06-E-04

Point Location

Node Copying

- Linear Space

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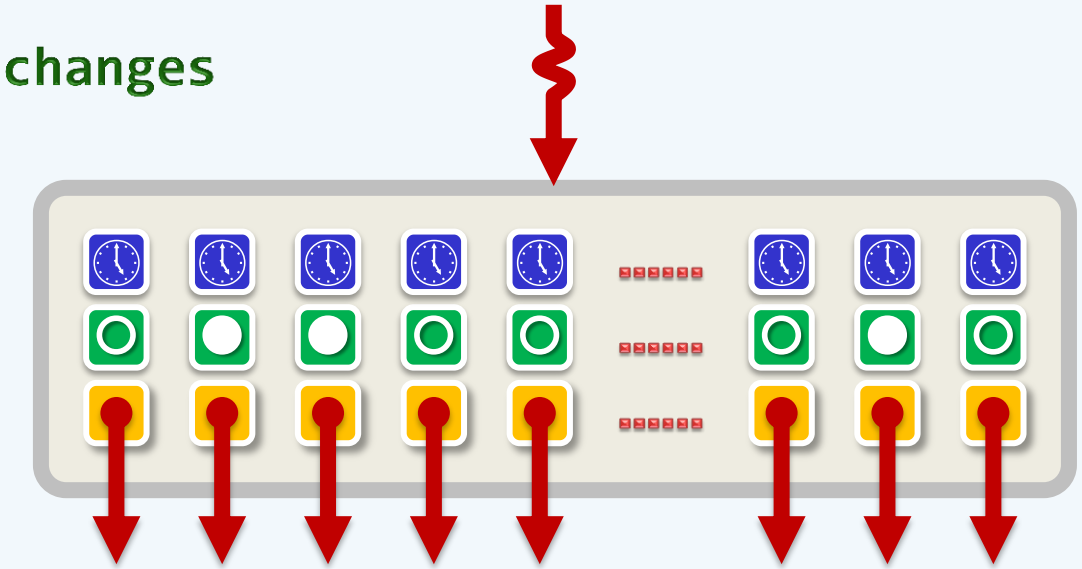
$O(1)$ For Each Update

❖ With the node-copying approach,

each insertion/deletion takes only $O(1)$ space:

- at most one node and, as just mentioned above,
- $O(1)$ pointer changes

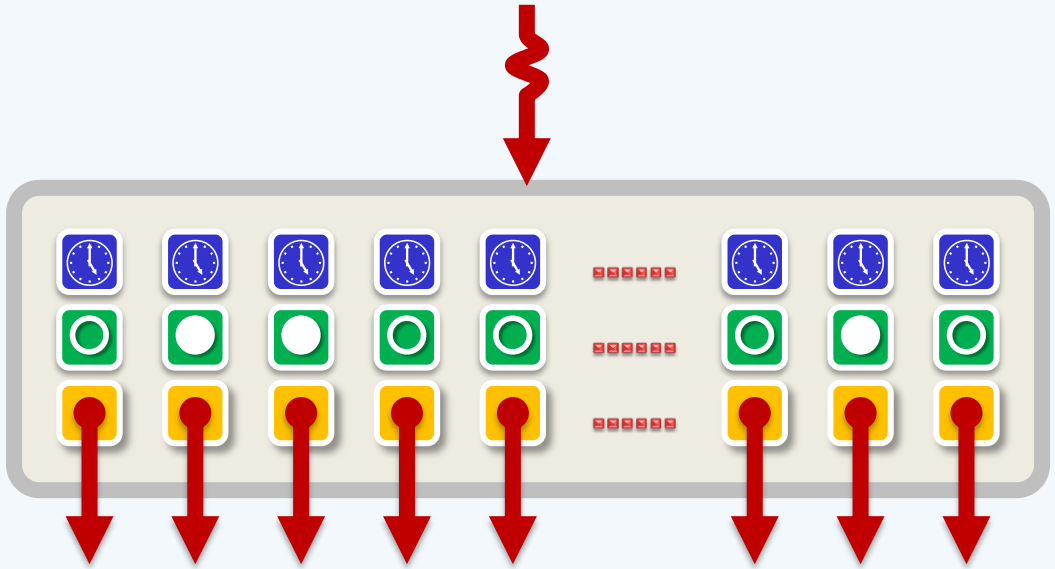


$O(n)$ As A Whole

❖ By

- allowing node to become arbitrarily "fat" and
- using time stamps,

we can store all slabs in a PPS of linear size



Drawback

- Each query/update now takes more time ...