# Quick Installaion Guide



# **INDEX**

- (1) Product Introducion
- (2) Configuration
- (3) Monitoring
- (4) Customizaion

## (1) PRODUCT INTRODUCTION

Appearance, Installaion and Logon

## **TOPIC**

- ▶ Appearance
- Hardware installaion
- ▶ Log On to web management

## OVERVIEW



#### Front Panel

- · Power button
- Power status LED
- HDD activity LED



#### Back Panel

- 12VDC Power input
- 2 x USB 2.0 service port
- 1 x 10/100/1000 Gigabit WAN port
- 3 x 10/100/1000 Gigabit LAN ports
- 1 x Auxiliary 12VDC output for heat ventilation fan
- 1 x VGA port
- 1 x Serial port (reserved)
- 1 x Console (reserved)

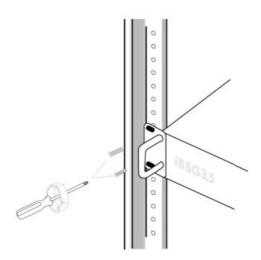
## Indicator Light Status



LED	Status	Specification
Davis	On	Indicator light should be light on in blue
Power	Off	System is off or no power
HDD	Blinking	Internal storage is reading or writing a data

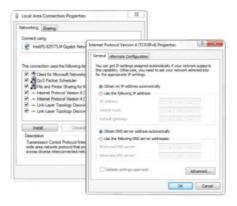


LED	Status	Specification			
Act (Left side)	Blinking	Port is receiving or sending data			
	Green	Port is connected with 10 or 100 Mbps mode			
Link (Right side)	Orange	Port is connected with 1 Gigabit mode			
	Off	Port is not connected			



- ► Rack fixing
- Fix the frame ear and screw on both sides of device
- Desktop fixing
- You can place device on any flat desks

 Make sure that your Laptop / Desktop Ethernet interface is seeing to DHCP mode



- Connect LAN cable from your Laptop/Desktop to 'LAN1' port on iBSG3.5 The Box
- ➤ Your laptop should obtain IP address from device with 192.168.2.x/24 range address.



- ► Access http://192.168.2.254/manage via your web browser, please avoid using old browser such as IE6-8 because it might not working properly
- ► Default username is 'admin' and password is 'admin123'

	Loginname	Admin	
	Password Duration	*******	
		End of S	Session
		Login	Clear

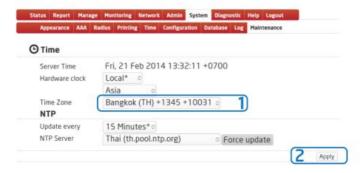
# (2) Configuration

Basic configuration and running

# **Topic**

- ▶ Initial note
- ▶ Network topologies
- ► Internet setup
- ▶ Ticket policy
- ▶ Ticket creation methods
- Ticket priting
- ▶ Client access

Once you've entered web management for the first time, please immedi ately change time zone seting according to your location by navigating to 'System → Time' tab



► After applied, System will redirect you to 'System → Maintenance' menu, you can now reboot the device by click at 'Reboot' button



# **Network Topologies**

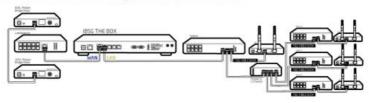
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# 

#### Multi WAN



## Multi WAN + Layer 3 Extension



- ► IBSG supported following connection types on WAN interface
- **DHCP** Automatically obtain an IP address from connected router
- **Static** Manually specify an IP address/subnet and gateway and DNS that provide by connected router or your ISP
- PPPOE A widely use <u>PPP over Ethernet</u> protocol for broadband connection such as xDSL, FTTx to properly setup this connection type, your connected modem must operating in 'Bridge' mode
- You can change conneation type to match with your internet conneation by navigating to 'Network-Basic' tab



After you've successfully setup an internet connection, you can check whatever internet is working properly or not by using 'Ping' tool in 'Diagnostic → ping' tab



▶ If you have configured the connection properly you will be able to see ping responses similar to above figure



Before you can create an internet ticket (aka. account) you must firstly create a 'policy' by navigating to 'manage → policy' tab then click at ⊕ button

- ► Each policy will have its own properties that will be inherit by policy's members
- Data rate Maximum data rate for each policy's members
   Download 8 Kbps 100Mbps or Unlimited
   Upload 8 Kbps 100Mbps or Unlimited
- Transfer Quota Accumulated data-transfer for each policy's members
- Usage Time Accumulated usage <u>time for each</u> policy's members
- Valid Period Time period after first time of usage for <u>each</u> policy's members
- Idle Timeout Duration of inactivity before system automatically dis connect <u>each</u> policy's members

