Remote Attestation with Multiple Verifiers

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Project info

Project Info

Design iterations on motivation, use cases, architectural design, message flow, related to remote attestation with multiple Verifiers.

Relevant Drafts

- Internet-Draft:https://datatracker.ietf.org/doc/draft-deshpande-rats-multi-verifier/02/

Relevant Side Meeting!

- Remote Attestation Challenges in Complex Scenarios, https://trello.com/c/LZrP2xQa/42-1600-1700-remote-attestation-challenges-in-complex-scenarios

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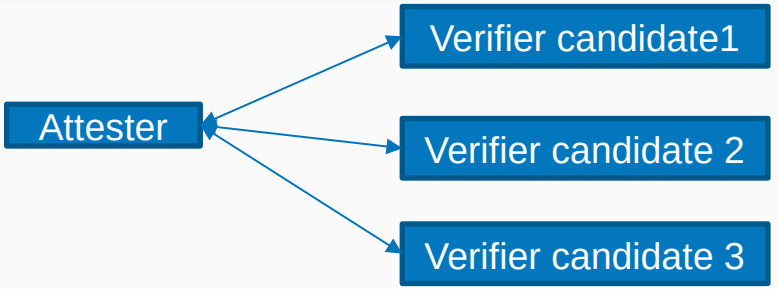
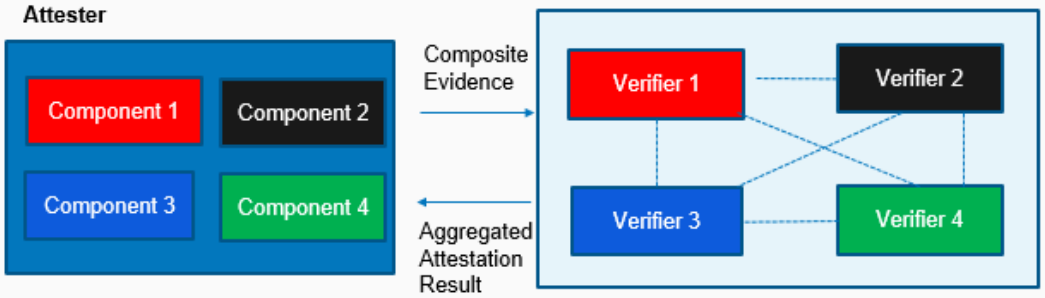
Hackathon Discussions

- **RATS Architecture with ONE Verifier**





The deployment of Real-World Verifier (Attestation Service) is becoming from ONE To Multi: **because**

1) Composite Attester: each sub-Attester has its own Verifier
2) Verifiers have to meet the trust and capability requirements of all sub-Attesters
3) Regulation requirements: Verifiers in different physical locations or domains

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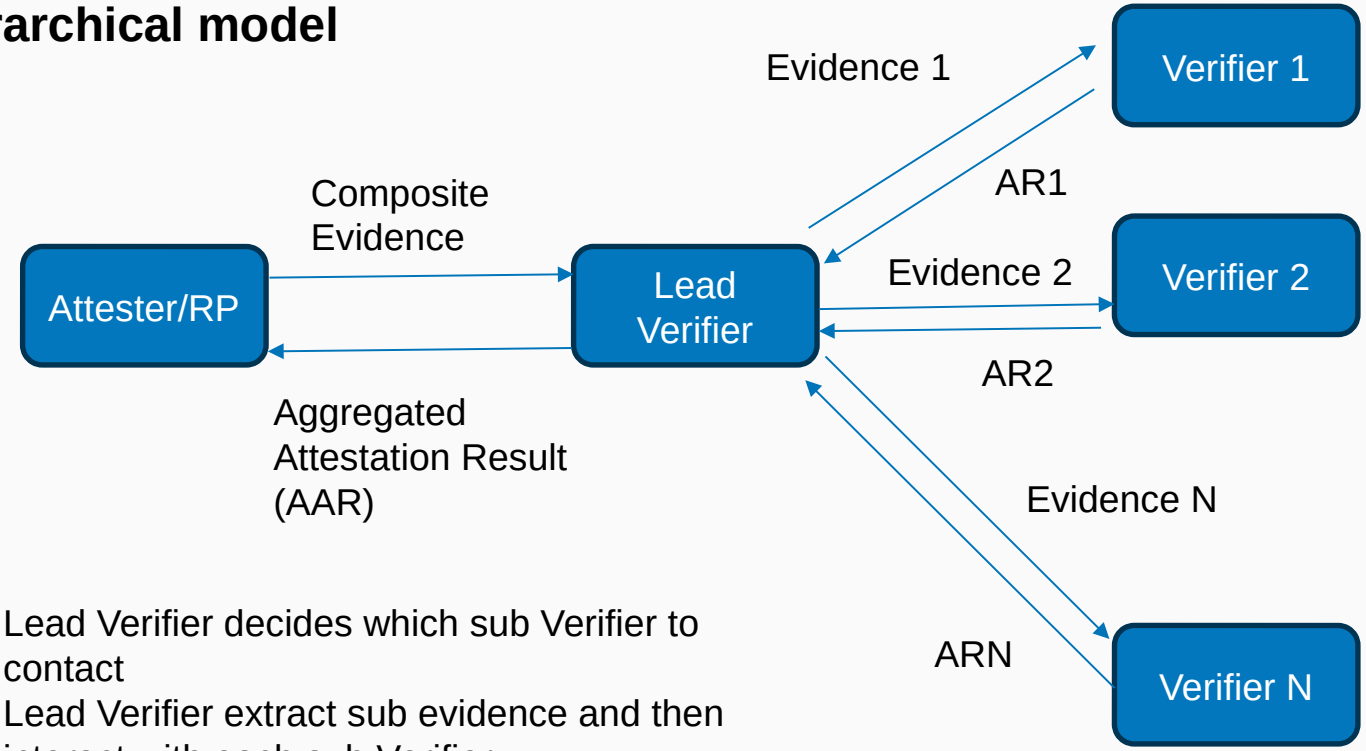
THANK YOU

Communication between the Attester with Verifiers

Hierarchical model



- Lead Verifier decides which sub Verifier to contact
- Lead Verifier extract sub evidence and then interact with each sub Verifier
- Each Sub-/Component Verifier (1-n) is not able to know the composition of the Attester

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Please join us for more discussion

- Draft:
  draft-deshpande-rats-multi-verifier-02 - Remote Attestation with Multiple Verifiers
- Github: ietf-rats/draft-deshpande-multi-verifier
- Side meeting: Remote Attestation Challenges in Complex Scenarios (Room: Segovia, Day/Time: 2025-07-22 (Tuesday) 16:00-17:00,
  16:00-17:00: Remote Attestation Challenges in Complex Scenarios on IETF 123 Side Meeting Scheduling | Trello
)
- RATS WG session 2 (Room: Patio 2, Day/Time: 2025-07-25 12:30-14:30 Remote Attestation with Multiple Verifiers, Agenda IETF123: rats,
  draft-deshpande-rats-multi-verifier-02 - Remote Attestation with Multiple Verifiers)
- Topics: Use cases, architectural design, security and privacy considerations,