

Python Bindings for RAMCloud

The amount of data generated in the Internet is enormous, web applications like facebook are finding it difficult to manage petabyte and terabyte of data without compromising its performance. RAMCloud is a new class of storage for these kind of large datacenter applications. It stores data as key-value inside the DRAMs(Main memory) of 1000-10000s servers, the data always reside in the DRAM and disk takes the role of backup/archival. These servers are connected to each other using high speed networking such as infiniband NICs and switches so that it can achieve the required level of performance. RAMCloud can provide an access latency of 5-10ms which is 1000x faster than the current disk based storage systems.

I would like to explain about RAMCloud and set of bindings for Python which allows synchronous access to RAMCloud operations. Various availability and durability technique used in RAMCloud will also be introduced.