Segment Descriptor (1386) OXFFFFFFF 1 byte (6=0) S= | Application (bit 44) 4096 bytes (6=1) bit 11 = 0 -> data bit 11 = 1 -> code (bit 40 ~ 43) Segment bit 8 = Accessed bit P = Accessed bit 9 = Write-enable bit 9 = Read-enable bit 10 = Expand-direction bit 10 = Conforming CPL is same as current DPL of CS other than transfer controls into Conforming with its own. DPL of data segments, call gates, and TSSs mean the lowest privilege of processor to get accesses. DPL of code segments mean the highest privilege of processor to transfer controls. DPL should be some as CPL without going from a call gate. Whenever segments accessed, the lower privilege is chosen either CPD or RPD from a selector which may be received by some interface invoked by somewhere other segments would have differ privilege. SS should be some as CPL whenever it has been loaded. Using Call gates, max { CPL, RPL} < gate DPL CALL or JMP when Conforming, callee DPL < CPL JMP when Non-Conforming, called DPL=CPL RET, caller DPL > CPL S=0 System (bit 44) LDT = 0010 Task Gate = 0101 (bit 11~8) bit 11 = 0 -> 16-bit bit 11 = 1 -> 32-bit TSS (Available) = 001 TSS (Busy) = 011 (bit 10~8) Call Gate = 100 Interrupt Gate = 110 Trap Gate = 111