



IEEE 802.1ah: Distribution of Encapsulation Functions

Ali Sajassi, 802.1ah Editor

June 20, 2005

802.1ah Encap

802.1ah encapsulation function can be decomposed into three sub-functions:

1. I-tag encap.
2. mac-in-mac
3. B-tag encap

I-tag encp



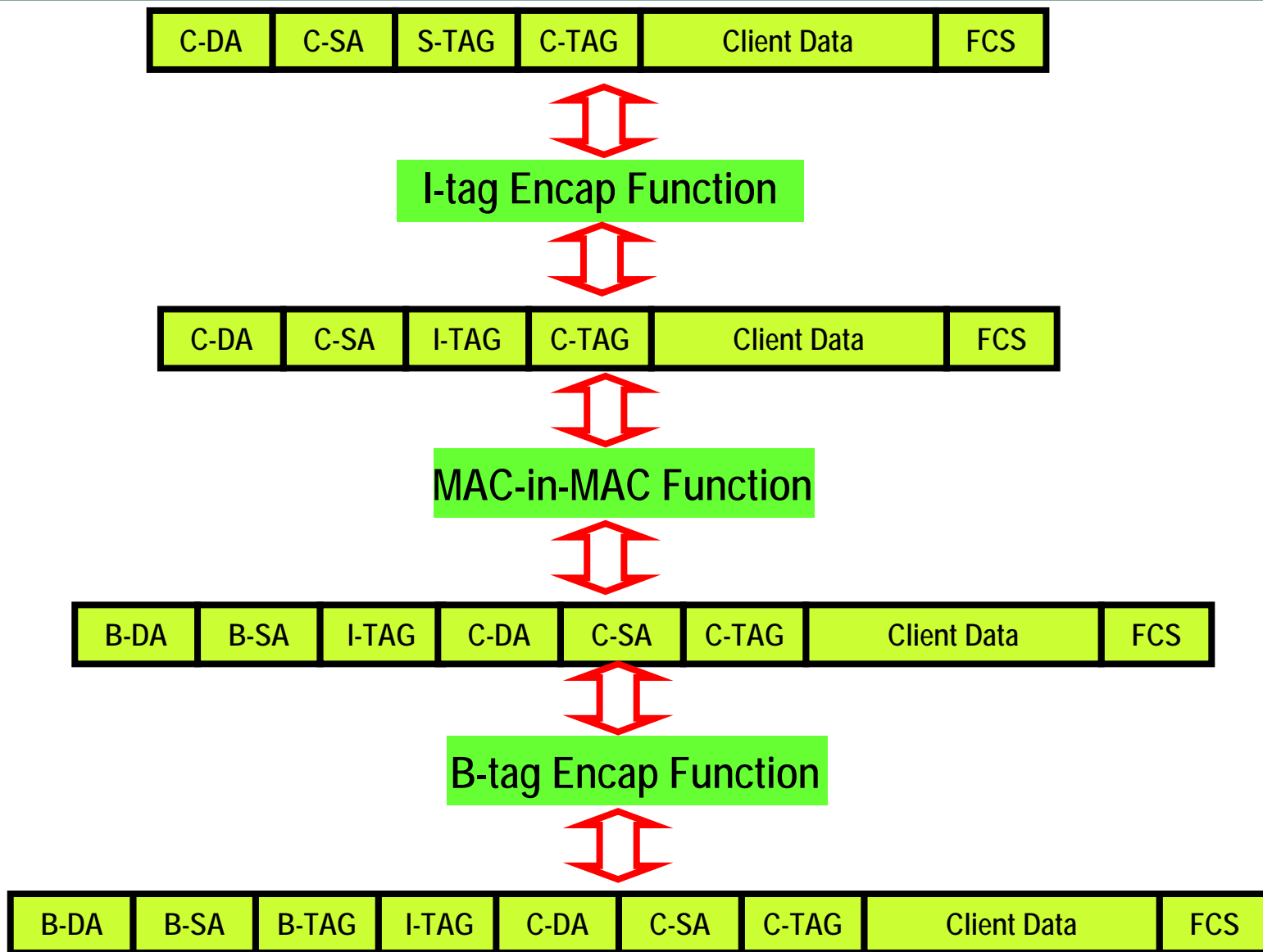
