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Infrastructure of audiovisual services – Communication
procedures

Gateway control protocol: Packages for RTSP and ITU-T H.248 interworking

Recommendation ITU-T H.248.66

ITU-T

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Recommendation ITU-T H.248.66

Gateway control protocol: Packages for RTSP and ITU-T H.248 interworking

Summary

Recommendation ITU-T H.248.66 provides guidance on mapping real time streaming protocol (RTSP) methods, error/status codes and header fields to ITU-T H.248 protocol information elements, packages and procedures. RTSP is used to control the playout of media resources. A media gateway controller (MGC) may be required to support the RTSP and request an ITU-T H.248-controlled media gateway (MG) to playout media resources and provide other associated functionality. Several packages are defined to enhance interoperability between RTSP and ITU-T H.248, however the functionalities defined in these packages may be used for other applications/services.

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Recommendation ITU-T H.248.66

Gateway control protocol: Packages for RTSP and ITU-T H.248 interworking

1 Scope

This Recommendation provides guidance on mapping real time streaming protocol (RTSP) methods, error/status codes and header fields to ITU-T H.248 protocol information elements, packages and procedures. Several packages are defined to enhance interoperability between RTSP and ITU-T H.248, however the functionalities defined in these packages may be used for other applications/services.

RTSP operates between user equipment (UE) and a media server. This Recommendation assumes that the media server is functionally decomposed into a media control function (MCF) and a media delivery function (MDF). These functions can be realized in a media gateway controller (MGC) and a media gateway (MG). The Figure 1 illustrates the theoretical architecture in scope.

NOTE 1 – There may be other network entities between the UE and MGC (MCF), or the UE and the MG (MDF).

NOTE 2 – Alternative architectures are for further study.

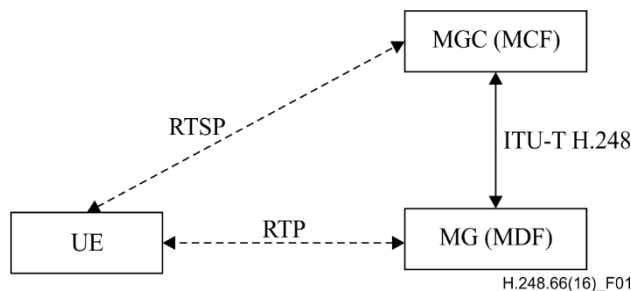


Figure 1 – RTSP and ITU-T H.248 interworking architecture

2 Reference

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 H.248.1] Recommendation ITU-T H.248.1 (2013), *Gateway control protocol: Version 3*.
- [ITU-T H.248.8] Recommendation ITU-T H.248.8 (2013), *Gateway control protocol: Error code and service change reason description*.
- [ITU-T H.248.9] Recommendation ITU-T H.248.9 (2009), *Gateway control protocol: Advanced media server packages*.
- [ITU-T H.248.10] Recommendation ITU-T H.248.10 (2001), *Gateway control protocol: Media gateway resource congestion handling package*.
- [ITU-T H.248.11] Recommendation ITU-T H.248.11 (2013), *Gateway control protocol: Media gateway overload control package*.

- [ITU-T H.248.77] Recommendation ITU-T H.248.77 (2010), *Gateway control protocol: Secure real-time transport protocol (SRTP) package and procedures*.
- [IETF RFC 2326] IETF RFC 2326 (1998), *Real Time Streaming Protocol (RTSP)*.
- [IETF RFC 3550] IETF RFC 3550 (2003), *RTP: A Transport Protocol for Real-Time Applications*.
- [IETF RFC 3986] IETF RFC 3986 (2005), *Uniform Resource Identifier (URI): Generic Syntax*.
- [IETF RFC 3987] IETF RFC 3987 (2005), *Internationalized Resource Identifiers (IRIs)*.
- [IETF RFC 4566] IETF RFC 4566 (2006), *SDP: Session Description Protocol*.
- [IETF RFC 5234] IETF RFC 5234 (2008), *Augmented BNF for Syntax Specifications: ABNF*.
- [IETF RFC 5322] IETF RFC 5322 (2008), *Internet Message Format*.
- [IETF RFC 7826] IETF RFC 7826 (2016), *Real Time Streaming Protocol 2.0 (RTSP)*.

3 Definitions

3.1 Terms defined elsewhere

None.

