Memory

Mem

PL | Proc | P3

base

base + limit

address (range check)
Binding
determine addr. w/in
a process.

compile time - location known when proc is built

load time - move into memory

execution time - calc. addr as needed
Logical addresses v. Physical addresses

Process view - one contiguous space

Machine view
Linking

prog 1

prog code

lib 1

lib 2

static link

prog 2
code

lib 1

.lib

prog 1

Code

lib 2

prog 2

Code

dynamic link

.so .dll
Reg 64
Reg 32
Reg 128
Reg 96
Reg 64
Reg 64
Reg 32
Reg 32

External fragmentation
- First fit
- Next fit
- Best fit
- Worst fit
Segmentation

1. text area
2. data
3. constants
4. lib.

Base, limit for each segment - segment table