## ▶ Example-1

- Policy name: 30hr\_in\_3days
- Data rate: 1.5Mbps / 256Kbps
- Usage time: 30 hours
- Validity period 3Days
- ▶ Each policy member will get maximum Download/Upload data rate 1.5 Mbps and 256 Kbps respectively
- ► Each policy member will have total 30 Hours of usage time but only valid for 3 Days after first time use

## Examplee-2

- · Policy name: nolimit\_3days
- Data rate: Unlimited
- Valid Period 3Days
- ► Each policy member will get maximum Download/Upload data rate that available from your connection
- ▶ Each policy member will have total 3 Days usage after first time use

12 Add/Edit 30hr\_in\_3days Active Benjard 256 Megabyte~ Minute 30 Hou United Person Cay idle Timenut (minutes) Build Date 2013-06-16 Build By Admin





- You can create many policies as needed
- ► Policy's properties can be modify anytime after created by using ✓ (2) button
- Data rate will effect immediately after change, with this behavior you could solve 'bandwidth problem' instantly by decreasing its value
- ▶ Policy removal is possible by using **(**3) button when no member associated

IBSG have 3 different tcket (aka. account) cration methods

- Add create a single account at a time which suitable for small amount of account or specify user only
- Generate generate large number of accounts up to 1,000 accounts at time, suitable for hotel or apartment where these accounts can print out and sell at reception counter
- Import import an account(s) from a CSV file suitable for some organiation that would like to use existing user database

You can access account creation methods in 'manage-account' tab and click at below icons tool

- ♣ Add (1)
- Generate (2)
- Import (3)



#### Ad Method



## ▶ Add example

- Policy: 30hr\_in\_3days
- Login: acc1
- Password: 1234
- ► An account named 'acc1' with password '1234' associated with '30hr\_in\_3days' policy will be created

#### **Generate Method**



#### ► Generate example

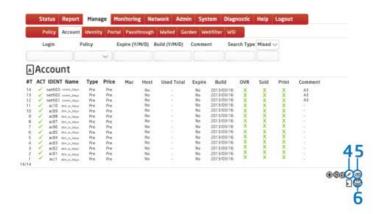
- Policy: 30hr\_in\_3days
- Count: 10
- · Prefix: ac
- · Suffix start: 1
- Password length: 4
- Accounts name 'ac01' to 'ac10' with '4' characters random password will be added to '30hr\_in\_3days'

Associated policy	nolimit	_3days	v
CSV data file	D:\data	.CSV	Browse
Skip first row	1		
Login column#	1		
Password column#	2	P	uto generate
Maximum login	1		
Comment column#	3	J	No Coment
	Import	Clase	

▶ Database.csv

	Α	В	С
1	LOGIN	PASSWD	COMMENT
2	Netfi01	1234	A1
3	Netfi02	1234	AZ
4	Netfi03	1234	A3

► Account name 'netfi01' to 'netfi03' with password '1234' will be added to 'nolimit\_3days' policy Here we have total 14 accounts created 1 from addmethod 10 from generatemethod and 3 from CSV file



- ➤ You can use 'search fields' above to filter only specific account by criteria such as Login (1), Policy (2) or Comment (3)
- ► You can change account properties such as 'password' or 'expire date' using (4) button

- ▶ iBSG have 3 build-in paper types for ticket printing
- Carbon required dot-matrix printer with 3 layers special size (100 x 140mm) continuous feed carbon copy paper
- A4 required only standard A4 paper with almost any printers (210 x 297mm)
  - With out background Plain style
    With background With background image
- Ticket Small size thermal printer (45 x 76mm)
- ➤ You can change paper type and printing properties in 'system-printing' tab and don't forget to click 'apply' when changed







- ➤ You have to select a list of accounts (1) that you wanted to print in 'manage -account' tab then click button (2) to print
- ➤ You can alternatively use 'check all' checkbox (3) to select all currently showing accounts
- ▶ Above window will appear, you can print this tickets by click at printer icon (1), or save to a PDF file (2) for later use



When users in iBSG (LAN1) network try to access a website via web browser, they will get redirected to 'landing page' (aka. Portal)