MAC-in-MAC



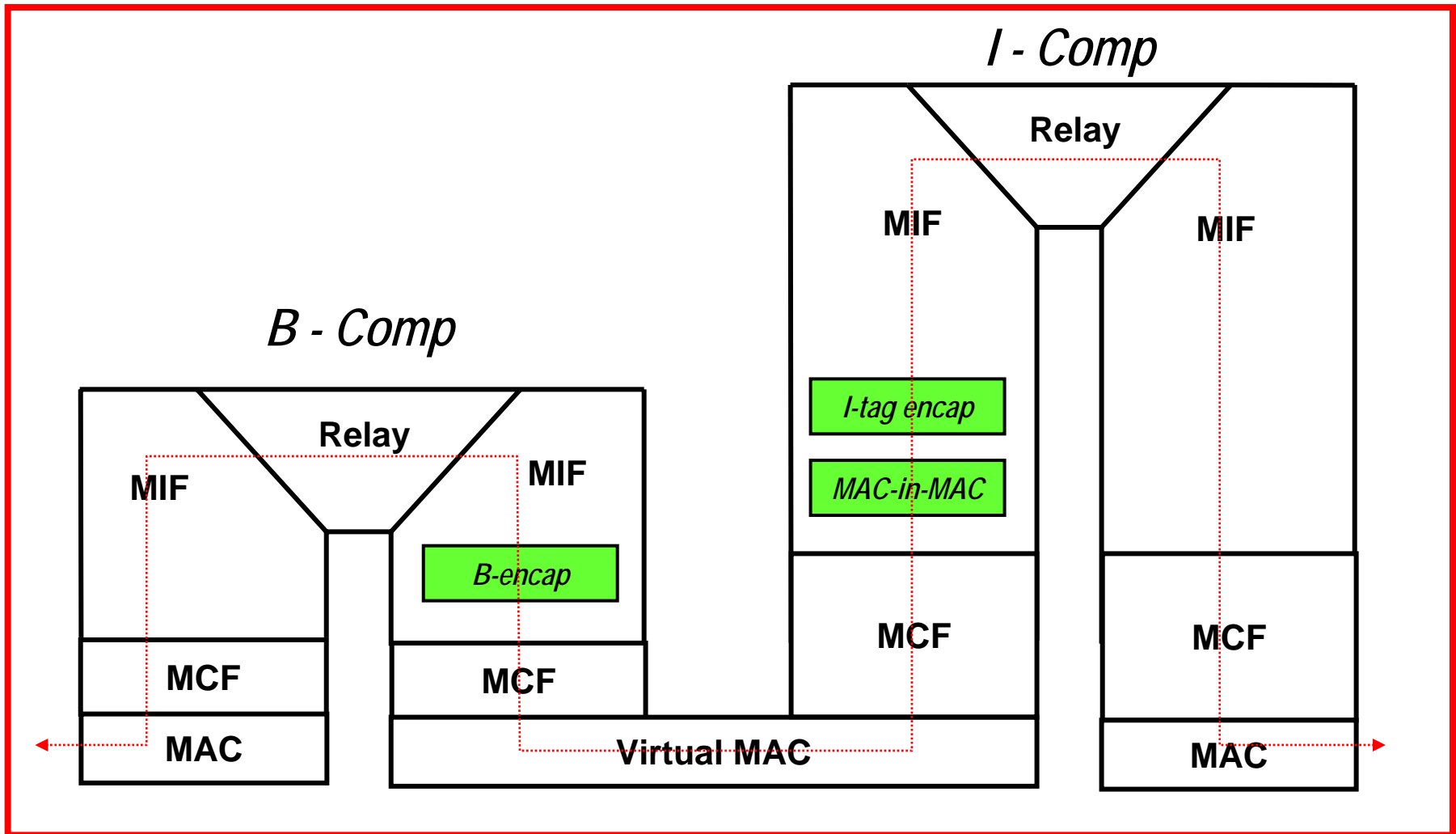
B-tag encp



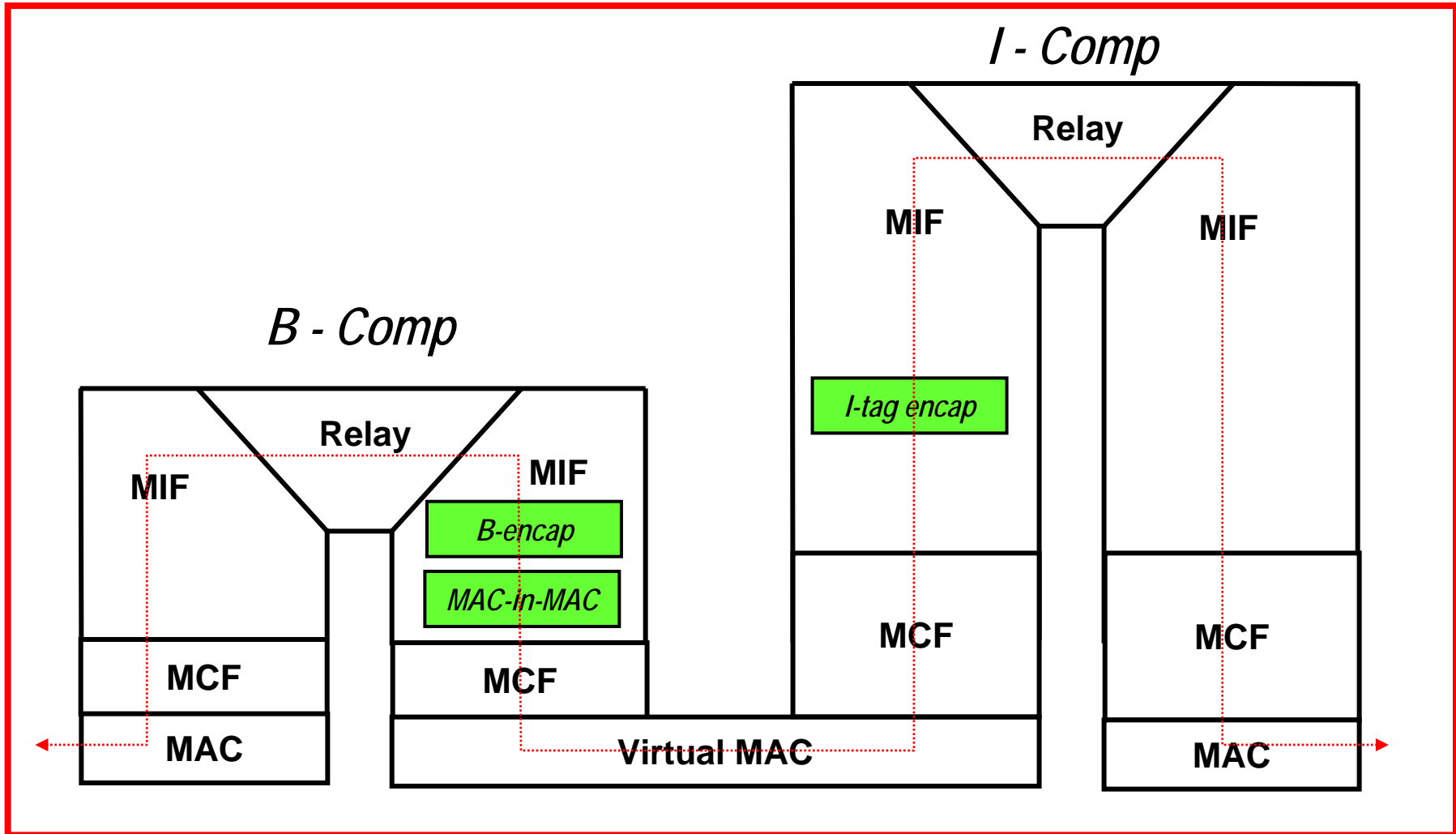
Encap. Functions



