



802.1Qau Draft 1.3 issues

Rev. 1

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CN Domain Protection

CN Domain protection problems

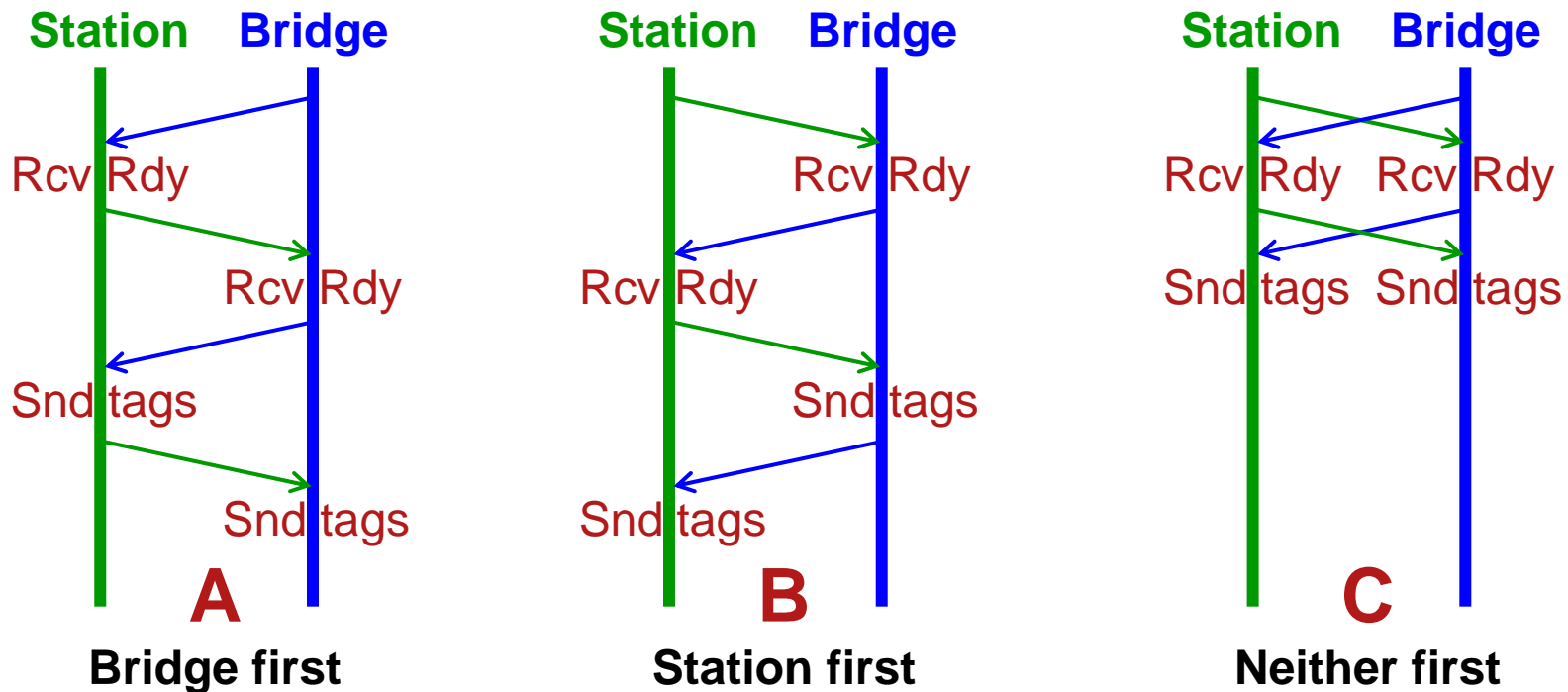
1. Rcv Rdy

- a. Bridge does not want to admit non-CN-aware traffic to a CN Priority, because it will subvert the ability of the network's Congestion Points to throttle traffic.
- b. Station may not want to admit non-CN-aware traffic to its CN-aware queues.

2. Snd tags

- a. Bridge does not want to transmit CN-tagged traffic to a non-CN aware station or network.
- b. End station does not want its CN-aware applications to consider that the link is up unless the neighboring device is CN-aware and compatibly configured.

