More Instant Messaging Interoperability (MIMI)

Birds-of-a-Feather (BOF)
IETF 115
November 9, 2022
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.
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- 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)
IETF 115 Meeting Tips

In-person participants
● Make sure to sign into the session using the Meetecho (usually the “Meetecho lite” client) from the Datatracker agenda
● Use Meetecho to join the mic queue
● 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
Agenda

Agenda Bash / Administrativia (Chairs) 5 minutes

Problem statement (Rohan Mahy) 20 minutes

Clarifying questions (Chairs) 20 minutes

Charter discussion (Chairs) 50 minutes

BOF questions (Chairs) 15 minutes

Solution space discussion (time permitting)
Drafts submitted

Overview documents:
- More Instant Messaging Interoperability (MIMI) problem outline  
- A Taxonomy for More Messaging Interop (MIMI)  
  https://www.ietf.org/archive/id/draft-rosenberg-mimi-taxonomy-00.html
- Architecture Options for More Messaging Interop (MIMI)  
  https://www.ietf.org/archive/id/draft-rosenberg-mimi-arch-options-00.html

Identity:
- Identity for E2E-Secure Communications  
  https://www.ietf.org/archive/id/draft-barnes-mimi-identity-arch-00.html
- More Instant Messaging Interoperability (MIMI) Identity Concepts  

Introduction problem:
- Simple Protocol for Inviting Numbers (SPIN)  
  https://www.ietf.org/archive/id/draft-rosenberg-mimi-spin-00.html

Message format:
- Message format for More Messaging Interop (MIMI)  
  https://www.ietf.org/archive/id/draft-rosenberg-mimi-msg-format-00.html
- Matrix Message Format  
- More Instant Messaging Interoperability (MIMI) message content  
  https://www.ietf.org/archive/id/draft-mahy-mimi-content-01.html
- Content Type Advertisement for Message Layer Security (MLS)  
  https://www.ietf.org/archive/id/draft-mahy-mls-content-adv-00.html

Message transport:
- Matrix Message Transport  
- Cached and Async meSsage Transport (CAST)  

Delivery service:
- MIMI Delivery Service  
  https://www.ietf.org/archive/id/draft-robert-mimi-delivery-service-00.html
Charter

1. Does anyone think the problem statement is unclear or poorly scoped?
2. Does anyone think the IETF is not an appropriate venue for solving this problem?
3. Does anyone object to forming a working group with the proposed charter, modulo changes discussed today?
BOF Questions

4. Who is willing to:
   Review documents?
   Serve as author or editor of documents?
   Chair the working group?

5. Who is interested in implementing?
Solution discussion
Appendix
- New EU regulation came into force on November 1, 2022.
- DMA places obligations on core platform services (CPS) offered by providers designated as gatekeepers.
- Core platform services include, among other things, “number-independent interpersonal communications services” such as over-the-top voice, video, and messaging.
- If a core platform service provider meets three cumulative requirements, it is presumed to be a gatekeeper:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Quantitative Criteria</th>
<th>Thresholds</th>
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| Provider has a significant impact on the EU internal market | - Annual turnover or market capitalization  
- Number of EU countries | - Annual turnover in the EU $\geq \€7.5B$ (at group level) in each of the last three years, or average market capitalization $\geq \€75B$ in the last year  
- Same CPS provided in $\geq 3$ EU member states |
| Provider provides a CPS which is an important gateway for business users to reach end users | - Number of end users  
- Number of business users | - $> 45M$ monthly active end users in the EU in the last year  
- $> 10K$ yearly active business users in the EU in the last year |
| Provider enjoys an entrenched and durable position | - Number of years meeting important gateway thresholds (in row above) | - Important gateway thresholds were met in each of the last 3 years |

Consult the regulation itself for more details.
DMA interoperability obligations

- DMA Article 7 requires a gatekeeper to “make the basic functionalities of its number-independent interpersonal communications services interoperable with the number-independent interpersonal communications services of another provider offering or intending to offer such services in the [European] Union, by providing the necessary technical interfaces or similar solutions that facilitate interoperability, upon request, and free of charge.”

- Timeline for when a gatekeeper will be required to comply:
  - Following gatekeeper designation (~March 2024)
    - text messaging between two individual end users
    - sharing of images, voice messages, videos and other attached files between two individual end users
  - Within 2 years from gatekeeper designation (~2026)
    - text messaging within groups of individual end users
    - sharing of images, voice messages, videos and other attached files between a group chat and an individual end user
  - Within 4 years from gatekeeper designation (~2028)
    - voice calls between two individual end users
    - video calls between two individual end users
    - voice calls between a group chat and an individual end user
    - video calls between a group chat and an individual end user
DMA Article 7 requires that:

“The level of security, including the end-to-end encryption, where applicable, that the gatekeeper provides to its own end users shall be preserved across the interoperable services.”