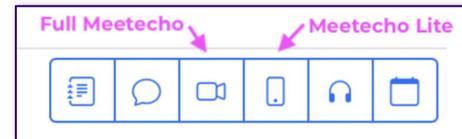# vCon BOF - IETF 116

Spencer Dawkins and Brian Rosen

Chair Slides

IETF 116 Meeting Tips

This session is being recorded

Use Meetecho to join the mic queue, answer polls

In-person participants
- Make sure to sign into the session using Meetecho (usually the "Meetecho lite" client) from the Datatracker agenda
- *Keep audio and video off if not using the onsite version*
- **Wear masks unless actively speaking at the microphone.**

Remote participants
- Make sure your audio and video are off unless you are chairing or presenting during a session
- Use of a headset is **strongly** recommended

IETF 116 Remote Meeting Tips

This session is being recorded

- **Enter the queue with** and leave with

- **When you are called on, enable your audio to be heard.**

- **Audio is enabled by unmuting and disabled by muting**

- **Video can also be enabled, but it is separate from audio.**

- **Video is encouraged to help comprehension but not required.**

Resources for IETF 116 Yokohama

- Agenda
  https://datatracker.ietf.org/meeting/agenda

- Meetecho and other information:
  https://www.ietf.org/how/meetings/115/preparation

- If you need technical assistance, see the Reporting Issues page:
  http://www.ietf.org/how/meetings/issues/

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Note well

This is a reminder of IETF policies in effect on various topics such as patents or code of conduct. It is only meant to point you in the right direction. Exceptions may apply. The IETF's patent policy and the definition of an IETF "contribution" and "participation" are set forth in BCP 79; please read it carefully.

As a reminder:

- By participating in the IETF, you agree to follow IETF processes and policies.
- If you are aware that any IETF contribution is covered by patents or patent applications that are owned or controlled by you or your sponsor, you must disclose that fact, or not participate in the discussion.
- As a participant in or attendee to any IETF activity you acknowledge that written, audio, video, and photographic records of meetings may be made public.
- Personal information that you provide to IETF will be handled in accordance with the IETF Privacy Statement.
- As a participant or attendee, you agree to work respectfully with other participants; please contact the ombudsteam (https://www.ietf.org/contact/ombudsteam/) if you have questions or concerns about this.

Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

- BCP 9 (Internet Standards Process)
- BCP 25 (Working Group processes)
- BCP 25 (Anti-Harassment Procedures)
- BCP 54 (Code of Conduct)
- BCP 78 (Copyright)
- BCP 79 (Patents, Participation)
- https://www.ietf.org/privacy-policy/(Privacy Policy)

Note really well

- IETF meetings, virtual meetings, and mailing lists are intended for professional collaboration and networking, as defined in the IETF Guidelines for Conduct (RFC 7154), the IETF Anti-Harassment Policy, and the IETF Anti-Harassment Procedures (RFC 7776). If you have any concerns about observed behavior, please talk to the Ombudsteam, who are available if you need to confidentially raise concerns about harassment or other conduct in the IETF.
- The IETF strives to create and maintain an environment in which people of many different backgrounds are treated with dignity, decency, and respect. Those who participate in the IETF are expected to behave according to professional standards and demonstrate appropriate workplace behavior.
- IETF participants must not engage in harassment while at IETF meetings, virtual meetings, social events, or on mailing lists. Harassment is unwelcome hostile or intimidating behavior -- in particular, speech or behavior that is aggressive or intimidates.
- If you believe you have been harassed, notice that someone else is being harassed, or have any other concerns, you are encouraged to raise your concern in confidence with one of the Ombudspersons.

