

# [Untangle] Open Source Firewall

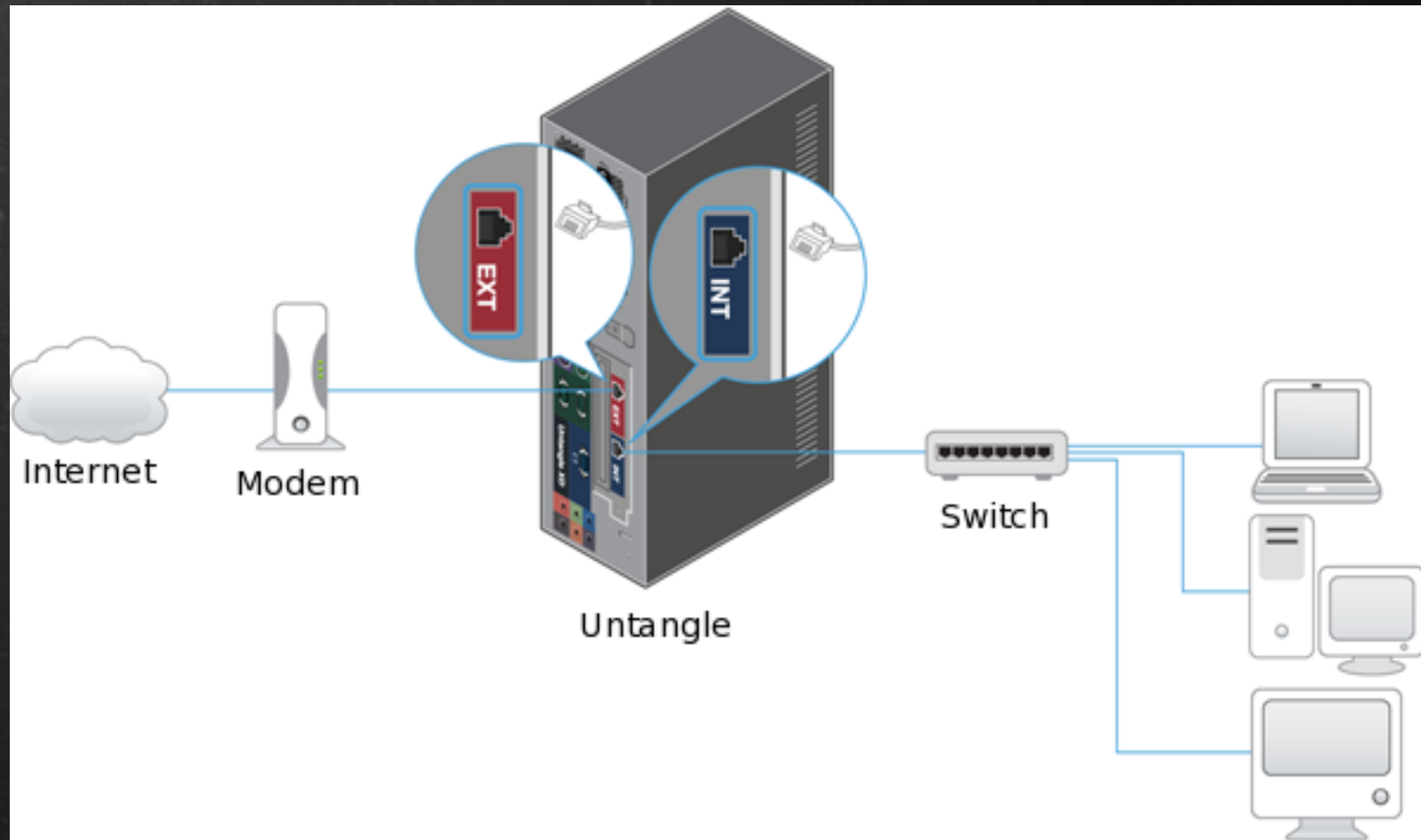
lwh@debian.kr  
[SarangIran.net]