3.2 Terms defined in this Recommendation

This Recommendation defines the following terms:

- 3.2.1 Add.req:** ITU-T H.248.1 Add command request.
- 3.2.2 AuditCapabilities.req:** ITU-T H.248.1 AuditCapabilities command request.
- 3.2.3 AuditValue.req:** ITU-T H.248.1 AuditValue command request.
- 3.2.4 Modify.req:** ITU-T H.248.1 Modify command request.
- 3.2.5 Move.req:** ITU-T H.248.1 Move command request.
- 3.2.6 Notify.req:** ITU-T H.248.1 Notify command request.
- 3.2.7 Playback:** The process of delivering media, otherwise known as "media delivery" in RTSP.
- 3.2.8 ServiceChange.req:** ITU-T H.248.1 internationalized resource identifier (IRI) command request.

4 Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

ABNF	Augmented Backus-Naur Form
BER	Basic Encoding Rules
HTTP	Hyper Text Transfer Protocol
IGMP	Internet Group Management Protocol
IRI	Internationalized Resource Identifier
MCF	Media Control Function
MDF	Media Delivery Function
MG	Media Gateway
MGC	Media Gateway Controller

NPT	Normal Play Time
PDU	Protocol Data Unit
RTP	Real-Time Transport Protocol
RTCP	RTP Control Protocol
RTSP	Real Time Streaming Protocol
SDP	Session Description Protocol
SMPTE	Society of Motion Picture and Television Engineers
TCP	Transmission Control Protocol
TLS	Transport Layer Security
TTL	Time To Live
UDP	User Datagram Protocol
UE	User Equipment
UTC	Coordinated Universal Time
URI	Universal Resource Identifier

5 Conventions

None.

6 RTSP and ITU-T H.248 interworking

6.1 Method interworking

6.1.1 OPTIONS

The MGC should be able to provide a response to an RTSP OPTIONS method based on the RTSP service capabilities. As the RTSP OPTIONS method may be used as a keep alive, the MGC may issue an appropriate ITU-T H.248 command (e.g., an empty AuditValue.req) to the MG to maintain a keep alive with the MG for a particular termination.

6.1.2 DESCRIBE

On receipt of an RTSP DESCRIBE method the MGC may request the presentation/session description from the MG if it does not already have this information. The MGC should add a Termination to a Context using an Add.req and set the Media Resource Identifier Specification (*mri/spec*) property to the universal resource identifier (URI) received in the DESCRIBE. The MGC should also CHOOSE wildcard the LocalControl descriptor to determine the presentation/session description information for the media resource of interest.

6.1.3 SETUP

Using the information in the RTSP SETUP method the MGC can use an Add.req or Modify.req to set the remote address/port in the Remote Descriptor and request the server port from the Local Descriptor. The MGC shall ensure that the "Specification" property of the Media Resource Identifier package (*mri/spec*) is set for the particular stream/termination to ensure that the correct media resource is specified.

Session information can either be provided by the MGC or from the session description protocol (SDP) session information from the MG. If a session identifier is provided by the client then the MGC can use the ITU-T H.248 stream concept to bundle the session.

In the case that a SETUP contains multiple transport options these may be provided to the MG using multiple groups and allowing the MG to choose the applicable group. The MGC may also request the acceptable range formats by performing a CHOOSE wildcard on the Format Types (*rfs/ft*) property.

An RTSP SETUP method may result in the transport parameters being changed while a media resource is being played. In this case the MGC may need to reissue a new RTSP Play (*rtsp/play*) signal while CHOOSE wildcarding the Play Range (*pr*) parameter to determine the playout time at which the change in transport parameters occurred. In addition, the MGC may need to perform a CHOOSE wildcard on the real-time transport protocol (RTP) Information Synchronization Source (*rtpinfo/ssrc*), RTP Information Sequence Number (*rtpinfo/seq*) and RTP Information Timestamp (*rtpinfo/ts*) properties.

On RTSP SETUP failure or session timeout the MGC is responsible subtracting the applicable ITU-T H.248 terminations.

See section 13.3 of [IETF RFC 7826] for more information on SETUP procedures.

6.1.4 PLAY

The RTSP PLAY method relates directly to sending an ITU-T H.248 signal. The playout of a particular media resource may be achieved by issuing an RTSP Play (*rtsp/play*) signal in a Modify.req. The MG shall play the media resource indicated by the Media Resource Identifier (*mri*) parameter carried in the signal. If provided this overrides the *mri/spec* property.

