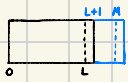
Segment Descriptor (i386)

S=1 Application (bit 44)



bit 43	bit 42	bit 41	bit 40
Data Segment	Expand-direction	Write-enable	Access
Code Segment	Conforming	Read-enable	Access

CPL follows DPL of current CS whenever transfer controls other than Conforming.

DPL of current SS follows CPL through stack switch.

DPL of data segment means the lowest privilege to get accesses.

DPL of code segment means the highest privilege to transfer controls.

RPL of selector used to lower the privilege of CPL when segment get accesses.

DPL of code segment matches CPL when direct call.

When CALL or JMP get accesses a gate, $\max\{CPL, RPL\} \le DPL$

When CALL or JMP to a Conforming transfer controls through a gate, $DPL \le CPL$

When JMP to a Non-Conforming transfer controls through a gate, $DPL = CPL$

direct call without stack switch

S=0 System (bit 44)

LDT = 0010 Task Gate = 0101 (bit 43~40)

16-bit = 0 32-bit = 1 (bit 43)

TSS (Available) = 001

TSS (Busy) = 011

non-recursive

Call Gate = 100 (bit 42~40)

Interrupt Gate = 110

Trap Gate = 111

GDT	Call Gate	Task Gate	TSS	LDT
LDT	Call Gate	Task Gate		
IDT	Interrupt Gate	Trap Gate	Task Gate	