

EDS6115

User's Manual

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1. Product Overview

The EDS6115 is a 1-Megapixel Day & Night Wi-Fi Dome Network Camera which adds surveillance capability to a variety of network environments. With a built-in removable mechanical IR-cut filter, it helps users keep an eye on what matters and get notified by what just happened on demand allowing 24/7 monitoring remotely.

It features LED Infrared Night Vision with automatic activation system. Megapixel HD with High speed H.264 encoding ensures high quality image recording without losing any details. Infrared Night Vision feature can assist to deliver 24/7 non-stop monitoring. With the support of patented EnGenius Cloud service, users can monitor their surveillance networks remotely in real time any time anywhere on any computer or on iOS or Android based mobile devices using EnGenius APPs.

1.1. Introduction

This document will guide you through detail steps for EDS6115 installation and both basic and advanced configurations. Familiarizing with the product features can help you to fully utilize the camera for various application scenarios. Please note that the product feature may improve over time, be sure to check out the latest firmware and user's manual for most updated changes on EnGenius web site.

Thank you for choosing EnGenius products.

1.2. Read Before Using

For users' convenience, the camera is configured with DHCP enabled by default which allows the camera to get an IP address for itself automatically. This applies to majority of the surveillance network settings. However, if you are connecting the product in an office (or any public setting), you may need to consult the IT department in charged for IP setting detail to avoid IP address conflict.

Like all electronic devices, do not install the product in hazardous environment where humidity or temperature is high to avoid danger. This camera is designed for indoor usage; when the camera is wall-mount installed, please secure the camera and wires in place to prevent it from dangling.

1.3. Key Features



- Megapixel HD Resolution to Deliver Quality Streaming on A Variety of Mobile Devices and PCs
- LED Infrared Night Vision up to 32 Feet (10 Meters) with Automatic Activation System
- Wireless N Network Compliant with Optimum Wi-Fi Performance
- Supports Simultaneous Dual-Stream Recording with High Speed H.264 Encoding
- Built-in Microphone
- Multiple Storage Options–Built-in Micro SD/SDHC Slot for Onboard Storage and Samba/FTP Client to Save to an External Storage
- Supports Push Message and Play Back on Smart Devices triggered by Motion/Sound Detection
- EnGenius Cloud Services Supported (Apps and Web-based Services)

1.4. Package Contents

The package should contain all of following items shown below.



1.5. Physical Description



2. Installation

2.1. Hardware Setup

Before installing the camera, please make sure the camera is properly configured and tested before hardware installation especially if it is mounted on a wall. Please also make sure the power outlet is available near the installation site.

I. Basic Connection without PoE



II. PoE Connection—Option 1

PoE Enabled Switch



III. PoE Connection—Option 2



When connecting to a non-PoE switch, please connect the camera to a switch via PoE injector (optional).

2.2. Ceiling / Wall Mount

- Locate an area on the ceiling / wall and make sure the area is capable of supporting the weight of camera.
- Use the ceiling mount bracket screw slots to drill the mounting screws into the ceiling or wall.
- Twist the camera body into the ceiling mount bracket and route cables into the side of conduit entry tunnel.
- Twist the camera to set counter-clockwise carefully and slowly until it is secured firmly.



For Installation with ceiling mount hooks into the ceiling light grid steel framing, first use the hooks and screw into the ceiling mount bracket until fixed upon the ceiling light grid steel framing. When done, twist the camera until it is secured.



2.3. IP Camera Connection

Before setting up the camera with your router, please ensure the Internet is ready. When camera is configured with the router with Internet connection, you can then access the camera through the Internet anytime anywhere. This section will guide you through the connection setup. Please follow the following guide step by step to setup the connection between your camera and the router. There are two ways to establish connection between the camera and router: Wired (Ethernet) and Wireless (Wi-Fi).



2.3.1. Connecting via Ethernet Cable

Connect the camera to the router on the LAN ports with a network CAT5 RJ45 Ethernet cable (shown below). You may use the cable that came with the package for initial setup; however, you may be required to switch to wireless setting or purchase a longer cable to extend the camera for longer range. As a rule of thumb, if your camera is close enough to the router use Ethernet cable if possible for optimized result; and for wall mount installation, it's best to adopt wireless setup. You can choose either way for the application you find suitable.



2.3.2. Connecting via Wi-Fi Setup

It is recommended that to make initial setup with RJ45 Ethernet cable and then switch to wireless after you have completed all the settings. However, you can also start wirelessly with WPS mechanism.

Ensure the router supports WPS feature and is enabled. Press the **WPS button** on both camera and the router at the same time. It may take up to **90 seconds** for the two devices to establish the connection. Make sure you are close enough to the router and ensure the router is not occupied by heavy traffic or P2P loading.

Please note that there may be differences in WPS between vendors; therefore, if router does not respond to camera connection request please use RJ45 cable for initial setup and manually configure wireless setting afterwards.



3. Accessing the Camera after Installation

There are several ways to get access to your camera on your network. You should probably have a setup similar to the following diagram. You can manage the camera using your PC, Laptop, Tablet or iOS/Android based mobile phone; we will call it **management station** in the following context. The key point is that management station and the camera must be connected under the same subnet.



3.1. Managing using PC or Laptop

3.1.1. EnViewer Finder

EnViewer Finder is a tool provided by EnGenius that helps you discover the camera within a local network. You should be able to find the tool inside the CD. Please install the tool to your **management station** desktop for quick access when you need it. Please take note of the IP address shown. In this example, **192.168.0.101** is the camera IP address.

			EnVi	ewer Finder by	EnGenius				×
O Refresh	Network	DDNS DDNS	Config	Upgrade	Peset Reset	Reboot	Username Password	admin	
Mo	del	Host name		IP	MAG		F/₩ Ver	sion	
	51130	ED51130		192.168.0.101	88:0	DC:96:16:A3:D7	0.9.43		
					-	Back Nex	d >	Can	cel



Double-click on the icon to run.

The camera list at the center displays the discovered cameras currently connected to your router (local network). If you do not find the one you intend to configure, please click on **Refresh** to rescan the network until it appears on the list. Please turn off any heavy-loading applications such as P2P that may occupy your network.

Enter **Username** and **Password** for the selected camera on the list. Click on **Next** to start configuration.

The **EnViewer Finder** will guide you step by step through the basic settings Network, DDNS and Config. You can also switch between settings by clicking the icons on the panel.



Rescan the network for camera.



Go to Network setting

DDNS

DDNS

Go to DDNS setting



Config



Upgrade







Reset the current camera to factory default



Reboot/restart the current camera

3.1.1.1. EnViewer Finder: Network

Home	Network	DDNS	Config		de	Reset	Reb	oot
Mode				System time				
OHCP	Manually	○ PPPoE		Time setup	Sy	nc with NT	P	~
TCP/IP				Timezone	(G	MT+08:00)	Taipei, Taiw	an V
IP	192	. 168 . 0 . 1	01	NTP server	po	ol.ntp.org		
Subnet mask	255	. 255 . 255 .	0	Enable day	ight saving			
Gateway IP	192	. 168 . 0 .	1	Start	JAN V	1st \vee	${\rm SUN} \ \lor$	12Al \lor
DN5 IP	192	. 168 . 0 .	1	End	JAN V	1st v	SUN V	12Al V
PPPoE				Authorization				
Username				Password of 'a	dmin'	••••	•	
Password				Confirm passw	ord	•••••	•	
UPnP				Camera name		EDS		
C Enable UPnP	,							
							< Back	Next >

MODE: There are three modes that your camera can get its IP address. **DHCP**, **Manually**, or **PPPoE**.

Mode		
DHCP	OManually	

DHCP:

It is the most popular way in the home network setting. It will request IP address from your router automatically. The requirement is that your router should enable DHCP (which is basically the default setting for most of the home router vendors). You are not required to enter any IP related information.

Manual:

TCP/IP	
IP	192 . 168 . 0 . 101
Subnet mask	255 . 255 . 255 . 0
Gateway IP	192 . 168 . 0 . 1
DNS IP	192 . 168 . 0 . 1

You will need to assign the IP address details in TCP/IP section. Please ensure that the IP address is not being used by someone else in the network.

FFFUL	Ρ	Ρ	Ρ	0	Ε	•
-------	---	---	---	---	---	---

PPPoE	
Username	
Password	

If you are connecting to the Internet without going through your router, you can connect the camera directly to your modem (given that your Internet service is using PPPoE protocol). Please consult your local ISP provider for more detail. Basically, the PPPoE setting is exactly the same as your router. You need to provide at least the **Username** and **Password** to get access.

UPnP: this feature must be enabled so that the camera can be discovered by UPnP services. Leave it **enabled** if you unsure what UPnP is.

UPnP Carlo Constant Constant

System Time:

Like any other surveillance system, time is essential because we want to keep track of the time of the events recorded or detected by the camera. By default, the camera is connected to a public NTP server (pool.ntp.org) and its time is always synchronized with the server over the Internet. Normally, you only need to change the **Time Zone**. Choose the one that matches your location. Leave the other setting as default should be fine. Setting the wrong time server or time zone will result in inaccurate scheduling and time stamp.

System time							
Time setup		Sync wit	h NTP	1	~		
Timezone		(GMT+08:00)Taipei, Taiwan					
NTP server		pool.ntp	.org				
Enable day	light savi	ng					
Start	JAN V	1st	\sim	sun \vee	12Al \vee		
End	JAN V	1st	\sim	SUN 🗸	12AI 🗸		

Authorization:

You may change the **Password of 'admin'** or **Camera Name** here. Please note that, once you changed the password. You will need to provide your new password next time upon login to the camera through EnViewer Finder or Web Browser. The Camera Name is the camera host name that represents the identity of the camera. If you installed several cameras, please assign a unique name for each camera for better identification.

Authorization	
Password of 'admin'	••••
Copfirm password	••••
Comminipassiona	
Camera name	EDS

3.1.1.2. EnViewer Finder: DDNS

Home	Network	DDNS DDNS	Config	Upgrade	Reset	Reboot	
Engenius DDNS	;						
Default DDNS n	name	0e95c28.engeniusddns.com					
DDNS alias		superman	.enger	iiusddns.com	Check available		
Refresh time		24hr	*				

Engenius DDNS				
Default DDNS name	0e95c28.engeniusddns.com			
DDNS alias	superman	.engeniusddns.com	Check available	
Refresh time	24hr 🗸			

Default DDNS name: Each camera has a unique DDNS name printed on the back of your camera. It is the default DDNS name.

DDNS Alias: You may try to rename it (**alias**) to a name so that you can memorize it better. For instance, you can use your initials with your birthday as a combination; for example, **ab19791220**. Then you need to check whether the name has been taken by someone else by clicking on **Check Availability** button. If the alias is not being used by others, then you can access the camera with both your default DDNS and the new alias DDNS (**ab19791220.engeniusddns.com**).

