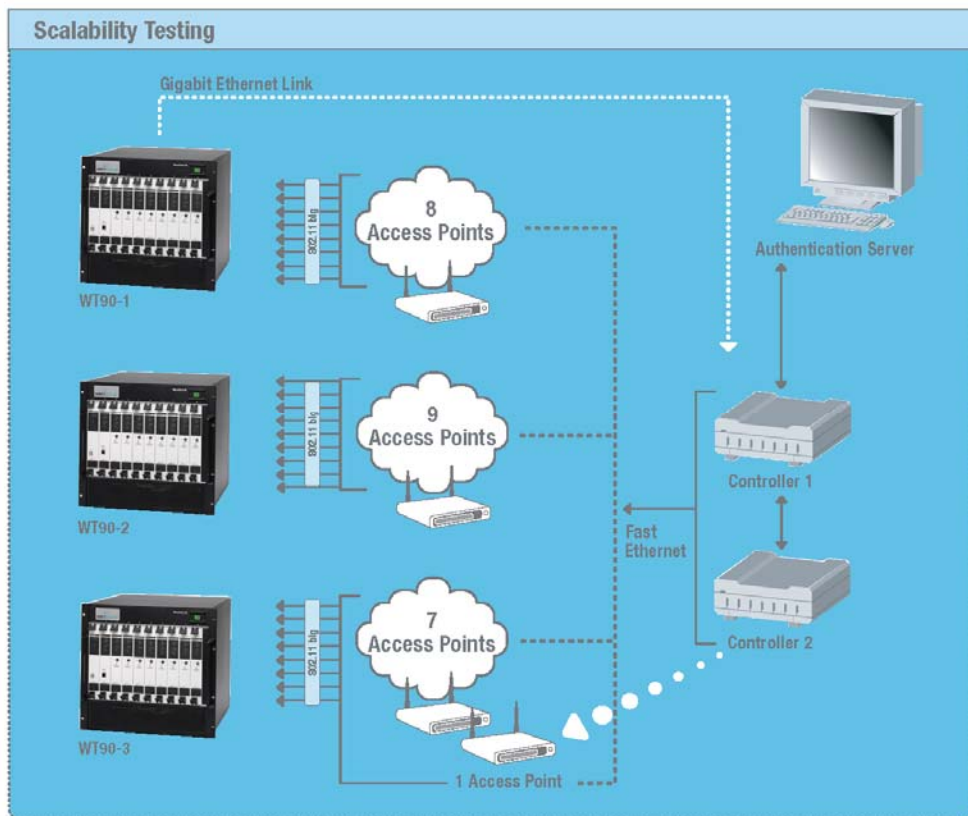


WaveLab—WLAN Large Scale Test Bed

WaveLab™, located in San Jose, California, is equipped with the first ever enterprise-class WiFi™ test bed capable of testing dozens of access points, and multiple switches and controllers. The Lab is ideal for of stress-testing WLAN equipment under real world large deployment scenarios.



Sample WaveLab setup

As the average number of access points per installation continues to increase, large scale testing on WLAN systems prior to deployment is essential for both equipment manufacturers and service providers. Large-scale testing is a better predictor of performance in enterprise settings, and is more stressful on the equipment than the usual method of running a few FTP sessions on a small collection of access points.

Benefits

- Test real-world complex scenarios
- Determine the scaling complexity of WiFi systems for enterprise use
- Load systems under test with thousands of statefull and unique WLAN client sessions
- Scale test from a single AP to dozens of APs and multiple WLAN controllers or switches
- Expose performance issues which cannot be determined in small-scale tests
- Produce precise latency and jitter measurements, key metrics for voice over WiFi and video applications
- Test controllers and/or switches using real AP's loaded by thousands of clients
- Detect and correct system flaws during development and prior to deployment
- Use WaveLab to demonstrate product capabilities to prospective customers



Test Methodology

The WaveLab test bed can be setup to meet your WLAN testing needs. With customized test methodologies. Examples of such methods:

Test	Description	Configurable Parameters
Voice Over WLAN	Determines the service level capacity, performance, call quality, and service level assurance offered by the system under test.	<ul style="list-style-type: none"> – Test duration – Individual MOS / R-Value score – Calls on the same AP – Maximum call packet loss – Search resolution – Client contention
Roaming	Measures the time needed for one to hundreds of clients to roam among dozens of access points at any given instance	<ul style="list-style-type: none"> – Test duration – Total clients – Roaming clients – Client distribution – Dwell time – Time distribution
Throughput	Determines the maximum rate at which the system under test forwards traffic with zero loss.	<ul style="list-style-type: none"> – Test duration – Test traffic frame size – Traffic orientation – Search resolution – Client contention
Latency	Measures the system under test latency and jitter from a single AP to multiple AP's	<ul style="list-style-type: none"> – Test duration – Intended load – Test traffic frame size – Traffic orientation – Client contention

TEST SETUP

- Three WaveTest90 chassis equipped with one or two gigabit Ethernet ports and twenty-five 802.11a/b/g test ports
- 25 RF Shielded enclosures, used to reduce interference from the system under test

PROVIDED FOR TESTING USE

- 19" standard racks, ready for system under test installation
- Cables and accessories
- VeriWave application engineer to assist with setup and test procedures

SUPPORT SYSTEMS UNDER TEST

- Up to 25 access points
- Controllers and/or switches
- Additional network components such as RADIUS server

NON-DISCLOSURE AGREEMENT

- All testing results remain strictly confidential



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