Tracer: Monitoring Fine Grained Memory Access

Ravi Tandon, Jonathan Balkind, Nevin Li

Abstract

We present the design and implementation of a *Tracer* (memory tracer) for tracing fine grained memory accesses by applications. *Tracer* is a tool which monitors object level access patterns of applications with negligible intrusion into the application code. Memory intensive applications such as *memcache*, *web server accelerators*, *etc.* require large amounts of memory. However, such applications have highly skewed memory access footprint. The design philosophy of *Tracer* is to assist such applications in identifying *entities* (such as C level *structures*) which get heavily accessed. This work presents an experimental study of *Tracer*.

1 Introduction

Example of incorporation citations [1].

- 2 Design
- 3 Evaluation
- 4 Related Work
- 5 Conclusions

References

[1] M. J. Freedman, E. Freudenthal, and D. Mazières. Democratizing content publication with Coral. In *Proc. 1st Symposium on Networked Systems Design and Implementation (NSDI)*, San Francisco, CA, Mar. 2004.