



# Computing-Aware Traffic Steering (cats)

## IETF 121, Dublin

Chairs: Adrian Farrel ([adrian@olddog.co.uk](mailto:adrian@olddog.co.uk))

Mohamed Boucadair ([mohamed.boucadair@orange.com](mailto:mohamed.boucadair@orange.com))

Peng Liu ([liupengyjy@chinamobile.com](mailto:liupengyjy@chinamobile.com))

Secretary: Cheng Li ([c.l@huawei.com](mailto:c.l@huawei.com))

AD: Jim Guichard ([james.n.guichard@futurewei.com](mailto:james.n.guichard@futurewei.com))



6<sup>th</sup> Meeting of CATS WG

**THIS MEETING WILL BE RECORDED**

# IETF 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.

As a reminder:

- By participating in the IETF, you agree to follow IETF processes and policies.
- If you are aware that any IETF contribution is covered by patents or patent applications that are owned or controlled by you or your sponsor, you must disclose that fact, or not participate in the discussion.
- As a participant in or attendee to any IETF activity you acknowledge that written, audio, video, and photographic records of meetings may be made public.
- Personal information that you provide to IETF will be handled in accordance with the IETF Privacy Statement.
- 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.

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)

Also see: <http://www.ietf.org/about/note-well.html>

# IETF Conduct Guidelines

- The IESG has asked all chairs to remind their working groups of the need for appropriate behavior. This is described in more detail in BCP 54. In summary:
  1. IETF participants extend respect and courtesy to their colleagues at all times.
  2. IETF participants have impersonal discussions.
  3. IETF participants devise solutions for the global Internet that meet the needs of diverse technical and operational environments.
  4. Individuals are prepared to contribute to the ongoing work of the group.

# Meeting Administrivia

- We have three chairs as a short-term measure until NomCom have made their choices
- Meetecho:
  - We are using Meetecho queue control
  - Chat available for use via Meetecho/Zulip
- Note taking:
  - <https://notes.ietf.org/notes-ietf-121-cats>
  - Cheng Li will take minutes, but...
    - Please help with minute taking
    - Please check that your comments are recorded correctly
- Session Materials: <https://datatracker.ietf.org/meeting/121/session/cats>
- Data tracker: <http://datatracker.ietf.org/wg/cats/>
- Zulip: <https://zulip.ietf.org/#narrow/stream/cats>



# Meeting Tips



## In-person participants

- Make sure to sign into the session using the Meetecho (usually the “onsite tool” client) from the agenda
  - <https://meetings.conf.meetecho.com/onsite121/?group=cats&short=&item=1>
- Use Meetecho to join the mic queue
- ***Keep audio and video off at all times***

## Remote participants

- Use of a headset is strongly recommended
- ***Make sure your audio and video are off*** until it is your turn to speak

# Deliverables & Milestones

- All drafts are welcome
  - Post them in the Datatracker
  - Discuss them on the list
- Solutions drafts in other working groups
  - All protocol work is fine if it has use cases and motivation
- Our focus must be on our deliverables and milestones
- Milestones are very clear...

Date	Milestone	Status
Jul 2023	Adopt the CATS Problem Statement, Use Cases, Gap Analysis, and Requirements documents	Done
Jul 2024	Adopt the CATS Framework and Architecture document	Done
Mar 2025	Adopt document describing CATS metrics (NEW)	
Nov 2025	Submit the CATS Framework and Architecture document to the IESG for publication as Informational	
Mar 2026	Submit document describing CATS metrics to the IESG for publication as Informational (NEW)	

# Meeting Goals

- **Consolidate** the Use Cases: Decide whether a set of individual use cases are:
  - overlapping with the ones already included in the CATS adopted document,
  - worth to be covered in the CATS documents, or
  - to be abandoned
- **Clarify** how the requirements are derived from the various use cases
- Agree on **a plan for the metrics** item

