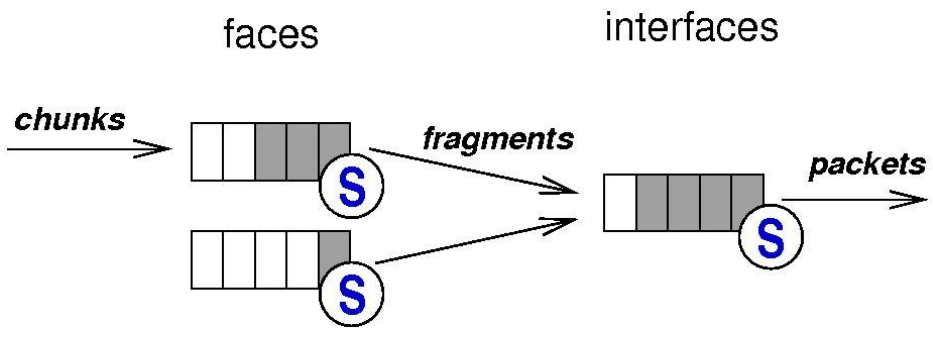
CCN-lite

CCN-lite is a lightweight implementation of the CCNx protocol. It supports most of the essential CCNx functionalities, and more:

- *Tiny code base:* The core CCNx logic keeps in less than 1000 LoC
- *Identical code* for three incarna-tions: Linux kernel, user space, OMNeT++ simulator
- *Scheduler support:* both at chunk and packet level
- *Fragmentation:* CCNx over Ethernet
- *Management:* via CCNx msgs
- *BSD-style licence*
- Finally: *interoperable* with CCNx !

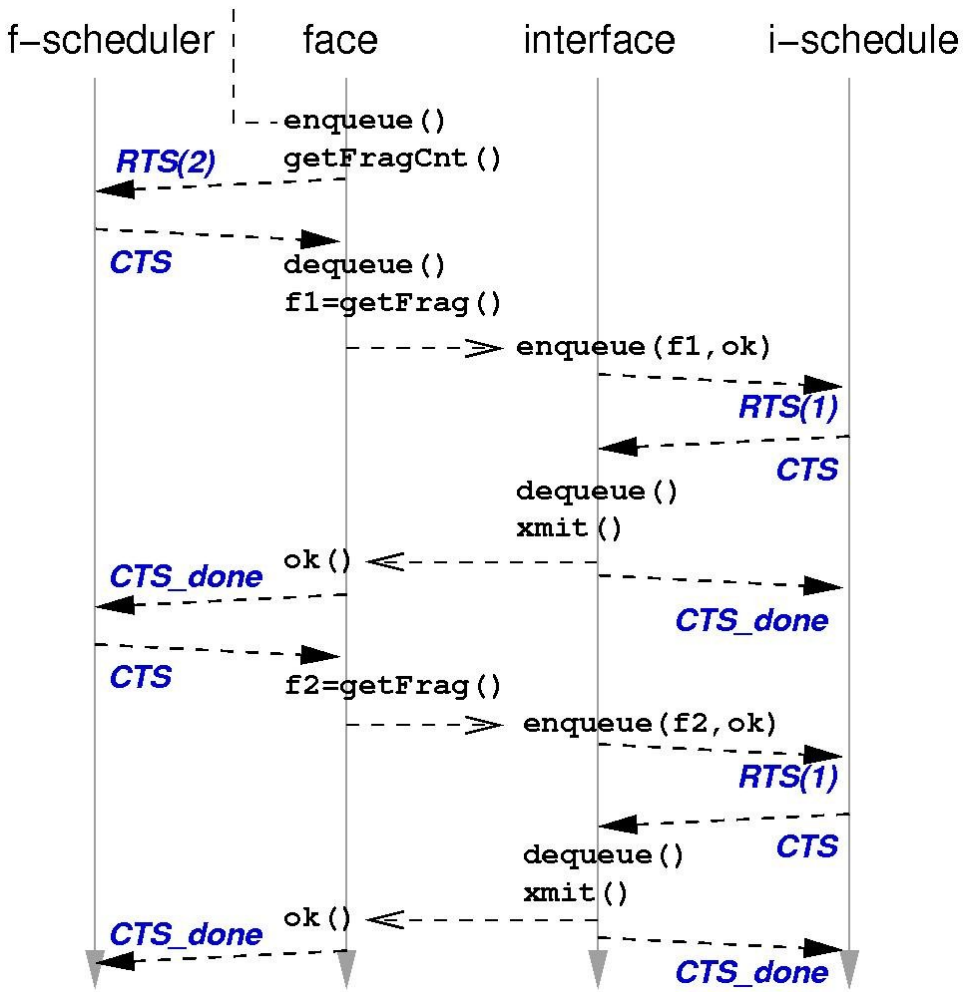
Ideal for:
- class room work
- experimental extensions
- non-caching relays
- code base for commercial products



Clean approach to the interleaving of queueing, scheduling and fragmentation in CCN-lite:

- CCN-lite has two levels of scheduling: each face has a queue and scheduler for chunks; interfaces have a queue and scheduler for packets (left Fig).
- Fragmentation (done at face level) turns chunks into packets, adds sequence numbers but also informative fields like last-received-seq-number.
- For freshness, informative fields should be filled out just before queueing at the interface level.
- Therefore, the interface has to trigger the next fragment generation and pull it (rather than the face generating all fragments in one go and push them).

Solution: `RTS/CTS/CTS_done` handshakes



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