Reminder: IETF Mask Policy

- Masks must be worn in meeting rooms and are recommended for common areas but not required.
- In meeting rooms, masks may briefly be removed for eating and drinking, but that cannot be an excuse to leave them off for long periods.
- In meeting rooms, active speakers, defined as those who are at the front of the room presenting or speaking in the mic queue, can remove their mask while speaking.
- No exemptions for mask wearing, medical or otherwise, will be allowed.
- Masks must be equivalent to N95/FFP2 or better, and free masks will be provided.

https://www.ietf.org/how/meetings/116/faq/#covidmeasures

Agenda

- Administrivia - Chairs, 10 minutes
  - Scribe and Zulip monitor selection
  - Notewell
  - Agenda Bash
- Overview - Chairs, 10 minutes
- Use Cases - Thomas McCarthy-Howe, 20 minutes
- Proposed Charter Walkthrough - Dan Petrie, 20 minutes
- Discussion - Proponents, 20 minutes
- RFC 5434-Style Questions - Chairs with AD support, 20 minutes
- Next Steps - AD, 10 minutes
- Spare slot time - 10 minutes
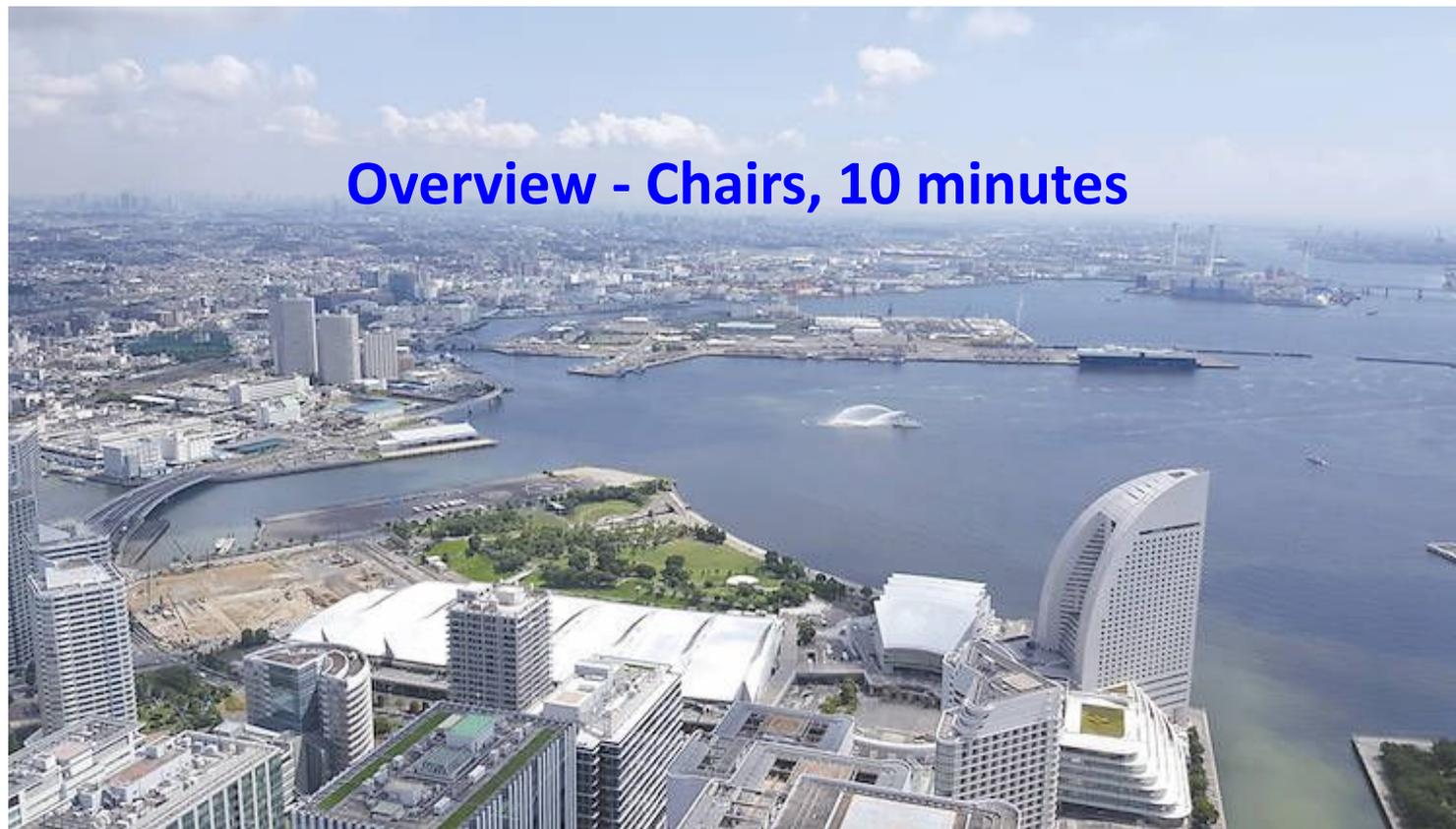
Overview - Chairs, 10 minutes

