COMP9242
Advanced Operating Systems
S2/2011 Week 2:
PS to seL4
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PS to Cap Derivation

- Copy, Mint, Mutate, Revoke are invoked on CNodes

\[ \text{Mint}(\text{key}, \text{dest}, \text{src}, \text{rights}) \]

- CNode cap must provide appropriate rights

- Copy takes a cap for destination
  - Allows copying of caps between CSpaces
  - Alternative to granting via IPC
Synchronous endpoints are synchronisation points
They provide communication between a sender and a receiver
**BUT** that doesn’t mean they have a sender and receiver “side”
An endpoint is essentially a queue of senders or receivers
  - first invocation of an empty EP queues the caller
  - any further callers of the same kind (sender/receiver) queue behind
    • modulo prio
Consequence: 2-way communication generally requires two EPs

- **Reply caps automatically provide the second endpoint!**