The RTSP PLAY method may include time range information in the Range Header, if included this should be sent to the MG in the Play Range (*pr*) parameter.

The MGC may need to determine the time range formats that are supported by the MG for the particular media resource for use in an RTSP PLAY response, in this case the MGC shall CHOOSE wildcard the Range Format (*rf*) parameter.

The MGC may need to determine the time range information regarding the playout of the media resource used in an RTSP PLAY response, in this case the MGC shall CHOOSE wildcard the Play Range (*pr*) parameter.

If the RTSP PLAY method contains a Scale header the appropriate value should be included in the Play Scale (*ps*) parameter. If the RTSP PLAY method contains a Speed header the appropriate value/s should be included in the Data Speed (*ds*) parameter. If the RTSP PLAY method contains a Seek-Style header the appropriate value should be included in the Seek Behaviour (*sb*) parameter.

In addition, the MGC may need to perform a CHOOSE wildcard on the RTP Information Synchronization Source (*rtpinfo/ssrc*), RTP Information Sequence Number (*rtpinfo/seq*) and RTP Information Timestamp (*rtpinfo/ts*).

The MGC may also set a NotifyCompletion event in order to ascertain when the playout of the signal has ceased.

If an RTSP PLAY method is received for a media resource which is currently playing out, several alternatives exist. If the time range information in the RTSP PLAY method Range header has changed compared to the playing out signal then the MGC should reissue an *rtsp/play* signal with the update time information (and any other relevant parameters). This will have the effect of restarting the signal at a different time location. If the RTSP PLAY method contains changed "Speed" or "Scale" information then the MGC should issue the Data Delivery Speed Adjustment Speed (*ddsa/spd*) and/or Playback Relative Scale Adjustment Scale (*prsa/scl*) signal respectively.

In order to be backwards compatible to RTSP version 1 [IETF RFC 2326] an MGC can provide PLAY METHOD queuing as ITU-T H.248 provides a signal completion mechanism that can be used to indicate when a play request is finished. Signals lists can also be used to ensure sequenced playout.

See section 13.4 of [IETF RFC 7826] for more information on PLAY procedures.

6.1.5 PLAY_NOTIFY

The use of RTSP PLAY_NOTIFY is triggered by the notification of the different media play state events, which are defined in the RTSP Play package. The MGC can customize the events when sending an RTSP Play signal. Three types of PLAY_NOTIFY requests correspond to the notification of the three events: End-of-Stream Notification Event (*rtsp/eos*), Media Properties and Range Change Event (*rtsp/mprc*), Scale Change event (*rtsp/sc*).

See section 13.5 of [IETF RFC 7826] for more information on PLAY_NOTIFY procedures.

6.1.6 PAUSE

The RTSP PAUSE method is achieved through the use of the Signal Pause (*sp/pause*) signal. On receipt of an RTSP PAUSE method the MGC should issue the *sp/pause* signal with the applicable parameters. In order to determine the pause point information, the MGC should perform a CHOOSE wildcard on the Pause Range (*pr*) parameter. That MGC may specify the Time format to be used by setting the Range Format (*rf*) parameter.

On reception of the *sp/pause* signal the MG shall pause the relevant signals. To resume playout of the signal from the pause point the MGC shall remove the *sp/pause* signal from the Signals Descriptor. If the MGC wishes to resume playout from another time point then the procedures for the RTSP PLAY method should be followed.

See section 13.6 of [IETF RFC 7826] for more information on PAUSE procedures.

6.1.7 TEARDOWN

The RTSP TEARDOWN method can be directly mapped to:

- An ITU-T H.248 Subtract.req command where an entire session is removed;
- Removal of an ITU-T H.248 stream via an ITU-T H.248 Modify command where only a single media is to be removed;
- Stopping an RTSP Play signal (*rtsp/play*) through removal from a Signals descriptor will also result in resources being freed.

See section 13.7 of [IETF RFC 7826] for more information on TEARDOWN procedures.

6.1.8 GET_PARAMETER

The RTSP GET_PARAMETER method is mapped to the ITU-T H.248 AuditValue.req message in order to determine property values.

See section 13.8 of [IETF RFC 7826] for more information on GET_PARAMETER procedures.

