



PACUG Wireless Discussion



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Centralized WLAN Architecture Components

WLAN Controllers

- Security Policies
- QoS Policies
- RF Management
- Mobility Management

LWAPP

Lightweight Access Points

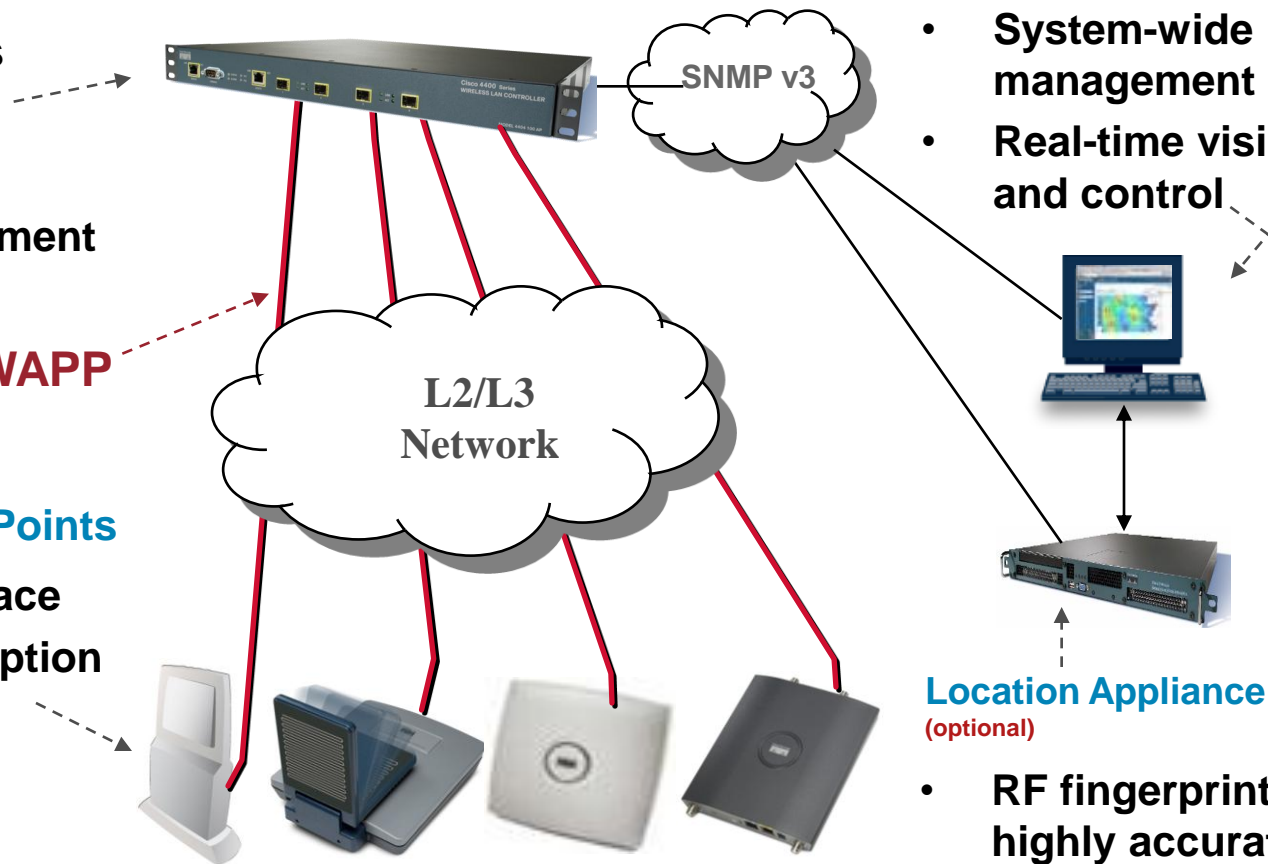
- Remote RF interface
- MAC Layer Encryption

Wireless Control System

- System-wide management
- Real-time visibility and control

Location Appliance (optional)

- RF fingerprinting for highly accurate asset and client tracking



Wireless Control System

Monitor Maps - Microsoft Internet Explorer provided by Cisco Systems, Inc.

