

Network Attestation for Secure Routing (NASR)

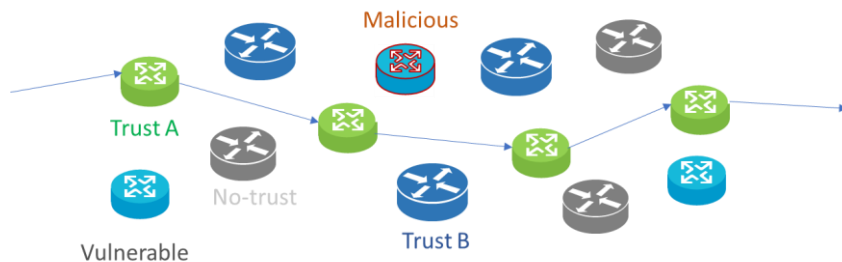
**IETF 119
16–17 March 2024
Brisbane, Australia**



Problem

Traditional routing security and encryption does not suffice anymore!

- **Problem:** Traditional routing security and encryption does not guarantee predictability and auditability of forwarding behaviors.



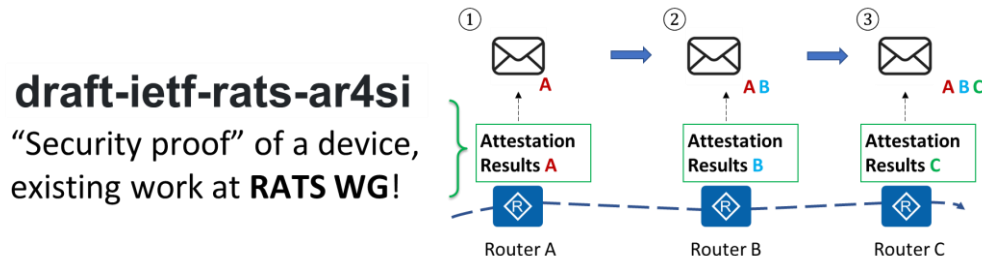
- **Motivation:** Clients want their sensitive data to forward only on trusted devices, with no data leakage or deviation from this path.

How to solve?

Reuse IETF work, build on solid IETF grounds, no disruption!

1. Attest to a path that consists only of trusted devices, trusted operation environments and trusted services

- A dedicated packet collects all devices' "security proofs" along the path, produce a path-level security proof!



2. Verify the actual forwarding complies to the above attestation


- Proof of Transit! (In-band or out-of-band)

What got done

- **NASR Initiative**— we seek WG formation and BoF
- **NASR Mailing List:** <https://www.ietf.org/mailman/listinfo/nasr>
- **NASR Documents:**
 - draft-richardson-nasr-terminology-00
 - draft-liu-nasr-requirements-01
 - draft-liu-path-validation-problem-statement-00
- **NASR Side Meeting** – Wednesday 6:30PM-8:00PM
- **New code:** <https://github.com/liuchunchi/vcpot-demo>

Seek collaboration for a new WG

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Join **NASR side meeting** at
Wednesday 6:30PM-8PM!
Room P6-7

Collaboration:

- Chartering and architecture
- Design team
- BoF co-proponents

Plans:

- **IETF 119:** NASR Side Meeting
- **IETF 120:** Non-WG Forming BoF
- **IETF 121:** WG Forming BoF
 - Interims, design team meetings in between.
- Side meeting agenda and materials:
 - https://github.com/liuchunchi/nasr_side_meeting
- Side Meeting Wiki Page:
 - <https://wiki.ietf.org/meeting/119/sidemeetings>
- NASR Mailing List:
 - <https://www.ietf.org/mailman/listinfo/nasr>