CND Protection 1: Full handshake

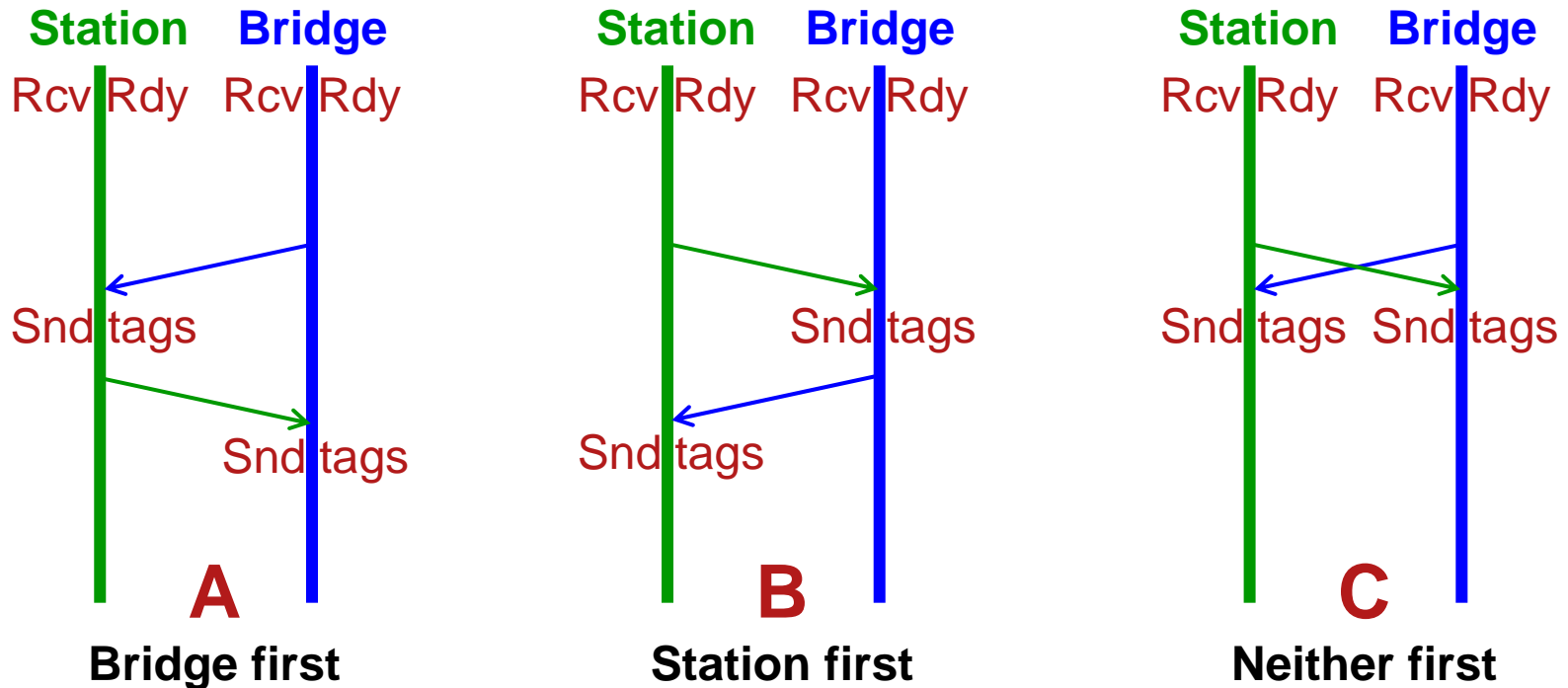


- Two separate handshakes, one for Bridge-to-Station, one for Station-to-Bridge.
- **First** receiver turns off its protection (**Rcv Rdy**).
Second sender enables tags (**Snd tags**).

CND Protection 1: Full handshake

- If the bridge's (and station's) **only method** for protecting the network (queues) is to **remap all incoming traffic** from a CN Priority to a non-CN priority, then this method ensures that the Rcv Rdy problem is solved.
- Solving the bridges' **Snd tags** problem requires that a bridge be able to remove CN-tags on output.

