Alligator Life Cycle

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Stacks

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free_segments

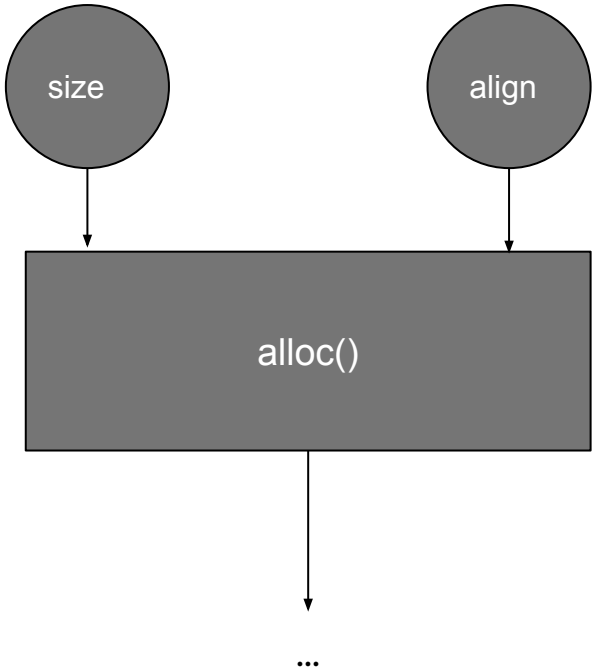
All free indexes in the current MiniPage. There is one of these per size class. The current MiniPage is the free_minipages head for the size class.

free_minipages

All MiniPages with free segments. There is one of these per size class.

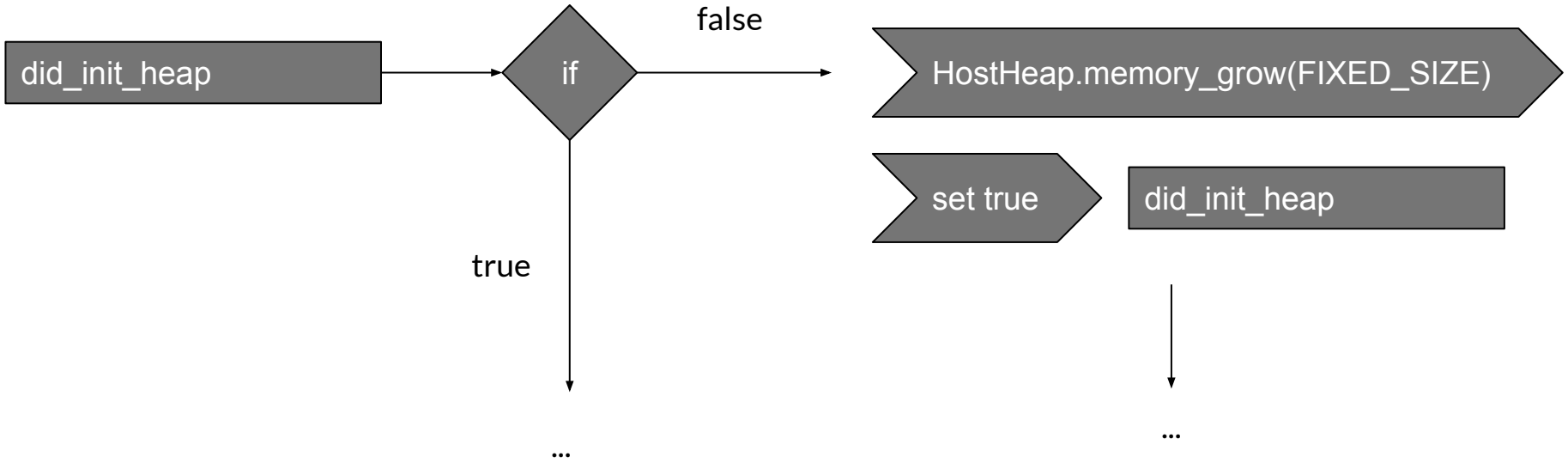
alloc()

alloc()



