

STREET WIFI Wireless Access Gateway (WAG)

WIFI Services are evolving on a daily basis. There is a very good reason for that.

WIFI is becoming the basic building block of modern communications. Runs on an unlicensed frequency on a global scale, its performance improves year after year, offers the best price-performance ratio and supports a wide range of business models.

At StreetWIFI we see all these advantages of the technology but more important we deeply sense the needs of CSPs and the end users and our StreetWIFI WAG was designed and built with those two key players in mind.

The StreetWIFI WAG offers Communications Service Providers a simple, scalable, carrier-grade WAG solution ideal for community Wi-Fi environments such as homespots, Multi Dwelling Units (MDUs) and venue-based public Wi-Fi.

Provides an ARC (Affordable, Robust and Compact) platform which delivers top performance per processing unit and adaptability to most business scenarios ensuring rapid adoption of this technology by CSPs on a global scale.

The StreetWIFI WAG is designed for multiple applications:

- Community WIFI: Agnostic regarding most vendors, making it a viable solutions for billions of residential APs worldwide that do not support Hotspot 2.0.
- Virtual Bridge communications for business, enabling a rapid and economic deployment of LANs between business locations
- Network Back End with several features to support a long array of business models including Network and Service monitoring tools, Designable Captive portals per SSID, Ad Server advertising in the portal, Walled Garden capabilities, billing per traffic, time or combination of both.
- Software only solutions making an ideal alternative to run on premises or on the cloud.

Highlights

ARC Software only platform

AP Vendor agnostic (*)

Highly Scalable

Commercially adaptable for all sizes of CSPs

Under the hood

- SoftGRE/EoGRE Tunneling
- IEEE 802.1q VLAN for SSID segregation
- FAS Web Service: Authentication,
- Accounting and CoA/DM
- vCPE: Pre & Post Authentication Policy Enforcement, Dynamic Captive Portal Policy per SSID,
- Carrier Grade NAT(IPv4), Vertical traffic segregation and processing per SSID, Intelligent Traffic Isolation
- OSPF

(*) Most vendors supported

Feature	Benefits						
Scalability	One Size fits all. From CSPs with a few thousand subscribers to multi million subscribers CSPs Scalable not only based on number of subscribers but on CPE vendor and technologies such as HFC, FTTH, WISP, ADSL Software only solution. Ready to be deployed on premises or on the upstream carrier Rapid adoption by many CSP potentiates usability and demand for the service						
End User perspective	For the individual user the main benefit is having much more connectivity options and at a lower price A great chance for 2 billion under connected or not connected at all For the CSP an excellent chance to create New Value Added Services and additional lines of revenue						
Affordable, Robust, Compact (ARC)	Wide array of possible business models. From licensing for CPE to success based models. Fermium services. Cobranding. Hybrid Virtual Operator High Availability, in service software upgrades, network monitoring Minimum processing requirements						
TUNNEL END POINT (From 1 to 29):	Tunnel End Point GRE MAC Monitor GRE Onto MySQL Elastic Search / Kibana (ELK) for Monitor (On premises or Cloud based)						
OPN CPD	Captive Portal – Supports multiple SSIDs with VLAN Tagging DNS Masq RIP DHCP RELAY						
OPN MAIN	<table> <tr> <td>OPENVPN</td><td>DNS</td></tr> <tr> <td>DHCP RELAY</td><td>RIP</td></tr> <tr> <td>GREoIP → Node</td><td>GREoIP → Central Back End</td></tr> </table>	OPENVPN	DNS	DHCP RELAY	RIP	GREoIP → Node	GREoIP → Central Back End
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