

4. 16KB Example

Address space size 16KB with 64-byte pages: 14-bit virtual address = 8 bits VPN + 6 bits offset

Linear page table would have $2^8=256$ entries

Example with virtual pages 0 and 1 used for code, 4 and 5 for the heap, 254 and 255 for the stack:

0000 0000	code
0000 0001	code
0000 0010	(free)
0000 0011	(free)
0000 0100	heap
0000 0101	heap
0000 0110	(free)
0000 0111	(free)
.....	... all free ...
1111 1100	(free)
1111 1101	(free)
1111 1110	stack
1111 1111	stack

Figure 20.4: A 16KB Address Space With 64-byte Pages