

TAKE HOME ASSIGNMENT#2

Due Date: November 10, 2004 (4x200=800 points)
CS 6/75995 ST: INTERNET-BASED APPLICATIONS

Fall 2004, Department of Computer Science, Kent State University

1. (Random Walk) Explain the impact of the rate of topology change on the performance of search by Random Walk and Flooding.
2. (Freenet) Consider a 4 node (N1,N2,N3 and N4) ring connected Freenet system. The files with following keys originates at the corresponding nodes N1: A01,A03, N2: A02,B02, N3: B01, B03, and N4: A03,B01. Consider that each node has a routing table with 3 entries. Consider the users at following nodes now searchers for the following files in sequence USER at N1 searches B01, USER at N2 searches A01, USER at N1 searches for A03. Show the initial routing table, and how they changes after each query.
3. (Reputation management) Lets consider that in the example given in Aydin Sel and et. al. [P2P-04] the local trust value of X3 is $T=.5$ and $DT=.125$, and the reputation query returned by X7 about X4 tells $t=.875$ and $dt=.25$. Recalculate the decision process. While file version will eventually be selected?