# Firewall? IPS? UTM?

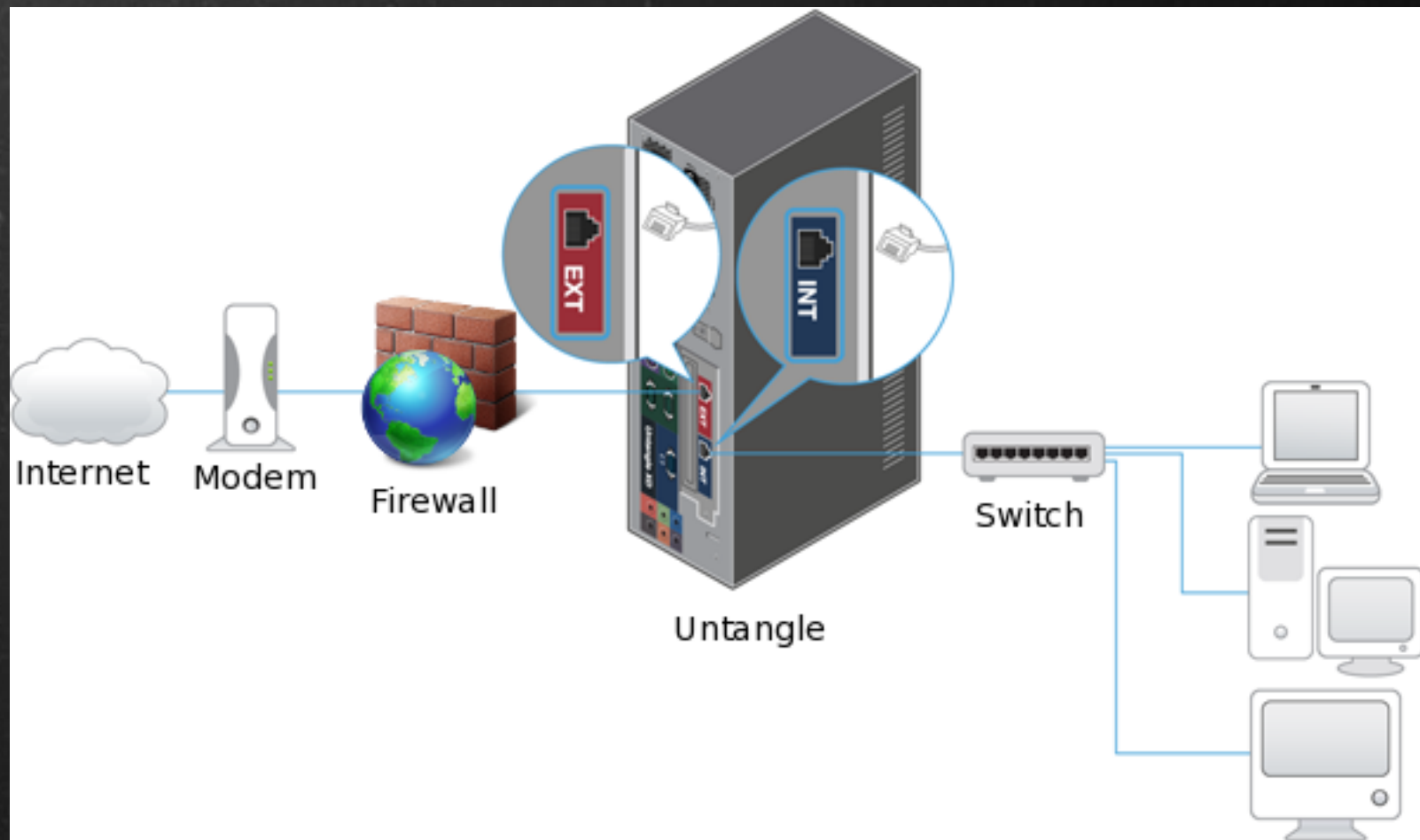
- Firewall
- IPS
- UTM

# Open source Firewalls

- EFW(Endian Firewall)
- Untangle Firewall
- pfSense
- IpCOP
- Astro Firewall
- &... so on...



