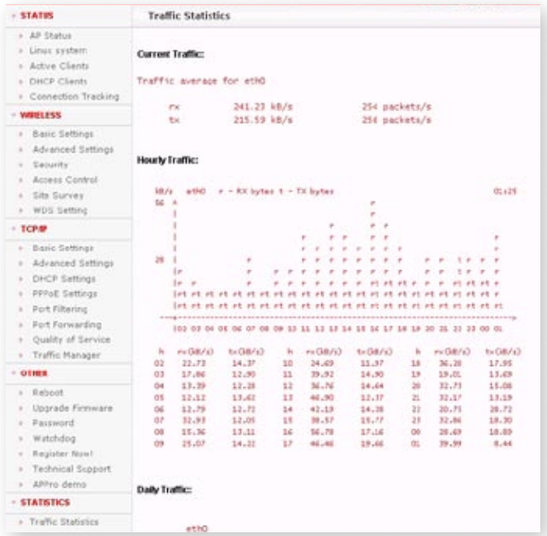
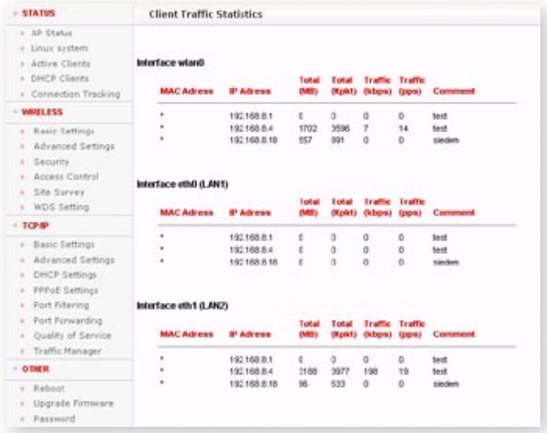


AP traffic statistics.



Traffic statistics fot each connected device.

Processor radiator – enhances the cooling of the device and prevents AP hungup because of high temperature.

Gold guarantee – Broken hardware with APPro54G is immediately replaced by the operating one. We knoe that the clients needs it in his network, not in service

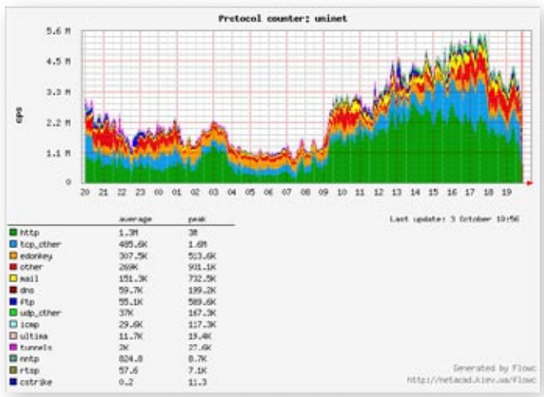
Cisco Netflow Statistics – export of statistics in Cisco Netflow format is a solution, which is not found in devices of this price level. This mechanism enables gathering of information about every trensferred packet with source and destination addresses and ports. Advanced tools enable the subsequent analysis and archiving of this information. These tools provide data such as: statistics about users' operation in the network, used protocols and aplications, traffic in ports and types of used services. You may supervise the statistics of the traffic live and through the daily and monthly reports.

List of connected clients with MAC and IP addresses – At any time you can check who is connected to the access point. Full information is accessible: MAC address, IP address, name of client, connection speed and the quantity of transferred data. The error statistics make it easy to determine the quality of each radio connection and detect problems.

List of active TCP/IP connections – it helps to browse in real time TCP or UDP sessions by the clients with such information as IP addresses, source and destination ports, transferred bytes. By this way you can diagnose the cause of excessive traffic in the network or virus attack.

Traffic statistics for each client – thanks to them you can supervise the operation of Traffic Manager. They present up-to-date transfer and the number of transferred packets in a secund for every IP, MAC address or in the subnet entered in Traffic Manager.

Management by WWW, SSH or Telnet – APPro54G enables the management of the access point on the www level. There is a option for advanced users of access to diagnostic tools via Telnet and SSH – ping, tcpdump, ifconfig and traceroute.



Netflow statistics.