# Agenda

Slot	Topic	Presenters
5 min	Agenda Bashing & Introduction	Chairs
45 min	CATS Use Cases & Requirements	Kehan/Jaehoon/Luis/Tianji
15 min	CATS Framework	Cheng
45 min	CATS Metrics Discussion	Kehan/Jordi
10 min	Flash Teasers	Cuicui/Meiling/Daniel/Cheng



# Flash Teasers

- *Quick* introduction to some individual I-Ds
- Presenters to *justify* how their document *fits the WG charter*
- Items that are not covered by the charter *won't be granted slots* in future meetings

# Detailed Agenda

Slot	Start	Duration	Information	Presenter
1	13:00	5 mins	<b>Title:</b> Meeting admin	Chairs
2	13:05	45 mins	<b>Title:</b> CATS Use Cases and Requirements	
2.1	13:05	10 mins	<b>Title:</b> Status update <b>Draft:</b> <a href="#">draft-ietf-cats-usecases-requirements</a>	Kehan Yao
2.2	13:15	15 mins	<b>Title:</b> Clarify the requirements and how these are derived/applicable to the various Use Cases <b>Draft:</b> <a href="#">draft-ietf-cats-usecases-requirements</a>	Kehan Yao
2.3	13:30	20 mins	<b>Title:</b> Discussion about how use cases in I-Ds are overlapping with existing UCs/have to be captured <b>Draft:</b> <a href="#">draft-jeong-cats-its-use-cases</a> 5mins <b>Draft:</b> <a href="#">draft-jiang-cats-usecase-5gedge</a> 5mins <b>Draft:</b> <a href="#">draft-lcmw-cats-midhaul</a> 5mins Discussion 5mins	Jaehoon Jeong Tianji Jiang Luis M.Contreras All
3	13:50	15 mins	<b>Title:</b> CATS Framework <b>Draft:</b> <a href="#">draft-ietf-cats-framework</a>	Cheng Li
4	14:05	45 mins	<b>Title:</b> CATS Metrics Discussion	
4.1	14:05	15 mins	<b>Title:</b> CATS Metric Description and Definition <b>Drafts:</b> <a href="#">draft-ysl-cats-metric-definition</a>	Kehan Yao
4.2	14:20	10 mins	<b>Title:</b> Joint Exposure of Network and Compute Information for Infrastructure-Aware Service Deployment <b>Draft:</b> <a href="#">draft-rcr-opsawg-operational-compute-metrics</a>	Jordi Ros Giralt
4.3	14:30	20mins	Plan for the WG	Chairs & All

# Agenda 2 of 2

Slot	Start	Duration	Information	Presenter
5	14:50	10 mins	Flash Teasers (1-slide)	
5.1		2 mins	<b>Title:</b> Security Considerations for Computing-Aware Traffic Steering <b>Draft:</b> <a href="#">draft-wang-cats-security-considerations</a>	Yu Fu
5.2		2 mins	<b>Title:</b> A mechanism of security monitoring and management for service resources in Computing-Aware Traffic Steering (CATS) <b>Draft:</b> <a href="#">draft-lu-cats-smam-security</a>	Meiling Chen
5.3		2 mins	<b>Title:</b> Microloop Prevention in a Hierarchical Segment Routing Solution for CATS <b>Draft:</b> <a href="#">draft-yuan-cats-hierarchical-loop-prevention</a>	Daniel Huang
5.4		2 mins	<b>Title:</b> Analysis for Multiple Data Plane Solutions of Computing-Aware Traffic Steering <b>Draft:</b> <a href="#">draft-fu-cats-muti-dp-solution</a>	Daniel Huang
5.5		2 mins	<b>Title:</b> Flow-Level Load Balancing of Computing-Aware Traffic Steering (CATS) <b>Draft:</b> <a href="#">draft-fu-cats-flow-lb</a>	Daniel Huang
5.6		2 mins	<b>Title:</b> CATS BGP Extension <b>Draft:</b> <a href="#">draft-ll-idr-cats-bgp-extension</a>	Cheng Li
6		/	Title: Open Discussion and Next Steps	Chairs and All