

Enterprise Wireless Infrastructure Sample

Overview

This document outlines a sample architecture for an enterprise wireless infrastructure, describing key components and their roles.

Core Components

- Wireless Access Points (APs)
- Wireless LAN Controller (WLC)
- Core Network Switches
- Authentication Server (RADIUS/LDAP)
- Firewall/Gateway
- Network Management Platform

Sample Topology

1. All APs connect to access switches throughout the facility.
2. Switches aggregate uplinks to a Core Switch.
3. Core Switch connects to Wireless LAN Controller and Firewall/Gateway.
4. WLC communicates with Authentication Server for secure access.

Configuration Summary

Component	Specification
AP Model	Dual-band, Wi-Fi 6, PoE supported
WLC	Centralized, supports minimum 100 APs
Authentication	802.1X with RADIUS integration
Management Platform	Centralized dashboard, SNMP monitoring

Best Practices

- Deploy APs for optimal coverage with minimal overlap.
- Utilize VLANs to segment guest and corporate traffic.
- Implement regular firmware and security updates.
- Monitor network and review logs for anomalies.

Contact

For further information, please contact the Network Engineering Department.