

# **VPIM**

**Voice Profile for Internet Mail**

**<http://www.vpim.org>**

**<http://welcome.to/vpim>**

**IETF WG  
co-chairs:**

**John Noerenberg <[jwn2@qualcomm.com](mailto:jwn2@qualcomm.com)>  
Glenn Parsons <[gparsons@nortelnetworks.com](mailto:gparsons@nortelnetworks.com)>**

**Mailing list:  
To subscribe:**

**[vpim@lists.neystadt.org](mailto:vpim@lists.neystadt.org)  
send a message to [majordomo@lists.neystadt.org](mailto:majordomo@lists.neystadt.org)  
with 'subscribe VPIM' as the body**

# Agenda

- 09:00 – Welcome & Agenda Bashing (5 min)
- 09:05 – Selected Topics from other Areas (5 min)
- 09:10 – Charter & Milestone discussion (5 min)
- 09:15 – VPIM v2 (20 min)
  - Voice Profile for Internet Mail - version 2 (Glenn Parsons & Greg Vaudreuil)
    - draft-ietf-*vpim-vpimv2r2-01.txt*
    - draft-ietf-*vpim-vpimv2r2-32k-00.txt*
    - draft-ietf-*vpim-vpimv2r2-vm-00.txt*
    - draft-ietf-*vpim-vpimv2r2-dur-00.txt*
  - MDN & DSN to Draft Standard (John Noerenberg & Greg Vaudreuil)

# Agenda (cont'd)

- 09:35 – VPIM Addressing (Glenn Parsons) (5 min)
  - draft-ietf-vpim-address-00.txt
  
- 09:45 – ENUM WG Update (Richard Shockey) (5 min)
  
- 09:55 – VPIM Directory (Greg Vaudreuil) (5 min)
  - Voice Messaging Directoy Service (schema)
    - draft-ietf-vpim-vpimdir-00.txt
  - Voice Message Routing Service
    - draft-ietf-vpim-routing-01.txt

# Agenda (cont'd)

- 10:00 – IVM (70 min)
  - Goals for Internet Voice Mail
    - draft-ietf-vpim-ivm-goals-01.txt
  - Internet Voice Messaging
    - draft-ietf-vpim-ivm-01.txt
  - Message Context for Internet Mail
    - draft-ietf-vpim-hint-04.txt
  - Critical Content of Internet Mail
    - draft-ietf-vpim-cc-03.txt
  - audio/wav with MS-GSM or G.711 codec
    - draft-ema-vpim-wav-00.txt & draft-ema-vpim-wav-00.txt (deleted)

# Agenda (cont'd)

- 11:10 – VPIM Addenda (15 min)
  - Using the BINARY & CHANNEL IMAP extensions for VPIM Messages
    - Draft-nerenberg-imap-channel-00.txt
    - Draft-nerenberg-imap-binary-02.txt
  - SIP MWI
    - Draft-mahy-sip-message-waiting-01.txt
  - Splitting Notification format from transport (John Neystadt)
  - Voice Messaging Client Behaviour
    - draft-ema-vpim-cb-01.txt
  - Calling Line Identification for VPIM Messages
    - draft-ema-vpim-clid-01.txt
  
- 11:25 – Wrap Up (5 min)

# Topics from other Areas

(that VPIM may need to think about)

- Internationalized Domain Names (IDN)
  - ASCII encoded foreign characters
  - UTF8 FQDN
- Middle Boxes
  - Making applications NAT aware
  - Content (e.g., audio) caching

# VPIM WG Topics

## VPIM v2

- VPIM v2 revision

## IVM

- IVM goals
- IVM profile
- Critical Content
- Message Context
- Codec
  - MS-GSMasWAV
  - G.711as raw

## VPIM Addenda

- VPIM addressing
- VPIM directory schema
- VPIM directory architecture (ENUM)
- VPIM IMAP extensions
  - Binary, Alternate channel
  - CLID
  - Client behaviour
- Content Negotiation for voice messaging