Refresh Time: options are 3HR, 6HR, 9HR, 12HR and 24HR. DDNS server needs to synchronize with your IP address often so that you can access your device over the Internet with DDNS name. Depends on your Internet Service provider, your WAN IP address lease time will be different. You can check with your local Internet Service provider for WAN IP address refresh time. The default setting is **24HR** (which means DDNS server will check the synchronization **every 24 hours**). Normally, the default setting 24HR is okay for most cases.

3.1.1.3. EnViewer Finder: Config

Home	Network	DDNS	Config	L Upgrade	Reset	Reboot
Stream 1						
URL	rtsp://	/192.168.0.101:554	0/live/ch01_0			
Resolution	720P	~	Codec	H20	54	¥
Max. frame rate)					
Stream 2						
URL	rtsp://	/192.168.0.101:554	0/live/ch02_0			
Resolution	VGA	~	Codec	H20	54	¥
Max. frame rate)		1			
					Open the	device web browser
					< B	ack Finish

Stream 1				
URL	rtsp://192.168.0.101:5540/live/ch01_0			
Resolution	720P	~	Codec	H264 🗸
Max. frame rate				
Stream 2				
URL	rtsp://192.160	8.0.101:5540/	ive/ch02_0	
Resolution	VGA	~	Codec	H264 🗸
Max. frame rate				

URL

The URLs are provided for your reference. There are many 3rd party media player that supports RTSP streams. You can provide these URLs to those players and view the camera streams in real time.

Resolution

Usually you do not need to worry about this page setting. However, you may need to know that the camera has two concurrent video streams running at the same time. **Stream 1** serves for monitoring over browser while **Stream 2** serves mobile APP EnViewer. The reason that Stream 2 has lower resolution (VGA) is that mobile devices have smaller screens and have limited network bandwidth than regular PC/Laptop; therefore, keeping lower resolution helps to smoother the view.

Codec

This setting determines what codec used for video compression. Please use the default for optimized performance. The compression method affects overall performance and media file size. The options are reserved for advanced purposes only.

Max frame rate

This setting determines how many frames are taken per second. This setting affects the quality of the video. High frame rate results in smoother video but larger video file.

Open the device web browser

Please **Select** this option before hitting **Finish** button. This will open the web browser with the detect Camera IP address entered in the web browser URL for you. Please bookmark it to your favorite so that you don't have to memorize the IP address when next time you want to login into the camera. You can also use your DDNS name to access the camera management page. Either way works fine.

Click Finish when completed.

3.1.1.4. EnViewer Finder: Upgrade



EnViewer Finder also allows you to upgrade your camera firmware. The product feature may improve over time, you may check EnGenius official web site for the latest firmware. New firmware may contain bug fixes or feature improvement; please download the latest firmware file to your local computer first before proceeding further:

Click **Browse** and select the firmware file you downloaded. Click **Update** to proceed with upgrade process.

It may take a moment for the upgrade process; please wait patiently.

WARNING: Do not turn off the device in the middle of upgrade process. Terminating the device during the process will damage the device and may cause the device to fail.

3.1.1.5. EnViewer Finder: Reset





You can **reset** the camera to its factory default state and your settings on the camera will be erased.

Note: It will take a while for the camera to come back on again. Therefore, the camera will not appear on the camera list if you rescan the network before it resets to default and boots up.
3.1.1.6. EnViewer Finder: Reboot





You can **reboot** the camera on EnViewer Finder if the camera stops responding for unknown reason. Click on **Yes** to proceed.

Note: It will take a while for the camera to come back on again. Therefore, the camera will not appear on the camera list if you rescan the network before it boots up.

3.1.2. Web Browser

You can use web browser on the management station to access the camera by entering IP address or DDNS of your camera. DDNS works only if your router is connected to the Internet. Please refer to the previous section if you do not know the IP address or DDNS of your camera.

For this example we have our DDNS and IP address as follows: DDNS: ab19791220.engeniusddns.com IP Address: 192.168.0.101

If you are using EnGenius Intelligent Router or IoT Gateway please proceed to Manage camera over EnGenius Router chapter. If not, please proceed to First Time Basic Setting chapter for more detail guide on camera initial settings.



EnGenius Router/Gateway

If you are using EnGenius Intelligent Router or IoT Gateway, you can manage the camera through the router management interface. The benefit of this is that you can manage both the router and the camera on a single integrated user interface. Please refer to **Manage camera over EnGenius Router** section for detail.



3.2. Manage using Tablet or Mobile Phones

You can manage your camera over Tablet or Mobile Phones using the free EnGenius APP **EnViewer**. EnViewer currently supports the two most popular Android and iOS platforms. Please search the keyword "EnViewer" in Google Play or iOS Store.



4. First Time Basic Settings

Open your browser and type in the camera IP (e.g. 192.168.0.103) address or the given DDNS name printed on the label on the back of your camera (e.g. 0f9e76a.engeniusddns.com) using a regular web browser.

EnGenius®	
EDS6131	Image: Second secon
	Copyright © 2013 EnGenius. All rights reserved.



Enter the default username admin and password admin. Click Login to proceed.

For the first time of login, you will be informed to download and install "**WebCMS**". Please click on "**Download WebCMS**" to start download (you will be required to have Internet connection on your router). WebCMS enables browsers to support camera feature. Don't worry if you are prompted with a different version number because the software upgrades from time to time.

WebCMS 0.2.3.0

Installation of IP Camera "WebCMS" plug-in control requires your attention. You need to download the latest "WebCMS" plug-in and install to continue view camera web user interface.

Download WebCMS

If prompted with the following question, click on **Save (Internet Explorer)**.



Save the downloaded file.



Once download is completed, you **MUST close all the browsers** before install WebCMS.



webCMS_0....

Double click on WebCMS to install the program. You may not have noticed, the installation is very fast, it only takes a few seconds for

WebCMS to be installed.

When installation is completed, open the browser and login into the camera again. You should be able to see the camera viewer in live as shown below. If you do not see the viewer that means you did not install **WebCMS** properly or try login using other browsers.

NOTE: If you are seeing grey color in the viewer, it is because the camera has detected insufficient of light in the room and enabled night vision mode automatically. If you point your camera to a brighter area, you should be able to see it switched to normal color mode. Try a few places to get a feeling on how it works. If listening closely, you may hear the click sound from the camera when night vision is switched on and off.



Congratulations, you are now ready to proceed with further camera settings!

4.1.1. Setting the Interface Language

First of all you may want to change the user interface language. The default factory language is English. To change the language, click on



icon the make the change. On the language list, click to select the one you feel comfortable with from the list. The user interface with refresh automatically with your chosen language.

Select Display Language

Choose your language	٠
Choose your language	
English	
繁體中文	
Español	
Português	
Français	
Deutsch	

4.1.2. Changing the Camera Name

On the management page, click to access the configuration Main Menu.

On the Main Menu, select **Network** → **UPnP**

Then, you may want to assign the camera with proper names for better identification if you have several cameras at the same time. Meaningful names such as living room, kitchen, baby room or any other descriptions you find suitable to describe the space being monitored.

3	Network
IP	Configuration
Er	Genius Cloud Services
UF	PnP

Select Network → UPnP

Host Name	EDS		
UPnP	Enable	🔍 Disabl	е
UPnPc	Enable	🔍 Disabl	e
			Apply

Cancel

Hostname: Enter a new name into this field Click Apply to change the camera name

4.1.3. Setting the Camera Time

It is crucial to setup camera time properly so that scheduling can be arranged and events be recorded with accurate date and time.

On the Main Menu, select System→ Time

🖵 System	
Status	
Service Port	
Time	
PC Folder	
Firmware	
Backup	
Reset to Default / Reboot	
Language	

Please refer to **Chapter 3** for time setting detail.

4.1.4. Setting the Storage Folder

The Storage Folder is the location where media files will be placed. On the Main Menu, select **System** \rightarrow **PC Storage Path**

🖵 System
Status
Service Port
Time
PC Storage Path
Firmware

Please refer to Chapter 3 for detail setting

4.1.5. Adding a User Account

On the Main Menu, select User Management \rightarrow User Account

👪 User Management
User Account
Push Message Mobile List

Please refer to **Chapter 4** for User Management for adding a User.

4.1.6. Wireless Setting

Please skip this step if you only use wired setup for your camera. Ensure your router supports wireless connection and enabled.



On the management page, click

to access the configuration Main Menu.



On the other hand, we also need to enable camera's wireless feature; please check again to ensure you have wireless enabled.

On the Main Menu, select Wireless \rightarrow Basic

System System Network Network Seasic WPS AP Profile Media	Wireless Settings Status Site Survey Wireless Information SSID Status	 Enable Disable Scan Disconnected 	
 Media Event Management 	Status Channel	Disconnected	
Event Server			
Storage InfoUser Management			Apply Cancel

Enable wireless by choosing Enable option

Click on Site Survey button to search for existing wireless access points (AP). When prompted with Site Survey window, click on **Refresh** button if you do not find your AP on the list. On the site list, choose your preferred AP and then click Add to AP Profile.

Site Survey

No.	Select	Channel	SSID	BSSID	Encryption	Auth	Signal(%)	Mode
1	۲	6	home	D0:22:BE:C8:2F:41	AES	WPA2PSK	7	11b/g/n
Refre	esh Ad	dd to AP Pr	ofile					

Then, on the AP Profile Settings window, please check if the security settings are correct. Please review the settings: Encryption, WPA type, and Pre-Shared Key type. They are automatically detected. Normally, you only need to provide the Pre-Shared Key (password). However, you can still change the settings if they do not match with the actual AP wireless security settings.

Enter your Pre-Shared Key and press Save to complete the setting.

AP Profile Settings

Network Name (SSID) :	home
Encryption :	WPA pre-shared key 🔻
WPA Type :	○ WPA(TKIP) ● WPA2(AES)
Pre-Shared Key Type :	Passphrase 🔻
Pre-Shared Key :	12345678

Please wait for a moment for the setup to complete.

Module is reloading, please wait 10 seconds

While waiting, you can remove RJ45 Ethernet Cable from the camera. It may take a moment for the camera to detach from wired network and switch to the newly established wireless connection with the chosen AP (your router).

Save

To check if the connection is successful, you can verify it by login into your camera again. In case the camera is still not accessible, please check your router again to see whether your camera is connected. Also, check the security setting again just for sure.

5. User Interface



Camera management page allows you to view and configure the camera at real time. This chapter will introduce all supported features and detail configurations.

5.1. Navigation Panel



The **Navigation Panel** is located at the top-right corner of the page. Since there are two different user levels (Administrator and Viewer), the functions shown on the Navigation Panel also vary accordingly. For more information about user account, please refer to **User Management** section.



Q (D (E) The viewer only has camera view features.

The descriptions are as follows

Q	Switch the management real time.	nt page to came	ra viewer within which	n snapshots or video clips can be taken at
\$	Switch the managements setting.	nt page to came	ra setting. Please refer	to Main Menu section for detail camera
A	Allows user to change	management pa	ge language setting.	
	Cloud Service Page	Download I moving your	NOW ! workforce and enj	oyment toward a mobile lifestyle.
		Android		iOS (for iPhone and iPad)
		Google play		Download on the App Store

t	Logout

5.2. Live View Settings



The Live View Management menu is located at the right side of the page.

