

# iBSG 3.5/Thebox

## Basic configuration guide



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# Topics

- Introduction
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- Installation
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    - Policy setup
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- Cloud service
  - Monitor, Events, Maintenance



Introduction

# PRODUCT TYPE



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# Product type

- Software



- Appliance (The box)



Installation

# SOFTWARE VS. THE BOX



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# Installation

- Software

Download

Install

Activate

Configure

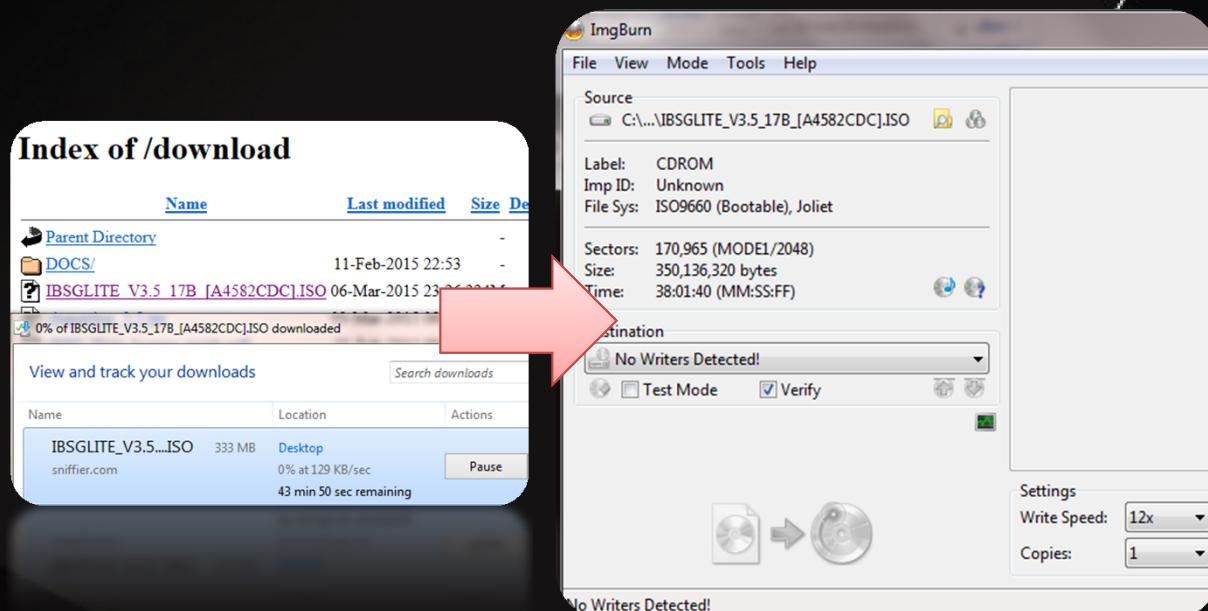
- The box

Activate  
(optional)