# VPIM WG Milestones

Jun 00	Document interworking VPIM v2 implementations
Jul 00	Issue updated Internet Drafts of IVM/VPIM v3 Goals, IVM/VPIM v3 Specification and related
Aug 00	Issue updated Internet Drafts of VPIM addressing
Aug 00	Issue updated Internet Drafts of VPIM directory
Aug 00	Issue updated VPIM v2 Internet Draft
Aug 00	WG last call on VPIM v3 Goals as Informational RFC
Sep 00	Issue updated Internet Drafts of VPIM IMAP extensions
Sep 00	Issue revised VPIM v3 Specification and related protocol documents as Internet Drafts
Oct 00	WG last call on IVM/VPIM v3 Specification and related protocol documents as Proposed Standards RFCs
Oct 00	Submit IVM/VPIM v3 Goals to IESG for consideration as Informational RFC
Oct 00	Submit VPIM addressing to IESG for consideration as a Proposed Standard
Oct 00	WG last call on revised VPIM v2 for Draft Standard
Nov 00	Submit VPIM v2 to IESG for consideration as a Draft Standard RFC
Nov 00	Submit IVM/VPIM v3 et al to IESG for consideration as a Proposed Standard
Nov 00	WG last call on VPIM IMAP extensions as Standards Track RFC
Dec 00	Submit VPIM IMAP extensions to IESG for consideration as Standards Track RFC
Dec 00	WG last call on VPIM addressing as Standards Track RFC
Dec 00	WG last call on VPIM directory profile as Standards Track RFC
Jan 01	Submit VPIM addressing to IESG for consideration as Standards Track RFC
Jan 01	Submit VPIM directory to IESG for consideration as Standards Track RFC
Jan 01	WG last call on IVM/VPIM v3 content negotiation as Proposed Standard RFC
Feb 01	Submit VPIM content negotiation to IESG for consideration as Proposed Standard RFC
Mar 01	Review final work items and close

# VPIM WG Milestones

**IETF 49**

- Done Document interworking VPIM v2 implementations
- Done Issue updated Internet Drafts of IVM Goals, IVM Specification and related
- Done Issue updated Internet Drafts of VPIM addressing
- Done Issue updated Internet Drafts of VPIM directory
- Done Issue updated VPIM v2 Internet Draft
- Jan 01 WG last call on IVM Goals as Informational RFC
- Done Issue updated Internet Drafts of VPIM IMAP extensions
- Done Issue revised IVM Specification and related protocol documents as Internet Drafts
- Feb 01 WG last call on IVM Specification and related protocol documents as Proposed Standards RFCs
- Feb 01 Submit IVM Goals to IESG for consideration as Informational RFC
  
- Jan 01 WG last call on revised VPIM v2 for Draft Standard
- Feb 01 Submit VPIM v2 to IESG for consideration as a Draft Standard RFC
- Mar 01 Submit IVM et al to IESG for consideration as a Proposed Standard
- Jan 01 WG last call on VPIM IMAP extensions as Standards Track RFC
- Feb 01 Submit VPIM IMAP extensions to IESG for consideration as Standards Track RFC
- Done WG last call on VPIM addressing as Standards Track RFC
- Jan 01 WG last call on VPIM directory profile as Standards Track RFC
- Jan 01 Submit VPIM addressing to IESG for consideration as Standards Track RFC
- Feb 01 Submit VPIM directory to IESG for consideration as Standards Track RFC
- Feb 01 WG last call on IVM content negotiation as Proposed Standard RFC
- Mar 01 Submit VPIM content negotiation to IESG for consideration as Proposed Standard RFC
- Mar 01 Review final work items and close

March 23, 2001

IETF 50 - Minneapolis

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# Revised VPIM WG Milestones

- Done Document interworking VPIM v2 implementations
- Done Issue updated Internet Drafts of IVM Goals, IVM Specification and related
- Done Issue updated Internet Drafts of VPIM addressing
- Done Issue updated Internet Drafts of VPIM directory
- Done Issue updated VPIM v2 Internet Draft
- Mar 01 WG last call on IVM Goals as Informational RFC
- Done Issue updated Internet Drafts of VPIM IMAP extensions
- Done Issue revised IVM Specification and related protocol documents as Internet Drafts
- Apr 01 WG last call on IVM Specification and related protocol documents as Proposed Standards RFCs
- Apr 01 Submit IVM Goals to IESG for consideration as Informational RFC
  