Live View	There are two streams running concurrently: Stream1 (1280 x 720) and Stream2 (640x480). Stream1 has the			
Stream 1 (1280 x 720)	higher resolution than stream2. Stream2 serves lower resolution for mobile devices which has smaller screens.			
Stream 2 (640 x 360)	You can preview each stream at real time by selecting it from the list.			
	This opens the local folder where the real time captured images and clips are stored. You may change the			
	folder path at Main Menu → System → PC Storage Path			
	Capture X			
	File Home Share View 1			
	EII A Move to * X Delete *			
	Copy Paste Copy to * Rename New folder Properties Copy for select none			
	Clipboard Organize New Open Select			
	(e) (⇒) → ↑ (<u>Li D:\capture</u>) ↓ C Search capt)			
	Name Date modified Type This PC Point 20140701-154125 ing 7/1/2014 3:41 PM IPG File			
	Desktop implicit control 154(25)pg 5 (504) 54(114) 5 (514) 54(114) Documents implicit control 154(25)pg 7 (1/2014) 341 PM JPG File			
	Downloads Ideo_20140701-154135.avi 7/1/2014 3:41 PM AVI File			

	This switch only applies to resolution 640 x 360. When enabled, the preview image will switched to 1:1 mode.
	By default the image will expand and fill the view screen if the actual image is smaller than the view.
	This switch will hide the browser and expand the view to full screen. You can press ESC button to cancel the full screen mode.
	This button takes a snap-shot on the real time view and store the image in the local folder.
	Toggle this button to start recording movie clip at real time. Click on the button to start recording. Please note
	click the button again.
()	Toggle this button to turn PC audio from the camera ON and OFF. The default is ON, click the button to turn it ON; the icon should change to to signify OFF state.

5.3. Main Menus

Only Administrator Users can get access to Main Menus. Viewers do not have the privilege of changing camera settings.



The Main Menu is shown below.

EDS6131	EnGenius Wirel	ess IP Camera		오 🏶 🕭 🗗
🖵 System				
Status	System			
Service Port		Model	EDS6131	
Time		Uptime	25 min 21 sec	
PC Storage Path		Current Date/Time	2014/12/05 11:07:24	
Firmware		Serial Number	00000001	
Backup		Firmware	0.9.3	
Reset to Default / Reboot		WebCMS Version	1.0.11	
Language		Default UID	1edfafe	
S Network		Default DDNS Name	1edfafe.engeniusddns.com	
(I) Wireless	Network			
🖬, Media		Attain IP Protocol	Dynamic IP Address	
Event Management		IP Address	192.168.0.100	
Event Server		Subnet Mask	255.255.255.0	
Storage Info		Default Gateway	192.168.0.1	
👪 User Management		MAC Address	00:61:31:12:05:01	
		Primary DNS	192.168.0.1	

5.4. System

The System setting menu consists of system related configurations.

🖵 System
Status
Service Port
Time
PC Storage Path
Firmware
Backup
Reset to Default / Reboot
Language
ONVIF

5.4.1. Status

Status Page displays the detail system level information on the page including current time, firmware version, DDNS name, IP address and etc.

System Model EDS6131 25 min 21 sec Uptime Current Date/Time 2014/12/05 11:07:24 Serial Number 000000001 Firmware 0.9.3 WebCMS Version 1.0.11 Default UID 1edfafe Default DDNS Name 1edfafe.engeniusddns.com

Network

Attain IP Protocol	Dynamic IP Address
IP Address	192.168.0.100
Subnet Mask	255.255.255.0
Default Gateway	192.168.0.1
MAC Address	00:61:31:12:05:01
Primary DNS	192.168.0.1
Secondary DNS	

5.4.2. Service Port

The default setting is as follows. This is only reserved for advanced users who want to keep certain ports for other particular services. Changing the ports will result in unexpected result. Unless necessary, please keep the default setting.

Port Settings

Note: We recommend that you keep the default settings to ensure that the service to function properly.

HTTP Port	80			
HTTP External Port	50000			
RTSP Port	554			
RTSP External Port	50037			
EnViewer Port	9091			
EnViewer External Port	50075			
		(Apply	Cancel

5.4.3. Time

Like any other surveillance system, time is essential because we want to keep track of the time of the events recorded or detected by the camera. By default, the camera is connected to a public time server (pool.ntp.org) and its time is always synchronized with the server over the Internet. Normally, you only need to change the **Time Zone**. Choose the one that matches your location. Leave the other setting as default should be fine. Setting the wrong time server or time zone will result in inaccurate scheduling and time stamp.

Time Setup	Synchronize with the NTP Server 🔻			
Time Zone	(GMT+08:00)Taipei, Taiwan	•		
NTP Time Server	pool.ntp.org			
Enable Daylight Saving				
Start Time	January ▼ 1st ▼ Sun ▼ 12 am ▼			
End Time	January 🔻 1st 🔻 Sun 🔻 12 am 🛡			
		Apply Cancel		

Time Setup: synchronized with time server or PC

Time Zone: select time zone

NTP Time Server: the time server address

Enable Daylight Saving: check the box if applicable

Start Time: The daylight saving start time

End Time: The daylight saving end time

5.4.4. PC Storage Path

Recording / Snapshot Path

Folder Path	C:\Users\Eric\AppData\LocalLow	Browse
Snapshot File Type	JPG 🗸	
Recording File Type	AVI 🗸	

Note: The video recording and snapshot will be stored in the target folder.

Apply Cancel

Folder Path: click "Browse" to change the path Snapshot File Type: support image format JPG, PNG & BMP Recording File Type: support format AVI & MP4

Compression rate comparison (High to Low): JPG > PNG > BMP

MP4 > AVI

You should consider keeping the default setting because it reduces image or clip file size.
5.4.5. Firmware

The product feature may improve over time; you may check EnGenius official web site for the latest firmware. New firmware may contain bug fixes or feature improvement which is beneficial to you.

Either download the latest firmware file to your local computer or use Auto Firmware Upgrade when Internet connection is available. For manual upgrade, click **Browse** and select the firmware file to start upgrading firmware.

Manual Firmware Upgrade To upgrade the device firmware, pl computer. Then, click on Choose F	ease ensure th File (or Browse	at you have save a) and select the	ed the target firmware in the file to be uploaded.
12			Apply Cancel
Auto Firmware Upgrade Current Firmware version New Firmware version Release Date Firmware File Size	Enable v1.0.0 unknown unknown 0k	○ Disable	Relase Note Upgrade

Select the downloaded new firmware then click on **Open**.

0	Open			×
🔄 🌛 🔻 🕇 📕 « Des	ktop ⊧ download	V 🖒 Sear	rch download	Q.
Organize 🔻 New folder	r			
^	Name		Date modified	Туре
PC This PC	newfirmware.dlf		7/2/2014 4:37 PM	DLF File
Documents				
🚺 Downloads				
Music				
Videos				
📥 Acer (C:) 🔍 🗸	<			>
File nar	me: newfirmware.dlf	♥ 所る	有檔案	~
		C	Open 🔽 🔿	Cancel

Click **Apply** to start upgrading the firmware.

You can upgrade the firmware of the IP-CAM in this page. Ensure, the firmware you want to use is on the local hard drive of your computer. Click on Browse to browse and locate the firmware to be used for your update.

Browse				
		(Apply	Cancel

It may take a moment for the upgrading process, please wait patiently.

WARNING: Do not turn off the device in the middle of upgrade process. Terminating the device during the process will damage the device and may cause the device to fail.

5.4.6. Back-up

There are times that you may want to test new settings or keep different settings for different application scenarios. You can do this with following steps:

■ Save Settings

Backup Settings	
Backup current settings to file	Backup
Restore saved settings from file	瀏覽
	Upload

Click Save to initiate setting backup process.

0		Save As		×
€ ∋ - ↑ 🎚	« Desktop 🕨	settings 🗸 🗸	C Search setting	s , , ,
Organize 👻 Ne	w folder			:= • @
👰 This PC	↑ Name	*	Date m	odified Type
📔 Desktop		No items	match your search.	
📗 Documents				
鷆 Downloads				
🚺 Music				
📔 Pictures	~ <			>
File <u>n</u> ame:	config.dlf			¥
Save as <u>t</u> ype:	DLF 檔案 (.dlf)			~
) Hide Folders			Save	Cancel

Click **Save** to store the file to the chosen location.

Restore Settings

Backup Settings		
Backup current settings to file	Backup	
Restore saved settings from file		瀏覽
	Upload	

Click on Browse to select the backup file.



Choose the configuration file and click on **Open**.

Click on **Upload** to start storing process.

Backup Settings	Save	
Destana Cattinua	Browse	config.dlf
Restore Settings	Upload	

It may take a moment for the uploading process, please wait patiently.

WARNING: Do not turn off the device in the middle of the upload. Terminating the device during the process will damage the device and may cause the device to fail.

5.4.7. Reboot/Reset to Default

There may be times that you feel like to restore the settings to factory default. To reset to default click on the button Reset to Default

If the camera for some reason stop responding or acting abnormally, you can choose to **Reboot the Device.** If the device still does not recover to normal operation, please consider to perform a hard reset (unplug and re-plug the power adapter).

To proceed **Reset to Default** will erase current settings and restore the device to its original factory settings. Note: We suggest you to back up current settings before running the reset.

Reset to Default

In case that the system stops responding or functioning incorrectly, you can perform **Reboot the Device** to restart. The current settings will be kept without change.

Reboot the Device

5.4.8. Language

The default User Interface language is English, you can change the language with just a mouse click.

On the language list, click to select the one you feel comfortable with from the list. The user interface with refresh automatically with your chosen language.

Select Display Language



5.5. Network

🚱 Network
IP Configuration
EnGenius Cloud Services
UPnP

The **Network** setting menu consists of Network related configurations.

5.5.1. IP Configuration

Each camera should be assigned with an IP address in the network for identification. **IP Configuration** setting allows you to change the method with which the camera obtains its IP address. The default setting **Dynamic IP (DHCP)** is applicable to most of the application scenario. However, advanced users can also change to **Static IP** or **PPPOE** whichever suit the purpose.

Mode	Dynamic IP (DHCP) 🔻
MAC Address	88:DC:96:16:A3:D7
	Note: We recommend that you keep the default settings to ensure that the service to function properly.
	Apply Cancel
Dynamic IP (DHCP) 🔻	
Static IP	
PPPoE	
Dynamic IP (DHCP)	

Mode: Static IP, PPPoE and Dynamic IP (DHCP)

Static IP

IP Configuration Settings		
Mode	Static IP V	
IP Address		
IP Subnet Mask		
Default Gateway		
Primary DNS		
Secondary DNS		
MAC Address	00:51:31:09:25:04	
	Note: We recommend that you keep the default settings to that the service to function properly.	ensure
	Apply	ancel

If your network requires Static IP, you need to specify the detail IP settings similar to above. Please note that, if you are managing your camera in local network similar to the example shown above, you will need to configure your management PC/Laptop under the same domain.

