About Memcached

memcached is a high-performance, distributed memory object caching system, generic in nature, but originally intended for use in speeding up dynamic web applications by alleviating database load.

You can think of it as a short-term memory for your applications

What it Does

memcached allows you to take memory from parts of your system where you have more than you need and make it accessible to areas where you have less than you need.

memcached also allows you to <u>make better use of</u> your memory. If you consider the diagram to the right, you can see two <u>deployment scenarios</u>:

- 1. Each node is completely independent (top).
- 2. Each node can make use of memory from other nodes (bottom).

The first scenario illustrates the classic deployment strategy, however you'll find that it's both wasteful in the sense that the total cache size is a fraction of the actual capacity of your web farm, but also in the amount of effort required to keep the cache consistent across all of those nodes.

第一种场景浪费:总缓存大小、缓存一致性

With memcached, you can see that <u>all of the servers are looking into the same virtual pool of memory.</u> This means that <u>a given</u> item is always stored and always retrieved from the same location in your entire web cluster.

Also, as the demand for your application grows to the point where you need to have more servers, it generally also grows in terms of the data that must be regularly accessed. A deployment strategy where these two aspects of your system scale together just makes sense.

The illustration to the right only shows two web servers for simplicity, but the property remains the same as the number increases. If you had fifty web servers, you'd still have a usable cache size of 64MB in the first example, but in the second, you'd have 3.2GB of usable cache.

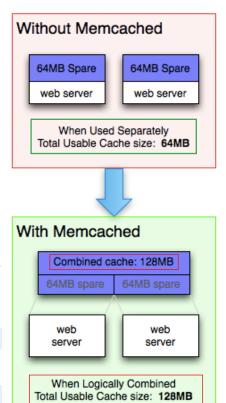
Of course, you aren't required to use your web server's memory for cache. Many memcached users have dedicated machines that are built to only be memcached servers.

Origin

Memcached was originally developed by Brad Fitzpatrick for <u>LiveJournal</u> in 2003.

Contributors





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