Basic Settings

Our Proxy supports configuration on the maximum size of LRU cache. By default, the value would be 10, but you can override this setting by given a fourth parameter when starting the proxy, for example:

./proxy 0.0.0.0 7777 20

Due to the constraint of Unix system, the filename cannot contain character ‘/’, thus, our file-naming mechanism will replace all ‘/’ character with ‘\_’ character, which works as follows:

For Server:

We use format: **www.xxx.xxx\_xxx.ext** to store cache

For Client:

We use format: **datetime\_GMT\_http:\_\_www.xxx.xxx\_xxx.ext** to store transferred file.

The client won’t remove the HTTP header, which means the file cannot be opened normally. A parser or manually remove the header will work in this case.

Since we’ve implemented the bonus feature, we’ll run tests based on BONUS cache refreshing logic. The Proxy will run at ‘/Server’ folder, and the Client will run at ‘/Test’ folder to tell the difference.

Test suits

1. We first try 10 HTTP requests and check for cache performance. Then we use ‘diff’ to check the correspondence between cached file and the client-side received file.

After that, we’ll try a request that is cached. Then we will try a request that should not be cached. After that, we’ll try a staled file request. Finally, we’ll try a new cache-required request to see if the cache deletes the least recently used one and add this new request. Below are some phases during operation.