# iBSG3.5

	Please Login
Loginname	
Password	
1 03344010	Remember Me
	Login Check Usage
	1 2
	Announcement
	Announcement Message here
	Contact
	Contact Information here

- ► Users can check their time-remaining and expire-date by check (1) button
- ▶ Users can check their usage-history or changing password by usage (2) button

► Users has to fill-in a correct Loginname/Password that reside in iBSG system to access the internet

Loginname	Please Login netfi01
Password	****
	Remember Me
	Login Check Usage
	♦
Login successfully Welcome to Hi-Speed internet, You can "Type	"Login address bar and hit enter to logout
Policy/Package: nolimit_3day Time remain: Time quota:	
Transfer remain: "	
Transfer quota: Valid/Expire date: 2013/06/01 13:58:30	
	Continue(B)
	ACCITS NAK ATBRIDGITE
C	Google

► Logged-in users can manually logout by typing 'Logout' in browser then press enter, this method works on every browser including mobile devices



# (3) Monitoring

System, Users and Devices

## **TOPIC**

- System monitoring
- User monitoring
- ▶ IP Device monitoring
- Device configurator

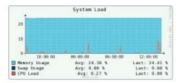
► To view overall system status please go to 'status-overview' tab

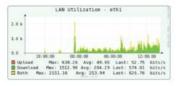


This page contain most frequent use of system and network status

- Uptime
- Load Average (1/5/15 min)
- Storage/Memory/Disk usage
- WAN IP and Physical status
- LAN IP and Physical status

#### **Utilization Graph**

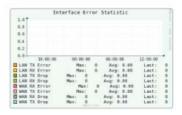




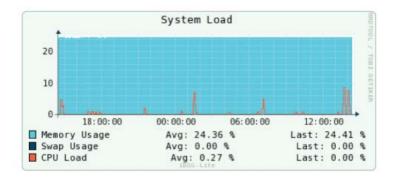




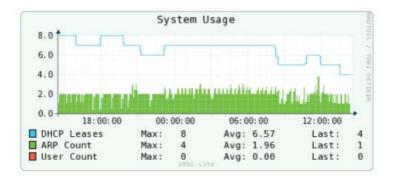




► Status history is available in 'status-utilization' tab This page contain 6 graphs that show historical system status for 1 day period



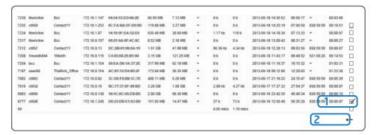
- System load
- Memory usage (Light-blue)
- Swap Usage (Dark-blue)
- CPU Load (Red)
- ▶ Because of Linux-OS behavior, memory usage can reach 100% for some period of time
- Swap usage should always 0 value, if not; that's indicates memory exhausted
- ► CPU Load can reach 100% when log files are being compressed around 4pm, but in average should not stay higher than 30%



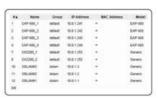
#### System usage

- DHCP Leases (Light-blue)
- · ARP Count (Red)
- User Count (Green)
- ► DHCP Leases IP Addresses count that has been offered by DHCP
- ►DHCP ARP ARP addresses count that has been detected by system
- ► User Count Users count that has been logged-in the system

▶ Real - time online user status is in 'status-user' tab



- ➤ You can force user to disconnect from system by select arget login name and click at button (2)
- ▶ iBSG has build-in SNMP device monitoring feature, you can add any ipenableddevice that reachable by the system in 'monitoring device' tab and it will be show in 'status-device'
- ► For SNMP enabled device you should specify a correct community string (1) so that extra status can be shown

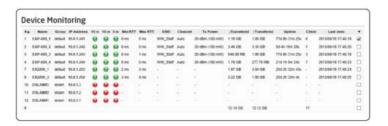




# IP Device Monitoring

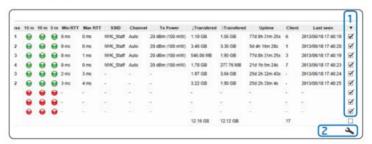
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▶ Device monitoring will continuous poll every devices and show latency level as icons from 'Green' (Low latency) to 'Red' (Unreachable)



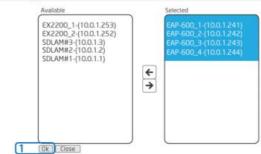
► EnGenius Access Points (1) are exclusively compatible with IBSG, that means you can change its configuration such as Channel, Tx Power, SSID Name, SSID Security and Isolation through IBSG device configurator without entering each device web-interface after deployed

