

1588 Transparent Clock use case

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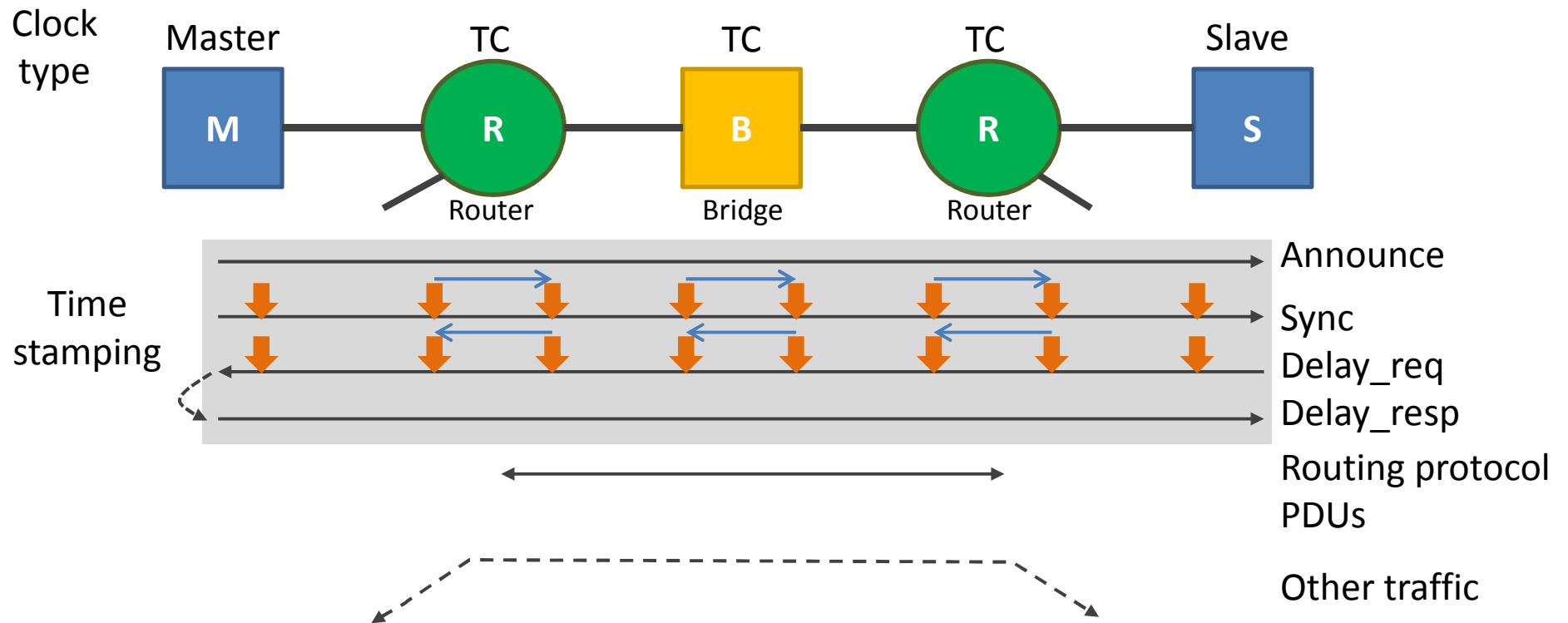
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Transparent Clock - status

