分布式算法讲义

黄 宇

2020年3月20日

目录

第一章 计算模型 2

第一章 计算模型

素材

YCSB [4, 1]

计算模型的基础是抽象。首先介绍各种抽象。然后介绍由各种不同抽象,组合而来的各种模型 [2]。

process groups, group membership。 virtual synchrony。 [3] (第六章)

Process groups are a powerful tool for the developer. They can have names, much like files, and this allows them to be treated like topics in a publish-subscribe system.

One thinks of a process group as a kind of object (abstract data type), and the processes that join the group as importing a replica of that object. Virtual synchrony standardizes the handling of group membership: the system tracks group members, and informs members each time the membership changes, an event called a view change.

参考文献

- [1] https://github.com/brianfrankcooper/YCSB.
- [2] CACHIN, C., GUERRAOUI, R., AND RODRIGUES, L. Introduction to Reliable and Secure Distributed Programming, 2nd ed. Springer Publishing Company, Incorporated, 2011.
- [3] CHARRON-BOST, B., PEDONE, F., AND SCHIPER, A., Eds. Replication: Theory and Practice. Springer-Verlag, Berlin, Heidelberg, 2010.
- [4] COOPER, B. F., SILBERSTEIN, A., TAM, E., RAMAKRISHNAN, R., AND SEARS, R. Benchmarking cloud serving systems with yesb. In *Proceedings of the 1st ACM Symposium on Cloud Computing* (New York, NY, USA, 2010), SoCC '10, ACM, pp. 143–154.