Router Mode



Bridge Mode - Stealth/Screen/tranceparnt/Inlie

# About Untangle

by Untangle Inc. (<http://www.untangle.com>)  
Free Software(GW Platform, Apps is GPLv2)  
UTM

Why Open Source ?



# Features

- Protect

Web Filter(Lite), Virus Blocker(Lite), Spam Blocker(Lite), Application Control(Lite), FW, IPS, Ad Blocker, Phish Blocker Spyware Blocker, Attack Blocker(Anti DoS)

- Connect

IPsec VPN, OpenVPN(Free), Captive Portal(Free)

- Manage

Policy Manager, Directory Connector, WAN Failover, WAN Balancer, Reports(Free)

- Perform

Web Cache, Bandwidth Control





# Size Guidance

Resource	Processor	Memory	Hard Drive	NICs	Notes
Minimum	Intel/AMD-compatible Processor (800+ Mhz)	512 MB	20 GB	2	
1-50 Users	Pentium 4 equivalent or greater	1 GB	80 GB	2 or more	
51-150 Users	Dual Core	2 GB	80 GB	2 or more	
151-500 Users	2 or more Cores	2 or more GB	80 GB	2 or more	
501-1500 Users	4 Cores	4 GB	80 GB	2 or more	64-bit
1501-5000 Users	4 or more Cores	4 or more GB	80 GB	2 or more	64-bit

## Untangle installer

Graphical install (normal mode)

Graphical install (expert mode)

Text install (normal mode)

Text install (expert mode)

Press [Tab] to edit options





## Choose language

Please choose the language used for the installation process. This language will be the default language for the final system.

*Choose a language:*

Greek	-	Ελληνικά
Gujarati	-	ગુજરાતી
Hebrew	-	עברית
Hindi	-	हिन्दी
Hungarian	-	Magyar
Indonesian	-	Bahasa Indonesia
Irish	-	Gaeilge
Italian	-	Italiano
Japanese	-	日本語
Khmer	-	ខ្មែរ
Korean	-	한국어
Kurdish	-	Kurdî
Latvian	-	Latviski
Lithuanian	-	Lietuviškai
Macedonian	-	Македонски
Malayalam	-	മലയാളം
Marathi	-	मराठी

Go Back

Continue



## 키보드 배치 선택

사용할 키맵:

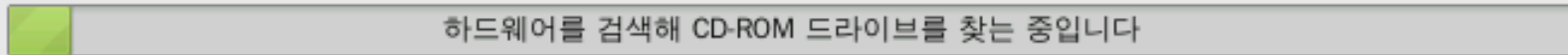
노르웨이  
덴마크  
독일 (데드키 없음)  
드보락  
라트비아  
라틴 아메리카  
러시아  
루마니아  
리투아니아  
마케도니아  
**미국 영어**  
벨기에  
벨라루시아  
불가리아  
브라질 (ABNT2 배치)  
브라질 (EUA 배치)  
세르비아 (키릴)  
스웨덴  
스위스 독일어  
스위스 프랑스어  
스페인어

뒤로 가기

계속



## CD-ROM 찾기 및 마운트

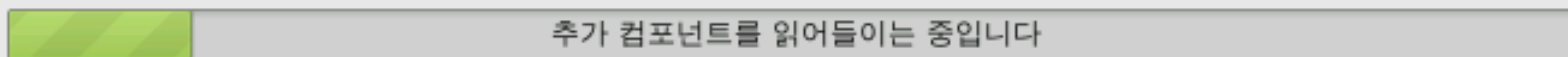


하드웨어를 검색하는 중입니다. 잠시 기다리십시오...





CD에서 설치 프로그램 컴포넌트를 읽어들이기



*efi-modules-2.6.26-2-486-di* 패키지를 가져오는 중입니다



네트워크 하드웨어 찾기

네트워크 하드웨어 찾기

하드웨어를 검색하는 중입니다. 잠시 기다리십시오...



## Untangle system



*Summary:*

Total memory: insufficient  
Processor speed: ok

계속



## Untangle system

Untangle must format the disk to continue  
WARNING: ALL DATA ON YOUR DISK WILL BE LOST!