Configure



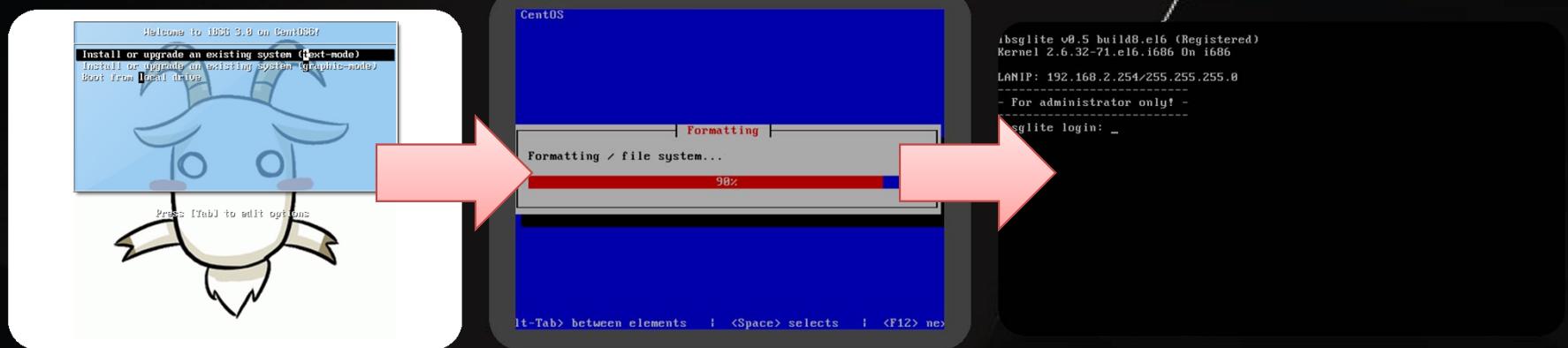
# Download



1. Download installation image at <https://ibsg.nvk.co.th/download/>
2. Burn ISO installation image to CD/DVD ROM



# Install



1. Boot from installation CD
2. Press enter
3. Wait for installation to complete

# Activate

The image illustrates the three-step process of activating a license:

1. Login to member portal at <https://ibsg.nvk.co.th/member>
2. Add license using PAK from NVK
3. Activate license

**Member Access**

**Add new license**

**Activate license**

**License Information**

License ID	150b8f06dabb
Member	support
Company	N.V.K.INTER CO., LTD.
Server	my new server
Capacity	150 - (Base)
Issue	2015/02/01 7:13 pm
Expire	∞
Renewal	2015/02/16 7:13 pm (14 Day 23 Hr 59 Min 47 Sec)

**Activation Information**

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Configure  
**STEPS**



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# Configure steps

Internet connectivity

Policy setup

Account creation

Device monitor (optional)



Configure

# INTERNET CONNECTIVITY



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# Management access

The screenshot shows a web-based administration interface. At the top left is a user icon. Next to it, the text "Administration zone." is displayed. Below this is a form with the following fields:

Loginname	<input type="text" value="admin"/>
Password	<input type="password" value="*****"/>
Duration	<input type="button" value="End of session ▾"/>
<input type="button" value="Login"/> <input type="button" value="Clear"/>	

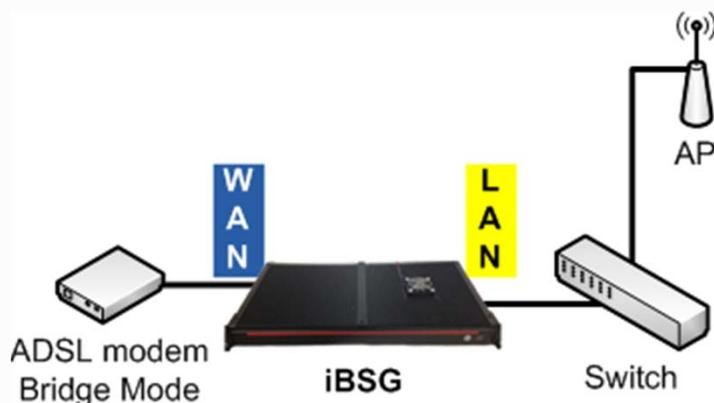
At the bottom of the page, a red footer bar contains the text "©2013 by N.V.K.INTER CO.,LTD v3.5-17beta".

