

Homework 2

*Assigned: March 4, 2002*

*Due: March 18, noon*

1. Find a set of Akamai servers, and run traceroute from a machine at GT to each server. Construct a picture of the topology using the results of traceroute. Comment on the results. Can you determine which servers are used for GT-originated requests? Do these tend to be close by (in Internet distance)?
2. Research one of the content distribution providers mentioned in the paper “On the use and performance of content distribution networks”. Write a one page summary of your findings, with particular emphasis on the methods used to select a particular server for a client.
3. Design a server selection scheme based on the findings reported in the paper “Performance characteristics of mirror servers”. Explain how your scheme works, and also give reasonable values of any parameters, using the paper to justify the choices.
4. Implement the prediction-by-partial-matching technique described in the paper on web prefetching. A log file will be provided, containing one line per access.  
More detail on the log file and experiments to be provided shortly.