Morning everyone, I am deeply honored to be part of this conference. Today, I am going to share with you our work—DRoT, a decentralized root of trust for trusted networks. I will have a Q&A session at the end of my speech, so if you have any questions, please hold them until then, thank you.

For many years, trusted computing research has focused on the trustworthiness of single computer platforms. To check on the trustworthiness of a network, we need a network attestation mechanism. The basis of attestation is a root of trust, so one of the next challenges, the most important one, is to create a root of trust for network attestation.

To solve this problem, we've proposed a network root of trust that manages measurement and storage.

A key feature of our design is the use of a distributed ledger. This ensures the system is resistant to tampering, thus establishing a decentralized root of trust, or DRoT, for the network.

It's important to note that our work does not implement a reporting function, but future improvements could include adding assessment results and anomaly detection reports to the ledger.

To conclude, we have developed a DRoT for networks, using a distributed ledger for tamper-proof storage of attestation evidence. The implementation of our design using docker containers is a testament to its viability and potential in advancing network security.

That's all for my speech. I am now open to any questions you may have. Thank you.

Answer:

Decentralization aims to build a system or network free from central control. This enhances independence, resistance to censorship, and fairness. It makes systems stronger, protects user privacy and security, and supports social and economic inclusion.