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ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

H.248.2
Amendment 1
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SERIES H: AUDIOVISUAL AND MULTIMEDIA SYSTEMS
Infrastructure of audiovisual services – Communication
procedures

Gateway control protocol: Facsimile, text
conversation and call discrimination packages

**Amendment 1: Discriminated call type
enhancement**

ITU-T Recommendation H.248.2 (2005) –
Amendment 1



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ITU-T Recommendation H.248.2

Gateway control protocol: Facsimile, text conversation and call discrimination packages

Amendment 1

Discriminated call type enhancement

Summary

This Recommendation defines packages that extend the applicability of the H.248.1 Gateway Control Protocol Recommendation. Specifically, this Recommendation describes packages for fax, text telephone, call type discrimination, and data call detection for use with the H.248.1 Gateway Control Protocol. As defined in ITU-T Rec. H.248.1, a "package" is an extension to H.248.1 that supports specific behaviour.

The packages are intended for control over gateway functions for transport of facsimile or text conversation between different network environments. Extensions can be made for other kinds of data transport.

- **The Call Type Discrimination package** defines control and monitoring of a line for the signalling protocols used in the beginning of a session of data transmission for fax, text telephony or data. This package has been revised to enable the MG to autonomously determine the call type to be supported.
- **The Text Telephone package** defines control of a text telephone session in any of the modes supported by the automoding text telephone Recommendation, ITU-T Rec. V.18.
- **The Fax package** defines control of a fax transmission.
- **The Fax/Textphone/Modem Tones Detection package** defines control over a termination for detection of any signals from a fax, text telephone or data modem during a connection in voice mode.
- **The Text Conversation package** 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.
- **The IP Fax package** defines control over facsimile transmission in a packet network.

All the packages have been editorially modified to align with the H.248.1 Packages Template.

Amendment 1 provides an enhancement to the types of call that may be discriminated through in-band signalling. It groups existing call types into like types. It provides an explanation of when those types are used. Several new call types are added to the Discriminated Call Type event. The Call discrimination flows have been corrected with the correct events.

NOTE – This Recommendation has been renumbered. It was previously known as ITU-T Rec. H.248, Annex F.

Source

Amendment 1 to ITU-T Recommendation H.248.2 (2005) was approved on 13 January 2007 by ITU-T Study Group 16 (2005-2008) under the ITU-T Recommendation A.8 procedure.

FOREWORD

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ITU-T Recommendation H.248.2

Gateway control protocol: Facsimile, text conversation and call discrimination packages

Amendment 1

Discriminated call type enhancement

Modifications introduced by this amendment are shown in revision marks. Unchanged text is replaced by ellipsis (...). Some parts of unchanged texts (clause numbers, etc.) may be kept to indicate the correct insertion points.

...

2.1 Normative references

...

– IETF RFC ~~2793~~4103 (2005~~0~~), *RTP Payload for Text Conversation*.

...

6 Text Conversation package

Package Name: Text Conversation

Package ID: txc (0x000F)

...

6.5.4 Descriptor to use for text conversation

...

Text conversation stream

...

T.140 is a registered MIME text stream name, which can be specified to be used as it is or in RTP embedding of IETF RFC ~~2793~~4103.

...

7.5.1 Basic operation

...

Text received through the V.18 modem is converted if necessary to T.140. It is embedded in the RTP/T.140 format according to the rules in ITU-T Rec. T.140 and IETF RFC ~~2793~~4103, specifying RTP/T.140. Text received from other text conversation terminations is transmitted through the text telephone termination after extraction from the RTP packets. This process continues until any end disconnects.

...

8 Call Type Discrimination package

...

Version: 23

...

8.1.5 Probe Order

...

Possible values: (For recommended orders, see ITU-T Rec. V.18.)

Any combination of none to six of the type indicators:

...

8.2.1.2.1 Discriminating Tone Type

...

Common to TEXT and DATA

...

V23hi (0x0010) A V.23 high carrier

...

8.2.2.2.1 Discriminated Call Type

...

For FAX

| | | |
|----------|----------|---|
| T30 | (0x0001) | For A T.30 PSTN sessions <u>FAX call</u> without ECM |
| T30ECM | (0x0002) | For A T.30 PSTN sessions <u>FAX call</u> with ECM (non-V.34) |
| T30V34 | (0x0003) | For A T.30 PSTN sessions <u>FAX call</u> with V.34 (half-duplex) |
| T38UDPTL | (0x0004) | For A T.38 <u>FAX call</u> using UDPTL |
| T38TCP | (0x0005) | For A T.38 <u>FAX call</u> using TCP |
| T37 | (0x0006) | For A T.37 <u>FAX call</u> |
| FAXAUDIO | (0x0007) | For audio codec (e.g., G.711 over RTP) |

This value is only used when the MG can determine that FAX is being used over the audio codec.

