

OmniRAN Network Reference Model with Heterogeneous Link Aggregation

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Abstract

This contribution proposes that the OmniRAN Network Reference Model be expanded to accommodate Heterogeneous Link Aggregation.

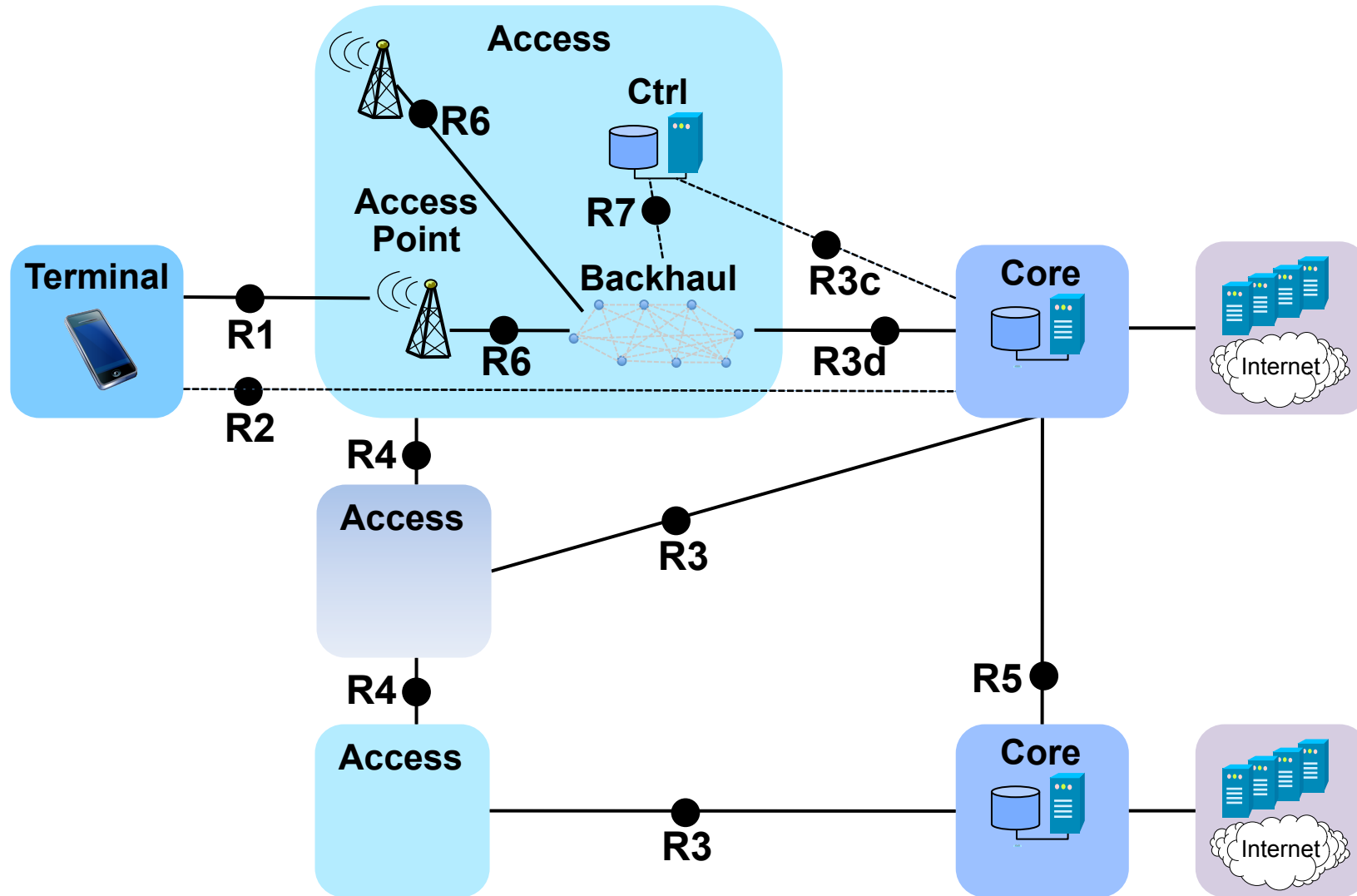
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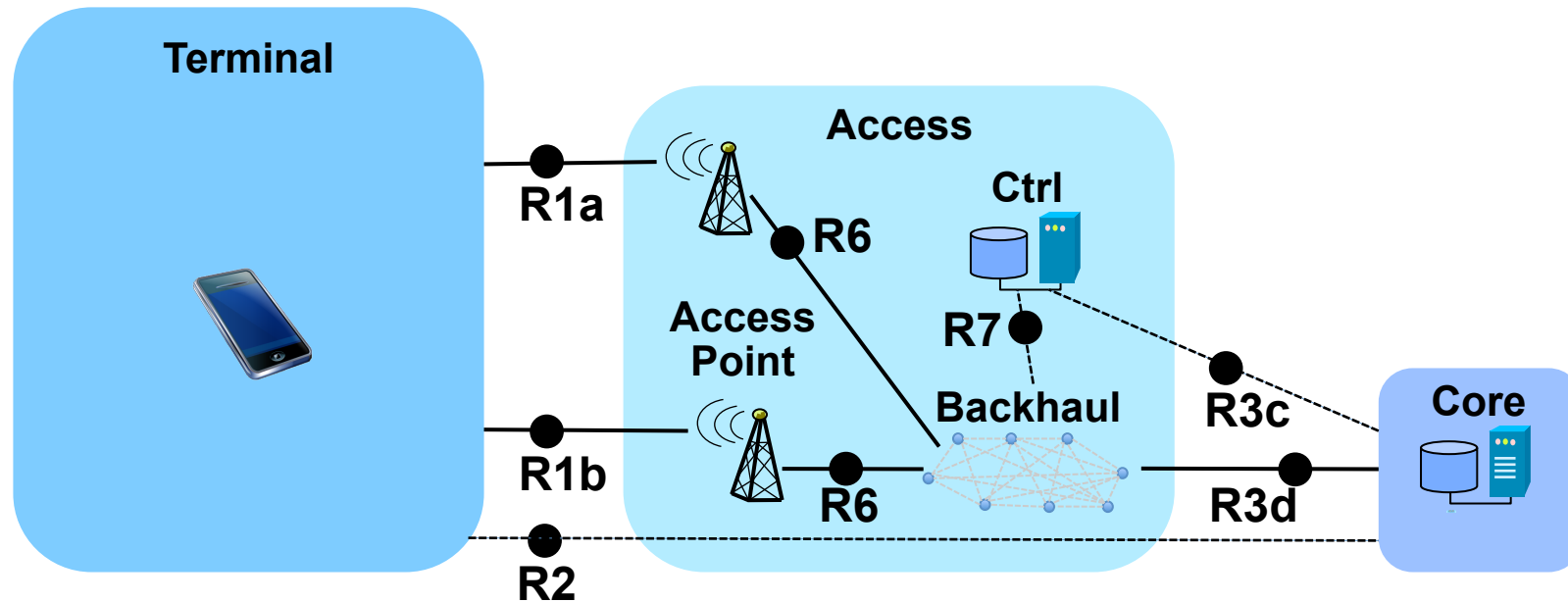
Summary