CND Protection 2: Half handshake

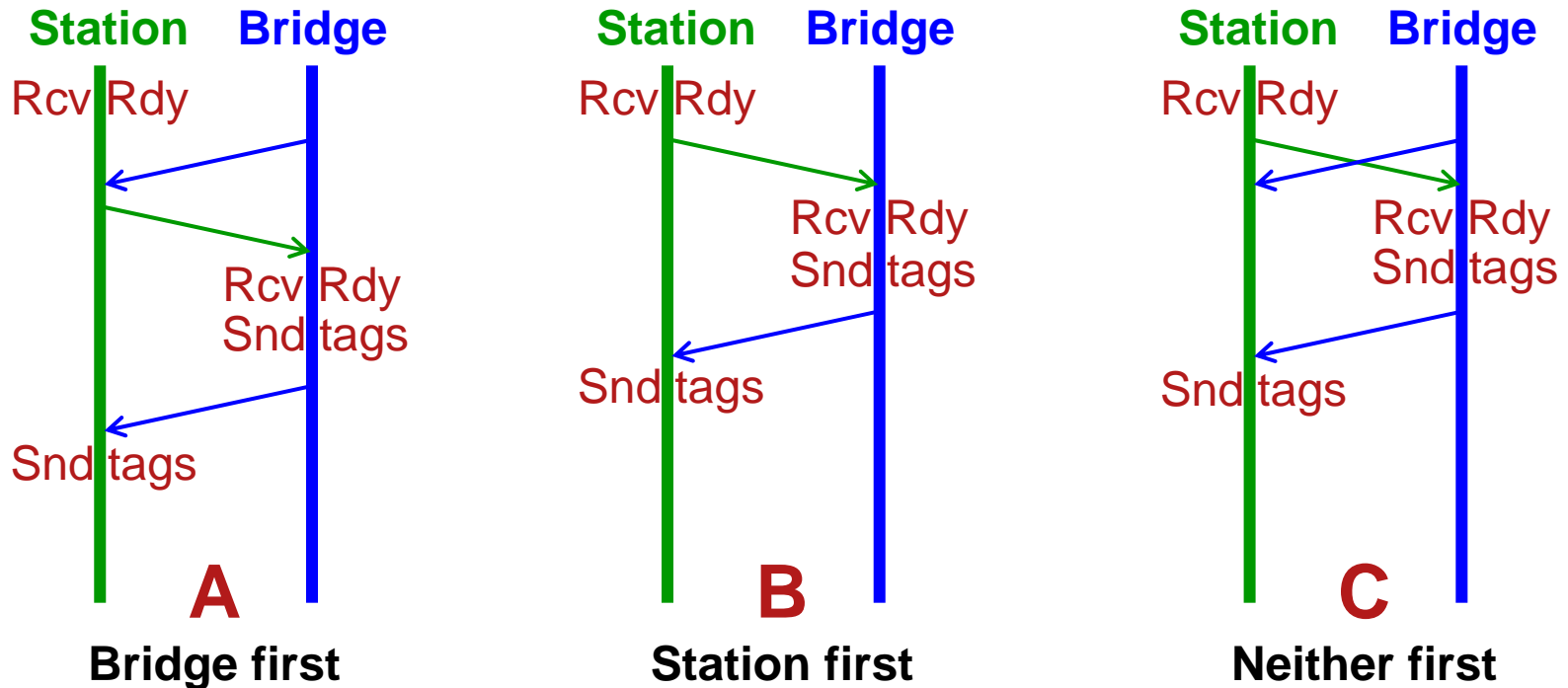


- Two separate handshakes, one for Bridge-to-Station, one for Station-to-Bridge.
- **First** receiver turns off its protection (Rcv Rdy). **Second** sender enables tags (Snd tags).

CND Protection **2**: Half handshake

- If the bridge (and station) can:
 - Admit only CN-tagged traffic to a CN Priority.
 - Deflect non-CN-tagged traffic received on a CN Priority to a non-CN Priority **and remove the CN-tag.**
- Then the Bridge and Station can start off in the Rcv Rdy state.
 - They are making the (safe) assumption that CN-tagged traffic is only sent by CN-aware systems.
- This is a quicker handshake, but requires an extra element, an **“Ingress CN-tag checker,”** in the bridge.

CND Protection 3: 3/4 handshake



- Two separate handshakes, one for Bridge-to-Station, one for Station-to-Bridge.
- **First** receiver turns off its protection (Rcv Rdy). **Second** sender enables tags (Snd tags).

CND Protection **3**: 3/4 handshake

- **Only the station** can:
 - Admit only CN-tagged traffic to a CN Priority.
 - Deflect non-CN-tagged traffic received on a CN Priority to a non-CN Priority **and remove the CN-tag**.
- The bridge deflects all CN Priority traffic to a non-CN Priority until it is Rcv Rdy.
- So, only the station can start off in the Rcv Rdy state.
- This requires the least novelty in the bridge.
- This is the solution that is in Draft 1.3.

Other issues

Other issues

- There are a number of LLDP handshake issues, as brought up at previous meetings.
 - The principally interested parties have not met since September.
 - The editor suggests an off-line meeting this week.
- CN-tag or not CN-tag?
 - The summary is in Annex Z. Any new arguments?
- Other Annex Z issues
 - Discuss and resolve.
- Editor's tasks
 - PICS Proforma
 - MIB
 - Next round of ballot comments