Arachne: Core-Aware Thread Management

By progressing of storage and network, a lot of services having low latency was developed. However, providing high throughput simultaneously to those services are so difficult. Because applications do not know how much resources are allocated for itself. To handle this problem, this paper suggested new thread which can be implemented on user-level (It was introduced as Arachne). The major feature of Arachne is that applications know what cores are assigned to them and also schedule threads. For allocating cores to applications, manager called 'core arbiter' was introduced. However, at that time, authors said that they were not considering NUMA architecture and this fact make me unsatisfied a little bit.