1. Access to <http://192.168.2.254/manage/>
2. Default credential is admin / admin123

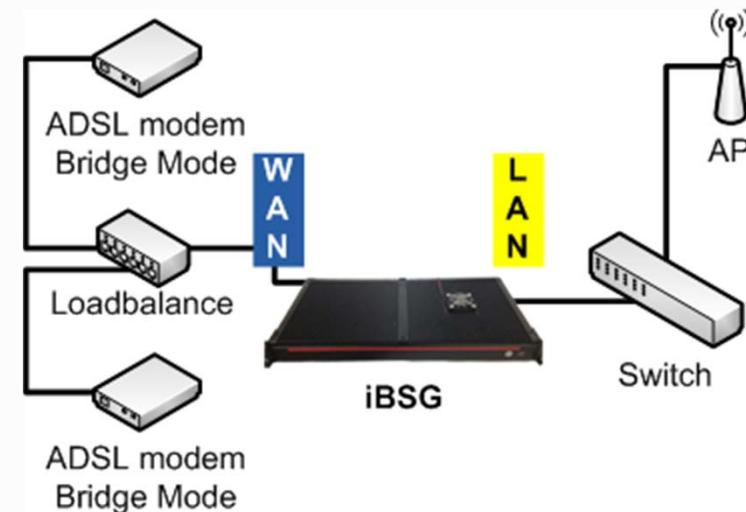


# Internet connectivity

- Single WAN



- Multi WAN



# Internet connectivity (cont)

## Network - Basic

Status	Report	Manage	Monitoring	Network
Basic	DHCP	DDNS	Proxy	
WAN / Internet				
Connection Type	DHCP			
Static DNS				
MTU	1500			
MSS Clamp	<input type="checkbox"/>			

Status	Report	Manage	Monitoring	Network
Basic	DHCP	DDNS	Proxy	
WAN / Internet				
Connection Type	Static			
IP Address	192.168.16.129			
Submet Mask	255.255.255.0			
Gateway	192.168.16.254			
Static DNS				
MTU	1500			
MSS Clamp	<input type="checkbox"/>			

Status	Report	Manage	Monitoring	Network
Basic	DHCP	DDNS	Proxy	Firewall
WAN / Internet				
Connection Type	PPPoE			
Username	pppoe1			
Password	*****			
Authentication	Auto			
Service Name				
Static DNS				
MTU	1492			
MSS Clamp	<input checked="" type="checkbox"/>			
Kernel Mode	<input checked="" type="checkbox"/>			
Alternate Link Check	<input checked="" type="checkbox"/>			

- **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 PPP over Ethernet protocol for broadband connection such as xDSL, FTTx to properly setup this connection type, your connected modem must operating in ‘bridge’ mode



# Internet connectivity (cont)

## Diagnostic - Ping

Navigation bar: Status, Report, Manage, Monitoring, Network, Admin, System, Diagnostic.

Sub-navigation bar: ARP, DHCP, Ping, Trace.

Form fields: Address (www.google.com), Interface (dropdown), Size (bytes) (32), Count (3), Ping button.

**Ping result**

#	Address	RX Bytes	TTL	RTT (ms)
1	61.19.2.29	40	55	2.44
2	61.19.2.29	40	55	2.15
3	61.19.2.29	40	55	2.22

You are logged in as 'admin' since 2015-03-14 08:52:03 am [171.99.103.243]

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- ✓ Testing internet connection between iBSG and internet



Configure

# POLICY SETUP



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# Policy setup

## Manage - Policy

The screenshot shows a web-based management interface for policy setup. At the top, there is a navigation bar with tabs: Policy, Account, Identity, Portal, Passthrough, Walled Garden, Webfilter, and WSI. The 'Policy' tab is selected, indicated by a red background. Below the navigation bar, there is a sidebar with a folder icon labeled 'Policies'. The main content area has a header 'No policy defined.' and a large, empty table-like space with a red 'Add' button containing a plus sign in the bottom right corner.

- Each policy will have its own properties that will be inherit by policy's members
- State – define state of policy's members
  - Active
  - Inactive
- 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 time for each policy's members
- Valid Period – Time period after first time of usage for each policy's members
- Idle Timeout – Duration of inactivity before system automatically disconnect each policy's members



# Policy setup (cont)

## Manage - Policy

Add / Edit

Id	0
Name	30hr_in_3days
State	<input checked="" type="radio"/> Active <input type="radio"/> Inactive
Identity	<input type="radio"/> Required <input checked="" type="radio"/> None
Type	<input type="radio"/> Postpaid <input checked="" type="radio"/> Prepaid
Price Rate	399
Datarate DN/UP	1520 256 Kbps
Transfer Quota	0 Megabyte
Daily Usage Time	0 Minute
Weekly Usage Time	0 Minute
Monthly Usage Time	0 Minute
Usage Time	30 Hour
Valid Period	3 Day
Idle Timeout	0 (minutes)
Comment	
Build Date	2013-06-16
Build By	admin
<input type="button" value="Add"/>	