Features

: : APPro54G – basic assests:

- > Kernel Linux, version 2.4.18;
- > Busybox, version 1.0.0;
- > Iptables, version 1.2.9 (SNAT, DNAT, MAC, TTL, iplimit);
- > Iproute2 (HTB, WRR, PRIO, ESFQ);
- > Tools: traceroute, ping, arping, tcdump, nslookup;
- > Shell compatible with Bash (SSH/Telnet);
- > compiler gcc accessible.

: : Appro54G – full operation:

- > AP, APC, WDS, bridge and multipoint bridge;
- > Routing, WLAN/LAN/WAN in any configuration;
- > NAT and DHCP for WLAN or LAN;
- > Independent ports LAN in any configuration LAN/WAN;
- > MAC Address cloning;

: : APPro54G – wider possibilities:

- > Packets aggregate in bridge mode;
- > ACK parameter regulation;
- > Transmission power regulation, sensitivity regulation and channel number regulation;
- > Locking of client-client traffic (Intra BSS Traffic);
- > Selection of operation rates (Tx Operation Rate);
- > 64 entries in table of MAC authorized addresses;

: : APPro54G – full control:

- > QoS in bridge mode and router mode (full Linux options);
- > Band management for 64 of IP or MAC addresses;
- > Mask application in the course of rules' definition;
- > p2p traffic classification on the basis of packets' analysis;
- > Protocols: eMule, Direct Connect, KaZaA, Gnutella, BitTorrent;
- > Traffic precedence;
- > Seperated band for: e-mail, www, P2P and others;
- > Traffic locking of addresses without assigned band;

: : APPro54G – enhanced reliability:

- > Hardware watchdog in additional module;
- > Watchdog restarting device in case of communications failure;
- > Temperature and voltage measurement;
- > Processor radiator;
- > Gold guarantee

APPro54G to access points based on RTL8186 chipset

Appro54G software is a specialized distribution of the Linux system for the most popular access point based on Realtek 8186 chipset. It is used by most of the IT producers, i.e. in the models: OvisLink WL-5460AP or Planet WAP-4035.
APPro54G contains all tools necessary for configuration, administration and diagnotics of wireless computer networks, including internet access. Application of the Linux system ensures a far better functioning than other typical solutions. The hardware management is possible via www interface. Advanced users can also manage it from the level of console (Telnet or SSh).

Thanks to our solution, you save on hardware purchase costs, such as managing server, router, firewall, switch, watchdog. You simplify the structure of your network and you enhance the reliability and safety of its operation.
The best recommendation is a fact that our solution is used by thousands of networks in many countries. APPro operates in over 80 000 access points in those networks.

Planet WAP-4035/APPro54G
WAN/4xLAN/WLAN b/g, 54 mbps

Demo APPro54G on the internet:
http://wifi.online.pl/demo54g/

online.pl APPro54G

: : APPro54G – enhanced safety:

> Static ARP;
> Firewall/NAT;
> Full operation of firewall in bridge mode and in router mode;
> Network access only for authorized MAC/IP pairs;
> Traffic locking through selected ports or their range;
> Network neighborhood filtering: RPC, (NETBIOS filtering);
> Locking of link sharing (TTL);
> Ports' forwarding;
> PPPoE protocol servicing;
> PPPoE client on WLAN or WAN interface;
> Optional PPPoE server.

: : APPro54G – you know so yoy can do better:

> Connected clients list with MAC and IP clients;
> TCP/IP Active connections list;
> Traffic statistics for each client;
> Data export in Cisco Netflow format;
> Management by WW, SSH or Telnet;
> Defining of proprietary rules of QoS, NAT, firewall and routing;
> Additional software installation option;
> Script recording in flash memory.

: : APPro54G – you sleep peacefully:

> 80 000 installations in thousands of networks all around the world;
> Standard interface in successive versions;
> regular and free update;

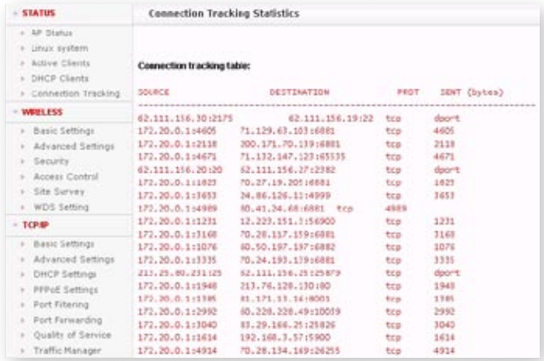
Desciption of selected functions of APPro54G

Packets' aggregate in bridge mode – one of the basic limits to the WIFI network efficiency is a maximum number of transferred packets in time unit. APPro54G puts small packets together into bigger packets of the greatest admissible size, which ensures a 20 % greater data transfer.