Chair Slides

Background of vCon Proposal

- White Paper
  - vCon: an Open Standard for Conversation Data
- Open Source projects implementing vCon
  - The Home Repo for vCons and the Conserver - Daniel Petrie, in Python
  - Torrey Searle, in Go, for OpenLine.ai
  - somleng-scfm, Samnang Chung, in Javascript, for UNICEF
- vCon Dispatched at IETF 115
  - From Dispatch Minutes: "Create draft with use case, problem statement to clarify scope, and then take to a BoF"
  - Draft is at draft-petrie-vcon, including problem statement to clarify scope
  - "take to a BOF" is what's happening now

Why the proponents brought vCon to the IETF

- Relative to the network stack, VCons connect two disparate levels:
  - vCons are created low in the stack as a result of physical activities, with networking, security and real time concerns.
  - They are consumed high in the stack by various applications
  - From the two possibilities of where a standard could be defined, the privacy and integrity issues at the lower level are more challenging, so **IETF ++**
- For lack of an interchange format, conversations live in silos
  - Therefore, all of the bad silo things happen such as:
  - Poor governance, transparency, for lack of centralization
  - **"IETF the Silo Killer"**
- Likely to be considered by multiple SDOs (W3C, for instance)

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Goals for this BOF

- This BOF is intended to **form** an IETF working group
  - We'll be asking [RFC 5434-style questions](#) about that
  - Each question will be in the form of a poll
  - People who disagree with the apparent conclusion are invited to explain why
- This BOF is not intended to **wordsmith** the proposed charter
  - The BOF is intended to capture any errors or gaps in the charter
  - Suggesting how the proposed charter should be amended is Just Fine
  - The amended charter should be clear to the community and other SDOs
- This BOF is not intended to **be** an IETF working group
  - We won't be discussing solutions or architectures here
  - If a vCon working group is formed, they'll be doing that anyway

Chair Slides

Use Cases - Thomas McCarthy-Howe, 20 minutes

Source: vCon Proposed Charter

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vCon: an Open Standard for Conversation Data

Personal Data Privacy

Artificial Intelligence

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Use Case 1: Privacy and Customer Data Protection

- One company sent my customer recording to another for analysis.
    - How is the recipient assured of the integrity of the communication?
    - How are they sure of the privacy?
    - Where did this customer information come from?
- What information does a company have about me, and how can they express it when it's in analog form?
- In what machine learning models was my data used for training or testing?
- Does this recorded conversation contain personal information? Can they guarantee that it doesn't?
- How can I measure the effectiveness of customer redaction tools?
- I want to switch carriers. How is my conversation data moved between them?
- I want to consolidate the conversation data across all modes of communication which are spread across silos for different product support teams and communication modes (e.g. text, web chat, email, VoIP).

Use Case 2: Integration of Conversation Analysis Services

- Define a standard for containing all conversation related data to ease integration of services which consume or output conversation data and analysis
- Define a standard that describes the analysis that was performed on the contained conversation, to establish a relationship between the conversations and which systems accessed it.
- Define a standard by which I can modify a conversation, and indicate the original conversation, without exposing the contents of the original conversation.
- I want to definitively answer what customer data exists in a recorded conversation, and assure its redaction or deletion in compliance with "Right to be Forgotten" Laws.
- I want to express the source of the conversation, and the express the path by which it has travelled across security boundaries.
- I want to express the parties in the conversation, so I can relate identity to the data that's been collected, across security boundaries.
- My enterprise has multiple call centers (in house and hosted). The call data has different formats for each of them. I want to be able to feed the data into any hosted transcription server.
- I want to feed email, web chat, SMS and phone conversations for a given customer into machine learning based analysis to derive customer satisfaction over time or at specific points.
- I want to be able to easily switch from one call transcription service to another.
- My enterprise needs to label (or perform some analysis on) all email, web chat, SMS and phone conversations with the product(s) to which they reference.