File Edit View Favorites Tools Help

Address <https://wcs1.cisco.com/webacs/monitorAreaMap.do?serviceDomainKey=ServiceDomain!7>

Google Search PageRank 126 blocked Check AutoLink AutoFill Options copy a window

CISCO SYSTEMS WCS

MONITOR CONFIGURE ADMIN LOCATE

Network Maps Controllers Access Points Clients Tags Security Alarms Events Reports

Maps > Cisco SJ - Site 5 > BLD 14 > 4th floor

-- Select a command -- GO

View View Filters RSSI Color Lookup Zoom Refresh

-- Select an option -- -35 dBm -85 dBm 100% 1 min

0 feet 50 100 150 200 250

0 50 100

Contributing APs

- sjc14-42b-ap6
- sjc14-42b-ap4
- sjc14-41b-ap4
- sjc14-42b-ap5

Refresh Heatmap

Reload

Done.
Loading RogueAps...
Loaded 31 out of 31 RogueAps
Done.
Loading RogueClients...
Loaded 4 out of 4 RogueClients
Done.

Location data was retrieved within last 15 minutes

Rogues	0	473
Coverage		0
Security	90 0	171
Controllers	2 1	0
Access Points	1 0	9
Location Servers	0	

0 6 clients

3 clients

3 clients

2 clients

4 clients

1 clients

1 clients

1 clients

4 clients

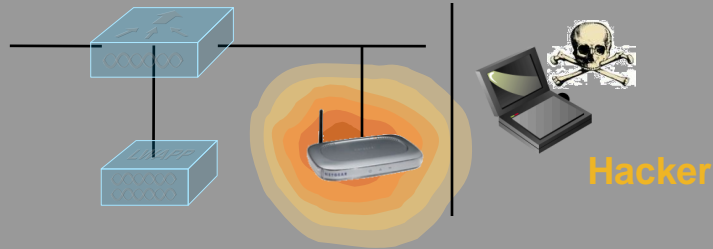
1 clients

Local intranet

start SofToken II Monitor Maps - ... C:\Documents a... Microsoft Power... 98% 1:22 PM

Centralized Wireless Gives You...

Security



Rogue APs—Employees create opening to enterprise network unknowingly
hackers, privacy issues

Guest Access

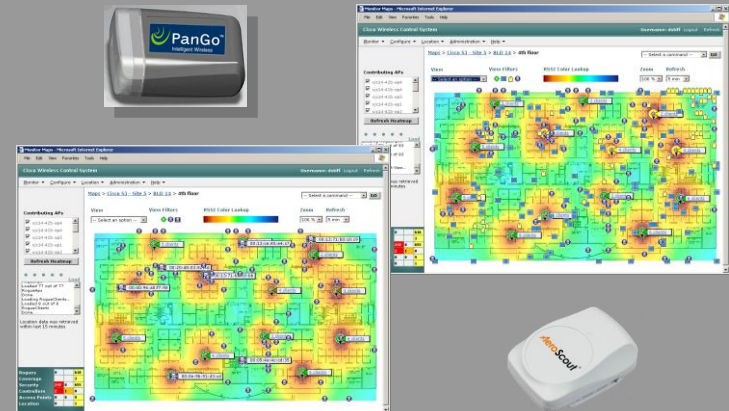


Voice

- WiFi enabled voice
- 7921G, Blackberry, Treo
- Better coverage
- Reduced Cost
- Integrated with IP PBX



Location



Aironet AP1250



Rugged Modular Platform



- Rugged design
 - Metal enclosure
 - Extended operating temperature range (–20 to +55°C)
 - External antenna connectors
 - Plenum rating
 - Flexible mounting options

Introducing the Aironet AP1250

- Wi-Fi CERTIFIED 802.11n draft 2.0
- *AP1250 selected for the Wi-Fi Alliance interoperability test bed*
- Multiple Input, Multiple Output (MIMO) technology
- Modular platform provides investment protection
- Designed to support higher speed WLAN technologies