ΡΡΡοΕ

IP Configuration Settings	
Mode	PPPoE 🗸
Username	
Password	
Service Name	
MAC Address	00:51:31:09:25:04
	Note: We recommend that you keep the default settings to ensure that the service to function properly.

If you are connecting to the Internet without going through your home router, you can connect the camera directly to your modem (given that you are using PPPoE for your Internet service). Please consult your local network service provider for more detail. Basically, the PPPoE setting is exactly the same as what your home router. You need to provide at least **Username** and **Password** to get access.

Apply

Cancel

Dynamic IP (DHCP)

IP Configuration Settings

Mode

Dynamic IP (DHCP)

MAC Address

00:51:31:09:25:04 Note: We recommend that you keep the default settings to ensure that the service to function properly.

 \sim

Apply Cancel

MAC Address: Type in the MAC address to insert the local MAC address into the field.

Click **Apply** when configuration is done to activate new settings.

Note: If you have a working Internet connection through your router, there is no need to type in the MAC address. Providing such MAC address only if the IP address assigner binds each IP with a specific MAC address.

5.5.2. EnGenius Cloud Service

Enconius cioud coungs	
Status	Enable Disable
Туре	Using Default UID / EnGenius DDNS Service 🔻
Default UID	0e95c28
UID Status	Connected
Default DDNS Name	0e95c28.engeniusddns.com
Alias DDNS Name	.engeniusddns.com Availability Check
Refresh Time	24HR •
DDNS Status	Connected

You must Enable EnGenius Cloud first and then choose the Type.

A key part about EnGenius Cloud Service is DDNS. Dynamic DNS (DDNS) is a type of DNS that works with dynamic IP address. DDNS keeps update its mapping regularly and ensures a consistent matching so that your device can be accessed over the Internet using a fixed DDNS name. You can either use the default EnGenius DDNS Service or other 3rd party Service you prefer.

Using Default UID / EnGenius DDNS Service ▼ Using Default UID / EnGenius DDNS Service Using Other DDNS Service

Users are recommended to use the free DDNS address printed on the label enclosed in the package. This is because ISP often leases dynamic WAN IP address that changes from time to time. DDNS domain name will always be the same even if the WAN IP address changes. The domain name can also be found on your System -> Status page.

EnGenius Cloud Settings	
Status	💿 Enable 🔍 Disable
Туре	Using Default UID / EnGenius DDNS Service 🔻
Default UID	0e95c28
UID Status	Connected
Default DDNS Name	0e95c28.engeniusddns.com
Alias DDNS Name	.engeniusddns.com Availability Check
Refresh Time	24HR •
DDNS Status	Connected

Default UID: default UID

UID Status: when working properly, it should show "Connected". **Default DDNS**: shows the default DDNS

Alias DDNS Name: You may find that your DDNS is too difficult to remember. EnGenius provides free DDNS name registration as long as the alias is not yet been taken other EnGenius product users. You can check the availability by clicking on the button **Availability Check** for verification. In this example, "superman.engeniusddns.com" is available. That is, when the setting is activated, both DDNS name "superman.engeniusddns.com" can be used to access this camera.

Refresh Time: options are 3HR, 6HR, 9HR, 12HR and 24HR. DDNS server needs to synchronize with your IP address often so that you can access your device over the Internet with DDNS name. Depends on your Internet Service provider, your WAN IP address lease time will be different.

You can check with your local Internet Service provider for WAN IP address refresh time. The default setting is **24HR** (which means DDNS server will check the synchronization **every 24 hours**). Normally, the default setting 24HR is okay for most cases.

DDNS Status: when working properly, it should show "Connected".

Note: DDNS will only work only if your router is connected to the Internet. If router is not connected to the Internet, your DDNS status will show "Disconnected".

EnGenius Cloud Settings	
Status	💿 Enable 🔍 Disable
Туре	Using Other DDNS Service
Server Address	3322(qdns) ▼
Host Name	
Username	
Password	

Apply	Cancel

If you prefer to use third-party DDNS server, you can choose this option.

The current supported third-party DDNS services are 3322(qdns), DHS, DynDNS, ZoneEdit and CyberGate. Choose the one that best suits your purpose. You should provide your account information so that the camera can communicate with the selected DDNS vendor.

Your third-party DDNS service account credential should include the following information.

Host Name: please enter your registered Host Name

Username: please enter your registered Username

Password: please enter the password for this

Click **Apply** when configuration is done to activate new settings.

5.5.3. UPnP

Universal Plug and Play (UPnP) allows the other device to detect the presence of the camera so that communication become possible. You should enable UPnP if you wish your camera to be recognized by your router. UPnP Traversal makes camera remote access over the Internet possible using camera DDNS name. You won't be able to access the camera if you disable UPnP feature. Please keep it **Enable** if you are not sure.

Hostname: You may rename your camera to other meaningful names such as storage room, lobby, or any other descriptions you find suitable to describe the space being monitored.

UPnP: Enable or Disable UPnPc: Enable or Disable

l

JPnP Settings		
Host Name	EDS-DAFB	
UPnP	Enable	ODisable
UPnPc	Enable	ODisable

Apply Cancel

Click **Apply** when configuration is done to activate new settings.

5.6. Wireless

¢1)	Wireless
Ba	asic
W	PS
AF	° Profile

All wireless related settings can be found under **Wireless** menu. The camera store several **AP profiles** (candidate AP list) although only one AP will be connected at any given time.

5.6.1. Basic

Under basic section, you can turn on or off the wireless radio, setting connection with the existing surrounding AP. Wireless Information shows the current wireless status.

Status	🖲 Enable 🔍 Disable
Site Survey	Scan
Wireless Information	
SSID	
Status	Disconnected
Channel	

To setup a wireless connection, you must first enable wireless by choosing **Enable** option.

Click on **Scan** button to search for existing wireless access points (AP).

When prompted with Site Survey window, click on **Refresh** button if you do not find your AP on the list. On the site list, choose your preferred AP and then click **Add to AP Profile**.

Site	Surve	ey 🛛						
No.	Select	Channel	SSID	BSSID	Encryption	Auth	Signal(%)	Mode
1	۲	6	home	D0:22:BE:C8:2F:41	AES	WPA2PSK	7	11b/g/n
Refre	esh Ac	dd to AP Pr	ofile					

Then, on the AP Profile Settings window, please check if the security settings are correct. Please review the settings: **Encryption**, **WPA type**, **and Pre-Shared Key type**. They are automatically detected. Normally, you only need to provide the **Pre-Shared Key** (password). However, you can still change the settings if they do not match with the actually AP wireless security settings.

Enter your Pre-Shared Key and press **Save** to complete the setting.

AP Profile Settings

Network Name (SSID) :	ExampleWLAN ×		
Encryption :	WPA pre-shared key V		
WPA Type :	○ WPA(TKIP)		
Pre-Shared Key Type :	Passphrase V		
Pre-Shared Key :	12345678		

-			_	
- 55	а	v	ρ	
~	-		-	

Please wait for a moment for the setup to complete.

While waiting, you can remove RJ45 Ethernet Cable from the camera now. It may take a moment for the camera to establish wireless connection with the chosen AP (your router).

Your camera should be connected to the AP now. You can verify it by login into your camera again. In case if the camera is still not accessible, please check your AP's wireless settings again to see whether your camera is connected.

5.6.2. WPS

Wi-Fi Protected Setup (WPS) is a network security standard that allows users to easily secure a wireless network. This feature allows user to setup wireless connection between the camera and AP without entering any detail wireless security configurations such as SSID, encryption method or pre-shared key (password). However, you need to initiate WPS process on both the camera and the AP **at the same time** so that they can find each other.

Normally, for WPS-enabled products, you should be able to find the WPS button on the product. Only few rare cases that require user to initiate WPS process over web page. Make sure WPS feature is **Enabled** on **both** the camera and your AP or wireless router. Then, you need to know how to initiate AP or wireless router's WPS process first. It is mostly likely a simple push of the WSP button on your AP or wireless router. On EDS6115, you can initiate WPS process on the web page or by **pressing the WPS button**.

WPS Button

The simplest way to setup wireless connection with an AP or wireless router is by pressing on the WPS button. First, press the WPS button on the AP (there may be changes on the LED lights as signs of initiation). Then, press the WPS button of the camera. Wait a minute for two devices to establish the wireless connection. Done!

WPS over web page

You can initiate camera's WPS process on the web page.

First, press the WPS button on the AP or wireless router (there may be changes on the LED lights as signs of initiation).

On camera's WPS page, press Start to Process.

Wait a minute for two devices to establish the wireless connection.

Done!

🚱 Network	Wi-Fi Protected Setup (WPS) Settings		
(1) Wireless	Status 💿 Enable 🔵 Disable		
Basic	WPS Via Push Button	Start to Process	
WPS			
AP Profile			

NOTE: For WPS to setup wireless connection successfully, timing is essential. Once AP or wireless router has initiated WPS process, your camera WPS process must be initiated within a given time range. It would be best if you have two devices in close range so that WPS process on both sides can be initiated immediately after another.

5.6.3. AP Profile

You can keep several AP Profiles (settings) if your application may need to switch between APs in case one of them failed. Each profile matches to a specific AP.

AP Profile T	able				
Select	No.	SSID	MAC	Authentication	Encryption
	1	SNWL	00:02:6F:DB:9F:D5	WPA2_PSK	AES
Add	Edit Move	e Up Move Down Dele	te Selected Delete All	Connect	

5.6.3.1. Add

AP Profile Settings

Network Name (SSID) :	hallAP
Encryption :	WPA pre-shared key 🔻
WPA Type :	● WPA(TKIP) – WPA2(AES)
Pre-Shared Key Type :	Passphrase 🔻
Pre-Shared Key :	EMUE3ZLJB85G

Save

WPA pre-shared key

Network Name (SSID): enter the SSID of the target AP Encryption: supports **Disabled**, **WEP** and **WPA pre-shared key** WPA Type: supports **WPA (TKIP)** and **WPS2(AES)** Pre-Shared Key Type: **Passphrase** or **HEX (64 character)**

WEP

Please note that WEP has proven be insure, this security option is reserved only for legacy products that supports WEP only.

Authentication Type: supports Open System and Shared Key
Key Length: 64bit and 128bit (the longer the safer)
Key Type: ASCII or HEX
Default Key: the key that will be used for authentication
Encryption Key 1~4: the candidate keys for authentication

AP Profile Settings

Network Name (SSID) :	hallAP
Encryption :	WEP •
Authentication Type :	🖲 Open System 🛛 🔘 Shared Key
Key Length :	64-bit 🔻
Кеу Туре :	ASCII (5 characters) 🔻
Default key :	Key 1 🔻
Encryption Key 1 :	****
Encryption Key 2 :	****
Encryption Key 3 :	****
Encryption Key 4 :	*****

Save

5.6.3.2. Edit

On the table **Select** the profile and then click on **Edit** to modify the profile setting.

