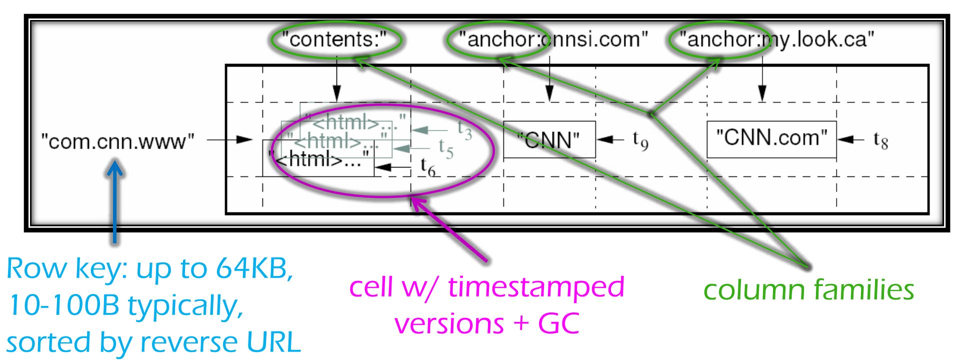
Distributed Storage Systems

Bigtable Data Model

(row:string, column:string, time:int64) → string

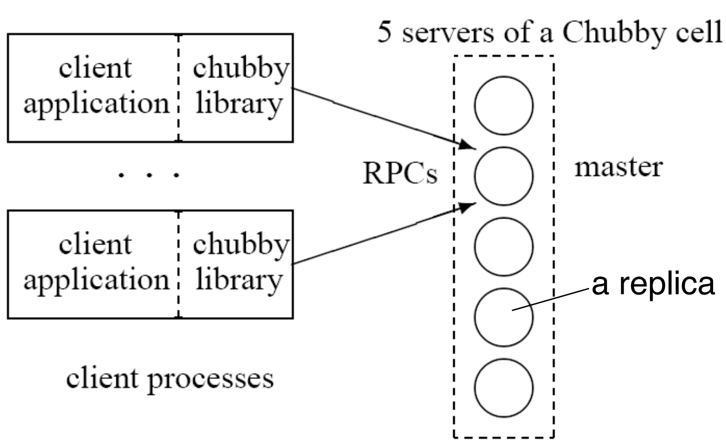
Webtable



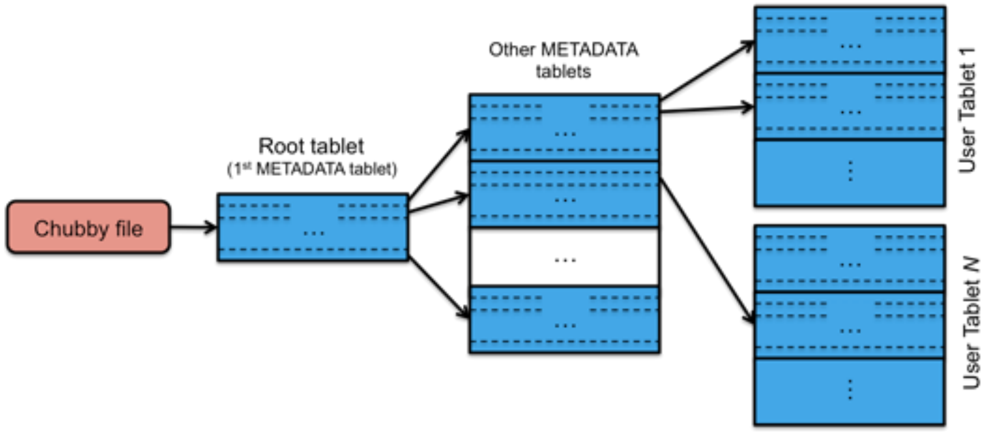
Bigtable API Example

```
// Open the table
Table *T = OpenOrDie("/bigtable/web/webtable");
// Write a new anchor and delete an old anchor
RowMutation r1(T, "com.cnn.www");
r1.Set("anchor:www.c-span.org", "CNN");
r1.Delete("anchor:www.abc.com");
Operation op;
Apply(&op, &r1);
```


