

Network Slicing (netslicing) BoF

IETF-99

Prague

Monday, July 17th, 2017

1.30pm-3.30pm

Chairs:

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Administrivia

- This is a non-WG-Forming BoF
 - More on that in a moment
- Minute Takers: Sue Hares
Kiran Makhijani
Ignas Bagdonas
- Jabber Scribe:
- Blue Sheets
 - Please fill them in and circulate
 - They are now scanned and published online
- State your name clearly and slowly at the mic



Reminders

- Agenda:
 - <https://datatracker.ietf.org/meeting/99/agenda/netslicing>
- Meeting materials, slides, audio streams
 - <http://tools.ietf.org/agenda/99/>
- Minutes Takers (Etherpad):
 - <http://etherpad.tools.ietf.org:9000/p/notes-ietf-99-netslicing>
- Jabber room
 - netslicing@jabber.ietf.org
- Mailing List:
 - <https://www.ietf.org/mailman/listinfo/netslices>



Agenda

1. Administrivia (chairs) [5 : 5/120]
2. Purpose of BoF (chairs/AD) [5 : 10/120]
3. How the IETF would approach this space (and what we won't do) (chairs) [5 : 15/120]
4. 3GPP viewpoint (Georg Mayer) [10 : 25/120]
5. Understanding what different people mean by Network Slicing
Addressing the following questions:
 - What do I mean by network slicing?
 - What are my main use cases?
 - What IETF work is in progress/needed?
 - What non-IETF work is relevant?
 - a) BoF proponents' view of network slicing
 - i. Terms and Systems (Alex Galis) [10 : 35/120]
 - IETF problems to solve / needing work
 - draft-galis-netslices-revised-problem-statement
 - draft-geng-netslices-architecture
 - ii. Requirements and Gap Analysis (Cristina Qiang) [10: 45/120]
 - draft-netslices-usecases
 - draft-qiang-netslices-gap-analysis
 - b) Network virtualization and network slicing (Daniel King) [10 : 55/120]
 - draft-king-teas-applicability-actn-slicing
 - c) Applicability of network slicing to IoT (Jari Arkko) [10 : 65/120]
 - d) Routing and Forwarding in support of Networking Slicing (Stewart Bryant) [10 : 75/120]
 - e) Network slice management and orchestration (Hannu Flinck) [10 : 85/120]
 - draft-flinck-slicing-management
6. Open discussion (chairs) [20 : 105/120]
7. Answering the RFC 5434 questions (chairs) [5 : 110/120]
8. Conclusions and next steps (chairs and ADs) [10 : 120/120]

Purpose of this BoF

- Not aiming to form a Working Group
- Trying to gather information, to educate, and to focus discussion
- Four main questions
 - What do we mean by “*network slicing*”?
 - What are the main use cases?
 - What IETF work is in progress/needed?
 - What non-IETF work is relevant?
- Draw no conclusions from this being in the OPS area



How the IETF Would Approach This Space

- The IETF works on the Internet and its protocols
- The IETF works best with focused working groups
 - Clearly defined problems
 - Achievable deliverables
 - Don't look for a WG that spans Areas and has a wide scope
- The IETF is not a research organization
 - We want tractable problems
 - For imminent implementation and deployment
- The IETF is not good at “all-embracing” architectures
 - We are best at on-the-wire protocols
 - Internal APIs are out of scope
 - Not a good history with external APIs
 - Although... YANG models



How To Conduct Yourself in this BoF

- Be civil (please)
- Listen carefully
 - Someone may use the same terminology as you, but with different meanings
 - You are both right!
- Stick to your time limit
 - We will 'gong' you out!
- Save all questions for the discussion
 - Except maybe questions for clarification



Questions to Have in Mind During the BoF

We will return to these questions at the end

- What is “*network slicing*”?
 - Do we have a common view?
 - Can we identify distinct views?
 - Is the definition clear?
- What are the main use cases?
 - Do we have a core set of use cases:
 - For the Internet
 - That a body of people want solved
- What IETF work is in progress?
 - Does it need encouragement or modification?
- What other IETF work is needed?
- Is there non-IETF work that we can utilize?
 - Should proponents divert their efforts outside of the IETF?



RFC 5434(ish)

Questions We Need to Answer

We will also return to these questions

- Is there a problem that needs solving?
 - Is the IETF the right group to attempt solving it?
- Is there a critical mass of participants willing to work on the problem (e.g., write drafts, review drafts, etc.)?
- Is the scope of the problem well defined and understood. That is, do people generally understand what could be worked on (and what not!)
 - Is it clear what the deliverables would be?
- Is there a reasonable probability of success tackling this problem and producing these deliverables?