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• 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)

Also see: http://www.ietf.org/about/note-well.html
Meeting Notes

• All decision will be confirmed on the mailing list.
• IETF 110 registration and a datatracker login required to attend
• Meeting is being recorded.
• Please use headphones when speaking.
• Remember to state full name when speaking.
• Bluesheets are tracked automatically by Meetecho.
• Microphone queue
  o Enter session queue (audio/video) with 🗣️, leave with 🗣️
  o Wait to be called. Enable audio by unmuting with 🗣️ Go back on mute with 🗣️
• Chairs will present slides.

Resources:

https://www.ietf.org/how/meetings/110/session-participant-guide/
Administrivia

Jabber Room: asap@jabber.ietf.org

Meetecho: https://meetings.conf.meetecho.com/ietf110/?group=asap

Minutes: https://codimd.ietf.org/notes-ietf-110-asap

Minutes taker: Need 1 or 2

Jabber Scribe: Need 1

Presentations: https://datatracker.ietf.org/meeting/ietf110/session/asap

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ASAP WG Agenda

1. Note Well, Note Takers, Agenda Bashing, Draft status - (Chairs, 10 min)

2. Automatic Peering for SIP Trunks (K. Inamdar, S. Narayanan, 40 min)

3. Wrap-up and Next Steps (Chairs, 10 min)
Automatic Peering for SIP Trunks


Kaustubh Inamdar, Sreekanth Narayanan, Cullen Jennings
Agenda

- Purpose of draft
- Story so far
- Open points of discussion
Bringing up service provider facing SIP trunks is a long-drawn, process that could take several hours...sometimes days...

- Administrators usually uncover a number of problems when the trunk is setup.
- Requires a significant amount of interaction between the administrator and service provider to ensure everything works.
- Deployment times significantly increase because of interoperability problems.
How big is the problem?

- A total of 6000 support cases opened with Cisco in 2019 for its Enterprise SBC, CUBE.
- 22% of these cases were directly related to ITSP interoperability.
- Multiply this by the number of enterprise SBC vendors to get a rough estimate of the magnitude of the problem.
- Still a significant number of enterprise networks are yet to migrate from TDM/Analog to SIP trunking...the problem isn’t going away anytime soon...
Purpose of the Draft: High-Level Overview

1. Capability Server
   Discovered or Manually Configured

2. HTTPS GET (Capability Set Request)

3. HTTPS Response (Capability Set)***

4. Parse Capability Set & Configure Trunk

*** Body encoded in XML or JSON
Example Capability Set

```xml
<peering-info xmlns="urn:ietf:params:xml:ns:yang:ietf-peering"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  <variant>1.0</variant>
  <transport-info>
    <transport>TCP;TLS;UDP</transport>
    <registrar>registrar1.voip.example.com:5060</registrar>
    <registrar>registrar2.voip.example.com:5060</registrar>
    <registrarRealm>voip.example.com</registrarRealm>
    <callControl>callServer1.voip.example.com:5060</callControl>
    <callControl>192.168.12.25:5065</callControl>
    <dns>8.8.8.8</dns>
    <dns>208.67.222.222</dns>
    <outboundProxy>0.0.0.0</outboundProxy>
  </transport-info>
  <call-specs>
    <earlyMedia>true</earlyMedia>
    <signalingForking>false</signalingForking>
    <supportedMethods>INVITE;OPTIONS;BYE;CANCEL;ACK;PRACK;SUBSCRIBE;NOTIFY;REGISTER</supportedMethods>
    <numRange>
      <type>range</type>
      <count>20</count>
      <value>19725455000</value>
    </numRange>
  </call-specs>
  <media>
    <mediaTypeAudio>
      <mediaFormat>PCMU;rate=8000;ptime=20</mediaFormat>
      <mediaFormat>G729;rate=8000;annexeB=yes</mediaFormat>
      <mediaFormat>G722;rate=8000;bitrate=56k,64k</mediaFormat>
    </mediaTypeAudio>
    <fax>
      <protocol>pass-through</protocol>
      <protocol>t38</protocol>
    </fax>
  </media>
</peering-info>
```
Story So Far

- Versions 1&2 were published before presenting at IETF 106.
- Consensus at IETF 106 to form a mini-working group.
- Charter for proposed workgroup reviewed in April 2020 and approved in the following months.
- ASAP workgroup formed in August 2020 and now has two co-chairs assigned (Gonzalo Salgueiro and Jean Mahoney)
Version History

• Versions -1 & -2:
  – Initial draft followed by name change and formatting changes

• Version -3:
  – Added certLocation field to the capability set.
  – Field is populated with a URL that provides a single PEM encoded file that contains all certificates in the chain of trust.
Version History (cont’d)

• Version -4:
  – Added the numRange field to the capability set.
  – numRange specifies the Direct Inward Dial (DID) number range allocated to the enterprise network by the SIP service provider.
  – Can be communicated as a list of values or a reference.
Version History (cont’d)

• Version -5:
  – Clarifying HTTP versions supported by this draft (v1.1 and above).
  – Clarifying the scope of work not to include low level details (e.g., IP addressing scheme, access network infrastructure).
  – Added a paragraph to clarify how this workflow operates when intermediary service providers are present between the enterprise and peering service provider.
Open Issues

• Inclusion of provision for discovery of capability set servers in service provider networks (e.g., via WebFinger).
• Are there any other parameters that need to be added to the capability set?
• Are there any modifications/clarifications that need to be carried out/provided?
• Are we good to have this draft adopted by the ASAP working group?
Call for Adoption

Adopt as WG item?

Automatic Peering for SIP Trunks

[[Decision to be confirmed on-list]]
Thank You!