



802.17 presentations

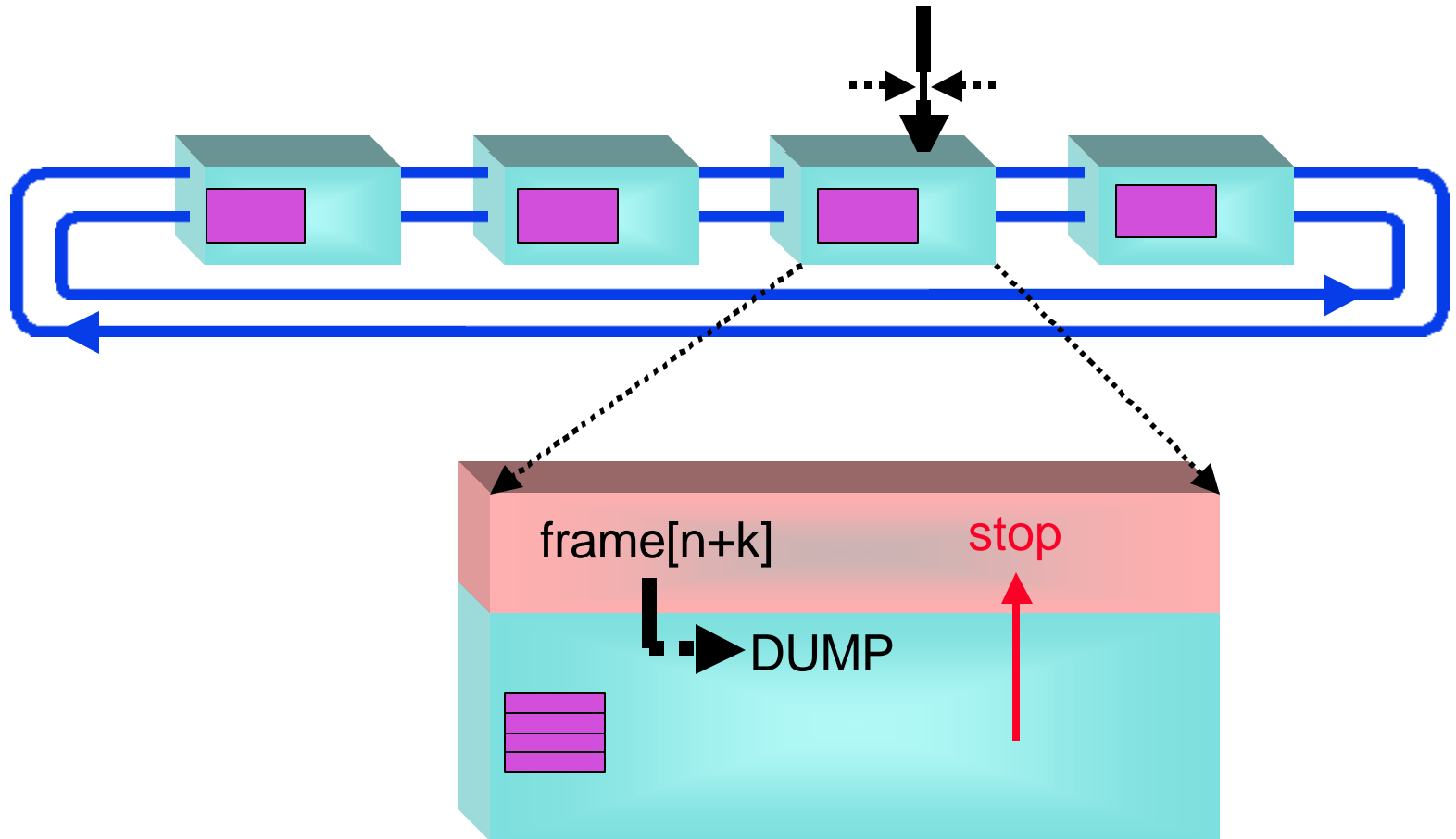
- Prepared for 802.17, March 2002
- David V. James, PhD
Chief Architect
Network Processing Solutions
Data Communications Division
110 Nortech Parkway
San Jose, CA 95134-2307
Tel: +1.408.942.2010
Fax: +1.408.942.2099
Base: dvj@alum.mit.edu
Work: djz@cypress.com