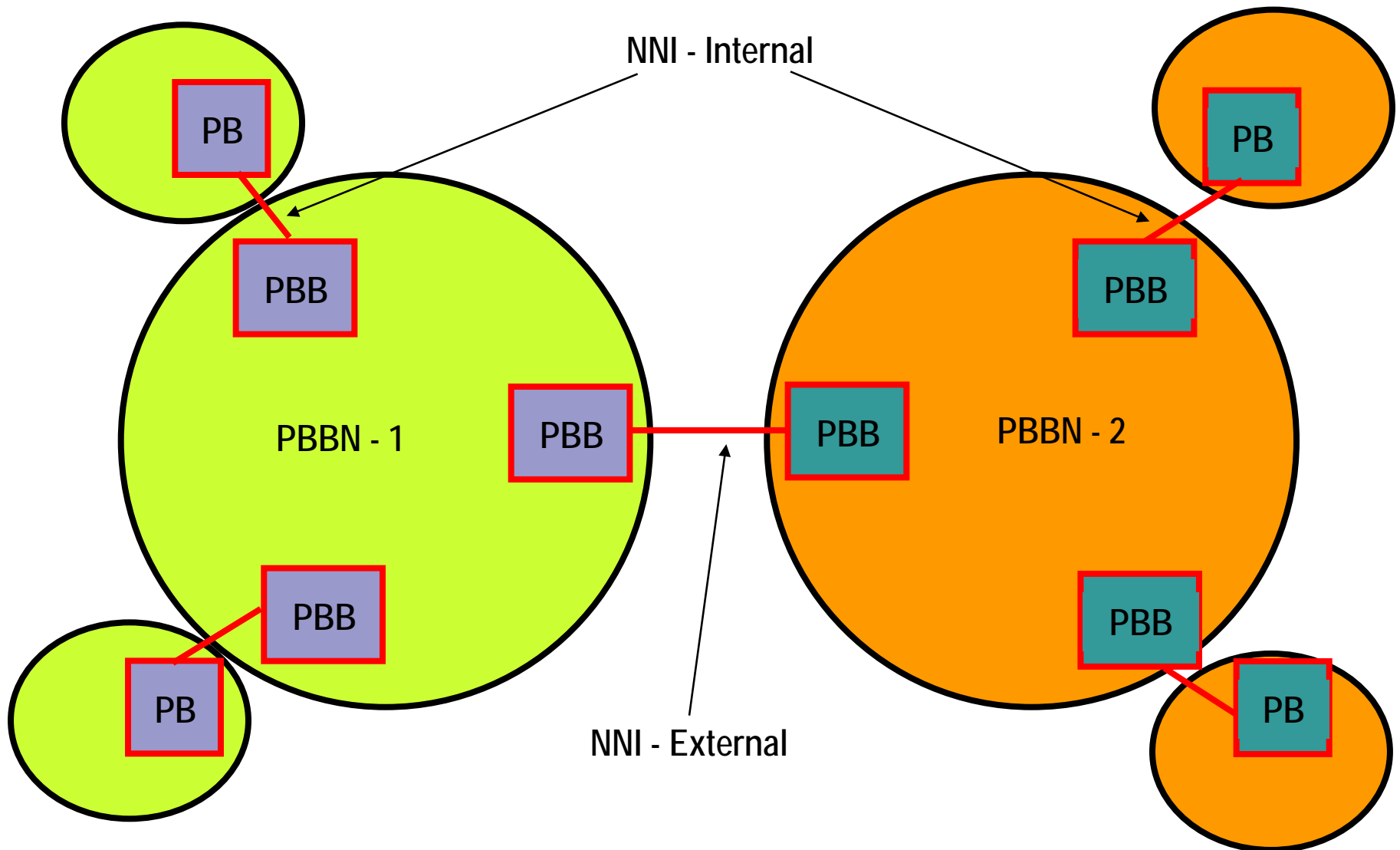
PBB: Model A



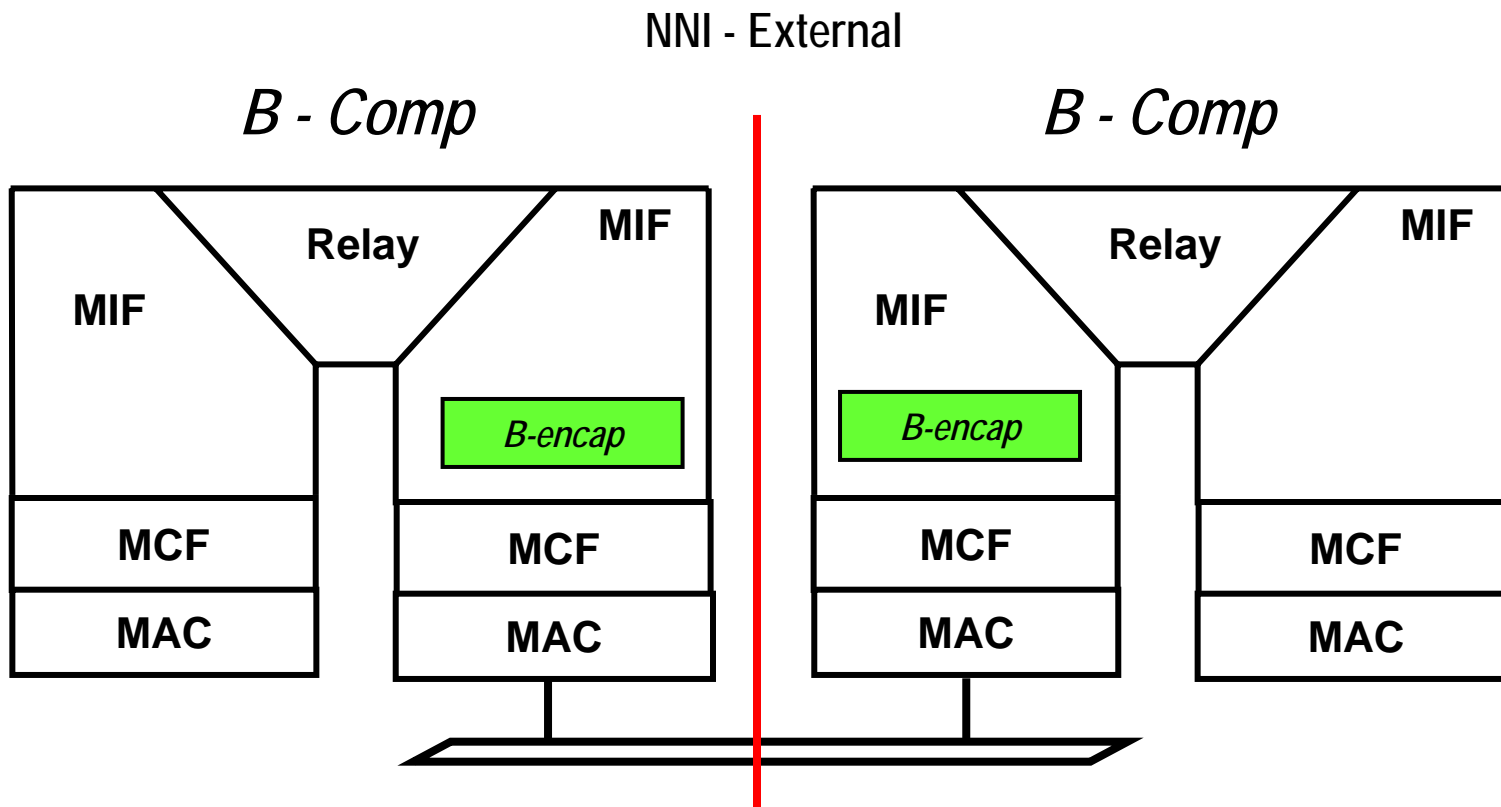
PBB: Model B



Applications: PBBN & PBN connectivities