- Example - 1

- Policy name: 30hr\_in\_3days
- Data rate: 1.5Mbps / 256Kbps
- Usage time: 30 Hours
- Validity period 3 Days

- 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

# Policy setup (cont)

## Manage - Policy

Add / Edit

<input type="text" value="0"/>	<input type="text" value="nolimit_3days"/>
<input checked="" type="radio"/> Active	<input type="radio"/> Inactive
<input type="radio"/> Required	<input checked="" type="radio"/> None
<input type="radio"/> Postpaid	<input checked="" type="radio"/> Prepaid
Price Rate 299	
Datarate DN/UP 0 0 Kbps	
Transfer Quota 0 Megabyte	
Daily Usage Time 0 Minute	
Weekly Usage Time 0 Minute	
Monthly Usage Time 0 Minute	
Usage Time 0 Hour	
Valid Period 3 Day	
Idle Timeout 0 (minutes)	
Comment	
Build Date 2013-06-16	
Build By admin	
<input type="button" value="Add"/>	

- Example - 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

Configure  
**ACCOUNT CREATION**



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# Account creation

## Manage - Account

The screenshot shows a software interface titled "Manage - Account". The top navigation bar includes links for Status, Report, Manage, Monitoring, Network, Admin, System, Diagnostic, Help, and Logout. Below this is a secondary navigation bar with tabs for Policy, Account, Identity, Portal, Passthrough, Walled Garden, Webfilter, and WSI. Under the "Account" tab, there are fields for Login, Policy, Expire (Y/M/D), Build (Y/M/D), Comment, and Search Type (set to mixed). A search bar with "Reset" and "Search" buttons is also present. The main content area is titled "Accounts" and displays the message "No account defined." There are three numbered circular icons (1, 2, 3) and a set of small action icons (add, edit, delete, etc.) below this message. A status bar at the bottom indicates "Actual: 1 accounts / 1 accounts / 1 accounts".

- **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 a 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 organization that would like to use existing user database



# Account creation (cont)

## Manage - Account

Add / Generate / Edit

Id	0
Sold Now	<input checked="" type="radio"/> No <input type="radio"/> Yes
State	<input checked="" type="radio"/> Active <input type="radio"/> Inactive
Policy	30hr_in_3days
Login	acc1
Password	1234 <input type="checkbox"/> Hide
MAC	
Host	
Datarate DN/UP	0 0 Kbps <input type="checkbox"/> Override
Maximum Login	1
Expire Date (Y M D)	2014 01 01 <input checked="" type="checkbox"/> Not Expire
Comment	
Build Date	2013-06-16
Build By	admin
<input type="button" value="Add"/>	

- 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

Configure  
**DEVICE MONITOR**



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# Device monitor

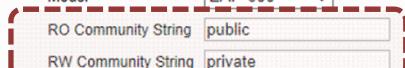
## Monitoring - Device

#▲	Name	Group	IP Address	MAC Address	Model
1	EAP-600_1	default	10.0.1.241	∞	EAP-600
2	EAP-600_2	default	10.0.1.242	∞	EAP-600
3	EAP-600_3	default	10.0.1.243	∞	EAP-600
4	EAP-600_4	default	10.0.1.244	∞	EAP-600
7	EX2200_1	default	10.0.1.253	∞	Generic
8	EX2200_2	default	10.0.1.252	∞	Generic
10	DSLAM#3	dslam	10.0.1.3	∞	Generic
11	DSLAM#2	dslam	10.0.1.2	∞	Generic
12	DSLAM#1	dslam	10.0.1.1	∞	Generic
9/9					

- iBSG has build-in SNMP device monitoring feature, you can add any ip-enabled-device

