NMRG Virtual Meeting
25 April 2019

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IRTF follows IETF policy ("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.

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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)

Virtual Meeting Etiquette

If you want to comment: type 'RH' (raise hand) in the Webex chat window

Respect the line i.e. speak when it's your turn

Stay to the point, be concise and precise

Agenda

Minutes taker(s)
https://etherpad.tools.ietf.org/p/nmrg-virtual-20190425

1. ~05 min. – Introduction

2. ~45 min. – Status progress on Intent Based Networking topic
   – status, discussion, next steps, work plan update

3. ~xx min. – Other items/TBD

4. ~10 min. – Status of the WG, next meetings, etc.

Intent Based Networking

- Intent Classification draft-li-nmrg- intent-classification-00 (updated)
  - Review and comments please!
- Clarifying the Concepts of Intent and Policy draft-clemm-nmrg-dist-intent-01
  - Comments received from Juergen S., Brian C. – more are welcome.
  - new version soon
- Levels of abstraction for network service specification, Walter Cerroni
  - Short presentation and discussion
- Towards a reference architecture for intent based networks, Marinos Charalambides
  - Short presentation and discussion

- ANIMA Intent Policy and Format draft-du-anima-an-intent-05 (expired)
- Intent Distribution for Autonomic Networking draft-liu-anima-intent-distribution-00 (expired)
- Concepts of Network Intent draft-moulchan-nmrg-network-intent-concepts-00 (expired)

IBN topic - current work plan
as agreed at IETF100/Singapore

- **How to call stuff**
  - document(s) on terminology/taxonomy

- **How to express/model intent**
  - information model, grammar, languages

- **How to realize Intent Based Systems**
  - "reference" functional architecture, functional blocks/components, mechanisms/techniques, theory of operations/lifecycle

- **Additional work items could also investigate**
  - functions and techniques ; use cases ; what are the challenges and corresponding research items

IBN topic - work plan update

- **Extend/Update with:**
  - Problem statement, scope, design challenges and goals
  - Concepts definition
  - Intent at design and run time, impact of CI/CD(?)
  - Interoperability
  - Continuous measure/validation of intent realization
  - Evaluation, validation, implementation

- **Are we missing some aspects of IBN?**
- What output will have most value/relevance?
- Collaboration with other communities for mutual benefits?
  - e.g. dedicated track in conference, workshop, special issue, joint meetings, papers, demos…
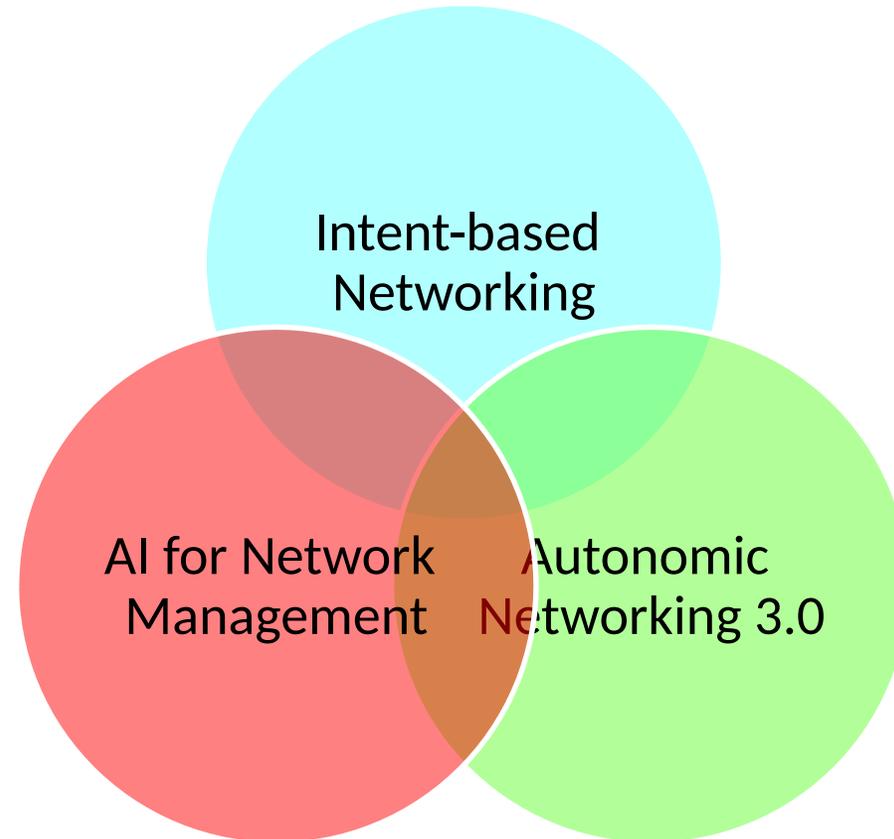 - e.g. IETF, ETSI, ONF, MEF, research communities, open source…

IBN topic - work plan update

- **Collective outcome**
  - What we should produce
    - Content ⊟ Problem statements, research proposals, experimental validation
    - Form ⊟ Internet Draft is not the only/ultimate format and form of output
    - Time ⊟ refine/update work plan, RG milestones

- **Deliverables, Milestones, Criteria for RG adoption**

- **Progressing the work (RG support)**
  - Regular, dedicated virtual meetings (1 or 2 per month?)
  - In-person interim meetings: June ; July-IETF105 ; October
  - Hackathon…?
  - Mailing list, other tools needed?

2019 meetings plan

- April, IEEE IM 2019, Washington
  - 2 sessions, Tuesday, 08 April 2019
  - Outreach to IEEE/IFIP NM communities

- June, NMRG Workshop, Silicon Valley, USA (under preparation)
  - Exact date/time TBC: 13-14 June 2019 or 24-25 June

- July, IETF 105, Montreal
  - Regular session(s)
  - Interim TBC

- October, NMRG Workshop, Bologna, (under preparation)

- November, IETF 106, Singapore

- Monthly virtual meetings + topic-specific ones as per need

Research agenda

Intent-based Networking

AI for Network Management

Autonomic Networking 3.0

More details in
https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=8334913 (page 15)

RG information

- New co-chair
  - Meeting with new IRTF chair earlier today...

- Two RG secretaries appointed
  - Jéferson Campos Nobre and Pedro Martinez Julia
    Thank you and good luck!

- Series of actions Jéferson and Pedro for wiki updates, knowledge hubs/repositories, social media...

ANRW 2019

- https://irtf.org/anrw/2019/
- Call for Papers
  - [...] New approaches to network management, operations, and control
  - **Submit your ideas!**
  - Deadline: May 10, 2019

Any other business?

- …