- Mar 01 WG last call on revised VPIM v2 for Draft Standard
- Apr 01 Submit VPIM v2 to IESG for consideration as a Draft Standard RFC
- Apr 01 Submit IVM et al to IESG for consideration as a Proposed Standard
- Apr 01 WG last call on VPIM IMAP extensions as Standards Track RFC
- May 01 Submit VPIM IMAP extensions to IESG for consideration as Standards Track RFC
- Done WG last call on VPIM addressing as Standards Track RFC
- Apr 01 WG last call on VPIM directory profile as Standards Track RFC
- Mar 01 Submit VPIM addressing to IESG for consideration as Standards Track RFC
- Apr 01 Submit VPIM directory to IESG for consideration as Standards Track RFC
- Jun 01 WG last call on IVM content negotiation as Proposed Standard RFC
- Jul 01 Submit VPIM content negotiation to IESG for consideration as Proposed Standard RFC
- Aug 01 Review final work items and close

# VPIM v2 to Draft Standard

- Approved as a Proposed Standard in September 1998
- Next steps...
  - Fix specification
    - Clarify ambiguities in VPIM v2
    - All normative (MUST & SHOULD) references to Draft Standards
  - Document interoperability
    - Inter vendor testing
    - Ensure all mandatory features implemented & interoperable
  - AD review of documents
  - Propose progression to Draft Standard

# VPIM v2 References

(MUST, SHOULD)

- Standard - SMTP, MAIL, DNS, ...
- Draft Standard - Pipelining, MIME, ...
- Proposed Standard
  - Content duration, multipart/voice-message, audio/32kadpcm --> **push**
  - image/tiff -----> **Fax WG pushing**
  - vCard, text/directory -----> **delete**
  - DSN, MDN, Enhanced Status Codes -----> **push**
- Experimental - Binary -----> **pushed**
- Informational - TIFF-F
- ITU-T Standard - E.164, G.726

# VPIM v2 Revision

*<draft-ietf-vpim-vpimv2r2-01.txt>*

Glenn Parsons & Greg Vaudreuil

- Open issues discussed at last meeting
- Waiting for update by editors
- Last call after meeting

# Toll Quality Voice - 32 kbit/s ADPCM MIME Sub-type Registration

*<draft-ietf-vpim-vpimv2r2-32k-00.txt>*

Glenn Parsons & Greg Vaudreuil

# Content Duration MIME Header Definition

*<draft-ietf-vpim-vpimv2r2-dur-00.txt>*

Glenn Parsons & Greg Vaudreuil

# VPIM Voice Message MIME Sub-type Registration

*<draft-ietf-vpim-vpimv2r2-vm-00.txt>*

Glenn Parsons & Greg Vaudreuil

# VPIM Website Status

- EMA has hosted hosted **vpim.org**
  - Temporarily unavailable during transition to new ISP
  - <http://welcome.to/vpim>
- EMA management transferred to The Open Group in January 2001
  - EMA Forum -- <http://www.ema.org>
- VPIM WG in the EMA Forum
  - Marketing and Education
  - Sponsor of interop testing events
  - Maintiner of VPIM Test Suite
  - Registrar for VPIM v2 Declarations
  - Repository for VPIM interop information

# VPIM v2 Interoperability Website

- Process onus on vendor
  - No test labs, no policing, no sticker -- casual interop testing
  - Declaration of Compatibility
    - List all features implemented
    - Currently 13 listed products
  - Declaration of Interoperability
    - Results of inter-vendor testing
    - Currently 50 listed tests
    - Includes all previous bakeoff results
  - EMA Forum is Registrar and repository of Declarations
- Results to be formatted to support VPIM v2 as a Draft Standard

<http://www.vpim.org/conformance/conformance.html>

# Fax WG Update

Minimal GSTN & Fax Addressing in Internet Mail

*<draft-ietf-fax-minaddr-v2-01.txt>*

*<draft-ietf-fax-faxaddr-v2-01.txt>*

- Both addressing docs (min GSTN and min FAX) have finished IETF last call.

- Published soon

# VPIM Addressing

*<draft-ietf-vpim-address-00.txt>*

Glenn Parsons

This document lists the various VPIM email addresses that are currently in common use and defines several new address formats for special case usage.