Access Point Options

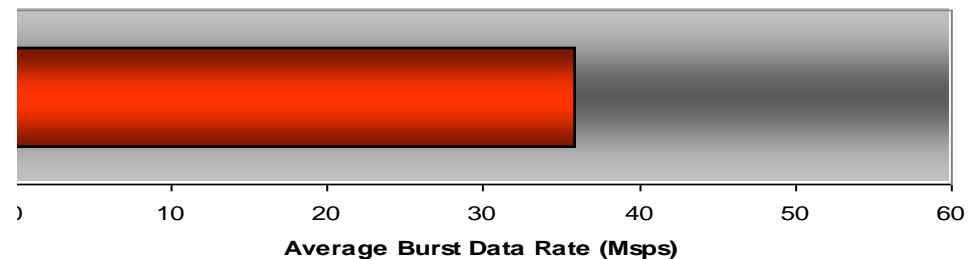


Better throughput, more reliable coverage

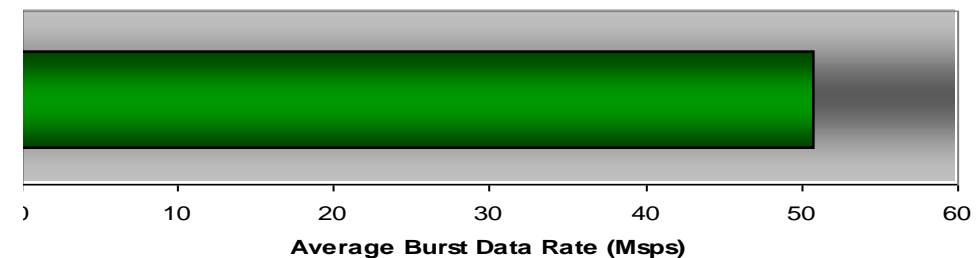
- Higher mean throughput, more reliable connections for each client
 - Consistent throughput and coverage
 - Better reliability, better user experience
 - Fewer help desk calls



Traditional AP



MIMO AP



AP1250 New Antenna Dipole Options

- New Grey antennas are not hinged allowing a smaller more elegant profile.
- If a hinge antenna is required then order the standard black dipole or the new white dipole



Blue Dot indicates 5 GHz

New Omni Antennas for AP1250

Single enclosure with 3 antenna elements

Very “clean” appearance.



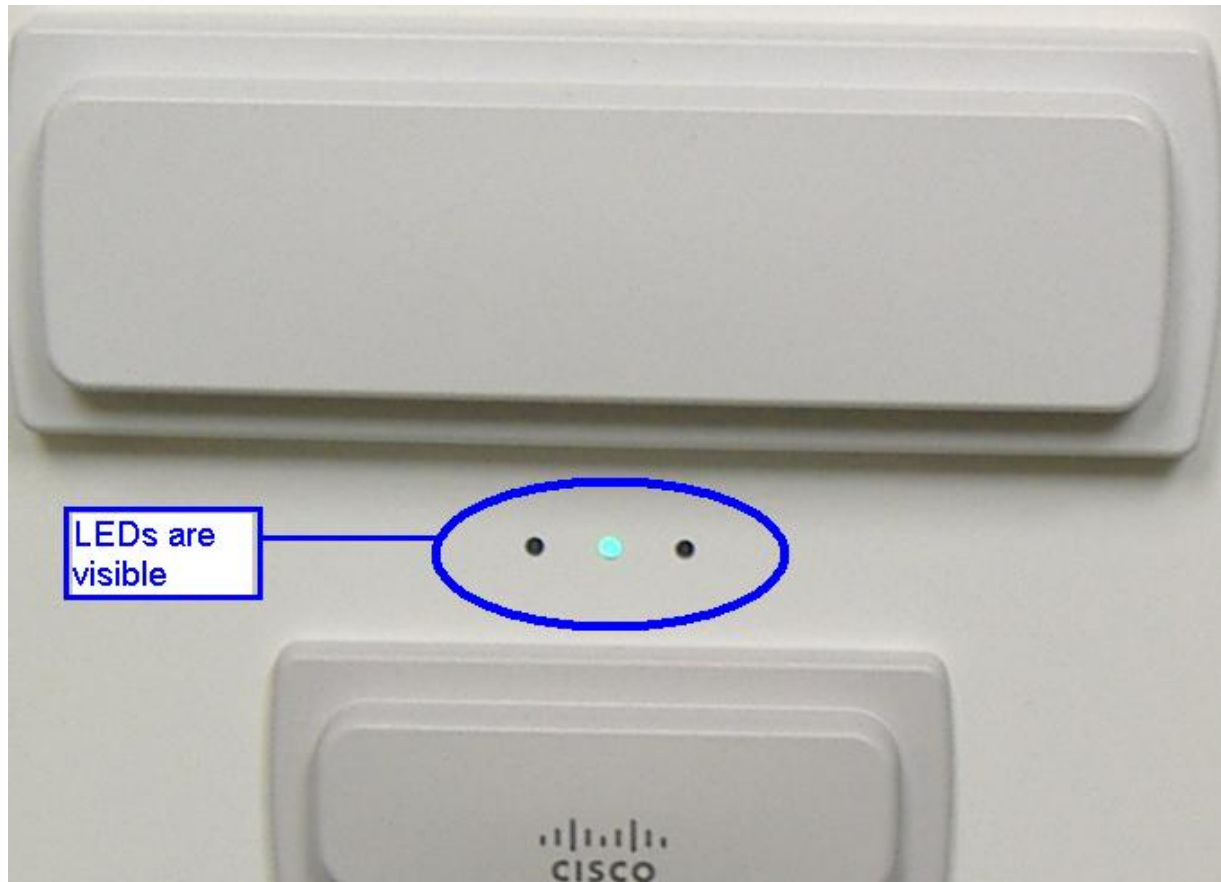
Ceiling Enclosures (3rd Party)