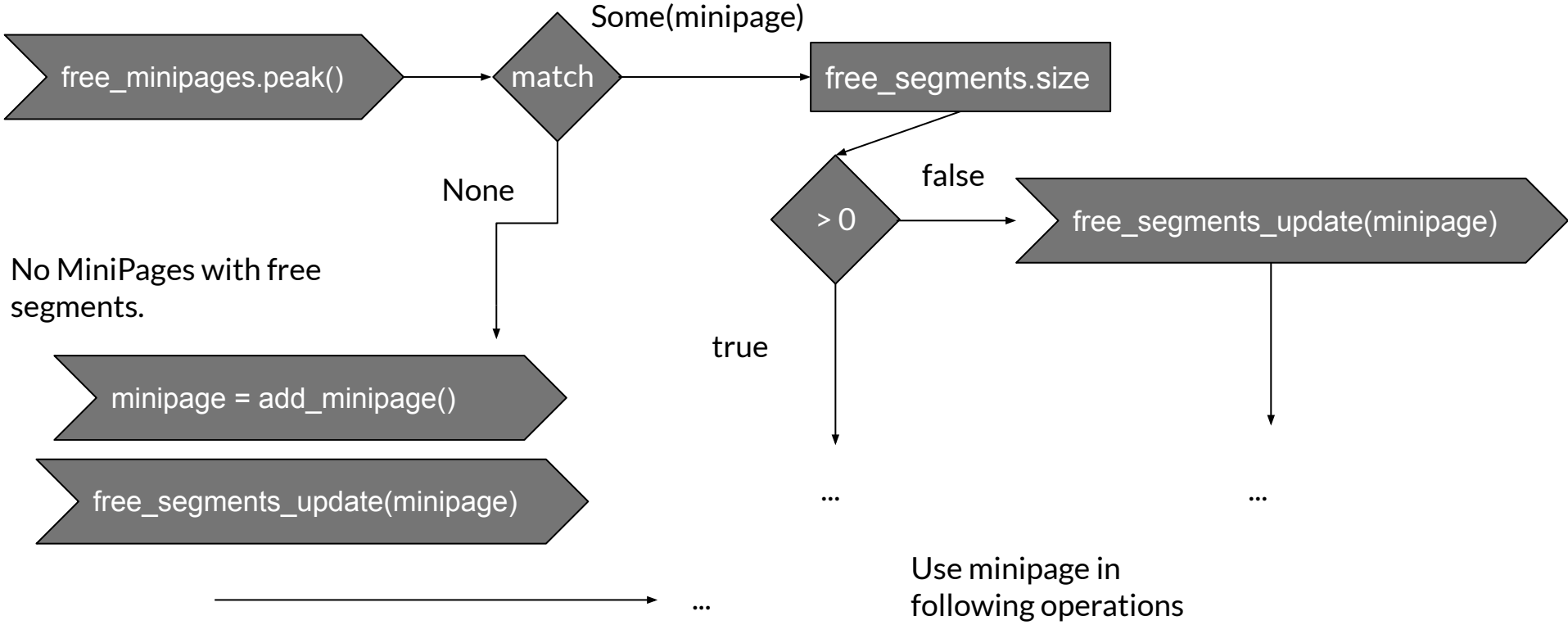
alloc() - Host Heap

Allocator hasn't requested its heap pages from the host yet. Requests a large fixed amount once.

