/ /

CONFIG_HIGHMEM64G — x86 PRIVATE — NEVER DEFINED

commit 6E0d0EC0d → SET A REASONABLE VALUE FOR MAX_PHYSMEM_BITS

↳ ASSUMED IN ABSENSE OF SPARSEMEM, MAX_PHYSMEM_BITS SHOULD BE BITS_PER_LONG

WRONG

CONFIG_PHYS_ADDR_T_64BIT → POTENTIAL FOR PAE

IF: [redacted] OR MAX_POSSIBLE_PHYSMEM_BITS OLDER MAX_PHYSMEM_BITS

NOT DEFINED BUT

CONFIG_PHYS_ADDR_T_64BIT IS SET

↳ NO ERROR FOR NOT KNOWING HOW MANY PHYSICAL MEMORY BITS ARE POSSIBLE

WOULDBE > BITS_PER_LONG ☆ WRONG

< UNKNOW_NUMBER

sninal

/ /

ALWAYS DEFINE MAX_PHYSMEM_BITS

↳ NOT WORK

↳ NOT A CONSTANT ANYMORE

EVERYTHING USING ZSMALLOC SHOULD DEFINE "MAX_POSSIBLE_PHYSMEM_BITS"

↳ DESCOBRIR P/ TODAS ARQUITETURAS?

PROTECTION FOR MAX_POSSIBLE_PHYSMEM_BITS BEING TOO LARGE.

↳ PFN_BITS < (BITS_PER_LONG - OBJ_TAG_BITS)

RIGHT NOW

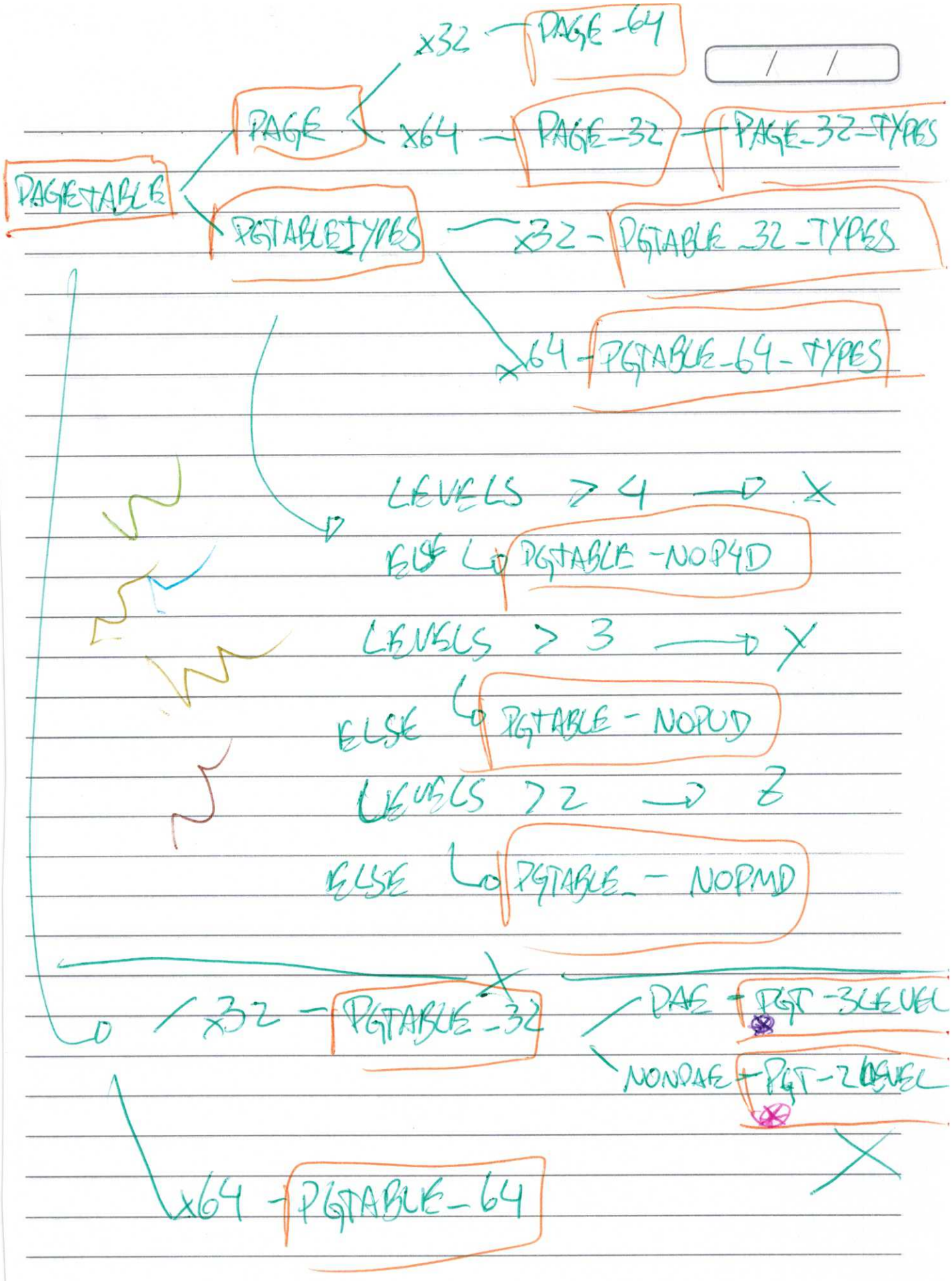
IMPLIES IN:

MAX_POSSIBLE_PHYSMEM_BITS

MUST BE

< BITS_PER_LONG + PAGE_SHIFT - OBJ_TAG_BITS.

or < 43 bits on 32 bit system.


x32 PAGE-64
PAGE
x64 PAGE-32 PAGE-32-TYPES
PAGETABLE
PGTABLETYPES x32 PGTABLE_32_TYPES
x64 PGTABLE_64_TYPES
LEVELS > 4 X
ELSE PGTABLE-NOP4D
LEVELS > 3 X
ELSE PGTABLE-NOPUD
LEVELS > 2 2
ELSE PGTABLE_-NOPMD
x32 PGTABLE_32
PAE PGT-3LEVEL
NONPAE PGT-2LEVEL
x64 PGTABLE_64

x86

PAGE → PAGE_TYPES → 32 bits
- PAGETABLE_32_TYPES:
  - PGTABLE_2LEVEL_TYPES
  - PGTABLE_3LEVEL_TYPES

(64 bits)
- PAGETABLE_64_TYPES!

ARM

PAGE → LPAE → PGTABLE-3LEVEL-TYPES

NON PAE → PGTABLE-2LEVEL-TYPES