AP Profile Table



Once complete the modification, click **Save** to make the changes effective.

AP Profile Settings

Network Name (SSID) :	SecondaryAP
Encryption :	WPA pre-shared key ▼
WPA Type :	○ WPA(TKIP) ● WPA2(AES)
Pre-Shared Key Type :	Passphrase 🔻
Pre-Shared Key :	99999999

Save

5.6.3.3. Move Up / Down

Each profile the ordered by the number at the front, the ones on top has higher priority when camera tries to search for the existing AP. You can change the AP priority by moving them up or down. Select the profile and then click either on **Move Up** or **Move Down**.

AP Profile Table					
Select	lect No. SSID		MAC	Authentication	Encryption
	1	SNWL	00:02:6F:DB:9F:D5	WPA2_PSK	AES
	2	EAP900H-2.4GHz	8A:DC:96:1A:B7:F5	WPA2_PSK	AES
Add Edit Move Up Move Down Delete Selected Delete All Connect					

5.6.3.4. Delete

Delete Selected: only delete the selected profile.

Select the profile to be deleted and then click on Delete Selected button.

AP Profile Table						
Select No. SSID		MAC	Authentication	Encryption		
		1	SNWL	00:02:6F:DB:9F:D5	WPA2_PSK	AES
		2	EAP900H-2.4GHz	8A:DC:96:1A:B7:F5	WPA2_PSK	AES
Add Edit Move Up Move Down Delete Selected Delete All Connect						

Delete All: this will delete all the AP profiles on the table

5.6.3.5. Connect

AP Profile Table						
Select No. SSID		MAC	Authentication	Encryption		
		1	SNWL	00:02:6F:DB:9F:D5	WPA2_PSK	AES
		2	EAP900H-2.4GHz	8A:DC:96:1A:B7:F5	WPA2_PSK	AES
Add Edit Move Up Move Down Delete Selected Delete All Connect						

Select a profile to be connected and then click on **Connect** to initiate the wireless connection.

5.7. Media

🔐 Media	
Video	
Camera	
Advanced	
Privacy Mask	
Audio	

All media quality related settings can be found under Media menu. These settings will have direct effect on the captured image or video.

5.7.1. Video

 Display overlay 		
Timestamp and Video Title	Storage	× (A-Z,0-9,:,/,-)
Stream 1		
Compression Format	H.264	\checkmark
Resolution	1280 x 720	\checkmark
Max. Frame per Second	30 fps	\checkmark
Bit Rate Encoding	Constant Bit Rate	\checkmark
Bit Rate (Ethernet)	4 Mbps	~
Bit Rate (Wi-Fi)	1 Mbps	\checkmark
Stream 2		
Compression Format	H.264	\checkmark
Resolution	640 x 360	\checkmark
Max. Frame per Second	30 fps	\checkmark
Bit Rate Encoding	Constant Bit Rate	\checkmark
Bit Rate (Ethernet)	1 Mbps	\checkmark
Bit Rate (Wi-Fi)	1 Mbps	~

Note: You may adjust Bit Rate Value according to your connectivity mode or bandwidth conditions. Higher bit rates delivers excellence resolution when video is viewed in full-screen on PC. Lower bit rates may be better choices in limited-bandwidth environments or via remote Wi-Fi network.


Enable: it is recommended that you enable **Time Stamp and Video Title**; the timestamp will show on the top-left corner of your video as shown below.



5.7.2. Camera

Image Settings

iniugo cottingo				
Brightness		50		
Contrast		50		
Saturation		50		
Sharpness		20		
Denoise		20		
El la Oranal	[0]]- N			
Flicker Control	60Hz V			
Mirror/Flip	None 🗸			
Day/Night Mode	Auto 🗸			
			Default Settings	Apply Cancel

You can get better quality by tuning the lighting condition of the camera. For example, in a dark room you may want to set the Brightness higher to generate clearer result. When directly facing an outdoor window (too much light) you may want to lower the Brightness a bit. There may be different settings under different circumstance; therefore, you should tune the setting if the image quality has become too low to serve its purpose. Please refer to the following examples for comparison between low and high for each of the light settings.

5.7.2.1. Light Setting

Brightness



Contrast



Sturation



Sharpness



De-noise



Please note that some of the effects will be more obvious in higher resolution at real time.

5.7.2.2. Flicker Control

The supported options are: 60Hz & 50Hz

Flicker Control is an anti-flicker feature setting.

AC lamp can cause a flicker effect, which is a consequence of the AC power frequency (50 or 60 Hz). As the light can change from picture to picture, causing light flicker. This will lead to inconsistent light source between each snapshot. To eliminate flicker, configure your camera to PAL (60Hz) or NTSC (50Hz) modes to compensate the effects. Check the power supply of your region for proper setting.

5.7.2.3. Mirror

Support Mirrors: None, Mirror, Flip and Both

There are times that the camera will have to be mounted upside down for sideways. That is, the view become difficult to monitor when it is upside down. The **Mirror** settings does not reflect on the preview at real time (unlike lighting condition settings). Therefore, you have to click on **Apply** to see the result.

The following examples compares none with a chosen mirror effect.

Mirror (Horizontal)



None

Mirror

Flip (Vertical)



Flip

Both (Horizontal and Vertical)



None

Both

5.7.2.4. Day/Night Mode

This controls Night Vision ON and OFF.

Auto: auto detect light sufficiency and switch between Day and Night automatically.Day: force the camera to turn OFF Night Vision.Night: force the camera to turn Night Vision ON.



Day

Night

5.7.3. Advanced

Exposure Settings		
Mode	Indoor 🗸	
Gain Control(dB)	24 🗸	
Shutter Time		
Max (sec)	1/30 🗸	
Min (sec)	1/2000 🗸	
Others		
EV Compensation	0 🗸	Note: Click on Apply for checking the updated view.

Exposure Settings

Mode: Manual, Indoor, Outdoor

For regular users, please choose indoor or outdoor, the default values will the preconfigured. The areas are grey out for preconfigured settings when you choose **Indoor** or **Outdoor**.

Default Settings

Cancel

Apply

Manual

Choose **Manual** if you would like to fine tune some of the settings that suits your application. Please be noted that these settings may have impacts on the image quality and performance. If you are not sure about the terms and behavior.





Note: Click on Apply for checking the updated view.

Default Settings	Apply	Cancel
------------------	-------	--------





Choose **Enable** if you would like to put certain areas in private. Please use selected window to hide certain area for privacy purpose.

5.7.5. Audio

Status

If you audio is important to what you are monitoring, you need to set the audio status to **Enable**. So that the microphone can pick up sounds in the environment. On the other hand, if audio is not necessary (for instance an open space with a lot of noises), you are advised to **Disable** the audio to reduce the clips file size.

Audio Settings			
Status	🖲 Enable 🛛 Di	sable	
Mode	Only Mic	\sim	
Microphone (Input) Gain			50
Encoding	G711U	\sim	
Sample Rate	8 K		
Bit Rate	16 Bit		
		Default Settings	Apply Cancel

Mode

Only Mic: enable only the microphone

Input Gain: setting the sensitivity of the microphone. High gain will result in higher volume and but picks up more noise. Encoding: supports G711A, AAC and G711U. Sample Rate: 8 K Bit Rate: 16 Bit

Changing Sample Rate and Bit Rate will impact the audio quality. The higher the rate, the better the quality and the larger the file will become.

5.8. Event Server

Event Server	
Network Storage	
FTP	
E-Mail	

It is required for users to configure **Event Server** settings before setting camera **Event**, **Alarm** or **Schedule Recording**. You will have to tell **where** the captured images or clips are going to be stored. The following concept diagram depicts the flow of the image file when and when captured. The file is stored at one of the predefine storage locations.

The simplest way to keep the media files is by local **SD card**; however, SD card storage size is relatively limited comparing to other alternatives. On the other hand, **Network Storage and FTP** require you to have existing servers ready for upload. **SMTP** is good for small image capture since it sends the file through email. You should choose what is best for your application.



5.8.1. Network Storage

This camera supports two types of Network Storage: **NFS** and **SAMBA**. Before going further, you need to **Enable** to configure the network storage first. Status

🔍 Enable 💿 Disable

Apply Cancel

Please refer to the following sections for NFS and SMABA.

5.8.1.1. NFS (Network File System)

Network Storage Settings	
Status	● Enable ◯ Disable
Protocol	Network File System (NFS)
Server	
Path	/ (insert / if the path contains the subfolder, i.e. folder/subfolder)
Storage Size	
Folder Size	0 GB (Integer only. 0 is no limit.)
✓ Overwrite	
	Apply Cancel

Server: IP address of the NFS server

Path: enter the initial path if applicable

Folder Size: storage allocated for the camera; the default value 0 signifies infinity.

Overwrite: when the defined folder is full, the oldest files will be overwritten to accommodate the new one.

Click Apply when done.

5.8.1.2. SAMBA

Network Storage Settings		
Status	Enable Disable	
Protocol	SAMBA 🗸	•
Server		
Path	/ (insert / if the path contains the su	ubfolder, i.e. folder/subfolder)
Username		
Password		
Storage Size		
Folder Size	0	GB (Integer only. 0 is no limit.)
✓ Overwrite		
		Test Apply Cancel

Server: IP address of the SAMBA server

Path: enter the initial path if applicable

User Name: username for accessing SAMBA server

Password: password for accessing SAMBA server

Folder Size: storage allocated for the camera; the default value 0 signifies infinity.

Overwrite: when the defined folder is full, the oldest files will be overwritten to accommodate the new one.

Click **Test** to verify the connection with the server using the username and password. Click **Apply** when done.

5.8.2. FTP (File Transfer Protocol)

FTP Settings	
Server IP address	e.g. 192.168.0.100
Port	21
Username	
Password	
FTP Path	/ (insert / if the path contains the subfolder, i.e. folder/subfolder)

Test Apply Cancel

Server: IP address of the FTP server

Port: the FTP server port; default 21

User Name: username for accessing FTP server

Password: password for accessing FTP server

FTP Path: enter the initial path if applicable

Click **Test** to verify the connection with the server using the username and password. Click **Apply** when done.

5.8.3. E-mail Alerts

E-mail SMTP Settings

Please refer to the settings from your	email service provider	to configure correctly.
----------------------------------------	------------------------	-------------------------

Email Service Provider	Manual 🗸	
SSL/TLS	◯ Enable	
SMTP Server		
Port	25	
Account		
Password		
From		e.g. user@domain.com
То		e.g. user@domain.com
Subject	EDS IPCam Alert	
		Test Apply Cancel

EDS6115 allows camera to send captured images to the predefined email box to notify about an event or alarm.

SMTP is an email sender's server. You need to check whether your email service provider supports SMTP and obtain the required information for this setting.