6.1.9 SET_PARAMETER

The RTSP SET_PARAMETER method is mapped to a Modify.req command that modifies a property/parameter in an applicable ITU-T H.248 descriptor.

See section 13.9 of [IETF RFC 7826] for more information on SET_PARAMETER procedures.

6.1.10 REDIRECT

An RTSP REDIRECT method may be initiated by the MGC based on service information from an MG. This information may be as a result of overload indications such as those defined in [ITU-T H.248.10] and [ITU-T H.248.11] or as a result of ITU-T H.248 ServiceChange procedures.

6.1.11 Extension methods

Extension methods defined outside the core [IETF RFC 7826] specification may be supported by existing ITU-T H.248 procedures/code points. For example, the "Announce" method

[b-IETF RTSPANN] may use existing ITU-T H.248 NotifyCompletion mechanisms to indicate the end of a stream of media.

6.2 Embedded (interleaved) binary data

Routing media data through an MGC is not recommended for performance reasons; however, the use of ITU-T H.248 signals and events allow the tunnelling of data. If an MGC receives an indication that interleaving should be used then it should set the RTSP Interleaving Package Outgoing Data (*rtpint/od*) event on the MG with the channel number that should be used to encode the data block. The MGC shall then be ready to receive media data from the MG to forward to the RTSP client. If the MGC receives media data (e.g., RTCP reports) it shall forward this information to the MG via the RTSP Interleaving Incoming Data (*rtpint/id*) signal.

NOTE – The interleaving mechanism supported by [IETF RFC 7826] allows a maximum protocol data unit (PDU) size of 65535 bytes. If interleaving is used across ITU-T H.248, consideration should be given to the maximum PDU size of the underlying ITU-T H.248 transport. PDU fragmentation may be needed. This is out of scope of this Recommendation.

6.3 Status/error code interworking

[ITU-T H.248] has a full range of status codes which map to hyper text transfer protocol (HTTP) and RTSP status codes. These codes are defined in [ITU-T H.248.8]. Mappings to various status codes are discussed below.

6.3.1 Success 1xx

A success status code 1xx may be generated as a result of an ITU-T H.248 response message that does not contain an error.

6.3.2 Success 2xx

A success status code 2xx may be generated as a result of an ITU-T H.248 response message that does not contain an error.

6.3.3 Redirection 3xx

[ITU-T H.248] has ServiceChange messages and overload mechanisms that enable the MGC to determine MG (resource) availability in order to generate 3xx responses.

6.3.4 Client error 4xx

The following error codes should be handled at the MGC level: 400, 401, 402, 403, 404, 405, 406, 407, 408, 411, 413, 415, 451, 452, 454, 455, 456, 459, 460, 462, 463, 464, 465, 466, 470, 471 and 472.

The following error codes may be mapped to ITU T H.248 error codes in the following manner:

- 404 *Not Found*: May be issued as a result of ITU-T H.248 error codes related to the playout of an announcement i.e., 606, 611.
- 410 *Gone*: May be issued as a result of ITU-T H.248 error codes related to the playout of an announcement. There are several ITU-T H.248 error codes in the 600-611 series that relate errors with respect to segments related to URIs. However, there is no specific error code that is equivalent to the definition in section 17.4.10 of [IETF RFC 7826]. If the MGC is able to determine through another means that the resource is gone it may generate 410, otherwise 404 should be used as per section 17.4.10 of [IETF RFC 7826].
- 453 *Not Enough Bandwidth*: May be issued as a result of ITU-T H.248 error codes i.e., 526.
- 457 *Invalid Range*: May be handled by the MGC if it knows the values supported by the MG otherwise may be mapped from ITU-T H.248 error codes i.e., 449.

- 458 *Parameter Is Read-Only*: May be handled by the MGC if it knows the values supported by the MG otherwise may be mapped from ITU-T H.248 error codes i.e., 534.
- 461 *Unsupported Transport*: May be handled by the MGC if it knows the values supported by the MG otherwise may be mapped from ITU-T H.248 error codes i.e., 445, 461.

6.3.5 Server error 5xx

The MGC is typically able to issue 5xx status codes independent of the MG. However, a 5xx error may be generated due to a condition on an MG. For example: if an MG has indicated that it is overloaded through the use of [ITU-T H.248.10] or [ITU-T H.248.11] the MGC may respond with "503 Service Unavailable" as the underlying resources related to the RTSP request may not be available even though the MGC itself is not overloaded. Likewise, an MGC may respond with "551 Option Not Supported" or "501 Not Implemented" if an MG does not support the functionality associated with the request even though the MGC may support an RTSP protocol function or option.