For TEXT

| | | |
|-------------------|---------------------|--|
| V18txp1 | (0x0008) | A V.18 txp signal <u>TEXT call carried in channel V.21(1)</u> |
| V18txp2 | (0x0009) | A V.18 txp signal <u>TEXT call carried in channel V.21(2)</u> |
| BellHi | (0x000A) | A Bell 103 carrier on the high channel |
| BellLo | (0x000B) | A Bell 103 low channel |
| Baudot45 | (0x000C) | A Baudot45 initial carrier and characters <u>TEXT call</u> |
| Baudot50 | (0x000D) | A Baudot50 initial carrier and characters <u>TEXT call</u> |
| Edt | (0x000E) | An EDT initial tone and characters <u>TEXT call</u> |
| DTMF | (0x000F) | DTMF signals <u>TEXT call</u> |
| V21hi | (0x0010) | A V.21 carrier on the higher channel |
| V21lo | (0x0011) | A V.21 carrier on the low channel |
| V23hi | (0x0012) | A V.23 high carrier |
| V23lo | (0x0013) | A V.23 low carrier |
| CTM | (0x0014) | A CTM signal <u>TEXT call</u> |
| <u>TEXTAUDIO</u> | <u>(0x0021)</u> | <u>For audio codec (e.g., G.711 over RTP)</u> |

This value is only used when the MG can determine that TEXT is being used over the audio codec.

Minitel (0x0024) A Minitel TEXT call

This value is only used when the MG can determine that TEXT is being used over V.23.

For Modem

| | | |
|-------------------|---------------------|--|
| BellHi | (0x000A) | A Bell 103 MODEM call on the high channel |
| BellLo | (0x000B) | A Bell 103 MODEM call on the low channel |
| V8 | (0x0015) | A V.8 signal <u>MODEM call</u> |
| V8bis | (0x0016) | A V.8 bis signal <u>MODEM call</u> |

NOTE – V8/V8 bis is used to negotiate the modem type. Implementers are encouraged to use the actual modem types: V.34, V.61, V.90, V.91 and V.92 where possible.

| | | |
|-------------------|---------------------|--|
| V21hi | (0x0010) | A V.21 Modem call on the higher channel |
| V21lo | (0x0011) | A V.21 Modem call on the low channel |
| V23hi | (0x0012) | A V.23 Modem call on the high carrier |
| V23lo | (0x0013) | A V.23 Modem call on the low carrier |
| <u>MODEMAUDIO</u> | <u>(0x0022)</u> | <u>For audio codec (e.g., G.711 over RTP)</u> |

This value is only used when the MG can determine that MODEM is being used over the audio codec.

V150MODEM (0x0023) For V.150 modem relay

Default: Audio (0x0000)

...

8.3.1.1.3 V.18 XCI Enable

Parameter Name: V18 XCI Enable

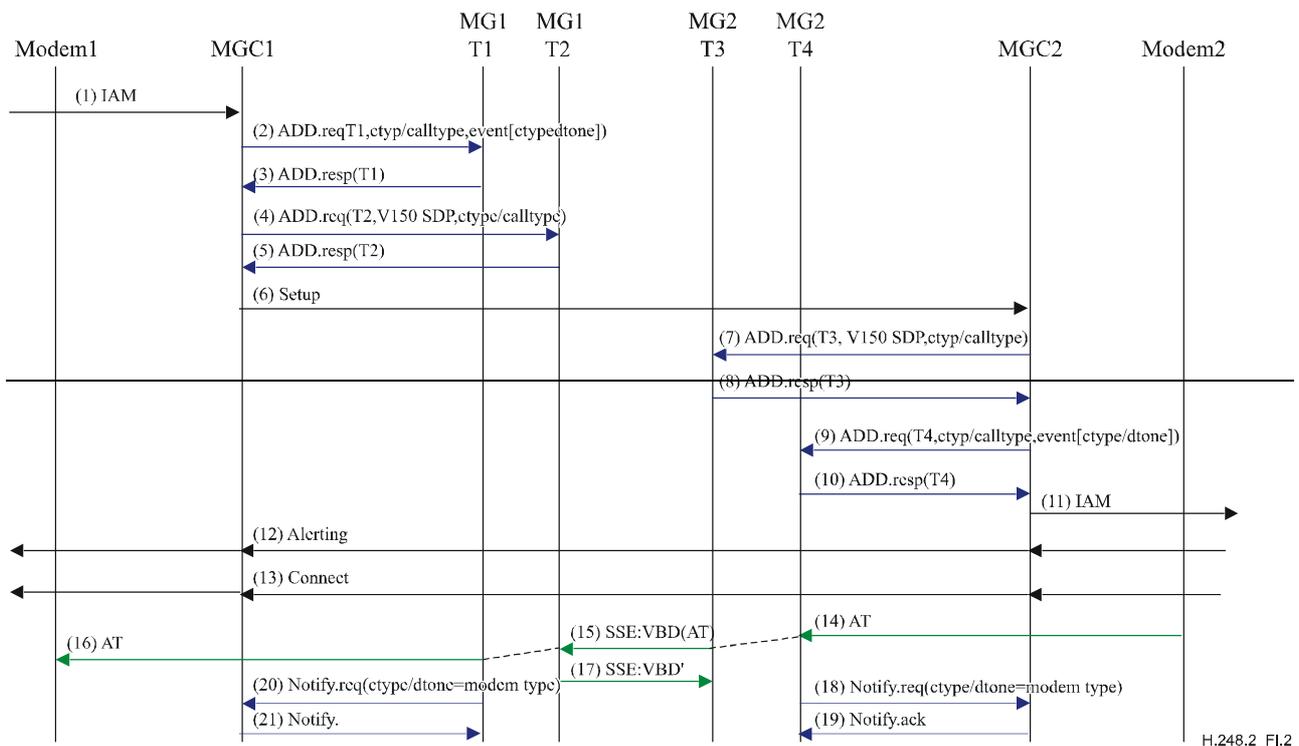
Parameter ID: v18xcien (0x0003)