➤ You can configure supported EnGenius Access point, by selecting devices(1) in 'status-device' tab and click bullon (2)



► Once configurator window appear, only supported device will be selected, you can proceed by click ok (1) bullon

## ◆Device Configurator



- ▶ Unlike EnGenius EZ-Controller iBSG supported most of obso leted EnGenius AP and can deploy configuration to different model/platform at once
- ➤ You have to select combo box (1) in front of parameters that would like to change and change it to desired value (2) then click at **'Deploy'** button



▶ It will now proceed configuration deploy to all selected AP

Device Configura	tor		
Name	IP Addrress	Status	Result
EAP-600_1	10.0.1.241	processing	\$ 1.50 m
EAP-600_2	10.0.1.242	success	1
EAP-600_3	10.0.1.243	processing	300
EAP-600_4	10.0.1.244	processing	3,1

► Some AP will automatically reboot once configuration changed, depends on AP platform and model

► EnGenius Access Point Configuration Compatibility Chart (EAPCCC)

Model	Compliance		2.4 Gh	z Radio		2.4	Ghz 55	iio oii		5 Gha	Radio		51	Shz SSI	D	
Model	Firmware	Reboat	TxPewer	Channel	Name	Broadcast	Security	Bolation	VID	TxPowe	Channel	Name	frontust	Security	toleton	VID
EOC-1650	1.3.1	Y	Υ	γ	Y	Υ	Y	γ	Y			-		13 <b>†</b> 33	-	-
E0C-2610	1.3.1	Y	Y	Y	Y	Υ	Y	Υ	Y		-	-		100		
ECB-3500	1.3.4	Y	Y	Υ	Y	Υ	Y	Y	Y			-	-	10		
EAP-3660	1.3.4	Y	Y	Υ	Y	Υ	Y	Y	Y	1	-	-	-	*		
EOC-2611P	1.3.1	Y	Y	Υ	Y	Υ	Y	Υ	Y	12	-	2	25	-	1	-
E0C-5510	1.3.1	77	Œ	51	30	1/3/	7	-	10	Y	Υ	Y	Y	Y	Υ	Y
M35	2.2.1	Υ	Υ	Υ	Υ	Υ	Y	Υ	Y			-		*		
M36	2.2.1	Y	Y	Υ	Y	Υ	Υ	Υ	Y		-			*		-
M200	2.2.1	Y	Y	Υ	Y	Υ	Y	Υ	Y	-	-	*	*			-
ECB-9500	2.3.2	Υ	Υ	Υ	Υ	Υ	Υ	12	-		0	2	120	12	20	0
EAP-9550	1.3.2	Y	Υ	Υ	Y	Υ	Y	7	-	-	77.	-		10		-
ECB-150/300	1.1.4	Y	Y	Υ	Y	Υ	Y				-	*	23		-	
ENH-200	1.1.13	Y	Y	Υ	Y	Υ	Y	Υ	Y			*	-	*	*	
ENH-200EXT	1.1.13	Y	Y	Υ	Y	Υ	Y	Υ	Y				-	(*)	*	-
ENH-210EXT	1.1.13	Y	Y	Y	Y	Υ	Y	Y	Y	-	-	-	10	140		
ERA-150	1.2.1	γ	Y	Y	Y	Υ	Y	Υ	Y	4		20				20
ENS-200	1.3.0	Υ	Υ	Υ	Y	Υ	Y	Υ	Y	-	2	2	(4)	14		28
ENS-202	1.3.1	Y	Y	Υ	Υ	Υ	Y	Υ	Y	-		-	*			2
ENS-202EXT	1.3.1	Y	Υ	Υ	Y	Υ	Υ	Υ	Y	-		-	. *:	120	*	*
ECB-350	1.1.13	Y	Υ	Υ	Y	Υ	Y	Υ	Y		-	•			*	-
EAP-350	1.1.13	Y	Υ	Υ	Y	Υ	Υ	Υ	Y	-	*	-			2	+
ENH-500	1.1.11	Y	-	-	-	-		14	*	Y	Υ	Y	Υ	Y	Y	Y
ENS-500	1.3.1	Y	-	-	-	-	2	14	-	Υ	N/C	Y	Y	Υ	Υ	Y
ENS-500EXT	1.3.1	Y	-	-	-	-	-	-	1	Y	N/C	Υ	Υ	Υ	Υ	Y
EAP-600	1.2.9*	Y	Υ	Υ	Y	Υ	Y	Υ	Y	Y	Υ	Y	Y	γ	Y	Υ
ENH-700EXT	1.2.2	Y	Υ	Υ	Y	Y	Y	Υ	Y	Υ	Υ	Υ	Y	Y	γ	Y

