

Fawnlog : A Shared Log on FAWN

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Abstract

The first step, key range splitting, occurs as described for[2] FAWN-DS[1]. While this operation can occur concurrently with the rest (the split and data transmission can overlap), for clarity, we describe the rest of this process as if the split had already taken place.

After the key ranges have been split appropriately, the node must become a working member of R chains. For each of these chains, the node must receive a consistent copy of the datastore file corresponding to the key range. The process below does so with minimal locking and ensures that if the node fails during the data copy operation, the existing replicas

1 Introduction

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2 Design and Implementation

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3 Evaluation

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4 Conclusion

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References

- [1] D. G. Andersen, J. Franklin, M. Kaminsky, A. Phanishayee, L. Tan, and V. Vasudevan. FAWN: A fast array of wimpy nodes. In *Proc. 22nd ACM Symposium on Operating Systems Principles (SOSP)*, Big Sky, MT, Oct. 2009.
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