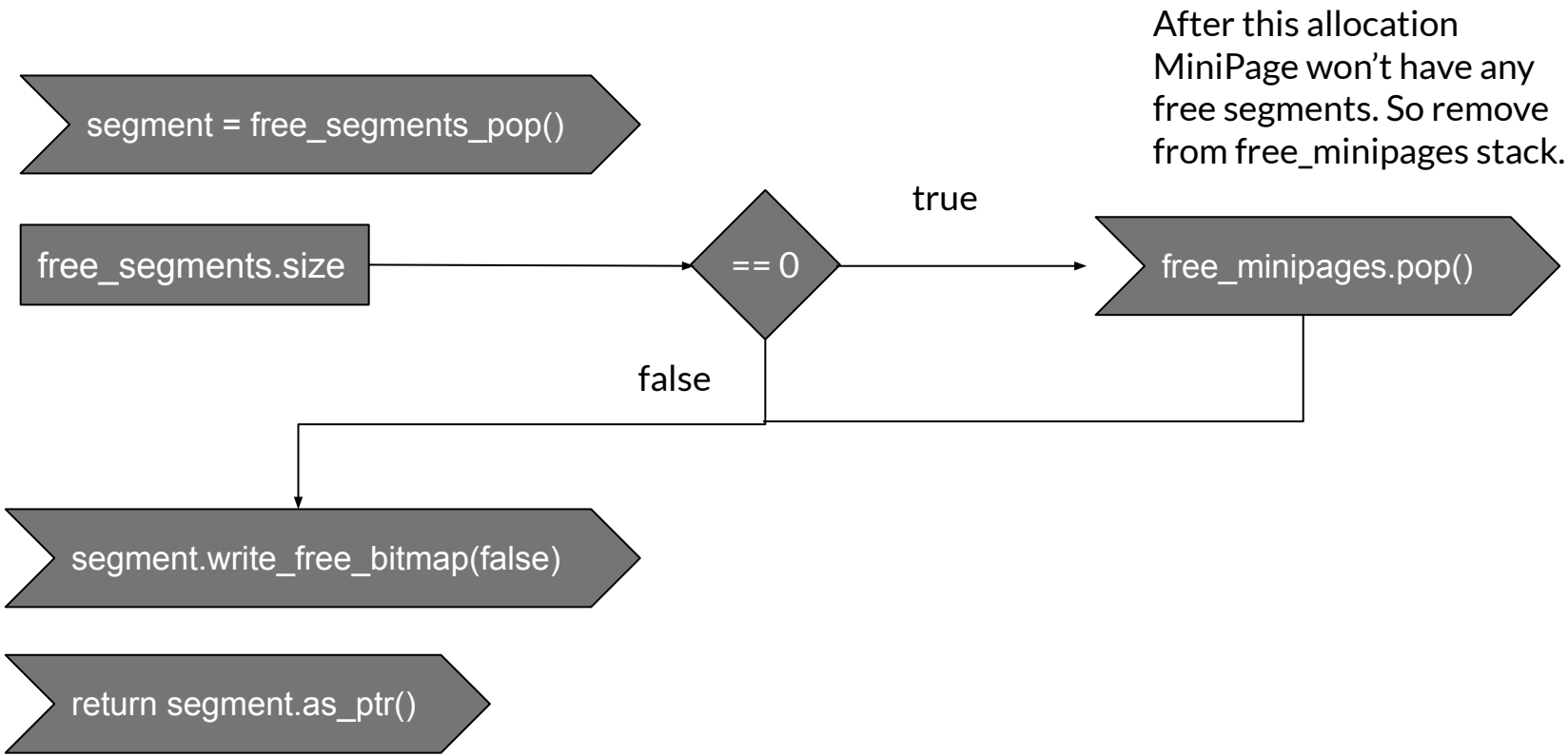


alloc() - Get MiniPage

At least one MiniPage with free segments exists.