*Do you want to proceed and format your disk?*

☒ 아니오

☐ 예

계속



디스크 찾기

디스크 및 기타 하드웨어를 찾는 중입니다

하드웨어를 검색하는 중입니다. 잠시 기다리십시오...





## 디스크 파티션하기

파티션 포맷하는 중입니다

SCSI1 (0,0,0) (sda) 장치의 파티션 #1의 /에 마운트한 ext3 파일 시스템을 만드는 중입니다...



## 베이스 시스템 설치

베이스 시스템을 설치하는 중입니다

베이스 패키지의 의존 패키지를 추가로 찾았습니다: `exim4` `exim4-base` `exim4-config` `exim4-daemon-light` `libept0` `libgdbm3` `lib:`



## 설치 마치고



설치를 마쳤습니다

설치를 마쳤습니다. 이제 새 데비안 시스템으로 부팅합니다. CD-ROM, 플로피 등 설치 미디어가 들어 있으면 반드시 빼십시오. 그래야 데비안을 설치한 디스크로 부팅합니다.

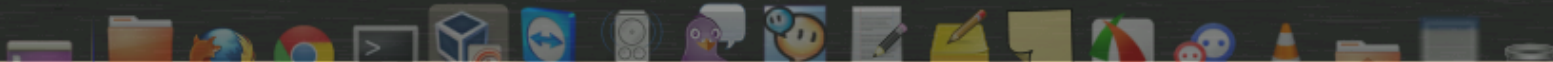
뒤로 가기

계속

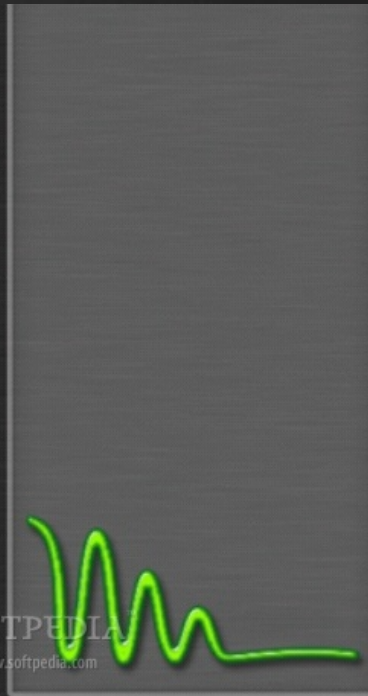
# Chap 2. Setting



untangle™







SOFTPEDIA  
www.softpedia.com

# untangle™

Use the button bar below to launch the Untangle Client.



**Launch  
Client**



**Change  
resolution**



**Turn On  
Screensaver**



**Turn Off  
Screensaver**



**Reboot**



**Shutdown**



**Recovery  
Utilities**



**Terminal**



Error: Username and Password do not match

### Untangle Administrator Login

Server: 211.115.217.24

Username:

Password:

Login



Language

## Language Selection

Please select your language:

[Next »](#)



## Thanks for using Untangle

This wizard will guide you through the initial setup and configuration of your Untangle Server

Click **Next** to get started.

### Welcome

- ① Settings
- ② Network Cards
- ③ Internet Connection
- ④ Internal Network
- ⑤ Email
- Finished

[Next »](#)



Welcome

**① Settings**

② Network Cards

③ Internet Connection


④ Internal Network

⑤ Email

Finished

**Configure your Server****Choose a password for the admin account**

Login: admin

Password: Confirm Password: **Select a timezone**(GMT+09:00) Seoul 

« Previous

Next »





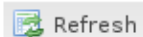
Welcome

**1** Settings**2** Network Cards**3** Internet Connection**4** Internal Network**5** Email

Finished

## Identify Network Cards

**Important:** This step identifies your external, internal, and other network cards. Plug an active cable into each network card one at a time and hit refresh to determine which network card is which. **Drag and drop** the interfaces to remap them at this time.