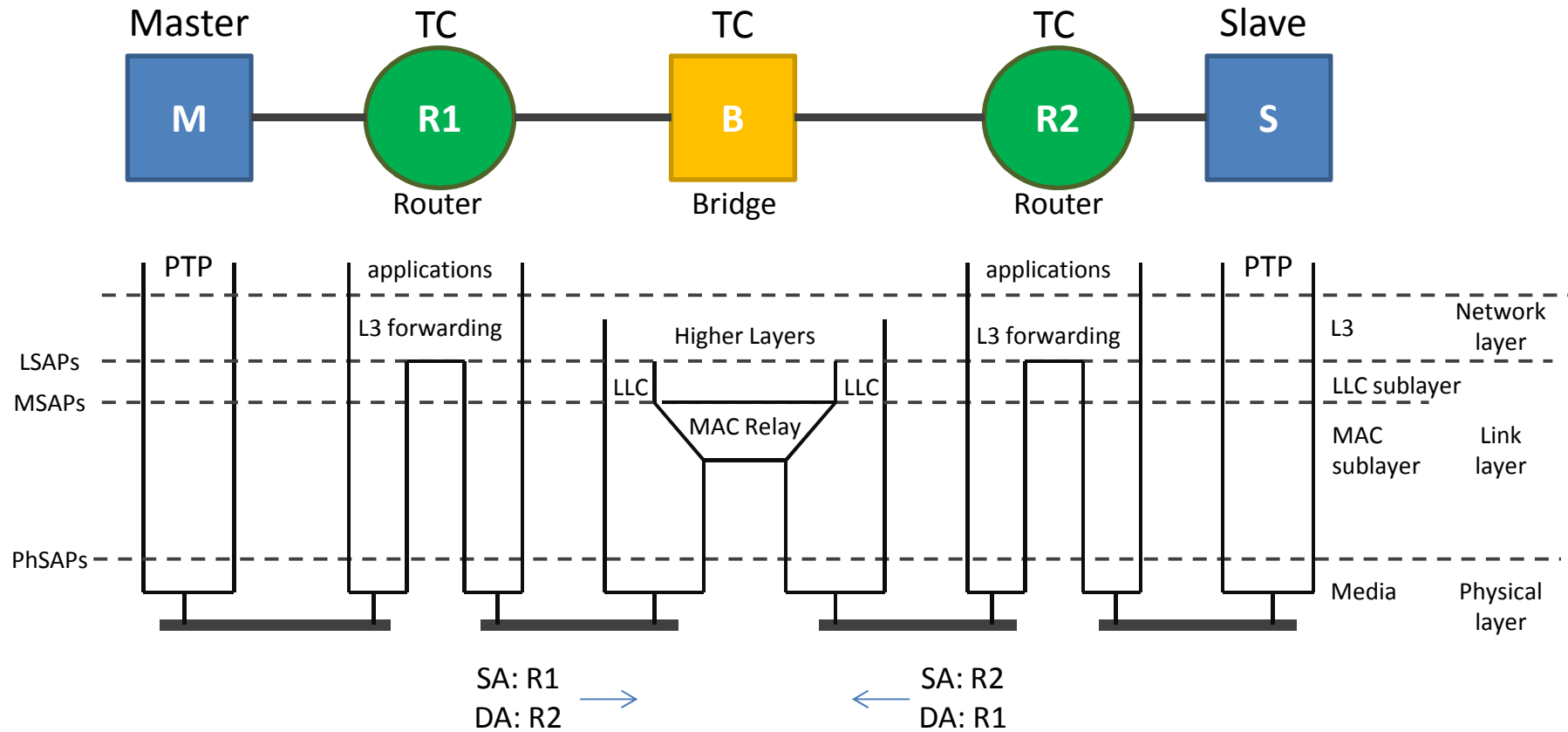
| Protocol stack | 802.1 bridging | L3 forwarding |
|---------------------|---|--------------------|
| ETH/PTP UC | TC valid w/SA replacement. Requires PTP:ClockIdentity for multiple Master, or Slave separation | N/A |
| ETH/PTP MC | Same as above | N/A |
| ETH/IPv4/UDP/PTP UC | TC invalid | TC fully supported |
| ETH/IPv4/UDP/PTP MC | ?? | TC fully supported |
| ETH/IPv6/UDP/PTP UC | TC invalid | TC fully supported |
| ETH/IPv6/UDP/PTP MC | ?? | TC fully supported |

Network scenario in next slides

Network Scenario (E2E TC)



Layer model



A deployment scenario

- Bridge installed
- Routers 1 and 2 are physically connected via bridge
- ARP establish MAC/IP-address binding
- TC is enabled on bridge ports, then what should be the next step?
 - Swap SA on R1-R2 connection?
(security issues: SA/SIP binding?)
 - All frames w/DA=R1 or R2 to higher layer?
 - Filter ingress; associate arrival time with frame through MAC relay function; update on egress?