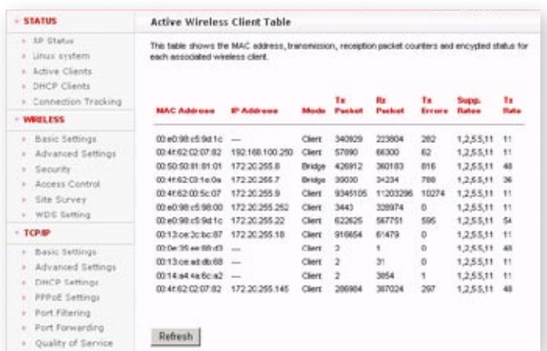
Transmission power regulation, sensitivity regulation and channel number regulation – The selection of sensivity and power of the access point makes it possible to adjust parameters to individual needs. The decrease of sensitivity is helpful when the device is interfered with another device operating close by, on the same channel. By adjusting the power to the installed aerial you can get a maximum range and keep the admissible transmission power.

The option of locking client-client traffic (Intra BSS Traffic) – traffic between clients in networks providing internet imposes a considerable load on the accessible radio band and reduces the quality of other services. By locking the client to client traffic, APPro54G is a solution to long pings and packets' losing

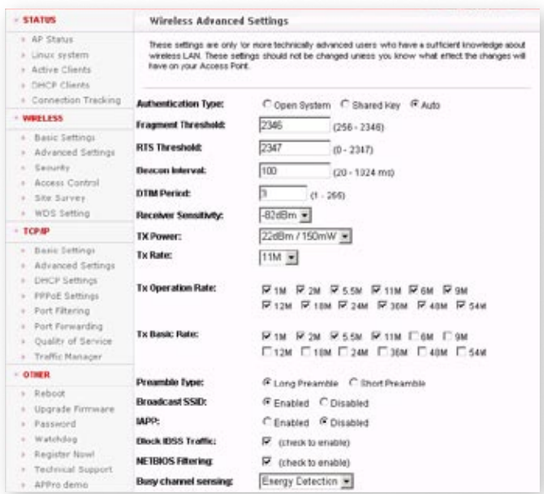
Optional LAN/WAN/WLAN configuration for NAT and DHCP and independent Eth ports – Thanks to APPro54G, you will configure selected ports of your device as WAN or LAN, even if that were not provided for by the producer. The access point from APPro54G can operate as a router of full value and as DHCP server and it can share the connection both in wire and wireless technologies. This function in other devices is rare.



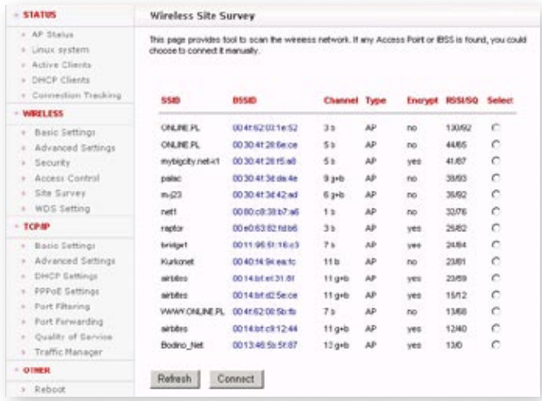
Active TCP/UDP sesions.



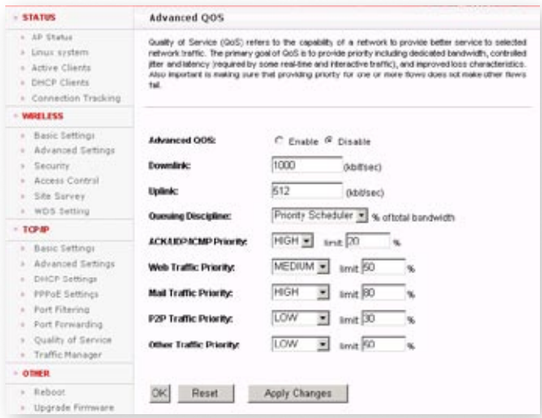
List of connected devices with their MAC/IP adresses.