Account: the email account name; if your email is <u>myemail@gmail.com</u>, myemail is the account name.

Password: the password you use to login into your email box.

Sender: you can type in your email address or other address if you would like the receiver to reply the email to.

SMTP Server: enter the SMTP server address (e.g. smtp.gmail.com).

Port: enter SMTP server port (normally 587 or 465)

Receiver: enter the receiver email here (usually your or the administrator's email).

Subject: enter the email subject here.

5.8.4. SD Card

This camera supports **MicroSD** card slot. Please be careful when choosing the SD card type. You need to insert a blank SD card into the slot as shown below. It may take a few seconds for the camera to recognize the inserted SD card.

You will be seeing the file list after inserted the SD card. If not, refresh the page by clicking on **Refresh** button and double check if the Micro SD card has been properly inserted into the slot.

A default folder named **snapshot** is created automatically by the camera for storing the media files.

Dismount: you should dismount the SD card before physically removing it from the slot to avoid file damage. **Format**: You can clean a SD card by formatting it (all data will be erased).



Refresh

Filelist of Memory Card						
						ť
Name	Last Modified	Size	Туре	Select		
		-	Directory			
🗀 snapshot	2014-Jul-14 03:24:36	-	Directory			
📁 video	2014-Jul-12 12:45:56	-	Directory			

You can browse through the folder like any other file manager by clicking on the folder name.

Click on the files to view it directly as shown below.



圇

Delete function: choose folder/file(s) and then click on the icon to **REMOVE** them from the SD card.

5.9. Event Management

exact and the second
Setup Wizard
Event Control
Motion Detection
Audio Detection
Event Action
Schedule Recording

This camera supports many smart features that allows you to utilize the camera in many application scenarios. This section will introduce each of them in detail.

5.9.1. Setup Wizard

Wizard is an integrated configuration flow guide to the two main features on the camera: Event Control and Schedule Recording.

Event Control: When camera detects an event that matches the predefined condition an **event** will be triggered and proceed with the defined actions; for instance, taking snapshots or recording videos for the specified length of time and interval.

Schedule Recording: Set the camera to record video regularly based on a predefined schedule.

5.9.1.1. Wizard – Schedule Recording

Step 1: Select Schedule Recording

	Recording Type	Stream Type	Media Type	Detection Type	Storage Destination
\bigcirc	Event	H.264 (1280 x 720)	Recording		SD Card
۲	Schedule	H.264 (1280 x 720)	Recording		SD Card

Current Date/Time : 2014/12/05 11:32:01

Note: If the current time shown is not correct, please adjust the setting in System-Time before you start the wizard setting.

Next

Choose **Schedule Recording** on the page and click **Next** to proceed.

Step 2: Select Schedule Recording

Schedule Recording Settings

Select All	Disable	All	Constant Recording						
✓ Monday	✓ From	00	:	00	То	23	:	59	🗹 All Day
✓ Tuesday	✓ From	00	:	00	То	23	:	59	🗹 All Day
✓ Wednesday	✓ From	00	:	00	То	23	:	59	🗹 All Day
✓ Thursday	✓ From	00	:	00	То	23	:	59	🗹 All Day
✓ Friday	✓ From	00	:	00	То	23	:	59	🗹 All Day
Saturday	✓ From	00	:	00	То	23	:	59	🗹 All Day
Sunday	✓ From	00	:	00	То	23	:	59	🗹 All Day

Note: The time is displayed using 24-hour format.

Storage Destination	Network Storage	~
Stream Type	H.264 (1280 x 720)	~
Video Length	1 min(s)	~
Video Format	AVI	

Next

Back

Cancel

Storage Destination: Network Storage (*Local SD card on certain models only)

Stream Type: H.264 (1280x720) or H.264 (640x360)

Video Interval: the maximum video length of time per file File Format: AVI.

Schedule Recording Settings

Select All	Disable	All	Constant Recording						
✓ Monday	✓ From	00	:	00	То	23	:	59	🗹 All Day
✓ Tuesday	✓ From	00	:	00	То	23	:	59	🗹 All Day
✓ Wednesday	✓ From	00	:	00	То	23	1	59	🗹 All Day
✓ Thursday	✓ From	00	:	00	То	23	1	59	🗹 All Day
✓ Friday	✓ From	00	:	00	То	23	:	59	🗹 All Day
✓ Saturday	✓ From	09	:	00	То	18	:	00	All Day
Sunday	✓ From	00	:	00	То	23	1	59	🗹 All Day

Note: The time is displayed using 24-hour format.

You can specify the time range for each schedule or simply click on **All Day** for 24-hours recording.

You must **Select** to enable the schedule.

Click Next when done.

Note: You may have two different schedules for the same day, e.g., Monday 08:00~12:00 and Monday 14:00 ~ 18:00.

Step 3: Network Storage Settings

Network Storage Settings	
Protocol	SAMBA 🗸
Server	192.168.200.1
Path	/schedule_Cam1 (insert / if the path contains the subfolder, i.e. folder(subfolder)
	(insert / if the path contains the subfolder, i.e. folder/subfolder)
Username	test
Password	••••
Folder Size	0 GB (Integer only. 0 is no limit.)
✓ Overwrite	
	Test Back Next Cancel

Please provide all necessary info for Network Storage Settings; for management consideration, a different subfolder can be specified for each camera.

Click **Next** to complete the wizard.

5.9.1.2. Wizard – Event

Step 1: Select Event

	Recording Type	Stream Type	Media Type	Detection Type	Storage Destination
۲	Event	H.264 (1280 x 720)	Recording		SD Card
0	Schedule	H.264 (1280 x 720)	Recording		SD Card

Current Date/Time : 2014/12/05 11:35:44

Note: If the current time shown is not correct, please adjust the setting in System-Time before you start the wizard setting.

Next

Choose **Event** on the page and click **Next** to proceed.

Step 2: Motion Detection Window Setting



Motion Detection Window is a hot zone that the camera analyzes for motion (image changes). When a motion is detected within the zone an event will be triggered.

When the window is selected, use your mouse to move the window to the area you intend to monitor. There can be 3 windows at the most. The Windows are differentiated by color; Window 1 is Green, Window 2 is Red and Window 3 is Blue.

Uncheck the window to remove the window from the view. **Sensitivity**: Level 0% to Level 100% (with Level 100% being the most sensitive)

Depends on your application, high sensitivity will trigger event more often than low sensitivity and produce more snapshots or videos. However, overly sensitive events will fill up the storage very quickly. Even if you have unlimited storage space, large amount of files can become a problem when you need search through each of the files to find what you are really looking for. It may take some time for you to fine tune the optimal sensitivity for your application.

Step 3: Audio Detection Settings

Audio Detection Settings			
Status	Enable	◯ Disable	
Sensitivity Level			60 %
			Back Next Cancel

Audio Detection is another way to trigger the event. You want the camera to initiate recording when there's a sound in the background. When the incidence falls out of the motion detection window, "sound" can be a good indication when a change in the environment has occurred for attention.

Status: Enable or Disable

Sensitivity Level: 0% to 100% (with 100% being the most sensitive)

Similar to motion detection, high sensitivity will trigger events more often than low sensitivity and produce more snapshots or videos. However, over-sensitive events will fill up the storage very quickly. Even if you have unlimited storage space, large amount of files can become a problem when you need to search through each of the files to find what you are really looking for. It may take some time for you to fine tune the optimal sensitivity for your application.
Step 4: Event Settings

Event Settings	
Event Type	Record V
Storage Destination	Network Storage
Event Duration	20 sec(s) 🗸
Pre-event	Enable O Disable
Pre-event Buffer	1 sec(s) V
Post-event	Enable O Disable
Post-event Buffer	1 sec(s)

Event Recording		
Video Format	AVI	
Stream Type	H.264 (1280 x 720)	\checkmark
Video Length	20 sec(s)	~



Event Type: Record or Snapshot Storage Destination: Network Storage (*SD Card only available on certain models) Event Duration: the length of recording time when event is triggered. Pre-event: Enable or Disable pre-event Pre-event Buffer: the length of pre-event time (1~5 seconds) Post-event: Enable or Disable post-event Post-alarm Buffer: the length of post-event time (1~5 seconds)

File Format: the media file format.Stream Type: H.264 (1280x720) or H.264 (640x360)Video Length: the maximum video length of time per file

Note:

If setting Event Duration to 30 seconds, the camera will keep recording for 30 seconds when event is triggered. In this case, if the Video Clip Size is 10 seconds, then 3 files will be generated for single instance of event. If Video Clip Size is 30 seconds, then only 1 file will be generated. Please note that pre-event and post-event will extend the length of the clip for the chosen extra length of time.

Event Method: Snapshot (images)

Event Settings		
Event Type	Snapshot	\checkmark
Event Duration	20 sec(s)	\checkmark
Snapshot		
Interval	5 sec(s)	\sim
Upload Type	SD Card Vetw	/ork Storage □ FTP □ E-Mail
		-

Back	Next	Cancel
------	------	--------

Event Duration: the length of recording time when event is triggered.Interval: 5 seconds to 5 minutes (the elapse time between each snapshot)Upload Type: method of storage.

Click Next when complete this step

Step 5: Network Storage Settings

Network Storage Settings	
Protocol	SAMBA 🗸
Server	192.168.200.1
Path	/schedule_Cam1 (insert / if the path contains the subfolder, i.e. folder/subfolder)
Username	test
Password	••••
Folder Size	0 GB (Integer only. 0 is no limit.)
✓ Overwrite	
	Test Back Next Cancel

Please provide all necessary info for Network Storage Settings; for management consideration, a different subfolder can be specified for each camera.

Click **Next** to complete the wizard.

5.9.2. Event Control

-

Event Detection					
Motion Detection	Enable	ODisable			
Audio Detection	Enable	◯ Disable			
Event Action					
Status	Enable	ODisable			
Action Type	Record	~			
Storage Destination	◯ <u>SD Card</u>	Network Storage	○ <u>ft</u>	P	
			(Apply	Cancel

You can choose event detection method and event action from this page.

5.9.2.1. Motion Detection

Motion Detection Settings



Motion Detection Window is a hot zone area that the camera analyzes for motion (image changes). When a motion is detected within the zone an alarm will be triggered.

When the window is selected, use your mouse to move the window to the area you intend to monitor. There can be 3 windows at the most. The Windows are differentiated by color; Window 1 is Green, Window 2 is Red and Window 3 is Blue.

Uncheck the window to remove the window from the view. **Sensitivity**: Level 0% to Level 100% (with Level 100% being the most sensitive)

Depends on your application, high sensitivity will trigger event more often than low sensitivity and produce more snapshots or videos. However, overly sensitive events will fill up the storage very quickly. Even if you have unlimited storage space, large amount of files can become a problem when you need search through each of the files to find what you are really looking for. It may take some time for you to fine tune the optimal sensitivity for your application.

You can adjust the motion detecting area by dragging the four corners to resize the window.