Ceiling Enclosures (3rd Party)



Ceiling Enclosures (cont.)

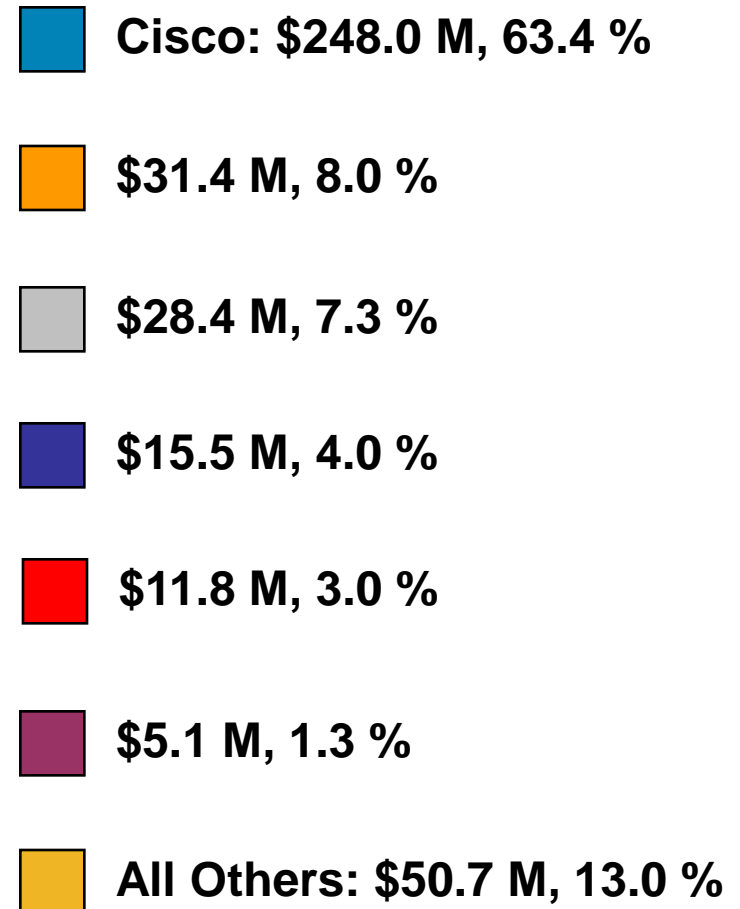
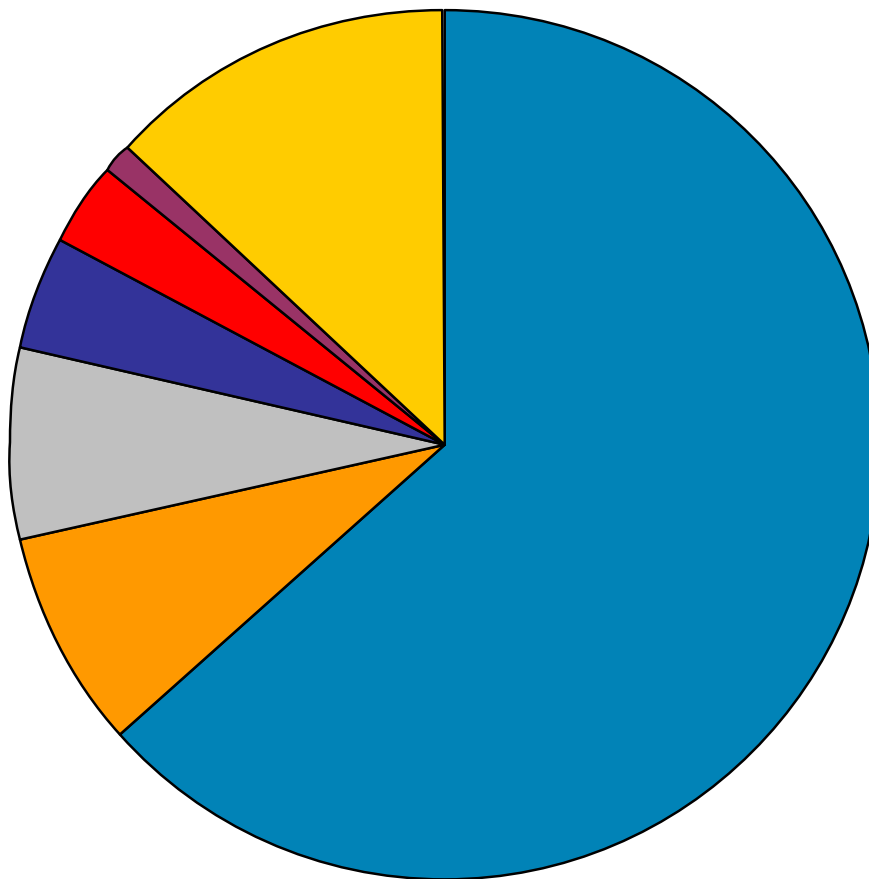