Refresh

Name	Status
External	eth0 : connected
Internal	eth1 : connected

« Previous

Next »





Welcome

1 Settings

2 Network Cards

3 **Internet Connection**

4 Internal Network

5 Email

Finished

## Configure your Internet Connection

Configuration Type: Dynamic (DHCP) ▾

Dynamic (DHCP)

Static

PPPoE

### DHCP Status

IP:

Netmask:

Gateway:

Primary DNS:

Secondary DNS:

Refresh

Test Connectivity

« Previous

Next »

## Setup Wizard - Iceweasel

File Edit View History Bookmarks Tools Help

http://localhost/setup/index.do

Google

Most Visited Getting Started Latest Headlines



Welcome

1 Settings

2 Network Cards

3 Internet Connection

4 Internal Network

5 Email

Finished

### Configure your Internet Connection

Configuration Type: Static

#### Static Settings

IP: 10.10.10.252

Netmask: 255.255.255.0

Gateway: 10.10.10.1

Primary DNS: 8.8.8.8

Secondary DNS(optional): 8.8.8.4

Test Connectivity

« Previous

Next »



Welcome

**1** Settings**2** Network Cards**3** Internet Connection**4** Internal Network**5** Email

Finished

## Configure your Internal Network Interface

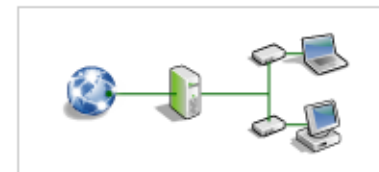
### ☒ Transparent Bridge

This is recommended if the external port is plugged into a firewall/router. This bridges Internal and External and disables DHCP.



### ☐ Router

This is recommended if the external port is plugged into your internet connection. This enables NAT on the Internal Interface and DHCP.


Internal Address: Internal Netmask:  ☒ Enable DHCP Server (default)

&lt;&lt; Previous

Next &gt;&gt;



# Chap 3. Configure











Apps



Config




**Standard Package**  
More Info 




**Premium Package**  
More Info 




**Spam Blocker**  
Install 


**Phish Blocker**  
Install 


**Web Filter Lite**  
Install 


**Kaspersky Virus Blocker**  
Buy  Trial Install 

**Web Filter**  
Buy  Trial Install 

**Commtouch Spam Booster**  
Buy  Trial Install 

 Help

 My Account

 Logout


Default Rack


Tx: 2252.54KB/s  
Rx: 59.14KB/s

88  
Sessions

2.51  
CPU Load



F: 1083.27 MBs  
U: 1042.47 MBs  
Memory


  
Disk

**Spyware Blocker**  
Settings  ? Help

SCAN  
BLOCK  
PASS


Pages scanned: 222608  
Pages blocked: 0  
Pages passed: 222608



  


**Virus Blocker**  
Settings  ? Help

SCAN  
BLOCK  
PASS  
REMOVE



Documents scanned  
Documents blocked  
Documents passed  
Infections removed



  


**Intrusion Prevention**  
Settings  ? Help

SCAN  
LOG  
BLOCK

Sessions scanned: 395182  
Sessions logged: 561  
Sessions blocked: 1480



**Firewall**  
Settings  ? Help

PASS  
LOG  
BLOCK

Sessions passed: 705309  
Sessions logged: 40281  
Sessions blocked: 39934



  



