

Voiceband Data Media Format

Slide Deck #2

`draft-foster-mmusic-vbdfORMAT-01.txt`

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Problem Context

- **Definition of VBD: Modulated modem and fax signals**
 - Usually uses PCM, PCMA, G726-32, G726-40 etc.
 - With FEC (RFC 2733), G726-32 adequate for low speed modems. Can use instead of more complex modem relay.
- **Voice and VBD – different characteristics and resource requirements**
 - Jitter Buffer
 - Packet Loss Concealment
- **Problem**
 - Discrimination between, e.g., PCM for voice and PCMU for VBD
- **Needs**
 - New encoding format (new MIME) audio/vbd
 - MIME parameter to determine underlying encoding e.g. PCMU, PCMA, G726-32, G726-40 etc.
 - Should support any underlying encoding that works
- **Representation in SDP and H.245**

Changes to internet draft from 00 to 01

- **Feedback: Make definition consistent with draft-ietf-avt-rtp-mime**
- **Response: Changed “VBD” from a format-specific parameter to a new (proposed) audio MIME subtype**
 - Makes the definition consistent with draft-ietf-avt-rtp-mime
- **Feedback: Flexible association of VBD with different “underlying” audio encodings**
- **Response: Format-specific parameter for VBD defines underlying encoding**
- **Next Steps: Collect inputs on AVT and MMUSIC groups and progress towards standardization**

Describing the VBD format

m=audio 3456 RTP/AVP 15 98 99

a=rtpmap:98 vbd/8000

a=fmtp:98 0

a=rtpmap:99 vbd/8000

a=fmtp:99 8

PT 96 not on
'm=' line

m=audio 3456 RTP/AVP 15 98

a=rtpmap:96 G726-40/8000

a=rtpmap:98 vbd/8000

a=fmtp:98 96

Describing the VBD format (Cont'd)

m=audio 3456 RTP/AVP 15 98 100

a=rtpmap:98 vbd/8000

a=fmtp:98 0

a=rtpmap:100 red/8000

a=fmtp:100 98/98

MIME proposal

MIME media type name: audio

MIME subtype name: vbd

Required parameters:

rate: The RTP timestamp clock rate, which is equal to the sampling rate. The typical rate is 8000, but other rates may be specified.

baseAlgorithm: The encoding scheme, such as PCMU, PCMA, G.726-32, G726-40 etc., used. No MIME parameters are inherited.

Optional parameters: channels,ptime, maxptime (Refer to draft-ietf-avt-rtp-mime-06.txt).

Security considerations: See section 5 of draft-ietf-avt-rtp-mime-06.txt.

Intended usage: Modulated facsimile and modem signals that benefit from special handling e.g. jitter buffer adjustment at a receiver.