Add / Edit

Id	<input type="text" value="1"/>
Group	<input type="button" value="default"/>
Name	<input type="text" value="EAP-600_1"/>
IP Address	<input type="text" value="10.0.1.241"/>
MAC Address	<input type="text"/>
Description	<input type="text"/>
SNMP	<input checked="" type="checkbox"/>
Version	<input type="button" value="1"/>
Vendor	<input type="button" value="EnGenius"/>
Model	<input type="button" value="EAP-600"/>
RO Community String	<input type="text" value="public"/>
RW Community String	<input type="text" value="private"/>
Traffic	<input checked="" type="checkbox"/>
Interface	<input type="button" value="eth0 - 1.23 GB/1.06 GB [up]"/>



**nvk**

# Device monitor (cont)

## Status - Device

#	Name	Group	IP Address	15 m	10 m	5 m	Min RTT	Max RTT	SSID	Channel	Tx Power	↓Transferred	↑Transferred	Uptime	Client	Last seen	▼
1	EAP-600_1	default	10.0.1.241	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: green;">●</span>	0 ms	0 ms	NVK_Staff	Auto	20 dBm (100 mW)	1.19 GB	1.06 GB	77d 8h 31m 25s	6	2013/06/18 17:40:19	<input checked="" type="checkbox"/>
2	EAP-600_2	default	10.0.1.242	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: green;">●</span>	0 ms	0 ms	NVK_Staff	Auto	20 dBm (100 mW)	3.46 GB	3.36 GB	5d 4h 16m 28s	1	2013/06/18 17:40:20	<input type="checkbox"/>
3	EAP-600_3	default	10.0.1.243	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: green;">●</span>	0 ms	1 ms	NVK_Staff	Auto	20 dBm (100 mW)	546.00 MB	1.90 GB	77d 8h 31m 25s	3	2013/06/18 17:40:19	<input type="checkbox"/>
4	EAP-600_4	default	10.0.1.244	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: green;">●</span>	0 ms	0 ms	NVK_Staff	Auto	20 dBm (100 mW)	1.78 GB	277.76 MB	21d 1h 5m 24s	7	2013/06/18 17:40:23	<input type="checkbox"/>
7	EX2200_1	default	10.0.1.253	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: green;">●</span>	2 ms	3 ms	-	-	-	1.97 GB	3.64 GB	25d 2h 32m 43s	-	2013/06/18 17:40:24	<input type="checkbox"/>
8	EX2200_2	default	10.0.1.252	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: green;">●</span>	3 ms	4 ms	-	-	-	3.22 GB	1.90 GB	25d 2h 33m 4s	-	2013/06/18 17:40:25	<input type="checkbox"/>
10	DSLAM#3	dslam	10.0.1.3	<span style="color: red;">●</span>	<span style="color: red;">●</span>	<span style="color: red;">●</span>	-	-	-	-	-	-	-	-	-	<input type="checkbox"/>	
11	DSLAM#2	dslam	10.0.1.2	<span style="color: red;">●</span>	<span style="color: red;">●</span>	<span style="color: red;">●</span>	-	-	-	-	-	-	-	-	-	<input type="checkbox"/>	
12	DSLAM#1	dslam	10.0.1.1	<span style="color: red;">●</span>	<span style="color: red;">●</span>	<span style="color: red;">●</span>	-	-	-	-	-	-	-	-	-	<input type="checkbox"/>	
9												12.16 GB	12.12 GB		17		<input type="checkbox"/>

- 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 NetFi device configurator without entering each device web-interface after deployed



# Device monitor

## Status - Device

**Device Configurator**

Available

- EX2200\_1 - (10.0.1.253)
- EX2200\_2 - (10.0.1.252)
- DSLAM#3 - (10.0.1.3)
- DSLAM#2 - (10.0.1.2)
- DSLAM#1 - (10.0.1.1)

Selected

- EAP-600\_1 - (10.0.1.241)
- EAP-600\_2 - (10.0.1.242)
- EAP-600\_3 - (10.0.1.243)
- EAP-600\_4 - (10.0.1.244)