Setting bandwidths

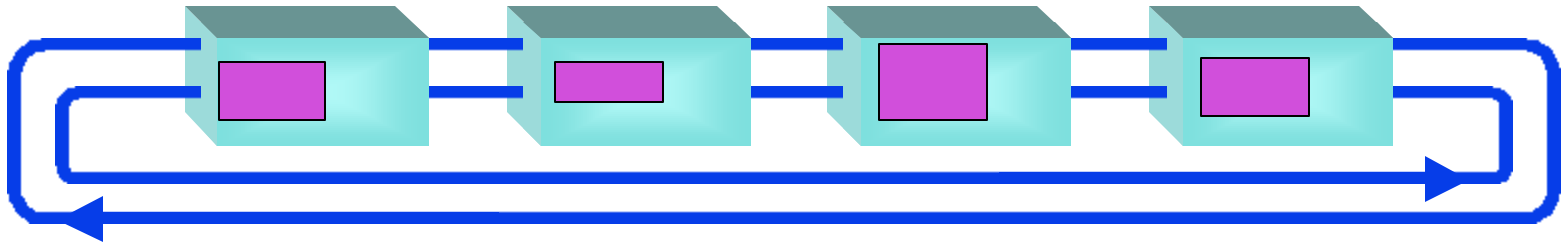


Negotiated bandwidths





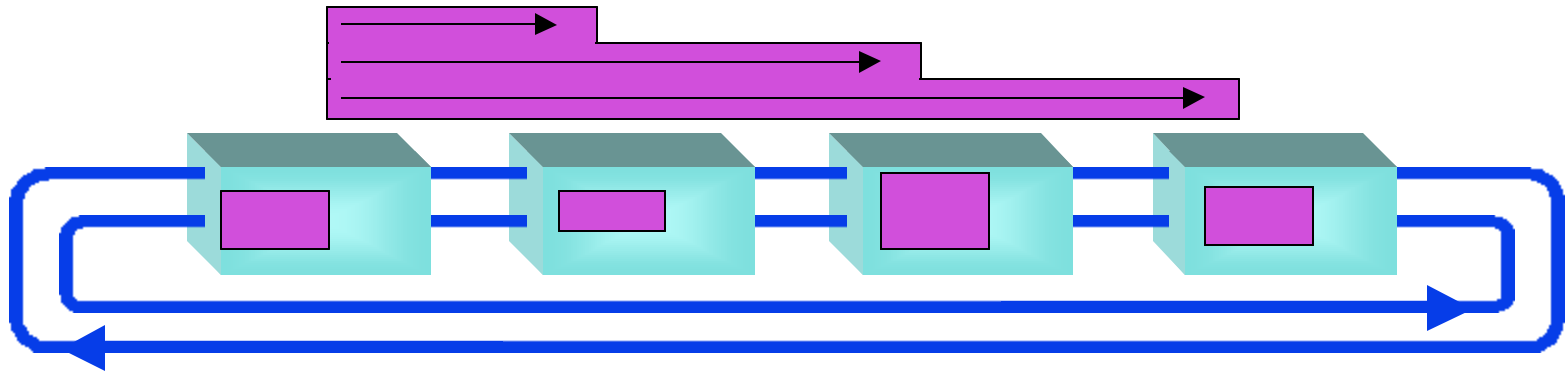
Bandwidth negotiations



- Sum of bandwidths < link capacity
- Independent accounts
 - class-A0 and class-A1 rates
 - class-B rates
 - class-C weightings
- Accounts are distance dependent



Distance-dependent accounts

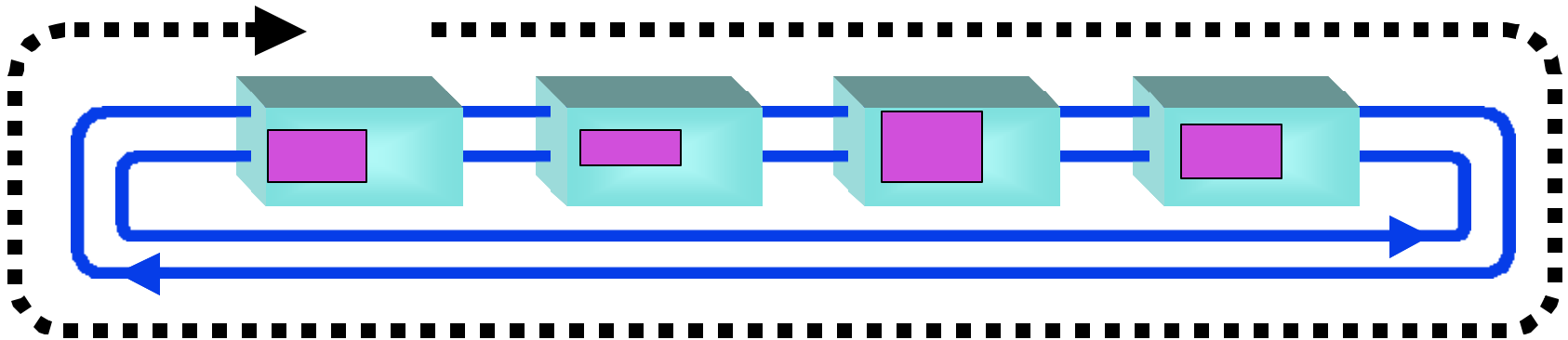


- **BW accounts have spatial dependencies**
- **Available BW has monotonic decrease**