**Services**



**Captive Portal**  
Settings  ? Help

BLOCK  
AUTHORIZE

Blocked Sessions  
Authorized Clients

**Reports**  
Settings  ? Help

# Chap 4. Operation

Apps

Config

Premium Package

More Info

Standard Package

More Info

Web Filter

Buy Trial Install

Web Filter Lite

Install

Kaspersky Virus Blocker

Buy Trial Install

Virus Blocker

Buy Trial Install

Spam Blocker

Buy Trial Install

CommTouch Spam Booster

Install

Spam Blocker Lite

Install

Phish Blocker

Install

Web Cache

Buy Trial Install

Bandwidth Control

Buy Trial Install

Ad Blocker

Help

My Account

Logout

Default Rack

Firewall

Rules

Event Log

Timestamp	Client	Client Port	Username	Blocked	Rule Id	Server (Pre-NAT)	Server Port (Pre-NAT)
2012-02-19 11:14:59 pm		52920		false	1		10050
2012-02-19 11:14:59 pm		58567		false	1		10050
2012-02-19 11:14:59 pm		54353		false	1		10050
2012-02-19 11:14:58 pm		47929		false	1		10050
2012-02-19 11:14:58 pm		54333		false	1		10050
2012-02-19 11:14:58 pm		52889		false	1		10050
2012-02-19 11:14:56 pm		54328		false	1		10050
2012-02-19 11:14:56 pm		52883		false	1		10050
2012-02-19 11:14:56 pm		54322		false	1		10050
2012-02-19 11:14:56 pm		58531		false	1		10050
2012-02-19 11:14:55 pm		54316		false	1		10050
2012-02-19 11:14:55 pm		54315		false	1		10050
2012-02-19 11:14:55 pm		58521		false	1		10050
2012-02-19 11:14:55 pm		54307		false	1		10050
2012-02-19 11:14:55 pm		47900		false	1		10050
2012-02-19 11:14:54 pm		47891		false	1		10050
2012-02-19 11:14:54 pm		47890		false	1		10050
2012-02-19 11:14:54 pm		52853		false	1		10050
2012-02-19 11:14:54 pm		52842		false	1		10050
2012-02-19 11:14:53 pm		52834		false	1		10050
2012-02-19 11:14:53 pm		58481		false	1		10050
2012-02-19 11:14:52 pm		52826		false	1		10050
2012-02-19 11:14:52 pm		58476		false	1		10050
2012-02-19 11:14:52 pm		52818		false	1		10050
2012-02-19 11:14:52 pm		52817		false	1		10050

All Events

Refresh

Auto Refresh

Page 1 of 40

Warning: Event logs are delayed by a few minutes.

Remove

Help

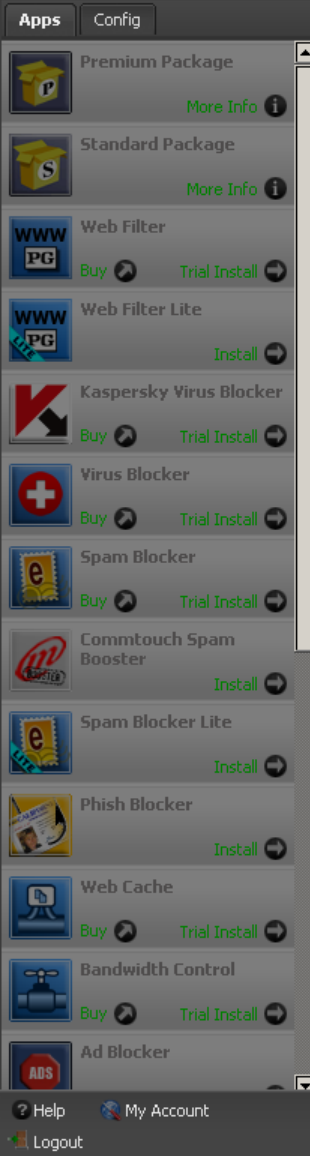
OK

Cancel

Apply

# Firewall Event Logs





Default Rack

Intrusion Prevention

Status

Rules

Event Log

Rules

+

Add

Import

Export

Category	Block	Log	Description	Id	Info	Edit	Delete
attack-responses	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Successful Administrator Privilege Gain (successful kadmind buffer overflow attempt)	1900	<a href="#">info</a>		
attack-responses	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Successful Administrator Privilege Gain (Microsoft cmd.exe banner)	2123	no info		
attack-responses	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Attempted Information Leak (403 Forbidden)	1201	no info		
attack-responses	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Potentially Bad Traffic (oracle one hour install)	1464	no info		
attack-responses	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Misc Attack (successful gobbles ssh exploit uname)	1811	no info		
attack-responses	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Attempted Information Leak (Invalid URL)	1200	<a href="#">info</a>		
attack-responses	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Successful User Privilege Gain (successful cross site scripting forced download attempt)	2412	no info		
attack-responses	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Potentially Bad Traffic (command error)	495	no info		
attack-responses	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Successful Administrator Privilege Gain (successful kadmind buffer overflow attempt)	1901	<a href="#">info</a>		
attack-responses	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Potentially Bad Traffic (directory listing)	1292	no info		
attack-responses	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Potentially Bad Traffic (index of /cgi-bin/ response)	1666	no info		
attack-responses	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Unsuccessful User Privilege Gain (rexec username too long response)	2104	no info		