Application A: PBBN to PBBN connection



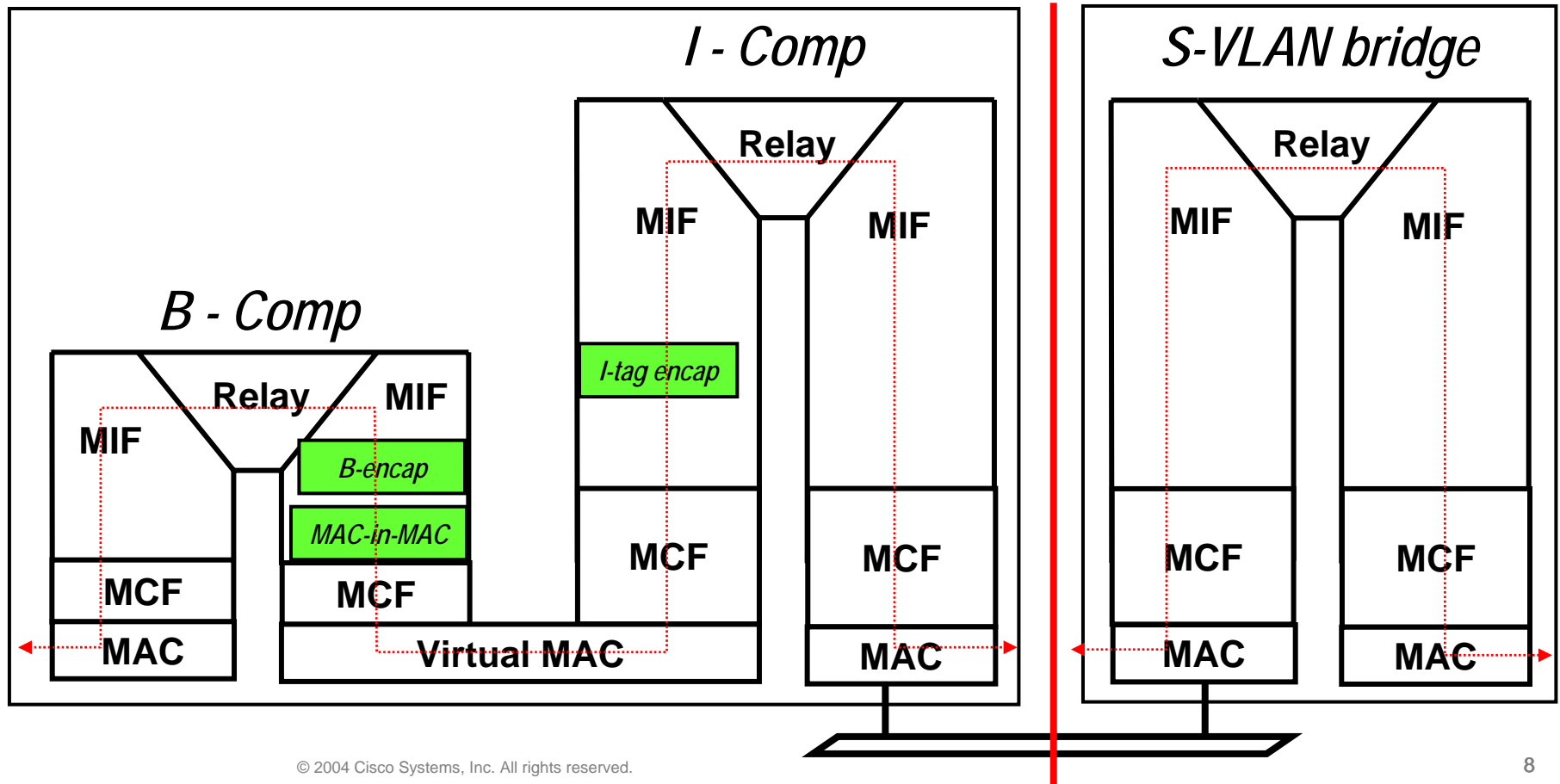
Do we need I-tag Translation table ?