Reboot

2.4GHz Radio

5GHz Radio

Channel/Frequency: Ch7-(2.442)

Transmit Power: 22 dBm (158 mW)

2.4GHz SSID

Enabled:  #1

Name: NVK\_Staff

Hide (not broadcast): disabled

Authen/Encrypt: WPA2 PSK (AES)

Key/Passphrase:

Isolation (L2 isolation): enabled

VID: 1

**Device Configurator**

Name	IP Address	Status	Result
EAP-600_1	10.0.1.241	processing...	
EAP-600_2	10.0.1.242	success	
EAP-600_3	10.0.1.243	processing...	
EAP-600_4	10.0.1.244	processing...	

Exit

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Client access

**LOGIN,LOGOUT**



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# Client access

- Login

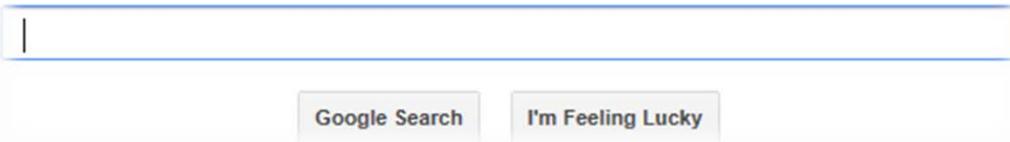
The screenshot shows the iBSG 3.5 login interface. On the left, there's a 'DEVICE MONITOR' section with 'Hot-Spot Gateway', 'Log Recorder', and 'AP Controller'. The main area has a 'Please login' form with fields for 'Loginname' (acc1) and 'Password' (xxxx), a 'Remember Me' checkbox, and buttons for 'Login', 'Check', and 'Usage'. Below the form is an 'Announcement' section with the placeholder 'Announcement message here'. A red arrow points from the right side of this interface to the Google search results below.

**Login successfully**

Welcome to Hi-Speed internet, You can type 'logout.' in address bar and hit enter to logout.

Policy/Package: nolimit\_3days  
Time remain: ∞  
Time quota: ∞  
Transfer remain: ∞  
Transfer quota: ∞  
Valid/Expire date: 2013/06/21 13:58:30

© 2013 NETFINETWORK [Continue \(8\)](#)



Google

A screenshot of a Google search results page. The search bar at the top contains the query 'nvk'. Below the search bar are two buttons: 'Google Search' and 'I'm Feeling Lucky'. A large, stylized 'Google' logo is centered on the page.



# Client access

- Logout





Cloud service



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# Monitor

**nvk iBSG**  
Net in Control

**Dashboard**

- Overview
- Events 4
- Servers
- Licenses
- Profile

Server status

Client count  
TOP 5

Event log

License count

**Servers**

Show 15 entries Search:

#	Name	IP Address	Loads (Avg)	Clients	Last Seen
8	Sirisin35	110.171.170.208	3%	45	3m 38s
7	U-Place	183.89.147.151	19%	99	1m 58s
6	Devel@VMx	180.183.117.184	0%	0	5d 16h 6s
5	2014-0269 (Pacific A)	61.90.175.2	1%	0	53s
4	2014-0161 (The Kump I)	61.91.41.62	2%	3	49s

