Securing distributed systems: A survey on access control techniques for cloud, blockchain, IoT and SDN

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Introduction

- Distributed systems revolutionize data storage and processing.
- Security is essential for cloud computing, blockchain, IoT, and SDN.

Objectives

- Survey and Summarize various access control techniques.
- Implement the techniques to secure these distributed systems.
- Understand the methods we can employ to protect cloud computing, blockchain, IoT devices, and SDN networks.

Access Control Techniques for Cloud Computing

- Role-Based Access Control (RBAC)
- Attribute-Based Access Control (ABAC)
- Multi-Factor Authentication (MFA)

Access Control Techniques for Blockchain

- Permissioned Blockchain
- Smart Contract Auditing

Access Control Techniques for IoT

- Device Authentication
- Secure Enclaves
- Access Control Lists (ACLs)

Access Control Techniques for SDN

- Network Segmentation
- Virtual Private Networks (VPNs)
- FlowVisor

Conclusion

- Importance of securing distributed systems.
- Key access control techniques for different systems

The End

• Thank You for your time.