Page 1

of 99

Displaying topics 1 - 25 of 2465

Variables

+

Add

Import

Export

Name	Pass	Description	Edit	Delete
\$AIM_SERVERS	[64.12.24.0/24,64.12.25.0/24,64.12.26.14/24,64.12.28.0/2...	Addresses of possible AOL Instant Messaging servers		
\$HTTP_PORTS	80	Port that HTTP servers run on		
\$HTTP_SERVERS	\$HOME_NET	Addresses of possible local HTTP servers		
\$ORACLE_PORTS	1521	Port that Oracle servers run on		
\$SMTP_SERVERS	\$HOME_NET	Addresses of possible local SMTP servers		
\$SQL_SERVERS	!any	Addresses of local SQL servers		
\$SSH_PORTS	22	Port that SSH servers run on		
\$TELNET_SERVERS	\$HOME_NET	Addresses of possible local telnet servers		

Remove

Help

OK

Cancel

Apply

# IPS Rule Set



# Captive Portal



Welcome to the Untangle® Captive Portal

**Username:**

**Password:**

Login

Please enter your username and password to connect to the Internet.

Captive Portal Login Page

# Chap. 5 Trouble Shooting







Apps

Config

Networking

Administration

Email

Local Directory

Upgrade

System

System Info

? Help

 My Account

 Logout

Default Rack

Tx: 5509.75KB/s

Rx: 102.48KB/s

Network

184

Sessions

1.18

CPU Load

F: 988.79 MBs

U: 1136.95 MBs

Memory



Disk

Spyware Blocker

Settings

? Help

SCAN

BLOCK

PASS

Pages scanned985713

Pages blocked0

Pages passed985714





Virus Blocker

Settings

? Help

SCAN

BLOCK

PASS

REMOVE

Documents scanned

Documents blocked

Documents passed

Infections removed





Intrusion Prevention

Settings

? Help

SCAN

LOG

BLOCK

Sessions scanned1379521

Sessions logged2093

Sessions blocked4405





Firewall

Settings

? Help

PASS

LOG

BLOCK

Sessions passed889161

Sessions logged63509

Sessions blocked63106





Services

Captive Portal

Settings

? Help

BLOCK

AUTHORIZE

Blocked Sessions

Authorized Clients





Reports

Settings

? Help





Config -> System

Support

Backup

Restore

Protocol Settings

Regional Settings

Warning: These settings should not be changed unless instructed to do so by support.

## ▲ HTTP

## Web Override

- ☐ Enable Processing of web traffic. (This is the default setting)
- ☒ Disable Processing of web traffic.

Support

Backup

Restore

Protocol Settings

Regional Settings

Warning: These settings should not be changed unless instructed to do so by support.

## ▼ HTTP

## ▲ FTP

- ☐ Enable Processing of File Transfer traffic. (This is the default setting)
- ☒ Disable Processing of File Transfer traffic.

# ETC - Hack Untangle

- Customizing Untangle Captive Portal page

Branding Logo

/var/www/images/BrandingLogo.gif

Captive Portal Icon

/var/www/skins/default/images/user/icon\_captive\_portal.png

Green Login button

/var/www/skins/default/images/user/green-button-background-3.gif

,green-button-background-3\_f2.gif (MouseOver)

Captive Portal Favicon

/var/www/images/favicon-captive-portal.png



# ETC - Regional Setting

- <http://pootle.untangle.com/ko/>
- <http://forums.untangle.com/korean/>

QnA

Thx.