

had approved the final version.

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References

- [1] Pang, H., & Zhai, Z. L. (2011). On distributed database. *Database and Information Management*, 2, 271–273
- [2] Aghazadeh, S., & Leach, J. (2017). Evaluating cache memory performance: A case study on redis and memcached. *International Journal of Advanced Computer Science and Applications*, 23–28.
- [3] Katsov, V. (2017). NoSQL data cache in ruby with redis. *Proceedings of the International Conference on Data Science, Technology and Applications (DATA)*
- [4] Chhokra, D., & Sravani, G. (2018). Distributed caching techniques in cloud computing: A survey. *Proceedings of the 2018 International Conference on Smart City and Emerging Technology*.
- [5] Liu, W., et al. (2019). A distributed cache consistency maintenance mechanism based on redis cluster. *Journal of Computer and Communications*, 61.
- [6] Pająk, M., et al. (2019). Optimizing live migration of KVM virtual machines between data centers by compression and caching in Memcached. *Future Generation Computer Systems*, 101, 555–568.
- [7] Panchenko, I., et al. (2017). Prediction of load on virtual machines based on counts of queries to Redis database. *Proceedings of the 2017 20th Conference of Open Innovations Association (FRUCT)*.
- [8] Gharaibeh, N. M., & Al-Naami, B. M. (2016). Caching policies for shared caches: New algorithms improving memcached performance. *Jordanian Journal of Computers and Information Technology (JJCIT)*, 2(2), 1995–6665.
- [9] Li, G., et al. (2017). A distributed caching strategy based on topology in Memcached cluster. *Proceedings of the GLOBECOM 2017-2017 IEEE Global Communications Conference*.
- [10] Yoon, D. H., et al. (2018). Efficient index caching in memcached. *Proceedings of the 2018 IEEE 34th International Conference on IEEE*.

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