

Chord

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- Intelligent choice of neighbors to reduce latency and message cost of routing (lookups/inserts)
- Uses *Consistent Hashing* on node's (peer's) address
 - **SHA-1**(ip_address,port) → 160 bit string
 - Truncated to m bits
 - Called *peer id* (number between 0 and $2^m - 1$)
 - Not unique but id conflicts very unlikely
 - Can then map peers to one of 2^m logical points on a circle