6.4 Header field definitions

The mapping of the header fields to ITU-T H.248 information elements is dependent on the RTSP method with which they are associated. In some cases RTSP headers are not mapped to ITU-T H.248 information elements as they are used solely by the MGC.

6.4.1 Non-mapped headers

The headers listed in Table 1 can be considered to be used by the MGC only and do not have a direct mapping to ITU-T H.248 information elements.

Table 1 – Header fields without direct mapping to ITU-T H.248 information elements

Accept-Credentials	Content-Type	Proxy-Supported
Accept-Encoding	CSeq	Public
Accept-Language	Date	Referrer
Allow	From	Request-Status
Authentication-Info	If-Match	Require
Authorization	If-Modified-Since	Server
Cache-Control	If-None-Match	Session
Connection	Last-Modified	Supported
Connection-Credentials	Notify-Reason	Timestamp
Content-Base	Pipelined-Requests	User-Agent
Content-Encoding	Proxy-Authenticate	Via
Content-Language	Proxy-Authentication-Info	WWW-Authenticate
Content-Length	Proxy-Authorization	
Content-Location	Proxy-Require	

6.4.2 Mapped headers

The following RTSP headers may be mapped to [ITU-T H.248].

6.4.2.1 Accept

The MGC should know the content types that are acceptable for the RTSP method response. However, if the MGC is unaware of the content types it may alternatively perform an ITU-T H.248 AuditCapabilities.req on the MG to determine the allowable application types.

6.4.2.2 Accept-ranges

The Accept-Ranges information may be determined by performing a CHOOSE wildcard on the Range Format (*rf*) parameter in a RTSP Play (*rtsp/play*), Signal Pause (*sp/pause*), Data Delivery Speed Adjustment Speed (*ddsa/spd*), and/or Playback Relative Scale Adjustment Scale (*prsa/scl*) signals.

6.4.2.3 Bandwidth

The Bandwidth header may be mapped to "Bandwidth parameter (b=)" in SDP carried by [ITU-T H.248].

6.4.2.4 Blocksize

The block size header may be mapped to the Media Block Size (*mbs/size*) property.

6.4.2.5 Expires

If the MGC requires media resource expiry information it should set the URI of the applicable resource on the MG via the Media Resource Identifier (*mri/spec*) property. The MGC may either CHOOSE wildcard via Add.req or Modify.req or perform an AuditValue.req on the Media Resource Description Expiry Date and Time (*mrde/dt*) property.

6.4.2.6 Location

It is expected that the MGC will use this for any re-directs. As discussed in clause 6.1.10 this may be based on information provided by the MG.

6.4.2.7 Media-properties

The MGC may use this information to control the play state when issuing an RTSP play signal to the MG. The Media properties change, that the MG requires, can be acquired by the notification of the Media Properties (*mp*) parameter in RTSP Play package.

6.4.2.8 Media-range

It is expected that the MGC will use this for the indication of the available media ranges. See clause 12.2 for the detection of the change that the MG requires.

6.4.2.9 Mtag

If the MGC requires the information for populating the mtag header, then it should use "SDP a=mtag:?" in an ITU-T H.248 Add.req or Modify.req to determine the value from the MG.

6.4.2.10 Range

Range is supported in [ITU-T H.248] depending on the METHOD and functionality required. See text in clauses 12.3.1.1.4, 13.3.1.1.4, 14.3.1.1.4, and 15.3.1.1.4 on how range maps to the Play Range (*plyrng*), Pause Range (*pr*), and Range (*rng*) parameters.

6.4.2.11 Retry-after

The MGC may provide this information based on provisioned values and MG outage information from ITU-T H.248 ServiceChange.req commands or Notify.req commands with MG overload indications (e.g., through the use of [ITU-T H.248.10] or [ITU-T H.248.11]).

NOTE – The inclusion of a specific ServiceChange Outage Time is for further study and may be included in subsequent [ITU-T H.248.1] versions.