Application B: PBBN to PBN Connection

NNI – Internal
(S-tag Srv I/F &
Transparent Srv I/F)

PBB

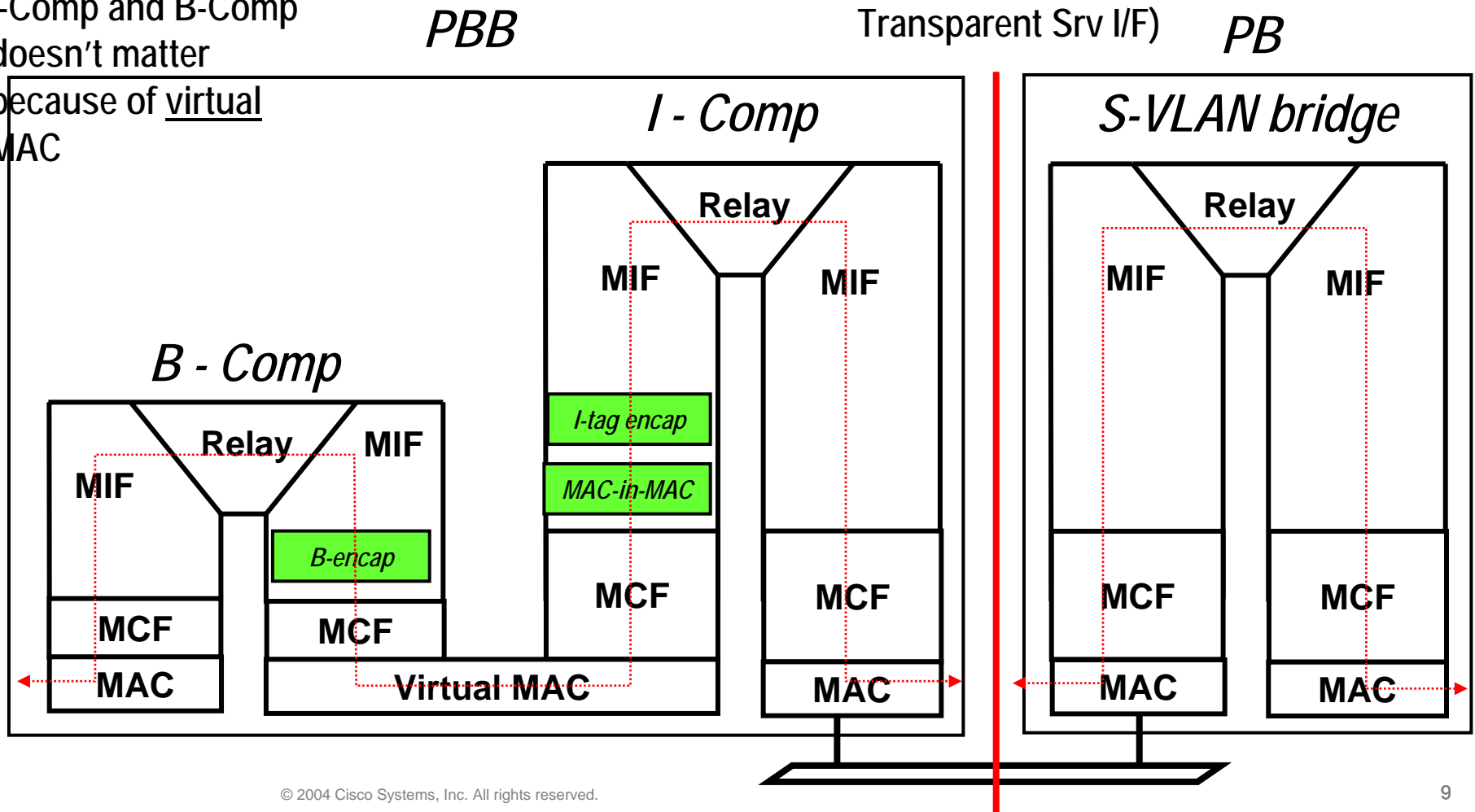
PB



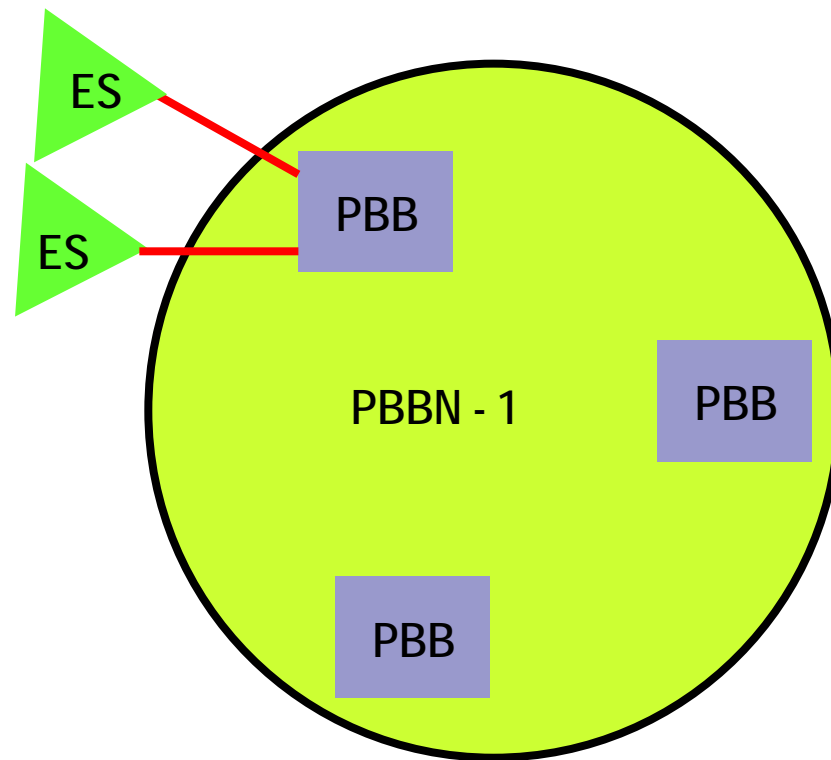
Application B: PBBN to PBN Connection - Continue