This enclosure allows the AP-1250 LEDs to be visible.

Covering the AP LEDs inside the enclosure with black electrical tape would allow customers to disable this feature should they wish to do so.

Dell'Oro: Q3 CY07 Total Enterprise WLAN

Enterprise WLAN TAM: \$390.9 M



Most Publicly Recognized Industry Platform

Product Awards



Head-to-Head Bakeoffs



Best of Show



Cisco Market Statistics

63.5% WLAN Market Share = 6.5 times more share than nearest competitor



Cisco is the strongest partner

Cisco spends more on Wireless R&D than the combined revenue of our two top competitors



Cisco will continue to securely innovate

Top 3 Cisco Advanced Technology with continued focus on WLAN growth

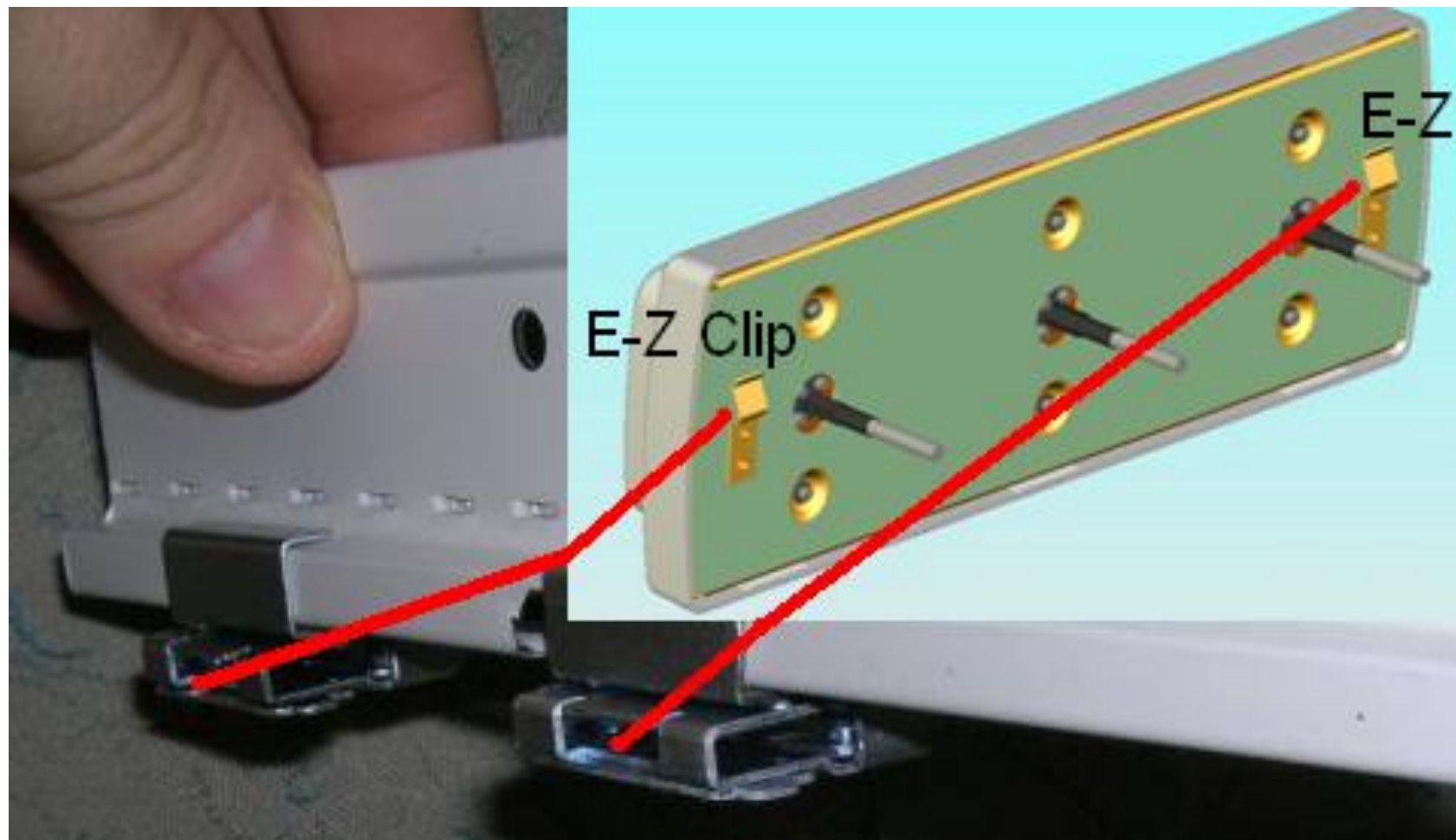


Cisco will deliver what customers need

Clip set when separated



Separated clips then go together on rail antenna E-Z clip then mounts to these clips





Proven Customer Track Record

- Close to 4 Million Cisco APs deployed worldwide
- 128,000+ Cisco WLAN customers worldwide
- 95% of Fortune 500 companies use Cisco products
- Largest Cisco deployment with dual-band APs at 1,200 Home Depot stores
- Cisco ranked Top 10 Most Powerful Networking Company by Network World
- Cisco # 1 for Innovations In IT by InformationWeek 500



Shaping the Industry

- Wi-Fi Alliance founding member
- Initial author of 802.11 and LWAPP (and subsequent resources on the subject)