Chubby Lock Service

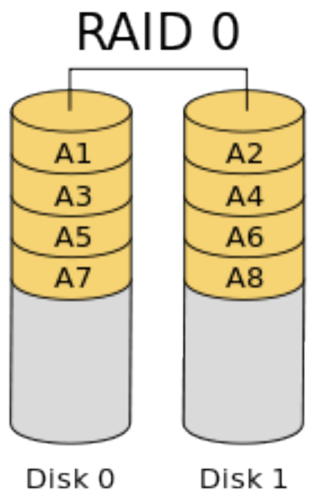


Bigtable Hierarchy

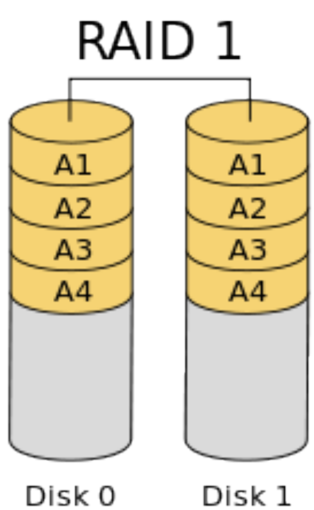


Distributed Storage Systems

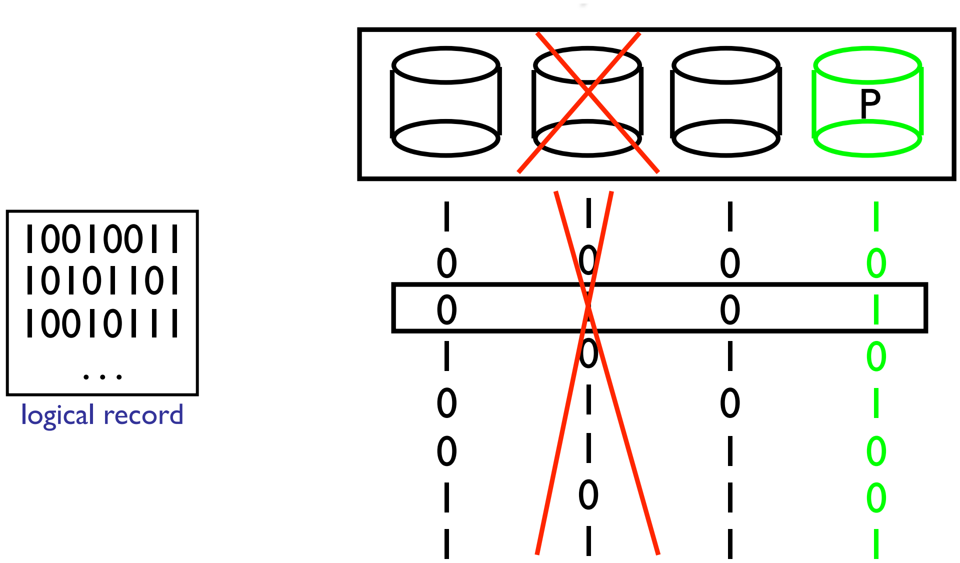
RAID 0: Striping



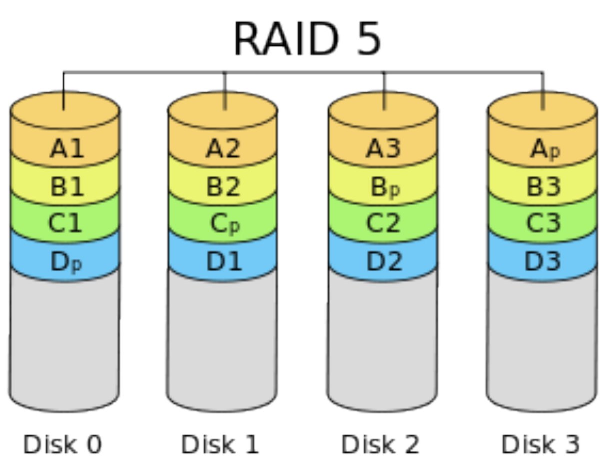
RAID 1: Mirroring



RAID 3: Parity Disk



RAID 5: Distributed Parity



RAID 1+0: Mirroring and Striping