

MAKING KERNEL OBJECTS MOVABLE

A History and the Way forward

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HISTORY

- Unmovable pages
- Movable LRU pages
- Movable CMA pages
- Movable Huge pages
- We need movable objects too

FROM PAGES TO OBJECTS

- Pages contain objects.
- If all the objects in a page are movable then the page is also movable.
- Small objects are managed by the slab allocator so the slab allocators need to provide a framework for making objects movable.



GARBAGE COLLATION AKA RECLAIM

Basically what the kernel does but

A) No way to find all the
pointers

B) Only a refcount.

C) Subsystem which interprets
the data must identify pointers
and move the object.