- Chair of numerous IEEE Committees (802.11i, 802.11r, 802.11m)
- Founding contributors to Network World's "Wireless Wizards" column
- Award winning CCIE Program



The Right Pieces for Success

- Global Support Organization
 - 24-hour, global access to a team of expert engineers
 - 120 countries geographic coverage
 - Technical Support Services - 390+ CCIEs
 - Onsite field engineers
- Global Partnerships
 - 200,000 World Wide Partners
 - 4000 Specialization Badges
 - IBM, Intel, HP, EDS, CG&Y, Microsoft
- Full Services Portfolio - Lifecycle Support
 - Advisory Services
 - Advanced Services
 - Technical Support Services



Computer
Products &
Consulting



Cisco Wireless Lan Controllers



Cisco 2106 & Wireless Lan Controller Module

- Supports 6 lightweight access points
- 4 10/100 Mbps interfaces



Cisco Catalyst 3750G Integrated Wireless Lan Controller

- Supports 25 or 50 lightweight access points

Cisco 4400



- Supports up to 100 lightweight access points (12/25/50/100 AP options)
- Up to 4 Gigabit uplink ports
- Up to 2 expansion slots (Enhanced Security Module)

Cisco Wireless Service Module (WiSM)



- Supports up to 300 lightweight access points
- 8 Gbps module throughput
- Tight integration with other 6500 Service Modules

All hardware includes Radio Resource Management (RRM), mobility, intrusion protection, and QoS