Exercise No. 8

Peer-To-Peer Networks

Summer 2008

Exercise 13 Onion routing

Chaum’s Mix Cascades can send a message anonymously from a peer $A$ to a target peer $B$. Extend the algorithm such that the target peer $B$ can send anonymously an answer to $A$ without revealing $A$’s identity (i.e. IP address) to $B$.

Design an Onion Routing algorithm where after sending and replying $B$ does not know $A$ and the send and reply messages cannot be distinguished by all other nodes (except $A$).

Exercise 14 TOR

Use TOR to disguise a web access. Check your external IP address against your true IP address. Can you change your external IP address to a specific value? Can you change it at all?