

# **IETF 122, Bangkok + Online NMRG 81st meeting**

Chairs: Laurent Ciavaglia, Jérôme François  
Secretaries: Jéferson Campos Nobre, Pedro Martinez-Julia



# Note Well – Intellectual Property

- **The IRTF follows the IETF Intellectual Property Rights (IPR) disclosure rules**
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  - Definitive information is in RFC 5378 (Copyright) and RFC 8179 (Patents, Participation), substituting IRTF for IETF, and at <https://irtf.org/policies/ipr>

# Note Well – Audio and Video Recordings

- The IRTF routinely makes recordings of online and in-person meetings, including audio, video and photographs, and publishes those recordings online
- If you participate in person and choose not to wear a red “do-not-photograph” lanyard, then you consent to appear in such recordings, and if you speak at a microphone, appear on a panel, or carry out an official duty as a member of IRTF leadership then you consent to appearing in recordings of you at that time
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# Note Well – Privacy & Code of Conduct

- As a participant in, or attendee to, any IRTF activity you acknowledge that written, audio, video, and photographic records of meetings may be made public
- Personal information that you provide to IRTF will be handled in accordance with the Privacy Policy at <https://www.ietf.org/privacy-policy/>
- 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
- See [RFC 7154](#) (Code of Conduct) and [RFC 7776](#) (Anti-Harassment Procedures), which also apply to IRTF

# Goals of the 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/122/session/nmrg>
- Meetecho:  
<https://meetings.conf.meetecho.com/ietf122/?session=33989>
- Notes: <https://notes.ietf.org/notes-ietf-122-nmrg>
- Video recording: <https://www.youtube.com/user/ietf/playlists>
  - Available post-meeting

# Agenda

- Introduction, document status, RG activities and news, RG Chairs, 15 min
- Network Digital Twin: Concepts and Reference Architecture, draft-irtf-nmrg-network-digital-twin-arch, Cheng Zhou 10 min + 5 min Q&A
- NDT – Practical Considerations and Examples, Marco Liebsch, 10 + 5 min Q&A
- Artificial Intelligence (AI) for Network Operations, draft-king-rokui-ainetops-usecases, Reza Rokui, 15min + 5 min Q&A
- Large Model based Agents for Network Operation and Maintenance, draft-chuyi-nmrg-ai-agent-network-00, Chuyi, 10 min + 5 min Q&A
- A Framework for LLM-Assisted Network Management with Human-in-the-Loop, draft-cui-nmrg-llm-nm, Mingzhe Xing, 10min + 5 min Q&A
- Open discussions on GenAI in Network Management:
  - Should we develop this topic within NMRG?
  - How to develop this as a group (i.e. beyond individual contributions)?
  - How to sync with other activities, RGs/WGs?

# Documents

- **In IESG review**

Challenges and Opportunities in Management for Green Networking, draft-irtf-nmrg-green-ps: : revised version addressing IESG conflict's review

- **Going to IRSG review**

Research Challenges in Coupling Artificial Intelligence and Network Management, draft-irtf-nmrg-ai-challenges: revised version addressing IRSG chair's comments

- **Going to IRSG review**

Network Digital Twin: Concepts and Reference Architecture, draft-irtf-nmrg-network-digital-twin-arch: revised version addressing comments received during last call (good positive support)

- **Adopted RG documents**

- Considerations of network/system for AI services, draft-hong-nmrg-ai-deploy: revision made (follow-up on mailing list and next meeting)
- Use Cases and Practices for Intent-Based Networking, draft-kdj-nmrg-ibn-use-cases: Good consolidation of use cases, call for adoption after IETF 121: positive support (15 + authors) + detailed comments



# General News

- **Research Agenda**

Finalized and pushed to datatracker for update: Accessible at [https://notes.inria.fr/1AVPWFd5Tga6o\\_kXbFawYA?view](https://notes.inria.fr/1AVPWFd5Tga6o_kXbFawYA?view)

- **Laurent stepping down as NMRG co-chair after IETF 122**

# Open Discussion on GenAI & Network Management

- Should we develop this topic within NMRG?
- How to develop this as a group (i.e. beyond individual contributions)?
- How to sync with other activities, RGs/WGs?