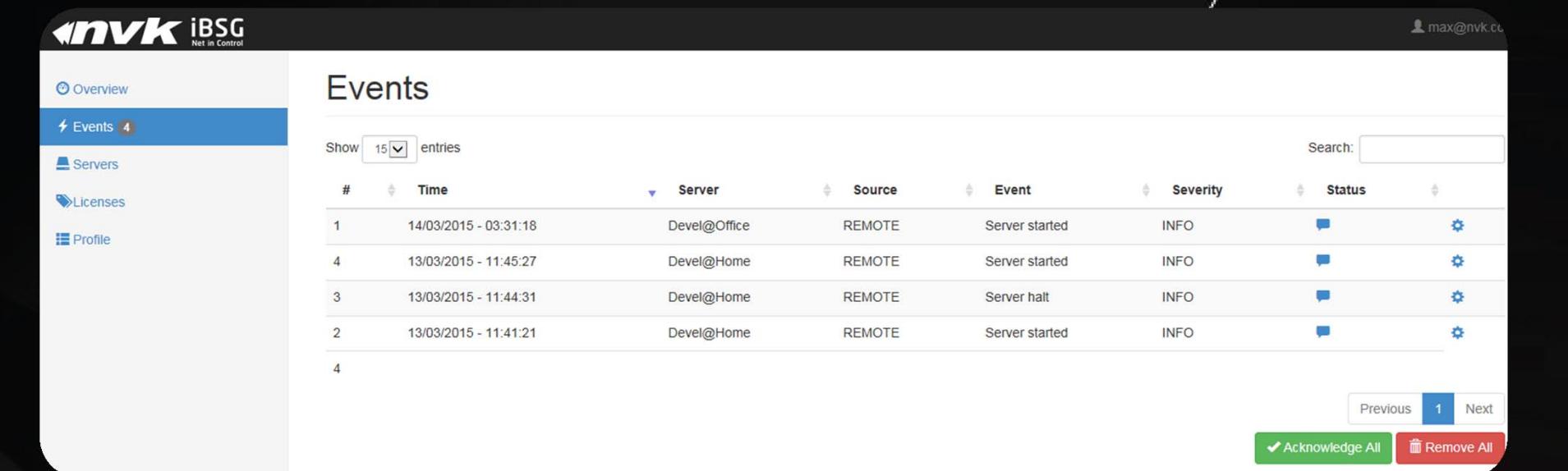
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# Events



The screenshot shows the nvk iBSG interface with a dark theme. The top navigation bar includes the nvk logo, the text "iBSG Net in Control", and a user account icon with the email "max@nvk.co". The left sidebar has links for "Overview", "Events 4" (which is selected and highlighted in blue), "Servers", "Licenses", and "Profile". The main content area is titled "Events" and displays a table of event logs. The table has columns for #, Time, Server, Source, Event, Severity, and Status. There are 4 entries listed:

#	Time	Server	Source	Event	Severity	Status
1	14/03/2015 - 03:31:18	Devel@Office	REMOTE	Server started	INFO	
4	13/03/2015 - 11:45:27	Devel@Home	REMOTE	Server started	INFO	
3	13/03/2015 - 11:44:31	Devel@Home	REMOTE	Server halt	INFO	
2	13/03/2015 - 11:41:21	Devel@Home	REMOTE	Server started	INFO	

Below the table, there are buttons for "Previous", "1", "Next", "Acknowledge All" (green button), and "Remove All" (red button). The footer of the page contains the nvk logo and social media links for Twitter (@nvkwireless), Facebook (facebook.com/nvkinter), and Website (www.nvk.co.th).



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# Maintenance

**nvk iBSG**  
Net in Control

max@

Overview

Events 4

Servers

Licenses

Profile

## Servers

Show 15 entries Search:

#	Name	Uptime	IP Address	Version	Clients/Capacity	Last Seen
8	Sirisin35	6d 4h 26m 51s	110.171.170.208	3.5-17beta	45/200	3m 19s
7	U-Place	6d 4h 28m 15s	183.89.147.151	3.5-17beta	100/200	1m 37s
6	Devel@VMX	1h 26m 39s	180.183.117.184	3.5-17beta	0/500	5d
5	2014-0269 (Pacific A)	9d 19h 48m 39s	61.90.175.2	3.5-17beta	0/150	34s
4	2014-0161 (The Kump I)	3d 15h 21m 57s	61.91.41.62	3.5-17beta	3/150	28s
3	2013-0075 (The Kump G)	10d 1h 6m	61.91.37.154	3.5-17beta	0/1000	3m 40s
2	Devel@Home	1d 10m 59s	49.49.251.36	3.5-17beta	0/150	4m 51s
1	Devel@Office	8h 25m 39s	110.78.162.42	3.5-17beta	0/150	4m 29s
8					148	

Previous 1

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