Therefore, you can have a combination of three different detection window sizes.



5.9.2.2. Audio Detection

Audio Detection Settings	
Sensitivity Level	60 %
	Apply Cancel

Sensitivity Level: 0% to 100% (with 100% being the most sensitive)

Similar to motion detection, high sensitivity will trigger events more often than low sensitivity and produce more snapshots or videos. However, over-sensitive events will fill up the storage very quickly. Even if you have unlimited storage space, large amount of files can become a problem when you need to search through each of the files to find what you are really looking for. It may take some time for you to fine tune the optimal sensitivity for your application.

5.9.2.3. Event Action

Event Action		
Event Duration	20 sec(s)	~
Snapshot		
Interval	5 sec(s)	~
Event Recording		
SD Card / Network Storage		
Video Format	AVI	
Stream Type	H.264 (1280 x 720)	~
Video Length	20 sec(s)	~
FTP		
Video Format	AVI	
Stream Type	H.264 (1280 x 720)	~
Video Length	5 sec(s)	~
Pre-event	Enable O Disat	ole
Pre-event Buffer	1 sec(s)	~
Post-event	Enable O Disat	ole
Post-event Buffer	1 sec(s)	~

Apply Cancel

This page provides **Event**-related settings (briefed in earlier **Wizard** sections).

5.9.3. Schedule Recording

Schedule Recording Settings

Status

Enable O Disable

S	elect All	D	isable	All		Constar	nt R	ecordin	g		
✓	Monday	~	From	00	:	00	То	23	:	59	🗹 All Day
✓	Tuesday	~	From	00	:	00	То	23	:	59	🗹 All Day
✓	Wednesday	\checkmark	From	00	:	00	То	23	:	59	🗹 All Day
✓	Thursday	\checkmark	From	00	:	00	То	23	:	59	🗹 All Day
✓	Friday	~	From	00	:	00	То	23	:	59	🗹 All Day
✓	Saturday	~	From	00	:	00	То	23	:	59	🗹 All Day
✓	Sunday	~	From	00	:	00	То	23	:	59	🗹 All Day

Note: The time is displayed using 24-hour format.

Storage Destination	O SD Card
Stream Type	H.264 (1280 x 720)
Video Length	1 min(s) V
Video Format	AVI

Apply Cancel

Storage Destination: Network Storage (*Local SD card on certain models only)
Stream Type: H.264 (1280x720) or H.264 (640x360)
Video Interval: the maximum video length of time per file
File Format: AVI.

5.10. User Management

User Account Push Message Mobile List	👪 User Management
Push Message Mobile List	User Account
	Push Message Mobile List

User	List	
Cole		

Select	No.	Username	Authority	
	1	admin	Administrator	
	2	guest	Viewer	
Add Edit Delete Selected Delete All Reset				

There are two types of user accounts: Administrator and Viewer. Administrator has full control over the camera settings while viewer only has the accessibility of watching the real time video. Viewer account is particularly useful when you have multiple users such as other staff members. You may have many administrators as well as viewers depending on your needs.

Administrator has full control of the camera interface with configuration features as shown below.



Viewer only has basic camera view interface.



5.10.1. Add User

User Name	
Password	
Confirm Password	
Authority	Administrator 🔻
Add Reset	

User Name: enter username Password: enter password Confirm Password: enter password for confirmation Authority: select Administrator or Viewer

Click Add to add the user

5.10.2. Edit User

User List

No.	User Name	Authority	Select
1	admin	Administrator	
2	guest	Viewer	
3	family	Viewer	
Edit	Delete Selected	elete All Reset	

Select a user from the list by click on the check box. Click **Edit** to change the user account setting.

User Name	friend
Password	••••
Confirm Password	
Authority	Viewer •
Edit Reset	

Make the changes and then click **Edit** to save the changes.

Once all necessary changes are made to the accounts, click **Apply** to make the changes affective.

User List

No.	User Name	Authority	Select
1	admin	Administrator	
2	guest	Viewer	
3	friend	Viewer	
Edit	Delete Selected	Delete All Reset	
		Apply	Cancel

5.10.3. Delete User

On the user list, **select** the user account to be deleted. Click on **Delete** Selected to delete the account.



When prompted with delete confirmation, click Yes to delete.

	192.16 8 .0.103	:		×
	Do you really want to delete th	ie selected entry	?	
r		Yes	No	

Once all necessary changes are made to the accounts, click **Apply** to make the changes affective.

User List			
No.	User Name	Authority	Select
1	admin	Administrator	
2	guest	Viewer	
Edit	Delete Selected	Delete All Reset	
		Apply	Cancel

6. Camera Connecting to EnGenius Router

Smart Recording is an intelligent camera management technology that allows EnGenius users to manage cameras collectively with ease. EnGenius bundles cameras with Intelligent Router and IoT gateway series and provides a single point of entrance for integrated management. Traditionally, if you have multiple cameras installed you will need to go through the tedious configurations on each of the camera. The benefits of Smart Recording are as follows:

1. Easy and Integrated Access





2. Integrated Storage

Smart Recording technology integrates the EnGenius Intelligent Router and IoT Gateway storage feature and allows you to store the media files on the centralized storage over the router.



3. Easy Remote Access over Internet

Traditionally, you cannot get access to your Camera over the Internet without some manual configuration known as Port Forwarding because your camera is installed under a local network. **Smart Recording** technology takes care of all the complicated setup and leave you with ease of control. That is, you will be able to access any of the cameras in your home by providing their DDNS names on EnViewer or web browser if you are using PC/Laptop.





6.1. Enable Router Storage Function

The best thing about **Smart Recording** is that you can make use of the EnGenius Router Storage function. You should attach an external USB storage device (portable hard-disk or USB flash drive) to your router. Enter the Username and Password of **your router** and press **Login**.



If you have not yet enable Samba Server on your router, choose USB Port -> File Sharing. Skip this step if samba is already enabled. Then, Enable Samba Service and click on Apply to activate the function.

🐟 USB Port			
File Sharing			
File Server	Samba Service	🖲 Enable 🔍 Disable	
Guest Account			
DLNA			Appiy

On your router's Main Menu, Click **System** \rightarrow **IP Camera** to access the connected cameras.

Note: that **only EnGenius Cameras** can be managed collectively by EnGenius Router. For other vendor's cameras, you still have to configure them one by one manually.

🖵 System		
Status		
LAN		
DHCP		
Log		
Monitor		
Language		
IP Camera		

Cloud Services	IP Camera Client Table
S EnShare	
EnRoute	192.168.0.101 88DC9616A3D7 EDS1130 Connect Add Profile
🛞 EnTalk	Refresh
Router Management	Current IP-Camera Profile
🖵 System	No. Name IP Address MAC Recording Motion Over-Write Folder Name
Status	
LAN	Edit Delete Selected Delete All Synchronize with IPCAM
DHCP	
Log	
Monitor	
Language	
(IP Camera)	

You should be see all your cameras listed on the **IP Camera Client Table**. If not, click **Refresh** button to scan the network again. Please be noted that only EnGenius Cameras will be listed on the table.

IP Camera Client Table

192.168.1.107	88DC9604CEE1	EDS3200Lobby	Connect	Add Profile
192.168.1.105	88DC9604CF38	EDS5200ParkingEntrance	Connect	Add Profile
192.168.1.106	88DC96025E7B	EDS5200SecuritySideWalk	Connect	Add Profile
192.168.1.113	004270003077	EDS1130	Connect	Add Profile

Refresh

Connect: You can get access to the selected cameras' camera mange page.

Add Profile: Add the selected camera to a profile (please refer to next section for more detail on Profile)

6.2. Camera Profile

A Profile is an entry that represents the added camera. You must add the camera to a profile so that the router has the privilege to configure your camera and link them together.

6.2.1. Add Profile

This example shows 4 connecting cameras on the router. We have chosen to add two cameras (Lobby and Entrance) for demonstration purpose.

Click on Add Profile button to add the chosen camera.

IP Camera Client Table

192.168.1.113	004270003077	EDS1130	Connect	Add Profile
192.168.1.107	88DC9604CEE1	EDS3200Lobby	Connect	Add Profile
192.168.1.100	003110016621	EDS3110	Connect	Add Profile
192.168.1.105	88DC9604CF38	EDS5200ParkingEntrance	Connect	Add Profile

USB Available Space	855.730 GB (98%) USB Available Space	855.730 GB (98%)
IP Camera Name	Lobby	IP Camera Name	Entrance
Schedule-Recording	Disable 🔻	Schedule-Recording	Enable 🔻
Motion-Recording	Enable •	Motion-Recording	Disable 🔻
Over-Write	Enable •	Over-Write	Disable 🔻
Folder Name	Lobby	Folder Name	Entrance
Storage Size	0 GB, 0 is Infinity.	Storage Size	0 GB, 0 is Infinity.

Apply Cancel

Apply Cancel

IP Camera Name: Lobby (use meaningful name for better identification)

Scheduled-Recording: Enable/Disable this type of recording

Motion-Recording: Enable/Disable this type of recording

Over-Write: Enable/Disable over-writing the old files when there's no space for storing the new files

Folder Name: The name of the folder where the media files of this camera will be stored on the router storage.

Storage Size: put 0 if storage is unlimited.

Click Apply when done.

The added cameras will be listed as shown below.

Current IP-Camera Profile

No.	Name	IP Address	MAC	Recording	Motion	Over-Write	Folder Name	Storage Size	Select
1	Lobby	192.168.1.107	88DC9604CEE1			1	Lobby	0	
2	Entrance	192.168.1.105	88DC9604CF38	1			Entrance	0	

Edit	Delete Selected	Delete All	Synchronize with IPCAM
------	-----------------	------------	------------------------

You can **Edit** or **Delete** profile by selecting the profile and click on the buttons below.

6.2.2. Edit Profile

Current IP-Camera Profile

No.	Name	IP Address	MAC	Recording	Motion	Over-Write	Folder Name	Storage Size	Select
1	Lobby	192.168.1.107	88DC9604CEE1			1	Lobby	0	
2	Entrance	192.168.1.105	88DC9604CF38	4			Entrance	0	

Edit	Dele
	00.0

ete Selected 🔵 🛛 Delete All 👘

Synchronize with IPCAM

Select the camera profile and then click Edit button to make the changes.

6.2.3. Delete Profile

Current IP-Camera Profile

No.	Name	IP Address	MAC	Recording	Motion	Over-Write	Folder Name	Storage Size	Select
1	Lobby	192.168.1.107	88DC9604CEE1			1	Lobby	0	
2	Entrance	192.168.1.105	88DC9604CF38	4			Entrance	0	

Edit	Delete
Euit	Delete

e Selected) Delete All

Synchronize with IPCAM

Select the camera profile and then click **Delete Selected** button to delete the profile.

Click **Delete All** to delete all the profiles.