Distribution of MAC-in-MAC function between I-Comp and B-Comp doesn't matter because of virtual MAC

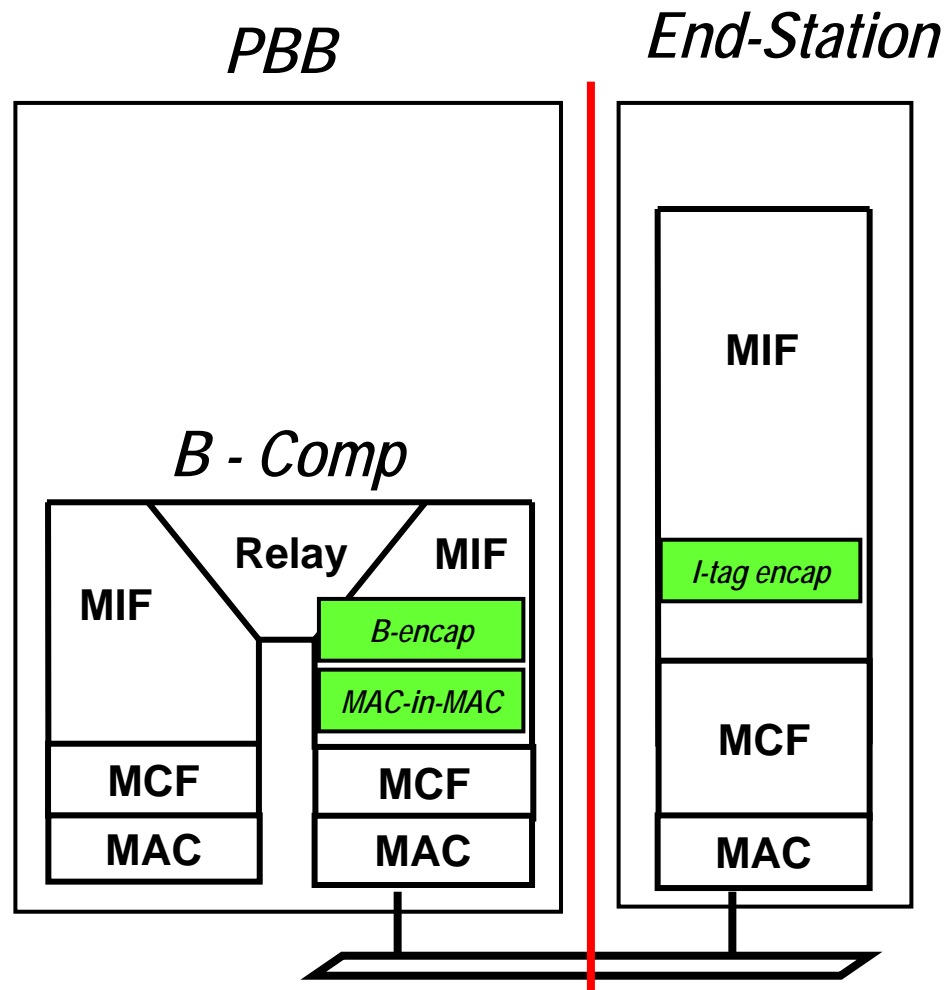
NNI – Internal (S-tag Srv I/F & Transparent Srv I/F) *PB*



