# DCCP Implementation on BSDs

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### What is this, Where is it?

- □ Preliminary DCCP implementation for BSDs
- □ Based on FreeBSD implementation by Lulea University
  - Support current specs
  - Bug fixes and some clean-ups
  - Support multiple OSs

- □Code is merged in KAME
  - Ouse ftp/anoncvs/cvsup to get the code
    - ▶ Weekly snapshot
      - △ftp://ftp.kame.net/pub/kame/snap/
    - See http://www.kame.net for more detailed info.

#### **Current Status**

- □ Current Supported OSs
  - ONetBSD2.0, FreeBSD5.4
  - OpenBSD is under development

- □ Current Supported I-Ds
  - odraft-ietf-dccp-spec-11.txt
  - odraft-ietf-dccp-ccid2-10.txt
  - odraft-ietf-dccp-ccid3-11.txt

## Interoperability with Linux implementation

- □ Mostly OK
  - After tiny fixes, Linux and NetBSD can communicate with DCCP successfully!

- □Two minor issues were found
  - Feature Negotiation
  - Time Stamp Option

## Current Interoperability Issues

#### □ Feature Negotation

- Linux implementation does not support feature negotiation, while KAME implementation waits for it to establish a connection
  - NetBSD implementation has a sysctl parameter that can disable feature negotiation to solve this issue

#### ☐ Time Stamp Option

- KAME implementation ignores ACKs without elapsed time option, but Linux implementation seems not to include elapsed time option in ACKs
  - Elapsed time option becomes mandatory in recent drafts

Need more tests and analysis!

- Feedback Wanted!
- Especially for CCID3 implementation!

Further information will be updated at: http://www.jp.nishida.org/dccp/