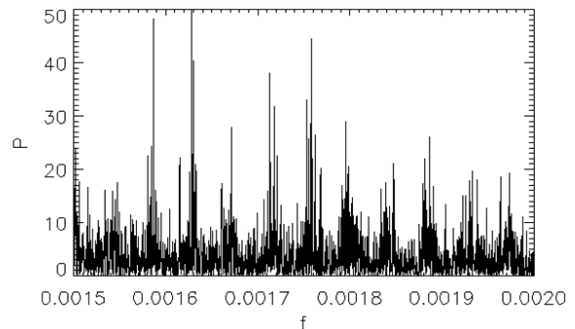


Arada Radio Resource Management

802.11k Radio Management Solution

Powered by Arada Wireless Software Solution



Arada System's 802.11k Radio Resource Management (RRM) solution improves overall throughput and operational efficiency of a wireless network.

The 802.11k solution manages the way traffic is distributed within a network by preventing excessive demand at any point of the network infrastructure. The load is distributed fairly across network resources through system level control of radio transmission characteristics. The overall throughput of the system is greater because more efficient use is made of the network resources.

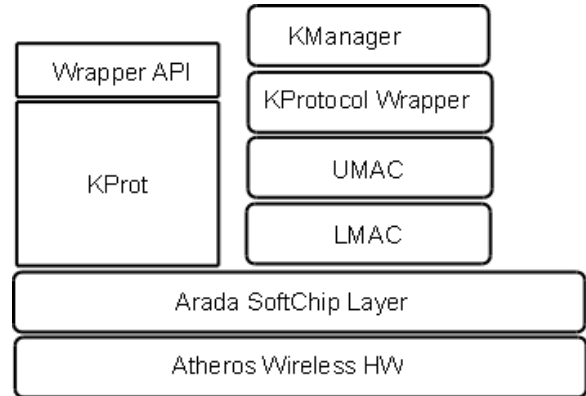
The solution utilizes dynamic algorithms for controlling parameters like transmit power and handover criteria to smoothly balance network load over the service area. Efficient dynamic RRM schemes increase network capacity and keep the grade of service above a certain level. The latter involves covering a certain area and avoiding outage.

The solution provides a user interface and an API Framework to allow full customization of applications.

Arada Systems brings you a complete, tested radio management solution that works in all WLAN environments. It utilizes your network infrastructure and spectrum resources as efficiently as possible and brings the benefit of increased system capacity with reduced cost of deployment.

Architectural Overview of 802.11k Solution

The implementation consists of a Protocol and Manager component.



Features & Benefits	
Automatic Load Balancing (ALB)	<ul style="list-style-type: none"> • STA Driven ALB <ul style="list-style-type: none"> ○ Pre- Association ○ Post Association • AP Driven ALB <ul style="list-style-type: none"> ○ Pre- Association of STA ○ Post Association • Cell Breathing
Dynamic Channel Selection	Based on: <ul style="list-style-type: none"> • Beacon Request Report • Channel Load • STA Statistics
Dynamic Transmit Power Control	Run-time Power Control of AP-STA Link based on measurement reports
Roaming Support	<ul style="list-style-type: none"> • Fast Roaming • Group Roaming • Forced Roaming
GUI Based	Ease-of-use and Configurability
API Framework	API Framework allows full customization: <ul style="list-style-type: none"> • Set of wrapper APIs for sending any particular request • Allows user to write intelligent application using radio resource management • Query information in the MAC for gathering measurement related information