draft-poon-tcp-tstamp-mod-00.txt

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TCP timestamp option modification

- Treat SEG.TSecr as a "cookie"
- TS.Echo to store the highest SEG.TSecr received
- New acceptance check: TS.Echo <= SEG.TSecr <= current time
- Initial timestamp chosen MUST be random such that it cannot be guessed easily
- Can be used to defend against blind data spoofing attack without changes in remote side

Issues

- IPR issue on one paragraph. Will be removed in next revision.
- Acceptable range can be too big after idle
- May require remote side modification to be effective in RST handling, app timeout is a possible remedy

Next revision

- Joint work with Noritoshi Demizu at NICT Japan
- Explore new ways to further limit the acceptable range
- Document possible ways to work with unmodified remote hosts