

Homework 3
CS 670 Distributed Operating Systems Theory
(Due on 3/03/05 in class)
(10 points)

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1. Consider two consistent cuts whose events are denoted by $C_1 = C_1(1), C_1(2), \dots, C_1(n)$ and $C_2 = C_2(1), C_2(2), \dots, C_2(n)$, respectively.

Define a third cut, $C_3 = C_3(1), C_3(2), \dots, C_3(n)$ that is the maximum of C_1 and C_2 ; that is, for every k , $C_3(k) = \text{later of } C_1(k) \text{ and } C_2(k)$.

Define a fourth cut, $C_4 = C_4(1), C_4(2), \dots, C_4(n)$ that is the minimum of C_1 and C_2 ; that is, for every k , $C_4(k) = \text{earlier of } C_1(k) \text{ and } C_2(k)$.

Prove that C_3 and C_4 are also consistent cuts.