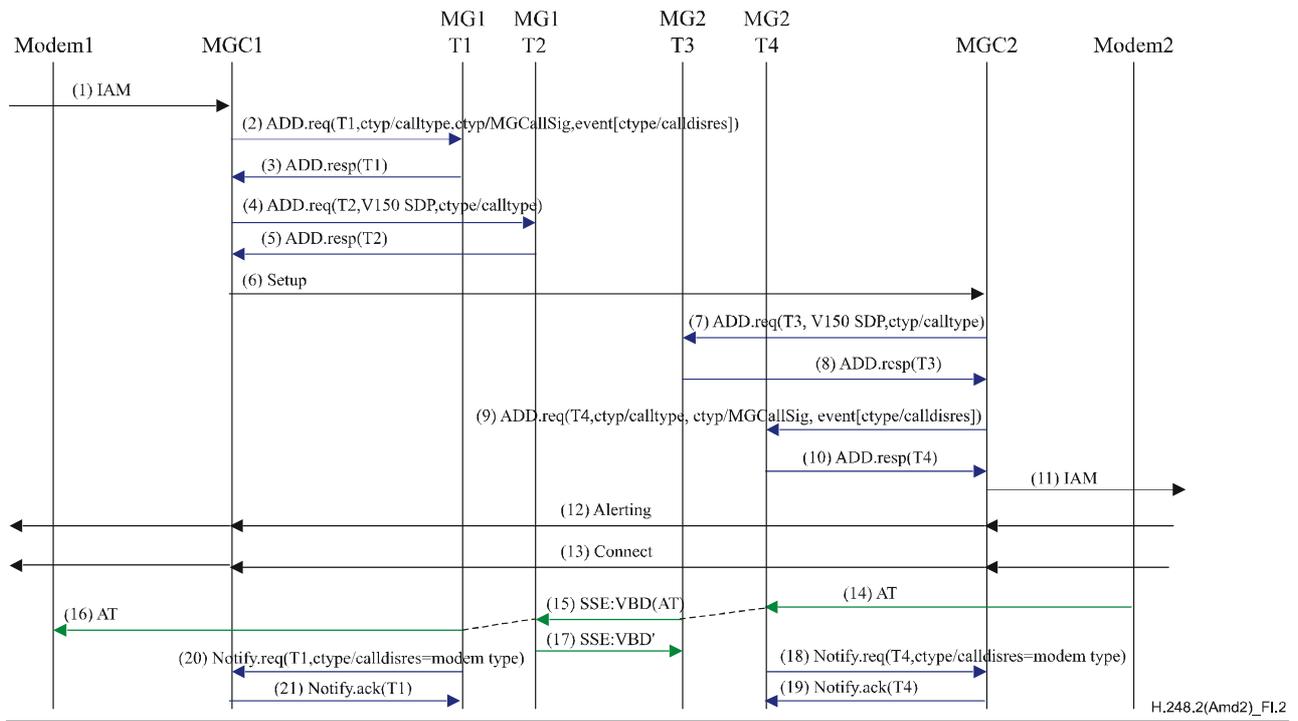
...

Appendix I

Call discrimination flows

...





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Figure I.2 – MG controlled call discrimination

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