

Methods of address translation leading upto but not including segmentation.

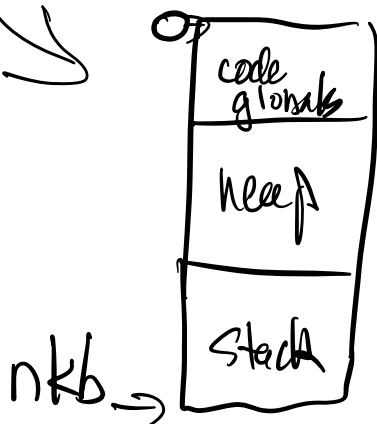
In the beginning:

- * All addresses were physical.
- * One program / process allowed at a time.
- * "OS" might have been statically linked or found at specific address.

Needed depression: go over

- * static linking
- * dynamic linking (DLL)

phys

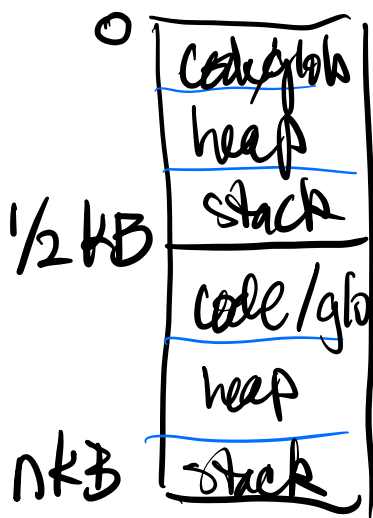


(OS is somewhere)

Innovation 1 Static relocation

At time of link - decide where prog will be loaded \Rightarrow how much memory to give it.

Divide phys memory into regions allowing more than one process in RAM



addresses are still physical.

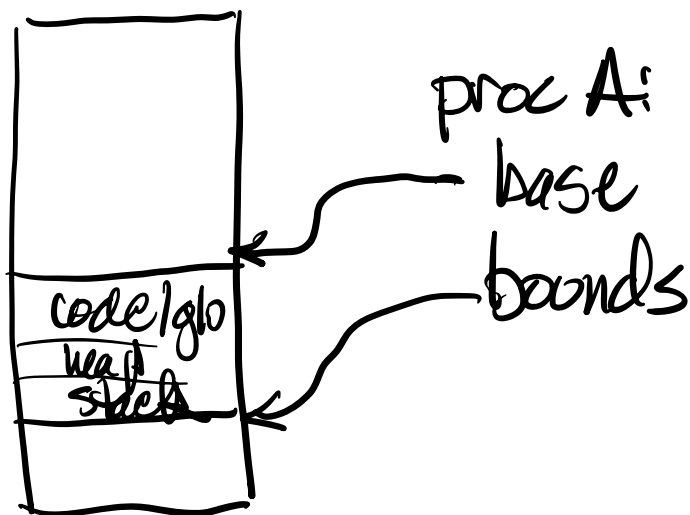
↖ "OS" is somewhere

Innovation 2 Dynamic relocation

Introduce Base & bounds registers

Base reg: Add its value to all virtual addresses.

Bounds reg: How much space does proc take.



This allows a proc to be swapped out & swapped in at a new location.

For first time: OS must keep track of a "Free list".

Free list: A rare example of a "free lunch". How/Why?