

What about the files?

- Filenames also mapped using same consistent hash function
 - SHA-1(filename) \rightarrow 160 bit string (*key*)
 - File is stored at **first peer with id greater than or equal to its key (mod 2^m)**
- File *cnn.com/index.html* that maps to key K42 is stored at first peer with id greater than 42
 - Note that we are considering a different file-sharing application here : *cooperative web caching*
 - The same discussion applies to any other file sharing application, including that of mp3 files.
- Consistent Hashing \Rightarrow with K keys and N peers, each peer stores $O(K/N)$ keys. (i.e., $< c.K/N$, for some constant c)