IBSG THE BOX

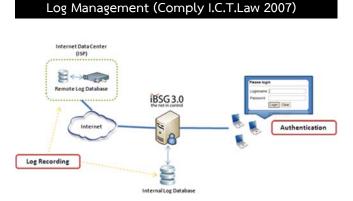
Wi-Fi Hotspot Gateway

PRODUCT REVIEW

iBSG The Box Wi-Fi Hotspot Gateway provides both WLAN controller and WLAN gateway functionality integrated into a single compact platform and managed as a single entity, which reduces the number of boxes that must be deployed and managed. This approach accelerates the return on investment and reduces the cost of on-going operations.

Flexibility of user policy and billing system

iBSG The Box offers a great flexibility to design and administrate user policy. Administrator is able to create user policy for both group users and single user, with active/inactive option. Bandwidth limit can be applied to a group of users or each individual user. "Smart Policy" feature is available, so that user will be automatically entitled to a new policy if certain condition applies, such as pass-over of trial plan or free period. With these user-friendly functions, IBSG THE BOX looks forward to providing best customer experience to handle different scenarios. This feature-rich product goes beyond a normal gateway, it also offers an integrated billing system, to utilize the benefit of user policy. Options to charge by time or data volume are up to the administrator. IBSG THE BOX even designs ticketing and printing interface to provide the greatest convenience to administrator. Moreover, IBSG THE BOX offers full support to AAA server to handle large scale applications.



Authentication and access control

IBSG THE BOX supports authentication via different ways, such as RADIUS accounting and RADIUS VSA for volume-based quota of an external RADIUS server. Username and Password, MAC address and set as the indicator to access in. Captive portal is one of the most commonly-used technology nowadays. Customer can customize the welcome page by changing the text or uploading a new banner image, or you can change the welcome page completely because full access to HTML code is given. Walled Garden is important too. This allows customer to present internet service to guests even if they have not authenticated themselves, for example, showing the hotel services pages, company directory or special offers to all guest.



AP and WLAN control

IBSG THE BOX monitors the wireless network to ensure optimal performance and respond to changes in the networking environment. From just one location, the entire network can be configured and managed, including AP's SSID, encryption, frequency and more. Customer will be able to review summaries of AP status, wireless client status and wireless network usage. Moreover, IBSG THE BOX offers not only AP configuration, but also wireless client management, which gives the most convenience and provides real scalability to the deployment.

Security

By centrally configuring all access points in the network, IBSG THE BOX ensures security settings been applied as user's need throughout coverage area, so that clients, guests and unwanted intruders all get appropriate access or denial to network resources. Encryption keys, SSID isolation and user separation features keep network traffic safe from prying eyes and MAC authentication lists to only allow approved devices in the network. Together with integrated layer 2 firewall, IBSG THE BOX simplifies the process of deploying a secured wireless network. Besides WLAN security, the option of storage and extraction of logs of user activities might fulfil some authorities' requirements for public security as well.



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TECHNICAL SPECIFICATIONS

| Networking | Support Router, NAT mode Support static IP, DHCP and PPPoE Built-in DHCP Server Configurable static routers Support Walled Garden Support MAC Address or IP Pass Through Support Ethernet connection to external terminal servers Support Proxy Support Port Forwarding |
|----------------------------|---|
| User Management | Support XXX¹ local accounts Support multi-level administrative management Support for multiple authentication methods (local, RADIUS) Group and policy-based access control User session management SSL protected login portal page Session idle timeout Session and account expiration control Login time frame control Session limit Online status monitoring of users Support user traffic session (TCP) logging |
| Accounting & Billing | Provide billing plans for accounts (both policy and user) Support captive portal authentication Support ticket generator Detailed per-user traffic history based on time for accounts Support RADIUS accounting Support RADIUS VSA for volume-based quota of an external RADIUS server Support batch creation for accounts |
| AP Management ² | AP status and connection monitoring Remote configuration for detected AP (SSID, TX power, encryption and etc) Remote advanced configuration for detected AP (Wireless work mode, channel, VLAN, Client isolation, and etc.) AP ping for diagnostics AP Client MAC address AP Client status |



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TECHNICAL SPECIFICATIONS

| System Administration | Web-based management user interface NTP time synchronization Backup and restore system configuration file SNMP v1/v2c Restore to factory defaults Log file delivery |
|------------------------|--|
| Security | Centralized WLAN security configuration SSID separation and layer 2 user separation Integrated layer 2 firewall Hypertext Transfer Protocol Secure (HTTPS) supported Flexible storage and extraction of logs of guest activities |
| Log Recording | Log Management (Comply I.C.T.Law 2007) Local and Remote Recording Authentication & Identification |
| Hardware Specification | Intel Atom Dual Core CPU 4 x Gigabit LAN port (1 WAN port) 4GB RAM 320GB SATA HDD 2 x USB Port 2 x Serial Port (Console and Serial) DC Adapter 12V/5A |
| iBSG User Concurrent | iBSG The Box 150 User Concurrent License (Standard) iBSG The Box 500 User Concurrent Upgrade License (Option) iBSG The Box 1,000 User Concurrent Upgrade License (Option) iBSG The Box Enterprise, L3 Authentication, 1000 User Concurrent Upgrade License (Option) |
| iBSG Cloud Service | Cloud RADIUS Server, 1000 User Concurrent, Unlimited User Generate (Option) Cloud RADIUS Server, 5000 User Concurrent, Unlimited User Generate (Option) Scheduled Log Recording, iBSG The Box Configuration and Local Database Backup, 1-Year Subscription (Option) |
| | Refer to User Concurrent License. For supported device models please refer to the web site: www.nvk.co.th/iBSG |