- Last call completed**
- Waiting for editor to update draft before forwarding for AD review.**

# ENUM WG Update

Richard Shockey

# Voice Messaging Directory Service

*<draft-ietf-vpim-vpimdir-00.txt>*

Anne Brown & Greg Vaudreuil

- Editors need to clean up ASN.1 & BNF
- Add in codec identification

# Voice Messaging Routing Service

*<draft-ietf-vpim-routing-01.txt>*

Greg Vaudreuil

# Internet Voice Mail

(IVM)

# Goals for Internet Voice Mail

*<draft-ietf-vpim-ivm-goals-01.txt>*

Emily Candell

# Internet Voice Messaging

*<draft-ietf-vpim-ivm-01.txt>*

Stuart McRae & Glenn Parsons

- Minor editorials required

# Message Context for Internet Mail

*<draft-ietf-vpim-hint-04.txt>*

Eric Burger, Emily Candell, Charles Eliot & Graham Klyne

# Critical Content of Internet Mail

*<draft-ietf-vpim-cc-03.txt>*

Eric Burger & Emily Candell

# IVM Codec Discussion

# audio/msgsm Specification

*<draft-ema-vpim-msgsm-00.txt>*

Greg Baribault, Erik Hedberg & Laile Di Silvestro

This document describes a new audio content type for Microsoft GSM -- a common desktop codec -- for use with VPIM v3. The differences from ETSI GSM 6.10 are also described.

# audio/wav Specification

*<draft-ema-vpim-wav-00.txt>*

Greg Baribault & Laile Di Silvestro

This document describes the audio content type for carrying Microsoft WAV audio files. This formalizes a long used defacto content type.

**BTW, this document is wrong!**

# Microsoft statement

December 2000

- Toby Nixon will be driving VPIM for Microsoft
  - He will oversee production of new drafts
- Neither the MS-GSM or audio/wav documents will be encumbered by intellectual property concerns from Microsoft
  - The WAV RFC will create an IANA registration for audio/wav, and pulls together existing documentation in support of that registration
  - The GSM RFC will describe how to format a GSM bitstream in such a way that it can be understood by the MS-GSM desktop codec.
- There are some technical mistakes in the (deleted) WAV draft that need to be corrected
  - e.g. the header format was completely wrong)

# Baseline Codec Discussion...

- VPIM v2
  - G.726 (audio/32kadpcm)
- VPIM v3 (original proposal)
  - audio/wav and raw
  - G.726, MS-GSM, G.711
- IVM (current proposal)
  - MS-GSM (audio/wav)
- IVM (new proposal)
  - G.711 (audio/basic or audio/wav)
- IVM (revised old proposal)
  - audio/wav
  - MUST play both and record at least one of:
    - MS-GSM WAV, G.711 raw
  - MAY play and record others

# Pros & Cons of G.711 and MS-GSM

- Advantages to MS-GSM (13 kbit/s):
  - Less Storage Space
  - Faster to download to client
  - Faster to send between servers
- Advantages to G.711 (64 kbit/s):
  - Better Voice Quality
  - "Universal" Client Support
  - Fewer MIPs / lower complexity / easy to implement

# Codec Consensus?

## Mandatory to receive and play

- MS-GSM as WAV
  - Audio/wav
- G.711 as raw
  - Audio/basic
- Both

# IMAP Extensions

- Discussion on IMAP-VOICE mailing list
  - <http://www.imc.org/ietf-imap-voice/>
- Binary - draft-nerenberg-imap-binary-01.txt
  - Binary fetch of body parts
  - Will allow fetching real binary size
- Channel - draft-nerenberg-imap-channel-01.txt
  - Indication to send body part to another channel
  - Profile to be written to help explain application
    - Playback audio on a telephone
    - Stream video playback to desktop viewer

# SIP MWI Update

SIP Extensions for Message Waiting Indication

*<draft-mahy-sip-message waiting-01.txt>*

Rohan Mahy

# Voice Messaging Client Behaviour

*<draft-ema-vpim-cb-01.txt>*

Jason Collins & Glenn Parsons

- Send for WG last call to informational

# Calling Line Identification for VPIM Messages

*<draft-ema-vpim-clid-01.txt>*

Jason Collins

- Waiting for editor updates based on comments
- Charset & unstructured field

# WG Focus

- VPIM v2 progression to Draft Standard
  - revision of VPIMv2 documents and MDN & DSN
  - documentation of interoperability
- Internet Voice Messaging (IVM)
  - Goals -- Core Specification
  - Critical Content -- Message Context
  - Codec choice
- VPIM Addenda
  - Addressing -- IMAP Extensions
  - Directory Profile & Schema -- Calling Line ID
  - Client Behavior -- Content Negotiation