

The Network-Centric Wireless LAN

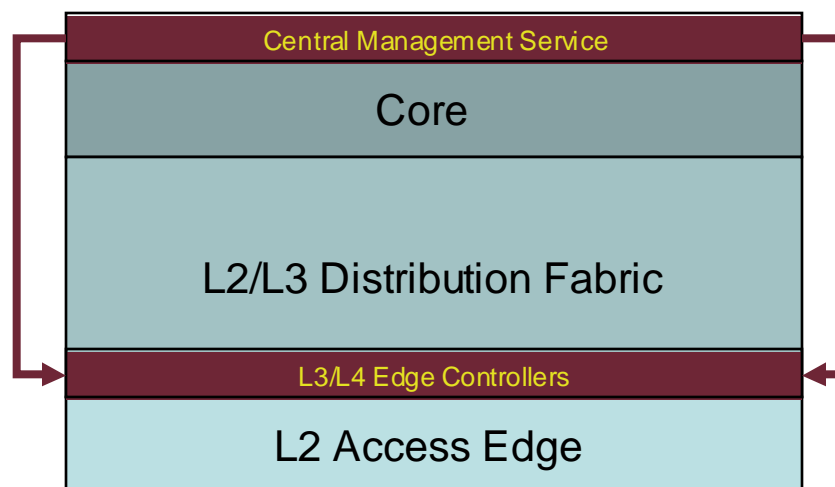
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System Overview



Access Manager

- Edge appliance
- Responsible for all packet processing
- Integrated L3 VPN support

Control Server

- Central management system
- Full L3 mobility support
 - Cross subnet roaming
 - Mobile, distributed VPN management
- Intuitive policy management system

Competitive Advantages

- Scalability
 - Split forwarding path/control plane architecture gives same scaling characteristics as the Internet itself.
 - System naturally scales to match deployments
 - geographic coverage of WiFi leads to small concentrations “at the wiring closet”
 - VPN service “grows” to match usage, especially when comparing Mb users vs Kb dialup users
- Sustainability
 - Access Points focused on providing connectivity, not security/access management
 - L3/L4 focus allows extensions into actual service management vs simple transport control
- Interoperability
 - Designed to work with existing and emerging transport technologies
- Capabilities
 - User specific controls
 - Application and service specific management/optimization

Rapid Roaming

- Need to consider multiple issues
 - L1/L2 connectivity: what are the radios doing?
 - CoS/QoS upstream: what's happening in the distribution fabric and core?
 - Security contexts: can I switch completely and safely in time?
 - Downstream **and** upstream traffic conflicts: beware asymmetric benchmarks!
- Where does Vernier fit in?
 - Complementary to "good RF"
 - Intermediary interface between RF and rest of network
 - L3/L4, user aware control allows end to end optimization and provisioning
 - Full L3 mobility support combined with authentication (WPA, 802.11i) termination allows support for fast reconnect, pre-authentication, fast session switching