6.4.2.12 RTP-info

The ssrc, seq and rtpime values may be determined by performing a CHOOSE wildcard via an Add.req or Modify.req on the RTP Information Synchronization Source (*rtpinfo/ssrc*), RTP

Information Sequence Number (*rtpinfo/seq*) and RTP Information Timestamp (*rtpinfo/ts*) properties respectively.

6.4.2.13 Scale

The Scale header maps to the on the Playback Scale (*ps*) parameter in a RTSP Play (*rtsp/play*) and or a Playback Scale (*ps*) parameter in the Playback Relative Scale Adjustment Scale (*prsa/scl*) signal. See clauses 12.6 and 15.6 for procedural information.

6.4.2.14 Seek-style

The Seek-Style header maps to the Seek Behaviour (*sb*) parameter in a RTSP Play (*rtsp/play*) signal. See clause 12.6 for procedural information.

6.4.2.15 Speed

The Speed header maps to the Data Speed (*ds*) parameter in a RTSP Play (*rtsp/play*) and or the Data Speed (*ds*) parameter in the Data Delivery Speed Adjustment Speed (*ddsa/spd*) signal. See clauses 12.6 and 14.6 for procedural information.

6.4.2.16 Terminate-Reason

Typically, the MGC may provide the information in the header to a user without MG involvement. However, the "time" parameter may be populated as a result of the MGC receiving a ServiceChange command with a "Graceful" ServiceChangeDelay parameter.

6.4.2.17 Transport

The MGC may interact with the MG via Add, Modify and Move commands to determine/set the transport parameters in the Local and Remote descriptors. [ITU-T H.248] supports over specification to allow for preferential lists of parameters.

General parameters

Unicast | multicast: The MGC may provide this to the MG via SDP in ITU-T H.248 Add.req, Modify.req or Move.req. An IPv4 address range 224.0.0.0 to 239.255.255.255 or an IPv6 address starting with FF indicates a multicast address. If a multicast address is used it is the responsibility of the MG to allocate a unicast IP address and join the multicast group through an applicable protocol, e.g., Internet group management protocol (IGMP). Likewise, at subtraction it is the responsibility of the MG to remove the unicast address from the multicast group.

If the MG is unable to allocate an IP address, error code 445 "Unsupported or Unknown Property" is returned.

Layers: Multicast layers are supported by the SDP c=line (for an IP multicast address).

Destination: The MGC may provide this to the MG via SDP in ITU-T H.248 Add.req, Modify.req or Move.req.

Source: It is expected that the MGC will provide this to the MG via SDP in ITU-T H.248 Add.req, Modify.req or Move.req.

Mode: It is expected that the MGC will be able to map a mode to the relevant ITU-T H.248 request.

Multimedia Internet keying (MIKEY): [ITU-T H.248.77] discusses the use of secure RTP in split MGC/MGs.

Interleaved: Interleaving is supported by the RTSP Interleaving (*rtspint*) package.

Ttl: Multicast time to live (TTL) is supported by the SDP c= line.

RTP parameters

The synchronization source may be specified through the use of Synchronization Source Property in clause 16.1.1. RTCP-mux may be specified via an SDP attribute in the ITU-T H.248 Local and Remote descriptors.

Connection oriented transport parameters

The values associated with parameters "setup" and "connection" have no direct information element in the ITU-T H.248 protocol. However, the MGC may provide an equivalent interworking. For example: for "connection" the MGC may utilise an existing ITU-T H.248 stream rather than assigning a new one with a new connection address.

6.4.2.18 Unsupported

It is expected the MGC will handle this. There may be some interaction with the MG via the ITU-T H.248 error codes i.e., 440, 443-446.

7 Media resource identification package

Package name:	Media Resource Identification
Package ID:	mri (0x00d5)
Description:	This package allows the MGC to identify a Media Resource that is operated on by the current or subsequent command.
Version:	1
Extends:	None

7.1 Properties

7.1.1 Specification

Property name:	Specification
Property ID:	spec (0x0001)
Description:	This property allows the MGC to specify a Media Resource which it currently or subsequently performs an operation on.
Type:	String
Possible values:	As per RTSPMediaResourceSpec of RTSP Media Resource Syntax (<i>mrs</i>) package. Optionally AnnouncementSpec in clause 6.2.5 of [ITU-T H.248.9] may be supported in addition.
Default:	None
Defined in:	TerminationState or LocalControl
Characteristics:	ReadWrite

7.2 Events

None.

7.3 Signals

None.