



## nEX-G ReachWireless

ReachWireless is a comprehensive wireless software platform built to implement highly functional, secure and manageable wired and wireless IP networking devices: Mesh Gateways and multi-radio Mesh Nodes, HotSpot access points, access controllers, enterprise access points, fixed 802.11 wireless network elements, base stations and customer premise equipment (CPE) and high performance, secure point to point or point to multi point wireless bridges.



### Flexible

ReachWireless incorporates state of the art security functionality such as WEP/WPA/WPA2, dynamic key, 802.1x authenticator and supplicant. Security policy settings can be applied per BSSID or interface basis.

Multiple BSSID, VLAN, tunneling and per interface network policies allow creation of very flexible network structures where the same hardware infrastructure can be used for public access with WEB login and WPA2 protected company network or multiple WISP networks can run on the same hardware.

### Device Management

ReachWireless was designed to address wireless network management problems as well. At the heart of ReachWireless management subsystem is a simple text based configuration file and the nex-G RCMS (Remote Configuration Management System) agent, which in pair with a RCMS server creates a structure for fast wireless network deployment and robust administration.

Among other features, the RCMS server has automatic provisioning, automatic configuration file and firmware image upload capabilities. The RCMS agent can bypass most firewall and NAT protected routers without additional configuration. nex-G has common management interfaces such as WEB, command line, SNMP and SYSLOG for troubleshooting. ReachWireless is accompanied by nex-G Configurator, a JAVA based GUI configuration file editor. The nex-G Configurator makes configuration process more convenient for our customers.

### Network Management

ReachWireless also provides a full fledged Network Management System (NMS) that enables operators to manage their network from a central location. A Network Management System provides advanced features such as Topology Views, Fault Management, Auto Discovery, Automatic Firmware Upgrades, Remote Device Configuration, Performance Management and Reporting.

The advantage of getting a Network Management System on top of the existing ReachWireless platform is that it can be installed at minimal cost, without any additional hardware equipment. All that is required is an automatic software upgrade of the nex-G Wireless software on the Base Service Sets.

Figure 1: nex-G Wireless Software Architecture