Allocation update sequence

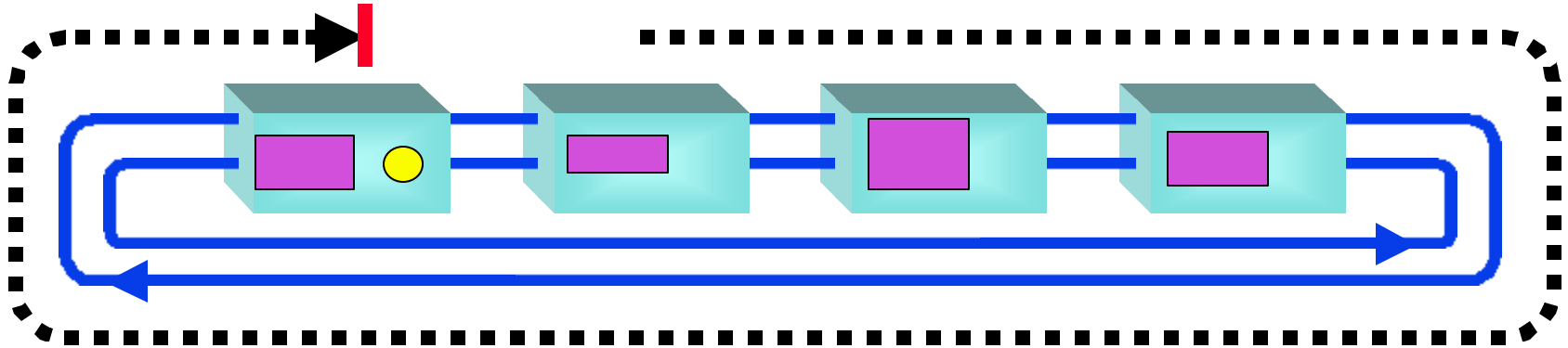
3) Distribute revised accounts



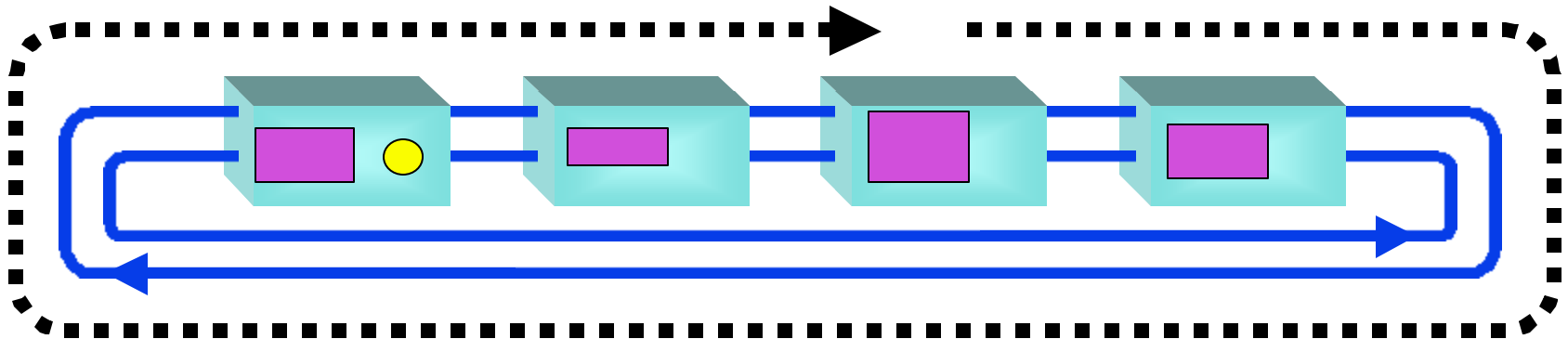


Concurrent conflicts

$\text{in.source} < \text{me.source}$



$\text{in.source} > \text{me.source}$





BW allocation conclusions

- **BW allocation is necessary to ensure consistency**
- **BW allocation should include spatial reuse**
Worst-cast hop-count OK for simple stations
- **No central tables are required**
- **MAC-identifier suffices for tie resolution**
- **Some error-recovery details may be necessary**
- **We need philosophy, not technical, agreement.**
(sufficient detail exists for first-round inclusion)