cor.1 (2004) Revision (2013)	Done
ITU-T H.248.17 Line test packages This Recommendation contains a number of packages that enables line tests to be performed. - quiet termination line test component; - loopback line test response; - ITU-T 404 Hz line test package; - ITU-T 816 Hz line test package; - ITU-T 1020 Hz line test package;	qtlr lltr itult404 itult816 itult1020	0x0053 0x0054 0x0055 0x0056 0x0057	1 1 1 1 1	ITU-T H.248.17 (2002), plus Cor.1 (2004) Revision (2013)	Done

Package name and description	Identity		Version	Reference	Status
	Text	Binary			
- ITU-T 2100 Hz disable tone line test package; - ITU-T 2100 Hz disable echo canceller tone line test package; - ITU-T 2804 Hz tone line test package; - ITU-T noise test tone line test package; - ITU-T digital pseudo random test tone line test package; - ITU-T ATME No. 2 test line response package; - ANSI 1004 Hz test tone line test package; - ANSI test responder line test package; - ANSI 2225 Hz test progress tone line test package; - ANSI digital test signal line test package; - ANSI inverting loopback line test response.	itultdist	0x0058	1		
	itultdisec	0x0059	1		
	itul2804	0x005a	1		
	itulnttt	0x005b	1		
	itultdprt	0x005c	1		
	itulatatme2	0x005d	1		
	ansilt1004	0x005e	1		
	ansilttres	0x005f	1		
	ansilt2225	0x0060	1		
	ansiltdts	0x0061	1		
	ansiinvlltr	0x0062	1		
ITU-T H.248.18 Package for support of multiple profiles This package enables the MGC to determine what packages are on the MG.	prp	0x0050	1	ITU-T H.248.18 (2002) Revision (2013)	Done
ITU-T H.248.19 Decomposed multipoint control unit, audio, video and data conferencing packages This Recommendation describes the decomposition of a media control unit, requirements and packages for media resource functions.				ITU-T H.248.19 (2004) plus Amd.1 (2006) plus Amd.2 (2009) Revision (2013)	Done