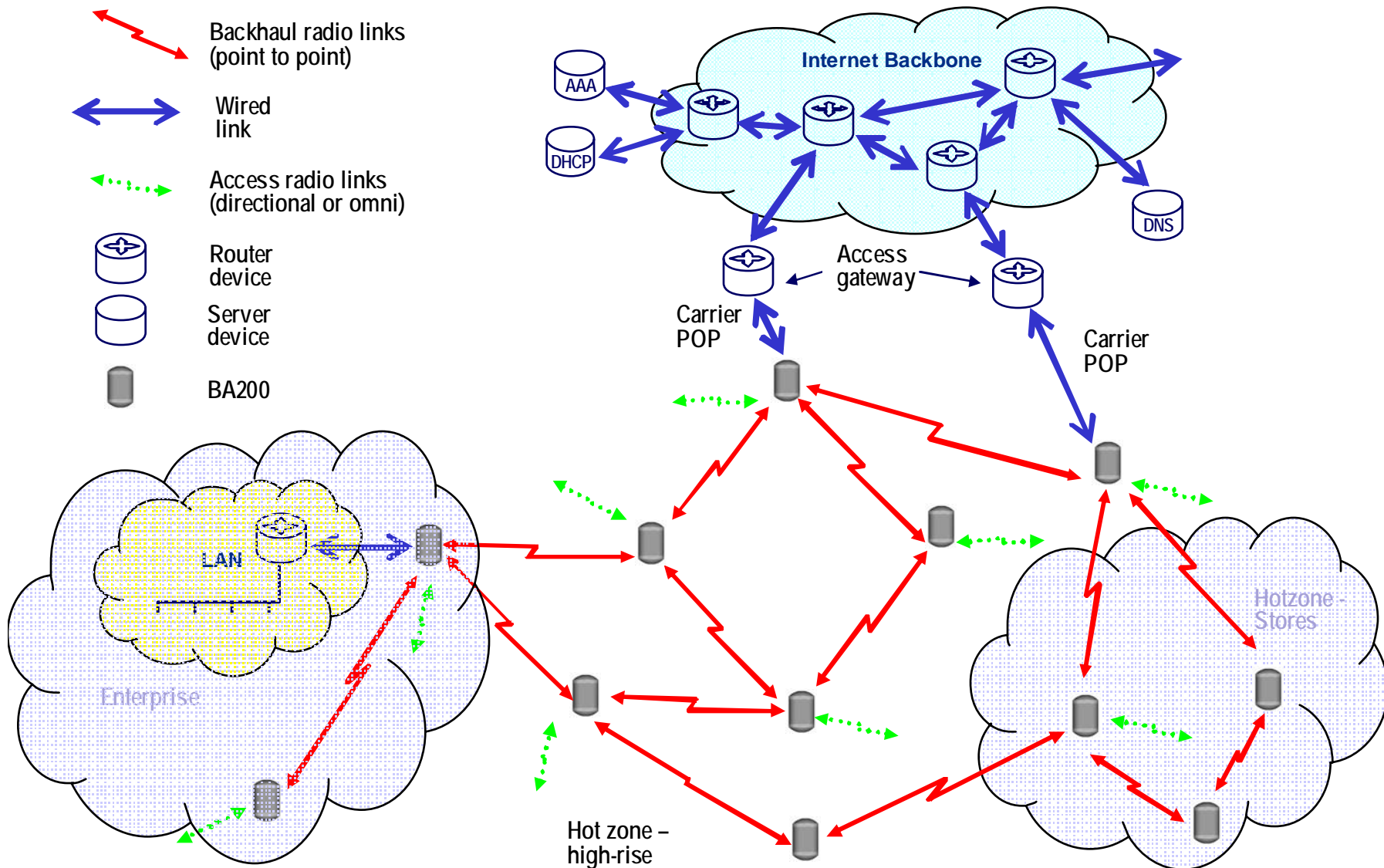




The Network-Centric Wireless LAN

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Point-to-Point Mesh Architecture



Why is this better?



- **Security**

- Point to point enhanced 802.11a links more secure than shared mesh backhaul systems

- **Implementation and management**

- Wireless backhaul dramatically reduces the cost of large deployments, outdoors or in harsh indoor environments.
- Out-to-in coverage is a cost effective way to provide Wi-Fi coverage for many large buildings.
 - Less disruptive installation outdoors
 - Fewer nodes

- **Availability**

- Access radios operate in entirely different band than backhaul
- Multiple point to point links keeps capacity high on the backhaul mesh. Each link operates independently without degrading other links
- Redundant routing
 - Load balancing

- **Total cost of ownership**

- Fewer nodes to install and manage
- Wireless backhaul drastically reduces deployment cost
 - No trenching

How is Mesh better?



- **How are mesh architectures better than other architectures when it relates to network contention and high availability?**
- **General wireless Mesh Benefits**
 - Redundant paths through the network
 - Self healing
- **BelAir's multiple point to point wireless mesh**
 - High capacity and availability
 - Up to three independent (and isolated) wireless backhaul links links in each node
 - Backhaul is in a different band than access
 - Scalability
 - There is NO contention on the backhaul links – they are dedicated
 - Extended reach between mesh nodes
 - Through point to point links with directional antennas
 - "Mesh around" obstructions
 - Use the mesh backhaul to get around line of site issues
 - Lots of flexibility in access node placement
 - Coverage and capacity where needed