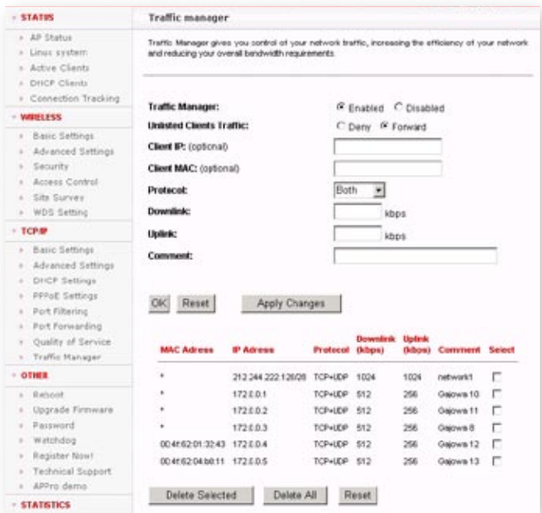
Radio interface configuration.



Site survey.



QoS configuration.



Traffic Manager.

PPPoE Client on WLAN or WAN interface – thank to this special function, APPro54G becomes a dedicated client terminal and enables the connection of LAN subnet to the network where PPPoE protocol is used.

The band management for 64 clients and mask application in the course of rules' definition – When the band is not managed, individual users who intensively enjoy the network can make it hard for others to access the internet. Up to this time the most frequent solution was to place a server, which managed the band. Appro54G enables you to save server costs, because it manages it itself and it uses queuing HTB for a maximum of 64 users. The special function of Traffic Manager makes it easy to assign the uplink and downlink band, not only for selected IP or MAC addresses, but also to define proprietary seperated subnets for many users with the common band. It means that the traffic regulation is closer to the client, which is more efficient and does not load the radio band (as it happens in the case of limiting traffic on the central server).

The seperated band for: e-mail, www and P2P and others – P2P trafic is a nightmare of the internet providers. Appro54G and QoS function define the part of the link, which can be used for www, mail and other protocols and what part will go to P2P. Thanks to fast management, there will always be a band for priority services. At the moments of overload the priority service replaces the service hat is not so important. The advanced technique of packets' analysis recognises such P2P protocols as: eDonkey/ eMule/ Overnet, Direct Connet, KaZaA, Gnutella or BitTorrent.

The access only for authorized clients, locking of link sharing (TTL) – Illegal connection to the net or the sharing and providing connection for third parties is no longer a problem. APPro54G enables the access to the network only for authorized MAC/IP address pairs and makes it possible to apply ARP statistics tables. Additionally, the locking of traffic for addresses not entered in Traffic Manager and the modification of TTL value in packets entering the user's network, efficiently limits such unwelcome acts.

The locking of traffic to selected ports or their range – option of filtering both individual ports and selected ranges ensures safety in the network and guards the users against virus.

The filtering of network neighborhood: RPC and so on, NETBIOS Filtering – Windows systems send periodically packets to ports: 135-139, 427, 445, 1025, 1512. They are used to communicate and exchange the files in local networks, but they generate unwelcome traffic. The locking of the named ports saves the band for the internet access. Starting this option will lock RPC Windows services. Thanks to this, the hazard of virus attacks is reduced.

Firewall/NAT – If the mechanisms of packet filtring and of locking network neighborhood were not sufficiently efficient, APPro54G offers full functions of the Linux firewall (both as bridge and router). One can also use the iptables tool with additional extensions: REDIRECT, MASQUERADE, MARK, CONNMARK, connlimit, conntrack, ICMP, iprange, lenght, limit, MAC, MARK, multiport, TTL, IPP2P and mport.

Firewall and QoS accissible both in bridge mode and router mode – All advanced functions APPro54G connected with: port filtering, network neighborhood locking, firewall, clients' authorization according to MAC addresses and band managing and QoS – operate when the device works as transparent bridge and router. You can use these functions in every mode of operation: AP, APC, WDS, P2P and P2MP.

Not so many tasks thanks to two watchdogs – APPro54G uses two watchdogs. One is built in AP. The second is on the chip card. This makes the access point reliable. Appro54G will reset AP after the voltage drop, after EMC interference or other causes. You no longer have to climb the roof or the chimney to restart the access point. The watchdog automatically supervises the connection to the selected IP address using the ping order and restarts AP when the connection is inaccessible.