6.2.4. Synchronize

Current IP-Camera Profile

No.	Name	IP Address	MAC	Recording	Motion	Over-Write	Folder Name	Storage Size	Select
1	Lobby	192.168.1.107	88DC9604CEE1			1	Lobby	0	
2	Entrance	192.168.1.105	88DC9604CF38	4			Entrance	0	

Edit

Delete Selected] Delete All

Synchronize with IPCAM

6.3. Fine Tune Camera Configuration set by the Router

This section provides extra information on what actually happened to your camera's setting after you added it to the **Profile** on the router. It is helpful for you to go through the automatically configured camera settings and make proper changes when necessary.

Click on **Connect** button to open the chosen camera's login page.

IP Camera Client Table

192.168.1.113	004270003077	EDS1130	Connect	Add Profile
192.168.1.105	88DC9604CF38	EDS5200ParkingEntrance	Connect	Add Profile
192.168.1.106	88DC96025E7B	EDS5200SecuritySideWalk	Connect	Add Profile
192.168.1.107	88DC9604CEE1	EDS3200Lobby	Connect	Add Profile
192.168.1.100	003110016621	EDS3110	Connect	Add Profile

6.3.1. Camera Storage Setting

Then go to **Storage** → **Network Storage** section.

As you can see shown below, the **camera storage is automatically configured** for you. These settings enable your camera to store media files on the router storage. Each camera will be given different **Path** so that you can search for the associated files easily.

In the previous example, we have named the camera profile as **Lobby**; therefore, the Path given to this camera is **/sda1/IP_Camera/Lobby**. Please **do not change the settings** because it only works if the setting matches the connected router.

3	Network
¢1)	Wireless
•••	Media
-	Storage
Ne	twork Storage
FT	Р
SN	ИТР
SD) Card
A	Event
ě:	User Management

🖉 Enable Network Storage

Protocol

Server

Path

Username

Password

Folder Size

🗷 Overwrite

AMBA v 2.168.0.1			
2.168.0.1			
la1/IP_Camera/L	obby	ex. /test	
nin			
••••			
	<mark>6</mark> В,	, O is Infinity.	
r			GB, 0 is Infinity.

6.3.2. Camera Event Setting

The router configured the camera with default Alarm Method: Record. If can make necessary changes if necessary. For instance, you may want to change Record to Snapshot if static pictures are preferable in your application.

Enable Alarm

D1

Alarm Method	Record •
Storage Type	Network Storage 🔻
Alarm Duration	1 Minute 🔻
SD Card / Network Storage	
File Format	AVI

AVI
H.264(1280x720) T
10 Seconds 🔻

Play Audio	🖲 Enable 🔍 Disable
Alarm Audio Files	alarm_1.wav ▼
Pre-alarm	🖲 Enable 🔍 Disable
Pre-alarm Duration	1 second 🔻
Post-alarm	🖲 Enable 🔍 Disable
Post-alarm Duration	1 second 🔻
6.3.3. Camera Motion Detection Setting

In the previous section, the Lobby profile is configured with Motion-Detection enabled. Therefore, the router configured the camera with a **full screen** motion detection window. You may change the motion detection region if necessary.



6.4. Access the Media files on the Router

6.4.1. Using web browser

Please refer to EnGenius Router user's manual for more detail on the Shared Storage feature.

You can click on USB Port icon to access the storage.





Choose Admin and click on Start button.





Choose the storage device to access the file.

EnShare Web Access					
Index of /usb_admin/sda1/					
Name	Last Modified	Size	Туре	Rename	Select
🗲 Parent Directory		-	Directory		
🗀 Album_Uploads	2011-Jan-01 00:01:34	-	Directory	4	
逼 Guest	2011-Jan-01 00:01:34	-	Directory	4	
🔁 <u>IP_Camera</u>	2014-Jul-13 22:53:56	-	Directory	A	
📴 System Volume Information	2014-May-30 09:16:44	-	Directory	A	
📁 video	2011-Jan-01 00:01:32	-	Directory	ATTAL	

In the previous example, the **Lobby** camera profile defines the path **/sda1/IP_Camera/Lobby/** The media files will be stored as shown below.

EnShare Web Access					
Index of /usb_admin/sda1/IP_Camera/Lol	oby/video/20140713/				
				l	
Name	Last Modified	Size	Туре	Rename	Select
😅 Parent Directory		-	Directory		
📕 alarm_video_20140713-065601.avi	2014-Jul-13 14:56:10	5.5M	video/x-msvideo	A	
月 <u>alarm video 20140713-065612.avi</u>	2014-Jul-13 14:56:20	5.0M	video/x-msvideo	1	
📕 alarm_video_20140713-065622.avi	2014-Jul-13 14:56:32	5.0M	video/x-msvideo	ATTAL	

Click the file to download it.

•	Save As		×
⊕ ∋ - ↑ ■	Desktop v C Search Des	ktop	Q,
Organize 🔻 Ne	w folder		0
🤣 Homegroup 🚺 light I This PC	 Name Homegroup light 	Size	Item ^
ie Desktop Documents Downloads ESR1750	This PC Contractions Network		~
File name: Save as type:	alarm_video_20140713-065612 AVI Video File		~
) Hide Folders	Save	Can	cel

6.4.2. Using Windows File Explorer



Once enabled Samba on the EnGenius router, you should find the router under Network in your File Explorer as shown above.

Double click on ENGENIUS to get access to the storage space.

Upon security prompt, enter the **router's username** and **password** to continue.

Windows Security	×
Enter network credentials Enter your credentials to connect to: ENGENIUS	
WILSON\admin	
admin admin Domain: - Remember my credentials	
Connect a smart card	
ОК	Cancel

You can access the media files located under **\\ENGENIUS\sda1\IP_Camera\Lobby**



7. Camera Connecting to Other Router

Normally, you do not need to make any changes to your router setting to be able to use the camera. However, in case if you experience issues in connecting the camera, you should probably check for the following settings. UPnP, UPnP Traversal and Firewall.

UPnP and UPnP Traversal:

Universal Plug and Play (UPnP) allows the other device to detect the presence of the camera so that communication become possible. Please ensure that your router supports UPnP Traversal and has it enabled. Most of the modern wireless router today supports this feature. You should enable UPnP if you wish your camera to be recognized by the home router. If you can't find the related settings, they are most likely enabled by default. UPnP Traversal makes camera remote access over the Internet possible using camera DDNS name.

Firewall:

By default, the firewall function of the router is not configured to filter out specific traffic. However, in case if you have trouble accessing the camera view, it's likely that the traffic has been blocked by the firewall on your router. You may want to double check whether you have blocked the service ports. Check the camera setting **System** –> **Service Port**. Make sure you do not block the following ports: 80, 50000, 554, 50045, 9091 and 50075.

🖵 System	
Status	
Service Port	
Time	

8. Application Guide

This chapter demonstrates some common applications using EnGenius Camera. The examples assume that the camera is already connected to a router that has Internet accessibility.



Note: Please ensure that your router supports UPnP Traversal and has it enabled. Most of the modern wireless router today supports this

feature. If you can't find the related settings, they are most likely enabled by default. UPnP Traversal makes camera remote access over the Internet possible using camera DDNS name (0e95c28.engeniusddns.com).

8.1. Example 1: Remote Surveillance and Motion Detection.



The application concept diagram shows a camera monitoring the property like office or warehouse. The management staff wants to remotely monitor their responsible property and needs to be alarmed when motion (intrusion) is detected.

8.1.1. Step 1: Choose Event Control



Please select preferred Event Action; for example here, E-Mail would be suggested.

8.1.2. Step 2: Configure Motion Detection



Please specify Window of your interest and click Apply.

8.1.3. Step 3: Configure Event Action

System		
Network	Event Action	
Wireless	Event Duration	20 sec(s)
Media	0 1 1	
Event Management	Snapshot	[]
Sotup Wizard	Interval	5 sec(s)
	Event Decording	
Event Control	SD Card / Network Storage	
Motion Detection	Video Format	AVI
Audio Detection	Stream Type	H.264 (1280 x 720) 🗸
Event Action	Video Length	20 sec(s)
Schedule Recording	FTP	
	Video Format	AVI
Event Server	Stream Type	H.264 (1280 x 720) 🗸
Storage Info	Video Length	5 sec(s)
User Management	Pre-event	● Enable ○ Disable
	Pre-event Buffer	1 sec(s)
	Post-event	Enable Disable
	Post-event Buffer	1 soc(s)

Apply Cancel

Select desired **Event Duration** and **Interval**; if you enable **Event Recording** via available methods such as **Network Storage** or **FTP**, please also review related settings regarding length and resolution. Once done, click **Apply** to activate the settings.

9. Trouble Shooting

9.1. Viewing Your Video

How do I view using a mobile?

You can view your video on your mobile devices (iOS or Android) by using **EnViewer**. EnViewer is an App that allows you to view and mange your camera at real time.

Where can I download my app?

You can download it by searching APP store (iOS) or Google Play(Android) for "EnViewer". You can also scan the following QR code to download **EnViewer** directly.

Android





iOS (for iPhone and iPad)



How do I use the web viewer on a computer?

You can view the camera at real time using a web browser. The supported web browsers are Google **Chrome** and Microsoft **Internet Explorer**. Given that you have configured your camera properly, you should be able to get access to your camera by entering its **DDNS** or **IP address**.

If you may have troubles finding your camera on your network, please use the provided utility on the enclosed CD, **EnViewer Finder**, to find out your camera's current IP address.

9.2. Networking

Why does my camera disconnect from my Wi-Fi connection?

There are various reasons that your camera disconnects from the wireless router. Usually it is due to weak Wi-Fi signals or interference from electrical appliances. Therefore, you should place your camera away from those possible interfering appliances and verify whether it's caused by weak signal.

You should also check if router has just rebooted or the administrator has changed Wi-Fi security settings. If your camera is located far apart from the router, the signal strength may be weak; however, this should not be a problem unless there are many walls or metal obstacles that may block the wireless signals. Lastly, reboot your camera and router.

How can I minimize interference?

Make sure there is no electrical appliance near the camera, such as microwave or devices that may interfere with the camera. Upon experiencing interference, try to turn off possible electrical devices that are currently running.

9.3. Security and Privacy

Accessing the camera from the Internet is convenient; however, it is also possible for anyone who has your username and password to login into your camera. Therefore, it is crucial to keep your username and password safe and change them regularly. Your videos or images are stored either locally or in network storage. The images and videos are accessible only when provided with proper security check.

Can EnGenius employees view my video?

No! No one can view your video or login into your camera without security check. The username and password is stored locally in your camera and it is not accessible by anyone but yourself. Therefore, it is important to keep your security information safely.

9.4. Cloud Video Services

If I cannot connect to the cloud service, what should I do next?

Please check your router's Internet settings. You can first check the Internet connectivity from other devices connecting to the router and determine possible sources to cause the issue. If other connecting devices can connect to the Internet through the router, the problem may be caused from other router settings. Check wireless security settings and turn off any firewall rules on the router to see if connection can get through.

10. Appendix

Federal Communication Commission Interference Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.