#### egends

Compatable
I/C Not Compatable Yet
Not Applicable

Private Firmware

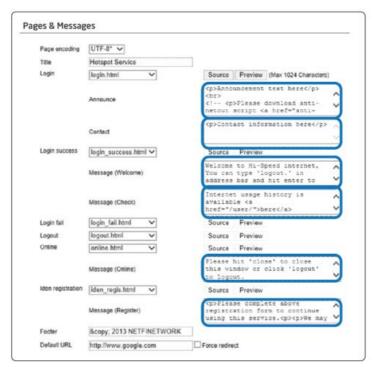
# (4) Customization

## **Portal**

- iBSG portal files come with 5 different pages
- Login this page will show when user try to access the internet
- Login Success this page will show when user successfully logged-in
- Login Fail this page will show when user fail to login
- Logout this page will show when user successfully logged-out
- Online this page will show when user accidently access iBSG LAN IP
- · while still logged-in the system

Continue Locut Close

iBS	G3.5	
	Please Login	
Loginname		
Password	Remember Me	
	Login Check Usage	
	Announcement	
	Announcement Message here	
	Contact	
	Contact Information here	
: aVt	Han vicin treated that	
Login successfully		
Welcome to Hi-Speed internet, You can "Type" Log	in address bar and hit enter to logout	
Policy/Package: Staff		
Time remain:		
Transfer remain:		
Transfer quota: Valid/Expire date:		
valur expire date.		201000000000000000000000000000000000000
8211	S NACE INTO COLUTE	Continue(7)
2	2.450 141500000110	
Login Error		
Loginname or Password is in valid(1)		
		Retry
paint	3 NAXX MTERECOLITO	Heby
Loout successfully		
Successfully logged out.		
You have logged-in for "1m 16s"		ReLogin   Close
a.111	RINNE INTRACEATE	
S	CONTRACTOR OF THE CONTRACTOR O	
N.,		
You are currentry online		
Please hit "close" this window or click "logout"		



► Each portal file have different static messages, you can easily change it in 'pages & message' section in 'manage-portal' tab

All portal file are standard HTML+CSS file, you can practi cally modify or change it completely to match with your customer needs

➤ You can upload new portal file by accessing to 'Portal file manager' section in 'manage-portal' tab and click at bullon(1)

Nar	ne	Directory	Size	Time	
<b>a</b>	login_fail.html		1.57 KB	2013-05-26 13:56:51	
e	logout.html		1.68 KB	2013-05-26 13:56:51	
<b>a</b> )	login.html		3.03 KB	2013-05-26 13.56.51	
e)	online.html		2.01 KB	2013-05-26 13:56:51	
<b>e</b> )	login_success.html		2.52 KB	2013-05-26 13:56:51	
e)	iden_regis.html		5.79 KB	2013-05-26 13:56:51	
ð	theme.css		1.32 KB	2013-05-26 13:56:51	
	extra_pages.zip	/bin	7.55 KB	2013-05-26 13:56:51	
1	shadow.png	/images	111 B	2013-05-26 13:56:51	
z	favicon.ico	/images	24.62 KB	2013-05-26 13:56:51	
2	reddot.gif	/images	40 B	2013-05-26 13:56:51	
1	leftlogo.jpg	/images	12.73 KB	2013-05-26 13:56:51	
	toplogo.jpg	/images	15.17 KB	2013-06-18 13:08:02	
1	toplogo_small.jpg	/images	7.10 KB	2013-06-18 13:08:02	
B	jquery-1.5.2.min.js	/script	83.93 KB	2013-05-26 13:56:51	
			169.15 KB		



➤ Select file to upload then click upload bullon(1) if file upload filename already exist system will overwrite existing file with newly uploaded

Files	/laXz\Desktop\toplogo.jpg	Browse
	/laXz\Desktop\leftlogo.jpg	Browse
		Browse
		Browse
		Browse
174		Browse
	Upload Close	
	n file size is 16MB each. n html css pdf btt ]	

► Example if you wish to change only logos, please named your logo files with 'toplogo.jpg' and 'leflogo.jpg' then upload it

 These are portals that were customized by some of our customer