- This contribution proposes an extension to omniran-14-0051-00-CF00 supporting Heterogeneous Link Aggregation
- Figures are based on the proposal of omniran-14-0051-00-CF00 calling out the Access Point and Backhaul elements within the Access block.

Network Reference Model with Backhaul

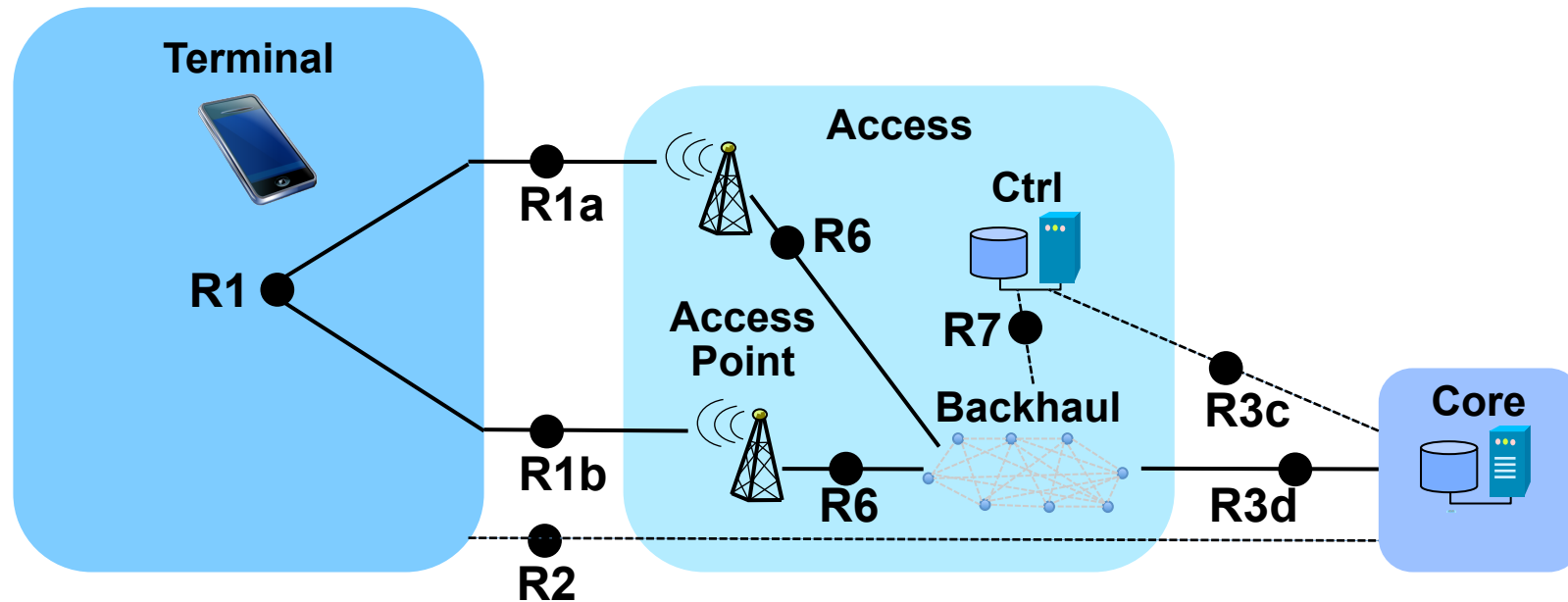


Terminal with two LAN interfaces



- R1a and R1b may use different MAC/PHYs (e.g. different radio technologies)
- Normally, these are separate LAN interfaces, with separate MAC addresses.

Network Reference Model with Backhaul and Heterogeneous Link Aggregation



- Terminal maps an outbound flow via either R1a or R1b
- Frames sent over R1a and R2a use the same source address
- Backhaul maps flow to R1 via either R1a or R1b
- Some parallels to 802.1AX

Questions

- Can Heterogeneous Link Aggregation be accommodated in the OmniRAN Network Reference Model?
- What's the simplest and most general way to do so?