Application C: PBB to End-station connection



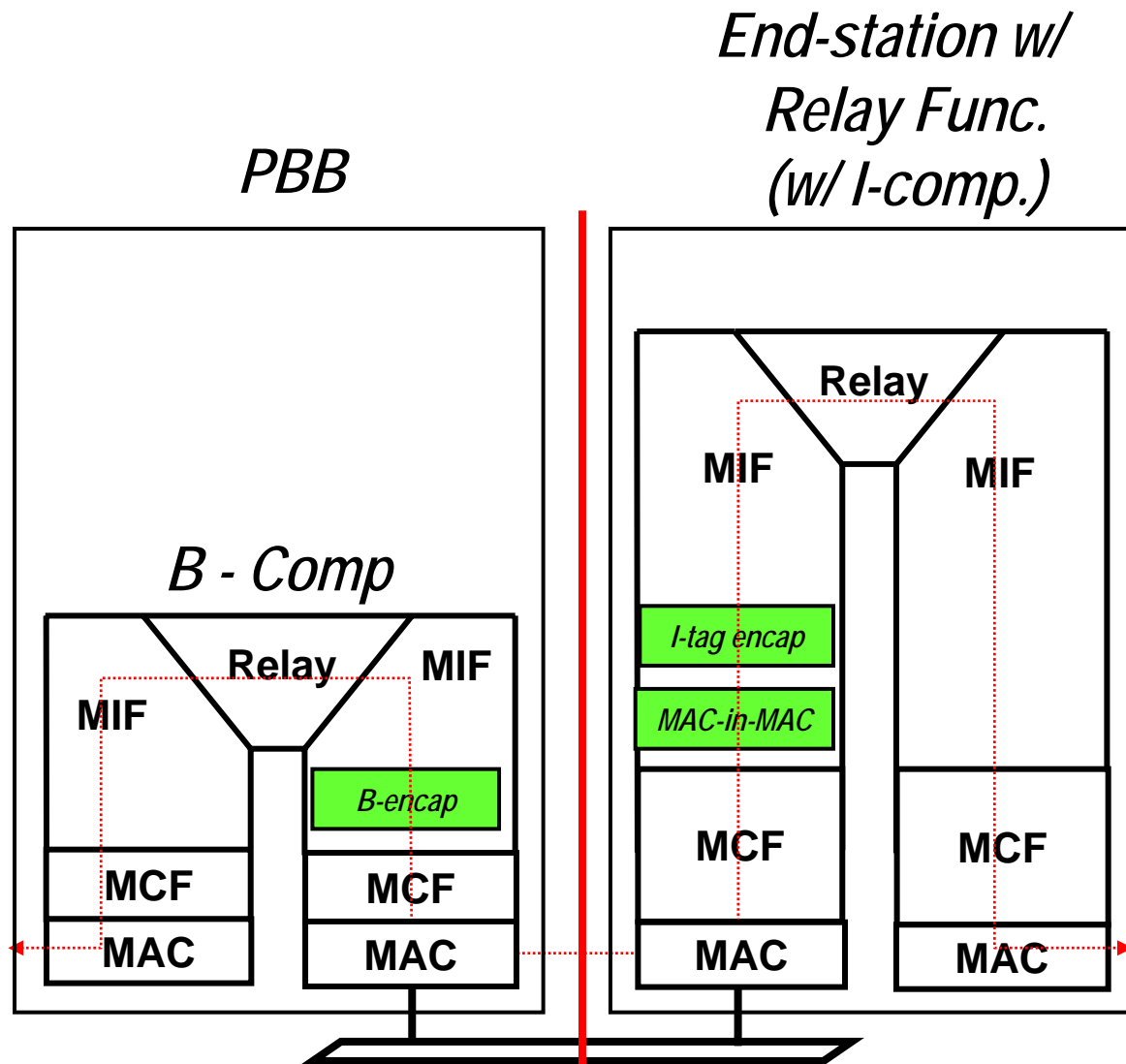
Application C: PBB to End-Station Connection



End-Stations:

1. DSLAMs
2. Servers
3. MPLS PEs

Application D: PBB to PBN Connection - Continue



End-Stations:

1. DSLAMs
2. Servers
3. MPLS PEs

CISCO SYSTEMS

