分布式算法讲义

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素材

YCSB [5, 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 [3]。

process groups，group membership。

virtual synchrony。

[4] (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.

[2]

多数据中心平台，从硬件设施，到软件基础设施(infrastructure)的介绍。

参考文献

[1] `https://github.com/brianfrankcooper/YCSB`.

[2] Barroso, L. A., Holzle, U., Ranganathan, P., and Martonosi, M. *The Datacenter As a Computer: Designing Warehouse-Scale Machines*, 3rd ed. Morgan & Claypool Publishers, 2018.

[3] Cachin, C., Guerraoui, R., and Rodrigues, L. *Introduction to Reliable and Secure Distributed Programming*, 2nd ed. Springer Publishing Company, Incorporated, 2011.

[4] Charron-Bost, B., Pedone, F., and Schiper, A., Eds. *Replication: Theory and Practice*. Springer-Verlag, Berlin, Heidelberg, 2010.

[5] Cooper, B. F., Silberstein, A., Tam, E., Ramakrishnan, R., and Sears, R. Benchmarking cloud serving systems with ycsb. In *Proceedings of the 1st ACM Symposium on Cloud Computing* (New York, NY, USA, 2010), SoCC '10, ACM, pp. 143–154.