Other Use Cases (this week, from Rohan Mahy)

- "Today many instant messaging applications allow multiple clients for the same user, ex: laptop and mobile, or old mobile phone migrating to new mobile phone. Being able to securely share the message history from an existing device to a new device seems like a nice way to share messages that the new client could not have an end-to-end session for"
  - Providing full messaging history with attachments
  - End-to-end security
- "When you have a group chat with substantive discussion and then add some other users who were not party to the conversation. Allowing an admin in the group be able to catch them up by sharing message history from some relevant point in the past would be a nice to have feature"
  - Providing partial/complete snapshot of prior conversations in the chat

Proposed Charter Walkthrough - Dan Petrie, 20 minutes

Source: vCon Proposed Charter

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Introduction and Group Overview

The generation of **conversational data**, contained in transcripts and multi-media files, is common in business, especially in customer facing organizations. However, the storage, **analysis** and **sharing** of the **data** they contain is not currently a standard. Standardizing a container for conversation data (vCon) has numerous advantages, and enables the **management of all of the conversation's content**. For instance, a standard allows for tools to determine the contents of the conversation, such that **privacy guarantees** and duties **can be accurately performed**. Having a standard container for conversation data also allows for easier management of conversation data, privacy concerns and management of party related data.

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Working Group Goal(s)

The VCON working group will define a standard container for conversation data and specify mechanisms to ensure the integrity and privacy of the data in the container.

(Use Case 1 and Use Case 2 inserted here by reference)

(Any additional use cases would also be added to proposed charter)

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In Scope for vCon Working Group

- Define a JSON based standard container and Media type to contain and/or reference conversational data including: call style meta data, recordings, data exchanged or presented in the conversations, conversation analysis, transcriptions, translations and annotations
- Define/specify a mechanism for proving integrity of the conversation data
- Define/specify a mechanism for encrypting conversation data protect the privacy of conversation parties
- *Determine if there is need for defining media types and standard containers for some small set of analysis, annotation or transcription data*

Out of Scope for vCon Working Group

- Algorithms or methodologies for transcription, translation, redaction, analysis or annotation of call data
- Real-time streaming or updating of conversational data
- Transport mechanisms
- Storage or databases specifications

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Milestones

- Specification for a JSON based container for conversation data
- *Recommendations or analysis of missing (not defined) data containers and media types for components of the conversation data*

Open Discussion - Chairs, 20 minutes

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RFC 5434-Style Questions - Chairs with AD support, 20 minutes

I'm so glad we all agree

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RFC 5434-Style Questions (1 of 2)

- Is the problem well defined, and well understood?
  - Polling for: Yes? No?
  - If not, what would make it well defined, and well understood?

- Does the problem need solving?
  - Polling for: Yes? No?

- Is the IETF the right place to solve it?
  - Yes? No?
  - If not, why not?

RFC 5434-Style Questions

- Is the proposed charter (as amended) close enough to be approved?
    - Polling for: Yes? No?
    - If not, what kinds of changes are still needed?

- Are the proposed deliverables (as amended) close enough to be useful?
    - Polling for: Yes? No?
    - If not, what are your concerns?

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Who Will Do the Work in the Working Group? 😁

- Please indicate if you are willing to review vCon documents
  - Rough count

- Please indicate if you are willing to help write vCon documents
  - Rough count
  - Please confirm your willingness by sending an email to vcon-chairs@ietf.org

- Please indicate if you are willing to help lead the vCon working group
  - Rough count
  - Please confirm your willingness by sending an email to vcon-chairs@ietf.org

Next Steps - AD, 10 minutes

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SAN FRANCISCO California

Thank you for participating in this vConversation!

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Spare slot time - 10 minutes

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