

Limits and Algorithms for Covert Communications

Highlight: Covert Communication on Renewal Packet Channels

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Challenge:

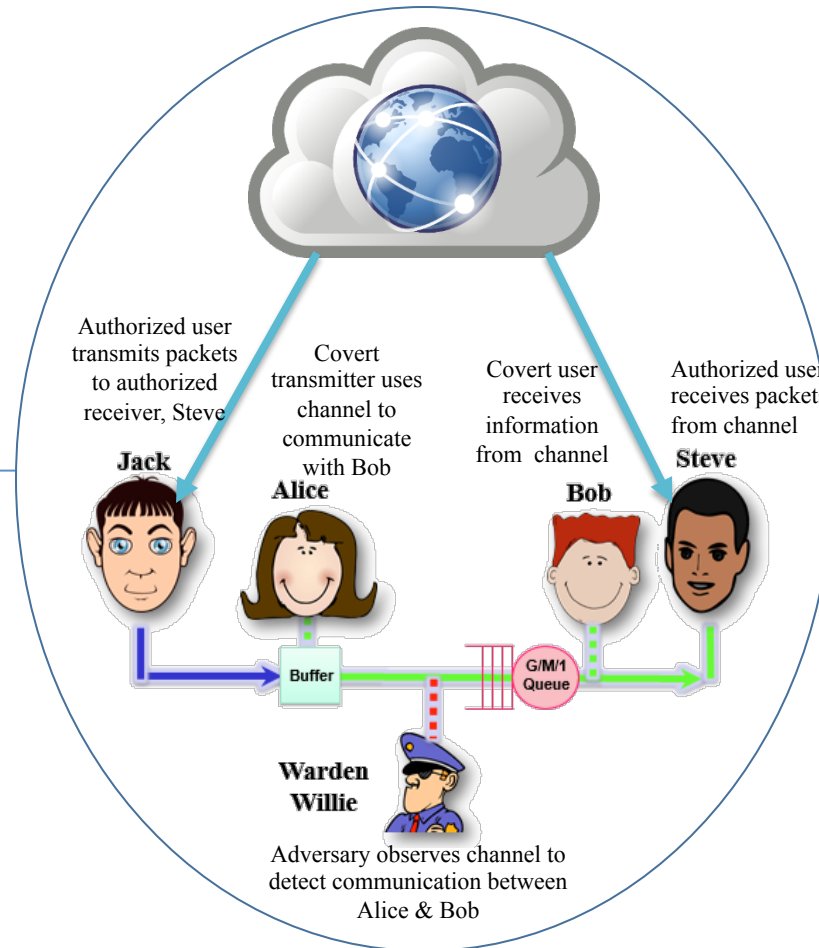
- Establishing covert communication on wired packet channels

Solution:

- Unauthenticated packets:** packet insertion
- Authenticated packets:** alter packet timings to send information

This work is being done at University of Massachusetts Amherst under grants CNS-1564067.

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Scientific Impact:

- Theoretical limits on covert comms on wired channels.
- Proposes methods for covert com on packet channels useful in internet

Broader Impact:

Practical answer to needs of covert communication:

- military operations
- prohibited environments (organizing social unrest)
- personal privacy: removing ability of users to be tracked