

10th International Conference "Distributed Computing and Grid Technologies in Science and Education" (GRID'2023)



Contribution ID: 317

Type: **not specified**

Combining PBFT and Raft for Scalable and Fault-tolerant Distributed Consensus

Thursday, 6 July 2023 16:45 (15 minutes)

Distributed systems require an efficient and reliable consensus mechanism to reach agreement between nodes. In recent years, two popular consensus algorithms, Practical Byzantine Fault Tolerance (PBFT) and Raft, have gained wide acceptance in the community due to their advantages. PBFT provides high speed and fault tolerance, while Raft is simple and easy to understand. However, each of them has its limitations, especially when working with scalable systems. This paper proposes a combined approach that combines the advantages of PBFT and Raft to achieve a scalable and fault-tolerant distributed consensus. The proposed method uses PBFT as the bottom layer, providing high speed and fault tolerance in scalable scenarios. Raft is used as the top layer, providing simplicity and reliability in configuration management and leader selection.

Summary

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Session Classification: Distributed Computing Systems

Track Classification: Distributed Computing Systems