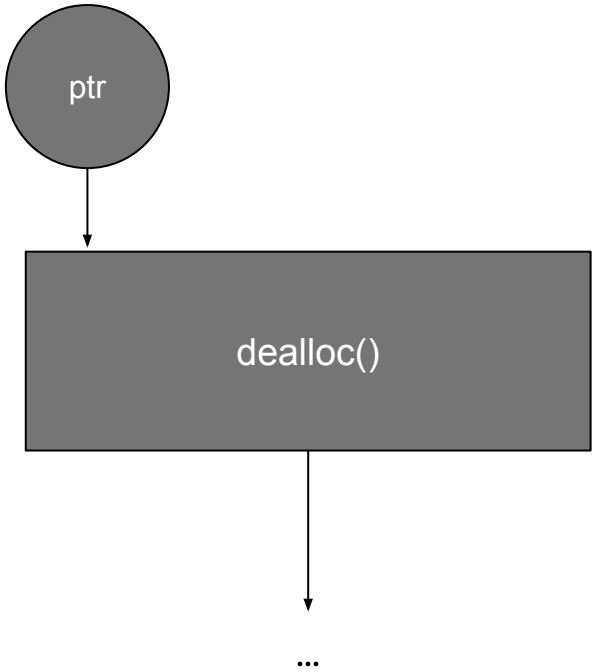


alloc() - Get Segment

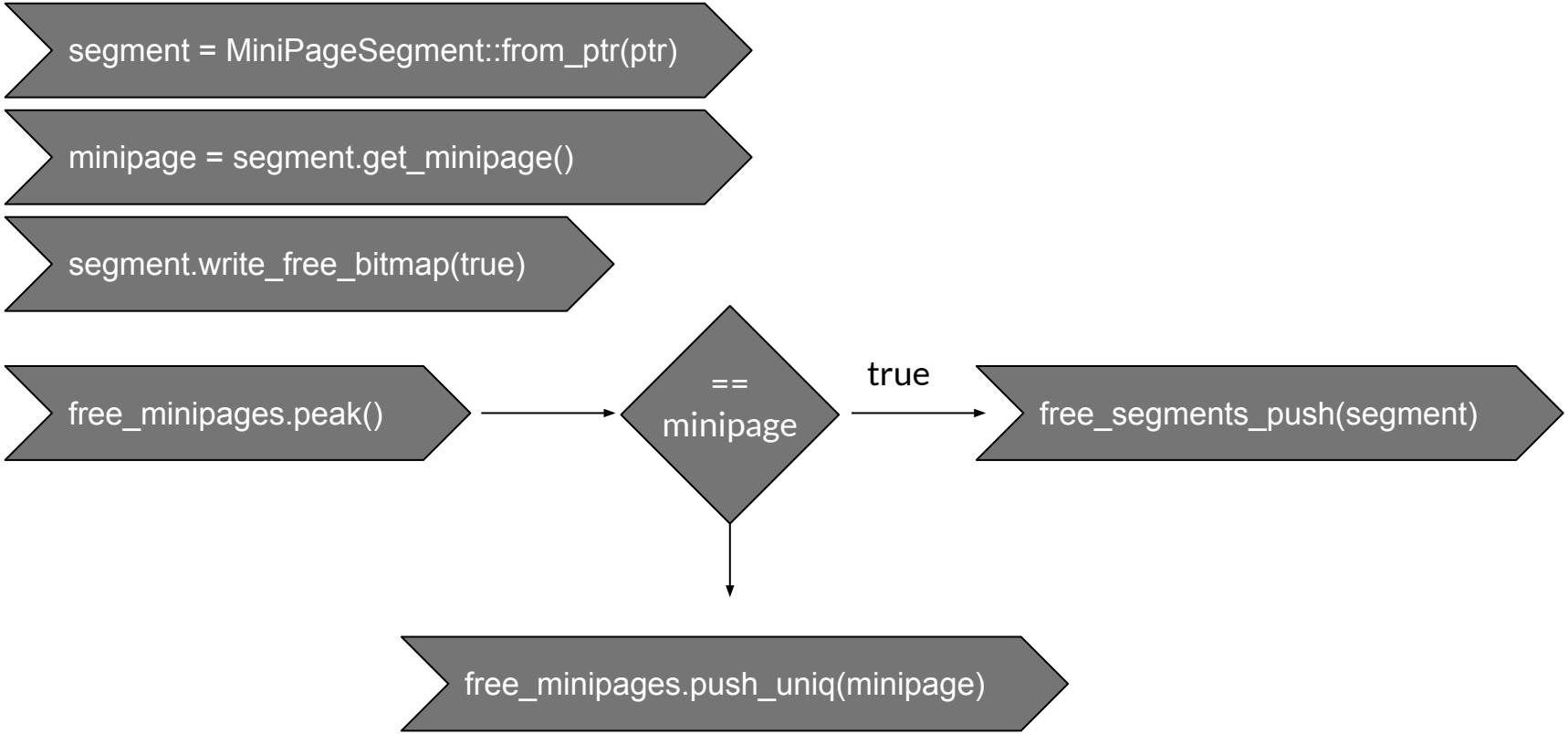


dealloc()

dealloc()



dealloc()


segment = MiniPageSegment::from_ptr(ptr)
minipage = segment.get_minipage()
segment.write_free_bitmap(true)
free_minipages.peak()
==
minipage
true
free_segments_push(segment)
free_minipages.push_uniq(minipage)