67th NMRG Meeting
IETF 115, Hybrid

Chairs: Laurent Ciavaglia, Jérôme François
Secretaries: Jéferson Campos Nobre, Pedro Martinez-Julia
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• See RFC 7154 (Code of Conduct) and RFC 7776 (Anti-Harassment Procedures), which also apply to IRTF.
The IRTF conducts research; it is not a standards development organization

The Internet Research Task Force (IRTF) focuses on longer term research issues related to the Internet while the parallel organization, the IETF, focuses on shorter term issues of engineering and standards making

While the IRTF can publish informational or experimental documents in the RFC series, its primary goal is to promote development of research collaboration and teamwork in exploring research issues related to Internet protocols, applications, architecture, and technology

See “An IRTF Primer for IETF Participants” – RFC 7418
Meeting useful links

• Materials: https://datatracker.ietf.org/meeting/115/session/nmrg
• Meetecho: https://meetings.conf.meetecho.com/ietf115/?group=nmrg
• Notes: https://notes.ietf.org/notes-ietf-115-nmrg
• Video recording: https://www.youtube.com/user/ietf/playlists (available post-meeting)
Status of RG documents (1)

- Two RFCs published on Intent Based Networking (IBN), October 2022
  - RFC 9315 - Intent-Based Networking - Concepts and Definitions
    https://www.rfc-editor.org/info/rfc9315
  - RFC 9316 - Intent Classification
    https://www.rfc-editor.org/info/rfc9316

- Active RG document
  - Digital Twin Network: Concepts and Reference Architecture
Status of RG documents (2)

- **Upcoming call for adoption**
  - Network measurement intent
  - IETF Network Slice Intent
  - Interconnection Intents

- As one or multiple use case document(s)

- Research Challenges in Artificial Intelligence for Network Management
Research agenda

• Updates to NMRG research agenda
  • Concluding IBN items
  • Topic: AI for Network Management
  • Topic: Network Digital Twin
  • Topic: Green Networking

Cf. https://datatracker.ietf.org/group/nmrg/about/ for current agenda and milestones
Agenda

• Introduction and RG status, RG Chairs, 05 min

• Intent Based Networking
  • IETF Network Slice Intent, Luis Contreras, 10 min.  
  • Interconnection Intents, Luis Contreras, 10 min.  
    https://datatracker.ietf.org/doc/draft-contreras-nmrg-interconnection-intents
  • Network measurement intent, Danyang Chen, 10 min. 
    https://datatracker.ietf.org/doc/draft-yang-nmrg-network-measurement-intent

• Artificial Intelligence for Network Management
  • Research Challenges in Artificial Intelligence for Network Management, Jérôme François, 10 min.  
  • Considerations of deploying AI services in a distributed approach, Yong-Geun Hong, 10 min.  

• Network Digital Twin
  • Performance-Oriented Digital Twins for Packet and Optical Networks, Chris Janz, 10 min.  
  • Requirements for Interfaces of Network Digital Twin, Danyang Chen, 10 min.   

• Miscellaneous
  • Challenges and Opportunities in Green Networking, Alex Clemm, 15 min.  
    https://datatracker.ietf.org/doc/draft-cx-green-ps
  • Modelling Boundaries, Nigel Davis, 15 min.  